

BALL AND ROLLER BEARINGS



CATALOG A-1000-XI

NTN[®]



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CATALOG A-1000-XI



NTN Terms and Conditions of Sale

Offer; Acceptance. These terms and conditions (these “Terms”) are deemed part of all quotations, acknowledgments, invoices, purchase orders and other documents relating to the sale of goods and services (the “Goods”) by Seller. If these Terms differ in any way from any purchase order, release or other document from Buyer, these Terms shall be construed as a counteroffer and will not be effective as an acceptance of any other term except on the express condition that Buyer assents to these Terms; provided that Buyer is deemed to have accepted these Terms upon the earlier of 10 days after receipt without objection and acceptance by Buyer of any Goods.

Warranties. (a) **Exclusive Warranty.** The exclusive Seller warranty is that the Goods are free from defects in materials and workmanship. This warranty is extended solely to Buyer and not to any successive buyers, users or other third parties. SELLER MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT THE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE GOODS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE GOODS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. SELLER DISCLAIMS ALL OTHER EXPRESS WARRANTIES. (b) **Buyer Remedy.** The exclusive remedy of Buyer as to any Good is that Seller shall repair or replace (at Seller’s option) the Good (with Buyer responsible for labor charges for removal or replacement thereof), such obligation being subject to the following: (i) the Good’s application was approved by Seller; (ii) Buyer delivers the Good to Seller with transportation charges prepaid; and (iii) analysis by Seller verifies that the Good was properly handled, installed, maintained, lubricated and not subject to abuse, misuse or inappropriate modification. (c) **Damage Limits; Etc.** SELLER SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE GOODS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY. Further, in no event shall liability of Seller for any act exceed the price of the Good on which liability is asserted. Buyer must commence any action within one year after the sale of such Good by Seller.

Delivery; Packaging. (a) **Dates.** Delivery and shipment dates are estimated dates only. (b) **Partial Shipment; Etc.** Each partial shipment is deemed a separate contract for the delivered Goods. (c) **Shipment Terms.** All shipments are freight collect - FOB shipping point and Seller reserves the right to select transportation methods and routing. (d) **Packaging.** Seller will package Goods as it deems proper for protection against normal handling and extra charges apply to special conditions. (e) **Risk of Loss.** Risk of loss will pass to Buyer upon tender by Seller at the point of shipment defined as Seller’s dock.

Pricing; Payment; Etc. (a) **Pricing.** Prices are subject to change without notice, and prices in effect on the shipping date will govern. Any increases in freight rates or transportation charges before shipment will be for Buyer’s account. Prices also are subject to increase for any taxes, duties (including dumping duties) or other charges imposed on Seller by any governmental authority for the sale, delivery or use of the Goods. (b) **Payment.** Terms of payment are net 30 days from the invoice date. If Buyer fails to make any payment when due or Seller otherwise deems itself insecure, Seller reserves the right to change terms of payment and discontinue shipments. Buyer agrees to pay Seller’s customary late and interest charges for any failed or late payments.

Inspection; Etc. Buyer promptly shall inspect all delivered Goods. If Buyer does not inspect any Goods within six days of delivery, Buyer is deemed to have waived its right to inspect and to accept the Goods. Buyer must report to Seller shortages or defective Goods within ten days of receipt. Buyer may not return Goods without Seller’s written consent, and Buyer’s acceptance shall be final and irrevocable.

Cancellation; Etc. Orders approved and accepted by Seller shall constitute firm commitments of Buyer and are not subject to cancellation or rescheduling. Orders for non-standard Goods not listed in Seller’s catalogs may not be canceled at all, nor will Seller accept return of such Goods for credit.

Indemnities. Buyer shall indemnify and hold harmless Seller, its employees and representatives from and against all liabilities, claims, actions, costs, expenses and disbursements (including attorney’s fees and disbursements) related to any investigation, litigation or other proceeding (whether or not Seller is a party thereto) which arises or is alleged to arise from Buyer’s acts or omissions under these Terms. Without limiting the foregoing, Buyer shall indemnify and hold harmless Seller and defend or settle any action brought against Seller to the extent that it is based on a claim that any Good made to Buyer specifications infringed intellectual property rights of another party.

Confidentiality; Inventions. (a) **Confidentiality.** All information and materials supplied by Seller to Buyer relating to the Goods are confidential and proprietary, and Buyer shall limit distribution thereof to its trusted employees and use its best efforts to preserve the confidentiality thereof. (b) **Inventions; Etc.** If Seller or any of its affiliates makes a discovery or invention pertaining to any research, development or design work contemplated hereby, such discovery or invention shall be the sole property of Seller and licensing shall be at the discretion of Seller.

Force Majeure. Seller shall not be liable for any delay or failure in delivery resulting from causes beyond its control, including earthquakes, fires, floods, strikes or other labor disputes, shortage of labor or materials, accidents to machinery, acts of sabotage, riots, delay in or lack of transportation or the requirements of any government authority.

Miscellaneous. (a) **Waiver.** No failure or delay by Seller in exercising any right and no course of dealing between Buyer and Seller shall operate as a waiver of rights by Seller. (b) **Assignment.** Buyer may not assign its rights hereunder without the Seller’s written consent. (c) **Law.** This Agreement is governed by Illinois law (without regard to conflict of law principles). (d) **Amendment.** This Agreement constitutes the entire agreement between Buyer and Seller relating to the Goods, and no provision may be changed or waived unless in a writing signed by the parties. (e) **Severability.** If any provision hereof is rendered ineffective or invalid, such provision shall not invalidate any other provision. (f) **Setoff.** All claims hereunder by Seller are subject to setoff by Seller for any counterclaim arising out of any transaction with Buyer. (g) **Tooling; Etc.** All materials, equipment, facilities and special tooling Seller uses to manufacture Goods shall remain the property of Seller. (h) **Definitions.** “Including” means “including without limitation.”

Although care has been taken to assure the accuracy of the data compiled in this catalog, NTN does not assume any liability to any company or person for errors or omissions.



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NTN is one of the three largest bearing companies in the world. With facilities at the hub of industrial centers around the globe, NTN Bearing Corporation is in an enviable position to best serve its customers, both domestic and worldwide.

In North America, as in all our manufacturing facilities, we attain maximum efficiency using our automated production equipment and processes to produce quality high-volume standard bearing sizes. Low-volume bearings and sizes are manufactured in a single facility and then exported worldwide according to customer requirements. All bearing types and sizes currently used in North America are in inventory at warehouses across the continent.

To best serve our customers, NTN devotes all resources to a single objective: production of the finest quality ball and roller bearings. All of our plants use advanced processing and high speed automated production equipment, engineered and built by NTN, to support our capacity for ultra-high quality bearings. NTN's Statistical Process Control programs ensure

that during the production run, every bearing produced meets or exceeds AFBMA and ISO standards. Electro-mechanical quality inspection is present at every phase of manufacturing.

Proof of NTN's success at meeting our objective are the many quality awards received from our customers. Another cherished award was received in 1954 when NTN became the first bearing manufacturer to win the Deming Prize. This prestigious award is given for outstanding performance above all mechanical industries in statistical quality control, and efficiency of machinery and management. NTN's rigid quality standards originated with the company in 1918, and is the basis for every product innovation and corporate decision made today.

NTN's highly trained employees are here to serve your engineering, sales, and manufacturing needs. Customers receive unparalleled attention through technical assistance from over 700 engineers in North America, Europe and the Far East — all linked through 24-hour global communications. This

provides you with access to support from research and development engineers, application experts and field engineers. Our extensive testing and development laboratories keep us at the leading edge of bearing technology.

NTN became a world leader through attention to our customers' needs and constant technological innovations. Value-added bearings are NTN's forte.

Our quality level allows purchasers to take them directly from receiving dock to application, eliminating incoming inspection costs. They add value to your end product with longer lifetime, less downtime and less maintenance.

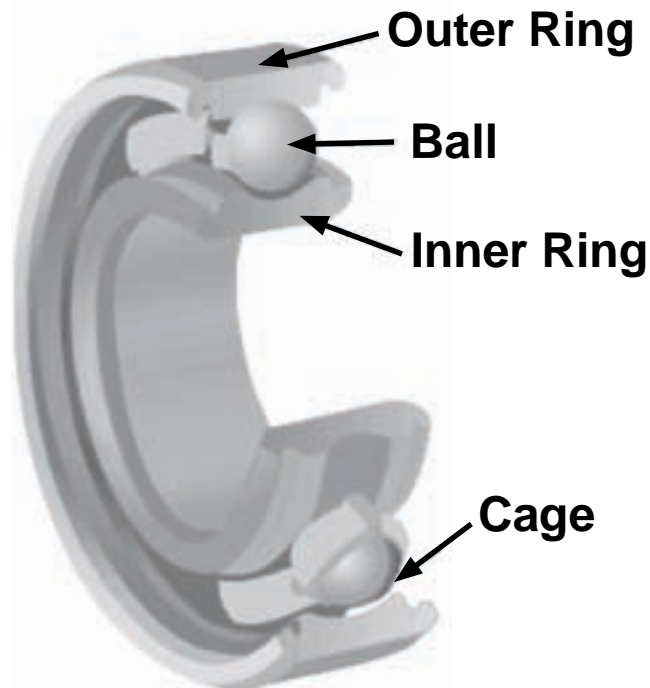




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| <p>1918 Began research and manufacture of ball bearings at Nishizono Ironworks (Uchibori, Kuwana-cho, Kuwanagun, Mie Pref.)</p> <p>1923 Nishizono Ironworks and Tomoe Trading Co. (Nishiku, Osaka) inaugurated joint manufacture and sale of bearings under the brand name NTN.</p> <p>1927 NTN Mfg. Co., Ltd. established with capital of ~50, 000.</p> <p>1937 Renamed the Toyo Bearing Mfg. Co., Ltd.</p> <p>1938 Established Showa Bearing Mfg. Co., Ltd. (Muko-gun, Hyogo Pref.)</p> <p>1939 Kuwana Plant constructed. Showa Bearing Mfg. Co., Ltd. merged to become Mukogawa Plant.</p> <p>1950 Established NTN Sales Co., Ltd.</p> <p>1954 Awarded Deming Prize for statistical quality control for the first time in the machinery industry.</p> <p>1960 Established Toyo Bearing Iwata Co., Ltd. Established NTN Walzlager (Europa).</p> <p>1962 Constructed needle bearing factory in Toyo Bearing Iwata Co., Ltd. Changed name of Muko-gawa Plant to Takarazuka Plant. Established Toyo Bearing Machine Tool Laboratory Co., Ltd.</p> <p>1963 Established NTN Bearing Corp. of America, New York. Skokie, IL, office and warehouse opened.</p> <p>1964 Established NTN France S.A. Established NTN Bearings (UK) Ltd.</p> <p>1966 Established NTN Powdered Metal Co., Ltd.</p> <p>1967 Executed Technical Assistance Agreement with Tung Yang Bearing Mfg. Co., Ltd. (Taiwan) NBCA Lincolnwood, IL, Head Office and warehouse established.</p> <p>1968 Established NTN Bearing Corp. of Canada Ltd.</p> <p>1970 NBCA California sales office opened.</p> <p>1971 Established American NTN Bearing Mfg. Corp. (Schiller Park, IL) Established NTN Trading-Hong Kong Ltd. Established Toyo Bearing Okayama Co.,Ltd. Established NTN Kugellagerfabrik. (Deutschland) NBCA Atlanta sales office opened.</p> | <p>1972 Renamed as NTN Toyo Bearing Co., Ltd. Established NTN Product Development Institute. NBCA Irvine, CA, office and warehouse occupied. NBCA Headquarters building occupied. (Des Plaines, IL)</p> <p>1973 Established NTN Bearing Mfg. (Canada) Ltd. (Merged into NTN Bearing Corp. of Canada Ltd. in 1980.) Constructed constant-velocity joint factory in Toyo Bearing Iwata Co., Ltd.</p> <p>1975 Established NTN Elgin Corp. (U.S.A.). (Merged into American NTN Bearing Mfg. Corp. in 1985.) New Takarazuka Plant completed. NBCA Michigan sales office opened.</p> <p>1976 NBCA Dallas sales office opened.</p> <p>1977 NBCA Totowa, NJ, office and warehouse occupied.</p> <p>1980 NBCA Automitve Sales/Engineering Office established, Southfield, MI. NBCA Distribution office and warehouse established, Mt. Prospect, IL.</p> <p>1981 Research Departments reorganized into General Engineering Laboratory.</p> <p>1982 Constructed constant-velocity joint factory in Toyo Bearing Okayama Co. Ltd. Constant Velocity joint technology licensed to Hyundai Motors (South Korea). NBCA Norcross, GA, office and warehouse occupied.</p> <p>1983 Constant velocity joint technology licensed to Lepco Co, Ltd. (Australia) Merged with Toyo Bearing Iwata Co., Ltd. and Toyo Bearing Okayama Co., Ltd. Constant velocity joint technology licensed to Taiway Ltd. (Taiwan) NBCA Irving, TX, office and warehouse occupied. NBCA Headquarters building expanded. (Des Plaines, IL) NBCA Midwest and Central sales offices established. (Des Plaines, IL) NBCA Peopria, IL, sales office opened.</p> <p>1984 Ground broken for Elgin, IL, tapered roller bearing manufacturing facility.</p> |
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| <p>1985 Established Toyo Bearing Nagano Co. Ltd. Bearing production technology licensed to National Engineering Industries Ltd. (India) Established NTN-Bower Corporation, a joint venture with Federal-Mogul Corporation. (U.S.A.)</p> <p>1986 Constructed (in Kuwana Plant) Japan's first plant dedicated to aerospace bearings.</p> <p>1987 NTN-Bower Corporation became 100% owned affiliate.</p> <p>1988 Established NTN Technical Center (U.S.A.) Inc. (Ann Arbor, MI) Established Unidrive Pty. Ltd., a joint venture manufacturer of constant velocity joints in Australia. Ground broken for Elgin, IL, bearing hub unit manufacturing facility.</p> <p>1989 Built new building for R&D at Iwata Plant. Merged with Toyo Bearing Nagano Co. Established NTN Driveshaft Inc. (Columbus, IN — CVJ facility) Renamed parent company NTN Corporation. Bearing hub unit production began at Elgin, IL, facility.</p> <p>1990 Built new building for R&D at Kuwana Plant. NTN USA Corporation founded as headquarters in the U.S.A.</p> <p>1991 NBCA and NTN USA Corp. occupied new Head Office in Mt. Prospect, IL. NBCA Eastern Region occupied new offices, training center and warehouse in Exton, PA.</p> <p>1994 Obtained ISO9002 certification (Kuwana Plant). Established a distribution center in Singapore.</p> <p>1996 Bought the ball bearing division of American firm Federal-Mogul Corporation (U.S.A.), NTN-BCA established. Achieved 200-million target for domestic production of constant velocity joints</p> <p>1997 Nagano Plant and 4 engineering departments obtained ISO9001/QS-9000 certification for their quality systems Established NTN do Brazil Ltda.</p> <p>1998 Established NTN Manufacturing (Thailand) Co., Ltd. Iwata area NTN enterprises obtained ISO14001 certification</p> | <p>Established NTN Transmission Europe for CVJ production through a joint corporation with Renault of France.</p> <p>1999 All plants and R&D Centers in Japan obtained ISO14001 certification by a multi-site qualification procedure</p> <p>2000 NTN Group completed full certification for the ISO9000 series</p> <p>2002 In a joint venture, established SHANGHAI NTN CORPORATION in China for the manufacture of CVJ cassettes and other products. In a joint venture with Nidec Corporation of Japan, established NTN-NIDEC (ZHEJIANG) CORPORATION for the manufacture of FDB units in China. In a joint venture with Taiwan Yulong Group Corporation, established GUANGZHOU NTN-YULON DRIVETRAIN CO., LTD. for the manufacture of C.V. Joint Units in Guang Zhou, China.</p> <p>2003 In the U.S.A. established NTK Precision Axle Corporation and Asahi Forge of America Corporation, joint ventures for production of constant velocity joint components. In China established Beijing NTN-Seohan Driveshaft Co., Ltd., a joint venture with Korea Flange Co., Ltd. for constant velocity joint production</p> |
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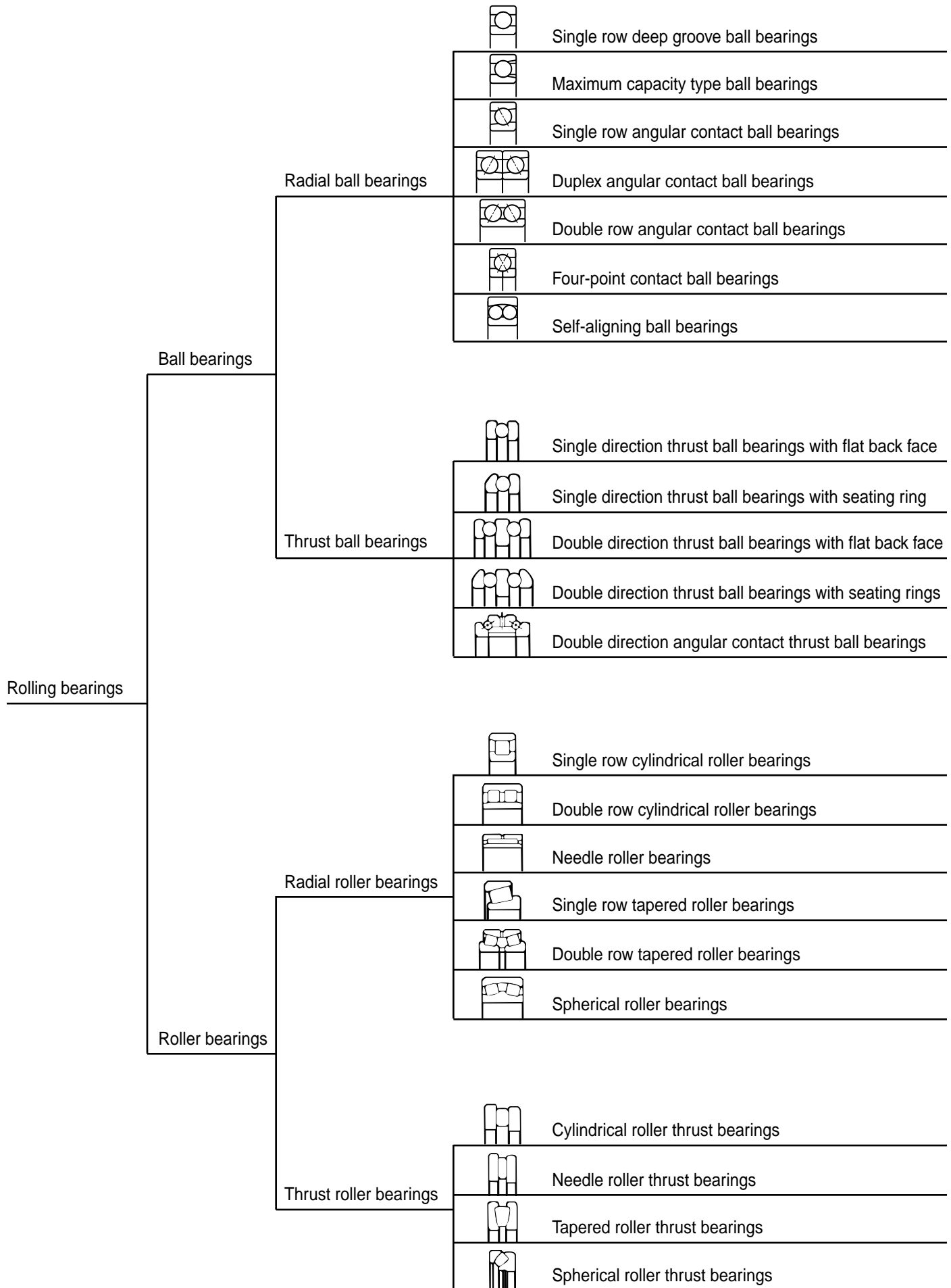
CLASSIFICATION OF ANTI-FRICTION BEARINGS

Most rolling bearings consist of bearing rings (an inner ring and an outer ring), rolling elements and a rolling element retainer (cage). The retainer separates the rolling elements at regular intervals, holds them in place within the inner and outer raceways, and allows them to rotate freely.

Rolling bearings fall into two main classifications: ball bearings and roller bearings. Balls geometrically contact the raceway surfaces of the inner and outer rings at “points,” while the contact surface of rollers is a “line” contact. Rollers come in four basic geometric styles: cylindrical, needle,

tapered and spherical. Rolling bearings can further be classified according to the direction in which the load is applied: radial, thrust, or a combination of both.

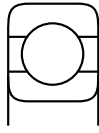
While the rolling elements and the bearing rings take any load applied to the bearings (at the contact point between the rolling elements and raceway surfaces), the retainer takes no direct load. It only serves to hold the rolling elements at equal distances from each other, forcing the rolling elements to enter the load zones and prevent them from falling out.





DESIGN AND CHARACTERISTICS OF BALL AND ROLLER BEARINGS

SINGLE ROW RADIAL BALL BEARINGS are the most widely used bearings and utilize an uninterrupted raceway, which makes these bearings suitable for radial loads, or a combination of thrust and radial loads. This design permits precision tolerances even at high speed operation.



The cage in this bearing is pressed steel. For high speed bearings, machined brass cages are available. Bearings with locating snap rings are also available.

PRELUBRICATED BEARINGS have integral seals, or shields, which are packed with long-life grease. In many applications, these bearings may be used without supplementary seals, closures, or protective devices. This design offers the lowest possible manufacturing cost to the consumer.

The boundary dimension of this type is the same as the corresponding bearings without the seals or shields.

SHIELDED BALL BEARINGS are protected on one, or both sides (suffixes Z and ZZ, respectively) by metal shields fastened to the outer ring. This close clearance labyrinth seal retains the lubricant and prevents the entrance of foreign matter.



SEALED BALL BEARINGS incorporate steel reinforced rubber seals securely fastened to a groove on the outer ring. Contact with the inner ring is by sealing lip (Contact Suffix LLU). Or, non-contact with the inner ring is by labyrinth seal (Non-contact Suffix LLB) to provide positive sealing at all times.



SINGLE ROW ANGULAR CONTACT BALL BEARINGS feature raceways with high and low shoulders. These opposing raceways are designed to carry thrust load in one direction.

These bearings may be preloaded at the factory so that the correct preload will develop within the bearing.



The bearings in this series are assembled with a specific internal clearance so that they will have a speci-

fied contact angle under load. The standard contact load used by NTN is 30°; bearings made to a 40° contact angle carry the suffix B.

For high speed grinding spindles, the 7000C, 7200C and the 7300C series are available. They are high accuracy bearings with a 15° contact angle, and phenolic resin cages for high speed operations.

DOUBLE ROW ANGULAR CONTACT BALL BEARINGS have an inner and outer ring with a double raceway. The two rows are so related that the contact angle is similar to a pair of back-to-back

single row bearings. The 5200 and 5300 series offer continuous races and can carry thrust loads in either direction. Since the 3200 and 3300 series have filling slots, it is necessary to mount them with the thrust load acting against the unnotched face of the rings.



DOUBLE ROW SELF-ALIGNING BEARINGS utilize an inner ring with two rows of balls in two deep raceways, and an outer ring with a single spherical raceway. In this way, the inner and outer rings can be misaligned relative to each other. The resulting effect is a comparatively large angle imposing moment loads upon the balls.

The boundary dimensions of the 1200 and 1300 series are the same as the 6200 and 6300 single row deep groove bearings.

CYLINDRICAL ROLLER BEARINGS have rollers which are essentially cylindrical in shape. This provides a modified line contact with the cylindrical inner and outer ring raceways, while the rollers are guided by ground ribs on either the inner or outer ring.

The cylindrical shape allows the inner ring to have axial movement relative to the outer ring (except the NH type). This is especially important when accommodating thermal expansion when both rings must be press fitted.

In this series, the NJ, NF and NH types can carry light or intermittent thrust loads.

The NN3000 and NN3000K series are available in high precision tolerances and are well suited for use in machine tool spindles.

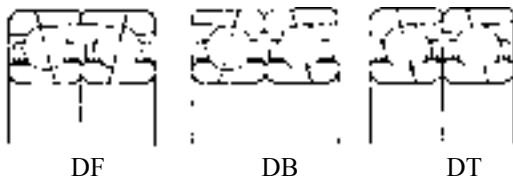
TAPERED ROLLER BEARINGS utilize conical rollers and raceways arranged so that the rollers and raceways meet at a common apex. The rollers are guided by contact between the large end of the roller and a rib on the inner ring. This provides high capacity for radial and single thrust loads.



SPHERICAL ROLLER BEARINGS have two rows of rollers in separate raceways which allows the bearing to compensate for angular thrust errors. They have large radial and thrust load capacity for heavy shock and impact loads, making them suitable for heavy industrial equipment.

DUPLEX BEARINGS use a set of two on a common shaft with the inner and outer rings clamped solidly together. They are used to gain axial shaft control, rigidity and extra capacity.

There are three fundamental combinations in duplex bearings: face-to-face (DF), back-to-back (DB), and tandem (DT).

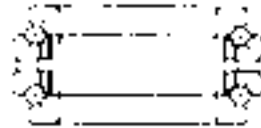


SINGLE DIRECTION THRUST BEARINGS consist of two washers having ball grooves ground into their adjacent faces with balls and cages mounted between these grooves. They are normally equipped with either pressed or machined cages and are suitable for carrying thrust loads at moderate speeds.

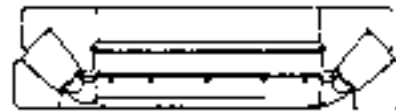


DOUBLE DIRECTION ANGULAR CONTACT THRUST BALL BEARINGS are back-to-back duplex bearings with a larger contact angle than that of normal angular contact ball bearings.

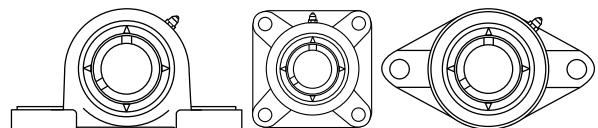
These bearings are primarily designed as thrust bearings for machine tools. They utilize machined brass cages.



SPHERICAL ROLLER THRUST BEARINGS are similar to double row spherical roller bearings, but have a greater contact angle. They are guided by ground flanges on the inner ring and operate against the spherical raceway in the outer ring. The contact angle is approximately 45°. Machined cages are normally used, and oil lubrication is recommended.

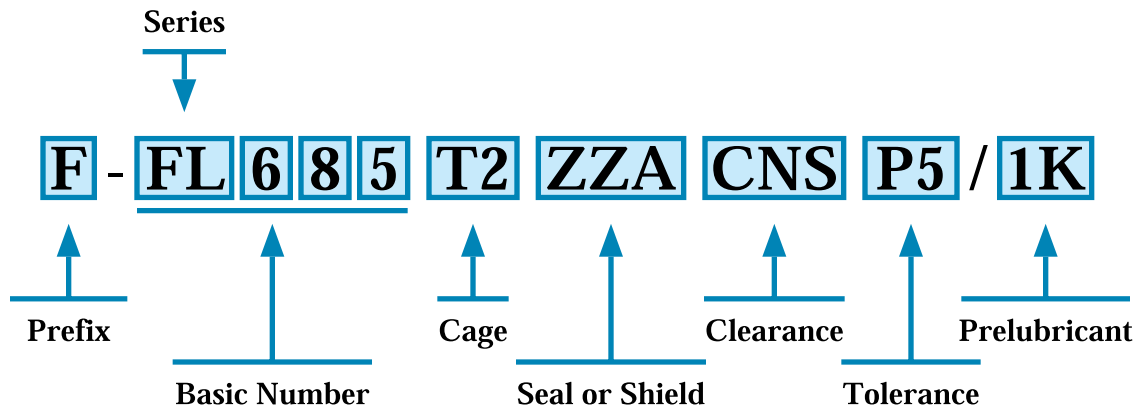


BEARING UNITS consist of a ball or roller bearing installed within a housing. The housings are most commonly made of cast iron but may also be made of other metals or nonmetallic materials. The housing provides rigidity and secure positioning for the bearing within the application. It also simplifies the task of replacing the bearing as the housing and bearing can be replaced as a complete unit.





| Open Type | Single Shield Type | Double Shield Type | Open Type | Flanged Outer Ring Single Shield Type | Double Shield Type |
|--|--|---|--|---|--|
| | | | | | |
| 67 68 69 60 62 63 R(A) | W(A)67ZA W68Z(A) (W)69Z(A) (W)60Z(A) 62Z 63Z R(A)-Z(A) | W(A)67ZZA W68ZZ(A) (W)69ZZ(A) (W)60ZZ(A) 62ZZ 63ZZ R(A)-ZZ(A) | FL67 FL68 FL69 FL60 FL62 FL63 FLR(A) | FL(A)W(A)67ZA FLW68Z(A) FL(W)69Z(A) FL(W)60Z(A) FL62Z FL63Z FLR(A)-Z(A) | FL(A)W(A)67ZZA FLW68ZZ(A) FL(W)69ZZ(A) FL(W)60ZZ(A) FL62ZZ FL63ZZ FLR(A)-ZZ(A) |
| | | | | | |
| RW | R(A)W-ZA | R(A)W-ZZA | FLRW | FLR(A)W-ZA | FLR(A)W-ZZA |



1. PREFIX

No Symbol: High carbon chrome bearing steel (equivalent to AISI E52100)
F: Martensitic stainless steel (equivalent to AISI 440C)

2. SERIES

67, 68: Metric series
69, 60: Metric series
62, 63: Metric series
R: Inch series
W: Wider than standard width (sealed type)
WA: Non-standard sizes
RA: Wider than standard width of inch series (open and sealed types)
FL: Flanged outer ring
FLA: Flanged outer ring, provided non-standard flange dimensions

3. CAGE

No Symbol: Pressed steel cage
J1: Pressed stainless steel cage
T1: Phenolic resin cage
T2: Nylon cage

4. SEAL OR SHIELD

No symbol: Open Type
Z, ZZ: Steel shield(s)
ZA, ZZA: Removable steel shield(s)
ZA1, ZZA1: Removable stainless steel shield(s)
Z1, ZZ1: Stainless steel shield(s)
LB, LLB: Non-contact type rubber seal(s)
LU, LLU: Contact type rubber seal(s)

5. INTERNAL CLEARANCE

No Symbol: Normal clearance
C2: Clearance less than normal
C3: Clearance greater than normal
C4: Clearance greater than C3
C2S: Low group of C2 clearance
CNS: Low group of normal clearance
CNM: Medium group of normal clearance
CNL: High group of normal clearance
C3S: Low group of C3 clearance
C3M: Medium group of C3 clearance
C3L: High group of C3

6. TOLERANCE

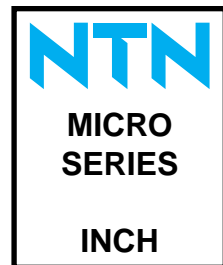
No Symbol: ISO class 0 (equivalent to ABEC 1)
P6: ISO class 6 (equivalent to ABEC 3)
P5: ISO class 5 (equivalent to ABEC 5)
P4: ISO class 4 (equivalent to ABEC 7)
P2: ISO class 2 (equivalent to ABEC 9)
P5A: ISO class 5A
P4A: ISO class 4A
PS5: NTN PS class 5
PS4: NTN PS class 4
PX1: Special tolerance

7. PRELUBRICANT

1K: Kyodo Yushi Multemp PS No. 2
2AS: Shell Alvania 2
1E: Exxon Andok C
6K: Klüber Isoflex Super LDS18
5C: Chevron SRI2
5K: Kyodo Yushi Multemp SRL
1W: Anderson Oil Winsor Lube L245X (oil)
L627: Exxon Polyrex EM

10. SPECIAL SPECIFICATION

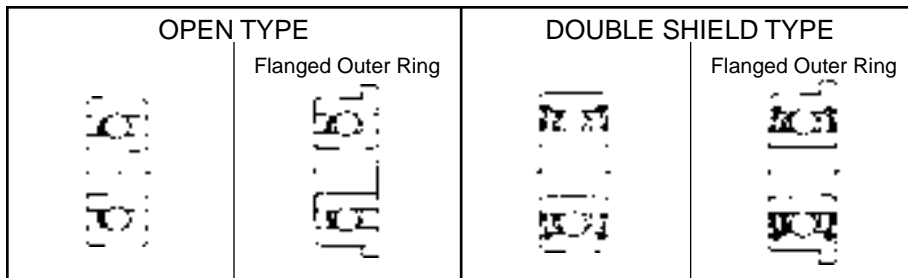
V1...Vn



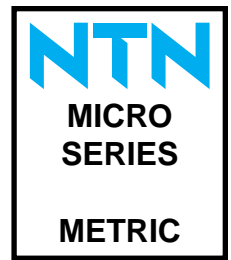
Units: INCHES

| MICRO BEARING (INCH SERIES) | | | | | | | | | | | | | | | | | |
|-----------------------------|---------------------|--------|--------|--------------|-------------------------|---------------------|--------------|--------------------|-------------|---------------------|-----------------------------------|-------|--------------|--------------------------|-----------|-----------------------|---------|
| OPEN TYPE | | | | | | | | DOUBLE SHIELD TYPE | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| Bearing No. | Boundary Dimensions | | | | Bearing No. Flange Type | Boundary Dimensions | | | Bearing No. | Boundary Dimensions | | | Flange Width | Basic Load Ratings (lbs) | | Limiting Speeds (RPM) | |
| | Bore | O.D. | Width | Min. Chamfer | | Flange O.D. | Flange Width | | | Width | Bearing No. Flange Type w/Shields | OD | | C Dynamic | Co Static | Grease | Oil |
| R01 | 0.0400 | 0.1250 | 0.0469 | 0.003 | — | — | — | — | — | — | — | — | — | 22 | 6 | 110,000 | 130,000 |
| R0 | 0.0469 | 0.1562 | 0.0625 | 0.003 | FLR0 | 0.203 | 0.013 | RA0ZZA | 0.0937 | FLRA0ZZA | 0.203 | 0.031 | 36 | 10 | 93,000 | 110,000 | |
| R1 | 0.0550 | 0.1875 | 0.0781 | 0.003 | FLR1 | 0.234 | 0.023 | RA1ZZA | 0.1094 | FLRA1ZZA | 0.234 | 0.031 | 42 | 13 | 81,000 | 95,000 | |
| R1-4 | 0.0781 | 0.2500 | 0.0937 | 0.003 | FLR1-4 | 0.296 | 0.023 | RA1-4ZZA | 0.1406 | FLRA1-4ZZA | 0.296 | 0.031 | 63 | 20 | 67,000 | 79,000 | |
| R133 | 0.0937 | 0.1875 | 0.0625 | 0.003 | FLR133 | 0.234 | 0.018 | RA133ZZA | 0.0937 | FLRA133ZZA | 0.234 | 0.031 | 28 | 9.5 | 73,000 | 85,000 | |
| R1-5 | 0.0937 | 0.3125 | 0.1094 | 0.005 | FLR1-5 | 0.359 | 0.023 | RA1-5ZZA | 0.1406 | FLRA1-5ZZA | 0.359 | 0.031 | 96 | 34 | 56,000 | 66,000 | |
| R144 | 0.1250 | 0.2500 | 0.0937 | 0.003 | FLR144 | 0.296 | 0.023 | RA144ZZA | 0.1094 | FLRA144ZZA | 0.296 | 0.031 | 64 | 22 | 59,000 | 70,000 | |
| R2-5 | 0.1250 | 0.3125 | 0.1094 | 0.003 | FLR2-5 | 0.359 | 0.023 | RA2-5ZZA | 0.1406 | FLRA2-5ZZA | 0.359 | 0.031 | 126 | 40 | 54,000 | 63,000 | |
| R2-6 | 0.1250 | 0.3750 | 0.1094 | 0.005 | — | — | — | RA2-6ZZA | 0.1406 | — | — | — | 144 | 50 | 49,000 | 58,000 | |
| R2 | 0.1250 | 0.3750 | 0.1562 | 0.012 | FLR2 | 0.440 | 0.030 | R2ZZA | 0.1562 | FLR2ZZA | 0.440 | 0.030 | 144 | 50 | 49,000 | 58,000 | |
| RA2 | 0.1250 | 0.5000 | 0.1719 | 0.012 | — | — | — | RA2ZZ | 0.1719 | — | — | — | 258 | 89 | 43,000 | 51,000 | |
| R155 | 0.1562 | 0.3125 | 0.1094 | 0.003 | FLR155 | 0.359 | 0.023 | RA155ZZA | 0.1250 | FLRA155ZZA | 0.359 | 0.036 | 76 | 30 | 51,000 | 60,000 | |
| R156 | 0.1875 | 0.3125 | 0.1094 | 0.003 | FLR156 | 0.359 | 0.023 | RA156ZZA | 0.1250 | FLRA156ZZA | 0.359 | 0.036 | 89 | 32 | 49,000 | 58,000 | |
| R166 | 0.1875 | 0.3750 | 0.1250 | 0.003 | FLR166 | 0.422 | 0.023 | R166ZZA | 0.1250 | FLRA166ZZA | 0.422 | 0.031 | 160 | 60 | 46,000 | 55,000 | |
| R3 | 0.1875 | 0.5000 | 0.1562 | 0.012 | — | — | — | — | 0.1875 | — | — | — | 295 | 110 | 41,000 | 48,000 | |
| RA3 | 0.1875 | 0.5000 | 0.1960 | 0.012 | FLRA3 | 0.565 | 0.042 | RA3ZZ | 0.1960 | FLRA3ZZ | 0.565 | 0.042 | 295 | 110 | 41,000 | 48,000 | |
| R168 | 0.2500 | 0.3750 | 0.1250 | 0.003 | FLR168 | 0.422 | 0.023 | R168ZZA | 0.1250 | FLRA168ZZA | 0.422 | 0.036 | 60 | 31 | 43,000 | 51,000 | |
| R188 | 0.2500 | 0.5000 | 0.1250 | 0.005 | FLR188 | 0.547 | 0.023 | RA188ZZA | 0.1875 | FLRA188ZZA | 0.547 | 0.045 | 186 | 84 | 39,000 | 46,000 | |
| R4 | 0.2500 | 0.6250 | 0.1960 | 0.012 | FLR4 | 0.690 | 0.042 | R4ZZ | 0.1960 | FLR4ZZ | 0.690 | 0.042 | 335 | 136 | 36,000 | 43,000 | |
| R6 | 0.3750 | 0.8750 | 0.2812 | 0.016 | FLR6 | 0.989 | 0.062 | R6ZZ | 0.2812 | FLR6ZZ | 0.989 | 0.062 | 526 | 199 | 31,000 | 37,000 | |

Bearing numbers listed above are for bearings made of high carbon chrome bearing steel; bearings made of stainless steel (equivalent to AISI 440 C) are also available upon request, for which "F" should be prefixed to the bearing numbers.



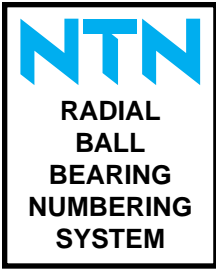
Units: Millimeters

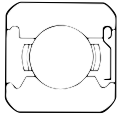
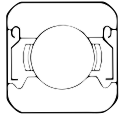
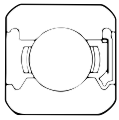
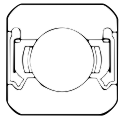
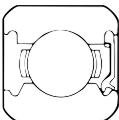
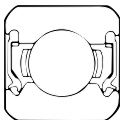


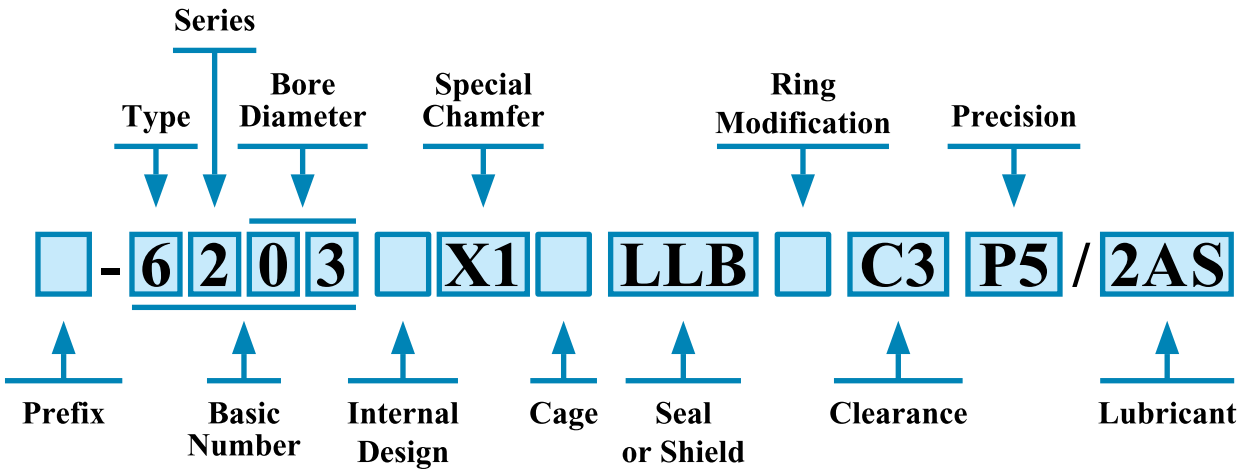
MICRO BEARING (METRIC SERIES)

| Bearing No. | Boundary Dimensions | | | | Bearing No. | Flange Dimensions | | Bearing No. | Width | Bearing No. | Flange Dimensions | | Limiting Speed (RPM) | | Basic Load Ratings (lbs) | |
|-------------|---------------------|------|-------|--------------|-------------|-------------------|-------|-------------|-------|--------------|-------------------|-------|----------------------|---------|--------------------------|-----------------------|
| | Bore | O.D. | Width | Min. Chamfer | | O.D. | Width | | | | O.D. | Width | Grease | Oil | Dynamic C | Static C ₀ |
| 68/1.5 | 1.5 | 4 | 1.2 | 0.15 | FL68/1.5 | 5.0 | 0.4 | W68/1.5ZZA | 2.0 | FLW68/1.5ZZA | 5.0 | 0.60 | 88,000 | 100,000 | 23 | 6 |
| 69/1.5A | 1.5 | 5 | 2.0 | 0.15 | FL69/1.5 | 6.5 | 0.6 | W69/1.5ZZA | 2.6 | FLW69/1.5ZZA | 6.5 | 0.80 | 79,000 | 93,000 | 53 | 15 |
| 60/1.5 | 1.5 | 6 | 2.5 | 0.15 | FL60/1.5 | 7.5 | 0.6 | W60/1.5ZZA | 3.0 | FLW60/1.5ZZA | 7.5 | 0.80 | 71,000 | 84,000 | 62 | 19 |
| 672 | 2.0 | 4 | 1.2 | 0.05 | — | — | — | W672ZZA | 2.0 | — | — | — | 83,000 | 98,000 | 23 | 8.5 |
| 682 | 2.0 | 5 | 1.5 | 0.08 | FL682 | 6.1 | 0.5 | W682ZZA | 2.3 | FLW682ZZA | 6.1 | 0.60 | 74,000 | 87,000 | 38 | 11 |
| 692 | 2.0 | 6 | 2.3 | 0.15 | FL692 | 7.5 | 0.6 | W692ZZA | 3.0 | FLW692ZZA | 7.5 | 0.80 | 67,000 | 79,000 | 63 | 20 |
| 602 | 2.0 | 7 | 2.8 | 0.15 | FL602 | 8.5 | 0.7 | W602ZZA | 3.5 | FLW602ZZA | 8.5 | 0.90 | 62,000 | 73,000 | 86 | 28 |
| 67/2.5 | 2.5 | 5 | 1.5 | 0.08 | — | — | — | W67/2.5ZZA | 2.3 | — | — | — | 70,000 | 82,000 | 34 | 13 |
| 68/2.5 | 2.5 | 6 | 1.8 | 0.08 | FL68/2.5 | 7.1 | 0.5 | W68/2.5ZZA | 2.6 | FLW68/2.5ZZA | 7.1 | 0.80 | 35,000 | 76,000 | 47 | 16 |
| 69/2.5 | 2.5 | 7 | 2.5 | 0.15 | FL69/2.5 | 8.5 | 0.7 | W69/2.5ZZA | 3.5 | FLW69/2.5ZZA | 8.5 | 0.90 | 59,000 | 70,000 | 64 | 22 |
| 60/2.5 | 2.5 | 8 | 2.8 | 0.15 | FL60/2.5 | 9.5 | 0.7 | W60/2.5ZZA | 4.0 | FLW60/2.5ZZA | 9.5 | 0.90 | 56,000 | 66,000 | 123 | 39 |
| 673 | 3.0 | 6 | 2.0 | 0.08 | FL673 | 7.2 | 0.6 | WA673ZZA | 2.5 | FLWA673ZZA | 7.2 | 0.60 | 60,000 | 71,000 | 54 | 21 |
| 683 | 3.0 | 7 | 2.0 | 0.1 | FL683 | 8.1 | 0.5 | W683ZZA | 3.0 | FLW683ZZA | 8.1 | 0.80 | 58,000 | 68,000 | 87 | 29 |
| 693 | 3.0 | 8 | 3.0 | 0.15 | FL693 | 9.5 | 0.7 | W693ZZA | 4.0 | FLW693ZZA | 9.5 | 0.90 | 54,000 | 63,000 | 126 | 40 |
| 603 | 3.0 | 9 | 3.0 | 0.15 | FL603 | 10.5 | 0.7 | W603ZZA | 5.0 | FLW603ZZA | 10.5 | 1.00 | 50,000 | 59,000 | 142 | 49 |
| 623 | 3.0 | 10 | 4.0 | 0.15 | FL623 | 11.5 | 1.0 | 623ZZA | 4.0 | FL623ZZA | 11.5 | 1.00 | 50,000 | 58,000 | 144 | 50 |
| 694 | 4.0 | 11 | 4.0 | 0.15 | FL694 | 12.5 | 1.0 | 694ZZA | 4.0 | FL694ZZA | 12.5 | 1.00 | 45,000 | 52,000 | 161 | 62 |
| 604 | 4.0 | 12 | 4.0 | 0.20 | FL604 | 13.5 | 1.0 | 604ZZ | 4.0 | FL604ZZ | 13.5 | 1.00 | 43,000 | 51,000 | 218 | 80 |
| 624 | 4.0 | 13 | 5.0 | 0.20 | FL624 | 15.0 | 1.0 | 624ZZ | 5.0 | FL624ZZ | 15.0 | 1.00 | 42,000 | 49,000 | 295 | 110 |
| 634 | 4.0 | 16 | 5.0 | 0.30 | — | — | — | 634ZZ | 5.0 | — | — | — | 37,000 | 44,000 | 395 | 153 |
| 675 | 5.0 | 8 | 2.0 | 0.08 | FL675 | 9.2 | 0.6 | WA675ZZA | 2.5 | FLWA675ZZA | 9.2 | 0.60 | 49,000 | 57,000 | 66 | 32 |
| 685 | 5.0 | 11 | 3.0 | 0.15 | FL685 | 12.5 | 0.8 | W685ZZA | 5.0 | FLW685ZZA | 12.5 | 1.00 | 43,000 | 51,000 | 161 | 63 |
| 695 | 5.0 | 13 | 4.0 | 0.20 | FL695 | 15.0 | 1.0 | 695ZZA | 4.0 | FL695ZZA | 15.0 | 1.00 | 40,000 | 47,000 | 242 | 97 |
| 605 | 5.0 | 14 | 5.0 | 0.20 | FL605 | 16.0 | 1.0 | 605ZZ | 5.0 | FL605ZZ | 16.0 | 1.00 | 39,000 | 46,000 | 299 | 114 |
| 625 | 5.0 | 16 | 5.0 | 0.30 | FL625 | 18.0 | 1.0 | 625ZZ | 5.0 | FL625ZZ | 18.0 | 1.00 | 37,000 | 44,000 | 395 | 153 |
| 635 | 5.0 | 19 | 6.0 | 0.30 | — | — | — | 635ZZ | 6.0 | — | — | — | 34,000 | 40,000 | 525 | 199 |
| 686 | 6.0 | 13 | 3.5 | 0.15 | FL686 | 15.0 | 1.0 | W686ZZA | 5.0 | FLW686ZZA | 15.0 | 1.10 | 39,000 | 46,000 | 243 | 99 |
| 696 | 6.0 | 15 | 5.0 | 0.20 | FL696 | 17.0 | 1.2 | 696ZZ | 5.0 | FL696ZZ | 17.0 | 1.20 | 37,000 | 44,000 | 305 | 119 |
| 606 | 6.0 | 17 | 6.0 | 0.30 | FL606 | 19.0 | 1.2 | 606ZZ | 6.0 | FL606ZZ | 19.0 | 1.20 | 35,000 | 42,000 | 495 | 195 |
| 626 | 6.0 | 19 | 6.0 | 0.30 | FL626 | 22.0 | 1.5 | 626ZZ | 6.0 | FL626ZZ | 22.0 | 1.50 | 34,000 | 40,000 | 525 | 199 |
| 677 | 7.0 | 11 | 2.5 | 0.10 | FL677 | 12.2 | 0.6 | WA677ZZA | 3.0 | FLWA677ZZA | 12.2 | 0.60 | 40,000 | 47,000 | 124 | 60 |
| 687 | 7.0 | 14 | 3.5 | 0.15 | FL687 | 16.0 | 1.0 | W687ZZA | 5.0 | FLW687ZZA | 16.0 | 1.10 | 37,000 | 44,000 | 264 | 115 |
| 697 | 7.0 | 17 | 5.0 | 0.30 | FL697 | 19.0 | 1.2 | 697ZZ | 5.0 | FL697ZZ | 19.0 | 1.20 | 35,000 | 41,000 | 360 | 160 |
| 607 | 7.0 | 19 | 6.0 | 0.30 | — | — | — | 607ZZ | 6.0 | — | — | — | 34,000 | 40,000 | 505 | 205 |
| 627 | 7.0 | 22 | 7.0 | 0.30 | — | — | — | 627ZZ | 7.0 | — | — | — | 32,000 | 37,000 | 750 | 315 |
| 698 | 8.0 | 19 | 6.0 | 0.30 | FL698 | 22.0 | 1.5 | 698ZZ | 6.0 | FL698ZZ | 22.0 | 1.50 | 33,000 | 39,000 | 445 | 194 |
| 608 | 8.0 | 22 | 7.0 | 0.30 | FL608 | 25.0 | 1.5 | 608ZZ | 7.0 | FL608ZZ | 25.0 | 1.50 | 32,000 | 37,000 | 750 | 315 |
| 628 | 8.0 | 24 | 8.0 | 0.30 | — | — | — | 628ZZ | 8.0 | — | — | — | 31,000 | 36,000 | 900 | 355 |
| 679 | 9.0 | 14 | 3.0 | 0.10 | — | — | — | W679ZZA | 4.5 | — | — | — | 36,000 | 42,000 | 207 | 105 |
| 689 | 9.0 | 17 | 4.0 | 0.20 | FL689 | 19.0 | 1.0 | W689ZZ | 5.0 | FLW689ZZ | 19.0 | 1.10 | 33,000 | 39,000 | 390 | 184 |
| 699 | 9.0 | 20 | 6.0 | 0.30 | — | — | — | 699ZZ | 6.0 | — | — | — | 32,000 | 38,000 | 560 | 245 |
| 609 | 9.0 | 24 | 7.0 | 0.30 | — | — | — | 609ZZ | 7.0 | — | — | — | 31,000 | 36,000 | 765 | 325 |
| 629 | 9.0 | 26 | 8.0 | 0.60 | — | — | — | 629ZZ | 8.0 | — | — | — | 30,000 | 35,000 | 1030 | 440 |

Bearing numbers listed above are for bearings made of high carbon chrome bearing steel; bearings made of stainless steel (equivalent to AISI 440 C) are also available upon request, for which "F" should be prefixed to the bearing numbers.



| SEAL STRUCTURE AND TYPE DESIGNATION | FEATURES |
|--|---|
|   Z ZZ | <p>The sealed V-slot around the inner ring creates an air and/or grease pocket which increases the labyrinth effect.</p> <p>This is a non-contact, low-friction torque type bearing assembly, which can be used effectively for general protection.</p> |
|   LB LLB | <p>Both sides of the seal edge have a circular concaved surface which creates several narrow wide gaps along the V-shaped groove of the inner ring's sealed surface. The unique design ensures a perfect labyrinth effect.</p> <p>This non-contact, low friction bearing assembly requires very little torque and is highly resistant to dust build-up.</p> |
|   LU LLU | <p>The seal edge forms a double-lip. The inner lip touches the V-slot side of the inner ring's seal surface. There is a slight gap between the inner ring and the outer lip which produces the labyrinth effect. Even if friction causes the inner lip to wear, the outer lip constricts around the inner ring to compensate, and thus constantly preserving the perfect sealing effect.</p> <p>Due to the fact that it is a contact type seal bearing, the torque will be a little greater but the seal will provide the optimum protection from dust penetration.</p> |



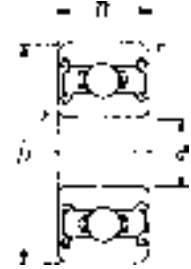
- 1. PREFIX
 - TS2: Heat stabilization for up to 320° F (160° C)
 - TS3: Heat stabilization for up to 390° F (200° C)
 - TS4: Heat stabilization for up to 480° F (250° C)
- 2. TYPE
 - 6: Single row deep groove ball bearings
 - 8, WC8: Single row deep groove ball bearings
 - BL: Maximum capacity
 - DE & DF: Special double row ball bearings
 - SC & SX: Special single row ball bearings
 - R: Inch series
 - TMB: Thermal mechanical bearing
- 3. INTERNAL DESIGN
 - A: Internal redesign, from A onward
 - U: Universal seal groove for open bearings
- 4. CHAMFER
 - Xn: Special chamfer, from 1 onward (X1, X2 ...)
- 5. CAGE
 - No Symbol: Pressed steel cage
 - J: Pressed steel cage
 - T1: Phenolic cage
 - T2: Nylon cage
 - L1: Machined brass cage
- 6. SEAL OR SHIELD
 - No Symbol: Open Type
 - LB, LLB: Non-contact rubber seal
 - LU, LLU: Double-lip contact rubber seal
 - LH, LLH: Light contact rubber seal
 - LUA, LLUA: Polyacrylic rubber seal
 - LUA1, LLUA1: Fluorocarbon rubber seal
 - Z, ZZ: Shield
 - Z1, ZZ1: Stainless steel shield
 - ZA, ZZA: Removable shield
- 7. RING MODIFICATION
 - N: Snap ring groove on outer ring, but without snap ring
 - NR: Snap ring groove on outer ring, snap ring included
 - /X.XX: Special bore, XX.XX in mm; Ex. 5/16" bore, /7.938
 - /XX.X: Special O.D., size XX.X in mm
- 8. INTERNAL CLEARANCE
 - C1: Radial clearance less than C2
 - C2: Radial clearance less than normal
 - C3: Radial clearance greater than normal
 - C4: Radial clearance greater than C3
 - C5: Radial clearance greater than C4
 - CSXX: Special radial clearance; XX is mean value in 0.001 mm units
- 9. TOLERANCE
 - P6: ISO class 6 (equivalent to ABEC 3)
 - P5: ISO class 5 (equivalent to ABEC 5)
 - P4: ISO class 4 (equivalent to ABEC 7)
 - PXn: Special tolerance, from 1 onward (PX1, PX2 ...)
 - Vn: Special requirement, from 1 onward (V1, V2 ...)
- 10. PRELUBRICANT (Typical)
 - 1E: Exxon Andok C grease
 - 1W: Anderson Oil Winsor Lube L-245X, MIL-L-6085A
 - 2AS: Shell Alvania #2 grease, MIL-G-18709A
 - 2E: Exxon Unirex N3
 - 3AS: Shell Oil Alvania #3 grease
 - 5C: Chevron SRI #2 grease, MIL-G-3545C
 - 5K: Kyodo Yushi Multemp SRL
 - 5S: Shell Aeroshell #7 grease, MIL-G-23827A
 - 9B: Mobil 28, MIL-G-81322
 - L627: Exxon Polyrex EM

SINGLE ROW RADIAL BALL BEARINGS

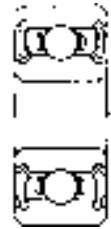
Units: INCHES



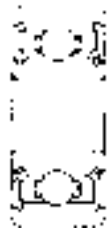
| Bearing No. | Bore | O.D. | Width | Fillet Radius | Basic Load Ratings (lbs) | | Weight (lbs) | Limiting Speed (rpm) | |
|-------------|--------|--------|-------|---------------|--------------------------|--------------------------|--------------|----------------------|--------|
| | d | D | B | (min.) r | Dynamic C | Static C ₀ | Open Type | Grease | Oil |
| RA3 | .1875 | .5000 | .1960 | 0.012 | 295 | 110 | .006 | 41,000 | 48,000 |
| R4 | .2500 | .6250 | .1960 | 0.012 | 335 | 139 | .010 | 36,000 | 43,000 |
| RA4 | .2500 | .7500 | .2812 | 0.016 | 525 | 199 | .017 | 34,000 | 40,000 |
| R6 | .3750 | .8750 | .2812 | 0.016 | 745 | 315 | .029 | 31,000 | 37,000 |
| R8 | .5000 | 1.1250 | .3125 | 0.016 | 1,150 | 540 | .040 | 26,000 | 30,000 |
| R10 | .6250 | 1.3750 | .3437 | 0.031 | 1,350 | 735 | .067 | 20,000 | 24,000 |
| R12 | .7500 | 1.6250 | .4375 | 0.031 | 1,780 | 1,000 | .100 | 18,000 | 21,000 |
| R14 | .8750 | 1.8750 | .5000 | 0.031 | 2,270 | 1,300 | .159 | 15,000 | 18,000 |
| R16 | 1.0000 | 2.0000 | .5000 | 0.031 | 2,260 | 1,340 | .178 | 14,000 | 16,000 |
| R18 | 1.1250 | 2.1250 | .5000 | 0.031 | 2,970 | 1,860 | .194 | 13,000 | 15,000 |
| R20 | 1.2500 | 2.2500 | .5000 | 0.031 | 2,650 | 1,810 | .200 | 12,000 | 14,000 |



Double Shielded
ZZ



Double Sealed
LLB
(Non-contact Type)



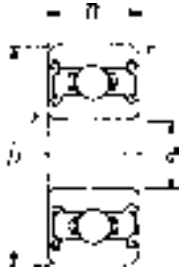
Double Sealed
LLU
(Contact Type)



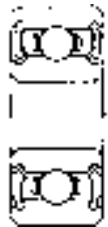
Units: INCHES
Millimeters

SINGLE ROW RADIAL BALL BEARINGS

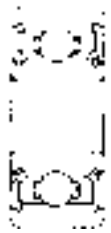
| Bearing No. | Bore d | O.D. D | Width B | Fillet Radius r | Basic Load Ratings (lbs) | | Weight (lbs) | Limiting Speed | | |
|-------------|------------|--------------|------------|--------------------|--------------------------|-----------------------|--------------|----------------|--------|--------|
| | | | | | Dynamic C | Static C ₀ | | Grease | Oil | LLU |
| 605 | .1969 5 | .5512 14 | .1969 5 | .008 .2 | 299 | 114 | .008 | 39,000 | 46,000 | — |
| 606 | .2362 6 | .6693 17 | .2362 6 | .012 .3 | 495 | 195 | .013 | 35,000 | 42,000 | — |
| 607 | .2756 7 | .7480 19 | .2362 6 | .012 .3 | 505 | 205 | .018 | 34,000 | 40,000 | 28,000 |
| 608 | .3150 8 | .8661 22 | .2756 7 | .012 .3 | 750 | 315 | .026 | 32,000 | 37,000 | 23,000 |
| 609 | .3543 9 | .9449 24 | .2756 7 | .012 .3 | 765 | 325 | .031 | 31,000 | 36,000 | 22,000 |
| 623 | .1181 3 | .3937 10 | .1575 4 | .006 .15 | 144 | 50 | .004 | 50,000 | 58,000 | — |
| 624 | .1575 4 | .5118 13 | .1969 5 | .008 .2 | 295 | 110 | .007 | 42,000 | 49,000 | — |
| 625 | .1969 5 | .6299 16 | .1969 5 | .012 .3 | 395 | 153 | .011 | 37,000 | 44,000 | — |
| 626 | .2362 6 | .7480 19 | .2362 6 | .012 .3 | 525 | 199 | .018 | 34,000 | 40,000 | 30,000 |
| 627 | .2756 7 | .8661 22 | .2756 7 | .012 .3 | 750 | 315 | .029 | 32,000 | 37,000 | 23,000 |
| 628 | .3150 8 | .9449 24 | .3150 8 | .012 .6 | 900 | 355 | .037 | 31,000 | 36,000 | 24,000 |
| 629 | .3543 9 | 1.0236 26 | .3150 8 | .024 .6 | 1,030 | 440 | .044 | 30,000 | 35,000 | 21,000 |
| 634 | .1575 4 | .6299 16 | .1969 5 | .012 .3 | 395 | 153 | .011 | 37,000 | 44,000 | — |
| 635 | .1969 5 | .7480 19 | .2362 6 | .012 .3 | 525 | 199 | .018 | 34,000 | 40,000 | 30,000 |



Double Shielded
ZZ



Double Sealed
LLB
(Non-contact Type)



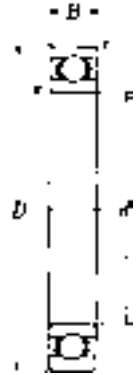
Double Sealed
LLU
(Contact Type)

SINGLE ROW RADIAL BALL BEARINGS

Units: **INCHES**
Millimeters

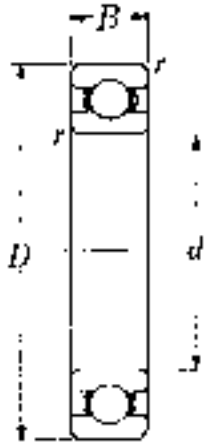


| Bearing No. | Bore | O.D. | Width | Fillet Radius | Basic Load Ratings (lbs) | | Weight (lbs) | Limiting Speed (RPM) | |
|-------------|---------------|---------------|-------------|---------------|--------------------------|-----------------------|--------------|----------------------|--------|
| | d | D | B | r | Dynamic C | Static C ₀ | | Grease | Oil |
| 6900 | .3937 10 | .8661 22 | .2362 6 | .012 .3 | 605 | 285 | .020 | 30,000 | 36,000 |
| 6901 | .4724 12 | .9449 24 | .2362 6 | .012 .3 | 650 | 330 | .024 | 27,000 | 32,000 |
| 6902B | .5906 15 | 1.1024 28 | .2756 7 | .012 .3 | 920 | 460 | .035 | 24,000 | 28,000 |
| 6903 | .6693 17 | 1.1811 30 | .2756 7 | .012 .3 | 1,050 | 580 | .040 | 22,000 | 26,000 |
| 6904 | .7874 20 | 1.4567 37 | .3543 9 | .012 .3 | 1,430 | 825 | .079 | 19,000 | 23,000 |
| 6905 | .9843 25 | 1.6535 42 | .3543 9 | .012 .3 | 1,580 | 1,020 | .093 | 16,000 | 19,000 |
| 6906 | 1.1811 30 | 1.8504 47 | .3543 9 | .012 .3 | 1,630 | 1,130 | .106 | 14,000 | 17,000 |
| 6907A | 1.3780 35 | 2.1654 55 | .3937 10 | .024 .6 | 2,510 | 1,670 | .163 | 12,000 | 15,000 |
| 6908A | 1.5748 40 | 2.4409 62 | .4724 12 | .024 .6 | 3,250 | 2,300 | .243 | 11,000 | 13,000 |
| 6909A | 1.7717 45 | 2.6772 68 | .4724 12 | .024 .6 | 3,400 | 2,530 | .282 | 9,800 | 12,000 |
| 6910B | 1.9685 50 | 2.8346 72 | .4724 12 | .024 .6 | 3,500 | 2,750 | .291 | 8,900 | 11,000 |
| 6911 | 2.1654 55 | 3.1496 80 | .5118 13 | .039 1.0 | 3,600 | 2,980 | .397 | 8,200 | 9,600 |
| 6912 | 2.3622 60 | 3.3465 85 | .5118 13 | .039 1.0 | 3,700 | 3,200 | .425 | 7,600 | 8,900 |
| 6913 | 2.5591 65 | 3.5433 90 | .5118 13 | .039 1.0 | 3,900 | 3,600 | .454 | 7,000 | 8,200 |
| 6914 | 2.7559 70 | 3.9370 100 | .6299 16 | .039 1.0 | 5,350 | 4,750 | .736 | 6,500 | 7,700 |
| 6915 | 2.9528 75 | 4.1339 105 | .6299 16 | .039 1.0 | 5,500 | 5,100 | .778 | 6,100 | 7,200 |
| 6916 | 3.1496 80 | 4.3307 110 | .6299 16 | .039 1.0 | 5,600 | 5,400 | .822 | 5,700 | 6,700 |
| 6917 | 3.3465 85 | 4.7244 120 | .7087 18 | .043 1.1 | 7,200 | 6,650 | 1.18 | 5,400 | 6,300 |
| 6918 | 3.5433 90 | 4.9213 125 | .7087 18 | .043 1.1 | 7,400 | 7,100 | 1.22 | 5,100 | 6,000 |
| 6919 | 3.7402 95 | 5.1181 130 | .7087 18 | .043 1.1 | 7,550 | 7,550 | 1.28 | 4,800 | 5,700 |
| 6920 | 3.9370 100 | 5.5118 140 | .7874 20 | .043 1.1 | 9,250 | 8,900 | 1.73 | 4,500 | 5,300 |
| 6921 | 4.1339 105 | 5.7087 145 | .7874 20 | .043 1.1 | 9,550 | 9,450 | 1.80 | 4,300 | 5,100 |
| 6922 | 4.3307 110 | 5.9055 150 | .7874 20 | .043 1.1 | 9,800 | 10,000 | 1.87 | 4,100 | 4,800 |
| 6924 | 4.7244 120 | 6.4961 165 | .8661 22 | .043 1.1 | 11,900 | 12,200 | 2.54 | 3,800 | 4,400 |





Units: INCHES
Millimeters



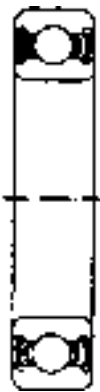
Open Type
60



Single
Shielded
60Z

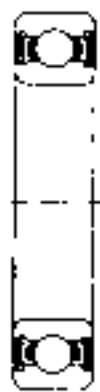


Double
Shielded
60ZZ



Double
Sealed
60LLU

(Contact Type)



Double
Sealed
60LLB

(Non-Contact Type)

SINGLE ROW RADIAL BALL BEARINGS

| Bearing No. | Bore d | O.D. D | Width B | Fillet Radii | | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|---------------|----------------|--------------|--------------|----------------|--------------------------|--------------------------|--------------|
| | | | | r | r ₁ | Dynamic C | Static C ₀ | |
| 6000 | .3937 10 | 1.0236 26 | .3150 8 | .012 .3 | — — | 1,030 | 440 | .042 |
| 6001 | .4724 12 | 1.1024 28 | .3150 8 | .012 .3 | — — | 1,150 | 540 | .049 |
| 6002 | .5906 15 | 1.2598 32 | .3543 9 | .012 .3 | — — | 1,260 | 635 | .066 |
| 6003 | .6693 17 | 1.3780 35 | .3937 10 | .012 .3 | — — | 1,530 | 755 | .086 |
| 6004 | .7874 20 | 1.6535 42 | .4724 12 | .024 .6 | .020 .5 | 2,110 | 1,140 | .152 |
| 60/22 | .8661 22 | 1.7323 44 | .4724 12 | .024 .6 | .020 .5 | 2,110 | 1,150 | .163 |
| 6005 | .9843 25 | 1.8504 47 | .4724 12 | .024 .6 | .020 .5 | 2,260 | 1,320 | .176 |
| 60/28 | 1.1024 28 | 2.0472 52 | .4724 12 | .024 .6 | .020 .5 | 2,800 | 1,660 | .216 |
| 6006 | 1.1811 30 | 2.1654 55 | .5118 13 | .039 1.0 | .020 .5 | 2,970 | 1,860 | .256 |
| 60/32A | 1.2598 32 | 2.2835 58 | .5118 13 | .039 1.0 | .020 .5 | 3,400 | 2,060 | .284 |
| 6007 | 1.3780 35 | 2.4409 62 | .5512 14 | .039 1.0 | .020 .5 | 3,600 | 2,310 | .342 |
| 6008 | 1.5748 40 | 2.6772 68 | .5906 15 | .039 1.0 | .020 .5 | 3,150 | 2,590 | .423 |
| 6009 | 1.7717 45 | 2.9528 75 | .6299 16 | .039 1.0 | .020 .5 | 4,700 | 3,400 | .540 |
| 6010 | 1.9685 50 | 3.1496 80 | .6299 16 | .039 1.0 | .020 .5 | 4,900 | 3,750 | .575 |
| 6011 | 2.1654 55 | 3.5433 90 | .7087 18 | .043 1.1 | .020 .5 | 6,350 | 4,800 | .849 |
| 6012 | 2.3622 60 | 3.7402 95 | .7087 18 | .043 1.1 | .020 .5 | 6,600 | 5,200 | .915 |
| 6013 | 2.5591 65 | 3.9370 100 | .7087 18 | .043 1.1 | .020 .5 | 6,850 | 5,650 | .959 |
| 6014 | 2.7559 70 | 4.3307 110 | .7874 20 | .043 1.1 | .020 .5 | 8,550 | 6,950 | 1.33 |
| 6015 | 2.9528 75 | 4.5276 115 | .7874 20 | .043 1.1 | .020 .5 | 8,900 | 7,550 | 1.41 |
| 6016 | 3.1496 80 | 4.9213 125 | .8661 22 | .043 1.1 | .020 .5 | 10,700 | 8,950 | 1.87 |
| 6017 | 3.3465 85 | 5.1181 130 | .8661 22 | .043 1.1 | .020 .5 | 11,100 | 9,700 | 1.96 |
| 6018 | 3.5433 90 | 5.5118 140 | .9449 24 | .059 1.5 | .020 .5 | 13,100 | 11,200 | 2.56 |
| 6019 | 3.7402 95 | 5.7087 145 | .9449 24 | .059 1.5 | .020 .5 | 13,600 | 12,100 | 2.67 |
| 6020 | 3.9370 100 | 5.9055 150 | .9449 24 | .059 1.5 | .020 .5 | 13,500 | 12,200 | 2.76 |
| 6021 | 4.1339 105 | 6.2992 160 | 1.0236 26 | .079 2.0 | .020 .5 | 16,300 | 14,800 | 3.51 |
| 6022 | 4.3307 110 | 6.6929 170 | 1.1024 28 | .079 2.0 | .020 .5 | 18,400 | 16,400 | 4.32 |
| 6024 | 4.7244 120 | 7.0866 180 | 1.1024 28 | .079 2.0 | — — | 19,100 | 17,800 | 4.56 |
| 6026 | 5.1181 130 | 7.8740 200 | 1.2992 33 | .079 2.0 | — — | 23,900 | 22,700 | 6.97 |
| 6028 | 5.5118 140 | 8.2677 210 | 1.2992 33 | .079 2.0 | — — | 24,700 | 24,400 | 7.39 |
| 6030 | 5.9055 150 | 8.8583 225 | 1.3780 35 | .083 2.1 | — — | 28,300 | 28,300 | 8.99 |
| 6032 | 6.2992 160 | 9.4488 240 | 1.4961 38 | .083 2.1 | — — | 32,000 | 32,500 | 11.1 |
| 6034 | 6.6929 170 | 10.2362 260 | 1.6535 42 | .083 2.1 | — — | 38,000 | 38,500 | 17.5 |
| 6036 | 7.0866 180 | 11.0236 280 | 1.8110 46 | .083 2.1 | — — | 42,500 | 44,500 | 22.7 |
| 6038 | 7.4803 190 | 11.4173 290 | 1.8110 46 | .083 2.1 | — — | 44,000 | 48,500 | 23.8 |
| 6040 | 7.8740 200 | 12.2047 310 | 2.0079 51 | .083 2.1 | — — | 49,000 | 54,500 | 30.6 |

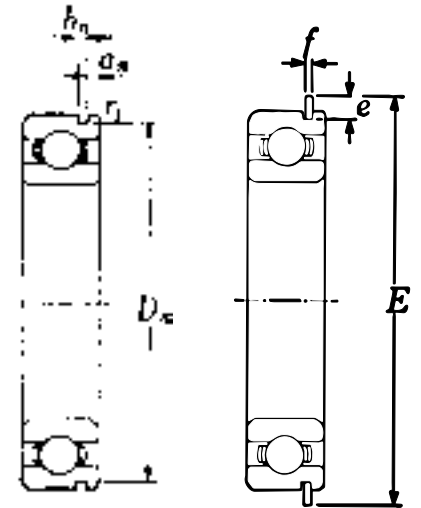
Continued on Page 22

SINGLE ROW RADIAL BALL BEARINGS

Units: **INCHES**
Millimeters



| Snap Ring Groove Dimensions | | | Snap Ring Dimensions | | | Limiting Speed (RPM) | | | Bore Diameter No. |
|-----------------------------|-------------|-------------|----------------------|---------|------|----------------------|--------|---------|-------------------|
| D_n (max) | a_n (max) | b_n (min) | E (max) | f (max) | e | Grease | Oil | LU, LLU | |
| — | — | — | — | — | — | 29,000 | 34,000 | 21,000 | 00 |
| — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | 26,000 | 30,000 | 18,000 | 01 |
| — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | 22,000 | 26,000 | 15,000 | 02 |
| — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | 20,000 | 24,000 | 14,000 | 03 |
| — | — | — | — | — | — | — | — | — | — |
| 1.565 | .081 | .065 | 1.82 | .042 | .125 | 18,000 | 21,000 | 11,000 | 04 |
| 39.75 | 2.06 | 1.65 | 46.3 | 1.07 | 3.17 | — | — | — | — |
| 1.644 | .081 | .053 | 1.90 | .044 | .129 | 17,000 | 20,000 | 10,000 | /22 |
| 41.75 | 2.06 | 1.35 | 48.3 | 1.12 | 3.28 | — | — | — | — |
| 1.756 | .081 | .065 | 2.07 | .042 | .156 | 15,000 | 18,000 | 9,400 | 05 |
| 44.60 | 2.06 | 1.65 | 52.7 | 1.07 | 3.96 | — | — | — | — |
| 1.958 | .081 | .053 | 2.28 | .044 | .161 | 14,000 | 16,000 | 8,400 | /28 |
| 49.73 | 2.06 | 1.35 | 57.9 | 1.12 | 4.09 | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |
| 2.071 | .082 | .065 | 2.39 | .042 | .156 | 13,000 | 15,000 | 7,700 | 06 |
| 52.60 | 2.08 | 1.65 | 60.7 | 1.07 | 3.96 | — | — | — | — |
| 2.189 | .082 | .053 | 2.51 | .044 | .159 | 12,000 | 15,000 | 7,200 | /32 |
| 55.60 | 2.08 | 1.35 | 63.7 | 1.12 | 4.05 | — | — | — | — |
| 2.347 | .082 | .087 | 2.67 | .065 | .156 | 12,000 | 14,000 | 6,800 | 07 |
| 59.61 | 2.08 | 2.21 | 67.7 | 1.65 | 3.96 | — | — | — | — |
| 2.552 | .098 | .087 | 2.94 | .065 | .188 | 10,000 | 12,000 | 6,100 | 08 |
| 64.82 | 2.49 | 2.21 | 74.6 | 1.65 | 4.78 | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |
| 2.828 | .098 | .087 | 3.21 | .065 | .188 | 9,200 | 11,000 | 5,400 | 09 |
| 71.83 | 2.49 | 2.21 | 81.6 | 1.65 | 4.78 | — | — | — | — |
| 3.024 | .098 | .087 | 3.41 | .065 | .188 | 8,400 | 9,800 | 5,000 | 10 |
| 76.81 | 2.49 | 2.21 | 86.6 | 1.65 | 4.78 | — | — | — | — |
| 3.417 | .113 | .118 | 3.80 | .095 | .188 | 7,700 | 9,000 | 4,500 | 11 |
| 86.79 | 2.87 | 3.00 | 96.5 | 2.41 | 4.78 | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |
| 3.615 | .113 | .118 | 4.00 | .095 | .188 | 7,000 | 8,300 | 4,100 | 12 |
| 91.82 | 2.87 | 3.00 | 101.6 | 2.41 | 4.78 | — | — | — | — |
| 3.811 | .113 | .118 | 4.19 | .095 | .188 | 6,500 | 7,700 | 3,900 | 13 |
| 96.80 | 2.87 | 3.00 | 106.5 | 2.41 | 4.78 | — | — | — | — |
| 4.205 | .113 | .118 | 4.59 | .095 | .188 | 6,100 | 7,100 | 3,600 | 14 |
| 106.81 | 2.87 | 3.00 | 116.6 | 2.41 | 4.78 | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |
| 4.402 | .113 | .118 | 4.79 | .095 | .188 | 5,700 | 6,700 | 3,300 | 15 |
| 111.81 | 2.87 | 3.00 | 121.6 | 2.41 | 4.78 | — | — | — | — |
| 4.733 | .113 | .134 | 5.30 | .109 | .281 | 5,300 | 6,200 | 3,100 | 16 |
| 120.22 | 2.87 | 3.40 | 134.7 | 2.77 | 7.14 | — | — | — | — |
| 4.930 | .113 | .134 | 5.50 | .109 | .281 | 5,000 | 5,900 | 2,900 | 17 |
| 125.22 | 2.87 | 3.40 | 139.7 | 2.77 | 7.14 | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |
| 5.324 | .146 | .134 | 5.89 | .109 | .281 | 4,700 | 5,600 | 2,800 | 18 |
| 135.23 | 3.71 | 3.40 | 149.7 | 2.77 | 7.14 | — | — | — | — |
| 5.521 | .146 | .134 | 6.09 | .109 | .281 | 4,500 | 5,300 | 2,600 | 19 |
| 140.23 | 3.71 | 3.40 | 154.7 | 2.77 | 7.1 | — | — | — | — |
| 5.718 | .146 | .134 | 6.29 | .109 | .281 | 4,200 | 5,000 | 2,600 | 20 |
| 145.24 | 3.71 | 3.40 | 159.7 | 2.77 | 7.14 | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |
| 6.111 | .146 | .134 | 6.68 | .109 | .281 | 4,000 | 4,700 | 2,400 | 21 |
| 155.22 | 3.71 | 3.40 | 169.7 | 2.77 | 7.14 | — | — | — | — |
| 6.443 | .146 | .150 | 7.20 | .120 | .375 | 3,800 | 4,500 | 2,300 | 22 |
| 163.65 | 3.71 | 3.81 | 182.9 | 3.05 | 9.53 | — | — | — | — |
| — | — | — | — | — | — | 3,500 | 4,100 | 2,100 | 24 |
| — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | 3,200 | 3,800 | 1,900 | 26 |
| — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | 3,000 | 3,500 | 1,800 | 28 |
| — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | 2,800 | 3,200 | 1,700 | 30 |
| — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | 2,600 | 3,000 | 1,600 | 32 |
| — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | 2,400 | 2,800 | — | 34 |
| — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | 2,300 | 2,700 | — | 36 |
| — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | 2,100 | 2,500 | — | 38 |
| — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | 2,000 | 2,400 | — | 40 |



With Snap Ring Groove
60N

With Snap Ring
60NR

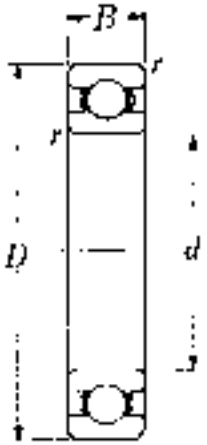


Single Shielded With Snap Ring
60ZNR

Continued on Page 23



Units: INCHES
Millimeters



Open Type
60

SINGLE ROW RADIAL BALL BEARINGS

| Bearing No. | Bore | | O.D. | Width | Fillet Radii | | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|--------------|--------------|-------------|-------------|--------------|----------|--------------------------|------------------|--------------|
| | <i>d</i> | <i>D</i> | | | <i>B</i> | <i>r</i> | <i>r₁</i> | Dynamic <i>C</i> | |
| 6044 | 8.66 220 | 13.39 340 | 2.205 56 | .118 3.0 | — | 54,500 | 65,000 | 34.6 | |
| 6048 | 9.45 240 | 14.17 360 | 1.102 28 | .118 3.0 | — | 56,000 | 70,000 | 37.0 | |
| 6052 | 10.24 260 | 15.75 400 | 2.559 65 | .157 4.0 | — | 65,500 | 84,500 | 55.1 | |
| 6056 | 11.02 280 | 16.54 420 | 2.559 65 | .157 4.0 | — | 73,000 | 95,000 | 68.3 | |
| 6060 | 11.81 300 | 18.11 460 | 2.913 74 | .157 4.0 | — | 80,000 | 108,000 | 96.6 | |
| 6064 | 12.60 320 | 18.90 480 | 2.913 74 | .157 4.0 | — | 83,500 | 119,000 | 102 | |
| 6068 | 13.39 340 | 20.47 520 | 3.228 82 | .197 5.0 | — | 94,000 | 137,000 | 136 | |
| 6072 | 14.17 360 | 21.26 540 | 3.228 82 | .197 5.0 | — | 98,500 | 150,000 | 143 | |
| 6076 | 14.96 380 | 22.05 560 | 3.228 82 | .197 5.0 | — | 103,000 | 163,000 | 149 | |
| 6080 | 15.75 400 | 23.62 600 | 3.543 90 | .197 5.0 | — | 114,000 | 185,000 | 193 | |
| 6084 | 16.54 420 | 24.41 620 | 3.543 90 | .197 5.0 | — | 119,000 | 201,000 | 201 | |

SINGLE ROW RADIAL BALL BEARINGS

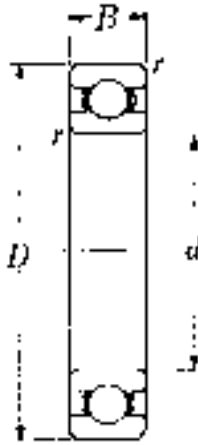
Units: **INCHES**
Millimeters



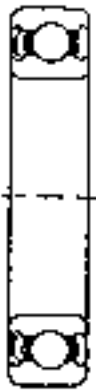
| Snap Ring Groove Dimensions | | | Snap Ring Dimensions | | | Limiting Speed (RPM) | | | Bore Diameter No. |
|-----------------------------|-------------|-------------|----------------------|-----------|-----|----------------------|-------|---------|-------------------|
| $D_n (max)$ | $a_n (max)$ | $b_n (min)$ | $E (max)$ | $f (max)$ | e | Grease | Oil | LU, LLU | |
| — | — | — | — | — | — | 1,800 | 2,200 | — | 44 |
| — | — | — | — | — | — | 1,700 | 2,000 | — | 48 |
| — | — | — | — | — | — | 1,500 | 1,800 | — | 52 |
| — | — | — | — | — | — | 1,400 | 1,600 | — | 56 |
| — | — | — | — | — | — | 1,300 | 1,500 | — | 60 |
| — | — | — | — | — | — | 1,200 | 1,400 | — | 64 |
| — | — | — | — | — | — | 1,100 | 1,300 | — | 68 |
| — | — | — | — | — | — | 1,100 | 1,200 | — | 72 |
| — | — | — | — | — | — | 990 | 1,200 | — | 76 |
| — | — | — | — | — | — | 930 | 1,100 | — | 80 |
| — | — | — | — | — | — | 880 | 1,000 | — | 84 |



Units: INCHES
Millimeters



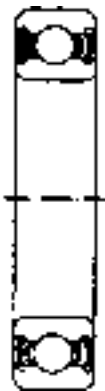
Open Type
62



Single
Shielded
62Z

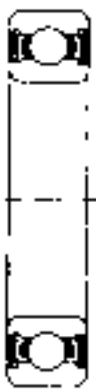


Double
Shielded
62ZZ



Double
Sealed
62LLU

(Contact Type)



Double
Sealed
62LLB

(Non-Contact Type)

SINGLE ROW RADIAL BALL BEARINGS

| Bearing No. | Bore d | O.D. D | Width B | Fillet Radii | | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|-----------------|---------------|--------------|--------------|----------------|--------------------------|--------------------------|--------------|
| | | | | r | r ₁ | Dynamic C | Static C ₀ | |
| 6200 | .3937 10 | 1.1811 30 | .3543 9 | .024 .6 | .020 .5 | 1,150 | 540 | .071 |
| 6201 | .4724 12 | 1.2598 32 | .3937 10 | .024 .6 | .020 .5 | 1,370 | 615 | .082 |
| 6201/12.69 | .4996 12.69 | 1.2598 32 | .3937 10 | .024 .6 | .020 .5 | 1,370 | 615 | .082 |
| 6201/12.695 | .4998 12.695 | 1.2598 32 | .3937 10 | .024 .6 | .020 .5 | 1,370 | 615 | .082 |
| 6201/12.7 | .5000 12.7 | 1.2598 32 | .3937 10 | .024 .6 | .020 .5 | 1,370 | 615 | .082 |
| 6201/13 | .5118 13 | 1.2598 32 | .3937 10 | .024 .6 | .020 .5 | 1,370 | 615 | .082 |
| 6202 | .5906 15 | 1.3780 35 | .4331 11 | .024 .6 | — | 1,740 | 805 | .099 |
| 6202/12.71 | .5004 12.71 | 1.3780 35 | .4331 11 | .024 .6 | — | 1,740 | 805 | .099 |
| 6202/15.875 | .6250 15.875 | 1.3780 35 | .4331 11 | .024 .6 | — | 1,740 | 805 | .099 |
| 6202/16 | .6299 16 | 1.3780 35 | .4331 11 | .024 .6 | — | 1,740 | 805 | .099 |
| 6203 | .6693 17 | 1.5748 40 | .4724 12 | .024 .6 | .020 .5 | 2,160 | 1,030 | .143 |
| 6203/12.7 | .5000 12.7 | 1.5748 40 | .4724 12 | .024 .6 | .020 .5 | 2,160 | 1,030 | .143 |
| 6203/15.875 | .6250 15.875 | 1.5748 40 | .4724 12 | .024 .6 | .020 .5 | 2,160 | 1,030 | .143 |
| 6203/16 | .6299 16 | 1.5748 40 | .4724 12 | .024 .6 | .020 .5 | 2,160 | 1,030 | .143 |
| 6203/19.05 | .7500 19.05 | 1.5748 40 | .4724 12 | .024 .6 | .020 .5 | 2,160 | 1,030 | .143 |
| 6204 | .7874 20 | 1.8504 47 | .5512 14 | .039 1 | .020 .5 | 2,890 | 1,500 | .234 |
| 62/22 | .8661 22 | 1.9685 50 | .5512 14 | .039 1 | .020 .5 | 2,900 | 1,530 | .258 |
| 6205 | .9843 25 | 2.0472 52 | .5906 15 | .039 1 | .020 .5 | 3,150 | 1,770 | .282 |
| 6205/25.4 | 1.0000 25.4 | 2.0472 52 | .5906 15 | .039 1 | .020 .5 | 3,150 | 1,770 | .282 |
| 62/28 | 1.1024 28 | 2.2835 58 | .6299 16 | .039 1 | .020 .5 | 4,000 | 2,190 | .377 |
| 6206 | 1.1811 30 | 2.4409 62 | .6299 16 | .039 1 | .020 .5 | 4,400 | 2,540 | .439 |
| 62/32 | 1.2598 32 | 2.5591 65 | .6693 17 | .039 1 | .020 .5 | 4,650 | 2,610 | .498 |
| 6207 | 1.3780 35 | 2.8346 72 | .6693 17 | .043 1.1 | .020 .5 | 5,750 | 3,450 | .635 |
| 6208 | 1.5748 40 | 3.1496 80 | .7087 18 | .043 1.1 | .020 .5 | 6,550 | 4,000 | .807 |
| 6209 | 1.7717 45 | 3.3465 85 | .7480 19 | .043 1.1 | .020 .5 | 7,350 | 4,600 | .897 |
| 6210 | 1.9685 50 | 3.5433 90 | .7874 20 | .043 1.1 | .020 .5 | 7,900 | 5,200 | 1.02 |
| 6211 | 2.1654 55 | 3.9370 100 | .8268 21 | .059 1.5 | .020 .5 | 9,750 | 6,550 | 1.34 |
| 6212 | 2.3622 60 | 4.3307 110 | .8661 22 | .059 1.5 | .020 .5 | 11,800 | 8,150 | 1.73 |
| 6213 | 2.5591 65 | 4.7244 120 | .9055 23 | .059 1.5 | .020 .5 | 12,900 | 9,000 | 2.18 |
| 6214 | 2.7559 70 | 4.9213 125 | .9449 24 | .059 1.5 | .020 .5 | 14,000 | 9,900 | 2.36 |
| 6215 | 2.9528 75 | 5.1181 130 | .9843 25 | .059 1.5 | .020 .5 | 14,900 | 11,100 | 2.60 |
| 6216 | 3.1496 80 | 5.5118 140 | 1.0236 26 | .079 2.0 | .020 .5 | 16,500 | 11,900 | 3.09 |
| 6217 | 3.3465 85 | 5.9055 150 | 1.1024 28 | .079 2.0 | .020 .5 | 18,700 | 14,300 | 3.95 |
| 6218 | 3.5433 90 | 6.2992 160 | 1.1811 30 | .079 2.0 | .020 .5 | 21,600 | 16,100 | 4.74 |
| 6219 | 3.7402 95 | 6.6929 170 | 1.2598 32 | .083 2.1 | .020 .5 | 24,500 | 18,400 | 5.78 |
| 6220 | 3.9370 100 | 7.0866 180 | 1.3386 34 | .083 2.1 | .012 .5 | 27,500 | 20,900 | 6.92 |

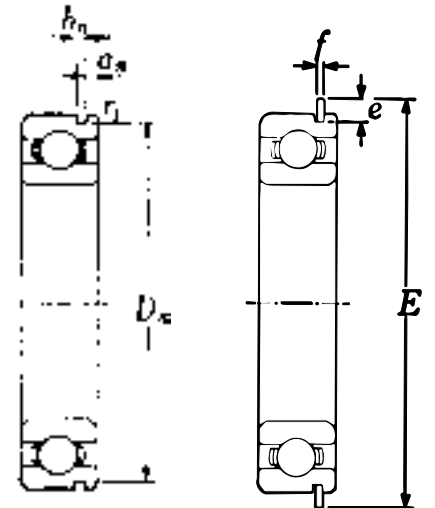
Continued on Page 26

SINGLE ROW RADIAL BALL BEARINGS

Units: INCHES
Millimeters



| Snap Ring Groove Dimensions | | | Snap Ring Dimensions | | | Limiting Speed (RPM) | | | Bore Diameter No. |
|-----------------------------|-------------|-------------|----------------------|------|------|----------------------|--------|--------|-------------------|
| D_n (max) | a_n (max) | b_n (min) | E (max) | f | e | Grease | Oil | LLU | |
| 1.109 | .081 | .065 | 1.37 | .042 | .125 | 25,000 | 30,000 | 18,000 | 00 |
| 28.17 | 2.06 | 1.65 | 34.7 | 1.07 | 3.17 | | | | |
| 1.187 | .081 | .065 | 1.44 | .042 | .125 | 22,000 | 26,000 | 16,000 | 01 |
| 30.15 | 2.06 | 1.65 | 36.7 | 1.07 | 3.17 | | | | |
| 1.187 | .081 | .065 | 1.44 | .042 | .125 | 22,000 | 26,000 | 16,000 | 01 |
| 30.15 | 2.06 | 1.65 | 36.7 | 1.07 | 3.17 | | | | |
| 1.187 | .081 | .065 | 1.44 | .042 | .125 | 22,000 | 26,000 | 16,000 | 01 |
| 30.15 | 2.06 | 1.65 | 36.7 | 1.07 | 3.17 | | | | |
| 1.187 | .081 | .065 | 1.44 | .042 | .125 | 22,000 | 26,000 | 16,000 | 01 |
| 30.15 | 2.06 | 1.65 | 36.7 | 1.07 | 3.17 | | | | |
| 1.306 | .081 | .065 | 1.56 | .042 | .125 | 19,000 | 23,000 | 15,000 | 02 |
| 33.17 | 2.06 | 1.65 | 39.7 | 1.07 | 3.17 | | | | |
| 1.306 | .081 | .065 | 1.56 | .042 | .125 | 19,000 | 23,000 | 15,000 | 02 |
| 33.17 | 2.06 | 1.65 | 39.7 | 1.07 | 3.17 | | | | |
| 1.306 | .081 | .065 | 1.56 | .042 | .125 | 19,000 | 23,000 | 15,000 | 02 |
| 33.17 | 2.06 | 1.65 | 39.7 | 1.07 | 3.17 | | | | |
| 1.306 | .081 | .065 | 1.56 | .042 | .125 | 19,000 | 23,000 | 15,000 | 02 |
| 33.17 | 2.06 | 1.65 | 39.7 | 1.07 | 3.17 | | | | |
| 1.500 | .081 | .065 | 1.76 | .042 | .125 | 18,000 | 21,000 | 12,000 | 03 |
| 38.10 | 2.06 | 1.65 | 44.6 | 1.07 | 3.17 | | | | |
| 1.500 | .081 | .065 | 1.76 | .042 | .125 | 18,000 | 21,000 | 12,000 | 03 |
| 38.10 | 2.06 | 1.65 | 44.6 | 1.07 | 3.17 | | | | |
| 1.500 | .081 | .065 | 1.76 | .042 | .125 | 18,000 | 21,000 | 12,000 | 03 |
| 38.10 | 2.06 | 1.65 | 44.6 | 1.07 | 3.17 | | | | |
| 1.500 | .081 | .065 | 1.76 | .042 | .125 | 18,000 | 21,000 | 12,000 | 03 |
| 38.10 | 2.06 | 1.65 | 44.6 | 1.07 | 3.17 | | | | |
| 1.500 | .081 | .065 | 1.76 | .042 | .125 | 18,000 | 21,000 | 12,000 | 03 |
| 38.10 | 2.06 | 1.65 | 44.6 | 1.07 | 3.17 | | | | |
| 1.756 | .097 | .065 | 2.07 | .042 | .156 | 16,000 | 18,000 | 10,000 | 04 |
| 44.60 | 2.46 | 1.65 | 52.7 | 1.07 | 3.96 | | | | |
| 1.874 | .097 | .065 | 2.19 | .042 | .156 | 14,000 | 17,000 | 9,700 | /22 |
| 47.60 | 2.46 | 1.65 | 55.7 | 1.07 | 3.96 | | | | |
| 1.958 | .097 | .065 | 2.28 | .042 | .156 | 13,000 | 15,000 | 8,900 | 05 |
| 49.73 | 2.46 | 1.65 | 57.9 | 1.07 | 3.96 | | | | |
| 1.958 | .097 | .065 | 2.28 | .042 | .156 | 13,000 | 15,000 | 8,900 | 05 |
| 49.73 | 2.46 | 1.65 | 57.9 | 1.07 | 3.96 | | | | |
| 2.189 | .097 | .065 | 2.51 | .042 | .156 | 12,000 | 14,000 | 8,100 | /28 |
| 55.60 | 2.46 | 1.65 | 63.7 | 1.07 | 3.96 | | | | |
| 2.347 | .129 | .087 | 2.67 | .065 | .156 | 11,000 | 13,000 | 7,300 | 06 |
| 59.61 | 3.28 | 2.21 | 67.7 | 1.65 | 3.96 | | | | |
| 2.465 | .129 | .087 | 2.78 | .065 | .156 | 11,000 | 12,000 | 7,100 | /32 |
| 62.61 | 3.28 | 2.21 | 70.7 | 1.65 | 3.96 | | | | |
| 2.709 | .129 | .087 | 3.09 | .065 | .188 | 9,800 | 11,000 | 6,300 | 07 |
| 68.81 | 3.28 | 2.21 | 78.6 | 1.65 | 4.77 | | | | |
| 3.024 | .129 | .087 | 3.41 | .065 | .188 | 8,700 | 10,000 | 5,600 | 08 |
| 76.81 | 3.28 | 2.21 | 86.6 | 1.65 | 4.77 | | | | |
| 3.221 | .129 | .087 | 3.61 | .065 | .188 | 7,800 | 9,200 | 5,200 | 09 |
| 81.81 | 3.28 | 2.21 | 91.6 | 1.65 | 4.77 | | | | |
| 3.417 | .129 | .118 | 3.80 | .095 | .188 | 7,100 | 8,300 | 4,700 | 10 |
| 86.79 | 3.28 | 3.00 | 96.5 | 2.41 | 4.77 | | | | |
| 3.811 | .129 | .118 | 4.19 | .095 | .188 | 6,400 | 7,600 | 4,300 | 11 |
| 96.80 | 3.28 | 3.00 | 106.5 | 2.41 | 4.77 | | | | |
| 4.205 | .129 | .118 | 4.59 | .095 | .188 | 6,000 | 7,000 | 3,800 | 12 |
| 106.81 | 3.28 | 3.00 | 116.6 | 2.41 | 4.77 | | | | |
| 4.536 | .160 | .134 | 5.11 | .109 | .281 | 5,500 | 6,500 | 3,600 | 13 |
| 115.21 | 4.06 | 3.40 | 129.7 | 2.77 | 7.13 | | | | |
| 4.733 | .160 | .134 | 5.30 | .109 | .281 | 5,100 | 6,000 | 3,400 | 14 |
| 120.22 | 4.06 | 3.40 | 134.7 | 2.77 | 7.13 | | | | |
| 4.930 | .160 | .134 | 5.50 | .109 | .281 | 4,800 | 5,600 | 3,200 | 15 |
| 125.22 | 4.06 | 3.40 | 139.7 | 2.77 | 7.13 | | | | |
| 5.324 | .193 | .134 | 5.89 | .109 | .281 | 4,500 | 5,300 | 3,000 | 16 |
| 135.23 | 4.90 | 3.40 | 149.7 | 2.77 | 7.13 | | | | |
| 5.718 | .193 | .134 | 6.29 | .109 | .281 | 4,200 | 5,000 | 2,800 | 17 |
| 145.24 | 4.90 | 3.40 | 159.7 | 2.77 | 7.13 | | | | |
| 6.111 | .193 | .134 | 6.68 | .109 | .281 | 4,000 | 4,700 | 2,600 | 18 |
| 155.22 | 4.90 | 3.40 | 169.7 | 2.77 | 7.13 | | | | |
| 6.443 | .224 | .150 | 7.20 | .120 | .375 | 3,700 | 4,400 | 2,500 | 19 |
| 163.65 | 5.69 | 3.81 | 182.9 | 3.05 | 9.52 | | | | |
| 6.837 | .224 | .150 | 7.59 | .120 | .375 | 3,500 | 4,200 | 2,300 | 20 |
| 173.66 | 5.69 | 3.81 | 192.9 | 3.05 | 9.52 | | | | |



With Snap Ring Groove 62N

With Snap Ring 62NR

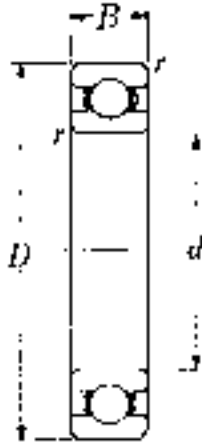


Single Shielded With Snap Ring 62ZNR

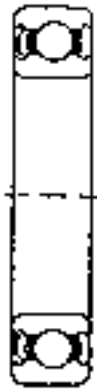
Continued on Page 27



Units: **INCHES**
Millimeters



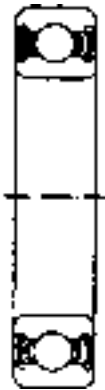
Open Type
62



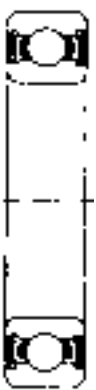
Single
Shielded
62Z



Double
Shielded
62ZZ



Double
Sealed
62LLU
(Contact Type)



Double
Sealed
62LLB
(Non-Contact Type)

SINGLE ROW RADIAL BALL BEARINGS

| Bearing No. | Bore | O.D. | Width | Fillet Radii | | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|---------------|----------------|--------------|--------------|----------------|--------------------------|-----------------------|--------------|
| | d | D | B | r | r ₁ | Dynamic C | Static C ₀ | |
| 6221 | 4.1339 105 | 7.4803 190 | 1.4173 36 | .083 2.1 | .020 .5 | 29,900 | 23,500 | 8.16 |
| 6222 | 4.3307 110 | 7.8740 200 | 1.4961 38 | .083 2.1 | .020 .5 | 32,500 | 26,300 | 9.61 |
| 6224 | 4.7244 120 | 8.4646 215 | 1.5748 40 | .083 2.1 | — | 35,000 | 29,500 | 11.4 |
| 6226 | 5.1181 130 | 9.0551 230 | 1.5748 40 | .118 3.0 | — | 37,500 | 33,000 | 12.8 |
| 6228 | 5.5118 140 | 9.8425 250 | 1.6535 42 | .118 3.0 | — | 37,500 | 33,500 | 16.5 |
| 6230 | 5.9055 150 | 10.6299 270 | 1.7717 45 | .118 3.0 | — | 39,500 | 37,500 | 20.7 |
| 6232 | 6.2992 160 | 11.4173 290 | 1.8898 48 | .118 3.0 | — | 41,500 | 42,000 | 31.5 |
| 6234 | 6.6929 170 | 12.2047 310 | 2.0472 52 | .157 4.0 | — | 47,500 | 50,000 | 38.6 |
| 6236 | 7.0866 180 | 12.5984 320 | 2.0472 52 | .157 4.0 | — | 51,000 | 54,000 | 40.3 |
| 6238 | 7.4803 190 | 13.3858 340 | 2.1654 55 | .157 4.0 | — | 57,500 | 63,500 | 50.7 |
| 6240 | 7.8740 200 | 14.1732 360 | 2.2835 58 | .157 4.0 | — | 60,800 | 70,000 | 62.2 |
| 6244 | 8.6614 220 | 15.7480 400 | 2.5590 65 | .157 4.0 | — | 67,000 | 81,500 | 66.6 |

SINGLE ROW RADIAL BALL BEARINGS

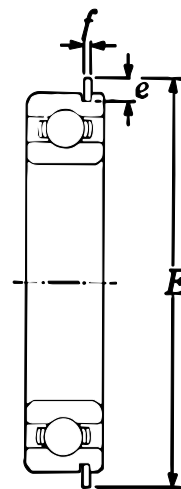
Units: INCHES
Millimeters



| Snap Ring Groove Dimensions | | | Snap Ring Dimensions | | | Limiting Speed (RPM) | | | Bore Diameter No. |
|-----------------------------|-------------|-------------|----------------------|-----------|------|----------------------|-------|---------|-------------------|
| D_n (max) | a_n (max) | b_n (min) | E (max) | f (max) | e | Grease | Oil | LU, LLU | |
| 7.230 | .224 | .150 | 7.99 | .120 | .375 | 3,400 | 4,000 | 2,300 | 21 |
| 183.64 | 5.69 | 3.81 | 202.9 | 3.05 | 9.52 | | | | |
| 7.624 | .224 | .150 | 8.38 | .120 | .375 | 3,200 | 3,800 | 2,200 | 22 |
| 193.65 | 5.69 | 3.81 | 212.9 | 3.05 | 9.52 | | | | |
| — | — | — | — | — | — | 2,900 | 3,400 | 2,000 | 24 |
| — | — | — | — | — | — | 2,300 | 2,700 | — | 26 |
| — | — | — | — | — | — | 2,100 | 2,500 | — | 28 |
| — | — | — | — | — | — | 2,000 | 2,400 | — | 30 |
| — | — | — | — | — | — | 1,900 | 2,200 | — | 32 |
| — | — | — | — | — | — | 1,800 | 2,100 | — | 34 |
| — | — | — | — | — | — | 1,700 | 1,800 | — | 36 |
| — | — | — | — | — | — | 1,800 | 2,100 | — | 38 |
| — | — | — | — | — | — | 1,700 | 2,000 | — | 40 |
| — | — | — | — | — | — | 1,500 | 1,800 | — | 44 |



With Snap Ring Groove
62N



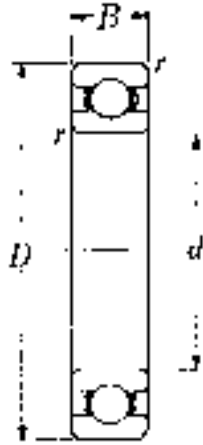
With Snap Ring
62NR



Single Shielded With Snap Ring
62ZNR



Units: INCHES
Millimeters



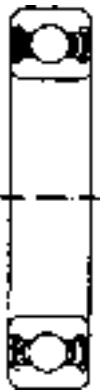
Open Type
63



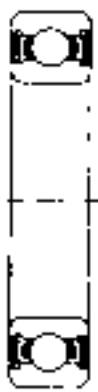
Single
Shielded
63Z



Double
Shielded
63ZZ



Double
Sealed
63LLU



Double
Sealed
63LLB

(Contact Type) (Non-Contact Type)

SINGLE ROW RADIAL BALL BEARINGS

| Bearing No. | Bore | O.D. | Width | Fillet Radii | | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|---------------|----------------|--------------|--------------|----------------|--------------------------|-----------------------|--------------|
| | d | D | | r | r ₁ | Dynamic C | Static C ₀ | |
| 6300 | .3937 10 | 1.3780 35 | .4331 11 | .024 .6 | .020 .5 | 1,840 | 785 | .117 |
| 6301 | .4724 12 | 1.4567 37 | .4724 12 | .039 1.0 | .020 .5 | 2,180 | 940 | .132 |
| 6302 | .5906 15 | 1.6535 42 | .5118 13 | .039 1.0 | .020 .5 | 2,570 | 1,220 | .181 |
| 6303 | .6693 17 | 1.8504 47 | .5512 14 | .039 1.0 | .020 .5 | 3,050 | 1,470 | .254 |
| 6304 | .7874 20 | 2.0472 52 | .5906 15 | .043 1.1 | .020 .5 | 3,600 | 1,770 | .317 |
| 63/22 | .8661 22 | 2.2047 56 | .6299 16 | .043 1.1 | .020 .5 | 4,150 | 2,080 | .388 |
| 6305 | .9843 25 | 2.4409 62 | .6693 17 | .043 1.1 | .020 .5 | 4,750 | 2,460 | .511 |
| 63/28 | 1.1024 28 | 2.6772 68 | .7087 18 | .043 1.1 | .020 .5 | 6,000 | 3,150 | .633 |
| 6306 | 1.1811 30 | 2.8346 72 | .7480 19 | .043 1.1 | .020 .5 | 6,000 | 3,400 | .763 |
| 63/32 | 1.2598 32 | 2.9528 75 | .7874 20 | .043 1.1 | .020 .5 | 6,700 | 3,800 | .842 |
| 6307 | 1.3780 35 | 3.1496 80 | .8268 21 | .059 1.5 | .020 .5 | 7,500 | 4,300 | 1.01 |
| 6308 | 1.5748 40 | 3.5433 90 | .9055 23 | .059 1.5 | .020 .5 | 9,150 | 5,400 | 1.40 |
| 6309 | 1.7717 45 | 3.9370 100 | .9843 25 | .059 1.5 | .020 .5 | 11,900 | 7,200 | 1.84 |
| 6310 | 1.9685 50 | 4.3307 110 | 1.0630 27 | .079 2.0 | .020 .5 | 13,900 | 8,600 | 2.36 |
| 6311 | 2.1654 55 | 4.7244 120 | 1.1417 29 | .079 2.0 | .020 .5 | 16,100 | 10,100 | 3.02 |
| 6312 | 2.3622 60 | 5.1181 130 | 1.2205 31 | .083 2.1 | .020 .5 | 18,400 | 11,700 | 3.75 |
| 6313 | 2.5591 65 | 5.5118 140 | 1.2992 33 | .083 2.1 | .020 .5 | 20,800 | 13,400 | 4.59 |
| 6314 | 2.7559 70 | 5.9055 150 | 1.3780 35 | .083 2.1 | .020 .5 | 23,400 | 15,300 | 5.56 |
| 6315 | 2.9528 75 | 6.2992 160 | 1.4567 37 | .083 2.1 | .020 .5 | 25,500 | 17,400 | 6.66 |
| 6316 | 3.1496 80 | 6.6929 170 | 1.5354 39 | .083 2.1 | .020 .5 | 27,600 | 19,500 | 7.91 |
| 6317 | 3.3465 85 | 7.0866 180 | 1.6142 41 | .118 3.0 | .020 .5 | 29,800 | 21,800 | 9.33 |
| 6318 | 3.5433 90 | 7.4803 190 | 1.6929 43 | .118 3.0 | .020 .5 | 32,000 | 24,100 | 10.8 |
| 6319 | 3.7402 95 | 7.8740 200 | 1.7717 45 | .118 3.0 | .020 .5 | 34,500 | 26,600 | 12.5 |
| 6320 | 3.9370 100 | 8.4646 215 | 1.8504 47 | .118 3.0 | — | 39,000 | 31,500 | 15.4 |
| 6321 | 4.1339 105 | 8.8583 225 | 1.9291 49 | .118 3.0 | — | 41,500 | 34,500 | 17.7 |
| 6322 | 4.3307 110 | 9.4488 240 | 1.9685 50 | .118 3.0 | — | 46,000 | 40,500 | 21.0 |
| 6324 | 4.7244 120 | 10.2362 260 | 2.1654 55 | .118 3.0 | — | 46,500 | 41,500 | 27.3 |
| 6326 | 5.1181 130 | 11.0236 280 | 2.2835 58 | .157 4.0 | — | 51,500 | 48,000 | 33.3 |
| 6328 | 5.5118 140 | 11.8110 300 | 2.4409 62 | .157 4.0 | — | 57,000 | 55,500 | 40.8 |
| 6330 | 5.9055 150 | 12.5984 320 | 2.5591 65 | .157 4.0 | — | 61,500 | 63,500 | 57.8 |
| 6332 | 6.2992 160 | 13.3858 340 | 2.6772 68 | .157 4.0 | — | 62,500 | 64,500 | 63.9 |
| 6334 | 6.6929 170 | 14.1732 360 | 2.8346 72 | .157 4.0 | — | 73,500 | 80,000 | 76.1 |
| 6336 | 7.0866 180 | 14.9606 380 | 2.9528 75 | .157 4.0 | — | 79,500 | 91,500 | 93.5 |
| 6338 | 7.4803 190 | 15.7480 400 | 3.0709 78 | .197 5.0 | — | 79,500 | 93,000 | 108 |
| 6340 | 7.8740 200 | 16.5354 420 | 3.1496 80 | .197 5.0 | — | 92,000 | 113,000 | 122 |
| 6344 | 8.6614 220 | 18.1102 460 | 3.4650 88 | .157 4.0 | — | 92,500 | 116,000 | 134 |

SINGLE ROW RADIAL BALL BEARINGS

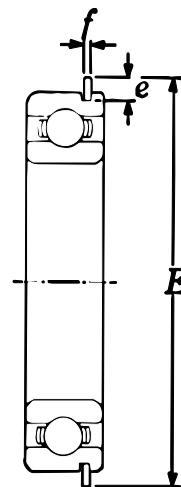
Units: **INCHES**
Millimeters



| Snap Ring Groove Dimensions | | | Snap Ring Dimensions | | | Limiting Speed (RPM) | | | Bore Diameter No. |
|-----------------------------|-------------|-------------|----------------------|---------|------|----------------------|--------|---------|-------------------|
| D_n (max) | a_n (max) | b_n (min) | E (max) | f (max) | e | Grease | Oil | LU, LLU | |
| 1.306 | .081 | .065 | 1.56 | .042 | .125 | 23,000 | 27,000 | 16,000 | 00 |
| 33.17 | 2.06 | 1.65 | 39.7 | 1.07 | 3.18 | | | | |
| 1.369 | .081 | .065 | 1.63 | .042 | .125 | 20,000 | 24,000 | 15,000 | 01 |
| 34.77 | 2.06 | 1.65 | 41.3 | 1.07 | 3.18 | | | | |
| 1.565 | .081 | .065 | 1.82 | .042 | .125 | 17,000 | 21,000 | 12,000 | 02 |
| 39.75 | 2.06 | 1.65 | 46.3 | 1.07 | 3.18 | | | | |
| 1.756 | .097 | .065 | 2.07 | .042 | .156 | 16,000 | 19,000 | 11,000 | 03 |
| 44.60 | 2.46 | 1.65 | 52.7 | 1.07 | 3.96 | | | | |
| 1.958 | .097 | .065 | 2.28 | .042 | .156 | 14,000 | 17,000 | 10,000 | 04 |
| 49.73 | 2.46 | 1.65 | 57.9 | 1.07 | 3.96 | | | | |
| 2.110 | .097 | .065 | 2.43 | .042 | .156 | 13,000 | 15,000 | 9,200 | /22 |
| 53.59 | 2.46 | 1.65 | 61.7 | 1.07 | 3.96 | | | | |
| 2.347 | .129 | .087 | 2.67 | .065 | .156 | 12,000 | 14,000 | 8,100 | 05 |
| 59.61 | 3.28 | 2.20 | 67.7 | 1.65 | 3.96 | | | | |
| 2.552 | .129 | .087 | 2.94 | .065 | .188 | 11,000 | 13,000 | 7,400 | /28 |
| 64.82 | 3.28 | 2.20 | 74.6 | 1.65 | 4.77 | | | | |
| 2.709 | .129 | .087 | 3.09 | .065 | .188 | 10,000 | 12,000 | 6,600 | 06 |
| 68.81 | 3.28 | 2.20 | 78.6 | 1.65 | 4.77 | | | | |
| 2.828 | .129 | .087 | 3.21 | .065 | .188 | 9,500 | 11,000 | 6,500 | /32 |
| 71.83 | 3.28 | 2.20 | 81.6 | 1.65 | 4.77 | | | | |
| 3.024 | .129 | .087 | 3.41 | .065 | .188 | 8,800 | 10,000 | 6,000 | 07 |
| 76.81 | 3.28 | 2.20 | 86.6 | 1.65 | 4.77 | | | | |
| 3.417 | .129 | .118 | 3.80 | .095 | .188 | 7,800 | 9,200 | 5,300 | 08 |
| 86.79 | 3.28 | 3.00 | 96.5 | 2.41 | 4.77 | | | | |
| 3.811 | .129 | .118 | 4.19 | .095 | .188 | 7,000 | 8,200 | 4,700 | 09 |
| 96.80 | 3.28 | 3.00 | 106.5 | 2.41 | 4.77 | | | | |
| 4.205 | .129 | .118 | 4.59 | .095 | .188 | 6,400 | 7,500 | 4,200 | 10 |
| 106.81 | 3.28 | 3.00 | 116.6 | 2.41 | 4.77 | | | | |
| 4.536 | .160 | .134 | 5.11 | .109 | .281 | 5,800 | 6,800 | 3,900 | 11 |
| 115.21 | 4.06 | 3.40 | 129.7 | 2.77 | 7.13 | | | | |
| 4.930 | .160 | .134 | 5.50 | .109 | .281 | 5,400 | 6,300 | 3,600 | 12 |
| 125.22 | 4.06 | 3.40 | 139.7 | 2.77 | 7.13 | | | | |
| 5.324 | .193 | .134 | 5.89 | .109 | .281 | 4,900 | 5,800 | 3,300 | 13 |
| 135.23 | 4.90 | 3.40 | 149.7 | 2.77 | 7.13 | | | | |
| 5.718 | .193 | .134 | 6.29 | .109 | .281 | 4,600 | 5,400 | 3,100 | 14 |
| 145.24 | 4.90 | 3.40 | 159.7 | 2.77 | 7.13 | | | | |
| 6.111 | .193 | .134 | 6.68 | .109 | .281 | 4,300 | 5,000 | 2,900 | 15 |
| 155.22 | 4.90 | 3.40 | 169.7 | 2.77 | 7.13 | | | | |
| 6.443 | .224 | .150 | 7.20 | .120 | .375 | 4,000 | 4,700 | 2,700 | 16 |
| 163.65 | 5.69 | 3.80 | 182.9 | 3.05 | 9.52 | | | | |
| 6.837 | .224 | .150 | 7.59 | .120 | .375 | 3,800 | 4,500 | 2,600 | 17 |
| 173.66 | 5.69 | 3.80 | 192.9 | 3.05 | 9.52 | | | | |
| 7.230 | .224 | .150 | 7.99 | .120 | .375 | 3,600 | 4,200 | 2,400 | 18 |
| 183.64 | 5.69 | 3.80 | 202.9 | 3.05 | 9.52 | | | | |
| 7.624 | .224 | .150 | 8.38 | .120 | .375 | 3,300 | 3,900 | 2,300 | 19 |
| 193.65 | 5.69 | 3.80 | 212.9 | 3.05 | 9.52 | | | | |
| — | — | — | — | — | — | 3,200 | 3,700 | 2,200 | 20 |
| — | — | — | — | — | — | 3,000 | 3,600 | 2,100 | 21 |
| — | — | — | — | — | — | 2,900 | 3,400 | 1,900 | 22 |
| — | — | — | — | — | — | 2,600 | 3,100 | — | 24 |
| — | — | — | — | — | — | 2,400 | 2,800 | — | 26 |
| — | — | — | — | — | — | 2,200 | 2,600 | — | 28 |
| — | — | — | — | — | — | 2,100 | 2,400 | — | 30 |
| — | — | — | — | — | — | 1,900 | 2,300 | — | 32 |
| — | — | — | — | — | — | 1,800 | 2,100 | — | 34 |
| — | — | — | — | — | — | 1,700 | 2,000 | — | 36 |
| — | — | — | — | — | — | 1,600 | 1,900 | — | 38 |
| — | — | — | — | — | — | 1,500 | 1,800 | — | 40 |
| — | — | — | — | — | — | 1,400 | 1,600 | — | 44 |



With Snap Ring Groove 63N



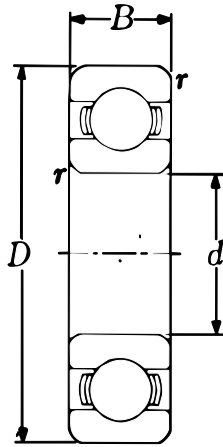
With Snap Ring 63NR



Single Shielded With Snap Ring 63ZNR



Units: INCHES
Millimeters



Open Type
64



Double Sealed
64LLB
(Contact Type)



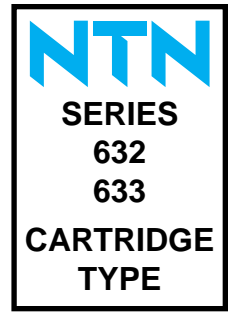
Double
Shielded
64ZZ

SINGLE ROW RADIAL BALL BEARINGS

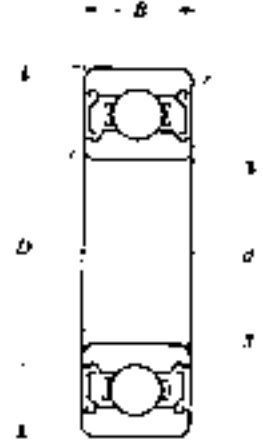
| Bearing Number | Bore | | Width B | Fillet Radius r | Basic Load Ratings (lbs) | | Weight (lbs) | Limiting Speed (RPM) | | | Bore Dia. No. |
|----------------|---------------|----------------|--------------|--------------------|--------------------------|-----------------------|--------------|----------------------|--------|--------|---------------|
| | d | D | | | Dynamic C | Static C ₀ | | Grease | Oil | LU,LLU | |
| 6403 | .6693 17 | 2.4409 62 | .6693 17 | .043 1.1 | 5,100 | 2,420 | .595 | 14,000 | 16,000 | 9,500 | 03 |
| 6404 | .7874 20 | 2.8346 72 | .7480 19 | .043 1.1 | 6,400 | 3,150 | .882 | 12,000 | 14,000 | 8,000 | 04 |
| 6405 | .9843 25 | 3.1496 80 | .8268 21 | .059 1.5 | 7,800 | 3,950 | 1.17 | 10,000 | 12,000 | 6,900 | 05 |
| 6406 | 1.1811 30 | 3.5433 90 | .9055 23 | .059 1.5 | 9,750 | 5,350 | 1.62 | 8,800 | 10,000 | 5,800 | 06 |
| 6407 | 1.3780 35 | 3.9370 100 | .9843 25 | .059 1.5 | 12,400 | 7,000 | 2.10 | 7,800 | 9,100 | 5,100 | 07 |
| 6408 | 1.5748 40 | 4.3307 110 | 1.0630 27 | .079 2.0 | 14,300 | 8,200 | 2.71 | 7,000 | 8,200 | 4,700 | 08 |
| 6409 | 1.7717 45 | 4.7244 120 | 1.1417 29 | .079 2.0 | 17,300 | 10,100 | 3.37 | 6,300 | 7,400 | 4,300 | 09 |
| 6410 | 1.9685 50 | 5.1181 130 | 1.2205 31 | .083 2.1 | 18,700 | 11,100 | 4.14 | 5,700 | 6,700 | — | 10 |
| 6411 | 2.1654 55 | 5.5118 140 | 1.2992 33 | .083 2.1 | 20,000 | 12,100 | 5.05 | 5,200 | 6,100 | — | 11 |
| 6412 | 2.3622 60 | 5.9055 150 | 1.3780 35 | .083 2.1 | 22,900 | 14,400 | 6.11 | 4,800 | 5,700 | — | 12 |
| 6413 | 2.5591 65 | 6.2992 160 | 1.4567 37 | .083 2.1 | 24,900 | 16,200 | 7.28 | 4,400 | 5,200 | — | 13 |
| 6414 | 2.7559 70 | 7.0866 180 | 1.6535 42 | .118 3.0 | 28,800 | 20,100 | 10.6 | 4,100 | 4,800 | — | 14 |
| 6415 | 2.9528 75 | 7.4803 190 | 1.7717 45 | .118 3.0 | 31,000 | 22,300 | 12.6 | 3,800 | 4,500 | — | 15 |
| 6416 | 3.1496 80 | 7.8740 200 | 1.8898 48 | .118 3.0 | 37,000 | 28,200 | 14.9 | 3,600 | 4,200 | — | 16 |
| 6417 | 3.3465 85 | 8.2677 210 | 2.0472 52 | .157 4.0 | 37,000 | 28,700 | 17.5 | 3,400 | 4,000 | — | 17 |
| 6418 | 3.5433 90 | 8.8583 225 | 2.1260 54 | .157 4.0 | 41,500 | 33,500 | 25.1 | 3,200 | 3,800 | — | 18 |
| 6419 | 3.7402 95 | 9.4488 240 | 2.1654 55 | .157 4.0 | 42,000 | 34,500 | 29.5 | 3,000 | 3,500 | — | 19 |
| 6420 | 3.9370 100 | 9.8425 250 | 2.2835 58 | .157 4.0 | 46,000 | 39,500 | 33.1 | 2,900 | 3,400 | — | 20 |
| 6421 | 4.1339 105 | 10.2362 260 | 2.3622 60 | .157 4.0 | 46,500 | 40,000 | 37.0 | 2,700 | 3,200 | — | 21 |
| 6422 | 4.3307 110 | 11.0236 280 | 2.5591 65 | .157 4.0 | 55,500 | 51,000 | 47.0 | 2,600 | 3,000 | — | 22 |
| 6424 | 4.7244 120 | 12.2047 310 | 2.8346 72 | .197 5.0 | 65,500 | 64,500 | 63.9 | 2,300 | 2,800 | — | 24 |
| 6426 | 5.1181 130 | 13.3858 340 | 3.0709 78 | .197 5.0 | 68,000 | 67,000 | 83.8 | 2,200 | 2,500 | — | 26 |

SINGLE ROW RADIAL BALL BEARINGS

Units: INCHES
Millimeters



| Bearing No. | Bore | O.D. | Width | Fillet Radius | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|---------------|---------------|-----------------|---------------|--------------------------|-----------------------|--------------|
| | d | D | B | r | Dynamic C | Static C ₀ | |
| 63204ZZ | .7874 20 | 1.8504 47 | .8110 20.6 | .039 1.0 | 2,870 | 1,500 | .34 |
| 63205ZZ | .9843 25 | 2.0472 52 | .8110 20.6 | .039 1.0 | 3,150 | 1,770 | .39 |
| 63206ZZ | 1.1811 30 | 2.4409 62 | .9370 23.8 | .039 1.0 | 4,400 | 2,540 | .63 |
| 63207ZZ | 1.3780 35 | 2.8346 72 | 1.0630 27.0 | .043 1.1 | 5,750 | 3,450 | .96 |
| 63208ZZ | 1.5748 40 | 3.1496 80 | 1.1890 30.2 | .043 1.1 | 6,550 | 4,000 | 1.28 |
| 63209ZZ | 1.7717 45 | 3.3465 85 | 1.1890 30.2 | .043 1.1 | 7,350 | 4,600 | 1.37 |
| 63210ZZ | 1.9685 50 | 3.5433 90 | 1.1890 30.2 | .043 1.1 | 7,900 | 5,200 | 1.45 |
| 63211ZZ | 2.1654 55 | 3.9370 100 | 1.3110 33.3 | .059 1.5 | 9,750 | 6,550 | 2.04 |
| 63212ZZ | 2.3622 60 | 4.3307 110 | 1.4370 36.5 | .059 1.5 | 11,800 | 8,150 | 2.80 |
| 63304ZZ | .7874 20 | 2.0472 52 | .8740 22.2 | .043 1.1 | 3,600 | 1,770 | .48 |
| 63305ZZ | .9843 25 | 2.4409 62 | 1.0000 25.4 | .043 1.1 | 4,750 | 2,460 | .78 |
| 63306ZZ | 1.1811 30 | 2.8346 72 | 1.1890 30.2 | .043 1.1 | 6,000 | 3,400 | 1.13 |
| 63307ZZ | 1.3780 35 | 3.1496 80 | 1.3740 34.9 | .059 1.5 | 7,500 | 4,300 | 1.64 |
| 63308ZZ | 1.5748 40 | 3.5433 90 | 1.4370 36.5 | .059 1.5 | 9,150 | 5,400 | 2.06 |
| 63309ZZ | 1.7717 45 | 3.9370 100 | 1.5630 39.7 | .059 1.5 | 11,900 | 7,200 | 3.00 |
| 63310ZZ | 1.9685 50 | 4.3307 110 | 1.7480 44.4 | .079 2.0 | 13,900 | 8,600 | 3.75 |
| 63311ZZ | 2.1654 55 | 4.7244 120 | 1.9370 49.2 | .079 2.0 | 16,100 | 10,100 | 5.12 |
| 63312ZZ | 2.3622 60 | 5.1181 130 | 2.1260 54.0 | .083 2.1 | 18,400 | 11,700 | 6.50 |
| 63313ZZ | 2.5591 65 | 5.5118 140 | 2.3110 58.7 | .083 2.1 | 20,800 | 13,400 | 8.17 |
| 63314ZZ | 2.7559 70 | 5.9055 150 | 2.5000 63.5 | .083 2.1 | 23,400 | 15,300 | 10.5 |
| 63315ZZ | 2.9528 75 | 6.2992 160 | 2.6890 68.3 | .083 2.1 | 25,500 | 17,400 | 12.5 |
| 63316ZZ | 3.1496 80 | 6.6929 170 | 2.6890 68.3 | .083 2.1 | 27,600 | 19,500 | 14.1 |
| 63317ZZ | 3.3465 85 | 7.0866 180 | 2.8740 73.0 | .118 3.0 | 29,800 | 21,800 | 16.9 |
| 63318ZZ | 3.5433 90 | 7.4803 190 | 2.8740 73.0 | .118 3.0 | 32,000 | 24,100 | 18.7 |
| 63320ZZ | 3.9370 100 | 8.4646 215 | 3.2500 82.55 | .118 3.0 | 39,000 | 31,500 | 26.72 |

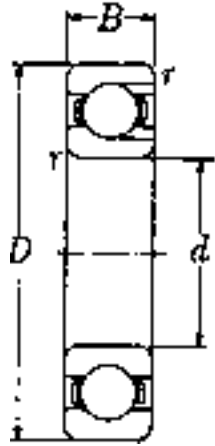


NTN
SERIES
BL2

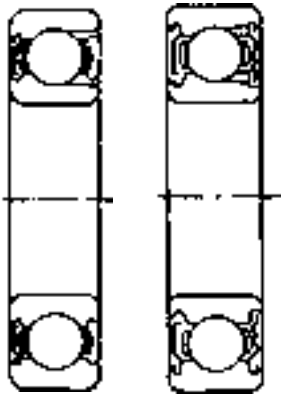
Maximum
Type

Units: INCHES
Millimeters

SINGLE ROW RADIAL BALL BEARINGS



Open Type



Single
Shielded
Z

Double
Shielded
ZZ

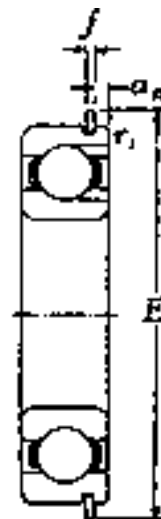
| Bearing No. | Bore | | Width | Fillet Radii | | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|---------------|---------------|--------------|--------------|------------|--------------------------|-----------|--------------|
| | d | D | | B | r | r ₁ | Dynamic C | |
| BL205 | .9843 25 | 2.0472 52 | .5906 15 | .039 1 | .020 .5 | 3,800 | 2,360 | .312 |
| BL2/28 | 1.1024 28 | 2.2835 58 | .6299 16 | .039 1 | .020 .5 | 5,250 | 3,300 | .420 |
| BL206 | 1.1811 30 | 2.4409 62 | .6299 16 | .039 1 | .020 .5 | 5,600 | 3,650 | .471 |
| BL2/32 | 1.2598 32 | 2.5591 65 | .6693 17 | .039 1 | .020 .5 | 6,100 | 3,900 | .540 |
| BL207 | 1.3780 35 | 2.8346 72 | .6693 17 | .043 1.1 | .020 .5 | 7,400 | 4,950 | .700 |
| BL208 | 1.5748 40 | 3.1496 80 | .7087 18 | .043 1.1 | .020 .5 | 8,800 | 6,250 | .880 |
| BL209 | 1.7717 45 | 3.3465 85 | .7480 19 | .043 1.1 | .020 .5 | 9,900 | 7,150 | 1.00 |
| BL210 | 1.9685 50 | 3.5433 90 | .7874 20 | .043 1.1 | .020 .5 | 10,300 | 7,850 | 1.10 |
| BL211 | 2.1654 55 | 3.9370 100 | .8268 21 | .059 1.5 | .020 .5 | 12,800 | 9,850 | 1.50 |
| BL212 | 2.3622 60 | 4.3307 110 | .8661 22 | .059 1.5 | .020 .5 | 15,500 | 12,200 | 1.90 |
| BL213 | 2.5591 65 | 4.7244 120 | .9055 23 | .059 1.5 | .020 .5 | 16,900 | 13,500 | 2.40 |
| BL214 | 2.7559 70 | 4.9213 125 | .9449 24 | .059 1.5 | .020 .5 | 18,300 | 14,900 | 2.60 |
| BL215 | 2.9528 75 | 5.1181 130 | .9843 25 | .059 1.5 | .020 .5 | 19,100 | 16,100 | 2.79 |
| BL216 | 3.1496 80 | 5.5118 140 | 1.0236 26 | .079 2.0 | .020 .5 | 22,400 | 19,100 | 3.50 |
| BL217 | 3.3465 85 | 5.9055 150 | 1.1024 28 | .079 2.0 | .020 .5 | 24,000 | 20,800 | 4.49 |
| BL218 | 3.5433 90 | 6.2992 160 | 1.1811 30 | .079 2.0 | .020 .5 | 29,500 | 25,700 | 5.50 |
| BL219 | 3.7402 95 | 6.6929 170 | 1.2598 32 | .079 2.0 | .020 .5 | 32,000 | 27,600 | 6.82 |
| BL220 | 3.9370 100 | 7.0866 180 | 1.3386 34 | .079 2.0 | .020 .5 | 36,000 | 31,500 | 8.03 |
| BL221 | 4.1339 105 | 7.4803 190 | 1.4173 36 | .079 2.0 | .020 .5 | 39,000 | 35,500 | 9.72 |
| BL222 | 4.3307 110 | 7.8740 200 | 1.4961 38 | .079 2.0 | .020 .5 | 42,500 | 39,500 | 11.3 |

SINGLE ROW RADIAL BALL BEARINGS

Units: **INCHES**
Millimeters



| Snap Ring Dimensions | | f | Limiting Speed (RPM) | | Bore Diameter No. |
|----------------------|---------|------|----------------------|--------|-------------------|
| a _n (max) | E (max) | | Grease | Oil | |
| .097 | 2.28 | .042 | 12,000 | 14,000 | 05 |
| 2.46 | 57.9 | 1.07 | | | |
| .097 | 2.51 | .042 | 11,000 | 13,000 | /28 |
| 2.46 | 63.7 | 1.07 | | | |
| .129 | 2.67 | .065 | 10,000 | 12,000 | 06 |
| 3.28 | 67.7 | 1.65 | | | |
| .129 | 2.78 | .065 | 9,500 | 11,000 | /32 |
| 3.28 | 70.7 | 1.65 | | | |
| .129 | 3.09 | .065 | 8,800 | 10,000 | 07 |
| 3.28 | 78.6 | 1.65 | | | |
| .129 | 3.41 | .065 | 7,800 | 9,200 | 08 |
| 3.28 | 86.6 | 1.65 | | | |
| .129 | 3.61 | .065 | 7,000 | 8,200 | 09 |
| 3.28 | 91.6 | 1.65 | | | |
| .129 | 3.80 | .095 | 6,400 | 7,500 | 10 |
| 3.28 | 96.5 | 2.41 | | | |
| .129 | 4.19 | .095 | 5,800 | 6,800 | 11 |
| 3.28 | 106.5 | 2.41 | | | |
| .129 | 4.59 | .095 | 5,400 | 6,300 | 12 |
| 3.28 | 116.6 | 2.41 | | | |
| .160 | 5.11 | .109 | 4,900 | 5,800 | 13 |
| 4.06 | 129.7 | 2.77 | | | |
| .160 | 5.30 | .109 | 4,600 | 5,400 | 14 |
| 4.06 | 134.7 | 2.77 | | | |
| .160 | 5.50 | .109 | 4,300 | 5,000 | 15 |
| 4.06 | 139.7 | 2.77 | | | |
| .193 | 5.89 | .109 | 4,000 | 4,700 | 16 |
| 4.90 | 149.7 | 2.77 | | | |
| .193 | 6.29 | .109 | 3,800 | 4,400 | 17 |
| 4.90 | 159.7 | 2.77 | | | |
| .193 | 6.68 | .109 | 3,600 | 4,200 | 18 |
| 4.90 | 169.7 | 2.77 | | | |
| .224 | 7.20 | .120 | 3,400 | 3,900 | 18 |
| 5.69 | 182.9 | 3.05 | | | |
| .224 | 7.59 | .120 | 3,200 | 3,700 | 20 |
| 5.69 | 192.9 | 3.05 | | | |
| .224 | 7.99 | .120 | 3,000 | 3,600 | 21 |
| 5.69 | 202.9 | 3.05 | | | |
| .224 | 8.38 | .120 | 2,900 | 3,400 | 22 |
| 5.69 | 212.9 | 3.05 | | | |



With Snap Ring
NR



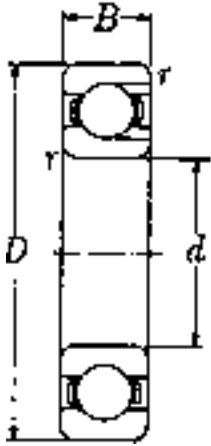
Single Shielded
With Snap Ring
ZNR



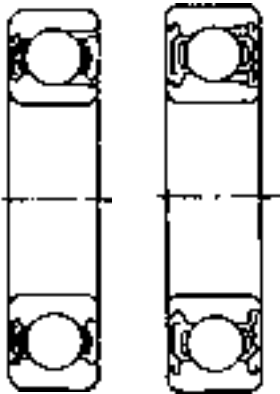
Units: INCHES
Millimeters

SINGLE ROW RADIAL BALL BEARINGS

| Bearing No. | Bore | O.D. | Width B | Fillet Radii | | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|---------------|---------------|--------------|--------------|----------------|--------------------------|-----------------------|--------------|
| | d | D | | r | r ₁ | Dynamic C | Static C ₀ | |
| BL304 | .7874 20 | 2.0472 52 | .5906 15 | .043 1.1 | .020 .5 | 4,550 | 2,530 | .359 |
| BL3/22 | .8661 22 | 2.2047 56 | .6299 16 | .043 1.1 | .020 .5 | 5,250 | 2,980 | .440 |
| BL305 | .9843 25 | 2.4409 62 | .6693 17 | .043 1.1 | .020 .5 | 6,050 | 3,500 | .568 |
| BL3/28 | 1.1024 28 | 2.6772 68 | .7087 18 | .043 1.1 | .020 .5 | 7,600 | 4,500 | .720 |
| BL306 | 1.1811 30 | 2.8346 72 | .7480 19 | .043 1.1 | .020 .5 | 7,400 | 4,650 | .858 |
| BL3/32 | 1.2598 32 | 2.9528 75 | .7874 20 | .043 1.1 | .020 .5 | 8,300 | 5,250 | .960 |
| BL307 | 1.3780 35 | 3.1496 80 | .8268 21 | .059 1.5 | .020 .5 | 9,800 | 6,450 | 1.10 |
| BL308 | 1.5748 40 | 3.5433 90 | .9055 23 | .059 1.5 | .020 .5 | 12,300 | 8,050 | 1.50 |
| BL309 | 1.7717 45 | 3.9370 100 | .9843 25 | .059 1.5 | .020 .5 | 14,700 | 9,900 | 2.10 |
| BL310 | 1.9685 50 | 4.3307 110 | 1.0630 27 | .079 2.0 | .020 .5 | 17,200 | 11,800 | 2.68 |
| BL311 | 2.1654 55 | 4.7244 120 | 1.1417 29 | .079 2.0 | .020 .5 | 21,100 | 15,200 | 3.41 |
| BL312 | 2.3622 60 | 5.1181 130 | 1.2205 31 | .079 2.0 | .020 .5 | 24,100 | 17,600 | 4.22 |
| BL313 | 2.5591 65 | 5.5118 140 | 1.2992 33 | .079 2.0 | .020 .5 | 27,300 | 20,200 | 5.19 |
| BL314 | 2.7559 70 | 5.9055 150 | 1.3780 35 | .079 2.0 | .020 .5 | 30,500 | 23,000 | 6.49 |
| BL315 | 2.9528 75 | 6.2992 160 | 1.4567 37 | .079 2.0 | .020 .5 | 33,500 | 26,000 | 7.92 |
| BL316 | 3.1496 80 | 6.6929 170 | 1.5354 39 | .079 2.0 | .020 .5 | 36,000 | 29,200 | 8.69 |
| BL317 | 3.3465 85 | 7.0866 180 | 1.6142 41 | .118 3.0 | .020 .5 | 39,000 | 32,500 | 10.3 |
| BL318 | 3.5433 90 | 7.4803 190 | 1.6929 43 | .118 3.0 | .020 .5 | 42,000 | 36,000 | 13.0 |
| BL319 | 3.7402 95 | 7.8740 200 | 1.7717 45 | .118 3.0 | .020 .5 | 45,000 | 40,000 | 15.0 |
| BL320 | 3.9370 100 | 8.4646 215 | 1.8504 47 | .118 3.0 | — | 51,000 | 47,500 | 18.3 |
| BL321 | 4.1339 105 | 8.8583 225 | 1.9291 49 | .118 3.0 | — | 54,000 | 52,000 | 20.8 |
| BL322 | 4.3307 110 | 9.4488 240 | 1.9685 50 | .118 3.0 | — | 60,500 | 60,500 | 24.3 |



Open Type



Single Shielded
Z

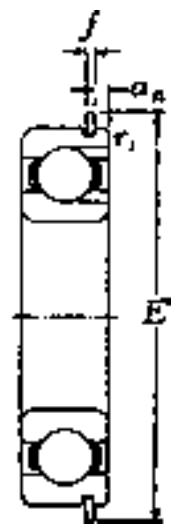
Double Shielded
ZZ

SINGLE ROW RADIAL BALL BEARINGS

Units: **INCHES**
Millimeters



| Snap Ring Dimensions | | f | Limiting Speed (RPM) | | Bore Diameter No. |
|----------------------|---------|------|----------------------|--------|-------------------|
| a _n (max) | E (max) | | Grease | Oil | |
| .097 | 2.28 | .042 | 13,000 | 15,000 | 04 |
| 2.46 | 57.9 | 1.07 | | | |
| .097 | 2.43 | .042 | 12,000 | 14,000 | /22 |
| 2.46 | 61.7 | 1.07 | | | |
| .129 | 2.67 | .065 | 11,000 | 12,000 | 05 |
| 3.28 | 67.7 | 1.65 | | | |
| .129 | 2.94 | .065 | 9,600 | 11,000 | /28 |
| 3.28 | 74.6 | 1.65 | | | |
| .129 | 3.09 | .065 | 9,000 | 11,000 | 06 |
| 3.28 | 78.6 | 1.65 | | | |
| .129 | 3.21 | .065 | 8,600 | 10,000 | /32 |
| 3.28 | 81.6 | 1.65 | | | |
| .129 | 3.41 | .065 | 7,900 | 9,300 | 07 |
| 3.28 | 86.6 | 1.65 | | | |
| .129 | 3.80 | .095 | 7,000 | 8,200 | 08 |
| 3.28 | 96.5 | 2.41 | | | |
| .129 | 4.19 | .095 | 6,300 | 7,400 | 09 |
| 3.28 | 106.5 | 2.41 | | | |
| .129 | 4.59 | .095 | 5,700 | 6,700 | 10 |
| 3.28 | 116.6 | 2.41 | | | |
| .160 | 5.11 | .109 | 5,200 | 6,100 | 11 |
| 4.06 | 129.7 | 2.77 | | | |
| .160 | 5.50 | .109 | 4,800 | 5,700 | 12 |
| 4.06 | 139.7 | 2.77 | | | |
| .193 | 5.89 | .109 | 4,400 | 5,200 | 13 |
| 4.90 | 149.7 | 2.77 | | | |
| .193 | 6.29 | .109 | 4,100 | 4,800 | 14 |
| 4.90 | 159.7 | 2.77 | | | |
| .193 | 6.68 | .109 | 3,800 | 4,500 | 15 |
| 4.90 | 169.7 | 2.77 | | | |
| .224 | 7.20 | .120 | 3,600 | 4,200 | 16 |
| 5.69 | 182.9 | 3.05 | | | |
| .224 | 7.59 | .120 | 3,400 | 4,000 | 17 |
| 5.69 | 192.9 | 3.05 | | | |
| .224 | 7.99 | .120 | 3,200 | 3,800 | 18 |
| 5.69 | 202.9 | 3.05 | | | |
| .224 | 8.38 | .120 | 3,000 | 3,500 | 19 |
| 5.69 | 212.9 | 3.05 | | | |
| — | — | — | 2,900 | 3,400 | 20 |
| — | — | — | 2,700 | 3,200 | 21 |
| — | — | — | 2,600 | 3,100 | 22 |



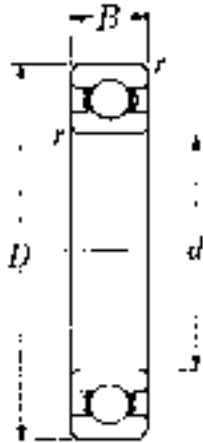
With Snap Ring
NR



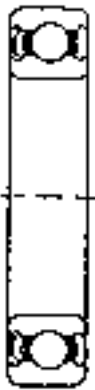
Single Shielded
With Snap Ring
ZNR



Units: INCHES
Millimeters



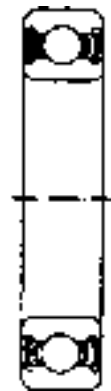
Open Type
TMB2



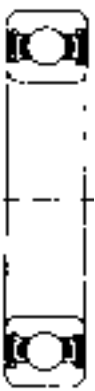
Single
Shielded
TMB2Z



Double
Shielded
TMB2ZZ



Double
Sealed
TMB2LLU
(Contact Type)



Double
Sealed
TMB2LLB
(Non-Contact Type)

SINGLE ROW RADIAL BALL BEARINGS

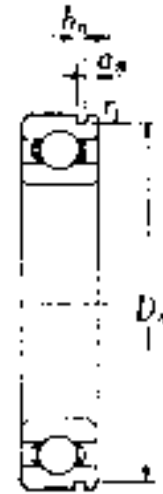
| Bearing No. | Bore | O.D. | Width | Fillet Radii | | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|---------------|---------------|--------------|--------------|----------------|--------------------------|-----------------------|--------------|
| | d | D | B | r | r ₁ | Dynamic C | Static C ₀ | |
| TMB200 | .3937 10 | 1.1811 30 | .3543 9 | .024 .6 | .020 .5 | 1,150 | 540 | .071 |
| TMB204 | .7874 20 | 1.8504 47 | .5512 14 | .039 1 | .020 .5 | 2,890 | 1,500 | .234 |
| TMB2/22 | .8661 22 | 1.9685 50 | .5512 14 | .039 1 | .020 .5 | 2,900 | 1,530 | .258 |
| TMB2/28 | 1.1024 28 | 2.2835 58 | .6299 16 | .039 1 | .020 .5 | 4,000 | 2,190 | .377 |
| TMB206 | 1.1811 30 | 2.4409 62 | .6299 16 | .039 1 | .020 .5 | 4,400 | 2,540 | .439 |
| TMB2/32 | 1.2598 32 | 2.5591 65 | .6693 17 | .039 1 | .020 .5 | 4,650 | 2,610 | .498 |
| TMB207 | 1.3780 35 | 2.8346 72 | .6693 17 | .043 1.1 | .020 .5 | 5,750 | 3,450 | .635 |
| TMB208 | 1.5748 40 | 3.1496 80 | .7087 18 | .043 1.1 | .020 .5 | 6,550 | 4,000 | .807 |
| TMB209 | 1.7717 45 | 3.3465 85 | .7480 19 | .043 1.1 | .020 .5 | 7,350 | 4,600 | .897 |
| TMB210 | 1.9685 50 | 3.5433 90 | .7874 20 | .043 1.1 | .020 .5 | 7,900 | 5,200 | 1.02 |
| TMB211 | 2.1654 55 | 3.9370 100 | .8268 21 | .059 1.5 | .020 .5 | 9,750 | 6,550 | 1.34 |
| TMB212 | 2.3622 60 | 4.3307 110 | .8661 22 | .059 1.5 | .020 .5 | 11,800 | 8,150 | 1.73 |
| TMB213 | 2.5591 65 | 4.7244 120 | .9055 23 | .059 1.5 | .020 .5 | 12,900 | 9,000 | 2.18 |
| TMB214 | 2.7559 70 | 4.9213 125 | .9449 24 | .059 1.5 | .020 .5 | 14,000 | 9,900 | 2.36 |
| TMB215 | 2.9528 75 | 5.1181 130 | .9843 25 | .059 1.5 | .020 .5 | 14,900 | 11,100 | 2.60 |
| TMB216 | 3.1496 80 | 5.5118 140 | 1.0236 26 | .079 2.0 | .020 .5 | 16,500 | 11,900 | 3.09 |
| TMB217 | 3.3465 85 | 5.9055 150 | 1.1024 28 | .079 2.0 | .020 .5 | 18,700 | 14,300 | 3.95 |
| TMB218 | 3.5433 90 | 6.2992 160 | 1.1811 30 | .079 2.0 | .020 .5 | 21,600 | 16,100 | 4.74 |
| TMB219 | 3.7402 95 | 6.6929 170 | 1.2598 32 | .079 2.0 | .020 .5 | 24,500 | 18,400 | 5.78 |
| TMB220 | 3.9370 100 | 7.0866 180 | 1.3386 34 | .079 2.0 | .020 .5 | 27,500 | 20,900 | 6.92 |

SINGLE ROW RADIAL BALL BEARINGS

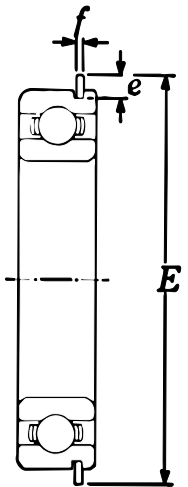
Units: **INCHES**
Millimeters



| Snap Ring Groove Dimensions | | | Snap Ring Dimensions | | | Limiting Speed (RPM) | | | Bore Diameter No. |
|-----------------------------|----------------------|----------------------|----------------------|------|------|----------------------|--------|--------|-------------------|
| D _n (max) | a _n (max) | b _n (min) | E (max) | f | e | Grease | Oil | LLU | |
| 1.109 | .081 | .065 | 1.37 | .042 | .125 | 25,000 | 30,000 | 18,000 | 00 |
| 28.17 | 2.06 | 1.65 | 34.7 | 1.07 | 3.17 | | | | |
| 1.756 | .097 | .065 | 2.07 | .042 | .156 | 16,000 | 18,000 | 10,000 | 04 |
| 44.60 | 2.46 | 1.65 | 52.7 | 1.07 | 3.96 | | | | |
| 1.874 | .097 | .065 | 2.19 | .042 | .156 | 14,000 | 17,000 | 9,700 | /22 |
| 47.60 | 2.46 | 1.65 | 55.7 | 1.07 | 3.96 | | | | |
| 2.189 | .097 | .065 | 2.51 | .042 | .156 | 12,000 | 14,000 | 8,100 | /28 |
| 55.60 | 2.46 | 1.65 | 63.7 | 1.07 | 3.96 | | | | |
| 2.347 | .129 | .087 | 2.67 | .065 | .156 | 11,000 | 13,000 | 7,300 | 06 |
| 59.61 | 3.28 | 2.21 | 67.7 | 1.65 | 3.96 | | | | |
| 2.465 | .129 | .087 | 2.78 | .065 | .156 | 11,000 | 12,000 | 7,100 | /32 |
| 62.61 | 3.28 | 2.21 | 70.7 | 1.65 | 3.96 | | | | |
| 2.709 | .129 | .087 | 3.09 | .065 | .188 | 9,800 | 11,000 | 6,300 | 07 |
| 68.81 | 3.28 | 2.21 | 78.6 | 1.65 | 4.77 | | | | |
| 3.024 | .129 | .087 | 3.41 | .065 | .188 | 8,700 | 10,000 | 5,600 | 08 |
| 76.81 | 3.28 | 2.21 | 86.6 | 1.65 | 4.77 | | | | |
| 3.221 | .129 | .087 | 3.61 | .065 | .188 | 7,800 | 9,200 | 5,200 | 09 |
| 81.81 | 3.28 | 2.21 | 91.6 | 1.65 | 4.77 | | | | |
| 3.417 | .129 | .118 | 3.80 | .095 | .188 | 7,100 | 8,300 | 4,700 | 10 |
| 86.79 | 3.28 | 3.00 | 96.5 | 2.41 | 4.77 | | | | |
| 3.811 | .129 | .118 | 4.19 | .095 | .188 | 6,400 | 7,600 | 4,300 | 11 |
| 96.80 | 3.28 | 3.00 | 106.5 | 2.41 | 4.77 | | | | |
| 4.205 | .129 | .118 | 4.59 | .095 | .188 | 6,000 | 7,000 | 3,800 | 12 |
| 106.81 | 3.28 | 3.00 | 116.6 | 2.41 | 4.77 | | | | |
| 4.536 | .160 | .134 | 5.11 | .109 | .281 | 5,500 | 6,500 | 3,600 | 13 |
| 115.21 | 4.06 | 3.40 | 129.7 | 2.77 | 7.13 | | | | |
| 4.733 | .160 | .134 | 5.30 | .109 | .281 | 5,100 | 6,000 | 3,400 | 14 |
| 120.22 | 4.06 | 3.40 | 134.7 | 2.77 | 7.13 | | | | |
| 4.930 | .160 | .134 | 5.50 | .109 | .281 | 4,800 | 5,600 | 3,200 | 15 |
| 125.22 | 4.06 | 3.40 | 139.7 | 2.77 | 7.13 | | | | |
| 5.324 | .193 | .134 | 5.89 | .109 | .281 | 4,500 | 5,300 | 3,000 | 16 |
| 135.23 | 4.90 | 3.40 | 149.7 | 2.77 | 7.13 | | | | |
| 5.718 | .193 | .134 | 6.29 | .109 | .281 | 4,200 | 5,000 | 2,800 | 17 |
| 145.24 | 4.90 | 3.40 | 159.7 | 2.77 | 7.13 | | | | |
| 6.111 | .193 | .134 | 6.68 | .109 | .281 | 4,000 | 4,700 | 2,600 | 18 |
| 155.22 | 4.90 | 3.40 | 169.7 | 2.77 | 7.13 | | | | |
| 6.443 | .224 | .150 | 7.20 | .120 | .375 | 3,700 | 4,400 | 2,500 | 19 |
| 163.65 | 5.69 | 3.81 | 182.9 | 3.05 | 9.52 | | | | |
| 6.837 | .224 | .150 | 7.59 | .120 | .375 | 3,500 | 4,200 | 2,300 | 20 |
| 173.66 | 5.69 | 3.81 | 192.9 | 3.05 | 9.52 | | | | |



With Snap Ring Groove TMB2N



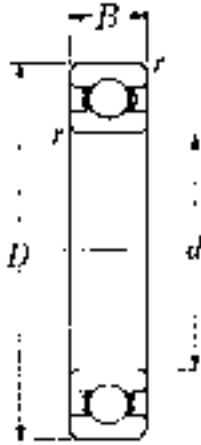
With Snap Ring TMB2NR



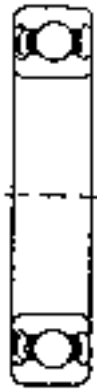
Single Shielded With Snap Ring TMB2ZNR



Units: INCHES
Millimeters



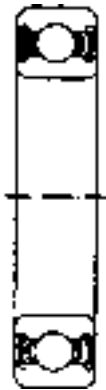
Open Type
TMB2



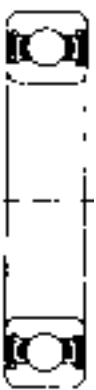
Single
Shielded
TMB2Z



Double
Shielded
TMB2ZZ



Double
Sealed
TMB2LLU
(Contact Type)



Double
Sealed
TMB2LLB
(Non-Contact Type)

SINGLE ROW RADIAL BALL BEARINGS

| Bearing No. | Bore | O.D. | Width | Fillet Radii | | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|---------------|----------------|--------------|--------------|----------------|--------------------------|-----------------------|--------------|
| | d | D | B | r | r ₁ | Dynamic C | Static C ₀ | |
| TMB221 | 4.1339 105 | 7.4803 190 | 1.4173 36 | .083 2.1 | .020 .5 | 29,900 | 23,500 | 8.16 |
| TMB222 | 4.3307 110 | 7.8740 200 | 1.4961 38 | .083 2.1 | .020 .5 | 32,500 | 26,300 | 9.61 |
| TMB224 | 4.7244 120 | 8.4646 215 | 1.5748 40 | .083 2.1 | — | 35,000 | 29,500 | 11.4 |
| TMB226 | 5.1181 130 | 9.0551 230 | 1.5748 40 | .118 3.0 | — | 37,500 | 33,000 | 12.8 |
| TMB228 | 5.5118 140 | 9.8425 250 | 1.6535 42 | .118 3.0 | — | 37,500 | 33,500 | 16.5 |
| TMB230 | 5.9055 150 | 10.6299 270 | 1.7717 45 | .118 — | — | 39,500 | 37,500 | 20.7 |
| TMB232 | 6.2992 160 | 11.4173 290 | 1.8898 48 | .118 — | — | 41,500 | 42,000 | 31.5 |
| TMB234 | 6.6929 170 | 12.2047 310 | 2.0472 52 | .197 4.0 | — | 47,500 | 50,000 | 38.6 |
| TMB236 | 7.0866 180 | 12.5984 320 | 2.0472 52 | .197 4.0 | — | 51,000 | 54,000 | 40.3 |
| TMB238 | 7.4803 190 | 13.3858 340 | 2.1654 55 | .197 4.0 | — | 57,500 | 63,500 | 50.7 |
| TMB240 | 7.8740 200 | 14.1732 360 | 2.2835 58 | .197 4.0 | — | 60,800 | 70,000 | 62.2 |
| TMB244 | 8.6614 220 | 15.7480 400 | 2.5590 65 | .197 4.0 | — | 67,000 | 81,500 | 66.6 |

SINGLE ROW RADIAL BALL BEARINGS

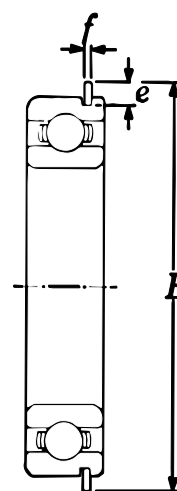
Units: **INCHES**
Millimeters



| Snap Ring Groove Dimensions | | | Snap Ring Dimensions | | | Limiting Speed (RPM) | | | Bore Diameter No. |
|-----------------------------|-------------|-------------|----------------------|-----------|------|----------------------|-------|---------|-------------------|
| D_n (max) | a_n (max) | b_n (min) | E (max) | f (max) | e | Grease | Oil | LU, LLU | |
| 7.230 | .224 | .150 | 7.99 | .120 | .375 | 3,400 | 4,000 | 2,300 | 21 |
| 183.64 | 5.69 | 3.81 | 202.9 | 3.05 | 9.52 | | | | |
| 7.624 | .224 | .150 | 8.38 | .120 | .375 | 3,200 | 3,800 | 2,200 | 22 |
| 193.65 | 5.69 | 3.81 | 212.9 | 3.05 | 9.52 | | | | |
| — | — | — | — | — | — | 2,900 | 3,400 | 2,000 | 24 |
| — | — | — | — | — | — | 2,300 | 2,700 | — | 26 |
| — | — | — | — | — | — | 2,100 | 2,500 | — | 28 |
| — | — | — | — | — | — | 2,000 | 2,400 | — | 30 |
| — | — | — | — | — | — | 1,900 | 2,200 | — | 32 |
| — | — | — | — | — | — | 1,800 | 2,100 | — | 34 |
| — | — | — | — | — | — | 1,700 | 1,800 | — | 36 |
| — | — | — | — | — | — | 1,800 | 2,100 | — | 38 |
| — | — | — | — | — | — | 1,700 | 2,000 | — | 40 |
| — | — | — | — | — | — | 1,500 | 1,800 | — | 44 |



With Snap Ring Groove
TMB2N



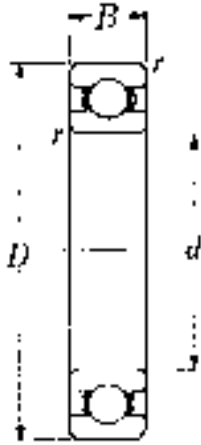
With Snap Ring
TMB2NR



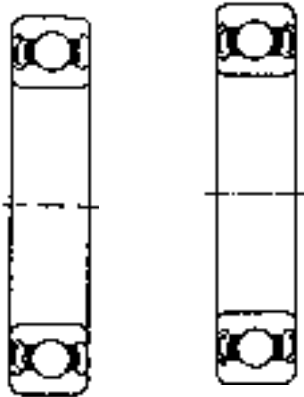
Single Shielded With Snap Ring
TMB2ZNR



Units: INCHES
Millimeters

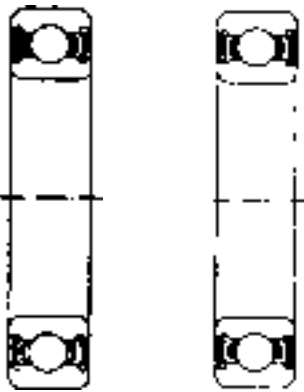


Open Type
TMB3



Single
Shielded
TMB3Z

Double
Shielded
TMB3ZZ



Double
Sealed
TMB3LLU
(Contact Type)

Double
Sealed
TMB3LLB
(Non-Contact Type)

SINGLE ROW RADIAL BALL BEARINGS

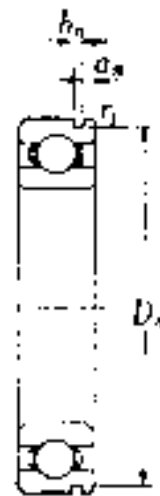
| Bearing No. | Bore | O.D. | Width | Fillet Radii | | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|---------------|----------------|--------------|--------------|----------------|--------------------------|-----------------------|--------------|
| | d | D | | r | r ₁ | Dynamic C | Static C ₀ | |
| TMB300 | .3937 10 | 1.3780 35 | .4331 11 | .024 .6 | .020 .5 | 1,840 | 785 | .117 |
| TMB301 | .4724 12 | 1.4567 37 | .4724 12 | .039 1.0 | .020 .5 | 2,180 | 940 | .132 |
| TMB302 | .5906 15 | 1.6535 42 | .5118 13 | .039 1.0 | .020 .5 | 2,570 | 1,220 | .181 |
| TMB303 | .6693 17 | 1.8504 47 | .5512 14 | .039 1.0 | .020 .5 | 3,050 | 1,470 | .254 |
| TMB304 | .7874 20 | 2.0472 52 | .5906 15 | .043 1.1 | .020 .5 | 3,600 | 1,770 | .317 |
| TMB3/22 | .8661 22 | 2.2047 56 | .6299 16 | — | .020 .5 | 4,150 | 2,080 | .388 |
| TMB305 | .9843 25 | 2.4409 62 | .6693 17 | .043 1.1 | .020 .5 | 4,750 | 2,460 | .511 |
| TMB3/28 | 1.1024 28 | 2.6772 68 | .7087 18 | .043 1.1 | .020 .5 | 6,000 | 3,150 | .633 |
| TMB306 | 1.1811 30 | 2.8346 72 | .7480 19 | .043 1.1 | .020 .5 | 6,000 | 3,400 | .763 |
| TMB3/32 | 1.2598 32 | 2.9528 75 | .7874 20 | .043 1.1 | .020 .5 | 6,700 | 3,800 | .842 |
| TMB307 | 1.3780 35 | 3.1496 80 | .8268 21 | .059 1.5 | .020 .5 | 7,500 | 4,300 | 1.01 |
| TMB308 | 1.5748 40 | 3.5433 90 | .9055 23 | .059 1.5 | .020 .5 | 9,150 | 5,400 | 1.40 |
| TMB309 | 1.7717 45 | 3.9370 100 | .9843 25 | .059 1.5 | .020 .5 | 11,900 | 7,200 | 1.84 |
| TMB310 | 1.9685 50 | 4.3307 110 | 1.0630 27 | .079 2.0 | .020 .5 | 13,900 | 8,600 | 2.36 |
| TMB311 | 2.1654 55 | 4.7244 120 | 1.1417 29 | .079 2.0 | .020 .5 | 16,100 | 10,100 | 3.02 |
| TMB312 | 2.3622 60 | 5.1181 130 | 1.2205 31 | .083 2.1 | .020 .5 | 18,400 | 11,700 | 3.75 |
| TMB313 | 2.5591 65 | 5.5118 140 | 1.2992 33 | .089 2.1 | .020 .5 | 20,800 | 13,400 | 4.59 |
| TMB314 | 2.7559 70 | 5.9055 150 | 1.3780 35 | .083 2.1 | .020 .5 | 23,400 | 15,300 | 5.56 |
| TMB315 | 2.9528 75 | 6.2992 160 | 1.4567 37 | .083 2.1 | .020 .5 | 25,500 | 17,400 | 6.66 |
| TMB316 | 3.1496 80 | 6.6929 170 | 1.5354 39 | .083 2.1 | .020 .5 | 27,600 | 19,500 | 7.91 |
| TMB317 | 3.3465 85 | 7.0866 180 | 1.6142 41 | .118 3.0 | .020 .5 | 29,800 | 21,800 | 9.33 |
| TMB318 | 3.5433 90 | 7.4803 190 | 1.6929 43 | .118 3.0 | .020 .5 | 32,000 | 24,100 | 10.8 |
| TMB319 | 3.7402 95 | 7.8740 200 | 1.7717 45 | .118 3.0 | .020 .5 | 34,500 | 26,600 | 12.5 |
| TMB320 | 3.9370 100 | 8.4646 215 | 1.8504 47 | .118 3.0 | — | 39,000 | 31,500 | 15.4 |
| TMB321 | 4.1339 105 | 8.8583 225 | 1.9291 49 | .118 3.0 | — | 41,500 | 34,500 | 17.7 |
| TMB322 | 4.3307 110 | 9.4488 240 | 1.9685 50 | .118 3.0 | — | 46,000 | 40,500 | 21.0 |
| TMB324 | 4.7244 120 | 10.2362 260 | 2.1654 55 | .118 3.0 | — | 46,500 | 41,500 | 27.3 |
| TMB326 | 5.1181 130 | 11.0236 280 | 2.2835 58 | .157 4.0 | — | 51,500 | 48,000 | 33.3 |
| TMB328 | 5.5118 140 | 11.8110 300 | 2.4409 62 | .157 4.0 | — | 57,000 | 55,500 | 40.8 |
| TMB330 | 5.9055 150 | 12.5984 320 | 2.5591 65 | .157 4.0 | — | 61,500 | 63,500 | 57.8 |
| TMB332 | 6.2992 160 | 13.3858 340 | 2.6772 68 | .157 4.0 | — | 62,500 | 64,500 | 63.9 |
| TMB334 | 6.6929 170 | 14.1732 360 | 2.8346 72 | .157 4.0 | — | 73,500 | 80,000 | 76.1 |
| TMB336 | 7.0866 180 | 14.9606 380 | 2.9528 75 | .157 4.0 | — | 79,500 | 91,500 | 93.5 |
| TMB338 | 7.4803 190 | 15.7480 400 | 3.0709 78 | .197 5.0 | — | 79,500 | 93,000 | 108 |
| TMB340 | 7.8740 200 | 16.5354 420 | 3.1496 80 | .197 5.0 | — | 92,000 | 113,000 | 122 |
| TMB344 | 8.6614 220 | 18.1102 460 | 3.4650 88 | .197 5.0 | — | 92,500 | 116,000 | 134 |

SINGLE ROW RADIAL BALL BEARINGS

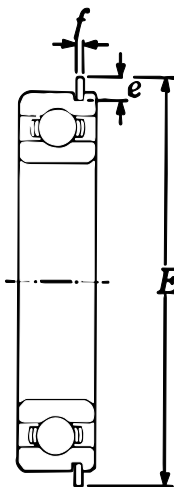
Units: **INCHES**
Millimeters



| Snap Ring Groove Dimensions | | | Snap Ring Dimensions | | | Limiting Speed (RPM) | | | Bore Diameter No. |
|-----------------------------|-------------|-------------|----------------------|---------|------|----------------------|--------|---------|-------------------|
| D_n (max) | a_n (max) | b_n (min) | E (max) | f (max) | e | Grease | Oil | LU, LLU | |
| 1.306 | .081 | .065 | 1.56 | .042 | .125 | 23,000 | 27,000 | 16,000 | 00 |
| 33.17 | 2.06 | 1.65 | 39.7 | 1.07 | 3.18 | | | | |
| 1.369 | .081 | .065 | 1.63 | .042 | .125 | 20,000 | 24,000 | 15,000 | 01 |
| 34.77 | 2.06 | 1.65 | 41.3 | 1.07 | 3.18 | | | | |
| 1.565 | .081 | .065 | 1.82 | .042 | .125 | 17,000 | 21,000 | 12,000 | 02 |
| 39.75 | 2.06 | 1.65 | 46.3 | 1.07 | 3.18 | | | | |
| 1.756 | .097 | .065 | 2.07 | .042 | .156 | 16,000 | 19,000 | 11,000 | 03 |
| 44.60 | 2.46 | 1.65 | 52.7 | 1.07 | 3.96 | | | | |
| 1.958 | .097 | .065 | 2.28 | .042 | .156 | 14,000 | 17,000 | 10,000 | 04 |
| 49.73 | 2.46 | 1.65 | 57.9 | 1.07 | 3.96 | | | | |
| 2.110 | .097 | .065 | 2.43 | .042 | .156 | 13,000 | 15,000 | 9,200 | /22 |
| 53.59 | 2.46 | 1.65 | 61.7 | 1.07 | 3.96 | | | | |
| 2.347 | .129 | .087 | 2.67 | .065 | .156 | 12,000 | 14,000 | 8,100 | 05 |
| 59.61 | 3.28 | 2.20 | 67.7 | 1.65 | 3.96 | | | | |
| 2.552 | .129 | .087 | 2.94 | .065 | .188 | 11,000 | 13,000 | 7,400 | /28 |
| 64.82 | 3.28 | 2.20 | 74.6 | 1.65 | 4.77 | | | | |
| 2.709 | .129 | .087 | 3.09 | .065 | .188 | 10,000 | 12,000 | 6,600 | 06 |
| 68.81 | 3.28 | 2.20 | 78.6 | 1.65 | 4.77 | | | | |
| 2.828 | .129 | .087 | 3.21 | .065 | .188 | 9,500 | 11,000 | 6,500 | /32 |
| 71.83 | 3.28 | 2.20 | 81.6 | 1.65 | 4.77 | | | | |
| 3.024 | .129 | .087 | 3.41 | .065 | .188 | 8,800 | 10,000 | 6,000 | 07 |
| 76.81 | 3.28 | 2.20 | 86.6 | 1.65 | 4.77 | | | | |
| 3.417 | .129 | .118 | 3.80 | .095 | .188 | 7,800 | 9,200 | 5,300 | 08 |
| 86.79 | 3.28 | 3.00 | 96.5 | 2.41 | 4.77 | | | | |
| 3.811 | .129 | .118 | 4.19 | .095 | .188 | 7,000 | 8,200 | 4,700 | 09 |
| 96.80 | 3.28 | 3.00 | 106.5 | 2.41 | 4.77 | | | | |
| 4.205 | .129 | .118 | 4.59 | .095 | .188 | 6,400 | 7,500 | 4,200 | 10 |
| 106.81 | 3.28 | 3.00 | 116.6 | 2.41 | 4.77 | | | | |
| 4.536 | .160 | .134 | 5.11 | .109 | .281 | 5,800 | 6,800 | 3,900 | 11 |
| 115.21 | 4.06 | 3.40 | 129.7 | 2.77 | 7.13 | | | | |
| 4.930 | .160 | .134 | 5.50 | .109 | .281 | 5,400 | 6,300 | 3,600 | 12 |
| 125.22 | 4.06 | 3.40 | 139.7 | 2.77 | 7.13 | | | | |
| 5.324 | .193 | .134 | 5.89 | .109 | .281 | 4,900 | 5,800 | 3,300 | 13 |
| 135.23 | 4.90 | 3.40 | 149.7 | 2.77 | 7.13 | | | | |
| 5.718 | .193 | .134 | 6.29 | .109 | .281 | 4,600 | 5,400 | 3,100 | 14 |
| 145.24 | 4.90 | 3.40 | 159.7 | 2.77 | 7.13 | | | | |
| 6.111 | .193 | .134 | 6.68 | .109 | .281 | 4,300 | 5,000 | 2,900 | 15 |
| 155.22 | 4.90 | 3.40 | 169.7 | 2.77 | 7.13 | | | | |
| 6.443 | .224 | .150 | 7.20 | .120 | .375 | 4,000 | 4,700 | 2,700 | 16 |
| 163.65 | 5.69 | 3.80 | 182.9 | 3.05 | 9.52 | | | | |
| 6.837 | .224 | .150 | 7.59 | .120 | .375 | 3,800 | 4,500 | 2,600 | 17 |
| 173.66 | 5.69 | 3.80 | 192.9 | 3.05 | 9.52 | | | | |
| 7.230 | .224 | .150 | 7.99 | .120 | .375 | 3,600 | 4,200 | 2,400 | 18 |
| 183.64 | 5.69 | 3.80 | 202.9 | 3.05 | 9.52 | | | | |
| 7.624 | .224 | .150 | 8.38 | .120 | .375 | 3,300 | 3,900 | 2,300 | 19 |
| 193.65 | 5.69 | 3.80 | 212.9 | 3.05 | 9.52 | | | | |
| — | — | — | — | — | — | 3,200 | 3,700 | 2,200 | 20 |
| — | — | — | — | — | — | 3,000 | 3,600 | 2,100 | 21 |
| — | — | — | — | — | — | 2,900 | 3,400 | 1,900 | 22 |
| — | — | — | — | — | — | 2,600 | 3,100 | — | 24 |
| — | — | — | — | — | — | 2,400 | 2,800 | — | 26 |
| — | — | — | — | — | — | 2,200 | 2,600 | — | 28 |
| — | — | — | — | — | — | 2,100 | 2,400 | — | 30 |
| — | — | — | — | — | — | 1,900 | 2,300 | — | 32 |
| — | — | — | — | — | — | 1,800 | 2,100 | — | 34 |
| — | — | — | — | — | — | 1,700 | 2,000 | — | 36 |
| — | — | — | — | — | — | 1,600 | 1,900 | — | 38 |
| — | — | — | — | — | — | 1,500 | 1,800 | — | 40 |
| — | — | — | — | — | — | 1,400 | 1,600 | — | 44 |



With Snap Ring Groove TMB3N

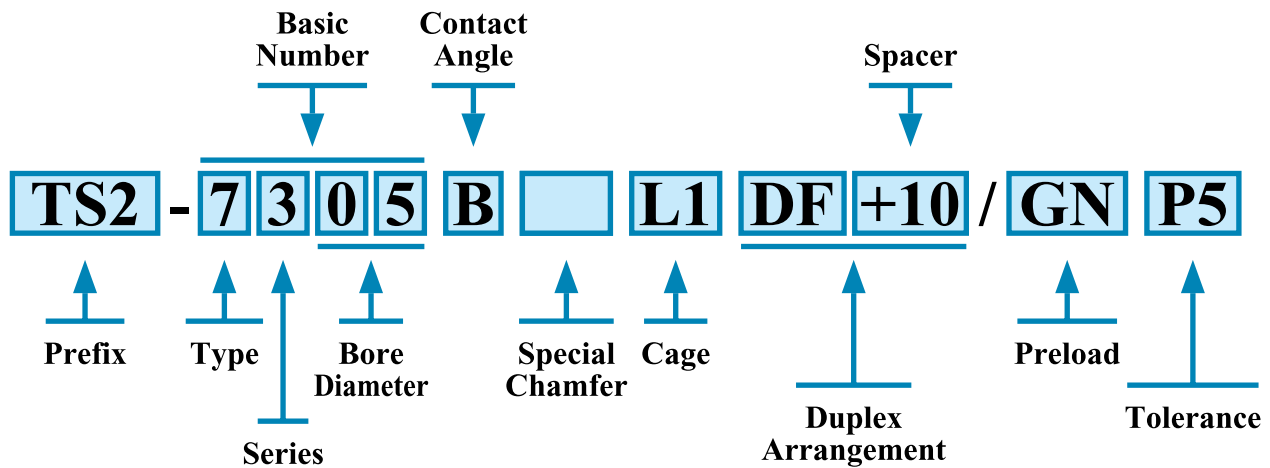


With Snap Ring TMB3NR



Single Shielded With Snap Ring TMB3ZNR

Notes



1. PREFIX

| | |
|------|--|
| TS2: | Heat stabilization for up to 320°F (160°C) |
| TS3: | Heat stabilization for up to 390°F (200°C) |
| TS4: | Heat stabilization for up to 480°F (250°C) |
| 5S: | Ceramic Rolling Elements |

2. TYPE

| | |
|-----------|---|
| 32,33: | Double row angular contact ball bearings with filling slot |
| 52,53: | Double row angular contact ball bearings without filling slot |
| 70,72,73: | Angular contact ball bearings |
| BNT: | High speed angular contact ball bearings |
| HSB: | High speed angular contact ball bearings |
| SF: | Special single row angular contact ball bearings |
| DE & DF: | Special double row angular contact ball bearings |

3. CONTACT ANGLE

| | |
|------------|-------------------|
| No Symbol: | Contact Angle 30° |
| B: | Contact angle 40° |
| C: | Contact angle 15° |

4. CHAMFER

| | |
|-----|---|
| Xn: | Special chamfer, from 1 onward (X1, X2 ...) |
|-----|---|

5. CAGE

| | |
|------------|-------------------------------|
| No Symbol: | Standard cage |
| J: | Pressed steel cage |
| L1: | Machined brass cage |
| T1: | Phenolic cage |
| T2: | Plastic cage, nylon or teflon |

6. DUPLEX ARRANGEMENT

| | |
|------|---|
| DB: | Duplex pair, back to back mounting |
| DF: | Duplex pair, face to face mounting |
| DT: | Duplex pair, tandem mounting |
| G: | Single bearings, flush ground universal mount for DB, DF and DT arrangement |
| GD2: | Pair of universally mountable bearings |
| +A: | Spacer (A is nominal width of spacer in mm) |

7. PRELOAD

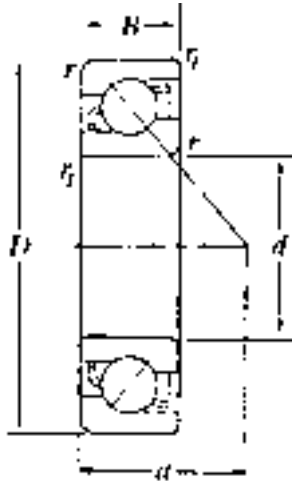
| | |
|-----|-----------------|
| GL: | Light preload |
| GN: | Normal preload |
| GM: | Medium preload |
| GH: | Heavy preload |
| Gn: | Special preload |

8. TOLERANCE

| | |
|------|---|
| P6: | ISO class 6 (equivalent to ABEC 3) |
| P5: | ISO class 5 (equivalent to ABEC 5) |
| P4: | ISO class 4 (equivalent to ABEC 7) |
| PXn: | Special Tolerance, from 1 onward (PX1, PX2 ...) |



Units: INCHES
Millimeters



40°
Contact Angle
72B

SINGLE ROW ANGULAR CONTACT BALL BEARINGS

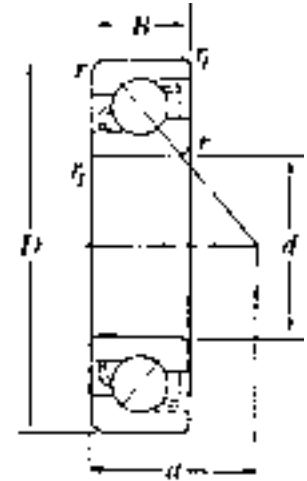
| Bearing No. | Bore | | O.D. | Width | Fillet Radius | | Load Center | Basic Load Ratings (lbs) | | Limiting Speeds (rpm) | | Weight (lbs) | Limiting Speeds (rpm) | |
|-------------|---------------|----------------|--------------|--------------|---------------|--------------|-------------|--------------------------|----------|-----------------------|---------------------|--------------|-----------------------|-----|
| | <i>d</i> | <i>D</i> | | | <i>B</i> | <i>r</i> | | <i>r1</i> | <i>a</i> | Dynamic <i>C</i> | Static <i>Co</i> | | Grease | Oil |
| 7200B | 0.3937 10 | 1.1811 30 | 0.3543 9 | 0.024 0.6 | 0.012 0.3 | 0.51 13 | 1,120 | 565 | 24,000 | 32,000 | 0.064 | 19,000 | 26,000 | |
| 7201B | 0.4724 12 | 1.2598 32 | 0.3937 10 | 0.024 0.6 | 0.012 0.3 | 0.55 14 | 1,480 | 750 | 21,000 | 28,000 | 0.079 | 17,000 | 23,000 | |
| 7202B | 0.5906 15 | 1.3780 35 | 0.4331 11 | 0.024 0.6 | 0.012 0.3 | 0.63 16 | 1,880 | 980 | 18,000 | 25,000 | 0.101 | 15,000 | 20,000 | |
| 7203B | 0.6693 17 | 1.5748 40 | 0.4724 12 | 0.024 0.6 | 0.012 0.3 | 0.72 18 | 2,480 | 1,370 | 17,000 | 22,000 | 0.146 | 13,000 | 18,000 | |
| 7204B | 0.7874 20 | 1.8504 47 | 0.5512 14 | 0.039 1.0 | 0.024 0.6 | 0.85 21.5 | 2,990 | 1,730 | 15,000 | 20,000 | 0.225 | 12,000 | 16,000 | |
| 7205B | 0.9843 25 | 2.0472 52 | 0.5906 15 | 0.039 1.0 | 0.024 0.6 | 0.94 24 | 3,300 | 2,120 | 12,000 | 16,000 | 0.284 | 10,000 | 13,000 | |
| 7206B | 1.1811 30 | 2.4409 62 | 0.6299 16 | 0.039 1.0 | 0.024 0.6 | 1.08 27.5 | 4,600 | 3,050 | 11,000 | 14,000 | 0.434 | 8,600 | 11,000 | |
| 7207B | 1.3780 35 | 2.8346 72 | 0.6693 17 | 0.043 1.1 | 0.024 0.6 | 1.22 31 | 6,100 | 4,150 | 9,300 | 12,000 | 0.633 | 7,500 | 10,000 | |
| 7208B | 1.5748 40 | 3.1496 80 | 0.7087 18 | 0.043 1.1 | 0.024 0.6 | 1.34 34 | 7,200 | 5,150 | 8,300 | 11,000 | 0.827 | 6,700 | 8,900 | |
| 7209B | 1.7717 45 | 3.3465 85 | 0.7480 19 | 0.043 1.1 | 0.024 0.6 | 1.46 37 | 8,100 | 5,900 | 7,400 | 9,900 | 0.904 | 6,000 | 8,000 | |
| 7210B | 1.9685 50 | 3.5433 90 | 0.7874 20 | 0.043 1.1 | 0.024 0.6 | 1.56 39.5 | 8,400 | 6,450 | 6,700 | 9,000 | 1.03 | 5,500 | 7,300 | |
| 7211B | 2.1654 55 | 3.9370 100 | 0.8268 21 | 0.059 1.5 | 0.039 1.0 | 1.69 43 | 10,400 | 8,100 | 6,100 | 8,200 | 1.35 | 5,000 | 6,600 | |
| 7212B | 2.3622 60 | 4.3307 110 | 0.8661 22 | 0.059 1.5 | 0.039 1.0 | 1.87 47.5 | 12,600 | 10,000 | 5,700 | 7,600 | 1.72 | 4,600 | 6,100 | |
| 7213B | 2.5591 65 | 4.7244 120 | 0.9055 23 | 0.059 1.5 | 0.039 1.0 | 1.99 50.5 | 14,300 | 11,800 | 5,200 | 7,000 | 2.16 | 4,200 | 5,600 | |
| 7214B | 2.7559 70 | 4.9213 125 | 0.9449 24 | 0.059 1.5 | 0.039 1.0 | 2.09 53 | 15,500 | 13,000 | 4,900 | 6,500 | 2.45 | 3,900 | 5,200 | |
| 7215B | 2.9528 75 | 5.1181 130 | 0.9843 25 | 0.059 1.5 | 0.039 1.0 | 2.20 56 | 16,000 | 14,000 | 4,500 | 6,000 | 2.62 | 3,700 | 4,900 | |
| 7216B | 3.1496 80 | 5.5118 140 | 1.0236 26 | 0.079 2 | 0.039 1.0 | 2.32 59 | 18,100 | 15,600 | 4,300 | 5,700 | 3.13 | 3,400 | 4,600 | |
| 7217B | 3.3465 85 | 5.9055 150 | 1.1024 28 | 0.079 2 | 0.039 1.0 | 2.50 63.5 | 20,200 | 18,100 | 4,000 | 5,300 | 4.01 | 3,200 | 4,300 | |
| 7218B | 3.5433 90 | 6.2992 160 | 1.1811 30 | 0.098 2.5 | 0.039 1.0 | 2.66 67.5 | 24,000 | 21,100 | 3,800 | 5,000 | 4.89 | 3,100 | 4,100 | |
| 7219B | 3.7402 95 | 6.6929 170 | 1.2598 32 | 0.083 2.1 | 0.059 1.5 | 2.81 71.5 | 27,200 | 24,200 | 3,500 | 4,700 | 6.00 | 2,900 | 3,800 | |
| 7220B | 3.9370 100 | 7.0866 180 | 1.3386 34 | 0.083 2.1 | 0.059 1.5 | 2.99 76 | 29,300 | 25,700 | 3,400 | 4,500 | 7.19 | 2,700 | 3,600 | |
| 7221B | 4.1339 105 | 7.4803 190 | 1.4173 36 | 0.083 2.1 | 0.059 1.5 | 3.15 80 | 32,000 | 29,000 | 3,200 | 4,300 | 8.53 | 2,600 | 3,500 | |
| 7222B | 4.3307 110 | 7.8740 200 | 1.4961 38 | 0.083 2.1 | 0.059 1.5 | 3.31 84 | 34,500 | 32,500 | 3,000 | 4,000 | 10.0 | 2,500 | 3,300 | |
| 7224B | 4.7244 120 | 8.4646 215 | 1.5748 40 | 0.083 2.1 | 0.059 1.5 | 3.56 90.5 | 37,000 | 36,500 | 2,800 | 3,700 | 13.8 | 2,300 | 3,000 | |
| 7226B | 5.1181 130 | 9.0551 230 | 1.5748 40 | 0.118 3 | 0.059 1.5 | 3.76 95.5 | 40,000 | 40,500 | 2,500 | 3,400 | 15.8 | 2,100 | 2,700 | |
| 7228B | 5.5118 140 | 9.8425 250 | 1.6535 42 | 0.118 3 | 0.059 1.5 | 4.06 103 | 41,000 | 44,000 | 2,300 | 3,100 | 19.4 | 1,900 | 2,500 | |
| 7230B | 5.9055 150 | 10.6299 270 | 1.7717 45 | 0.118 3 | 0.059 1.5 | 4.37 111 | 47,000 | 53,000 | 2,200 | 2,900 | 24.3 | 1,800 | 2,400 | |
| 7232B | 6.2992 160 | 11.4173 290 | 1.8898 48 | 0.118 3 | 0.059 1.5 | 4.65 118 | 53,500 | 62,500 | 2,000 | 2,700 | 30.2 | 1,600 | 2,200 | |
| 7234B | 6.6929 170 | 12.2047 310 | 2.0472 52 | 0.157 4 | 0.059 1.5 | 5.00 127 | 60,000 | 73,500 | 1,900 | 2,500 | 37.5 | 1,500 | 2,100 | |
| 7236B | 7.0866 180 | 12.5984 320 | 2.0472 52 | 0.157 4 | 0.059 1.5 | 5.16 131 | 62,000 | 78,500 | 1,800 | 2,400 | 39.0 | 1,400 | 1,900 | |
| 7238B | 7.4803 190 | 13.3858 340 | 2.1654 55 | 0.157 4 | 0.059 1.5 | 5.47 139 | 61,500 | 79,500 | 1,700 | 2,200 | 47.0 | 1,400 | 1,800 | |
| 7240B | 7.8740 200 | 14.1732 360 | 2.2835 58 | 0.157 4 | 0.059 1.5 | 5.75 146 | 68,500 | 91,500 | 1,600 | 2,100 | 55.8 | 1,300 | 1,700 | |

SINGLE ROW ANGULAR CONTACT BALL BEARINGS

Units: INCHES
Millimeters



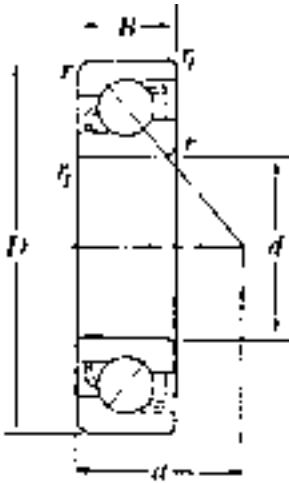
| Bearing No. | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius | | Load Center <i>a</i> | Basic Load Ratings (lbs) | | Limiting Speeds (rpm) | | Weight (lbs) | Limiting Speeds (rpm) | |
|-------------|------------------|------------------|-------------------|---------------|--------------|-------------------------|--------------------------|---------------------|-----------------------|--------|--------------|-----------------------|--------|
| | | | | <i>r</i> | <i>r1</i> | | Dynamic <i>C</i> | Static <i>Co</i> | Grease | Oil | | Grease | Oil |
| 7300B | 0.3937 10 | 1.3780 35 | 0.4331 11 | 0.024 0.6 | 0.020 0.3 | 0.59 15 | 2,140 | 1,040 | 22,000 | 29,000 | 0.090 | 18,000 | 24,000 |
| 7301B | 0.4724 12 | 1.4567 37 | 0.4724 12 | 0.039 1 | 0.024 0.6 | 0.6496 16.5 | 2,370 | 1,110 | 19,000 | 26,000 | 0.099 | 16,000 | 21,000 |
| 7302B | 0.5906 15 | 1.6535 42 | 0.5118 13 | 0.039 1 | 0.024 0.6 | 0.7480 19 | 2,810 | 1,500 | 17,000 | 22,000 | 0.126 | 13,000 | 18,000 |
| 7303B | 0.6693 17 | 1.8504 47 | 0.5512 14 | 0.039 1 | 0.024 0.6 | 0.81 20.5 | 3,350 | 1,800 | 15,000 | 20,000 | 0.240 | 12,000 | 16,000 |
| 7304B | 0.7874 20 | 2.0472 52 | 0.5906 15 | 0.043 1.1 | 0.024 0.6 | 0.89 22.5 | 3,900 | 2,170 | 13,000 | 18,000 | 0.311 | 11,000 | 14,000 |
| 7305B | 0.9843 25 | 2.4409 62 | 0.6693 17 | 0.043 1.1 | 0.024 0.6 | 1.06 27 | 5,500 | 3,300 | 11,000 | 15,000 | 0.516 | 9,100 | 12,000 |
| 7306B | 1.1811 30 | 2.8346 72 | 0.7480 19 | 0.043 1.1 | 0.024 0.6 | 1.24 31.5 | 6,950 | 4,600 | 9,600 | 13,000 | 0.776 | 7,700 | 10,000 |
| 7307B | 1.3780 35 | 3.1496 80 | 0.8268 21 | 0.059 1.5 | 0.039 1 | 1.36 34.5 | 8,250 | 5,450 | 8,400 | 11,000 | 1.03 | 6,800 | 9,000 |
| 7308B | 1.5748 40 | 3.5433 90 | 0.9055 23 | 0.059 1.5 | 0.039 1 | 1.54 39 | 10,100 | 6,800 | 7,400 | 9,900 | 1.40 | 6,000 | 8,000 |
| 7309B | 1.7717 45 | 3.9370 100 | 0.9843 25 | 0.059 1.5 | 0.039 1 | 1.69 43 | 13,100 | 9,050 | 6,600 | 8,900 | 1.88 | 5,400 | 7,200 |
| 7310B | 1.9685 50 | 4.3307 110 | 1.0630 27 | 0.079 2 | 0.039 1 | 1.85 47 | 15,300 | 10,800 | 6,000 | 8,100 | 2.45 | 4,900 | 6,500 |
| 7311B | 2.1654 55 | 4.7244 120 | 1.1417 29 | 0.079 2 | 0.039 1 | 2.05 52 | 17,700 | 12,800 | 5,500 | 7,300 | 3.13 | 4,500 | 5,900 |
| 7312B | 2.3622 60 | 5.1181 130 | 1.2205 31 | 0.083 2.1 | 0.043 1.1 | 2.20 56 | 20,200 | 14,800 | 5,100 | 6,800 | 3.90 | 4,100 | 5,500 |
| 7313B | 2.5591 65 | 5.5118 140 | 1.2992 33 | 0.083 2.1 | 0.043 1.1 | 2.34 59.5 | 22,900 | 17,000 | 4,700 | 6,300 | 4.72 | 3,800 | 5,100 |
| 7314B | 2.7559 70 | 5.9055 150 | 1.3780 35 | 0.083 2.1 | 0.043 1.1 | 2.50 63.5 | 25,700 | 19,300 | 4,400 | 5,800 | 5.75 | 3,500 | 4,700 |
| 7315B | 2.9528 75 | 6.2992 160 | 1.4567 37 | 0.083 2.1 | 0.043 1.1 | 2.68 68 | 28,000 | 21,900 | 4,100 | 5,400 | 6.90 | 3,300 | 4,400 |
| 7316B | 3.1496 80 | 6.6929 170 | 1.5354 39 | 0.083 2.1 | 0.043 1.1 | 2.83 72 | 30,500 | 24,600 | 3,800 | 5,100 | 8.20 | 3,100 | 4,100 |
| 7317B | 3.3465 85 | 7.0866 180 | 1.6142 41 | 0.118 3 | 0.043 1.1 | 2.99 76 | 32,500 | 27,400 | 3,600 | 4,800 | 9.77 | 2,900 | 3,900 |
| 7318B | 3.5433 90 | 7.4803 190 | 1.6929 43 | 0.118 3 | 0.043 1.1 | 3.17 80.5 | 35,000 | 30,500 | 3,400 | 4,500 | 11.4 | 2,700 | 3,700 |
| 7319B | 3.7402 95 | 7.8740 200 | 1.7717 45 | 0.118 3 | 0.043 1.1 | 3.33 84.5 | 37,500 | 33,500 | 3,200 | 4,200 | 13.2 | 2,600 | 3,400 |
| 7320B | 3.9370 100 | 8.4646 215 | 1.8504 47 | 0.118 3 | 0.043 1.1 | 3.52 89.5 | 43,000 | 40,000 | 3,000 | 4,000 | 16.1 | 2,400 | 3,300 |
| 7321B | 4.1339 105 | 8.8583 225 | 1.9291 49 | 0.118 3 | 0.043 1.1 | 3.68 93.5 | 45,500 | 43,500 | 2,900 | 3,800 | 18.4 | 2,300 | 3,100 |
| 7322B | 4.3307 110 | 9.4488 240 | 1.9685 50 | 0.118 3 | 0.043 1.1 | 3.90 99 | 51,000 | 51,000 | 2,700 | 3,700 | 21.6 | 2,200 | 3,000 |
| 7324B | 4.7244 120 | 10.2362 260 | 2.1654 55 | 0.157 4 | 0.043 1.1 | 4.21 107 | 50,500 | 52,000 | 2,500 | 3,300 | 32.4 | 2,000 | 2,700 |
| 7326B | 5.1181 130 | 11.0236 280 | 2.2835 58 | 0.157 4 | 0.059 1.5 | 4.53 115 | 56,000 | 60,500 | 2,300 | 3,100 | 38.8 | 1,900 | 2,500 |
| 7328B | 5.5118 140 | 11.8110 300 | 2.4409 62 | 0.157 4 | 0.059 1.5 | 4.84 123 | 62,000 | 69,500 | 2,100 | 2,800 | 47.4 | 1,700 | 2,300 |
| 7330B | 5.9055 150 | 12.5984 320 | 2.5591 65 | 0.157 4 | 0.059 1.5 | 5.16 131 | 67,500 | 79,000 | 2,000 | 2,600 | 55.3 | 1,600 | 2,100 |
| 7332B | 6.2992 160 | 13.3858 340 | 2.6772 68 | 0.157 4 | 0.059 1.5 | 5.47 139 | 71,000 | 87,000 | 1,800 | 2,400 | 65.7 | 1,500 | 2,000 |
| 7334B | 6.6929 170 | 14.1732 360 | 2.8346 72 | 0.157 4 | 0.059 1.5 | 5.79 147 | 80,000 | 100,000 | 1,700 | 2,300 | 77.8 | 1,400 | 1,800 |
| 7336B | 7.0866 180 | 14.9606 380 | 2.9528 75 | 0.157 4 | 0.059 1.5 | 6.10 155 | 84,000 | 110,000 | 1,600 | 2,100 | 90.2 | 1,300 | 1,700 |
| 7338B | 7.4803 190 | 15.7480 400 | 3.0709 78 | 0.197 5 | 0.079 2 | 6.42 163 | 87,500 | 120,000 | 1,500 | 2,000 | 104 | 1,200 | 1,600 |
| 7340B | 7.8740 200 | 16.5354 420 | 3.1496 80 | 0.197 5 | 0.079 2 | 6.69 170 | 92,000 | 125,000 | 1,400 | 1,900 | 117 | 1,200 | 1,500 |



40°
Contact Angle
73B



Units: INCHES
Millimeters



40°
Contact Angle
74B

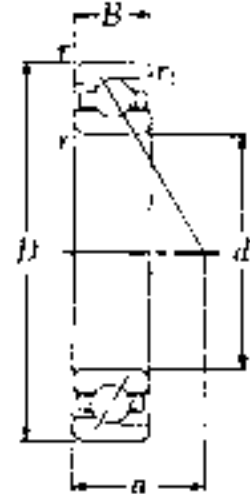
| Bearing No. | Bore | O.D. | Width | Fillet Radius | | Load Center a | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|--------------|---------------|--------------|---------------|----------------|------------------|--------------------------|-----------------------|--------------|
| | d | D | B | r | r ₁ | | Dynamic C | Static C ₀ | |
| 7404B | .7874 20 | 2.8346 72 | .7480 19 | .043 1.1 | .024 .6 | 1.14 29 | 6,850 | 3,650 | 1.00 |
| 7406B | 1.1811 30 | 3.5433 90 | .9843 25 | .039 1 | .024 .6 | 1.46 37 | 9,100 | 5,450 | 1.83 |
| 7407B | 1.3780 35 | 3.9370 100 | .9843 25 | .039 1 | .024 .6 | 1.61 41 | 11,600 | 7,350 | 2.45 |
| 7408B | 1.5748 40 | 4.3307 110 | 1.0630 27 | .059 1.5 | .024 .6 | 1.77 45 | 13,600 | 8,500 | 3.09 |
| 7409B | 1.7717 45 | 4.7244 120 | 1.1417 29 | .059 1.5 | .024 .6 | 1.95 49.5 | 16,800 | 11,100 | 3.94 |
| 7410B | 1.9685 50 | 5.1181 130 | 1.2205 31 | .083 2.1 | .043 1.1 | 2.11 53.5 | 19,100 | 12,800 | 4.87 |
| 7411B | 2.1654 55 | 5.5118 140 | 1.2992 33 | .083 2.1 | .043 1.1 | 2.26 57.5 | 20,300 | 13,900 | 6.02 |
| 7412B | 2.3622 60 | 5.9055 150 | 1.3780 35 | .083 2.1 | .043 1.1 | 2.44 62 | 22,800 | 15,900 | 7.25 |
| 7413B | 2.5591 65 | 6.2992 160 | 1.4567 37 | .083 2.1 | .043 1.1 | 2.60 66 | 26,500 | 19,800 | 8.77 |
| 7414B | 2.7559 70 | 7.0866 180 | 1.6535 42 | .098 2.5 | .043 1.1 | 2.89 73.5 | 31,000 | 24,900 | 12.7 |
| 7415B | 2.9528 75 | 7.4803 190 | 1.7717 45 | .098 2.5 | .043 1.1 | 3.09 78.5 | 33,500 | 27,000 | 15.0 |
| 7416B | 3.1496 80 | 7.8740 200 | 1.8898 48 | .098 2.5 | .043 1.1 | 3.27 83 | 35,500 | 29,800 | 17.5 |
| 7417B | 3.3465 85 | 8.2677 210 | 2.0472 52 | .118 3 | .039 1 | 3.46 88 | 39,500 | 33,500 | 20.4 |
| 7418B | 3.5433 90 | 8.8583 225 | 2.1260 54 | .118 3 | .039 1 | 3.68 93.5 | 45,000 | 44,000 | 24.9 |

SINGLE ROW ANGULAR CONTACT BALL BEARINGS

Units: INCHES
Millimeters



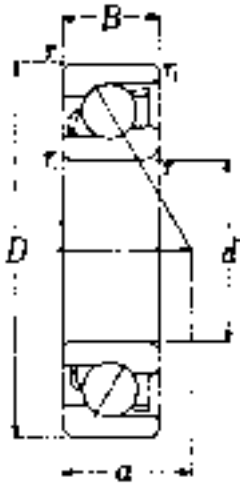
| Bearing No. | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius | | Load Center <i>a</i> | Basic Load Ratings (lbs) | | Limiting Speeds (rpm) | | Weight (lbs) | Limiting Speeds (rpm) | |
|-------------|------------------|------------------|-------------------|---------------|---------------|-------------------------|--------------------------|---------------------|-----------------------|--------|--------------|-----------------------|--------|
| | | | | <i>r</i> | <i>r1</i> | | Dynamic <i>C</i> | Static <i>Co</i> | Grease | Oil | | Grease | Oil |
| 7000 | 0.3937 10 | 1.0236 26 | 0.3150 8 | 0.012 0.3 | 0.006 0.15 | 0.35 9.0 | 1,040 | 465 | 29,000 | 39,000 | 0.049 | 23,000 | 31,000 |
| 7001 | 0.4724 12 | 1.1024 28 | 0.3150 8 | 0.012 0.3 | 0.006 0.15 | 0.39 10.0 | 1,140 | 555 | 26,000 | 35,000 | 0.053 | 21,000 | 28,000 |
| 7002 | 0.5906 15 | 1.2598 32 | 0.3543 9 | 0.012 0.3 | 0.006 0.15 | 0.45 11.5 | 1,300 | 705 | 23,000 | 31,000 | 0.077 | 18,000 | 24,000 |
| 7003 | 0.6693 17 | 1.3780 35 | 0.3937 10 | 0.012 0.3 | 0.006 0.15 | 0.49 12.5 | 1,610 | 860 | 21,000 | 28,000 | 0.099 | 17,000 | 22,000 |
| 7004 | 0.7874 20 | 1.6535 42 | 0.4724 12 | 0.024 0.6 | 0.012 0.3 | 0.59 15.0 | 2,180 | 1,260 | 19,000 | 25,000 | 0.174 | 15,000 | 20,000 |
| 7005 | 0.9843 25 | 1.8504 47 | 0.4724 12 | 0.024 0.6 | 0.012 0.3 | 0.65 16.5 | 2,420 | 1,540 | 16,000 | 21,000 | 0.201 | 12,000 | 17,000 |
| 7006 | 1.1811 30 | 2.1654 55 | 0.5118 13 | 0.039 1 | 0.024 0.6 | 0.75 19.0 | 3,100 | 2,130 | 13,000 | 18,000 | 0.293 | 11,000 | 14,000 |
| 7007 | 1.3780 35 | 2.4409 62 | 0.5512 14 | 0.039 1 | 0.024 0.6 | 0.83 21.0 | 3,950 | 2,830 | 12,000 | 16,000 | 0.403 | 9,400 | 13,000 |
| 7008 | 1.5748 40 | 2.6772 68 | 0.5906 15 | 0.039 1 | 0.024 0.6 | 0.91 23.0 | 4,200 | 3,300 | 10,000 | 14,000 | 0.481 | 8,300 | 11,000 |
| 7009 | 1.7717 45 | 2.9528 75 | 0.6299 16 | 0.039 1 | 0.024 0.6 | 1.00 25.5 | 5,000 | 3,950 | 9,500 | 13,000 | 0.613 | 7,500 | 10,000 |
| 7010 | 1.9685 50 | 3.1496 80 | 0.6299 16 | 0.039 1 | 0.024 0.6 | 1.06 27.0 | 5,300 | 4,500 | 8,600 | 11,000 | 0.677 | 6,800 | 9,100 |
| 7011 | 2.1654 55 | 3.5433 90 | 0.7087 18 | 0.043 1.1 | 0.024 0.6 | 1.18 30.0 | 7,000 | 5,900 | 7,900 | 11,000 | 0.924 | 6,300 | 8,400 |
| 7012 | 2.3622 60 | 3.7402 95 | 0.7087 18 | 0.043 1.1 | 0.024 0.6 | 1.24 31.5 | 7,150 | 6,300 | 7,200 | 9,600 | 0.990 | 5,800 | 7,700 |
| 7013 | 2.5591 65 | 3.9370 100 | 0.7087 18 | 0.043 1.1 | 0.024 0.6 | 1.30 33.0 | 7,600 | 7,050 | 6,700 | 9,000 | 1.05 | 5,400 | 7,100 |
| 7014 | 2.7559 70 | 4.3307 110 | 0.7874 20 | 0.043 1.1 | 0.024 0.6 | 1.42 36.0 | 9,600 | 8,850 | 6,200 | 8,300 | 1.58 | 5,000 | 6,600 |
| 7015 | 2.9528 75 | 4.5276 115 | 0.7874 20 | 0.043 1.1 | 0.024 0.6 | 1.48 37.5 | 9,800 | 9,400 | 5,800 | 7,800 | 1.67 | 4,600 | 6,200 |
| 7016 | 3.1496 80 | 4.9213 125 | 0.8661 22 | 0.043 1.1 | 0.024 0.6 | 1.59 40.5 | 12,000 | 11,400 | 5,500 | 7,300 | 2.16 | 4,400 | 5,800 |
| 7017 | 3.3465 85 | 5.1181 130 | 0.8661 22 | 0.043 1.1 | 0.024 0.6 | 1.65 42.0 | 12,300 | 12,000 | 5,100 | 6,900 | 2.43 | 4,100 | 5,500 |
| 7018 | 3.5433 90 | 5.5118 140 | 0.9449 24 | 0.059 1.5 | 0.039 1 | 1.77 45.0 | 14,700 | 14,200 | 4,900 | 6,500 | 3.09 | 3,900 | 5,200 |
| 7019 | 3.7402 95 | 5.7087 145 | 0.9449 24 | 0.059 1.5 | 0.039 1 | 1.83 46.5 | 15,000 | 15,000 | 4,600 | 6,100 | 3.26 | 3,700 | 4,900 |
| 7020 | 3.9370 100 | 5.9055 150 | 0.9449 24 | 0.059 1.5 | 0.039 1 | 1.89 48.0 | 15,400 | 15,900 | 4,400 | 5,800 | 3.35 | 3,500 | 4,600 |
| 7021 | 4.1339 105 | 6.2992 160 | 1.0236 26 | 0.079 2 | 0.039 1 | 2.03 51.5 | 18,000 | 18,400 | 4,100 | 5,500 | 4.21 | 3,300 | 4,400 |
| 7022 | 4.3307 110 | 6.6929 170 | 1.1024 28 | 0.079 2 | 0.039 1 | 2.15 54.5 | 20,600 | 20,900 | 3,900 | 5,300 | 5.29 | 3,100 | 4,200 |
| 7024 | 4.7244 120 | 7.0866 180 | 1.1024 28 | 0.079 2 | 0.039 1 | 2.26 57.5 | 21,100 | 22,200 | 3,600 | 4,800 | 5.73 | 2,900 | 3,800 |
| 7026 | 5.1181 130 | 7.8740 200 | 1.2992 33 | 0.079 2 | 0.039 1 | 2.52 64.0 | 26,400 | 28,200 | 3,300 | 4,400 | 8.64 | 2,600 | 3,500 |
| 7028 | 5.5118 140 | 8.2677 210 | 1.2992 33 | 0.079 2 | 0.039 1 | 2.64 67.0 | 26,900 | 29,800 | 3,100 | 4,100 | 9.17 | 2,400 | 3,300 |
| 7030 | 5.9055 150 | 8.8583 225 | 1.3780 35 | 0.083 2.1 | 0.043 1.1 | 2.81 71.5 | 31,000 | 34,500 | 2,800 | 3,800 | 10.7 | 2,300 | 3,000 |
| 7032 | 6.2992 160 | 9.4488 240 | 1.4961 38 | 0.083 2.1 | 0.043 1.1 | 3.03 77.0 | 35,000 | 39,500 | 2,700 | 3,600 | 13.0 | 2,100 | 2,800 |
| 7034 | 6.6929 170 | 10.2362 260 | 1.6535 42 | 0.083 2.1 | 0.043 1.1 | 3.27 83.0 | 42,000 | 48,000 | 2,500 | 3,300 | 17.4 | 2,000 | 2,600 |
| 7036 | 7.0866 180 | 11.0236 280 | 1.8110 46 | 0.083 2.1 | 0.043 1.1 | 3.52 89.5 | 49,000 | 59,500 | 2,300 | 3,100 | 22.0 | 1,900 | 2,500 |
| 7038 | 7.4803 190 | 11.4173 290 | 1.8110 46 | 0.083 2.1 | 0.043 1.1 | 3.64 92.5 | 50,500 | 63,000 | 2,200 | 2,900 | 23.6 | 1,800 | 2,300 |
| 7040 | 7.8740 200 | 12.2047 310 | 2.0079 51 | 0.083 2.1 | 0.043 1.1 | 3.90 99.0 | 56,500 | 73,000 | 2,100 | 2,800 | 30.4 | 1,700 | 2,200 |



30°
Contact Angle



Units: INCHES
Millimeters



30°
Contact Angle
72

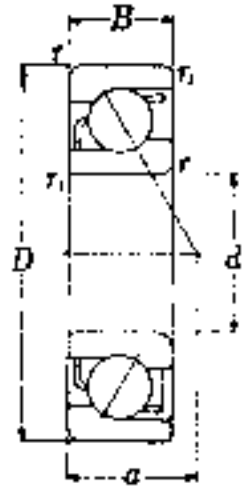
| Bearing No. | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius | | Load Center <i>a</i> | Basic Load Ratings (lbs) | | Limiting Speeds (rpm) | | Weight (lbs) | Limiting Speeds (rpm) | |
|-------------|------------------|------------------|-------------------|---------------|--------------|-------------------------|--------------------------|---------------------|-----------------------|--------|--------------|-----------------------|--------|
| | | | | <i>r</i> | <i>r1</i> | | Dynamic <i>C</i> | Static <i>Co</i> | Grease | Oil | | Grease | Oil |
| | | | | | | | | | | | | | |
| 7200 | 0.3937 10 | 1.1811 30 | 0.3543 9 | 0.024 0.6 | 0.012 0.3 | 0.41 10.5 | 1,220 | 615 | 28,000 | 37,000 | 0.064 | 22,000 | 30,000 |
| 7201 | 0.4724 12 | 1.2598 32 | 0.3937 10 | 0.024 0.6 | 0.012 0.3 | 0.45 11.5 | 1,600 | 810 | 25,000 | 33,000 | 0.077 | 20,000 | 26,000 |
| 7202 | 0.5906 15 | 1.3780 35 | 0.4331 11 | 0.024 0.6 | 0.012 0.3 | 0.49 12.5 | 2,040 | 1,060 | 22,000 | 29,000 | 0.101 | 17,000 | 23,000 |
| 7203 | 0.6693 17 | 1.5748 40 | 0.4724 12 | 0.024 0.6 | 0.012 0.3 | 0.57 14.5 | 2,690 | 1,490 | 19,000 | 26,000 | 0.141 | 15,000 | 21,000 |
| 7204 | 0.7874 20 | 1.8504 47 | 0.5512 14 | 0.039 1 | 0.024 0.6 | 0.67 17 | 3,250 | 1,890 | 17,000 | 23,000 | 0.220 | 14,000 | 18,000 |
| 7205 | 0.9843 25 | 2.0472 52 | 0.5906 15 | 0.039 1 | 0.024 0.6 | 0.75 19 | 3,650 | 2,320 | 14,000 | 19,000 | 0.276 | 11,000 | 15,000 |
| 7206 | 1.1811 30 | 2.4409 62 | 0.6299 16 | 0.039 1 | 0.024 0.6 | 0.85 21.5 | 5,050 | 3,350 | 12,000 | 16,000 | 0.425 | 9,800 | 13,000 |
| 7207 | 1.3780 35 | 2.8346 72 | 0.6693 17 | 0.043 1.1 | 0.024 0.6 | 0.94 24 | 6,700 | 4,500 | 11,000 | 14,000 | 0.619 | 8,600 | 11,000 |
| 7208 | 1.5748 40 | 3.1496 80 | 0.7087 18 | 0.043 1.1 | 0.024 0.6 | 1.04 26.5 | 7,950 | 5,650 | 9,600 | 13,000 | 0.783 | 7,700 | 10,000 |
| 7209 | 1.7717 45 | 3.3465 85 | 0.7480 19 | 0.043 1.1 | 0.024 0.6 | 1.12 28.5 | 8,900 | 6,450 | 8,700 | 12,000 | 0.891 | 6,900 | 9,200 |
| 7210 | 1.9685 50 | 3.5433 90 | 0.7874 20 | 0.043 1.1 | 0.024 0.6 | 1.18 30 | 9,300 | 7,050 | 7,900 | 10,000 | 1.01 | 6,300 | 8,300 |
| 7211 | 2.1654 55 | 3.9370 100 | 0.8268 21 | 0.059 1.5 | 0.039 1 | 1.30 33 | 11,500 | 8,900 | 7,100 | 9,500 | 1.32 | 5,700 | 7,600 |
| 7212 | 2.3622 60 | 4.3307 110 | 0.8661 22 | 0.059 1.5 | 0.039 1 | 1.42 36 | 13,900 | 11,000 | 6,600 | 8,800 | 1.69 | 5,300 | 7,000 |
| 7213 | 2.5591 65 | 4.7244 120 | 0.9055 23 | 0.059 1.5 | 0.039 1 | 1.50 38 | 15,800 | 13,000 | 6,100 | 8,100 | 2.12 | 4,900 | 6,500 |
| 7214 | 2.7559 70 | 4.9213 125 | 0.9449 24 | 0.059 1.5 | 0.039 1 | 1.57 40 | 17,200 | 14,300 | 5,700 | 7,600 | 2.40 | 4,500 | 6,000 |
| 7215 | 2.9528 75 | 5.1181 130 | 0.9843 25 | 0.059 1.5 | 0.039 1 | 1.67 42.5 | 17,800 | 15,400 | 5,300 | 7,100 | 2.58 | 4,200 | 5,600 |
| 7216 | 3.1496 80 | 5.5118 140 | 1.0236 26 | 0.079 2 | 0.039 1 | 1.77 45 | 20,000 | 17,100 | 5,000 | 6,600 | 3.06 | 3,900 | 5,300 |
| 7217 | 3.3465 85 | 5.9055 150 | 1.1024 28 | 0.079 2 | 0.039 1 | 1.89 48 | 22,400 | 19,900 | 4,700 | 6,200 | 3.92 | 3,700 | 5,000 |
| 7218 | 3.5433 90 | 6.2992 160 | 1.1811 30 | 0.079 2 | 0.039 1 | 2.01 51 | 26,500 | 23,200 | 4,400 | 5,900 | 4.81 | 3,500 | 4,700 |
| 7219 | 3.7402 95 | 6.6929 170 | 1.2598 32 | 0.083 2.1 | 0.043 1.1 | 2.15 54.5 | 30,000 | 26,500 | 4,100 | 5,500 | 5.89 | 3,300 | 4,400 |
| 7220 | 3.9370 100 | 7.0866 180 | 1.3386 34 | 0.083 2.1 | 0.043 1.1 | 2.26 57.5 | 32,500 | 28,200 | 3,900 | 5,200 | 7.05 | 3,100 | 4,200 |
| 7221 | 4.1339 105 | 7.4803 190 | 1.4173 36 | 0.083 2.1 | 0.043 1.1 | 2.38 60.5 | 35,000 | 32,000 | 3,700 | 5,000 | 8.36 | 3,000 | 4,000 |
| 7222 | 4.3307 110 | 7.8740 200 | 1.4961 38 | 0.083 2.1 | 0.043 1.1 | 2.52 64 | 38,000 | 35,500 | 3,500 | 4,700 | 9.81 | 2,800 | 3,800 |
| 7224 | 4.7244 120 | 8.4646 215 | 1.5748 40 | 0.083 2.1 | 0.043 1.1 | 2.70 68.5 | 41,000 | 40,000 | 3,200 | 4,300 | 13.8 | 2,600 | 3,400 |
| 7226 | 5.1181 130 | 9.0551 230 | 1.5748 40 | 0.118 3 | 0.043 1.1 | 2.83 72 | 44,000 | 44,500 | 3,000 | 4,000 | 15.8 | 2,400 | 3,100 |
| 7228 | 5.5118 140 | 9.8425 250 | 1.6535 42 | 0.118 3 | 0.043 1.1 | 3.05 77.5 | 45,500 | 48,500 | 2,700 | 3,600 | 19.4 | 2,200 | 2,900 |
| 7230 | 5.9055 150 | 10.6299 270 | 1.7717 45 | 0.118 3 | 0.043 1.1 | 3.27 83 | 52,000 | 58,000 | 2,500 | 3,400 | 24.3 | 2,000 | 2,700 |
| 7232 | 6.2992 160 | 11.4173 290 | 1.8898 48 | 0.118 3 | 0.043 1.1 | 3.50 89 | 59,000 | 69,000 | 2,400 | 3,200 | 30.2 | 1,900 | 2,500 |
| 7234 | 6.6929 170 | 12.2047 310 | 2.0472 52 | 0.157 4 | 0.059 1.5 | 3.76 95.5 | 66,000 | 80,500 | 2,200 | 3,000 | 37.5 | 1,800 | 2,400 |
| 7236 | 7.0866 180 | 12.5984 320 | 2.0472 52 | 0.157 4 | 0.059 1.5 | 3.86 98 | 68,500 | 86,500 | 2,100 | 2,800 | 39.0 | 1,700 | 2,200 |
| 7238 | 7.4803 190 | 13.3858 340 | 2.1654 55 | 0.157 4 | 0.059 1.5 | 4.09 104 | 68,000 | 87,500 | 2,000 | 2,600 | 47.0 | 1,600 | 2,100 |
| 7240 | 7.8740 200 | 14.1732 360 | 2.2835 58 | 0.157 4 | 0.059 1.5 | 4.33 110 | 76,000 | 101,000 | 1,900 | 2,500 | 55.8 | 1,500 | 2,000 |

SINGLE ROW ANGULAR CONTACT BALL BEARINGS

Units: INCHES
Millimeters



| Bearing No. | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius | | Load Center <i>a</i> | Basic Load Ratings (lbs) | | Limiting Speeds (rpm) | | Weight (lbs) | Limiting Speeds (rpm) | |
|-------------|----------------------|----------------------|----------------------|---------------|--------------|-------------------------|--------------------------|---------------------|-----------------------|--------|--------------|-----------------------|--------|
| | | | | <i>r</i> | <i>r1</i> | | Dynamic <i>C</i> | Static <i>Co</i> | Grease | Oil | | Grease | Oil |
| 7300 | 0.3937 10 35 | 1.3780 35 11 | 0.4331 11 0.6 | 0.024 0.6 | 0.012 0.3 | 0.47 12 | 2,280 | 11,100 | 26,000 | 34,000 | 0.088 | 20,000 | 27,000 |
| 7301 | 0.4724 12 37 | 1.4567 42 12 | 0.4724 12 1 | 0.039 1 | 0.024 0.6 | 0.5118 13 | 2,510 | 1,180 | 23,000 | 30,000 | 0.097 | 18,000 | 24,000 |
| 7302 | 0.5906 15 42 | 1.6535 42 13 | 0.5118 13 1 | 0.039 1 | 0.024 0.6 | 0.5906 15 | 3,000 | 1,620 | 19,000 | 26,000 | 0.121 | 15,000 | 21,000 |
| 7303 | 0.6693 17 47 | 1.8504 47 14 | 0.5512 14 1 | 0.039 1 | 0.024 0.6 | 0.63 16 | 3,600 | 1,940 | 18,000 | 24,000 | 0.236 | 14,000 | 19,000 |
| 7304 | 0.7874 20 52 | 2.0472 52 15 | 0.5906 15 1.1 | 0.043 1.1 | 0.024 0.6 | 0.71 18 | 4,200 | 2,340 | 16,000 | 21,000 | 0.304 | 12,000 | 17,000 |
| 7305 | 0.9843 25 62 | 2.4409 62 17 | 0.6693 17 1.1 | 0.043 1.1 | 0.024 0.6 | 0.83 21 | 5,950 | 3,550 | 13,000 | 17,000 | 0.507 | 10,000 | 14,000 |
| 7306 | 1.1811 30 72 | 2.8346 72 19 | 0.7480 19 1.1 | 0.043 1.1 | 0.024 0.6 | 0.96 24.5 | 7,550 | 5,000 | 11,000 | 15,000 | 0.761 | 8,900 | 12,000 |
| 7307 | 1.3780 35 80 | 3.1496 80 21 | 0.8268 21 1.5 | 0.059 1.5 | 0.039 1 | 1.06 27 | 9,000 | 5,900 | 9,800 | 13,000 | 1.02 | 7,800 | 10,000 |
| 7308 | 1.5748 40 90 | 3.5433 90 23 | 0.9055 23 0.59 | 0.059 1 | 0.039 1 | 1.20 30.5 | 11,000 | 7,400 | 8,600 | 12,000 | 1.38 | 6,900 | 9,200 |
| 7309 | 1.7717 45 100 | 3.9370 100 25 | 0.9843 25 1.5 | 0.059 1.5 | 0.039 1 | 1.32 33.5 | 14,300 | 9,800 | 7,800 | 10,000 | 1.85 | 6,200 | 8,200 |
| 7310 | 1.9685 50 110 | 4.3307 110 27 | 1.0630 27 2 | 0.079 2 | 0.039 1 | 1.44 36.5 | 16,700 | 11,700 | 7,100 | 9,400 | 2.40 | 5,600 | 7,500 |
| 7311 | 2.1654 55 120 | 4.7244 120 29 | 1.1417 29 2 | 0.079 2 | 0.039 1 | 1.57 40 | 19,300 | 13,900 | 6,400 | 8,600 | 3.06 | 5,100 | 6,800 |
| 7312 | 2.3622 60 130 | 5.1181 130 31 | 1.2205 31 2.1 | 0.083 2.1 | 0.059 1.5 | 1.69 43 | 22,000 | 16,100 | 5,900 | 7,900 | 3.84 | 4,700 | 6,300 |
| 7313 | 2.5591 65 140 | 5.5118 140 33 | 1.2992 33 2.1 | 0.083 2.1 | 0.059 1.5 | 1.81 46 | 25,000 | 18,400 | 5,500 | 7,300 | 4.65 | 4,400 | 5,800 |
| 7314 | 2.7559 70 150 | 5.9055 150 35 | 1.3780 35 2.1 | 0.083 2.1 | 0.059 1.5 | 1.95 49.5 | 28,000 | 21,000 | 5,100 | 6,800 | 5.64 | 4,100 | 5,400 |
| 7315 | 2.9528 75 160 | 6.2992 160 37 | 1.4567 37 2.1 | 0.083 2.1 | 0.059 1.5 | 2.07 52.5 | 30,500 | 23,800 | 4,800 | 6,300 | 6.77 | 3,800 | 5,000 |
| 7316 | 3.1496 80 170 | 6.6929 170 39 | 1.5354 39 2.1 | 0.083 2.1 | 0.059 1.5 | 2.19 55.5 | 33,000 | 26,700 | 4,500 | 5,900 | 8.05 | 3,500 | 4,700 |
| 7317 | 3.3465 85 180 | 7.0866 180 41 | 1.6142 41 3 | 0.118 3 | 0.059 1.5 | 2.32 59 | 35,500 | 29,800 | 4,200 | 5,600 | 9.57 | 3,300 | 4,500 |
| 7318 | 3.5433 90 190 | 7.4803 190 43 | 1.6929 43 3 | 0.118 3 | 0.059 1.5 | 2.44 62 | 38,500 | 33,000 | 4,000 | 5,300 | 11.2 | 3,200 | 4,200 |
| 7319 | 3.7402 95 200 | 7.8740 200 45 | 1.7717 45 3 | 0.118 3 | 0.059 1.5 | 2.56 65 | 41,000 | 36,500 | 3,700 | 5,000 | 13.0 | 3,000 | 3,900 |
| 7320 | 3.9370 100 215 | 8.4646 215 47 | 1.8504 47 3 | 0.118 3 | 0.059 1.5 | 2.72 69 | 46,500 | 43,500 | 3,500 | 4,700 | 15.8 | 2,800 | 3,700 |
| 7321 | 4.1339 105 225 | 8.8583 225 49 | 1.9291 49 3 | 0.118 3 | 0.059 1.5 | 2.83 72 | 49,500 | 47,500 | 3,400 | 4,500 | 18.1 | 2,700 | 3,600 |
| 7322 | 4.3307 110 240 | 9.4488 240 50 | 1.9685 50 3 | 0.118 3 | 0.059 1.5 | 2.99 76 | 52,000 | 50,500 | 3,200 | 4,300 | 21.2 | 2,600 | 3,400 |
| 7324 | 4.7244 120 260 | 10.2362 260 55 | 2.1654 55 3 | 0.118 3 | 0.059 1.5 | 3.25 82.5 | 55,500 | 56,500 | 2,900 | 3,900 | 32.4 | 2,300 | 3,100 |
| 7326 | 5.1181 130 280 | 11.0236 280 58 | 2.2835 58 4 | 0.157 4 | 0.059 1.5 | 3.46 88 | 61,500 | 66,000 | 2,700 | 3,600 | 38.8 | 2,100 | 2,800 |
| 7328 | 5.5118 140 300 | 11.8110 300 62 | 2.4409 62 4 | 0.157 4 | 0.059 1.5 | 3.72 94.5 | 67,500 | 75,500 | 2,500 | 3,300 | 47.4 | 2,000 | 2,600 |
| 7330 | 5.9055 150 320 | 12.5984 320 65 | 2.5591 65 4 | 0.157 4 | 0.059 1.5 | 3.94 100 | 74,000 | 86,000 | 2,300 | 3,100 | 55.3 | 1,800 | 2,400 |
| 7332 | 6.2992 160 340 | 13.3858 340 68 | 2.6772 68 4 | 0.157 4 | 0.059 1.5 | 4.17 106 | 78,000 | 95,000 | 2,100 | 2,800 | 65.7 | 1,700 | 2,300 |
| 7334 | 6.6929 170 360 | 14.1732 360 72 | 2.8346 72 4 | 0.157 4 | 0.059 1.5 | 4.45 113 | 87,500 | 109,000 | 2,000 | 2,700 | 77.8 | 1,600 | 2,100 |
| 7336 | 7.0866 180 380 | 14.9606 380 75 | 2.9528 75 4 | 0.157 4 | 0.059 1.5 | 4.65 118 | 92,000 | 120,000 | 1,900 | 2,500 | 90.2 | 1,500 | 2,000 |
| 7338 | 7.4803 190 400 | 15.7480 400 78 | 3.0709 78 5 | 0.197 5 | 0.059 1.5 | 4.88 124 | 96,500 | 131,000 | 1,800 | 2,300 | 104 | 1,400 | 1,900 |
| 7340 | 7.8740 200 420 | 16.5354 420 80 | 3.1496 80 5 | 0.197 5 | 0.059 1.5 | 5.12 130 | 101,000 | 137,000 | 1,700 | 2,200 | 117 | 1,300 | 1,800 |



30°
Contact Angle
73



**SERIES
70C**

**High
Precision
Grade**

Suffix P5

- AFBMA RBEC 5 •
- ISO Class 5 •

Suffix P4

- AFBMA ABEC 7 •
- ISO Class 4 •

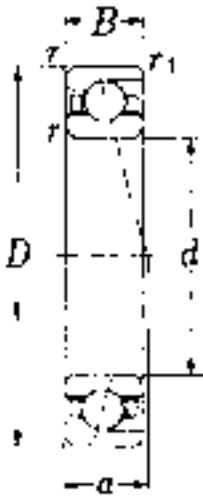
Suffix P2

- AFBMA ABEC 9 •
- ISO Class 2 •

Units: **INCHES**
Millimeters

SINGLE ROW ANGULAR CONTACT BALL BEARINGS

| Bearing No. | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius | | Load Center <i>a</i> | Basic Load Ratings (lbs) | | Limiting Speeds (rpm) | | Weight (lbs) | Limiting Speeds (rpm) | |
|-------------|------------------|------------------|-------------------|---------------|--------------|-------------------------|--------------------------|---------------------|-----------------------|--------|--------------|-----------------------|--------|
| | | | | <i>r</i> | <i>r1</i> | | Dynamic <i>C</i> | Static <i>Co</i> | Grease | Oil | | Grease | Oil |
| 7000C | 0.3937 10 | 1.0236 26 | 0.3150 8 | 0.012 0.3 | 0.15 0.06 | 0.26 6.5 | 1,790 | 990 | 43,000 | 58,000 | 0.042 | 34,000 | 46,000 |
| 7001C | 0.4724 12 | 1.1024 28 | 0.3150 8 | 0.012 0.3 | 0.15 0.06 | 0.26 6.5 | 1,220 | 595 | 39,000 | 52,000 | 0.046 | 31,000 | 41,000 |
| 7002C | 0.5906 15 | 1.2598 32 | 0.3543 9 | 0.012 0.3 | 0.15 0.06 | 0.30 7.5 | 1,400 | 760 | 32,000 | 42,000 | 0.064 | 27,000 | 36,000 |
| 7003C | 0.6693 17 | 1.3780 35 | 0.3937 10 | 0.012 0.3 | 0.15 0.06 | 0.33 8.5 | 1,740 | 925 | 31,000 | 41,000 | 0.084 | 24,000 | 33,000 |
| 7004C | 0.7874 20 | 1.6535 42 | 0.4724 12 | 0.024 0.6 | 0.012 0.3 | 0.39 10.0 | 2,360 | 1,360 | 27,000 | 36,000 | 0.146 | 22,000 | 29,000 |
| 7005C | 0.9843 25 | 1.8504 47 | 0.4724 12 | 0.024 0.6 | 0.012 0.3 | 0.43 11.0 | 2,630 | 1,670 | 23,000 | 31,000 | 0.132 | 18,000 | 24,000 |
| 7006C | 1.1811 30 | 2.1654 55 | 0.5118 13 | 0.039 1.0 | 0.024 0.6 | 0.49 12.5 | 3,400 | 2,310 | 20,000 | 26,000 | 0.196 | 16,000 | 21,000 |
| 7007C | 1.3780 35 | 2.4409 62 | 0.5512 14 | 0.039 1.0 | 0.024 0.6 | 0.53 13.5 | 4,300 | 3,050 | 17,000 | 23,000 | 0.287 | 14,000 | 18,000 |
| 7008C | 1.5748 40 | 2.6772 68 | 0.5906 15 | 0.039 1.0 | 0.024 0.6 | 0.57 14.5 | 4,600 | 3,550 | 15,000 | 21,000 | 0.357 | 12,000 | 16,000 |
| 7009C | 1.7717 45 | 2.9528 75 | 0.6299 16 | 0.039 1.0 | 0.024 0.6 | 0.63 16.0 | 5,500 | 4,350 | 14,000 | 19,000 | 0.461 | 11,000 | 15,000 |
| 7010C | 1.9685 50 | 3.1496 80 | 0.6299 16 | 0.039 1.0 | 0.024 0.6 | 0.65 16.5 | 5,850 | 4,900 | 13,000 | 17,000 | 0.514 | 10,000 | 13,000 |
| 7011C | 2.1654 55 | 3.5433 90 | 0.7087 18 | 0.043 1.1 | 0.024 0.6 | 0.73 18.5 | 7,650 | 6,450 | 12,000 | 15,000 | 0.712 | 9,200 | 12,000 |
| 7012C | 2.3622 60 | 3.7402 95 | 0.7087 18 | 0.043 1.1 | 0.024 0.6 | 0.77 19.5 | 7,900 | 6,900 | 11,000 | 14,000 | 0.772 | 8,400 | 11,000 |
| 7013C | 2.5591 65 | 3.9370 100 | 0.7087 18 | 0.043 1.1 | 0.024 0.6 | 0.79 20.0 | 8,350 | 7,700 | 9,900 | 13,000 | 0.840 | 7,800 | 10,000 |
| 7014C | 2.7559 70 | 4.3307 110 | 0.7874 20 | 0.043 1.1 | 0.024 0.6 | 0.87 22.0 | 10,500 | 9,650 | 9,200 | 12,000 | 1.28 | 7,300 | 9,700 |
| 7015C | 2.9528 75 | 4.5276 115 | 0.7874 20 | 0.043 1.1 | 0.024 0.6 | 0.89 22.5 | 10,800 | 10,300 | 8,600 | 11,000 | 1.33 | 6,800 | 9,000 |
| 7016C | 3.1496 80 | 4.9213 125 | 0.8661 22 | 0.043 1.1 | 0.024 0.6 | 0.96 24.5 | 13,200 | 12,400 | 8,000 | 11,000 | 1.72 | 6,400 | 8,500 |
| 7017C | 3.3465 85 | 5.1181 130 | 0.8661 22 | 0.043 1.1 | 0.024 0.6 | 1.00 25.5 | 13,500 | 13,200 | 7,600 | 10,000 | 1.94 | 6,000 | 8,000 |
| 7018C | 3.5433 90 | 5.5118 140 | 0.9449 24 | 0.059 1.5 | 0.039 1.0 | 1.08 27.5 | 16,100 | 15,500 | 7,100 | 9,500 | 2.47 | 5,700 | 7,500 |
| 7019C | 3.7402 95 | 5.7087 145 | 0.9449 24 | 0.059 1.5 | 0.039 1.0 | 1.10 28.0 | 16,500 | 16,500 | 6,800 | 9,000 | 2.60 | 5,400 | 7,100 |
| 7020C | 3.9370 100 | 5.9055 150 | 0.9449 24 | 0.059 1.5 | 0.039 1.0 | 1.12 28.5 | 16,900 | 17,400 | 6,400 | 8,600 | 2.69 | 5,100 | 6,800 |
| 7021C | 4.1339 105 | 6.2992 160 | 1.0236 26 | 0.079 2.0 | 0.039 1.0 | 1.22 31.0 | 19,800 | 20,100 | 6,100 | 8,100 | 3.37 | 4,800 | 6,400 |
| 7022C | 4.3307 110 | 6.6929 170 | 1.1024 28 | 0.079 2.0 | 0.039 1.0 | 1.30 33.0 | 22,700 | 22,800 | 5,800 | 7,700 | 4.23 | 4,600 | 6,100 |
| 7024C | 4.7244 120 | 7.0866 180 | 1.1024 28 | 0.079 2.0 | 0.039 1.0 | 1.34 34.0 | 23,200 | 24,300 | 5,300 | 7,100 | 4.74 | 4,200 | 5,600 |
| 7026C | 5.1181 130 | 7.8740 200 | 1.2992 33 | 0.079 2.0 | 0.039 1.0 | 1.52 38.5 | 29,000 | 31,000 | 4,900 | 6,500 | 7.14 | 3,800 | 5,100 |
| 7028C | 5.5118 140 | 8.2677 210 | 1.2992 33 | 0.079 2.0 | 0.039 1.0 | 1.57 40.0 | 29,700 | 32,500 | 4,500 | 6,000 | 7.58 | 3,600 | 4,800 |
| 7030C | 5.9055 150 | 8.8583 225 | 1.3780 35 | 0.083 2.1 | 0.043 1.1 | 1.67 42.5 | 34,000 | 38,000 | 4,200 | 5,600 | 10.7 | 3,300 | 4,400 |
| 7032C | 6.2992 160 | 9.4488 240 | 1.4961 38 | 0.083 2.1 | 0.043 1.1 | 1.81 46.0 | 38,500 | 43,500 | 3,900 | 5,200 | 13.0 | 3,100 | 4,100 |
| 7034C | 6.6929 170 | 10.2362 260 | 1.6535 42 | 0.083 2.1 | 0.043 1.1 | 1.97 50.0 | 46,000 | 52,500 | 3,700 | 4,900 | 17.4 | 2,900 | 3,900 |
| 7036C | 7.0866 180 | 11.0236 280 | 1.8110 46 | 0.083 2.1 | 0.043 1.1 | 2.13 54.0 | 54,000 | 65,500 | 3,400 | 4,600 | 22.0 | 2,700 | 3,600 |
| 7038C | 7.4803 190 | 11.4173 290 | 1.8110 46 | 0.083 2.1 | 0.043 1.1 | 2.17 55.0 | 55,500 | 69,000 | 3,200 | 4,300 | 23.6 | 2,600 | 3,400 |
| 7040C | 7.8740 200 | 12.2047 310 | 2.0079 51 | 0.083 2.1 | 0.043 1.1 | 2.34 59.5 | 62,000 | 80,000 | 3,100 | 4,100 | 30.4 | 2,400 | 3,200 |



15°
Contact
Angle

SINGLE ROW ANGULAR CONTACT BALL BEARINGS

Units: **INCHES**
Millimeters



**SERIES
72C**

**High
Precision
Grade**

Suffix P5

- AFBMA RBEC 5 •
- ISO Class 5 •

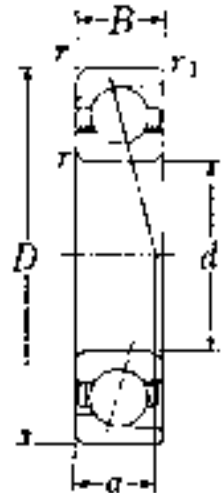
Suffix P4

- AFBMA ABEC 7 •
- ISO Class 4 •

Suffix P2

- AFBMA ABEC 9 •
- ISO Class 2 •

| Bearing No. | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius | | Load Center <i>a</i> | Basic Load Ratings (lbs) | | Limiting Speeds (rpm) | | Weight (lbs) | Limiting Speeds (rpm) | |
|-------------|------------------|------------------|-------------------|---------------|--------------|-------------------------|--------------------------|---------------------|-----------------------|--------|--------------|-----------------------|--------|
| | | | | <i>r</i> | <i>rI</i> | | Dynamic <i>C</i> | Static <i>Co</i> | Grease | Oil | | Grease | Oil |
| | | | | | | | | | | | | | |
| 7200C | 0.3937 10 | 1.1811 30 | 0.3543 9 | 0.024 0.6 | 0.012 0.3 | 0.28 7.0 | 1,220 | 595 | 41,000 | 55,000 | 0.037 | 32,000 | 43,000 |
| 7201C | 0.4724 12 | 1.2598 32 | 0.3937 10 | 0.024 0.6 | 0.012 0.3 | 0.31 8.0 | 1,590 | 780 | 36,000 | 49,000 | 0.049 | 29,000 | 38,000 |
| 7202C | 0.5906 15 | 1.3780 35 | 0.4331 11 | 0.024 0.6 | 0.012 0.3 | 0.35 9.0 | 2,020 | 1,010 | 32,000 | 42,000 | 0.068 | 25,000 | 33,000 |
| 7203C | 0.6693 17 | 1.5748 40 | 0.4724 12 | 0.024 0.6 | 0.012 0.3 | 0.39 10.0 | 2,510 | 1,310 | 29,000 | 38,000 | 0.106 | 23,000 | 30,000 |
| 7204C | 0.7874 20 | 1.8504 47 | 0.5512 14 | 0.039 1.0 | 0.024 0.6 | 0.45 11.5 | 3,300 | 1,840 | 25,000 | 34,000 | 0.181 | 20,000 | 27,000 |
| 7205C | 0.9843 25 | 2.0472 52 | 0.5906 15 | 0.039 1.0 | 0.024 0.6 | 0.49 12.5 | 3,750 | 2,300 | 21,000 | 28,000 | 0.249 | 17,000 | 22,000 |
| 7206C | 1.1811 30 | 2.4409 62 | 0.6299 16 | 0.039 1.0 | 0.024 0.6 | 0.55 14.0 | 5,200 | 3,300 | 18,000 | 24,000 | 0.395 | 14,000 | 19,000 |
| 7207C | 1.3780 35 | 2.8346 72 | 0.6693 17 | 0.043 1.1 | 0.024 0.6 | 0.61 15.5 | 6,850 | 4,500 | 16,000 | 21,000 | 0.578 | 13,000 | 17,000 |
| 7208C | 1.5748 40 | 3.1496 80 | 0.7087 18 | 0.043 1.1 | 0.024 0.6 | 0.67 17.0 | 8,150 | 5,650 | 14,000 | 19,000 | 0.752 | 11,000 | 15,000 |
| 7209C | 1.7717 45 | 3.3465 85 | 0.7480 19 | 0.043 1.1 | 0.024 0.6 | 0.71 18.0 | 9,200 | 6,500 | 14,000 | 19,000 | 0.858 | 10,000 | 13,000 |
| 7210C | 1.9685 50 | 3.5433 90 | 0.7874 20 | 0.043 1.1 | 0.024 0.6 | 0.77 19.5 | 9,650 | 7,150 | 12,000 | 15,000 | 0.963 | 9,100 | 12,000 |
| 7211C | 2.1654 55 | 3.9370 100 | 0.8268 21 | 0.059 1.5 | 0.039 1.0 | 0.83 21.0 | 11,900 | 9,000 | 11,000 | 14,000 | 1.27 | 8,300 | 11,000 |
| 7212C | 2.3622 60 | 4.3307 110 | 0.8661 22 | 0.059 1.5 | 0.039 1.0 | 0.89 22.5 | 14,400 | 11,100 | 9,700 | 13,000 | 1.66 | 7,700 | 10,000 |
| 7213C | 2.5591 65 | 4.7244 120 | 0.9055 23 | 0.059 1.5 | 0.039 1.0 | 0.94 24.0 | 15,700 | 12,300 | 9,000 | 12,000 | 2.07 | 7,100 | 9,500 |
| 7214C | 2.7559 70 | 4.9213 125 | 0.9449 24 | 0.059 1.5 | 0.039 1.0 | 0.98 25.0 | 17,100 | 13,500 | 8,300 | 11,000 | 2.34 | 6,600 | 8,800 |
| 7215C | 2.9528 75 | 5.1181 130 | 0.9843 25 | 0.059 1.5 | 0.039 1.0 | 1.04 26.5 | 17,800 | 14,700 | 7,800 | 10,000 | 2.56 | 6,200 | 8,200 |
| 7216C | 3.1496 80 | 5.5118 140 | 1.0236 26 | 0.079 2.0 | 0.039 1.0 | 1.08 27.5 | 20,900 | 17,400 | 7,300 | 9,700 | 3.04 | 5,800 | 7,700 |
| 7217C | 3.3465 85 | 5.9055 150 | 1.1024 28 | 0.079 2.0 | 0.039 1.0 | 1.18 30.0 | 23,400 | 20,300 | 6,900 | 9,100 | 3.88 | 5,400 | 7,200 |
| 7218C | 3.5433 90 | 6.2992 160 | 1.1811 30 | 0.079 2.0 | 0.039 1.0 | 1.24 31.5 | 27,600 | 23,500 | 6,500 | 8,600 | 4.76 | 5,100 | 6,800 |
| 7219C | 3.7402 95 | 6.6929 170 | 1.2598 32 | 0.083 2.1 | 0.043 1.1 | 1.34 34.0 | 31,000 | 26,900 | 6,100 | 8,100 | 5.82 | 4,800 | 6,400 |
| 7220C | 3.9370 100 | 7.0866 180 | 1.3386 34 | 0.083 2.1 | 0.043 1.1 | 1.42 36.0 | 33,500 | 28,500 | 5,800 | 7,700 | 6.99 | 4,600 | 6,100 |
| 7221C | 4.1339 105 | 7.4803 190 | 1.4173 36 | 0.083 2.1 | 0.043 1.1 | 1.50 38.0 | 36,500 | 32,000 | 5,500 | 7,300 | 8.27 | 4,400 | 5,800 |
| 7222C | 4.3307 110 | 7.8740 200 | 1.4961 38 | 0.083 2.1 | 0.043 1.1 | 1.57 40.0 | 39,500 | 36,000 | 5,200 | 6,900 | 9.72 | 4,100 | 5,500 |



15°
Contact
Angle



**SERIES
73C**

**High
Precision
Grade**

Suffix P5

- AFBMA RBEC 5 •
- ISO Class 5 •

Suffix P4

- AFBMA ABEC 7 •
- ISO Class 4 •

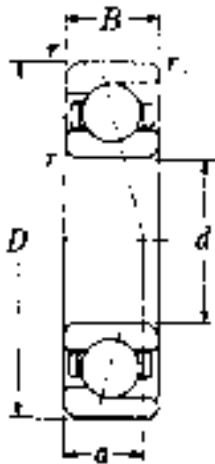
Suffix P2

- AFBMA ABEC 9 •
- ISO Class 2 •

Units: **INCHES**
Millimeters

SINGLE ROW ANGULAR CONTACT BALL BEARINGS

| Bearing No. | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius | | Load Center <i>a</i> | Basic Load Ratings (lbs) | | Limiting Speeds (rpm) | | Weight (lbs) | Limiting Speeds (rpm) | |
|-------------|------------------|------------------|-------------------|---------------|--------------|-------------------------|--------------------------|---------------------|-----------------------|--------|--------------|-----------------------|--------|
| | | | | <i>r</i> | <i>rI</i> | | Dynamic <i>C</i> | Static <i>Co</i> | Grease | Oil | | Grease | Oil |
| 7302C | 0.5906 15 | 1.6535 42 | 0.5118 13 | 0.039 1 | 0.024 0.6 | 0.41 10.5 | 2,990 | 1,540 | 28,000 | 38,000 | 0.130 | 23,000 | 30,000 |
| 7303C | 0.6693 17 | 1.8504 47 | 0.5512 14 | 0.039 1 | 0.024 0.6 | 0.45 11.5 | 3,550 | 1,860 | 26,000 | 35,000 | 0.190 | 21,000 | 27,000 |
| 7304C | 0.7874 20 | 2.0472 52 | 0.5906 15 | 0.043 1.1 | 0.024 0.6 | 0.49 12.5 | 1,450 | 2,240 | 23,000 | 31,000 | 0.260 | 18,000 | 24,000 |
| 7305C | 0.9843 25 | 2.4409 62 | 0.6693 17 | 0.043 1.1 | 0.024 0.6 | 0.57 14.5 | 5,950 | 3,450 | 19,000 | 26,000 | 0.445 | 15,000 | 20,000 |
| 7306C | 1.1811 30 | 2.8346 72 | 0.7480 19 | 0.043 1.1 | 0.024 0.6 | 0.65 16.5 | 7,250 | 4,550 | 16,000 | 22,000 | 0.690 | 13,000 | 17,000 |
| 7307C | 1.3780 35 | 3.1496 80 | 0.8268 21 | 0.059 1.5 | 0.039 1.0 | 0.71 18.0 | 9,050 | 5,800 | 14,000 | 19,000 | 0.939 | 11,000 | 15,000 |
| 7308C | 1.5748 40 | 3.5433 90 | 0.9055 23 | 0.059 1.5 | 0.039 1.0 | 0.79 20.0 | 11,100 | 7,250 | 13,000 | 17,000 | 1.36 | 10,000 | 13,000 |
| 7309C | 1.7717 45 | 3.9370 100 | 0.9843 25 | 0.059 1.5 | 0.039 1.0 | 0.89 22.5 | 14,400 | 9,700 | 11,000 | 15,000 | 1.82 | 9,000 | 12,000 |
| 7310C | 1.9685 50 | 4.3307 110 | 1.0630 27 | 0.079 2 | 0.039 1.0 | 0.96 24.5 | 16,900 | 11,600 | 10,000 | 14,000 | 2.31 | 8,200 | 11,000 |
| 7311C | 2.1654 55 | 4.7244 120 | 1.1417 29 | 0.079 2 | 0.039 1.0 | 1.04 26.5 | 19,500 | 13,600 | 94,000 | 13,000 | 2.93 | 7,500 | 9,900 |
| 7312C | 2.3622 60 | 5.1181 130 | 1.2205 31 | 0.083 2.1 | 0.043 1.1 | 1.12 28.5 | 22,300 | 15,800 | 8,700 | 12,000 | 3.70 | 6,900 | 9,200 |
| 7313C | 2.5591 65 | 5.5118 140 | 1.2992 33 | 0.083 2.1 | 0.043 1.1 | 1.18 30.0 | 25,200 | 18,100 | 8,100 | 11,000 | 4.52 | 6,400 | 8,500 |
| 7314C | 2.7559 70 | 5.9055 150 | 1.3780 35 | 0.083 2.1 | 0.043 1.1 | 1.26 32.0 | 28,400 | 20,700 | 7,500 | 10,000 | 5.47 | 5,900 | 7,900 |
| 7315C | 2.9528 75 | 6.2992 160 | 1.4567 37 | 0.083 2.1 | 0.043 1.1 | 1.34 34.0 | 31,000 | 23,400 | 7,000 | 9,300 | 6.79 | 5,500 | 7,400 |
| 7316C | 3.1496 80 | 6.6929 170 | 1.5354 39 | 0.083 2.1 | 0.043 1.1 | 1.42 36.0 | 33,500 | 26,200 | 6,500 | 8,700 | 8.14 | 5,200 | 6,900 |
| 7317C | 3.3465 85 | 7.0866 180 | 1.6142 41 | 0.118 3.0 | 0.043 1.1 | 1.52 38.5 | 36,000 | 29,300 | 6,200 | 8,200 | 9.44 | 4,900 | 6,500 |
| 7318C | 3.5433 90 | 7.4803 190 | 1.6929 43 | 0.118 3.0 | 0.043 1.1 | 1.59 40.5 | 41,000 | 35,500 | 5,800 | 7,800 | 11.0 | 4,600 | 6,100 |
| 7319C | 3.7402 95 | 7.8740 200 | 1.7717 45 | 0.118 3.0 | 0.043 1.1 | 1.67 42.5 | 44,000 | 39,000 | 5,500 | 7,300 | 12.9 | 4,300 | 5,800 |
| 7320C | 3.9370 100 | 8.4646 215 | 1.8504 47 | 0.118 3.0 | 0.043 1.1 | 1.75 44.5 | 50,000 | 46,500 | 5,200 | 6,900 | 15.7 | 4,100 | 5,500 |
| 7321C | 4.1339 105 | 8.8583 225 | 1.9291 49 | 0.118 3.0 | 0.043 1.1 | 1.83 46.5 | 53,000 | 50,500 | 5,500 | 7,300 | 17.9 | 3,900 | 5,200 |
| 7322C | 4.3307 110 | 9.4488 240 | 1.9685 50 | 0.118 3.0 | 0.043 1.1 | 1.91 48.5 | 56,000 | 54,500 | 4,700 | 6,300 | 20.9 | 3,700 | 5,000 |



15°
Contact
Angle

ANGULAR CONTACT BALL BEARINGS

Units: INCHES
Millimeters



**SERIES
BNT0
HSB0C**
High Speed
Service

- Suffix P5**
• AFBMA RBEC 5 •
• ISO Class 5 •
- Suffix P4**
• AFBMA ABEC 7 •
• ISO Class 4 •
- Suffix P2**
• AFBMA ABEC 9 •
• ISO Class 2 •

| Bearing No. | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius | | Load Center <i>a</i> | Basic Load Ratings (lbs) | | Limiting Speeds (rpm) | | Weight (lbs) |
|-------------|------------------|------------------|-------------------|---------------|---------------|-------------------------|--------------------------|---------------------|-----------------------|--------|--------------|
| | | | | <i>r</i> | <i>r1</i> | | Dynamic <i>C</i> | Static <i>Co</i> | Grease | Oil | |
| BNT000 | 0.3937 10 | 1.0236 26 | 0.3150 8 | 0.012 0.3 | 0.006 0.15 | 0.26 6.5 | 845 | 325 | 48,000 | 64,000 | 0.037 |
| BNT001 | 0.4724 12 | 1.1024 28 | 0.3150 8 | 0.012 0.3 | 0.006 0.15 | 0.26 6.5 | 930 | 390 | 43,000 | 57,000 | 0.043 |
| BNT002 | 0.5906 15 | 1.2598 32 | 0.3543 9 | 0.012 0.3 | 0.006 0.15 | 0.30 7.5 | 1,070 | 500 | 38,000 | 50,000 | 0.063 |
| BNT003 | 0.6693 17 | 1.3780 35 | 0.3937 10 | 0.012 0.3 | 0.006 0.15 | 0.33 8.5 | 1,330 | 605 | 34,000 | 46,000 | 0.083 |
| BNT004 | 0.7874 20 | 1.6535 42 | 0.4724 12 | 0.024 0.6 | 0.012 0.3 | 0.39 10.0 | 1,800 | 890 | 30,000 | 40,000 | 0.145 |
| BNT005 | 0.9843 25 | 1.8504 47 | 0.4724 12 | 0.024 0.6 | 0.012 0.3 | 0.43 11.0 | 2,010 | 1,090 | 25,000 | 34,000 | 0.171 |
| BNT006 | 1.1811 30 | 2.1654 55 | 0.5118 13 | 0.039 1.0 | 0.024 0.6 | 0.49 12.5 | 2,600 | 1,510 | 22,000 | 29,000 | 0.265 |
| BNT007 | 1.3780 35 | 2.4409 62 | 0.5512 14 | 0.039 1.0 | 0.024 0.6 | 0.53 13.5 | 3,300 | 2,010 | 19,000 | 26,000 | 0.372 |
| BNT008 | 1.5748 40 | 2.6772 68 | 0.5906 15 | 0.039 1.0 | 0.024 0.6 | 0.57 14.5 | 3,550 | 2,340 | 17,000 | 23,000 | 0.464 |
| BNT009 | 1.7717 45 | 2.9528 75 | 0.6299 16 | 0.039 1.0 | 0.024 0.6 | 0.63 16.0 | 4,200 | 2,830 | 15,000 | 21,000 | 0.600 |
| HSB010C | 1.9685 50 | 3.1496 80 | 0.6299 16 | 0.039 1.0 | 0.024 0.6 | 0.65 16.5 | 4,680 | 2,565 | 14,000 | 19,000 | 0.564 |
| HSB011C | 2.1654 55 | 3.5433 90 | 0.7087 18 | 0.043 1.1 | 0.024 0.6 | 0.73 18.5 | 5,085 | 3,060 | 13,000 | 17,000 | 0.875 |
| HSB012C | 2.3622 60 | 3.7402 95 | 0.7087 18 | 0.043 1.1 | 0.024 0.6 | 0.77 19.5 | 5,332 | 3,375 | 12,000 | 16,000 | 0.937 |
| HSB013C | 2.5591 65 | 3.9370 100 | 0.7087 18 | 0.043 1.1 | 0.024 0.6 | 0.79 20.0 | 5,400 | 3,555 | 11,000 | 15,000 | 0.997 |
| HSB014C | 2.7559 70 | 4.3307 110 | 0.7874 20 | 0.043 1.1 | 0.024 0.6 | 0.87 22.0 | 6,615 | 4,477 | 10,000 | 14,000 | 1.41 |
| HSB015C | 2.9528 75 | 4.5276 115 | 0.7874 20 | 0.043 1.1 | 0.024 0.6 | 0.89 22.5 | 7,087 | 5,040 | 9,500 | 13,000 | 1.50 |
| HSB016C | 3.1496 80 | 4.9213 125 | 0.8661 22 | 0.043 1.1 | 0.024 0.6 | 0.96 24.5 | 8,100 | 5,782 | 8,900 | 12,000 | 2.02 |
| HSB017C | 3.3465 85 | 5.1181 130 | 0.8661 22 | 0.043 1.1 | 0.024 0.6 | 1.00 25.5 | 8,212 | 6,030 | 8,400 | 11,000 | 2.11 |
| HSB018C | 3.5433 90 | 5.5118 140 | 0.9449 24 | 0.059 1.5 | 0.039 1.0 | 1.08 27.5 | 9,450 | 7,087 | 7,900 | 11,000 | 2.76 |
| HSB019C | 3.7402 95 | 5.7087 145 | 0.9449 24 | 0.059 1.5 | 0.039 1.0 | 1.10 28.0 | 9,562 | 7,312 | 7,500 | 10,000 | 2.87 |
| HSB020C | 3.9370 100 | 5.9055 150 | 0.9449 24 | 0.059 1.5 | 0.039 1.0 | 1.12 28.5 | 9,900 | 7,875 | 7,100 | 9,500 | 3.00 |
| HSB021C | 4.1339 105 | 6.2992 160 | 1.0236 26 | 0.079 2 | 0.039 1.0 | 1.22 31 | 11,400 | 9,100 | 6,700 | 9,000 | 3.81 |
| HSB022C | 4.3307 110 | 6.6929 170 | 1.1024 28 | 0.079 2 | 0.039 1.0 | 1.30 33 | 14,100 | 11,100 | 6,400 | 8,600 | 4.70 |
| HSB024C | 4.7244 120 | 7.0866 180 | 1.1024 28 | 0.079 2 | 0.039 1.0 | 1.34 34 | 14,200 | 11,600 | 5,900 | 7,900 | 5.03 |
| HSB026C | 5.1181 130 | 7.8740 200 | 1.2992 33 | 0.079 2 | 0.039 1.0 | 1.52 38.5 | 20,300 | 16,000 | 5,400 | 7,200 | 7.50 |
| HSB028C | 5.5118 140 | 8.2677 210 | 1.2992 33 | 0.079 2 | 0.039 1.0 | 1.57 40 | 21,000 | 17,300 | 5,000 | 6,700 | 8.11 |
| HSB030C | 5.9055 150 | 8.8583 225 | 1.3780 35 | 0.083 2.1 | 0.043 1.1 | 1.67 42.5 | 21,700 | 18,700 | 4,600 | 6,200 | 9.83 |
| HSB032C | 6.2992 160 | 9.4488 240 | 1.4961 38 | 0.083 2.1 | 0.043 1.1 | 1.81 46 | 25,400 | 21,800 | 4,300 | 5,800 | 12.0 |
| HSB034C | 6.6929 170 | 10.2362 260 | 1.6535 42 | 0.083 2.1 | 0.043 1.1 | 1.97 50 | 29,000 | 25,000 | 4,100 | 5,400 | 16.3 |



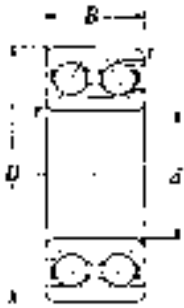
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Contact
Angle

NTN
SERIES
32
33
MAXIMUM
TYPE

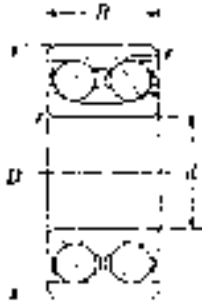
Units: **INCHES**
 Millimeters

DOUBLE ROW ANGULAR CONTACT BALL BEARINGS

| Bearing No. | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius <i>r</i> | Basic Load Ratings (lbs) | | Limiting Speeds (rpm) | | Weight (lbs) |
|-------------|------------------|------------------|-------------------|------------------------------|-----------------------------|--------------------------------|--------------------------|--------|-----------------|
| | | | | | Dynamic <i>C</i> | Static <i>C₀</i> | Grease | Oil | |
| 3200 | 0.3937 10 | 1.1811 30 | 0.5625 14.29 | 0.024 0.6 | 1,890 | 1,460 | 14,000 | 19,000 | 0.112 |
| 3201 | 0.4724 12 | 1.2598 32 | 0.6250 15.88 | 0.024 0.6 | 1,900 | 1,510 | 13,000 | 17,000 | 0.132 |
| 3202 | 0.5906 15 | 1.3780 35 | 0.6250 15.88 | 0.024 0.6 | 2,500 | 2,040 | 11,000 | 15,000 | 0.152 |
| 3203 | 0.6693 17 | 1.5748 40 | 0.6875 17.46 | 0.024 0.6 | 3,200 | 2,660 | 9,900 | 13,000 | 0.218 |
| 3204 | 0.7874 20 | 1.8504 47 | 0.8125 20.64 | 0.039 1 | 3,950 | 3,400 | 8,800 | 12,000 | 0.366 |
| 3205 | 0.9843 25 | 2.0472 52 | 0.8125 20.64 | 0.039 1 | 4,350 | 4,150 | 7,300 | 9,800 | 0.403 |
| 3206 | 1.1811 30 | 2.4409 62 | 0.9375 23.81 | 0.039 1 | 6,250 | 6,150 | 6,300 | 8,400 | 0.668 |
| 3207 | 1.3780 35 | 2.8346 72 | 1.0625 26.99 | 0.043 1.1 | 8,400 | 8,550 | 5,500 | 7,400 | 1.01 |
| 3208 | 1.5748 40 | 3.1496 80 | 1.1875 30.16 | 0.043 1.1 | 9,100 | 10,100 | 4,900 | 6,600 | 1.38 |
| 3209 | 1.7717 45 | 3.3465 85 | 1.1875 30.16 | 0.043 1.1 | 10,400 | 11,700 | 4,400 | 5,900 | 1.49 |
| 3210 | 1.9685 50 | 3.5433 90 | 1.1875 30.16 | 0.043 1.1 | 11,800 | 13,400 | 4,000 | 5,300 | 1.54 |
| 3211 | 2.1654 55 | 3.9370 100 | 1.3125 33.34 | 0.059 1.5 | 14,800 | 17,200 | 3,600 | 4,900 | 2.36 |
| 3212 | 2.3622 60 | 4.3307 110 | 1.4375 36.51 | 0.59 1.5 | 15,800 | 19,800 | 3,400 | 4,500 | 2.95 |
| 3213 | 2.5591 65 | 4.7244 120 | 1.5000 38.10 | 0.059 1.5 | 17,500 | 22,300 | 3,100 | 4,200 | 3.70 |
| 3214 | 2.7559 70 | 4.9213 125 | 1.5625 39.69 | 0.059 1.5 | 19,300 | 24,800 | 2,900 | 3,900 | 4.06 |
| 3215 | 2.9528 75 | 5.1181 130 | 1.6250 41.28 | 0.059 1.5 | 21,100 | 27,500 | 2,700 | 3,600 | 4.43 |
| 3216 | 3.1496 80 | 5.5118 140 | 1.7500 44.45 | 0.079 2 | 23,300 | 29,400 | 2,500 | 3,400 | 5.97 |
| 3217 | 3.3465 85 | 5.9055 150 | 1.9375 49.21 | 0.079 2 | 27,300 | 35,000 | 2,400 | 3,200 | 7.67 |
| 3218 | 3.5433 90 | 6.2992 160 | 2.0625 52.39 | 0.079 2 | 30,500 | 38,000 | 2,200 | 3,000 | 9.35 |
| 3219 | 3.7402 95 | 6.6929 170 | 2.1875 55.56 | 0.083 2.1 | 32,500 | 41,500 | 2,100 | 2,800 | 11.2 |
| 3220 | 3.9370 100 | 7.0866 180 | 2.3750 60.33 | 0.083 2.1 | 42,500 | 52,500 | 2,000 | 2,700 | 13.0 |
| 3302 | 0.5906 15 | 1.6535 42 | 0.7500 19.05 | 0.039 1 | 3,200 | 2,660 | 9,900 | 13,000 | 0.280 |
| 3303 | 0.6693 17 | 1.8504 47 | 0.8750 22.23 | 0.039 1 | 3,950 | 3,350 | 9,000 | 12,000 | 0.408 |
| 3304 | 0.7874 20 | 2.0472 52 | 0.8750 22.23 | 0.043 1.1 | 4,750 | 4,150 | 8,000 | 11,000 | 0.487 |
| 3305 | 0.9843 25 | 2.4409 62 | 1.0000 25.40 | 0.043 1.1 | 6,600 | 6,000 | 6,700 | 8,900 | 0.780 |
| 3306 | 1.1811 30 | 2.8346 72 | 1.1875 30.16 | 0.043 1.1 | 8,700 | 8,200 | 5,700 | 7,600 | 1.23 |
| 3307 | 1.3780 35 | 3.1496 80 | 1.3750 34.93 | 0.059 1.5 | 11,100 | 10,700 | 5,000 | 6,600 | 1.67 |
| 3308 | 1.5748 40 | 3.5433 90 | 1.4375 36.51 | 0.059 1.5 | 12,200 | 12,900 | 4,400 | 5,900 | 2.27 |
| 3309 | 1.7717 45 | 3.9370 100 | 1.5625 39.69 | 0.059 1.5 | 15,100 | 16,300 | 4,000 | 5,300 | 3.02 |
| 3310 | 1.9685 50 | 4.3307 110 | 1.7500 44.45 | 0.079 2 | 18,300 | 20,100 | 3,600 | 4,800 | 4.37 |
| 3311 | 2.1654 55 | 4.7244 120 | 1.9375 49.21 | 0.079 2 | 21,700 | 24,300 | 3,300 | 4,400 | 5.34 |
| 3312 | 2.3622 60 | 5.1181 130 | 2.1250 53.98 | 0.083 2.1 | 25,400 | 28,900 | 3,000 | 4,000 | 6.77 |
| 3313 | 2.5591 65 | 5.5118 140 | 2.3125 58.74 | 0.083 2.1 | 29,400 | 34,000 | 2,800 | 3,700 | 8.60 |
| 3314 | 2.7559 70 | 5.9055 150 | 2.5000 63.50 | 0.083 2.1 | 34,500 | 38,000 | 2,600 | 3,500 | 11.5 |
| 3315 | 2.9528 75 | 6.2992 160 | 2.6875 68.26 | 0.083 2.1 | 38,500 | 43,000 | 2,400 | 3,200 | 13.9 |



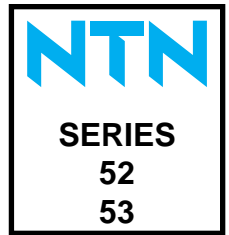
32



33

DOUBLE ROW ANGULAR CONTACT BALL BEARINGS

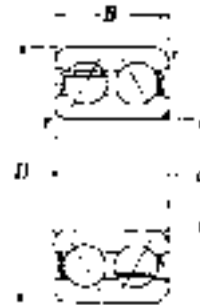
Units: INCHES
Millimeters



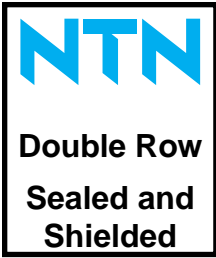
| Bearing No. | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius <i>r</i> | Basic Load Ratings (lbs) | | Limiting Speeds (rpm) | | Weight (lbs) |
|-------------|------------------|------------------|-------------------|------------------------------|-----------------------------|----------------------------|--------------------------|--------|-----------------|
| | | | | | <i>Dynamic</i> <i>C</i> | <i>Static</i> <i>Co</i> | Grease | Oil | |
| 5200 | 0.3937 10 | 1.1811 30 | 0.5630 14.3 | 0.024 0.6 | 1,560 | 855 | 14,000 | 19,000 | 0.108 |
| 5201 | 0.4724 12 | 1.2598 32 | 0.6260 15.9 | 0.024 0.6 | 2,050 | 1,140 | 13,000 | 17,000 | 0.126 |
| 5202 | 0.5906 15 | 1.3780 35 | 0.6260 15.9 | 0.024 0.6 | 2,260 | 1,360 | 11,000 | 15,000 | 0.141 |
| 5203 | 0.6693 17 | 1.5748 40 | 0.6890 17.5 | 0.024 0.6 | 2,870 | 1,770 | 9,900 | 13,000 | 0.212 |
| 5204 | 0.7874 20 | 1.8504 47 | 0.8110 20.6 | 0.039 1 | 4,300 | 2,710 | 8,800 | 12,000 | 0.337 |
| 5205 | 0.9843 25 | 2.0472 52 | 0.8110 20.6 | 0.039 1 | 4,650 | 3,200 | 7,300 | 9,800 | 0.386 |
| 5206 | 1.1811 30 | 2.4409 62 | 0.9370 23.8 | 0.039 1 | 6,450 | 4,600 | 6,300 | 8,400 | 0.631 |
| 5207 | 1.3780 35 | 2.8346 72 | 1.0630 27.0 | 0.043 1.1 | 8,500 | 6,250 | 5,500 | 7,400 | 0.961 |
| 5208 | 1.5748 40 | 3.1496 80 | 1.1890 30.2 | 0.043 1.1 | 9,600 | 7,250 | 4,900 | 6,600 | 1.30 |
| 5209 | 1.7717 45 | 3.3465 85 | 1.1890 30.2 | 0.043 1.1 | 10,800 | 8,300 | 4,400 | 5,900 | 1.41 |
| 5210 | 1.9685 50 | 3.5433 90 | 1.1890 30.2 | 0.043 1.1 | 11,500 | 9,400 | 4,000 | 5,300 | 1.52 |
| 5211 | 2.1654 55 | 3.9370 100 | 1.3110 33.3 | 0.059 1.5 | 14,200 | 11,900 | 3,600 | 4,900 | 2.17 |
| 5212 | 2.3622 60 | 4.3307 110 | 1.4370 36.5 | 0.059 1.5 | 16,100 | 13,100 | 3,400 | 4,500 | 2.80 |
| 5213 | 2.5591 65 | 4.7244 120 | 1.5000 38.1 | 0.059 1.5 | 18,700 | 16,300 | 3,100 | 4,200 | 3.46 |
| 5214 | 2.7559 70 | 4.9213 125 | 1.5630 39.7 | 0.059 1.5 | 20,400 | 17,900 | 2,900 | 3,900 | 3.97 |
| 5215 | 2.9528 75 | 5.1181 130 | 1.6260 41.3 | 0.059 1.5 | 20,300 | 18,100 | 2,700 | 3,600 | 4.19 |
| 5216 | 3.1496 80 | 5.5118 140 | 1.7480 44.4 | 0.079 2 | 23,800 | 21,400 | 2,500 | 3,400 | 5.27 |
| 5217 | 3.3465 85 | 5.9055 150 | 1.9370 49.2 | 0.079 2 | 25,100 | 23,900 | 2,400 | 3,200 | 6.75 |
| 5218 | 3.5433 90 | 6.2992 160 | 2.0630 52.4 | 0.079 2 | 31,500 | 29,000 | 2,200 | 3,000 | 8.22 |
| 5219 | 3.7402 95 | 6.6929 170 | 2.1890 55.6 | 0.083 2.1 | 35,500 | 33,000 | 2,100 | 2,800 | 10.7 |
| 5220 | 3.9370 100 | 7.0866 180 | 2.3740 60.3 | 0.083 2.1 | 40,000 | 37,500 | 2,000 | 2,700 | 13.1 |
| 5302 | 0.5906 15 | 1.6535 42 | 0.7480 19 | 0.039 1 | 3,850 | 2,260 | 9,900 | 13,000 | 0.291 |
| 5303 | 0.6693 17 | 1.8504 47 | 0.8740 22.2 | 0.039 1 | 2,870 | 1,770 | 9,000 | 12,000 | 0.212 |
| 5304 | 0.7874 20 | 2.0472 52 | 0.8740 22.2 | 0.043 1.1 | 4,650 | 2,850 | 8,000 | 11,000 | 0.478 |
| 5305 | 0.9843 25 | 2.4409 62 | 1.0000 25.4 | 0.043 1.1 | 6,850 | 4,600 | 6,700 | 8,900 | 0.798 |
| 5206 | 1.1811 30 | 2.8346 72 | 1.1890 30.2 | 0.043 1.1 | 8,900 | 6,200 | 5,700 | 7,600 | 1.22 |
| 5307 | 1.3780 35 | 3.1496 80 | 1.3740 34.9 | 0.059 1.5 | 11,100 | 7,850 | 5,000 | 6,600 | 1.69 |
| 5308 | 1.5748 40 | 3.5433 90 | 1.4370 36.5 | 0.059 1.5 | 13,600 | 9,850 | 4,400 | 5,900 | 2.23 |
| 5309 | 1.7717 45 | 3.9370 100 | 1.5630 39.7 | 0.059 1.5 | 16,300 | 12,100 | 4,000 | 5,300 | 2.95 |
| 5310 | 1.9685 50 | 4.3307 110 | 1.7480 44.4 | 0.079 2 | 19,200 | 14,500 | 3,600 | 4,800 | 3.99 |
| 5311 | 2.1654 55 | 4.7244 120 | 1.9370 49.2 | 0.079 2 | 23,900 | 18,500 | 3,300 | 4,400 | 5.11 |
| 5312 | 2.3622 60 | 5.1181 130 | 2.1260 54.0 | 0.083 2.1 | 27,300 | 21,400 | 3,000 | 4,000 | 6.72 |
| 5313 | 2.5591 65 | 5.5118 140 | 2.3110 58.7 | 0.083 2.1 | 31,000 | 24,600 | 2,800 | 3,700 | 8.73 |
| 5314 | 2.7559 70 | 5.9055 150 | 2.5000 63.5 | 0.083 2.1 | 35,000 | 28,000 | 2,600 | 3,500 | 10.4 |
| 5315 | 2.9528 75 | 6.2992 160 | 2.6890 68.3 | 0.083 2.1 | 38,000 | 31,500 | 2,400 | 3,200 | 12.5 |



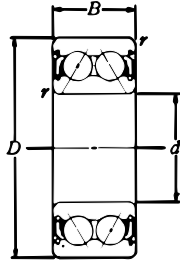
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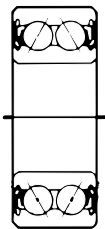
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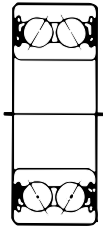
Units: **INCHES**
Millimeters



Type ZZ
with two shields



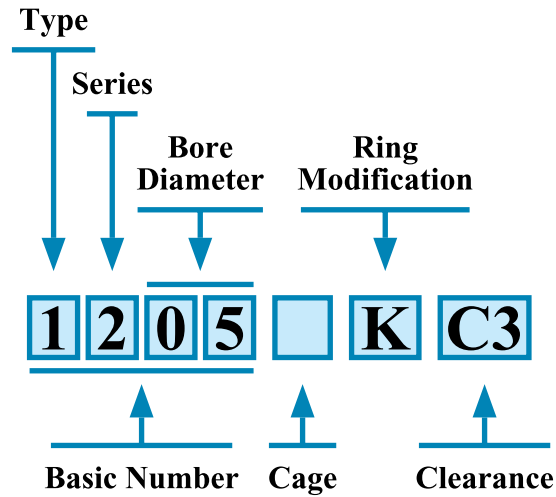
Type LLB
with two seals
(non-contact)



Type LLU
with two seals
(contact)

DOUBLE ROW ANGULAR CONTACT BALL BEARINGS

| Bearing No. | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius <i>r</i> | Basic Load Ratings (lbs) | | Limiting Speeds (rpm) | | Weight (lbs) | |
|-------------------|------------------|------------------|-------------------|------------------------------|-----------------------------|--------------------------------|-----------------------|--------|-----------------|--------------|
| | | | | | Dynamic <i>C</i> | Static <i>C₀</i> | Grease | | | |
| | | | | | | | ZZ, LLM | LLD | | Oil Z, LM |
| 5200CZZ, LLB, LLU | 0.3937 10 | 1.1811 30 | 0.5630 14.3 | 0.024 0.6 | 1,560 | 855 | 17,000 | 15,000 | 22,000 | .108 |
| 5201CZZ, LLB, LLU | 0.4724 12 | 1.2598 32 | 0.6260 15.9 | 0.024 0.6 | 1,710 | 1,010 | 15,000 | 12,000 | 20,000 | .126 |
| 5202CZZ, LLB, LLU | 0.5906 15 | 1.3780 35 | 0.6260 15.9 | 0.024 0.6 | 1,840 | 1,180 | 13,000 | 12,000 | 17,000 | .141 |
| 5203CZZ, LLB, LLU | 0.6693 17 | 1.5748 40 | 0.6890 17.5 | 0.024 0.6 | 2,430 | 1,590 | 11,000 | 10,000 | 15,000 | .212 |
| 5204CZZ, LLB, LLU | 0.7874 20 | 1.8504 47 | 0.8110 20.6 | 0.039 1 | 3,550 | 2,280 | 10,000 | 9,000 | 13,000 | .337 |
| 5205CZZ, LLB, LLU | 0.9843 25 | 2.0472 52 | 0.8110 20.6 | 0.039 1 | 4,100 | 2,970 | 8,500 | 7,500 | 11,000 | .386 |
| 5206CZZ, LLB, LLU | 1.1811 30 | 2.4409 62 | 0.9370 23.8 | 0.039 1 | 5,850 | 4,400 | 7,100 | 6,300 | 9,500 | .631 |
| 5207CZZ, LLB, LLU | 1.3780 35 | 2.8346 72 | 1.0630 27.0 | 0.043 1.1 | 7,400 | 5,500 | 6,300 | 5,300 | 8,500 | .961 |
| 5208CZZ, LLB, LLU | 1.5748 40 | 3.1496 80 | 1.1890 30.2 | 0.043 1.1 | 9,050 | 7,150 | 5,600 | 4,800 | 7,100 | 1.30 |
| 5303CZZ, LLB, LLU | 0.6693 17 | 1.8504 47 | 0.8740 22.2 | 0.039 1 | 4,250 | 2,670 | 10,000 | 9,500 | 13,000 | .399 |
| 5305CZZ, LLB, LLU | 0.9843 25 | 2.4409 62 | 1.0000 25.4 | 0.043 1.1 | 5,950 | 4,050 | 7,500 | 6,300 | 10,000 | .798 |
| 5306CZZ, LLB, LLU | 1.1811 30 | 2.8346 72 | 1.1890 30.2 | 0.043 1.1 | 7,400 | 5,450 | 6,300 | 5,300 | 8,500 | 1.22 |
| 5307CZZ, LLB, LLU | 1.3780 35 | 3.1496 80 | 1.3740 34.9 | 0.059 1.5 | 11,100 | 7,850 | 5,600 | 4,800 | 7,500 | 1.69 |
| 5308CZZ, LLB, LLU | 1.5748 40 | 3.5433 90 | 1.4370 36.5 | 0.059 1.5 | 12,400 | 9,000 | 5,300 | 4,500 | 6,700 | 2.23 |



1. TYPE

- 1: Standard for self-aligning ball bearings
- 2: Standard for self-aligning ball bearings

2. CAGE

- No Symbol: Standard cage
- J: Pressed steel cage
- T2: Plastic cage, nylon or teflon
- L1: Machined brass cage

3. RING MODIFICATION

- K: 1:12 tapered bore

4. INTERNAL CLEARANCE

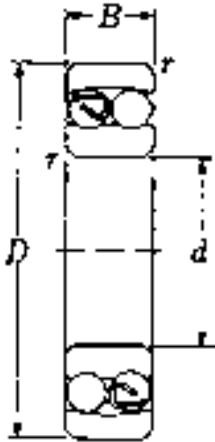
- C1: Radial clearance less than C2
- C2: Radial clearance less than normal
- C3: Radial clearance greater than normal
- C4: Radial clearance greater than C3
- C5: Radial clearance greater than C4
- CSXX: Special radial clearance;
XX is mean value in 0.001 mm units



Units: INCHES
Millimeters

SELF-ALIGNING BALL BEARINGS

| Bearing No. | | Bore | | O.D. | Width | Fillet Radius | Basic Load Ratings (lbs) | | Weight (lbs) | | Limiting Speeds (rpm) | |
|-------------|------------|---------------|---------------|--------------|--------------|------------------|--------------------------|-----------|--------------|--------|-----------------------|--|
| <i>12</i> | <i>12K</i> | <i>d</i> | <i>D</i> | <i>B</i> | <i>r</i> | <i>Dynamic C</i> | <i>Static C0</i> | <i>12</i> | <i>12K</i> | Grease | Oil | |
| 1200 | — | 0.3937 10 | 1.1811 30 | 0.3543 9 | 0.024 0.6 | 1,230 | 268 | .075 | — | 21,000 | 24,000 | |
| 1201 | — | 0.4724 12 | 1.2598 32 | 0.3937 10 | 0.024 0.6 | 1,260 | 286 | .088 | — | 18,000 | 22,000 | |
| 1202 | — | 0.5906 15 | 1.3780 35 | 0.4331 11 | 0.024 0.6 | 1,680 | 395 | .108 | — | 16,000 | 19,000 | |
| 1203 | — | 0.6693 17 | 1.5748 40 | 0.4724 12 | 0.024 0.6 | 1,770 | 450 | .161 | — | 14,000 | 17,000 | |
| 1204 | 1204K | 0.7874 20 | 1.8504 47 | 0.5512 14 | 0.039 1.0 | 2,230 | 585 | .265 | .26 | 13,000 | 15,000 | |
| 1205 | 1205K | 0.9843 25 | 2.0472 52 | 0.5906 15 | 0.039 1.0 | 2,720 | 740 | .311 | .304 | 11,000 | 13,000 | |
| 1206 | 1206K | 1.1811 30 | 2.4409 62 | 0.6299 16 | 0.039 1.0 | 3,500 | 1,050 | .485 | .476 | 9,200 | 11,000 | |
| 1207 | 1207K | 1.3780 35 | 2.8346 72 | 0.6693 17 | 0.043 1.1 | 3,550 | 1,150 | .712 | .699 | 8,000 | 9,400 | |
| 1208 | 1208K | 1.5748 40 | 3.1496 80 | 0.7087 18 | 0.043 1.1 | 4,350 | 1,470 | .919 | .906 | 7,100 | 8,400 | |
| 1209 | 1209K | 1.7717 45 | 3.3465 85 | 0.7480 19 | 0.043 1.1 | 4,900 | 1,650 | 1.03 | 1.01 | 6,400 | 7,500 | |
| 1210 | 1210K | 1.9685 50 | 3.5433 90 | 0.7874 20 | 0.043 1.1 | 5,100 | 1,820 | 1.16 | 1.14 | 5,800 | 6,800 | |
| 1211 | 1211K | 2.1654 55 | 3.9370 100 | 0.8268 21 | 0.059 1.5 | 6,000 | 2,250 | 1.55 | 1.53 | 5,300 | 6,200 | |
| 1212 | 1212K | 2.3622 60 | 4.3307 110 | 0.8661 22 | 0.059 1.5 | 6,800 | 2,590 | 1.98 | 1.95 | 4,900 | 5,800 | |
| 1213 | 1213K | 2.5591 65 | 4.7244 120 | 0.9055 23 | 0.059 1.5 | 6,950 | 2,820 | 2.54 | 2.49 | 4,500 | 5,300 | |
| 1214 | — | 2.7559 70 | 4.9213 125 | 0.9449 24 | 0.059 1.5 | 7,800 | 3,100 | 2.78 | — | 4,200 | 4,900 | |
| 1215 | 1215K | 2.9528 75 | 5.1181 130 | 0.9843 25 | 0.059 1.5 | 8,750 | 3,550 | 3 | 2.95 | 3,900 | 4,600 | |
| 1216 | 1216K | 3.1496 80 | 5.5118 140 | 1.0236 26 | 0.079 2 | 8,950 | 3,800 | 3.68 | 3.62 | 3,700 | 4,300 | |
| 1217 | 1217K | 3.3465 85 | 5.9055 150 | 1.1024 28 | 0.079 2 | 11,000 | 4,650 | 4.56 | 4.5 | 3,500 | 4,100 | |
| 1218 | 1218K | 3.5433 90 | 6.2992 160 | 1.1811 30 | 0.079 2 | 12,800 | 5,300 | 5.56 | 5.47 | 3,300 | 3,800 | |
| 1219 | 1219K | 3.7402 95 | 6.6929 170 | 1.2598 32 | 0.083 2.1 | 14,300 | 6,100 | 6.83 | 6.72 | 3,100 | 3,600 | |
| 1220 | 1220K | 3.9370 100 | 7.0866 180 | 1.3386 34 | 0.083 2.1 | 15,500 | 6,700 | 8.16 | 8.02 | 2,900 | 3,400 | |
| 1221 | — | 4.1339 105 | 7.4803 190 | 1.4173 36 | 0.083 2.1 | 16,700 | 7,300 | 9.63 | — | 2,800 | 3,300 | |
| 1222 | 1222K | 4.3307 110 | 7.8740 200 | 1.4961 38 | 0.083 2.1 | 18,100 | 7,950 | 11.4 | 11.2 | 2600 | 3100 | |



Cylindrical Bore
12



Tapered Bore
12K
Taper 1:12

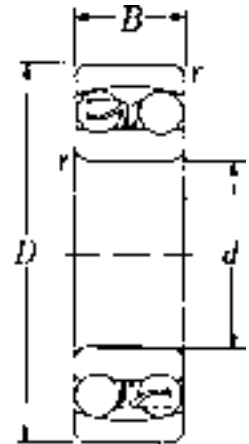
The d dimension for the tapered bore is measured from the side of the bearing with the smallest bore dimension.

SELF-ALIGNING BALL BEARINGS

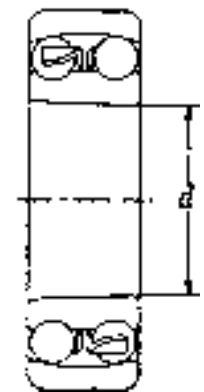
Units: INCHES
Millimeters



| Bearing No. | | Bore | O.D. | Width | Fillet Radius | Basic Load Ratings (lbs) | | Weight (lbs) | | Limiting Speeds (rpm) | |
|-------------|-------|----------------------|---------------------|---------------------|---------------|--------------------------|---------------------|--------------|-------|-----------------------|--------|
| 22 | 22K | <i>d</i> | <i>D</i> | <i>B</i> | <i>r</i> | Dynamic <i>C</i> | Static <i>C0</i> | 22 | 22K | Grease | Oil |
| 2200 | — | 0.3937 10 30 | 1.1811 30 14 | 0.5512 14 0.6 | 0.024 0.6 | 1,640 | 360 | 0.104 | — | 19,000 | 23,000 |
| 2201 | — | 0.4724 12 32 | 1.2598 32 14 | 0.5512 14 0.6 | 0.024 0.6 | 1,710 | 390 | 0.117 | — | 17,000 | 20,000 |
| 2202 | — | 0.5906 15 35 | 1.3780 35 14 | 0.5512 14 0.6 | 0.024 0.6 | 1,730 | 415 | 0.132 | — | 15,000 | 18,000 |
| 2203 | — | 0.6693 17 40 | 1.5748 40 16 | 0.6299 16 0.6 | 0.024 0.6 | 2,200 | 545 | 0.194 | — | 13,000 | 16,000 |
| 2204 | 2204K | 0.7874 20 47 | 1.8504 47 18 | 0.7087 18 1 | 0.039 1 | 2,830 | 745 | 0.309 | 0.300 | 12,000 | 14,000 |
| 2205 | 2205K | 0.9843 25 52 | 2.0472 52 18 | 0.7087 18 1 | 0.039 1 | 2,760 | 775 | 0.359 | 0.348 | 10,000 | 12,000 |
| 2206 | 2206K | 1.1811 30 62 | 2.4409 62 20 | 0.7874 20 1 | 0.039 1 | 3,400 | 1,020 | 0.573 | 0.560 | 8,600 | 10,000 |
| 2207 | 2207K | 1.3780 35 72 | 2.8346 72 23 | 0.9055 23 1.1 | 0.043 1.1 | 4,850 | 1,480 | 0.888 | 0.873 | 7,500 | 8,800 |
| 2208 | 2208K | 1.5748 40 80 | 3.1496 80 23 | 0.9055 23 1.1 | 0.043 1.1 | 5,000 | 1,650 | 1.11 | 1.09 | 6,700 | 7,900 |
| 2209 | 2209K | 1.7717 45 85 | 3.3465 85 23 | 0.9055 23 1.1 | 0.043 1.1 | 5,200 | 1,830 | 1.20 | 1.18 | 6,000 | 7,100 |
| 2210 | 2210K | 1.9685 50 90 | 3.5433 90 23 | 0.9055 23 1.1 | 0.043 1.1 | 5,200 | 1,900 | 1.30 | 1.27 | 5,500 | 6,400 |
| 2211 | 2211K | 2.1654 55 100 | 3.9370 100 25 | 0.9843 25 1.5 | 0.059 1.5 | 5,950 | 2,220 | 1.79 | 1.75 | 5,000 | 5,800 |
| 2212 | 2212K | 2.3622 60 110 | 4.3307 110 28 | 1.1024 28 1.5 | 0.059 1.5 | 7,650 | 2,840 | 2.40 | 2.36 | 4,600 | 5,400 |
| 2213 | 2213K | 2.5591 65 120 | 4.7244 120 31 | 1.2205 31 1.5 | 0.059 1.5 | 9,750 | 3,700 | 3.22 | 3.15 | 4,200 | 5,300 |
| 2214 | — | 2.7559 70 125 | 4.9213 125 31 | 1.2205 31 1.5 | 0.059 1.5 | 9,850 | 3,850 | 3.35 | — | 3,900 | 4,600 |
| 2215 | 2215K | 2.9528 75 130 | 5.1181 130 31 | 1.2205 31 1.5 | 0.059 1.5 | 9,950 | 4,000 | 3.57 | 3.48 | 3,700 | 4,300 |
| 2216 | 2216K | 3.1496 80 140 | 5.5118 140 33 | 1.2992 33 2.0 | .079 2.0 | 10,900 | 4,450 | 4.43 | 4.34 | 3,400 | 4,000 |
| 2217 | 2217K | 3.3465 85 150 | 5.9055 150 36 | 1.4173 36 2.0 | .079 2.0 | 13,100 | 5,300 | 5.56 | 5.42 | 3,200 | 3,800 |
| 2218 | 2218K | 3.5433 90 160 | 6.2992 160 40 | 1.5748 40 2.0 | .079 2.0 | 15,800 | 6,450 | 7.50 | 7.34 | 3,100 | 3,600 |
| 2219 | 2219K | 3.7402 95 170 | 6.6929 170 43 | 1.6929 43 2.1 | .083 2.1 | 18,700 | 7,750 | 9.04 | 8.82 | 2,900 | 3,400 |
| 2220 | 2220K | 3.9370 100 180 | 7.0866 180 46 | 1.8110 46 2.1 | .083 2.1 | 21,100 | 8,650 | 11.0 | 10.7 | 2,700 | 3,200 |
| 2221 | — | 4.1339 105 190 | 7.4803 190 50 | 1.9685 50 2.1 | .083 2.1 | 24,400 | 10,100 | 13.4 | — | 2,600 | 3,100 |
| 2222 | 2222K | 4.3307 110 200 | 7.8740 200 53 | 2.0866 53 2.1 | .083 2.1 | 27,900 | 11,600 | 15.7 | 15.3 | 2,500 | 2,900 |



Cylindrical Bore 22

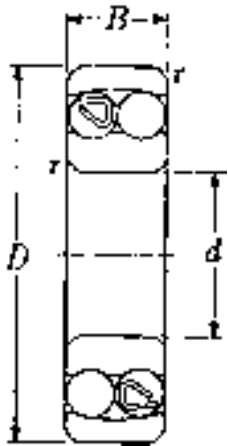


Tapered Bore 22K
Taper 1:12

The d dimension for the tapered bore is measured from the side of the bearing with the smallest bore dimension.



Units: **INCHES**
Millimeters



Cylindrical Bore
13



Tapered Bore
13K
Taper 1:12

| SELF-ALIGNING BALL BEARINGS | | | | | | | | | | | | |
|-----------------------------|------------|---------------|---------------|--------------|-------------|---------------|--------------------------|------------------|--------------|------------|-----------------------|--------|
| Bearing No. | | Bore | O.D. | Width | | Fillet Radius | Basic Load Ratings (lbs) | | Weight (lbs) | | Limiting Speeds (rpm) | |
| <i>13</i> | <i>13K</i> | <i>d</i> | <i>D</i> | <i>B</i> | <i>B1*</i> | <i>r</i> | <i>Dynamic C</i> | <i>Static Co</i> | <i>13</i> | <i>13K</i> | Grease | Oil |
| 1300 | — | 0.3937 10 | 1.3780 35 | 0.4331 11 | — | 0.024 0.6 | 1,630 | 365 | 0.128 | — | 18,000 | 21,000 |
| 1301 | — | 0.4724 12 | 1.4567 37 | 0.4724 12 | — | 0.039 1 | 2,130 | 485 | 0.148 | — | 16,000 | 18,000 |
| 1302 | — | 0.5906 15 | 1.6535 42 | 0.5118 13 | — | 0.039 1 | 2,150 | 515 | 0.207 | — | 13,000 | 16,000 |
| 1303 | — | 0.6693 17 | 1.8504 47 | 0.5512 14 | — | 0.039 1 | 2,820 | 715 | 0.287 | — | 12,000 | 14,000 |
| 1304 | 1304K | 0.7874 20 | 2.0472 52 | 0.5906 15 | — | 0.043 1.1 | 2,790 | 750 | 0.359 | 0.355 | 11,000 | 13,000 |
| 1305 | 1305K | 0.9843 25 | 2.4409 62 | 0.6693 17 | — | 0.043 1.1 | 4,050 | 1,130 | 0.567 | 0.556 | 9,100 | 11,000 |
| 1306 | 1306K | 1.1811 30 | 2.8346 72 | 0.7480 19 | — | 0.043 1.1 | 4,800 | 1,420 | 0.853 | 0.840 | 7,700 | 9,100 |
| 1307 | 1307K | 1.3780 35 | 3.1496 80 | 0.8268 21 | — | 0.059 1.5 | 5,650 | 1,770 | 1.12 | 1.11 | 6,800 | 8,000 |
| 1308 | 1308K | 1.5748 40 | 3.5433 90 | 0.9055 23 | — | 0.059 1.5 | 6,650 | 2,180 | 1.58 | 1.55 | 6,000 | 7,000 |
| 1309 | 1309K | 1.7717 45 | 3.9370 100 | 0.9843 25 | — | 0.059 1.5 | 8,550 | 2,860 | 2.11 | 2.08 | 5,400 | 6,300 |
| 1310 | 1310K | 1.9685 50 | 4.3307 110 | 1.0630 27 | — | 0.079 2.0 | 9,750 | 3,150 | 2.67 | 2.62 | 4,900 | 5,800 |
| 1311 | 1311K | 2.1654 55 | 4.7244 120 | 1.1417 29 | — | 0.079 2.0 | 11,600 | 4,000 | 3.48 | 3.44 | 4,500 | 5,200 |
| 1312 | 1312K | 2.3622 60 | 5.1181 130 | 1.2205 31 | — | 0.083 2.1 | 12,900 | 4,700 | 4.32 | 4.25 | 4,100 | 4,800 |
| 1313 | 1313K | 2.5591 65 | 5.5118 140 | 1.2992 33 | — | 0.083 2.1 | 13,900 | 5,150 | 5.40 | 5.31 | 3,800 | 4,500 |
| 1314 | — | 2.7559 70 | 5.9055 150 | 1.3780 35 | — | 0.083 2.1 | 16,700 | 6,250 | 6.59 | — | 3,500 | 4,200 |
| 1315 | 1315K | 2.9528 75 | 6.2992 160 | 1.4567 37 | — | 0.083 2.1 | 17,800 | 6,750 | 7.85 | 7.74 | 3,300 | 3,900 |
| 1316 | 1316K | 3.1496 80 | 6.6929 170 | 1.5354 39 | — | 0.083 2.1 | 19,900 | 7,450 | 9.22 | 9.08 | 3,100 | 3,600 |
| 1317 | 1317K | 3.3465 85 | 7.0866 180 | 1.6142 41 | — | 0.118 3 | 22,000 | 8,500 | 11.0 | 10.8 | 2,900 | 3,400 |
| 1318 | 1318K | 3.5433 90 | 7.4803 190 | 1.6929 43 | 1.772 45 | 0.118 3 | 26,100 | 10,000 | 12.8 | 12.6 | 2,700 | 3,200 |
| 1319 | 1319K | 3.7402 95 | 7.8740 200 | 1.7717 45 | 1.890 48 | 0.118 3 | 29,600 | 11,400 | 14.7 | 14.5 | 2,600 | 3,000 |
| 1320 | 1320K | 3.9370 100 | 8.4646 215 | 1.8504 47 | 2.047 52 | 0.118 3 | 32,000 | 12,900 | 18.3 | 18.1 | 2,400 | 2,900 |
| 1321 | — | 4.1339 105 | 8.8583 225 | 1.9291 49 | 2.126 54 | 0.118 3 | 35,000 | 14,500 | 22.0 | — | 2,300 | 2,700 |
| 1322 | 1322K | 4.3307 110 | 9.4488 240 | 1.9685 50 | 2.165 55 | 0.118 3 | 37,000 | 16,100 | 26.0 | 25.8 | 2,200 | 2,600 |

* B₁ is the combined width of the balls. Note that for bearings No. 1318(K) - 1322(K), the balls project beyond the ring face (B₁>B).

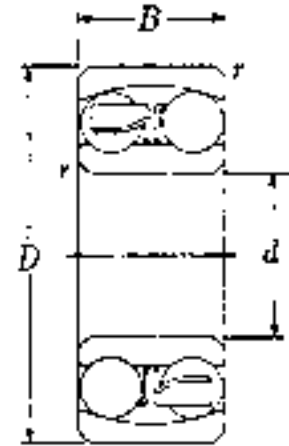
The d dimension for the tapered bore is measured from the side of the bearing with the smallest bore dimension.

SELF-ALIGNING BALL BEARINGS

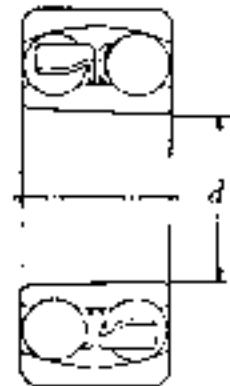
Units: INCHES
Millimeters



| Bearing No. | | Bore | O.D. | Width | Fillet Radius | Basic Load Ratings (lbs) | | Weight (lbs) | | Limiting Speeds (rpm) | |
|-------------|-------|---------------|---------------|--------------|---------------|--------------------------|------------------|--------------|-------|-----------------------|--------|
| 23 | 23K | <i>d</i> | <i>D</i> | <i>B</i> | <i>r</i> | Dynamic <i>C</i> | Static <i>C0</i> | 22 | 22K | Grease | Oil |
| 2300 | — | 0.3937 10 | 1.3780 35 | 0.6693 17 | 0.024 0.6 | 2,270 | 485 | 0.183 | — | 17,000 | 20,000 |
| 2301 | — | 0.4724 12 | 1.4567 37 | 0.6693 17 | 0.039 1 | 2,640 | 610 | 0.201 | — | 15,000 | 17,000 |
| 2302 | — | 0.5906 15 | 1.6535 42 | 0.6693 17 | 0.039 1 | 2,700 | 650 | 0.251 | — | 13,000 | 15,000 |
| 2303 | — | 0.6693 17 | 1.8504 47 | 0.7480 19 | 0.039 1 | 3,250 | 800 | 0.348 | — | 11,000 | 14,000 |
| 2304 | 2304K | 0.7874 20 | 2.0472 52 | 0.8268 21 | 0.043 1.1 | 4,050 | 1,060 | 0.461 | 0.452 | 10,000 | 12,000 |
| 2305 | 2305K | 0.9843 25 | 2.4409 62 | 0.9449 24 | 0.043 1.1 | 5,500 | 1,480 | 0.739 | 0.721 | 8,500 | 10,000 |
| 2306 | 2306K | 1.1811 30 | 2.8346 72 | 1.0630 27 | 0.043 1.1 | 7,050 | 1,970 | 1.10 | 1.08 | 7,200 | 8,500 |
| 2307 | 2307K | 1.3780 35 | 3.1496 80 | 1.2205 31 | 0.059 1.5 | 8,850 | 2,530 | 1.49 | 1.45 | 6,300 | 7,400 |
| 2308 | 2308K | 1.5748 40 | 3.5433 90 | 1.2992 33 | 0.059 1.5 | 10,100 | 3,050 | 2.04 | 1.99 | 5,600 | 6,600 |
| 2309 | 2309K | 1.7717 45 | 3.9370 100 | 1.4173 36 | 0.059 1.5 | 12,200 | 3,750 | 2.71 | 2.65 | 5,000 | 5,900 |
| 2310 | 2310K | 1.9685 50 | 4.3307 110 | 1.5748 40 | 0.079 2.0 | 14,500 | 4,550 | 3.62 | 3.53 | 4,600 | 5,400 |
| 2311 | 2311K | 2.1654 55 | 4.7244 120 | 1.6929 43 | 0.079 2.0 | 16,900 | 5,400 | 4.63 | 4.52 | 4,200 | 4,900 |
| 2312 | 2312K | 2.3622 60 | 5.1181 130 | 1.8110 46 | 0.083 2.1 | 19,600 | 6,350 | 5.73 | 5.58 | 3,800 | 4,500 |
| 2313 | 2313K | 2.5591 65 | 5.5118 140 | 1.8898 48 | 0.083 2.1 | 21,600 | 7,300 | 7.12 | 6.94 | 3,600 | 4,200 |
| 2314 | — | 2.7559 70 | 5.9055 150 | 2.0079 51 | 0.083 2.1 | 24,600 | 8,450 | 8.60 | — | 3,300 | 3,900 |
| 2315 | 2315K | 2.9528 75 | 6.2992 160 | 2.1654 55 | 0.083 2.1 | 27,700 | 9,650 | 10.4 | 10.2 | 3,100 | 3,600 |
| 2316 | 2316K | 3.1496 80 | 6.6929 170 | 2.2835 58 | 0.083 2.1 | 28,800 | 10,200 | 13.4 | 13.1 | 2,900 | 3,400 |
| 2317 | 2317K | 3.3465 85 | 7.0866 180 | 2.3622 60 | 0.118 3 | 31,500 | 11,500 | 15.5 | 15.2 | 2,700 | 3,200 |
| 2318 | 2318K | 3.5433 90 | 7.4803 190 | 2.5197 64 | 0.118 3 | 34,000 | 12,900 | 18.6 | 18.2 | 2,600 | 3,000 |
| 2319 | 2319K | 3.7402 95 | 7.8740 200 | 2.6378 67 | 0.118 3 | 37,000 | 14,500 | 21.6 | 21.1 | 2,400 | 2,800 |
| 2320 | 2320K | 3.9370 100 | 8.4646 215 | 2.8740 73 | 0.118 3 | 43,000 | 17,800 | 27.3 | 26.7 | 2,300 | 2,700 |
| 2321 | — | 4.1339 105 | 8.8583 225 | 3.0315 77 | 0.118 3 | 46,000 | 19,500 | 31.5 | — | 2,200 | 2,600 |
| 2322 | 2322K | 4.3307 110 | 9.4488 240 | 3.1496 80 | 0.118 3 | 48,500 | 21,300 | 38.1 | 37.3 | 2,100 | 2,400 |

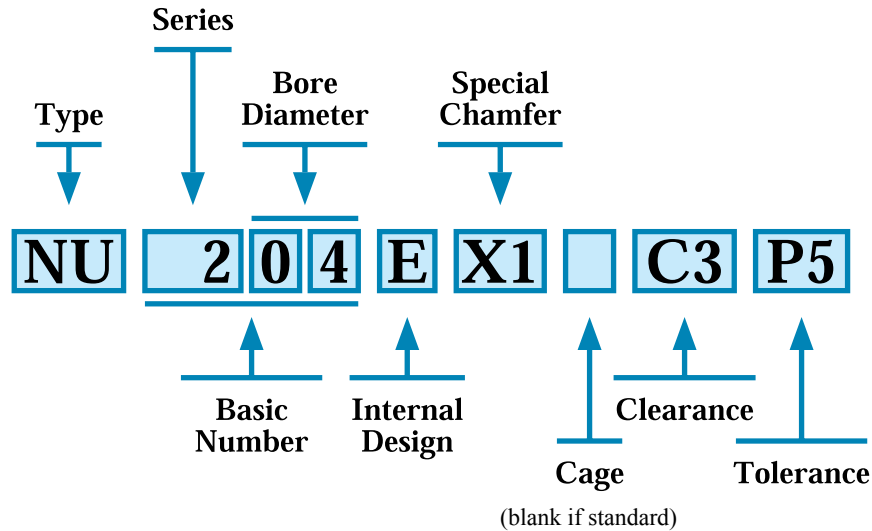
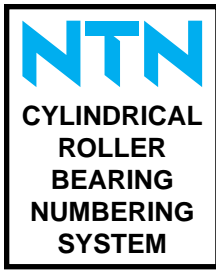


Cylindrical Bore
23



Tapered Bore
23K
Taper 1:12

The *d* dimension for the tapered bore is measured from the side of the bearing with the smallest bore dimension.



1. TYPE

- N: Straight outer ring with inner ring and roller assembly
- NU: Straight inner ring with outer ring and roller assembly
- NF: One lip outer ring with inner ring and roller assembly
- NJ: One lip inner ring with outer ring and roller assembly
- NH: NJ series bearing with HJ thrust collar (NJ+HJ=NH)
- NN: Double row precision cylindrical bearings
- HJ: Separate thrust collar
- R, RN, RNU: Special cylindrical roller bearings

2. SERIES

- 10: Standard series cylindrical roller bearings
- 2: Standard series cylindrical roller bearings
- 22: Standard series cylindrical roller bearings
- 23: Standard series cylindrical roller bearings
- 3: Standard series cylindrical roller bearings
- 4: Standard series cylindrical roller bearings

3. INTERNAL DESIGN

- E: High capacity cylindrical roller bearings

4. CHAMFER

- Xn: Special chamfer, from 1 onward (X1, X2 . . .)

5. CAGE

- F1: Machined steel cage
- J: Pressed steel cage
- G1: Machined brass cage
- T2: Nylon cage

6. INTERNAL CLEARANCE

- C1: Radial clearance less than C2
- C2: Radial clearance less than normal
- No Suffix: Normal Radial Clearance
- C3: Radial clearance greater than normal
- C4: Radial clearance greater than C3
- C5: Radial clearance greater than C4
- CSXX: Special radial clearance; XX is mean value in 0.001 mm units (µm)
- NA: Radial clearance of cylindrical roller bearings with non-interchangeable components

7. TOLERANCE

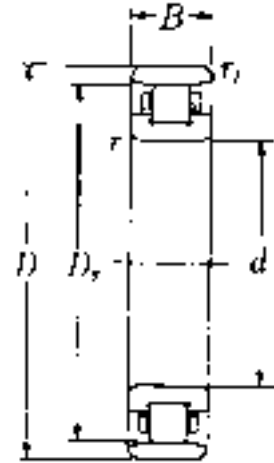
- Normal: ISO class 0
- P6: ISO class 6 (equivalent to RBEC 3)
- P5: ISO class 5 (equivalent to RBEC 5)
- P4: ISO class 4 (equivalent to RBEC 7)

CYLINDRICAL ROLLER BEARINGS

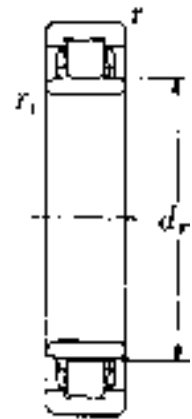
Units: INCHES
Millimeters



| Bearing No. | Bore | O.D. | Width | Fillet Radii | | Outer Ring I.D. | Inner Ring O.D. | Basic Load Ratings (lbs) | | Weight (lbs) | |
|-------------|----------------|----------------|--------------|--------------|----------------|------------------|------------------|--------------------------|-----------------------|--------------|------|
| | d | D | B | r | r ₁ | D _r | d _r | Dynamic C | Static C ₀ | N10 | NU10 |
| 1005 | .9843 25 | 1.8504 47 | .4724 12 | .024 .6 | .012 .3 | 1.6339 41.5 | 1.2008 30.5 | 3,400 | 3,150 | .201 | .203 |
| 1006 | 1.1811 30 | 2.1654 55 | .5118 13 | .039 1.0 | .024 .6 | 1.9094 48.5 | 1.4370 36.5 | 4,400 | 4,400 | .291 | .295 |
| 1007 | 1.3780 35 | 2.4409 62 | .5512 14 | .039 1.0 | .024 .6 | 2.1654 55.0 | 1.6535 42.0 | 5,100 | 5,200 | .386 | .392 |
| 1008 | 1.5748 40 | 2.6772 68 | .5906 15 | .039 1.0 | .024 .6 | 2.4016 61.0 | 1.8504 47.0 | 6,150 | 6,500 | .481 | .487 |
| 1009 | 1.7717 45 | 2.9528 75 | .6299 16 | .039 1.0 | .024 .6 | 2.6575 67.5 | 2.0669 52.5 | 7,000 | 7,600 | .608 | .617 |
| 1010 | 1.9685 50 | 3.1496 80 | .6299 16 | .039 1.0 | .024 .6 | 2.8543 72.5 | 2.2638 57.5 | 7,200 | 8,100 | .653 | .661 |
| 1011 | 2.1654 55 | 3.5433 90 | .7087 18 | .059 1.5 | .039 1.0 | 3.1693 80.5 | 2.5394 64.5 | 8,450 | 9,850 | .959 | .974 |
| 1012 | 2.3622 60 | 3.7402 95 | .7087 18 | .059 1.5 | .039 1.0 | 3.3661 85.5 | 2.7362 69.5 | 9,000 | 10,900 | 1.03 | 1.04 |
| 1013 | 2.5591 65 | 3.9370 100 | .7087 18 | .059 1.5 | .039 1.0 | 3.5630 90.5 | 2.9331 74.5 | 9,250 | 11,500 | 1.10 | 1.11 |
| 1014 | 2.7559 70 | 4.3307 110 | .7874 20 | .059 1.5 | .039 1.0 | 3.9370 100.0 | 3.1496 80.0 | 13,100 | 15,800 | 1.52 | 1.54 |
| 1015 | 2.9528 75 | 4.5276 115 | .7874 20 | .059 1.5 | .039 1.0 | 4.1339 105.0 | 3.3465 85.0 | 13,500 | 16,700 | 1.60 | 1.63 |
| 1016 | 3.1496 80 | 4.9213 125 | .8661 22 | .059 1.5 | .039 1.0 | 4.4685 113.5 | 3.6024 91.5 | 16,300 | 20,400 | 2.13 | 2.16 |
| 1017 | 3.3465 85 | 5.1181 130 | .8661 22 | .059 1.5 | .039 1.0 | 4.6654 118.5 | 3.7992 96.5 | 16,700 | 21,500 | 2.23 | 2.27 |
| 1018 | 3.5433 90 | 5.5118 140 | .9449 24 | .079 2.0 | .059 1.5 | 5.0000 127.0 | 4.0551 103.0 | 19,800 | 25,700 | 2.91 | 2.95 |
| 1019 | 3.7402 95 | 5.7087 145 | .9449 24 | .079 2.0 | .059 1.5 | 5.1969 132.0 | 4.2520 108.0 | 20,400 | 27,000 | 3.04 | 3.09 |
| 1020 | 3.9370 100 | 5.9055 150 | .9449 24 | .079 2.0 | .059 1.5 | 5.3937 137.0 | 4.4488 113.0 | 20,900 | 28,300 | 3.15 | 3.20 |
| 1021 | 4.1339 105 | 6.2992 160 | 1.0236 26 | .098 2.5 | .059 1.5 | 5.7283 145.5 | 4.7047 119.5 | 23,700 | 32,000 | 3.99 | 4.06 |
| 1022 | 4.3307 110 | 6.6929 170 | 1.1024 28 | .098 2.5 | .059 1.5 | 6.1024 155.0 | 4.9213 125.0 | 29,500 | 39,000 | 4.96 | 5.03 |
| 1024 | 4.7244 120 | 7.0866 180 | 1.1024 28 | .098 2.5 | .059 1.5 | 6.4961 165.0 | 5.3150 135.0 | 31,000 | 43,000 | 5.29 | 5.38 |
| 1026 | 5.1181 130 | 7.8740 200 | 1.2992 33 | .098 2.5 | .059 1.5 | 7.1654 182.0 | 5.8268 148.0 | 38,500 | 53,500 | 8.00 | 8.14 |
| 1028 | 5.5118 140 | 8.2677 210 | 1.2992 33 | .098 2.5 | .059 1.5 | 7.5591 192.0 | 6.2205 158.0 | 39,500 | 56,000 | 8.51 | 8.64 |
| 1030 | 5.9055 150 | 8.8583 225 | 1.3780 35 | .098 2.5 | .079 2.0 | 8.0906 205.5 | 6.6732 169.5 | 45,500 | 66,000 | 10.4 | 10.5 |
| 1032 | 6.2992 160 | 9.4488 240 | 1.4961 38 | .098 2.5 | .079 2.0 | 8.6614 220.0 | 7.0866 180.0 | 53,500 | 77,000 | 12.8 | 13.0 |
| 1034 | 6.6929 170 | 10.2362 260 | 1.6535 42 | .098 2.5 | .098 2.5 | 9.3307 237.0 | 7.5984 193.0 | 62,500 | 90,000 | 17.1 | 17.4 |
| 1036 | 7.0866 180 | 11.0236 280 | 1.8110 46 | .098 2.5 | .098 2.5 | 10.0394 255.0 | 8.0709 205.0 | 77,000 | 110,000 | 22.3 | 22.7 |
| 1038 | 7.4803 190 | 11.4173 290 | 1.8110 46 | .098 2.5 | .098 2.5 | 10.4331 265.0 | 8.4646 215.0 | 79,000 | 115,000 | 23.1 | 23.6 |
| 1040 | 7.8740 200 | 12.2047 310 | 2.0079 51 | .098 2.5 | .098 2.5 | 11.0630 281.0 | 9.0157 229.0 | 87,500 | 131,000 | 30.2 | 30.6 |
| 1044 | 8.6614 220 | 13.3858 340 | 2.2047 56 | .118 3.0 | .118 3.0 | 12.2047 310.0 | 9.8425 250.0 | 113,000 | 168,000 | 39.5\ | 40.1 |
| 1048 | 9.4488 240 | 14.1732 360 | 2.2047 56 | .118 3.0 | .118 3.0 | 12.9921 330.0 | 10.6299 270.0 | 119,000 | 184,000 | 42.5\ | 43.2 |
| 1052 | 10.2362 260 | 15.7480 400 | 2.5591 65 | .157 4.0 | .157 4.0 | 14.3307 364.0 | 11.6535 296.0 | 145,000 | 224,000 | 63.3 | 64.2 |
| 1056 | 11.0236 280 | 16.5354 420 | 2.5591 65 | .157 4.0 | .157 4.0 | 15.1181 384.0 | 12.4409 316.0 | 148,000 | 235,000 | 67.0 | 68.1 |
| 1060 | 11.8110 300 | 18.1102 460 | 2.9134 74 | .157 4.0 | .157 4.0 | 16.5354 420.0 | 13.3858 340.0 | 192,000 | 300,000 | 94.6 | 96.1 |
| 1064 | 12.5984 320 | 18.8976 480 | 2.9134 74 | .157 4.0 | .157 4.0 | 17.3228 440.0 | 14.1732 360.0 | 197,000 | 315,000 | 99.9 | 101 |



N10



NU10

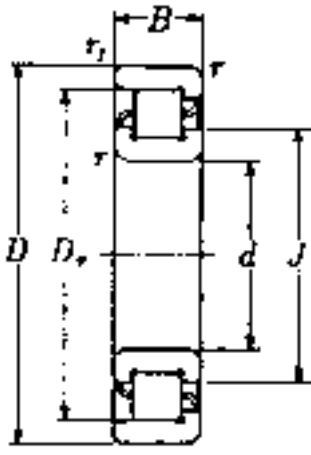
These figures may vary slightly according to cage type and type of bearing.



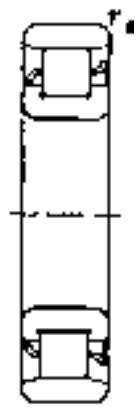
Units: INCHES
Millimeters

CYLINDRICAL ROLLER BEARINGS

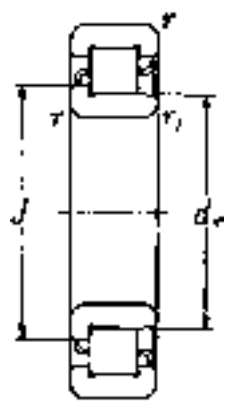
| Bearing No. | Bore | O.D. | Width | Fillet Radii | | Outer Ring I.D. | Inner Ring O.D. | Shoulder Height |
|-------------|----------------|----------------|--------------|--------------|----------------------|------------------|------------------|-----------------|
| | <i>d</i> | <i>D</i> | | <i>r</i> | <i>r₁</i> | | | |
| 204 | .7874 20 | 1.8504 47 | .5512 14 | .039 1.0 | .024 .6 | 1.5748 40.0 | 1.0630 27.0 | 1.181 30.0 |
| 205 | .9843 25 | 2.0472 52 | .5906 15 | .039 1.0 | .024 .6 | 1.7717 45.0 | 1.2598 32.0 | 1.378 35.0 |
| 206 | 1.1811 30 | 2.4409 62 | .6299 16 | .039 1.0 | .024 .6 | 2.1063 53.5 | 1.5157 38.5 | 1.646 41.8 |
| 207 | 1.3780 35 | 2.8346 72 | .6693 17 | .059 1.5 | .024 .6 | 2.4331 61.8 | 1.7244 43.8 | 1.874 47.6 |
| 208 | 1.5748 40 | 3.1496 80 | .7087 18 | .059 1.5 | .059 1.5 | 2.7559 70.0 | 1.9685 50.0 | 2.134 54.2 |
| 209 | 1.7717 45 | 3.3465 85 | .7480 19 | .059 1.5 | .059 1.5 | 2.9528 75.0 | 2.1654 55.0 | 2.323 59.0 |
| 210 | 1.9685 50 | 3.5433 90 | .7874 20 | .059 1.5 | .059 1.5 | 3.1654 80.4 | 2.3780 60.4 | 2.543 64.6 |
| 211 | 2.1654 55 | 3.9370 100 | .8268 21 | .079 2.0 | .059 1.5 | 3.4843 88.5 | 2.6181 66.5 | 2.787 70.8 |
| 212 | 2.3622 60 | 4.3307 110 | .8661 22 | .079 2.0 | .079 2.0 | 3.8386 97.5 | 2.8937 73.5 | 3.087 78.4 |
| 213 | 2.5591 65 | 4.7244 120 | .9055 23 | .079 2.0 | .079 2.0 | 4.1575 105.6 | 3.1339 79.6 | 3.339 84.8 |
| 214 | 2.7559 70 | 4.9213 125 | .9449 24 | .079 2.0 | .079 2.0 | 4.3504 110.5 | 3.3268 84.5 | 3.528 89.6 |
| 215 | 2.9528 75 | 5.1181 130 | .9843 25 | .079 2.0 | .079 2.0 | 4.5866 116.5 | 3.4843 88.5 | 3.701 94.0 |
| 216 | 3.1496 80 | 5.5118 140 | 1.0236 26 | .098 2.5 | .098 2.5 | 4.9331 125.3 | 3.7520 95.3 | 3.984 101.2 |
| 217 | 3.3465 85 | 5.9055 150 | 1.1024 28 | .098 2.5 | .098 2.5 | 5.2677 133.8 | 4.0079 101.8 | 4.260 108.2 |
| 218 | 3.5433 90 | 6.2992 160 | 1.1811 30 | .098 2.5 | .098 2.5 | 5.6299 143.0 | 4.2126 107.0 | 4.496 114.2 |
| 219 | 3.7402 95 | 6.6929 170 | 1.2598 32 | .098 2.5 | .098 2.5 | 5.9646 151.5 | 4.4685 113.5 | 4.764 121.0 |
| 220 | 3.9370 100 | 7.0866 180 | 1.3386 34 | .098 2.5 | .098 2.5 | 6.2992 160.0 | 4.7244 120.0 | 5.039 128.0 |
| 221 | 4.1339 105 | 7.4803 190 | 1.4173 36 | .098 2.5 | .098 2.5 | 6.6457 168.8 | 4.9921 126.8 | 5.315 135.0 |
| 222 | 4.3307 110 | 7.8740 200 | 1.4961 38 | .098 2.5 | .098 2.5 | 7.0276 178.5 | 5.2165 132.5 | 5.571 141.5 |
| 224 | 4.7244 120 | 8.4646 215 | 1.5748 40 | .098 2.5 | .098 2.5 | 7.5394 191.5 | 5.6496 143.5 | 6.024 153.0 |
| 226 | 5.1181 130 | 9.0551 230 | 1.5748 40 | .118 3.0 | .118 3.0 | 8.0315 204.0 | 6.1417 156.0 | 6.516 165.5 |
| 228 | 5.5118 140 | 9.8425 250 | 1.6535 42 | .118 3.0 | .118 3.0 | 8.7008 221.0 | 6.6535 169.0 | 7.067 179.5 |
| 230 | 5.9055 150 | 10.6299 270 | 1.7717 45 | .118 3.0 | .118 3.0 | 9.3701 238.0 | 7.1654 182.0 | 7.598 193.0 |
| 232 | 6.2992 160 | 11.4173 290 | 1.8898 48 | .118 3.0 | .118 3.0 | 10.0394 255.0 | 7.6772 195.0 | 8.150 207.0 |
| 234 | 6.6929 170 | 12.2047 310 | 2.0472 52 | .157 4.0 | .157 4.0 | 10.7087 272.0 | 8.1890 208.0 | 8.681 220.5 |
| 236 | 7.0866 180 | 12.5984 320 | 2.0472 52 | .157 4.0 | .157 4.0 | 11.1024 282.0 | 8.5827 218.0 | 9.075 230.5 |
| 238 | 7.4803 190 | 13.3858 340 | 2.1654 55 | .157 4.0 | .157 4.0 | 11.7717 299.0 | 9.0945 231.0 | 9.626 244.5 |
| 240 | 7.8740 200 | 14.1732 360 | 2.2835 58 | .157 4.0 | .157 4.0 | 12.4409 316.0 | 9.6063 244.0 | 10.157 258.0 |
| 244 | 8.6614 220 | 15.7480 400 | 2.5591 65 | .157 4.0 | .157 4.0 | 13.7795 350.0 | 10.6299 270.0 | 11.260 286.0 |
| 248 | 9.4488 240 | 17.3228 440 | 2.8346 72 | .157 4.0 | .157 4.0 | 15.1575 385.0 | 11.6142 295.0 | 12.323 313.0 |
| 252 | 10.2362 260 | 18.8976 480 | 3.1496 80 | .197 5.0 | .197 5.0 | 16.5354 420.0 | 12.5984 320.0 | 13.386 340.0 |
| 256 | 11.0236 280 | 19.6850 500 | 3.1496 80 | .197 5.0 | .197 5.0 | 17.3228 440.0 | 13.3858 340.0 | 14.173 360.0 |
| 260 | 11.8110 300 | 21.2598 540 | 3.3465 85 | .197 5.0 | .197 5.0 | 18.7402 476.0 | 14.3307 364.0 | 15.236 387.0 |
| 264 | 12.5984 320 | 22.8346 580 | 3.6220 92 | .197 5.0 | .197 5.0 | 20.0787 510.0 | 15.3543 390.0 | 16.339 415.0 |



NF2



N2



NJ2

CYLINDRICAL ROLLER BEARINGS

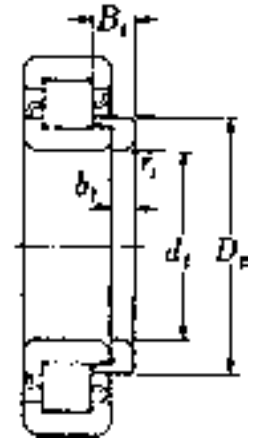
Units: INCHES
Millimeters

NTN
SERIES
NF2 • N2
NJ2 • NU2
HJ2
SEPARATE
THRUST
COLLAR

| Basic Load Ratings (lbs) | | Weight (lbs) | | Separate Thrust Collar No. | Thrust Collar Dimensions | | | | | Collar Weight (lbs) |
|--------------------------|--------------|--------------|------|----------------------------|--------------------------|--------|-------|-------|-------|---------------------|
| Dynamic C | Static C_o | N2 | NU2 | | d_t | D_t | B_t | b_t | r_t | |
| 3,750 | 3,150 | .240 | .245 | HJ204 | .787 | 1.181 | .266 | .118 | .024 | .026 |
| | | | | | 20 | 30.0 | 6.75 | 3 | .6 | |
| 4,200 | 3,800 | .295 | .302 | HJ205 | .984 | 1.378 | .285 | .118 | .024 | .033 |
| | | | | | 25 | 35.0 | 7.25 | 3 | .6 | |
| 5,600 | 5,250 | .448 | .456 | HJ206 | 1.181 | 1.646 | .325 | .157 | .024 | .055 |
| | | | | | 30 | 41.8 | 8.25 | 4 | .6 | |
| 8,000 | 7,700 | .637 | .650 | HJ207 | 1.378 | 1.874 | .315 | .157 | .024 | .066 |
| | | | | | 35 | 47.6 | 8.00 | 4 | .6 | |
| 9,850 | 9,650 | .816 | .833 | HJ208 | 1.575 | 2.134 | .354 | .197 | .059 | .101 |
| | | | | | 40 | 54.2 | 9.00 | 5 | 1.5 | |
| 10,400 | 10,500 | .933 | .952 | HJ209 | 1.772 | 2.323 | .374 | .197 | .059 | .117 |
| | | | | | 45 | 59.0 | 9.50 | 5 | 1.5 | |
| 11,400 | 12,200 | 1.06 | 1.08 | HJ210 | 1.969 | 2.543 | .394 | .197 | .059 | .139 |
| | | | | | 50 | 64.6 | 10.00 | 5 | 1.5 | |
| 13,700 | 14,900 | 1.38 | 1.41 | HJ211 | 2.165 | 2.787 | .433 | .236 | .059 | .185 |
| | | | | | 55 | 70.8 | 11.00 | 6 | 1.5 | |
| 16,200 | 18,000 | 1.77 | 1.80 | HJ212 | 2.362 | 3.087 | .433 | .236 | .079 | .238 |
| | | | | | 60 | 78.4 | 11.00 | 6 | 2.0 | |
| 18,900 | 21,200 | 2.20 | 2.25 | HJ213 | 2.559 | 3.339 | .433 | .236 | .079 | .271 |
| | | | | | 65 | 84.8 | 11.00 | 6 | 2.0 | |
| 19,600 | 22,700 | 2.43 | 2.47 | HJ214 | 2.756 | 3.528 | .492 | .276 | .079 | .331 |
| | | | | | 70 | 89.6 | 12.50 | 7 | 2.0 | |
| 22,700 | 26,400 | 2.67 | 2.71 | HJ215 | 2.953 | 3.701 | .492 | .276 | .079 | .344 |
| | | | | | 75 | 94.0 | 12.50 | 7 | 2.0 | |
| 25,000 | 29,200 | 3.24 | 3.31 | HJ216 | 3.150 | 3.984 | .531 | .315 | .098 | .456 |
| | | | | | 80 | 101.2 | 13.50 | 8 | 2.5 | |
| 28,300 | 33,500 | 4.03 | 4.12 | HJ217 | 3.346 | 4.260 | .551 | .315 | .098 | .551 |
| | | | | | 85 | 108.2 | 14.00 | 8 | 2.5 | |
| 34,000 | 40,000 | 4.96 | 5.07 | HJ218 | 3.543 | 4.496 | .591 | .354 | .098 | .672 |
| | | | | | 90 | 114.2 | 15.00 | 9 | 2.5 | |
| 37,000 | 44,000 | 6.00 | 6.13 | HJ219 | 3.740 | 4.764 | .610 | .354 | .118 | .776 |
| | | | | | 95 | 121.0 | 15.50 | 9 | 2.5 | |
| 41,000 | 49,000 | 7.19 | 7.34 | HJ220 | 3.937 | 5.039 | .669 | .394 | .118 | .979 |
| | | | | | 100 | 128.0 | 17.00 | 10 | 2.5 | |
| 45,000 | 54,000 | 8.53 | 8.71 | HJ221 | 4.134 | 5.315 | .689 | .394 | .118 | 1.11 |
| | | | | | 105 | 135.0 | 17.50 | 10 | 2.5 | |
| 54,000 | 65,000 | 10.0 | 10.2 | HJ222 | 4.331 | 5.571 | .728 | .433 | .118 | 1.36 |
| | | | | | 110 | 141.5 | 18.50 | 11 | 2.5 | |
| 61,000 | 76,000 | 12.0 | 12.3 | HJ224 | 4.724 | 6.024 | .748 | .433 | .118 | 1.58 |
| | | | | | 120 | 153.0 | 19.00 | 11 | 2.5 | |
| 63,500 | 81,500 | 16.3 | 16.6 | HJ226 | 5.118 | 6.516 | .748 | .433 | .118 | 1.85 |
| | | | | | 130 | 165.5 | 19.00 | 11 | 3.0 | |
| 73,000 | 94,500 | 20.4 | 20.9 | HJ228 | 5.512 | 7.067 | .748 | .433 | .118 | 2.20 |
| | | | | | 140 | 179.5 | 19.00 | 11 | 3.0 | |
| 84,500 | 111,000 | 25.8 | 26.2 | HJ230 | 5.906 | 7.598 | .807 | .472 | .118 | 2.73 |
| | | | | | 150 | 193.0 | 20.50 | 12 | 3.0 | |
| 96,000 | 128,000 | 31.3 | 32.0 | HJ232 | 6.299 | 8.150 | .827 | .472 | .118 | 3.26 |
| | | | | | 160 | 207.0 | 21.00 | 12 | 3.0 | |
| 107,000 | 143,000 | 38.8 | 39.7 | HJ234 | 6.693 | 8.681 | .866 | .472 | .157 | 3.75 |
| | | | | | 170 | 220.5 | 22.00 | 12 | 4.0 | |
| 111,000 | 152,000 | 40.3 | 41.2 | HJ236 | 7.087 | 9.075 | .866 | .472 | .157 | 3.97 |
| | | | | | 180 | 230.5 | 22.00 | 12 | 4.0 | |
| 125,000 | 173,000 | 48.7 | 49.6 | HJ238 | 7.480 | 9.626 | .925 | .512 | .157 | 4.85 |
| | | | | | 190 | 244.5 | 23.50 | 13 | 4.0 | |
| 140,000 | 195,000 | 57.8 | 58.9 | HJ240 | 7.874 | 10.157 | .984 | .551 | .157 | 5.73 |
| | | | | | 200 | 258.0 | 25.00 | 14 | 4.0 | |
| 171,000 | 242,000 | 80.9 | 82.5 | HJ244 | 8.661 | 11.260 | 1.083 | .591 | .157 | 7.83 |
| | | | | | 220 | 286.0 | 27.50 | 15 | 4.0 | |
| 211,000 | 300,000 | 109 | 111 | HJ248 | 9.449 | 12.323 | 1.161 | .630 | .157 | 10.3 |
| | | | | | 240 | 313.0 | 29.50 | 16 | 4.0 | |
| 258,000 | 375,000 | 145 | 148 | HJ252 | 10.236 | 13.386 | 1.299 | .709 | .197 | 13.7 |
| | | | | | 260 | 340.0 | 33.00 | 18 | 5.0 | |
| 267,000 | 395,000 | 153 | 156 | HJ256 | 11.024 | 14.173 | 1.299 | .709 | .197 | 16.3 |
| | | | | | 280 | 360.0 | 33.00 | 18 | 5.0 | |
| 315,000 | 465,000 | 190 | 194 | HJ260 | 11.811 | 15.236 | 1.358 | .787 | .197 | 20.2 |
| | | | | | 300 | 387.0 | 34.50 | 20 | 5.0 | |
| 360,000 | 540,000 | 240 | 245 | HJ264 | 12.598 | 16.339 | 1.457 | .827 | .197 | 24.9 |
| | | | | | 320 | 415.0 | 37.00 | 21 | 5.0 | |



NU2



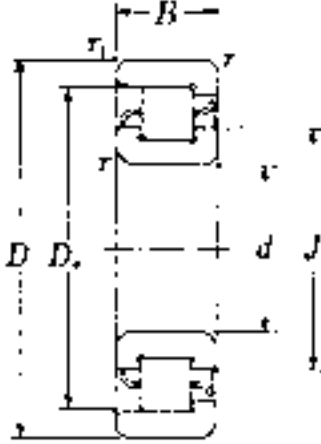
(NH2=NJ2+HJ2)

These figures may vary slightly according to cage type and type of bearing.

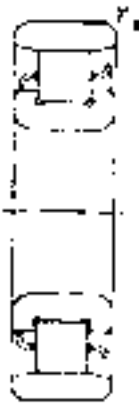


Units: INCHES
Millimeters

CYLINDRICAL ROLLER BEARINGS



NF3



N3



NJ3

| Bearing No. | Bore | O.D. | Width <i>B</i> | Fillet Radii | | Outer Ring I.D. <i>D_r</i> | Inner Ring O.D. <i>d_r</i> | Shoulder Height <i>J</i> |
|-------------|----------------|----------------|-------------------|--------------|----------------------|--|--|--------------------------------|
| | <i>d</i> | <i>D</i> | | <i>r</i> | <i>r₁</i> | | | |
| 304 | .7874 20 | 2.0472 52 | .5906 15 | .059 1.5 | .024 .6 | 1.7520 44.5 | 1.1220 28.5 | 1.252 31.8 |
| 305 | .9843 25 | 2.4409 62 | .6693 17 | .059 1.5 | .059 1.5 | 2.0866 53.0 | 1.3780 35.0 | 1.535 39.0 |
| 306 | 1.1811 30 | 2.8346 72 | .7480 19 | .059 1.5 | .059 1.5 | 2.4409 62.0 | 1.6535 42.0 | 1.807 45.9 |
| 307 | 1.3780 35 | 3.1496 80 | .8268 21 | .079 2.0 | .059 1.5 | 2.6850 68.2 | 1.8189 46.2 | 2.000 50.8 |
| 308 | 1.5748 40 | 3.5433 90 | .9055 23 | .079 2.0 | .079 2.0 | 3.0512 77.5 | 2.1063 53.5 | 2.299 58.4 |
| 309 | 1.7717 45 | 3.9370 100 | .9843 25 | .079 2.0 | .079 2.0 | 3.4055 86.5 | 2.3031 58.5 | 2.520 64.0 |
| 310 | 1.9685 50 | 4.3307 110 | 1.0630 27 | .098 2.5 | .098 2.5 | 3.7402 95.0 | 2.5591 65.0 | 2.795 71.0 |
| 311 | 2.1654 55 | 4.7244 120 | 1.1417 29 | .098 2.5 | .098 2.5 | 4.1142 104.5 | 2.7756 70.5 | 3.039 77.2 |
| 312 | 2.3622 60 | 5.1181 130 | 1.2205 31 | .098 2.5 | .098 2.5 | 4.4488 113.0 | 3.0315 77.0 | 3.315 84.2 |
| 313 | 2.5591 65 | 5.5118 140 | 1.2992 33 | .098 2.5 | .098 2.5 | 4.7835 121.5 | 3.2874 83.5 | 3.583 91.0 |
| 314 | 2.7559 70 | 5.9055 150 | 1.3780 35 | .098 2.5 | .098 2.5 | 5.1181 130.0 | 3.5433 90.0 | 3.858 98.0 |
| 315 | 2.9528 75 | 6.2992 160 | 1.4567 37 | .098 2.5 | .098 2.5 | 5.4921 139.5 | 3.7598 95.5 | 4.102 104.2 |
| 316 | 3.1496 80 | 6.6929 170 | 1.5354 39 | .098 2.5 | .098 2.5 | 5.7874 147.0 | 4.0551 103.0 | 4.402 111.8 |
| 317 | 3.3465 85 | 7.0866 180 | 1.6142 41 | .118 3.0 | .118 3.0 | 6.1417 156.0 | 4.2520 108.0 | 4.626 117.5 |
| 318 | 3.5433 90 | 7.4803 190 | 1.6929 43 | .118 3.0 | .118 3.0 | 6.4961 165.0 | 4.5276 115.0 | 4.921 125.0 |
| 319 | 3.7402 95 | 7.8740 200 | 1.7717 45 | .118 3.0 | .118 3.0 | 6.8307 173.5 | 4.7835 121.5 | 5.197 132.0 |
| 320 | 3.9370 100 | 8.4646 215 | 1.8504 47 | .118 3.0 | .118 3.0 | 7.3031 185.5 | 5.0984 129.5 | 5.531 140.5 |
| 321 | 4.1339 105 | 8.8583 225 | 1.9291 49 | .118 3.0 | .118 3.0 | 7.6772 195.0 | 5.3150 135.0 | 5.787 147.0 |
| 322 | 4.3307 110 | 9.4488 240 | 1.9685 50 | .118 3.0 | .118 3.0 | 8.1496 207.0 | 5.6299 143.0 | 6.122 155.5 |
| 324 | 4.7244 120 | 10.2362 260 | 2.1654 55 | .118 3.0 | .118 3.0 | 8.8976 226.0 | 6.0630 154.0 | 6.634 168.5 |
| 326 | 5.1181 130 | 11.0236 280 | 2.2835 58 | .157 4.0 | .157 4.0 | 9.5669 243.0 | 6.5748 167.0 | 7.165 182.0 |
| 328 | 5.5118 140 | 11.8110 300 | 2.4409 62 | .157 4.0 | .157 4.0 | 10.2362 260.0 | 7.0866 180.0 | 7.717 196.0 |
| 330 | 5.9055 150 | 12.5984 320 | 2.5591 65 | .157 4.0 | .157 4.0 | 10.9055 277.0 | 7.5984 193.0 | 8.268 210.0 |
| 332 | 6.2992 160 | 13.3858 340 | 2.6772 68 | .157 4.0 | .157 4.0 | 11.4961 292.0 | 8.1890 208.0 | 8.858 225.0 |
| 334 | 6.6929 170 | 14.1732 360 | 2.8346 72 | .157 4.0 | .157 4.0 | 12.2047 310.0 | 8.6614 220.0 | 9.370 238.0 |
| 336 | 7.0866 180 | 14.9606 380 | 2.9528 75 | .157 4.0 | .157 4.0 | 12.9134 328.0 | 9.1339 232.0 | 9.921 252.0 |
| 338 | 7.4803 190 | 15.7480 400 | 3.0709 78 | .197 5.0 | .197 5.0 | 13.5827 345.0 | 9.6457 245.0 | 10.433 265.0 |
| 340 | 7.8740 200 | 16.5354 420 | 3.1496 80 | .197 5.0 | .197 5.0 | 14.1732 360.0 | 10.2362 260.0 | 11.024 280.0 |
| 344 | 8.6614 220 | 18.1102 460 | 3.4646 88 | .197 5.0 | .197 5.0 | 15.5906 396.0 | 11.1811 284.0 | 12.087 307.0 |
| 348 | 9.4488 240 | 19.6850 500 | 3.7402 95 | .197 5.0 | .197 5.0 | 16.9291 430.0 | 12.2047 310.0 | 13.189 335.0 |
| 352 | 10.2362 260 | 21.2598 540 | 4.0157 102 | .236 6.0 | .236 6.0 | 18.2677 464.0 | 13.2283 336.0 | 14.252 362.0 |
| 356 | 11.0236 280 | 22.8346 580 | 4.2520 108 | .236 6.0 | .236 6.0 | 19.6063 498.0 | 14.2520 362.0 | 15.354 390.0 |

CYLINDRICAL ROLLER BEARINGS

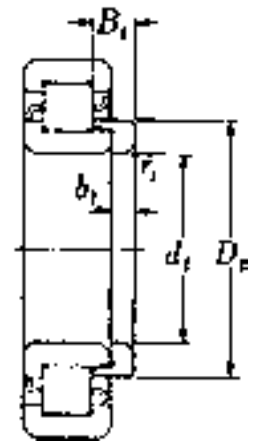
Units: **INCHES**
Millimeters



| Basic Load Ratings (lbs) | | Weight (lbs) | | Separate Thrust Collar No. | Thrust Collar Dimensions | | | | | Collar Weight (lbs) |
|--------------------------|--------------|--------------|------|----------------------------|--------------------------|--------|-------|-------|-------|---------------------|
| Dynamic C | Static C_o | N3 | NU3 | | d_t | D_t | B_t | b_t | r_t | |
| 5,200 | 4,350 | .328 | .337 | HJ304 | .787 | 1.252 | .295 | .157 | .024 | .037 |
| 7,050 | 6,250 | .518 | .531 | HJ305 | .20 | 31.8 | 7.5 | 4 | .6 | .055 |
| | | | | | .984 | 1.535 | .315 | .157 | .059 | |
| 8,700 | 7,900 | .772 | .789 | HJ306 | .25 | 39.0 | 8.0 | 4 | 1.5 | .086 |
| | | | | | 1.181 | 1.807 | .374 | .197 | .059 | |
| 11,200 | 10,500 | 1.03 | 1.05 | HJ307 | .30 | 45.9 | 9.5 | 5 | 1.5 | .123 |
| | | | | | 1.378 | 2.000 | .433 | .236 | .059 | |
| 13,200 | 12,800 | 1.42 | 1.45 | HJ308 | .35 | 50.8 | 11.0 | 6 | 1.5 | .183 |
| | | | | | 1.575 | 2.299 | .492 | .276 | .079 | |
| 17,700 | 17,400 | 1.89 | 1.93 | HJ309 | .40 | 58.4 | 12.5 | 7 | 2.0 | .218 |
| | | | | | 1.772 | 2.520 | .492 | .276 | .079 | |
| 19,500 | 19,400 | 2.45 | 2.51 | HJ310 | .45 | 64.0 | 12.5 | 7 | 2.0 | .313 |
| | | | | | 1.969 | 2.795 | .551 | .315 | .098 | |
| 24,900 | 25,000 | 3.13 | 3.20 | HJ311 | .50 | 71.0 | 14.0 | 8 | 2.5 | .401 |
| | | | | | 2.165 | 3.039 | .591 | .354 | .098 | |
| 27,800 | 28,400 | 3.90 | 3.99 | HJ312 | .55 | 77.2 | 15.0 | 9 | 2.5 | .485 |
| | | | | | 2.362 | 3.315 | .610 | .354 | .098 | |
| 30,500 | 31,000 | 4.81 | 4.92 | HJ313 | .60 | 84.2 | 15.5 | 9 | 2.5 | .617 |
| | | | | | 2.559 | 3.583 | .669 | .394 | .098 | |
| 35,500 | 38,000 | 5.84 | 5.97 | HJ314 | .65 | 91.0 | 17.0 | 10 | 2.5 | .728 |
| | | | | | 2.756 | 3.858 | .689 | .394 | .098 | |
| 43,000 | 46,000 | 7.01 | 7.17 | HJ315 | .70 | 98.0 | 17.5 | 10 | 2.5 | .882 |
| | | | | | 2.953 | 4.102 | .728 | .433 | .098 | |
| 45,000 | 50,000 | 8.31 | 8.51 | HJ316 | .75 | 104.2 | 18.5 | 11 | 2.5 | 1.04 |
| | | | | | 3.150 | 4.402 | .768 | .433 | .098 | |
| 50,500 | 55,500 | 9.79 | 10.0 | HJ317 | .80 | 111.8 | 19.5 | 11 | 2.5 | 1.23 |
| | | | | | 3.346 | 4.626 | .807 | .472 | .118 | |
| 54,000 | 59,500 | 11.4 | 11.7 | HJ318 | .85 | 117.5 | 20.5 | 12 | 3.0 | 1.39 |
| | | | | | 3.543 | 4.921 | .827 | .472 | .118 | |
| 61,500 | 70,000 | 13.2 | 13.5 | HJ319 | .90 | 125.0 | 21.0 | 12 | 3.0 | 1.68 |
| | | | | | 3.740 | 5.197 | .886 | .512 | .118 | |
| 71,000 | 81,500 | 16.1 | 16.5 | HJ320 | .95 | 132.0 | 22.5 | 13 | 3.0 | 1.97 |
| | | | | | 3.937 | 5.531 | .886 | .512 | .118 | |
| 81,000 | 94,000 | 22.1 | 22.5 | HJ321 | 1.00 | 140.5 | 22.5 | 13 | 3.0 | 2.14 |
| | | | | | 4.134 | 5.787 | .886 | .512 | .118 | |
| 90,500 | 105,000 | 25.8 | 26.5 | HJ322 | 1.05 | 147.0 | 22.5 | 13 | 3.0 | 2.58 |
| | | | | | 4.331 | 6.122 | .906 | .551 | .118 | |
| 107,000 | 124,000 | 33.3 | 34.2 | HJ324 | 1.10 | 155.5 | 23.0 | 14 | 3.0 | 3.09 |
| | | | | | 4.724 | 6.634 | .925 | .551 | .118 | |
| 126,000 | 150,000 | 39.2 | 40.1 | HJ326 | 1.20 | 168.5 | 23.5 | 14 | 3.0 | 3.57 |
| | | | | | 5.118 | 7.165 | .945 | .551 | .157 | |
| 139,000 | 168,000 | 48.1 | 49.2 | HJ328 | 1.30 | 182.0 | 24.0 | 14 | 4.0 | 4.25 |
| | | | | | 5.512 | 7.717 | 1.024 | .591 | .157 | |
| 149,000 | 182,000 | 57.1 | 58.4 | HJ330 | 1.40 | 196.0 | 26.0 | 15 | 4.0 | 5.22 |
| | | | | | 5.906 | 8.268 | 1.043 | .591 | .157 | |
| 157,000 | 197,000 | 67.5 | 69.0 | HJ332 | 1.50 | 210.0 | 26.5 | 15 | 4.0 | 6.06 |
| | | | | | 6.299 | 8.858 | 1.102 | .591 | .157 | |
| 179,000 | 227,000 | 79.6 | 81.6 | HJ334 | 1.60 | 225.0 | 28.0 | 15 | 4.0 | 7.17 |
| | | | | | 6.693 | 9.370 | 1.161 | .630 | .157 | |
| 203,000 | 260,000 | 92.4 | 94.6 | HJ336 | 1.70 | 238.0 | 29.5 | 16 | 4.0 | 8.49 |
| | | | | | 7.087 | 9.921 | 1.201 | .669 | .157 | |
| 219,000 | 283,000 | 106 | 109 | HJ338 | 1.80 | 252.0 | 30.5 | 17 | 4.0 | 9.81 |
| | | | | | 7.480 | 10.433 | 1.260 | .709 | .197 | |
| 219,000 | 286,000 | 120 | 123 | HJ340 | 1.90 | 265.0 | 32.0 | 18 | 5.0 | 11.0 |
| | | | | | 7.874 | 11.024 | 1.299 | .709 | .197 | |
| 268,000 | 355,000 | 158 | 162 | HJ344 | 2.00 | 280.0 | 33.0 | 18 | 5.0 | 15.5 |
| | | | | | 8.661 | 12.087 | 1.417 | .787 | .197 | |
| 320,000 | 440,000 | 201 | 206 | HJ348 | 2.20 | 307.0 | 36.0 | 20 | 5.0 | 18.1 |
| | | | | | 9.449 | 13.189 | 1.555 | .866 | .197 | |
| 365,000 | 500,000 | 251 | 258 | HJ352 | 2.40 | 335.0 | 39.5 | 22 | 5.0 | 25.1 |
| | | | | | 10.236 | 14.252 | 1.693 | .945 | .236 | |
| 410,000 | 570,000 | 306 | 313 | HJ356 | 2.60 | 362.0 | 43.0 | 24 | 6.0 | 30.6 |
| | | | | | 11.024 | 15.354 | 1.811 | 1.024 | .236 | |
| | | | | | 280 | 390.0 | 46.0 | 26 | 6.0 | |



NU3



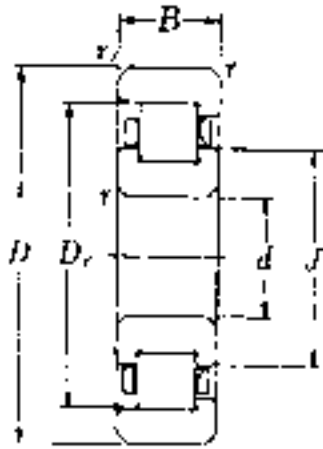
(NH3=NJ3+HJ3)

These figures may vary slightly according to cage type and type of bearing.



Units: INCHES
Millimeters

CYLINDRICAL ROLLER BEARINGS



NF4



N4



NJ4

| Bearing No. | Bore | O.D. | Width | Fillet Radius | | Outer Ring I.D. | Inner Ring O.D. | Shoulder Height |
|-------------|---------------|----------------|--------------|---------------|----------------------|----------------------|----------------------|-----------------|
| | <i>d</i> | <i>D</i> | <i>B</i> | <i>r</i> | <i>r₁</i> | <i>D_r</i> | <i>d_r</i> | <i>J</i> |
| 406 | 1.1811 30 | 3.5433 90 | .9055 23 | .079 2.0 | | 2.8740 73.0 | 1.7717 45.0 | 1.988 50.5 |
| 407 | 1.3780 35 | 3.9370 100 | .9843 25 | .079 2.0 | | 3.2677 83.0 | 2.0866 53.0 | 2.323 59.0 |
| 408 | 1.5748 40 | 4.3307 110 | 1.0630 27 | .098 2.5 | | 3.6220 92.0 | 2.2835 58.0 | 2.551 64.8 |
| 409 | 1.7717 45 | 4.7244 120 | 1.1417 29 | .098 2.5 | | 3.9567 100.5 | 2.5394 64.5 | 2.827 71.8 |
| 410 | 1.9685 50 | 5.1181 130 | 1.2205 31 | .098 2.5 | | 4.3622 110.8 | 2.7874 70.8 | 3.102 78.8 |
| 411 | 2.1654 55 | 5.5118 140 | 1.2992 33 | .098 2.5 | | 4.6142 117.2 | 3.0394 77.2 | 3.354 85.2 |
| 412 | 2.3622 60 | 5.9055 150 | 1.3780 35 | .098 2.5 | | 5.0000 127.0 | 3.2677 83.0 | 3.614 91.8 |
| 413 | 2.5591 65 | 6.2992 160 | 1.4567 37 | .098 2.5 | | 5.3268 135.3 | 3.5157 89.3 | 3.878 98.5 |
| 414 | 2.7559 70 | 7.0866 180 | 1.6535 42 | .118 3.0 | | 5.9843 152.0 | 3.9370 100.0 | 4.350 110.5 |
| 415 | 2.9528 75 | 7.4803 190 | 1.7717 45 | .118 3.0 | | 6.3189 160.5 | 4.1142 104.5 | 4.567 116.0 |
| 416 | 3.1496 80 | 7.8740 200 | 1.8898 48 | .118 3.0 | | 6.6929 170.0 | 4.3307 110.0 | 4.803 122.0 |
| 417 | 3.3465 85 | 8.2677 210 | 2.0472 52 | .157 4.0 | | 6.9685 177.0 | 4.4488 113.0 | 4.961 126.0 |
| 418 | 3.5433 90 | 8.8583 225 | 2.1260 54 | .157 4.0 | | 7.5394 191.5 | 4.8622 123.5 | 5.394 137.0 |
| 419 | 3.7402 95 | 9.4488 240 | 2.1654 55 | .157 4.0 | | 7.9331 201.5 | 5.2559 133.5 | 5.787 147.0 |
| 420 | 3.9370 100 | 9.8425 250 | 2.2835 58 | .157 4.0 | | 8.3071 211.0 | 5.4724 139.0 | 6.043 153.5 |
| 421 | 4.1339 105 | 10.2362 260 | 2.3622 60 | .157 4.0 | | 8.6811 220.5 | 5.6890 144.5 | 6.280 159.5 |
| 422 | 4.3307 110 | 11.0236 280 | 2.5591 65 | .157 4.0 | | 9.2520 235.0 | 6.1024 155.0 | 6.732 171.0 |
| 424 | 4.7244 120 | 12.2047 310 | 2.8346 72 | .197 5.0 | | 10.2362 260.0 | 6.6929 170.0 | 7.402 188.0 |
| 426 | 5.1181 130 | 13.3858 340 | 3.0709 78 | .197 5.0 | | 11.2205 285.0 | 7.2835 185.0 | 8.071 205.0 |
| 428 | 5.5118 140 | 14.7132 374 | 3.2283 82 | .197 5.0 | | 11.8898 302.0 | 7.7953 198.0 | 8.622 219.0 |
| 430 | 5.9055 150 | 14.9606 380 | 3.3465 85 | .197 5.0 | | 12.4803 317.0 | 8.3858 213.0 | 9.213 234.0 |

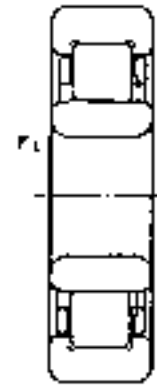
CYLINDRICAL ROLLER BEARINGS

Units: **INCHES**
Millimeters

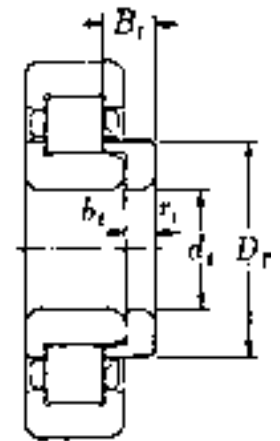


SERIES
NF4 • N4
NJ4 • NU4
HJ4
SEPARATE
THRUST
COLLAR

| Basic Load Ratings (lbs) | | Weight (lbs) | | Separate Thrust Collar No. | Thrust Collar Dimensions | | | | | Collar Weight (lbs) |
|--------------------------|--------------|--------------|------|----------------------------|--------------------------|-------|-------|-------|-------|---------------------|
| Dynamic C | Static C_o | N4 | NU4 | | d_t | D_t | B_t | b_t | r_t | |
| 14,100 | 12,400 | 1.75 | 1.79 | HJ406 | 1.181 | 1.988 | .453 | .276 | .079 | .176 |
| 16,900 | 15,500 | 2.29 | 2.36 | HJ407 | 30 | 50.5 | 11.5 | 7 | 2.0 | .265 |
| | | | | | 35 | 59.0 | 13.0 | 8 | 2.0 | |
| 21,500 | 20,000 | 3.02 | 3.09 | HJ408 | 40 | 64.8 | 13.0 | 8 | 2.5 | .309 |
| | | | | | 45 | 71.8 | 13.5 | 8 | 2.5 | |
| 25,900 | 25,100 | 3.77 | 3.86 | HJ409 | 1.772 | 2.827 | .531 | .315 | .098 | .386 |
| 31,000 | 30,500 | 4.70 | 4.81 | HJ410 | 50 | 78.8 | 14.5 | 9 | 2.5 | .507 |
| | | | | | 55 | 85.2 | 16.5 | 10 | 2.5 | |
| 31,500 | 31,000 | 5.78 | 5.91 | HJ411 | 60 | 91.8 | 16.5 | 10 | 2.5 | .639 |
| | | | | | 65 | 98.5 | 18.0 | 11 | 2.5 | |
| 37,500 | 38,000 | 6.97 | 7.14 | HJ412 | 70 | 110.5 | 20.0 | 12 | 3.0 | .750 |
| | | | | | 75 | 116.0 | 21.5 | 13 | 3.0 | |
| 44,000 | 45,500 | 8.36 | 8.55 | HJ413 | 80 | 122.0 | 22.0 | 13 | 3.0 | .926 |
| | | | | | 85 | 126.0 | 24.0 | 14 | 4.0 | |
| 54,500 | 58,000 | 12.2 | 12.5 | HJ414 | 90 | 137.0 | 24.0 | 14 | 4.0 | 1.33 |
| | | | | | 95 | 147.0 | 25.5 | 15 | 4.0 | |
| 59,000 | 61,500 | 14.5 | 14.8 | HJ415 | 100 | 153.5 | 27.0 | 16 | 4.0 | 1.57 |
| | | | | | 105 | 159.5 | 27.0 | 16 | 4.0 | |
| 67,500 | 71,000 | 17.0 | 17.4 | HJ416 | 110 | 171.0 | 29.5 | 17 | 4.0 | 1.72 |
| | | | | | 115 | 175.0 | 30.5 | 17 | 5.0 | |
| 75,000 | 78,500 | 20.2 | 20.7 | HJ417 | 120 | 188.0 | 30.5 | 17 | 5.0 | 1.94 |
| | | | | | 125 | 192.0 | 31.5 | 17 | 5.0 | |
| 84,000 | 90,000 | 24.0 | 24.7 | HJ418 | 130 | 205.0 | 32.0 | 18 | 5.0 | 2.31 |
| | | | | | 135 | 209.0 | 33.0 | 18 | 5.0 | |
| 90,000 | 99,500 | 28.4 | 29.1 | HJ419 | 140 | 219.0 | 33.0 | 18 | 5.0 | 2.87 |
| | | | | | 145 | 223.0 | 34.0 | 18 | 5.0 | |
| 101,000 | 111,000 | 32.0 | 32.8 | HJ420 | 150 | 234.0 | 36.5 | 20 | 5.0 | 3.31 |
| | | | | | 155 | 238.0 | 37.5 | 20 | 5.0 | |
| 112,000 | 125,000 | 35.7 | 36.6 | HJ421 | 160 | 249.0 | 38.0 | 21 | 5.0 | 3.64 |
| | | | | | 165 | 253.0 | 39.0 | 21 | 5.0 | |
| 123,000 | 140,000 | 45.4 | 46.5 | HJ422 | 170 | 264.0 | 40.0 | 22 | 5.0 | 4.63 |
| | | | | | 175 | 268.0 | 41.0 | 22 | 5.0 | |
| 151,000 | 173,000 | 62.2 | 63.7 | HJ424 | 180 | 283.0 | 43.0 | 23 | 5.0 | 5.73 |
| | | | | | 185 | 287.0 | 44.0 | 23 | 5.0 | |
| 185,000 | 215,000 | 81.1 | 83.1 | HJ426 | 190 | 302.0 | 45.0 | 24 | 5.0 | 7.28 |
| | | | | | 195 | 306.0 | 46.0 | 24 | 5.0 | |
| 197,000 | 230,000 | 95.2 | 97.7 | HJ428 | 200 | 321.0 | 47.0 | 25 | 5.0 | 8.27 |
| | | | | | 205 | 325.0 | 48.0 | 25 | 5.0 | |
| 209,000 | 253,000 | 190 | 112 | HJ430 | 5.906 | 9.213 | 1.437 | .787 | .197 | 10.40 |



NU4



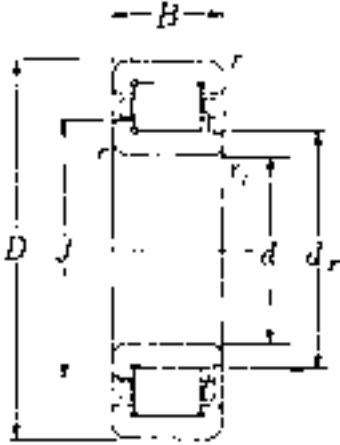
NH4=NJ4+HJ4

These figures may vary slightly according to cage type and type of bearing.



Units: INCHES
Millimeters

CYLINDRICAL ROLLER BEARINGS



NJ22



NU22

| Bearing No. | Bore | O.D. | Width <i>B</i> | Fillet Radii | | Inner Ring O.D. <i>d_r</i> | Shoulder Height <i>J</i> |
|-------------|---------------|----------------|-------------------|--------------|----------------------|--|--------------------------------|
| | <i>d</i> | <i>D</i> | | <i>r</i> | <i>r₁</i> | | |
| 2205 | .9843 25 | 2.0472 52 | .7087 18 | .039 1.0 | .024 .6 | 1.2598 32.0 | 1.378 35.0 |
| 2206 | 1.1811 30 | 2.4409 62 | .7874 20 | .039 1.0 | .024 .6 | 1.5157 38.5 | 1.646 41.8 |
| 2207 | 1.3780 35 | 2.8346 72 | .9055 23 | .059 1.5 | .024 .6 | 1.7244 43.8 | 1.874 47.6 |
| 2208 | 1.5748 40 | 3.1496 80 | .9055 23 | .059 1.5 | .059 1.5 | 1.9685 50.0 | 2.134 54.2 |
| 2209 | 1.7717 45 | 3.3465 85 | .9055 23 | .059 1.5 | .059 1.5 | 2.1654 55.0 | 2.323 59.0 |
| 2210 | 1.9685 50 | 3.5433 90 | .9055 23 | .059 1.5 | .059 1.5 | 2.3780 60.4 | 2.543 64.6 |
| 2211 | 2.1654 55 | 3.9370 100 | .9843 25 | .079 2.0 | .059 1.5 | 2.6181 66.5 | 2.787 70.8 |
| 2212 | 2.3622 60 | 4.3307 110 | 1.1024 28 | .079 2.0 | .079 2.0 | 2.8937 73.5 | 3.087 78.4 |
| 2213 | 2.5591 65 | 4.7244 120 | 1.2205 31 | .079 2.0 | .079 2.0 | 3.1339 79.6 | 3.339 84.8 |
| 2214 | 2.7559 70 | 4.9213 125 | 1.2205 31 | .079 2.0 | .079 2.0 | 3.3268 84.5 | 3.528 89.6 |
| 2215 | 2.9528 75 | 5.1181 130 | 1.2205 31 | .079 2.0 | .079 2.0 | 3.4843 88.5 | 3.701 94.0 |
| 2216 | 3.1496 80 | 5.5118 140 | 1.2992 33 | .098 2.5 | .098 2.5 | 3.7520 95.3 | 3.984 101.2 |
| 2217 | 3.3465 85 | 5.9055 150 | 1.4173 36 | .098 2.5 | .098 2.5 | 4.0079 101.8 | 4.260 108.2 |
| 2218 | 3.5433 90 | 6.2992 160 | 1.5748 40 | .098 2.5 | .098 2.5 | 4.2126 107.0 | 4.496 114.2 |
| 2219 | 3.7402 95 | 6.6929 170 | 1.6929 43 | .098 2.5 | .098 2.5 | 4.4685 113.5 | 4.764 121.0 |
| 2220 | 3.9370 100 | 7.0866 180 | 1.8110 46 | .098 2.5 | .098 2.5 | 4.7244 120.0 | 5.039 128.0 |
| 2222 | 4.3307 110 | 7.8740 200 | 2.0866 53 | .098 2.5 | .098 2.5 | 5.2165 132.5 | 5.571 141.5 |
| 2224 | 4.7244 120 | 8.4646 215 | 2.2835 58 | .098 2.5 | .098 2.5 | 5.6496 143.5 | 6.024 153.0 |
| 2226 | 5.1181 130 | 9.0551 230 | 2.5197 64 | .118 3.0 | .118 3.0 | 6.1417 156.0 | 6.516 165.5 |
| 2228 | 5.5118 140 | 9.8425 250 | 2.6772 68 | .118 3.0 | .118 3.0 | 6.6535 169.0 | 7.067 179.5 |
| 2230 | 5.9055 150 | 10.6299 270 | 2.8740 73 | .118 3.0 | .118 3.0 | 7.1654 182.0 | 7.598 193.0 |
| 2232 | 6.2992 160 | 11.4173 290 | 3.1496 80 | .118 3.0 | .118 3.0 | 7.6772 195.0 | 8.150 207.0 |
| 2234 | 6.6929 170 | 12.2047 310 | 3.3858 86 | .157 4.0 | .157 4.0 | 8.1890 208.0 | 8.681 220.5 |
| 2236 | 7.0866 180 | 12.5984 320 | 3.3858 86 | .157 4.0 | .157 4.0 | 8.5827 218.0 | 9.075 230.5 |
| 2238 | 7.4803 190 | 13.3858 340 | 3.6220 92 | .157 4.0 | .157 4.0 | 9.0945 231.0 | 9.626 244.5 |
| 2240 | 7.8740 200 | 14.1732 360 | 3.8583 98 | .157 4.0 | .157 4.0 | 9.6063 244.0 | 10.157 258.0 |

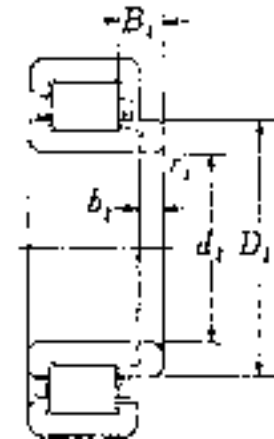
CYLINDRICAL ROLLER BEARINGS

Units: INCHES
Millimeters



SERIES
NJ22
NU22
HJ22
SEPARATE
THRUST
COLLAR

| Basic Load Ratings (lbs) | | Weight (lbs) | | Separate Thrust Collar No. | Thrust Collar Dimensions | | | | | Collar Weight (lbs) |
|--------------------------|-----------------------|--------------|------|----------------------------|--------------------------|----------------|----------------|----------------|----------------|---------------------|
| Dynamic C | Static C ₀ | NJ22 | NU22 | | d _t | D _t | B _t | b _t | r _t | |
| 5,650 | 5,550 | .412 | .401 | HJ2205 | .984 | 1.378 | .295 | .118 | .024 | .033 |
| | | | | | 25 | 35.0 | 7.5 | 3.0 | .6 | |
| 7,850 | 8,050 | .639 | .631 | HJ2206 | 1.181 | 1.646 | .335 | .157 | .024 | .055 |
| | | | | | 30 | 41.8 | 8.5 | 4.0 | .6 | |
| 11,700 | 12,500 | 1.00 | .974 | HJ2207 | 1.378 | 1.874 | .335 | .157 | .024 | .068 |
| | | | | | 35 | 47.6 | 8.5 | 4.0 | .6 | |
| 13,100 | 13,900 | 1.21 | 1.18 | HJ2208 | 1.575 | 2.134 | .374 | .197 | .059 | .104 |
| | | | | | 40 | 54.2 | 9.5 | 5.0 | 1.5 | |
| 13,800 | 15,200 | 1.31 | 1.28 | HJ2209 | 1.772 | 2.323 | .374 | .197 | .059 | .117 |
| | | | | | 45 | 59.0 | 9.5 | 5.0 | 1.5 | |
| 15,200 | 17,700 | 1.42 | 1.38 | HJ2210 | 1.969 | 2.543 | .374 | .197 | .059 | .134 |
| | | | | | 50 | 64.6 | 9.5 | 5.0 | 1.5 | |
| 17,800 | 20,900 | 1.94 | 1.88 | HJ2211 | 2.165 | 2.787 | .433 | .236 | .059 | .185 |
| | | | | | 55 | 70.8 | 11.0 | 6.0 | 1.5 | |
| 22,700 | 27,800 | 2.65 | 2.58 | HJ2212 | 2.362 | 3.087 | .433 | .236 | .079 | .238 |
| | | | | | 60 | 78.4 | 11.0 | 6.0 | 2.0 | |
| 27,000 | 33,500 | 3.48 | 3.40 | HJ2213 | 2.559 | 3.339 | .453 | .236 | .079 | .278 |
| | | | | | 65 | 84.8 | 11.5 | 6.0 | 2.0 | |
| 28,100 | 36,000 | 3.70 | 3.59 | HJ2214 | 2.756 | 3.528 | .492 | .276 | .079 | .331 |
| | | | | | 70 | 89.6 | 12.5 | 7.0 | 2.0 | |
| 30,500 | 38,500 | 3.88 | 3.77 | HJ2215 | 2.953 | 3.701 | .492 | .276 | .079 | .344 |
| | | | | | 75 | 94.0 | 12.5 | 7.0 | 2.0 | |
| 34,500 | 44,500 | 4.83 | 4.70 | HJ2216 | 3.150 | 3.984 | .531 | .315 | .098 | .456 |
| | | | | | 80 | 101.2 | 13.5 | 8.0 | 2.5 | |
| 40,000 | 52,000 | 6.11 | 5.93 | HJ2217 | 3.346 | 4.260 | .551 | .315 | .098 | .551 |
| | | | | | 85 | 108.2 | 14.0 | 8.0 | 2.5 | |
| 46,500 | 59,500 | 7.78 | 7.56 | HJ2218 | 3.543 | 4.496 | .630 | .354 | .098 | .694 |
| | | | | | 90 | 114.2 | 16.0 | 9.0 | 2.5 | |
| 52,000 | 67,000 | 9.50 | 9.24 | HJ2219 | 3.740 | 4.764 | .650 | .354 | .098 | .800 |
| | | | | | 95 | 121.0 | 16.5 | 9.0 | 2.5 | |
| 58,000 | 76,000 | 11.4 | 11.1 | HJ2220 | 3.937 | 5.039 | .709 | .394 | .098 | 1.01 |
| | | | | | 100 | 128.0 | 18.0 | 10.0 | 2.5 | |
| 75,000 | 99,500 | 16.4 | 16.0 | HJ2222 | 4.331 | 5.571 | .807 | .433 | .098 | 1.42 |
| | | | | | 110 | 141.5 | 20.5 | 11.0 | 2.5 | |
| 86,000 | 118,000 | 20.5 | 19.9 | HJ2224 | 4.724 | 6.024 | .866 | .433 | .098 | 1.69 |
| | | | | | 120 | 153.0 | 22.0 | 11.0 | 2.5 | |
| 89,000 | 126,000 | 25.6 | 24.9 | HJ2226 | 5.118 | 6.516 | .984 | .433 | .118 | 2.10 |
| | | | | | 130 | 165.5 | 25.0 | 11.0 | 3.0 | |
| 105,000 | 151,000 | 32.4 | 31.5 | HJ2228 | 5.512 | 7.067 | .984 | .433 | .118 | 2.51 |
| | | | | | 140 | 179.5 | 25.0 | 11.0 | 3.0 | |
| 123,000 | 180,000 | 40.8 | 39.7 | HJ2230 | 5.906 | 7.598 | 1.043 | .472 | .118 | 3.06 |
| | | | | | 150 | 193.0 | 26.5 | 12.0 | 3.0 | |
| 142,000 | 211,000 | 52.0 | 50.7 | HJ2232 | 6.299 | 8.150 | 1.102 | .472 | .118 | 3.73 |
| | | | | | 160 | 207.0 | 28.0 | 12.0 | 3.0 | |
| 161,000 | 242,000 | 64.2 | 62.4 | HJ2234 | 6.693 | 8.681 | 1.142 | .472 | .157 | 4.25 |
| | | | | | 170 | 220.5 | 29.0 | 12.0 | 4.0 | |
| 167,000 | 257,000 | 66.8 | 65.0 | HJ2236 | 7.087 | 9.075 | 1.142 | .472 | .157 | 4.50 |
| | | | | | 180 | 230.5 | 29.0 | 12.0 | 4.0 | |
| 187,000 | 290,000 | 81.1 | 78.9 | HJ2238 | 7.480 | 9.626 | 1.240 | .512 | .157 | 5.56 |
| | | | | | 190 | 244.5 | 31.5 | 13.0 | 4.0 | |
| 208,000 | 325,000 | 97.4 | 94.8 | HJ2240 | 7.874 | 10.157 | 1.339 | .551 | .157 | 6.59 |
| | | | | | 200 | 258.0 | 34.0 | 14.0 | 4.0 | |



NH22=NJ22+HJ22

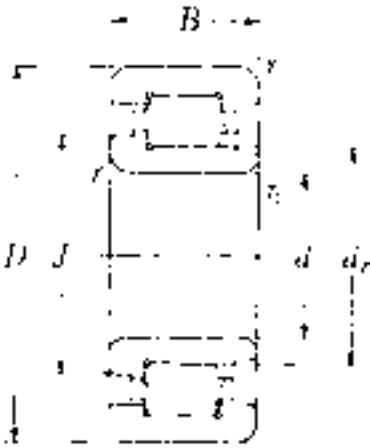
These figures may vary according to cage type and type of bearing.



Units: **INCHES**
Millimeters

CYLINDRICAL ROLLER BEARINGS

| Bearing No. | Bore | O.D. | Width | Fillet Radii | | Inner Ring O.D. | Shoulder Height |
|-------------|---------------|----------------|---------------|--------------|----------------------|----------------------|-----------------|
| | <i>d</i> | <i>D</i> | <i>B</i> | <i>r</i> | <i>r₁</i> | <i>d_r</i> | <i>J</i> |
| 2305 | .9843 25 | 2.4409 62 | .9449 24 | .059 1.5 | .059 1.5 | 1.3780 35.0 | 1.535 39.0 |
| 2306 | 1.1811 30 | 2.8346 72 | 1.0630 27 | .059 1.5 | .059 1.5 | 1.6535 42.0 | 1.807 45.9 |
| 2307 | 1.3780 35 | 3.1496 80 | 1.2205 31 | .079 2.0 | .059 1.5 | 1.8189 46.2 | 2.000 50.8 |
| 2308 | 1.5748 40 | 3.5433 90 | 1.2992 33 | .079 2.0 | .079 2.0 | 2.1063 53.5 | 2.299 58.4 |
| 2309 | 1.7717 45 | 3.9370 100 | 1.4173 36 | .079 2.0 | .079 2.0 | 2.3031 58.5 | 2.520 64.0 |
| 2310 | 1.9685 50 | 4.3307 110 | 1.5748 40 | .098 2.5 | .098 2.5 | 2.5591 65.0 | 2.795 71.0 |
| 2311 | 2.1654 55 | 4.7244 120 | 1.6929 43 | .098 2.5 | .098 2.5 | 2.7756 70.5 | 3.039 77.2 |
| 2312 | 2.3622 60 | 5.1181 130 | 1.8110 46 | .098 2.5 | .098 2.5 | 3.0315 77.0 | 3.315 84.2 |
| 2313 | 2.5591 65 | 5.5118 140 | 1.8898 48 | .098 2.5 | .098 2.5 | 3.2874 83.5 | 3.583 91.0 |
| 2314 | 2.7559 70 | 5.9055 150 | 2.0079 51 | .098 2.5 | .098 2.5 | 3.5433 90.0 | 3.858 98.0 |
| 2315 | 2.9528 75 | 6.2992 160 | 2.1654 55 | .098 2.5 | .098 2.5 | 3.7598 95.5 | 4.102 104.2 |
| 2316 | 3.1496 80 | 6.6929 170 | 2.2835 58 | .098 2.5 | .098 2.5 | 4.0551 103.0 | 4.402 111.8 |
| 2317 | 3.3465 85 | 7.0866 180 | 2.3622 60 | .118 3.0 | .118 3.0 | 4.2520 108.0 | 4.626 117.5 |
| 2318 | 3.5433 90 | 7.4803 190 | 2.5197 64 | .118 3.0 | .118 3.0 | 4.5276 115.0 | 4.921 125.0 |
| 2319 | 3.7402 95 | 7.8740 200 | 2.6378 67 | .118 3.0 | .118 3.0 | 4.7835 121.5 | 5.197 132.0 |
| 2320 | 3.9370 100 | 8.4646 215 | 2.8740 73 | .118 3.0 | .118 3.0 | 5.0984 129.5 | 5.531 140.5 |
| 2322 | 4.3307 110 | 9.4488 240 | 3.1496 80 | .118 3.0 | .118 3.0 | 5.6299 143.0 | 6.122 155.5 |
| 2324 | 4.7244 120 | 10.2362 260 | 3.3858 86 | .118 3.0 | .118 3.0 | 6.0630 154.0 | 6.634 168.5 |
| 2326 | 5.1181 130 | 11.0236 280 | 3.6614 93 | .157 4.0 | .157 4.0 | 6.5748 167.0 | 7.165 182.0 |
| 2328 | 5.5118 140 | 11.8110 300 | 4.0157 102 | .157 4.0 | .157 4.0 | 7.0866 180.0 | 7.717 196.0 |
| 2330 | 5.9055 150 | 12.5984 320 | 4.2520 108 | .157 4.0 | .157 4.0 | 7.5984 193.0 | 8.268 210.0 |
| 2332 | 6.2992 160 | 13.3858 340 | 4.4882 114 | .157 4.0 | .157 4.0 | 8.1890 208.0 | 8.858 225.0 |
| 2334 | 6.6929 170 | 14.1732 360 | 4.7244 120 | .157 4.0 | .157 4.0 | 8.6614 220.0 | 9.370 238.0 |
| 2336 | 7.0866 180 | 14.9606 380 | 4.9606 126 | .157 4.0 | .157 4.0 | 9.1339 232.0 | 9.921 252.0 |
| 2338 | 7.4803 190 | 15.7480 400 | 5.1969 132 | .197 5.0 | .197 5.0 | 9.6457 245.0 | 10.433 265.0 |
| 2340 | 7.8740 200 | 16.5354 420 | 5.4331 138 | .197 5.0 | .197 5.0 | 10.2362 260.0 | 11.024 280.0 |



NJ23



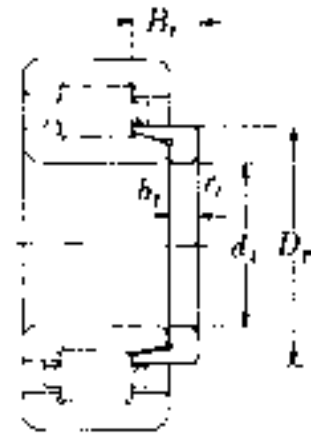
NU23

CYLINDRICAL ROLLER BEARINGS

Units: INCHES
Millimeters



| Basic Load Ratings (lbs) | | Weight (lbs) | | Separate Thrust Collar No. | Thrust Collar Dimensions | | | | | Collar Weight (lbs) |
|--------------------------|--------------|--------------|------|----------------------------|--------------------------|-----------------|---------------|------------|-------------|---------------------|
| Dynamic C | Static C_o | NJ23 | NU23 | | d_t | D_t | B_t | b_t | r_t | |
| 10,300 | 10,100 | .840 | .816 | HJ2305 | .984 25 | 1.535 39.0 | .354 9.0 | .157 4 | .059 1.5 | .060 |
| 11,600 | 11,400 | 1.26 | 1.22 | HJ2306 | 1.181 30 | 1.807 45.9 | .453 11.5 | .197 5 | .059 1.5 | .095 |
| 14,500 | 14,800 | 1.74 | 1.69 | HJ2307 | 1.378 35 | 2.000 50.8 | .551 14.0 | .236 6 | .059 1.5 | .141 |
| 18,500 | 19,800 | 2.31 | 2.25 | HJ2308 | 1.575 40 | 2.299 58.4 | .571 14.5 | .276 7 | .079 2.0 | .198 |
| 23,800 | 25,500 | 3.11 | 3.02 | HJ2309 | 1.772 45 | 2.520 64.0 | .591 15.0 | .276 7 | .079 2.0 | .240 |
| 27,100 | 29,500 | 4.14 | 4.03 | HJ2310 | 1.969 50 | 2.795 71.0 | .669 17.0 | .315 8 | .098 2.5 | .346 |
| 33,500 | 36,500 | 5.31 | 5.16 | HJ2311 | 2.165 55 | 3.039 77.2 | .728 18.5 | .354 9 | .098 2.5 | .448 |
| 38,000 | 40,500 | 6.61 | 6.44 | HJ2312 | 2.362 60 | 3.315 84.2 | .748 19.0 | .354 9 | .098 2.5 | .540 |
| 42,000 | 48,000 | 8.00 | 7.76 | HJ2313 | 2.559 65 | 3.583 91.0 | .787 20.0 | .394 10 | .098 2.5 | .670 |
| 50,000 | 59,000 | 9.72 | 9.44 | HJ2314 | 2.756 70 | 3.858 98.0 | .807 20.5 | .394 10 | .098 2.5 | .789 |
| 61,500 | 73,500 | 11.9 | 11.6 | HJ2315 | 2.953 75 | 4.102 104.2 | .846 21.5 | .433 11 | .098 2.5 | .952 |
| 61,500 | 74,500 | 14.6 | 14.2 | HJ2316 | 3.150 80 | 4.402 111.8 | .906 23.0 | .433 11 | .098 2.5 | 1.13 |
| 71,000 | 86,000 | 16.9 | 16.4 | HJ2317 | 3.346 85 | 4.626 117.5 | .945 24.0 | .472 12 | .118 3.0 | 1.34 |
| 73,500 | 88,500 | 20.0 | 19.5 | HJ2318 | 3.543 90 | 4.921 125.0 | 1.024 26.0 | .472 12 | .118 3.0 | 1.55 |
| 88,500 | 112,000 | 23.1 | 22.5 | HJ2319 | 3.740 95 | 5.197 132.0 | 1.043 26.5 | .512 13 | .118 3.0 | 1.82 |
| 104,000 | 133,000 | 29.5 | 28.7 | HJ2320 | 3.937 100 | 5.531 140.5 | 1.083 27.5 | .512 13 | .118 3.0 | 2.17 |
| 136,000 | 177,000 | 40.6 | 39.5 | HJ2322 | 4.331 110 | 6.122 155.5 | 1.102 28.0 | .551 14 | .118 3.0 | 2.82 |
| 159,000 | 206,000 | 51.1 | 49.6 | HJ2324 | 4.724 120 | 6.634 168.5 | 1.102 28.0 | .551 14 | .118 3.0 | 3.37 |
| 189,000 | 253,000 | 63.9 | 62.2 | HJ2326 | 5.118 130 | 7.165 182.0 | 1.161 29.5 | .551 14 | .157 4.0 | 3.97 |
| 207,000 | 281,000 | 80.2 | 77.8 | HJ2328 | 5.512 140 | 7.717 196.0 | 1.319 33.5 | .591 15 | .157 4.0 | 4.87 |
| 229,000 | 315,000 | 96.6 | 93.7 | HJ2330 | 5.906 150 | 8.268 210.0 | 1.339 34.0 | .591 15 | .157 4.0 | 5.93 |
| 241,000 | 340,000 | 115 | 111 | HJ2332 | 6.299 160 | 8.858 225.0 | 1.457 37.0 | .591 15 | .157 4.0 | 6.97 |
| 275,000 | 395,000 | 135 | 131 | HJ2334 | 6.693 170 | 9.370 238.0 | 1.516 38.5 | .630 16 | .157 4.0 | 8.18 |
| 310,000 | 450,000 | 158 | 153 | HJ2336 | 7.087 180 | 9.921 252.0 | 1.575 40.0 | .669 17 | .157 4.0 | 9.74 |
| 340,000 | 500,000 | 183 | 177 | HJ2338 | 7.480 190 | 10.433 265.0 | 1.634 41.5 | .709 18 | .197 5.0 | 11.1 |
| 340,000 | 505,000 | 210 | 204 | HJ2340 | 7.874 200 | 11.024 280.0 | 1.752 44.5 | .709 18 | .197 5.0 | 12.7 |



NH23=NJ23+HJ23

These figures may vary slightly according to cage type and type of bearing.



**SERIES
NN30
NN30K**

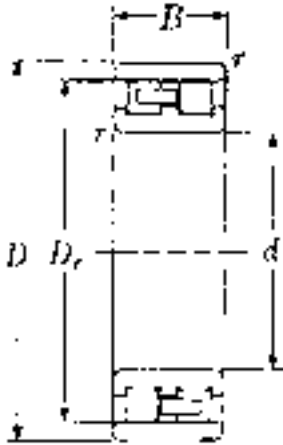
**PRECISION
AND SUPER
PRECISION
GRADE**

Suffix P5

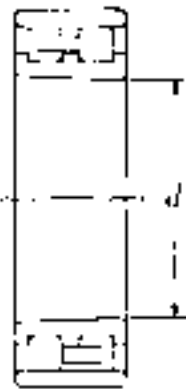
- AFBMA RBEC 5 •
- ISO Class 5 •

Units: **INCHES**
Millimeters

DOUBLE ROW CYLINDRICAL ROLLER BEARINGS



Cylindrical
Bore
NN30

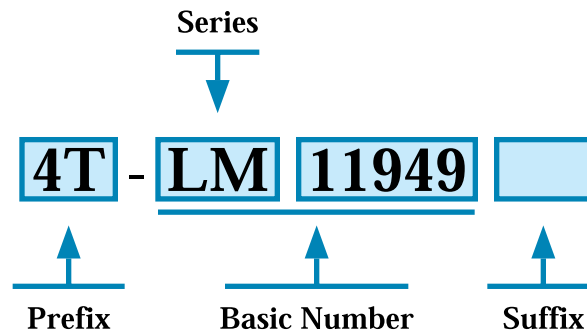


Tapered Bore
NN30K
Taper 1:12

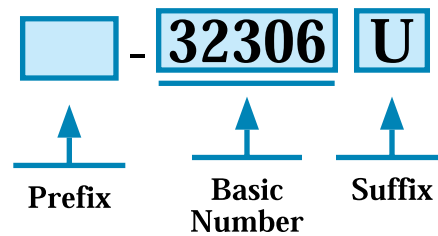
| Bearing No. | | Bore | O.D. | Width | Fillet Radius | Outer Ring I.D. | Basic Load Ratings (lbs) | | Weight (lbs) | |
|-------------|---------|----------------|----------------|----------------|----------------|------------------|--------------------------|-----------|--------------|-------|
| NN30 | NN30K | d | D | B | r | Dr | Dynamic C | Static Co | NN30 | NN30K |
| NN3005 | NN3005K | .9843 | 1.8504 | .6299 | .024 | 1.6260 | 5,800 | 6,750 | .271 | .262 |
| | | ²⁵ | ⁴⁷ | ¹⁶ | ^{.6} | ^{41.3} | | | | |
| NN3006 | NN3006K | 1.1811 | 2.1654 | .7480 | .039 | 1.9094 | 6,900 | 8,350 | .439 | .425 |
| | | ³⁰ | ⁵⁵ | ¹⁹ | ^{1.0} | ^{48.5} | | | | |
| NN3007 | NN3007K | 1.3780 | 2.4409 | .7874 | .039 | 2.1654 | 8,500 | 10,700 | .569 | .553 |
| | | ³⁵ | ⁶² | ²⁰ | ^{1.0} | ^{55.0} | | | | |
| NN3008 | NN3008K | 1.5748 | 2.6772 | .8268 | .039 | 2.4016 | 9,750 | 12,500 | .688 | .668 |
| | | ⁴⁰ | ⁶⁸ | ²¹ | ^{1.0} | ^{61.0} | | | | |
| NN3009 | NN3009K | 1.7717 | 2.9528 | .9055 | .039 | 2.6575 | 11,600 | 15,400 | .893 | .866 |
| | | ⁴⁵ | ⁷⁵ | ²³ | ^{1.0} | ^{67.5} | | | | |
| NN3010 | NN3010K | 1.9685 | 3.1496 | .9055 | .039 | 2.8543 | 11,900 | 16,300 | 1.00 | .970 |
| | | ⁵⁰ | ⁸⁰ | ²³ | ^{1.0} | ^{72.5} | | | | |
| NN3011 | NN3011K | 2.1654 | 3.5433 | 1.0236 | .059 | 3.1890 | 15,600 | 21,700 | 1.44 | 1.39 |
| | | ⁵⁵ | ⁹⁰ | ²⁶ | ^{1.5} | ^{81.0} | | | | |
| NN3012 | NN3012K | 2.3622 | 3.7402 | 1.0236 | .059 | 3.3898 | 16,000 | 22,900 | 1.55 | 1.51 |
| | | ⁶⁰ | ⁹⁵ | ²⁶ | ^{1.5} | ^{86.1} | | | | |
| NN3013 | NN3013K | 2.5591 | 3.9370 | 1.0236 | .059 | 3.5827 | 16,800 | 25,000 | 1.67 | 1.62 |
| | | ⁶⁵ | ¹⁰⁰ | ²⁶ | ^{1.5} | ^{91.0} | | | | |
| NN3014 | NN3014K | 2.7559 | 4.3307 | 1.1811 | .059 | 3.9370 | 21,300 | 32,000 | 2.29 | 2.25 |
| | | ⁷⁰ | ¹¹⁰ | ³⁰ | ^{1.5} | ^{100.0} | | | | |
| NN3015 | NN3015K | 2.9528 | 4.5276 | 1.1811 | .059 | 4.1339 | 21,700 | 33,500 | 2.51 | 2.45 |
| | | ⁷⁵ | ¹¹⁵ | ³⁰ | ^{1.5} | ^{105.0} | | | | |
| NN3016 | NN3016K | 3.1496 | 4.9213 | 1.3386 | .059 | 4.4488 | 26,000 | 40,000 | 3.35 | 3.24 |
| | | ⁸⁰ | ¹²⁵ | ³⁴ | ^{1.5} | ^{113.0} | | | | |
| NN3017 | NN3017K | 3.3465 | 5.1181 | 1.3386 | .059 | 4.6457 | 27,400 | 43,500 | 3.55 | 3.44 |
| | | ⁸⁵ | ¹³⁰ | ³⁴ | ^{1.5} | ^{118.0} | | | | |
| NN3018 | NN3018K | 3.5433 | 5.5118 | 1.4567 | .079 | 5.0000 | 32,000 | 51,000 | 4.56 | 4.43 |
| | | ⁹⁰ | ¹⁴⁰ | ³⁷ | ^{2.0} | ^{127.0} | | | | |
| NN3019 | NN3019K | 3.7402 | 5.7087 | 1.4567 | .079 | 5.1969 | 33,000 | 53,500 | 4.78 | 4.63 |
| | | ⁹⁵ | ¹⁴⁵ | ³⁷ | ^{2.0} | ^{132.0} | | | | |
| NN3020 | NN3020K | 3.9370 | 5.9055 | 1.4567 | .079 | 5.3937 | 34,500 | 57,500 | 4.98 | 4.83 |
| | | ¹⁰⁰ | ¹⁵⁰ | ³⁷ | ^{2.0} | ^{137.0} | | | | |
| NN3021 | NN3021K | 4.1339 | 6.2992 | 1.6142 | .098 | 5.7480 | 44,500 | 72,500 | 6.37 | 6.17 |
| | | ¹⁰⁵ | ¹⁶⁰ | ⁴¹ | ^{2.5} | ^{146.0} | | | | |
| NN3022 | NN3022K | 4.3307 | 6.6929 | 1.7717 | .098 | 6.1024 | 51,500 | 84,500 | 8.11 | 7.85 |
| | | ¹¹⁰ | ¹⁷⁰ | ⁴⁵ | ^{2.5} | ^{155.0} | | | | |
| NN3024 | NN3024K | 4.7244 | 7.0866 | 1.8110 | .098 | 6.4961 | 52,500 | 88,000 | 8.77 | 8.49 |
| | | ¹²⁰ | ¹⁸⁰ | ⁴⁶ | ^{2.5} | ^{165.0} | | | | |
| NN3026 | NN3026K | 5.1181 | 7.8740 | 2.0472 | .098 | 7.1654 | 64,000 | 107,000 | 13.1 | 12.7 |
| | | ¹³⁰ | ²⁰⁰ | ⁵² | ^{2.5} | ^{182.0} | | | | |
| NN3028 | NN3028K | 5.5118 | 8.2677 | 2.0866 | .098 | 7.5591 | 67,000 | 116,000 | 14.2 | 13.8 |
| | | ¹⁴⁰ | ²¹⁰ | ⁵³ | ^{2.5} | ^{192.0} | | | | |
| NN3030 | NN3030K | 5.9055 | 8.8583 | 2.2047 | .098 | 8.1102 | 75,000 | 132,000 | 17.2 | 16.7 |
| | | ¹⁵⁰ | ²²⁵ | ⁵⁶ | ^{2.5} | ^{206.0} | | | | |
| NN3032 | NN3032K | 6.2992 | 9.4488 | 2.3622 | .098 | 8.6220 | 84,000 | 149,000 | 19.7 | 19.0 |
| | | ¹⁶⁰ | ²⁴⁰ | ⁶⁰ | ^{2.5} | ^{219.0} | | | | |
| NN3034 | NN3034K | 6.6929 | 10.2362 | 2.6378 | .098 | 9.2913 | 99,000 | 174,000 | 27.8 | 26.9 |
| | | ¹⁷⁰ | ²⁶⁰ | ⁶⁷ | ^{2.5} | ^{236.0} | | | | |
| NN3036 | NN3036K | 7.0866 | 11.0236 | 2.9134 | .098 | 10.0394 | 127,000 | 224,000 | 36.6 | 35.5 |
| | | ¹⁸⁰ | ²⁸⁰ | ⁷⁴ | ^{2.5} | ^{255.0} | | | | |
| NN3038 | NN3038K | 7.4803 | 11.4173 | 2.9528 | .098 | 10.4331 | 130,000 | 233,000 | 38.6 | 37.5 |
| | | ¹⁹⁰ | ²⁹⁰ | ⁷⁵ | ^{2.5} | ^{265.0} | | | | |
| NN3040 | NN3040K | 7.8740 | 12.2047 | 3.2283 | .098 | 11.1024 | 147,000 | 262,000 | 47.6 | 47.2 |
| | | ²⁰⁰ | ³¹⁰ | ⁸² | ^{2.5} | ^{282.0} | | | | |
| NN3044 | NN3044K | 8.6614 | 13.3858 | 3.5433 | .118 | 12.2047 | 183,000 | 330,000 | 64.6 | 62.6 |
| | | ²²⁰ | ³⁴⁰ | ⁹⁰ | ^{3.0} | ^{310.0} | | | | |
| NN3048 | NN3048K | 9.4488 | 14.1732 | 3.6220 | .118 | 12.9921 | 192,000 | 360,000 | 72.3 | 70.1 |
| | | ²⁴⁰ | ³⁶⁰ | ⁹² | ^{2.0} | ^{330.0} | | | | |
| NN3052 | NN3052K | 10.2362 | 15.7480 | 4.0945 | .157 | 14.3307 | 239,000 | 450,000 | 104 | 101 |
| | | ²⁶⁰ | ⁴⁰⁰ | ¹⁰⁴ | ^{4.0} | ^{364.0} | | | | |
| NN3056 | NN3056K | 11.0236 | 16.5354 | 4.1732 | .157 | 15.1181 | 243,000 | 465,000 | 113 | 109 |
| | | ²⁸⁰ | ⁴²⁰ | ¹⁰⁶ | ^{4.0} | ^{384.0} | | | | |
| NN3060 | NN3060K | 11.8110 | 18.1102 | 4.6457 | .157 | 16.4567 | 299,000 | 575,000 | 156 | 151 |
| | | ³⁰⁰ | ⁴⁶⁰ | ¹¹⁸ | ^{4.0} | ^{418.0} | | | | |
| NN3064 | NN3064K | 12.5984 | 18.8976 | 4.7638 | .157 | 17.2441 | 305,000 | 600,000 | 168 | 163 |
| | | ³²⁰ | ⁴⁸⁰ | ¹²¹ | ^{4.0} | ^{438.0} | | | | |

Note: The d dimension for the tapered bore is measured from the side of the bearing with the smallest bore dimension.

Inch Series



ISO Series



1. PREFIX

| | |
|-----|---|
| ET: | NTN Endurance tapered roller bearings, case hardened material |
| 4T: | NTN 4-Top tapered roller bearings, case hardened material |
| E: | Case hardened steel |
| T: | Internationally interchangeable dimensions |

2. SERIES

| | |
|------|---|
| H: | Heavy |
| HH: | Heavier than heavy |
| HM: | Heavy-medium |
| L: | Light |
| LM: | Light medium |
| M: | Medium |
| ISO: | Metric series 320X, 302, 322, 303 and 323 |

3. SUFFIX

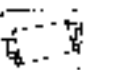
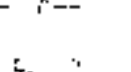
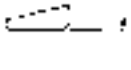
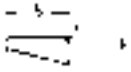
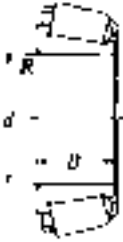
| | |
|------|--|
| A: | Different bore, O.D., width or radius from basic part number |
| PK: | Class K for J-Line |
| PXn: | Special tolerance, n; from 1 onward |
| S: | Different bore, OD, width or radius from basic part number |
| U: | ISO series; internationally interchangeable through hardened steel |
| W: | Slot or keyway |
| X: | Different bore, O.D., width or radius from basic part number |
| -0: | AFBMA class 0 |
| -00: | AFBMA class 00 |
| -2: | AFBMA class 2 |
| -3: | AFBMA class 3 |
| -4: | AFBMA class 4 |



Units: INCHES
Millimeters

TAPERED ROLLER BEARINGS

| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
|----------------------|------------------|------------------|--------------------------|------------|-------------------|------------------|----------------------------|------------------|
| | <i>d</i> | <i>B</i> | <i>R</i> | | <i>D</i> | <i>b</i> | <i>r</i> | <i>T</i> |
| 4T-335 SERIES | | | | | | | | |
| 4T-335 | 1.3750 34.925 | .8820 22.403 | .03 .6 | 4T-332 | 3.1496 80.000 | .7018 17.826 | .05 1.3 | .8268 21.000 |
| 4T-336 | 1.6250 41.275 | .8820 22.403 | .03 .6 | 4T-332A | 3.1496 80.000 | .8268 21.000 | .09 2.3 | .9518 24.176 |
| 4T-339 | 1.3780 35.000 | .8820 22.403 | .03 .6 | | | | | |
| 4T-342 | 1.6250 41.275 | .8820 22.403 | .14 2.5 | | | | | |
| 4T-342A | 1.6250 41.275 | 1.1802 29.977 | .14 2.5 | | | | | |
| 4T-342S | 1.6880 42.875 | .8820 22.403 | .14 2.5 | | | | | |
| 4T-344A | 1.5748 40.000 | .8820 22.403 | .03 .6 | | | | | |
| 4T-355 SERIES | | | | | | | | |
| 4T-355 | 1.7500 44.450 | .8540 21.692 | .09 2.3 | 4T-352 | 3.5480 90.119 | .8586 21.808 | .09 2.3 | .9055 23.000 |
| 4T-355X | 1.7500 44.450 | .8540 21.692 | .14 2.5 | 4T-354A | 3.3465 85.000 | .6875 17.462 | .05 1.3 | .8125 20.638 |
| 4T-359A | 1.8125 46.038 | .8540 21.692 | .14 2.5 | 4T-354X | 3.3465 85.000 | .6875 17.462 | .06 1.5 | .8125 20.638 |
| 4T-359S | 1.8125 46.038 | .8540 21.692 | .09 2.3 | | | | | |
| 4T-365 SERIES | | | | | | | | |
| 4T-366 | 1.9685 50.000 | .8750 22.225 | .09 2.3 | 4T-362 | 3.5433 90.000 | .6250 15.875 | .08 2.0 | .7874 20.000 |
| 4T-368 | 2.0000 50.800 | .8750 22.225 | .06 1.0 | 4T-362A | 3.5000 88.900 | .6501 16.513 | .05 1.3 | .8125 20.638 |
| 4T-368A | 2.0000 50.800 | .8750 22.225 | .14 2.5 | 4T-363 | 3.5433 90.000 | .7874 20.000 | .03 .8 | .7874 20.000 |
| 4T-368S | 2.0312 51.592 | .8750 22.225 | .08 1.5 | | | | | |
| 4T-369A | 1.8750 47.625 | .8750 22.225 | .14 2.5 | | | | | |
| 4T-369S | 1.8750 47.625 | .8750 22.225 | .09 2.3 | | | | | |
| 4T-370A | 2.0000 50.800 | .8750 22.225 | .20 4.0 | | | | | |
| 4T-385 SERIES | | | | | | | | |
| 4T-385 | 2.1654 55.000 | .8640 21.946 | .09 2.3 | 4T-382 | 3.8750 98.425 | .7018 17.826 | .03 .8 | .8268 21.000 |
| * 4T-385A | 2.0000 50.800 | .8640 21.946 | .09 2.3 | 4T-382A | 3.8125 96.838 | .6250 15.875 | .03 .8 | .8268 21.000 |
| 4T-385X | 2.1654 55.000 | .8640 21.946 | .14 2.5 | 4T-382S | 3.8125 96.838 | .7982 20.275 | .09 2.3 | 1.0000 25.400 |
| 4T-386A | 1.8750 47.625 | .8640 21.946 | .03 .6 | 4T-383A | 3.9370 100.000 | .7018 17.826 | .08 2.0 | .8268 21.000 |
| 4T-387 | 2.2500 57.150 | .8640 21.946 | .09 2.3 | | | | | |
| 4T-387A | 2.2500 57.150 | .8640 21.946 | .14 2.5 | | | | | |
| 4T-387AS | 2.2500 57.150 | .8640 21.946 | .20 4.0 | | | | | |
| 4T-387S | 2.2500 57.150 | .8640 21.946 | .03 .6 | | | | | |
| 4Y-388A | 2.2650 57.531 | .8640 21.946 | .14 2.5 | | | | | |
| 4T-389A | 2.1250 53.975 | .8640 21.946 | .03 .6 | | | | | |
| 4T-395 SERIES | | | | | | | | |
| 4T-390 | 2.2500 57.150 | .8660 21.996 | .09 2.3 | 4T-393 | 4.3307 110.000 | 1.0630 27.000 | .03 .8 | 1.0630 27.000 |
| 4T-395 | 2.5000 63.500 | .8660 21.996 | .14 2.5 | 4T-394A | 4.3307 110.000 | .7411 18.824 | .05 1.3 | .8661 22.000 |
| 4T-395A | 2.6250 66.675 | .8660 21.996 | .03 .6 | 4T-394AS | 4.3307 110.000 | .7411 18.824 | .13 3.3 | .8661 22.000 |
| 4T-395S | 2.6250 66.675 | .8660 21.996 | .14 2.5 | | | | | |
| * 4T-396 | 1.9685 50.000 | .8660 21.996 | .03 .6 | | | | | |
| 4T-399A | 2.6875 68.262 | .8660 21.996 | .09 2.3 | | | | | |
| 4T-399AS | 2.6875 68.262 | .8660 21.996 | .20 4.0 | | | | | |



These maximum fillet radii will be cleared by the cone or cup radii.

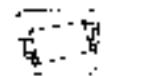
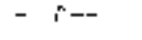
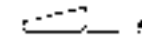
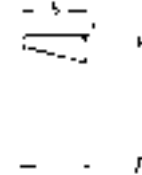
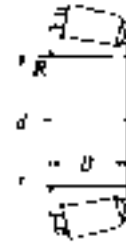
* 0.6 in. (1.5 mm) front radius

TAPERED ROLLER BEARINGS

Units: INCHES
Millimeters



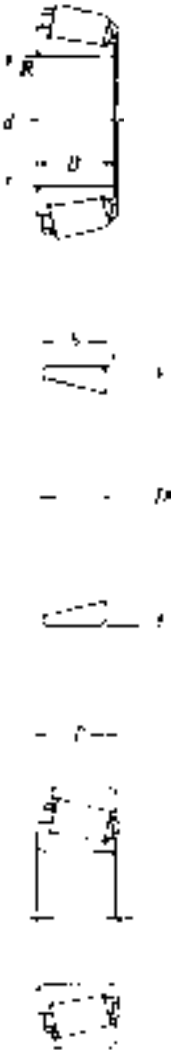
| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
|----------------------|------------------|------------------|--------------------------|------------|-------------------|------------------|----------------------------|------------------|
| | <i>d</i> | <i>B</i> | <i>R</i> | | <i>D</i> | <i>b</i> | <i>r</i> | <i>T</i> |
| 4T-415 SERIES | | | | | | | | |
| 4T-418 | 1.5000 38.100 | 1.1450 29.083 | .14 2.5 | 4T-412 | 3.2500 82.550 | 1.1875 30.162 | .13 3.3 | 1.3750 34.925 |
| 4T-420 | 1.5748 40.000 | 1.1450 29.083 | .14 2.5 | 4T-414 | 3.4843 88.500 | .8750 22.225 | .06 1.5 | 1.0625 26.988 |
| 4T-435 SERIES | | | | | | | | |
| 4T-438 | 1.7500 44.450 | 1.1772 29.901 | .14 2.5 | 4T-432A | 3.7500 95.250 | .8750 22.225 | .03 .8 | 1.0938 27.783 |
| 4T-443 | 1.2500 31.750 | 1.1772 29.901 | .03 .6 | | | | | |
| 4T-455 SERIES | | | | | | | | |
| 4T-455 | 2.0000 50.800 | 1.1542 29.317 | .03 .6 | 4T-453 | 4.2500 107.950 | 1.0630 27.000 | .03 .8 | 1.0943 27.795 |
| 4T-461 | 1.6870 42.850 | 1.1542 29.317 | .03 .6 | 4T-453A | 4.2500 107.950 | .8750 22.225 | .03 .8 | 1.0938 27.783 |
| 4T-462 | 2.2500 57.150 | 1.1542 29.317 | .09 2.3 | 4T-453X | 4.1250 104.775 | .9687 24.605 | .13 3.3 | 1.1875 30.162 |
| 4T-467 | 1.8750 47.625 | 1.1542 29.317 | .03 .6 | 4T-454 | 4.3307 110.000 | 1.0630 27.000 | .08 2.0 | 1.0943 27.795 |
| 4T-469 | 2.2500 57.150 | 1.1542 29.317 | .14 2.5 | | | | | |
| 4T-475 SERIES | | | | | | | | |
| 4T-480 | 2.6875 68.262 | 1.1420 29.007 | .14 2.5 | 4T-472 | 4.7244 120.000 | .9542 24.237 | .08 2.0 | 1.1730 29.794 |
| 4T-482 | 2.7500 69.850 | 1.1420 29.007 | .14 2.5 | 4T-472A | 4.7244 120.000 | .9230 23.444 | .13 3.3 | 1.1418 29.002 |
| 4T-483 | 2.5000 63.500 | 1.1420 29.007 | .14 2.5 | 4T-472X | 4.8750 123.825 | .9687 24.605 | .13 3.3 | 1.1875 30.162 |
| 4T-484 | 2.7500 70.000 | 1.1420 29.007 | .08 1.5 | | | | | |
| 4T-495 SERIES | | | | | | | | |
| 4T-495 | 3.2500 82.550 | 1.1720 29.769 | .14 2.5 | | | | | |
| 4T-495A | 3.0000 76.200 | 1.1720 29.769 | .14 2.5 | 4T-492A | 5.2500 133.350 | .8750 22.225 | .13 3.3 | 1.1875 30.162 |
| 4T-495AX | 3.0000 76.200 | 1.1720 29.769 | .25 6.4 | 4T-493 | 5.3750 136.525 | .8750 22.225 | .13 3.3 | 1.1875 30.162 |
| 4T-496 | 3.1875 80.962 | 1.1720 29.769 | .14 2.5 | | | | | |
| 4T-497 | 3.3750 85.725 | 1.1720 29.769 | .14 2.5 | | | | | |
| 4T-498 | 3.3125 84.138 | 1.1720 29.769 | .14 2.5 | | | | | |
| 4T-525 SERIES | | | | | | | | |
| 4T-526 | 1.6250 41.275 | 1.4200 36.068 | .14 2.5 | 4T-522 | 4.0000 101.600 | 1.0625 26.988 | .13 3.3 | 1.3750 34.925 |
| 4T-527 | 1.7500 44.450 | 1.4200 36.068 | .14 2.5 | | | | | |
| 4T-528 | 1.8750 47.625 | 1.4200 36.068 | .14 2.5 | | | | | |
| 4T-529 | 2.0000 50.800 | 1.4200 36.068 | .03 .6 | | | | | |
| 4T-535 SERIES | | | | | | | | |
| 4T-535 | 1.7500 44.450 | 1.4550 36.957 | .14 2.5 | 4T-532A | 4.3750 111.125 | 1.1875 30.162 | .13 3.3 | 1.5000 38.100 |
| 4T-536 | 1.8750 47.625 | 1.4550 36.957 | .14 2.5 | 4T-532X | 4.2500 107.950 | 1.1250 28.575 | .13 3.3 | 1.4375 36.512 |
| 4T-537 | 2.0000 50.800 | 1.4550 36.957 | .14 2.5 | | | | | |
| 4T-539 | 2.1250 53.975 | 1.4550 36.957 | .14 2.5 | | | | | |
| 4T-539A | 2.1250 53.975 | 1.4550 36.957 | .22 5.5 | | | | | |
| 4T-543 | 1.5748 40.000 | 1.4550 36.957 | .14 2.5 | | | | | |



These maximum fillet radii will be cleared by the cone or cup radii.



Units: **INCHES**
Millimeters



| TAPERED ROLLER BEARINGS | | | | | | | | |
|-------------------------|------------------|------------------|--------------------------|------------|-------------------|------------------|----------------------------|------------------|
| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
| | <i>d</i> | <i>B</i> | <i>R</i> | | <i>D</i> | <i>b</i> | <i>r</i> | <i>T</i> |
| 4T-555 SERIES | | | | | | | | |
| 4T-555S | 2.2500 57.150 | 1.4440 36.678 | .14 2.5 | 4T-552 | 4.8750 123.825 | 1.3125 33.338 | .13 3.3 | 1.5000 38.100 |
| 4T-557A | 2.3750 60.325 | 1.4440 36.678 | .31 6.0 | 4T-552A | 4.8750 123.825 | 1.1875 30.162 | .13 3.3 | 1.5000 38.100 |
| 4T-557S | 2.1250 53.975 | 1.4440 36.678 | .14 2.5 | 4T-553A | 4.9213 125.000 | 1.1875 30.162 | .13 3.3 | 1.5000 38.100 |
| 4T-559 | 2.5000 63.500 | 1.4440 36.678 | .14 2.5 | 4T-553X | 4.8125 122.238 | 1.1875 30.162 | .13 3.3 | 1.5000 38.100 |
| 4T-560 | 2.6250 66.675 | 1.4440 36.678 | .14 2.5 | | | | | |
| 4T-565 SERIES | | | | | | | | |
| 4T-567 | 2.8750 73.025 | 1.4240 36.170 | .14 2.5 | 4T-563 | 5.0000 127.000 | 1.1250 28.575 | .13 3.3 | 1.4375 36.512 |
| 4T-575 SERIES | | | | | | | | |
| 4T-575 | 3.0000 76.200 | 1.4212 36.098 | .14 2.5 | 4T-572 | 5.5115 139.992 | 1.1250 28.575 | .13 3.3 | 1.4375 36.513 |
| 4T-575S | 3.0000 76.200 | 1.4212 36.098 | .27 6.8 | 4T-572X | 5.5000 139.700 | 1.1250 28.575 | .13 3.3 | 1.4375 36.513 |
| 4T-576 | 2.8750 73.025 | 1.4212 36.098 | .14 2.5 | | | | | |
| 4T-577 | 2.9375 74.612 | 1.4212 36.098 | .14 2.5 | | | | | |
| 4T-580 | 3.2500 82.550 | 1.4212 36.098 | .14 2.5 | | | | | |
| 4T-581 | 3.1875 80.962 | 1.4212 36.098 | .14 2.5 | | | | | |
| 4T-582 | 3.2500 82.550 | 1.4212 36.098 | .27 6.8 | | | | | |
| 4T-595 SERIES | | | | | | | | |
| 4T-593 | 3.5000 88.900 | 1.4300 36.322 | .14 3.5 | 4T-592 | 6.0000 152.400 | 1.3125 33.338 | .13 3.3 | 1.5625 39.688 |
| 4T-593A | 3.5000 88.900 | 1.4300 36.322 | .25 6.4 | 4T-592A | 6.0000 152.400 | 1.1875 30.162 | .13 3.3 | 1.5625 39.688 |
| 4T-594 | 3.7500 95.250 | 1.4300 36.322 | .14 3.5 | 4T-592XS | 5.8125 147.638 | 1.0312 26.192 | .13 3.3 | 1.4062 35.717 |
| 4T-594A | 3.7500 95.250 | 1.4300 36.322 | .20 4.0 | | | | | |
| 4T-595 | 3.2500 82.550 | 1.4300 36.322 | .14 3.5 | | | | | |
| 4T-596 | 3.3750 85.723 | 1.4300 36.322 | .14 3.5 | | | | | |
| 4T-598 | 3.6250 92.075 | 1.4300 36.322 | .14 3.5 | | | | | |
| 4T-598A | 3.6250 92.075 | 1.4300 36.322 | .25 6.4 | | | | | |
| 4T-615 SERIES | | | | | | | | |
| 4T-620 | 1.5625 39.688 | 1.6250 41.275 | .03 .6 | 4T-612 | 4.7500 120.650 | 1.2500 31.750 | .13 3.3 | 1.6250 41.275 |
| 4T-621 | 2.1250 53.975 | 1.6250 41.275 | .14 3.5 | | | | | |
| 4T-623 | 2.2500 57.150 | 1.6250 41.275 | .14 3.5 | | | | | |
| 4T-635 SERIES | | | | | | | | |
| 4T-635 | 2.2500 57.150 | 1.6250 41.275 | .14 2.5 | 4T-632 | 5.3750 136.525 | 1.2500 31.750 | .13 3.3 | 1.6250 41.275 |
| 4T-639 | 2.5000 63.500 | 1.6250 41.275 | .14 2.5 | 4T-633 | 5.1250 130.175 | 1.2500 31.750 | .13 3.3 | 1.6250 41.275 |
| 4T-643 | 2.7500 69.850 | 1.6250 41.275 | .14 2.5 | | | | | |
| 4T-645 | 2.8125 71.438 | 1.6250 41.275 | .25 6.4 | | | | | |

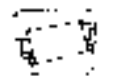
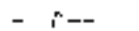
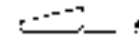
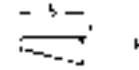
These maximum fillet radii will be cleared by the cone or cup radii.

TAPERED ROLLER BEARINGS

Units: INCHES
Millimeters



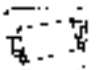
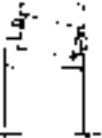
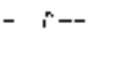
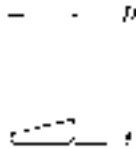
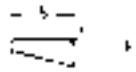
| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
|----------------------|----------|------------|--------------------------|------------|----------|-----------|----------------------------|---------------|
| | <i>d</i> | <i>B</i> | <i>R</i> | | <i>D</i> | <i>b</i> | <i>r</i> | <i>T</i> |
| 4T-655 SERIES | | | | | | | | |
| 4T-659 | 3.0000 | 1.6250 | .14 | 4T-652 | 6.0000 | 1.2500 | .13 | 1.6250 |
| | 76.200 | 41.275 | 2.5 | | 152.400 | 31.750 | 3.3 | 41.275 |
| 4T-665 | 3.3750 | 1.6250 | .14 | | | | | |
| | 85.725 | 41.275 | 2.5 | | | | | |
| 4T-665A | 3.3750 | 1.6250 | .25 | | | | | |
| | 85.725 | 41.275 | 6.4 | | | | | |
| 4T-662 | 3.1875 | 1.5000 | .14 | 4T-652 | 6.0000 | 1.2500 | .13 | 1.5000 |
| | 80.962 | 38.100 | 2.5 | | 152.400 | 31.750 | 3.3 | 38.100 |
| | | | | 4T-653 | 5.7500 | 1.2500 | .13 | 1.5000 |
| | | | | | 146.050 | 31.750 | 3.3 | 38.100 |
| 4T-675 SERIES | | | | | | | | |
| 4T-681 | 3.6250 | 1.6250 | .14 | 4T-672 | 6.6250 | 1.1875 | .13 | 1.6250 |
| | 92.075 | 41.275 | 2.5 | | 168.275 | 30.162 | 3.3 | 41.275 |
| 4T-681A | 3.6250 | 1.6250 | .25 | | | | | |
| | 92.075 | 41.275 | 6.4 | | | | | |
| 4T-683 | 3.7500 | 1.6250 | .14 | | | | | |
| | 95.250 | 41.275 | 2.5 | | | | | |
| 4T-683XA | 3.7500 | 1.6250 | .20 | | | | | |
| | 95.250 | 41.275 | 4.0 | | | | | |
| 4T-685 | 3.8750 | 1.6250 | .14 | | | | | |
| | 98.425 | 41.275 | 2.5 | | | | | |
| 4T-687 | 4.0000 | 1.6250 | .14 | | | | | |
| | 101.600 | 41.275 | 2.5 | | | | | |
| 4T-745 SERIES | | | | | | | | |
| 4T-745A | 2.7500 | 1.8375 | .14 | 4T-742 | 5.9090 | 1.4375 | .13 | 1.7500 |
| | 69.850 | 46.672 | 2.5 | | 150.089 | 36.512 | 3.3 | 44.450 |
| 4T-748 | 3.1496 | 1.8375 | .12 | 4T-743 | 5.9055 | 1.3780 | .13 | 1.7502 |
| | 80.000 | 46.672 | 2.5 | | 150.000 | 35.000 | 3.3 | 44.455 |
| 4T-749 | 3.3475 | 1.8375 | .14 | | | | | |
| | 85.026 | 46.672 | 2.5 | | | | | |
| 4T-749A | 3.2500 | 1.8375 | .14 | | | | | |
| | 82.550 | 46.672 | 2.5 | | | | | |
| 4T-749S | 3.3475 | 1.8375 | .20 | | | | | |
| | 85.026 | 46.672 | 4.0 | | | | | |
| 4T-750A | 3.2500 | 1.8375 | .27 | | | | | |
| | 82.550 | 46.672 | 6.8 | | | | | |
| 4T-755 SERIES | | | | | | | | |
| 4T-756A | 3.1250 | 1.9000 | .31 | 4T-752 | 6.3750 | 1.5000 | .13 | 1.8750 |
| | 79.375 | 48.260 | 6.0 | | 161.925 | 38.100 | 3.3 | 47.625 |
| 4T-759 | 3.5000 | 1.9000 | .14 | | | | | |
| | 88.900 | 48.260 | 2.5 | | | | | |
| 4T-760 | 3.5625 | 1.9000 | .14 | | | | | |
| | 90.488 | 48.260 | 2.5 | | | | | |
| 4T-766 | 3.5000 | 1.9000 | .28 | | | | | |
| | 88.900 | 48.260 | 7.0 | | | | | |
| 4T-795 SERIES | | | | | | | | |
| 4T-797 | 5.1181 | 1.8750 | .14 | 4T-792 | 8.1250 | 1.3750 | .13 | 1.8750 |
| | 130.000 | 47.625 | 2.5 | | 206.375 | 34.925 | 3.3 | 47.625 |
| 4T-855 SERIES | | | | | | | | |
| 4T-855 | 3.5000 | 2.2650 | .31 | 4T-854 | 7.5000 | 1.7500 | .13 | 2.2500 |
| | 88.900 | 57.531 | 6.0 | | 190.500 | 44.450 | 3.3 | 57.150 |
| 4T-857 | 3.6250 | 2.2650 | .31 | | | | | |
| | 92.075 | 57.531 | 6.0 | | | | | |
| 4T-861 | 4.0000 | 2.2650 | .31 | | | | | |
| | 101.600 | 57.531 | 6.0 | | | | | |
| 4T-864 | 3.7500 | 2.2650 | .31 | | | | | |
| | 95.250 | 57.531 | 6.0 | | | | | |
| 4T-866 | 3.8750 | 2.2650 | .14 | | | | | |
| | 98.425 | 57.531 | 2.5 | | | | | |
| 4T-869 | 3.4375 | 2.2650 | .31 | | | | | |
| | 87.312 | 57.531 | 6.0 | | | | | |
| 4T-935 SERIES | | | | | | | | |
| 4T-936 | 4.2500 | 2.6250 | .31 | 4T-932 | 8.3750 | 2.1250 | .13 | 2.6250 |
| | 107.950 | 66.675 | 6.0 | | 212.725 | 53.975 | 3.3 | 66.675 |
| 4T-938 | 4.5000 | 2.6250 | .28 | | | | | |
| | 114.300 | 66.675 | 7.0 | | | | | |



These maximum fillet radii will be cleared by the cone or cup radii.



Units: INCHES
Millimeters



TAPERED ROLLER BEARINGS

| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
|-----------------------|------------------|------------------|--------------------------|------------|-------------------|-----------------|----------------------------|------------------|
| | <i>d</i> | <i>B</i> | <i>R</i> | | <i>D</i> | <i>b</i> | <i>r</i> | <i>T</i> |
| 4T-1300 SERIES | | | | | | | | |
| 4T-1380 | .8750 22.225 | .7940 20.168 | .06 1.0 | 4T-1328 | 2.0625 52.388 | .5625 14.288 | .06 1.5 | .7625 19.368 |
| 4T-1700 SERIES | | | | | | | | |
| 4T-1755 | .8750 22.225 | .7810 19.837 | .05 1.3 | 4T-1729 | 2.2400 56.896 | .6250 15.875 | .05 1.3 | .7625 19.368 |
| 4T-1779 | .9375 23.812 | .7810 19.837 | .03 .6 | 4T-1729X | 2.2400 56.896 | .6250 15.875 | .06 1.5 | .7625 19.368 |
| 4T-1780 | 1.0000 25.400 | .7810 19.837 | .03 .6 | | | | | |
| 4T-1900 SERIES | | | | | | | | |
| 4T-1986 | 1.0000 25.400 | .7620 19.355 | .05 1.3 | 4T-1922 | 2.2500 57.150 | .6250 15.875 | .06 1.5 | .7813 19.845 |
| 4T-1988 | 1.1250 28.575 | .7620 19.355 | .14 2.5 | | | | | |
| 4T-2500 SERIES | | | | | | | | |
| 4T-2580 | 1.2500 31.750 | .9983 25.357 | .03 .8 | 4T-2523 | 2.7500 69.850 | .7500 19.050 | .05 1.3 | .9375 23.812 |
| 4T-2585 | 1.3125 33.338 | .9983 25.357 | .14 2.5 | | | | | |
| 4T-2600 SERIES | | | | | | | | |
| 4T-2690 | 1.1562 29.367 | 1.0013 25.433 | .14 2.5 | 4T-2631 | 2.6150 66.421 | .7500 19.050 | .05 1.3 | .9375 23.812 |
| 4T-2700 SERIES | | | | | | | | |
| 4T-2776 | 1.5000 38.100 | 1.0100 25.654 | .17 4.3 | 4T-2720 | 3.0000 76.200 | .7500 19.050 | .13 3.3 | .9375 23.812 |
| 4T-2777 | 1.5000 38.100 | 1.0100 25.654 | .22 5.5 | 4T-2729 | 3.0000 76.200 | .7500 19.050 | .03 .8 | .9375 23.812 |
| 4T-2780 | 1.4365 36.487 | 1.0100 25.654 | .06 1.5 | 4T-2735X | 2.8750 73.025 | .7500 19.050 | .03 .8 | .9375 23.812 |
| 4T-2788 | 1.5000 38.100 | 1.0100 25.654 | .14 2.5 | | | | | |
| 4T-2789 | 1.5625 39.688 | 1.0100 25.654 | .14 2.5 | | | | | |
| 4T-2790 | 1.3125 33.338 | 1.0100 25.654 | .06 1.0 | | | | | |
| 4T-2793 | 1.3750 34.925 | 1.0100 25.654 | .03 .6 | | | | | |
| 4T-2794 | 1.4365 36.487 | 1.0100 25.654 | .14 2.5 | | | | | |
| 4T-2796 | 1.3750 34.925 | 1.0100 25.654 | .14 2.5 | | | | | |
| 4T-2900 SERIES | | | | | | | | |
| 4T-2984 | 1.8125 46.038 | 1.0082 25.608 | .14 2.5 | 4T-2924 | 3.3464 85.000 | .8125 20.637 | .05 1.3 | 1.0000 25.400 |
| 4T-3100 SERIES | | | | | | | | |
| 4T-3193 | 1.2500 31.750 | 1.1810 29.997 | .14 2.5 | 4T-3120 | 2.8593 72.626 | .9375 23.812 | .13 3.3 | 1.1875 30.162 |
| 4T-3196 | 1.3125 33.338 | 1.1810 29.997 | .14 2.5 | | | | | |
| 4T-3300 SERIES | | | | | | | | |
| 4T-3379 | 1.3750 34.925 | 1.1965 30.391 | .14 2.5 | 4T-3320 | 3.1562 80.167 | .9375 23.812 | .13 3.3 | 1.1563 29.370 |
| 4T-3384 | 1.6250 41.275 | 1.1965 30.391 | .03 .6 | 4T-3325 | *3.1496 80.000 | .9375 23.812 | .13 3.3 | 1.1563 29.370 |
| 4T-3386 | 1.5625 39.688 | 1.1965 30.391 | .03 .6 | | | | | |
| 4T-3400 SERIES | | | | | | | | |
| 4T-3478 | 1.3750 34.925 | 1.1721 29.771 | .14 2.5 | 4T-3420 | 3.1250 79.375 | .9375 23.812 | .13 3.3 | 1.1563 29.370 |
| 4T-3479 | 1.4375 36.512 | 1.1721 29.771 | .03 .6 | | | | | |
| 4T-3482 | 1.3750 34.925 | 1.1721 29.771 | .03 .6 | | | | | |
| 4T-3490 | 1.5000 38.100 | 1.1721 29.771 | .14 2.5 | | | | | |

These maximum fillet radii will be cleared by the cone or cup radii.

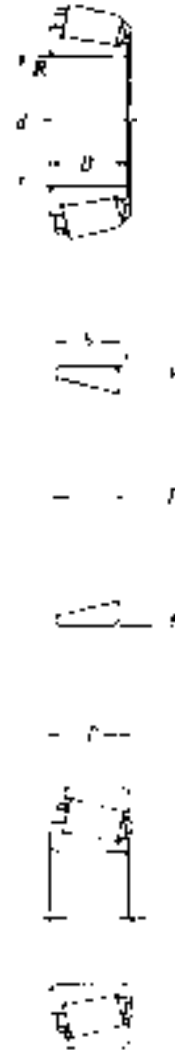
* Tolerance +.0000 to -.0010 in (+0 to -.025 mm)

TAPERED ROLLER BEARINGS

Units: **INCHES**
Millimeters



| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
|-----------------------|------------------|------------------|--------------------------|------------|-------------------|------------------|----------------------------|------------------|
| | d | B | R | | D | b | r | T |
| 4T-3500 SERIES | | | | | | | | |
| 4T-3578 | 1.7500 44.450 | 1.2160 30.886 | .14 2.5 | 4T-3520 | 3.3125 84.138 | .9375 23.812 | .13 3.3 | 1.1875 30.162 |
| 4T-3578A | 1.7500 44.450 | 1.2160 30.886 | .22 5.5 | 4T-3525 | 3.4375 87.312 | .9375 23.812 | .13 3.3 | 1.1875 30.162 |
| 4T-3580 | 1.5000 38.100 | 1.2160 30.886 | .06 1.0 | | | | | |
| 4T-3585 | 1.6250 41.275 | 1.2160 30.886 | .06 1.0 | | | | | |
| 4T-3586 | 1.7810 45.237 | 1.2160 30.886 | .14 2.5 | | | | | |
| 4T-3700 SERIES | | | | | | | | |
| 4T-3767 | 2.0625 52.388 | 1.1930 30.302 | .09 2.3 | 4T-3720 | 3.6718 93.264 | .9375 23.812 | .13 3.3 | 1.1875 30.162 |
| 4T-3775 | 2.0000 50.800 | 1.1930 30.302 | .03 .6 | 4T-3730 | 3.6718 93.264 | .9375 23.812 | .03 .8 | 1.1875 30.162 |
| 4T-3776 | 1.7710 44.983 | 1.1930 30.302 | .14 2.5 | | | | | |
| 4T-3778 | 1.8750 47.625 | 1.1930 30.302 | .25 6.4 | | | | | |
| 4T-3779 | 1.8750 47.625 | 1.1930 30.302 | .14 2.5 | | | | | |
| 4T-3780 | 2.0000 50.800 | 1.1930 30.302 | .14 2.5 | | | | | |
| 4T-3781 | 1.9375 49.212 | 1.1930 30.302 | .14 2.5 | | | | | |
| 4T-3782 | 1.7500 44.450 | 1.1930 30.302 | .14 2.5 | | | | | |
| 4T-3783 | 1.7500 44.450 | 1.1930 30.302 | .25 6.4 | | | | | |
| 4T-3784 | 2.0000 50.800 | 1.1930 30.302 | .25 6.4 | | | | | |
| 4T-3795 | 2.0000 50.800 | 1.1930 30.302 | .14 2.5 | | | | | |
| 4T-3800 SERIES | | | | | | | | |
| 4T-3872 | 1.3750 34.925 | 1.1875 30.162 | .14 2.5 | 4T-3820 | 3.3750 85.725 | .9375 23.812 | .13 3.3 | 1.1875 30.162 |
| 4T-3872A | 1.3750 34.925 | 1.1875 30.162 | .03 .6 | | | | | |
| 4T-3877 | 1.6250 41.275 | 1.1875 30.162 | .14 2.5 | | | | | |
| 4T-3880 | 1.6250 41.275 | 1.1875 30.162 | .03 .6 | | | | | |
| 4T-3900 SERIES | | | | | | | | |
| 4T-3979 | 2.2500 57.150 | 1.1830 30.048 | .14 2.5 | 4T-3920 | 4.4375 112.712 | .9375 23.812 | .13 3.3 | 1.1875 30.162 |
| 4T-3982 | 2.5000 63.500 | 1.1830 30.048 | .14 2.5 | 4T-3925 | 4.4375 112.712 | .9375 23.812 | .03 .8 | 1.1875 30.162 |
| 4T-3984 | 2.6250 66.675 | 1.1830 30.048 | .14 2.5 | | | | | |
| 4T-3994 | 2.6250 66.675 | 1.1830 30.048 | .22 5.5 | | | | | |
| 4T-4300 SERIES | | | | | | | | |
| 4T-4388 | 1.6250 41.275 | 1.5900 40.386 | .14 2.5 | 4T-4335 | 3.5625 90.488 | 1.3125 33.338 | .13 3.3 | 1.5625 39.688 |
| 4T-5300 SERIES | | | | | | | | |
| 4T-5356 | 1.7500 44.450 | 1.7510 44.475 | .05 1.3 | 4T-5335 | 4.0625 103.188 | 1.4375 36.512 | .13 3.3 | 1.7188 43.658 |
| 4T-5358 | 1.8750 47.625 | 1.7510 44.475 | .05 1.3 | | | | | |
| 4T-5361 | 1.8750 47.625 | 1.7510 44.475 | .14 2.5 | | | | | |
| 4T-5395 | 1.9375 49.212 | 1.7510 44.475 | .14 2.5 | | | | | |



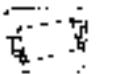
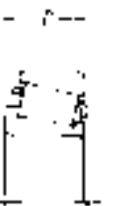
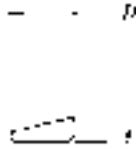
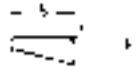
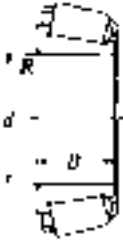
These maximum fillet radii will be cleared by the cone or cup radii.



Units: INCHES
Millimeters

TAPERED ROLLER BEARINGS

| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
|------------------------|-------------------|------------------|--------------------------|------------|-------------------|------------------|----------------------------|------------------|
| | <i>d</i> | <i>B</i> | <i>R</i> | | <i>D</i> | <i>b</i> | <i>r</i> | <i>T</i> |
| 4T-5500 SERIES | | | | | | | | |
| 4T-5562 | 1.9375 49.212 | 1.7230 43.764 | .05 1.3 | 4T-5535 | 4.8125 122.238 | 1.4375 36.512 | .13 3.3 | 1.7188 43.658 |
| 4T-5565 | 2.0000 50.800 | 1.7230 43.764 | .05 1.3 | | | | | |
| 4T-5566 | 2.1875 55.562 | 1.7230 43.764 | .05 1.3 | | | | | |
| 4T-5578 | 2.1250 53.975 | 1.7230 43.764 | .14 2.5 | | | | | |
| 4T-5582 | 2.3750 60.325 | 1.7230 43.764 | .03 .6 | | | | | |
| 4T-5583 | 2.3750 60.325 | 1.7230 43.764 | .14 2.5 | | | | | |
| 4T-5584 | 2.5000 63.500 | 1.7230 43.764 | .14 2.5 | | | | | |
| 4T-5595 | 2.5938 65.883 | 1.7230 43.764 | .14 2.5 | | | | | |
| 4T-5700 SERIES | | | | | | | | |
| 4T-5760 | 3.0000 76.200 | 1.8150 46.100 | .14 2.5 | 4T-5735 | 5.3438 135.733 | 1.3750 34.925 | .13 3.3 | 1.7500 44.450 |
| 4T-5795 | 3.0625 77.788 | 1.8150 46.100 | .14 2.5 | | | | | |
| 4T-6300 SERIES | | | | | | | | |
| 4T-6361 | 2.3622 60.000 | 2.2050 56.007 | .12 2.5 | 4T-6320 | 5.3447 135.755 | 1.7500 44.450 | .13 3.3 | 2.1250 53.975 |
| 4T-6376 | 2.3750 60.325 | 2.2050 56.007 | .14 2.5 | | | | | |
| 4T-6379 | 2.5625 65.088 | 2.2050 56.007 | .14 2.5 | | | | | |
| 4T-6381 | *2.1649 55.000 | 2.2050 56.007 | .14 2.5 | | | | | |
| 4T-6382 | 2.5000 63.500 | 2.2050 56.007 | .17 4.3 | | | | | |
| 4T-6386 | 2.6250 66.675 | 2.2050 56.007 | .17 4.3 | | | | | |
| 4T-6389 | 2.6250 66.675 | 2.2050 56.007 | .25 6.4 | | | | | |
| 4T-6400 SERIES | | | | | | | | |
| 4T-6461A | 3.0000 76.200 | 2.1350 54.229 | .38 9.7 | 4T-6420 | 5.8750 147.225 | 1.7500 44.450 | .13 3.3 | 2.1250 53.975 |
| 4T-6500 SERIES | | | | | | | | |
| 4T-6559 | 3.2500 82.550 | 2.1693 55.100 | .14 2.5 | 4T-6535 | 6.3750 161.925 | 1.6875 42.862 | .13 3.3 | 2.1250 53.975 |
| 4T-6576 | 3.0000 76.200 | 2.1693 55.100 | .14 2.5 | | | | | |
| 4T-6580 | 3.5000 88.900 | 2.1693 55.100 | .14 2.5 | | | | | |
| 4T-02400 SERIES | | | | | | | | |
| 4T-02474 | 1.1250 28.575 | .8750 22.225 | .03 .6 | 4T-02420 | 2.6875 68.262 | .6875 17.462 | .06 1.0 | .8750 22.225 |
| 4T-02475 | 1.2500 31.750 | .8750 22.225 | .14 2.5 | | | | | |
| 4T-02800 SERIES | | | | | | | | |
| 4T-02872 | 1.1250 28.575 | .8750 22.225 | .03 .6 | 4T-02820 | 2.8750 73.025 | .6875 17.462 | .13 3.3 | .8750 22.225 |
| 4T-05000 SERIES | | | | | | | | |
| 4T-05062 | .6250 15.875 | .5662 14.381 | .06 1.0 | 4T-05185 | 1.8504 47.000 | .4375 11.112 | .05 1.3 | .5662 14.381 |
| 4T-05079 | *.7874 20.000 | .5662 14.381 | .06 1.0 | | | | | |
| 4T-07000 SERIES | | | | | | | | |
| 4T-07079 | .7874 20.000 | .5614 14.260 | .06 1.0 | 4T-07196 | 1.9687 50.005 | .3750 9.525 | .04 .6 | .5313 13.495 |
| 4T-07087 | .8750 22.225 | .5614 14.260 | .05 1.3 | 4T-07204 | 2.0470 51.994 | .5000 12.700 | .05 1.3 | .5910 15.011 |
| 4T-07093 | .9375 23.812 | .5614 14.260 | .06 1.0 | 4T-07210X | 2.0000 50.800 | .5000 12.700 | .06 1.0 | .5910 15.011 |
| 4T-07100 | 1.0000 25.400 | .5614 14.260 | .04 .6 | | | | | |



These maximum fillet radii will be cleared by the cone or cup radii.

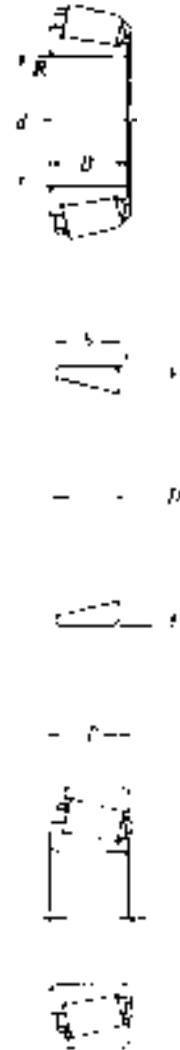
* Tolerance +.0000 to -.0005 in. (+0 to -.013 mm)

TAPERED ROLLER BEARINGS

Units: INCHES
Millimeters



| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
|---------------------------|----------|------------|--------------------------|------------|----------|-----------|----------------------------|---------------|
| | <i>d</i> | <i>B</i> | <i>R</i> | | <i>D</i> | <i>b</i> | <i>r</i> | <i>T</i> |
| 4T-09000 SERIES | | | | | | | | |
| 4T-09067 | .7500 | .7500 | .05 | 4T-09194 | 1.9380 | .6875 | .14 | .8350 |
| | 19.050 | 19.050 | 1.3 | 0T-09195 | 1.9380 | .5625 | .05 | .7100 |
| | | | | 4T-09196 | 1.9380 | .6875 | .06 | .8350 |
| 4T-09074 | .7500 | .8480 | # | 4T-09194 | 1.9380 | .6875 | .14 | .9063 |
| 4T-09078 | 19.050 | 21.539 | # | 4T-09194 | 1.9380 | .6875 | .14 | 23.020 |
| | .7500 | .8480 | .05 | 4T-09195 | 1.9380 | .5625 | .05 | .7813 |
| | 19.050 | 21.539 | 1.3 | 4T-09196 | 1.9380 | .6875 | .06 | .9063 |
| | | | | | 49.225 | 17.462 | 1.0 | 21.209 |
| | | | | | 49.225 | 14.288 | 1.3 | 18.034 |
| | | | | | 49.225 | 17.462 | 1.0 | 21.209 |
| | | | | | 49.225 | 14.288 | 1.3 | 19.845 |
| | | | | | 49.225 | 17.462 | 1.0 | 23.020 |
| 4T-11000 SERIES | | | | | | | | |
| 4T-11162 | 1.6250 | .6844 | .06 | 4T-11300 | 3.0000 | .5625 | .06 | .7090 |
| | 41.275 | 17.384 | 1.0 | | 76.200 | 14.288 | 1.0 | 18.009 |
| 4T-11500 SERIES | | | | | | | | |
| 4T-11590 | .6250 | .5625 | .06 | 4T-11520 | 1.6875 | .3750 | .06 | .5625 |
| | 15.875 | 14.288 | 1.0 | | 42.862 | 9.525 | 1.0 | 14.288 |
| 4T-LM11700 SERIES | | | | | | | | |
| * 4T-LM11749 | .6875 | .5750 | .05 | 4T-LM11710 | 1.5700 | .4200 | .05 | .5450 |
| | 17.462 | 14.605 | 1.3 | | 39.878 | 10.668 | 1.3 | 13.843 |
| 4T-LM11900 SERIES | | | | | | | | |
| * 4T-LM11949 | .7500 | .6550 | .05 | 4T-LM11910 | 1.7810 | .4750 | .05 | .6100 |
| | 19.050 | 16.637 | 1.3 | | 45.237 | 12.065 | 1.3 | 15.494 |
| 4T-LM12000 SERIES | | | | | | | | |
| 4T-12175 | 1.7500 | .6750 | .06 | 4T-12303 | 3.0312 | .4688 | .06 | .6875 |
| | 44.450 | 17.145 | 1.0 | | 76.992 | 11.908 | 1.0 | 17.462 |
| 4T-LM12500 SERIES | | | | | | | | |
| 4T-12580 | .8125 | .7813 | .06 | 4T-12520 | 1.9380 | .6250 | .06 | .7813 |
| | 20.638 | 19.845 | 1.0 | | 49.225 | 15.875 | 1.0 | 19.845 |
| 4T-LM12600 SERIES | | | | | | | | |
| 4T-M12649 | .8437 | .7200 | .05 | 4T-M12610 | 1.9687 | .5500 | .05 | .6900 |
| | 21.430 | 18.288 | 1.3 | | 50.005 | 13.970 | 1.3 | 17.526 |
| 4T-LM112700 SERIES | | | | | | | | |
| * 4T-LM12749 | .8661 | .6550 | .05 | 4T-LM12710 | 1.7810 | .4750 | .05 | .6100 |
| | 22.000 | 16.637 | 1.3 | | 45.237 | 12.065 | 1.3 | 15.494 |
| | | | | 4T-LM12711 | 1.8110 | .4750 | .05 | .6100 |
| | | | | | 46.000 | 12.065 | 1.3 | 15.494 |
| 4T-13600 SERIES | | | | | | | | |
| 4T-13685 | 1.5000 | .7500 | .14 | 4T-13620 | 2.7170 | .5938 | .03 | .7500 |
| | 38.100 | 19.050 | 2.5 | | 69.012 | 15.083 | .8 | 19.050 |
| 4T-13686 | 1.5000 | 1.0313 | .06 | 4T-13621 | 2.7170 | .5938 | .09 | .7500 |
| | 38.100 | 26.195 | 1.0 | | 69.012 | 15.083 | 2.3 | 19.050 |
| 4T-13687 | 1.5000 | .7500 | .08 | | | | | |
| | 38.100 | 19.050 | 1.5 | | | | | |
| 4T-14000 SERIES | | | | | | | | |
| 4T-14116 | 1.1900 | .7710 | .03 | 4T-14274 | 2.7170 | .6250 | .13 | .7813 |
| | 30.226 | 19.583 | .6 | | 69.012 | 15.875 | 3.3 | 19.845 |
| 4T-14117A | 1.1811 | .7710 | .14 | 4T-14276 | 2.7170 | .6250 | .05 | .7813 |
| | 30.000 | 19.583 | 2.5 | | 69.012 | 15.875 | 1.3 | 19.845 |
| 4T-14118 | 1.1811 | .7560 | .03 | 4T-14282 | 2.8345 | .5918 | .06 | .7481 |
| | 30.000 | 19.202 | .6 | | 71.996 | 15.032 | 1.0 | 19.002 |
| 4T-14124 | 1.2500 | .7710 | .03 | 4T-14283 | 2.8380 | .7250 | .09 | .8813 |
| | 31.750 | 19.583 | .6 | | 72.085 | 18.415 | 2.3 | 22.385 |
| 4T-14125A | 1.2500 | .7710 | .14 | | | | | |
| | 31.750 | 19.583 | 2.5 | | | | | |
| 4T-14131 | 1.3125 | .7710 | .03 | | | | | |
| | 33.338 | 19.583 | .6 | | | | | |
| 4T-14137A | 1.3750 | .7710 | .06 | | | | | |
| | 34.925 | 19.583 | 1.0 | | | | | |
| 4T-14138A | 1.3750 | .7710 | .14 | | | | | |
| | 34.925 | 19.583 | 2.5 | | | | | |



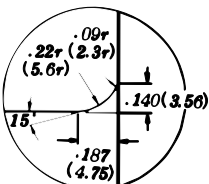
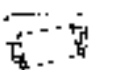
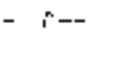
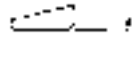
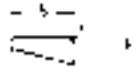
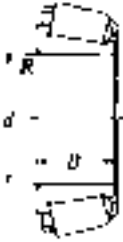
These maximum fillet radii will be cleared by the cone or cup radii. Tolerance +.0000 to -.0010 in. (-0 to -.025 mm)
 * Cone Bore Tolerance .0008 to -.0000 in. (+0.020 to 0 mm) Tolerance +.0000 to -.0005 in. (+0 to -.013 mm)
 Overall Bearing Width Tolerance +.0140 to -.0000 in (+.356 to -0 mm) .08 in. (2.0 mm) x 45 degree front face chamfer
 # .06 in. (1.5 mm) x 45 degree chamfer



Units: INCHES
Millimeters

TAPERED ROLLER BEARINGS

| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
|------------------------------------|-------------------|------------------|--------------------------|------------|------------------|-----------------|----------------------------|------------------|
| | <i>d</i> | <i>B</i> | <i>R</i> | | <i>D</i> | <i>b</i> | <i>r</i> | <i>T</i> |
| 4T-14000 SERIES (Continued) | | | | | | | | |
| # 4T-14136A | 1.3750 34.925 | 1.0520 26.721 | .03 .6 | 4T-14274 | 2.7170 69.012 | .6250 15.875 | .13 3.3 | 1.0623 26.982 |
| | | | | 4T-14276 | 2.7170 69.012 | .6250 15.875 | .05 1.3 | 1.0623 26.982 |
| | | | | 4T-14282 | 2.8345 71.996 | .5918 15.032 | .06 1.0 | 1.0291 26.139 |
| | | | | 4T-14283 | 2.8380 | .7250 | .09 | 1.1623 |
| 4T-15000 SERIES | | | | | | | | |
| 4T-15100 | 1.0000 25.400 | .8125 20.638 | .14 2.5 | 4T-15243 | 2.4375 61.912 | .5625 14.288 | .08 1.5 | .7500 19.050 |
| 4T-15101 | 1.0000 25.400 | .8125 20.638 | .14 2.5 | 4T-15244 | 2.4409 62.000 | .6250 15.875 | .05 1.3 | .8125 20.638 |
| 4T-15103S | 1.0300 26.162 | .7850 19.939 | .03 .6 | 4T-15245 | 2.4409 62.000 | .5625 14.288 | .05 1.3 | .7500 19.050 |
| 4T-15106 | 1.0625 26.988 | .8125 20.638 | .03 .6 | 4T-15250 | 2.5000 63.500 | .6250 15.875 | .05 1.3 | .8125 20.638 |
| 4T-15113 | 1.1250 28.575 | .8125 20.638 | .03 .6 | 4T-15250X | 2.5000 63.500 | .6250 15.875 | .06 1.0 | .8125 20.638 |
| 4T-15116 | 1.1855 30.112 | .8125 20.638 | .03 .6 | | | | | |
| 4T-15117 | *1.1811 30.000 | .8125 20.638 | .05 1.3 | | | | | |
| 4T-15118 | 1.1895 30.213 | .8125 20.638 | .14 2.5 | | | | | |
| 4T-15119 | 1.1895 30.213 | .8125 20.638 | .06 1.0 | | | | | |
| 4T-15120 | 1.1895 30.213 | .8125 20.638 | .03 .6 | | | | | |
| 4T-15125 | 1.2500 31.750 | .8125 20.638 | .14 2.5 | | | | | |
| 4T-15126 | 1.2500 31.750 | .8125 20.638 | .03 .6 | | | | | |
| 4T-15123 | 1.2500 31.750 | .7500 19.050 | | 4T-15243 | 2.4375 61.912 | .5625 14.288 | .08 2.0 | .7150 18.161 |
| | | | | 4T-15244 | 2.4409 62.000 | .6250 15.875 | .05 1.3 | .7775 19.749 |
| | | | | 4T-15245 | 2.4409 62.000 | .5625 14.288 | .05 1.3 | .7150 18.161 |
| | | | | 4T-15250 | 2.5000 63.500 | .6250 15.875 | .05 1.3 | .7775 19.749 |
| | | | | 4T-15250X | 2.5000 63.500 | .6250 15.875 | .06 1.5 | .7775 19.749 |
| 4T-15500 SERIES | | | | | | | | |
| 4T-15578 | 1.0000 25.400 | .6875 17.462 | .05 1.3 | 4T-15520 | 2.2500 57.150 | .5313 13.495 | .06 1.5 | .6875 17.462 |
| 4T-15580 | 1.0625 26.988 | .6875 17.462 | .14 2.5 | | | | | |
| 4T-15590 | 1.1250 28.575 | .6875 17.462 | .14 2.5 | | | | | |
| 4T-16000 SERIES | | | | | | | | |
| 4T-16150 | 1.5000 38.100 | .8125 20.638 | .14 2.5 | 4T-16282 | 2.8346 72.000 | .5605 14.237 | .06 1.5 | .7480 19.000 |
| | | | | 4T-16284 | 2.8440 72.238 | .6250 15.875 | .05 1.3 | .8125 20.638 |
| 4T-17000 SERIES | | | | | | | | |
| 4T-17118 | 1.1811 30.000 | .6522 16.566 | .06 1.0 | 4T-17244 | 2.4409 62.000 | .5625 14.288 | .06 1.5 | .6300 16.002 |
| 4T-17500 SERIES | | | | | | | | |
| 4T-17580 | .6250 15.875 | .6563 16.670 | .06 1.0 | 4T-17520 | 1.6875 42.862 | .5313 13.495 | .06 1.5 | .6563 16.670 |
| 4T-17800 SERIES | | | | | | | | |
| 4T-17887 | 1.7807 45.230 | .8125 20.638 | .08 1.5 | 4T-17831 | 3.1490 79.985 | .5937 15.080 | .05 1.3 | .7812 19.842 |
| 4T-18500 SERIES | | | | | | | | |
| 4T-18590 | 1.6250 41.275 | .6875 17.462 | .14 2.5 | 4T-18520 | 2.8750 73.025 | .5000 12.700 | .06 1.5 | .6562 16.667 |



These maximum fillet radii will be cleared by the cone or cup radii.

* Tolerance .0000 to -.0005 in. (+0 to -.013 mm)

** Tolerance .0008 to .0000 in. (+.020 to 0 mm)

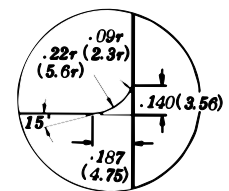
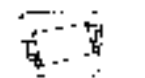
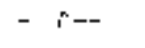
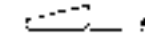
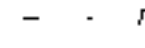
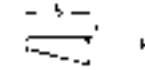
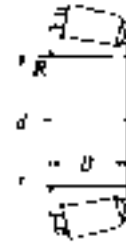
Extended shoulder on back face

TAPERED ROLLER BEARINGS

Units: INCHES
Millimeters



| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
|------------------------|------------------|------------------|--------------------------|------------|------------------|-----------------|----------------------------|------------------|
| | <i>d</i> | <i>B</i> | <i>R</i> | | <i>D</i> | <i>b</i> | <i>r</i> | <i>T</i> |
| 4T-18600 SERIES | | | | | | | | |
| 4T-18685 | 1.7500 44.450 | .6875 17.462 | .11 2.8 | 4T-18620 | 3.1250 79.375 | .5313 13.495 | .06 1.0 | .6875 17.462 |
| 4T-18690 | 1.8125 46.038 | .6875 17.462 | .11 2.8 | | | | | |
| 4T-18700 SERIES | | | | | | | | |
| 4T-18780 | 1.8125 46.038 | .6875 17.462 | .09 2.3 | 4T-18720 | 3.3465 85.000 | .5313 13.495 | .06 1.0 | .6875 17.462 |
| 4T-18790 | 2.0000 50.800 | .6875 17.462 | .14 2.5 | | | | | |
| 4T-19000 SERIES | | | | | | | | |
| 4T-19150 | 1.5000 38.100 | .6504 16.520 | .06 1.0 | 4T-19268 | 2.6875 68.262 | .4688 11.908 | .06 1.0 | .6250 15.875 |
| | | | | 4T-19268X | 2.6880 68.275 | .6312 16.032 | .06 1.0 | .7874 20.000 |
| | | | | 4T-19283X | 2.8346 72.000 | .5625 14.288 | .08 1.5 | .6700 17.018 |
| 4T-21000 SERIES | | | | | | | | |
| 4T-21075 | .7500 19.050 | .8598 21.839 | .06 1.0 | 4T-21212 | 2.1250 53.975 | .6250 15.875 | .09 2.3 | .8750 22.225 |
| 4T-22700 SERIES | | | | | | | | |
| 4T-22780 | 1.6875 42.862 | 1.0625 26.988 | .14 2.5 | 4T-22720 | 3.2500 82.550 | .8125 20.638 | .13 3.3 | 1.0313 26.195 |
| 4T-23000 SERIES | | | | | | | | |
| 4T-23100 | 1.0000 25.400 | .8450 21.463 | .06 1.0 | 4T-23250X | 2.5000 63.500 | .5780 14.681 | .09 2.3 | .8540 21.692 |
| 4T-24700 SERIES | | | | | | | | |
| 4T-24780 | 1.6250 41.275 | .9063 23.020 | .14 2.5 | 4T-24720 | 3.0000 76.200 | .6875 17.462 | .03 .6 | .8750 22.225 |
| | | | | 4T-24721 | 3.0000 76.200 | .8125 20.638 | .09 2.3 | 1.0000 25.400 |
| | | | | 4T-24722 | 3.0000 76.200 | .6875 17.462 | .13 3.3 | .8750 22.225 |
| 4T-25500 SERIES | | | | | | | | |
| 4T-25577 | 1.6880 42.875 | 1.0000 25.400 | .13 2.5 | 4T-25519 | 3.2500 82.550 | .7500 19.050 | .08 1.5 | .9375 23.812 |
| *4T-25578 | 1.6875 42.862 | 1.0000 25.400 | .09 2.3 | 4T-25520 | 3.2650 82.931 | .7500 19.050 | .03 .6 | .9375 23.812 |
| 4T-25580 | 1.7500 44.450 | 1.0000 25.400 | .14 2.5 | 4T-25521 | 3.2700 83.058 | .7500 19.050 | .13 3.3 | .9375 23.812 |
| 4T-25584 | 1.7710 44.983 | 1.0000 25.400 | .06 1.0 | 4T-25522 | 3.2700 83.058 | .7525 19.114 | .08 1.5 | .9400 23.876 |
| 4T-25590 | 1.7960 45.618 | 1.0000 25.400 | .14 2.5 | 4T-25523 | 3.2650 82.931 | .8750 22.225 | .09 2.3 | 1.0625 26.988 |
| | | | | 4T-25526 | 3.3465 85.000 | .7500 19.050 | .09 2.3 | .9375 23.812 |
| 4T-25583 | 1.7500 44.450 | 1.4125 35.878 | | 4T-25519 | 3.2500 82.550 | .7500 19.050 | .08 1.5 | 1.3500 34.290 |
| | | | | 4T-25520 | 3.2650 82.931 | .7500 19.050 | .03 .6 | 1.3500 34.290 |
| | | | | 4T-25521 | 3.2700 83.058 | .7500 19.050 | .13 3.3 | 1.3500 34.290 |
| | | | | 4T-25522 | 3.2700 83.058 | .7525 19.114 | .08 1.5 | 1.3525 34.354 |
| | | | | 4T-25523 | 3.2650 82.931 | .8750 22.225 | .09 2.3 | 1.4750 37.465 |
| | | | | 4T-25526 | 3.3465 85.000 | .7500 19.050 | .09 2.3 | 1.3500 34.290 |
| 4T-25800 SERIES | | | | | | | | |
| 4T-25877 | 1.3750 34.925 | .9688 24.608 | .06 1.0 | 4T-25820 | 2.8750 73.025 | .7500 19.050 | .09 2.3 | .9375 23.812 |
| 4T-25878 | 1.3750 34.925 | .9688 24.608 | .14 2.5 | 4T-25821 | 2.8750 73.025 | .7500 19.050 | .03 .6 | .9375 23.812 |
| 4T-25880 | 1.4365 36.487 | .9688 24.608 | .06 1.0 | | | | | |



These maximum fillet radii will be cleared by the cone or cup radii.

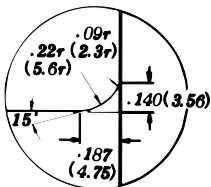
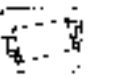
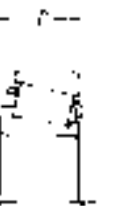
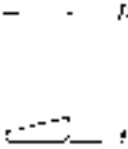
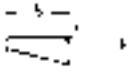
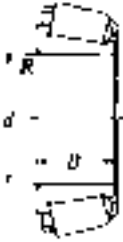
* Large rib OD ground .03 in. (0.8 mm) x 45 front face chamfer.



Units: INCHES
Millimeters

TAPERED ROLLER BEARINGS

| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
|--------------------------|------------------|------------------|--------------------------|------------|-------------------|-----------------|----------------------------|------------------|
| | <i>d</i> | <i>B</i> | <i>R</i> | | <i>D</i> | <i>b</i> | <i>r</i> | <i>T</i> |
| 4T-26800 SERIES | | | | | | | | |
| 4T-26878 | 1.5000 38.100 | 1.0000 25.400 | .03 .6 | 4T-26820 | 3.1562 80.167 | .8125 20.638 | .13 3.3 | 1.0000 25.400 |
| 4T-26881 | 1.5625 39.688 | 1.0000 25.400 | .14 2.5 | 4T-26822 | 3.1250 79.375 | .7500 19.050 | .03 .6 | .9375 23.812 |
| 4T-26882 | 1.6250 41.275 | 1.0000 25.400 | .14 2.5 | 4T-26823 | 3.0000 76.200 | .8125 20.638 | .06 1.0 | 1.0000 25.400 |
| 4T-26883 | 1.3780 35.000 | 1.0000 25.400 | .03 .6 | 4T-26830 | 3.1562 80.167 | .8125 20.638 | .03 .6 | 1.0000 25.400 |
| 4T-26884 | 1.6880 42.875 | 1.0000 25.400 | .14 2.5 | | | | | |
| 4T-26886 | 1.6880 42.875 | 1.0000 25.400 | .06 1.0 | | | | | |
| 4T-27800 SERIES | | | | | | | | |
| 4T-27881 | 1.5000 38.100 | .9330 23.698 | .14 2.5 | 4T-27820 | 3.1510 80.035 | .7288 18.512 | .06 1.0 | .9688 24.608 |
| 4T-28000 SERIES | | | | | | | | |
| 4T-28150 | 1.5000 38.100 | .8244 20.940 | .06 1.0 | 4T-28300 | 3.0000 76.200 | .6105 15.507 | .05 1.3 | .8125 20.638 |
| 4T-28500 SERIES | | | | | | | | |
| 4T-28580 | 2.0000 50.800 | 1.0000 25.400 | .14 2.5 | 4T-28520 | 3.5425 89.980 | .7869 19.987 | .09 2.3 | .9744 24.750 |
| 4T-28584 | 2.0625 52.388 | 1.0000 25.400 | .14 2.5 | 4T-28521 | 3.6250 92.075 | .7813 19.845 | .03 .6 | .9688 24.608 |
| 4T-28600 SERIES | | | | | | | | |
| 4T-28678 | 2.0000 50.800 | .9688 24.608 | .14 2.5 | 4T-28621 | 3.8125 96.838 | .7656 19.446 | .03 .6 | .9688 24.608 |
| 4T-28682 | 2.2500 57.150 | .9688 24.608 | .14 2.5 | 4T-28622 | 3.8437 97.630 | .7656 19.446 | .03 .6 | .9688 24.608 |
| 4T-28900 SERIES | | | | | | | | |
| 4T-28980 | 2.3613 59.977 | 1.0000 25.400 | .14 2.5 | 4T-28920 | 4.0000 101.600 | .7813 19.845 | .13 3.3 | 1.0000 25.400 |
| 4T-28985 | 2.3750 60.325 | 1.0000 25.400 | .14 2.5 | 4T-28921 | 3.9370 100.000 | .7813 19.845 | .13 3.3 | 1.0000 25.400 |
| 4T-29500 SERIES | | | | | | | | |
| 4T-29585 | 2.5000 63.500 | 1.0000 25.400 | .14 2.5 | 4T-29520 | 4.2500 107.950 | .7500 19.050 | .13 3.3 | 1.0000 25.400 |
| 4T-29600 SERIES | | | | | | | | |
| 4T-29675 | 2.7500 69.850 | 1.0000 25.400 | .06 1.0 | 4T-29620 | 4.4375 112.712 | .7500 19.050 | .13 3.3 | 1.0000 25.400 |
| 4T-29685 | 2.8750 73.025 | 1.0000 25.400 | .14 2.5 | 4T-29630 | 4.7500 120.650 | .7500 19.050 | .13 3.3 | 1.0000 25.400 |
| 4T-LM29700 SERIES | | | | | | | | |
| 4T-LM29748 | 1.5000 38.100 | .7200 18.288 | | 4T-LM29710 | 2.5625 65.088 | .5500 13.970 | .05 1.3 | .7100 18.034 |
| 4T-31500 SERIES | | | | | | | | |
| 4T-31593 | 1.3750 34.925 | 1.1250 28.575 | .14 2.5 | 4T-31520 | 3.0000 76.200 | .9375 23.812 | .13 3.3 | 1.1563 29.370 |
| 4T-31594 | 1.3750 34.925 | 1.1250 28.575 | .06 1.0 | | | | | |
| 4T-31597 | 1.4375 36.512 | 1.1250 28.575 | .14 2.5 | | | | | |
| 4T-33000 SERIES | | | | | | | | |
| 4T-33225 | 2.2500 57.150 | 1.1875 30.162 | .14 2.5 | 4T-33462 | 4.6250 117.475 | .9375 23.812 | .13 3.3 | 1.1875 30.162 |
| 4T-33262 | 2.6250 66.675 | 1.1875 30.162 | .14 2.5 | 4T-33472 | 4.7244 120.000 | .9230 23.444 | .03 .6 | 1.1730 29.764 |
| 4T-33275 | 2.7500 69.850 | 1.1875 30.162 | .14 2.5 | | | | | |
| 4T-33281 | 2.8125 71.438 | 1.1875 30.162 | .14 2.5 | | | | | |
| 4T-33287 | 2.8750 73.025 | 1.1875 30.162 | .14 2.5 | | | | | |



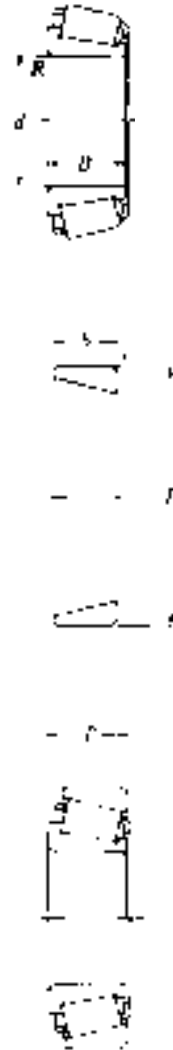
These maximum fillet radii will be cleared by the cone or cup radii.

TAPERED ROLLER BEARINGS

Units: INCHES
Millimeters



| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
|-------------------------|-------------------|------------------|--------------------------|------------|-------------------|------------------|----------------------------|------------------|
| | d | B | R | | D | b | r | T |
| 4T-33800 SERIES | | | | | | | | |
| 4T-33891 | 2.0625 52.388 | 1.1250 28.575 | .14 2.5 | 4T-33821 | 3.7500 95.250 | .8750 22.225 | .09 2.3 | 1.0938 27.783 |
| 4T-34000 SERIES | | | | | | | | |
| 4T-34306 | 3.0625 77.788 | .9060 23.012 | .14 2.5 | 4T-34478 | 4.7812 121.442 | .6875 17.462 | .08 1.5 | .9688 24.608 |
| | | | | 4T-34492A | 4.9233 125.052 | .6457 16.400 | .08 1.5 | .9343 23.731 |
| 4T-39500 SERIES | | | | | | | | |
| 4T-39581 | 2.2500 57.150 | 1.1875 30.162 | .31 6.0 | 4T-39520 | 4.4375 112.712 | .9375 23.812 | .13 3.3 | 1.1875 30.162 |
| 4T-39585 | 2.5000 63.500 | 1.1875 30.162 | .14 2.5 | | | | | |
| 4T-39590 | 2.6250 66.675 | 1.1875 30.162 | .14 2.5 | | | | | |
| 4T-41000 SERIES | | | | | | | | |
| 4T-41125 | 1.1250 28.575 | .9550 24.257 | .19 4.8 | 4T-41286 | 2.8593 72.626 | .6875 17.462 | .06 1.0 | .9688 24.608 |
| 4T-42000 SERIES | | | | | | | | |
| 4T-42346 | 3.4630 87.960 | 1.1406 28.971 | .12 2.5 | 4T-42584 | 5.8437 148.430 | .8438 21.433 | .12 2.5 | 1.1250 28.575 |
| 4T-42350 | 3.5000 88.900 | 1.1406 28.971 | .12 2.5 | 4T-42587 | 5.8750 149.225 | .9688 24.608 | .13 3.3 | 1.2500 31.750 |
| 4T-42368 | 3.6875 93.662 | 1.1406 28.971 | .12 2.5 | | | | | |
| 4T-42375 | 3.7500 95.250 | 1.1406 28.971 | .12 2.5 | | | | | |
| 4T-42381 | 3.8125 96.838 | 1.1406 28.971 | .14 2.5 | | | | | |
| 4T-42600 SERIES | | | | | | | | |
| 4T-42687 | 3.0000 76.200 | 1.2205 31.000 | .14 2.5 | 4T-42620 | 5.0000 127.000 | .8750 22.225 | .13 3.3 | 1.1875 30.162 |
| 4T-43000 SERIES | | | | | | | | |
| 4T-43131 | 1.3125 33.338 | .9478 24.074 | .14 2.5 | 4T-43300 | 3.0000 76.200 | .6563 16.670 | | .9688 24.608 |
| 4T-44000 SERIES | | | | | | | | |
| 4T-44150 | 1.5000 38.100 | .9330 23.698 | .09 2.3 | 4T-44348 | 3.4834 88.500 | .6875 17.462 | .06 1.0 | 1.0000 25.400 |
| 4T-L44600 SERIES | | | | | | | | |
| *4T-L44640 | .9375 23.813 | .5800 14.732 | .06 1.0 | 4T-L44610 | 1.9800 50.292 | .4200 10.668 | .05 1.3 | .5600 14.224 |
| *4T-L44643 | 1.0000 25.400 | .5800 14.732 | .05 1.3 | | | | | |
| *4T-L44649 | 1.0625 26.988 | .5800 14.732 | .14 2.5 | | | | | |
| 4T-45200 SERIES | | | | | | | | |
| 4T-45282 | 1.8750 47.625 | 1.2188 30.958 | .14 2.5 | 4T-45220 | 4.1250 104.775 | .9375 23.813 | .13 3.3 | 1.1875 30.162 |
| 4T-45284 | 2.0000 50.800 | 1.2188 30.958 | .25 6.4 | | | | | |
| 4T-L45400 SERIES | | | | | | | | |
| *4T-L45449 | 1.1417 29.000 | .5800 14.732 | .14 2.5 | 4T-L45410 | 1.9800 50.292 | .4200 10.668 | .05 1.3 | .5600 14.224 |
| 4T-46000 SERIES | | | | | | | | |
| 4T-46143 | 1.4375 36.512 | 1.2500 31.750 | .06 1.0 | 4T-46368 | 3.6875 93.662 | 1.0313 26.195 | .13 3.3 | 1.2500 31.750 |
| 4T-46162 | 1.6250 41.275 | 1.2500 31.750 | .03 .6 | 4T-46369 | 3.6875 93.662 | 1.0313 26.195 | .05 1.3 | 1.2500 31.750 |
| 4T-46700 SERIES | | | | | | | | |
| 4T-46790 | 6.5000 165.100 | 1.5625 39.688 | .14 2.5 | 4T-46720 | 8.8750 225.425 | 1.3125 33.338 | .13 3.3 | 1.6250 41.275 |



These maximum fillet radii will be cleared by the cone or cup radii.

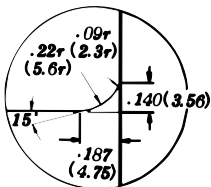
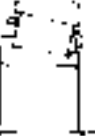
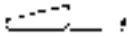
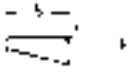
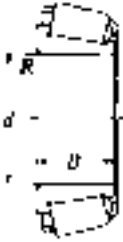
- * Cone bore tolerance +.0008 to -.0000 in. (+.020 to -0 mm)
- Overall bearing width tolerance +.0140 to -.0000 in. (+.356 to -0 mm)
- .13 in. (3.3 mm) x 45 degree back face chamfer



Units: INCHES
Millimeters

TAPERED ROLLER BEARINGS

| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
|--------------------------|-------------------|------------------|--------------------------|------------|-------------------|------------------|----------------------------|------------------|
| | <i>d</i> | <i>B</i> | <i>R</i> | | <i>D</i> | <i>b</i> | <i>r</i> | <i>T</i> |
| 4T-47600 SERIES | | | | | | | | |
| 4T-47678 | 3.0000 76.200 | 1.3125 33.338 | .25 6.4 | 4T-47620 | 5.2500 133.350 | 1.0313 26.195 | .13 3.3 | 1.3125 33.338 |
| 4T-47679 | 3.0000 76.200 | 1.3125 33.338 | .14 2.5 | 4T-47623A | 5.3750 136.525 | 1.7500 44.450 | | 1.7500 44.450 |
| 4T-47681 | 3.1875 80.962 | 1.3125 33.338 | .14 2.5 | | | | | |
| 4T-47686 | 3.2500 82.550 | 1.3125 33.338 | .14 2.5 | | | | | |
| 4T-47687 | 3.2500 82.550 | 1.3125 33.338 | .27 6.8 | | | | | |
| 4T-47800 SERIES | | | | | | | | |
| 4T-47890 | 3.6250 92.075 | 1.3750 34.925 | .14 2.5 | 4T-47820 | 5.7500 146.050 | 1.0313 26.195 | .13 3.3 | 1.3125 33.338 |
| 4T-47896 | 3.7500 95.250 | 1.3750 34.925 | .14 2.5 | | | | | |
| 4T-LM48500 SERIES | | | | | | | | |
| #4T-LM48548 | 1.3750 34.925 | .7200 18.288 | | 4T-LM48510 | 2.5625 65.088 | .5500 13.970 | .05 1.3 | .7100 18.034 |
| 4T-48600 SERIES | | | | | | | | |
| 4T-48684 | 5.6250 142.875 | 1.5625 39.688 | .31 .6 | 4T-48620 | 7.8750 200.025 | 1.3437 34.130 | .13 3.3 | 1.6250 41.275 |
| 4T-49000 SERIES | | | | | | | | |
| 4T-49175 | 1.7500 44.450 | 1.2500 31.750 | .14 2.5 | 4T-49368 | 3.6875 93.662 | 1.0000 25.400 | .13 3.3 | 1.2500 31.750 |
| 4T-49500 SERIES | | | | | | | | |
| 4T-49585 | 2.0000 50.800 | 1.2500 31.750 | .14 2.5 | 4T-49520 | 4.0000 101.600 | 1.0000 25.400 | .13 3.3 | 1.2500 31.750 |
| 4T-52000 SERIES | | | | | | | | |
| 4T-52387 | 3.8750 98.425 | 1.4219 36.116 | .14 2.5 | 4T-52618 | 6.1875 157.162 | 1.0313 26.195 | .13 3.3 | 1.4375 36.512 |
| 4T-52400 | 4.0000 101.600 | 1.4219 36.116 | .14 2.5 | 4T-52638 | 6.3750 161.925 | 1.1563 29.370 | .13 3.3 | 1.5625 39.688 |
| 4T-52401 | 4.0000 101.600 | 1.4219 36.116 | .31 .6 | | | | | |
| 4T-55000C SERIES | | | | | | | | |
| 4T-55175C | 1.7500 44.450 | 1.0594 26.909 | .14 2.5 | 4T-55437 | 4.3750 111.125 | .8125 20.638 | .13 3.3 | 1.1875 30.162 |
| 4T-55200C | 2.0000 50.800 | 1.0594 26.909 | .14 2.5 | | | | | |
| 4T-56000 SERIES | | | | | | | | |
| 4T-56425 | 4.2500 107.950 | 1.4375 36.512 | .14 2.5 | 4T-56650 | 6.5000 165.100 | 1.0625 26.988 | .13 3.3 | 1.4375 36.512 |
| 4T-59000 SERIES | | | | | | | | |
| 4T-59162 | 1.6250 41.275 | 1.4375 36.512 | .06 1.0 | 4T-59429 | 4.2900 108.966 | 1.0625 26.987 | .13 3.3 | 1.3750 34.925 |
| 4T-59200 | 2.0000 50.800 | 1.4375 36.512 | .14 2.5 | | | | | |
| 4T-65300 SERIES | | | | | | | | |
| 4T-65390 | 1.9375 49.212 | 1.7500 44.450 | .14 2.5 | 4T-65320 | 4.5000 114.300 | 1.3750 34.925 | .13 3.3 | 1.7500 44.450 |
| 4T-LM67000 SERIES | | | | | | | | |
| #4T-LM67048 | 1.2500 31.750 | .6600 16.764 | | 4T-LM67010 | 2.3280 59.131 | .4650 11.811 | .05 1.3 | .6250 15.875 |
| 4T-67300 SERIES | | | | | | | | |
| 4T-67388 | 5.0000 127.000 | 1.8125 46.038 | .14 2.5 | 4T-67322 | 7.7500 196.850 | 1.5000 38.100 | .13 3.3 | 1.8125 46.038 |
| | | | | 4T-67324 | 8.0000 203.200 | 1.8125 46.038 | .13 3.3 | 1.8125 46.038 |



These maximum fillet radii will be cleared by the cone or cup radii.

Cone bore tolerance +.0008 to -.0000 in. (+.020 to -.0 mm)

Overall bearing width tolerance +.0140 to -.0000 in. (+.356 to -.0 mm)

Threaded O.D.

Front face corner break .015 in. (0.38 mm) max.

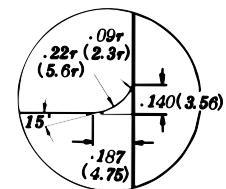
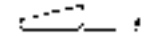
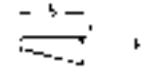
.03 in. (.8 mm) x 45 degree back face chamfer

TAPERED ROLLER BEARINGS

Units: INCHES
Millimeters



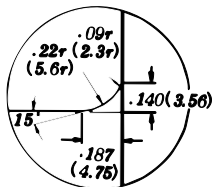
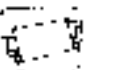
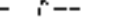
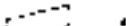
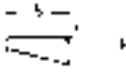
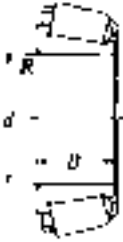
| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
|---------------------------|-------------------|------------------|--------------------------|-------------|-------------------|------------------|----------------------------|------------------|
| | <i>d</i> | <i>B</i> | <i>R</i> | | <i>D</i> | <i>b</i> | <i>r</i> | <i>T</i> |
| 4T-L68100 SERIES | | | | | | | | |
| 4T-L68149 | *1.3780 35.000 | .6600 16.764 | | 4T-L68110 | 2.3280 59.131 | .4700 11.938 | .05 1.3 | .6250 15.875 |
| | | | | 4T-L68111 | 2.3622 60.000 | .4700 11.938 | .05 1.3 | .6250 15.875 |
| 4T-L69300 SERIES | | | | | | | | |
| 4T-JL69349 | 1.4961 38.000 | .6693 17.000 | | 4T-JL69310 | 2.4803 63.000 | .5313 13.495 | .05 1.3 | .6693 17.000 |
| 4T-72000C SERIES | | | | | | | | |
| 4T-72188C | 1.8750 47.625 | 1.2910 32.791 | .03 .6 | 4T-72487 | 4.8750 123.825 | 1.0000 25.400 | .13 3.3 | 1.4375 36.512 |
| 4T-72200C | 2.0000 50.800 | 1.2910 32.791 | .14 2.5 | | | | | |
| 4T-78000C SERIES | | | | | | | | |
| 4T-78215C | 2.1250 53.975 | 1.3085 33.236 | .14 2.5 | 4T-78551 | 5.5130 140.030 | .9260 23.520 | .09 2.3 | 1.4375 36.512 |
| 4T-78225C | 2.2500 57.150 | 1.3085 33.236 | .14 2.5 | | | | | |
| 4T-78238C | 2.3750 60.325 | 1.3085 33.236 | .20 4.0 | | | | | |
| 4T-LM78300 SERIES | | | | | | | | |
| 4T-LM78349 | *1.3780 35.000 | .6693 17.000 | | 4T-LM78310A | 2.4409 62.000 | .5354 13.600 | .06 1.0 | .6575 16.700 |
| 4T-HM81600 SERIES | | | | | | | | |
| 4T-HM81649 | *.6299 16.000 | .8268 21.000 | .04 .6 | 4T-HM81610 | 1.8504 47.000 | .6299 16.000 | .08 1.5 | .8268 21.000 |
| 4T-M84200 SERIES | | | | | | | | |
| 4T-M84249 | 1.0000 25.400 | .9100 23.114 | .03 .6 | 4T-M84210 | 2.3437 59.530 | .7200 18.288 | .06 1.0 | .9200 23.368 |
| 4T-M84500 SERIES | | | | | | | | |
| 4T-M84548 | 1.0000 25.400 | .7650 19.431 | .06 1.0 | 4T-M84510 | 2.2500 57.150 | .5800 14.732 | .06 1.0 | .7650 19.431 |
| 4T-M86600 SERIES | | | | | | | | |
| 4T-M86649 | 1.1875 30.162 | .8438 21.433 | .06 1.0 | 4T-M86610 | 2.5312 64.292 | .6563 16.670 | .06 1.0 | .8438 21.433 |
| 4T-M88800 SERIES | | | | | | | | |
| 4T-M88048 | 1.3125 33.338 | .8750 22.225 | .03 .6 | 4T-M88010 | 2.6875 68.262 | .6875 17.462 | .06 1.0 | .8750 22.225 |
| 4T-HM88500 SERIES | | | | | | | | |
| 4T-HM88542 | 1.2500 31.750 | 1.0928 27.783 | .05 1.3 | 4T-HM88510 | 2.8750 73.025 | .9063 23.020 | .13 3.3 | 1.1563 29.370 |
| 4T-HM88547 | 1.3125 33.338 | 1.0938 27.783 | .03 .6 | | | | | |
| 4T-HM88600 SERIES | | | | | | | | |
| 4T-HM88649 | 1.3750 34.925 | 1.0000 25.400 | .09 2.3 | 4T-HM88610 | 2.8438 72.233 | .7812 19.842 | .09 2.3 | 1.0000 25.400 |
| | | | | 4T-HM88611 | 2.8346 72.000 | .8442 21.443 | .06 1.0 | 1.0630 27.000 |
| 4T-HM89400 SERIES | | | | | | | | |
| 4T-HM89443 | 1.3125 33.338 | 1.1250 28.575 | .03 .6 | 4T-HM89410 | 3.0000 76.200 | .9063 23.020 | .13 3.3 | 1.1563 29.370 |
| 4T-HM89446 | 1.3750 34.925 | 1.1250 28.575 | .14 2.5 | 4T-HM89411 | 3.0000 76.200 | .9063 23.020 | .03 .6 | 1.1563 29.370 |
| 4T-HM89448 | 1.4375 36.512 | 1.1250 28.575 | .03 .6 | | | | | |
| 4T-HM89449 | 1.4375 36.512 | 1.1250 28.575 | .14 2.5 | | | | | |
| 4T-LM102900 SERIES | | | | | | | | |
| 4T-LM102949 | 1.7812 45.242 | .7800 19.812 | .14 2.5 | 4T-LM102910 | 2.8910 73.431 | .6200 15.748 | .03 .6 | .7700 19.558 |



These maximum fillet radii will be cleared by the cone or cup radii. .06 in. (1.5 mm) front face chamfer
 Cup outside dia. tolerance +.0000 to -.0010 in. (+0 to -.025 mm) * Tolerance +.0000 to -.0005 in. (+0 to -.013 mm)
 Overall bearing width tolerance +.0140 to -.0000 in. (+0.356 to -.0 mm)
 For 'J' prefix part tolerances see Table 8 Pg. 254



Units: INCHES
Millimeters



TAPERED ROLLER BEARINGS

| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
|---------------------------|--------------------|------------------|--------------------------|--------------|-------------------|------------------|----------------------------|------------------|
| | <i>d</i> | <i>B</i> | <i>R</i> | | <i>D</i> | <i>b</i> | <i>r</i> | <i>T</i> |
| 4T-LM104900 SERIES | | | | | | | | |
| 4T-LM104949 | 2.0000 50.800 | .8750 22.225 | .14 2.5 | 4T-LM104911 | 3.2500 82.550 | .6500 16.510 | .05 1.3 | .8500 21.590 |
| 4T-JLM104948 | 1.9685 50.000 | .8465 21.500 | .12 2.5 | 4T-JLM104910 | 3.2283 82.000 | .6693 17.000 | .02 .3 | .8465 21.500 |
| 4T-M201000 SERIES | | | | | | | | |
| 4T-M201047 | 1.5625 39.688 | .8700 22.098 | .03 .6 | 4T-M201011 | 2.8750 73.025 | .8400 21.336 | .09 2.3 | 1.0100 25.654 |
| 4T-M205100 SERIES | | | | | | | | |
| 4T-JM205149 | 1.9685 50.000 | 1.1024 28.000 | .12 2.5 | 4T-JM205110 | 3.5433 90.000 | .9055 23.000 | .10 2.0 | 1.1024 28.000 |
| 4T-M207000 SERIES | | | | | | | | |
| 4T-JM207049 | 2.1654 55.000 | 1.1417 29.000 | .06 1.0 | 4T-JM207010 | 3.7402 95.000 | .9252 23.500 | .10 2.0 | 1.1417 29.000 |
| 4T-H211700 SERIES | | | | | | | | |
| 4T-JH211749 | 2.5591 65.000 | 1.5157 38.500 | .12 2.5 | 4T-JH211710 | 4.7244 120.000 | 1.2598 32.000 | .10 2.0 | 1.5354 39.000 |
| 4T-HM212000 SERIES | | | | | | | | |
| 4T-HM212044 | 2.3750 60.325 | 1.5100 38.354 | .31 6.0 | 4T-HM212010 | 4.8125 122.238 | 1.1700 29.718 | .06 1.0 | 1.5000 38.100 |
| 4T-HM212046 | 2.5000 63.500 | 1.5100 38.354 | .14 2.5 | 4T-HM212011 | 4.8125 122.238 | 1.1700 29.718 | .13 3.3 | 1.5000 38.100 |
| 4T-HM212047 | 2.5000 63.500 | 1.5100 38.354 | .28 7.0 | | | | | |
| 4T-HM212049 | 2.6250 66.675 | 1.5100 38.354 | .14 2.5 | | | | | |
| 4T-H212700 SERIES | | | | | | | | |
| 4T-H212749 | *2.5984 66.000 | 1.6339 41.500 | .28 7.0 | 4T-212710 | 4.8819 124.000 | 1.3386 34.000 | .14 2.5 | 1.6339 41.500 |
| 4T-L217800 SERIES | | | | | | | | |
| 4T-L217849 | 3.5000 88.900 | .8125 20.638 | .06 1.0 | 4T-L217810 | 4.8750 123.825 | .6563 16.670 | .06 1.0 | .8125 20.638 |
| 4T-HM218200 SERIES | | | | | | | | |
| 4T-HM218248 | 3.5433 90.000 | 1.5748 40.000 | .28 7.0 | 4T-HM218210 | 5.7874 147.000 | 1.2795 32.500 | .14 2.5 | 1.5748 40.000 |
| 4T-HM220100 SERIES | | | | | | | | |
| 4T-HM220149 | *3.9370 100.000 | 1.6535 42.000 | .31 6.0 | 4T-HM220110 | 6.1811 157.000 | 1.3386 34.000 | .14 2.5 | 1.6535 42.000 |
| 4T-LM300800 SERIES | | | | | | | | |
| 4T-LM300849 | *1.6142 41.000 | .7087 18.000 | | 4T-LM300811 | 2.6772 68.000 | .5315 13.500 | .06 1.0 | .6890 17.500 |
| 4T-H307700 SERIES | | | | | | | | |
| 4T-JH307749 | 2.1654 55.000 | 1.5354 39.000 | .12 2.5 | 4T-JH307710 | 4.3307 110.000 | 1.2598 32.000 | .10 2.0 | 1.5354 39.000 |
| 4T-LM501300 SERIES | | | | | | | | |
| 4T-LM501349 | 1.6250 41.275 | .7800 19.812 | .14 2.5 | 4T-LM501310 | 2.8910 73.431 | .5800 14.732 | .03 .6 | .7700 19.558 |
| | | | | 4T-LM501314 | 2.8910 73.431 | .6537 16.604 | .03 .6 | .8437 21.430 |
| 4T-LM503300 SERIES | | | | | | | | |
| 4T-LM503349 | *1.8110 46.000 | .7087 18.000 | .09 2.3 | 4T-LM503310 | 2.9528 75.000 | .5512 14.000 | .06 1.0 | .7087 18.000 |
| 4T-HH506300 SERIES | | | | | | | | |
| 4T-HH506348 | 1.9375 49.212 | 1.7500 44.450 | .14 2.5 | 4T-HH506310 | 4.5000 114.300 | 1.4200 36.068 | .13 3.3 | 1.7500 44.450 |
| 4T-LM506800 SERIES | | | | | | | | |
| 4T-JLM506849 | 2.1654 55.000 | .9055 23.000 | .06 1.0 | 4T-JLM506810 | 3.5433 90.000 | .7283 18.500 | .02 .3 | .9055 23.000 |

These maximum fillet radii will be cleared by the cone or cup radii.

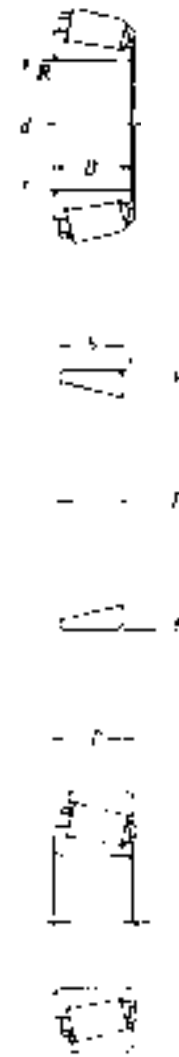
- * Cone bore tolerance +.0000 to -.0005 in. (+0 to -.013 mm)
- Cup outside dia. tolerance +.0000 to -.0010 in. (+0 to -.025 mm)
- .09 in. (2.3 mm) front face chamfer
- Tolerance +.0000 to -.0010 in. (+0 to -.025 mm)
- For 'J' prefix part tolerances see Table 8 Page 254

TAPERED ROLLER BEARINGS

Units: INCHES
Millimeters



| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
|---------------------------|-------------------|------------------|--------------------------|--------------|-------------------|------------------|----------------------------|------------------|
| | <i>d</i> | <i>B</i> | <i>R</i> | | <i>D</i> | <i>b</i> | <i>r</i> | <i>T</i> |
| 4T-LM508700 SERIES | | | | | | | | |
| 4T-JLM508748 | 2.3622 60.000 | .9449 24.000 | .20 5.0 | 4T-JLM508710 | 3.7402 95.000 | .7480 19.000 | .10 2.5 | .9449 24.000 |
| 4T-M511900 SERIES | | | | | | | | |
| 4T-JM511946 | 2.5590 65.000 | 1.1024 28.000 | .12 3.0 | 4T-JM511910 | 4.3307 110.000 | .8858 22.500 | .10 2.5 | 1.1024 28.000 |
| 4T-HM516400 SERIES | | | | | | | | |
| 4T-HM516448 | 3.2500 82.550 | 1.5625 39.688 | .27 6.8 | 4T-HM516410 | 5.2500 133.350 | 1.2813 32.545 | .13 3.3 | 1.5625 39.688 |
| 4T-M515600 SERIES | | | | | | | | |
| 4T-JM515649 | 3.1496 80.000 | 1.3386 34.000 | .12 3.0 | 4T-JM515610 | 5.1181 130.000 | 1.1220 28.500 | .10 2.5 | 1.3780 35.000 |
| 4T-HM515700 SERIES | | | | | | | | |
| 4T-HM515745 | 3.0000 76.200 | 1.8150 46.100 | .14 3.5 | 4T-HM515716 | 5.5960 142.138 | 1.3125 33.338 | .13 3.3 | 1.7500 44.450 |
| 4T-HM516800 SERIES | | | | | | | | |
| 4T-JHM516849 | 3.3465 85.000 | 1.4961 38.000 | .12 3.0 | 4T-JHM516810 | 5.5118 140.000 | 1.2402 31.500 | .10 2.5 | 1.5354 39.000 |
| 4T-HM518400 SERIES | | | | | | | | |
| 4T-HM518445 | 3.5000 88.900 | 1.5625 39.688 | .25 6.4 | 4T-HM518410 | 6.0000 152.400 | 1.1875 30.163 | .13 3.3 | 1.5625 39.688 |
| 4T-HM522600 SERIES | | | | | | | | |
| 4T-JHM522649 | 4.3307 110.000 | 1.8110 46.000 | .12 3.0 | 4T-JHM522610 | 7.0866 180.000 | 1.4961 38.000 | .10 2.5 | 1.8504 47.000 |
| 4T-LM603000 SERIES | | | | | | | | |
| 4T-LM603049 | 1.7812 45.242 | .7812 19.842 | .14 3.5 | 4T-LM603011 | 3.0625 77.788 | .5937 15.080 | .03 .8 | .7812 19.842 |
| | | | | 4T-LM603012 | 3.0625 77.788 | .6562 16.667 | .03 .8 | .8437 21.430 |
| 4T-LM612900 SERIES | | | | | | | | |
| 4T-JM612949 | 2.7559 70.000 | 1.1417 29.000 | .12 3.0 | 4T-JM612910 | 4.5276 115.000 | .9055 23.000 | .10 2.5 | 1.1417 29.000 |
| 4T-HM617000 SERIES | | | | | | | | |
| 4T-HM617049 | 3.3750 85.725 | 1.6875 42.862 | .19 4.8 | 4T-HM617010 | 5.5960 142.138 | 1.3438 34.133 | .13 3.3 | 1.6875 42.862 |
| 4T-M704600 SERIES | | | | | | | | |
| 4T-JLM704649 | 1.9685 50.000 | .8661 22.000 | .14 3.5 | 4T-JLM704610 | 3.3071 84.000 | .6890 17.500 | .06 1.5 | .8661 22.000 |
| 4T-LM710900 SERIES | | | | | | | | |
| 4T-JLM710949 | 2.5591 65.000 | .9055 23.000 | .12 3.0 | 4T-JLM710910 | 4.1339 105.000 | .7283 18.500 | .04 1.0 | .9449 24.000 |
| 4T-M714200 SERIES | | | | | | | | |
| 4T-JM714249 | 2.9528 75.000 | 1.1614 29.500 | .12 3.0 | 4T-JM714210 | 4.7244 120.000 | .9843 25.000 | .10 2.5 | 1.2205 31.000 |
| 4T-H715300 SERIES | | | | | | | | |
| 4T-H715343 | 2.6875 68.262 | 1.8125 46.038 | .14 3.5 | 4T-H715311 | 5.3750 136.525 | 1.4375 36.512 | .13 3.3 | 1.8125 46.038 |
| 4T-H715345 | 2.8125 71.438 | 1.8125 46.038 | .14 3.5 | 4T-H715313W | 5.3750 136.525 | 1.5625 39.688 | .13 3.3 | 1.9375 49.213 |
| 4T-M716600 SERIES | | | | | | | | |
| 4T-JM716649 | 3.3465 85.000 | 1.1417 29.000 | .12 3.0 | 4T-JM716610 | 5.1181 130.000 | .9449 24.000 | .10 2.5 | 1.1811 30.000 |
| 4T-M718100 SERIES | | | | | | | | |
| 4T-JM718149 | 3.5433 90.000 | 1.3386 34.000 | .12 3.0 | 4T-JM718110 | 5.7087 145.000 | 1.0630 27.000 | .10 2.5 | 1.3780 35.000 |



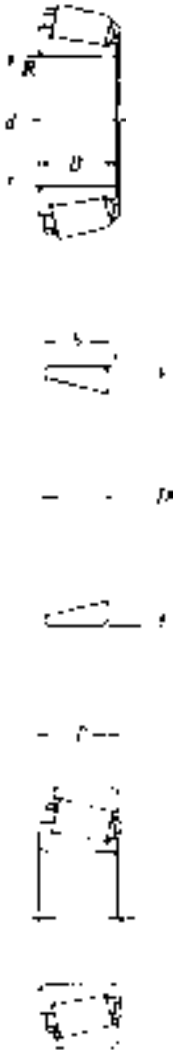
These maximum fillet radii will be cleared by the cone or cup radii.

* For 'J' prefix part tolerances see Table 8 Page 254

Key way on backface



Units: INCHES
Millimeters



| TAPERED ROLLER BEARINGS | | | | | | | | |
|---------------------------|-------------------|------------------|--------------------------|--------------|--------------------|------------------|----------------------------|------------------|
| Cone Number | Bore | Cone Width | Max. shaft fillet radius | Cup Number | O.D. | Cup Width | Max. housing fillet radius | Overall Width |
| | <i>d</i> | <i>B</i> | <i>R</i> | | <i>D</i> | <i>b</i> | <i>r</i> | <i>T</i> |
| 4T-M719100 SERIES | | | | | | | | |
| 4T-JM719149 | 3.7402 95.000 | 1.3386 34.000 | .12 3.0 | 4T-JM719113 | 5.9055 150.000 | 1.0630 27.000 | .10 2.5 | 1.3780 35.000 |
| 4T-HM720200 SERIES | | | | | | | | |
| 4T-JHM720249 | 3.9370 100.000 | 1.5748 40.000 | .12 3.0 | 4T-JHM720210 | 6.2992 160.000 | 1.2598 32.000 | .10 2.5 | 1.6142 41.000 |
| 4T-M736100 SERIES | | | | | | | | |
| 4T-JM736149 | 7.0866 180.000 | 1.7717 45.000 | .12 3.0 | 4T-JM736110 | 9.8425 250.000 | 1.4567 37.000 | .10 2.5 | 1.8504 47.000 |
| 4T-LM739700 SERIES | | | | | | | | |
| 4T-LM739749 | 7.7500 196.850 | 1.5625 39.688 | .14 3.5 | 4T-LM739710 | 10.1250 257.175 | 1.1875 30.162 | .13 3.3 | 1.5625 39.688 |
| 4T-HM801300 SERIES | | | | | | | | |
| 4T-HM801346 | 1.5000 38.100 | 1.1250 28.575 | .03 .8 | 4T-HM801310 | 3.2500 82.550 | .9063 23.020 | .13 3.3 | 1.1563 29.370 |
| 4T-M802000 SERIES | | | | | | | | |
| 4T-M802048 | 1.6250 41.275 | 1.0100 25.654 | .14 3.5 | 4T-M802011 | 3.2500 82.550 | .7950 20.193 | .13 3.3 | 1.0450 26.543 |
| 4T-HM803100 SERIES | | | | | | | | |
| 4T-HM803146 | 1.6250 41.275 | 1.1563 29.370 | .14 3.5 | 4T-HM803110 | 3.5000 88.900 | .9063 23.020 | .13 3.3 | 1.1875 30.162 |
| 4T-HM803149 | 1.7500 44.450 | 1.1563 29.370 | .14 3.5 | | | | | |
| 4T-M804000 SERIES | | | | | | | | |
| 4T-M804049 | 1.8750 47.625 | 1.0000 25.400 | .14 3.5 | 4T-M804010 | 3.5000 88.900 | .7500 19.050 | .13 3.3 | 1.0000 25.400 |
| 4T-M804800 SERIES | | | | | | | | |
| 4T-HM804846 | 1.8750 47.625 | 1.1563 29.370 | .14 3.5 | 4T-HM804810 | 3.7500 95.250 | .9063 23.020 | .13 3.3 | 1.1875 30.162 |
| 4T-HM804848 | 1.9060 48.412 | 1.1563 29.370 | .09 2.3 | | | | | |
| 4T-LM806600 SERIES | | | | | | | | |
| 4T-LM806649 | 2.1250 53.975 | .7500 19.050 | .09 2.3 | 4T-LM806610 | 3.5000 88.900 | .5312 13.492 | .08 2.0 | .7500 19.050 |
| 4T-HM807000 SERIES | | | | | | | | |
| 4T-HM807040 | 1.7500 44.450 | 1.4375 36.512 | .14 3.5 | 4T-HM807010 | 4.1250 104.775 | 1.1250 28.575 | .13 3.3 | 1.4375 36.512 |
| 4T-HM807044 | 1.9375 49.212 | 1.4375 36.512 | .14 3.5 | | | | | |
| 4T-HM807046 | 2.0000 50.800 | 1.4375 36.512 | .14 3.5 | | | | | |
| 4T-HM807049 | 2.1250 53.975 | 1.4375 36.512 | .14 3.5 | | | | | |
| 4T-LM813000 SERIES | | | | | | | | |
| 4T-JLM813049 | 2.7559 70.000 | .9843 25.000 | .04 1.0 | 4T-JLM813010 | 4.3307 110.000 | .8071 20.500 | .10 2.5 | 1.0236 26.000 |
| 4T-HM813800 SERIES | | | | | | | | |
| 4T-HM813840 | 2.1875 55.562 | 1.4375 36.512 | .14 3.5 | 4T-HM813810 | 5.0000 127.000 | 1.0625 26.988 | .13 3.3 | 1.4375 36.512 |
| 4T-HM813841 | 2.3750 60.325 | 1.4375 36.512 | .14 3.5 | | | | | |
| 4T-M822000 SERIES | | | | | | | | |
| 4T-JM822049 | 4.3307 110.000 | 1.3780 35.000 | .12 3.0 | 4T-JM822010 | 6.4961 165.000 | 1.0433 26.500 | .10 2.5 | 1.3780 35.000 |
| 4T-HM903200 SERIES | | | | | | | | |
| 4T-HM903249 | 1.7500 44.450 | 1.1250 28.575 | .14 3.5 | 4T-HM903210 | 3.7500 95.250 | .8750 22.225 | .03 .8 | 1.2188 30.958 |
| 4T-HM903249A | 1.7500 44.450 | 1.1142 28.300 | .14 3.5 | | | | | |

These maximum fillet radii will be cleared by the cone or cup radii.

* For 'J' prefix part tolerances see Table 8 Page 254



**RATING AT 33.3 RPM FOR 500 HOURS
BASED ON AFBMA**

TAPERED ROLLER BEARINGS

| Series | Basic Load Ratings (lbs) | | Series | Basic Load Ratings (lbs) | | Series | Basic Load Ratings (lbs) | | Series | Basic Load Ratings (lbs) | |
|---------|--------------------------|-----------------------|------------|--------------------------|-----------------------|-------------|--------------------------|-----------------------|-------------|--------------------------|-----------------------|
| | Dynamic C | Static C ₀ | | Dynamic C | Static C ₀ | | Dynamic C | Static C ₀ | | Dynamic C | Static C ₀ |
| 4T-335 | 15,300 | 16,900 | 4T-6500 | 69,000 | 104,000 | 4T-39500 | 31,000 | 43,500 | 4T-L217800 | 18,000 | 31,500 |
| 4T-355 | 15,700 | 17,800 | 4T-02400 | 12,800 | 15,100 | 4T-41000 | 13,100 | 12,500 | 4T-HM218200 | 51,000 | 76,500 |
| 4T-365 | 17,200 | 20,400 | 4T-02800 | 12,700 | 15,300 | 4T-42000 | 31,000 | 48,500 | 4T-HM220100 | 56,000 | 85,500 |
| 4T-385 | 17,600 | 21,700 | 4T-05000 | 5,400 | 5,450 | 4T-42600 | 30,500 | 43,500 | 4T-LM300800 | 10,300 | 14,100 |
| 4T-395 | 20,100 | 27,000 | 4T-07000 | 5,850 | 6,300 | 4T-43000 | 14,700 | 15,000 | 4T-H307700 | 39,000 | 49,500 |
| 4T-415 | 21,500 | 24,100 | 4T-09000 | 8,600 | 8,700 | 4T-44000 | 15,900 | 17,500 | 4T-LM501300 | 12,600 | 15,700 |
| 4T-435 | 24,300 | 29,100 | 4T-11000 | 9,550 | 11,600 | 4T-L44600 | 6,500 | 7,600 | 4T-LM503300 | 11,500 | 16,000 |
| 4T-455 | 25,800 | 33,000 | 4T-11500 | 3,950 | 3,950 | 4T-45200 | 29,200 | 38,000 | 4T-HH506300 | 45,500 | 58,500 |
| 4T-475 | 28,700 | 40,000 | 4T-LM11700 | 5,350 | 5,450 | 4T-L45400 | 6,300 | 8,000 | 4T-LM506800 | 17,400 | 24,400 |
| 4T-495 | 29,000 | 42,500 | 4T-LM11900 | 6,350 | 6,450 | 4T-46000 | 23,300 | 29,500 | 4T-LM508700 | 18,700 | 27,300 |
| 4T-525 | 30,500 | 37,000 | 4T-12000 | 9,850 | 12,200 | 4T-46700 | 57,000 | 125,000 | 4T-M511900 | 26,800 | 39,000 |
| 4T-535 | 32,000 | 40,000 | 4T-12500 | 8,400 | 8,750 | 4T-47600 | 34,500 | 53,000 | 4T-M515600 | 37,500 | 56,000 |
| 4T-555 | 35,500 | 48,500 | 4T-M12600 | 8,500 | 8,750 | 4T-47800 | 37,000 | 59,500 | 4T-HM515700 | 45,000 | 62,500 |
| 4T-565 | 36,500 | 51,500 | 4T-LM12700 | 6,650 | 7,600 | 4T-LM48500 | 10,400 | 12,600 | 4T-HM516400 | 40,000 | 68,000 |
| 4T-575 | 40,000 | 59,500 | 4T-13600 | 10,700 | 13,400 | 4T-48600 | 53,500 | 110,000 | 4T-HM516800 | 44,500 | 67,000 |
| 4T-595 | 40,500 | 62,500 | 4T-14000 | 10,800 | 13,000 | 4T-49000 | 25,000 | 30,000 | 4T-HM518400 | 57,000 | 81,500 |
| 4T-615 | 38,500 | 48,000 | 4T-15000 | 10,500 | 12,200 | 4T-49500 | 24,800 | 30,500 | 4T-HM522600 | 68,500 | 108,000 |
| 4T-635 | 43,500 | 59,000 | 4T-15500 | 8,900 | 10,200 | 4T-52000 | 42,000 | 68,000 | 4T-LM603000 | 12,900 | 16,600 |
| 4T-655 | 46,500 | 66,500 | 4T-16000 | 10,800 | 13,100 | 4T-55000C | 23,400 | 30,500 | 4T-M612900 | 28,000 | 38,500 |
| 4T-675 | 50,000 | 77,000 | 4T-17000 | 8,750 | 9,500 | 4T-56000 | 43,000 | 70,500 | 4T-HM617000 | 48,500 | 78,500 |
| 4T-745 | 58,500 | 81,000 | 4T-17500 | 6,000 | 5,850 | 4T-59000 | 32,000 | 40,000 | 4T-LM704600 | 15,700 | 21,200 |
| 4T-755 | 60,500 | 86,500 | 4T-17800 | 13,400 | 17,000 | 4T-65300 | 42,000 | 50,500 | 4T-LM710900 | 19,200 | 26,200 |
| 4T-795 | 70,500 | 116,000 | 4T-18500 | 10,300 | 12,500 | 4T-LM67000 | 7,750 | 9,200 | 4T-M714200 | 29,400 | 44,500 |
| 4T-855 | 85,500 | 124,000 | 4T-18600 | 10,200 | 12,600 | 4T-67300 | 69,500 | 124,000 | 4T-H715300 | 50,500 | 80,000 |
| 4T-935 | 107,000 | 156,000 | 4T-18700 | 11,100 | 14,600 | 4T-L68100 | 7,950 | 10,700 | 4T-M716600 | 30,500 | 48,000 |
| 4T-1300 | 9,150 | 9,600 | 4T-19000 | 9,750 | 11,500 | 4T-L69300 | 8,700 | 11,800 | 4T-M718100 | 42,500 | 62,500 |
| 4T-1700 | 9,600 | 10,400 | 4T-21000 | 9,050 | 8,700 | 4T-72000C | 34,500 | 42,500 | 4T-M719100 | 40,500 | 62,500 |
| 4T-1900 | 9,150 | 10,000 | 4T-22700 | 16,900 | 21,800 | 4T-78000C | 38,500 | 47,500 | 4T-HM720200 | 43,000 | 69,500 |
| 4T-2500 | 15,500 | 18,300 | 4T-23000 | 10,600 | 11,400 | 4T-LM78300 | 8,350 | 10,800 | 4T-M736100 | 83,000 | 160,000 |
| 4T-2600 | 14,400 | 16,300 | 4T-24700 | 14,600 | 18,100 | 4T-HM81600 | 7,850 | 8,150 | 4T-LM739700 | 60,500 | 142,000 |
| 4T-2700 | 16,400 | 20,300 | 4T-25500 | 17,100 | 22,000 | 4T-M84200 | 11,200 | 13,000 | 4T-HM801300 | 19,500 | 26,300 |
| 4T-2900 | 17,700 | 23,400 | 4T-25800 | 15,900 | 19,200 | 4T-M84500 | 9,500 | 11,000 | 4T-M802000 | 18,100 | 23,400 |
| 4T-3100 | 19,000 | 22,000 | 4T-26800 | 17,200 | 21,900 | 4T-M86600 | 11,600 | 14,600 | 4T-803100 | 21,000 | 28,000 |
| 4T-3300 | 21,400 | 25,100 | 4T-27800 | 15,100 | 18,500 | 4T-M88000 | 12,700 | 16,000 | 4T-M804000 | 18,500 | 22,800 |
| 4T-3400 | 20,900 | 25,600 | 4T-28000 | 12,500 | 14,200 | 4T-HM88500 | 16,200 | 21,800 | 4T-HM804800 | 24,400 | 33,000 |
| 4T-3500 | 21,200 | 26,400 | 4T-28500 | 18,800 | 26,100 | 4T-HM88600 | 14,600 | 19,000 | 4T-LM806600 | 13,700 | 18,600 |
| 4T-3700 | 22,900 | 30,000 | 4T-28600 | 19,900 | 28,700 | 4T-HM89400 | 17,500 | 23,700 | 4T-HM807000 | 31,000 | 42,500 |
| 4T-3800 | 23,600 | 29,600 | 4T-28900 | 20,300 | 30,000 | 4T-LM102900 | 12,200 | 17,100 | 4T-LM813000 | 21,800 | 33,500 |
| 4T-3900 | 26,800 | 39,000 | 4T-29500 | 20,600 | 31,500 | 4T-LM104900 | 15,700 | 21,100 | 4T-HM813800 | 36,500 | 51,500 |
| 4T-4300 | 30,500 | 39,500 | 4T-29600 | 21,500 | 34,000 | 4T-M201000 | 14,000 | 17,800 | 4T-M822000 | 43,000 | 70,500 |
| 4T-5300 | 39,000 | 52,000 | 4T-LM29700 | 9,750 | 12,800 | 4T-M205100 | 23,900 | 31,500 | 4T-HM903200 | 21,600 | 26,100 |
| 4T-5500 | 43,500 | 63,500 | 4T-31500 | 18,100 | 21,800 | 4T-M207000 | 24,000 | 32,500 | | | |
| 4T-5700 | 47,500 | 74,500 | 4T-33000 | 26,200 | 39,500 | 4T-H211700 | 41,500 | 55,500 | | | |
| 4T-6300 | 62,500 | 85,000 | 4T-33800 | 24,100 | 31,000 | 4T-HM212000 | 42,000 | 55,000 | | | |
| 4T-6400 | 64,500 | 92,000 | 4T-34000 | 20,500 | 28,600 | 4T-H212700 | 46,000 | 62,500 | | | |



TAPERED ROLLER BEARINGS

LBS.

| | | | |
|----------------------------|----------------------------|-----------------------------|--------------------------------|
| 4T-749A / 742 7.43 | 4T-2900 SERIES | 4T-5300 SERIES | 4T-LM11700 SERIES |
| 4T-749A / 743 7.37 | 4T-2984 / 2924 1.36 | 4T-5356 / 5335 4.14 | 4T-LM11749 / LM1171019 |
| 4T-749S / 742 7.14 | 4T-3100 SERIES | 4T-5358 / 5335 3.96 | 4T-LM11900 SERIES |
| 4T-749S / 743 7.09 | 4T-3193 / 3120 1.32 | 4T-5361 / 5335 3.95 | 4T-LM11949 / LM1191027 |
| 4T-750A / 742 7.39 | 4T-3196 / 3120 1.28 | 4T-5395 / 5335 3.86 | 4T-12000 SERIES |
| 4T-750A / 743 7.33 | 4T-3300 SERIES | 4T-5500 SERIES | 4T-12175 / 1230368 |
| 4T-755 SERIES | 4T-3379 / 3320 1.61 | 4T-5562 / 5535 6.16 | 4T-12500 SERIES |
| 4T-756A / 752 10.03 | 4T-3379 / 3325 1.61 | 4T-5565 / 5535 6.02 | 4T-12580 / 1252040 |
| 4T-759 / 752 9.02 | 4T-3384 / 3320 1.43 | 4T-5566 / 5535 5.71 | 4T-M12600 SERIES |
| 4T-760 / 752 8.84 | 4T-3384 / 3325 1.42 | 4T-5578 / 5535 5.82 | 4T-M12649 / M1261037 |
| 4T-766 / 752 8.99 | 4T-3386 / 3320 1.47 | 4T-5582 / 5535 5.39 | 4T-LM12700 SERIES |
| 4T-795 SERIES | 4T-3386 / 3325 1.47 | 4T-5583 / 5535 5.38 | 4T-LM12749 / LM1271026 |
| 4T-797 / 792 12.50 | 4T-3400 SERIES | 4T-5584 / 5535 5.14 | 4T-LM12749 / LM1271127 |
| 4T-855 SERIES | 4T-3478 / 3420 1.60 | 4T-5595 / 5535 4.96 | 4T-13600 SERIES |
| 4T-855 / 854 17.33 | 4T-3479 / 3420 1.56 | 4T-5700 SERIES | 4T-13685 / 1362065 |
| 4T-857 / 854 16.88 | 4T-3482 / 3420 1.61 | 4T-5760 / 5735 6.06 | 4T-13685 / 1362165 |
| 4T-861 / 854 15.43 | 4T-3490 / 3420 1.51 | 4T-5795 / 5735 5.90 | 4T-13686 / 1362084 |
| 4T-864 / 854 16.41 | 4T-3500 SERIES | 4T-6300 SERIES | 4T-13686 / 1362184 |
| 4T-866 / 854 16.00 | 4T-3578 / 3520 1.54 | 4T-6361 / 6320 8.69 | 4T-13687 / 1362066 |
| 4T-869 / 854 17.55 | 4T-3578 / 3525 1.72 | 4T-6376 / 6320 8.66 | 4T-13687 / 1362165 |
| 4T-935 SERIES | 4T-3578A / 3520 1.53 | 4T-6379 / 6320 8.18 | 4T-14000 SERIES |
| 4T-936 / 932 23.59 | 4T-3578A / 3525 1.71 | 4T-6381 / 6320 9.12 | 4T-14116 / 1427481 |
| 4T-938 / 932 22.27 | 4T-3580 / 3520 1.77 | 4T-6382 / 6320 8.35 | 4T-14116 / 1427682 |
| 4T-1300 SERIES | 4T-3580 / 3525 1.94 | 4T-6386 / 6320 8.02 | 4T-14116 / 1427888 |
| 4T-1380 / 1328 44 | 4T-3585 / 3520 1.66 | 4T-6389 / 6320 8.00 | 4T-14116 / 1428288 |
| 4T-1700 SERIES | 4T-3585 / 3525 1.84 | 4T-6400 SERIES | 4T-14117A / 1427481 |
| 4T-1755 / 1729 56 | 4T-3586 / 3520 1.51 | 4T-6461A / 6420 9.33 | 4T-14117A / 1427681 |
| 4T-1755 / 1729X 57 | 4T-3586 / 3525 1.69 | 4T-6500 SERIES | 4T-14117A / 1428288 |
| 4T-1779 / 1729 54 | 4T-3700 SERIES | 4T-6559 / 6535 11.24 | 4T-14117A / 1428398 |
| 4T-1779 / 1729X 55 | 4T-3767 / 3720 1.81 | 4T-6576 / 6535 11.99 | 4T-14118 / 1427481 |
| 4T-1780 / 1729 52 | 4T-3767 / 3730 1.81 | 4T-6580 / 6535 10.42 | 4T-14118 / 1427682 |
| 4T-1780 / 1729X 53 | 4T-3775 / 3720 1.88 | 4T-02400 SERIES | 4T-14118 / 1428298 |
| 4T-1900 SERIES | 4T-3775 / 3730 1.89 | 4T-02474 / 0242090 | 4T-14118 / 1427688 |
| 4T-1986 / 1922 53 | 4T-3776 / 3720 2.10 | 4T-02475 / 0242084 | 4T-14118 / 1428398 |
| 4T-1988 / 1922 48 | 4T-3776 / 3730 2.11 | 4T-02800 SERIES | 4T-14124 / 1427478 |
| 4T-2500 SERIES | 4T-3778 / 3720 1.98 | 4T-02872 / 02820 1.06 | 4T-14124 / 1427679 |
| 4T-2580 / 2523 1.00 | 4T-3778 / 3730 1.99 | 4T-05000 SERIES | 4T-14124 / 1428286 |
| 4T-2585 / 2523 96 | 4T-3779 / 3720 2.00 | 4T-05062 / 0518529 | 4T-14124 / 1428396 |
| 4T-2600 SERIES | 4T-3779 / 3730 2.01 | 4T-05079 / 0518526 | 4T-14125A / 1427478 |
| 4T-2690 / 2631 90 | 4T-3780 / 3720 1.87 | 4T-07000 SERIES | 4T-14125A / 1427678 |
| 4T-2700 SERIES | 4T-3780 / 3730 1.88 | 4T-07079 / 0719630 | 4T-14125A / 1428285 |
| 4T-2776 / 2720 1.09 | 4T-3781 / 3720 1.93 | 4T-07079 / 0720436 | 4T-14125A / 1428395 |
| 4T-2776 / 2729 1.10 | 4T-3781 / 3730 1.94 | 4T-07079 / 07210X34 | 4T-14131 / 1427476 |
| 4T-2776 / 2735X 97 | 4T-3782 / 3720 2.12 | 4T-07079 / 0720436 | 4T-14131 / 1427676 |
| 4T-2777 / 2720 1.08 | 4T-3782 / 3730 2.13 | 4T-07087 / 0719629 | 4T-14131 / 1428283 |
| 4T-2777 / 2729 1.09 | 4T-3783 / 3720 2.10 | 4T-07087 / 0719629 | 4T-14131 / 1428393 |
| 4T-2777 / 2735X 97 | 4T-3783 / 3730 2.11 | 4T-07087 / 0720434 | 4T-14136A / 1427486 |
| 4T-2780 / 2720 1.14 | 4T-3784 / 3720 1.85 | 4T-07087 / 07210X32 | 4T-14136A / 1427687 |
| 4T-2780 / 2729 1.15 | 4T-3784 / 3730 1.86 | 4T-07093 / 0719627 | 4T-14136A / 1428293 |
| 4T-2780 / 2735X 1.03 | 4T-3784 / 3730 1.86 | 4T-07093 / 0720433 | 4T-14136A / 14283 1.04 |
| 4T-2788 / 2720 1.09 | 4T-3795 / 3720 1.86 | 4T-07093 / 07210X30 | 4T-14137A / 1427473 |
| 4T-2788 / 2729 1.10 | 4T-3795 / 3730 1.87 | 4T-07100 / 0719626 | 4T-14137A / 1427673 |
| 4T-2788 / 2735X 98 | 4T-3800 SERIES | 4T-07100 / 0720432 | 4T-14137A / 1428280 |
| 4T-2789 / 2720 1.05 | 4T-3872 / 3820 1.98 | 4T-07100 / 07210X29 | 4T-14137A / 1428390 |
| 4T-2789 / 2729 1.06 | 4T-3872A / 3820 1.99 | 4T-09000 SERIES | 4T-14137A / 1428390 |
| 4T-2789 / 2735X 93 | 4T-3877 / 3820 1.79 | 4T-09067 / 0919443 | 4T-14138A / 1427472 |
| 4T-2790 / 2720 1.21 | 4T-3880 / 3820 1.79 | 4T-09067 / 0919539 | 4T-14138A / 1427673 |
| 4T-2790 / 2729 1.22 | 4T-3900 SERIES | 4T-09067 / 0919644 | 4T-14138A / 1428279 |
| 4T-2790 / 2735X 1.10 | 4T-3979 / 3920 3.09 | 4T-09074 / 0919445 | 4T-14138A / 1428390 |
| 4T-2793 / 2720 1.18 | 4T-3979 / 3925 3.12 | 4T-09074 / 0919541 | 4T-15000 SERIES |
| 4T-2793 / 2729 1.19 | 4T-3982 / 3920 2.78 | 4T-09074 / 0919646 | 4T-15100 / 1524366 |
| 4T-2793 / 2735X 1.06 | 4T-3982 / 3925 2.80 | 4T-09078 / 0919445 | 4T-15100 / 1524469 |
| 4T-2794 / 2720 1.13 | 4T-3984 / 3920 2.60 | 4T-09078 / 0919541 | 4T-15100 / 1524566 |
| 4T-2794 / 2729 1.14 | 4T-3984 / 3925 2.62 | 4T-09078 / 0919541 | 4T-15100 / 1525073 |
| 4T-2794 / 2735X 1.02 | 4T-3994 / 3920 2.60 | 4T-09078 / 0919646 | 4T-15100 / 15250X73 |
| 4T-2796 / 2720 1.17 | 4T-3994 / 3925 2.61 | 4T-11000 SERIES | 4T-15101 / 1524366 |
| 4T-2796 / 2729 1.18 | 4T-4300 SERIES | 4T-11162 / 1130074 | 4T-15101 / 1524470 |
| 4T-2796 / 2735X 1.06 | 4T-4388 / 4335 2.76 | 4T-11500 SERIES | 4T-15101 / 1524567 |
| | | 4T-11590 / 1152023 | 4T-15101 / 1525073 |
| | | | 4T-15101 / 15250X73 |
| | | | 4T-15103S / 1524364 |



Bearing Series → 4T-335 SERIES

Cone Number

Cup Number

1.18

Weight (lbs)

TAPERED ROLLER BEARINGS LBS.

Table listing tapered roller bearings with columns for part numbers and weights. Includes series like 4T-15103S, 4T-15106, 4T-15113, 4T-15116, 4T-15117, 4T-15118, 4T-15119, 4T-15120, 4T-15123, 4T-15125, 4T-15126, 4T-15578, 4T-15580, 4T-15590, 4T-16150, 4T-16284, 4T-17118, 4T-17244, 4T-17580, 4T-17887, 4T-18590.

Table listing tapered roller bearings with columns for series names and weights. Includes series like 4T-18600 SERIES, 4T-18700 SERIES, 4T-19000 SERIES, 4T-21000 SERIES, 4T-22700 SERIES, 4T-23000 SERIES, 4T-24700 SERIES, 4T-25500 SERIES, 4T-25800 SERIES, 4T-25877, 4T-25878, 4T-25880, 4T-25887, 4T-26800 SERIES.

Table listing tapered roller bearings with columns for series names and weights. Includes series like 4T-26878, 4T-26881, 4T-26882, 4T-26883, 4T-26884, 4T-26886, 4T-27800 SERIES, 4T-28000 SERIES, 4T-28500 SERIES, 4T-28600 SERIES, 4T-28900 SERIES, 4T-29500 SERIES, 4T-29600 SERIES, 4T-LM29748, 4T-31500 SERIES, 4T-33000 SERIES, 4T-33225, 4T-33262, 4T-33275, 4T-33281, 4T-33287, 4T-33800 SERIES.

Table listing tapered roller bearings with columns for series names and weights. Includes series like 4T-34000 SERIES, 4T-39500 SERIES, 4T-41000 SERIES, 4T-42000 SERIES, 4T-42346, 4T-42350, 4T-42368, 4T-42375, 4T-42381, 4T-42600 SERIES, 4T-43000 SERIES, 4T-44000 SERIES, 4T-L44600 SERIES, 4T-45200 SERIES, 4T-L45400 SERIES, 4T-46000 SERIES, 4T-46162, 4T-46700 SERIES, 4T-47600 SERIES, 4T-LM48500 SERIES, 4T-48600 SERIES, 4T-49000 SERIES, 4T-49500 SERIES.



TAPERED ROLLER BEARINGS

LBS.

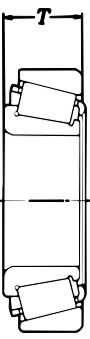
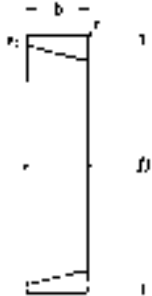
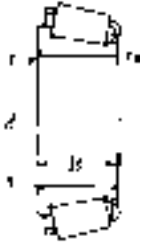
| | | | |
|--|---|---|---|
| <p>4T-52000 SERIES 4T-52387 / 526185.78 4T-52387 / 526386.70 4T-52400 / 526185.47 4T-52400 / 526386.37 4T-52401 / 526185.41 4T-52401 / 526386.32</p> <p>4T-55000C SERIES 4T-55175C / 554373.20 4T-55200C / 554372.97</p> <p>4T-56000 SERIES 4T-56425 / 566505.93</p> <p>4T-59000 SERIES 4T-59162 / 594293.85 4T-59200 / 594293.41</p> <p>4T-65300 SERIES 4T-65390 / 653204.92</p> <p>4T-LM67000 SERIES 4T-LM67048 / LM6701040</p> <p>4T-67300 SERIES 4T-67388 / 6732211.24 4T-67388 / 6732413.08</p> <p>4T-L68100 SERIES 4T-L68149 / L6811038 4T-L68149 / L6811139</p> <p>4T-L69300 SERIES 4T-JL69349 / JL6931044</p> <p>4T-72000C SERIES 4T-72188C / 724874.76 4T-72200C / 724874.63</p> <p>4T-78000C SERIES 4T-78215C / 785516.09 4T-78225C / 785515.93 4T-78238C / 785515.74</p> <p>4T-LM78300 SERIES 4T-LM78349 / LM78310A46</p> <p>4T-HM81600 SERIES 4T-HM81649 / HM8161043</p> <p>4T-M84200 SERIES 4T-M84249 / M8421071</p> <p>4T-M84500 SERIES 4T-M84548 / M8451053</p> <p>4T-M86600 SERIES 4T-M86649 / M8661074</p> <p>4T-M88000 SERIES 4T-M88048 / M8801083</p> | <p>4T-HM88500 SERIES 4T-HM88542 / HM885101.37 4T-HM88547 / HM885101.33</p> <p>4T-HM88600 SERIES 4T-HM88649 / HM886101.08 4T-HM88649 / HM886111.12</p> <p>4T-HM89400 SERIES 4T-HM89443 / HM894101.47 4T-HM89443 / HM894111.48 4T-HM89446 / HM894101.42 4T-HM89446 / HM894111.44 4T-HM89448 / HM894101.39 4T-HM89448 / HM894111.40 4T-HM89449 / HM894101.37 4T-HM89449 / HM894111.39</p> <p>4T-LM102900 SERIES 4T-LM102949 / LM10291068</p> <p>4T-LM104900 SERIES 4T-LM104949 / LM10491192 4T-JLM104948 / JLM10491093 4T-LM104949 / LM10491192 4T-JLM104948 / JLM10491093</p> <p>4T-M201000 SERIES 4T-M201047 / M20101195</p> <p>4T-M205100 SERIES 4T-JM205149 / JM2051101.66</p> <p>4T-M20700 SERIES 4T-JM207049 / JM2070101.81</p> <p>4T-H211700 SERIES 4T-JH211749 / JH211704.19</p> <p>4T-HM212000 SERIES 4T-HM212044 / HM2120104.49 4T-HM212044 / HM2120114.45 4T-HM212046 / HM2120104.32 4T-HM212046 / HM2120114.30 4T-HM212047 / HM2120104.29 4T-HM212047 / HM2120114.28 4T-HM212049 / HM2120104.11 4T-HM212049 / HM2120114.09</p> <p>4T-H212700 SERIES 4T-H212749 / 2127104.80</p> <p>4T-L217800 SERIES 4T-L217849 / L2178101.63</p> <p>4T-HM218200 SERIES 4T-HM218248 / HM2182105.62</p> <p>4T-HM220100 SERIES 4T-HM220149 / HM2201106.31</p> | <p>4T-LM300800 SERIES 4T-LM300849 / LM30081153</p> <p>4T-H307700 SERIES 4T-JH307749 / JH3077103.77</p> <p>4T-LM501300 SERIES 4T-LM501349 / LM50131074 4T-LM501349 / LM50131478</p> <p>4T-LM503300 SERIES 4T-LM503349 / LM50331066</p> <p>4T-HH506300 SERIES 4T-HH506348 / HH5063105.14</p> <p>4T-LM506800 SERIES 4T-JLM506849 / JLM5068101.23</p> <p>4T-LM508700 SERIES 4T-JLM508748 / JLM5087101.34</p> <p>4T-M511900 SERIES 4T-JM511946 / JM5119102.38</p> <p>4T-HM516400 SERIES 4T-HM516448 / HM5164104.76</p> <p>4T-M515600 SERIES 4T-JM515649 / JM5156103.81</p> <p>4T-HM515700 SERIES 4T-HM515745 / HM5157166.75</p> <p>4T-HM516800 SERIES 4T-JHM516849 / JHM5168105.07</p> <p>4T-HM518400 SERIES 4T-HM518445 / HM5184106.39</p> <p>4T-HM522600 SERIES 4T-JHM522649 / JHM52261010.20</p> <p>4T-LM603000 SERIES 4T-LM603049 / LM60301182</p> <p>4T-LM612900 SERIES 4T-JM612949 / JM6129102.49</p> <p>4T-HM617000 SERIES 4T-HM617049 / HM6170105.93</p> <p>4T-M704600 SERIES 4T-JLM704649 / JLM7046101.03</p> <p>4T-LM710900 SERIES 4T-JLM710949 / JLM7109101.64</p> <p>4T-M714200 SERIES 4T-JM714249 / JM7142102.84</p> <p>4T-H715300 SERIES 4T-H715343 / H7153117.13 4T-H715343 / H715313W7.35 4T-H715345 / H7153116.85 4T-H715345 / H715313W7.07</p> | <p>4T-M716600 SERIES 4T-JM716649 / JM7166103.06</p> <p>4T-M718100 SERIES 4T-JM718149 / JM7181104.72</p> <p>4T-M719100 SERIES 4T-JM719149 / JM7191134.83</p> <p>4T-HM720200 SERIES 4T-JHM720249 / JHM7202106.70</p> <p>4T-M736100 SERIES 4T-JM736149 / JM73611014.90</p> <p>4T-LM739700 SERIES 4T-LM739749 / LM7397101.17</p> <p>4T-HM801300 SERIES 4T-HM801346 / HM8013101.70</p> <p>4T-M802000 SERIES 4T-M802048 / M8020111.42</p> <p>4T-HM803100 SERIES 4T-HM803146 / HM8031101.98 4T-HM803149 / HM8031101.87</p> <p>4T-M804000 SERIES 4T-M804049 / M8040101.45</p> <p>4T-HM804800 SERIES 4T-HM804846 / HM8048102.16 4T-HM804848 / HM8048102.13</p> <p>4T-LM806600 SERIES 4T-LM806649 / LM80661096</p> <p>4T-HM807000 SERIES 4T-HM807040 / HM8070103.57 4T-HM807044 / HM8070103.35 4T-HM807046 / HM8070103.29 4T-HM807049 / HM8070103.11</p> <p>4T-LM813000 SERIES 4T-JLM813049 / JLM8130101.96</p> <p>4T-HM813800 SERIES 4T-HM813840 / HM8138105.16 4T-HM813841 / HM8138104.87</p> <p>4T-M822000 SERIES 4T-JM822049 / JM8220105.56</p> <p>4T-HM903200 SERIES 4T-HM903249 / HM9032102.21 4T-HM903249A / HM9032102.20</p> |
|--|---|---|---|



Units: INCHES
Millimeters

TAPERED ROLLER BEARINGS

| Bearing No. | Bore <i>d</i> | O.D. <i>D</i> | Overall Width <i>T</i> | Cone Width <i>B</i> | Cup Width <i>b</i> | Fillet Radii | | Basic Load Ratings (lbs) | |
|-------------|------------------|------------------|---------------------------|------------------------|-----------------------|--------------|----------------------|--------------------------|--------------------------------|
| | | | | | | <i>r</i> | <i>r₁</i> | Dynamic <i>C</i> | Static <i>C₀</i> |
| 4T-30208 | 1.5748 40 | 3.1496 80 | .7776 19.75 | .7087 18 | .6299 16 | .039 1.0 | .039 1.0 | 13,800 | 15,100 |
| 4T-30209 | 1.7717 45 | 3.3465 85 | .8169 20.75 | .7480 19 | .6299 16 | .039 1.0 | .039 1.0 | 15,200 | 17,600 |
| 4T-30210 | 1.9685 50 | 3.5433 90 | .8563 21.75 | .7874 20 | .6693 17 | .039 1.0 | .039 1.0 | 17,400 | 20,900 |
| 4T-30211 | 2.1654 55 | 3.9370 100 | .8957 22.75 | .8268 21 | .7087 18 | .059 1.5 | .039 1.0 | 20,900 | 24,900 |
| 4T-30212 | 2.3622 60 | 4.3307 110 | .9350 23.75 | .8661 22 | .7480 19 | .059 1.5 | .039 1.0 | 23,500 | 28,000 |
| 4T-30213 | 2.5591 65 | 4.7244 120 | .9744 24.75 | .9055 23 | .7874 20 | .059 1.5 | .039 1.0 | 27,700 | 33,000 |
| 4T-30214 | 2.7559 70 | 4.9213 125 | 1.0335 26.25 | .9449 24 | .8268 21 | .059 1.5 | .039 1.0 | 29,500 | 36,500 |
| 4T-30215 | 2.9528 75 | 5.1181 130 | 1.0728 27.25 | .9843 25 | .8661 22 | .059 1.5 | .059 1.0 | 31,000 | 39,500 |
| 30216U | 3.1496 80 | 5.5118 140 | 1.1122 28.25 | 1.0236 26 | .8661 22 | .079 2.0 | .059 1.5 | 36,000 | 45,000 |
| 30217U | 3.3465 85 | 5.9055 150 | 1.2008 30.5 | 1.1024 28 | .9449 24 | .079 2.0 | .059 1.5 | 41,000 | 52,000 |
| 30218U | 3.5433 90 | 6.2992 160 | 1.2795 32.5 | 1.1811 30 | 1.0236 26 | .079 2.0 | .059 1.5 | 46,500 | 60,000 |
| 30219U | 3.7402 95 | 6.6929 170 | 1.3583 34.5 | 1.2598 32 | 1.0630 27 | .098 2.5 | .079 2.0 | 51,000 | 65,000 |
| 30220U | 3.9370 100 | 7.0866 180 | 1.4567 37 | 1.3386 34 | 1.1417 29 | .098 2.5 | .079 2.0 | 58,000 | 75,500 |
| 30221U | 4.1339 105 | 7.4803 190 | 1.5354 39 | 1.4173 36 | 1.1811 30 | .098 2.5 | .079 2.0 | 64,500 | 85,000 |
| 30222U | 4.3307 110 | 7.8740 200 | 1.6142 41 | 1.4961 38 | 1.2598 32 | .098 2.5 | .079 2.0 | 72,500 | 97,500 |
| 30224U | 4.7244 120 | 8.4646 215 | 1.7126 43.5 | 1.5748 40 | 1.3386 34 | .098 2.5 | .079 2.0 | 78,000 | 106,000 |
| 30226U | 5.1181 130 | 9.0551 230 | 1.7224 43.75 | 1.5748 40 | 1.3386 34 | .118 3.0 | .098 2.5 | 84,000 | 113,000 |
| 30228* | 5.5118 140 | 9.8425 250 | 1.8012 45.75 | 1.6535 42 | 1.4173 36 | .098 2.5 | .098 2.5 | 84,000 | 109,000 |
| 30230U | 5.9055 150 | 10.6299 270 | 1.9291 49 | 1.7717 45 | 1.4961 38 | .118 3.0 | .098 2.5 | 101,000 | 136,000 |
| 30232U | 6.2992 160 | 11.4173 290 | 2.0472 52 | 1.8898 48 | 1.5748 40 | .118 3.0 | .098 2.5 | 118,000 | 162,000 |
| 30234U | 6.6929 170 | 12.2047 310 | 2.2441 57 | 2.0472 52 | 1.6929 43 | .157 4.0 | .118 3.0 | 137,700 | 190,000 |
| 30236* | 7.0866 180 | 12.5984 320 | 2.2441 57 | 2.0472 52 | 1.6929 43 | .118 3.0 | .118 3.0 | 126,000 | 162,000 |
| 30238U | 7.4803 190 | 13.3858 340 | 2.3622 60 | 2.1654 55 | 1.8110 46 | .157 4.0 | .118 3.0 | 161,000 | 226,000 |
| 30240* | 7.8740 200 | 14.1732 360 | 2.5197 64 | 2.2835 58 | 1.8898 48 | .118 3.0 | .118 3.0 | 152,000 | 223,000 |
| 4T-30306 | 1.1811 30 | 2.8346 72 | .8169 20.75 | .7480 19 | .6299 16 | .039 1.0 | .039 1.0 | 13,500 | 13,700 |
| 4T-30307 | 1.3780 35 | 3.1496 80 | .8957 22.75 | .8268 21 | .7087 18 | .059 1.5 | .039 1.0 | 16,800 | 17,400 |
| 4T-30307D | 1.3780 35 | 3.1496 80 | .8957 22.75 | .8268 21 | .5906 15 | .059 1.5 | .039 1.0 | 14,300 | 15,700 |
| 4T-30308 | 1.5748 40 | 3.5433 90 | .9941 25.25 | .9055 23 | .7874 20 | .059 1.5 | .039 1.0 | 20,600 | 22,900 |
| 4T-30308D | 1.5748 40 | 3.5433 90 | .9941 25.25 | .9055 23 | .6693 17 | .059 1.5 | .039 1.0 | 17,300 | 19,200 |
| 4T-30309 | 1.7717 45 | 3.9370 100 | 1.0728 27.25 | .9843 25 | .8661 22 | .059 1.5 | .039 1.0 | 25,000 | 28,300 |
| 4T-30309D | 1.7717 45 | 3.9370 100 | 1.0728 27.25 | .9843 25 | .7087 18 | .059 1.5 | .039 1.0 | 21,600 | 24,500 |
| 4T-30310 | 1.9685 50 | 4.3307 110 | 1.1516 29.25 | 1.0630 27 | .9055 23 | .079 2.0 | .059 1.5 | 29,800 | 34,000 |
| 4T-30310D | 1.9685 50 | 4.3307 110 | 1.1516 29.25 | 1.0630 27 | .7480 19 | .079 2.0 | .059 1.5 | 25,500 | 29,300 |
| 4T-30311 | 2.1654 55 | 4.7244 120 | 1.2402 31.5 | 1.1417 29 | .9843 25 | .079 2.0 | .059 1.5 | 35,000 | 40,500 |
| 4T-30311D | 2.1654 55 | 4.7244 120 | 1.2402 31.5 | 1.1417 29 | .8268 21 | .079 2.0 | .059 1.5 | 29,700 | 34,500 |
| 4T-30312D | 2.3622 60 | 5.1181 130 | 1.3189 33.5 | 1.2205 31 | .8661 22 | .098 2.5 | .079 2.0 | 34,000 | 39,500 |
| 30312U | 2.3622 60 | 5.1181 130 | 1.3189 33.5 | 1.2205 31 | 1.0236 26 | .098 2.5 | .079 2.0 | 40,500 | 47,000 |
| 4T-30313D | 2.5591 65 | 5.5118 140 | 1.4173 36 | 1.2992 33 | .9055 23 | .098 2.5 | .079 2.0 | 39,000 | 46,000 |



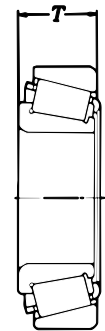
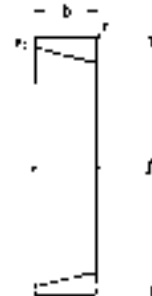
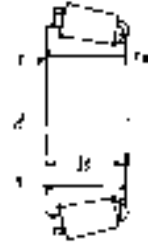
* These bearings do not adopt subunit size.

TAPERED ROLLER BEARINGS

Units: INCHES
Millimeters



| Bearing No. | Bore | | O.D. | | Overall Width <i>T</i> | Cone Width <i>B</i> | Cup Width <i>b</i> | Fillet Radii | | Basic Load Ratings (lbs) | |
|-------------|------------|----------|----------|----------|---------------------------|------------------------|-----------------------|--------------|----------------------|--------------------------|--------------------------------|
| | <i>d</i> | <i>D</i> | <i>T</i> | <i>B</i> | | | | <i>r</i> | <i>r_i</i> | Dynamic <i>C</i> | Static <i>C₀</i> |
| 30313U | 2.5591 | 5.5118 | 1.4173 | 1.2992 | 1.1024 | .098 | .079 | 45,500 | 53,500 | | |
| 4T-30314D | 65 140 | 2.7559 | 5.9055 | 1.4961 | 1.3780 | .9843 | .098 | 43,500 | 51,500 | | |
| | 70 150 | 2.7559 | 5.9055 | 1.4961 | 1.3780 | .9843 | .098 | 43,500 | 51,500 | | |
| 30314U | 2.7559 | 5.9055 | 1.4961 | 1.3780 | 1.1811 | .098 | .079 | 51,500 | 61,000 | | |
| 30315DU | 70 150 | 2.9528 | 6.2992 | 1.5748 | 1.4567 | 1.0236 | .098 | 48,500 | 57,500 | | |
| | 75 160 | 2.9528 | 6.2992 | 1.5748 | 1.4567 | 1.0236 | .098 | 48,500 | 57,500 | | |
| 30315U | 2.9528 | 6.2992 | 1.5748 | 1.4567 | 1.2205 | .098 | .079 | 57,500 | 68,000 | | |
| 30316DU | 75 160 | 3.1496 | 6.6929 | 1.6732 | 1.5354 | 1.0630 | .098 | 53,000 | 63,500 | | |
| | 80 170 | 3.1496 | 6.6929 | 1.6732 | 1.5354 | 1.0630 | .098 | 53,000 | 63,500 | | |
| 30316U | 3.1496 | 6.6929 | 1.6732 | 1.5354 | 1.2992 | .098 | .079 | 65,500 | 79,000 | | |
| 30317DU | 80 170 | 3.3465 | 7.0866 | 1.7520 | 1.6142 | 1.1024 | .118 | 55,500 | 66,000 | | |
| | 85 180 | 3.3465 | 7.0866 | 1.7520 | 1.6142 | 1.1024 | .118 | 55,500 | 66,000 | | |
| 30317U | 3.3465 | 7.0866 | 1.7520 | 1.6142 | 1.3386 | .118 | .098 | 68,500 | 81,500 | | |
| 30318DU | 85 180 | 3.5433 | 7.4803 | 1.8307 | 1.6929 | 1.1811 | .118 | 61,000 | 72,500 | | |
| | 90 190 | 3.5433 | 7.4803 | 1.8307 | 1.6929 | 1.1811 | .118 | 61,000 | 72,500 | | |
| 30318U | 3.5433 | 7.4803 | 1.8307 | 1.6929 | 1.4173 | .118 | .098 | 76,000 | 91,500 | | |
| 30319* | 90 190 | 3.7402 | 7.8740 | 1.9488 | 1.7717 | 1.4961 | .098 | 71,000 | 82,500 | | |
| | 95 200 | 3.7402 | 7.8740 | 1.9488 | 1.7717 | 1.4961 | .098 | 71,000 | 82,500 | | |
| 30319DU | 3.7402 | 7.8740 | 1.9488 | 1.7717 | 1.2598 | .118 | .098 | 66,500 | 80,000 | | |
| 30320* | 95 200 | 3.9370 | 8.4646 | 2.0276 | 1.8504 | 1.5354 | .098 | 75,000 | 86,000 | | |
| | 100 215 | 3.9370 | 8.4646 | 2.0276 | 1.8504 | 1.5354 | .098 | 75,000 | 86,000 | | |
| 30321* | 4.1339 | 8.8583 | 2.1063 | 1.9291 | 1.6142 | .098 | .098 | 82,000 | 94,500 | | |
| 30322* | 105 225 | 4.3307 | 9.4488 | 2.1457 | 1.9685 | 1.6535 | .098 | 89,500 | 104,000 | | |
| | 110 240 | 4.3307 | 9.4488 | 2.1457 | 1.9685 | 1.6535 | .098 | 89,500 | 104,000 | | |
| 30324* | 4.7244 | 10.2362 | 2.3425 | 2.1654 | 1.8110 | .098 | .098 | 105,000 | 123,000 | | |
| 30326* | 120 260 | 5.1181 | 11.0236 | 2.5098 | 2.2835 | 1.9291 | .118 | 118,000 | 140,000 | | |
| | 130 280 | 5.1181 | 11.0236 | 2.5098 | 2.2835 | 1.9291 | .118 | 118,000 | 140,000 | | |
| 30328* | 5.5118 | 11.8110 | 2.6673 | 2.4409 | 2.0866 | .118 | .118 | 144,000 | 176,000 | | |
| 30330* | 140 300 | 5.9055 | 12.5984 | 2.8346 | 2.5591 | 2.1654 | .118 | 153,000 | 197,000 | | |
| | 150 320 | 5.9055 | 12.5984 | 2.8346 | 2.5591 | 2.1654 | .118 | 153,000 | 197,000 | | |
| 30332* | 6.2992 | 13.3858 | 2.9528 | 2.6772 | 2.2835 | .118 | .118 | 170,000 | 219,000 | | |
| 30334* | 160 340 | 6.6929 | 14.1732 | 3.1496 | 2.8346 | 2.4409 | .118 | 190,000 | 248,000 | | |
| | 170 360 | 6.6929 | 14.1732 | 3.1496 | 2.8346 | 2.4409 | .118 | 190,000 | 248,000 | | |
| 31320XU | 3.9370 | 8.4646 | 2.2244 | 2.0079 | 1.3780 | .118 | .098 | 79,500 | 97,500 | | |
| 31321XU | 100 215 | 4.1339 | 8.8583 | 2.2835 | 2.0866 | 1.4173 | .118 | 85,500 | 105,000 | | |
| | 105 225 | 4.1339 | 8.8583 | 2.2835 | 2.0866 | 1.4173 | .118 | 85,500 | 105,000 | | |
| 31322XU | 4.3307 | 9.4488 | 2.4803 | 2.2441 | 1.4961 | .118 | .098 | 97,000 | 120,000 | | |
| 31324XU | 110 240 | 4.7244 | 10.2362 | 2.6772 | 2.4409 | 1.6535 | .118 | 116,000 | 147,000 | | |
| | 120 260 | 4.7244 | 10.2362 | 2.6772 | 2.4409 | 1.6535 | .118 | 116,000 | 147,000 | | |
| 31326XU | 5.1181 | 11.0236 | 2.8346 | 2.5984 | 1.7323 | .157 | .118 | 135,000 | 176,000 | | |
| 31328XU | 130 280 | 5.5118 | 11.8110 | 3.0315 | 2.7559 | 1.8504 | .157 | 154,000 | 204,000 | | |
| | 140 300 | 5.5118 | 11.8110 | 3.0315 | 2.7559 | 1.8504 | .157 | 154,000 | 204,000 | | |
| 31330XU | 5.9055 | 12.5984 | 3.2283 | 2.9528 | 1.9685 | .157 | .118 | 175,000 | 232,000 | | |
| 32016XU | 150 320 | 3.1496 | 4.9213 | 1.1417 | 1.1417 | .8661 | .039 | 31,500 | 48,500 | | |
| | 80 125 | 3.3465 | 5.1181 | 1.1417 | 1.1417 | .8661 | .039 | 32,000 | 50,500 | | |
| 32017XU | 3.3465 | 5.1181 | 1.1417 | 1.1417 | .8661 | .039 | .039 | 32,000 | 50,500 | | |
| 32018XU | 85 130 | 3.5433 | 5.5118 | 1.2598 | 1.2598 | .9449 | .059 | 38,000 | 61,000 | | |
| | 90 140 | 3.5433 | 5.5118 | 1.2598 | 1.2598 | .9449 | .059 | 38,000 | 61,000 | | |
| 32019XU | 3.7402 | 5.7087 | 1.2598 | 1.2598 | .9449 | .059 | .039 | 38,500 | 63,000 | | |
| 32020XU | 95 145 | 3.9370 | 5.9055 | 1.2598 | 1.2598 | .9449 | .059 | 38,000 | 63,000 | | |
| | 100 150 | 3.9370 | 5.9055 | 1.2598 | 1.2598 | .9449 | .059 | 38,000 | 63,000 | | |
| 32021XU | 4.1339 | 6.2992 | 1.3780 | 1.3780 | 1.0236 | .079 | .059 | 45,000 | 75,000 | | |
| 32022XU | 105 160 | 4.3307 | 6.6929 | 1.4961 | 1.4961 | 1.1417 | .079 | 53,000 | 87,500 | | |
| | 110 170 | 4.3307 | 6.6929 | 1.4961 | 1.4961 | 1.1417 | .079 | 53,000 | 87,500 | | |
| 32024XU | 4.7244 | 7.0866 | 1.4961 | 1.4961 | 1.1417 | .079 | .059 | 55,000 | 94,500 | | |
| 32026XU | 120 180 | 5.1181 | 7.8740 | 1.7717 | 1.7717 | 1.3386 | .079 | 71,500 | 122,000 | | |
| | 130 200 | 5.1181 | 7.8740 | 1.7717 | 1.7717 | 1.3386 | .079 | 71,500 | 122,000 | | |



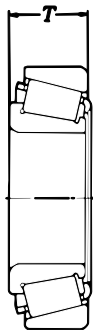
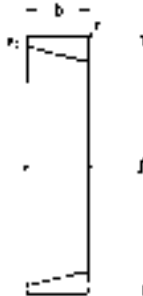
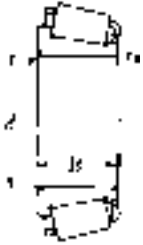
* These bearings do not adopt subunit size.



Units: INCHES
Millimeters

TAPERED ROLLER BEARINGS

| Bearing No. | Bore | | O.D. | | Overall Width | | Cone Width | | Cup Width | | Fillet Radii | | Basic Load Ratings (lbs) | |
|-------------|----------------|----------------|-----------------|---------------|---------------|-------------|----------------------|------------------|-----------------------------|--|--------------|--|--------------------------|--|
| | <i>d</i> | <i>D</i> | <i>T</i> | <i>B</i> | <i>b</i> | <i>r</i> | <i>r₁</i> | Dynamic <i>C</i> | Static <i>C₀</i> | | | | | |
| 32028XU | 5.5118 140 | 8.2677 210 | 1.7717 45 | 1.7717 45 | 1.3386 34 | .079 2.0 | .059 1.5 | 74,500 | 131,000 | | | | | |
| 32030XU | 5.9055 150 | 8.8583 225 | 1.8898 48 | 1.8898 48 | 1.4173 36 | .098 2.5 | .079 2.0 | 83,000 | 147,000 | | | | | |
| 32032XU | 6.2992 160 | 9.4488 240 | 2.0079 51 | 2.0079 51 | 1.4961 38 | .098 2.5 | .079 2.0 | 98,000 | 178,000 | | | | | |
| 32034XU | 6.6929 170 | 10.2362 260 | 2.2441 57 | 2.2441 57 | 1.6929 43 | .098 2.5 | .079 2.0 | 112,000 | 201,000 | | | | | |
| 32036XU | 7.0866 180 | 11.0236 280 | 2.5197 64 | 2.5197 64 | 1.8898 48 | .098 2.5 | .079 2.0 | 145,000 | 262,000 | | | | | |
| 32038XU | 7.4803 190 | 11.4173 290 | 2.5197 64 | 2.5197 64 | 1.8898 48 | .098 2.5 | .079 2.0 | 148,000 | 272,000 | | | | | |
| 32040XU | 7.8740 200 | 12.2047 310 | 2.7559 70 | 2.7559 70 | 2.0866 53 | .098 2.5 | .079 2.0 | 180,000 | 330,000 | | | | | |
| 32044XU | 8.6614 220 | 13.3858 340 | 2.9921 76 | 2.9921 76 | 2.2441 57 | .118 3.0 | .098 2.5 | 207,000 | 380,000 | | | | | |
| 32048XU | 9.4488 240 | 14.1732 360 | 2.9921 76 | 2.9921 76 | 2.2441 57 | .118 3.0 | .098 2.5 | 209,000 | 395,000 | | | | | |
| 32052XU | 10.2362 260 | 15.7480 400 | 3.4252 87 | 3.4252 87 | 2.5591 65 | .157 4.0 | .118 3.0 | 271,000 | 510,000 | | | | | |
| 32056XU | 11.0236 280 | 16.5354 420 | 3.4252 87 | 3.4252 87 | 2.5591 65 | .157 4.0 | .118 3.0 | 275,000 | 530,000 | | | | | |
| 32060XU | 11.8110 300 | 18.1102 460 | 3.9370 100 | 3.9370 100 | 2.9134 74 | .157 4.0 | .118 3.0 | 335,000 | 635,000 | | | | | |
| 32064XU | 12.5984 320 | 18.8976 480 | 3.9370 100 | 3.9370 100 | 2.9134 74 | .157 4.0 | .118 3.0 | 340,000 | 660,000 | | | | | |
| 4T-32203R* | .6693 17 | 1.5748 40 | .6791 17.25 | .6299 16 | .5512 14 | .024 .6 | .024 .6 | 5,900 | 6,350 | | | | | |
| 4T-32205R* | .9843 25 | 2.0472 52 | .7579 19.25 | .7087 18 | .5906 15 | .024 .6 | .024 .6 | 8,550 | 9,650 | | | | | |
| 4T-32208 | 1.5748 40 | 3.1496 80 | .9744 24.75 | .9055 23 | .7480 19 | .039 1.0 | .039 1.0 | 17,800 | 21,000 | | | | | |
| 4T-32209 | 1.7717 45 | 3.3465 85 | .9744 24.75 | .9055 23 | .7480 19 | .039 1.0 | .039 1.0 | 18,400 | 22,500 | | | | | |
| 4T-32210 | 1.9685 50 | 3.5433 90 | .9744 24.75 | .9055 23 | .7480 19 | .039 1.0 | .039 1.0 | 19,700 | 24,500 | | | | | |
| 4T-32211 | 2.1654 55 | 3.9370 100 | 1.0531 26.75 | .9843 25 | .8268 21 | .059 1.5 | .039 1.0 | 24,300 | 30,000 | | | | | |
| 32212U | 2.3622 60 | 4.3307 110 | 1.1713 29.75 | 1.1024 28 | .9449 24 | .059 1.5 | .039 1.0 | 29,200 | 37,000 | | | | | |
| 32213U | 2.5591 65 | 4.7244 120 | 1.2894 32.75 | 1.2205 31 | 1.0630 27 | .059 1.5 | .039 1.0 | 35,500 | 46,000 | | | | | |
| 32214U | 2.7559 70 | 4.9213 125 | 1.3091 33.25 | 1.2205 31 | 1.0630 27 | .059 1.5 | .039 1.0 | 37,500 | 49,500 | | | | | |
| 32215U | 2.9528 75 | 5.1181 130 | 1.3091 33.25 | 1.2205 31 | 1.0630 27 | .059 1.5 | .039 1.0 | 37,500 | 50,500 | | | | | |
| 32216U | 3.1496 80 | 5.5118 140 | 1.3878 35.25 | 1.2992 33 | 1.1024 28 | .079 2.0 | .059 1.5 | 44,500 | 59,500 | | | | | |
| 32217U | 3.3465 85 | 5.9055 150 | 1.5157 38.5 | 1.4173 36 | 1.1811 30 | .079 2.0 | .059 1.5 | 50,500 | 67,500 | | | | | |
| 32218U | 3.5433 90 | 6.2992 160 | 1.6732 42.5 | 1.5748 40 | 1.3386 34 | .079 2.0 | .059 1.5 | 59,000 | 81,000 | | | | | |
| 32219U | 3.7402 95 | 6.6929 170 | 1.7913 45.5 | 1.6929 43 | 1.4567 37 | .098 2.5 | .079 2.0 | 67,500 | 93,500 | | | | | |
| 32220U | 3.9370 100 | 7.0866 180 | 1.9291 49 | 1.8110 46 | 1.5354 39 | .098 2.5 | .079 2.0 | 74,500 | 104,000 | | | | | |
| 32221U | 4.1339 105 | 7.4803 190 | 2.0866 53 | 1.9685 50 | 1.6929 43 | .098 2.5 | .079 2.0 | 85,000 | 122,000 | | | | | |
| 32222U | 4.3307 110 | 7.8740 200 | 2.2047 56 | 2.0866 53 | 1.8110 46 | .098 2.5 | .079 2.0 | 94,500 | 136,000 | | | | | |
| 32224U | 4.7244 120 | 8.4646 215 | 2.4213 61.5 | 2.2835 58 | 1.9685 50 | .098 2.5 | .079 2.0 | 104,000 | 153,000 | | | | | |
| 32226U | 5.1181 130 | 9.0551 230 | 2.6673 67.75 | 2.5197 64 | 2.1260 54 | .118 3.0 | .098 2.5 | 119,000 | 183,000 | | | | | |
| 32228U | 5.5118 140 | 9.8425 250 | 2.8248 71.75 | 2.6772 68 | 2.2835 58 | .118 3.0 | .098 2.5 | 137,000 | 207,000 | | | | | |
| 32230U | 5.9055 150 | 10.6299 270 | 3.0315 77 | 2.8740 73 | 2.3622 60 | .118 3.0 | .098 2.5 | 157,000 | 240,000 | | | | | |
| 32232U | 6.2992 160 | 11.4173 290 | 3.3071 84 | 3.1496 80 | 2.6378 67 | .118 3.0 | .098 2.5 | 200,000 | 320,000 | | | | | |
| 32234U | 6.6929 170 | 12.2047 310 | 3.5827 91 | 3.3858 86 | 2.7953 71 | .157 4.0 | .118 3.0 | 224,000 | 360,000 | | | | | |
| 32236U | 7.0866 180 | 12.5984 320 | 3.5827 91 | 3.3858 86 | 2.7953 71 | .157 4.0 | .118 3.0 | 231,000 | 380,000 | | | | | |
| 32238* | 7.4803 190 | 13.3858 340 | 3.8189 97 | 3.6220 92 | 2.9528 75 | .118 3.0 | .118 3.0 | 225,000 | 375,000 | | | | | |



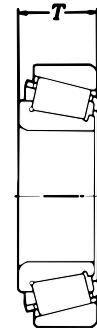
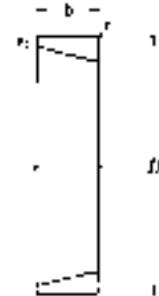
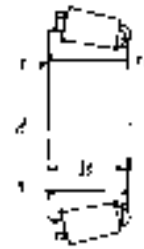
* These bearings do not adopt subunit size.

TAPERED ROLLER BEARINGS

Units: INCHES
Millimeters



| Bearing No. | Bore | O.D. | Overall Width | Cone Width | Cup Width | Fillet Radii | | Basic Load Ratings (lbs) | |
|-------------|---------------|----------------|-----------------|--------------|--------------|--------------|----------------------|--------------------------|-----------------------------|
| | <i>d</i> | <i>D</i> | <i>T</i> | <i>B</i> | <i>b</i> | <i>r</i> | <i>r₁</i> | Dynamic <i>C</i> | Static <i>C₀</i> |
| 32240* | 7.8740 200 | 14.1732 360 | 4.0945 104 | 3.8583 98 | 3.2283 82 | .118 3.0 | .118 3.0 | 259,000 | 440,000 |
| 4T-32306 | 1.1811 30 | 2.8346 72 | 1.1319 28.75 | 1.0630 27 | .9055 23 | .039 1.0 | .039 1.0 | 18,200 | 20,200 |
| 4T-32307 | 1.3780 35 | 3.1496 80 | 1.2894 32.75 | 1.2205 31 | .9843 25 | .059 1.5 | .059 1.0 | 22,800 | 25,800 |
| 4T-32308 | 1.5748 40 | 3.5433 90 | 1.3878 35.25 | 1.2992 33 | 1.0630 27 | .059 1.5 | .039 1.0 | 27,500 | 33,500 |
| 4T-32308C | 1.5748 40 | 3.5433 90 | 1.3878 35.25 | 1.2992 33 | 1.0630 27 | .059 1.5 | .039 1.0 | 24,800 | 31,500 |
| 4T-32309 | 1.7717 45 | 3.9370 100 | 1.5059 38.25 | 1.4173 36 | 1.1811 30 | .059 1.5 | .039 1.0 | 34,500 | 43,000 |
| 4T-32310 | 1.9685 50 | 4.3307 110 | 1.6634 42.25 | 1.5748 40 | 1.2992 33 | .079 2.0 | .059 1.5 | 41,500 | 52,000 |
| 4T-32311 | 2.1654 55 | 4.7244 120 | 1.7913 45.5 | 1.6929 43 | 1.3780 35 | .079 2.0 | .059 1.5 | 48,500 | 62,000 |
| 32312U | 2.3622 60 | 5.1181 130 | 1.9094 48.5 | 1.8810 46 | 1.4567 37 | .098 2.5 | .079 2.0 | 55,000 | 70,500 |
| 32313U | 2.5591 65 | 5.5118 140 | 2.0079 51 | 1.8898 48 | 1.5354 39 | .098 2.5 | .079 2.0 | 61,500 | 79,000 |
| 32314U | 2.7559 70 | 5.9055 150 | 2.1260 54 | 2.0079 51 | 1.6535 42 | .098 2.5 | .079 2.0 | 69,500 | 90,500 |
| 32315U | 2.9528 75 | 6.2992 160 | 2.2835 58 | 2.1654 55 | 1.7717 45 | .098 2.5 | .079 2.0 | 80,000 | 105,000 |
| 32316U | 3.1496 80 | 6.6929 170 | 2.4213 61.5 | 2.2835 58 | 1.8898 48 | .098 2.5 | .079 2.0 | 89,000 | 118,000 |
| 32317U | 3.3465 85 | 7.0866 180 | 2.5000 63.5 | 2.3622 60 | 1.9291 49 | .118 3 | .098 2.5 | 90,500 | 118,000 |
| 32318U | 3.5433 90 | 7.4803 190 | 2.6575 67.5 | 2.5197 64 | 2.0866 53 | .118 3 | .098 2.5 | 101,000 | 133,000 |
| 32319U | 3.7402 95 | 7.8740 200 | 2.8150 71.5 | 2.6378 67 | 2.1654 55 | .118 3 | .098 2.5 | 113,000 | 151,000 |
| 32320U | 3.9370 100 | 8.4646 215 | 3.0512 77.5 | 2.8740 73 | 2.3622 60 | .118 3 | .098 2.5 | 128,000 | 173,000 |
| 32321U | 4.1339 105 | 8.8583 225 | 3.2087 81.5 | 3.0315 77 | 2.4803 63 | .118 3 | .098 2.5 | 138,000 | 186,000 |
| 32322* | 4.3307 110 | 9.4488 240 | 3.3268 84.5 | 3.1496 80 | 2.5591 65 | .098 2.5 | .098 2.5 | 140,000 | 186,000 |
| 32324U | 4.7244 120 | 10.2362 260 | 3.5630 90.5 | 3.3858 86 | 2.7165 69 | .118 3 | .098 2.5 | 183,000 | 255,000 |
| 32910XU | 1.9685 50 | 2.8346 72 | .5906 15 | .5906 15 | .4724 12 | .024 .6 | .024 .6 | 8,000 | 12,800 |
| 32911XU | 2.1654 55 | 3.1496 80 | .6693 17 | .6693 17 | .5512 14 | .024 .6 | .024 .6 | 10,000 | 16,500 |
| 32912XU | 2.3622 60 | 3.3465 85 | .6693 17 | .6693 17 | .5512 14 | .024 .6 | .024 .6 | 10,300 | 17,600 |
| 32913XU | 2.5591 65 | 3.5433 90 | .6693 17 | .6693 17 | .5512 14 | .024 .6 | .024 .6 | 10,900 | 19,200 |
| 32914XU | 2.7559 70 | 3.9370 100 | .7874 20 | .7874 20 | .6299 16 | .024 .6 | .024 .6 | 15,400 | 24,700 |
| 32915XU | 2.9528 75 | 4.1339 105 | .7874 20 | .7874 20 | .6299 16 | .024 .6 | .024 .6 | 15,600 | 25,600 |
| 32916XU | 3.1496 80 | 4.3307 110 | .7874 20 | .7874 20 | .6299 16 | .024 .6 | .024 .6 | 16,200 | 27,300 |
| 32917XU | 3.3465 85 | 4.7244 120 | .9055 23 | .9055 23 | .7087 18 | .039 1.0 | .039 1.0 | 21,100 | 35,500 |
| 32918XU | 3.5433 90 | 4.9213 125 | .9055 23 | .9055 23 | .7087 18 | .039 1.0 | .039 1.0 | 21,900 | 37,500 |
| 32919XU | 3.7402 95 | 5.1181 130 | .9055 23 | .9055 23 | .7087 18 | .039 1.0 | .039 1.0 | 22,600 | 40,000 |
| 32920XU | 3.9370 100 | 5.5118 140 | .9843 25 | .9843 25 | .7874 20 | .039 1.0 | .039 1.0 | 27,200 | 46,500 |
| 32921XU | 4.1339 105 | 5.7087 145 | .9843 25 | .9843 25 | .7874 20 | .039 1.0 | .039 1.0 | 28,200 | 49,500 |
| 32922XU | 4.3307 110 | 5.9055 150 | .9843 25 | .9843 25 | .7874 20 | .039 1.0 | .039 1.0 | 28,600 | 51,000 |
| 32924XU | 4.7244 120 | 6.4961 165 | 1.1417 29 | 1.1417 29 | .9055 23 | .039 1.0 | .039 1.0 | 36,500 | 66,000 |
| 32926XU | 5.1181 130 | 7.0866 180 | 1.2598 32 | 1.2598 32 | .9843 25 | .059 1.5 | .039 1.0 | 43,500 | 79,000 |
| 32928XU | 5.5118 140 | 7.4803 190 | 1.2598 32 | 2.2598 32 | .9843 25 | .059 1.5 | .039 1.0 | 45,000 | 84,000 |
| 32930XU | 5.9055 150 | 8.2677 210 | 1.4961 38 | 1.4961 38 | 1.1811 30 | .079 2.0 | .059 1.5 | 60,000 | 110,000 |
| 32932XU | 6.2992 160 | 8.6614 220 | 1.4961 38 | 1.4961 38 | 1.1811 30 | .079 2.0 | .059 1.5 | 62,000 | 117,000 |



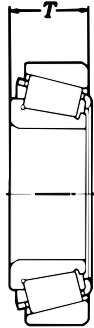
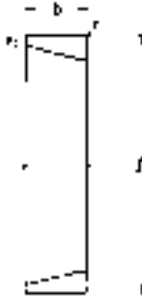
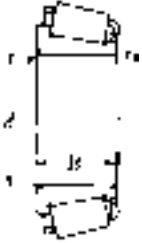
* These bearings do not adopt subunit size.



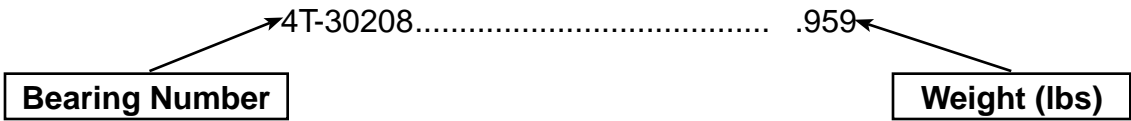
Units: INCHES
Millimeters

TAPERED ROLLER BEARINGS

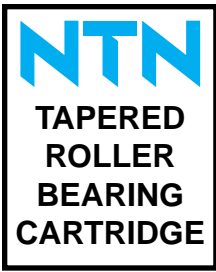
| Bearing No. | Bore | O.D. | Overall Width | Cone Width | Cup Width | Fillet Radii | | Basic Load Ratings (lbs) | |
|-------------|----------------|----------------|----------------|----------------|----------------|--------------|----------------------|--------------------------|-----------------------------|
| | <i>d</i> | <i>D</i> | <i>T</i> | <i>B</i> | <i>b</i> | <i>r</i> | <i>r₁</i> | Dynamic <i>C</i> | Static <i>C₀</i> |
| 32934XU | 6.6929 170 | 9.0551 230 | 1.4961 38 | 1.4961 38 | 1.1811 30 | .079 2.0 | .059 1.5 | 64,500 | 125,000 |
| 32936XU | 7.0866 180 | 9.8425 250 | 1.7717 45 | 1.7717 45 | 1.3386 34 | .079 2.0 | .059 1.5 | 79,000 | 158,000 |
| 32938XU | 7.4803 190 | 10.2362 260 | 1.7717 45 | 1.7717 45 | 1.3386 34 | .079 2.0 | .059 1.5 | 79,500 | 159,000 |
| 32940XU | 7.8740 200 | 11.0236 280 | 2.0079 51 | 2.0079 51 | 1.5354 39 | .098 2.5 | .079 2.0 | 108,000 | 201,000 |
| 32944XU | 8.6614 220 | 11.8110 300 | 2.0079 51 | 2.0079 51 | 1.5354 39 | .098 2.5 | .079 2.0 | 108,000 | 213,000 |
| 32948XU | 9.4488 240 | 12.5984 320 | 2.0079 51 | 2.0079 51 | 1.5354 39 | .098 2.5 | .079 2.0 | 110,000 | 226,000 |
| 32952XU | 10.2362 260 | 14.1732 360 | 2.5000 63.5 | 2.5000 63.5 | 1.8898 48 | .098 2.5 | .079 2.0 | 159,000 | 320,000 |
| 32956XU | 11.0236 280 | 14.9606 380 | 2.5000 63.5 | 2.5000 63.5 | 1.8898 48 | .098 2.5 | .079 2.0 | 163,000 | 340,000 |
| 32960XU | 11.8110 300 | 16.5354 420 | 2.9921 76 | 2.9921 76 | 2.2441 57 | .118 3.0 | .098 2.5 | 226,000 | 470,000 |
| 32964XU | 12.5984 320 | 17.3228 440 | 2.9921 76 | 2.9921 76 | 2.2441 57 | .118 3.0 | .098 2.5 | 228,000 | 485,000 |
| 32968XU | 13.3858 340 | 18.1102 460 | 2.9921 76 | 2.9921 76 | 2.2441 57 | .118 3.0 | .098 2.5 | 235,000 | 510,000 |
| 32972XU | 14.1732 360 | 18.8976 480 | 2.9921 76 | 2.9921 76 | 2.2441 57 | .118 3.0 | .098 2.5 | 236,000 | 525,000 |
| 33016U | 3.1496 80 | 4.9213 125 | 1.4173 36 | 1.4173 36 | 1.1614 29.5 | .039 1.0 | .039 1.0 | 39,000 | 64,000 |
| 33017U | 3.3465 85 | 5.1181 130 | 1.4173 36 | 1.4173 36 | 1.1614 29.5 | .039 1.0 | .039 1.0 | 39,500 | 66,500 |
| 33018U | 3.5433 90 | 5.5118 140 | 1.5354 39 | 1.5354 39 | 1.2795 32.5 | .059 1.5 | .039 1.0 | 48,000 | 80,500 |
| 33019U | 3.7402 95 | 5.7087 145 | 1.5354 39 | 1.5354 39 | 1.2795 32.5 | .059 1.5 | .039 1.0 | 49,500 | 84,000 |
| 33020U | 3.9370 100 | 5.9055 150 | 1.5354 39 | 1.5354 39 | 1.2795 32.5 | .059 1.5 | .039 1.0 | 50,500 | 87,500 |
| 33021U | 4.1339 105 | 6.2992 160 | 1.6929 43 | 1.6929 43 | 1.3386 34 | .079 2.0 | .059 1.5 | 55,000 | 94,500 |
| 33022U | 4.3307 110 | 6.6929 170 | 1.8504 47 | 1.8504 47 | 1.4567 37 | .079 2.0 | .059 1.5 | 65,000 | 113,000 |
| 4T-33113 | 2.5591 65 | 4.3307 110 | 1.3386 34 | 1.3386 34 | 1.0433 26.5 | .039 1.0 | .039 1.0 | 32,500 | 47,500 |
| 4T-33208 | 1.5748 40 | 3.1496 80 | 1.2598 32 | 1.2598 32 | .9843 25 | .039 1.0 | .039 1.0 | 23,300 | 29,600 |
| 4T-33209 | 1.7717 45 | 3.3465 85 | 1.2598 32 | 1.2598 32 | .9843 25 | .039 1.0 | .039 1.0 | 24,100 | 31,500 |
| 4T-33210 | 1.9685 50 | 3.5433 90 | 1.2598 32 | 1.2598 32 | .9646 24.5 | .039 1.0 | .039 1.0 | 25,800 | 35,500 |
| 4T-33211 | 2.1654 55 | 3.9370 100 | 1.3780 35 | 1.3780 35 | 1.0630 27 | .059 1.5 | .039 1.0 | 31,000 | 42,000 |
| 33212U | 2.3622 60 | 4.3307 110 | 1.4961 38 | 1.4961 38 | 1.1417 29 | .059 1.5 | .039 1.0 | 37,500 | 52,500 |
| 33213U | 2.5591 65 | 4.7244 120 | 1.6142 41 | 1.6142 41 | 1.2598 32 | .059 1.5 | .039 1.0 | 44,000 | 59,500 |
| 33214U | 2.7559 70 | 4.9213 125 | 1.6142 41 | 1.6142 41 | 1.2598 32 | .059 1.5 | .039 1.0 | 45,500 | 63,500 |
| 33215U | 2.9528 75 | 5.1181 130 | 1.6142 41 | 1.6142 41 | 1.2205 31 | .059 1.5 | .039 1.0 | 46,500 | 67,000 |
| 33216U | 3.1496 80 | 5.5118 140 | 1.8110 46 | 1.8110 46 | 1.3780 35 | .079 2.0 | .059 1.5 | 56,500 | 82,500 |
| 33217U | 3.3465 85 | 5.9055 150 | 1.9291 49 | 1.9291 49 | 1.4567 37 | .079 2.0 | .059 1.5 | 64,000 | 94,500 |



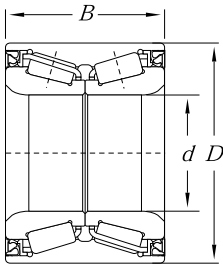
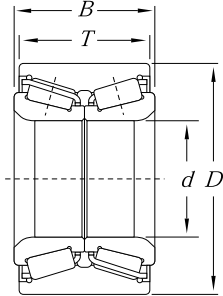
* These bearings do not adopt subunit size.



| METRIC ISO SERIES TAPERED ROLLER BEARINGS | | | LBS. |
|---|------|----------------|------|
| 4T-30208..... | .959 | 30317U..... | 11.5 |
| 4T-30209..... | 1.09 | 30318DU..... | 12.5 |
| 4T-30210..... | 1.24 | 30318U..... | 13.3 |
| 4T-30211..... | 1.63 | 30319..... | 14.5 |
| 4T-30212..... | 2.09 | 30319DU..... | 14.3 |
| 4T-30213..... | 2.60 | 30320..... | 17.0 |
| 4T-30214..... | 2.78 | 30321..... | 19.7 |
| 4T-30215..... | 3.11 | 30322..... | 23.1 |
| 30216U..... | 3.79 | 30324..... | 29.1 |
| 30217U..... | 4.72 | 30326..... | 36.8 |
| 30218U..... | 5.86 | 30328..... | 45.0 |
| 30219U..... | 6.77 | 30330..... | 54.5 |
| 30220U..... | 8.33 | 30332..... | 64.4 |
| 30221U..... | 9.68 | 30334..... | 76.7 |
| 30222U..... | 11.4 | 31320XU..... | 19.1 |
| 30224U..... | 13.7 | 31321XU..... | 21.3 |
| 30226U..... | 16.0 | 31322XU..... | 39.7 |
| 30228..... | 18.1 | 31324XU..... | 34.0 |
| 30230U..... | 24.7 | 31326XU..... | 41.9 |
| 30232U..... | 28.4 | 31328XU..... | 50.7 |
| 30234U..... | 37.5 | 31330XU..... | 61.1 |
| 30236..... | 37.9 | 32016XU..... | 2.82 |
| 30238U..... | 45.9 | 32017XU..... | 2.98 |
| 30240..... | 54.7 | 32018XU..... | 3.95 |
| 4T-30306..... | .899 | 32019XU..... | 4.03 |
| 4T-30307..... | 1.19 | 32020XU..... | 4.21 |
| 4T-30307D..... | 1.17 | 32021XU..... | 5.34 |
| 4T-30308..... | 1.70 | 32022XU..... | 6.77 |
| 4T-30308D..... | 1.63 | 32024XU..... | 7.17 |
| 4T-30309..... | 2.23 | 32026XU..... | 10.9 |
| 4T-30309D..... | 2.11 | 32028XU..... | 11.6 |
| 4T-30310..... | 2.89 | 32030XU..... | 14.0 |
| 4T-30310D..... | 2.76 | 32032XU..... | 17.2 |
| 4T-30311..... | 3.66 | 32034XU..... | 23.1 |
| 4T-30311D..... | 3.51 | 32036XU..... | 32.0 |
| 4T-30312D..... | 4.34 | 32038XU..... | 33.3 |
| 30312U..... | 4.54 | 32040XU..... | 42.5 |
| 4T-30313D..... | 5.34 | 32044XU..... | 55.1 |
| 30313U..... | 5.62 | 32048XU..... | 59.1 |
| 4T-30314D..... | 6.44 | 32052XU..... | 86.9 |
| 30314U..... | 6.75 | 32056XU..... | 92.2 |
| 30315DU..... | 7.65 | 32060XU..... | 131 |
| 30315U..... | 7.87 | 32064XU..... | 138 |
| 30316DU..... | 9.06 | 4T-32203R..... | 229 |
| 30316U..... | 9.72 | 4T-32205R..... | 399 |
| 30317DU..... | 10.7 | 4T-32208..... | 1.23 |
| | | 4T-32209..... | 1.34 |
| | | 4T-32210..... | 1.43 |
| | | 4T-32211..... | 1.93 |
| | | 32212U..... | 2.60 |
| | | 32213U..... | 3.48 |
| | | 32214U..... | 3.70 |
| | | 32215U..... | 3.84 |
| | | 32216U..... | 4.81 |
| | | 32217U..... | 6.06 |
| | | 32218U..... | 7.69 |
| | | 32219U..... | 9.48 |
| | | 32220U..... | 11.3 |
| | | 32221U..... | 13.8 |
| | | 32222U..... | 16.4 |
| | | 32224U..... | 20.0 |
| | | 32226U..... | 24.7 |
| | | 32228U..... | 31.1 |
| | | 32230U..... | 40.1 |
| | | 32232U..... | 51.8 |
| | | 32234U..... | 63.3 |
| | | 32236U..... | 67.7 |
| | | 32238..... | 73.4 |
| | | 32240..... | 96.1 |
| | | 4T-32306..... | 1.29 |
| | | 4T-32307..... | 1.74 |
| | | 4T-32308..... | 2.38 |
| | | 4T-32308C..... | 2.43 |
| | | 4T-32309..... | 3.22 |
| | | 4T-32310..... | 4.23 |
| | | 4T-32311..... | 5.38 |
| | | 32312U..... | 6.66 |
| | | 32313U..... | 8.07 |
| | | 32314U..... | 9.83 |
| | | 32315U..... | 11.8 |
| | | 32316U..... | 14.1 |
| | | 32317U..... | 15.8 |
| | | 32318U..... | 18.9 |
| | | 32319U..... | 22.3 |
| | | 32320U..... | 28.0 |
| | | 32321U..... | 32.0 |
| | | 32322..... | 37.3 |
| | | 32324U..... | 49.4 |
| | | 32910XU..... | 421 |
| | | 32911XU..... | 604 |
| | | 32912XU..... | 648 |
| | | 32913XU..... | 694 |
| | | 32914XU..... | 1.07 |
| | | 32915XU..... | 1.13 |
| | | 32916XU..... | 1.19 |
| | | 32917XU..... | 1.70 |
| | | 32918XU..... | 1.80 |
| | | 32919XU..... | 1.88 |
| | | 32920XU..... | 2.51 |
| | | 32921XU..... | 2.65 |
| | | 32922XU..... | 2.73 |
| | | 32924XU..... | 3.90 |
| | | 32926XU..... | 5.20 |
| | | 32928XU..... | 5.53 |
| | | 32930XU..... | 8.64 |
| | | 32932XU..... | 9.15 |
| | | 32934XU..... | 9.70 |
| | | 32936XU..... | 14.4 |
| | | 32938XU..... | 14.9 |
| | | 32940XU..... | 19.8 |
| | | 32944XU..... | 22.5 |
| | | 32948XU..... | 24.0 |
| | | 32952XU..... | 41.4 |
| | | 32956XU..... | 44.1 |
| | | 32960XU..... | 69.2 |
| | | 32964XU..... | 73.0 |
| | | 32968XU..... | 76.9 |
| | | 32972XU..... | 80.7 |
| | | 33016U..... | 3.53 |
| | | 33017U..... | 3.75 |
| | | 33018U..... | 4.81 |
| | | 33019U..... | 5.00 |
| | | 33020U..... | 5.22 |
| | | 33021U..... | 6.61 |
| | | 33022U..... | 8.38 |
| | | 4T-33113..... | 2.82 |
| | | 4T-33208..... | 1.60 |
| | | 4T-33209..... | 1.73 |
| | | 4T-33210..... | 1.88 |
| | | 4T-33211..... | 2.54 |
| | | 33212U..... | 3.42 |
| | | 33213U..... | 4.37 |
| | | 33214U..... | 4.63 |
| | | 33215U..... | 4.85 |
| | | 33216U..... | 6.44 |
| | | 33217U..... | 7.89 |



Units: **INCHES**
Millimeters



TAPERED ROLLER BEARINGS FOR WHEEL APPLICATIONS

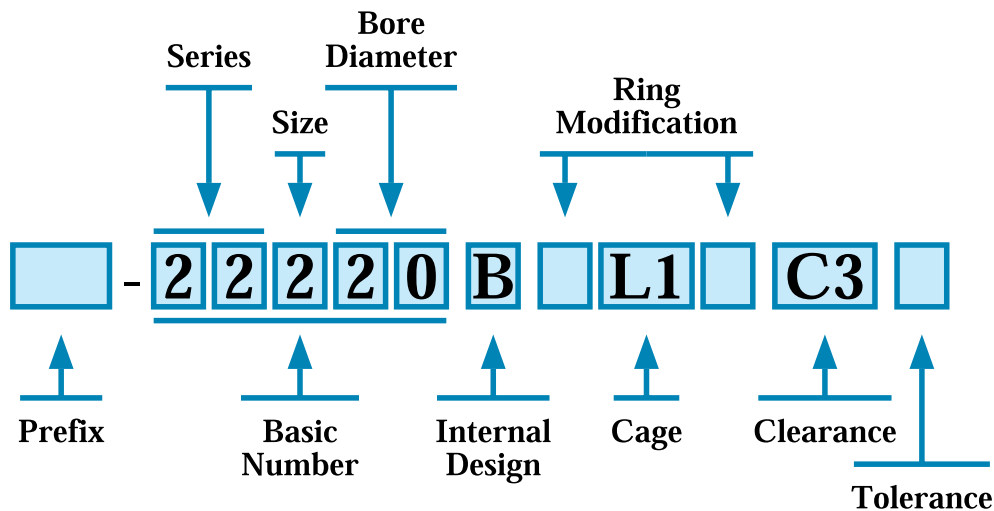
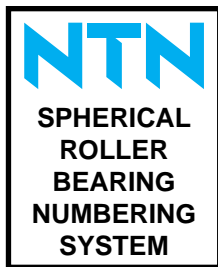
| Bearing Number | Bore | | O.D. | | Width Dimensions | | Seal | Basic Load Ratings (lbs) | | Weight (lbs) |
|----------------|------------|--------------|------------|------------|------------------|-----------------------------|---------|--------------------------|--|--------------|
| | <i>d</i> | <i>D</i> | <i>B</i> | <i>T</i> | Dynamic <i>C</i> | Static <i>C₀</i> | | | | |
| 4T-CRI-0574 | .98 25 | 2.05 52 | 1.46 37 | 1.46 37 | X | 60,500 | 76,500 | .79 | | |
| 4T-CRI-0569 | 1.06 27 | 2.05 52 | 1.73 44 | 1.69 43 | | 55,000 | 77,000 | .88 | | |
| 4T-CRI-0685 | 1.26 32 | 2.28 58 | 2.56 65 | 2.24 57 | | 63,500 | 93,000 | 1.63 | | |
| 4T-CRI-0797 | 1.34 34 | 2.67 67.8 | 1.69 43 | 1.57 40 | | 88,000 | 131,000 | 1.63 | | |
| 4T-CRI-0760 | 1.38 35 | 2.52 64 | 1.46 37 | 1.46 37 | X | 58,500 | 82,000 | 1.08 | | |
| 4T-CRI-0778 | 1.38 35 | 2.44 62 | 2.05 52 | 1.89 48 | X | 75,000 | 113,000 | 1.37 | | |
| 4T-CRI-0820 | 1.50 38 | 2.52 64 | 1.26 32 | 1.14 29 | | 60,000 | 90,500 | .86 | | |
| 4T-CRI-08A05 | 1.50 38 | 2.56 65 | 2.05 52 | 1.89 48 | | 60,000 | 89,500 | 1.43 | | |
| 4T-CRI-0849 | 1.50 38 | 2.99 76 | 1.69 43 | 1.57 40 | | 91,000 | 139,000 | 1.39 | | |
| 4T-CRI-0868 | 1.54 39 | 2.68 68 | 1.46 37 | 1.46 37 | X | 62,000 | 91,500 | 1.19 | | |
| 4T-CRI-0826 | 1.57 40 | 3.15 80 | 1.50 38 | 1.50 38 | | 95,000 | 137,000 | 1.94 | | |
| 4T-CRI-0822 | 1.65 42 | 2.83 72 | 1.50 38 | 1.50 38 | X | 75,000 | 105,000 | 1.30 | | |
| 4T-CRI-0823 | 1.65 42 | 2.83 72 | 1.50 38 | 1.38 35 | | 82,500 | 127,000 | 1.32 | | |
| 4T-CRI-0881 | 1.65 42 | 2.83 72 | 1.50 38 | 1.38 35 | | 82,500 | 127,000 | 1.32 | | |
| 4T-CRI-08A01 | 1.65 42 | 2.83 72 | 1.50 38 | 1.38 35 | | 75,000 | 105,000 | 1.28 | | |
| 4T-CRI-08A02 | 1.65 42 | 2.83 72 | 2.05 52 | 1.89 48 | | 57,000 | 80,000 | 1.70 | | |
| 4T-CRI-0993 | 1.69 43 | 2.87 73 | 1.77 45 | 1.61 41 | | 75,000 | 105,000 | 1.52 | | |
| 4T-CRI-0966 | 1.77 45 | 3.54 90 | 2.13 54 | 2.01 51 | | 154,000 | 223,000 | 3.42 | | |
| 4T-CRI-0992 | 1.81 46 | 3.03 77 | 1.77 45 | 1.61 41 | | 79,500 | 124,000 | 1.76 | | |
| 4T-CRI-0988 | 1.81 46 | 3.07 78 | 1.93 49 | 1.93 49 | X | 94,000 | 148,000 | 2.07 | | |
| 4T-CRI-0994 | 1.81 46 | 3.15 80 | 1.69 43 | 1.57 40 | | 94,000 | 148,000 | 2.01 | | |
| 4T-CRI-1069 | 1.97 50 | 3.31 84 | 2.13 54 | 2.13 54 | X | 107,000 | 173,000 | 2.38 | | |

**COMPONENT PARTS FOR
TAPERED ROLLER BEARING SETS**



| Set Numbers | Cone/Cup |
|-------------|---------------------------|
| 4T-SET 1 | 4T-LM11749/LM11710 |
| 4T-SET 2 | 4T-LM11949/LM11910 |
| 4T-SET 2L | 4T-LM11949XJXL/LM11910XL |
| 4T-SET 3 | 4T-M12649/M12610 |
| 4T-SET 4 | 4T-L44649/L44610 |
| 4T-SET 5 | 4T-LM48548/LM48510 |
| 4T-SET 5L | 4T-LM48548XJXL/LM48510XL |
| 4T-SET 6 | 4T-LM67048/LM67010 |
| 4T-SET 6L | 4T-LM67048XJXL/LM67010XL |
| 4T-SET 7 | 4T-M201047S/M201011+A * |
| 4T-SET 12 | 4T-LM12749/LM12710 |
| 4T-SET 13 | 4T-L68149/L68110 |
| 4T-SET 14 | 4T-L44643/L44610 |
| 4T-SET 15 | 4T-L45449/L45410 |
| 4T-SET 16 | 4T-LM12749/LM12711 |
| 4T-SET 17 | 4T-L68149/L68111 |
| 4T-SET 18 | 4T-JL69349/JL69310 |
| 4T-SET 19 | 4T-07100/07196 |
| 4T-SET 21 | 4T-1988/1922 |
| 4T-SET 22 | 4T-JLM506848E/JLM506810DB |
| 4T-SET 23 | 4T-LM104949E/LM104911DB |
| 4T-SET 24 | 4T-CR-0659 |
| 4T-SET 28 | 4T-CR-0679PX1 |
| 4T-SET 29 | 4T-LM67045/LM67010 |
| 4T-SET 30 | 4T-CR-0580PX1 |
| 4T-SET 31 | 4T-JL68145/JL68111Z |
| 4T-SET 32 | 4T-320/28XX1 |
| 4T-SET 33 | 4T-320/32XX1 |
| 4T-SET 34 | 4T-LM12748/LM12710 |
| 4T-SET 35 | 4T-LM501349/LM501310 |
| 4T-SET 36 | 4T-LM603049/LM603012 |
| 4T-SET 37 | 4T-LM603049/LM603011 |
| 4T-SET 38 | 4T-LM104949/LM104911 |
| 4T-SET 39 | 4T-JL26749/JL26710 |
| 4T-SET 40 | 4T-JLM104946/JLM104910Z |
| 4T-SET 42 | 4T-JLM506849A/JLM506811 |
| 4T-SET 47 | 4T-LM102949/LM102910 |

* A - Retaining Ring (TKB1001)



1. PREFIX

- TS2: Heat stabilization for up to 320° F (160° C)
- TS3: Heat stabilization for up to 390° F (200° C)
- TS4: Heat stabilization for up to 480° F (250° C)
- LH: STJ2 Material (Temp 250°C)
- MX: All components phosphate coated

2. SERIES

- 213: Standard series spherical roller bearings
- 222, 223: Standard series spherical roller bearings
- 230, 231, 232, 239: Standard series spherical roller bearings
- 240, 241: Standard series spherical roller bearings
- W: Wide series spherical roller bearing with integral seals

3. INTERNAL DESIGN

- B: One piece ribbed inner ring, asymmetrical rollers and center guided retainer
- C: Plain inner ring, center floating guide ring
- UA: Inner ring without center guide, asymmetrical rollers, and outer ring center-guided retainer (limited thrust capabilities)
- E: High capacity spherical roller bearings

4. CAGE

- No Symbol: Standard cage
- J: Pressed steel cage
- L1: Machined brass cage
- T2: Nylon cage

5. SEALS

- LL: Two integral garter seals with steel backing plates

6. RING MODIFICATION

- D1: Oil groove and holes
- K: 1:12 tapered bore

7. INTERNAL CLEARANCE

- C1: Radial clearance less than C2
- C2: Radial clearance less than normal
- No Suffix: Normal internal clearance
- C3: Radial clearance greater than normal
- C4: Radial clearance greater than C3
- C5: Radial clearance greater than C4
- CSXX: Special radial clearance; XX is mean value in 0.001 mm units

8. TOLERANCE

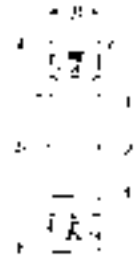
- No Symbol: Class 0 (equivalent to ABEC 1); standard
- PXn: Special tolerance, from 1 onward
- Vn: Special requirement, from 1 onward
- VS1: Special tolerance for shaker screen bearings (C3 clearance)
- VS2: Special tolerance for shaker screen bearings (C4 clearance)

SPHERICAL ROLLER BEARINGS

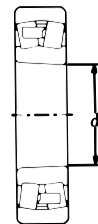
Units: **INCHES**
Millimeters



| Bearing No. | | Bore | O.D. | Width | Fillet Radius (minimum) | Basic Load Ratings (lbs) | |
|-------------|---------|---------------|---------------|--------------|-------------------------|--------------------------|-----------------------------|
| 213 | 213K | <i>d</i> | <i>D</i> | <i>B</i> | <i>r</i> | <i>Dynamic C</i> | <i>Static C_o</i> |
| 21308C | 21308CK | 1.5748 40 | 3.5433 90 | .9055 23 | .039 1.0 | 19,800 | 20,200 |
| 21309C | 21309CK | 1.7717 45 | 3.9370 100 | .9843 25 | .039 1.0 | 23,000 | 23,800 |
| 21310C | 21310CK | 1.9685 50 | 4.3307 110 | 1.0630 27 | .059 1.5 | 26,400 | 28,500 |
| 21311 | 21311K | 2.1654 55 | 4.7244 120 | 1.1417 29 | .098 2.5 | 32,500 | 36,500 |
| 21312 | 21312K | 2.3622 60 | 5.1181 130 | 1.2205 31 | .098 2.5 | 37,500 | 43,000 |
| 21313 | 21313K | 2.5591 65 | 5.5118 140 | 1.2992 33 | .098 2.5 | 43,500 | 51,000 |
| 21314 | 21314K | 2.7559 70 | 5.9055 150 | 1.3780 35 | .098 2.5 | 49,500 | 59,000 |
| 21315 | 21315K | 2.9528 75 | 6.2992 160 | 1.4567 37 | .098 2.5 | 53,500 | 64,500 |
| 21316 | 21316K | 3.1496 80 | 6.6929 170 | 1.5354 39 | .098 2.5 | 58,500 | 71,000 |
| 21317 | 21317K | 3.3465 85 | 7.0866 180 | 1.6142 41 | .117 3.0 | 65,000 | 80,000 |
| 21318 | 21318K | 3.5433 90 | 7.4803 190 | 1.6929 43 | .117 3.0 | 72,000 | 90,000 |
| 21319 | 21319K | 3.7402 95 | 7.8740 200 | 1.7717 45 | .117 3.0 | 75,500 | 94,500 |
| 21320 | 21320K | 3.9370 100 | 8.4646 215 | 1.8504 47 | .117 3.0 | 83,000 | 105,000 |



Cylindrical Bore
213



Tapered Bore
213K
Taper 1:12

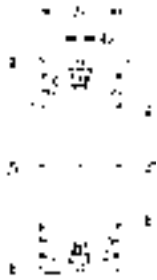
Note: The *d* dimension for the tapered bore is measured from the side of the bearing with the smallest bore dimension.



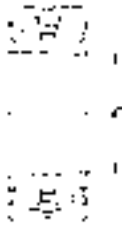
Units: INCHES
Millimeters

In this series, machined brass cages are also available. When placing an order for them, put the suffix L1 on the bearing number.

Example: 22211EL1



Cylindrical Bore
232



Tapered Bore
232K
Taper 1:12

| SPHERICAL ROLLER BEARINGS | | | | | | | | |
|---------------------------|-----------|----------------|----------------|---------------|-------------------------|------------------|--------------------------|-----------------------------|
| Bearing No. | | Bore | O.D. | Width | Fillet Radius (minimum) | Oil Groove Width | Basic Load Ratings (lbs) | |
| 222 | 222K | <i>d</i> | <i>D</i> | <i>B</i> | <i>r</i> | <i>G</i> | Dynamic <i>C</i> | Static <i>C₀</i> |
| 22208CD1 | 22208CKD1 | 1.5748 40 | 3.1496 80 | .9055 23 | .043 1.1 | — — | 17,800 | 19,900 |
| 22209CD1 | 22209CKD1 | 1.7717 45 | 3.3465 85 | .9055 23 | .043 1.1 | — — | 18,600 | 21,400 |
| 22210CD1 | 22210CKD1 | 1.9685 50 | 3.5433 90 | .9055 23 | .043 1.1 | — — | 19,300 | 23,000 |
| 22211ED1 | 22211EKD1 | 2.1654 55 | 3.9370 100 | .9843 25 | .079 2.0 | — — | 26,460 | 32,413 |
| 22212ED1 | 22212EKD1 | 2.3622 60 | 4.3307 110 | 1.1024 28 | .079 2.0 | — — | 33,736 | 40,792 |
| 22213ED1 | 22213EKD1 | 2.5591 65 | 4.7244 120 | 1.2205 31 | .079 2.0 | — — | 39,690 | 48,951 |
| 22214ED1 | 22214EKD1 | 2.7559 70 | 4.9213 125 | 1.2205 31 | .079 2.0 | — — | 41,233 | 52,038 |
| 22215ED1 | 22215EKD1 | 2.9528 75 | 5.1181 130 | 1.2205 31 | .079 2.0 | — — | 42,777 | 55,345 |
| 22216ED1 | 22216EKD1 | 3.1496 80 | 5.5118 140 | 1.2992 33 | .098 2.5 | — — | 47,848 | 62,181 |
| 22217ED1 | 22217EKD1 | 3.3465 85 | 5.9055 150 | 1.4173 36 | .098 2.5 | — — | 56,448 | 71,662 |
| 22218ED1 | 22218EKD1 | 3.5433 90 | 6.2992 160 | 1.5748 40 | .098 2.5 | — — | 65,709 | 87,097 |
| 22219BD1 | 22219BKD1 | 3.7402 95 | 6.6920 170 | 1.6929 43 | .098 2.5 | — — | 65,500 | 86,500 |
| 22220BD1 | 22220BKD1 | 3.9370 100 | 7.0865 180 | 1.8110 46 | .098 2.5 | .31 8 | 70,000 | 92,500 |
| 22222BD1 | 22222BKD1 | 4.3307 110 | 7.8740 200 | 2.0866 53 | .098 2.5 | .39 10 | 92,500 | 128,000 |
| 22224BD1 | 22224BKD1 | 4.7244 120 | 8.4646 215 | 2.2835 58 | .098 2.5 | .39 10 | 109,000 | 158,000 |
| 22226BD1 | 22226BKD1 | 5.1181 130 | 9.0551 230 | 2.5197 64 | .118 3.0 | .39 10 | 127,000 | 176,000 |
| 22228BD1 | 22228BKD1 | 5.5118 140 | 9.8425 250 | 2.6772 68 | .118 3.0 | .39 10 | 153,000 | 218,000 |
| 22230BD1 | 22230BKD1 | 5.9055 150 | 10.6299 270 | 2.8740 73 | .118 3.0 | .47 12 | 174,000 | 262,000 |
| 22232BD1 | 22232BKD1 | 6.2992 160 | 11.4173 290 | 3.1496 80 | .118 3.0 | .47 12 | 195,000 | 290,000 |
| 22234BD1 | 22234BKD1 | 6.6929 170 | 12.2047 310 | 3.3858 86 | .157 4.0 | .47 12 | 225,000 | 340,000 |
| 22236B | 22236BK | 7.0866 180 | 12.5984 320 | 3.3858 86 | .157 4.0 | .47 12 | 233,000 | 360,000 |
| 22238B | 22238BK | 7.4803 190 | 13.3858 340 | 3.6220 92 | .157 4.0 | .47 12 | 260,000 | 410,000 |
| 22240B | 22240BK | 7.8740 200 | 14.1732 360 | 3.8583 98 | .157 4.0 | .47 12 | 295,000 | 450,000 |
| 22244B | 22244BK | 8.6614 220 | 15.7480 400 | 4.2520 108 | .157 4.0 | .47 12 | 350,000 | 545,000 |
| 22248B | 22248BK | 9.4488 240 | 17.3228 440 | 4.7244 120 | .157 4.0 | .63 16 | 430,000 | 680,000 |
| 22252B | 22252BK | 10.2362 260 | 18.8976 480 | 5.1181 130 | .197 5.0 | .63 16 | 500,000 | 805,000 |
| 22256B | 22256BK | 11.0236 280 | 19.6850 500 | 5.1181 130 | .197 5.0 | .63 16 | 520,000 | 855,000 |
| 22260B | 22260BK | 11.8110 300 | 21.2598 540 | 5.5118 140 | .197 5.0 | .79 20 | 600,000 | 975,000 |
| 22264B | 22264BK | 12.5984 320 | 22.8346 580 | 5.9055 150 | .197 5.0 | .79 20 | 695,000 | 1,140,000 |

The suffix D1 means the bearing has lubrication holes and an oil groove. However, for bearing numbers 22236B(K) and over, the suffix D1 is not needed as the lubrication holes and oil groove are standard.

For bearings with a blank G dimension, no lubrication holes and oil groove are provided. These features may be added upon request. (Add suffix D1.)

Note: 'E' type features higher load capacity and high temp. resin cages (40° C to 150° C); EP oil additives could effect cage material.

Note: The d dimension for the tapered bore is measured from the side of the bearing with the smallest bore dimension.

SPHERICAL ROLLER BEARINGS

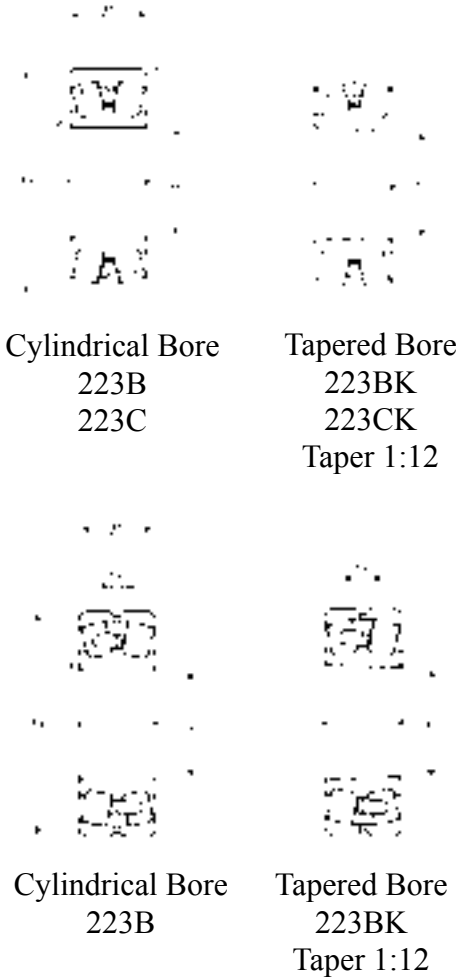
Units: **INCHES**
Millimeters



| Bearing No. | | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius <i>r</i> | Oil Groove Width <i>G</i> | Basic Load Ratings (lbs) | |
|-------------|-----------|------------------|------------------|-------------------|------------------------------|---------------------------------|-----------------------------|--------------------------------|
| 223 | 223K | | | | | | Dynamic <i>C</i> | Static <i>C₀</i> |
| 22308CD1 | 22308CKD1 | 1.5748 40 | 3.5433 90 | 1.2992 33 | .039 1.0 | — — | 27,200 | 28,800 |
| 22309CD1 | 22309CKD1 | 1.7717 45 | 3.9370 100 | 1.4173 36 | .059 1.5 | — — | 33,000 | 37,500 |
| 22310CD1 | 22310CKD1 | 1.9685 50 | 4.3307 110 | 1.5748 40 | .059 1.5 | — — | 42,000 | 47,500 |
| 22311BD1 | 22311BKD1 | 2.1654 55 | 4.7244 120 | 1.6929 43 | .098 2.5 | — — | 46,000 | 52,500 |
| 22312BD1 | 22312BKD1 | 2.3622 60 | 5.1181 130 | 1.8110 46 | .098 2.5 | — — | 53,000 | 60,500 |
| 22313BD1 | 22313BKD1 | 2.5591 65 | 5.5118 140 | 1.8898 48 | .098 2.5 | — — | 59,500 | 71,000 |
| 22314BD1 | 22314BKD1 | 2.7559 70 | 5.9055 150 | 2.0079 51 | .098 2.5 | — — | 72,500 | 85,000 |
| 22315BD1 | 22315BKD1 | 2.9528 75 | 6.2992 160 | 2.1654 55 | .098 2.5 | — — | 74,000 | 92,000 |
| 22316BD1 | 22316BKD1 | 3.1496 80 | 6.6929 170 | 2.2835 58 | .098 2.5 | — — | 86,000 | 105,000 |
| 22317BD1 | 22317BKD1 | 3.3465 85 | 7.0866 180 | 2.3622 60 | .118 3.0 | .31 8 | 93,500 | 115,000 |
| 22318BD1 | 22318BKD1 | 3.5433 90 | 7.4803 190 | 2.5197 64 | .118 3.0 | .39 10 | 107,000 | 132,000 |
| 22319BD1 | 22319BKD1 | 3.7402 95 | 7.8740 200 | 2.6378 67 | .118 3.0 | .39 10 | 112,000 | 138,000 |
| 22320BD1 | 22320BKD1 | 3.9370 100 | 8.4646 215 | 2.8740 73 | .118 3.0 | .39 10 | 136,000 | 169,000 |
| 22322BD1 | 22322BKD1 | 4.3307 110 | 9.4488 240 | 3.1496 80 | .118 3.0 | .39 10 | 167,000 | 209,000 |
| 22324BD1 | 22324BKD1 | 4.7244 120 | 10.2362 260 | 3.3858 86 | .118 3.0 | .47 12 | 198,000 | 252,000 |
| 22326BD1 | 22326BKD1 | 5.1181 130 | 11.0236 280 | 3.6614 93 | .157 4.0 | .47 12 | 221,000 | 282,000 |
| 22328BD1 | 22328BKD1 | 5.5118 140 | 11.8110 300 | 4.0157 102 | .157 4.0 | .47 12 | 250,000 | 320,000 |
| 22330B | 22330BK | 5.9055 150 | 12.5984 320 | 4.2520 108 | .157 4.0 | .47 12 | 281,000 | 385,000 |
| 22332B | 22332BK | 6.2992 160 | 13.3858 340 | 4.4882 114 | .157 4.0 | .47 12 | 315,000 | 440,000 |
| 22334B | 22334BK | 6.6929 170 | 14.1732 360 | 4.7244 120 | .157 4.0 | .47 12 | 340,000 | 480,000 |
| 22336B | 22336BK | 7.0866 180 | 14.9606 380 | 4.9606 126 | .157 4.0 | .47 12 | 385,000 | 565,000 |
| 22338B | 22338BK | 7.4803 190 | 15.7480 400 | 5.1969 132 | .197 5.0 | .47 12 | 415,000 | 615,000 |
| 22340B | 22340BK | 7.8740 200 | 16.5354 420 | 5.4331 138 | .197 5.0 | .63 16 | 460,000 | 680,000 |
| 22344B | 22344BK | 8.6614 220 | 18.1102 460 | 5.7087 145 | .197 5.0 | .63 16 | 530,000 | 790,000 |
| 22348B | 22348BK | 9.4488 240 | 19.6850 500 | 6.1024 155 | .197 5.0 | .63 16 | 605,000 | 910,000 |
| 22352B | 22352BK | 10.2362 260 | 21.2598 540 | 6.4961 165 | .197 5.0 | .79 20 | 695,000 | 1,060,000 |
| 22356B | 22356BK | 11.0236 280 | 22.8346 580 | 6.8898 175 | .236 6.0 | .79 20 | 790,000 | 1,200,000 |
| 22360B | 22360BK | 11.8110 300 | 24.4094 620 | 7.2835 185 | .295 7.5 | .79 20 | 805,000 | 1,210,000 |

In this series, machined brass cages are also available. When placing an order for them, put the suffix L1 on the bearing number.

Example: 22311BL1



The suffix D1 means the bearing has lubrication holes and an oil groove. However, for bearing numbers 22330B(K) and over, the suffix D1 is not needed as the lubrication holes and oil groove are standard.

For bearings with a blank G dimension, no lubrication holes and oil groove are provided. These features may be added upon request. (Add suffix D1.)

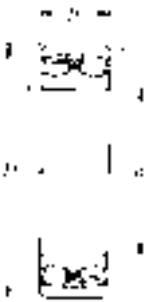
Note: The *d* dimension for the tapered bore is measured from the side of the bearing with the smallest bore dimension.



Units: **INCHES**
Millimeters

In this series, machined brass cages are also available. When placing an order for them, put the suffix L1 on the bearing number.

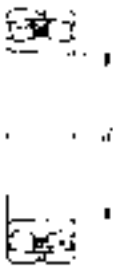
Example: 23024BL1D1



Cylindrical Bore
230



Cylindrical Bore
230



Tapered Bore
230K
Taper 1:12

| SPHERICAL ROLLER BEARINGS | | | | | | | | |
|---------------------------|-----------|------------------|------------------|-------------------|------------------------------|---------------------------------|-----------------------------|--------------------------------|
| Bearing No. | | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius <i>r</i> | Oil Groove Width <i>G</i> | Basic Load Ratings (lbs) | |
| 230 | 230K | | | | | | Dynamic <i>C</i> | Static <i>C₀</i> |
| 23022BD1 | 23022BKD1 | 4.3307 110 | 6.6929 170 | 1.7717 45 | .098 2.5 | .31 8 | 63,500 | 102,000 |
| 23024BD1 | 23024BKD1 | 4.7244 120 | 7.0866 180 | 1.8110 46 | .098 2.5 | .31 8 | 66,500 | 111,000 |
| 23026BD1 | 23026BKD1 | 5.1181 130 | 7.8740 200 | 2.0472 52 | .098 2.5 | .31 8 | 84,500 | 139,000 |
| 23028BD1 | 23028BKD1 | 5.5118 140 | 8.2677 210 | 2.0866 53 | .098 2.5 | .31 8 | 90,500 | 156,000 |
| 23030BD1 | 23030BKD1 | 5.9055 150 | 8.8583 225 | 2.2047 56 | .098 2.5 | .31 8 | 100,000 | 174,000 |
| 23032BD1 | 23032BKD1 | 6.2992 160 | 9.4488 240 | 2.3622 60 | .098 2.5 | .31 8 | 114,000 | 199,000 |
| 23034BD1 | 23034BKD1 | 6.6929 170 | 10.2362 260 | 2.6378 67 | .098 2.5 | .39 10 | 141,000 | 242,000 |
| 23036BD1 | 23036BKD1 | 7.0866 180 | 11.0236 280 | 2.9134 74 | .098 2.5 | .39 10 | 166,000 | 291,000 |
| 23038BD1 | 23038BKD1 | 7.4803 190 | 11.4173 290 | 2.9528 75 | .098 2.5 | .39 10 | 170,000 | 305,000 |
| 23040BD1 | 23040BKD1 | 7.8740 200 | 12.2047 310 | 3.2283 82 | .098 2.5 | .39 10 | 205,000 | 365,000 |
| 23044B | 23044BK | 8.6614 220 | 13.3858 340 | 3.5433 90 | .118 3.0 | .47 12 | 238,000 | 430,000 |
| 23048B | 23048BK | 9.4488 240 | 14.1732 360 | 3.6220 92 | .118 3.0 | .47 12 | 255,000 | 480,000 |
| 23052B | 23052BK | 10.2362 260 | 15.7480 400 | 4.0945 104 | .157 4.0 | .47 12 | 320,000 | 590,000 |
| 23056B | 23056BK | 11.0236 280 | 16.5354 420 | 4.1732 106 | .157 4.0 | .47 12 | 340,000 | 655,000 |
| 23060B | 23060BK | 11.8110 300 | 18.1102 460 | 4.6457 118 | .157 4.0 | .47 12 | 425,000 | 800,000 |
| 23064B | 23064BK | 12.5984 320 | 18.8976 480 | 4.7638 121 | .157 4.0 | .47 12 | 440,000 | 870,000 |
| 23068B | 23068BK | 13.3858 340 | 20.4724 520 | 5.2362 133 | .197 5.0 | .63 16 | 505,000 | 990,000 |
| 23072B | 23072BK | 14.1732 360 | 21.2598 540 | 5.2756 134 | .197 5.0 | .63 16 | 535,000 | 1,060,000 |
| 23076B | 23076BK | 14.9606 380 | 22.0472 560 | 5.3150 135 | .197 5.0 | .63 16 | 550,000 | 1,120,000 |
| 23080B | 23080BK | 15.7480 400 | 23.6220 600 | 5.8268 148 | .197 5.0 | .63 16 | 655,000 | 1,320,000 |
| 23084B | 23084BK | 16.5354 420 | 24.4094 620 | 5.9055 150 | .197 5.0 | .63 16 | 680,000 | 1,400,000 |
| 23088B | 23088BK | 17.3228 440 | 25.5906 650 | 6.1811 157 | .236 6.0 | .79 20 | 735,000 | 1,540,000 |
| 23092B | 23092BK | 18.1102 460 | 26.7717 680 | 6.4173 163 | .236 6.0 | .79 20 | 805,000 | 1,680,000 |
| 23096B | 23096BK | 18.8976 480 | 27.5591 700 | 6.4961 165 | .236 6.0 | .79 20 | 835,000 | 1,770,000 |
| 230/500B | 230/500BK | 19.6850 500 | 28.3465 720 | 6.5748 167 | .236 6.0 | .79 20 | 860,000 | 1,870,000 |
| 230/530B | 230/530BK | 20.8661 530 | 30.7087 780 | 7.2835 185 | .236 6.0 | .79 20 | 985,000 | 2,110,000 |
| 230/560B | 230/560BK | 22.0472 560 | 32.2835 820 | 7.6772 195 | .236 6.0 | .79 20 | 1,080,000 | 2,360,000 |
| 230/600B | 230/600BK | 23.6220 600 | 34.2520 870 | 7.8740 200 | .236 6.0 | .79 20 | 1,160,000 | 2,640,000 |
| 230/630B | 230/630BK | 24.8031 630 | 36.2205 920 | 8.3465 212 | .295 7.5 | .79 20 | 1,320,000 | 2,920,000 |
| 230/670B | 230/670BK | 26.3780 670 | 38.5827 980 | 9.0551 230 | .295 7.5 | .79 20 | 1,470,000 | 3,300,000 |
| 230/710B | 230/710BK | 27.9528 710 | 40.5512 1030 | 9.2913 236 | .295 7.5 | .94 24 | 1,610,000 | 3,650,000 |
| 230/750B | 230/750BK | 29.5276 750 | 42.9134 1090 | 9.8425 250 | .295 7.5 | .94 24 | 1,840,000 | 4,100,000 |

The suffix D1 means the bearing has lubrication holes and an oil groove. However, for bearing numbers 23044B(K) and over, the suffix D1 is not needed as the lubrication holes and the oil groove are standard.

Note: The *d* dimension for the tapered bore is measured from the side of the bearing with the smallest bore dimension.

SPHERICAL ROLLER BEARINGS

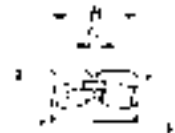
Units: INCHES
Millimeters



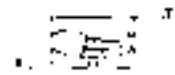
| Bearing No. | | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius <i>r</i> | Oil Groove Width <i>G</i> | Basic Load Ratings (lbs) | |
|-------------|-----------|------------------|------------------|-------------------|------------------------------|---------------------------------|-----------------------------|--------------------------------|
| 231 | 231K | | | | | | Dynamic <i>C</i> | Static <i>C₀</i> |
| 23122BD1 | 23122BKD1 | 4.3307 110 | 7.0866 180 | 2.2047 56 | .098 2.5 | .31 8 | 83,000 | 131,000 |
| 23124BD1 | 23124BKD1 | 4.7244 120 | 7.8740 200 | 2.4409 62 | .098 2.5 | .39 10 | 102,000 | 158,000 |
| 23126BD1 | 23126BKD1 | 5.1181 130 | 8.2677 210 | 2.5197 64 | .098 2.5 | .39 10 | 111,000 | 179,000 |
| 23128BD1 | 23128BKD1 | 5.5118 140 | 8.8583 225 | 2.6772 68 | .098 2.5 | .39 10 | 121,000 | 201,000 |
| 23130BD1 | 23130BKD1 | 5.9055 150 | 9.8425 250 | 3.1496 80 | .098 2.5 | .39 10 | 165,000 | 268,000 |
| 23132BD1 | 23132BKD1 | 6.2992 160 | 10.6299 270 | 3.3858 86 | .098 2.5 | .47 12 | 189,000 | 310,000 |
| 23134BD1 | 23134BKD1 | 6.6929 170 | 11.0236 280 | 3.4646 88 | .098 2.5 | .47 12 | 199,000 | 335,000 |
| 23136BD1 | 23136BKD1 | 7.0866 180 | 11.8110 300 | 3.7795 96 | .118 3.0 | .47 12 | 232,000 | 390,000 |
| 23138B | 23138BK | 7.4803 190 | 12.5984 320 | 4.0945 104 | .118 3.0 | .47 12 | 268,000 | 455,000 |
| 23140B | 23140BK | 7.8740 200 | 13.3858 340 | 4.4094 112 | .118 3.0 | .47 12 | 305,000 | 510,000 |
| 23144B | 23144BK | 8.6614 220 | 14.5669 370 | 4.7244 120 | .157 4.0 | .47 12 | 350,000 | 610,000 |
| 23148B | 23148BK | 9.4488 240 | 15.7480 400 | 5.0394 128 | .157 4.0 | .47 12 | 390,000 | 690,000 |
| 23152B | 23152BK | 10.2362 260 | 17.3228 440 | 5.6693 144 | .157 4.0 | .63 16 | 470,000 | 845,000 |
| 23156B | 23156BK | 11.0236 280 | 18.1102 460 | 5.7480 146 | .197 5.0 | .63 16 | 505,000 | 930,000 |
| 23160B | 23160BK | 11.8110 300 | 19.6850 500 | 6.2992 160 | .197 5.0 | .63 16 | 605,000 | 1,090,000 |
| 23164B | 23164BK | 12.5984 320 | 21.2598 540 | 6.9291 176 | .197 5.0 | .79 20 | 700,000 | 1,300,000 |
| 23168B | 23168BK | 13.3858 340 | 22.8346 580 | 7.4803 190 | .197 5.0 | .79 20 | 810,000 | 1,480,000 |
| 23172B | 23172BK | 14.1732 360 | 23.6220 600 | 7.5591 192 | .197 5.0 | .79 20 | 845,000 | 1,580,000 |
| 23176B | 23176BK | 14.9606 380 | 24.4094 620 | 7.6378 194 | .197 5.0 | .79 20 | 880,000 | 1,690,000 |
| 23180B | 23180BK | 15.7480 400 | 25.5906 650 | 7.8740 200 | .236 6.0 | .94 24 | 940,000 | 1,810,000 |
| 23184B | 23184BK | 16.5354 420 | 27.5591 700 | 8.8189 224 | .236 6.0 | .94 24 | 1,150,000 | 2,200,000 |
| 23188B | 23188BK | 17.3228 440 | 28.3465 720 | 8.8976 226 | .236 6.0 | .94 24 | 1,170,000 | 2,260,000 |
| 23192B | 23192BK | 18.1102 460 | 28.9212 760 | 9.4488 240 | .295 7.5 | .94 24 | 1,290,000 | 2,560,000 |
| 23196B | 23196BK | 18.8976 480 | 31.1024 790 | 9.7638 248 | .295 7.5 | .94 24 | 1,410,000 | 2,810,000 |
| 231/500B | 231/500BK | 19.6850 500 | 32.6772 830 | 10.3937 264 | .295 7.5 | .94 24 | 1,540,000 | 3,050,000 |
| 231/530B | 231/530BK | 20.8661 530 | 34.2520 870 | 10.7087 272 | .295 7.5 | .94 24 | 1,570,000 | 3,200,000 |
| 231/560B | 231/560BK | 22.0472 560 | 36.2205 920 | 11.0236 280 | .295 7.5 | .94 24 | 1,720,000 | 3,500,000 |
| 231/600B | 231/600BK | 23.6220 600 | 38.5827 980 | 11.8110 300 | .295 7.5 | .94 24 | 2,030,000 | 4,150,000 |
| 231/630B | 231/630BK | 24.8031 630 | 40.5512 1030 | 12.4016 315 | .295 7.5 | .94 24 | 2,150,000 | 4,450,000 |
| 231/670B | 231/670BK | 26.3780 670 | 42.9134 1090 | 13.2283 336 | .295 7.5 | .94 24 | 2,530,000 | 5,300,000 |
| 231/710B | 231/710BK | 27.9528 710 | 45.2756 1150 | 13.5827 345 | .374 9.5 | .94 24 | 2,620,000 | 5,600,000 |

In this series, machined brass cages are also available. When placing an order for them, put the suffix L1 on the bearing number.

Example: 23124BL1D1



Cylindrical Bore
231



Tapered Bore
231K
Taper 1:12

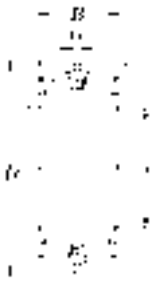
The suffix D1 means the bearing has lubrication holes and an oil groove. However, for bearing numbers 23138B(K) and over, the suffix D1 is not needed as the lubrication holes and oil groove are standard.

Note: The *d* dimension for the tapered bore is measured from the side of the bearing with the smallest bore dimension.

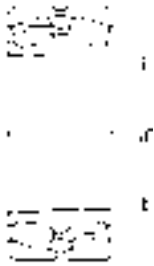


Units: INCHES
Millimeters

Use Suffix L1 for brass cages.
Example: 23218BL1



Cylindrical Bore
232



Tapered Bore
232K
Taper 1:12

| SPHERICAL ROLLER BEARINGS | | | | | | | | |
|---------------------------|-----------|----------------|------------------|----------------|---------------|------------------|--------------------------|-----------------------------|
| Bearing No. | | Bore | O.D. | Width | Fillet Radius | Oil Groove Width | Basic Load Ratings (lbs) | |
| 232 | 232K | <i>d</i> | <i>D</i> | <i>B</i> | <i>r</i> | <i>G</i> | Dynamic <i>C</i> | Static <i>C₀</i> |
| 23218BD1 | 23218BKD1 | 3.5433 90 | 6.2992 160 | 2.0630 52.4 | .039 1.0 | — | 71,500 | 103,000 |
| 23220BD1 | 23220BKD1 | 3.9370 100 | 7.0866 180 | 3.3740 60.3 | .083 2.1 | — | 91,000 | 130,000 |
| 23222BD1 | 23222BKD1 | 4.3307 110 | 7.8740 200 | 2.7480 69.8 | .079 2.0 | .39 10 | 115,000 | 171,000 |
| 23224BD1 | 23224BKD1 | 4.7244 120 | 8.4646 215 | 2.9921 76 | .079 2.0 | .39 10 | 132,000 | 198,000 |
| 23226BD1 | 23226BKD1 | 5.1181 130 | 9.0551 230 | 3.1496 80 | .098 2.5 | .39 10 | 154,000 | 239,000 |
| 23228BD1 | 23228BKD1 | 5.5118 140 | 9.8425 250 | 3.4646 88 | .098 2.5 | .39 10 | 181,000 | 285,000 |
| 23230BD1 | 23230BKD1 | 5.9055 150 | 10.6299 270 | 3.7705 96 | .098 2.5 | .47 12 | 210,000 | 330,000 |
| 23232BD1 | 23232BKD1 | 6.2992 160 | 11.4173 290 | 4.0945 104 | .098 2.5 | .47 12 | 237,000 | 375,000 |
| 23234BD1 | 23234BKD1 | 6.6929 170 | 12.2047 310 | 4.3307 110 | .118 3.0 | .47 12 | 264,000 | 440,000 |
| 23236B | 23236BK | 7.0866 180 | 12.5984 320 | 4.4094 112 | .118 3.0 | .47 12 | 284,000 | 465,000 |
| 23238B | 23238BK | 7.4803 190 | 13.3858 340 | 4.7244 120 | .118 3.0 | .47 12 | 320,000 | 530,000 |
| 23240B | 23240BK | 7.8740 200 | 14.1732 360 | 5.0394 128 | .118 3.0 | .47 12 | 365,000 | 595,000 |
| 23244B | 23244BK | 8.6614 220 | 15.7480 400 | 5.6693 144 | .118 3.0 | .47 12 | 440,000 | 730,000 |
| 23248B | 23248BK | 9.4488 240 | 17.3228 440 | 6.2992 160 | .118 3.0 | .63 16 | 535,000 | 900,000 |
| 23252B | 23252BK | 10.2362 260 | 18.8976 480 | 6.8504 174 | .157 4.0 | .63 16 | 620,000 | 1,060,000 |
| 23256B | 23256BK | 11.0236 280 | 19.6850 500 | 6.9291 176 | .157 4.0 | .63 16 | 660,000 | 1,160,000 |
| 23260B | 23260BK | 11.8110 300 | 21.2598 540 | 7.5591 192 | .157 4.0 | .79 20 | 775,000 | 1,350,000 |
| 23264B | 23264BK | 12.5984 320 | 22.8346 580 | 8.1890 208 | .157 4.0 | .79 20 | 890,000 | 1,560,000 |
| 23268B | 23268BK | 13.3858 340 | 24.4094 620 | 8.8189 224 | .197 5.0 | .79 20 | 990,000 | 1,760,000 |
| 23272B | 23272BK | 14.1732 360 | 25.5906 650 | 9.1339 232 | .197 5.0 | .94 24 | 1,090,000 | 1,950,000 |
| 23276B | 23276BK | 14.9606 380 | 26.7717 680 | 9.4488 240 | .197 5.0 | .94 24 | 1,170,000 | 2,170,000 |
| 23280B | 23280BK | 15.7480 400 | 28.3465 720 | 10.0787 256 | .197 5.0 | .94 24 | 1,330,000 | 2,420,000 |
| 23284B | 23284BK | 16.5354 420 | 29.9213 760 | 10.7087 272 | .295 7.5 | .94 24 | 1,450,000 | 2,660,000 |
| 23288B | 23288BK | 17.3228 440 | 31.1024 790 | 11.0236 280 | .295 7.5 | .94 24 | 1,530,000 | 2,850,000 |
| 23292B | 23292BK | 18.1102 460 | 32.6772 830 | 11.6535 296 | .295 7.5 | .94 24 | 1,730,000 | 3,200,000 |
| 23296B | 23296BK | 18.8976 480 | 34.2520 870 | 12.2047 310 | .295 7.5 | .94 24 | 1,880,000 | 3,550,000 |
| 232/500B | 232/500BK | 19.6850 500 | 36.2205 920 | 13.2283 336 | .295 7.5 | .94 24 | 2,120,000 | 4,000,000 |
| 232/530B | 232/530BK | 20.8661 530 | 38.5826 980 | 13.9764 355 | .295 7.5 | 1.65 42 | 2,330,000 | 4,450,000 |
| 232/560B | 232/560BK | 22.0472 560 | 40.5511 1,030 | 14.3701 365 | .374 9.5 | 1.65 42 | 2,490,000 | 4,750,000 |
| 232/600B | 232/600BK | 23.6220 600 | 42.9133 1,090 | 15.2756 388 | .374 9.5 | 1.65 42 | 2,740,000 | 5,350,000 |
| 232/630B | 232/630BK | 24.8031 630 | 45.2755 1,150 | 16.2204 412 | .374 9.5 | 1.65 42 | 3,100,000 | 6,050,000 |
| 232/670B | 232/670BK | 26.3779 670 | 48.0314 1,220 | 17.2441 438 | .374 9.5 | 1.65 42 | 3,600,000 | 7,150,000 |
| 232/710B | 232/710BK | 27.9527 710 | 50.3936 1,280 | 17.7165 450 | .374 9.5 | 1.65 42 | 3,650,000 | 7,300,000 |
| 232/750B | 232/750BK | 29.5275 750 | 53.5432 1,360 | 18.7008 475 | .374 9.5 | 1.65 42 | 4,100,000 | 8,250,000 |

The suffix D1 means the bearing has lubrication holes and an oil groove. However, for bearing numbers 23236B(K) and over, the suffix D1 is not needed as the lubrication holes and oil groove are standard.

Note: The *d* dimension for the tapered bore is measured from the side of the bearing with the smallest bore dimension.

SPHERICAL ROLLER BEARINGS

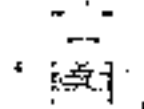
| Bearing No. | | Bore | O.D. | Width | Fillet Radius | Oil Groove Width | Basic Load Ratings (lbs) | |
|-------------|----------|----------------|-----------------|---------------|---------------|------------------|--------------------------|-----------------------------|
| 239 | 239K | <i>d</i> | <i>D</i> | <i>B</i> | <i>r</i> | <i>G</i> | Dynamic <i>C</i> | Static <i>C_o</i> |
| 23926D1 | 23926KD1 | 5.1181 130 | 7.0866 180 | 1.4567 37 | .079 2.0 | .28 7 | 48,000 | 85,000 |
| 23932D1 | 23932KD1 | 6.2992 160 | 8.6614 220 | 1.7717 45 | .098 2.5 | .31 8 | 72,500 | 138,000 |
| 23934D1 | 23934KD1 | 6.6929 170 | 9.0551 230 | 1.7717 45 | .098 2.5 | .31 8 | 74,500 | 146,000 |
| 23936D1 | 23936KD1 | 7.0866 180 | 9.8425 250 | 2.0472 52 | .098 2.5 | .31 8 | 99,500 | 188,000 |
| 23938D1 | 23938KD1 | 7.4803 190 | 10.2362 260 | 2.0472 52 | .098 2.5 | .39 10 | 103,000 | 200,000 |
| 23940D1 | 23940KD1 | 7.8740 200 | 11.0236 280 | 2.3622 60 | .098 2.5 | .39 10 | 123,000 | 247,000 |
| 23944D1 | 23944KD1 | 8.6614 220 | 11.8110 300 | 2.3622 60 | .098 2.5 | .39 10 | 127,000 | 263,000 |
| 23948 | 23948K | 9.4488 240 | 12.5984 320 | 2.3622 60 | .098 2.5 | .47 12 | 127,000 | 267,000 |
| 23952 | 23952K | 10.2362 260 | 14.1732 360 | 2.9528 75 | .098 2.5 | .47 12 | 171,000 | 355,000 |
| 23956 | 23956K | 11.0236 280 | 14.9606 380 | 2.9528 75 | .098 2.5 | .47 12 | 187,000 | 395,000 |
| 23960 | 23960K | 11.8110 300 | 16.5354 420 | 3.5433 90 | .118 3.0 | .47 12 | 249,000 | 520,000 |
| 23964 | 23964K | 12.5984 320 | 17.3228 440 | 3.5433 90 | .118 3.0 | .47 12 | 257,000 | 555,000 |
| 23968 | 23968K | 13.3858 340 | 18.1102 460 | 3.5433 90 | .118 3.0 | .47 12 | 274,000 | 595,000 |
| 23972 | 23972K | 14.1732 360 | 18.8976 480 | 3.5433 90 | .118 3.0 | .47 12 | 298,000 | 660,000 |
| 23976 | 23976K | 14.9606 380 | 20.4724 520 | 4.1732 106 | .157 4.0 | .63 16 | 350,000 | 795,000 |
| 23980 | 23980K | 15.7480 400 | 21.2598 540 | 4.1732 106 | .157 4.0 | .63 16 | 355,000 | 820,000 |
| 23984 | 23984K | 16.5354 420 | 22.0472 560 | 4.1732 106 | .157 4.0 | .63 16 | 365,000 | 865,000 |
| 23988 | 23988K | 17.3228 440 | 23.6220 600 | 4.6457 118 | .157 4.0 | .63 16 | 455,000 | 1,050,000 |
| 23992 | 23992K | 18.1102 460 | 24.4094 620 | 4.6457 118 | .157 4.0 | .63 16 | 470,000 | 1,110,000 |
| 23996 | 23996K | 18.8976 480 | 25.5906 650 | 5.0394 128 | .197 5.0 | .79 20 | 525,000 | 1,240,000 |
| 239/500 | 239/500K | 19.6850 500 | 26.3780 670 | 5.0394 128 | .197 5.0 | .79 20 | 535,000 | 1,260,000 |
| 239/530 | 239/530K | 20.8661 530 | 27.5928 710 | 5.3543 136 | .197 5.0 | .79 20 | 595,000 | 1,450,000 |
| 239/560 | 239/560K | 22.0472 560 | 29.5276 750 | 5.5118 140 | .197 5.0 | .79 20 | 635,000 | 1,500,000 |
| 239/600 | 239/600K | 23.6220 600 | 31.4961 800 | 5.9055 150 | .197 5.0 | .79 20 | 710,000 | 1,750,000 |
| 239/630 | 239/630K | 24.8031 630 | 33.4646 850 | 6.4961 165 | .236 6.0 | .79 20 | 830,000 | 2,080,000 |
| 239/670 | 239/670K | 26.3780 670 | 35.4331 900 | 6.6929 170 | .236 6.0 | .79 20 | 925,000 | 2,330,000 |
| 239/710 | 239/710K | 27.9528 710 | 37.4016 950 | 7.0866 180 | .236 6.0 | .79 20 | 995,000 | 2,580,000 |
| 239/750 | 239/750K | 29.5276 750 | 39.3701 1000 | 7.2835 185 | .236 6.0 | .79 20 | 1,130,000 | 2,930,000 |
| 239/800 | 239/800K | 31.4961 800 | 41.7323 1060 | 7.6772 195 | .236 6.0 | .94 24 | 1,220,000 | 3,100,000 |
| 239/850 | 239/850K | 33.4646 850 | 44.0945 1120 | 7.8740 200 | .236 6.0 | .94 24 | 1,310,000 | 3,400,000 |
| 239/900 | 239/900K | 35.4331 900 | 46.4567 1180 | 8.1102 206 | .236 6.0 | .94 24 | 1,490,000 | 3,900,000 |

Units: INCHES
Millimeters

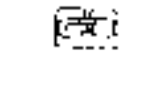


In this series, machined brass cages are also available. When placing an order for them, put the suffix L1 on the bearing number.

Example: 23932L1D1



Cylindrical Bore
239



Tapered Bore
239K
Taper 1:12

The suffix D1 means the bearing has lubrication holes and an oil groove. However, for bearing numbers 23948(K) and over, the suffix D1 is not needed as the lubrication holes and oil groove are standard.

Note: The *d* dimension for the tapered bore is measured from the side of the bearing with the smallest bore dimension.



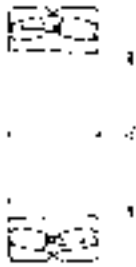
Units: **INCHES**
Millimeters

Bearing Numbers 24048B(K30) and under have machined brass cages. Machined brass cage are also available for bearing numbers 24052B(K30) and over. When placing an order for them, put the suffix L1 on the bearing number.

Example: 24052BL1



Cylindrical Bore
240



Tapered Bore
240K30
Taper 1:30

| SPHERICAL ROLLER BEARINGS | | | | | | | | |
|---------------------------|-------------|------------------|------------------|-------------------|------------------------------|---------------------------------|-----------------------------|--------------------------------|
| Bearing No. | | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius <i>r</i> | Oil Groove Width <i>G</i> | Basic Load Ratings (lbs) | |
| 240 | 240K30 | | | | | | Dynamic <i>C</i> | Static <i>C₀</i> |
| 24024BD1 | 24024BK30D1 | 4.7244 120 | 7.0866 180 | 2.3622 60 | .098 2.5 | .31 8 | 87,000 | 151,000 |
| 24026BD1 | 24026BK30D1 | 5.1181 130 | 7.8740 200 | 2.7165 69 | .098 2.5 | .31 8 | 114,000 | 201,000 |
| 24028BD1 | 24028BK30D1 | 5.5118 140 | 8.2677 210 | 2.7165 69 | .098 2.5 | .31 8 | 115,000 | 213,000 |
| 24030BD1 | 24030BK30D1 | 5.9055 150 | 8.8583 225 | 2.9528 75 | .098 2.5 | .31 8 | 131,000 | 238,000 |
| 24032BD1 | 24032BK30D1 | 6.2992 160 | 9.4488 240 | 3.1496 80 | .098 2.5 | .31 8 | 146,000 | 269,000 |
| 24034BD1 | 24034BK30D1 | 6.6929 170 | 10.2362 260 | 3.5433 90 | .098 2.5 | .39 10 | 180,000 | 330,000 |
| 24036BD1 | 24036BK30D1 | 7.0866 180 | 11.0236 280 | 3.9370 100 | .098 2.5 | .39 10 | 219,000 | 405,000 |
| 24038BD1 | 24038BK30D1 | 7.4803 190 | 11.4173 290 | 3.9370 100 | .098 2.5 | .39 10 | 224,000 | 415,000 |
| 24040BD1 | 24040BK30D1 | 7.8740 200 | 12.2047 310 | 4.2913 109 | .098 2.5 | .39 10 | 264,000 | 490,000 |
| 24044B | 24044BK30 | 8.6614 220 | 13.3858 340 | 4.6457 118 | .118 3.0 | .47 12 | 305,000 | 580,000 |
| 24048B | 24048BK30 | 9.4488 240 | 14.1732 360 | 4.6457 118 | .118 3.0 | .47 12 | 320,000 | 630,000 |
| 24052B | 24052BK30 | 10.2362 260 | 15.7480 400 | 5.5118 140 | .118 3.0 | .47 12 | 410,000 | 800,000 |
| 24056B | 24056BK30 | 11.0236 280 | 16.5354 420 | 5.5118 140 | .118 3.0 | .47 12 | 440,000 | 890,000 |
| 24060B | 24060BK30 | 11.8110 300 | 18.1102 460 | 6.2992 160 | .118 3.0 | .47 12 | 550,000 | 1,120,000 |
| 24064B | 24064BK30 | 12.5984 320 | 18.8976 480 | 6.2992 160 | .118 3.0 | .47 12 | 565,000 | 1,170,000 |
| 24068B | 24068BK30 | 13.3858 340 | 20.4724 520 | 7.0866 180 | .157 4.0 | .63 16 | 675,000 | 1,390,000 |
| 24072B | 24072BK30 | 14.1732 360 | 21.2598 540 | 7.0866 180 | .157 4.0 | .63 16 | 690,000 | 1,450,000 |
| 24076B | 24076BK30 | 14.9606 380 | 22.0472 560 | 7.0866 180 | .157 4.0 | .63 16 | 715,000 | 1,560,000 |
| 24080B | 24080BK30 | 15.7480 400 | 23.6220 600 | 7.8740 200 | .157 4.0 | .63 16 | 860,000 | 1,890,000 |
| 24084B | 24084BK30 | 16.5354 420 | 24.4094 620 | 7.8740 200 | .197 5.0 | .63 16 | 870,000 | 1,900,000 |
| 24088B | 24088BK30 | 17.3228 440 | 25.5906 650 | 8.3464 212 | .236 6.0 | .79 20 | 965,000 | 2,120,000 |
| 24092B | 24092BK30 | 18.1102 460 | 26.7717 680 | 8.5827 218 | .236 6.0 | .79 20 | 1,030,000 | 2,280,000 |
| 24096B | 24096BK30 | 18.8976 480 | 27.5591 700 | 8.5827 218 | .236 6.0 | .79 20 | 1,060,000 | 2,400,000 |
| 240/500B | 240/500BK30 | 19.6850 500 | 28.3465 720 | 8.5827 218 | .236 6.0 | .79 20 | 1,090,000 | 2,500,000 |

The suffix D1 means the bearing has lubrication holes and an oil groove. However, for bearing numbers 24044B(K) and over, the suffix D1 is not needed as the lubrication holes and oil groove are standard.

Note: The *d* dimension for the tapered bore is measured from the side of the bearing with the smallest bore dimension.

SPHERICAL ROLLER BEARINGS

| Bearing No. | | Bore | O.D. | Width | Fillet Radius | Oil Groove Width | Basic Load Ratings (lbs) | |
|-------------|-------------|----------------|----------------|----------------|---------------|------------------|--------------------------|-----------------------------|
| 241 | 241K30 | <i>d</i> | <i>D</i> | <i>B</i> | <i>r</i> | <i>G</i> | <i>Dynamic C</i> | <i>Static C_o</i> |
| 24122BD1 | 24122BK30D1 | 4.3307 110 | 7.0866 180 | 2.7165 69 | .098 2.5 | .31 8 | 101,000 | 170,000 |
| 24124BD1 | 24124BK30D1 | 4.7244 120 | 7.8740 200 | 3.1496 80 | .098 2.5 | .31 8 | 129,000 | 213,000 |
| 24126BD1 | 24126BK30D1 | 5.1181 130 | 8.2677 210 | 3.1496 80 | .098 2.5 | .31 8 | 132,000 | 224,000 |
| 24128BD1 | 24128BK30D1 | 5.5118 140 | 8.8583 225 | 3.3465 85 | .098 2.5 | .31 8 | 151,000 | 257,000 |
| 24130BD1 | 24130BK30D1 | 5.9055 150 | 9.8425 250 | 3.9370 100 | .098 2.5 | .31 8 | 201,000 | 350,000 |
| 24132BD1 | 24132BK30D1 | 6.2992 160 | 10.6299 270 | 4.2913 109 | .098 2.5 | .39 10 | 234,000 | 400,000 |
| 24134BD1 | 24134BK30D1 | 6.6929 170 | 11.0236 280 | 4.2913 109 | .098 2.5 | .39 10 | 242,000 | 420,000 |
| 24136BD1 | 24136BK30D1 | 7.0866 180 | 11.8110 300 | 4.6457 118 | .118 3.0 | .39 10 | 280,000 | 495,000 |
| 24138B | 24138BK30 | 7.4803 190 | 12.5984 320 | 5.0394 128 | .118 3.0 | .47 12 | 320,000 | 555,000 |
| 24140B | 24140BK30 | 7.8740 200 | 13.3858 340 | 5.5118 140 | .118 3.0 | .47 12 | 365,000 | 650,000 |
| 24144B | 24144BK30 | 8.6614 220 | 14.5669 370 | 5.9055 150 | .157 4.0 | .47 12 | 425,000 | 760,000 |
| 24148B | 24148BK30 | 9.4488 240 | 15.7480 400 | 6.2992 160 | .157 4.0 | .47 12 | 475,000 | 860,000 |
| 24152B | 24152BK30 | 10.2362 260 | 17.3228 440 | 7.0866 180 | .157 4.0 | .47 12 | 555,000 | 1,010,000 |
| 24156B | 24156BK30 | 11.0236 280 | 18.1102 460 | 7.0866 180 | .197 5.0 | .47 12 | 605,000 | 1,150,000 |
| 24160B | 24160BK30 | 11.8110 300 | 19.6850 500 | 7.8740 200 | .197 5.0 | .47 12 | 745,000 | 1,430,000 |
| 24164B | 24164BK30 | 12.5984 320 | 21.2598 540 | 8.5827 218 | .197 5.0 | .63 16 | 865,000 | 1,640,000 |
| 24168B | 24168BK30 | 13.3858 340 | 22.8346 580 | 9.5669 243 | .197 5.0 | .63 16 | 1,030,000 | 2,010,000 |
| 24172B | 24172BK30 | 14.1732 360 | 23.6220 600 | 9.5669 243 | .197 5.0 | .63 16 | 1,040,000 | 2,090,000 |
| 24176B | 24176BK30 | 14.9606 380 | 24.4094 620 | 9.5669 243 | .197 5.0 | .63 16 | 1,070,000 | 2,130,000 |
| 24180B | 24180BK30 | 15.7480 400 | 25.5906 650 | 9.8425 250 | .236 6.0 | .79 20 | 1,140,000 | 2,330,000 |
| 24184B | 24184BK30 | 16.5354 420 | 27.5591 700 | 11.0236 280 | .236 6.0 | .79 20 | 1,380,000 | 2,740,000 |
| 24188B | 24188BK30 | 17.3228 440 | 28.3465 720 | 11.0236 280 | .236 6.0 | .79 20 | 1,450,000 | 2,940,000 |
| 24192B | 24192BK30 | 18.1102 460 | 29.9213 760 | 11.8110 300 | .295 7.5 | .79 20 | 1,600,000 | 3,250,000 |
| 24196B | 24196BK30 | 18.8976 480 | 31.1024 790 | 12.1260 308 | .295 7.5 | .79 20 | 1,690,000 | 3,500,000 |
| 241/500B | 241/500BK30 | 19.6850 500 | 32.6772 830 | 12.7953 325 | .295 7.5 | .79 20 | 1,830,000 | 3,800,000 |

Units: INCHES
Millimeters

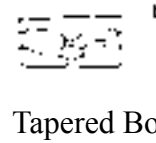
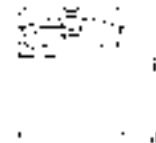


Bearing numbers 24144B(K30) and under have machined brass cages. Machined brass cages are also available for bearing numbers 24148B(K30) and over. When placing an order for them, put the suffix L1 on the bearing number.

Example: 24148BL1



Cylindrical Bore
241



Tapered Bore
241K30
Taper 1:30

The suffix D1 means the bearing has lubrication holes and an oil groove. However, for bearing numbers 24138B(K30) and over, the suffix D1 is not needed as the lubrication holes and oil groove are standard.

Note: The *d* dimension for the tapered bore is measured from the side of the bearing with the smallest bore dimension.



Units: **INCHES**
Millimeters

The cage is made of machined brass.



223

| SPHERICAL ROLLER BEARINGS | | | | | | | |
|---------------------------|---------------|----------------|----------------|------------------------|---------------------------|--------------------------|-----------------------------|
| Bearing No. | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius <i>r</i> | Oil Groove Width <i>G</i> | Basic Load Ratings (lbs) | |
| | | | | | | Dynamic <i>C</i> | Static <i>C₀</i> |
| 22314UAVS1 | 2.7559 70 | 5.9055 150 | 2.0079 51 | .098 2.5 | .31 8 | 77,000 | 92,500 |
| 22315UAVS1 | 2.9528 75 | 6.2992 160 | 2.1654 55 | .098 2.5 | .31 8 | 86,500 | 112,000 |
| 22316UAVS1 | 3.1496 80 | 6.6929 170 | 2.2835 58 | .098 2.5 | .31 8 | 94,500 | 118,000 |
| 22317UAVS1 | 3.3465 85 | 7.0866 180 | 2.3622 60 | .118 3.0 | .31 8 | 102,000 | 128,000 |
| 22318UAVS1 | 3.5433 90 | 7.4803 190 | 2.5197 64 | .118 3.0 | .39 10 | 116,000 | 146,000 |
| 22319UAVS1 | 3.7402 95 | 7.8740 200 | 2.6378 67 | .118 3.0 | .39 10 | 127,000 | 162,000 |
| 22320UAVS1 | 3.9370 100 | 8.4646 215 | 2.8740 73 | .118 3.0 | .39 10 | 151,000 | 194,000 |
| 22322UAVS1 | 4.3307 110 | 9.4488 240 | 3.1496 80 | .118 3.0 | .39 10 | 188,000 | 244,000 |
| 22324UAVS1 | 4.7244 120 | 10.2362 260 | 3.3858 86 | .118 3.0 | .47 12 | 212,000 | 276,000 |
| 22326UAVS1 | 5.1181 130 | 11.0236 280 | 3.6614 93 | .157 4.0 | .47 12 | 246,000 | 325,000 |
| 22328UAVS1 | 5.5118 140 | 11.8110 300 | 4.0157 102 | .157 4.0 | .47 12 | 287,000 | 385,000 |
| 22330UAVS1 | 5.9055 150 | 12.5984 320 | 4.2520 108 | .157 4.0 | .47 12 | 320,000 | 460,000 |
| 22332UAVS1 | 6.2992 160 | 13.3858 340 | 4.4882 114 | .157 4.0 | .47 12 | 345,000 | 495,000 |
| 22334UAVS1 | 3.6929 170 | 14.1732 360 | 4.7244 120 | .157 4.0 | .47 12 | 385,000 | 565,000 |
| 22336UAVS1 | 7.0866 180 | 14.9606 380 | 4.9606 126 | .157 4.0 | .47 12 | 435,000 | 655,000 |
| 22338UAVS1 | 7.4803 190 | 15.7480 400 | 5.1969 132 | .197 5.0 | .47 12 | 470,000 | 720,000 |
| 22340UAVS1 | 7.8740 200 | 16.5354 420 | 5.4331 138 | .197 5.0 | .63 16 | 500,000 | 765,000 |

The suffix VS1 means the bearing has controlled O.D., bore and radial clearance for shaker screen application.

Note: Lubrication holes and oil groove provided as standard; suffix D1 not needed.

SPHERICAL ROLLER BEARINGS

Units: **Millimeters**
INCHES



| Bearing No. MX-W222K | Bore <i>d</i> | O.D. <i>D</i> | Width <i>B</i> | Fillet Radius <i>r</i> | Oil Groove Width <i>G</i> | Basic Load Ratings (lbs) | |
|-------------------------|------------------|------------------|-------------------|------------------------------|---------------------------------|-----------------------------|--------------------|
| | | | | | | Dynamic <i>C</i> | Static <i>C</i> |
| MX-W22211BLLKC3 | 55 2.1654 | 100 3.9370 | 40 1.5748 | 0.60 0.024 | 6 0.2362 | 21,000 | 24,700 |
| MX-W22213BLLKC3 | 65 2.5591 | 120 4.7244 | 46.5 1.8307 | 0.60 0.024 | 6 0.2362 | 32,000 | 40,000 |
| MX-W22215BLLKC3 | 75 2.9528 | 130 5.1181 | 46.5 1.8307 | 0.60 0.024 | 8 0.3150 | 37,500 | 50,000 |
| MX-W22217BLLKC3 | 85 3.3465 | 150 5.9055 | 51.5 2.0276 | 0.60 0.024 | 8 0.3150 | 46,500 | 61,000 |
| MX-W22220BLLKC3 | 100 3.9370 | 180 7.0866 | 64.5 2.5394 | 1.0 0.039 | 8 0.3150 | 69,500 | 92,000 |
| MX-W22222BLLKC3 | 110 4.3307 | 200 7.8740 | 71 2.7953 | 1.0 0.039 | 8 0.3150 | 92,000 | 128,000 |
| MX-W22224BLLKC3 | 120 4.7244 | 215 8.4646 | 76 2.9921 | 1.0 0.039 | 10 0.3937 | 109,000 | 157,000 |
| MX-W22226BLLKC3 | 130 5.1181 | 230 9.0551 | 84 3.3071 | 1.0 0.039 | 10 0.3937 | 127,000 | 176,000 |
| MX-W22228BLLKC3 | 140 5.5118 | 250 9.8425 | 88 3.4627 | 1.0 0.039 | 10 0.3937 | 153,000 | 218,000 |
| MX-W22232BLLKC3 | 160 6.2992 | 290 11.4173 | 104 4.0945 | 1.0 0.039 | 12 0.4724 | 196,000 | 290,000 |



Tapered Bore
MX-W222K
Taper 1:12



*Detail:

For outside diameter chamfer dimensions, contact NTN Engineering.

Note: The *d* dimensions for the tapered bore is measured from the side of the bearing with the smallest bore dimension. Lubrication holes and oil groove provided as standard, suffix D1 not needed.



Bearing Series → **213 SERIES**

Bearing Number → 21308C..... **Weight (lbs)** ← 1.55

SPHERICAL ROLLER BEARINGS

LBS.

| 213 SERIES | | 230 SERIES | | 231 SERIES | |
|-------------------|------|-------------------|------|-------------------|------|
| 21308C..... | 1.55 | 21308CK..... | 1.53 | 23022B..... | 8.18 |
| 21309C..... | 2.04 | 21309CK..... | 2.01 | 23024BD1..... | 8.93 |
| 21310C..... | 2.67 | 21310CK..... | 2.62 | 23026BD1..... | 13.0 |
| 21311..... | 3.77 | 21311K..... | 3.73 | 23028BD1..... | 14.0 |
| 21312..... | 4.63 | 21312K..... | 4.56 | 23030BD1..... | 17.0 |
| 21313..... | 5.62 | 21313K..... | 5.53 | 23032BD1..... | 20.8 |
| 21314..... | 7.01 | 21314K..... | 6.92 | 23034BD1..... | 28.0 |
| 21315..... | 8.40 | 21315K..... | 8.29 | 23036BD1..... | 36.8 |
| 21316..... | 9.99 | 21316K..... | 9.85 | 23038BD1..... | 39.0 |
| 21317..... | 11.8 | 21317K..... | 11.6 | 23040BD1..... | 50.0 |
| 21318..... | 13.9 | 21318K..... | 13.7 | 23044B..... | 65.9 |
| 21319..... | 15.7 | 21319K..... | 15.4 | 23048B..... | 73.6 |
| 21320..... | 19.6 | 21320K..... | 19.4 | 23052B..... | 107 |
| 222 SERIES | | 230 SERIES | | 231 SERIES | |
| 22208C..... | 1.16 | 22208CK..... | 1.14 | 23056B..... | 116 |
| 22209C..... | 1.55 | 22209CK..... | 1.53 | 23060B..... | 160 |
| 22210C..... | 2.15 | 22210CK..... | 2.10 | 23064B..... | 172 |
| 22211B..... | 1.87 | 22211BK..... | 1.83 | 23068B..... | 229 |
| 22212B..... | 2.54 | 22212BK..... | 2.49 | 23072B..... | 243 |
| 22213B..... | 3.31 | 22213BK..... | 3.24 | 23076B..... | 254 |
| 22214B..... | 3.42 | 22214BK..... | 3.35 | 23080B..... | 328 |
| 22215B..... | 3.64 | 22215BK..... | 3.55 | 23084B..... | 346 |
| 22216B..... | 4.74 | 22216BK..... | 4.65 | 23088B..... | 399 |
| 22217B..... | 5.86 | 22217BK..... | 5.75 | 23092B..... | 454 |
| 22218B..... | 7.72 | 22218BK..... | 7.56 | 23096B..... | 478 |
| 22219B..... | 9.04 | 22219BK..... | 8.84 | 230/500B..... | 498 |
| 22220BD1..... | 10.9 | 22220BKD1..... | 10.7 | 230/530B..... | 675 |
| 22222BD1..... | 15.9 | 22222BKD1..... | 15.5 | 230/560B..... | 778 |
| 22224BD1..... | 20.1 | 22224BKD1..... | 19.6 | 230/600B..... | 882 |
| 22226BD1..... | 24.7 | 22226BKD1..... | 24.0 | 230/630B..... | 1060 |
| 22228BD1..... | 30.9 | 22228BKD1..... | 30.2 | 230/670B..... | 1310 |
| 22230BD1..... | 39.9 | 22230BKD1..... | 39.0 | 230/710B..... | 1460 |
| 22232BD1..... | 50.0 | 22232BKD1..... | 48.9 | 230/750B..... | 1740 |
| 22234BD1..... | 61.7 | 22234BKD1..... | 60.2 | 23122BD1..... | 11.9 |
| 22236B..... | 64.6 | 22236BK..... | 63.1 | 23124BD1..... | 17.0 |
| 22238B..... | 80.7 | 22238BK..... | 78.9 | 23126BD1..... | 18.7 |
| 22240B..... | 97.0 | 22240BK..... | 94.8 | 23128BD1..... | 22.5 |
| 22244B..... | 133 | 22244BK..... | 130 | 23130BD1..... | 34.4 |
| 22248B..... | 180 | 22248BK..... | 176 | 23132BD1..... | 43.7 |
| 22252B..... | 234 | 22252BK..... | 229 | 23134BD1..... | 47.4 |
| 22256B..... | 247 | 22256BK..... | 243 | 23136BD1..... | 55.3 |
| 22260B..... | 311 | 22260BK..... | 304 | 23138B..... | 77.8 |
| 223 SERIES | | 230 SERIES | | 231 SERIES | |
| 22308C..... | 2.15 | 22308CK..... | 2.10 | 23140B..... | 95.5 |
| 22309C..... | 2.93 | 22309CK..... | 2.87 | 23144B..... | 118 |
| 22310C..... | 3.95 | 22310CK..... | 3.86 | 23148B..... | 145 |
| 22311B..... | 5.07 | 22311BK..... | 4.96 | 23152B..... | 202 |
| 22312B..... | 6.39 | 22312BK..... | 6.24 | 23156B..... | 215 |
| 22313B..... | 7.61 | 22313BK..... | 7.43 | 23160B..... | 289 |
| 22314B..... | 9.30 | 22314BK..... | 9.08 | 23164B..... | 368 |
| 22315B..... | 11.6 | 22315BK..... | 11.3 | 23168B..... | 463 |
| 22316B..... | 13.3 | 22316BK..... | 13.0 | 23172B..... | 489 |
| 22317BD1..... | 15.7 | 22317BKD1..... | 15.3 | 23176B..... | 518 |
| 22318BD1..... | 18.4 | 22318BKD1..... | 18.0 | 23180B..... | 582 |
| 22319BD1..... | 21.5 | 22319BKD1..... | 21.0 | 23184B..... | 780 |
| 22320BD1..... | 27.3 | 22320BKD1..... | 26.7 | 23188B..... | 816 |
| 22322BD1..... | 37.7 | 22322BKD1..... | 36.8 | 23192B..... | 977 |
| 22324BD1..... | 47.4 | 22324BKD1..... | 46.3 | 23196B..... | 1080 |
| 22326BD1..... | 59.1 | 22326BKD1..... | 57.8 | 231/500B..... | 1290 |
| 22328BD1..... | 74.5 | 22328BKD1..... | 72.8 | 231/530B..... | 1440 |
| 22330B..... | 94.1 | 22330BK..... | 92.2 | 231/560B..... | 1660 |
| 22332B..... | 112 | 22332BK..... | 110 | 231/600B..... | 2000 |
| 22334B..... | 132 | 22334BK..... | 129 | 231/630B..... | 2310 |
| 22336B..... | 154 | 22336BK..... | 151 | 231/670B..... | 2760 |
| 22338B..... | 179 | 22338BK..... | 175 | 231/710B..... | 3130 |
| 22340B..... | 205 | 22340BK..... | 201 | 23122BKD1..... | 11.5 |
| 22344B..... | 258 | 22344BK..... | 254 | 23122BKD1..... | 16.4 |
| 22348B..... | 326 | 22348BK..... | 320 | 23126BKD1..... | 18.1 |
| 22352B..... | 403 | 22352BK..... | 395 | 23128BKD1..... | 21.7 |
| 22356B..... | 494 | 22356BK..... | 485 | 23130BKD1..... | 33.3 |
| 22360B..... | 595 | 22360BK..... | 584 | 23132BKD1..... | 42.3 |
| | | | | 23134BKD1..... | 45.9 |
| | | | | 23136BKD1..... | 53.4 |
| | | | | 23138BK..... | 75.4 |
| | | | | 23140BK..... | 92.6 |
| | | | | 23144BK..... | 114 |
| | | | | 23148BK..... | 141 |
| | | | | 23152BK..... | 195 |
| | | | | 23156BK..... | 209 |
| | | | | 23160BK..... | 280 |
| | | | | 23164BK..... | 357 |
| | | | | 23168BK..... | 450 |
| | | | | 23172BK..... | 474 |
| | | | | 23176BK..... | 503 |
| | | | | 23180BK..... | 564 |
| | | | | 23184BK..... | 756 |
| | | | | 23188BK..... | 789 |
| | | | | 23192BK..... | 946 |
| | | | | 23196BK..... | 1050 |
| | | | | 231/500BK..... | 1250 |
| | | | | 231/530BK..... | 1400 |
| | | | | 231/560BK..... | 1610 |
| | | | | 231/600BK..... | 1940 |
| | | | | 231/630BK..... | 2250 |
| | | | | 231/670BK..... | 2670 |
| | | | | 231/710BK..... | 3040 |



Bearing Series → **213 SERIES**

Bearing Number

21308C 1.55

Weight (lbs)

SPHERICAL ROLLER BEARINGS

LBS.

| MX-W SERIES | |
|---------------------|------|
| MX-W22211BLLC3..... | 2.6 |
| MX-W22213BLLC3..... | 4.2 |
| MX-W22215BLLC3..... | 4.6 |
| MX-W22217BLLC3..... | 6.2 |
| MX-W22220BLLC3..... | 13.0 |
| MX-W22222BLLC3..... | 18.7 |
| MX-W22224BLLC3..... | 24.0 |
| MX-W22226BLLC3..... | 28.4 |
| MX-W22228BLLC3..... | 36.2 |
| MX-W22232BLLC3..... | 59.5 |

| 232 SERIES | |
|-------------------|------|
| 23218B..... | 9.81 |
| 23220B..... | 14.3 |
| 23222BD1..... | 21.4 |
| 23224BD1..... | 26.7 |
| 23226BD1..... | 31.5 |
| 23228BD1..... | 41.4 |
| 23230BD1..... | 53.1 |
| 23232BD1..... | 66.1 |
| 23234BD1..... | 81.1 |
| 23236B..... | 86.0 |
| 23238B..... | 105 |
| 23240B..... | 126 |
| 23244B..... | 176 |
| 23248B..... | 238 |
| 23252B..... | 311 |
| 23256B..... | 331 |
| 23260B..... | 425 |
| 23264B..... | 536 |
| 23268B..... | 661 |
| 23272B..... | 747 |
| 23276B..... | 838 |
| 23280B..... | 1010 |
| 23284B..... | 1200 |
| 23288B..... | 1320 |
| 23292B..... | 1550 |
| 23296B..... | 1790 |
| 232/500B..... | 2200 |
| 232/530B..... | 2650 |
| 232/560B..... | 3000 |
| 232/600B..... | 3400 |
| 232/630B..... | 4190 |
| 232/670B..... | 5000 |
| 232/710B..... | 5600 |
| 232/750B..... | 6720 |

| 239 SERIES | |
|-------------------|------|
| 23932D1..... | 12.1 |
| 23934D1..... | 12.8 |
| 23936D1..... | 18.1 |
| 23938D1..... | 19.0 |
| 23940D1..... | 26.7 |
| 23944D1..... | 28.9 |
| 23948..... | 30.9 |
| 23952..... | 52.9 |
| 23956..... | 58.2 |
| 23960..... | 88.2 |
| 23964..... | 94.8 |
| 23968..... | 98.5 |
| 23972..... | 104 |
| 23976..... | 154 |
| 23980..... | 161 |
| 23984..... | 168 |
| 23988..... | 223 |
| 23992..... | 236 |
| 23996..... | 271 |
| 239/500..... | 289 |
| 239/530..... | 346 |
| 239/560..... | 401 |
| 239/600..... | 481 |
| 239/630..... | 611 |
| 239/670..... | 699 |
| 239/710..... | 827 |
| 239/750..... | 908 |
| 239/800..... | 1070 |
| 239/850..... | 1210 |
| 239/900..... | 1370 |

| 240 SERIES | |
|-------------------|------|
| 24024BD1..... | 12.1 |
| 24026BD1..... | 17.8 |
| 24028BD1..... | 18.9 |
| 24030BD1..... | 23.6 |
| 24032BD1..... | 28.7 |
| 24034BD1..... | 39.0 |
| 24036BD1..... | 51.4 |
| 24038BD1..... | 53.6 |
| 24040BD1..... | 68.3 |
| 24044B..... | 88.6 |
| 24048B..... | 94.8 |
| 24052B..... | 144 |
| 24056B..... | 152 |
| 24060B..... | 216 |
| 24064B..... | 227 |
| 24068B..... | 309 |
| 24072B..... | 324 |
| 24076B..... | 337 |
| 24080B..... | 445 |
| 24084B..... | 463 |
| 24088B..... | 540 |
| 24092B..... | 608 |
| 24096B..... | 628 |
| 240/500B..... | 650 |

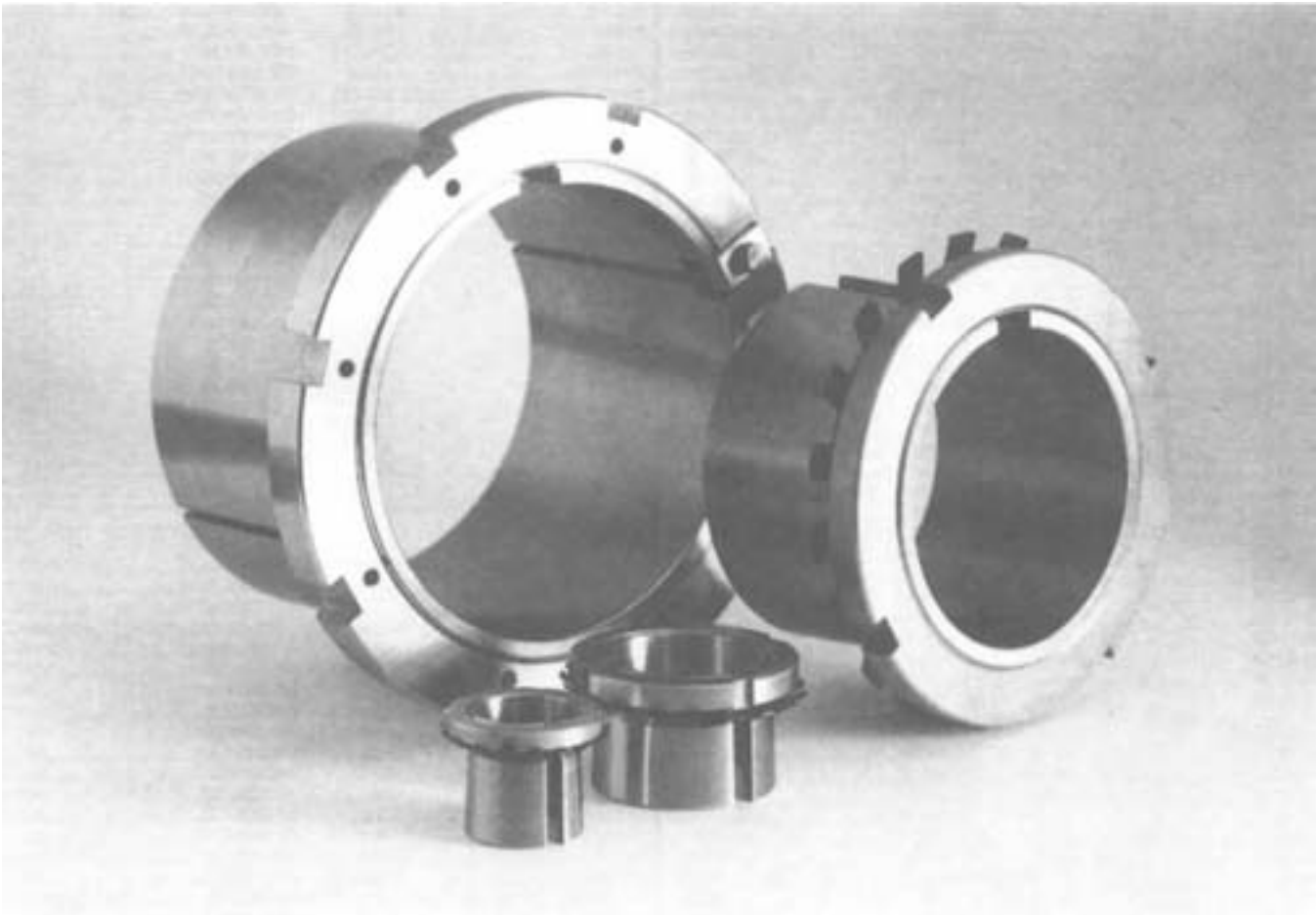
| 241 SERIES | |
|-------------------|------|
| 24122BD1..... | 15.6 |
| 24124BD1..... | 22.7 |
| 24126BD1..... | 24.3 |
| 24128BD1..... | 29.3 |
| 24130BD1..... | 44.5 |
| 24132BD1..... | 57.3 |
| 24134BD1..... | 60.0 |
| 24136BD1..... | 75.6 |
| 24138B..... | 94.4 |
| 24140B..... | 118 |
| 24144B..... | 148 |
| 24148B..... | 181 |
| 24152B..... | 251 |
| 24156B..... | 265 |
| 24160B..... | 355 |
| 24164B..... | 567 |
| 24168B..... | 593 |
| 24172B..... | 619 |
| 24176B..... | 644 |
| 24180B..... | 725 |
| 24184B..... | 970 |
| 24188B..... | 1010 |
| 24192B..... | 1210 |
| 24196B..... | 1340 |
| 241/500B..... | 1580 |

| 22314UAVS1 SERIES | |
|--------------------------|------|
| 22314UAVS1..... | 9.48 |
| 22315UAVS1..... | 11.6 |
| 22316UAVS1..... | 13.8 |
| 22317UAVS1..... | 16.0 |
| 22318UAVS1..... | 19.1 |
| 22319UAVS1..... | 21.9 |
| 22320UAVS1..... | 28.4 |
| 22322UAVS1..... | 39.9 |
| 22324UAVS1..... | 48.1 |
| 22326UAVS1..... | 62.4 |
| 22328UAVS1..... | 75.9 |
| 22330UAVS1..... | 91.1 |
| 22332UAVS1..... | 108 |
| 22334UAVS1..... | 132 |
| 22336UAVS1..... | 149 |
| 22338UAVS1..... | 174 |
| 22340UAVS1..... | 199 |



- Accurate and finely ground tapered surface
- Minimal eccentricity

- Narrow slot type (Bore nos. -05 to 13)
- Precisely Machined screw thread



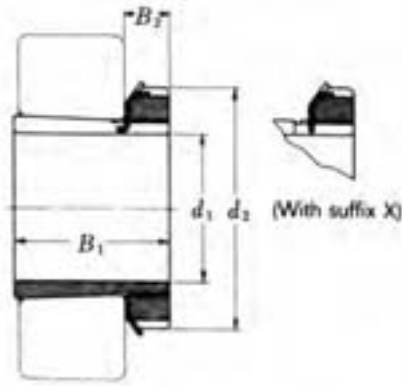
Note:



The Lockwasher with the straight inner tab must be used with the narrow slot type of adapter sleeve (suffix X)



Either the bent tab or the strait tab type may be used with the wide slot type of adapter sleeve (without suffix X).



NTN
SERIES
H2, HE2,
HS2, HA2
H3, HE3,
HS3, HA3

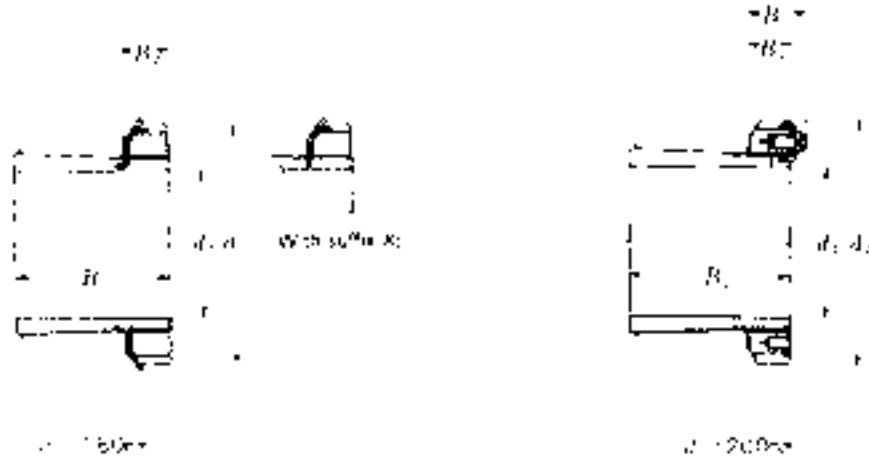
| Adapter No. | | | | d ₁ | | | | B ₁ | | d ₂ | B ₂ | Weight | |
|-------------|---------|--------|--------|----------------|-----------|-----------|-----------|----------------|-------|----------------|----------------|--------|-------|
| H | HE | HS | HA | H mm | HE in. | HS in. | HA in. | mm | in. | mm | mm | kg | lbs. |
| H204 | — | — | — | 17 | — | — | — | 24 | 0.945 | 32 | 7 | 0.041 | 0.090 |
| H205X | HE205 | — | — | 20 | 3/4 | — | — | 26 | 1.024 | 38 | 8 | 0.070 | 0.154 |
| H206X | HE206 | HS206 | HA206 | 25 | 1 | 7/8 | 1 5/16 | 27 | 1.063 | 45 | 8 | 0.099 | 0.218 |
| H207X | — | HS207 | HA207X | 30 | — | 1 1/8 | 1 3/16 | 29 | 1.142 | 52 | 9 | 0.125 | 0.276 |
| H208X | HE208X | HS208X | HA208X | 35 | 1 1/4 | 1 3/8 | 1 5/16 | 31 | 1.220 | 58 | 10 | 0.174 | 0.384 |
| H209X | HE209X | HS209 | HA209 | 40 | 1 1/2 | 1 5/8 | 1 7/16 | 33 | 1.299 | 65 | 11 | 0.227 | 0.500 |
| H210X | HE210X | HS210 | HA210 | 45 | 1 3/4 | 1 5/8 | 1 11/16 | 35 | 1.378 | 70 | 12 | 0.274 | 0.604 |
| H211X | HE211XY | HS211 | HA211 | 50 | 2 | 1 7/8 | 1 15/16 | 37 | 1.457 | 75 | 12 | 0.308 | 0.679 |
| H213X | — | HS212 | — | 55 | — | 2 1/8 | — | 38 | 1.496 | 80 | 13 | 0.346 | 0.763 |
| H213X | HE213X | HS213 | HA213 | 60 | 2 1/4 | 2 3/8 | 2 3/16 | 40 | 1.575 | 85 | 14 | 0.401 | 0.884 |
| H215X | HE215X | — | HA215 | 65 | 2 1/2 | — | 2 7/16 | 43 | 1.693 | 98 | 15 | 0.707 | 1.560 |
| H216X | HE216X | — | HA216 | 70 | 2 3/4 | — | 2 11/16 | 46 | 1.811 | 105 | 17 | 0.882 | 1.940 |
| H217X | HE217X | — | HA217X | 75 | 3 | — | 2 15/16 | 50 | 1.969 | 110 | 18 | 1.020 | 2.250 |
| H218X | — | — | HA218 | 80 | — | — | 3 3/16 | 52 | 2.047 | 120 | 18 | 1.190 | 2.620 |
| H219X | HE219X | — | — | 85 | 3 1/4 | — | — | 55 | 2.165 | 125 | 19 | 1.370 | 3.020 |
| H220X | HE220X | — | HA220 | 90 | 3 1/2 | — | 3 7/16 | 58 | 2.283 | 130 | 20 | 1.490 | 3.280 |
| H222X | HE222X | — | HA222X | 100 | 4 | — | 3 15/16 | 63 | 2.480 | 145 | 21 | 1.930 | 4.250 |

| Adapter No. | | | | d ₁ | | | | B ₁ | | d ₂ | B ₂ | Weight | |
|-------------|---------|--------|--------|----------------|-----------|-----------|-----------|----------------|-------|----------------|----------------|--------|-------|
| H | HE | HS | HA | H mm | HE in. | HS in. | HA in. | mm | in. | mm | mm | kg | lbs. |
| H304 | — | — | — | 17 | — | — | — | 28 | 1.102 | 32 | 7 | 0.045 | 0.099 |
| H305X | HE305 | — | — | 20 | 3/4 | — | — | 29 | 1.142 | 38 | 8 | 0.075 | 0.165 |
| H306X | HE306X | HS306 | HA306 | 25 | 1 | 7/8 | 1 5/16 | 31 | 1.220 | 45 | 8 | 0.109 | 0.240 |
| H307X | — | HS307 | HA307X | 30 | — | 1 1/8 | 1 3/16 | 35 | 1.378 | 52 | 9 | 0.142 | 0.313 |
| H308X | HE308X | HS308X | HA308X | 35 | 1 1/4 | 1 3/8 | 1 5/16 | 36 | 1.417 | 58 | 10 | 0.189 | 0.417 |
| H309X | HE309X | HS309 | HA309 | 40 | 1 1/2 | 1 5/8 | 1 7/16 | 39 | 1.535 | 65 | 11 | 0.248 | 0.547 |
| H310X | HE310X | HS310 | HA310 | 45 | 1 3/4 | 1 5/8 | 1 11/16 | 42 | 1.654 | 70 | 12 | 0.303 | 0.668 |
| H311X | HE311XY | HS311 | HA311 | 50 | 2 | 1 7/8 | 1 15/16 | 45 | 1.772 | 75 | 12 | 0.345 | 0.761 |
| H312X | — | HS312 | HA312 | 55 | — | 2 1/8 | — | 47 | 1.850 | 80 | 13 | 0.394 | 0.869 |
| H313X | HE313X | HS313 | HA313 | 60 | 2 1/4 | 2 3/8 | 2 3/16 | 50 | 1.969 | 85 | 14 | 0.458 | 1.010 |
| H315X | HE315X | — | HA315 | 65 | 2 1/2 | — | 2 7/16 | 55 | 2.165 | 98 | 15 | 0.831 | 1.830 |
| H316X | HE316X | — | HA316 | 70 | 2 3/4 | — | 2 11/16 | 59 | 2.323 | 105 | 17 | 1.030 | 2.270 |
| H317X | HE317X | — | HA317X | 75 | 3 | — | 2 15/16 | 63 | 2.480 | 110 | 18 | 1.180 | 2.600 |
| H318X | — | — | HA318 | 80 | — | — | 3 3/16 | 65 | 2.559 | 120 | 18 | 1.370 | 3.020 |
| H319X | HE319X | — | — | 85 | 3 1/4 | — | — | 68 | 2.677 | 125 | 19 | 1.560 | 3.440 |
| H320X | HE320X | — | HA320 | 90 | 3 1/2 | — | 3 7/16 | 71 | 2.795 | 130 | 20 | 1.690 | 3.730 |
| H322X | HE322X | — | HA322X | 100 | 4 | — | 3 15/16 | 77 | 3.031 | 145 | 21 | 2.180 | 4.810 |

- Notes: 1. The adapter no. denotes the complete assembly of adapter sleeve, locknut and lockwasher or lockplate.
2. Suffix X denotes the narrow slot type of adapter sleeve. The straight inner tab type of lockwasher (also denoted by suffix X) should be used with sleeve.
3. Suffix Y denotes a non-standard thread. This is necessary in certain cases because of the thin section of the sleeve.
4. The weights given in above table are for adapters of type H. There is little difference in the weights of other types of the same size.

NTN

SERIES
H 23
HE23
HS23
HA23



| Adapter No. | | | | d_1 | | | | B_1 | | d_2 | B_2 | B_3^* | Weight | |
|-------------|----------|---------|---------|-------|--------|--------|---------|-------|-------|-------|-------|---------|--------|-------|
| H | HE | HS | HA | H mm | HE in. | HS in. | HA in. | mm | in. | mm | mm | mm | kg | lbs. |
| H2304 | — | — | — | 17 | — | — | — | 31 | 1.102 | 32 | 7 | — | 0.049 | 0.108 |
| H2305X | HE2305 | — | — | 20 | 3/4 | — | — | 35 | 1.142 | 38 | 8 | — | 0.087 | 0.192 |
| H2306X | HE2306X | HS2306 | — | 25 | 1 | 7/8 | — | 38 | 1.220 | 45 | 8 | — | 0.126 | 0.278 |
| H2307X | — | HS2307 | — | 30 | — | 1 1/8 | — | 43 | 1.378 | 52 | 9 | — | 0.165 | 0.364 |
| H2308X | HE2308X | HS2308X | — | 35 | 1 1/4 | 1 3/8 | — | 46 | 1.417 | 58 | 10 | — | 0.224 | 0.494 |
| H2309X | HE2309X | HS2309X | HA2309 | 40 | 1 1/2 | 1 5/8 | 1 7/16 | 50 | 1.535 | 65 | 11 | — | 0.280 | 0.617 |
| H2310X | HE2310X | HS2310 | HA2310 | 45 | 1 3/4 | 1 5/8 | 1 11/16 | 55 | 1.654 | 70 | 12 | — | 0.362 | 0.798 |
| H2311X | HE2311XY | HS2311 | HA2311 | 50 | 2 | 1 7/8 | 1 15/16 | 59 | 1.772 | 75 | 12 | — | 0.420 | 0.926 |
| H2312X | — | HS2312 | — | 55 | — | 2 1/8 | — | 62 | 1.850 | 80 | 13 | — | 0.481 | 1.06 |
| H2313X | HE2313X | HS2313X | HA2313 | 60 | 2 1/4 | 2 3/8 | 2 3/16 | 65 | 1.969 | 85 | 14 | — | 0.557 | 1.23 |
| H2315X | HE2315X | — | HA2315 | 65 | 2 1/2 | — | 2 7/16 | 73 | 2.165 | 98 | 15 | — | 1.050 | 2.31 |
| H2316X | HE2316X | — | HA2316 | 70 | 2 3/4 | — | 2 11/16 | 78 | 2.323 | 105 | 17 | — | 1.280 | 2.82 |
| H2317X | HE2317X | — | HA2317X | 75 | 3 | — | 2 15/16 | 82 | 2.480 | 110 | 18 | — | 1.450 | 3.20 |
| H2318X | — | — | HA2318 | 80 | — | — | 3 3/16 | 86 | 2.559 | 120 | 18 | — | 1.690 | 3.73 |
| H2319X | HE2319X | — | — | 85 | 3 1/4 | — | — | 90 | 2.677 | 125 | 19 | — | 1.920 | 4.23 |
| H2320X | HE2320X | — | HA2320 | 90 | 3 1/2 | — | 3 7/16 | 97 | 2.795 | 130 | 20 | — | 2.150 | 4.74 |
| H2322X | HE2322X | — | HA2322X | 100 | 4 | — | 3 15/16 | 105 | 3.031 | 145 | 21 | — | 2.740 | 6.04 |
| H2324X | HE2324 | — | HA2324 | 110 | 4 1/4 | — | 4 3/16 | 112 | 4.409 | 155 | 22 | — | 3.190 | 7.03 |
| H2326 | HE2326 | — | HA2326 | 115 | 4 1/2 | — | 4 7/16 | 121 | 4.764 | 165 | 23 | — | 4.600 | 10.1 |
| H2328 | HE2328 | — | HA2328 | 125 | 5 | — | 4 15/16 | 131 | 5.157 | 180 | 24 | — | 5.550 | 12.2 |
| H2330 | HE2330 | — | HA2330 | 135 | 5 1/4 | — | 5 3/16 | 139 | 5.472 | 195 | 26 | — | 6.630 | 14.6 |
| H2332 | HE2332 | — | HA2332 | 140 | 5 1/2 | — | 5 7/16 | 147 | 5.787 | 210 | 28 | — | 9.140 | 20.2 |
| H2334 | HE2334 | — | HA2334 | 150 | 6 | — | 5 15/16 | 154 | 6.063 | 220 | 29 | — | 10.200 | 22.5 |
| H2336 | HE2336 | — | HA2336 | 160 | 6 1/4 | — | 6 7/16 | 161 | 6.339 | 230 | 30 | — | 11.300 | 24.9 |
| H2338 | HE2338 | — | HA2338 | 170 | 6 1/2 | — | 6 15/16 | 169 | 6.654 | 240 | 31 | — | 12.600 | 27.8 |
| H2340 | HE2340 | — | HA2340 | 180 | 7 | — | 7 3/16 | 176 | 6.929 | 250 | 32 | — | 13.900 | 30.6 |
| H2344 | — | — | — | 200 | — | — | — | 183 | 7.205 | 280 | 32 | 44 | 16.700 | 36.8 |
| H2348 | — | — | — | 220 | — | — | — | 196 | 7.717 | 300 | 34 | 46 | 19.700 | 43.4 |
| H2352 | — | — | — | 240 | — | — | — | 208 | 8.189 | 330 | 36 | 49 | 24.200 | 53.4 |
| H2356 | — | — | — | 260 | — | — | — | 221 | 8.701 | 350 | 38 | 51 | 27.800 | 61.3 |

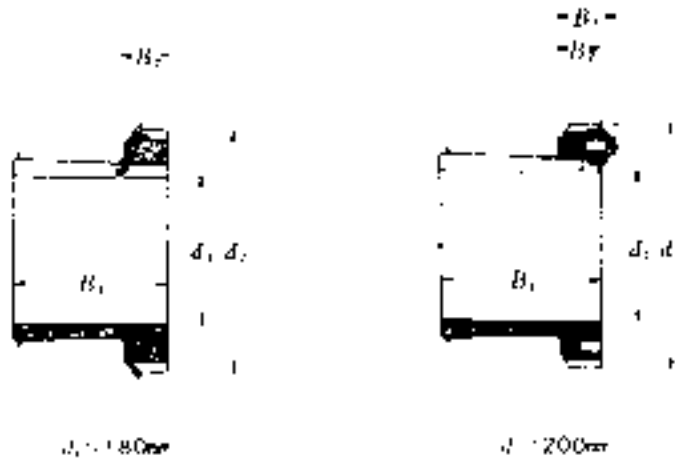
* Adapters with the dimension B_3 have a locking device as shown in the right illustration.

Notes: 1. The adapter no. denotes the complete assembly of adapter sleeve, locknut and lockwasher or lockplate.

2. Suffix X denotes the narrow slot type of adapter sleeve. The straight inner tab type of lockwasher (also denoted by suffix X) should be used with sleeve.

3. Suffix Y denotes a non-standard thread. This is necessary in certain cases because of the thin section of the sleeve.

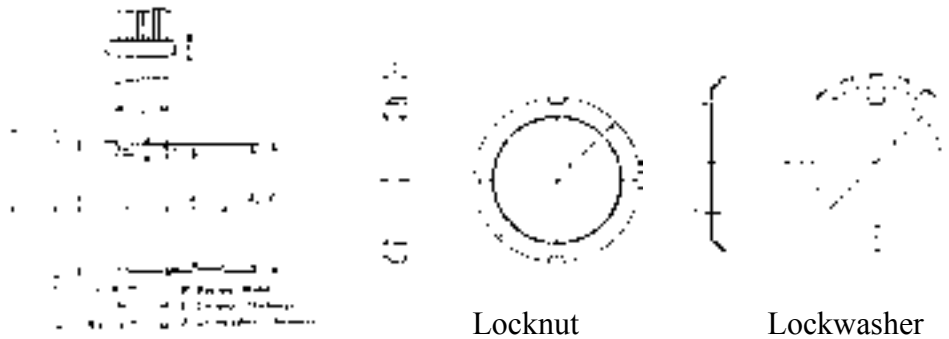
4. The weights given in above table are for adapters of type H. There is little difference in the weights of other types of the same size.



| Adapter No. | | | d_1 | | | B_1 | | d_2 | B_2 | B_3^* | Weight | |
|-------------|---------|--------|---------|-----------|-----------|-------|--------|-------|-------|---------|---------|------|
| H | HE | HA | H mm | HE in. | HA in. | mm | in. | mm | mm | mm | kg | lbs. |
| H3122X | HE3122X | HA3122 | 100 | 4 | 3 15/16 | 81 | 3.189 | 145 | 21 | — | 2.250 | 4.96 |
| H3124X | HE3124X | HA3124 | 110 | 4 1/4 | 4 3/16 | 88 | 3.465 | 155 | 22 | — | 2.640 | 5.82 |
| H3126 | HE3126 | HA3126 | 115 | 4 1/2 | 4 7/16 | 92 | 3.622 | 165 | 23 | — | 3.660 | 8.07 |
| H3128 | HE3128 | HA3128 | 125 | 5 | 4 15/16 | 97 | 3.819 | 180 | 24 | — | 4.340 | 9.57 |
| H3130 | HE3130 | HA3130 | 135 | 5 1/4 | 5 3/16 | 111 | 4.370 | 195 | 26 | — | 5.520 | 12.2 |
| H3132 | HE3132 | HA3132 | 140 | 5 1/2 | 5 7/16 | 119 | 4.685 | 210 | 28 | — | 7.670 | 16.9 |
| H3134 | HE3134 | HA3134 | 150 | 6 | 5 15/16 | 122 | 4.803 | 220 | 29 | — | 8.380 | 18.5 |
| H3136 | HE3136 | HA3136 | 160 | 6 1/2 | 6 7/16 | 131 | 5.157 | 230 | 30 | — | 9.500 | 20.9 |
| H3138 | HE3138 | HA3138 | 170 | 6 3/4 | 6 15/16 | 141 | 5.551 | 240 | 31 | — | 10.800 | 23.8 |
| H3140 | HE3140 | HA3140 | 180 | 7 | 7 3/16 | 150 | 5.906 | 250 | 32 | — | 12.100 | 26.7 |
| H3144 | — | HA3144 | 200 | — | 7 15/16 | 158 | 6.220 | 280 | 32 | 44 | 14.700 | 32.4 |
| H3148 | — | — | 220 | — | — | 169 | 6.654 | 300 | 34 | 46 | 17.300 | 38.1 |
| H3152 | — | — | 240 | — | — | 187 | 7.362 | 330 | 36 | 49 | 22.000 | 48.5 |
| H3156 | — | — | 260 | — | — | 192 | 7.559 | 350 | 38 | 51 | 24.500 | 54.0 |
| H3160 | — | — | 280 | — | — | 208 | 8.189 | 380 | 40 | 53 | 30.200 | 66.6 |
| H3164 | — | — | 300 | — | — | 226 | 8.898 | 400 | 42 | 56 | 34.900 | 77.0 |
| H3168 | — | — | 320 | — | — | 254 | 10.000 | 440 | 55 | 72 | 49.500 | 109 |
| H3172 | — | — | 340 | — | — | 259 | 10.197 | 460 | 58 | 75 | 54.200 | 119 |
| H3176 | — | — | 360 | — | — | 264 | 10.394 | 490 | 60 | 77 | 61.700 | 136 |
| H3180 | — | — | 380 | — | — | 272 | 10.709 | 520 | 62 | 82 | 70.600 | 156 |
| H3184 | — | — | 400 | — | — | 304 | 11.969 | 540 | 70 | 90 | 84.200 | 186 |
| H3188 | — | — | 410 | — | — | 307 | 12.087 | 560 | 70 | 90 | 104.000 | 229 |
| H3192 | — | — | 430 | — | — | 326 | 12.835 | 580 | 75 | 95 | 116.000 | 256 |
| H3196 | — | — | 450 | — | — | 335 | 13.189 | 620 | 75 | 95 | 133.000 | 293 |
| H31/500 | — | — | 470 | — | — | 356 | 14.016 | 630 | 80 | 100 | 143.000 | 315 |

* Adapters with the dimension B_3 have a locking device as shown in the right illustration.

Notes: The weights given in above table are for adapters of type H. There is little difference in the weights of other types of the same size.



Locknut

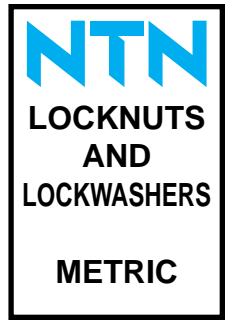
Lockwasher

LOCKNUTS AND LOCKWASHERS

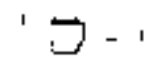
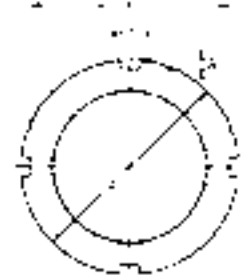
| For Bearing with this Bore Number | LOCKNUT NUMBER | LOCKWASHER NUMBER | Shaft Dimensions | | | | | | | | | | | Locknut Dimensions | | Lockwasher Dimensions | | |
|-----------------------------------|----------------|-------------------|---------------------|--------|--------------------------------------|------------------|---|------------------|------------------|--|--------------------|--------------------|--------------------|--------------------|--------------------------------|-----------------------|--------------------|--------------------------------|
| | | | <i>d</i> Nominal | | <i>d₃</i> Thread O. D. | | <i>d₂</i> Thread Pitch Diameter | | Threads per inch | <i>d₁</i> (inch) Extension Diameter Maximum | <i>C</i> (inch) | <i>G</i> (inch) | <i>I</i> (inch) | <i>E</i> (inch) | <i>D₁</i> (inch) | <i>L</i> (inch) | <i>T</i> (inch) | <i>d₄</i> (inch) |
| | | | (mm) | (inch) | Maximum | Tolerance +.0000 | Maximum | Tolerance +.0000 | | | | | | | | | | |
| 05 | N05 | W05 | 25 | .9843 | .969 | -.0054 | .9487 | -.0034 | 32 | 7/8 | 15/32 | 19/32 | 1/16 | 3/16 | 1 9/16 | 1 3/32 | .050 | 1.000 |
| 06 | N06 | W06 | 30 | 1.1811 | 1.173 | -.0082 | 1.1369 | -.0040 | 18 | 1 1/16 | 15/32 | 19/32 | 3/32 | 3/16 | 1 3/4 | 1 3/32 | .050 | 1.199 |
| 07 | N07 | W07 | 35 | 1.3780 | 1.376 | -.0082 | 1.3399 | -.0040 | 18 | 1 1/4 | 1/2 | 5/8 | 3/32 | 3/16 | 2 1/16 | 7/16 | .050 | 1.407 |
| 08 | N08 | W08 | 40 | 1.5748 | 1.563 | -.0082 | 1.5269 | -.0045 | 18 | 1 15/32 | 17/32 | 21/32 | 3/32 | 5/16 | 2 1/4 | 7/16 | .058 | 1.593 |
| 09 | N09 | W09 | 45 | 1.7717 | 1.767 | -.0082 | 1.7309 | -.0045 | 18 | 1 11/16 | 17/32 | 11/4 | 1/8 | 5/16 | 2 17/32 | 7/16 | .058 | 1 13/16 |
| 10 | N10 | W10 | 50 | 1.9685 | 1.967 | -.0082 | 1.9309 | -.0045 | 18 | 1 7/8 | 19/32 | 3/4 | 1/8 | 5/16 | 2 11/16 | 1/2 | .058 | 2 |
| 11 | N11 | W11 | 55 | 2.1654 | 2.157 | -.0082 | 2.1209 | -.0051 | 18 | 2 1/16 | 19/32 | 3/4 | 1/8 | 5/16 | 2 31/32 | 1/2 | .063 | 2 3/16 |
| 12 | N12 | W12 | 60 | 2.3622 | 2.360 | -.0082 | 2.3239 | -.0051 | 18 | 2 1/4 | 9/8 | 25/32 | 1/8 | 5/16 | 3 3/32 | 17/32 | .063 | 2 13/32 |
| 13 | N13 | W13 | 65 | 2.5591 | 2.548 | -.0082 | 2.5119 | -.0051 | 18 | 2 7/16 | 21/32 | 13/16 | 1/8 | 5/16 | 3 3/8 | 9/16 | .063 | 2 19/32 |
| 14 | N14 | W14 | 70 | 2.7559 | 2.751 | -.0082 | 2.7149 | -.0051 | 18 | 2 5/8 | 21/32 | 29/32 | 1/8 | 5/16 | 3 5/8 | 9/16 | .063 | 2 13/16 |
| 15 | AN15A | W15 | 75 | 2.9528 | 2.933 | -.0112 | 2.8789 | -.0054 | 12 | 2 25/32 | 11/16 | 15/16 | 5/32 | 5/16 | 3 7/8 | 19/32 | .072 | 3 |
| 16 | AN16A | W16 | 80 | 3.1496 | 3.137 | -.0112 | 3.0829 | -.0059 | 12 | 3 | 1 1/16 | 1 9/16 | 3/32 | 3/8 | 4 3/32 | 19/32 | .072 | 3 3/16 |
| 17 | AN17A | W17 | 85 | 3.3465 | 3.340 | -.0112 | 3.2859 | -.0074 | 12 | 3 3/16 | 23/32 | 31/32 | 5/32 | 3/8 | 4 13/32 | 5/8 | .072 | 3 13/32 |
| 18 | AN18A | W18 | 90 | 3.5433 | 3.527 | -.0112 | 3.4729 | -.0074 | 12 | 3 3/8 | 13/16 | 1 1/16 | 5/32 | 3/8 | 4 21/32 | 11/16 | .094 | 3 19/32 |
| 19 | AN19A | W19 | 95 | 3.7402 | 3.730 | -.0112 | 3.6759 | -.0074 | 12 | 3 9/16 | 27/32 | 1 3/32 | 5/32 | 3/8 | 4 15/16 | 23/32 | .094 | 3 13/16 |
| 20 | AN20A | W20 | 100 | 3.9370 | 3.918 | -.0112 | 3.8639 | -.0074 | 12 | 3 25/32 | 7/8 | 1 3/16 | 5/32 | 3/8 | 5 3/16 | 3/4 | .094 | 4 |
| 21 | AN21A | W21 | 105 | 4.1339 | 4.122 | -.0112 | 4.0679 | -.0083 | 12 | 3 15/16 | 7/8 | 1 3/16 | 3/32 | 3/8 | 5 1/16 | 3/4 | .094 | 4 7/32 |
| 22 | AN22A | W22 | 110 | 4.3307 | 4.325 | -.0112 | 4.2709 | -.0083 | 12 | 4 3/16 | 29/32 | 1 7/32 | 5/32 | 3/8 | 5 23/32 | 25/32 | .125 | 4 13/32 |
| 24 | AN24A | W24 | 120 | 4.7244 | 4.716 | -.0112 | 4.6619 | -.0083 | 12 | 4 9/16 | 15/16 | 1 1/4 | 5/32 | 3/8 | 6 1/8 | 13/16 | .125 | 4 13/16 |
| 26 | AN26A | W26 | 130 | 5.1181 | 5.106 | -.0112 | 5.0519 | -.0083 | 12 | 4 15/16 | 1 | 1 5/16 | 5/32 | 1/2 | 6 3/4 | 7/8 | .125 | 5 7/32 |
| 28 | AN28A | W28 | 140 | 5.5118 | 5.497 | -.0112 | 5.4429 | -.0083 | 12 | 5 5/16 | 1 1/16 | 1 3/8 | 3/32 | 5/8 | 7 3/32 | 15/16 | .125 | 5 19/32 |
| 30 | AN30A | W30 | 150 | 5.9055 | 5.888 | -.0112 | 5.8339 | -.0083 | 12 | 5 23/32 | 1 1/8 | 1 1/2 | 5/32 | 5/8 | 7 11/16 | 31/32 | .156 | 6 |
| 32 | AN32A | W32 | 160 | 6.2992 | 6.284 | -.0152 | 6.2028 | -.0091 | 8 | 6 1/8 | 1 3/16 | 1 9/16 | 1/4 | 5/8 | 8 1/16 | 1 1/32 | .156 | 6 13/32 |
| 34 | AN34A | W34 | 170 | 6.6929 | 6.659 | -.0152 | 6.5778 | -.0091 | 8 | 6 1/2 | 1 7/32 | 1 19/32 | 1/4 | 3/4 | 8 21/32 | 1 1/16 | .156 | 6 25/32 |
| 36 | AN36A | W36 | 180 | 7.0866 | 7.066 | -.0152 | 6.9848 | -.0091 | 8 | 6 29/32 | 1 1/4 | 1 5/8 | 1/4 | 3/4 | 9 1/16 | 1 3/32 | .156 | 7 3/16 |
| 38 | AN38A | W38 | 190 | 7.4803 | 7.472 | -.0152 | 7.3908 | -.0091 | 8 | 7 5/16 | 1 9/32 | 1 21/32 | 1/4 | 3/4 | 9 15/32 | 1 1/8 | .156 | 7 19/32 |
| 40 | AN40A | W40 | 200 | 7.8740 | 7.847 | -.0152 | 7.7658 | -.0114 | 8 | 7 11/16 | 1 11/32 | 1 23/32 | 1/4 | 7/8 | 9 27/32 | 1 3/16 | .156 | 8 |
| 44 | N44 | W44 | 220 | 8.6614 | 8.628 | -.0152 | 8.5468 | -.0121 | 8 | 8 5/16 | 1 3/8 | 1 9/16 | 1/4 | 1 1/16 | 11 | 1 1/4 | .156 | 8 45/64 |
| 22 | N022 | W022 | 110 | 4.3307 | 4.325 | -.0112 | 4.2709 | -.0083 | 12 | 4 3/16 | 29/32 | 1 7/32 | 5/32 | 3/8 | 5 5/16 | 25/32 | .125 | 4 13/32 |
| 24 | N024 | W024 | 120 | 4.7244 | 4.716 | -.0112 | 4.6619 | -.0083 | 12 | 4 9/16 | 15/16 | 1 1/4 | 5/32 | 3/8 | 5 11/16 | 13/16 | .125 | 4 13/16 |
| 26 | N026 | W026 | 130 | 5.1181 | 5.106 | -.0112 | 5.0519 | -.0083 | 12 | 4 15/16 | 1 | 1 5/16 | 5/32 | 1/2 | 6 1/8 | 7/8 | .125 | 5 7/32 |
| 28 | N028 | W028 | 140 | 5.5118 | 5.497 | -.0112 | 5.4429 | -.0083 | 12 | 5 5/16 | 1 1/16 | 1 3/8 | 5/32 | 5/8 | 6 1/2 | 15/16 | .125 | 5 19/32 |
| 30 | N030 | W030 | 150 | 5.9055 | 5.888 | -.0112 | 5.8339 | -.0083 | 12 | 5 23/32 | 1 1/8 | 1 1/2 | 5/32 | 5/8 | 7 1/8 | 31/32 | .125 | 6 |
| 32 | N032 | W032 | 160 | 6.2992 | 6.284 | -.0152 | 6.2028 | -.0091 | 8 | 6 1/8 | 1 3/16 | 1 9/16 | 1/4 | 5/8 | 7 1/2 | 1 1/32 | .125 | 6 13/32 |
| 34 | N034 | W034 | 170 | 6.6929 | 6.659 | -.0152 | 6.5778 | -.0091 | 8 | 6 1/2 | 1 7/32 | 1 19/32 | 1/4 | 3/4 | 7 7/8 | 1 1/16 | .125 | 6 25/32 |
| 36 | N036 | W036 | 180 | 7.0866 | 7.066 | -.0152 | 6.9848 | -.0091 | 8 | 6 29/32 | 1 1/4 | 1 5/8 | 1/4 | 3/4 | 8 1/4 | 1 3/32 | .125 | 7 3/16 |
| 38 | N038 | W038 | 190 | 7.4803 | 7.472 | -.0152 | 7.3908 | -.0091 | 8 | 7 5/16 | 1 9/32 | 1 21/32 | 1/4 | 3/4 | 8 11/16 | 1 1/8 | .125 | 7 19/32 |
| 40 | N040 | W040 | 200 | 7.8740 | 7.847 | -.0152 | 7.7658 | -.0114 | 8 | 7 11/16 | 1 11/32 | 1 23/32 | 1/4 | 7/8 | 9 7/16 | 1 3/16 | .125 | 8 |
| 44 | N044 | W044 | 220 | 8.6614 | 8.628 | -.0152 | 8.5468 | -.0121 | 8 | 8 5/16 | 1 3/8 | 1 9/16 | 1/4 | 1 1/16 | 10 1/4 | 1 1/4 | .125 | 8 45/64 |

Threads are derived from the Screw Thread Standards for Federal services Handbook H-28.
Tolerance: + 1/64 to -0 inch

LOCKNUTS AND LOCKWASHERS

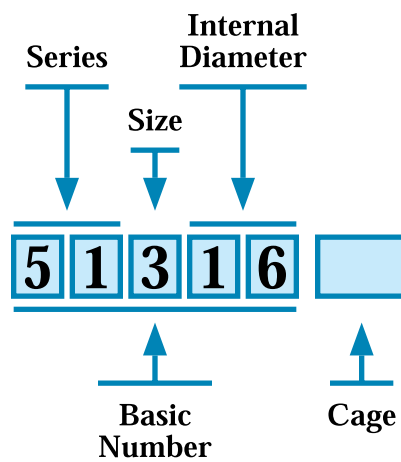


| For Bearing with Bore Number | Locknut Number | Lockwasher Number | Thread Size | Threads per mm | Dimensions (mm) | | | | | | Shaft Diameter (mm) |
|------------------------------|----------------|-------------------|-------------|----------------|-----------------|-----------------------|-----------------------|----------|----------|----------|---------------------|
| | | | | | <i>d</i> | <i>d</i> ₁ | <i>d</i> ₂ | <i>g</i> | <i>b</i> | <i>h</i> | |
| — | AN00 | AW00 | M10 X 75 | .75 | 13 | 18 | 14 | 3 | 2 | 4 | 10 |
| — | AN01 | AW01 | M12 X 1 | 1.0 | 17 | 22 | 18 | 3 | 2 | 4 | 12 |
| — | AN02 | AW02 | M15 X 1 | 1.0 | 21 | 25 | 21 | 4 | 2 | 5 | 15 |
| — | AN03 | AW03 | M17 X 1 | 1.0 | 24 | 28 | 24 | 4 | 2 | 5 | 17 |
| 04 | AN04 | AW04 | M20 X 1 | 1.0 | 26 | 32 | 28 | 4 | 2 | 6 | 20 |
| 05 | AN05 | AW05 | M25 X 1.5 | 1.5 | 32 | 38 | 34 | 5 | 2 | 7 | 25 |
| 06 | AN06 | AW06 | M30 X 1.5 | 1.5 | 38 | 45 | 41 | 5 | 2 | 7 | 30 |
| 07 | AN07 | AW07 | M35 X 1.5 | 1.5 | 44 | 52 | 48 | 5 | 2 | 8 | 35 |
| 08 | AN08 | AW08 | M40 X 1.5 | 1.5 | 50 | 58 | 53 | 6 | 2.5 | 9 | 40 |
| 09 | AN09 | AW09 | M45 X 1.5 | 1.5 | 56 | 65 | 60 | 6 | 2.5 | 10 | 45 |
| 10 | AN10 | AW10 | M50 X 1.5 | 1.5 | 61 | 70 | 65 | 6 | 2.5 | 11 | 50 |
| 11 | AN11 | AW11 | M55 X 2 | 2.0 | 67 | 75 | 69 | 7 | 3 | 11 | 55 |
| 12 | AN12 | AW12 | M60 X 2 | 2.0 | 73 | 80 | 74 | 7 | 3 | 11 | 60 |
| 13 | AN13 | AW13 | M65 X 2 | 2.0 | 79 | 85 | 79 | 7 | 3 | 12 | 65 |
| 14 | AN14 | AW14 | M70 X 2 | 2.0 | 85 | 92 | 85 | 8 | 3.5 | 12 | 70 |
| 15 | AN15 | AW15 | M75 X 2 | 2.0 | 90 | 98 | 91 | 8 | 3.5 | 13 | 75 |
| 16 | AN16 | AW16 | M80 X 2 | 2.0 | 95 | 105 | 98 | 8 | 3.5 | 15 | 80 |
| 17 | AN17 | AW17 | M85 X 2 | 2.0 | 102 | 110 | 103 | 8 | 3.5 | 16 | 85 |
| 18 | AN18 | AW18 | M90 X 2 | 2.0 | 108 | 120 | 112 | 10 | 4 | 16 | 90 |
| 19 | AN19 | AW19 | M95 X 2 | 2.0 | 113 | 125 | 117 | 10 | 4 | 17 | 95 |
| 20 | AN20 | AW20 | M100 X 2 | 2.0 | 120 | 130 | 122 | 10 | 4 | 18 | 100 |
| 21 | AN21 | AW21 | M105 X 2 | 2.0 | 126 | 140 | 130 | 12 | 5 | 18 | 105 |
| 22 | AN22 | AW22 | M110 X 2 | 2.0 | 133 | 145 | 135 | 12 | 5 | 19 | 110 |
| — | AN23 | AW23 | M115 X 2 | 2.0 | 137 | 150 | 140 | 12 | 5 | 19 | 115 |
| 24 | AN24 | AW24 | M120 X 2 | 2.0 | 138 | 155 | 145 | 12 | 5 | 20 | 120 |
| — | AN25 | AW25 | M125 X 2 | 2.0 | 148 | 160 | 150 | 12 | 5 | 21 | 125 |
| 26 | AN26 | AW26 | M130 X 2 | 2.0 | 149 | 165 | 155 | 12 | 5 | 21 | 130 |
| — | AN27 | AW27 | M135 X 2 | 2.0 | 160 | 175 | 163 | 14 | 6 | 22 | 135 |
| 28 | AN28 | AW28 | M140 X 2 | 2.0 | 160 | 180 | 168 | 14 | 6 | 22 | 140 |
| — | AN29 | AW29 | M145 X 2 | 2.0 | 171 | 190 | 178 | 14 | 6 | 24 | 145 |
| 30 | AN30 | AW30 | M150 X 2 | 2.0 | 171 | 195 | 183 | 14 | 6 | 24 | 150 |
| — | AN31 | AW31 | M155 X 3 | 3.0 | 182 | 200 | 186 | 16 | 7 | 25 | 155 |
| 32 | AN32 | AW32 | M160 X 3 | 3.0 | 182 | 210 | 196 | 16 | 7 | 25 | 160 |
| — | AN33 | AW33 | M165 X 3 | 3.0 | 193 | 210 | 196 | 16 | 7 | 26 | 165 |
| 34 | AN34 | AW34 | M170 X 3 | 3.0 | 193 | 220 | 206 | 16 | 7 | 26 | 170 |
| 36 | AN36 | AW36 | M180 X 3 | 3.0 | 203 | 230 | 214 | 18 | 8 | 27 | 180 |
| 38 | AN38 | AW38 | M190 X 3 | 3.0 | 214 | 240 | 224 | 18 | 8 | 28 | 190 |
| 40 | AN40 | AW40 | M200 X 3 | 3.0 | 226 | 250 | 234 | 18 | 8 | 29 | 200 |
| 44 | AN44 | AL44 | Tr220 X 4 | 4.0 | 250 | 280 | 260 | 20 | 10 | 32 | 220 |
| 48 | AN48 | AL44 | Tr240 X 4 | 4.0 | 270 | 300 | 280 | 20 | 10 | 34 | 240 |
| 52 | AN52 | AL52 | Tr260 X 4 | 4.0 | 300 | 330 | 306 | 24 | 12 | 36 | 260 |
| 56 | AN56 | AL52 | Tr280 X 4 | 4.0 | 320 | 350 | 326 | 24 | 12 | 38 | 280 |
| 60 | AN60 | AL60 | Tr300 X 4 | 4.0 | 340 | 380 | 356 | 24 | 12 | 40 | 300 |
| 64 | AN64 | AL64 | Tr320 X 5 | 5.0 | 360 | 400 | 376 | 24 | 12 | 42 | 320 |
| 68 | AN68 | AL68 | Tr340 X 5 | 5.0 | 400 | 440 | 410 | 28 | 15 | 55 | 340 |
| 72 | AN72 | AL68 | Tr360 X 5 | 5.0 | 420 | 460 | 430 | 28 | 15 | 58 | 360 |
| 76 | AN76 | AL76 | Tr380 X 5 | 5.0 | 450 | 490 | 454 | 32 | 18 | 60 | 380 |
| 80 | AN80 | AL80 | Tr400 X 5 | 5.0 | 470 | 520 | 484 | 32 | 18 | 62 | 400 |
| 84 | AN84 | AL80 | Tr420 X 5 | 5.0 | 490 | 540 | 504 | 32 | 18 | 70 | 420 |
| 88 | AN88 | AL88 | Tr440 X 5 | 5.0 | 510 | 560 | 520 | 36 | 20 | 70 | 440 |
| 92 | AN92 | AL88 | Tr460 X 5 | 5.0 | 540 | 580 | 540 | 36 | 20 | 75 | 460 |
| 96 | AN96 | AL96 | Tr480 X 5 | 5.0 | 560 | 620 | 580 | 36 | 20 | 75 | 480 |
| /500 | AN100 | AL100 | Tr500 X 5 | 5.0 | 580 | 630 | 584 | 40 | 23 | 80 | 800 |





| LOCKNUTS AND LOCKWASHERS | | | | | | | |
|--------------------------|--------------|-------------------|-------------|------------------|--------------|-------------------|-------------|
| — INCH SIZES — | | | | — METRIC SIZES — | | | |
| Locknut Number | Weight (lbs) | Lockwasher Number | Weight (oz) | Locknut Number | Weight (lbs) | Lockwasher Number | Weight (oz) |
| N05 | .12 | W05 | .16 | AN00 | .01 | AW00 | .05 |
| N06 | .14 | W06 | .18 | AN01 | .02 | AW01 | .07 |
| N07 | .22 | W07 | .26 | AN02 | .02 | AW02 | .09 |
| N08 | .24 | W08 | .39 | AN03 | .03 | AW03 | .11 |
| N09 | .31 | W09 | .48 | AN04 | .04 | AW04 | .12 |
| N10 | .36 | W10 | .49 | AN05 | .06 | AW05 | .23 |
| N11 | .44 | W11 | .59 | AN06 | .09 | AW06 | .28 |
| N12 | .49 | W12 | .61 | AN07 | .12 | AW07 | .37 |
| N13 | .59 | W13 | .71 | AN08 | .19 | AW08 | .43 |
| N14 | .67 | W14 | .81 | AN09 | .26 | AW09 | .54 |
| AN15A | .83 | W15 | 1.19 | AN10 | .33 | AW10 | .56 |
| AN16A | .96 | W16 | 1.37 | AN11 | .35 | AW11 | .69 |
| AN17A | 1.10 | W17 | 1.42 | AN12 | .38 | AW12 | .89 |
| AN18A | 1.37 | W18 | 2.21 | AN13 | .45 | AW13 | 1.02 |
| AN19A | 1.63 | W19 | 2.47 | AN14 | .53 | AW14 | 1.18 |
| AN20A | 1.89 | W20 | 2.76 | AN15 | .63 | AW15 | 1.26 |
| AN21A | 1.99 | W21 | 2.94 | AN16 | .88 | AW16 | 1.64 |
| AN22A | 2.33 | W22 | 4.60 | AN17 | .99 | AW17 | 1.85 |
| AN24A | 2.55 | W24 | 4.90 | AN18 | 1.23 | AW18 | 2.20 |
| AN26A | 3.53 | W26 | 6.21 | AN19 | 1.45 | AW19 | 2.36 |
| AN28A | 3.92 | W28 | 6.40 | AN20 | 1.54 | AW20 | 2.70 |
| AN30A | 4.89 | W30 | 9.71 | AN21 | 1.86 | AW21 | 2.91 |
| AN32A | 5.55 | W32 | 9.92 | AN22 | 2.13 | AW22 | 3.32 |
| AN34A | 6.93 | W34 | 12.22 | AN23 | 2.23 | AW23 | 3.81 |
| AN36A | 7.35 | W36 | 12.87 | AN24 | 2.38 | AW24 | 3.70 |
| AN38A | 7.99 | W38 | 13.46 | AN25 | 2.62 | AW25 | 4.16 |
| AN40A | 8.86 | W40 | 13.88 | AN26 | 2.76 | AW26 | 3.99 |
| N44 | 11.85 | W44 | 19.41 | AN27 | 3.42 | AW27 | 5.08 |
| N022 | 1.62 | W022 | 3.39 | AN28 | 3.44 | AW28 | 5.01 |
| N024 | 1.82 | W024 | 3.75 | AN29 | 4.41 | AW29 | 5.93 |
| N026 | 2.21 | W026 | 4.02 | AN30 | 4.48 | AW30 | 5.82 |
| N028 | 2.50 | W028 | 4.39 | AN31 | 4.87 | AW31 | 7.37 |
| N030 | 3.42 | W030 | 6.21 | AN32 | 5.71 | AW32 | 7.83 |
| N032 | 3.89 | W032 | 6.53 | AN33 | 5.36 | AW33 | 8.50 |
| N034 | 4.25 | W034 | 6.98 | AN34 | 6.17 | AW34 | 8.71 |
| N036 | 4.50 | W036 | 7.16 | AN36 | 6.77 | AW36 | 9.45 |
| N038 | 5.02 | W038 | 7.41 | AN38 | 7.47 | AW38 | 9.81 |
| N040 | 7.10 | W040 | 9.01 | AN40 | 8.14 | AW40 | 10.34 |
| N044 | 8.20 | W044 | 9.58 | AN44 | 11.47 | AL44 | .92 |
| | | | | AN48 | 13.12 | AL44 | .92 |
| | | | | AN52 | 17.75 | AL52 | 1.20 |
| | | | | AN56 | 19.96 | AL52 | 1.20 |
| | | | | AN60 | 26.02 | AL60 | 1.34 |
| | | | | AN64 | 28.89 | AL64 | 1.89 |
| | | | | AN68 | 50.94 | AL68 | 2.35 |
| | | | | AN72 | 55.35 | AL68 | 2.35 |
| | | | | AN76 | 68.13 | AL76 | 2.81 |
| | | | | AN80 | 81.36 | AL80 | 2.89 |
| | | | | AN84 | 95.92 | AL80 | 2.89 |
| | | | | AN88 | 99.89 | AL88 | 3.17 |
| | | | | AN92 | 111.13 | AL88 | 3.17 |
| | | | | AN96 | 137.15 | AL96 | 3.67 |
| | | | | AN100 | 139.58 | AL100 | 3.70 |



1. SERIES & SIZE

- 51, 53*: Single direction thrust ball bearing
- 52, 54*: Double direction thrust ball bearing
- 56: Angular contact thrust ball bearing
- 29: Spherical thrust roller bearing
- 29: Single direction thrust ball bearing
- 9: Single direction thrust ball bearing

2. CAGE

- No Symbol: Standard cage
- J: Pressed steel cage
- L1: Machined brass cage
- T2: Plastic cage, nylon or teflon

* Self-aligning outside diameter



Units: INCHES
Millimeters

SINGLE DIRECTION THRUST BALL BEARINGS



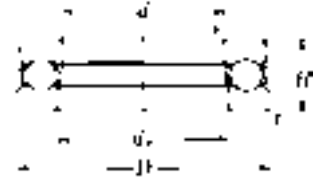
| Bearing No. | d | d _e | D _i | D | H | r | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|----------------|----------------|----------------|----------------|--------------|-------------|--------------------------|-----------------------|--------------|
| | | | | | | | Dynamic C | Static C _o | |
| 51100 | .3937 10 | .433 11 | .945 24 | .9449 24 | .3543 9 | .012 0.3 | 2,250 | 3,150 | .046 |
| 51101 | .4724 12 | .512 13 | 1.024 26 | 1.0236 26 | .3543 9 | .012 0.3 | 2,320 | 3,450 | .051 |
| 51102 | .5906 15 | .630 16 | 1.102 28 | 1.1024 28 | .3543 9 | .012 0.3 | 2,370 | 3,750 | .053 |
| 51103 | .6693 17 | .709 18 | 1.181 30 | 1.1811 30 | .3543 9 | .012 0.3 | 2,430 | 4,100 | .057 |
| 51104 | .7874 20 | .827 21 | 1.378 35 | 1.3780 35 | .3937 10 | .012 0.3 | 3,200 | 5,550 | .088 |
| 51105 | .9843 25 | 1.024 26 | 1.654 42 | 1.6535 42 | .4331 11 | .024 0.6 | 4,400 | 8,350 | .132 |
| 51106 | 1.1811 30 | 1.260 32 | 1.850 47 | 1.8504 47 | .4331 11 | .024 0.6 | 4,600 | 9,500 | .152 |
| 51107 | 1.3780 35 | 1.457 37 | 2.047 52 | 2.0472 52 | .4724 12 | .024 0.6 | 4,600 | 10,000 | .187 |
| 51108 | 1.5748 40 | 1.654 42 | 2.362 60 | 2.3622 60 | .5118 13 | .024 0.6 | 6,050 | 14,100 | .276 |
| 51109 | 1.7717 45 | 1.850 47 | 2.559 65 | 2.5591 65 | .5512 14 | .024 0.6 | 6,250 | 15,500 | .326 |
| 51110 | 1.9685 50 | 2.047 52 | 2.756 70 | 2.7559 70 | .5512 14 | .024 0.6 | 6,450 | 17,000 | .355 |
| 51111 | 2.1654 55 | 2.244 57 | 3.071 78 | 3.0709 78 | .6299 16 | .024 0.6 | 7,800 | 20,900 | .498 |
| 51112 | 2.3622 60 | 2.441 62 | 3.346 85 | 3.3465 85 | .6693 17 | .039 1.0 | 9,300 | 25,300 | .653 |
| 51113 | 2.5591 65 | 2.638 67 | 3.543 90 | 3.5433 90 | .7087 18 | .039 1.0 | 9,400 | 26,400 | .745 |
| 51114 | 2.7559 70 | 2.835 72 | 3.740 95 | 3.7402 95 | .7087 18 | .039 1.0 | 9,700 | 28,500 | .785 |
| 51115 | 2.9528 75 | 3.031 77 | 3.937 100 | 3.9370 100 | .7480 19 | .039 1.0 | 10,000 | 30,500 | .880 |
| 51116 | 3.1496 80 | 3.228 82 | 4.134 105 | 4.1339 105 | .7480 19 | .039 1.0 | 10,000 | 31,500 | .930 |
| 51117 | 3.3465 85 | 3.425 87 | 4.331 110 | 4.3307 110 | .7480 19 | .039 1.0 | 10,300 | 34,000 | .979 |
| 51118 | 3.5433 90 | 3.622 92 | 4.724 120 | 4.7244 120 | .8661 22 | .039 1.0 | 13,400 | 42,500 | 1.51 |
| 51120 | 3.9370 100 | 4.016 102 | 5.315 135 | 5.3150 135 | .9843 25 | .039 1.0 | 19,100 | 60,500 | 2.16 |
| 51122 | 4.3307 110 | 4.409 112 | 5.709 145 | 5.7087 145 | .9843 25 | .039 1.0 | 19,600 | 64,500 | 2.36 |
| 51124 | 4.7244 120 | 4.803 122 | 6.102 155 | 6.1024 155 | .9843 25 | .039 1.0 | 20,000 | 69,000 | 2.45 |
| 51126 | 5.1181 130 | 5.197 132 | 6.693 170 | 6.6929 170 | 1.1811 30 | .039 1.0 | 23,300 | 79,000 | 3.81 |
| 51128X | 5.5113 140 | 5.591 142 | 7.008 178 | 7.0866 180 | 1.2205 31 | .039 1.0 | 24,000 | 84,000 | 4.11 |
| 51130X | 5.9055 150 | 5.984 152 | 7.402 188 | 7.4803 190 | 1.2205 31 | .039 1.0 | 24,600 | 90,500 | 4.71 |
| 51132X | 6.2992 160 | 6.378 162 | 7.795 198 | 7.8740 200 | 1.2205 31 | .039 1.0 | 25,100 | 96,000 | 5.04 |
| 51134X | 6.6929 170 | 6.772 172 | 8.386 213 | 8.4646 215 | 1.3386 34 | .059 1.5 | 30,000 | 115,000 | 6.46 |
| 51136X | 7.0866 180 | 7.205 183 | 8.740 222 | 8.8583 225 | 1.3386 34 | .059 1.5 | 30,500 | 119,000 | 6.65 |
| 51138X | 7.4803 190 | 7.598 193 | 9.331 237 | 9.4488 240 | 1.4567 37 | .059 1.5 | 38,500 | 148,000 | 8.64 |
| 51140X | 7.8740 200 | 7.992 203 | 9.724 247 | 9.8425 250 | 1.4567 37 | .059 1.5 | 38,500 | 152,000 | 9.05 |
| 51144X | 8.6614 220 | 8.780 223 | 10.512 267 | 10.6299 270 | 1.4567 37 | .059 1.5 | 40,000 | 166,000 | 9.88 |
| 51148X | 9.4488 240 | 9.567 243 | 11.693 297 | 11.8110 300 | 1.7717 45 | .079 2.0 | 51,000 | 210,000 | 15.8 |
| 51152X | 10.2362 260 | 10.354 263 | 12.480 317 | 12.5984 320 | 1.7717 45 | .079 2.0 | 52,000 | 222,000 | 17.0 |

SINGLE DIRECTION THRUST BALL BEARINGS

Units: **INCHES**
Millimeters



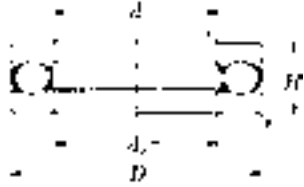
| Bearing No. | <i>d</i> | <i>d_e</i> | <i>D</i> | <i>H</i> | <i>r</i> | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|---------------|----------------------|---------------|--------------|-------------|--------------------------|-----------------------------|--------------|
| | | | | | | <i>Dynamic C</i> | <i>Static C₀</i> | |
| 51200 | .3937 10 | .472 12 | 1.0236 26 | .4331 11 | .024 0.6 | 2,850 | 3,850 | .066 |
| 51201 | .4724 12 | .551 14 | 1.1024 28 | .4331 11 | .024 0.6 | 2,960 | 4,250 | .075 |
| 51202 | .5906 15 | .669 17 | 1.2598 32 | .4724 12 | .024 0.6 | 3,750 | 5,600 | .101 |
| 51203 | .6693 17 | .748 19 | 1.3780 35 | .4724 12 | .024 0.6 | 3,850 | 6,150 | .119 |
| 51204 | .7874 20 | .866 22 | 1.5748 40 | .5512 14 | .024 0.6 | 5,000 | 8,500 | .179 |
| 51205 | .9843 25 | 1.063 27 | 1.8504 47 | .5906 15 | .024 0.6 | 6,250 | 11,300 | .245 |
| 51206 | 1.1811 30 | 1.260 32 | 2.0472 52 | .6299 16 | .024 0.6 | 6,600 | 13,100 | .306 |
| 51207 | 1.3780 35 | 1.457 37 | 2.4409 62 | .7087 18 | .039 1.0 | 8,800 | 17,600 | .474 |
| 51208 | 1.5748 40 | 1.654 42 | 2.6772 68 | .7480 19 | .039 1.0 | 10,600 | 22,100 | .608 |
| 51209 | 1.7717 45 | 1.850 47 | 2.8740 73 | .7874 20 | .039 1.0 | 10,700 | 23,600 | .699 |
| 51210 | 1.9685 50 | 2.047 52 | 3.0709 78 | .8661 22 | .039 1.0 | 10,900 | 25,100 | .833 |
| 51211 | 2.1654 55 | 2.244 57 | 3.5433 90 | .9843 25 | .039 1.0 | 15,600 | 35,500 | 1.34 |
| 51212 | 2.3622 60 | 2.441 62 | 3.7402 95 | 1.0236 26 | .039 1.0 | 16,500 | 40,000 | 1.49 |
| 51213 | 2.5591 65 | 2.638 67 | 3.9370 100 | 1.0630 27 | .039 1.0 | 16,800 | 42,500 | 1.69 |
| 51214 | 2.7559 70 | 2.835 72 | 4.1339 105 | 1.0630 27 | .039 1.0 | 17,100 | 44,500 | 1.75 |
| 51215 | 2.9528 75 | 3.031 77 | 4.3307 110 | 1.0630 27 | .039 1.0 | 17,400 | 47,000 | 1.93 |
| 51216 | 3.1496 80 | 3.228 82 | 4.5276 115 | 1.1024 28 | .039 1.0 | 17,700 | 49,000 | 2.02 |
| 51217 | 3.3465 85 | 3.465 88 | 4.9213 125 | 1.2205 31 | .039 1.0 | 21,400 | 59,500 | 2.76 |
| 51218 | 3.5433 90 | 3.661 93 | 5.3150 135 | 1.3780 35 | .059 1.5 | 26,200 | 73,000 | 3.75 |
| 51220 | 3.9370 100 | 4.055 103 | 5.9055 150 | 1.4961 38 | .059 1.5 | 33,000 | 92,000 | 5.05 |
| 51222 | 4.3307 110 | 4.449 113 | 6.2992 160 | 1.4961 38 | .059 1.5 | 34,500 | 101,000 | 5.42 |
| 51224 | 4.7244 120 | 4.843 123 | 6.6929 170 | 1.5354 39 | .059 1.5 | 34,500 | 106,000 | 5.97 |
| 51226 | 5.1181 130 | 5.236 133 | 7.4803 190 | 1.7717 45 | .079 2.0 | 43,000 | 127,000 | 9.03 |
| 51228 | 5.5118 140 | 5.630 143 | 7.8740 200 | 1.8110 46 | .079 2.0 | 43,500 | 133,000 | 10.2 |





Units: **INCHES**
Millimeters

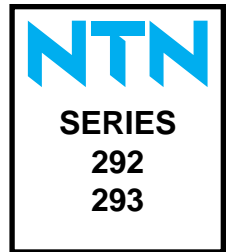
SINGLE DIRECTION THRUST BALL BEARINGS



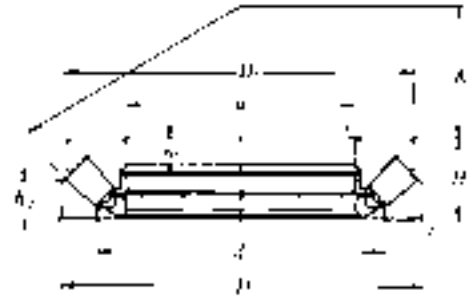
| Bearing No. | d | d _e | D | H | r | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|---------------|----------------|---------------|--------------|-------------|--------------------------|-----------------------|--------------|
| | | | | | | Dynamic C | Static C _o | |
| 2900 | .3937 10 | .402 10.2 | 1.0236 26 | .4724 12 | .024 0.6 | 2,850 | 3,850 | .073 |
| 2901 | .4724 12 | .480 12.2 | 1.1024 28 | .4724 12 | .024 0.6 | 2,960 | 4,250 | .082 |
| 2902 | .5906 15 | .598 15.2 | 1.2205 31 | .4724 12 | .024 0.6 | 3,200 | 5,150 | .090 |
| 2903 | .7087 18 | .717 18.2 | 1.3780 35 | .4724 12 | .024 0.6 | 3,250 | 5,550 | .099 |
| 2904 1/2 | .7874 20 | .795 20.2 | 1.4567 37 | .4724 12 | .024 0.6 | 3,350 | 6,000 | .121 |
| 2904 | .8661 22 | .874 22.2 | 1.6535 42 | .5512 14 | .024 0.6 | 4,250 | 7,800 | .185 |
| 2905 | .9843 25 | .992 25.2 | 1.7717 45 | .5512 14 | .024 0.6 | 4,350 | 8,350 | .207 |
| 2906 | 1.1811 30 | 1.189 30.2 | 1.9685 50 | .5512 14 | .024 0.6 | 4,550 | 9,500 | .238 |
| 2907 | 1.3780 35 | 1.386 35.2 | 2.1654 55 | .6299 16 | .024 0.6 | 6,700 | 14,000 | .304 |
| 2908 | 1.5748 40 | 1.583 40.2 | 2.3622 60 | .6299 16 | .024 0.6 | 7,050 | 15,700 | .340 |
| 2909 | 1.7717 45 | 1.780 45.2 | 2.6772 68 | .6299 16 | .024 0.6 | 7,250 | 17,400 | .441 |
| 2910 | 1.9685 50 | 1.976 50.2 | 2.9134 74 | .7087 18 | .024 0.6 | 8,650 | 21,100 | .567 |
| 2911 | 2.1654 55 | 2.173 55.2 | 3.0709 78 | .7087 18 | .024 0.6 | 9,000 | 23,200 | .582 |
| 2912 | 2.3622 60 | 2.370 60.2 | 3.2283 82 | .7087 18 | .024 0.6 | 9,100 | 24,300 | .595 |
| 2913 | 2.5591 65 | 2.567 65.2 | 3.5433 90 | .7874 20 | .024 0.6 | 10,600 | 28,900 | .820 |
| 2914 | 2.7559 70 | 2.764 70.2 | 3.7402 95 | .7874 20 | .024 0.6 | 11,000 | 31,500 | .873 |
| 2915 | 2.9528 75 | 2.961 75.2 | 3.9370 100 | .7874 20 | .024 0.6 | 11,400 | 34,000 | .926 |
| 2916 | 3.1496 80 | 3.157 80.2 | 4.3307 110 | .8661 22 | .024 0.6 | 12,900 | 38,500 | 1.31 |
| 2917 | 3.3465 85 | 3.354 85.2 | 4.5276 115 | .8661 22 | .024 0.6 | 13,300 | 41,500 | 1.40 |
| 2918 | 3.5433 90 | 3.551 90.2 | 4.7244 120 | .8661 22 | .024 0.6 | 13,400 | 42,500 | 1.47 |
| 2919 | 3.7402 95 | 3.748 95.2 | 5.1181 130 | .9843 25 | .024 0.6 | 12,500 | 40,000 | 2.09 |
| 2920 | 3.9370 100 | 3.945 100.2 | 5.3150 135 | .9843 25 | .024 0.6 | 19,100 | 60,500 | 2.17 |
| 2922 | 4.3307 110 | 4.339 110.2 | 5.7087 145 | .9843 25 | .024 0.6 | 19,600 | 64,500 | 2.36 |
| 2924 | 4.7244 120 | 4.732 120.2 | 6.2992 160 | 1.0630 27 | .024 0.6 | 22,100 | 75,500 | 3.20 |

SPHERICAL ROLLER THRUST BEARINGS

Units: **INCHES**
Millimeters



| Bearing No. | d | D | H | D ₁ | d ₁ | h ₁ | h ₂ | A | r | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|----------------|----------------|--------------|-----------------|----------------|----------------|----------------|--------------|-------------|--------------------------|-----------------------|--------------|
| | | | | | | | | | | Dynamic C | Static C ₀ | |
| 29230 | 5.9055 150 | 8.4646 215 | 1.5354 39 | 8.1890 208 | 7.01 178 | .551 14 | .748 19.0 | 3.228 82 | .079 2.0 | 76,500 | 300,000 | 9.85 |
| 29232 | 6.2992 160 | 8.8583 225 | 1.5354 39 | 8.6220 219 | 7.40 188 | .551 14 | .748 19.0 | 3.386 86 | .079 2.0 | 80,500 | 325,000 | 10.4 |
| 29234 | 6.6929 170 | 9.4488 240 | 1.6535 42 | 9.1732 233 | 7.80 198 | .591 15 | .787 20.0 | 3.622 92 | .079 2.0 | 95,500 | 395,000 | 12.8 |
| 29236 | 7.0866 180 | 9.8425 250 | 1.6535 42 | 9.5669 243 | 8.19 208 | .591 15 | .787 20.0 | 3.819 97 | .079 2.0 | 101,000 | 430,000 | 13.5 |
| 29238 | 7.4803 190 | 10.6299 270 | 1.8898 48 | 10.3150 262 | 8.78 223 | .591 15 | .945 24.0 | 4.094 104 | .098 2.5 | 119,000 | 500,000 | 18.8 |
| 29240 | 7.8740 200 | 11.0236 280 | 1.8898 48 | 10.6693 271 | 9.29 236 | .591 15 | .945 24.0 | 4.252 108 | .098 2.5 | 120,000 | 515,000 | 19.6 |
| 29244 | 8.6614 220 | 11.8110 300 | 1.8898 48 | 11.4961 292 | 10.00 254 | .591 15 | .945 24.0 | 4.606 117 | .098 2.5 | 125,000 | 560,000 | 22.0 |
| 29248 | 9.4488 240 | 13.3858 340 | 2.3622 60 | 12.9921 330 | 11.14 330 | .748 19 | 1.181 30.0 | 5.118 130 | .098 2.5 | 185,000 | 810,000 | 36.8 |
| 29252 | 10.2362 260 | 14.1732 360 | 2.3622 60 | 13.7795 350 | 11.89 302 | .748 19 | 1.181 30.0 | 5.472 139 | .098 2.5 | 195,000 | 885,000 | 40.8 |
| 29256 | 11.0236 280 | 14.9606 380 | 2.3622 60 | 14.5669 370 | 12.72 323 | .748 19 | 1.181 30.0 | 5.906 150 | .098 2.5 | 197,000 | 910,000 | 43.0 |
| 29317 | 3.3465 85 | 5.9055 150 | 1.5354 39 | 5.6496 143.5 | 4.49 114 | .512 13 | .748 19.0 | 1.969 50 | .079 2.0 | 59,500 | 185,000 | 6.33 |
| 29218 | 3.5433 90 | 6.1024 155 | 1.5354 39 | 5.8465 148.5 | 4.61 117 | .512 13 | .748 19.0 | 2.047 52 | .079 2.0 | 64,000 | 206,000 | 6.75 |
| 29220 | 3.9370 100 | 6.6929 170 | 1.6535 42 | 6.4173 163 | 5.08 129 | .551 14 | .819 20.8 | 2.283 58 | .079 2.0 | 78,000 | 260,000 | 8.62 |
| 29322 | 4.3307 110 | 7.4803 190 | 1.8898 48 | 7.1654 182 | 5.63 143 | .630 16 | .906 23.0 | 2.520 64 | .098 2.5 | 99,500 | 335,000 | 12.3 |
| 29224 | 4.7244 120 | 8.2677 210 | 2.1260 54 | 7.8740 200 | 6.26 159 | .709 18 | 1.024 26.0 | 2.756 70 | .098 2.5 | 120,000 | 400,000 | 16.9 |
| 29226 | 5.1181 130 | 8.8583 225 | 2.2835 58 | 8.4646 215 | 6.73 171 | .748 19 | 1.102 28.0 | 2.992 76 | .098 2.5 | 138,000 | 475,000 | 20.8 |
| 29328 | 5.5118 140 | 9.4488 240 | 2.3622 60 | 9.0551 230 | 7.20 183 | .787 20 | 1.142 29.0 | 3.228 82 | .098 2.5 | 154,000 | 530,000 | 24.5 |
| 29230 | 5.9055 150 | 9.8425 250 | 2.3622 60 | 9.4488 240 | 7.64 194 | .787 20 | 1.142 29.0 | 3.425 87 | .098 2.5 | 151,000 | 535,000 | 25.6 |
| 29232 | 6.2992 160 | 10.6299 270 | 2.6378 67 | 10.2362 260 | 8.19 208 | .906 23 | 1.260 32.0 | 3.622 92 | .118 3.0 | 185,000 | 645,000 | 34.0 |
| 29334 | 6.6929 170 | 11.0236 280 | 2.6378 67 | 10.6299 270 | 8.50 216 | .906 23 | 1.260 32.0 | 3.780 96 | .118 3.0 | 192,000 | 685,000 | 35.7 |
| 29236 | 7.0866 180 | 11.8110 300 | 2.8740 73 | 11.4173 290 | 9.13 232 | .984 25 | 1.378 35.0 | 4.055 103 | .118 3.0 | 224,000 | 805,000 | 45.6 |
| 29238 | 7.4803 190 | 12.5984 320 | 3.0709 78 | 12.1260 308 | 9.69 246 | 1.063 27 | 1.496 38.0 | 4.331 110 | .157 4.0 | 258,000 | 955,000 | 55.3 |
| 29340 | 7.8740 200 | 13.3858 340 | 3.3465 85 | 12.7953 325 | 10.28 261 | 1.142 29 | 1.614 41.0 | 4.567 116 | .157 4.0 | 288,000 | 1,030,000 | 68.8 |
| 29244 | 8.6614 220 | 14.1732 360 | 3.3465 85 | 13.5827 345 | 11.02 280 | 1.142 29 | 1.614 41.0 | 4.921 125 | .157 4.0 | 310,000 | 1,170,000 | 73.4 |
| 29248 | 9.4488 240 | 14.9606 380 | 3.3465 85 | 14.3701 365 | 11.81 300 | 1.142 29 | 1.614 41.0 | 5.315 135 | .157 4.0 | 310,000 | 1,180,000 | 78.3 |
| 29352 | 10.2362 260 | 16.5354 420 | 3.7402 95 | 15.9449 405 | 12.95 329 | 1.260 32 | 1.772 45.0 | 5.827 148 | .197 5.0 | 385,000 | 1,530,000 | 115 |
| 29256 | 11.0236 280 | 17.3228 440 | 3.7402 95 | 16.6535 423 | 13.70 348 | 1.260 32 | 1.811 46.0 | 6.220 158 | .197 5.0 | 405,000 | 1,630,000 | 120 |

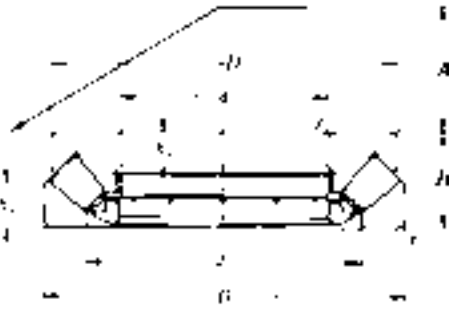


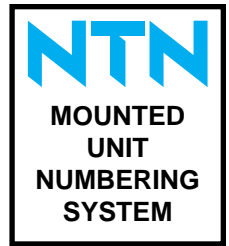


Units: INCHES
Millimeters

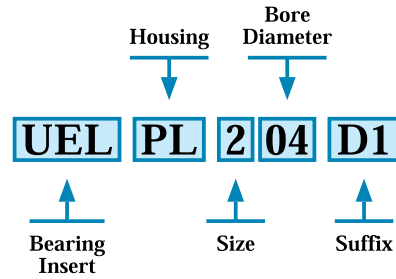
SPHERICAL ROLLER THRUST BEARINGS

| Bearing No. | d | D | H | D _I | d _I | h _I | h ₂ | A | r | Basic Load Ratings (lbs) | | Weight (lbs) |
|-------------|----------------|----------------|---------------|----------------|----------------|----------------|----------------|--------------|-------------|--------------------------|-----------------------|--------------|
| | | | | | | | | | | Dynamic C | Static C ₀ | |
| 29412 | 2.3622 60 | 5.1181 130 | 1.6535 42 | 4.8425 123 | 3.50 89 | .591 15 | .787 20 | 1.496 38 | .079 2.0 | 63,500 | 181,000 | 5.75 |
| 29413 | 2.5591 65 | 5.5118 140 | 1.7717 45 | 5.2362 133 | 3.78 96 | .630 16 | .827 21 | 1.654 42 | .098 2.5 | 74,000 | 212,000 | 7.36 |
| 29414 | 2.7559 70 | 5.9055 150 | 1.8898 48 | 5.5906 142 | 4.06 103 | .669 17 | .906 23 | 1.732 44 | .098 2.5 | 82,000 | 234,000 | 8.95 |
| 29415 | 2.9528 75 | 6.2992 160 | 2.0079 51 | 5.9843 152 | 4.29 109 | .709 18 | .945 24 | 1.850 47 | .098 2.5 | 94,000 | 268,000 | 10.5 |
| 29416 | 3.1496 80 | 6.6929 170 | 2.1260 54 | 6.3780 162 | 4.61 117 | .748 19 | 1.024 26 | 1.969 50 | .098 2.5 | 103,000 | 310,000 | 13.0 |
| 29417 | 3.3465 85 | 7.0866 180 | 2.2835 58 | 6.6929 170 | 4.92 125 | .827 21 | 1.102 28 | 2.126 54 | .098 2.5 | 110,000 | 335,000 | 15.5 |
| 29418 | 3.5433 90 | 7.4803 190 | 2.3622 60 | 7.0866 180 | 5.20 132 | .866 22 | 1.142 29 | 2.205 56 | .098 2.5 | 123,000 | 380,000 | 18.0 |
| 29420 | 3.9370 100 | 8.2677 210 | 2.6378 67 | 7.8740 200 | 5.75 146 | .945 24 | 1.260 32 | 2.441 62 | .118 3.0 | 154,000 | 480,000 | 24.7 |
| 29422 | 4.3307 110 | 9.0551 230 | 2.8740 73 | 8.6614 220 | 6.38 162 | 1.024 26 | 1.378 35 | 2.717 69 | .118 3.0 | 190,000 | 590,000 | 32.4 |
| 29424 | 4.7244 120 | 9.8425 250 | 3.0709 78 | 9.2913 236 | 6.85 174 | 1.142 29 | 1.457 37 | 2.913 74 | .157 4.0 | 219,000 | 690,000 | 40.1 |
| 29426 | 5.1181 130 | 10.6299 270 | 3.3465 85 | 10.0394 255 | 7.44 189 | 1.220 31 | 1.614 41 | 3.189 81 | .157 4.0 | 242,000 | 795,000 | 50.3 |
| 29428 | 5.5118 140 | 11.0236 280 | 3.3465 85 | 10.5512 268 | 7.83 199 | 1.220 31 | 1.614 41 | 3.386 86 | .157 4.0 | 251,000 | 845,000 | 54.2 |
| 29430 | 5.9055 150 | 11.8110 300 | 3.5433 90 | 11.2205 285 | 8.43 214 | 1.260 32 | 1.732 44 | 3.622 92 | .157 4.0 | 288,000 | 980,000 | 65.9 |
| 29432 | 6.2992 160 | 12.5984 320 | 3.7402 95 | 12.0472 306 | 9.02 229 | 1.339 34 | 1.772 45 | 3.898 99 | .197 5.0 | 335,000 | 1,160,000 | 79.8 |
| 29434 | 6.6929 170 | 13.3858 340 | 4.0551 103 | 12.7559 324 | 9.57 243 | 1.457 37 | 1.969 50 | 4.094 104 | .197 5.0 | 370,000 | 1,300,000 | 97.7 |
| 29436 | 7.0866 180 | 14.1732 360 | 4.2913 109 | 13.4646 342 | 10.04 255 | 1.535 39 | 2.047 52 | 4.331 110 | .197 5.0 | 415,000 | 1,400,000 | 116 |
| 29438 | 7.4803 190 | 14.9606 380 | 4.5276 115 | 14.1732 360 | 10.67 271 | 1.614 41 | 2.165 55 | 4.606 117 | .197 5.0 | 450,000 | 1,530,000 | 134 |
| 29440 | 7.8740 200 | 15.7480 400 | 4.8031 122 | 14.9606 380 | 11.26 286 | 1.693 43 | 2.323 59 | 4.803 122 | .197 5.0 | 500,000 | 1,720,000 | 159 |
| 29444 | 8.6614 220 | 16.5354 420 | 4.8031 122 | 15.7480 400 | 12.13 308 | 1.693 43 | 2.283 58 | 5.197 132 | .236 6.0 | 515,000 | 1,820,000 | 165 |
| 29448 | 9.4488 240 | 17.3228 440 | 4.8031 122 | 16.5354 420 | 12.83 326 | 1.693 43 | 2.323 59 | 5.591 142 | .236 6.0 | 540,000 | 1,950,000 | 176 |
| 29452 | 10.2362 260 | 18.8976 480 | 5.1969 132 | 18.1102 460 | 14.06 357 | 1.890 48 | 2.520 64 | 6.063 154 | .236 6.0 | 615,000 | 2,250,000 | 229 |
| 29456 | 11.0236 280 | 20.4724 520 | 5.7087 145 | 19.4882 495 | 15.24 387 | 2.047 52 | 2.677 68 | 6.535 166 | .236 6.0 | 750,000 | 2,790,000 | 295 |

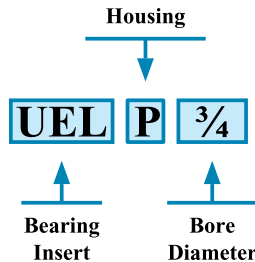




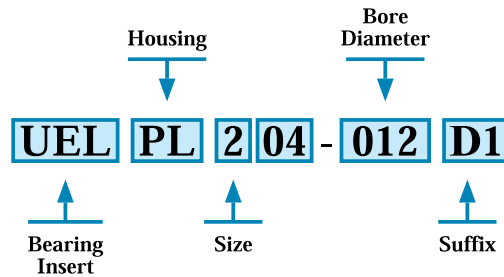
Metric Series



Ultra Class Series



Inch Series



1. PREFIX

| | |
|----|------------------------------------|
| F: | Stainless |
| A: | Lube on non-locking mechanism side |

2. BEARING INSERTS*

| | |
|------|---|
| AEL: | Narrow inner ring, locking collar |
| AR: | Narrow inner ring, set screw type |
| AS: | Narrow inner ring, set screw type |
| JEL: | Narrow inner ring, locking collar |
| REL: | Wide inner ring, locking collar |
| UR: | Wide inner ring, set screw type |
| UC: | Wide inner ring, set screw type, with flinger |
| UEL: | Wide inner ring, locking collar, with flinger |
| UK: | Tapered bore, with flinger |

3. HOUSINGS

| | |
|------|---|
| F: | Flanged unit, cast - 4-bolt square housing |
| FA: | Flanged unit, cast - rhombus housing |
| FC: | Flanged piloted unit, cast - round housing |
| FD: | Flanged unit, cast - 2-bolt housing |
| FH: | Flanged unit, cast housing |
| FL: | Flanged unit, cast - 2-bolt housing |
| FS: | Flanged piloted unit, cast - 4-bolt square housing |
| FU: | Flanged unit, cast - 4-bolt square housing |
| PF: | Flanged unit, pressed steel - 3-bolt round housing |
| PFL: | Flanged unit, pressed steel - 2-bolt housing |
| RPF: | Flanged unit, pressed steel with rubber ring - 3-bolt round housing |
| HP: | Pillow Block, cast housing, high center height |
| P: | Pillow Block, cast housing |
| PL: | Pillow Block, cast housing, low center height |

| | |
|------|--|
| PP: | Pillow Block, pressed steel housing |
| RPP: | Pillow Block, pressed steel housing with rubber ring |
| UP: | Pillow Block, cast housing |
| C: | Cylindrical cartridge unit |
| HB: | Hanger unit, cast housing |
| PT: | Mini stretcher |
| T: | Take-up unit, cast housing |

4. SIZE

| | |
|----|--------|
| 2: | Light |
| X: | Medium |
| 3: | Heavy |

5. SUFFIX

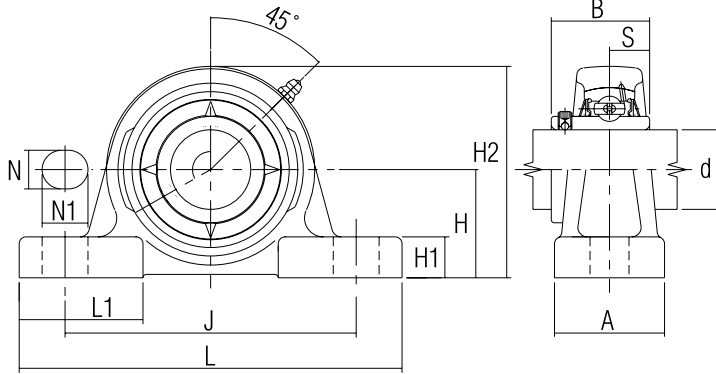
| | |
|--------|----------------------------------|
| D1: | Relube type |
| W3: | Cup Point Set Screw |
| N: | Snap Ring Groove |
| NR: | Snap Ring and Groove |
| R: | Meets ISO Series |
| HT1D1: | Heat stabilized for up to 284° F |
| HT2D1: | Heat stabilized for up to 392° F |

* To order a bearing with a cylindrical O.D., add S to the part number (example: JELS).

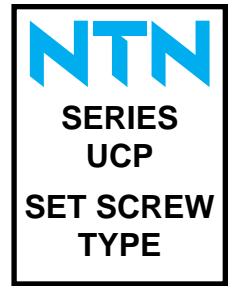


**MOUNTED
UNIT
SELECTION
MATRIX**

| Bearing Insert | | Housing | | High Base Pillow Block | | Low Base Pillow Block | | 2-Bolt Flange | | 4-Bolt Square Flange | | Pressed Steel Pillow Block | | Pressed Steel Flanges | |
|--------------------------|--------------------------|---------------|------|------------------------|-------|-----------------------|--------|---------------|-------|----------------------|--------|----------------------------|-------------------------|-----------------------|--|
| | | Page | | Page | | Page | | Page | | Page | | Page | | Page | |
| Ultra-Class | Setscrew Type | A-UC2 | 204 | UCP- | 135 | UCPL- | 136 | UCFLU- | 144 | UCFU- | 149 | | | | |
| | | A-UCX | 206 | UCPX- | 137 | | | UCFLUX- | 145 | UCFUX- | 150 | | | | |
| | | A-AR2 | 208 | ARP- | 138 | ARPL- | 139 | ARFLU- | 146 | ARFU- | 152 | | | | |
| | Eccentric Locking Collar | A-UEL2 | 211 | UEL- | 140 | UELPL- | 141 | UELFLU- | 147 | UELFU- | 151 | | | | |
| | | A-JEL2 | 214 | JEL- | 142 | JELPL- | 143 | JELFLU- | 148 | JELFU- | 153 | | | | |
| | Standard ISO Series | Setscrew Type | UC2 | 204 | UCP2 | 156 | UCPL2- | 158 | UCFL2 | 174 | UCF2 | 191 | | | |
| UC3 | | | 205 | UCP3 | 159 | | | UCFL3 | 175 | UCF3 | 193 | | | | |
| UCX | | | 206 | UCPX | 160 | | | UCFLX | 176 | UCFX | 195 | | | | |
| AS2 | | | 207 | | | ASPL2 | 162 | ASFD2 | 182 | | ASPP2 | 163 | ASPF2 | 188 | |
| Eccentric Locking Collar | | UEL2 | 211 | UEL2 | 164 | UELPL2 | 165 | UELFL2 | 177 | UELF2 | 197 | | | | |
| | | UEL3 | 212 | UEL3 | 166 | | | UELFL3 | 178 | UELF3 | 198 | | | | |
| | | AEL2 | 213 | AEL2 | 168 | AELPL2 | 169 | AELFL2 | 180 | | AELPP2 | 170 | AELPF2 | 189 | |
| | | JEL2 | 214 | | | JELPL2 | 167 | JELFL2 | 181 | | | | JELPF2 | 190 | |
| Adapter Type | | UK2 | 216 | UKP2 | 171 | | | | | UKF2 | 200 | | | | |
| | | | | | | | | | | | | | | | |
| Other Bearings | | | UCS3 | 210 | AELS2 | 213 | ASS2 | 207 | UCS2 | 209 | REL2 | 215 | Farm Implement Bearings | 222 | |



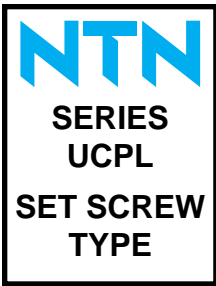
Units: **Millimeters**
INCHES



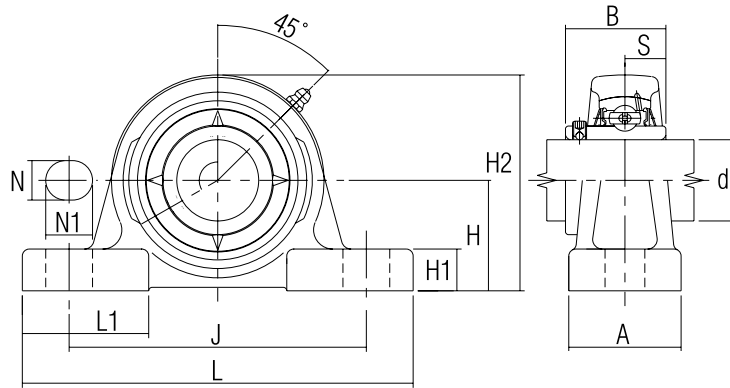
PILLOW BLOCKS - ULTRA CLASS

| Part Number | Nominal Dimensions | | | | | | | | | | | | Bolt Size | Lube Hole of Housing | Insert Bearing Number | Housing Number |
|---------------|--------------------|---------|----------|---------|---------|-------|--------|--------|---------|---------|--------|-------|-----------|----------------------|--|----------------|
| | d | H | L | J | A | N | N1 | H1 | H2 | L1 | B | S | | | | |
| UCP-1/2 | 0.5000 | 30.2 | 127 | 92.1 | 38 | 11.1 | 22.2 | 14 | 62 | 42 | 27.4 | 11.5 | 3/8 | 1/4-28UNF | A-UC201X-008D1 A-UC202X-009D1 A-UC202X-010D1 A-UC203X-011D1 | P201D1V50 |
| UCP-9/16 | 0.5625 | 1 3/16 | 5 | 3 5/8 | 1 1/2 | 7/16 | 7/8 | 9/16 | 2 7/16 | 1 21/32 | 1.0787 | 0.453 | | | | |
| UCP-5/8 | 0.6250 | | | | | | | | | | | | | | | |
| UCP-11/16 | 0.6875 | | | | | | | | | | | | | | | |
| UCP-3/4 | 0.7500 | 33.3 | 127 | 96 | 38 | 11.1 | 19.8 | 14 | 65 | 42 | 31 | 12.7 | 3/8 | 1/4-28UNF | A-UC204-012D1 | P204D1V50 |
| | | 1 5/16 | 5 | 3 25/32 | 1 1/2 | 7/16 | 25/32 | 9/16 | 2 9/16 | 1 21/32 | 1.2205 | 0.500 | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| UCP-13/16 | 0.8125 | 36.5 | 140 | 104.8 | 38 | 11.1 | 20.6 | 15 | 71 | 42 | 34.1 | 14.3 | 3/8 | 1/8-27NPT | A-UC205-013D1 A-UC205-014D1 A-UC205-015D1 A-UC205-100D1 | P205D1V50 |
| UCP-7/8 | 0.8750 | 1 7/16 | 5 1/2 | 4 1/8 | 1 1/2 | 7/16 | 13/16 | 19/32 | 2 25/32 | 1 21/32 | 1.3425 | 0.563 | | | | |
| UCP-15/16 | 0.9375 | | | | | | | | | | | | | | | |
| UCP-1 | 1.0000 | | | | | | | | | | | | | | | |
| UCP-1 1/16 | 1.0625 | 42.9 | 165 | 117.5 | 48 | 14.3 | 23.8 | 17 | 83 | 54 | 38.1 | 15.9 | 1/2 | 1/8-27NPT | A-UC206-101D1 A-UC206-102D1 A-UC206-103D1 A-UC206-104D1 | P206D1V50 |
| UCP-1 1/8 | 1.1250 | 1 11/16 | 6 1/2 | 4 5/8 | 1 7/8 | 9/16 | 15/16 | 21/32 | 3 3/32 | 2 1/8 | 1.5000 | 0.626 | | | | |
| UCP-1 3/16 | 1.1875 | | | | | | | | | | | | | | | |
| UCP-1 1/4S | 1.2500 | | | | | | | | | | | | | | | |
| UCP-1 1/4 | 1.2500 | 47.6 | 167 | 130.2 | 48 | 14.3 | 24.6 | 18 | 93 | 54 | 42.9 | 17.5 | 1/2 | 1/8-27NPT | A-UC207-104D1 A-UC207-105D1 A-UC207-106D1 A-UC207-107D1 | P207D1V50 |
| UCP-1 5/16 | 1.3125 | 1 7/8 | 6 9/16 | 5 1/8 | 1 7/8 | 9/16 | 31/32 | 23/32 | 3 21/32 | 2 1/8 | 1.6890 | 0.689 | | | | |
| UCP-1 3/8 | 1.3750 | | | | | | | | | | | | | | | |
| UCP-1 7/16 | 1.4375 | | | | | | | | | | | | | | | |
| UCP-1 1/2 | 1.5000 | 49.2 | 184 | 136.5 | 54 | 14.3 | 26.2 | 18 | 98 | 52 | 49.2 | 19 | 1/2 | 1/8-27NPT | A-UC208-108D1 A-UC208-109D1 | P208D1V50 |
| UCP-1 9/16 | 1.5625 | 1 15/16 | 7 1/4 | 5 3/8 | 2 1/8 | 9/16 | 1 1/32 | 23/32 | 3 27/32 | 2 1/16 | 1.9370 | 0.748 | | | | |
| UCP-1 5/8 | 1.6250 | 54 | 190 | 149.2 | 54 | 14.3 | 28.6 | 20 | 106 | 60 | 49.2 | 19 | 1/2 | 1/8-27NPT | A-UC209-110D1 A-UC209-111D1 A-UC209-112D1 | P209D1V50 |
| UCP-1 11/16 | 1.6875 | 2 1/8 | 7 15/32 | 5 7/8 | 2 1/8 | 9/16 | 1 1/8 | 25/32 | 4 3/16 | 2 3/8 | 1.9370 | 0.748 | | | | |
| UCP-1 3/4 | 1.7500 | | | | | | | | | | | | | | | |
| UCP-1 13/16 | 1.8125 | 57.2 | 206 | 158 | 60 | 17.5 | 23.8 | 21 | 114 | 65 | 51.6 | 19 | 5/8 | 1/8-27NPT | A-UC210-113D1 A-UC210-114D1 A-UC210-115D1 A-UC210-200D1 | P210D1V50 |
| UCP-1 7/8 | 1.8750 | 2 1/4 | 8 1/8 | 6 7/32 | 2 3/8 | 11/16 | 15/16 | 13/16 | 4 1/2 | 2 9/16 | 2.0315 | 0.748 | | | | |
| UCP-1 15/16 | 1.9375 | | | | | | | | | | | | | | | |
| UCP-2S | 2.0000 | | | | | | | | | | | | | | | |
| UCP-2 | 2.0000 | 63.5 | 219 | 176.2 | 60 | 18.3 | 29.4 | 23 | 126 | 65 | 55.6 | 22.2 | 5/8 | 1/8-27NPT | A-UC211-200D1 A-UC211-201D1 A-UC211-202D1 A-UC211-203D1 | P211D1V50 |
| UCP-2 1/16 | 2.0625 | 2 1/2 | 8 5/8 | 6 15/16 | 2 3/8 | 23/32 | 1 5/32 | 29/32 | 4 3/32 | 2 9/16 | 2.1890 | 0.874 | | | | |
| UCP-2 1/8 | 2.1250 | | | | | | | | | | | | | | | |
| UCP-2 3/16 | 2.1875 | | | | | | | | | | | | | | | |
| UCP-2 1/4 | 2.2500 | 69.8 | 241 | 188.1 | 70 | 18.3 | 29.4 | 25 | 138 | 70 | 65.1 | 25.4 | 5/8 | 1/8-27NPT | A-UC212-204D1 A-UC212-205D1 A-UC212-206D1 A-UC212-207D1 | P212D1V50 |
| UCP-2 5/16 | 2.3125 | 2 3/4 | 9 1/2 | 7 13/32 | 2 3/4 | 23/32 | 1 5/32 | 31/32 | 5 7/16 | 2 3/4 | 2.5630 | 1.000 | | | | |
| UCP-2 3/8 | 2.3750 | | | | | | | | | | | | | | | |
| UCP-2 7/16 | 2.4375 | | | | | | | | | | | | | | | |
| UCP-2 1/2 | 2.5 | 76.2 | 265 | 203 | 70 | 25 | 28 | 27 | 151 | 77 | 65.1 | 25.4 | 3/4 | 1/8-27NPT | A-UC213-208D1 A-UC213-209D1 | P213D1V50 |
| UCP-2 9/16 | 2.5625 | 3 | 10 7/16 | 8 | 2 3/4 | 31/32 | 1 3/32 | 1 1/16 | 5 15/16 | 3 1/32 | 2.563 | 1 | | | | |
| UCP-2 5/8 R | 2.625 | 79.4 | 266 | 210 | 72 | 25 | 28 | 27 | 157 | 77 | 74.6 | 30.2 | 3/4 | 1/8-27NPT | A-UC214-210D1 A-UC214-211D1 A-UC214-213D1 | P214D1V50 |
| UCP-2 11/16 R | 2.6875 | 3 1/8 | 10 15/32 | 8 9/32 | 2 27/32 | 31/32 | 1 3/32 | 1 1/16 | 6 3/16 | 3 1/32 | 2.937 | 1.189 | | | | |
| UCP-2 3/4 R | 2.75 | | | | | | | | | | | | | | | |
| UCP-2 13/16 | 2.8125 | 82.6 | 275 | 215.9 | 74 | 22.2 | 31.8 | 28 | 163 | 80 | 77.8 | 33.3 | 3/4 | 1/8-27NPT | A-UC215-213D1 A-UC215-214D1 A-UC215-215D1 A-UC215-300D1 | P215D1V50 |
| UCP-2 7/8 | 2.8750 | 3 1/4 | 10 13/16 | 8 1/2 | 2 29/32 | 7/8 | 1 1/4 | 1 3/32 | 6 13/32 | 3 5/32 | 3.0630 | 1.311 | | | | |
| UCP-2 15/16 | 2.9375 | | | | | | | | | | | | | | | |
| UCP-3 | 3.0000 | | | | | | | | | | | | | | | |

Note: Metric Sizes available. The production and shipment of black oxide coated inserts will be introduced as a rolling change. This is denoted with an M at the end of the current part number. Please consult NTN for availability.



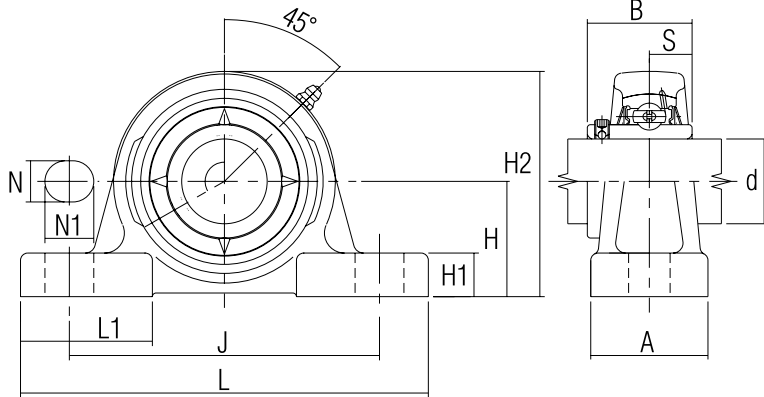
Units: Millimeters
INCHES



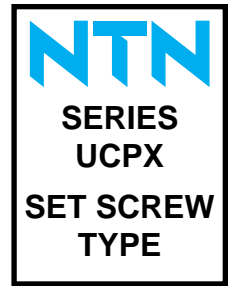
PILLOW BLOCKS - ULTRA CLASS

| Part Number | Nominal Dimensions | | | | | | | | | | | | Bolt Size | Lube Hole of Housing | Insert Bearing Number | Housing Number | | |
|--------------|--------------------|---------|----------|---------|---------|-------|--------|--------|---------|---------|--------|-------|---------------|----------------------|-----------------------|----------------|-----------|---------------|
| | d | H | L | J | A | N | N1 | H1 | H2 | L1 | B | S | | | | | | |
| UCPL-1/2 | 0.5000 | 27 | 121 | 92.1 | 34.9 | 11.1 | 22.2 | 13 | 54 | 40 | 27.4 | 11.5 | 3/8 | 1/4-28UNF | A-UC201X-008D1 | PL201D1V50 | | |
| UCPL-9/16 | 0.5625 | 1 1/16 | 4 3/4 | 3 5/8 | 1 3/8 | 7/16 | 7/8 | 1/2 | 2 1/8 | 1 9/16 | 1.0787 | 0.453 | | | A-UC202X-009D1 | | | |
| UCPL-5/8 | 0.6250 | | | | | | | | | | | | | | A-UC202X010D1 | | | |
| UCPL-11/16 | 0.6875 | | | | | | | | | | | | | | A-UC203X-011D1 | | | |
| UCPL-3/4 | 0.7500 | 31.75 | 127 | 96 | 38.1 | 11.1 | 19.8 | 14 | 64 | 42 | 31 | 12.7 | 3/8 | 1/4-28UNF | A-UC204-012D1 | PL204D1V50 | | |
| | | 1 1/4 | 5 | 3 25/32 | 1 1/2 | 7/16 | 25/32 | 9/16 | 2 17/32 | 1 21/32 | 1.2205 | 0.500 | | | A-UC205-013D1 | | | |
| UCPL-13/16 | 0.8125 | 33.3 | 140 | 104.8 | 38.1 | 11.1 | 20.6 | 15 | 68 | 42 | 34.1 | 14.3 | | | 3/8 | | 1/8-27NPT | A-UC205-014D1 |
| UCPL-7/8 | 0.8750 | 1 3/16 | 5 1/2 | 4 1/8 | 1 1/2 | 7/16 | 13/16 | 19/32 | 2 11/16 | 1 21/32 | 1.3425 | 0.563 | | | | | | A-UC205-015D1 |
| UCPL-15/16 | 0.9375 | | | | | | | | | | | | A-UC205-100D1 | | | | | |
| UCPL-1 | 1.0000 | | | | | | | | | | | | | | | | | |
| UCPL-1 1/16 | 1.0625 | 39.7 | 165 | 117.5 | 47.6 | 14.3 | 23.8 | 17 | 80 | 54 | 38.1 | 15.9 | 1/2 | 1/8-27NPT | A-UC206-101D1 | PL206D1V50 | | |
| UCPL-1 1/8 | 1.1250 | 1 9/16 | 6 1/2 | 4 5/8 | 1 7/8 | 9/16 | 15/16 | 21/32 | 3 5/32 | 2 1/8 | 1.5000 | 0.626 | | | A-UC206-102D1 | | | |
| UCPL-1 3/16 | 1.1875 | | | | | | | | | | | | | | A-UC206-103D1 | | | |
| UCPL-1 1/4S | 1.2500 | | | | | | | | | | | | | | A-UC206-104D1 | | | |
| UCPL-1 1/4 | 1.2500 | 46 | 167 | 130.2 | 47.6 | 14.3 | 24.6 | 18 | 91 | 54 | 42.9 | 17.5 | 1/2 | 1/8-27NPT | A-UC207-104D1 | PL207D1V50 | | |
| UCPL-1 5/16 | 1.3125 | 1 13/16 | 6 9/16 | 5 1/8 | 1 7/8 | 9/16 | 31/32 | 23/32 | 3 19/32 | 2 1/8 | 1.6890 | 0.689 | | | A-UC207-105D1 | | | |
| UCPL-1 3/8 | 1.3750 | | | | | | | | | | | | | | A-UC207-106D1 | | | |
| UCPL-1 7/16 | 1.4375 | | | | | | | | | | | | | | A-UC207-107D1 | | | |
| UCPL-1 1/2 | 1.5000 | 49.2 | 184 | 136.5 | 54 | 14.3 | 26.2 | 18 | 98 | 52 | 49.2 | 19 | 1/2 | 1/8-27NPT | A-UC208-108D1 | P208D1V50 | | |
| UCPL-1 9/16 | 1.5625 | 1 15/16 | 7 1/4 | 5 3/8 | 2 1/8 | 9/16 | 1 1/32 | 23/32 | 3 27/32 | 2 1/16 | 1.9370 | 0.748 | | | A-UC208-109D1 | | | |
| UCPL-1 5/8 | 1.6250 | 54 | 190 | 149.2 | 54 | 14.3 | 28.6 | 20 | 104 | 60 | 49.2 | 19 | 1/2 | 1/8-27NPT | A-UC209-110D1 | PL209D1V50 | | |
| UCPL-1 11/16 | 1.6875 | 2 1/8 | 7 15/32 | 5 7/8 | 2 1/8 | 9/16 | 1 1/8 | 25/32 | 4 3/32 | 2 3/8 | 1.9370 | 0.748 | | | A-UC209-111D1 | | | |
| UCPL-1 3/4 | 1.7500 | | | | | | | | | | | | | | A-UC209-112D1 | | | |
| UCPL-1 13/16 | 1.8125 | 55.6 | 206 | 158 | 60.3 | 17.5 | 23.8 | 21 | 112 | 65 | 51.6 | 19 | 5/8 | 1/8-27NPT | A-UC210-113D1 | PL210D1V50 | | |
| UCPL-1 7/8 | 1.8750 | 2 3/16 | 8 1/8 | 6 7/32 | 2 3/8 | 11/16 | 15/16 | 13/16 | 4 13/32 | 2 9/16 | 2.0315 | 0.748 | | | A-UC210-114D1 | | | |
| UCPL-1 15/16 | 1.9375 | | | | | | | | | | | | | | A-UC210-115D1 | | | |
| UCPL-2S | 2.0000 | | | | | | | | | | | | | | A-UC210-200D1 | | | |
| UCPL-2 | 2.0000 | 61.9 | 219 | 176.2 | 60 | 18.3 | 29.4 | 23 | 124 | 65 | 55.6 | 22.2 | 5/8 | 1/8-27NPT | A-UC211-200D1 | PL211D1V50 | | |
| UCPL-2 1/16 | 2.0625 | 2 7/16 | 8 5/8 | 6 15/16 | 2 3/8 | 23/32 | 1 5/32 | 29/32 | 4 7/8 | 2 9/16 | 2.1890 | 0.874 | | | A-UC211-201D1 | | | |
| UCPL-2 1/8 | 2.1250 | | | | | | | | | | | | | | A-UC211-202D1 | | | |
| UCPL-2 3/16 | 2.1875 | | | | | | | | | | | | | | A-UC211-203D1 | | | |
| UCPL-2 1/4 | 2.2500 | 68.3 | 241 | 188.1 | 69.9 | 17.5 | 29.4 | 25 | 136 | 70 | 65.1 | 25.4 | 5/8 | 1/8-27NPT | A-UC212-204D1 | PL212D1V50 | | |
| UCPL-2 5/16 | 2.3125 | 2 11/16 | 9 1/2 | 7 13/32 | 2 3/4 | 11/16 | 1 5/32 | 31/32 | 5 11/32 | 2 3/4 | 2.5630 | 1.000 | | | A-UC212-205D1 | | | |
| UCPL-2 3/8 | 2.3750 | | | | | | | | | | | | | | A-UC212-206D1 | | | |
| UCPL-2 7/16 | 2.4375 | | | | | | | | | | | | | | A-UC212-207D1 | | | |
| UCPL-2 1/2 | 2.5000 | 76.2 | 265 | 203.2 | 70 | 25 | 28 | 27 | 151 | 77 | 65.1 | 25.4 | 3/4 | 1/8-27NPT | A-UC213-208D1 | PL213D1V50 | | |
| UCPL-2 9/16 | 2.5625 | 3 | 10 7/16 | 8 | 2 3/4 | 31/32 | 1 3/32 | 1 1/16 | 5 15/16 | 3 1/32 | 2.563 | 1 | | | A-UC213-209D1 | | | |
| UCPL-2 5/8 | 2.6250 | 76.2 | 266 | 203.2 | 72.2 | 20.6 | 34.9 | 27 | 154 | 77 | 74.6 | 30.2 | 3/4 | 1/8-27NPT | A-UC214-210D1 | PL214D1V50 | | |
| UCPL-2 11/16 | 2.6875 | 3 | 10 15/32 | 8 | 2 27/32 | 13/16 | 1 3/8 | 1 1/16 | 6 1/16 | 3 1/32 | 2.9370 | 1.189 | | | A-UC214-211D1 | | | |
| UCPL-2 3/4 | 3.7500 | | | | | | | | | | | | | | A-UC214-212D1 | | | |
| UCPL-2 13/16 | 2.8125 | 84.1 | 305 | 241.3 | 73.8 | 22.2 | 31.8 | 28 | 165 | 80 | 77.8 | 33.3 | 3/4 | 1/8-27NPT | A-UC215-213D1 | PL215D1V50 | | |
| UCPL-2 7/8 | 2.8750 | 3 5/16 | 12 | 9 1/2 | 2 29/32 | 7/8 | 1 1/4 | 1 3/32 | 6 1/2 | 3 5/32 | 3.0630 | 1.311 | | | A-UC215-214D1 | | | |
| UCPL-2 15/16 | 2.9375 | | | | | | | | | | | | | | A-UC215-215D1 | | | |
| UCPL-3 | 3.0000 | | | | | | | | | | | | | | A-UC215-300D1 | | | |

Note: Metric Sizes available. The production and shipment of black oxide coated inserts will be introduced as a rolling change. This is denoted with an M at the end of the current part number. Please consult NTN for availability.



Units: Millimeters
INCHES



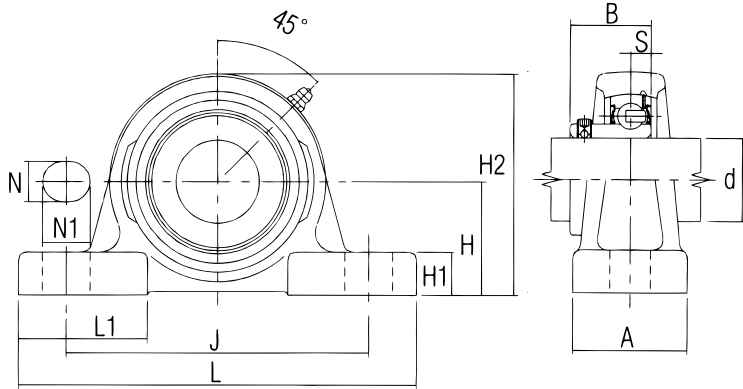
PILLOW BLOCKS - ULTRA CLASS

| Part Number | Nominal Dimensions | | | | | | | | | | | | Bolt Size | Lube Hole of Housing | Insert Bearing Number | Housing Number |
|-------------------------------------|--------------------|---------|----------|----------|---------|-------|--------|--------|---------|---------|--------|-------|-----------|----------------------|-----------------------|----------------|
| | d | H | L | J | A | N | N1 | H1 | H2 | L1 | B | S | | | | |
| UCPX-1 ³ / ₁₆ | 0.8125 | 42.9 | 165 | 117.5 | 48 | 14.3 | 23.8 | 17 | 83 | 54 | 38.1 | 15.9 | 1/2 | 1/8-27UNF | A-UCX05-013D1 | P206D1V50 |
| UCPX-7/8 | 0.8750 | 1 11/16 | 6 1/2 | 4 5/8 | 1 7/8 | 9/16 | 15/16 | 21/32 | 3 9/32 | 2 1/8 | 1.5000 | 0.626 | | | A-UCX05-014D1 | |
| UCPX-15/16 | 0.9375 | | | | | | | | | | | | | | A-UCX05-015D1 | |
| UCPX-1 | 1.0000 | | | | | | | | | | | | | | A-UCX05-100D1 | |
| UCPX-1 1/16 | 1.0625 | 47.6 | 167 | 130.2 | 48 | 14.3 | 24.6 | 18 | 93 | 54 | 42.9 | 17.5 | 1/2 | 1/8-27UNF | A-UCX06-101D1 | P207D1V50 |
| UCPX-1 1/8 | 1.1250 | 1 7/8 | 6 9/16 | 5 1/8 | 1 7/8 | 9/16 | 31/32 | 23/32 | 3 21/32 | 2 1/8 | 1.6890 | 0.689 | | | A-UCX06-102D1 | |
| UCPX-1 3/16 | 1.1875 | | | | | | | | | | | | | | A-UCX06-103D1 | |
| UCPX-1 1/4 | 1.2500 | 54 | 179 | 136.5 | 48 | 14.3 | 26.2 | 23 | 105 | 60 | 49.2 | 19 | 1/2 | 1/8-27UNF | A-UC207-104D1 | PX07D1V50 |
| UCPX-1 5/16 | 1.3125 | 2 1/8 | 7 1/16 | 5 3/8 | 1 7/8 | 9/16 | 1 1/32 | 29/32 | 4 1/8 | 2 3/8 | 1.9370 | 0.748 | | | A-UCX07-105D1 | |
| UCPX-1 3/8 | 1.3750 | | | | | | | | | | | | | | A-UCX07-106D1 | |
| UCPX-1 7/16 | 1.4375 | | | | | | | | | | | | | | A-UCX07-107D1 | |
| UCPX-1 1/2 | 1.5000 | 54 | 190 | 149.2 | 54 | 14.3 | 28.6 | 20 | 106 | 60 | 49.2 | 19 | 1/2 | 1/8-27NPT | A-UCX08-108D1 | P209D1V50 |
| UCPX-1 9/16 | 1.5625 | 2 1/8 | 7 15/32 | 5 7/8 | 2 1/8 | 9/16 | 1 1/8 | 25/32 | 4 3/16 | 2 3/8 | 1.9370 | 0.748 | | | A-UCX08-109D1 | |
| UCPX-1 5/8 | 1.6250 | 57.2 | 206 | 158 | 60 | 17.5 | 23.8 | 21 | 114 | 65 | 51.6 | 19 | 5/8 | 1/8-27NPT | A-UCX09-110D1 | P210D1V50 |
| UCPX-1 11/16 | 1.6875 | 2 1/4 | 8 1/8 | 6 7/32 | 2 3/8 | 11/16 | 15/16 | 13/16 | 4 1/2 | 2 9/16 | 2.0315 | 0.748 | | | A-UCX09-111D1 | |
| UCPX-1 3/4 | 1.7500 | | | | | | | | | | | | | | A-UCX09-112D1 | |
| UCPX-1 13/16 | 1.8125 | 63.5 | 219 | 176.2 | 60 | 18.3 | 29.4 | 23 | 126 | 65 | 55.6 | 22.2 | 5/8 | 1/8-27NPT | A-UC210-113D1 | P211D1V50 |
| UCPX-1 7/8 | 1.8750 | 2 1/2 | 8 5/8 | 6 15/16 | 2 3/8 | 23/32 | 1 9/32 | 29/32 | 4 31/32 | 2 9/16 | 2.1890 | 0.874 | | | A-UCX10-114D1 | |
| UCPX-1 15/16 | 1.9375 | | | | | | | | | | | | | | A-UCX10-115D1 | |
| UCPX-2 | 2.0000 | | | | | | | | | | | | | | A-UC211-200D1 | |
| UCPX-2 1/16 | 2.0625 | 69.8 | 241 | 188.1 | 70 | 18.3 | 29.4 | 25 | 138 | 70 | 65.1 | 25.4 | 5/8 | 1/8-27NPT | A-UCX11-201D1 | P212D1V50 |
| UCPX-2 1/8 | 2.1250 | 2 3/4 | 9 1/2 | 7 13/32 | 2 3/4 | 23/32 | 1 5/32 | 31/32 | 5 7/16 | 2 3/4 | 2.5630 | 1.000 | | | A-UCX11-202D1 | |
| UCPX-2 3/16 | 2.1875 | | | | | | | | | | | | | | A-UCX11-203D1 | |
| UCPX-2 1/4 | 2.2500 | | | | | | | | | | | | | | A-UC212-204D1 | |
| UCPX-2 7/16 | 2.4375 | 76.2 | 266 | 203.2 | 72 | 20.6 | 34.9 | 27 | 154 | 77 | 74.6 | 30.2 | 3/4 | 1/8-27NPT | A-UC214-207D1 | PL214D1V50 |
| UCPX-2 1/2 | 2.5000 | 3 | 10 15/32 | 8 | 2 27/32 | 13/16 | 1 3/8 | 1 1/16 | 6 1/16 | 3 1/32 | 2.9370 | 1.189 | | | A-UCX13-208D1 | |
| UCPX-2 9/16 | 2.5625 | | | | | | | | | | | | | | A-UCX13-209D1 | |
| UCPX-2 5/8 | 2.6250 | 88.9 | 330 | 228.6 | 89 | 23.8 | 50.8 | 32 | 178 | 95 | 77.8 | 33.3 | 3/4 | 1/8-27NPT | A-UCX14-210D1 | PX14D1V50 |
| UCPX-2 11/16 | 2.6875 | 3 1/2 | 13 | 9 | 3 1/2 | 15/16 | 2 | 1 1/4 | 7 | 3 3/4 | 3.0630 | 1.311 | | | A-UCX14-211D1 | |
| UCPX-2 3/4 | 2.7500 | | | | | | | | | | | | | | A-UCX14-212D1 | |
| UCPX-2 13/16 | 2.8125 | 88.9 | 330 | 228.9 | 89 | 23.8 | 50.8 | 32 | 178 | 95 | 82.6 | 33.3 | 3/4 | 1/8-27NPT | A-UCX15-213D1 | PX15D1V50 |
| UCPX-2 7/8 | 2.8750 | 3 1/2 | 13 | 9 | 3 1/2 | 15/16 | 2 | 1 1/4 | 7 | 3 3/4 | 3.2520 | 1.311 | | | A-UCX15-214D1 | |
| UCPX-2 15/16 | 2.9375 | | | | | | | | | | | | | | A-UCX15-215D1 | |
| UCPX-3 | 3.0000 | | | | | | | | | | | | | | A-UCX15-300D1 | |
| UCPX-3 3/16 | 2.1875 | 101.6 | 356 | 278.6 | 111 | 23.8 | 50.8 | 33 | 203 | 110 | 85.7 | 34.1 | 3/4 | 1/8-27NPT | A-UCX16-303D1 | PX16D1V50 |
| | | 4 | 14 | 10 31/32 | 4 3/8 | 15/16 | 2 | 1 5/16 | 8 | 4 11/32 | 3.3740 | 1.343 | | | | |
| UCPX-3 7/16 | 3.4375 | 101.6 | 356 | 278.6 | 111 | 23.8 | 50.8 | 33 | 203 | 110 | 104 | 42.9 | 3/4 | 1/8-27NPT | A-UCX18-307D1 | PX18D1V50 |
| UCPX-3 1/2 | 3.5000 | 4 | 14 | 10 31/32 | 4 3/8 | 15/16 | 2 | 1 5/16 | 8 | 4 11/32 | 4.0945 | 1.689 | | | A-UCX18-308D1 | |

Note: Metric Sizes available. The production and shipment of black oxide coated inserts will be introduced as a rolling change. This is denoted with an M at the end of the current part number. Please consult NTN for availability.

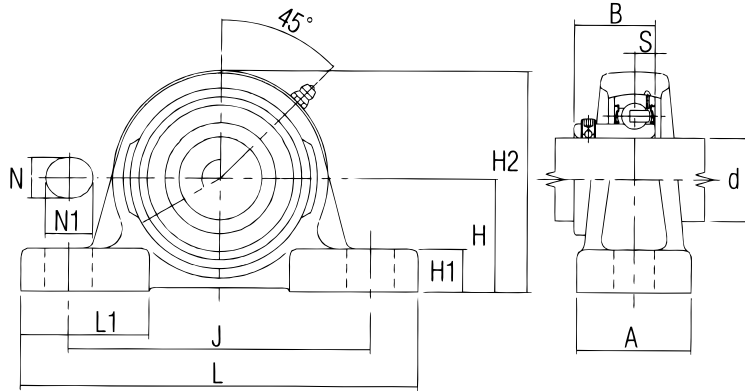


Units: Millimeters
INCHES

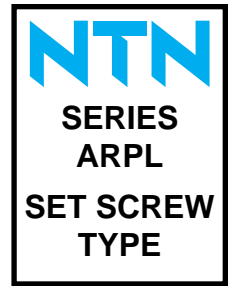


PILLOW BLOCKS - ULTRA CLASS HIGH BASE

| Part Number | Nominal Dimensions | | | | | | | | | | | | Bolt Size | Lube Hole of Housing | Insert Bearing Number | Housing Number | |
|-------------|--------------------|---------|---------|---------|-------|-------|--------|-------|---------|---------|--------|-------|-----------|----------------------|-----------------------|----------------|---------------|
| | d | H | L | J | A | N | N1 | H1 | H2 | L1 | B | S | | | | | |
| ARP-1/2 | 0.5000 | | 127 | 92.1 | 38.1 | 11.1 | 22.2 | 14 | | 42 | | | | 3/8 | 1/4-28UNF | A-AR201-008D1 | P201D1V50 |
| ARP-9/16 | 0.5625 | 1 3/16 | 5 | 3 5/8 | 1 1/2 | 7/16 | 7/8 | 9/16 | 2 7/16 | 1 21/32 | 0.8858 | 0.256 | | | | A-AR202-009D1 | |
| ARP-5/8 | 0.6250 | | | | | | | | | | | | | | | A-AR202-010D1 | |
| ARP-11/16 | 0.6875 | | | | | | | | | | | | | | | A-AR203-011D1 | |
| ARP-3/4 | 0.7500 | 1 5/16 | 127 | 96 | 38.1 | 11.1 | 19.8 | 14 | 65 | 42 | 1.0039 | 0.295 | 3/8 | 1/4-28UNF | A-AR204-012D1 | P204D1V50 | |
| ARP-13/16 | 0.8125 | 1 7/16 | 140 | 104.8 | 38.1 | 11.1 | 20.6 | 15 | 2 25/32 | 42 | 1.0630 | 0.295 | 3/8 | 1/8-27NPT | A-AR205-013D1 | | |
| ARP-7/8 | 0.8750 | | 5 1/2 | 4 1/8 | 1 1/2 | 7/16 | 13/16 | 19/32 | 2 25/32 | 1 21/32 | | | | | | | A-AR205-014D1 |
| ARP-15/16 | 0.9375 | | | | | | | | | | | | | | | | A-AR205-015D1 |
| ARP-1 | 1.0000 | | | | | | | | | | | | | | | A-AR205-100D1 | |
| ARP-1 1/16 | 1.0625 | 1 11/16 | 165 | 117.5 | 47.6 | 14.3 | 23.8 | 17 | 3 9/32 | 54 | 1.1811 | 0.354 | 1/2 | 1/8-27NPT | A-AR206-101D1 | P206D1V50 | |
| ARP-1 1/8 | 1.1250 | | 6 1/2 | 4 5/8 | 1 7/8 | 9/16 | 15/16 | 21/32 | 3 9/32 | 2 1/8 | | | | | | | A-AR206-102D1 |
| ARP-1 3/16 | 1.1875 | | | | | | | | | | | | | | | | A-AR206-103D1 |
| ARP-1 1/4S | 1.2500 | | | | | | | | | | | | | | | | A-AR206-104D1 |
| ARP-1 1/4 | 1.2500 | 1 7/8 | 167 | 130.2 | 47.6 | 14.3 | 24.6 | 18 | 3 21/32 | 54 | 1.3780 | 0.374 | 1/2 | 1/8-27NPT | A-AR207-104D1 | P207D1V50 | |
| ARP-1 5/16 | 1.3125 | | 6 9/16 | 5 1/8 | 1 7/8 | 9/16 | 31/32 | 23/32 | 3 21/32 | 2 1/8 | | | | | | | A-AR207-105D1 |
| ARP-1 3/8 | 1.3750 | | | | | | | | | | | | | | | | A-AR207-106D1 |
| ARP-1 7/16 | 1.4375 | | | | | | | | | | | | | | | | A-AR207-107D1 |
| ARP-1 1/2 | 1.5000 | 49.2 | 184 | 136.5 | 54 | 14.3 | 26.2 | 18 | 98 | 52 | 1.5748 | 0.433 | 1/2 | 1/8-27NPT | A-AR208-108D1 | P208D1V50 | |
| ARP-1 9/16 | 1.5625 | 1 15/16 | 7 1/4 | 5 3/8 | 2 1/8 | 9/16 | 1 1/32 | 23/32 | 3 27/32 | 2 1/16 | | | | | | | A-AR208-109D1 |
| ARP-1 5/8 | 1.6250 | 2 1/8 | 190 | 149.2 | 54 | 14.3 | 28.6 | 20 | 4 3/16 | 60 | 1.6339 | 0.433 | 1/2 | 1/8-27NPT | A-AR209-110D1 | P209D1V50 | |
| ARP-1 11/16 | 1.6875 | | 7 15/32 | 5 7/8 | 2 1/8 | 9/16 | 1 1/8 | 25/32 | 4 3/16 | 2 3/8 | | | | | | | A-AR209-111D1 |
| ARP-1 3/4 | 1.7500 | | | | | | | | | | | | | | | | A-AR209-112D1 |
| ARP-1 13/16 | 1.8125 | 2 1/4 | 206 | 158 | 60.3 | 17.5 | 23.8 | 21 | 4 1/2 | 65 | 1.6929 | 0.433 | 5/8 | 1/8-27NPT | A-AR210-113D1 | P210D1V50 | |
| ARP-1 7/8 | 1.8750 | | 8 1/8 | 6 7/32 | 2 3/8 | 11/16 | 19/16 | 13/16 | 4 1/2 | 2 9/16 | | | | | | | A-AR210-114D1 |
| ARP-1 15/16 | 1.9375 | | | | | | | | | | | | | | | | A-AR210-115D1 |
| ARP-2S | 2.0000 | | | | | | | | | | | | | | | | A-AR210-200D1 |
| ARP-2 | 2.0000 | 2 1/2 | 219 | 176.2 | 60 | 18.3 | 29.4 | 23 | 4 31/32 | 65 | 1.6929 | 0.472 | 5/8 | 1/8-27NPT | A-AR211-200D1 | P211D1V50 | |
| ARP-2 1/16 | 2.0625 | | 8 5/8 | 6 15/16 | 2 3/8 | 23/32 | 1 5/32 | 29/32 | 4 31/32 | 2 9/16 | | | | | | | A-AR211-201D1 |
| ARP-2 1/8 | 2.1250 | | | | | | | | | | | | | | | | A-AR211-202D1 |
| ARP-2 3/16 | 2.1875 | | | | | | | | | | | | | | | | A-AR211-203D1 |



Units: Millimeters
INCHES



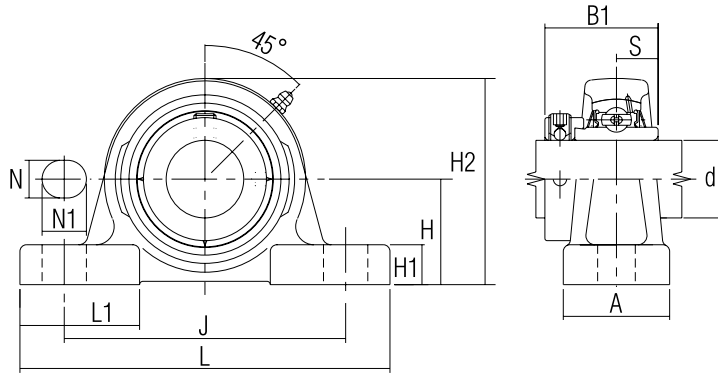
PILLOW BLOCKS - ULTRA CLASS LOW BASE

| Part Number | Nominal Dimensions | | | | | | | | | | | | Bolt Size | Lube Hole of Housing | Insert Bearing Number | Housing Number |
|--------------|--------------------|---------|---------|---------|-------|-------|--------|-------|---------|---------|--------|-------|-----------|----------------------|-----------------------|----------------|
| | d | H | L | J | A | N | N1 | H1 | H2 | L1 | B | S | | | | |
| ARPL-1/2 | 0.5000 | 27 | 121 | 92.1 | 34.9 | 11.1 | 22.2 | 13 | 54 | 40 | | | 3/8 | 1/4-28UNF | A-AR201-008D1 | PL201D1V50 |
| ARPL-9/16 | 0.5625 | 1 1/16 | 4 3/4 | 3 5/8 | 1 3/8 | 7/16 | 7/8 | 1/2 | 2 1/8 | 1 9/16 | 0.8858 | 0.256 | 3/8 | | A-AR202-009D1 | |
| ARPL-5/8 | 0.6250 | | | | | | | | | | | | | | A-AR202-010D1 | |
| ARPL-11/16 | 0.6875 | | | | | | | | | | | | | | A-AR203-011D1 | |
| ARPL-3/4 | 0.7500 | 31.75 | 127 | 96 | 38.1 | 11.1 | 19.8 | 14 | 64 | 42 | | | 3/8 | 1/4-28UNF | A-AR204-012D1 | PL204D1V50 |
| | | 1 1/4 | 5 | 3 29/32 | 1 1/2 | 7/16 | 29/32 | 9/16 | 2 17/32 | 1 21/32 | 1.0039 | 0.295 | | | | |
| ARPL-13/16 | 0.8125 | 33.3 | 140 | 104.8 | 38.1 | 11.1 | 20.6 | 15 | 68 | 42 | | | 3/8 | 1/8-27NPT | A-AR205-013D1 | PL205D1V50 |
| ARPL-7/8 | 0.8750 | 1 5/16 | 5 1/2 | 4 1/8 | 1 1/2 | 7/16 | 13/16 | 19/32 | 2 11/16 | 1 21/32 | 1.0630 | 0.295 | | | A-AR205-014D1 | |
| ARPL-15/16 | 0.9375 | | | | | | | | | | | | | | A-AR205-015D1 | |
| ARPL-1 | 1.0000 | | | | | | | | | | | | | | A-AR205-100D1 | |
| ARPL-1 1/16 | 1.0625 | 39.7 | 165 | 117.5 | 47.6 | 14.3 | 23.8 | 17 | 80 | 54 | | | 1/2 | 1/8-27NPT | A-AR206-101D1 | PL206D1V50 |
| ARPL-1 1/8 | 1.1250 | 1 9/16 | 6 1/2 | 4 5/8 | 1 7/8 | 9/16 | 15/16 | 21/32 | 3 5/32 | 2 1/8 | 1.1811 | 0.354 | | | A-AR206-102D1 | |
| ARPL-1 3/16 | 1.1875 | | | | | | | | | | | | | | A-AR206-103D1 | |
| ARPL-1 1/4 | 1.2500 | | | | | | | | | | | | | | A-AR206-104D1 | |
| ARPL-1 1/4 | 1.2500 | 46 | 167 | 130.2 | 47.6 | 14.3 | 24.6 | 18 | 91 | 54 | | | 1/2 | 1/8-27NPT | A-AR207-104D1 | PL207D1V50 |
| ARPL-1 5/16 | 1.3125 | 1 13/16 | 6 9/16 | 5 1/8 | 1 7/8 | 9/16 | 31/32 | 23/32 | 3 19/32 | 2 1/8 | 1.3780 | 0.374 | | | A-AR207-105D1 | |
| ARPL-1 3/8 | 1.3750 | | | | | | | | | | | | | | A-AR207-106D1 | |
| ARPL-1 7/16 | 1.4375 | | | | | | | | | | | | | | A-AR207-107D1 | |
| ARPL-1 1/2 | 1.5000 | 49.2 | 184 | 136.5 | 54 | 14.3 | 26.2 | 18 | 98 | 52 | | | 1/2 | 1/8-27NPT | A-AR208-108D1 | P208D1V50 |
| ARPL-1 9/16 | 1.5625 | 1 15/16 | 7 1/4 | 5 3/8 | 2 1/8 | 9/16 | 1 1/32 | 23/32 | 3 27/32 | 2 1/16 | 1.5748 | 0.374 | | | A-AR208-109D1 | |
| ARPL-1 5/8 | 1.6250 | 52.4 | 190 | 149.2 | 54 | 14.3 | 28.6 | 20 | 104 | 60 | | | 1/2 | 1/8-27NPT | A-AR209-110D1 | PL209D1V50 |
| ARPL-1 11/16 | 1.6875 | 2 1/16 | 7 15/32 | 5 7/8 | 2 1/8 | 9/16 | 1 1/8 | 25/32 | 4 3/32 | 2 3/8 | 1.6339 | 0.433 | | | A-AR209-111D1 | |
| ARPL-1 3/4 | 1.7500 | | | | | | | | | | | | | | A-AR209-112D1 | |
| ARPL-1 13/16 | 1.8125 | 55.6 | 206 | 158 | 60.3 | 17.5 | 23.8 | 21 | 112 | 65 | | | 5/8 | 1/8-27NPT | A-AR210-113D1 | PL210D1V50 |
| ARPL-1 7/8 | 1.8750 | 2 3/16 | 8 1/8 | 6 7/32 | 2 3/8 | 11/16 | 15/16 | 13/16 | 4 13/32 | 2 9/16 | 1.6929 | 0.433 | | | A-AR210-114D1 | |
| ARPL-1 15/16 | 1.9375 | | | | | | | | | | | | | | A-AR210-115D1 | |
| ARPL-2S | 2.0000 | | | | | | | | | | | | | | A-AR210-200D1 | |
| ARPL-2 | 2.0000 | 61.9 | 219 | 176.2 | 60 | 18.3 | 29.4 | 23 | 124 | 65 | | | 5/8 | 1/8-27NPT | A-AR211-200D1 | PL211D1V50 |
| ARPL-2 1/16 | 2.0625 | 2 7/16 | 8 5/8 | 6 15/16 | 2 3/8 | 23/32 | 1 5/32 | 29/32 | 4 7/8 | 2 9/16 | 1.6929 | 0.472 | | | A-AR211-201D1 | |
| ARPL-2 1/8 | 2.1250 | | | | | | | | | | | | | | A-AR211-202D1 | |
| ARPL-2 3/16 | 2.1875 | | | | | | | | | | | | | | A-AR211-203D1 | |

NTN

SERIES UELP ECCENTRIC LOCKING COLLAR TYPE

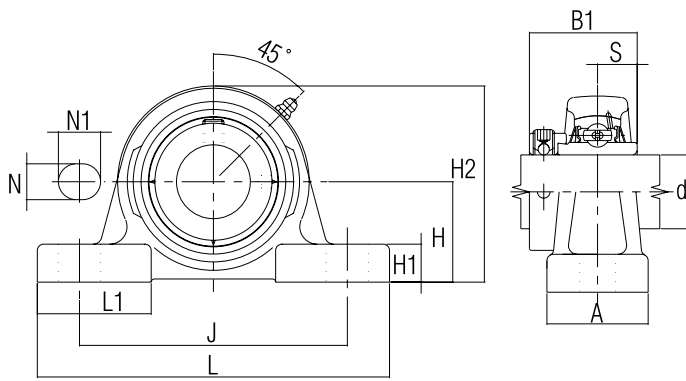
Units: **Millimeters**
INCHES



PILLOW BLOCKS - ULTRA CLASS

| Part Number | Nominal Dimensions | | | | | | | | | | | | Bolt Size | Lube Hole of Housing | Insert Bearing Number | Housing Number |
|---------------|--------------------|---------|----------|---------|---------|-------|--------|--------|---------|---------|-------|-------|-----------|----------------------|-----------------------|----------------|
| | d | H | L | J | A | N | N1 | H1 | H2 | L1 | B1 | S | | | | |
| UELP-1/2 | 0.5000 | 30.2 | 127 | 92.1 | 38 | 11.1 | 22.2 | 14 | 62 | 42 | 37.3 | 12.4 | 3/8 | 1/4-28UNF | A-UEL201-008D1 | P201D1V50 |
| UELP-9/16 | 0.5625 | 1 3/16 | 5 | 3 5/8 | 1 1/2 | 7/16 | 7/8 | 9/16 | 2 7/16 | 1 21/32 | 1.469 | 0.488 | | | A-UEL202-009D1 | |
| UELP-5/8 | 0.6250 | | | | | | | | | | | | | | A-UEL202-010D1 | |
| UELP-11/16 | 0.6875 | | | | | | | | | | | | | | A-UEL203-011D1 | |
| UELP-3/4 | 0.7500 | 33.3 | 127 | 96 | 38 | 11.1 | 19.8 | 14 | 65 | 42 | 43.7 | 17.1 | 3/8 | 1/4-28UNF | A-UEL204-012D1 | P204D1V50 |
| | | 1 5/16 | 5 | 3 25/32 | 1 1/2 | 7/16 | 25/32 | 9/16 | 2 9/16 | 1 21/32 | 1.720 | 0.673 | | | | |
| UELP-13/16 | 0.8125 | 36.5 | 140 | 104.8 | 38 | 11.1 | 20.6 | 15 | 71 | 42 | 44.4 | 17.5 | 3/8 | 1/8-27NPT | A-UEL205-013D1 | P205D1V50 |
| UELP-7/8 | 0.8750 | 1 7/16 | 5 1/2 | 4 1/8 | 1 1/2 | 7/16 | 13/16 | 19/32 | 2 25/32 | 1 21/32 | 1.748 | 0.689 | | | A-UEL205-014D1 | |
| UELP-15/16 | 0.9375 | | | | | | | | | | | | | | A-UEL205-015D1 | |
| UELP-1 | 1.0000 | | | | | | | | | | | | | | A-UEL205-100D1 | |
| UELP-1 1/16 | 1.0625 | 42.9 | 165 | 117.5 | 48 | 14.3 | 23.8 | 17 | 83 | 54 | 48.4 | 18.3 | 1/2 | 1/8-27NPT | A-UEL206-101D1 | P206D1V50 |
| UELP-1 1/8 | 1.1250 | 1 11/16 | 6 1/2 | 4 5/8 | 1 7/8 | 9/16 | 15/16 | 21/32 | 3 9/32 | 2 1/8 | 1.906 | 0.720 | | | A-UEL206-102D1 | |
| UELP-1 3/16 | 1.1875 | | | | | | | | | | | | | | A-UEL206-103D1 | |
| UELP-1 1/4S | 1.2500 | | | | | | | | | | | | | | A-UEL206-104D1 | |
| UELP-1 1/4 | 1.2500 | 47.6 | 167 | 130.2 | 48 | 14.3 | 24.6 | 18 | 93 | 54 | 51.1 | 18.8 | 1/2 | 1/8-27NPT | A-UEL207-104D1 | P207D1V50 |
| UELP-1 5/16 | 1.3125 | 1 7/8 | 6 9/16 | 5 1/8 | 1 7/8 | 9/16 | 31/32 | 23/32 | 3 21/32 | 2 1/8 | 2.012 | 0.740 | | | A-UEL207-105D1 | |
| UELP-1 3/8 | 1.3750 | | | | | | | | | | | | | | A-UEL207-106D1 | |
| UELP-1 7/16 | 1.4375 | | | | | | | | | | | | | | A-UEL207-107D1 | |
| UELP-1 1/2 | 1.5000 | 49.2 | 184 | 136.5 | 54 | 14.3 | 26.2 | 18 | 98 | 52 | 56.3 | 21.4 | 1/2 | 1/8-27NPT | A-UEL208-108D1 | P208D1V50 |
| UELP-1 9/16 | 1.5625 | 1 15/16 | 7 1/4 | 5 3/8 | 2 1/8 | 9/16 | 1 1/32 | 29/32 | 3 27/32 | 2 1/16 | 2.217 | 0.843 | | | A-UEL208-109D1 | |
| UELP-1 5/8 | 1.6250 | 54 | 190 | 149.2 | 54 | 14.3 | 28.6 | 20 | 106 | 60 | 56.3 | 21.4 | 1/2 | 1/8-27NPT | A-UEL209-110D1 | P209D1V50 |
| UELP-1 11/16 | 1.6875 | 2 1/8 | 7 15/32 | 5 7/8 | 2 1/8 | 9/16 | 1 1/8 | 25/32 | 4 3/16 | 2 3/8 | 2.217 | 0.843 | | | A-UEL209-111D1 | |
| UELP-1 3/4 | 1.7500 | | | | | | | | | | | | | | A-UEL209-112D1 | |
| UELP-1 13/16 | 1.8125 | 57.2 | 206 | 158 | 60 | 17.5 | 23.8 | 21 | 114 | 65 | 62.7 | 24.6 | 5/8 | 1/8-27NPT | A-UEL210-113D1 | P210D1V50 |
| UELP-1 7/8 | 1.8750 | 2 1/4 | 8 1/8 | 6 7/32 | 2 3/8 | 11/16 | 15/16 | 13/16 | 4 1/2 | 2 9/16 | 2.469 | 0.969 | | | A-UEL210-114D1 | |
| UELP-1 15/16 | 1.9375 | | | | | | | | | | | | | | A-UEL210-115D1 | |
| UELP-2S | 2.0000 | | | | | | | | | | | | | | A-UEL210-200D1 | |
| UELP-2 | 2.0000 | 63.5 | 219 | 176.2 | 60 | 18.3 | 29.4 | 23 | 126 | 65 | 71.4 | 27.8 | 5/8 | 1/8-27NPT | A-UEL211-200D1 | P211D1V50 |
| UELP-2 1/16 | 2.0625 | 2 1/2 | 8 5/8 | 6 15/16 | 2 3/8 | 23/32 | 1 5/32 | 29/32 | 4 31/32 | 2 9/16 | 2.811 | 1.094 | | | A-UEL211-201D1 | |
| UELP-2 1/8 | 2.1250 | | | | | | | | | | | | | | A-UEL211-202D1 | |
| UELP-2 3/16 | 2.1875 | | | | | | | | | | | | | | A-UEL211-203D1 | |
| UELP-2 1/4 | 2.2500 | 69.8 | 241 | 188.1 | 70 | 18.3 | 29.4 | 25 | 138 | 70 | 77.8 | 31.0 | 5/8 | 1/8-27NPT | A-UEL212-204D1 | P212D1V50 |
| UELP-2 5/16 | 2.3125 | 2 3/4 | 9 1/2 | 7 13/32 | 2 3/4 | 23/32 | 1 5/32 | 31/32 | 5 7/16 | 2 3/4 | 3.063 | 1.220 | | | A-UEL212-205D1 | |
| UELP-2 3/8 | 2.3750 | | | | | | | | | | | | | | A-UEL212-206D1 | |
| UELP-2 7/16 | 2.4375 | | | | | | | | | | | | | | A-UEL212-207D1 | |
| UELP-2 1/2 | 2.5 | 76.2 | 265 | 203 | 70 | 25 | 28 | 27 | 151 | 77 | 85.7 | 34.15 | 3/4 | 1/8-27NPT | A-UEL213-208D1 | P213D1V50 |
| UELP-2 9/16 | 2.5625 | 3 | 10 7/16 | 8 | 2 3/4 | 31/32 | 1 3/32 | 1 1/16 | 5 5/16 | 3 1/32 | 3.374 | 1.344 | | | A-UEL213-209D1 | |
| UELP-2 5/8R | 2.625 | 79.4 | 266 | 210 | 72 | 25 | 28 | 27 | 157 | 77 | 85.7 | 34.15 | 3/4 | 1/8-27NPT | A-UEL214-210D1 | P214D1V50 |
| UELP-2 11/16R | 2.6875 | 3 1/8 | 10 15/32 | 8 9/32 | 2 5/8 | 31/32 | 1 3/32 | 1 1/16 | 6 3/16 | 3 1/32 | 3.374 | 1.344 | | | A-UEL214-211D1 | |
| UELP-2 3/4R | 2.75 | | | | | | | | | | | | | | A-UEL214-212D1 | |
| UELP-2 13/16 | 2.8125 | 82.6 | 275 | 215.9 | 74 | 22.2 | 31.8 | 28 | 163 | 80 | 92 | 37.3 | 3/4 | 1/8-27NPT | A-UEL215-213D1 | P215D1V50 |
| UELP-2 7/8 | 2.8750 | 3 1/4 | 10 13/16 | 8 1/2 | 2 29/32 | 7/8 | 1 1/4 | 1 3/32 | 6 13/32 | 3 5/32 | 3.622 | 1.469 | | | A-UEL215-214D1 | |
| UELP-2 15/16 | 2.9375 | | | | | | | | | | | | | | A-UEL215-215D1 | |
| UELP-3 | 3.0000 | | | | | | | | | | | | | | A-UEL215-300D1 | |

Note: Metric Sizes available. The production and shipment of black oxide coated inserts will be introduced as a rolling change. This is denoted with an M at the end of the current part number. Please consult NTN for availability.



Units: Millimeters
INCHES



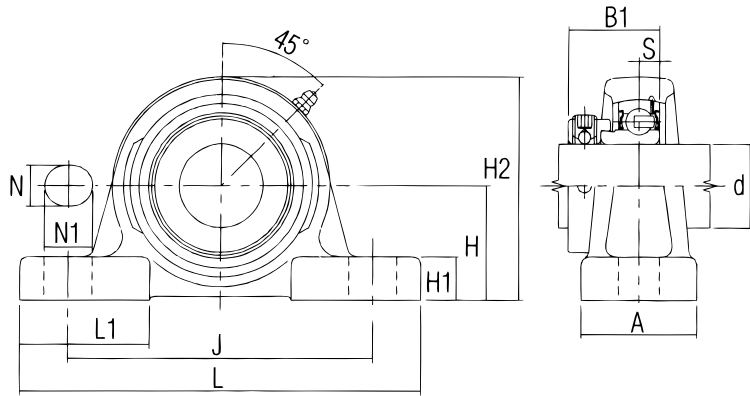
PILLOW BLOCKS - ULTRA CLASS

| Part Number | Nominal Dimensions | | | | | | | | | | | | Bolt Size | Lube Hole of Housing | Insert Bearing Number | Housing Number |
|---------------|--------------------|---------|----------|---------|---------|--------|--------|--------|---------|---------|-------|-------|-----------|----------------------|--|----------------|
| | d | H | L | J | A | N | N1 | H1 | H2 | L1 | B1 | S | | | | |
| UELPL-1/2 | 0.5000 | 27 | 121 | 92.1 | 34.9 | 11.1 | 22.2 | 13 | 54 | 40 | 37.3 | 12.4 | 3/8 | 1/4-28UNF | A-UEL201-008D1 A-UEL202-009D1 A-UEL202-010D1 A-UEL203-011D1 | PL201D1V50 |
| UELPL-9/16 | 0.5625 | 1 1/16 | 4 3/4 | 3 5/8 | 1 3/8 | 7/16 | 7/8 | 1/2 | 2 1/8 | 1 9/16 | 1.469 | 0.488 | | | | |
| UELPL-5/8 | 0.6250 | | | | | | | | | | | | | | | |
| UELPL-11/16 | 0.6875 | | | | | | | | | | | | | | | |
| UELPL-3/4 | 0.7500 | 31.75 | 127 | 96 | 38.1 | 11.1 | 19.8 | 14 | 64 | 42 | 43.7 | 17.1 | 3/8 | 1/4-28UNF | A-UEL204-012D1 | PL204D1V50 |
| UELPL-13/16 | 0.8125 | 33.3 | 140 | 104.8 | 38.1 | 11.1 | 20.6 | 15 | 68 | 42 | 44.4 | 17.5 | | | | |
| UELPL-7/8 | 0.8750 | 1 5/16 | 5 1/2 | 4 1/8 | 1 1/2 | 7/16 | 13/16 | 19/32 | 2 11/16 | 1 21/32 | 1.748 | 0.689 | | | | |
| UELPL-15/16 | 0.9375 | | | | | | | | | | | | | | | |
| UELPL-1 | 1.0000 | | | | | | | | | | | | | | | |
| UELPL-1 1/16 | 1.0625 | 39.7 | 165 | 117.5 | 47.6 | 14.3 | 23.8 | 17 | 80 | 54 | 48.4 | 18.3 | 1/2 | 1/8-27NPT | A-UEL206-101D1 A-UEL206-102D1 A-UEL206-103D1 A-UEL206-104D1 | PL206D1V50 |
| UELPL-1 1/8 | 1.1250 | 1 9/16 | 6 1/2 | 4 5/8 | 1 7/8 | 9/16 | 15/16 | 21/32 | 3 5/32 | 2 1/8 | 1.906 | 0.720 | | | | |
| UELPL-1 3/16 | 1.1875 | | | | | | | | | | | | | | | |
| UELPL-1 1/4 | 1.2500 | | | | | | | | | | | | | | | |
| UELPL-1 1/4 | 1.2500 | 46 | 167 | 130.2 | 47.6 | 14.3 | 24.6 | 18 | 91 | 54 | 51.1 | 18.8 | 1/2 | 1/8-27NPT | A-UEL207-104D1 A-UEL207-105D1 A-UEL207-106D1 A-UEL207-107D1 | PL207D1V50 |
| UELPL-1 5/16 | 1.3125 | 1 13/16 | 6 9/16 | 5 1/8 | 1 7/8 | 9/16 | 31/32 | 23/32 | 3 19/32 | 2 1/8 | 2.012 | 0.740 | | | | |
| UELPL-1 3/8 | 1.3750 | | | | | | | | | | | | | | | |
| UELPL-1 7/16 | 1.4375 | | | | | | | | | | | | | | | |
| UELPL-1 1/2 | 1.5000 | 49.2 | 184 | 136.5 | 54 | 14.3 | 26.2 | 18 | 98 | 52 | 56.3 | 21.4 | 1/2 | 1/8-27NPT | A-UEL208-108D1 A-UEL208-109D1 | P208D1V50 |
| UELPL-1 9/16 | 1.5625 | 1 15/16 | 7 1/4 | 5 3/8 | 2 1/8 | 9/16 | 1 1/32 | 23/32 | 3 27/32 | 2 1/16 | 2.217 | 0.843 | | | | |
| UELPL-1 5/8 | 1.6250 | 54 | 190 | 149.2 | 54 | 14.3 | 28.6 | 20 | 104 | 60 | 56.3 | 21.4 | 1/2 | 1/8-27NPT | A-UEL209-110D1 A-UEL209-111D1 A-UEL209-112D1 | PL209D1V50 |
| UELPL-1 11/16 | 1.6875 | 2 1/8 | 7 15/32 | 5 7/8 | 2 1/8 | 9/16 | 1 1/8 | 25/32 | 4 3/32 | 2 3/8 | 2.217 | 0.843 | | | | |
| UELPL-1 3/4 | 1.7500 | | | | | | | | | | | | | | | |
| UELPL-1 13/16 | 1.8125 | 55.6 | 206 | 158 | 60.3 | 17.5 | 23.8 | 21 | 112 | 65 | 62.7 | 24.6 | 5/8 | 1/8-27NPT | A-UEL210-113D1 A-UEL210-114D1 A-UEL210-115D1 A-UEL210-200D1 | PL210D1V50 |
| UELPL-1 7/8 | 1.8750 | 2 3/16 | 8 1/8 | 6 7/32 | 2 3/8 | 11/16 | 15/16 | 13/16 | 4 13/32 | 2 9/16 | 2.469 | 0.969 | | | | |
| UELPL-1 15/16 | 1.9375 | | | | | | | | | | | | | | | |
| UELPL-2S | 2.0000 | | | | | | | | | | | | | | | |
| UELPL-2 | 2.0000 | 61.9 | 219 | 176.2 | 60 | 18.3 | 29.4 | 23 | 124 | 65 | 71.4 | 27.8 | 5/8 | 1/8-27NPT | A-UEL211-200D1 A-UEL211-201D1 A-UEL211-202D1 A-UEL211-203D1 | PL211D1V50 |
| UELPL-2 1/16 | 2.0625 | 2 7/16 | 8 5/8 | 6 15/16 | 2 3/8 | 23/32 | 1 5/32 | 29/32 | 4 7/8 | 2 9/16 | 2.811 | 1.094 | | | | |
| UELPL-2 1/8 | 2.1250 | | | | | | | | | | | | | | | |
| UELPL-2 3/16 | 2.1875 | | | | | | | | | | | | | | | |
| UELPL-2 1/4 | 2.2500 | 68.3 | 241 | 188.1 | 69.9 | 17.5 | 29.4 | 25 | 136 | 70 | 77.8 | 31.0 | 5/8 | 1/8-27NPT | A-UEL212-204D1 A-UEL212-205D1 A-UEL212-206D1 A-UEL212-207D1 | PL212D1V50 |
| UELPL-2 5/16 | 2.3125 | 2 11/16 | 9 1/2 | 7 13/32 | 2 3/4 | 1 1/16 | 1 5/32 | 31/32 | 5 11/32 | 2 3/4 | 3.063 | 1.220 | | | | |
| UELPL-2 3/8 | 2.3750 | | | | | | | | | | | | | | | |
| UELPL-2 7/16 | 2.4375 | | | | | | | | | | | | | | | |
| UELPL-2 1/2 | 2.5000 | 76.2 | 265 | 203.2 | 70 | 25 | 28 | 27 | 151 | 77 | 85.7 | 34.15 | 3/4 | 1/8-27NPT | A-UEL213-208D1 A-UEL213-209D1 | PL213D1V50 |
| UELPL-2 9/16 | 2.5625 | 3 | 10 15/32 | 8 | 2 3/4 | 31/32 | 1 3/32 | 1 1/16 | 5 15/16 | 3 1/32 | 3.374 | 1.344 | | | | |
| UELPL-2 5/8 | 2.6250 | 76.2 | 266 | 203.2 | 72.2 | 20.6 | 34.9 | 27 | 154 | 77 | 85.7 | 34.1 | 3/4 | 1/8-27NPT | A-UEL214-210D1 A-UEL214-211D1 A-UEL214-212D1 | PL214D1V50 |
| UELPL-2 11/16 | 2.6875 | 3 | 10 15/32 | 8 | 2 27/32 | 13/16 | 1 3/8 | 1 1/16 | 6 1/16 | 3 1/32 | 3.374 | 1.344 | | | | |
| UELPL-2 3/4 | 2.7500 | | | | | | | | | | | | | | | |
| UELPL-2 13/16 | 2.8125 | 84.1 | 305 | 241.3 | 73.8 | 22.2 | 31.8 | 28 | 165 | 80 | 92 | 37.3 | 3/4 | 1/8-27NPT | A-UEL215-213D1 A-UEL215-214D1 A-UEL215-215D1 A-UEL215-300D1 | PL215D1V50 |
| UELPL-2 7/8 | 2.8750 | 3 5/16 | 12 | 9 1/2 | 2 29/32 | 7/8 | 1 1/4 | 1 3/32 | 6 1/2 | 3 5/32 | 3.622 | 1.469 | | | | |
| UELPL-2 15/16 | 2.9375 | | | | | | | | | | | | | | | |
| UELPL-3 | 3.0000 | | | | | | | | | | | | | | | |

Note: Metric Sizes available. The production and shipment of black oxide coated inserts will be introduced as a rolling change. This is denoted with an M at the end of the current part number. Please consult NTN for availability.

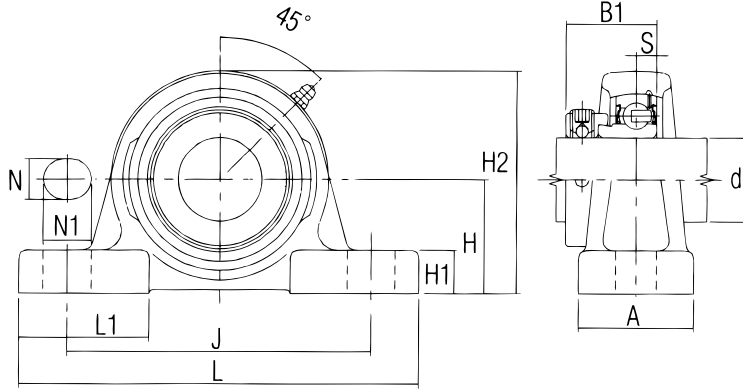
NTN
SERIES
JELP
ECCENTRIC
LOCKING
COLLAR
TYPE

Units: **Millimeters**
INCHES



PILLOW BLOCKS - ULTRA CLASS HIGH BASE

| Part Number | Nominal Dimensions | | | | | | | | | | | | Bolt Size | Lube Hole of Housing | Insert Bearing Number | Housing Number | |
|--------------|--------------------|---------|---------|---------|-------|-------|--------|-------|---------|---------|-------|-------|-----------|----------------------|-----------------------|----------------|----------------|
| | d | H | L | J | A | N | N1 | H1 | H2 | L1 | B1 | S | | | | | |
| JELP-1/2 | 0.5000 | | 127 | 92.1 | 38.1 | 11.1 | 22.2 | 14 | | 42 | | | | 3/8 | 1/4-28UNF | A-JEL201-008D1 | PL201D1V50 |
| JELP-9/16 | 0.5625 | 1 3/16 | 5 | 3 5/8 | 1 1/2 | 7/16 | 7/8 | 9/16 | 2 7/16 | 1 21/32 | 1.126 | 0.256 | | | | A-JEL202-009D1 | |
| JELP-5/8 | 0.6250 | | | | | | | | | | | | | | | A-JEL202-010D1 | |
| JELP-11/16 | 0.6875 | | | | | | | | | | | | | | | A-JEL203-011D1 | |
| JELP-3/4 | 0.7500 | 1 5/16 | 127 | 96 | 38.1 | 11.1 | 19.8 | 14 | | 42 | | | 3/8 | 1/4-28UNF | A-JEL204-012D1 | PL204D1V50 | |
| | | | 5 | 3 29/32 | 1 1/2 | 7/16 | 29/32 | 9/16 | 2 9/16 | 1 21/32 | 1.220 | 0.295 | | | | | |
| JELP-13/16 | 0.8125 | 1 7/16 | 140 | 104.8 | 38.1 | 11.1 | 20.6 | 15 | | 42 | | | 3/8 | 1/8-27NPT | A-JEL205-013D1 | PL205D1V50 | |
| JELP-7/8 | 0.8750 | | 5 1/2 | 4 1/8 | 1 1/2 | 7/16 | 13/16 | 15/32 | 2 25/32 | 1 21/32 | 1.220 | 0.295 | | | | | A-JEL205-014D1 |
| JELP-15/16 | 0.9375 | | | | | | | | | | | | | | | | A-JEL205-015D1 |
| JELP-1 | 1.0000 | | | | | | | | | | | | | | | | A-JEL205-100D1 |
| JELP-1 1/16 | 1.0625 | 1 11/16 | 165 | 117.5 | 47.6 | 14.3 | 23.8 | 17 | | 54 | | | 1/2 | 1/8-27NPT | A-JEL206-101D1 | PL206D1V50 | |
| JELP-1 1/8 | 1.1250 | | 6 1/2 | 4 5/8 | 1 7/8 | 9/16 | 15/16 | 21/32 | 3 9/32 | 2 1/8 | 1.406 | 0.354 | | | | | A-JEL206-102D1 |
| JELP-1 3/16 | 1.1875 | | | | | | | | | | | | | | | | A-JEL206-103D1 |
| JELP-1 1/4S | 1.2500 | | | | | | | | | | | | | | | | A-JEL206-104D1 |
| JELP-1 1/4 | 1.2500 | 1 7/8 | 167 | 130.2 | 47.6 | 14.3 | 24.6 | 18 | | 54 | | | 1/2 | 1/8-27NPT | A-JEL207-104D1 | PL207D1V50 | |
| JELP-1 5/16 | 1.3125 | | 6 9/16 | 5 1/8 | 1 7/8 | 9/16 | 31/32 | 23/32 | 3 21/32 | 2 1/8 | 1.531 | 0.374 | | | | | A-JEL207-105D1 |
| JELP-1 3/8 | 1.3750 | | | | | | | | | | | | | | | | A-JEL207-106D1 |
| JELP-1 7/16 | 1.4375 | | | | | | | | | | | | | | | | A-JEL207-107D1 |
| JELP-1 1/2 | 1.5000 | 49.2 | 184 | 136.5 | 54 | 14.3 | 26.2 | 18 | | 52 | | | 1/2 | 1/8-27NPT | A-JEL208-108D1 | PL208D1V50 | |
| JELP-1 9/16 | 1.5625 | 1 15/16 | 7 1/4 | 5 3/8 | 2 1/8 | 9/16 | 1 1/32 | 23/32 | 3 27/32 | 2 1/16 | 1.720 | 0.433 | | | | | A-JEL208-109D1 |
| JELP-1 5/8 | 1.6250 | 2 1/8 | 190 | 149.2 | 54 | 14.3 | 28.6 | 20 | | 60 | | | 1/2 | 1/8-27NPT | A-JEL209-110D1 | PL209D1V50 | |
| JELP-1 11/16 | 1.6875 | | 7 15/32 | 5 7/8 | 2 1/8 | 9/16 | 1 1/8 | 25/32 | 4 3/16 | 2 3/8 | 1.720 | 0.433 | | | | | A-JEL209-111D1 |
| JELP-1 3/4 | 1.7500 | | | | | | | | | | | | | | | | A-JEL209-112D1 |
| JELP-1 13/16 | 1.8125 | 2 1/4 | 206 | 158 | 60.3 | 17.5 | 23.8 | 21 | | 65 | | | 5/8 | 1/8-27NPT | A-JEL210-113D1 | PL210D1V50 | |
| JELP-1 7/8 | 1.8750 | | 8 1/8 | 6 7/32 | 2 3/8 | 11/16 | 19/16 | 13/16 | 4 1/2 | 2 9/16 | 1.720 | 0.433 | | | | | A-JEL210-114D1 |
| JELP-1 15/16 | 1.9375 | | | | | | | | | | | | | | | | A-JEL210-115D1 |
| JELP-2S | 2.0000 | | | | | | | | | | | | | | | | A-JEL210-200D1 |
| JELP-2 | 2.0000 | 2 1/2 | 219 | 176.2 | 60 | 18.3 | 29.4 | 23 | | 65 | | | 5/8 | 1/8-27NPT | A-JEL211-200D1 | PL211D1V50 | |
| JELP-2 1/16 | 2.0625 | | 8 5/8 | 6 15/16 | 2 3/8 | 23/32 | 1 5/32 | 29/32 | 4 31/32 | 2 9/16 | 1.906 | 0.472 | | | | | A-JEL211-201D1 |
| JELP-2 1/8 | 2.1250 | | | | | | | | | | | | | | | | A-JEL211-202D1 |
| JELP-2 3/16 | 2.1875 | | | | | | | | | | | | | | | | A-JEL211-203D1 |

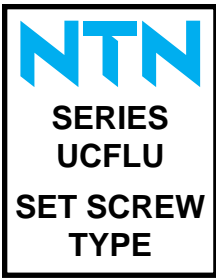


Units: Millimeters
INCHES

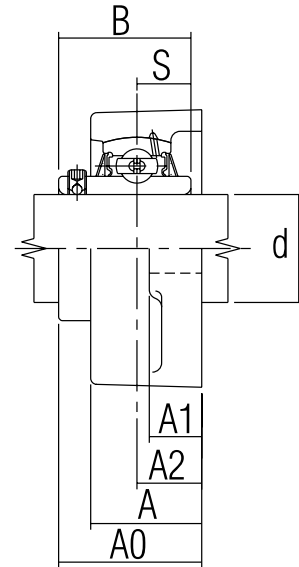
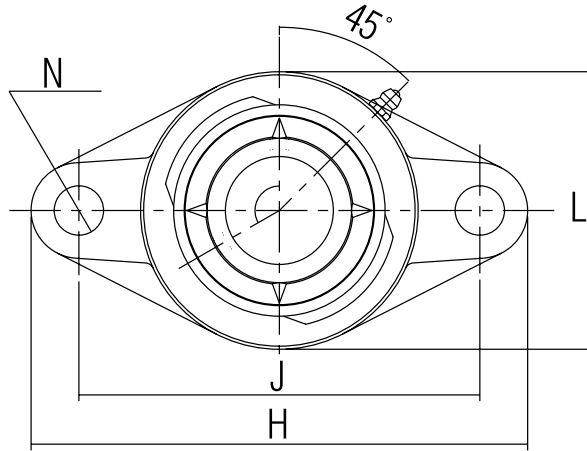


PILLOW BLOCKS - ULTRA CLASS LOW BASE

| Part Number | Nominal Dimensions | | | | | | | | | | | | Bolt Size | Lube Hole of Housing | Insert Bearing Number | Housing Number |
|---------------|--------------------|---------|---------|---------|-------|-------|--------|-------|---------|---------|-------|-------|-----------|----------------------|-----------------------|----------------|
| | d | H | L | J | A | N | N1 | H1 | H2 | L1 | B1 | S | | | | |
| JELPL-1/2 | 0.5000 | 27 | 121 | 92.1 | 34.9 | 11.1 | 22.2 | 13 | 54 | 40 | | | 3/8 | 1/4-28UNF | A-JEL201-008D1 | PL201D1V50 |
| JELPL-9/16 | 0.5625 | 1 1/16 | 4 3/4 | 3 5/8 | 1 3/8 | 7/16 | 7/8 | 1/2 | 2 1/8 | 1 9/16 | 1.126 | 0.256 | | | A-JEL202-009D1 | |
| JELPL-5/8 | 0.6250 | | | | | | | | | | | | | | A-JEL202-010D1 | |
| JELPL-11/16 | 0.6875 | | | | | | | | | | | | | | A-JEL203-011D1 | |
| JELPL-3/4 | 0.7500 | 31.75 | 127 | 96 | 38.1 | 11.1 | 19.8 | 14 | 64 | 42 | | | 3/8 | 1/4-28UNF | A-JEL204-012D1 | PL204D1V50 |
| | | 1 1/4 | 5 | 3 29/32 | 1 1/2 | 7/16 | 29/32 | 9/16 | 2 17/32 | 1 21/32 | 1.220 | 0.295 | | | | |
| JELPL-13/16 | 0.8125 | 33.3 | 140 | 104.8 | 38.1 | 11.1 | 20.6 | 15 | 68 | 42 | | | 3/8 | 1/8-27NPT | A-JEL205-013D1 | PL205D1V50 |
| JELPL-7/8 | 0.8750 | 1 5/16 | 5 1/2 | 4 1/8 | 1 1/2 | 7/16 | 13/16 | 19/32 | 2 11/16 | 1 21/32 | 1.220 | 0.295 | | | A-JEL205-014D1 | |
| JELPL-15/16 | 0.9375 | | | | | | | | | | | | | | A-JEL205-015D1 | |
| JELPL-1 | 1.0000 | | | | | | | | | | | | | | A-JEL205-100D1 | |
| JELPL-1 1/16 | 1.0625 | 39.7 | 165 | 117.5 | 47.6 | 14.3 | 23.8 | 17 | 80 | 54 | | | 1/2 | 1/8-27NPT | A-JEL206-101D1 | PL206D1V50 |
| JELPL-1 1/8 | 1.1250 | 1 9/16 | 6 1/2 | 4 5/8 | 1 7/8 | 9/16 | 15/16 | 21/32 | 3 5/32 | 2 1/8 | 1.406 | 0.354 | | | A-JEL206-102D1 | |
| JELPL-1 3/16 | 1.1875 | | | | | | | | | | | | | | A-JEL206-103D1 | |
| JELPL-1 1/4 | 1.2500 | | | | | | | | | | | | | | A-JEL206-104D1 | |
| JELPL-1 1/4 | 1.2500 | 46 | 167 | 130.2 | 47.6 | 14.3 | 24.6 | 18 | 91 | 54 | | | 1/2 | 1/8-27NPT | A-JEL207-104D1 | PL207D1V50 |
| JELPL-1 5/16 | 1.3125 | 1 13/16 | 6 9/16 | 5 1/8 | 1 7/8 | 9/16 | 31/32 | 23/32 | 3 19/32 | 2 1/8 | 1.531 | 0.374 | | | A-JEL207-105D1 | |
| JELPL-1 3/8 | 1.3750 | | | | | | | | | | | | | | A-JEL207-106D1 | |
| JELPL-1 7/16 | 1.4375 | | | | | | | | | | | | | | A-JEL207-107D1 | |
| JELPL-1 1/2 | 1.5000 | 49.2 | 184 | 136.5 | 54 | 14.3 | 26.2 | 18 | 98 | 52 | | | 1/2 | 1/8-27NPT | A-JEL208-108D1 | P208D1V50 |
| JELPL-1 9/16 | 1.5625 | 1 15/16 | 7 1/4 | 5 3/8 | 2 1/8 | 9/16 | 1 1/2 | 23/32 | 3 27/32 | 2 1/16 | 1.720 | 0.374 | | | A-JEL208-109D1 | |
| JELPL-1 5/8 | 1.6250 | 52.4 | 190 | 149.2 | 54 | 14.3 | 28.6 | 20 | 104 | 60 | | | 1/2 | 1/8-27NPT | A-JEL209-110D1 | PL209D1V50 |
| JELPL-1 11/16 | 1.6875 | 2 1/16 | 7 15/32 | 5 7/8 | 2 1/8 | 9/16 | 1 1/8 | 25/32 | 4 3/32 | 2 3/8 | 1.720 | 0.433 | | | A-JEL209-111D1 | |
| JELPL-1 3/4 | 1.7500 | | | | | | | | | | | | | | A-JEL209-112D1 | |
| JELPL-1 13/16 | 1.8125 | 55.6 | 206 | 158 | 60.3 | 17.5 | 23.8 | 21 | 112 | 65 | | | 5/8 | 1/8-27NPT | A-JEL210-113D1 | PL210D1V50 |
| JELPL-1 7/8 | 1.8750 | 2 3/16 | 8 1/8 | 6 7/32 | 2 3/8 | 11/16 | 15/16 | 13/16 | 4 13/32 | 2 9/16 | 1.720 | 0.433 | | | A-JEL210-114D1 | |
| JELPL-1 15/16 | 1.9375 | | | | | | | | | | | | | | A-JEL210-115D1 | |
| JELPL-2S | 2.0000 | | | | | | | | | | | | | | A-JEL210-200D1 | |
| JELPL-2 | 2.0000 | 61.9 | 219 | 176.2 | 60 | 18.3 | 29.4 | 23 | 124 | 65 | | | 5/8 | 1/8-27NPT | A-JEL211-200D1 | PL211D1V50 |
| JELPL-2 1/16 | 2.0625 | 2 7/16 | 8 5/8 | 6 15/16 | 2 3/8 | 23/32 | 1 5/32 | 29/32 | 4 7/8 | 2 9/16 | 1.906 | 0.472 | | | A-JEL211-201D1 | |
| JELPL-2 1/8 | 2.1250 | | | | | | | | | | | | | | A-JEL211-202D1 | |
| JELPL-2 3/16 | 2.1875 | | | | | | | | | | | | | | A-JEL211-203D1 | |



Units: Millimeters
INCHES

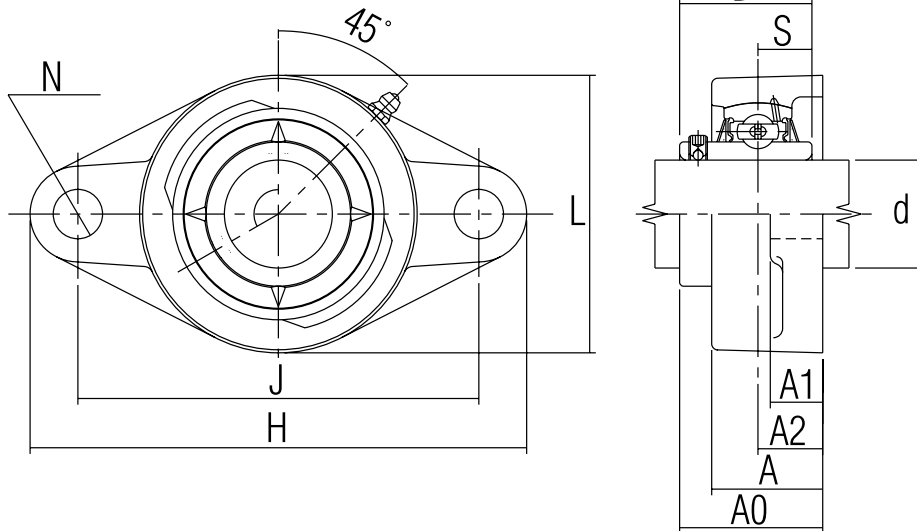
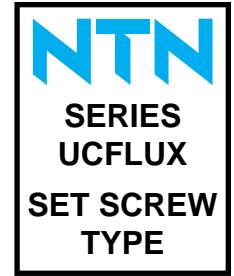


FLANGED UNITS - ULTRA CLASS CAST IRON HOUSING (2 BOLT)

| Part Number | Nominal Dimensions | | | | | | | | | | | Lube Hole of Housing | Insert Bearing Number | Housing Number | | |
|---------------|--------------------|---------|---------|--------|-------|---------|-------|---------|---------|--------|-------|----------------------|-----------------------|----------------|---------------|-------------|
| | d | H | J | A2 | A1 | A | N | L | A0 | B | S | | | | | |
| UCFLU-1/2 | 0.5000 | 98 | 76 | 17 | 13 | 28 | 9.9 | 61 | 32.9 | 27.4 | 11.5 | 1/4-28UNF | A-UC201X-008D1 | FLU201D1V50 | | |
| UCFLU-9/16 | 0.5625 | 3 27/32 | 3 | 21/32 | 33/64 | 1 7/64 | 25/64 | 2 13/32 | 1 19/64 | 1.0787 | 0.453 | | A-UC202X-009D1 | | | |
| UCFLU-5/8 | 0.6250 | | | | | | | | | | | | A-UC202X-010D1 | | | |
| UCFLU-11/16 | 0.6875 | | | | | | | | | | | | A-UC203X-011D1 | | | |
| UCFLU-3/4 | 0.7500 | 113 | 90 | 19 | 15 | 29.5 | 10.7 | 61 | 37.3 | 31 | 12.7 | 1/4-28UNF | A-UC204-012D1 | FLU204D1V50 | | |
| | | 4 7/16 | 3 17/32 | 3/4 | 19/32 | 1 5/32 | 27/64 | 2 13/32 | 1 15/32 | 1.2205 | 0.500 | | | | | |
| UCFLU-13/16 | 0.8125 | 125 | 99 | 19 | 15 | 30 | 11.9 | 70 | 38.9 | 34.1 | 14.3 | | 1/8-27NPT | | A-UC205-013D1 | FLU205D1V50 |
| UCFLU-7/8 | 0.8750 | 4 29/32 | 3 57/64 | 3/4 | 19/32 | 1 3/16 | 15/32 | 2 3/4 | 1 17/32 | 1.3425 | 0.563 | | | | A-UC205-014D1 | |
| UCFLU-15/16 | 0.9375 | | | | | | | | | | | A-UC205-015D1 | | | | |
| UCFLU-1 | 1.0000 | | | | | | | | | | | A-UC205-100D1 | | | | |
| UCFLU-1 1/16 | 1.0625 | 142 | 116.5 | 20 | 16 | 33 | 11.5 | 83 | 42.1 | 38.1 | 15.9 | 1/8-27NPT | A-UC206-101D1 | FLU206D1V50 | | |
| UCFLU-1 1/8 | 1.1250 | 5 19/32 | 4 19/32 | 25/32 | 5/8 | 1 5/16 | 29/64 | 3 9/32 | 1 21/32 | 1.5000 | 0.626 | | A-UC206-102D1 | | | |
| UCFLU-1 3/16 | 1.1875 | | | | | | | | | | | | A-UC206-103D1 | | | |
| UCFLU-1 1/4S | 1.2500 | | | | | | | | | | | | A-UC206-104D1 | | | |
| UCFLU-1 1/4 | 1.2500 | 156 | 130 | 21 | 17 | 36 | 14.3 | 96 | 46.4 | 42.9 | 17.5 | 1/8-27NPT | A-UC207-104D1 | FLU207D1V50 | | |
| UCFLU-1 5/16 | 1.3125 | 6 5/32 | 5 1/8 | 53/64 | 21/32 | 1 13/32 | 9/16 | 3 25/32 | 1 53/64 | 1.6890 | 0.689 | | A-UC207-105D1 | | | |
| UCFLU-1 3/8 | 1.3750 | | | | | | | | | | | | A-UC207-106D1 | | | |
| UCFLU-1 7/16 | 1.4375 | | | | | | | | | | | | A-UC207-107D1 | | | |
| UCFLU-1 1/2 | 1.5000 | 172 | 143.5 | 24 | 17 | 39 | 13.1 | 105 | 54.4 | 49.2 | 19 | 1/8-27NPT | A-UC208-108D1 | FLU208D1V50 | | |
| UCFLU-1 9/16 | 1.5625 | 6 25/32 | 5 21/32 | 15/16 | 21/32 | 1 13/32 | 33/64 | 4 1/8 | 2 9/64 | 1.9370 | 0.748 | | A-UC208-109D1 | | | |
| UCFLU-1 5/8 | 1.6250 | 183 | 148.5 | 24 | 18 | 40 | 13.1 | 111 | 54.4 | 49.2 | 19 | 1/8-27NPT | A-UC208-110D1 | FLU209D1V50 | | |
| UCFLU-1 11/16 | 1.6875 | 7 3/32 | 5 27/32 | 15/16 | 23/32 | 1 9/16 | 33/64 | 4 3/8 | 2 9/64 | 1.9370 | 0.748 | | A-UC209-111D1 | | | |
| UCFLU-1 3/4 | 1.7500 | | | | | | | | | | | | A-UC209-112D1 | | | |
| UCFLU-1 13/16 | 1.8125 | 190 | 157 | 28 | 20 | 46 | 17.1 | 116 | 60.7 | 51.6 | 19 | 1/8-27NPT | A-UC210-113D1 | FLU209D1V50 | | |
| UCFLU-1 7/8 | 1.8750 | 7 15/32 | 6 3/16 | 1 7/64 | 25/32 | 1 13/16 | 43/64 | 4 9/16 | 2 25/64 | 2.0315 | 0.748 | | A-UC210-114D1 | | | |
| UCFLU-1 15/16 | 1.9375 | | | | | | | | | | | | A-UC210-115D1 | | | |
| UCFLU-2S | 2.0000 | | | | | | | | | | | | A-UC210-200D1 | | | |
| UCFLU-2 | 2.0000 | 217 | 184 | 31 | 20.5 | 49 | 17.1 | 134 | 64.3 | 55.6 | 22.2 | 1/8-27NPT | A-UC211-200D1 | FLU211D1V50 | | |
| UCFLU-2 1/16 | 2.0625 | 8 17/32 | 7 1/4 | 1 1/32 | 13/16 | 1 15/16 | 43/64 | 5 5/32 | 2 17/32 | 2.1890 | 0.874 | | A-UC211-201D1 | | | |
| UCFLU-2 1/8 | 2.1250 | | | | | | | | | | | | A-UC211-202D1 | | | |
| UCFLU-2 3/16 | 2.1875 | | | | | | | | | | | | A-UC211-203D1 | | | |

Note: Metric Sizes available. The production and shipment of black oxide coated inserts will be introduced as a rolling change. This is denoted with an M at the end of the current part number. Please consult NTN for availability.

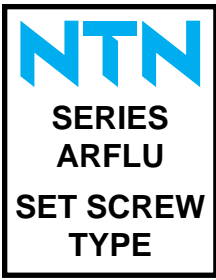
Units: Millimeters
INCHES



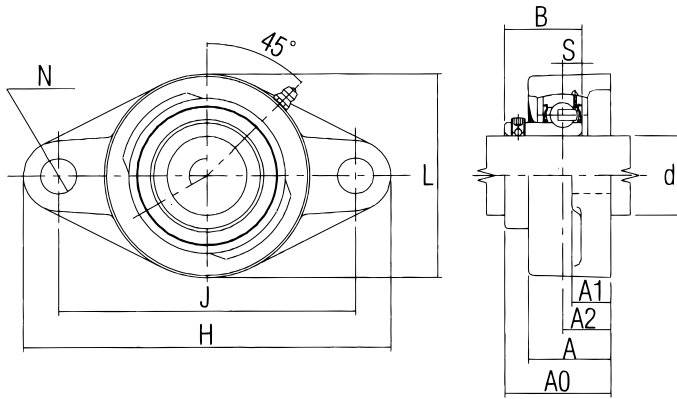
FLANGED UNITS - ULTRA CLASS CAST IRON HOUSING (2 BOLT)

| Part Number | Nominal Dimensions | | | | | | | | | | | Lube Hole of Housing | Insert Bearing Number | Housing Number |
|---------------------------------------|--------------------|---------|---------|--------|-------|---------|-------|---------|---------|--------|-------|----------------------|-----------------------|----------------|
| | d | H | J | A2 | A1 | A | N | L | A0 | B | S | | | |
| UCFLUX-1 ³ / ₁₆ | 0.8125 | 142 | 116.5 | 20 | 16 | 33 | 11.5 | 83 | 42.1 | 38.1 | 15.9 | 1/8-27NPT | A-UCX05-013D1 | FLU206D1V50 |
| UCFLUX-7/8 | 0.8750 | 5 19/32 | 4 19/32 | 25/32 | 5/8 | 1 5/16 | 29/64 | 3 3/32 | 1 21/32 | 1.5000 | 0.626 | | A-UCX05-014D1 | |
| UCFLUX-15/16 | 0.9375 | | | | | | | | | | | | A-UCX05-015D1 | |
| UCFLUX-1 | 1.0000 | | | | | | | | | | | | A-UCX05-100D1 | |
| UCFLUX-1 1/16 | 1.0625 | 156 | 130 | 21 | 17 | 36 | 13.1 | 96 | 46.4 | 42.9 | 17.5 | 1/8-27NPT | A-UCX06-101D1 | FLU207D1V50 |
| UCFLUX-1 1/8 | 1.1250 | 6 5/32 | 5 1/8 | 53/64 | 21/32 | 1 13/32 | 33/64 | 3 25/32 | 1 53/64 | 1.6890 | 0.689 | | A-UCX06-102D1 | |
| UCFLUX-1 3/16 | 1.1875 | | | | | | | | | | | | A-UCX06-103D1 | |
| UCFLUX-1 1/4 | 1.2500 | | | | | | | | | | | | A-UCX07-104D1 | |
| UCFLUX-1 5/16 | 1.3125 | 172 | 143.5 | 24 | 17 | 39 | 13.1 | 105 | 54.4 | 49.2 | 19 | 1/8-27NPT | A-UCX07-105D1 | FLU208D1V50 |
| UCFLUX-1 3/8 | 1.3750 | 6 25/32 | 5 21/32 | 15/16 | 21/32 | 1 13/32 | 33/64 | 4 1/8 | 2 9/64 | 1.9370 | 0.748 | | A-UCX07-106D1 | |
| UCFLUX-1 7/16 | 1.4375 | | | | | | | | | | | | A-UCX07-107D1 | |
| UCFLUX-1 1/2 | 1.5000 | 183 | 148.5 | 24 | 18 | 40 | 13.1 | 111 | 54.4 | 49.2 | 19 | 1/8-27NPT | A-UCX08-108D1 | FLU209D1V50 |
| UCFLUX-1 9/16 | 1.5625 | 7 3/32 | 5 27/32 | 15/16 | 23/32 | 1 9/16 | 33/64 | 4 3/8 | 2 9/64 | 1.9370 | 0.748 | | A-UCX08-109D1 | |
| UCFLUX-1 5/8 | 1.6250 | 190 | 157 | 28 | 20 | 46 | 17.1 | 116 | 60.7 | 51.6 | 19 | 1/8-27NPT | A-UCX09-110D1 | FLU210D1V50 |
| UCFLUX-1 11/16 | 1.6875 | 7 15/32 | 6 3/16 | 1 7/64 | 25/32 | 1 13/16 | 43/64 | 4 9/16 | 2 25/64 | 2.0315 | 0.748 | | A-UCX09-111D1 | |
| UCFLUX-1 3/4 | 1.7500 | | | | | | | | | | | | A-UCX09-112D1 | |
| UCFLUX-1 13/16 | 1.8125 | | | | | | | | | | | | A-UCX10-113D1 | |
| UCFLUX-1 7/8 | 1.8750 | 217 | 184 | 31 | 20.5 | 49 | 17.1 | 134 | 64.3 | 55.6 | 22.2 | 1/8-27NPT | A-UCX10-114D1 | FLU211D1V50 |
| UCFLUX-1 15/16 | 1.9375 | 8 17/32 | 7 1/4 | 1 7/32 | 13/16 | 1 15/16 | 43/64 | 5 9/32 | 2 17/32 | 2.1890 | 0.874 | | A-UCX10-115D1 | |
| UCFLUX-2 | 2.0000 | | | | | | | | | | | | A-UCX11-200D1 | |

Note: Metric Sizes available. The production and shipment of black oxide coated inserts will be introduced as a rolling change. This is denoted with an M at the end of the current part number. Please consult NTN for availability.



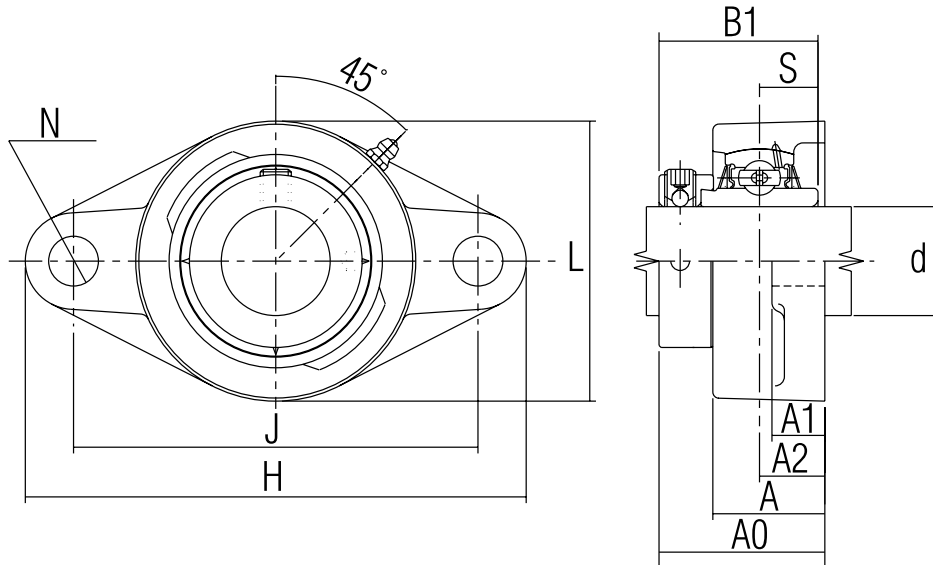
Units: **Millimeters**
INCHES



FLANGED UNITS - ULTRA CLASS CAST IRON HOUSING (2 BOLT)

| Part Number | Nominal Dimensions | | | | | | | | | | | Lube Hole of Housing | Insert Bearing Number | Housing Number |
|---------------|--------------------|---------|---------|--------|-------|---------|-------|---------|---------|--------|-------|----------------------|-----------------------|----------------|
| | d | H | J | A2 | A1 | A | N | L | A0 | B1 | S | | | |
| ARFLU-1/2 | 0.5000 | 98 | 76 | 17 | 13 | 28 | 9.9 | 61 | 1 19/64 | 1.8858 | 0.256 | 1/4-28UNF | A-AR201-008D1 | FLU201D1V50 |
| ARFLU-9/16 | 0.5625 | 3 27/32 | 3 | 21/32 | 33/64 | 1 7/64 | 25/64 | 2 13/32 | 1 29/64 | | | | A-AR202-009D1 | |
| ARFLU-5/8 | 0.6250 | | | | | | | | | | | | A-AR202-010D1 | |
| ARFLU-11/16 | 0.6875 | | | | | | | | | | | | A-AR203-011D1 | |
| ARFLU-3/4 | 0.7500 | 113 | 90 | 19 | 15 | 29.5 | 10.7 | 61 | 1 29/64 | 1.0039 | 0.295 | 1/4-28UNF | A-AR204-012D1 | FLU204D1V50 |
| ARFLU-13/16 | 0.8125 | 125 | 99 | 19 | 15 | 30 | 11.9 | 70 | 1 33/64 | 1.0630 | 0.295 | 1/8-27NPT | A-AR205-013D1 | FLU205D1V50 |
| ARFLU-7/8 | 0.8750 | 4 29/32 | 3 57/64 | 3/4 | 19/32 | 1 3/16 | 15/32 | 2 3/4 | | | | | A-AR205-014D1 | |
| ARFLU-15/16 | 0.9375 | | | | | | | | | | | | A-AR205-015D1 | |
| ARFLU-1 | 1.0000 | | | | | | | | | | | | A-AR205-100D1 | |
| ARFLU-1 1/16 | 1.0625 | 142 | 116.5 | 20 | 16 | 33 | 11.5 | 83 | 1 39/64 | 1.1811 | 0.354 | 1/8-27NPT | A-AR206-101D1 | FLU206D1V50 |
| ARFLU-1 1/8 | 1.1250 | 5 19/32 | 4 19/32 | 25/32 | 5/8 | 1 5/16 | 29/64 | 3 9/32 | | | | | A-AR206-102D1 | |
| ARFLU-1 3/16 | 1.1875 | | | | | | | | | | | | A-AR206-103D1 | |
| ARFLU-1 1/4S | 1.2500 | | | | | | | | | | | | A-AR206-104D1 | |
| ARFLU-1 1/4 | 1.2500 | 156 | 130 | 21 | 17 | 36 | 13.1 | 96 | 1 53/64 | 1.3780 | 0.374 | 1/8-27NPT | A-AR207-104D1 | FLU207D1V50 |
| ARFLU-1 5/16 | 1.3125 | 6 5/32 | 5 1/8 | 53/64 | 21/32 | 1 13/32 | 33/64 | 3 25/32 | | | | | A-AR207-105D1 | |
| ARFLU-1 3/8 | 1.3750 | | | | | | | | | | | | A-AR207-106D1 | |
| ARFLU-1 7/16 | 1.4375 | | | | | | | | | | | | A-AR207-107D1 | |
| ARFLU-1 1/2 | 1.5000 | 172 | 143.5 | 24 | 17 | 39 | 13.1 | 105 | 2 3/32 | 1.5748 | 0.433 | 1/8-27NPT | A-AR208-108D1 | FLU208D1V50 |
| ARFLU-1 9/16 | 1.5625 | 6 25/32 | 5 21/32 | 15/16 | 21/32 | 1 17/32 | 33/64 | 4 1/8 | | | | | A-AR208-109D1 | |
| ARFLU-1 5/8 | 1.6250 | 183 | 148.5 | 24 | 18 | 40 | 13.1 | 111 | 2 9/64 | 1.6339 | 0.433 | 1/8-27NPT | A-AR209-110D1 | FLU209D1V50 |
| ARFLU-1 11/16 | 1.6875 | 7 3/32 | 5 27/32 | 15/16 | 23/32 | 1 9/16 | 33/64 | 4 3/8 | | | | | A-AR209-111D1 | |
| ARFLU-1 3/4 | 1.7500 | | | | | | | | | | | | A-AR209-112D1 | |
| ARFLU-1 13/16 | 1.8125 | 190 | 157 | 28 | 20 | 46 | 17.1 | 116 | 2 23/64 | 1.6929 | 0.433 | 1/8-27NPT | A-AR210-113D1 | FLU210D1V50 |
| ARFLU-1 7/8 | 1.8750 | 7 15/32 | 6 3/16 | 1 7/64 | 25/32 | 1 13/16 | 43/64 | 4 9/16 | | | | | A-AR210-114D1 | |
| ARFLU-1 15/16 | 1.9375 | | | | | | | | | | | | A-AR210-115D1 | |
| ARFLU-2S | 2.0000 | | | | | | | | | | | | A-AR210-200D1 | |
| ARFLU-2 | 2.0000 | 217 | 184 | 31 | 20.5 | 49 | 17.1 | 134 | 2 7/16 | 1.6929 | 0.472 | 1/8-27NPT | A-AR211-200D1 | FLU211D1V50 |
| ARFLU-2 1/16 | 2.0625 | 8 17/32 | 7 1/4 | 1 7/32 | 13/16 | 1 15/16 | 43/64 | 5 9/32 | | | | | A-AR211-201D1 | |
| ARFLU-2 1/8 | 2.1250 | | | | | | | | | | | | A-AR211-202D1 | |
| ARFLU-2 3/16 | 2.1875 | | | | | | | | | | | | A-AR211-203D1 | |

Units: Millimeters
INCHES



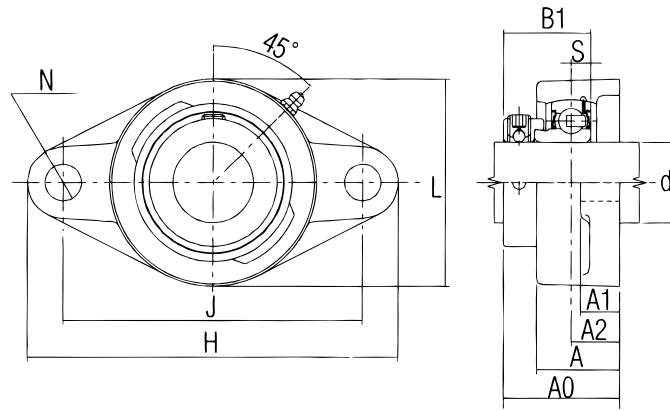
FLANGED UNITS - ULTRA CLASS CAST IRON HOUSING (2 BOLT)

| Part Number | Nominal Dimensions | | | | | | | | | | | Lube Hole of Housing | Insert Bearing Number | Housing Number | |
|----------------|--------------------|---------|---------|--------|-------|---------|-------|---------|---------|--------|-------|----------------------|-----------------------|----------------|----------------|
| | d | H | J | A2 | A1 | A | N | L | A0 | B1 | S | | | | |
| UELFLU-1/2 | 0.5000 | 98 | 76 | 17 | 13 | 28 | 9.9 | 61 | 42 | 37.3 | 12.4 | 1/4-28UNF | A-UEL201-008D1 | FLU201D1V50 | |
| UELFLU-9/16 | 0.5625 | 3 27/32 | 3 | 21/32 | 33/64 | 1 7/64 | 25/64 | 2 13/32 | 1 21/32 | 1.469 | 0.488 | | A-UEL202-009D1 | | |
| UELFLU-5/8 | 0.6250 | | | | | | | | | | | | A-UEL202-010D1 | | |
| UELFLU-11/16 | 0.6875 | | | | | | | | | | | | A-UEL203-011D1 | | |
| UELFLU-3/4 | 0.7500 | 113 | 90 | 19 | 15 | 29.5 | 10.7 | 61 | 45.6 | 43.7 | 17.1 | 1/4-28UNF | A-UEL204-012D1 | FLU204D1V50 | |
| | | 4 7/16 | 3 17/32 | 3/4 | 19/32 | 1 5/32 | 27/64 | 2 13/32 | 1 51/64 | 1.720 | 0.673 | | A-UEL205-013D1 | | |
| UELFLU-13/16 | 0.8125 | 125 | 99 | 19 | 15 | 30 | 11.9 | 70 | 45.9 | 44.4 | 17.5 | | 1/8-27NPT | | A-UEL205-014D1 |
| UELFLU-7/8 | 0.8750 | 4 29/32 | 3 57/64 | 3/4 | 19/32 | 1 3/16 | 15/32 | 2 3/4 | 1 13/16 | 1.748 | 0.689 | | | | A-UEL205-015D1 |
| UELFLU-15/16 | 0.9375 | | | | | | | | | | | A-UEL205-100D1 | | | |
| UELFLU-1 | 1.0000 | | | | | | | | | | | | | | |
| UELFLU-1 1/16 | 1.0625 | 142 | 116.5 | 20 | 16 | 33 | 11.5 | 83 | 50.1 | 48.4 | 18.3 | 1/8-27NPT | A-UEL206-101D1 | FLU206D1V50 | |
| UELFLU-1 1/8 | 1.1250 | 5 19/32 | 4 19/32 | 25/32 | 5/8 | 1 3/16 | 29/64 | 3 9/32 | 1 31/32 | 1.906 | 0.720 | | A-UEL206-102D1 | | |
| UELFLU-1 3/16 | 1.1875 | | | | | | | | | | | | A-UEL206-103D1 | | |
| UELFLU-1 1/4S | 1.2500 | | | | | | | | | | | | A-UEL206-104D1 | | |
| UELFLU-1 1/4 | 1.2500 | 156 | 130 | 21 | 17 | 36 | 13.1 | 96 | 53.3 | 51.1 | 18.8 | 1/8-27NPT | A-UEL207-104D1 | FLU207D1V50 | |
| UELFLU-1 5/16 | 1.3125 | 6 5/32 | 5 1/8 | 53/64 | 21/32 | 1 13/32 | 33/64 | 3 25/32 | 2 3/32 | 2.012 | 0.740 | | A-UEL207-105D1 | | |
| UELFLU-1 3/8 | 1.3750 | | | | | | | | | | | | A-UEL207-106D1 | | |
| UELFLU-1 7/16 | 1.4375 | | | | | | | | | | | | A-UEL207-107D1 | | |
| UELFLU-1 1/2 | 1.5000 | 172 | 143.5 | 24 | 17 | 39 | 13.1 | 105 | 58.9 | 56.3 | 21.4 | 1/8-27NPT | A-UEL208-108D1 | FLU208D1V50 | |
| UELFLU-1 9/16 | 1.5625 | 6 25/32 | 5 21/32 | 15/16 | 21/32 | 1 13/32 | 33/64 | 4 1/8 | 2 5/16 | 2.217 | 0.843 | | A-UEL208-109D1 | | |
| UELFLU-1 5/8 | 1.6250 | 183 | 148.5 | 24 | 18 | 40 | 13.1 | 111 | 58.9 | 56.3 | 21.4 | 1/8-27NPT | A-UEL208-110D1 | FLU209D1V50 | |
| UELFLU-1 11/16 | 1.6875 | 7 3/32 | 5 27/32 | 15/16 | 23/32 | 1 9/16 | 33/64 | 4 3/8 | 2 5/16 | 2.217 | 0.843 | | A-UEL209-111D1 | | |
| UELFLU-1 3/4 | 1.7500 | | | | | | | | | | | | A-UEL209-112D1 | | |
| UELFLU-1 13/16 | 1.8125 | 190 | 157 | 28 | 20 | 46 | 17.1 | 116 | 66.1 | 62.7 | 24.6 | 1/8-27NPT | A-UEL210-113D1 | FLU209D1V50 | |
| UELFLU-1 7/8 | 1.8750 | 7 15/32 | 6 3/16 | 1 7/64 | 25/32 | 1 13/16 | 43/64 | 4 9/16 | 2 39/64 | 2.469 | 0.969 | | A-UEL210-114D1 | | |
| UELFLU-1 15/16 | 1.9375 | | | | | | | | | | | | A-UEL210-115D1 | | |
| UELFLU-2S | 2.0000 | | | | | | | | | | | | A-UEL210-200D1 | | |
| UELFLU-2 | 2.0000 | 217 | 184 | 31 | 20.5 | 49 | 17.1 | 134 | 64.3 | 55.6 | 22.2 | 1/8-27NPT | A-UEL211-200D1 | FLU211D1V50 | |
| UELFLU-2 1/16 | 2.0625 | 8 17/32 | 7 1/4 | 1 7/32 | 13/16 | 1 15/16 | 43/64 | 5 9/32 | 2 17/32 | 2.1890 | 0.874 | | A-UEL211-201D1 | | |
| UELFLU-2 1/8 | 2.1250 | | | | | | | | | | | | A-UEL211-202D1 | | |
| UELFLU-2 3/16 | 2.1875 | | | | | | | | | | | | A-UEL211-203D1 | | |

Note: Metric Sizes available. The production and shipment of black oxide coated inserts will be introduced as a rolling change. This is denoted with an M at the end of the current part number. Please consult NTN for availability.

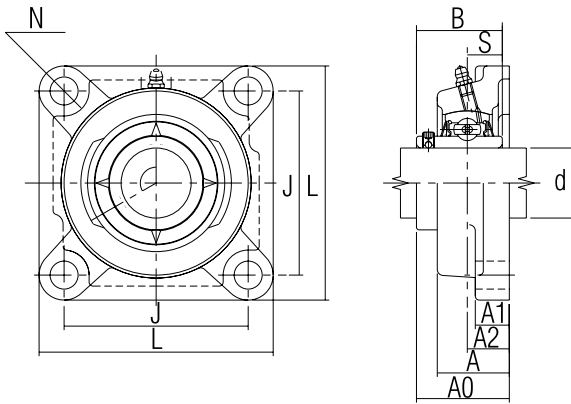
NTN
SERIES
JELFLU
ECCENTRIC
LOCKING
COLLAR
TYPE

Units: Millimeters
 INCHES

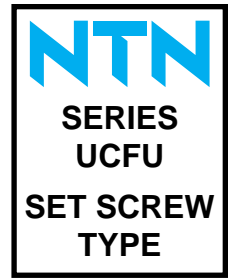


FLANGED UNITS - ULTRA CLASS CAST IRON HOUSING (2 BOLT)

| Part Number | Nominal Dimensions | | | | | | | | | | | Lube Hole of Housing | Insert Bearing Number | Housing Number |
|----------------|--------------------|---------|---------|--------|-------|---------|-------|---------|---------|-------|-------|----------------------|-----------------------|----------------|
| | d | H | J | A2 | A1 | A | N | L | A0 | B1 | S | | | |
| JELFLU-1/2 | 0.5000 | 98 | 76 | 17 | 13 | 28 | 9.9 | 61 | 1 35/64 | 1.126 | 0.256 | 1/4-28UNF | A-JEL201-008D1 | FLU201D1V50 |
| JELFLU-9/16 | 0.5625 | 3 27/32 | 3 | 21/32 | 33/64 | 1 7/64 | 25/64 | 2 13/32 | 1 35/64 | 1.126 | 0.256 | | A-JEL202-009D1 | |
| JELFLU-5/8 | 0.6250 | | | | | | | | | | | | A-JEL202-010D1 | |
| JELFLU-11/16 | 0.6875 | | | | | | | | | | | | A-JEL203-011D1 | |
| JELFLU-3/4 | 0.7500 | 113 | 90 | 19 | 15 | 29.5 | 10.7 | 61 | 1 43/64 | 1.220 | 0.295 | 1/4-28UNF | A-JEL204-012D1 | FLU204D1V50 |
| JELFLU-13/16 | 0.8125 | 4 7/16 | 3 17/32 | 3/4 | 19/32 | 1 5/32 | 27/64 | 2 13/32 | 1 43/64 | 1.220 | 0.295 | | A-JEL205-013D1 | |
| JELFLU-7/8 | 0.8750 | | | | | | | | | | | | A-JEL205-014D1 | |
| JELFLU-15/16 | 0.9375 | | | | | | | | | | | | A-JEL205-015D1 | |
| JELFLU-1 | 1.0000 | | | | | | | | | | | | A-JEL205-100D1 | |
| JELFLU-1 1/16 | 1.0625 | 142 | 116.5 | 20 | 16 | 33 | 11.5 | 83 | 1 27/32 | 1.406 | 0.354 | 1/8-27NPT | A-JEL206-101D1 | FLU206D1V50 |
| JELFLU-1 1/8 | 1.1250 | 5 19/32 | 4 19/32 | 25/32 | 5/8 | 1 5/16 | 29/64 | 3 9/32 | 1 27/32 | 1.406 | 0.354 | | A-JEL206-102D1 | |
| JELFLU-1 3/16 | 1.1875 | | | | | | | | | | | | A-JEL206-103D1 | |
| JELFLU-1 1/4S | 1.2500 | | | | | | | | | | | | A-JEL206-104D1 | |
| JELFLU-1 1/4 | 1.2500 | 156 | 130 | 21 | 17 | 36 | 13.1 | 96 | 1 63/64 | 1.531 | 0.374 | 1/8-27NPT | A-JEL207-104D1 | FLU207D1V50 |
| JELFLU-1 5/16 | 1.3125 | 6 5/32 | 5 1/8 | 53/64 | 21/32 | 1 13/32 | 33/64 | 3 25/32 | 1 63/64 | 1.531 | 0.374 | | A-JEL207-105D1 | |
| JELFLU-1 3/8 | 1.3750 | | | | | | | | | | | | A-JEL207-106D1 | |
| JELFLU-1 7/16 | 1.4375 | | | | | | | | | | | | A-JEL207-107D1 | |
| JELFLU-1 1/2 | 1.5000 | 172 | 143.5 | 24 | 17 | 39 | 13.1 | 105 | 2 15/64 | 1.720 | 0.433 | 1/8-27NPT | A-JEL208-108D1 | FLU208D1V50 |
| JELFLU-1 9/16 | 1.5625 | 6 25/32 | 5 21/32 | 15/16 | 21/32 | 1 17/32 | 33/64 | 4 1/8 | 2 15/64 | 1.720 | 0.433 | | A-JEL208-109D1 | |
| JELFLU-1 5/8 | 1.6250 | 183 | 148.5 | 24 | 18 | 40 | 13.1 | 111 | 2 15/64 | 1.720 | 0.433 | 1/8-27NPT | A-JEL209-110D1 | FLU209D1V50 |
| JELFLU-1 11/16 | 1.6875 | 7 3/32 | 5 27/32 | 15/16 | 23/32 | 1 9/16 | 33/64 | 4 3/8 | 2 15/64 | 1.720 | 0.433 | | A-JEL209-111D1 | |
| JELFLU-1 3/4 | 1.7500 | | | | | | | | | | | | A-JEL209-112D1 | |
| JELFLU-1 13/16 | 1.8125 | 190 | 157 | 28 | 20 | 46 | 17.1 | 116 | 2 25/64 | 1.720 | 0.433 | 1/8-27NPT | A-JEL210-113D1 | FLU210D1V50 |
| JELFLU-1 7/8 | 1.8750 | 7 15/32 | 6 3/16 | 1 7/64 | 25/32 | 1 13/16 | 43/64 | 4 9/16 | 2 25/64 | 1.720 | 0.433 | | A-JEL210-114D1 | |
| JELFLU-1 15/16 | 1.9375 | | | | | | | | | | | | A-JEL210-115D1 | |
| JELFLU-2S | 2.0000 | | | | | | | | | | | | A-JEL210-200D1 | |
| JELFLU-2 | 2.0000 | 217 | 184 | 31 | 20.5 | 49 | 17.1 | 134 | 2 21/32 | 1.906 | 0.472 | 1/8-27NPT | A-JEL211-200D1 | FLU211D1V50 |
| JELFLU-2 1/16 | 2.0625 | 8 17/32 | 7 1/4 | 1 7/32 | 13/16 | 1 15/16 | 43/64 | 5 9/32 | 2 21/32 | 1.906 | 0.472 | | A-JEL211-201D1 | |
| JELFLU-2 1/8 | 2.1250 | | | | | | | | | | | | A-JEL211-202D1 | |
| JELFLU-2 3/16 | 2.1875 | | | | | | | | | | | | A-JEL211-203D1 | |



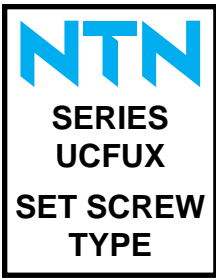
Units: **Millimeters**
INCHES



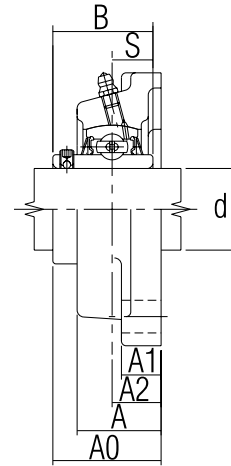
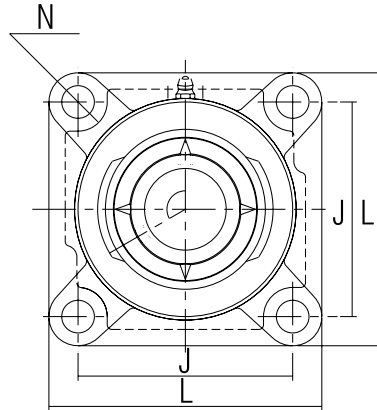
FLANGED UNITS - ULTRA CLASS CAST IRON HOUSING (4 BOLT)

| Part Number | Nominal Dimensions | | | | | | | | | | Lube Hole of Housing | Insert Bearing Number | Housing Number | | |
|---------------|--------------------|---------|---------|---------|-------|---------|-------|---------|--------|-------|----------------------|-----------------------|----------------|---------------|------------|
| | d | L | J | A2 | A1 | A | N | A0 | B | S | | | | | |
| UCFU-1/2 | 0.5000 | 76 | 54 | 17 | 13 | 28 | 10.7 | 32.9 | 27.4 | 11.5 | 1/4-28UNF | A-UC201X-008D1 | FU201D1V50 | | |
| UCFU-9/16 | 0.5625 | 3 | 2 1/8 | 2 1/32 | 1/2 | 1 1/64 | 27/64 | 1 19/64 | 1.0787 | 0.453 | | A-UC202X-009D1 | | | |
| UCFU-5/8 | 0.6250 | | | | | | | | | | | A-UC202X-010D1 | | | |
| UCFU-11/16 | 0.6875 | | | | | | | | | | | A-UC203X-011D1 | | | |
| UCFU-3/4 | 0.7500 | 86 | 63.5 | 19 | 15 | 29.5 | 10.7 | 37.3 | 31 | 12.7 | 1/4-28UNF | A-UC204-012D1 | FU204D1V50 | | |
| | | 3 3/8 | 2 1/2 | 3/4 | 19/32 | 1 5/32 | 27/64 | 1 15/32 | 1.2205 | 0.500 | | | | | |
| UCFU-13/16 | 0.8125 | 96 | 70 | 19 | 15 | 30 | 11.5 | 38.9 | 34.1 | 14.3 | | 1/8-27NPT | | A-UC205-013D1 | FU205D1V50 |
| UCFU-7/8 | 0.8750 | 3 25/32 | 2 3/4 | 3/4 | 19/32 | 1 3/16 | 29/64 | 1 17/32 | 1.3425 | 0.563 | | | | A-UC205-014D1 | |
| UCFU-15/16 | 0.9375 | | | | | | | | | | A-UC205-015D1 | | | | |
| UCFU-1 | 1.0000 | | | | | | | | | | A-UC205-100D1 | | | | |
| UCFU-1 1/16 | 1.0625 | 109 | 82.5 | 20 | 16 | 33 | 11.5 | 42.1 | 38.1 | 15.9 | 1/8-27NPT | A-UC206-101D1 | FU206D1V50 | | |
| UCFU-1 1/8 | 1.1250 | 4 9/32 | 3 1/4 | 25/32 | 9/8 | 1 9/16 | 29/64 | 1 21/32 | 1.5000 | 0.626 | | A-UC206-102D1 | | | |
| UCFU-1 3/16 | 1.1875 | | | | | | | | | | | A-UC206-103D1 | | | |
| UCFU-1 1/4S | 1.2500 | | | | | | | | | | | A-UC206-104D1 | | | |
| UCFU-1 1/4 | 1.2500 | 118 | 92 | 21 | 17 | 36 | 13.1 | 46.4 | 42.9 | 17.5 | 1/8-27NPT | A-UC207-104D1 | FU207D1V50 | | |
| UCFU-1 5/16 | 1.3125 | 4 21/32 | 3 5/8 | 53/64 | 21/32 | 1 13/32 | 33/64 | 1 53/64 | 1.6890 | 0.689 | | A-UC207-105D1 | | | |
| UCFU-1 3/8 | 1.3750 | | | | | | | | | | | A-UC207-106D1 | | | |
| UCFU-1 7/16 | 1.4375 | | | | | | | | | | | A-UC207-107D1 | | | |
| UCFU-1 1/2 | 1.5000 | 131 | 101.5 | 24 | 17 | 39 | 13.1 | 54.3 | 49.2 | 19 | 1/8-27NPT | A-UC208-108D1 | FU208D1V50 | | |
| UCFU-1 9/16 | 1.5625 | 5 3/32 | 4 | 15/16 | 21/32 | 1 17/32 | 33/64 | 2 9/64 | 1.9370 | 0.748 | | A-UC208-109D1 | | | |
| UCFU-1 5/8 | 1.6250 | 137 | 105 | 24 | 17 | 40 | 13.1 | 54.3 | 49.2 | 19 | | 1/8-27NPT | | A-UC209-110D1 | FU209D1V50 |
| UCFU-1 11/16 | 1.6875 | 5 13/32 | 4 1/8 | 15/16 | 23/32 | 1 9/16 | 33/64 | 2 9/64 | 1.9370 | 0.748 | | | | A-UC209-111D1 | |
| UCFU-1 3/4 | 1.7500 | | | | | | | | | | A-UC209-112D1 | | | | |
| UCFU-1 13/16 | 1.8125 | 144 | 111 | 28 | 20 | 46 | 17.1 | 60.7 | 51.6 | 19 | 1/8-27NPT | A-UC210-113D1 | FU210D1V50 | | |
| UCFU-1 7/8 | 1.8750 | 5 21/32 | 4 3/8 | 1 7/64 | 25/32 | 1 13/16 | 43/64 | 2 25/64 | 2.0315 | 0.748 | | A-UC210-114D1 | | | |
| UCFU-1 15/16 | 1.9375 | | | | | | | | | | | A-UC210-115D1 | | | |
| UCFU-2S | 2.0000 | | | | | | | | | | | A-UC210-200D1 | | | |
| UCFU-2 | 2.0000 | 163 | 130 | 31 | 21 | 49 | 17.1 | 64.3 | 55.6 | 22.2 | 1/8-27NPT | A-UC211-200D1 | FU211D1V50 | | |
| UCFU-2 1/16 | 2.0625 | 6 13/32 | 5 1/8 | 1 7/32 | 13/16 | 1 15/16 | 43/64 | 2 17/32 | 2.1890 | 0.874 | | A-UC211-201D1 | | | |
| UCFU-2 1/8 | 2.1250 | | | | | | | | | | | A-UC211-202D1 | | | |
| UCFU-2 3/16 | 2.1875 | | | | | | | | | | | A-UC211-203D1 | | | |
| UCFU-2 1/4 | 2.2500 | 175 | 143 | 34 | 21 | 53 | 17.1 | 73.8 | 65.1 | 25.4 | 1/8-27NPT | A-UC212-204D1 | FU212D1V50 | | |
| UCFU-2 5/16 | 2.3125 | 6 7/8 | 5 5/8 | 1 11/32 | 13/16 | 2 3/32 | 43/64 | 2 29/32 | 2.5630 | 1.000 | | A-UC212-205D1 | | | |
| UCFU-2 3/8 | 2.3750 | | | | | | | | | | | A-UC212-206D1 | | | |
| UCFU-2 7/16 | 2.4375 | | | | | | | | | | | A-UC212-207D1 | | | |
| UCFU-2 1/2R | 2.5000 | 187 | 149 | 38 | 22 | 59 | 19 | 77.7 | 65.1 | 25.4 | 1/8-27NPT | A-UC213-208D1 | FU213D1V50 | | |
| UCFU-2 9/16R | 2.5625 | 7 3/8 | 5 55/64 | 1 1/2 | 7/8 | 2 5/16 | 3/4 | 3 1/16 | 2.563 | 1 | | A-UC213-209D1 | | | |
| UCFU-2 5/8R | 2.6250 | 193 | 149 | 38 | 22 | 62 | 16.3 | 82.6 | 74.6 | 30.2 | 1/8-27NPT | A-UC214-210D1 | FU214D1V50 | | |
| UCFU-2 11/16R | 2.6875 | 7 19/32 | 5 7/8 | 1 1/2 | 7/8 | 2 7/16 | 41/64 | 3 1/4 | 2.9370 | 1.189 | | A-UC214-211D1 | | | |
| UCFU-2 3/4R | 2.7500 | | | | | | | | | | | A-UC214-212D1 | | | |
| UCFU-2 13/16 | 2.8125 | 200 | 152 | 41 | 22 | 65 | 19.8 | 85.3 | 77.8 | 33.3 | 1/8-27NPT | A-UC215-213D1 | FU215D1V50 | | |
| UCFU-2 7/8 | 2.8750 | 7 7/8 | 6 | 1 39/64 | 7/8 | 2 9/16 | 25/32 | 3 23/64 | 3.0630 | 1.311 | | A-UC215-214D1 | | | |
| UCFU-2 15/16 | 2.9375 | | | | | | | | | | | A-UC215-215D1 | | | |
| UCFU-3 | 3.0000 | | | | | | | | | | | A-UC215-300D1 | | | |

Note: Metric Sizes available. The production and shipment of black oxide coated inserts will be introduced as a rolling change. This is denoted with an M at the end of the current part number. Please consult NTN for availability.



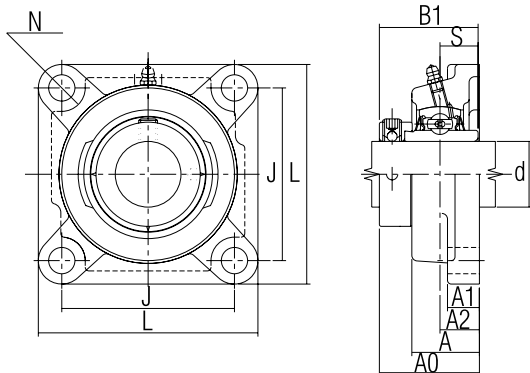
Units: **Millimeters**
INCHES



FLANGED UNITS - ULTRA CLASS CAST IRON HOUSING (4 BOLT)

| Part Number | Nominal Dimensions | | | | | | | | | | Lube Hole of Housing | Insert Bearing Number | Housing Number |
|--------------------------------------|--------------------|---------|-------|---------|-------|---------|-------|---------|--------|-------|----------------------|-----------------------|----------------|
| | d | L | J | A2 | A1 | A | N | A0 | B | S | | | |
| UCFUX-1 ³ / ₁₆ | 0.8125 | 109 | 82.5 | 20 | 16 | 33 | 11.5 | 42.1 | 38.1 | 15.9 | 1/8-27NPT | A-UCX05-013D1 | FU206D1V50 |
| UCFUX-7/8 | 0.8750 | 4 9/32 | 3 1/4 | 25/32 | 5/8 | 1 5/16 | 29/64 | 1 21/32 | 1.5000 | 0.626 | | A-UCX05-014D1 | |
| UCFUX-15/16 | 0.9375 | | | | | | | | | | | A-UCX05-015D1 | |
| UCFUX-1 | 1.0000 | | | | | | | | | | | A-UCX05-100D1 | |
| UCFUX-1 1/16 | 1.0625 | 118 | 92 | 21 | 17 | 36 | 13.1 | 46.4 | 42.9 | 17.5 | 1/8-27NPT | A-UCX06-101D1 | FU207D1V50 |
| UCFUX-1 1/8 | 1.1250 | 4 21/32 | 3 5/8 | 53/64 | 21/32 | 1 13/32 | 33/64 | 1 53/64 | 1.6890 | 0.689 | | A-UCX06-102D1 | |
| UCFUX-1 3/16 | 1.1875 | | | | | | | | | | | A-UCX06-103D1 | |
| UCFUX-1 1/4 | 1.2500 | | | | | | | | | | | A-UCX07-104D1 | |
| UCFUX-1 5/16 | 1.2500 | 131 | 101.5 | 24 | 17 | 39 | 13.1 | 54.3 | 49.2 | 19 | 1/8-27NPT | A-UCX07-105D1 | FU208D1V50 |
| UCFUX-1 3/8 | 1.3750 | 5 3/32 | 4 | 15/16 | 21/32 | 1 17/32 | 33/64 | 2 9/64 | 1.9370 | 0.748 | | A-UCX07-106D1 | |
| UCFUX-1 7/16 | 1.4375 | | | | | | | | | | | A-UCX07-107D1 | |
| UCFUX-1 1/2 | 1.5000 | 137 | 105 | 24 | 18 | 40 | 13.1 | 54.3 | 49.2 | 19 | 1/8-27NPT | A-UCX08-108D1 | FU209D1V50 |
| UCFUX-1 9/16 | 1.5625 | 5 13/32 | 4 1/8 | 15/16 | 23/32 | 1 9/16 | 33/64 | 2 9/64 | 1.9370 | 0.748 | | A-UCX08-109D1 | |
| UCFUX-1 5/8 | 1.6250 | 144 | 111 | 28 | 20 | 46 | 17.1 | 60.7 | 51.6 | 19 | 1/8-27NPT | A-UCX09-110D1 | FU210D1V50 |
| UCFUX-1 11/16 | 1.6875 | 5 21/32 | 4 3/8 | 1 7/64 | 29/32 | 1 13/16 | 43/64 | 2 29/64 | 2.0315 | 0.748 | | A-UCX09-111D1 | |
| UCFUX-1 3/4 | 1.7500 | | | | | | | | | | | A-UCX09-112D1 | |
| UCFUX-1 13/16 | 1.8125 | | | | | | | | | | | A-UCX10-113D1 | |
| UCFUX-1 7/8 | 1.8750 | 163 | 130 | 31 | 21 | 49 | 17.1 | 64.3 | 55.6 | 22.2 | 1/8-27NPT | A-UCX10-114D1 | FU211D1V50 |
| UCFUX-1 15/16 | 1.9375 | 6 13/32 | 5 1/8 | 1 7/32 | 13/16 | 1 15/16 | 43/64 | 2 17/32 | 2.1890 | 0.874 | | A-UCX10-115D1 | |
| UCFUX-2 | 2.0000 | | | | | | | | | | | A-UCX11-200D1 | |
| UCFUX-2 1/16 | 2.0000 | 175 | 143 | 34 | 21 | 53 | 17.1 | 73.8 | 65.1 | 25.4 | 1/8-27NPT | A-UCX11-201D1 | FU212D1V50 |
| UCFUX-2 1/8 | 2.1250 | 6 7/8 | 5 5/8 | 1 11/32 | 13/16 | 2 3/32 | 43/64 | 2 29/32 | 2.5630 | 1.000 | | A-UCX11-202D1 | |
| UCFUX-2 3/16 | 2.1875 | | | | | | | | | | | A-UCX11-203D1 | |
| UCFUX-2 1/4 | 2.2500 | | | | | | | | | | | A-UCX12-204D1 | |
| UCFUX-2 5/16 | 2.3125 | | | | | | | | | | | A-UCX12-205D1 | |
| UCFUX-2 7/16 | 2.4375 | 193 | 143 | 38 | 22 | 62 | 16.3 | 82.6 | 74.6 | 30.2 | 1/8-27NPT | A-UCX14-207D1 | FU214D1V50 |
| UCFUX-2 1/2 | 2.5000 | 7 19/32 | 5 7/8 | 1 1/2 | 7/8 | 2 7/16 | 41/64 | 3 1/4 | 2.9370 | 1.189 | | A-UCX13-208D1 | |
| UCFUX-2 9/16 | 2.5625 | | | | | | | | | | | A-UCX13-209D1 | |
| UCFUX-2 5/8 | 2.6250 | 200 | 152 | 41 | 22 | 65 | 19.8 | 85.3 | 77.8 | 33.3 | 1/8-27NPT | A-UCX14-210D1 | FU215D1V50 |
| UCFUX-2 11/16 | 2.6875 | 7 7/8 | 6 | 1 39/64 | 7/8 | 2 9/16 | 25/32 | 3 23/64 | 3.0630 | 1.311 | | A-UCX14-211D1 | |
| UCFUX-2 3/4 | 2.7500 | | | | | | | | | | | A-UCX14-212D1 | |
| UCFUX-2 13/16 | 2.8125 | 200 | 152.5 | 40.9 | 22 | 65 | 19.8 | 90.5 | 82.6 | 33.3 | 1/8-27NPT | A-UCX15-213D1 | FU215D1V50 |
| UCFUX-2 7/8 | 2.8750 | 7 7/8 | 6 | 1 39/64 | 7/8 | 2 9/16 | 25/32 | 3 9/16 | 3.2520 | 1.311 | | A-UCX15-214D1 | |
| UCFUX-2 15/16 | 2.9375 | | | | | | | | | | | A-UCX15-215D1 | |
| UCFUX-3 | 3.0000 | | | | | | | | | | | A-UCX15-300D1 | |

Note: Metric Sizes available. The production and shipment of black oxide coated inserts will be introduced as a rolling change. This is denoted with an M at the end of the current part number. Please consult NTN for availability.



Units: **Millimeters**
INCHES



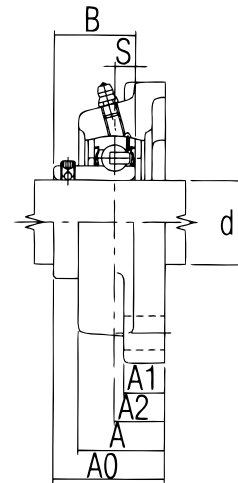
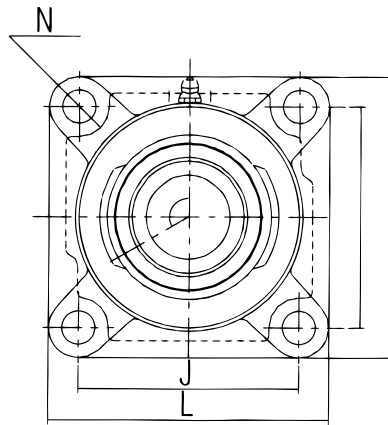
FLANGED UNITS - ULTRA CLASS CAST IRON HOUSING (4 BOLT)

| Part Number | Nominal Dimensions | | | | | | | | | | Lube Hole of Housing | Insert Bearing Number | Housing Number | | |
|----------------|--------------------|---------|---------|---------|-------|---------|-------|----------|-------|-------|----------------------|-----------------------|----------------|----------------|------------|
| | d | L | J | A2 | A1 | A | N | A0 | B1 | S | | | | | |
| UELFU-1/2 | 0.5000 | 76 | 54 | 17 | 13 | 28 | 10.7 | 42.1 | 37.3 | 12.4 | 1/4-28UNF | A-UEL201-008D1 | FU201D1V50 | | |
| UELFU-9/16 | 0.5625 | 3 | 2 1/8 | 2 1/32 | 1/2 | 1 7/64 | 27/64 | 1 2 1/32 | 1.469 | 0.488 | | A-UEL202-009D1 | | | |
| UELFU-5/8 | 0.6250 | | | | | | | | | | | A-UEL202-010D1 | | | |
| UELFU-11/16 | 0.6875 | | | | | | | | | | | A-UEL203-011D1 | | | |
| UELFU-3/4 | 0.7500 | 86 | 63.5 | 19 | 15 | 29.5 | 10.7 | 45.6 | 43.7 | 17.1 | 1/4-28UNF | A-UEL204-012D1 | FU204D1V50 | | |
| | | 3 3/8 | 2 1/2 | 3/4 | 19/32 | 1 5/32 | 27/64 | 1 51/64 | 1.720 | 0.673 | | | | | |
| UELFU-13/16 | 0.8125 | 96 | 70 | 19 | 15 | 30 | 11.5 | 46 | 44.4 | 17.5 | | 1/8-27NPT | | A-UEL205-013D1 | FU205D1V50 |
| UELFU-7/8 | 0.8750 | 3 25/32 | 2 3/4 | 3/4 | 19/32 | 1 3/16 | 29/64 | 1 13/16 | 1.748 | 0.689 | | | | A-UEL205-014D1 | |
| UELFU-15/16 | 0.9375 | | | | | | | | | | A-UEL205-015D1 | | | | |
| UELFU-1 | 1.0000 | | | | | | | | | | A-UEL205-100D1 | | | | |
| UELFU-1 1/16 | 1.0625 | 109 | 82.5 | 20 | 16 | 33 | 11.5 | 50 | 48.4 | 18.3 | 1/8-27NPT | A-UEL206-101D1 | FU206D1V50 | | |
| UELFU-1 1/8 | 1.1250 | 4 9/32 | 3 1/4 | 25/32 | 9/8 | 1 5/16 | 29/64 | 1 31/32 | 1.906 | 0.720 | | A-UEL206-102D1 | | | |
| UELFU-1 3/16 | 1.1875 | | | | | | | | | | | A-UEL206-103D1 | | | |
| UELFU-1 1/4S | 1.2500 | | | | | | | | | | | A-UEL206-104D1 | | | |
| UELFU-1 1/4 | 1.2500 | 118 | 92 | 21 | 17 | 36 | 13.1 | 53.2 | 51.1 | 18.8 | 1/8-27NPT | A-UEL207-104D1 | FU207D1V50 | | |
| UELFU-1 5/16 | 1.3125 | 4 21/32 | 3 5/8 | 53/64 | 21/32 | 1 13/32 | 33/64 | 2 3/32 | 2.012 | 0.740 | | A-UEL207-105D1 | | | |
| UELFU-1 3/8 | 1.3750 | | | | | | | | | | | A-UEL207-106D1 | | | |
| UELFU-1 7/16 | 1.4375 | | | | | | | | | | | A-UEL207-107D1 | | | |
| UELFU-1 1/2 | 1.5000 | 131 | 101.5 | 24 | 17 | 39 | 13.1 | 58.7 | 56.3 | 21.4 | 1/8-27NPT | A-UEL208-108D1 | FU208D1V50 | | |
| UELFU-1 9/16 | 1.5625 | 5 3/32 | 4 | 15/16 | 21/32 | 1 17/32 | 33/64 | 2 5/16 | 2.217 | 0.843 | | A-UEL208-109D1 | | | |
| UELFU-1 5/8 | 1.6250 | 137 | 105 | 24 | 17 | 40 | 13.1 | 58.7 | 56.3 | 21.4 | 1/8-27NPT | A-UEL209-110D1 | FU209D1V50 | | |
| UELFU-1 11/16 | 1.6875 | 5 13/32 | 4 1/8 | 15/16 | 23/32 | 1 9/16 | 33/64 | 2 5/16 | 2.217 | 0.843 | | A-UEL209-111D1 | | | |
| UELFU-1 3/4 | 1.7500 | | | | | | | | | | | A-UEL209-112D1 | | | |
| UELFU-1 13/16 | 1.8125 | 144 | 111 | 28 | 20 | 46 | 17.1 | 66.3 | 62.7 | 24.6 | 1/8-27NPT | A-UEL210-113D1 | FU210D1V50 | | |
| UELFU-1 7/8 | 1.8750 | 5 21/32 | 4 3/8 | 1 7/64 | 25/32 | 1 13/16 | 43/64 | 2 39/64 | 2.469 | 0.969 | | A-UEL210-114D1 | | | |
| UELFU-1 15/16 | 1.9375 | | | | | | | | | | | A-UEL210-115D1 | | | |
| UELFU-2S | 2.0000 | | | | | | | | | | | A-UEL210-200D1 | | | |
| UELFU-2 | 2.0000 | 163 | 130 | 31 | 21 | 49 | 17.1 | 74.6 | 71.4 | 27.8 | 1/8-27NPT | A-UEL211-200D1 | FU211D1V50 | | |
| UELFU-2 1/16 | 2.0625 | 6 13/32 | 5 1/8 | 1 7/32 | 13/16 | 1 15/16 | 43/64 | 2 15/16 | 2.811 | 1.094 | | A-UEL211-201D1 | | | |
| UELFU-2 1/8 | 2.1250 | | | | | | | | | | | A-UEL211-202D1 | | | |
| UELFU-2 3/16 | 2.1875 | | | | | | | | | | | A-UEL211-203D1 | | | |
| UELFU-2 1/4 | 2.2500 | 175 | 143 | 34 | 21 | 53 | 17.1 | 81 | 77.8 | 31 | 1/8-27NPT | A-UEL212-204D1 | FU212D1V50 | | |
| UELFU-2 5/16 | 2.3125 | 6 7/8 | 5 5/8 | 1 11/32 | 13/16 | 2 3/32 | 43/64 | 3 3/16 | 3.063 | 1.220 | | A-UEL212-205D1 | | | |
| UELFU-2 3/8 | 2.3750 | | | | | | | | | | | A-UEL212-206D1 | | | |
| UELFU-2 7/16 | 2.4375 | | | | | | | | | | | A-UEL212-207D1 | | | |
| UELFU-2 1/2R | 2.5000 | 187 | 149 | 38 | 22 | 59 | 19 | 89.55 | 85.7 | 34.15 | 1/8-27NPT | A-UEL213-208D1M | FU213D1V50 | | |
| UELFU-2 9/16R | 2.5625 | 7 3/8 | 5 55/64 | 1 1/2 | 7/8 | 2 5/16 | 3/4 | 3 1/2 | 3.374 | 1.344 | | A-UEL213-209D1M | | | |
| UELFU-2 5/8R | 2.6250 | 193 | 149 | 38 | 22 | 62 | 16.3 | 89.7 | 85.7 | 34.1 | 1/8-27NPT | A-UEL214-210D1 | FU214D1V50 | | |
| UELFU-2 11/16R | 2.6875 | 7 19/32 | 5 7/8 | 1 1/2 | 7/8 | 2 7/16 | 41/64 | 3 17/32 | 3.374 | 1.344 | | A-UEL214-211D1 | | | |
| UELFU-2 3/4R | 2.7500 | | | | | | | | | | | A-UEL214-212D1 | | | |
| UELFU-2 13/16 | 2.8125 | 200 | 152 | 41 | 22 | 65 | 19.8 | 95.6 | 92 | 37.3 | 1/8-27NPT | A-UEL215-213D1 | FU215D1V50 | | |
| UELFU-2 7/8 | 2.8750 | 7 7/8 | 6 | 1 39/64 | 7/8 | 2 9/16 | 25/32 | 3 49/64 | 3.622 | 1.469 | | A-UEL215-214D1 | | | |
| UELFU-2 15/16 | 2.9375 | | | | | | | | | | | A-UEL215-215D1 | | | |
| UELFU-3 | 3.0000 | | | | | | | | | | | A-UEL215-300D1 | | | |

Note: Metric Sizes available. The production and shipment of black oxide coated inserts will be introduced as a rolling change. This is denoted with an M at the end of the current part number. Please consult NTN for availability.

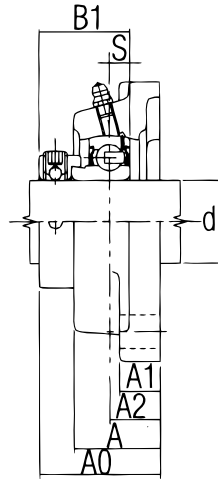
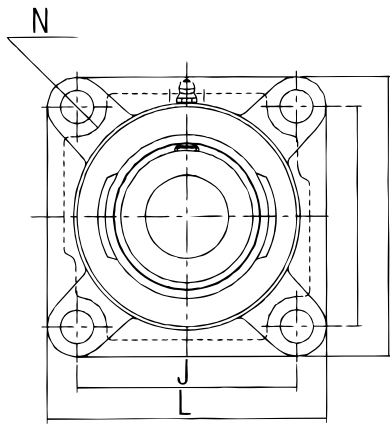


Units: **Millimeters**
INCHES



FLANGED UNITS - ULTRA CLASS CAST IRON HOUSING (4 BOLT)

| Part Number | Nominal Dimensions | | | | | | | | | | Lube Hole of Housing | Insert Bearing Number | Housing Number | |
|--------------|--------------------|---------|-------|--------|-------|---------|-------|---------|--------|-------|----------------------|--|--|------------|
| | d | L | J | A2 | A1 | A | N | A0 | B | S | | | | |
| ARFU-1/2 | 0.5000 | 76 | 54 | 17 | 13 | 28 | 10.7 | | | | | 1/4-28UNF | A-AR201-008D1 A-AR202-009D1 A-AR202-010D1 A-AR203-011D1 | FU201D1V50 |
| ARFU-9/16 | 0.5625 | 3 | 2 1/8 | 21/32 | 1/2 | 1 1/64 | 27/64 | 1 19/64 | 0.8858 | 0.256 | | | | |
| ARFU-5/8 | 0.6250 | | | | | | | | | | | | | |
| ARFU-11/16 | 0.6875 | | | | | | | | | | | | | |
| ARFU-3/4 | 0.7500 | 86 | 63.5 | 19 | 15 | 29.5 | 27/64 | 1 29/64 | 1.0039 | 0.295 | 1/4-28UNF | A-AR204-012D1 | FU204D1V50 | |
| ARFU-13/16 | 0.8125 | 96 | 70 | 19 | 15 | 30 | 29/64 | 1 33/64 | 1.0630 | 0.295 | 1/8-27NPT | A-AR205-013D1 A-AR205-014D1 A-AR205-015D1 A-AR205-100D1 | FU205D1V50 | |
| ARFU-7/8 | 0.8750 | 3 25/32 | 2 3/4 | 3/4 | 19/32 | 1 3/16 | | | | | | | | |
| ARFU-15/16 | 0.9375 | | | | | | | | | | | | | |
| ARFU-1 | 1.0000 | | | | | | | | | | | | | |
| ARFU-1 1/16 | 1.0625 | 109 | 82.5 | 20 | 16 | 33 | 29/64 | 1 39/64 | 1.1811 | 0.354 | 1/8-27NPT | A-AR206-101D1 A-AR206-102D1 A-AR206-103D1 A-AR206-104D1 | FU206D1V50 | |
| ARFU-1 1/8 | 1.1250 | 4 9/32 | 3 1/4 | 25/32 | 5/8 | 1 5/16 | | | | | | | | |
| ARFU-1 3/16 | 1.1875 | | | | | | | | | | | | | |
| ARFU-1 1/4S | 1.2500 | | | | | | | | | | | | | |
| ARFU-1 1/4 | 1.2500 | 118 | 92 | 21 | 17 | 36 | 33/64 | 1 53/64 | 1.3780 | 0.374 | 1/8-27NPT | A-AR207-104D1 A-AR207-105D1 A-AR207-106D1 A-AR207-107D1 | FU207D1V50 | |
| ARFU-1 5/16 | 1.3125 | 4 21/32 | 3 5/8 | 53/64 | 21/32 | 1 13/32 | | | | | | | | |
| ARFU-1 3/8 | 1.3750 | | | | | | | | | | | | | |
| ARFU-1 7/16 | 1.4375 | | | | | | | | | | | | | |
| ARFU-1 1/2 | 1.5000 | | 101.5 | 24 | 17 | 39 | 33/64 | 2 3/32 | 1.5748 | 0.433 | 1/8-27NPT | A-AR208-108D1 A-AR208-109D1 | FU208D1V50 | |
| ARFU-1 9/16 | 1.5625 | 5 5/32 | 4 | 15/16 | 21/32 | 1 17/32 | | | | | | | | |
| ARFU-1 5/8 | 1.6250 | 137 | 105 | 24 | 17 | 40 | 33/64 | 2 9/64 | 1.6339 | 0.433 | 1/8-27NPT | A-AR209-110D1 A-AR209-111D1 A-AR209-112D1 | FU209D1V50 | |
| ARFU-1 11/16 | 1.6875 | 5 13/32 | 4 1/8 | 15/16 | 23/32 | 1 9/16 | | | | | | | | |
| ARFU-1 3/4 | 1.7500 | | | | | | | | | | | | | |
| ARFU-1 13/16 | 1.8125 | 144 | 111 | 28 | 20 | 46 | 43/64 | 2 23/64 | 1.6929 | 0.433 | 1/8-27NPT | A-AR210-113D1 A-AR210-114D1 A-AR210-115D1 A-AR210-200D1 | FU210D1V50 | |
| ARFU-1 7/8 | 1.8750 | 5 21/32 | 4 3/8 | 1 7/64 | 25/32 | 1 13/16 | | | | | | | | |
| ARFU-1 15/16 | 1.9375 | | | | | | | | | | | | | |
| ARFU-2S | 2.0000 | | | | | | | | | | | | | |
| ARFU-2 | 2.0000 | 163 | 130 | 31 | 21 | 49 | 43/64 | 2 7/16 | 1.6929 | 0.472 | 1/8-27NPT | A-AR211-200D1 A-AR211-201D1 A-AR211-202D1 A-AR211-203D1 | FU211D1V50 | |
| ARFU-2 1/16 | 2.0625 | 6 13/32 | 5 1/8 | 1 7/32 | 13/16 | 1 15/16 | | | | | | | | |
| ARFU-2 1/8 | 2.1250 | | | | | | | | | | | | | |
| ARFU-2 3/16 | 2.1875 | | | | | | | | | | | | | |



Units: Millimeters
INCHES



FLANGED UNITS - ULTRA CLASS CAST IRON HOUSING (4 BOLT)

| Part Number | Nominal Dimensions | | | | | | | | | | Lube Hole of Housing | Insert Bearing Number | Housing Number | |
|---------------|--------------------|---------|-------|--------|-------|---------|-------|---------|-------|-------|----------------------|-----------------------|----------------|----------------|
| | d | L | J | A2 | A1 | A | N | A0 | B1 | S | | | | |
| JELFU-1/2 | 0.5000 | 76 | 54 | 17 | 13 | 28 | 10.7 | 1 35/64 | 1.126 | 0.256 | 1/4-28UNF | A-JEL201-008D1 | FU201D1V50 | |
| JELFU-9/16 | 0.5625 | 3 | 2 1/8 | 21/32 | 1/2 | 1 1/64 | 27/64 | | | | | A-JEL202-009D1 | | |
| JELFU-5/8 | 0.6250 | | | | | | | | | | | A-JEL202-010D1 | | |
| JELFU-11/16 | 0.6875 | | | | | | | | | | | A-JEL203-011D1 | | |
| JELFU-3/4 | 0.7500 | 86 | 63.5 | 19 | 15 | 29.5 | 11.5 | 1 43/64 | 1.220 | 0.295 | 1/4-28UNF | A-JEL204-012D1 | FU204D1V50 | |
| JELFU-13/16 | 0.8125 | 96 | 70 | 19 | 15 | 30 | 11.5 | 1 43/64 | 1.220 | 0.295 | 1/8-27NPT | A-JEL205-013D1 | FU205D1V50 | |
| JELFU-7/8 | 0.8750 | 3 25/32 | 2 3/4 | 3/4 | 19/32 | 1 3/16 | 29/64 | | | | | A-JEL205-014D1 | | |
| JELFU-15/16 | 0.9375 | | | | | | | | | | | A-JEL205-015D1 | | |
| JELFU-1 | 1.0000 | | | | | | | | | | | A-JEL205-100D1 | | |
| JELFU-1 1/16 | 1.0625 | 109 | 82.5 | 20 | 16 | 33 | 11.5 | 1 27/32 | 1.406 | 0.354 | 1/8-27NPT | A-JEL206-101D1 | FU206D1V50 | |
| JELFU-1 1/8 | 1.1250 | 4 9/32 | 3 1/4 | 25/32 | 5/8 | 1 5/16 | 29/64 | | | | | A-JEL206-102D1 | | |
| JELFU-1 3/16 | 1.1875 | | | | | | | | | | | A-JEL206-103D1 | | |
| JELFU-1 1/4S | 1.2500 | | | | | | | | | | | A-JEL206-104D1 | | |
| JELFU-1 1/4 | 1.2500 | 118 | 92 | 21 | 17 | 36 | 13.1 | 1 63/64 | 1.531 | 0.374 | 1/8-27NPT | A-JEL207-104D1 | FU207D1V50 | |
| JELFU-1 5/16 | 1.3125 | 4 21/32 | 3 5/8 | 53/64 | 21/32 | 1 13/32 | 33/64 | | | | | A-JEL207-105D1 | | |
| JELFU-1 3/8 | 1.3750 | | | | | | | | | | | A-JEL207-106D1 | | |
| JELFU-1 7/16 | 1.4375 | | | | | | | | | | | A-JEL207-107D1 | | |
| JELFU-1 1/2 | 1.5000 | 124 | 101.5 | 24 | 17 | 39 | 13.1 | 2 15/64 | 1.720 | 0.433 | 1/8-27NPT | A-JEL208-108D1 | FU208D1V50 | |
| JELFU-1 9/16 | 1.5625 | 5 5/32 | 4 | 15/16 | 21/32 | 1 17/32 | 33/64 | | | | | A-JEL208-109D1 | | |
| JELFU-1 5/8 | 1.6250 | 137 | 105 | 24 | 17 | 40 | 13.1 | 2 15/64 | 1.720 | 0.433 | | 1/8-27NPT | | A-JEL209-110D1 |
| JELFU-1 11/16 | 1.6875 | 5 13/32 | 4 1/8 | 15/16 | 23/32 | 1 9/16 | 33/64 | | | | | | | A-JEL209-111D1 |
| JELFU-1 3/4 | 1.7500 | | | | | | | | | | A-JEL209-112D1 | | | |
| JELFU-1 13/16 | 1.8125 | 144 | 111 | 28 | 20 | 46 | 17.1 | 2 25/64 | 1.720 | 0.433 | 1/8-27NPT | A-JEL210-113D1 | FU210D1V50 | |
| JELFU-1 7/8 | 1.8750 | 5 21/32 | 4 3/8 | 1 7/64 | 25/32 | 1 13/16 | 43/64 | | | | | A-JEL210-114D1 | | |
| JELFU-1 15/16 | 1.9375 | | | | | | | | | | | A-JEL210-115D1 | | |
| JELFU-2S | 2.0000 | | | | | | | | | | | A-JEL210-200D1 | | |
| JELFU-2 | 2.0000 | 163 | 130 | 31 | 21 | 49 | 17.1 | 2 21/32 | 1.906 | 0.472 | 1/8-27NPT | A-JEL211-200D1 | FU211D1V50 | |
| JELFU-2 1/16 | 2.0625 | 6 13/32 | 5 1/8 | 1 7/32 | 13/16 | 1 15/16 | 43/64 | | | | | A-JEL211-201D1 | | |
| JELFU-2 1/8 | 2.1250 | | | | | | | | | | | A-JEL211-202D1 | | |
| JELFU-2 3/16 | 2.1875 | | | | | | | | | | | A-JEL211-203D1 | | |



Bearing Series → UCP SERIES

UCP-1/2..... 1.5 ←

Complete Pillow Block Number

Weight (lbs)

ULTRA-CLASS MOUNTED UNITS

LBS.

| | | | |
|-----------------------|-----------------------|-------------------------|-------------------------|
| UCP Series | UCPL-2.7/8.....19.0 | ARPL-1.3/16.....3.1 | UELPL-1.11/16.....5.7 |
| UCP-1/2.....1.5 | UCPL-2.15/16.....18.7 | ARPL-1.1/4S.....3.1 | UELPL-1.3/4.....5.7 |
| UCP-9/16.....1.5 | UCPL-3.....18.5 | ARPL-1.1/4.....4.0 | UELPL-1.13/16.....7.7 |
| UCP-5/8.....1.5 | UCPX Series | ARPL-1.5/16.....3.7 | UELPL-1.7/8.....7.7 |
| UCP-11/16.....1.5 | UCPX-13/16.....3.5 | ARPL-1.3/8.....3.7 | UELPL-1.15/16.....7.5 |
| UCP-3/4.....1.8 | UCPX-7/8.....3.5 | ARPL-1.7/16.....3.5 | UELPL-2S.....7.5 |
| UCP-13/16.....2.0 | UCPX-15/16.....3.5 | ARPL-1.1/2.....4.6 | UELPL-2.....9.7 |
| UCP-7/8.....2.0 | UCPX-1.....3.4 | ARPL-1.9/16.....4.6 | UELPL-2.1/16.....9.5 |
| UCP-15/16.....2.0 | UCPX-1.1/16.....4.2 | ARPL-1.5/8.....5.5 | UELPL-2.1/8.....9.5 |
| UCP-1.....2.0 | UCPX-1.1/8.....4.1 | ARPL-1.11/16.....5.3 | UELPL-2.3/16.....9.3 |
| UCP-1.1/16.....3.3 | UCPX-1.1/8.....4.1 | ARPL-1.3/4.....5.3 | UELPL-2.1/4.....13.0 |
| UCP-1.1/8.....3.3 | UCPX-1.3/16.....4.1 | ARPL-1.13/16.....7.1 | UELPL-2.5/16.....12.8 |
| UCP-1.3/16.....3.3 | UCPX-1.1/4.....4.0 | ARPL-1.7/8.....7.1 | UELPL-2.3/8.....12.8 |
| UCP-1.1/4S.....3.3 | UCPX-1.5/16.....5.4 | ARPL-1.15/16.....6.8 | UELPL-2.7/16.....12.6 |
| UCP-1.1/4.....4.0 | UCPX-1.3/8.....5.3 | ARPL-2S.....6.8 | UELPL-2.1/2.....12.6 |
| UCP-1.5/16.....4.0 | UCPX-1.7/16.....5.2 | ARPL-2S.....8.8 | UELPL-2.9/16.....16.8 |
| UCP-1.3/8.....4.0 | UCPX-1.1/2.....5.8 | ARPL-2.1/16.....8.6 | UELPL-2.5/8R.....16.8 |
| UCP-1.7/16.....4.0 | UCPX-1.9/16.....5.7 | ARPL-2.1/8.....8.6 | UELPL-2.11/16R.....16.5 |
| UCP-1.1/2.....4.9 | UCPX-1.5/8.....7.7 | ARPL-2.3/16.....8.4 | UELPL-2.3/4R.....19.8 |
| UCP-1.9/16.....4.9 | UCPX-1.11/16.....7.7 | UELPL Series | UELPL-2.13/16.....19.8 |
| UCP-1.5/8.....5.7 | UCPX-1.3/4.....7.6 | UELPL-1/2.....1.8 | UELPL-2.7/8.....19.6 |
| UCP-1.11/16.....5.7 | UCPX-1.13/16.....7.4 | UELPL-9/16.....1.8 | UELPL-2.15/16.....19.4 |
| UCP-1.3/4.....5.5 | UCPX-1.7/8.....9.4 | UELPL-5/8.....1.8 | UELPL-3.....19.0 |
| UCP-1.13/16.....7.5 | UCPX-1.15/16.....9.3 | UELPL-11/16.....1.5 | JELP Series |
| UCP-1.7/8.....7.3 | UCPX-2.....9.1 | UELPL-3/4.....1.8 | JELP-1/2.....1.5 |
| UCP-1.15/16.....7.3 | UCPX-2.1/16.....12.9 | UELPL-13/16.....2.2 | JELP-9/16.....1.5 |
| UCP-2S.....7.3 | UCPX-2.1/8.....12.8 | UELPL-7/8.....2.2 | JELP-5/8.....1.5 |
| UCP-2.....9.3 | UCPX-2.3/16.....12.6 | UELPL-15/16.....2.2 | JELP-11/16.....1.5 |
| UCP-2.1/16.....9.0 | UCPX-2.1/4.....12.4 | UELPL-1.....2.2 | JELP-3/4.....1.8 |
| UCP-2.1/8.....9.0 | UCPX-2.7/16.....16.0 | UELPL-1.1/16.....3.5 | JELP-13/16.....1.8 |
| UCP-2.3/16.....8.8 | UCPX-2.1/2.....15.9 | UELPL-1.1/8.....3.5 | JELP-7/8.....2.0 |
| UCP-2.1/4.....12.3 | UCPX-2.9/16.....16.7 | UELPL-1.3/16.....3.3 | JELP-15/16.....2.0 |
| UCP-2.5/16.....12.1 | UCPX-2.5/8.....26.2 | UELPL-1.1/4S.....3.3 | JELP-1.....2.0 |
| UCP-2.3/8.....12.1 | UCPX-2.11/16.....26.0 | UELPL-1.1/4.....4.4 | JELP-1.1/16.....3.3 |
| UCP-2.7/16.....11.9 | UCPX-2.3/4.....25.7 | UELPL-1.5/16.....4.4 | JELP-1.1/8.....3.3 |
| UCP-2.1/2.....14.8 | UCPX-2.13/16.....26.0 | UELPL-1.3/8.....4.2 | JELP-1.3/16.....3.3 |
| UCP-2.9/16.....14.6 | UCPX-2.7/8.....25.7 | UELPL-1.7/16.....4.2 | JELP-1.1/4S.....3.3 |
| UCP-2.5/8R.....16.5 | UCPX-2.15/16.....25.4 | UELPL-1.1/2.....5.3 | JELP-1.1/4.....4.2 |
| UCP-2.11/16R.....16.3 | UCPX-3.....25.2 | UELPL-1.9/16.....5.3 | JELP-1.5/16.....4.2 |
| UCP-2.3/4R.....16.1 | UCPX-3.3/16.....39.4 | UELPL-1.5/8.....6.0 | JELP-1.3/8.....4.0 |
| UCP-2.13/16.....18.7 | UCPX-3.7/16.....40.1 | UELPL-1.11/16.....6.0 | JELP-1.7/16.....4.0 |
| UCP-2.7/8.....18.5 | UCPX-3.1/2.....39.7 | UELPL-1.3/4.....6.0 | JELP-1.1/2.....4.9 |
| UCP-2.15/16.....18.3 | ARP Series | UELPL-1.13/16.....7.9 | JELP-1.9/16.....4.9 |
| UCP-3.....18.1 | ARP-1/2.....1.5 | UELPL-1.7/8.....7.9 | JELP-1.5/8.....6.0 |
| UCPL Series | ARP-9/16.....1.5 | UELPL-1.15/16.....7.7 | JELP-1.11/16.....5.7 |
| UCPL-1/2.....1.5 | ARP-5/8.....1.5 | UELPL-2S.....7.5 | JELP-1.3/4.....5.7 |
| UCPL-9/16.....1.5 | ARP-11/16.....1.5 | UELPL-2.....9.7 | JELP-1.13/16.....7.5 |
| UCPL-5/8.....1.5 | ARP-3/4.....1.5 | UELPL-2.1/16.....9.7 | JELP-1.7/8.....7.5 |
| UCPL-11/16.....1.5 | ARP-13/16.....2.0 | UELPL-2.1/8.....9.5 | JELP-1.15/16.....7.3 |
| UCPL-3/4.....1.8 | ARP-7/8.....2.0 | UELPL-2.3/16.....9.5 | JELP-2S.....7.3 |
| UCPL-13/16.....2.0 | ARP-15/16.....2.0 | UELPL-2.1/4.....13.0 | JELP-2S.....9.3 |
| UCPL-7/8.....2.0 | ARP-1.....2.0 | UELPL-2.5/16.....13.0 | JELP-2.1/16.....9.3 |
| UCPL-15/16.....2.0 | ARP-1.1/16.....3.3 | UELPL-2.3/8.....12.8 | JELP-2.1/8.....9.0 |
| UCPL-1.....2.0 | ARP-1.1/8.....3.1 | UELPL-2.7/16.....12.6 | JELP-2.3/16.....9.0 |
| UCPL-1.1/16.....3.3 | ARP-1.3/16.....3.1 | UELPL-2.1/2.....16.3 | JELPL Series |
| UCPL-1.1/8.....3.3 | ARP-1.1/4S.....3.1 | UELPL-2.9/16.....16.1 | JELPL-1/2.....1.5 |
| UCPL-1.3/16.....3.1 | ARP-1.1/4.....4.0 | UELPL-2.5/8R.....17.4 | JELPL-9/16.....1.5 |
| UCPL-1.1/4S.....3.1 | ARP-1.5/16.....4.0 | UELPL-2.11/16R.....17.2 | JELPL-5/8.....1.5 |
| UCPL-1.1/4.....4.0 | ARP-1.3/8.....3.7 | UELPL-2.3/4R.....16.9 | JELPL-11/16.....1.5 |
| UCPL-1.5/16.....4.0 | ARP-1.7/16.....3.7 | UELPL-2.13/16.....19.4 | JELPL-3/4.....1.8 |
| UCPL-1.3/8.....4.0 | ARP-1.1/2.....4.6 | UELPL-2.7/8.....19.2 | JELPL-13/16.....2.0 |
| UCPL-1.7/16.....3.7 | ARP-1.9/16.....4.6 | UELPL-2.15/16.....19.0 | JELPL-7/8.....2.0 |
| UCPL-1.1/2.....4.9 | ARP-1.5/8.....5.5 | UELPL-3.....18.5 | JELPL-15/16.....2.0 |
| UCPL-1.9/16.....4.9 | ARP-1.11/16.....5.5 | UELPL Series | JELPL-1.....2.0 |
| UCPL-1.5/8.....5.7 | ARP-1.3/4.....5.3 | UELPL-1/2.....1.8 | JELPL-1.1/16.....3.3 |
| UCPL-1.11/16.....5.5 | ARP-1.13/16.....7.3 | UELPL-9/16.....1.8 | JELPL-1.1/8.....3.1 |
| UCPL-1.3/4.....5.5 | ARP-1.7/8.....7.3 | UELPL-5/8.....1.8 | JELPL-1.3/16.....3.1 |
| UCPL-1.13/16.....7.3 | ARP-1.15/16.....7.1 | UELPL-11/16.....1.5 | JELPL-1.1/4S.....3.1 |
| UCPL-1.7/8.....7.3 | ARP-2S.....7.1 | UELPL-3/4.....1.8 | JELPL-1.1/4.....4.0 |
| UCPL-1.15/16.....7.1 | ARP-2S.....8.8 | UELPL-13/16.....2.2 | JELPL-1.5/16.....4.0 |
| UCPL-2S.....7.1 | ARP-2.1/16.....8.8 | UELPL-7/8.....2.2 | JELPL-1.3/8.....4.0 |
| UCPL-2.....9.0 | ARP-2.1/8.....8.6 | UELPL-15/16.....2.2 | JELPL-1.7/16.....3.7 |
| UCPL-2.1/16.....9.0 | ARP-2.3/16.....8.6 | UELPL-1.....2.0 | JELPL-1.1/2.....4.9 |
| UCPL-2.1/8.....8.8 | ARPL Series | UELPL-1.1/16.....3.3 | JELPL-1.9/16.....4.9 |
| UCPL-2.3/16.....8.8 | ARPL-1/2.....1.5 | UELPL-1.1/8.....3.3 | JELPL-1.5/8.....5.7 |
| UCPL-2.1/4.....12.3 | ARPL-9/16.....1.5 | UELPL-1.3/16.....3.3 | JELPL-1.11/16.....5.7 |
| UCPL-2.5/16.....12.1 | ARPL-5/8.....1.5 | UELPL-1.1/4S.....3.3 | JELPL-1.3/4.....5.5 |
| UCPL-2.3/8.....11.9 | ARPL-11/16.....1.5 | UELPL-1.1/4.....4.2 | JELPL-1.13/16.....7.3 |
| UCPL-2.7/16.....11.9 | ARPL-3/4.....1.8 | UELPL-1.5/16.....4.2 | JELPL-1.7/8.....7.3 |
| UCPL-2.1/2.....11.9 | ARPL-13/16.....2.0 | UELPL-1.3/8.....4.2 | JELPL-1.15/16.....7.3 |
| UCPL-2.9/16.....11.9 | ARPL-7/8.....2.0 | UELPL-1.7/16.....4.0 | JELPL-2S.....7.1 |
| UCPL-2.5/8.....16.1 | ARPL-15/16.....2.0 | UELPL-1.1/2.....5.3 | JELPL-2S.....9.3 |
| UCPL-2.11/16.....15.9 | ARPL-1.....2.0 | UELPL-1.9/16.....5.3 | JELPL-2.1/16.....9.0 |
| UCPL-2.3/4.....19.0 | ARPL-1.1/16.....3.1 | UELPL-1.5/8.....6.0 | |
| UCPL-2.13/16.....19.2 | ARPL-1.1/8.....3.1 | | |



Bearing Series → **UCP SERIES**

UCP-1/2..... 1.5

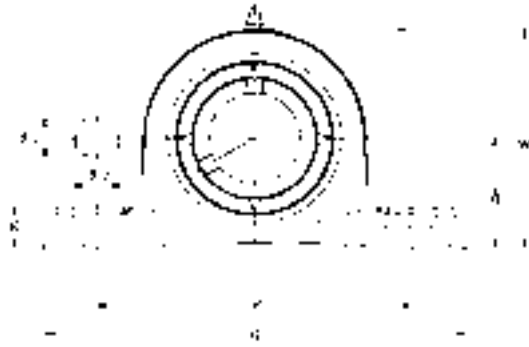
Complete Pillow Block Number

Weight (lbs)

| ULTRA-CLASS MOUNTED UNITS | | | LBS. |
|---------------------------|-----|----------------------|------|
| JELPL-2.3/16..... | 0.8 | UELFLU Series | |
| UCFLU Series | | UELFLU-1/2..... | 1.1 |
| UCFLU-1/2..... | 0.9 | UELFLU-9/16..... | 1.1 |
| UCFLU-9/16..... | 0.9 | UELFLU-5/8..... | 1.1 |
| UCFLU-5/8..... | 0.9 | UELFLU-11/16..... | 0.9 |
| UCFLU-11/16..... | 0.9 | UELFLU-3/4..... | 1.3 |
| UCFLU-3/4..... | 1.3 | UELFLU-13/16..... | 1.8 |
| UCFLU-13/16..... | 1.5 | UELFLU-7/8..... | 1.8 |
| UCFLU-7/8..... | 1.5 | UELFLU-15/16..... | 1.8 |
| UCFLU-15/16..... | 1.5 | UELFLU-1..... | 1.5 |
| UCFLU-1..... | 1.5 | UELFLU-1 1/16..... | 2.4 |
| UCFLU-1.1/16..... | 2.4 | UELFLU-1 1/8..... | 2.4 |
| UCFLU-1.1/8..... | 2.4 | UELFLU-1 3/16..... | 2.4 |
| UCFLU-1.3/16..... | 2.2 | UELFLU-1 1/4S..... | 2.4 |
| UCFLU-1.1/4S..... | 2.2 | UELFLU-1 1/4..... | 3.5 |
| UCFLU-1.1/4..... | 3.3 | UELFLU-1 5/16..... | 3.5 |
| UCFLU-1.5/16..... | 3.3 | UELFLU-1 3/8..... | 3.5 |
| UCFLU-1.3/8..... | 3.1 | UELFLU-1 7/16..... | 3.3 |
| UCFLU-1.7/16..... | 3.1 | UELFLU-1 1/2..... | 4.4 |
| UCFLU-1.1/2..... | 4.2 | UELFLU-1 9/16..... | 4.4 |
| UCFLU-1.9/16..... | 4.0 | UELFLU-1 5/8..... | 5.1 |
| UCFLU-1.5/8..... | 4.6 | UELFLU-1 11/16..... | 4.9 |
| UCFLU-1.11/16..... | 4.6 | UELFLU-1 3/4..... | 4.9 |
| UCFLU-1.3/4..... | 4.6 | UELFLU-1 13/16..... | 6.0 |
| UCFLU-1.13/16..... | 5.5 | UELFLU-1 7/8..... | 6.0 |
| UCFLU-1.7/8..... | 5.5 | UELFLU-1 15/16..... | 5.7 |
| UCFLU-1.15/16..... | 5.3 | UELFLU-2S..... | 5.7 |
| UCFLU-2S..... | 5.3 | UELFLU-2..... | 8.4 |
| UCFLU-2..... | 7.7 | UELFLU-2 1/16..... | 8.2 |
| UCFLU-2 1/16..... | 7.7 | UELFLU-2 1/8..... | 8.2 |
| UCFLU-2 1/8..... | 7.5 | UELFLU-2 3/16..... | 7.9 |
| UCFLU-2.3/16..... | 7.5 | JELFLU Series | |
| UCFLUX Series | | JELFLU-1/2..... | 0.9 |
| UCFLUX-13/16..... | 2.4 | JELFLU-9/16..... | 0.9 |
| UCFLUX-7/8..... | 2.4 | JELFLU-5/8..... | 0.9 |
| UCFLUX-15/16..... | 2.3 | JELFLU-11/16..... | 0.9 |
| UCFLUX-1..... | 2.3 | JELFLU-3/4..... | 1.1 |
| UCFLUX-1 1/16..... | 3.4 | JELFLU-13/16..... | 1.5 |
| UCFLUX-1 1/8..... | 3.3 | JELFLU-7/8..... | 1.5 |
| UCFLUX-1 3/16..... | 3.3 | JELFLU-15/16..... | 1.5 |
| UCFLUX-1 1/4..... | 3.2 | JELFLU-1..... | 1.5 |
| UCFLUX-1 5/16..... | 4.3 | JELFLU-1.1/16..... | 2.4 |
| UCFLUX-1 3/8..... | 4.2 | JELFLU-1.1/8..... | 2.2 |
| UCFLUX-1 7/16..... | 4.1 | JELFLU-1.3/16..... | 2.2 |
| UCFLUX-1 1/2..... | 4.9 | JELFLU-1.1/4S..... | 2.2 |
| UCFLUX-1 9/16..... | 4.8 | JELFLU-1.1/4..... | 3.3 |
| UCFLUX-1 5/8..... | 5.7 | JELFLU-1.5/16..... | 3.3 |
| UCFLUX-1 11/16..... | 5.6 | JELFLU-1.3/8..... | 3.3 |
| UCFLUX-1 3/4..... | 5.5 | JELFLU-1.7/16..... | 3.1 |
| UCFLUX-1 13/16..... | 5.4 | JELFLU-1.1/2..... | 4.2 |
| UCFLUX-1 7/8..... | 8.2 | JELFLU-1.9/16..... | 4.0 |
| UCFLUX-1 15/16..... | 8.0 | JELFLU-1.5/8..... | 4.9 |
| UCFLUX-2..... | 7.9 | JELFLU-1.11/16..... | 4.9 |
| ARFLU Series | | JELFLU-1.3/4..... | 4.6 |
| ARFLU-1/2..... | 0.9 | JELFLU-1.13/16..... | 5.5 |
| ARFLU-9/16..... | 0.9 | JELFLU-1.7/8..... | 5.5 |
| ARFLU-5/8..... | 0.9 | JELFLU-1.15/16..... | 5.5 |
| ARFLU-11/16..... | 0.9 | JELFLU-2S..... | 5.3 |
| ARFLU-3/4..... | 1.1 | JELFLU-2S..... | 7.9 |
| ARFLU-13/16..... | 1.5 | JELFLU-2.1/16..... | 7.7 |
| ARFLU-7/8..... | 1.5 | JELFLU-2.1/8..... | 7.7 |
| ARFLU-15/16..... | 1.5 | JELFLU-2.3/16..... | 7.5 |
| ARFLU-1..... | 1.5 | UCFU Series | |
| ARFLU-1.1/16..... | 2.2 | UCFU-1/2..... | 1.3 |
| ARFLU-1.1/8..... | 2.2 | UCFU-9/16..... | 1.3 |
| ARFLU-1.3/16..... | 2.2 | UCFU-5/8..... | 1.3 |
| ARFLU-1.1/4S..... | 2.2 | UCFU-11/16..... | 1.3 |
| ARFLU-1.1/4..... | 3.3 | UCFU-3/4..... | 1.8 |
| ARFLU-1.5/16..... | 3.1 | UCFU-13/16..... | 2.0 |
| ARFLU-1.3/8..... | 2.9 | UCFU-7/8..... | 2.0 |
| ARFLU-1.7/16..... | 2.9 | UCFU-15/16..... | 2.0 |
| ARFLU-1.1/2..... | 3.7 | UCFU-1..... | 2.0 |
| ARFLU-1.9/16..... | 3.7 | UCFU-1 1/16..... | 2.9 |
| ARFLU-1.5/8..... | 4.4 | UCFU-1 1/8..... | 2.9 |
| ARFLU-1.11/16..... | 4.4 | UCFU-1 3/16..... | 2.6 |
| ARFLU-1.3/4..... | 4.4 | UCFU-1 1/4S..... | 2.6 |
| ARFLU-1.13/16..... | 5.3 | UCFU-1 1/4..... | 3.7 |
| ARFLU-1.7/8..... | 5.3 | UCFU-1 5/16..... | 3.7 |
| ARFLU-1.15/16..... | 5.1 | UCFU-1 3/8..... | 3.7 |
| ARFLU-2S..... | 5.1 | UCFU-1 7/16..... | 3.5 |
| ARFLU-2S..... | 7.5 | UCFU-1 1/2..... | 4.4 |
| ARFLU-2.1/16..... | 7.3 | UCFU-1 9/16..... | 4.4 |
| ARFLU-2.1/8..... | 7.3 | UCFU-1 5/8..... | 5.5 |
| ARFLU-2.3/16..... | 7.1 | UCFU-1 11/16..... | 5.3 |
| | | UCFU-1 3/4..... | 5.3 |
| | | UCFU-1 13/16..... | 6.4 |
| | | UCFU-1 7/8..... | 6.6 |
| | | UCFU-1 15/16..... | 6.4 |
| | | UCFU-1..... | 2.0 |
| | | UCFU-1 1/16..... | 2.9 |
| | | UCFU-1 1/8..... | 2.9 |
| | | UCFU-1 3/8..... | 4.0 |
| | | UCFU-1 1/2..... | 4.0 |
| | | UCFU-1 5/8..... | 5.7 |
| | | UCFU-1 3/4..... | 5.5 |
| | | UCFU-1 7/8..... | 6.6 |
| | | UCFU-1 15/16..... | 6.6 |
| | | UCFU-2..... | 9.0 |
| | | UCFU-2 1/16..... | 9.0 |
| | | UCFU-2 1/8..... | 8.8 |
| | | UCFU-2 3/16..... | 8.8 |
| | | UCFU-2 1/4..... | 11.0 |
| | | UCFU-2 5/16..... | 10.8 |
| | | UCFU-2 3/8..... | 10.6 |
| | | UCFU-2 7/16..... | 10.4 |
| | | UCFU-2 1/2..... | 12.9 |
| | | UCFU-2.9/16R..... | 12.9 |
| | | UCFU-2 5/8R..... | 13.0 |
| | | UCFU-2 11/16R..... | 12.8 |
| | | UCFU-2.3/4R..... | 14.0 |
| | | UCFU-2 13/16..... | 16.3 |
| | | UCFU-2 7/8..... | 16.1 |
| | | UCFU-2 15/16..... | 15.9 |
| | | UCFU-3..... | 15.7 |
| | | UCFUX Series | |
| | | UCFUX-13/16..... | 3.0 |
| | | UCFUX-7/8..... | 2.9 |
| | | UCFUX-15/16..... | 2.9 |
| | | UCFUX-1..... | 2.8 |
| | | UCFUX-1 1/16..... | 4.3 |
| | | UCFUX-1 1/8..... | 4.2 |
| | | UCFUX-1 3/16..... | 4.2 |
| | | UCFUX-1 1/4..... | 4.1 |
| | | UCFUX-1 5/16..... | 4.9 |
| | | UCFUX-1 3/8..... | 4.8 |
| | | UCFUX-1 7/16..... | 4.7 |
| | | UCFUX-1 1/2..... | 5.5 |
| | | UCFUX-1 9/16..... | 5.4 |
| | | UCFUX-1 5/8..... | 6.7 |
| | | UCFUX-1 11/16..... | 6.7 |
| | | UCFUX-1 3/4..... | 6.6 |
| | | UCFUX-1 13/16..... | 6.4 |
| | | UCFUX-1 7/8..... | 8.6 |
| | | UCFUX-1 15/16..... | 8.5 |
| | | UCFUX-2..... | 8.4 |
| | | UCFUX-2 1/16..... | 10.5 |
| | | UCFUX-2 1/8..... | 10.4 |
| | | UCFUX-2 3/16..... | 10.3 |
| | | UCFUX-2 1/4..... | 10.0 |
| | | UCFUX-2 5/16..... | 9.9 |
| | | UCFUX-2 7/16..... | 15.0 |
| | | UCFUX-2 1/2..... | 14.9 |
| | | UCFUX-2 9/16..... | 14.7 |
| | | UCFUX-2 5/8..... | 15.7 |
| | | UCFUX-2 11/16..... | 15.5 |
| | | UCFUX-2 3/4..... | 15.3 |
| | | UCFUX-2 13/16..... | 16.4 |
| | | UCFUX-2 7/8..... | 16.1 |
| | | UCFUX-2 15/16..... | 15.9 |
| | | UCFUX-3..... | 15.6 |
| | | UELFU Series | |
| | | UELFU-1/2..... | 1.5 |
| | | UELFU-9/16..... | 1.5 |
| | | UELFU-5/8..... | 1.5 |
| | | UELFU-11/16..... | 1.3 |
| | | UELFU-3/4..... | 1.8 |
| | | UELFU-13/16..... | 2.2 |
| | | UELFU-7/8..... | 2.2 |
| | | UELFU-15/16..... | 2.0 |
| | | UELFU-1..... | 2.0 |
| | | UELFU-1 1/16..... | 2.9 |
| | | UELFU-1 1/8..... | 2.9 |
| | | UELFU-1 3/16..... | 2.9 |
| | | UELFU-1 1/4S..... | 2.9 |
| | | UELFU-1 1/4..... | 4.0 |
| | | UELFU-1 5/16..... | 4.0 |
| | | UELFU-1 3/8..... | 4.0 |
| | | UELFU-1 7/16..... | 4.0 |
| | | UELFU-1 1/2..... | 4.9 |
| | | UELFU-1 9/16..... | 4.6 |
| | | UELFU-1 5/8..... | 5.7 |
| | | UELFU-1 11/16..... | 5.5 |
| | | UELFU-1 3/4..... | 5.5 |
| | | UELFU-1 13/16..... | 6.6 |
| | | UELFU-1 7/8..... | 6.6 |
| | | UELFU-1 15/16..... | 6.4 |
| | | UELFU-2S..... | 6.4 |
| | | UELFU-2..... | 9.7 |
| | | UELFU-2 1/16..... | 9.5 |
| | | UELFU-2 1/8..... | 9.5 |
| | | UELFU-2 3/16..... | 9.3 |
| | | UELFU-2 1/4..... | 11.7 |
| | | UELFU-2 5/16..... | 11.5 |
| | | UELFU-2 3/8..... | 11.2 |
| | | UELFU-2 7/16..... | 11.2 |
| | | UELFU-2 1/2R..... | 14.4 |
| | | UELFU-2 9/16R..... | 14.2 |
| | | UELFU-2 5/8R..... | 13.7 |
| | | UELFU-2 11/16R..... | 13.4 |
| | | UELFU-2 3/4R..... | 14.5 |
| | | UELFU-2 13/16..... | 17.0 |
| | | UELFU-2 7/8..... | 16.8 |
| | | UELFU-2 15/16..... | 16.5 |
| | | UELFU-3..... | 16.1 |
| | | ARFU Series | |
| | | ARFU-1/2..... | 1.3 |
| | | ARFU-9/16..... | 1.3 |
| | | ARFU-5/8..... | 1.3 |
| | | ARFU-11/16..... | 1.3 |
| | | ARFU-3/4..... | 1.5 |
| | | ARFU-13/16..... | 2.0 |
| | | ARFU-7/8..... | 2.0 |
| | | ARFU-15/16..... | 2.0 |
| | | ARFU-1..... | 2.0 |
| | | ARFU-1.1/16..... | 2.6 |
| | | ARFU-1.1/8..... | 2.6 |
| | | ARFU-1.3/16..... | 2.6 |
| | | ARFU-1.1/4S..... | 2.6 |
| | | ARFU-1.1/4..... | 3.7 |
| | | ARFU-1.5/16..... | 3.5 |
| | | ARFU-1.3/8..... | 3.5 |
| | | ARFU-1.7/16..... | 3.3 |
| | | ARFU-1.1/2..... | 4.2 |
| | | ARFU-1.9/16..... | 4.0 |
| | | ARFU-1.5/8..... | 5.3 |
| | | ARFU-1.11/16..... | 5.1 |
| | | ARFU-1.3/4..... | 5.1 |
| | | ARFU-1.13/16..... | 6.0 |
| | | ARFU-1.7/8..... | 6.0 |
| | | ARFU-1.15/16..... | 5.7 |
| | | ARFU-2S..... | 5.7 |
| | | ARFU-2S..... | 8.8 |
| | | ARFU-2.1/16..... | 8.6 |
| | | ARFU-2.1/8..... | 8.6 |
| | | ARFU-2.3/16..... | 8.4 |
| | | JELFU Series | |
| | | JELFU-1/2..... | 1.3 |
| | | JELFU-9/16..... | 1.3 |
| | | JELFU-5/8..... | 1.3 |
| | | JELFU-11/16..... | 1.3 |
| | | JELFU-3/4..... | 1.5 |
| | | JELFU-13/16..... | 2.0 |
| | | JELFU-7/8..... | 2.0 |
| | | JELFU-15/16..... | 2.0 |
| | | JELFU-1..... | 2.0 |
| | | JELFU-1.1/16..... | 2.9 |
| | | JELFU-1.1/8..... | 2.6 |
| | | JELFU-1.3/16..... | 2.6 |
| | | JELFU-1.1/4S..... | 2.6 |
| | | JELFU-1.1/4..... | 3.7 |
| | | JELFU-1.5/16..... | 3.7 |
| | | JELFU-1.3/8..... | 3.7 |
| | | JELFU-1.7/16..... | 3.7 |
| | | JELFU-1.1/2..... | 4.4 |
| | | JELFU-1.9/16..... | 4.4 |
| | | JELFU-1.5/8..... | 5.5 |
| | | JELFU-1.11/16..... | 5.5 |
| | | JELFU-1.3/4..... | 5.3 |
| | | JELFU-1.13/16..... | 6.2 |
| | | JELFU-1.7/8..... | 6.2 |
| | | JELFU-1.15/16..... | 6.2 |
| | | JELFU-2S..... | 6.0 |
| | | JELFU-2S..... | 9.3 |
| | | JELFU-2.1/16..... | 9.0 |
| | | JELFU-2.1/8..... | 9.0 |
| | | JELFU-2.3/16..... | 8.8 |



Units: Millimeters
INCHES



PILLOW BLOCKS - CAST HOUSING

| Shaft Dia. | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|--|--------------------|----------------|----------------|-------------|-----------------------|-----------------------|---------------|-----------------|-----------------------|---------------|------------|--------------------------------------|---|-----------------------------|----------------------------|
| | | <i>h</i> | <i>a</i> | <i>e</i> | <i>b</i> | <i>s</i> ₁ | <i>s</i> ₂ | <i>g</i> | <i>w</i> | <i>B</i> _i | <i>n</i> | | | | <i>C</i> _{Dynamic} | <i>C</i> _{Static} |
| 12 ½ | UCP201D1 UCP201-008D1 | 30.2 1 ¾ | 127 5 | 95 3 ¾ | 38 1 ½ | 13 ½ | 16 ⅝ | 14 ⅞ | 62 2 ⅞ | 31 1.220 | 12.7 .500 | M10 ⅝ | P203D1 P203D1 | UC201D1 UC201-008D1 | 2,890 | 1,500 |
| 15 9/16 5/8 | UCP202D1 UCP202-009D1 UCP202-010D1 | 30.2 1 ¾ | 127 5 | 95 3 ¾ | 38 1 ½ | 13 ½ | 16 ⅝ | 14 ⅞ | 62 2 ⅞ | 31 1.220 | 12.7 .500 | M10 ⅝ | P203D1 P203D1 P203D1 | UC202D1 UC202-009D1 UC202-010D1 | 2,890 | 1,500 |
| 17 1 1/16 | UCP203D1 UCP203-011D1 | 30.2 1 ¾ | 127 5 | 95 3 ¾ | 38 1 ½ | 13 ½ | 16 ⅝ | 14 ⅞ | 62 2 ⅞ | 31 1.220 | 12.7 .500 | M10 ⅝ | P203D1 P203D1 | UC203D1 UC203-011D1 | 2,890 | 1,500 |
| 20 ¾ | UCP204D1 UCP204-012D1 | 33.3 1 5/16 | 127 5 | 95 3 ¾ | 38 1 ½ | 13 ½ | 16 ⅝ | 14 ⅞ | 65 2 9/16 | 31 1.220 | 12.7 .500 | M10 ⅝ | P204D1 P204D1 | UC204D1 UC204-012D1 | 2,890 | 1,500 |
| 25 1 3/16 7/8 1 5/16 1 | UCP205D1 UCP205-013D1 UCP205-014D1 UCP205-015D1 UCP205-100D1 | 36.5 1 7/16 | 140 5 ½ | 105 4 ⅞ | 38 1 ½ | 13 ½ | 16 ⅝ | 15 1 1/8 | 71 2 25/32 | 34 1.339 | 14.3 .563 | M10 ⅝ | P205D1 P205D1 P205D1 P205D1 | UC205D1 UC205-013D1 UC205-014D1 UC205-015D1 UC205-100D1 | 3,150 | 1,770 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | UCP206D1 UCP206-101D1 UCP206-102D1 UCP206-103D1 UCP206-104D1 | 42.9 1 11/16 | 165 6 ½ | 121 4 ¾ | 48 1 7/8 | 17 2 1/32 | 20 25/32 | 17 2 1/32 | 83 3 3/32 | 38.1 1.500 | 15.9 .626 | M14 ½ | P206D1 P206D1 P206D1 P206D1 | UC206D1 UC206-101D1 UC206-102D1 UC206-103D1 UC206-104D1 | 4,400 | 2,540 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UCP207D1 UCP207-104D1 UCP207-105D1 UCP207-106D1 UCP207-107D1 | 47.6 1 7/8 | 167 6 9/16 | 127 5 | 48 1 7/8 | 17 2 1/32 | 20 25/32 | 18 2 3/32 | 93 3 2 1/32 | 42.9 1.689 | 17.5 .689 | M14 ½ | P207D1 P207D1 P207D1 P207D1 | UC207D1 UC207-104D1 UC207-105D1 UC207-106D1 UC207-107D1 | 5,750 | 3,440 |
| 40 1 1/2 1 9/16 | UCP208D1 UCP208-108D1 UCP208-109D1 | 49.2 1 15/16 | 184 7 ¼ | 137 5 13/32 | 54 2 1/8 | 17 2 1/32 | 20 25/32 | 18 2 3/32 | 98 3 27/32 | 49.2 1.937 | 19 .748 | M14 ½ | P208D1 P208D1 | UC208D1 UC208-108D1 UC208-109D1 | 6,550 | 4,000 |
| 45 1 5/8 1 11/16 1 3/4 | UCP209D1 UCP209-110D1 UCP209-111D1 UCP209-112D1 | 54 2 1/8 | 190 7 15/32 | 146 5 ¾ | 54 2 1/8 | 17 2 1/32 | 20 25/32 | 20 25/32 | 106 4 3/16 | 49.2 1.937 | 19 .748 | M14 ½ | P209D1 P209D1 P209D1 | UC209D1 UC209-110D1 UC209-111D1 UC209-112D1 | 7,350 | 4,590 |
| 50 1 13/16 1 7/8 1 15/16 2 | UCP210D1 UCP210-113D1 UCP210-114D1 UCP210-115D1 UCP210-200D1 | 57.2 2 ¼ | 206 8 1/8 | 159 6 ¼ | 60 2 3/8 | 20 25/32 | 23 29/32 | 21 1 13/16 | 114 4 ½ | 51.6 2.031 | 19 .748 | M16 5/8 | P210D1 P210D1 P210D1 P210D1 | UC210D1 UC210-113D1 UC210-114D1 UC210-115D1 UC210-200D1 | 7,900 | 5,220 |
| 55 2 2 1/16 2 1/8 2 3/16 | UCP211D1 UCP211-200D1 UCP211-201D1 UCP211-202D1 UCP211-203D1 | 63.5 2 ½ | 219 8 5/8 | 171 6 23/32 | 60 2 3/8 | 20 25/32 | 23 29/32 | 23 29/32 | 126 4 3 1/32 | 55.6 2.189 | 22.2 .874 | M16 5/8 | P211D1 P211D1 P211D1 P211D1 | UC211D1 UC211-200D1 UC211-201D1 UC211-202D1 UC211-203D1 | 9,750 | 6,570 |
| 60 2 1/4 2 3/8 2 7/16 | UCP212D1 UCP212-204D1 UCP212-206D1 UCP212-207D1 | 69.8 2 ¾ | 241 9 ½ | 184 7 ¼ | 70 2 ¾ | 20 25/32 | 23 29/32 | 25 3 1/32 | 138 5 7/16 | 65.1 2.563 | 25.4 1.000 | M16 5/8 | P212D1 P212D1 P212D1 | UC212D1 UC212-204D1 UC212-206D1 UC212-207D1 | 11,800 | 8,100 |

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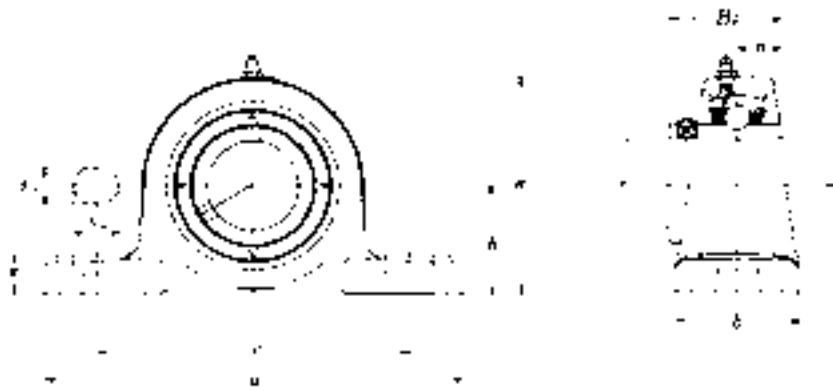
Units: Millimeters
INCHES



| PILLOW BLOCKS - CAST HOUSING | | | | | | | | | | | | | | | | |
|------------------------------|--|--------------------|-----------------|----------------|---------------|----------------|----------------|--------------|----------------|---------------|---------------|------------|----------------------------|---------------------------------------|--------------------------|-----------------------|
| Shaft Dia. | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
| | | h | a | e | b | s ₁ | s ₂ | g | w | Bi | n | | | | Dynamic C | Static C ₀ |
| 65 2 1/2 | UCP213D1 UCP213-208D1 | 76.2 3 | 265 10 7/16 | 203 8 | 70 2 3/4 | 25 3 1/2 | 28 1 3/32 | 27 1 1/16 | 151 5 15/16 | 65.1 2.563 | 25.4 1.000 | M20 3/4 | P213D1 P213D1 | UC213D1 UC213-208D1 | 12,900 | 9,000 |
| 70 2 11/16 2 3/4 | UCP214D1 UCP214-211D1 UCP214-212D1 | 79.4 3 1/8 | 266 10 15/32 | 210 8 9/32 | 72 2 27/32 | 25 3 1/2 | 28 1 3/32 | 27 1 1/16 | 157 6 3/16 | 74.6 2.937 | 30.2 1.189 | M20 3/4 | P214D1 P214D1 P214D1 | UC214D1 UC214-211D1 UC214-211D1 | 14,000 | 9,900 |
| 75 2 15/16 3 | UCP215D1 UCP215-215D1 UCP215-300D1 | 82.6 3 1/4 | 275 10 13/16 | 217 8 17/32 | 74 2 29/32 | 25 3 1/2 | 28 1 3/32 | 28 1 3/32 | 163 6 13/32 | 77.8 3.063 | 33.3 1.311 | M20 3/4 | P215D1 P215D1 P215D1 | UC215D1 UC215-215D1 UC215-300D1 | 14,900 | 11,100 |
| 80 3 1/8 | UCP216D1 UCP216-302D1 | 88.9 3 1/2 | 292 11 1/2 | 232 9 1/8 | 78 3 1/16 | 25 3 1/2 | 28 1 3/32 | 30 1 3/16 | 175 6 7/8 | 82.6 3.252 | 33.3 1.311 | M20 3/4 | P216D1 P216D1 | UC216D1 UC216-302D1 | 16,300 | 11,900 |
| 85 3 1/4 | UCP217D1 UCP217-304D1 | 95.2 3 3/4 | 310 12 7/32 | 247 9 23/32 | 83 3 9/32 | 25 3 1/2 | 28 1 3/32 | 32 1 1/4 | 187 7 3/8 | 85.7 3.374 | 34.1 1.343 | M20 3/4 | P217D1 P217D1 | UC217D1 UC217-304D1 | 18,700 | 14,400 |
| 90 3 1/2 | UCP218D1 UCP218-308D1 | 101.6 4 | 327 12 7/8 | 262 10 5/16 | 88 3 15/32 | 27 1 1/16 | 30 1 3/16 | 33 1 5/16 | 200 7 7/8 | 96 3.780 | 39.7 1.563 | M22 7/8 | P218D1 P218D1 | UC218D1 UC218-308D1 | 21,600 | 16,100 |



Units: Millimeters
INCHES



| PILLOW BLOCKS - CAST HOUSING (LOW CENTER HEIGHT) | | | | | | | | | | | | | | | | |
|--|---|--------------------|----------------|------------|-------------|----------------------|----------------------|-------------|----------------|---------------|--------------|------------|---|---|--------------------------|----------------------|
| Shaft Dia. | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
| | | <i>h</i> | <i>a</i> | <i>e</i> | <i>b</i> | <i>s₁</i> | <i>s₂</i> | <i>g</i> | <i>w</i> | <i>Bi</i> | <i>n</i> | | | | <i>C</i> | <i>C₀</i> |
| 20 ¾ | UCPL204D1 UCPL204-012D1 | 31.75 1 ¼ | 127 5 | 95 3 ¾ | 38 1 ½ | 13 ½ | 16 ⅝ | 14 ⅞ | 64 2 17/32 | 31 1.220 | 12.7 .500 | M10 ⅜ | PL204D1 PL204D1 | UC204D1 UC204-012D1 | 2,890 | 1,500 |
| 25 1 3/16 7/8 1 5/16 1 | UCPL205D1 UCPL205-013D1 UCPL205-014D1 UCPL205-015D1 UCPL205-100D1 | 33.34 1 5/16 | 140 5 ½ | 105 4 ⅞ | 38 1 ½ | 13 ½ | 16 ⅝ | 15 19/32 | 68 2 11/16 | 34 1.339 | 14.3 .563 | M10 ⅜ | PL205D1 PL205D1 PL205D1 PL205D1 | UC205D1 UC205-013D1 UC205-014D1 UC205-015D1 UC205-100D1 | 3,150 | 1,770 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | UCPL206D1 UCPL206-101D1 UCPL206-102D1 UCPL206-103D1 UCPL206-104D1 | 39.69 1 9/16 | 165 6 ½ | 121 4 ¾ | 48 1 7/8 | 17 21/32 | 20 25/32 | 17 21/32 | 80 3 5/32 | 38.1 1.500 | 15.9 .626 | M14 ½ | PL206D1 PL206D1 PL206D1 PL206D1 PL206D1 | UC206D1 UC206-101D1 UC206-102D1 UC206-103D1 UC206-104D1 | 4,400 | 2,540 |
| 35 1 ¼ 1 5/16 1 3/8 1 7/16 | UCPL207D1 UCPL207-104D1 UCPL207-105D1 UCPL207-106D1 UCPL207-107D1 | 46.04 1 13/16 | 167 6 5/16 | 127 5 | 48 1 7/8 | 17 21/32 | 20 25/32 | 18 23/32 | 91 3 19/32 | 42.9 1.689 | 17.5 .689 | M14 ½ | PL207D1 PL207D1 PL207D1 PL207D1 PL207D1 | UC207D1 UC207-104D1 UC207-105D1 UC207-106D1 UC207-107D1 | 5,750 | 3,440 |
| 45 1 5/8 1 11/16 1 ¾ | UCPL209D1 UCPL209-110D1 UCPL209-111D1 UCPL209-112D1 | 52.39 2 1/16 | 190 7 15/32 | 146 5 ¾ | 54 2 1/8 | 17 21/32 | 20 25/32 | 20 25/32 | 104 4 3/32 | 49.2 1.937 | 19 .748 | M14 ½ | PL209D1 PL209D1 PL209D1 PL209D1 | UC209D1 UC209-110D1 UC209-111D1 UC209-112D1 | 7,350 | 4,590 |
| 50 1 13/16 1 7/8 1 15/16 2 | UCPL210D1 UCPL210-113D1 UCPL210-114D1 UCPL210-115D1 UCPL210-200D1 | 55.56 2 3/16 | 206 8 1/8 | 159 6 ¼ | 60 2 3/8 | 20 25/32 | 23 29/32 | 21 13/16 | 112 4 13/32 | 51.6 2.031 | 19 .748 | M16 5/8 | PL210D1 PL210D1 PL210D1 PL210D1 PL210D1 | UC210D1 UC210-113D1 UC210-114D1 UC210-115D1 UC210-200D1 | 7,900 | 5,220 |

Note: These numbers indicate relubricatable type. If maintenance free type is needed, please order without suffix D1
UCPL204 and UCPL205 have solid bases.
UCPL208 has the same dimensions as UCP208 shown on page 156



Units: Millimeters
INCHES

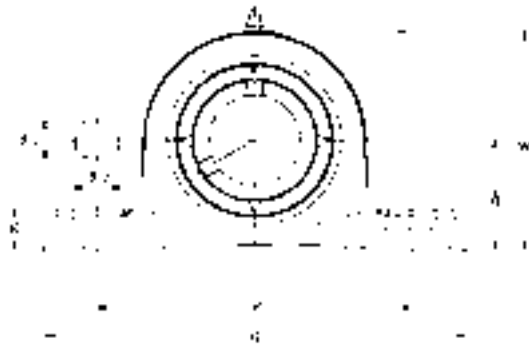


PILLOW BLOCKS - CAST HOUSING

| Shaft Dia. | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|--|--------------------|-----------------|-----------------|----------------|----------------|----------------|---------------|-----------------|--------------|-------------|--------------|--------------------------------------|---|--------------------------|-----------------------|
| | | h | a | e | b | s ₁ | s ₂ | g | w | Bi | n | | | | Dynamic C | Static C ₀ |
| 25 7/8 15/16 1 | UCP305D1 UCP305-014D1 UCP305-015D1 UCP305-100D1 | 45 1 25/32 | 175 6 7/8 | 132 5 3/16 | 45 1 25/32 | 17 21/32 | 20 25/32 | 15 19/32 | 85 3 11/32 | 38 1.496 | 15 .591 | M14 1/2 | P305D1 P305D1 P305D1 | UC305D1 UC305-014D1 UC305-015D1 UC305-100D1 | 4,750 | 2,460 |
| 30 1 1/8 1 3/16 | UCP306D1 UCP306-102D1 UCP306-103D1 | 50 1 31/32 | 180 7 3/32 | 140 5 1/2 | 50 1 31/32 | 17 21/32 | 20 25/32 | 18 23/32 | 95 3 3/4 | 43 1.693 | 17 .669 | M14 1/2 | P306D1 P306D1 P306D1 | UC306D1 UC306-102D1 UC306-102D1 | 6,000 | 3,400 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UCP307D1 UCP307-104D1 UCP307-105D1 UCP307-106D1 UCP307-107D1 | 56 2 7/32 | 210 8 9/32 | 160 6 5/16 | 56 2 7/32 | 17 21/32 | 25 31/32 | 20 25/32 | 106 4 3/16 | 48 1.890 | 19 .748 | M14 1/2 | P307D1 P307D1 P307D1 P307D1 | UC307D1 UC307-104D1 UC307-105D1 UC307-106D1 UC307-107D1 | 7,500 | 4,300 |
| 40 1 1/2 | UCP308D1 UCP308-108D1 | 60 2 3/8 | 220 8 21/32 | 170 6 11/16 | 60 2 3/8 | 17 21/32 | 27 1 1/16 | 22 7/8 | 116 4 9/16 | 52 2.047 | 19 .748 | M14 1/2 | P308D1 P308D1 | UC308D1 UC308-108D1 | 9,150 | 5,400 |
| 45 1 5/8 1 11/16 1 3/4 | UCP309D1 UCP309-110D1 UCP309-111D1 UCP309-112D1 | 67 2 5/8 | 245 9 21/32 | 190 7 15/32 | 67 2 5/8 | 20 25/32 | 30 1 3/16 | 24 15/16 | 129 5 3/32 | 57 2.244 | 22 .866 | M16 5/8 | P309D1 P309D1 P309D1 | UC309D1 UC309-110D1 UC309-111D1 UC309-112D1 | 11,900 | 7,200 |
| 50 1 7/8 1 15/16 | UCP310D1 UCP310-114D1 UCP310-115D1 | 75 2 15/16 | 275 10 13/16 | 212 8 11/32 | 75 2 15/16 | 20 25/32 | 35 1 3/8 | 27 1 1/16 | 143 5 5/8 | 61 2.402 | 22 .866 | M16 5/8 | P310D1 P310D1 P310D1 | UC310D1 UC310-114D1 UC310-115D1 | 13,900 | 8,660 |
| 55 2 2 1/8 2 3/16 | UCP311D1 UCP311-200D1 UCP311-202D1 UCP311-203D1 | 80 3 5/32 | 310 12 7/32 | 236 9 9/32 | 80 3 5/32 | 20 25/32 | 38 1 1/2 | 30 1 3/16 | 154 6 1/16 | 66 2.598 | 25 .984 | M16 5/8 | P311D1 P311D1 P311D1 | UC311D1 UC311-200D1 UC311-202D1 UC311-203D1 | 16,100 | 10,100 |
| 60 2 1/4 2 3/8 2 7/16 | UCP312D1 UCP312-204D1 UCP312-206D1 UCP312-207D1 | 85 3 11/32 | 330 13 | 250 9 27/32 | 85 3 11/32 | 25 31/32 | 38 1 1/2 | 32 1 1/4 | 165 6 1/2 | 71 2.795 | 26 1.024 | M20 3/4 | P312D1 P312D1 P312D1 | UC312D1 UC312-204D1 UC312-206D1 UC312-207D1 | 18,400 | 11,700 |
| 65 2 1/2 | UCP313D1 UCP313-208D1 | 90 3 17/32 | 340 13 3/8 | 260 10 1/4 | 90 3 17/32 | 25 31/32 | 38 1 1/2 | 33 1 5/16 | 176 6 15/16 | 75 2.953 | 30 1.181 | M20 3/4 | P313D1 P313D1 | UC313D1 UC313-208D1 | 20,800 | 13,400 |
| 70 2 11/16 2 3/4 | UCP314D1 UCP314-211D1 UCP314-212D1 | 95 3 3/4 | 360 14 3/16 | 280 11 1/32 | 90 3 17/32 | 27 1 1/16 | 40 1 9/16 | 35 1 3/8 | 187 7 3/8 | 78 3.071 | 33 1.299 | M22 7/8 | P314D1 P314D1 P314D1 | UC314D1 UC314-211D1 UC314-212D1 | 23,400 | 15,300 |
| 75 2 15/16 3 | UCP315D1 UCP315-215D1 UCP315-300D1 | 100 3 15/16 | 380 14 31/32 | 290 11 13/32 | 100 3 15/16 | 27 1 1/16 | 40 1 9/16 | 35 1 3/8 | 198 7 25/32 | 82 3.228 | 32 1.260 | M22 7/8 | P315D1 P315D1 P315D1 | UC315D1 UC315-215D1 UC315-215D1 | 25,500 | 17,400 |
| 80 3 1/8 3 3/16 | UCP316D1 UCP316-302D1 UCP316-303D1 | 106 4 3/16 | 400 15 3/4 | 300 11 13/16 | 110 4 11/32 | 27 1 1/16 | 40 1 9/16 | 40 1 9/16 | 210 8 9/32 | 86 3.386 | 34 1.339 | M22 7/8 | P316D1 P316D1 P316D1 | UC316D1 UC316-302D1 UC316-303D1 | 27,600 | 19,500 |
| 85 3 3/4 | UCP317D1 UCP317-304D1 | 112 4 13/32 | 420 16 17/32 | 320 12 19/32 | 110 4 11/32 | 33 1 5/16 | 45 1 25/32 | 40 1 9/16 | 220 8 21/32 | 96 3.780 | 40 1.575 | M27 1 | P317D1 P317D1 | UC317D1 UC317-304D1 | 29,800 | 21,800 |
| 90 3 7/16 3 1/2 | UCP318D1 UCP318-307D1 UCP318-308D1 | 118 4 21/32 | 430 16 15/16 | 330 13 | 110 4 11/32 | 33 1 5/16 | 45 1 25/32 | 45 1 25/32 | 235 9 1/4 | 96 3.780 | 40 1.575 | M27 1 | P318D1 P318D1 P318D1 | UC318D1 UC318-307D1 UC318-308D1 | 32,000 | 24,100 |
| 95 3 3/4 | UCP319D1 UCP319-312D1 | 125 4 29/32 | 470 18 1/2 | 360 14 3/16 | 120 4 23/32 | 36 1 13/32 | 50 1 31/32 | 45 1 25/32 | 250 9 27/32 | 103 4.055 | 41 1.614 | M30 1 1/8 | P319D1 P319D1 | UC319D1 UC319-312D1 | 34,500 | 26,600 |
| 100 3 15/16 4 | UCP320D1 UCP320-315D1 UCP320-400D1 | 140 5 1/2 | 490 19 9/32 | 380 14 31/32 | 120 4 23/32 | 36 1 13/32 | 50 1 31/32 | 50 1 31/32 | 275 10 13/16 | 108 4.252 | 42 1.654 | M30 1 1/8 | P320D1 P320D1 P320D1 | UC320D1 UC320-315D1 UC320-400D1 | 39,000 | 31,500 |
| 105 | UCP321D1 | 140 | 490 | 380 | 120 | 36 | 50 | 50 | 280 | 112 | 44 | M30 | P321D1 | UC321D1 | 41,400 | 34,500 |
| 110 | UCP322D1 | 150 | 520 | 400 | 140 | 40 | 55 | 55 | 300 | 117 | 46 | M33 | P322D1 | UC322D1 | 46,100 | 40,500 |
| 120 | UCP324D1 | 160 | 570 | 450 | 140 | 40 | 55 | 65 | 320 | 126 | 51 | M33 | P324D1 | UC324D1 | 46,600 | 41,500 |
| 130 | UCP326D1 | 180 | 600 | 480 | 140 | 40 | 55 | 75 | 355 | 135 | 54 | M33 | P326D1 | UC326D1 | 51,500 | 48,000 |
| 140 | UCP328D1 | 200 | 620 | 500 | 140 | 40 | 55 | 75 | 390 | 145 | 59 | M33 | P328D1 | UC328D1 | 56,900 | 55,500 |



Units: Millimeters
INCHES

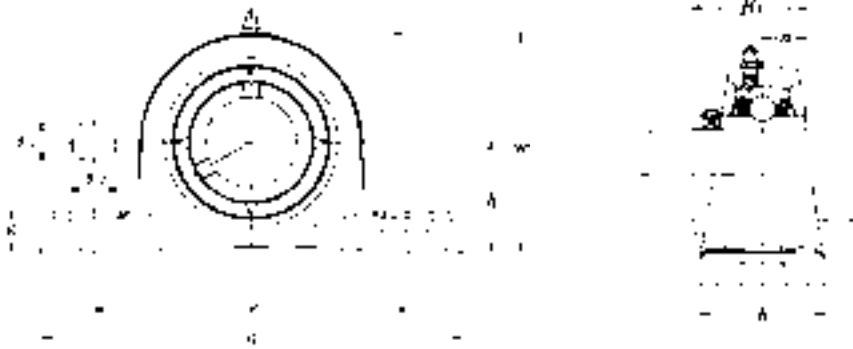
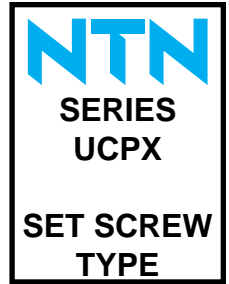


PILLOW BLOCKS - CAST HOUSING

| Shaft Dia. | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|--|--------------------|---------------|-----------------|--------------|----------------|----------------|--------------|-----------------|---------------|---------------|------------|--|--|--------------------------|-----------------------|
| | | h | a | e | b | s ₁ | s ₂ | g | w | Bi | n | | | | Dynamic C | Static C ₀ |
| 25 1 3/16 7/8 15/16 1 | UCPX05D1 UCPX05-013D1 UCPX05-014D1 UCPX05-015D1 UCPX05-100D1 | 44.4 1 3/4 | 159 6 1/4 | 119 4 11/16 | 51 2 | 17 2 1/32 | 20 25/32 | 18 23/32 | 85 3 11/32 | 38.1 1.500 | 15.9 0.626 | M14 1/2 | PX05D1 PX05D1 PX05D1 PX05D1 PX05D1 | UCX05D1 UCX05-013D1 UCX05-014D1 UCX05-015D1 UCX05-100D1 | 4,390 | 2,540 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | UCPX06D1 UCPX06-101D1 UCPX06-102D1 UCPX06-103D1 UCPX06-104D1 | 47.6 1 7/8 | 175 6 7/8 | 127 5 | 57 2 1/4 | 17 2 1/32 | 20 25/32 | 20 25/32 | 93 3 2 1/32 | 42.9 1.689 | 17.5 0.689 | M14 1/2 | PX06D1 PX06D1 PX06D1 PX06D1 PX06D1 | UCX06D1 UCX06-101D1 UCX06-102D1 UCX06-103D1 UC207-104D1 | 5,780 | 3,440 |
| 35 1 9/16 1 3/8 1 7/16 | UCPX07D1 UCPX07-105D1 UCPX07-106D1 UCPX07-107D1 | 54 2 1/8 | 203 8 | 144 5 2 1/32 | 57 2 1/4 | 17 2 1/32 | 20 25/32 | 21 1 1/16 | 105 4 1/8 | 49.2 1.937 | 19 0.748 | M14 1/2 | PX07D1 PX07D1 PX07D1 PX07D1 | UCX07D1 UCX07-105D1 UCX07-106D1 UCX07-107D1 | 6,550 | 4,000 |
| 40 1 1/2 1 9/16 | UCPX08D1 UCPX08-108D1 UCPX08-109D1 | 58.7 2 9/16 | 222 8 3/4 | 156 6 5/32 | 67 2 5/8 | 20 25/32 | 23 29/32 | 26 1 1/32 | 111 4 3/8 | 49.2 1.937 | 19 0.748 | M16 5/8 | PX08D1 PX08D1 PX08D1 | UCX08D1 UCX08-108D1 UCX08-109D1 | 7,310 | 4,590 |
| 45 1 5/8 1 1 1/16 1 3/4 1 13/16 | UCPX09D1 UCPX09-110D1 UCPX09-111D1 UCPX09-112D1 UCPX09-113D1 | 58.7 2 5/16 | 222 8 3/4 | 156 6 5/32 | 67 2 5/8 | 20 25/32 | 23 29/32 | 26 1 1/32 | 116 4 9/16 | 51.6 2.031 | 19 0.748 | M16 5/8 | PX09D1 PX09D1 PX09D1 PX09D1 PX09D1 | UCX09D1 UCX09-110D1 UCX09-111D1 UCX09-112D1 UC210-113D1 | 7,870 | 5,220 |
| 50 1 7/8 1 15/16 2 | UCPX10D1 UCPX10-114D1 UCPX10-115D1 UCPX10-200D1 | 63.5 2 1/2 | 241 9 1/2 | 171 6 29/32 | 73 2 7/8 | 20 25/32 | 23 29/32 | 27 1 1/16 | 126 4 3 1/32 | 55.6 2.189 | 22.2 0.874 | M16 5/8 | PX10D1 PX10D1 PX10D1 PX10D1 | UCX10D1 UCX10-114D1 UCX10-115D1 UC211-200D1 | 9,780 | 6,570 |
| 55 2 1/16 2 1/8 2 3/16 2 1/4 2 5/16 | UCPX11D1 UCPX11-201D1 UCPX11-202D1 UCPX11-203D1 UCPX11-204D1 UCPX11-205D1 | 69.8 2 3/4 | 260 10 1/4 | 184 7 1/4 | 79 3 1/8 | 25 3 1/32 | 28 1 3/32 | 30 1 3/16 | 137 5 1 3/32 | 65.1 2.563 | 25.4 1.000 | M20 3/4 | PX11D1 PX11D1 PX11D1 PX11D1 PX11D1 PX11D1 | UCX11D1 UCX11-201D1 UCX11-202D1 UCX11-203D1 UC212-204D1 UC212-205D1 | 11,810 | 8,100 |
| 60 2 3/8 2 7/16 | UCPX12D1 UCPX12-206D1 UCPX12-207D1 | 76.2 3 | 286 11 1/4 | 203 8 | 83 3 9/32 | 25 3 1/32 | 28 1 3/32 | 33 1 5/16 | 151 5 15/16 | 65.1 2.563 | 25.4 1.000 | M20 3/4 | PX12D1 PX12D1 PX12D1 | UCX12D1 UCX12-206D1 UCX12-207D1 | 12,930 | 9,000 |
| 65 2 1/2 2 9/16 | UCPX13D1 UCPX13-208D1 UCPX13-209D1 | 76.2 3 | 286 11 1/4 | 203 8 | 83 3 9/32 | 25 3 1/32 | 28 1 3/32 | 33 1 5/16 | 154 6 1/16 | 74.6 2.937 | 30.2 1.189 | M20 3/4 | PX13D1 PX13D1 PX13D1 | UCX13D1 UCX13-208D1 UCX13-209D1 | 13,940 | 9,900 |
| 70 2 5/8 2 1 1/16 2 3/4 | UCPX14D1 UCPX14-210D1 UCPX14-211D1 UCPX14-212D1 | 88.9 3 1/2 | 330 13 | 229 9 1/32 | 89 3 1/2 | 27 1 1/16 | 30 1 1/16 | 35 1 3/8 | 170 6 1 1/16 | 77.8 3.063 | 33.3 1.311 | M22 7/8 | PX14D1 PX14D1 PX14D1 PX14D1 | UCX14D1 UCX14-210D1 UCX14-211D1 UCX14-212D1 | 14,840 | 11,130 |
| 75 2 13/16 2 7/8 2 15/16 3 | UCPX15D1 UCPX15-213D1 UCPX15-214D1 UCPX15-215D1 UCPX15-300D1 | 88.9 3 1/2 | 330 13 | 229 9 1/32 | 89 3 1/2 | 27 1 1/16 | 30 1 1/16 | 35 1 3/8 | 175 6 7/8 | 82.6 3.252 | 33.3 1.311 | M22 7/8 | PX15D1 PX15D1 PX15D1 PX15D1 PX15D1 | UCX15D1 UCX15-213D1 UCX15-214D1 UCX15-215D1 UCX15-300D1 | 16,310 | 11,920 |

Continued next page ...

Units: Millimeters
INCHES



| PILLOW BLOCKS - CAST HOUSING | | | | | | | | | | | | | | | | |
|--------------------------------|--|--------------------|-----------|----------------|---------------|----------------|----------------|---------------|----------------|----------------|---------------|------------|--------------------------------------|--|--------------------------|-----------------------|
| Shaft Dia. | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
| | | h | a | e | b | s ₁ | s ₂ | g | w | Bi | n | | | | Dynamic C | Static C ₀ |
| 80 3 1/8 3 3/16 3 1/4 | UCPX16D1 UCPX16-302D1 UCPX16-303D1 UCPX16-304D1 | 101.6 4 | 381 15 | 283 11 5/32 | 102 4 1/32 | 27 1 1/16 | 30 1 3/16 | 40 1 9/16 | 194 7 5/8 | 85.7 3.374 | 34.1 1.343 | M22 7/8 | PX16D1 PX16D1 PX16D1 PX16D1 | UCX16D1 UCX16-302D1 UCX16-303D1 UC217-304D1 | 18,780 | 14,390 |
| 85 3 5/16 3 7/16 | UCPX17D1 UCPX17-305D1 UCPX17-307D1 | 101.6 4 | 381 15 | 283 11 5/32 | 102 4 1/32 | 27 1 1/16 | 30 1 3/16 | 40 1 9/16 | 200 7 7/8 | 96 3.780 | 39.7 1.563 | M22 7/8 | PX17D1 PX17D1 PX17D1 | UCX17D1 UCX17-305D1 UCX17-307D1 | 21,590 | 16,080 |
| 90 3 1/2 | UCPX18D1 UCPX18-308D1 | 101.6 4 | 381 15 | 283 11 5/32 | 111 4 3/8 | 27 1 1/16 | 30 1 3/16 | 40 1 9/16 | 206 8 1/8 | 104 4.094 | 42.9 1.689 | M22 7/8 | PX18D1 PX18D1 | UCX18D1 UCX18-308D1 | 24,520 | 18,440 |
| 100 3 7/8 3 15/16 4 | UCPX20D1 UCPX20-314D1 UCPX20-315D1 UCPX20-400D1 | 127 5 | 432 17 | 337 13 9/32 | 121 4 3/4 | 33 1 5/16 | 36 1 13/32 | 45 1 25/32 | 244 9 19/32 | 117.5 4.626 | 49.2 1.937 | M27 1 | PX20D1 PX20D1 PX20D1 PX20D1 | UCX20D1 UCX20-314D1 UCX20-315D1 UCX20-400D1 | 29,910 | 23,620 |



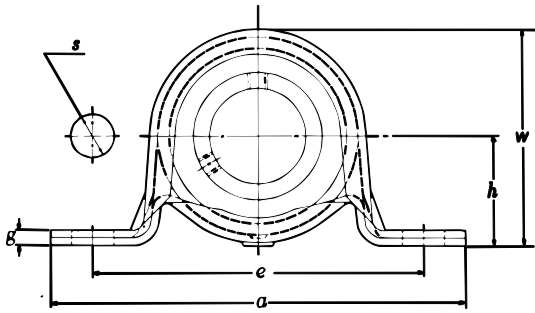
Units: Millimeters
INCHES



| PILLOW BLOCKS - CAST HOUSING (LOW CENTER HEIGHT) | | | | | | | | | | | | | | | | |
|--|---|--------------------|---------------|--------------|-------------|----------------|----------------|-------------|---------------|-------------|-------------|-----------|----------------------------------|---|--------------------------|-----------------------|
| Shaft Dia. | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
| | | h | a | e | b | s ₁ | s ₂ | g | w | Bi | n | | | | Dynamic C | Static C ₀ |
| 12 ½ | ASPL201 ASPL201-008 | 26.99 1 ¼ | 121 4 ¾ | 89 3 ½ | 35 1 ⅜ | 11 7/16 | 14 9/16 | 13 ½ | 54 2 ⅛ | 22 .866 | 6 .236 | M10 ⅜ | PL201 PL201 | AS201 AS201-008 | 2,160 | 1,040 |
| 15 9/16 5/8 | ASPL202 ASPL202-009 ASPL202-010 | 26.99 1 ¼ | 121 4 ¾ | 89 3 ½ | 35 1 ⅜ | 11 7/16 | 14 9/16 | 13 ½ | 54 2 ⅛ | 22 .866 | 6 .236 | M10 ⅜ | PL201 PL201 PL201 | AS202 AS202-009 AS202-010 | 2,160 | 1,040 |
| 17 1 1/16 | ASPL203 ASPL203-011 | 26.99 1 ¼ | 121 4 ¾ | 89 3 ½ | 35 1 ⅜ | 11 7/16 | 14 9/16 | 13 ½ | 54 2 ⅛ | 22 .866 | 6 .236 | M10 ⅜ | PL201 PL201 | AS203 AS203-011 | 2,160 | 1,040 |
| 20 ¾ | ASPL204 ASPL204-012 | 31.75 1 ¼ | 127 5 | 95 3 ¾ | 38 1 ½ | 13 ½ | 16 5/8 | 14 9/16 | 64 2 17/32 | 25 .984 | 7 .276 | M10 ⅜ | PL204 PL204 | AS204 AS204-012 | 2,890 | 1,500 |
| 25 1 3/16 7/8 15/16 1 | ASPL205 ASPL205-013 ASPL205-014 ASPL205-015 ASPL205-100 | 33.34 1 5/16 | 140 5 ½ | 105 4 1/8 | 38 1 ½ | 13 ½ | 16 5/8 | 15 19/32 | 68 2 11/16 | 27 1.063 | 7.5 .295 | M10 ⅜ | PL205 PL205 PL205 PL205 | AS205 AS205-013 AS205-014 AS205-015 AS205-100 | 3,150 | 1,770 |
| 30 1 1/16 1 1/8 1 3/16 1 ¼ | ASPL206 ASPL206-101 ASPL206-102 ASPL206-103 ASPL206-104 | 39.69 1 9/16 | 165 6 ½ | 121 4 ¾ | 48 1 7/8 | 17 21/32 | 20 25/32 | 17 21/32 | 80 3 5/32 | 29 1.142 | 8 .315 | M14 ½ | PL206 PL206 PL206 PL206 | AS206 AS206-101 AS206-102 AS206-103 AS206-104 | 4,400 | 2,540 |
| 35 1 ¼ 1 5/16 1 ⅜ 1 7/16 | ASPL207 ASPL207-104 ASPL207-105 ASPL207-106 ASPL207-107 | 46.04 1 13/16 | 167 6 9/16 | 127 5 | 48 1 7/8 | 17 21/32 | 20 25/32 | 18 23/32 | 91 3 19/32 | 34 1.339 | 8.5 .335 | M14 ½ | PL207 PL207 PL207 PL207 | AS207 AS207-104 AS207-105 AS207-106 AS207-107 | 5,750 | 3,440 |

Note: ASPL201 - ASPL205 have a solid base

Units: Millimeters
INCHES



PILLOW BLOCKS - PRESSED STEEL HOUSING

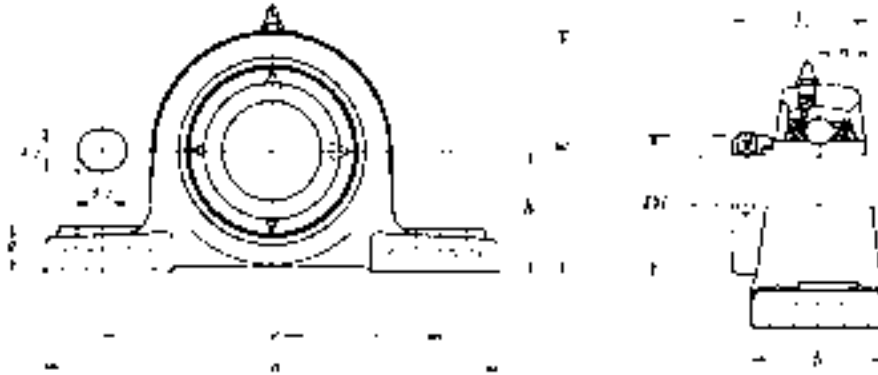
| Shaft Dia. | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | | Max. Radial Load (lbs) |
|--|---|--------------------|----------------|---------------|---------------|------------|-------------|-----------------|-------------|-------------|------------|---|---|--------------------------|-----------------------|------------------------|
| | | h | a | e | b | s | g | w | Bi | n | | | | Dynamic C | Static C ₀ | |
| 12 1/2 | ASPP201 ASPP201-008 | 22.2 7/8 | 86 3 3/8 | 68 2 11/16 | 25 3 1/32 | 9.5 3/8 | 3.2 .126 | 43.8 1 23/32 | 22 .866 | 6 .236 | M8 5/16 | PP203 PP203 | AS201 AS201-008 | 2,160 | 1,040 | 440 |
| 15 9/16 5/8 | ASPP202 ASPP202-009 ASPP202-010 | 22.2 7/8 | 86 3 3/8 | 68 2 11/16 | 25 3 1/32 | 9.5 3/8 | 3.2 .126 | 43.8 1 23/32 | 22 .866 | 6 .236 | M8 5/16 | PP203 PP203 PP203 | AS202 AS202-009 AS202-010 | 2,160 | 1,040 | 440 |
| 17 11/16 | ASPP203 ASPP203-011 | 22.2 7/8 | 86 3 3/8 | 68 2 11/16 | 25 3 1/32 | 9.5 3/8 | 3.2 .126 | 43.8 1 23/32 | 22 .866 | 6 .236 | M8 5/16 | PP203 PP203 | AS203 AS203-011 | 2,160 | 1,040 | 440 |
| 20 3/4 | ASPP204 ASPP204-012 | 25.4 1 | 98 3 27/32 | 76 3 | 32 1 1/4 | 9.5 3/8 | 3.2 .126 | 50.5 2 | 25 .984 | 7 .276 | M8 5/16 | PP204 PP204 | AS204 AS204-012 | 2,890 | 1,500 | 550 |
| 25 13/16 7/8 15/16 1 | ASPP205 ASPP205-013 ASPP205-014 ASPP205-015 ASPP205-100 | 28.6 1 1/8 | 108 4 1/4 | 86 3 3/8 | 32 1 1/4 | 11 7/16 | 4 .157 | 56.6 2 7/32 | 27 1.063 | 7.5 .295 | M10 3/8 | PP205 PP205 PP205 PP205 PP205 | AS205 AS205-013 AS205-014 AS205-015 AS205-100 | 3,150 | 1,770 | 770 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | ASPP206 ASPP206-101 ASPP206-102 ASPP206-103 ASPP206-104 | 33.3 1 5/16 | 117 4 19/32 | 95 3 3/4 | 38 1 1/2 | 11 7/16 | 4 .157 | 66.3 2 5/8 | 29 1.142 | 8 .315 | M10 3/8 | PP206 PP206 PP206 PP206 PP206 | AS206 AS206-101 AS206-102 AS206-103 AS206-104 | 4,400 | 2,540 | 880 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | ASPP207 ASPP207-104 ASPP207-105 ASPP207-106 ASPP207-107 | 39.7 1 9/16 | 129 5 3/32 | 106 4 3/16 | 42 1 21/32 | 11 7/16 | 4.6 .181 | 78 3 1/16 | 34 1.339 | 8.5 .335 | M10 3/8 | PP207 PP207 PP207 PP207 PP207 | AS207 AS207-104 AS207-105 AS207-106 AS207-107 | 5,750 | 3,440 | 990 |

Axial load should be less than 1/3 of radial load.

NTN

**SERIES
UELP2
ECCENTRIC
LOCKING
COLLAR
TYPE**

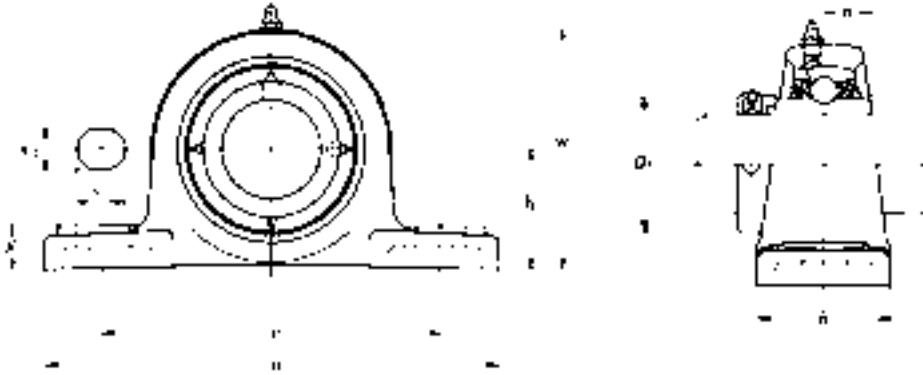
Units: Millimeters
INCHES



PILLOW BLOCKS - CAST HOUSING

| Shaft Dia. | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|--|--------------------|-----------------|----------------|---------------|-----------------------|-----------------------|--------------|----------------|--------------|---------------|----------------|------------|--|--|--------------------------|------------------------------|
| | | <i>h</i> | <i>a</i> | <i>e</i> | <i>b</i> | <i>s</i> ₁ | <i>s</i> ₂ | <i>g</i> | <i>w</i> | <i>Di</i> | <i>L</i> | <i>n</i> | | | | Dynamic <i>C</i> | Static <i>C</i> ₀ |
| 20 3/4 | UEL204D1 UEL204-012D1 | 33.3 1 5/16 | 127 5 | 95 3 3/4 | 38 1 1/2 | 13 1/2 | 16 5/8 | 14 9/16 | 65 2 9/16 | 33.3 1.31 | 43.7 1.720 | 17.1 .673 | M10 3/8 | P204D1 P204D1 | UEL204D1 UEL204-012D1 | 2,890 | 1,500 |
| 25 1 3/16 7/8 1 1/16 1 | UEL205D1 UEL205-013D1 UEL205-014D1 UEL205-015D1 UEL205-100D1 | 36.5 1 7/16 | 140 5 1/2 | 105 4 1/8 | 38 1 1/2 | 13 1/2 | 16 5/8 | 15 1 1/8 | 71 2 25/32 | 38.1 1.50 | 44.4 1.748 | 17.5 .689 | M10 3/8 | P205D1 P205D1 P205D1 P205D1 P205D1 | UEL205D1 UEL205-013D1 UEL205-014D1 UEL205-015D1 UEL205-100D1 | 3,150 | 1,770 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | UEL206D1 UEL206-101D1 UEL206-102D1 UEL206-103D1 UEL206-104D1 | 42.9 1 11/16 | 165 6 1/2 | 121 4 3/4 | 48 1 7/8 | 17 2 1/32 | 20 25/32 | 17 2 1/32 | 83 3 3/32 | 44.5 1.75 | 48.4 1.906 | 18.3 .720 | M14 1/2 | P206D1 P206D1 P206D1 P206D1 P206D1 | UEL206D1 UEL206-101D1 UEL206-102D1 UEL206-103D1 UEL206-104D1 | 4,400 | 2,540 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UEL207D1 UEL207-104D1 UEL207-105D1 UEL207-106D1 UEL207-107D1 | 47.6 1 7/8 | 167 6 9/16 | 127 5 | 48 1 7/8 | 17 2 1/32 | 20 25/32 | 18 23/32 | 93 3 21/32 | 55.6 2.19 | 51.1 2.012 | 18.8 .740 | M14 1/2 | P207D1 P207D1 P207D1 P207D1 P207D1 | UEL207D1 UEL207-104D1 UEL207-105D1 UEL207-106D1 UEL207-107D1 | 5,750 | 3,440 |
| 40 1 1/2 1 9/16 | UEL208D1 UEL208-108D1 UEL208-109D1 | 49.2 1 15/16 | 184 7 1/4 | 137 5 13/32 | 54 2 1/8 | 17 2 1/32 | 20 25/32 | 18 23/32 | 98 3 27/32 | 60.2 2.37 | 56.3 2.217 | 21.4 .843 | M14 1/2 | P208D1 P208D1 P208D1 | UEL208D1 UEL208-108D1 UEL208-109D1 | 6,550 | 4,000 |
| 45 1 5/8 1 11/16 1 3/4 | UEL209D1 UEL209-110D1 UEL209-111D1 UEL209-112D1 | 54 2 1/8 | 190 7 15/32 | 146 5 3/4 | 54 2 1/8 | 17 2 1/32 | 20 25/32 | 20 25/32 | 106 4 3/16 | 63.5 2.50 | 56.3 2.217 | 21.4 .843 | M14 1/2 | P209D1 P209D1 P209D1 P209D1 | UEL209D1 UEL209-110D1 UEL209-111D1 UEL209-112D1 | 7,350 | 4,590 |
| 50 1 13/16 1 7/8 1 15/16 2 | UEL210D1 UEL210-113D1 UEL210-114D1 UEL210-115D1 UEL210-200D1 | 57.2 2 1/4 | 206 8 1/8 | 159 6 1/4 | 60 2 3/8 | 20 25/32 | 23 29/32 | 21 13/16 | 114 4 1/2 | 69.9 2.75 | 62.7 2.469 | 24.6 .969 | M16 5/8 | P210D1 P210D1 P210D1 P210D1 P210D1 | UEL210D1 UEL210-113D1 UEL210-114D1 UEL210-115D1 UEL210-200D1 | 7,900 | 5,220 |
| 55 2 2 1/16 2 1/8 2 3/16 | UEL211D1 UEL211-200D1 UEL211-201D1 UEL211-202D1 UEL211-203D1 | 63.5 2 1/2 | 219 8 5/8 | 171 6 23/32 | 60 2 3/8 | 20 25/32 | 23 29/32 | 23 29/32 | 126 4 31/32 | 76.2 3.00 | 71.4 2.811 | 27.8 1.094 | M16 3/8 | P211D1 P211D1 P211D1 P211D1 P211D1 | UEL211D1 UEL211-200D1 UEL211-201D1 UEL211-202D1 UEL211-203D1 | 9,750 | 6,570 |
| 60 2 1/4 2 3/8 2 7/16 | UEL212D1 UEL212-204D1 UEL212-206D1 UEL212-207D1 | 69.8 2 3/4 | 241 9 1/2 | 184 7 1/4 | 70 2 3/4 | 20 25/32 | 23 29/32 | 25 31/32 | 138 5 7/16 | 84.1 3.31 | 77.8 3.063 | 31 1.220 | M16 5/8 | P212D1 P212D1 P212D1 P212D1 | UEL212D1 UEL212-204D1 UEL212-206D1 UEL212-207D1 | 11,800 | 8,100 |
| 65 2 1/2 | UEL213D1 UEL213-208D1 | 76.2 3 | 265 10 7/16 | 203 8 | 70 2 3/4 | 25 31/32 | 28 1 3/32 | 27 1 1/16 | 151 5 15/16 | 97.0 3.82 | 85.7 3.374 | 34.15 1.344 | M20 3/4 | P213D1 P213D1 | UEL213D1 UEL213-208D1 | 12,900 | 9,000 |
| 70 2 11/16 2 3/4 | UEL214D1 UEL214-211D1 UEL214-212D1 | 79.4 3 3/8 | 266 10 15/32 | 210 8 9/32 | 72 2 27/32 | 25 31/32 | 28 1 3/32 | 27 1 1/16 | 157 6 3/16 | 97.0 3.82 | 85.7 3.374 | 34.15 1.344 | M20 3/4 | P214D1 P214D1 P214D1 | UEL214D1 UEL214-211D1 UEL214-212D1 | 14,000 | 9,900 |
| 75 2 15/16 3 | UEL215D1 UEL215-215D1 UEL215-300D1 | 82.6 3 1/4 | 275 10 13/16 | 217 8 17/32 | 74 2 29/32 | 25 31/32 | 28 1 3/32 | 28 1 3/32 | 163 6 13/32 | 97.0 3.82 | 92 3.622 | 37.3 1.469 | M20 3/4 | P215D1 P215D1 P215D1 | UEL215D1 UEL215-215D1 UEL215-300D1 | 14,900 | 11,130 |

Units: Millimeters
INCHES

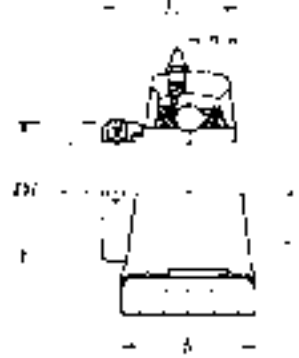
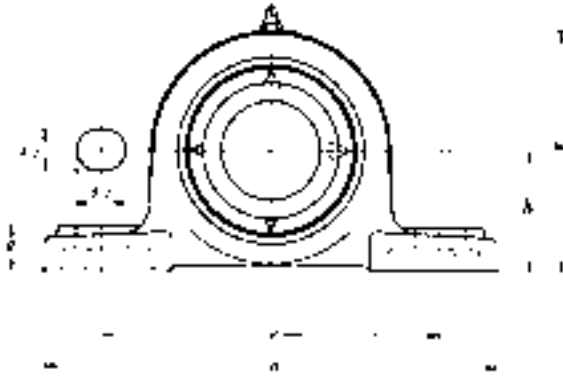


| PILLOW BLOCKS - CAST HOUSING (LOW CENTER HEIGHT) | | | | | | | | | | | | | | | | | |
|--|------------------------------|--------------------|---------|-------|-------|----------------|----------------|--------|----------|------|-------|------|-----------|----------------|----------------|--------------------------|-----------------------|
| Shaft Dia. | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
| | | h | a | e | b | s ₁ | s ₂ | g | w | Di | L | n | | | | Dynamic C | Static C ₀ |
| 20 3/4 | UELPL204D1 | 31.75 | 127 | 95 | 38 | 13 | 16 | 14 | 64 | 33.3 | 43.7 | 17.1 | M10 | PL204D1 | UEL204D1 | 2,890 | 1,500 |
| | UELPL204-012D1 | 1 1/4 | 5 | 3 3/4 | 1 1/2 | 1/2 | 5/8 | 9/16 | 2 17/32 | 1.31 | 1.920 | .673 | 3/8 | PL204D1 | UEL204-012D1 | | |
| 25 1 3/16 7/8 15/16 1 | UELPL205D1 | 33.34 | 140 | 105 | 38 | 13 | 16 | 15 | 68 | 38.1 | 44.4 | 17.5 | M10 | PL205D1 | UEL205D1 | 3,150 | 1,770 |
| | UELPL205-013D1 | 1 5/16 | 5 1/2 | 4 1/8 | 1 1/2 | 1/2 | 5/8 | 19/32 | 2 1 1/16 | 1.50 | 1.748 | .689 | 3/8 | PL205D1 | UEL205-013D1 | | |
| | UELPL205-014D1 | | | | | | | | | | | | | PL205D1 | UEL205-014D1 | | |
| | UELPL205-015D1 | | | | | | | | | | | | | PL205D1 | UEL205-015D1 | | |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | UELPL206D1 | 39.69 | 165 | 121 | 48 | 17 | 20 | 17 | 80 | 44.5 | 48.4 | 18.3 | M14 | PL206D1 | UEL206D1 | 4,400 | 2,540 |
| | UELPL206-101D1 | 1 9/16 | 6 1/2 | 4 3/4 | 1 7/8 | 2 1/32 | 25/32 | 2 1/32 | 3 5/32 | 1.75 | 1.906 | .720 | 1/2 | PL206D1 | UEL206-101D1 | | |
| | UELPL206-102D1 | | | | | | | | | | | | | PL206D1 | UEL206-102D1 | | |
| | UELPL206-103D1 | | | | | | | | | | | | | PL206D1 | UEL206-103D1 | | |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UELPL207D1 | 46.04 | 167 | 127 | 48 | 17 | 20 | 18 | 91 | 55.6 | 51.1 | 18.8 | M14 | PL207D1 | UEL207D1 | 5,750 | 3,440 |
| | UELPL207-104D1 | 1 13/16 | 6 9/16 | 5 | 1 7/8 | 2 1/32 | 25/32 | 23/32 | 3 19/32 | 2.19 | 2.012 | .740 | 1/2 | PL207D1 | UEL207-104D1 | | |
| | UELPL207-105D1 | | | | | | | | | | | | | PL207D1 | UEL207-105D1 | | |
| | UELPL207-106D1 | | | | | | | | | | | | | PL207D1 | UEL207-106D1 | | |
| 45 1 5/8 1 11/16 1 3/4 | UELPL209D1 | 52.39 | 190 | 146 | 54 | 17 | 20 | 20 | 104 | 63.5 | 56.3 | 21.4 | M14 | PL209D1 | UEL209D1 | 7,350 | 4,590 |
| | UELPL209-110D1 | 2 1/16 | 7 15/32 | 5 3/4 | 2 1/8 | 2 1/32 | 25/32 | 29/32 | 4 3/32 | 2.50 | 2.217 | .843 | 1/2 | PL209D1 | UEL209-110D1 | | |
| | UELPL209-111D1 | | | | | | | | | | | | | PL209D1 | UEL209-111D1 | | |
| | UELPL209-112D1 | | | | | | | | | | | | | PL209D1 | UEL209-112D1 | | |
| 50 1 13/16 1 7/8 1 15/16 2 | UELPL210D1 | 55.56 | 206 | 159 | 60 | 20 | 23 | 21 | 112 | 69.9 | 62.7 | 24.6 | M16 | PL210D1 | UEL210D1 | 7,900 | 5,220 |
| | UELPL210-113D1 | 2 3/16 | 8 1/8 | 6 1/4 | 2 3/8 | 25/32 | 29/32 | 13/16 | 4 13/32 | 2.75 | 2.469 | .969 | 3/8 | PL210D1 | UEL210-113D1 | | |
| | UELPL210-114D1 | | | | | | | | | | | | | PL210D1 | UEL210-114D1 | | |
| | UELPL210-115D1 | | | | | | | | | | | | | PL210D1 | UEL210-115D1 | | |
| | UELPL210-200D1 | | | | | | | | | | | | | PL210D1 | UEL210-200D1 | | |

Note: These numbers indicate relubricatable type. If maintenance free type is needed, please order without suffix D1
 UELPL204 and UELPL205 have solid bases.
 UELPL208 has the same dimensions as UELP208 shown on page 164

NTN
SERIES
UERP3
ECCENTRIC
LOCKING
COLLAR
TYPE

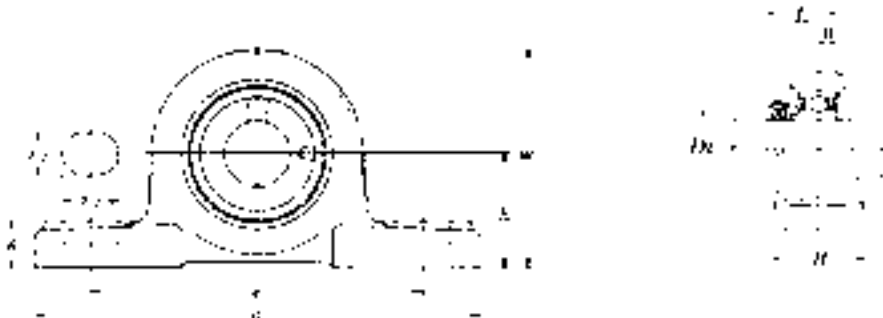
Units: Millimeters
 INCHES



PILLOW BLOCKS - CAST HOUSING

| Shaft Dia. | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|---|--------------------|-----------------|-----------------|----------------|----------------|----------------|---------------|-----------------|--------------|----------------|----------------|--------------|--|--|--------------------------|-----------------------|
| | | h | a | e | b | s ₁ | s ₂ | g | w | Di | L | n | | | | Dynamic C | Static C ₀ |
| 25 7/8 15/16 1 | UELP305D1 UELP305-014D1 UELP305-015D1 UELP305-100D1 | 45 1 49/64 | 175 6 7/8 | 132 5 3/16 | 45 1 25/32 | 17 21/32 | 20 25/32 | 15 19/32 | 85 3 11/32 | 42.8 1.69 | 46.8 1.843 | 16.7 .657 | M14 1/2 | P305D1 P305D1 P305D1 P305D1 | UEL305D1 UEL305-014D1 UEL305-015D1 UEL305-100D1 | 4,750 | 2,460 |
| 30 1 1/8 1 3/16 | UELP306D1 UELP306-102D1 UELP306-103D1 | 50 1 31/32 | 180 7 3/32 | 140 5 1/2 | 50 1 31/32 | 17 21/32 | 20 25/32 | 18 23/32 | 95 3 3/4 | 50 1.97 | 50 1.969 | 17.5 .689 | M14 1/2 | P306D1 P306D1 P306D1 | UEL306D1 UEL306-102D1 UEL306-103D1 | 6,000 | 3,400 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UELP307D1 UELP307-104D1 UELP307-105D1 UELP307-106D1 UELP307-107D1 | 56 2 13/64 | 210 8 9/32 | 160 6 5/16 | 56 2 7/32 | 17 21/32 | 25 31/32 | 20 29/32 | 106 4 3/16 | 55 2.17 | 51.6 2.031 | 18.3 .720 | M14 1/2 | P307D1 P307D1 P307D1 P307D1 P307D1 | UEL307D1 UEL307-104D1 UEL307-105D1 UEL307-106D1 UEL307-107D1 | 7,500 | 4,300 |
| 40 1 1/2 | UELP308D1 UELP308-108D1 | 60 2 23/64 | 220 8 21/32 | 170 6 11/16 | 60 2 3/8 | 17 21/32 | 27 1 1/16 | 22 7/8 | 116 4 9/16 | 63.5 2.50 | 57.1 2.248 | 19.8 .780 | M14 1/2 | P308D1 P308D1 | UEL308D1 UEL308-108D1 | 9,150 | 5,400 |
| 45 1 5/8 1 11/16 1 3/4 | UELP309D1 UELP309-110D1 UELP309-111D1 UELP309-112D1 | 67 2 41/64 | 245 9 21/32 | 190 7 15/32 | 67 2 5/8 | 20 25/32 | 30 1 3/16 | 24 15/16 | 129 5 3/32 | 70 2.76 | 58.7 2.311 | 19.8 .780 | M16 5/8 | P309D1 P309D1 P309D1 P309D1 | UEL309D1 UEL309-110D1 UEL309-111D1 UEL309-112D1 | 11,900 | 7,200 |
| 50 1 7/8 1 15/16 | UELP310D1 UELP310-114D1 UELP310-115D1 | 75 2 61/64 | 275 10 13/16 | 212 8 11/32 | 75 2 15/16 | 20 25/32 | 35 1 3/8 | 27 1 1/16 | 143 5 5/8 | 76.2 3.00 | 66.6 2.622 | 24.6 .969 | M16 5/8 | P310D1 P310D1 P310D1 | UEL310D1 UEL310-114D1 UEL310-115D1 | 13,900 | 8,600 |
| 55 2 2 1/8 2 3/16 | UELP311D1 UELP311-200D1 UELP311-202D1 UELP311-203D1 | 80 3 5/32 | 310 12 7/32 | 236 9 9/32 | 80 3 3/32 | 20 25/32 | 38 1 1/2 | 30 1 3/16 | 154 6 1/16 | 83 3.27 | 73 2.874 | 27.8 1.094 | M16 5/8 | P311D1 P311D1 P311D1 P311D1 | UEL311D1 UEL311-200D1 UEL311-202D1 UEL311-203D1 | 16,100 | 10,100 |
| 60 2 1/4 2 3/8 2 7/16 | UELP312D1 UELP312-204D1 UELP312-206D1 UELP312-207D1 | 85 3 11/32 | 330 13 | 250 9 27/32 | 85 3 11/32 | 25 31/32 | 38 1 1/2 | 32 1 1/4 | 165 6 1/2 | 89 3.50 | 79.4 3.126 | 30.95 1.219 | M20 3/4 | P312D1 P312D1 P312D1 P312D1 | UEL312D1 UEL312-204D1 UEL312-206D1 UEL312-207D1 | 18,400 | 11,700 |
| 65 2 1/2 | UELP313D1 UELP313-208D1 | 90 3 35/64 | 340 13 3/8 | 260 10 1/4 | 90 3 17/32 | 25 31/32 | 38 1 1/2 | 33 1 9/16 | 176 6 15/16 | 97 3.82 | 85.7 3.374 | 32.55 1.281 | M20 3/4 | P313D1 P313D1 | UEL313D1 UEL313-208D1 | 20,800 | 13,400 |
| 70 2 11/16 2 3/4 | UELP314D1 UELP314-211D1 UELP314-212D1 | 95 3 47/64 | 360 14 3/16 | 280 11 1/32 | 90 3 17/32 | 27 1 1/16 | 40 1 9/16 | 35 1 3/8 | 187 7 3/8 | 102 4.00 | 92.1 3.626 | 34.15 1.344 | M22 7/8 | P314D1 P314D1 P314D1 | UEL314D1 UEL314-211D1 UEL314-212D1 | 23,400 | 15,300 |
| 75 2 15/16 3 | UELP315D1 UELP315-215D1 UELP315-300D1 | 100 3 15/16 | 380 14 31/32 | 290 11 13/32 | 100 3 15/16 | 27 1 1/16 | 40 1 9/16 | 35 1 3/8 | 198 7 25/32 | 113 4.45 | 100 3.937 | 37.3 1.469 | M22 7/8 | P315D1 P315D1 P315D1 | UEL315D1 UEL315-215D1 UEL315-300D1 | 25,500 | 17,400 |
| 80 3 1/8 3 3/16 | UELP316D1 UELP316-302D1 UELP316-303D1 | 106 4 11/64 | 400 15 3/4 | 300 11 13/16 | 110 4 11/32 | 27 1 1/16 | 40 1 9/16 | 40 1 9/16 | 210 8 9/32 | 119 4.69 | 106.4 4.189 | 40.5 1.594 | M22 7/8 | P316D1 P316D1 P316D1 | UEL316D1 UEL316-302D1 UEL316-303D1 | 27,600 | 19,500 |
| 85 3 1/4 | UELP317D1 UELP317-304D1 | 112 4 13/32 | 420 16 17/32 | 320 12 19/32 | 110 4 11/32 | 33 1 5/16 | 45 1 25/32 | 40 1 9/16 | 220 8 21/32 | 127 5.00 | 109.5 4.311 | 42.05 1.656 | M27 1 | P317D1 P317D1 | UEL317D1 UEL317-304D1 | 29,800 | 21,800 |
| 90 3 7/16 3 1/2 | UELP318D1 UELP318-307D1 UELP318-308D1 | 118 4 41/64 | 430 16 15/16 | 330 13 | 110 4 11/32 | 33 1 5/16 | 45 1 25/32 | 45 1 25/32 | 235 9 1/4 | 133 5.24 | 115.9 4.563 | 43.65 1.719 | M27 1 | P318D1 P318D1 P318D1 | UEL318D1 UEL318-307D1 UEL318-308D1 | 32,000 | 24,100 |
| 95 3 3/4 | UELP319D1 UELP319-312D1 | 125 4 59/64 | 470 18 1/2 | 360 14 3/16 | 120 4 23/32 | 36 1 13/32 | 50 1 31/32 | 45 1 25/32 | 250 9 27/32 | 140 5.50 | 122.3 4.815 | 38.9 1.531 | M30 1 1/8 | P319D1 P319D1 | UEL319D1 UEL319-312D1 | 34,500 | 26,600 |
| 100 3 15/16 4 | UELP320D1 UELP320-315D1 UELP320-400D1 | 140 5 33/64 | 490 19 9/32 | 380 14 31/32 | 120 4 23/32 | 36 1 13/32 | 50 1 31/32 | 50 1 31/32 | 275 10 13/16 | 146 5.75 | 128.6 5.063 | 50 1.969 | M30 1 1/8 | P320D1 P320D1 P320D1 | UEL320D1 UEL320-315D1 UEL320-400D1 | 39,000 | 31,500 |
| 105 | UEL321D1 | 140 | 490 | 380 | 120 | 36 | 50 | 50 | 280 | 157 | 139.7 | 48.4 | M30 | P321D1 | UEL321D1 | 41,500 | 34,500 |
| 110 | UEL322D1 | 150 | 520 | 400 | 140 | 40 | 55 | 55 | 300 | 168 | 141.3 | 49.2 | M33 | P322D1 | UEL322D1 | 46,000 | 40,500 |

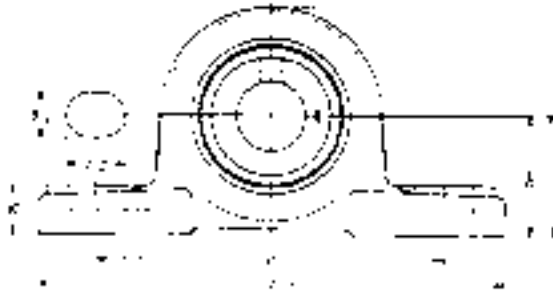
Units: Millimeters
INCHES



| PILLOW BLOCKS - CAST HOUSING (LOW CENTER HEIGHT) | | | | | | | | | | | | | | | | | |
|--|--|--------------------|---------------|--------------|-------------|-----------------------|-----------------------|-------------|---------------|--------------|---------------|-------------|------------|---|--|--------------------------|------------------------------|
| Shaft Dia. | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
| | | <i>h</i> | <i>a</i> | <i>e</i> | <i>b</i> | <i>s</i> ₁ | <i>s</i> ₂ | <i>g</i> | <i>w</i> | <i>Di</i> | <i>L</i> | <i>n</i> | | | | Dynamic <i>C</i> | Static <i>C</i> ₀ |
| 12 1/2 | JELPL201 JELPL201-008 | 26.99 1 1/16 | 121 4 3/4 | 89 3 1/2 | 35 1 3/8 | 11 7/16 | 14 9/16 | 13 1/2 | 54 2 1/8 | 29 1.14 | 28.6 1.126 | 6.5 .256 | M10 3/8 | PL201 PL201 | JEL201 JEL201-008 | 2,160 | 1,030 |
| 15 9/16 5/8 | JELPL202 JELPL202-009 JELPL202-010 | 26.99 1 1/16 | 121 4 3/4 | 89 3 1/2 | 35 1 3/8 | 11 7/16 | 14 9/16 | 13 1/2 | 54 2 1/8 | 29 1.14 | 28.6 1.126 | 6.5 .256 | M10 3/8 | PL201 PL201 PL201 | JEL202 JEL202-009 JEL202-010 | 2,160 | 1,030 |
| 17 11/16 | JELPL203 JELPL203-011 | 26.99 1 1/16 | 121 4 3/4 | 89 3 1/2 | 35 1 3/8 | 11 7/16 | 14 9/16 | 13 1/2 | 54 2 1/8 | 29 1.14 | 28.6 1.126 | 6.5 .256 | M10 3/8 | PL201 PL201 | JEL203 JEL203-011 | 2,160 | 1,030 |
| 20 3/4 | JELPL204 JELPL204-012 | 31.75 1 1/4 | 127 5 | 95 3 3/4 | 38 1 1/2 | 13 1/2 | 16 5/8 | 14 9/16 | 64 2 17/32 | 33.3 1.31 | 31 1.220 | 7.5 .295 | M10 3/8 | PL204 PL204 | JEL204 JEL204-012 | 2,890 | 1,500 |
| 25 13/16 7/8 15/16 1 | JELPL205 JELPL205-013 JELPL205-014 JELPL205-015 JELPL205-100 | 33.34 1 5/16 | 140 5 1/2 | 105 4 1/8 | 38 1 1/2 | 13 1/2 | 16 5/8 | 15 19/32 | 68 2 11/16 | 38.1 1.50 | 31 1.220 | 7.5 .295 | M10 3/8 | PL205 PL205 PL205 PL205 PL205 | JEL205 JEL205-013 JEL205-014 JEL205-015 JEL205-100 | 3,150 | 1,770 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | JELPL206 JELPL206-101 JELPL206-102 JELPL206-103 JELPL206-104 | 39.69 1 9/16 | 165 6 1/2 | 121 4 3/4 | 48 1 7/8 | 17 21/32 | 20 25/32 | 17 21/32 | 80 3 5/32 | 44.5 1.75 | 35.7 1.406 | 9 .354 | M14 1/2 | PL206 PL206 PL206 PL206 PL206 | JEL206 JEL206-101 JEL206-102 JEL206-103 JEL206-104 | 4,400 | 2,540 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | JELPL207 JELPL207-104 JELPL207-105 JELPL207-106 JELPL207-107 | 46.04 1 13/16 | 167 6 9/16 | 127 5 | 48 1 7/8 | 17 21/32 | 20 25/32 | 18 23/32 | 91 3 19/32 | 55.6 2.19 | 38.9 1.531 | 9.5 .374 | M14 1/2 | PL207 PL207 PL207 PL207 PL207 | JEL207 JEL207-104 JEL207-105 JEL207-106 JEL207-107 | 5,750 | 3,450 |

NTN
SERIES
AELP2
ECCENTRIC
LOCKING
COLLAR
TYPE

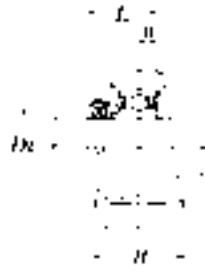
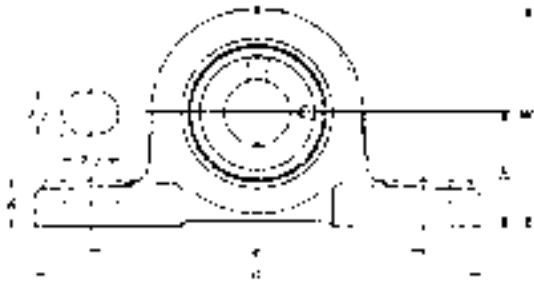
Units: **Millimeters**
INCHES



PILLOW BLOCKS - CAST HOUSING

| Shaft Diameter | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|---|--|-------------------------|-----------------------|---------------------|--------------------|----------------------|----------------------|--------------------|-------------------------|----------------------|----------------------|--------------------|-----------------|---|---|--------------------------|------------------|
| | | <i>h</i> | <i>a</i> | <i>e</i> | <i>b</i> | <i>s₁</i> | <i>s₂</i> | <i>g</i> | <i>w</i> | <i>Di</i> | <i>L</i> | <i>n</i> | | | | <i>dynamic C</i> | <i>static Co</i> |
| | | | | | | | | | | | | | | | | | |
| 20 ¾ | AELP204D1 AELP204-012D1 | 33.34 1 5/16 | 127 5 | 95 3 ¾ | 38 1 ½ | 13 ½ | 16 5/8 | 14 9/16 | 65.09 2 7/16 | 33.3 1.31 | 31 1.220 | 7.5 .295 | M10 ¾ | P204D1 P204D1 | AEL204D1 AEL204-012D1 | 2,890 | 1,500 |
| 25 1 3/16 7/8 1 5/16 1 | AELP205D1 AELP205-013D1 AELP205-014D1 AELP205-015D1 AELP205-100D1 | 36.51 1 7/16 | 140 5 ½ | 105 4 ½ | 38 1 ½ | 13 ½ | 16 5/8 | 15 19/32 | 70.64 2 25/32 | 38.1 1.50 | 31 1.220 | 7.5 .295 | M10 ¾ | P205D1 P205D1 P205D1 P205D1 P205D1 | AEL205D1 AEL205-013D1 AEL205-014D1 AEL205-015D1 AEL205-100D1 | 3,150 | 1,770 |
| 30 1 1/16 1 1/8 1 3/16 1 ¼ | AELP206D1 AELP206-101D1 AELP206-102D1 AELP206-103D1 AELP206-104D1 | 42.86 1 11/16 | 165 6 ½ | 121 4 ¾ | 48 1 7/8 | 17 21/32 | 20 25/32 | 17 21/32 | 83.34 3 9/32 | 44.50 1.75 | 35.7 1.406 | 9.0 .354 | M14 ½ | P206D1 P206D1 P206D1 P206D1 P206D1 | AEL206D1 AEL206-101D1 AEL206-102D1 AEL206-103D1 AEL206-104D1 | 4,400 | 2,540 |
| 35 1 ¼ 1 5/16 1 3/8 1 7/16 | AELP207D1 AELP207-104D1 AELP207-105D1 AELP207-106D1 AELP207-107D1 | 47.63 1 7/8 | 167 6 9/16 | 127 5 | 48 1 7/8 | 17 21/32 | 20 25/32 | 18 21/32 | 92.87 3 21/32 | 55.6 2.19 | 38.9 1.531 | 9.5 .374 | M14 ½ | P207D1 P207D1 P207D1 P207D1 P207D1 | AEL207D1 AEL207-104D1 AEL207-105D1 AEL207-106D1 AEL207-107D1 | 5,750 | 3,440 |
| 40 1 ½ 1 9/16 | AELP208D1 AELP208-108D1 AELP208-109D1 | 49.2 1 15/16 | 184 7 ¼ | 137 5 3/8 | 54 2 1/8 | 17 21/32 | 20 25/32 | 18 21/32 | 98 3 27/32 | 52 2.37 | 49.2 1.719 | 19 .433 | M14 ½ | P208D1 P208D1 P208D1 | AEL208D1 AEL208-108D1 AEL208-109D1 | 6,550 | 4,000 |
| 45 1 5/8 1 11/16 1 ¾ | AELP209D1 AELP209-110D1 AELP209-111D1 AELP209-112D1 | 54 2 1/8 | 190 7 15/32 | 146 5 ¾ | 54 2 1/8 | 17 21/32 | 20 25/32 | 20 21/32 | 106 4 3/16 | 60 2 3/8 | 49.2 1.937 | 19 .748 | M14 ½ | P209D1 P209D1 P209D1 P209D1 | AEL209D1 AEL209-110D1 AEL209-111D1 AEL209-112D1 | 7,350 | 4,590 |
| 50 1 13/16 1 7/8 1 15/16 | AELP210D1 AELP210-113D1 AELP210-114D1 AELP210-115D1 | 57.2 2 ¼ | 206 8 1/8 | 159 6 ¼ | 60 2 3/8 | 20 25/32 | 23 29/32 | 21 13/16 | 114 4 ½ | 65 2 9/16 | 51.6 2.031 | 19 .749 | M16 ¾ | P210D1 P210D1 P210D1 P210D1 | AEL210D1 AEL210-113D1 AEL210-114D1 AEL210-115D1 | 7,900 | 5,220 |

Units: Millimeters
INCHES

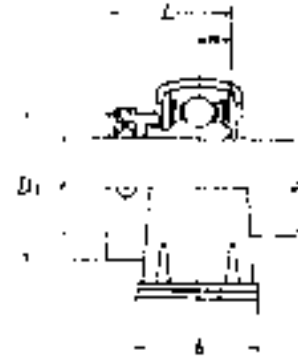
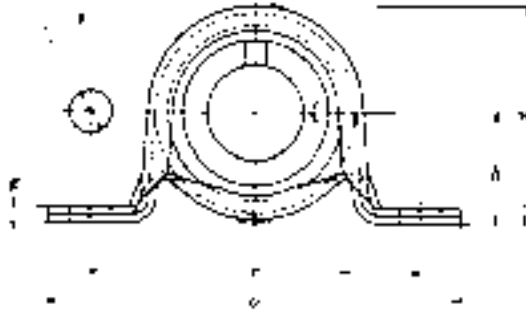


| PILLOW BLOCKS - CAST HOUSING (LOW CENTER HEIGHT) | | | | | | | | | | | | | | | | | |
|--|--|--------------------|---------------|--------------|-------------|----------------|----------------|--------------|---------------|--------------|---------------|-------------|------------|---|--|--------------------------|-----------------------|
| Shaft Dia. | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
| | | h | a | e | b | s ₁ | s ₂ | g | w | Di | L | n | | | | Dynamic C | Static C ₀ |
| 12 1/2 | AELPL201 AELPL201-008 | 26.99 1 1/16 | 121 4 3/4 | 89 3 1/2 | 35 1 3/8 | 11 7/16 | 14 9/16 | 13 1/2 | 54 2 1/8 | 29 1.14 | 28.6 1.126 | 6.5 .256 | M10 3/8 | PL201 PL201 | AEL201 AEL201-008 | 2,160 | 1,040 |
| 15 9/16 5/8 | AELPL202 AELPL202-009 AELPL202-010 | 26.99 1 1/16 | 121 4 3/4 | 89 3 1/2 | 35 1 3/8 | 11 7/16 | 14 9/16 | 13 1/2 | 54 2 1/8 | 29 1.14 | 28.6 1.126 | 6.5 .256 | M10 3/8 | PL201 PL201 PL201 | AEL202 AEL202-009 AEL202-010 | 2,160 | 1,040 |
| 17 11/16 | AELPL203 AELPL203-011 | 26.99 1 1/16 | 121 4 3/4 | 89 3 1/2 | 35 1 3/8 | 11 7/16 | 14 9/16 | 13 1/2 | 54 2 1/8 | 29 1.14 | 28.6 1.126 | 6.5 .256 | M10 3/8 | PL201 PL201 | AEL203 AEL203-011 | 2,160 | 1,040 |
| 20 3/4 | AELPL204 AELPL204-012 | 31.75 1 1/4 | 127 5 | 95 3 3/4 | 38 1 1/2 | 13 1/2 | 16 5/8 | 14 9/16 | 64 2 17/32 | 33.3 1.31 | 31 1.220 | 7.5 .295 | M10 3/8 | PL204 PL204 | AEL204 AEL204-012 | 2,890 | 1,500 |
| 25 13/16 7/8 15/16 1 | AELPL205 AELPL205-013 AELPL205-014 AELPL205-015 AELPL205-100 | 33.34 1 5/16 | 140 5 1/2 | 105 4 1/8 | 38 1 1/2 | 13 1/2 | 16 5/8 | 15 1 1/32 | 68 2 11/16 | 38.1 1.50 | 31 1.220 | 7.5 .295 | M10 3/8 | PL205 PL205 PL205 PL205 PL205 | AEL205 AEL205-013 AEL205-014 AEL205-015 AEL205-100 | 3,150 | 1,770 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | AELPL206 AELPL206-101 AELPL206-102 AELPL206-103 AELPL206-104 | 39.69 1 9/16 | 165 6 1/2 | 121 4 3/4 | 48 1 7/8 | 17 21/32 | 20 25/32 | 17 21/32 | 80 3 5/32 | 44.5 1.75 | 35.7 1.406 | 9 .354 | M14 1/2 | PL206 PL206 PL206 PL206 PL206 | AEL206 AEL206-101 AEL206-102 AEL206-103 AEL206-104 | 4,400 | 2,540 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | AELPL207 AELPL207-104 AELPL207-105 AELPL207-106 AELPL207-107 | 46.04 1 13/16 | 167 6 9/16 | 127 5 | 48 1 7/8 | 17 21/32 | 20 25/32 | 18 23/32 | 91 3 19/32 | 55.6 2.19 | 38.9 1.531 | 9.5 .374 | M14 1/2 | PL207 PL207 PL207 PL207 PL207 | AEL207 AEL207-104 AEL207-105 AEL207-106 AEL207-107 | 5,750 | 3,440 |

Note: AELPL201 - AELPL205 have a solid base

NTN
SERIES
AELPP2
ECCENTRIC
LOCKING
COLLAR
TYPE

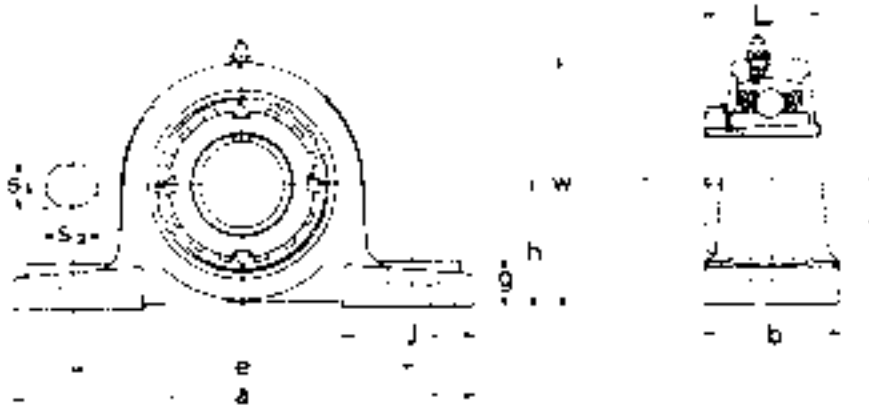
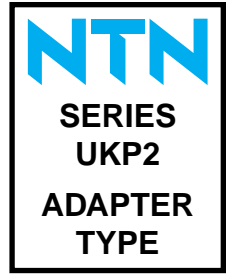
Units: Millimeters
 INCHES



PILLOW BLOCKS - PRESSED STEEL HOUSING

| Shaft Dia. | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | | Max. Radial Load (lbs) |
|--|--|--------------------|----------------|---------------|---------------|------------|-------------|-----------------|---------------|-------------|------------|---|--|----------------|--------------------------|-----|------------------------|
| | | h | a | e | b | s | g | w | L | n | Dynamic C | | | | Static C ₀ | | |
| 12 ½ | AELPP201 AELPP201-008 | 22.2 7/8 | 86 3 3/8 | 68 2 11/16 | 25 3 1/32 | 9.5 3/8 | 3.2 .126 | 43.8 1 23/32 | 28.6 1.126 | 6.5 .256 | M8 5/16 | PP203 PP203 | AEL201 AEL201-008 | 2,160 | 1,040 | 440 | |
| 15 9/16 5/8 | AELPP202 AELPP202-009 AELPP202-010 | 22.2 7/8 | 86 3 3/8 | 68 2 11/16 | 25 3 1/32 | 9.5 3/8 | 3.2 .126 | 43.8 1 23/32 | 28.6 1.126 | 6.5 .256 | M8 5/16 | PP203 PP203 PP203 | AEL202 AEL202-009 AEL202-010 | 2,160 | 1,040 | 440 | |
| 17 1 1/16 | AELPP203 AELPP203-011 | 22.2 7/8 | 86 3 3/8 | 68 2 11/16 | 25 3 1/32 | 9.5 3/8 | 3.2 .126 | 43.8 1 23/32 | 28.6 1.126 | 6.5 .256 | M8 5/16 | PP203 PP203 | AEL203 AEL203-011 | 2,160 | 1,040 | 440 | |
| 20 ¾ | AELPP204 AELPP204-012 | 25.4 1 | 98 3 27/32 | 76 3 | 32 1 ¼ | 9.5 3/8 | 3.2 .126 | 50.5 2 | 31 1.220 | 7.5 .295 | M8 5/16 | PP204 PP204 | AEL204 AEL204-012 | 2,890 | 1,500 | 550 | |
| 25 1 3/16 7/8 15/16 1 | AELPP205 AELPP205-013 AELPP205-014 AELPP205-015 AELPP205-100 | 28.6 1 1/8 | 108 4 ¼ | 86 3 3/8 | 32 1 ¼ | 11 7/16 | 4 .157 | 56.6 2 7/32 | 31 1.220 | 7.5 .295 | M10 3/8 | PP205 PP205 PP205 PP205 PP205 | AEL205 AEL205-013 AEL205-014 AEL205-015 AEL205-100 | 3,150 | 1,770 | 770 | |
| 30 1 1/16 1 1/8 1 3/16 1 ¼ | AELPP206 AELPP206-101 AELPP206-102 AELPP206-103 AELPP206-104 | 33.3 1 5/16 | 117 4 19/32 | 95 3 ¾ | 38 1 ½ | 11 7/16 | 4 .157 | 66.3 2 5/8 | 35.7 1.406 | 9 .354 | M10 3/8 | PP206 PP206 PP206 PP206 PP206 | AEL206 AEL206-101 AEL206-102 AEL206-103 AEL206-104 | 4,400 | 2,540 | 880 | |
| 35 1 ¼ 1 5/16 1 3/8 1 7/16 | AELPP207 AELPP207-104 AELPP207-105 AELPP207-106 AELPP207-107 | 39.7 1 9/16 | 129 5 3/32 | 106 4 3/16 | 42 1 21/32 | 11 7/16 | 4.6 .181 | 78 3 1/16 | 38.9 1.531 | 9.5 .374 | M10 3/8 | PP207 PP207 PP207 PP207 PP207 | AEL207 AEL207-104 AEL207-105 AEL207-106 AEL207-107 | 5,750 | 3,440 | 990 | |

Axial load should be less than 1/3 of radial load.



PILLOW BLOCKS - CAST HOUSING

| Shaft Diameter | Unit Number | Nominal Dimensions | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|----------------|---|--------------------|-----------------|----------------|---------------|-----------------------|-----------------------|--------------|----------------|-------------|---------------|------------|----------------|---|--------------------------|-----------------------|
| | | <i>h</i> | <i>a</i> | <i>e</i> | <i>b</i> | <i>s</i> ₁ | <i>s</i> ₂ | <i>g</i> | <i>w</i> | <i>L</i> | <i>j</i> | | | | <i>C</i> | <i>C</i> ₀ |
| 20 ¾ | UKP205D1 ; H 2305X UKP205D1 ; HE2305 | 36.5 1 7/16 | 140 5 ½ | 105 4 ½ | 38 1 ½ | 13 ½ | 16 5/8 | 15 19/32 | 71 2 25/32 | 35 1.378 | 42 1 21/32 | M10 ¾ | P205D1 | UK205D1 ; H 2305X UK205D1 ; HE2305 | 3,150 | 1,770 |
| 25 7/8 | UKP206D1 ; H 2306X UKP206D1 ; HS2306 UKP206D1 ; HE2306X | 42.9 1 11/16 | 165 6 ½ | 121 4 ¾ | 48 1 7/8 | 17 21/32 | 20 25/32 | 17 21/32 | 83 3 3/32 | 38 1.496 | 54 2 1/8 | M14 ½ | P206D1 | UK206D1 ; H 2306X UK206D1 ; HS2306 UK206D1 ; HE2306X | 4,400 | 2,540 |
| 30 1 1/8 | UKP207D1 ; H 2307X UKP207D1 ; HS2307 | 47.6 1 7/8 | 167 6 9/16 | 127 5 | 48 1 7/8 | 17 21/32 | 20 25/32 | 18 23/32 | 93 3 21/32 | 43 1.693 | 54 2 1/8 | M14 ½ | P207D1 | UK207D1 ; H 2307X UK207D1 ; HS2307 | 5,750 | 3,450 |
| 35 1 ¼ | UKP208D1 ; H 2308X UKP208D1 ; HE2308 UKP208D1 ; HS2308X | 49.2 1 15/16 | 184 7 ¼ | 137 5 13/32 | 54 2 1/8 | 17 21/32 | 20 25/32 | 18 25/32 | 98 3 27/32 | 46 1.811 | 52 2 1/16 | M14 ½ | P207D1 | UK208D1 ; H 2308X UK208D1 ; HE2308 UK208D1 ; HS2308X | 6,550 | 4,000 |
| 40 1 7/16 | UKP209D1 ; H 2309X UKP209D1 ; HA2309 UKP209D1 ; HE2309X UKP209D1 ; HS2309X | 54 2 1/8 | 190 7 15/32 | 146 5 ¾ | 54 2 1/8 | 17 21/32 | 20 25/32 | 20 25/32 | 106 4 3/16 | 50 1.969 | 60 2 3/8 | M14 ½ | P208D1 | UK209D1 ; H 2309X UK209D1 ; HA2309 UK209D1 ; HE2309X UK209D1 ; HS2309X | 7,350 | 4,600 |
| 45 1 5/8 | UKP210D1 ; H 2310X UKP210D1 ; HS2310 UKP210D1 ; HA2310 UKP210D1 ; HE2310X | 57.2 2 ¼ | 206 8 1/8 | 159 6 ¼ | 60 2 3/8 | 20 25/32 | 23 29/32 | 21 13/16 | 114 4 ½ | 55 2.165 | 65 1 9/16 | M16 5/8 | P210D1 | UK210D1 ; H 2310X UK210D1 ; HS2310 UK210D1 ; HA2310 UK210D1 ; HE2310X | 7,900 | 5,200 |
| 50 1 7/8 | UKP211D1 ; H 2311X UKP211D1 ; HS2311 UKP211D1 ; HA2311 UKP211D1 ; HE2311XY | 63.5 2 ½ | 219 8 5/8 | 171 6 23/32 | 60 2 3/8 | 20 25/32 | 23 29/32 | 23 29/32 | 126 4 32/32 | 59 2.323 | 65 2 9/16 | M16 5/8 | P211D1 | UK211D1 ; H 2311X UK211D1 ; HS2311 UK211D1 ; HA2311 UK211D1 ; HE2311XY | 9,750 | 6,550 |
| 55 2 1/8 | UKP212D1 ; H 2312X UKP212D1 ; HS2312 | 69.8 2 ¾ | 241 9 ½ | 184 7 ¼ | 70 2 ¾ | 20 25/32 | 23 29/32 | 25 31/32 | 138 5 7/16 | 62 2.441 | 70 2 ¾ | M16 5/8 | P212D1 | UK212D1 ; H 2312X UK212D1 ; HS2312 | 11,800 | 8,150 |
| 60 2 3/16 | UKP213D1 ; H 2313X UKP213D1 ; HA2313 UKP213D1 ; HE2313 UKP213D1 ; HS2313 | 76.2 3 | 265 10 7/16 | 203 8 | 70 2 ¾ | 25 31/32 | 28 1 3/32 | 27 1 1/16 | 151 5 15/16 | 65 2.559 | 77 3 1/32 | M20 ¾ | P213D1 | UK213D1 ; H 2313X UK213D1 ; HA2313 UK213D1 ; HE2313 UK213D1 ; HS2313 | 12,900 | 9,000 |
| 65 2 7/16 | UKP215D1 ; H 2315X UKP215D1 ; HA2315 UKP215D1 ; HE2315 | 82.6 3 ¼ | 275 10 13/16 | 217 8 17/32 | 74 2 29/32 | 25 31/32 | 28 1 3/32 | 27 1 3/32 | 151 6 13/32 | 65 2.874 | 77 3 5/32 | M20 ¾ | P215D1 | UK215D1 ; H 2315X UK215D1 ; HA2315 UK215D1 ; HE2315 | 14,900 | 11,100 |
| 70 2 11/16 | UKP216D1 ; H2316X UKP216D1 ; HA2316 UKP216D1 ; HE2316 | 88.9 3 ½ | 292 11 ½ | 232 9 1/8 | 78 3 1/16 | 25 31/32 | 28 1 3/32 | 30 1 3/16 | 175 6 7/8 | 78 3.071 | 85 3 11/32 | M22 7/8 | P216D1 | UK216D1 ; H2316X UK216D1 ; HA2316 UK216D1 ; HE2316 | 16,300 | 11,900 |
| 75 2 15/16 | UKP217D1 ; H 2317X UKP217D1 ; HA2317 UKP217D1 ; HE2317 | 95.2 3 ¾ | 310 12 7/32 | 247 9 23/32 | 83 3 9/32 | 25 31/32 | 28 1 3/32 | 32 1 1/4 | 187 7 3/8 | 82 3.228 | 85 3 11/32 | M22 7/8 | P217D1 | UK217D1 ; H 2317X UK217D1 ; HA2317 UK217D1 ; HE2317 | 18,700 | 14,300 |
| 80 3 1/16 | UKP218D1 ; H 2318X UKP218D1 ; HA2318 | 101.6 4 | 327 12 7/8 | 262 10 5/16 | 88 3 15/32 | 27 1 1/16 | 30 1 3/16 | 33 1 5/16 | 200 7 7/8 | 86 3.386 | 90 3 17/32 | M22 7/8 | P218D1 | UK218D1 ; H 2318X UK218D1 ; HA2318 | 21,600 | 16,100 |

These numbers indicate re-lubricate type. If maintenance free type is needed, please order without suffix "D1".

Adapter number with suffix "X" means a narrow slot type adapter sleeve. In this case the lock washer with the straight inner prong should be used.

For HE2311XY, screw thread pitch different from the standard is applied, because of the thin thread section of sleeve. To distinguish it, a suffix "Y" is added.

Note: Please consult NTN Engineering for grease fitting details.



Bearing Series → **UCP2 SERIES**

UCP201D1 1.5

Complete Pillow Block Number

Weight (lbs)

GREENLINE PILLOW BLOCKS

LBS.

| | |
|---------------------|------|
| UCP2 SERIES | |
| UCP201D1 | 1.5 |
| UCP201-008D1 | 1.5 |
| UCP202D1 | 1.5 |
| UCP202-009D1 | 1.5 |
| UCP202-010D1 | 1.5 |
| UCP203D1 | 1.5 |
| UCP203-011D1 | 1.5 |
| UCP204D1 | 1.5 |
| UCP204-012D1 | 1.5 |
| UCP205D1 | 1.8 |
| UCP205-013D1 | 1.8 |
| UCP205-014D1 | 1.8 |
| UCP205-015D1 | 1.8 |
| UCP205-100D1 | 1.8 |
| UCP206D1 | 2.9 |
| UCP206-101D1 | 2.9 |
| UCP206-102D1 | 2.9 |
| UCP206-103D1 | 2.9 |
| UCP206-104D1 | 2.9 |
| UCP207D1 | 3.5 |
| UCP207-104D1 | 3.5 |
| UCP207-105D1 | 3.5 |
| UCP207-106D1 | 3.5 |
| UCP207-107D1 | 3.5 |
| UCP208D1 | 4.2 |
| UCP208-108D1 | 4.2 |
| UCP208-109D1 | 4.2 |
| UCP209D1 | 4.9 |
| UCP209-110D1 | 4.9 |
| UCP209-111D1 | 4.9 |
| UCP209-112D1 | 4.9 |
| UCP210D1 | 5.7 |
| UCP210-113D1 | 5.7 |
| UCP210-114D1 | 5.7 |
| UCP210-115D1 | 5.7 |
| UCP210-200D1 | 5.7 |
| UCP211D1 | 7.3 |
| UCP211-200D1 | 7.3 |
| UCP211-201D1 | 7.3 |
| UCP211-202D1 | 7.3 |
| UCP211-203D1 | 7.3 |
| UCP212D1 | 10.0 |
| UCP212-204D1 | 10.0 |
| UCP212-206D1 | 10.0 |
| UCP212-207D1 | 10.0 |
| UCP213D1 | 13.0 |
| UCP213-208D1 | 13.0 |
| UCP214D1 | 15.0 |
| UCP214-211D1 | 15.0 |
| UCP214-212D1 | 15.0 |
| UCP215D1 | 16.0 |
| UCP215-215D1 | 16.0 |
| UCP215-300D1 | 16.0 |
| UCP216D1 | 20.0 |
| UCP216-302D1 | 20.0 |
| UCP217D1 | 24.0 |
| UCP217-304D1 | 24.0 |
| UCP218D1 | 29.0 |
| UCP218-308D1 | 29.0 |
| UCPL2 SERIES | |
| UCPL204D1 | 1.3 |
| UCPL204-012D1 | 1.3 |
| UCPL205D1 | 1.8 |
| UCPL205-013D1 | 1.8 |
| UCPL205-014D1 | 1.8 |
| UCPL205-015D1 | 1.8 |
| UCPL205-100D1 | 1.8 |
| UCPL206D1 | 2.6 |
| UCPL206-101D1 | 2.6 |
| UCPL206-102D1 | 2.6 |
| UCPL206-103D1 | 2.6 |
| UCPL206-104D1 | 2.6 |
| UCPL207D1 | 3.5 |
| UCPL207-104D1 | 3.5 |
| UCPL207-105D1 | 3.5 |
| UCPL207-106D1 | 3.5 |
| UCPL207-107D1 | 3.5 |
| UCPL209D1 | 4.9 |
| UCPL209-110D1 | 4.9 |
| UCPL209-111D1 | 4.9 |
| UCPL209-112D1 | 4.9 |
| UCPL210D1 | 5.7 |

| | |
|--------------------|-------|
| UCPL210-113D1 | 5.7 |
| UCPL210-114D1 | 5.7 |
| UCPL210-115D1 | 5.7 |
| UCPL210-200D1 | 5.7 |
| UCP3 SERIES | |
| UCP305D1 | 3.3 |
| UCP305-014D1 | 3.3 |
| UCP305-015D1 | 3.3 |
| UCP305-100D1 | 3.3 |
| UCP306D1 | 4.0 |
| UCP306-102D1 | 4.0 |
| UCP306-103D1 | 4.0 |
| UCP307D1 | 6.2 |
| UCP307-104D1 | 6.2 |
| UCP307-105D1 | 6.2 |
| UCP307-106D1 | 6.2 |
| UCP307-107D1 | 6.2 |
| UCP308D1 | 6.6 |
| UCP308-108D1 | 6.6 |
| UCP309D1 | 9.0 |
| UCP309-110D1 | 9.0 |
| UCP309-111D1 | 9.0 |
| UCP309-112D1 | 9.0 |
| UCP310D1 | 0.1 |
| UCP310-114D1 | 13.0 |
| UCP310-115D1 | 13.0 |
| UCP311D1 | 16.0 |
| UCP311-200D1 | 16.0 |
| UCP311-202D1 | 16.0 |
| UCP311-203D1 | 16.0 |
| UCP312D1 | 21.0 |
| UCP312-204D1 | 21.0 |
| UCP312-206D1 | 21.0 |
| UCP312-207D1 | 21.0 |
| UCP313D1 | 22.0 |
| UCP313-208D1 | 22.0 |
| UCP314D1 | 26.0 |
| UCP314-211D1 | 26.0 |
| UCP314-212D1 | 26.0 |
| UCP315D1 | 31.0 |
| UCP315-215D1 | 31.0 |
| UCP315-300D1 | 31.0 |
| UCP316D1 | 40.0 |
| UCP316-302D1 | 40.0 |
| UCP316-303D1 | 40.0 |
| UCP317D1 | 44.0 |
| UCP317-304D1 | 44.0 |
| UCP318D1 | 53.0 |
| UCP318-307D1 | 53.0 |
| UCP318-308D1 | 53.0 |
| UCP319D1 | 64.0 |
| UCP319-312D1 | 64.0 |
| UCP320D1 | 77.0 |
| UCP320-315D1 | 77.0 |
| UCP320-400D1 | 77.0 |
| UCP321D1 | 77.0 |
| UCP322D1 | 99.0 |
| UCP324D1 | 121.0 |
| UCP326D1 | 159.0 |
| UCP328D1 | 196.0 |
| UCPX SERIES | |
| UCPX05D1 | 3.3 |
| UCPX05-013D1 | 3.3 |
| UCPX05-014D1 | 3.3 |
| UCPX05-015D1 | 3.3 |
| UCPX05-100D1 | 3.3 |
| UCPX06D1 | 4.4 |
| UCPX06-101D1 | 4.4 |
| UCPX06-102D1 | 4.4 |
| UCPX06-103D1 | 4.4 |
| UCPX06-104D1 | 4.4 |
| UCPX07D1 | 5.7 |
| UCPX07-105D1 | 5.7 |
| UCPX07-106D1 | 5.7 |
| UCPX07-107D1 | 5.7 |
| UCPX08D1 | 7.3 |
| UCPX08-108D1 | 7.3 |
| UCPX08-109D1 | 7.3 |
| UCPX09D1 | 7.3 |
| UCPX09-110D1 | 7.3 |
| UCPX09-111D1 | 7.3 |
| UCPX09-112D1 | 7.3 |

| | |
|---------------------|------|
| UCPX09-113D1 | 7.3 |
| UCPX10D1 | 9.5 |
| UCPX10-114D1 | 9.5 |
| UCPX10-115D1 | 9.5 |
| UCPX10-200D1 | 9.5 |
| UCPX11D1 | 13.0 |
| UCPX11-202D1 | 13.0 |
| UCPX11-203D1 | 13.0 |
| UCPX11-204D1 | 13.0 |
| UCPX11-205D1 | 13.0 |
| UCPX12D1 | 16.0 |
| UCPX12-206D1 | 16.0 |
| UCPX12-207D1 | 16.0 |
| UCPX13D1 | 17.0 |
| UCPX13-208D1 | 17.0 |
| UCPX13-209D1 | 17.0 |
| UCPX14D1 | 22.0 |
| UCPX14-210D1 | 22.0 |
| UCPX14-211D1 | 22.0 |
| UCPX14-212D1 | 22.0 |
| UCPX15D1 | 24.0 |
| UCPX15-213D1 | 24.0 |
| UCPX15-214D1 | 24.0 |
| UCPX15-215D1 | 24.0 |
| UCPX15-300D1 | 24.0 |
| UCPX16D1 | 33.0 |
| UCPX16-302D1 | 33.0 |
| UCPX16-303D1 | 33.0 |
| UCPX16-304D1 | 33.0 |
| UCPX17D1 | 35.0 |
| UCPX17-305D1 | 35.0 |
| UCPX17-307D1 | 35.0 |
| UCPX18D1 | 37.0 |
| UCPX18-308D1 | 37.0 |
| UCPX20D1 | 66.0 |
| UCPX20-314D1 | 66.0 |
| UCPX20-315D1 | 66.0 |
| UCPX20-400D1 | 66.0 |
| ASPL2 SERIES | |
| ASPL201 | 1.3 |
| ASPL201-008 | 1.3 |
| ASPL202 | 1.3 |
| ASPL202-009 | 1.3 |
| ASPL202-010 | 1.3 |
| ASPL203 | 1.1 |
| ASPL203-011 | 1.1 |
| ASPL204 | 1.3 |
| ASPL204-012 | 1.3 |
| ASPL205 | 1.5 |
| ASPL205-013 | 1.5 |
| ASPL205-014 | 1.5 |
| ASPL205-015 | 1.5 |
| ASPL205-100 | 1.5 |
| ASPL206 | 2.6 |
| ASPL206-101 | 2.6 |
| ASPL206-103 | 2.6 |
| ASPL206-104 | 2.6 |
| ASPL207 | 3.3 |
| ASPL207-104 | 3.3 |
| ASPL207-105 | 3.3 |
| ASPL207-106 | 3.3 |
| ASPL207-107 | 3.3 |
| ASPP2 SERIES | |
| ASPP201 | 0.4 |
| ASPP201-008 | 0.4 |
| ASPP202 | 0.2 |
| ASPP202-009 | 0.2 |
| ASPP202-010 | 0.2 |
| ASPP203 | 0.2 |
| ASPP203-011 | 0.2 |
| ASPP204 | 0.4 |
| ASPP204-012 | 0.4 |
| ASPP205 | 0.7 |
| ASPP205-013 | 0.7 |
| ASPP205-014 | 0.7 |
| ASPP205-015 | 0.7 |
| ASPP205-100 | 0.7 |
| ASPP206 | 0.9 |
| ASPP206-101 | 0.9 |
| ASPP206-102 | 0.9 |
| ASPP206-103 | 0.9 |
| ASPP206-104 | 0.9 |

| | |
|----------------------|------|
| ASPP207 | 1.3 |
| ASPP207-104 | 1.3 |
| ASPP207-105 | 1.3 |
| ASPP207-106 | 1.3 |
| ASPP207-107 | 1.3 |
| UELP2 SERIES | |
| UELPL204D1 | 1.5 |
| UELPL204-012D1 | 1.5 |
| UELPL205D1 | 2.0 |
| UELPL205-013D1 | 2.0 |
| UELPL205-014D1 | 2.0 |
| UELPL205-015D1 | 2.0 |
| UELPL205-100D1 | 2.0 |
| UELPL206D1 | 3.1 |
| UELPL206-101D1 | 3.1 |
| UELPL206-102D1 | 3.1 |
| UELPL206-103D1 | 3.1 |
| UELPL206-104D1 | 3.1 |
| UELPL207D1 | 4.0 |
| UELPL207-104D1 | 4.0 |
| UELPL207-105D1 | 4.0 |
| UELPL207-106D1 | 4.0 |
| UELPL207-107D1 | 4.0 |
| UELPL208D1 | 4.4 |
| UELPL208-108D1 | 4.4 |
| UELPL208-109D1 | 4.4 |
| UELPL209D1 | 5.3 |
| UELPL209-110D1 | 5.3 |
| UELPL209-111D1 | 5.3 |
| UELPL209-112D1 | 5.3 |
| UELPL210D1 | 6.2 |
| UELPL210-113D1 | 6.2 |
| UELPL210-114D1 | 6.2 |
| UELPL210-115D1 | 6.2 |
| UELPL210-200D1 | 6.2 |
| UELPL211D1 | 7.7 |
| UELPL211-200D1 | 7.7 |
| UELPL211-201D1 | 7.7 |
| UELPL211-202D1 | 7.7 |
| UELPL211-203D1 | 7.7 |
| UELPL212D1 | 11.0 |
| UELPL212-204D1 | 11.0 |
| UELPL212-206D1 | 11.0 |
| UELPL212-207D1 | 11.0 |
| UELPL213D1 | 14.0 |
| UELPL213-208D1 | 14.0 |
| UELPL214D1 | 15.0 |
| UELPL214-211D1 | 15.0 |
| UELPL214-212D1 | 15.0 |
| UELPL215D1 | 17.0 |
| UELPL215-215D1 | 17.0 |
| UELPL215-300D1 | 17.0 |
| UELPL2 SERIES | |
| UELPL204D1 | 1.5 |
| UELPL204-012D1 | 1.5 |
| UELPL205D1 | 1.8 |
| UELPL205-013D1 | 1.8 |
| UELPL205-014D1 | 1.8 |
| UELPL205-015D1 | 1.8 |
| UELPL205-100D1 | 1.8 |
| UELPL206D1 | 3.1 |
| UELPL206-101D1 | 3.1 |
| UELPL206-102D1 | 3.1 |
| UELPL206-103D1 | 3.1 |
| UELPL206-104D1 | 3.1 |
| UELPL207D1 | 3.7 |
| UELPL207-104D1 | 3.7 |
| UELPL207-105D1 | 3.7 |
| UELPL207-106D1 | 3.7 |
| UELPL207-107D1 | 3.7 |
| UELPL209D1 | 5.1 |
| UELPL209-110D1 | 5.1 |
| UELPL209-111D1 | 5.1 |
| UELPL209-112D1 | 5.1 |
| UELPL210D1 | 6.0 |
| UELPL210-113D1 | 6.0 |
| UELPL210-114D1 | 6.0 |
| UELPL210-115D1 | 6.0 |
| UELPL210-200D1 | 6.0 |
| UELPL3 SERIES | |
| UELPL305D1 | 3.1 |
| UELPL305-014D1 | 3.1 |



Bearing Series → **UCP2 SERIES**

UCP201D1 1.5

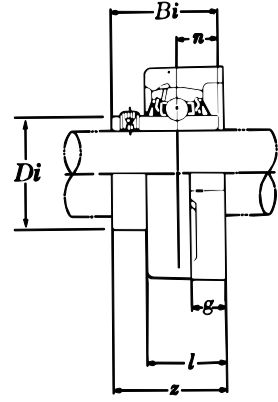
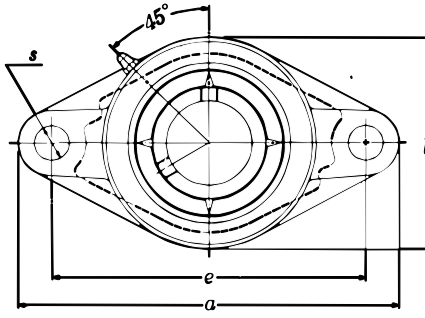
Complete Pillow Block Number

Weight (lbs)

| GREENLINE PILLOW BLOCKS | | LBS. |
|-------------------------|----------------------------|-----------------------------|
| UEL305-015D1 3.1 | AELP205-015D1 1.9 | UKP208D1:HE2308X 4.4 |
| UEL305-100D1 3.1 | AELP205-100D1 1.9 | UKP208D1:HS2308X 4.4 |
| UEL306D1 4.2 | AELP206D1 2.8 | UKP209D1:H2309X 5.1 |
| UEL306-102D1 4.2 | AELP206-101D1 2.8 | UKP209D1:HA2309 5.1 |
| UEL306-103D1 4.2 | AELP206-102D1 2.8 | UKP209D1:HE2309X 5.1 |
| UEL307D1 6.4 | AELP206-103D1 2.8 | UKP209D1:HS2309X 5.1 |
| UEL307-104D1 6.4 | AELP206-104D1 2.8 | UKP210D1:H2310X 6.2 |
| UEL307-105D1 6.4 | AELP207D1 3.7 | UKP210D1:HS2310 6.2 |
| UEL307-106D1 6.4 | AELP207-104D1 3.8 | UKP210D1:HA2310 6.2 |
| UEL307-107D1 6.4 | AELP207-105D1 3.8 | UKP210D1:HE2310X 6.2 |
| UEL308D1 6.8 | AELP207-106D1 3.8 | UKP211D1:H2311X 7.7 |
| UEL308-108D1 6.8 | AELP207-107D1 3.8 | UKP211D1:HS2311 7.7 |
| UEL309D1 9.5 | AELP208D1 4.2 | UKP211D1:HA2311 7.7 |
| UEL309-110D1 9.5 | AELP208-108D1 4.2 | UKP211D1:HE2311XY 7.7 |
| UEL309-111D1 9.5 | AELP208-109D1 4.2 | UKP212D1:H2312X 10.0 |
| UEL309-112D1 9.5 | AELP209D1 4.9 | UKP212D1:HS2312 10.0 |
| UEL310D1 13.0 | AELP209-110D1 4.9 | UKP213D1:H2313X 13.0 |
| UEL310-114D1 13.0 | AELP209-111D1 4.9 | UKP213D1:HA2313X 13.0 |
| UEL310-115D1 13.0 | AELP209-112D1 4.9 | UKP213D1:HE2313 13.0 |
| UEL311D1 17.0 | AELP210D1 5.8 | UKP213D1:HS2313 13.0 |
| UEL311-200D1 17.0 | AELP210-113D1 5.8 | UKP215D1:H2315X 17.0 |
| UEL311-202D1 17.0 | AELP210-114D1 5.8 | UKP215D1:HA2315 17.0 |
| UEL311-203D1 17.0 | AELP210-115D1 5.8 | UKP215D1:HE2315 17.0 |
| UEL312D1 21.0 | AELPL2 SERIES | UKP216D1:H2316 21.0 |
| UEL312-204D1 21.0 | AELPL201 1.3 | UKP216D1:HA2316 21.0 |
| UEL312-206D1 21.0 | AELPL201-008 1.3 | UKP216D1:HE2316 21.0 |
| UEL312-207D1 21.0 | AELPL202 1.3 | UKP217D1:H2317X 26.0 |
| UEL313D1 24.0 | AELPL202-009 1.3 | UKP217D1:HA2317 26.0 |
| UEL313-208D1 24.0 | AELPL202-010 1.3 | UKP217D1:HE2317 26.0 |
| UEL314D1 26.0 | AELPL203 1.3 | UKP218D1:H2318X 31.0 |
| UEL314-211D1 26.0 | AELPL203-011 1.3 | UKP218D1:HA2318 31.0 |
| UEL314-212D1 26.0 | AELPL204 1.5 | |
| UEL315D1 33.0 | AELPL204-012 1.5 | |
| UEL315-215D1 33.0 | AELPL205 1.8 | |
| UEL315-300D1 33.0 | AELPL205-013 1.8 | |
| UEL316D1 42.0 | AELPL205-014 1.8 | |
| UEL316-302D1 42.0 | AELPL205-015 1.8 | |
| UEL316-303D1 42.0 | AELPL205-100 1.8 | |
| UEL317D1 46.0 | AELPL206 2.6 | |
| UEL317-304D1 46.0 | AELPL206-101 2.6 | |
| UEL318D1 55.0 | AELPL206-102 2.6 | |
| UEL318-307D1 55.0 | AELPL206-103 2.6 | |
| UEL318-308D1 55.0 | AELPL206-104 2.6 | |
| UEL319D1 66.0 | AELPL207 3.5 | |
| UEL319-312D1 66.0 | AELPL207-104 3.5 | |
| UEL320D1 82.0 | AELPL207-105 3.5 | |
| UEL320-315D1 82.0 | AELPL207-106 3.5 | |
| UEL320-315D1 82.0 | AELPL207-107 3.5 | |
| UEL320-400D1 82.0 | AELPP2 SERIES | |
| UEL321D1 82.0 | AELPP201 0.4 | |
| UEL322D1 106.0 | AELPP201-008 0.4 | |
| JELPL2 SERIES | AELPP202 0.4 | |
| JELPL201 1.3 | AELPP202-009 0.4 | |
| JELPL201-008 1.3 | AELPP202-010 0.4 | |
| JELPL202 1.3 | AELPP203 0.4 | |
| JELPL202-009 1.3 | AELPP203-011 0.4 | |
| JELPL202-010 1.3 | AELPP204 0.4 | |
| JELPL203 1.3 | AELPP204-012 0.4 | |
| JELPL203-011 1.3 | AELPP205 0.7 | |
| JELPL204 1.5 | AELPP205-013 0.7 | |
| JELPL204-012 1.5 | AELPP205-014 0.7 | |
| JELPL205 1.8 | AELPP205-015 0.7 | |
| JELPL205-013 1.8 | AELPP205-100 0.7 | |
| JELPL205-014 1.8 | AELPP206 1.1 | |
| JELPL205-015 1.8 | AELPP206-101 1.1 | |
| JELPL205-100 1.8 | AELPP206-102 1.1 | |
| JELPL206 2.6 | AELPP206-103 1.1 | |
| JELPL206-101 2.6 | AELPP206-104 1.1 | |
| JELPL206-102 2.6 | AELPP207 1.5 | |
| JELPL206-103 2.6 | AELPP207-104 1.5 | |
| JELPL206-104 2.6 | AELPP207-105 1.5 | |
| JELPL207 3.5 | AELPP207-106 1.5 | |
| JELPL207-104 3.5 | AELPP207-107 1.5 | |
| JELPL207-105 3.5 | UKP2 SERIES | |
| JELPL207-106 3.5 | UKP205D1:H2305X 2.0 | |
| JELPL207-107 3.5 | UKP205D1:HE2305 2.0 | |
| AELP2 SERIES | UKP206D1:H2306X 2.9 | |
| AELP204D1 1.5 | UKP206D1:HS2306 2.9 | |
| AELP204-012D1 1.5 | UKP206D1:HE2306X 2.9 | |
| AELP205D1 1.9 | UKP207D1:H2307X 3.7 | |
| AELP205-013D1 1.9 | UKP207D1:HS2307 3.7 | |
| AELP205-014D1 1.9 | UKP208D1:HS2308X 4.4 | |

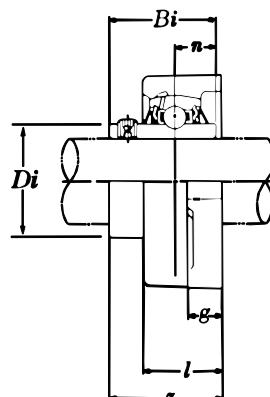
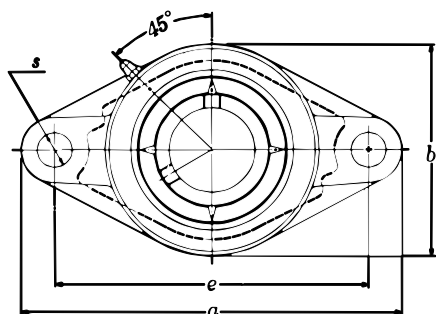
NTN
SERIES
UCFL2
SET SCREW
TYPE

Units: **Millimeters**
INCHES



FLANGED UNITS - CAST HOUSING (TWO BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|---|--------------------|----------------|--------------|---------------|-------------|----------------|-----------------|---------------|---------------|-------------|---|---|--------------------------|-----------|
| | | a | e | g | l | s | b | z | Bi | n | | | | Dynamic C | Static Co |
| 12 ½ | UCFL201D1 UCFL201-008D1 | 113 4 ⅞ | 90 3 ¾ | 11 ⅞ | 25.5 1 | 12 15/32 | 60 2 ⅜ | 33.3 1 ⅞ | 31 1.220 | 12.7 .500 | M10 ⅝ | FL204D1 FL204D1 | UC201D1 UC201-008D1 | 2,890 | 1,500 |
| 15 ⅝ 5/8 | UCFL202D1 UCFL202-009D1 UCFL202-010D1 | 113 4 ⅞ | 90 3 ¾ | 11 ⅞ | 25.5 1 | 12 25/64 | 60 2 ⅜ | 33.3 1 ⅞ | 31 1.220 | 12.7 .500 | M10 ⅝ | FL204D1 FL204D1 FL204D1 | UC202D1 UC202-009D1 UC202-010D1 | 2,890 | 1,500 |
| 17 1 1/16 | UCFL203D1 UCFL203-011D1 | 113 4 ⅞ | 90 3 ¾ | 11 ⅞ | 25.5 1 | 12 25/64 | 60 2 ⅜ | 33.3 1 ⅞ | 31 1.220 | 12.7 .500 | M10 ⅝ | FL204D1 FL204D1 | UC203D1 UC203-011D1 | 2,890 | 1,500 |
| 20 ¾ | UCFL204D1 UCFL204-012D1 | 113 4 ⅞ | 90 3 ¾ | 11 ⅞ | 25.5 1 | 12 25/64 | 60 2 ⅜ | 33.3 1 ⅞ | 31 1.220 | 12.7 .500 | M10 ⅝ | FL204D1 FL204D1 | UC204D1 UC204-012D1 | 2,890 | 1,500 |
| 25 1 3/16 7/8 1 1/8 1 1/4 | UCFL205D1 UCFL205-013D1 UCFL205-014D1 UCFL205-015D1 UCFL205-100D1 | 130 5 ½ | 99 3 5/8 | 13 ½ | 27 1 1/16 | 16 5/8 | 68 2 1/16 | 35.7 1 13/32 | 34 1.339 | 14.3 .563 | M14 ¾ | FL205D1 FL205D1 FL205D1 FL205D1 FL205D1 | UC205D1 UC205-013D1 UC205-014D1 UC205-015D1 UC205-100D1 | 3,150 | 1,770 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | UCFL206D1 UCFL206-101D1 UCFL206-102D1 UCFL206-103D1 UCFL206-104D1 | 148 5 13/16 | 117 4 3/8 | 13 ½ | 31 1 1/32 | 16 5/8 | 80 3 1/2 | 40.2 1 37/64 | 38.1 1.500 | 15.9 .626 | M14 ¾ | FL206D1 FL206D1 FL206D1 FL206D1 FL206D1 | UC206D1 UC206-101D1 UC206-102D1 UC206-103D1 UC206-104D1 | 4,400 | 2,540 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UCFL207D1 UCFL207-104D1 UCFL207-105D1 UCFL207-106D1 UCFL207-107D1 | 161 6 1/32 | 130 5 1/8 | 15 1 9/32 | 34 1 1/32 | 16 5/8 | 90 3 1/32 | 44.4 1 3/4 | 42.9 1.689 | 17.5 .689 | M14 7/16 | FL207D1 FL207D1 FL207D1 FL207D1 FL207D1 | UC207D1 UC207-104D1 UC207-105D1 UC207-106D1 UC207-107D1 | 5,750 | 3,440 |
| 40 1 1/2 1 1/16 | UCFL208D1 UCFL208-108D1 UCFL208-109D1 | 175 6 7/8 | 144 5 43/64 | 15 1 9/32 | 36 1 1/32 | 16 5/8 | 100 3 15/16 | 51.2 2 1/64 | 49.2 1.937 | 19 .748 | M14 7/16 | FL208D1 FL208D1 FL208D1 | UC208D1 UC208-108D1 UC208-109D1 | 6,550 | 4,000 |
| 45 1 5/8 1 11/16 1 3/4 | UCFL209D1 UCFL209-110D1 UCFL209-111D1 UCFL209-112D1 | 188 7 13/32 | 148 5 53/64 | 16 5/8 | 38 1 1/2 | 19 3/4 | 108 4 1/4 | 52.2 2 1/16 | 49.2 1.937 | 19 .748 | M16 ½ | FL209D1 FL209D1 FL209D1 FL209D1 | UC209D1 UC209-110D1 UC209-111D1 UC209-112D1 | 7,350 | 4,590 |
| 50 1 13/16 1 7/8 1 15/16 2 | UCFL210D1 UCFL210-113D1 UCFL210-114D1 UCFL210-115D1 UCFL210-200D1 | 197 7 3/4 | 157 6 3/16 | 16 5/8 | 40 1 9/16 | 19 3/4 | 115 4 17/32 | 54.6 2 5/32 | 51.6 2.031 | 19 .748 | M16 ½ | FL210D1 FL210D1 FL210D1 FL210D1 FL210D1 | UC210D1 UC210-113D1 UC210-114D1 UC210-115D1 UC210-200D1 | 7,900 | 5,220 |
| 55 2 2 1/16 2 1/8 2 3/16 | UCFL211D1 UCFL211-200D1 UCFL211-201D1 UCFL211-202D1 UCFL211-203D1 | 224 8 13/16 | 184 7 1/4 | 18 23/32 | 43 1 11/16 | 19 3/4 | 130 5 1/8 | 58.4 2 19/64 | 55.6 2.189 | 22.2 .874 | M16 9/16 | FL211D1 FL211D1 FL211D1 FL211D1 FL211D1 | UC211D1 UC211-200D1 UC211-201D1 UC211-202D1 UC211-203D1 | 9,750 | 6,570 |
| 60 2 1/4 2 3/8 2 7/16 | UCFL212D1 UCFL212-204D1 UCFL212-206D1 UCFL212-207D1 | 250 9 27/32 | 202 7 61/64 | 18 23/32 | 48 1 7/8 | 23 29/32 | 140 5 1/2 | 68.7 2 49/64 | 65.1 2.563 | 25.4 1.000 | M20 ¾ | FL212D1 FL212D1 FL212D1 FL212D1 | UC212D1 UC212-204D1 UC212-206D1 UC212-207D1 | 11,800 | 8,100 |
| 65 2 1/2 | UCFL213D1 UCFL213-208D1 | 258 10 9/32 | 210 8 17/64 | 22 7/8 | 50 1 31/32 | 23 29/32 | 155 6 3/32 | 69.7 2 3/4 | 65.1 2.563 | 25.4 1.000 | M20 ¾ | FL213D1 FL213D1 | UC213D1 UC213-208D1 | 12,900 | 9,000 |
| 70 2 11/16 2 3/4 | UCFL214D1 UCFL214-211D1 UCFL214-212D1 | 265 10 7/16 | 216 8 1/2 | 22 7/8 | 54 2 1/8 | 23 29/32 | 160 6 3/16 | 75.4 2 31/32 | 74.6 2.937 | 30.2 1.189 | M20 ¾ | FL214D1 FL214D1 FL214D1 | UC214D1 UC214-211D1 UC214-212D1 | 14,000 | 9,900 |
| 75 2 15/16 3 | UCFL215D1 UCFL215-215D1 UCFL215-300D1 | 275 10 13/16 | 225 8 59/64 | 22 7/8 | 56 2 1/32 | 23 29/32 | 165 6 1/2 | 78.5 3 3/32 | 77.8 3.063 | 33.3 1.311 | M20 ¾ | FL215D1 FL215D1 FL215D1 | UC215D1 UC215-215D1 UC215-300D1 | 14,900 | 11,100 |
| 80 3 1/8 | UCFL216D1 UCFL216-302D1 | 290 11 13/32 | 233 9 11/64 | 22 7/8 | 58 2 9/32 | 25 63/64 | 180 7 3/32 | 83.3 3 9/32 | 82.6 3.252 | 33.3 1.311 | M22 7/8 | FL216D1 FL216D1 | UC216D1 UC216-302D1 | 16,300 | 11,900 |
| 85 3 1/4 | UCFL217D1 UCFL217-304D1 | 305 12 | 248 9 49/64 | 24 15/16 | 63 2 15/32 | 25 63/64 | 190 7 15/32 | 87.6 3 29/64 | 85.7 3.374 | 34.1 1.343 | M22 7/8 | FL217D1 FL217D1 | UC217D1 UC217-304D1 | 18,700 | 14,400 |
| 90 3 1/2 | UCFL218D1 UCFL218-308D1 | 320 12 19/32 | 265 10 7/16 | 24 15/16 | 68 2 11/16 | 25 63/64 | 205 8 1/16 | 96.3 3 51/64 | 96 3.780 | 39.7 1.563 | M22 7/8 | FL218D1 FL218D1 | UC218D1 UC218-308D1 | 21,600 | 16,100 |



Units: Millimeters
INCHES

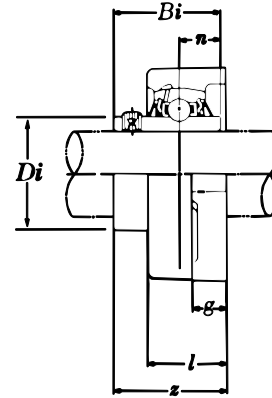
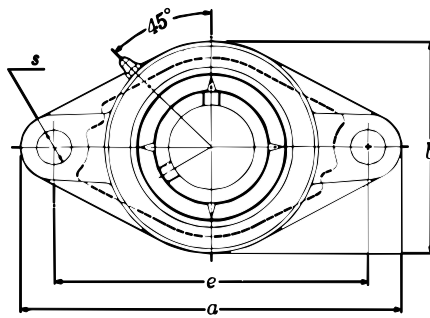


FLANGED UNITS - CAST HOUSING (TWO BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|---|--------------------|-----------------|---------------|---------------|---------------|----------------|----------------|--------------|-------------|--------------|---|---|--------------------------|-----------|
| | | a | e | g | l | s | b | z | Bi | n | | | | Dynamic C | Static Co |
| 25 7/8 1 1/16 1 | UCFL305D1 UCFL305-014D1 UCFL305-015D1 UCFL305-100D1 | 150 5 29/32 | 113 4 7/16 | 13 1/2 | 29 1 1/32 | 19 3/4 | 80 3 3/32 | 39 1 17/32 | 38 1.496 | 15 .591 | M16 5/8 | FL305D1 FL305D1 FL305D1 FL305D1 | UC305D1 UC305-014D1 UC305-015D1 UC305-100D1 | 4,750 | 2,460 |
| 30 1 1/8 1 3/16 | UCFL306D1 UCFL306-102D1 UCFL306-103D1 | 180 7 3/32 | 134 5 3/32 | 15 19/32 | 32 1 1/4 | 23 29/32 | 90 3 17/32 | 44 1 47/64 | 43 1.693 | 17 .669 | M20 3/4 | FL306D1 FL306D1 FL306D1 | UC306D1 UC306-102D1 UC306-103D1 | 6,000 | 3,400 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UCFL307D1 UCFL307-104D1 UCFL307-105D1 UCFL307-106D1 UCFL307-107D1 | 185 7 9/32 | 141 5 32/64 | 16 5/8 | 36 1 13/32 | 23 29/32 | 100 3 15/16 | 49 1 59/64 | 48 1.890 | 19 .748 | M20 3/4 | FL307D1 FL307D1 FL307D1 FL307D1 FL307D1 | UC307D1 UC307-104D1 UC307-105D1 UC307-106D1 UC307-107D1 | 7,500 | 4,300 |
| 40 1 1/2 | UCFL308D1 UCFL308-108D1 | 200 7 7/8 | 158 6 7/32 | 17 21/32 | 40 1 9/16 | 23 29/32 | 112 4 13/32 | 56 2 13/64 | 52 2.047 | 19 .748 | M20 3/4 | FL308D1 FL308D1 | UC308D1 UC308-108D1 | 9,150 | 5,400 |
| 45 1 5/8 1 11/16 1 3/4 | UCFL309D1 UCFL309-110D1 UCFL309-111D1 UCFL309-112D1 | 230 9 1/16 | 177 6 31/32 | 18 23/32 | 44 1 23/32 | 25 63/64 | 125 4 29/32 | 60 2 23/64 | 57 2.244 | 22 .866 | M22 7/8 | FL309D1 FL309D1 FL309D1 FL309D1 | UC309D1 UC309-110D1 UC309-111D1 UC309-112D1 | 11,900 | 7,200 |
| 50 1 7/8 1 15/16 | UCFL310D1 UCFL310-114D1 UCFL310-115D1 | 240 9 7/16 | 187 7 23/64 | 19 3/4 | 48 1 7/8 | 25 63/64 | 140 5 1/2 | 67 2 41/64 | 61 2.402 | 22 .866 | M22 7/8 | FL310D1 FL310D1 FL310D1 | UC310D1 UC310-114D1 UC310-115D1 | 13,900 | 8,600 |
| 55 2 2 1/8 2 3/16 | UCFL311D1 UCFL311-200D1 UCFL311-202D1 UCFL311-203D1 | 250 9 27/32 | 198 7 51/64 | 20 29/32 | 52 2 1/16 | 25 63/64 | 150 5 29/32 | 71 2 51/64 | 66 2.598 | 25 .984 | M22 7/8 | FL311D1 FL311D1 FL311D1 FL311D1 | UC311D1 UC311-200D1 UC311-202D1 UC311-203D1 | 16,100 | 10,100 |
| 60 2 1/4 2 3/8 2 7/16 | UCFL312D1 UCFL312-204D1 UCFL312-206D1 UCFL312-207D1 | 270 10 5/8 | 212 8 11/32 | 22 7/8 | 56 2 1/32 | 31 1 7/32 | 160 6 9/16 | 78 3 3/64 | 71 2.795 | 26 1.024 | M27 1 | FL312D1 FL312D1 FL312D1 FL312D1 | UC312D1 UC312-204D1 UC312-206D1 UC312-207D1 | 18,400 | 11,700 |
| 65 2 1/2 | UCFL313D1 UCFL313-208D1 | 295 11 5/8 | 240 9 29/64 | 25 31/32 | 58 2 9/32 | 31 1 7/32 | 175 6 7/8 | 78 3 5/64 | 75 2.953 | 30 1.181 | M27 1 | FL313D1 FL313D1 | UC313D1 UC313-208D1 | 20,800 | 13,400 |
| 70 2 11/16 2 3/4 | UCFL314D1 UCFL314-211D1 UCFL314-212D1 | 315 12 13/32 | 250 9 27/32 | 28 1 3/32 | 61 2 13/32 | 35 1 3/8 | 185 7 3/32 | 81 3 3/16 | 78 3.071 | 33 1.299 | M30 1 1/8 | FL314D1 FL314D1 FL314D1 | UC314D1 UC314-211D1 UC314-212D1 | 23,400 | 15,300 |
| 75 2 15/16 3 | UCFL315D1 UCFL315-215D1 UCFL315-300D1 | 320 12 19/32 | 260 10 15/64 | 30 1 3/16 | 66 2 19/32 | 35 1 3/8 | 195 7 11/16 | 89 3 1/2 | 82 3.228 | 32 1.260 | M30 1 1/8 | FL315D1 FL315D1 FL315D1 | UC315D1 UC315-215D1 UC315-300D1 | 25,500 | 17,400 |
| 80 3 1/8 3 3/16 | UCFL316D1 UCFL316-302D1 UCFL316-303D1 | 355 13 31/32 | 285 11 7/32 | 32 1 1/4 | 68 2 11/16 | 38 1 1/2 | 210 8 3/32 | 90 3 39/64 | 86 3.386 | 34 1.339 | M33 1 1/4 | FL316D1 FL316D1 FL316D1 | UC316D1 UC316-302D1 UC316-303D1 | 27,600 | 19,500 |
| 85 3 1/4 | UCFL317D1 UCFL317-304D1 | 370 14 9/16 | 300 11 13/16 | 32 1 1/4 | 74 2 29/32 | 38 1 1/2 | 220 8 21/32 | 100 3 15/16 | 96 3.780 | 40 1.575 | M33 1 1/4 | FL317D1 FL317D1 | UC317D1 UC317-304D1 | 29,800 | 21,800 |
| 90 3 7/16 3 1/2 | UCFL318D1 UCFL318-307D1 UCFL318-308D1 | 385 15 5/32 | 315 12 13/32 | 36 1 13/32 | 76 3 | 38 1 1/2 | 235 9 1/4 | 100 3 15/16 | 96 3.780 | 40 1.575 | M33 1 1/4 | FL318D1 FL318D1 FL318D1 | UC318D1 UC318-307D1 UC318-308D1 | 32,000 | 24,100 |
| 95 3 3/4 | UCFL319D1 UCFL319-312D1 | 405 15 15/16 | 330 13 | 40 1 9/16 | 94 3 11/16 | 41 1 39/64 | 250 9 27/32 | 121 4 49/64 | 103 4.055 | 41 1.614 | M36 1 3/8 | FL319D1 FL319D1 | UC319D1 UC319-312D1 | 34,500 | 26,600 |
| 100 3 15/16 4 | UCFL320D1 UCFL320-315D1 UCFL320-400D1 | 440 17 5/16 | 360 14 11/64 | 40 2 21/64 | 94 3 11/16 | 44 1 47/64 | 270 10 5/8 | 125 4 59/64 | 108 4.252 | 42 1.654 | M39 1 1/2 | FL320D1 FL320D1 FL320D1 | UC320D1 UC320-315D1 UC320-400D1 | 39,000 | 31,500 |
| 105 | UCFL321D1 | 440 | 360 | 40 | 94 | 44 | 270 | 127 | 112 | 44 | M39 | FL321D1 | UC321D1 | 41,500 | 34,500 |
| 110 | UCFL322D1 | 470 | 390 | 42 | 96 | 44 | 300 | 131 | 117 | 46 | M39 | FL322D1 | UC322D1 | 46,000 | 40,500 |
| 120 | UCFL324D1 | 520 | 430 | 48 | 110 | 47 | 330 | 140 | 126 | 51 | M42 | FL324D1 | UC324D1 | 46,500 | 41,500 |
| 130 | UCFL326D1 | 550 | 460 | 50 | 115 | 47 | 360 | 146 | 135 | 54 | M42 | FL326D1 | UC326D1 | 51,500 | 48,000 |
| 140 | UCFL328D1 | 600 | 500 | 60 | 125 | 51 | 400 | 161 | 145 | 59 | M45 | FL328D1 | UC328D1 | 57,000 | 55,500 |

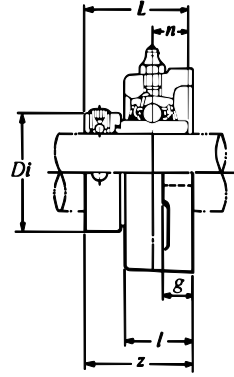
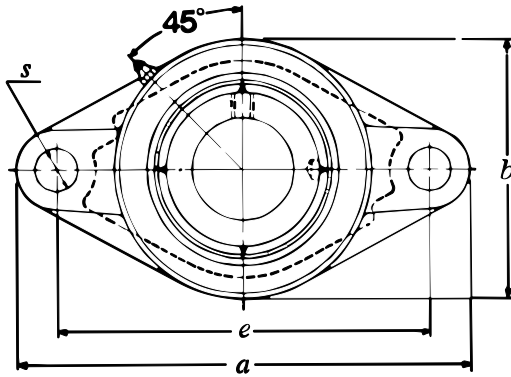
NTN
SERIES UCFLX
SET SCREW TYPE

Units: Millimeters
 INCHES



FLANGED UNITS - CAST HOUSING (TWO BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|---|--------------------|----------------|--------------|---------------|-------------|---------------|-----------------|---------------|--------------|------------|---|---|--------------------------|-----------|
| | | a | e | g | l | s | b | z | Bi | n | | | | Dynamic C | Static Co |
| 25 1 3/16 7/8 15/16 1 | UCFLX05D1 UCFLX05-013D1 UCFLX05-014D1 UCFLX05-015D1 UCFLX05-100D1 | 141 5 3/16 | 117 4 39/64 | 13 1/2 | 30 1 3/16 | 12 1 1/8 | 83 3 9/32 | 40.2 1 37/64 | 38.1 1.500 | 15.9 .626 | M10 3/8 | FLX05D1 FLX05D1 FLX05D1 FLX05D1 FLX05D1 | UCX05D1 UCX05-013D1 UCX05-014D1 UCX05-015D1 UCX05-100D1 | 4,390 | 2,540 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | UCFLX06D1 UCFLX06-101D1 UCFLX06-102D1 UCFLX06-103D1 UCFLX06-104D1 | 156 6 5/32 | 130 5 1/8 | 15 1 9/32 | 34 1 11/32 | 16 5/8 | 95 3 3/4 | 44.4 1 3/4 | 42.9 1.689 | 17.5 .689 | M14 1/2 | FLX06D1 FLX06D1 FLX06D1 FLX06D1 FLX06D1 | UCX06D1 UCX06-101D1 UCX06-102D1 UCX06-103D1 UCX06-104D1 | 5,780 | 3,440 |
| 35 1 5/16 1 3/8 1 7/16 | UCFLX07D1 UCFLX07-105D1 UCFLX07-106D1 UCFLX07-107D1 | 171 6 23/32 | 144 5 43/64 | 16 5/8 | 38 1 1/2 | 16 5/8 | 105 4 1/8 | 51.2 2 1/64 | 49.2 1.937 | 19 .748 | M14 1/2 | FLX07D1 FLX07D1 FLX07D1 FLX07D1 | UCX07D1 UCX07-105D1 UCX07-106D1 UCX07-107D1 | 6,550 | 4,000 |
| 40 1 1/2 1 9/16 | UCFLX08D1 UCFLX08-108D1 UCFLX08-109D1 | 179 7 1/16 | 148 5 53/64 | 16 5/8 | 40 1 9/16 | 16 5/8 | 111 4 3/8 | 52.2 2 1/16 | 49.2 1.937 | 19 .748 | M14 1/2 | FLX08D1 FLX08D1 FLX08D1 | UCX08D1 UCX08-108D1 UCX08-109D1 | 7,310 | 4,590 |
| 45 1 5/8 1 11/16 1 3/4 1 13/16 | UCFLX09D1 UCFLX09-110D1 UCFLX09-111D1 UCFLX09-112D1 UCFLX09-113D1 | 189 7 7/16 | 157 6 3/16 | 16 5/8 | 40 1 9/16 | 16 5/8 | 116 4 9/16 | 55.6 2 3/16 | 51.6 2.031 | 19 .748 | M14 1/2 | FLX09D1 FLX09D1 FLX09D1 FLX09D1 FLX09D1 | UCX09D1 UCX09-110D1 UCX09-111D1 UCX09-112D1 UCX09-113D1 | 7,870 | 5,220 |
| 50 1 7/8 1 15/16 2 | UCFLX10D1 UCFLX10-114D1 UCFLX10-115D1 UCFLX10-200D1 | 216 8 1/2 | 184 7 1/4 | 18 23/32 | 44 1 23/32 | 19 3/4 | 133 5 1/4 | 59.4 2 11/32 | 55.6 2.189 | 22.2 .874 | M16 5/8 | FLX10D1 FLX10D1 FLX10D1 FLX10D1 | UCX10D1 UCX10-114D1 UCX10-115D1 UCX10-200D1 | 9,780 | 6,570 |



Units: Millimeters
INCHES

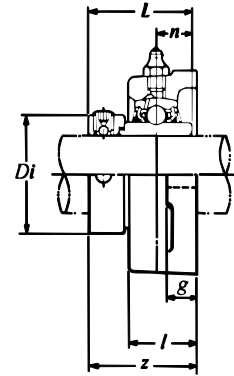
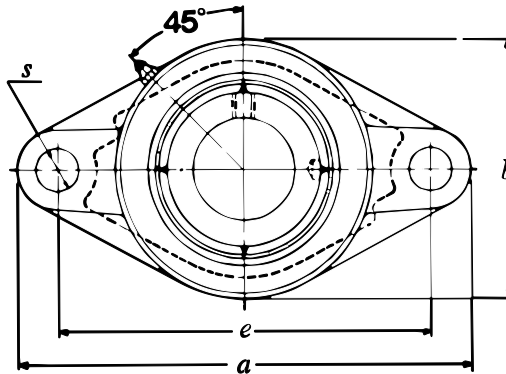


FLANGED UNITS - CAST HOUSING (TWO BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|--|--------------------|----------------|-------------|---------------|-------------|------------------|---------------|---------------|----------------|-------------|---|--|--------------------------|-----------|
| | | a | e | g | l | s | z | Bi | Di | n | | | | Dynamic C | Static Co |
| 20 3/4 | UELFL204D1 UELFL204-012D1 | 113 4 7/16 | 90 3 39/64 | 11 7/16 | 25.5 1 | 12 15/32 | 41.6 1 4 1/64 | 43.7 1.720 | 33 1.299 | 17.1 .673 | M10 5/16 | FL204D1 FL204D1 | UEL204D1 UEL204-012D1 | 2,890 | 1,500 |
| 25 1 13/16 7/8 1 15/16 1 | UELFL205D1 UELFL205-013D1 UELFL205-014D1 UELFL205-015D1 UELFL205-100D1 | 130 5 1/8 | 99 3 57/64 | 13 1/2 | 27 1 1/16 | 16 5/8 | 42.9 1 11/16 | 44.4 1.748 | 38 1.496 | 17.5 .689 | M14 3/8 | FL205D1 FL205D1 FL205D1 FL205D1 FL205D1 | UEL205D1 UEL205-013D1 UEL205-014D1 UEL205-015D1 UEL205-100D1 | 3,150 | 1,770 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | UELFL206D1 UELFL206-101D1 UELFL206-102D1 UELFL206-103D1 UELFL206-104D1 | 148 5 13/16 | 117 4 9/64 | 13 1/2 | 31 1 7/32 | 16 5/8 | 48.1 1 57/64 | 48.4 1.906 | 44.5 1.752 | 18.3 .720 | M14 3/8 | FL206D1 FL206D1 FL206D1 FL206D1 FL206D1 | UEL206D1 UEL206-101D1 UEL206-102D1 UEL206-103D1 UEL206-104D1 | 4,400 | 2,540 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UELFL207D1 UELFL207-104D1 UELFL207-105D1 UELFL207-106D1 UELFL207-107D1 | 161 6 13/32 | 130 5 1/8 | 15 19/32 | 34 1 11/32 | 16 5/8 | 51.3 2 1/64 | 51.1 2.012 | 55.5 2.185 | 18.8 .740 | M14 7/16 | FL207D1 FL207D1 FL207D1 FL207D1 FL207D1 | UEL207D1 UEL207-104D1 UEL207-105D1 UEL207-106D1 UEL207-107D1 | 5,750 | 3,440 |
| 40 1 1/2 1 9/16 | UELFL208D1 UELFL208-108D1 UELFL208-109D1 | 175 6 7/8 | 144 5 43/64 | 15 19/32 | 36 1 13/32 | 16 5/8 | 55.9 2 13/64 | 56.3 2.217 | 60 2.362 | 21.4 .843 | M14 7/16 | FL207D1 FL208D1 FL208D1 | UEL208D1 UEL208-108D1 UEL208-109D1 | 6,550 | 4,000 |
| 45 1 5/8 1 11/16 1 3/4 | UELFL209D1 UELFL209-110D1 UELFL209-111D1 UELFL209-112D1 | 188 7 13/32 | 148 5 53/64 | 16 5/8 | 38 1 1/2 | 19 3/4 | 56.9 2 15/64 | 56.3 2.217 | 63.5 2.500 | 21.4 .843 | M16 1/2 | FL209D1 FL209D1 FL209D1 FL209D1 | UEL209D1 UEL209-110D1 UEL209-111D1 UEL209-112D1 | 7,350 | 4,590 |
| 50 1 13/16 1 7/8 1 15/16 2 | UELFL210D1 UELFL210-113D1 UELFL210-114D1 UELFL210-115D1 UELFL210-200D1 | 197 7 3/4 | 157 6 3/16 | 16 5/8 | 40 1 9/16 | 19 3/4 | 60.1 2 29/64 | 62.7 2.469 | 69.5 2.736 | 24.6 .969 | M16 1/2 | FL210D1 FL210D1 FL210D1 FL210D1 FL210D1 | UEL210D1 UEL210-113D1 UEL210-114D1 UEL210-115D1 UEL210-200D1 | 7,900 | 5,220 |
| 55 2 2 1/16 2 1/8 2 3/16 | UELFL211D1 UELFL211-200D1 UELFL211-201D1 UELFL211-202D1 UELFL211-203D1 | 224 8 13/16 | 184 7 1/4 | 18 23/32 | 43 1 11/16 | 19 3/4 | 68.6 2 45/64 | 71.4 2.811 | 76 2.992 | 27.8 1.094 | M16 9/16 | FL211D1 FL211D1 FL211D1 FL211D1 FL211D1 | UEL211D1 UEL211-200D1 UEL211-201D1 UEL211-202D1 UEL211-203D1 | 9,750 | 6,570 |
| 60 2 1/4 2 3/8 2 7/16 | UELFL212D1 UELFL212-204D1 UELFL212-206D1 UELFL212-207D1 | 250 9 27/32 | 202 7 61/64 | 18 23/32 | 48 1 7/8 | 23 29/32 | 75.8 2 63/64 | 77.8 3.063 | 84 3.307 | 31 1.220 | M20 3/4 | FL212D1 FL212D1 FL212D1 FL212D1 | UEL212D1 UEL212-204D1 UEL212-206D1 UEL212-207D1 | 11,800 | 8,100 |
| 65 2 1/2 | UELFL213D1 UELFL213-208D1 | 258 10 5/32 | 210 8 17/64 | 22 7/8 | 50 1 31/32 | 23 29/32 | 81.55 3 13/64 | 85.7 3.374 | 97 3.819 | 34.15 1.344 | M20 3/4 | FL213D1 FL213D1 | UEL213D1 UEL213-208D1 | 12,900 | 9,000 |
| 70 2 11/16 2 3/4 | UELFL214D1 UELFL214-211D1 UELFL214-212D1 | 265 10 7/16 | 216 8 1/2 | 22 7/8 | 54 2 1/8 | 23 29/32 | 82.55 3 1/4 | 85.7 3.374 | 97 3.819 | 34.15 1.344 | M20 3/4 | FL214D1 FL214D1 FL214D1 | UEL214D1 UEL214-211D1 UEL214-212D1 | 14,000 | 9,900 |
| 75 2 15/16 3 | UELFL215D1 UELFL215-215D1 UELFL215-300D1 | 275 10 13/16 | 225 8 55/64 | 22 7/8 | 56 2 7/32 | 23 29/32 | 88.7 3 31/64 | 92 3.622 | 102 4.016 | 37.3 1.469 | M20 3/4 | FL215D1 FL215D1 FL215D1 | UEL215D1 UEL215-215D1 UEL215-300D1 | 14,900 | 11,130 |

NTN
SERIES
UELFL3
ECCENTRIC
LOCKING
COLLAR
TYPE

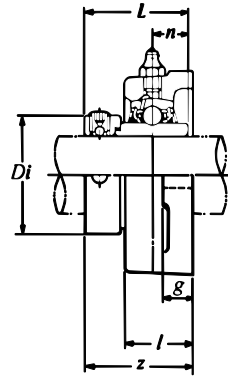
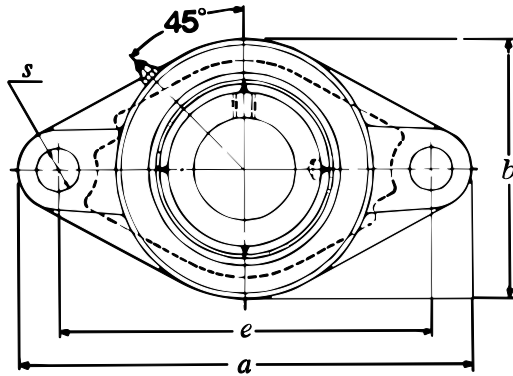
Units: Millimeters
 INCHES



FLANGED UNITS - CAST HOUSING (TWO BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|--|--------------------|-----------------|---------------|---------------|---------------|-------------------|----------------|---------------|----------------|--------------|---|--|--------------------------|-----------|
| | | a | e | g | l | s | z | Bi | Di | n | | | | Dynamic C | Static Co |
| 25 7/8 15/16 1 | UELFL305D1 UELFL305-014D1 UELFL305-015D1 UELFL305-100D1 | 150 5 29/32 | 113 4 29/64 | 13 1/2 | 29 1 1/32 | 19 3/4 | 46.1 1 19/16 | 46.8 1.843 | 42.8 1.685 | 16.7 .657 | M16 5/8 | FL305D1 FL305D1 FL305D1 FL305D1 | UEL305D1 UEL305-014D1 UEL305-015D1 UEL305-100D1 | 4,750 | 2,460 |
| 30 1 1/8 1 3/16 | UELFL306D1 UELFL306-102D1 UELFL306-103D1 | 180 7 3/32 | 134 5 9/32 | 15 19/32 | 32 1 1/4 | 23 29/32 | 50.5 1 63/64 | 50 1.969 | 50 1.969 | 17.5 .689 | M20 3/4 | FL306D1 FL306D1 FL306D1 | UEL306D1 UEL306-102D1 UEL306-103D1 | 6,000 | 3,400 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UELFL307D1 UELFL307-104D1 UELFL307-105D1 UELFL307-106D1 UELFL307-107D1 | 185 7 3/32 | 141 5 35/64 | 16 9/8 | 36 1 13/32 | 23 29/32 | 53.3 2 3/32 | 51.6 2.031 | 55 2.165 | 18.3 .720 | M20 3/4 | FL307D1 FL307D1 FL307D1 FL307D1 FL307D1 | UEL307D1 UEL307-104D1 UEL307-105D1 UEL307-106D1 UEL307-107D1 | 7,500 | 4,300 |
| 40 1 1/2 | UELFL308D1 UELFL308-108D1 | 200 7 7/8 | 158 6 7/32 | 17 21/32 | 40 1 9/16 | 23 29/32 | 60.3 3 3/8 | 57.1 2.248 | 63.5 2.500 | 19.8 .780 | M20 3/4 | FL308D1 FL308D1 | UEL308D1 UEL308-108D1 | 9,150 | 5,400 |
| 45 1 5/8 1 11/16 1 3/4 | UELFL309D1 UELFL309-110D1 UELFL309-111D1 UELFL309-112D1 | 230 9 1/16 | 177 6 31/32 | 18 23/32 | 44 1 23/32 | 25 63/64 | 63.9 2 33/64 | 58.7 2.311 | 70 2.756 | 19.8 .780 | M22 7/8 | FL309D1 FL309D1 FL309D1 FL309D1 | UEL309D1 UEL309-110D1 UEL309-111D1 UEL309-112D1 | 11,900 | 7,200 |
| 50 1 7/8 1 15/16 | UELFL310D1 UELFL310-114D1 UELFL310-115D1 | 240 9 7/16 | 187 7 23/64 | 19 3/4 | 48 1 7/8 | 25 63/64 | 70 2 3/4 | 66.6 2.622 | 76.2 3.000 | 24.6 .969 | M22 7/8 | FL310D1 FL310D1 FL310D1 | UEL310D1 UEL310-114D1 UEL310-115D1 | 13,900 | 8,600 |
| 55 2 2 1/8 2 3/16 | UELFL311D1 UELFL311-200D1 UELFL311-202D1 UELFL311-203D1 | 250 9 27/32 | 198 7 51/64 | 20 25/32 | 52 2 1/16 | 25 63/64 | 75.2 2 61/64 | 73 2.874 | 83 3.268 | 27.8 1.094 | M22 7/8 | FL311D1 FL311D1 FL311D1 FL311D1 | UEL311D1 UEL311-200D1 UEL311-202D1 UEL311-203D1 | 16,100 | 10,100 |
| 60 2 1/4 2 3/8 2 7/16 | UELFL312D1 UELFL312-204D1 UELFL312-206D1 UELFL312-207D1 | 270 10 9/8 | 212 8 11/32 | 22 7/8 | 56 2 7/32 | 31 1 7/32 | 81.45 3 13/64 | 79.4 3.126 | 89 3.504 | 30.95 1.219 | M27 1 | FL312D1 FL312D1 FL312D1 FL312D1 | UEL312D1 UEL312-204D1 UEL312-206D1 UEL312-207D1 | 18,400 | 11,700 |
| 65 2 1/2 | UELFL313D1 UELFL313-208D1 | 295 11 5/8 | 240 9 29/64 | 25 31/32 | 58 2 9/32 | 31 1 7/32 | 86.15 3 29/64 | 85.7 3.374 | 97 3.819 | 32.55 1.281 | M27 1 | FL313D1 FL313D1 | UEL313D1 UEL313-208D1 | 20,800 | 13,400 |
| 70 2 11/16 2 3/4 | UELFL314D1 UELFL314-211D1 UELFL314-212D1 | 315 12 13/32 | 250 9 27/32 | 28 1 3/32 | 61 2 13/32 | 35 1 3/8 | 93.95 3 45/64 | 92.1 3.626 | 102 4.016 | 34.15 1.344 | M30 1 1/8 | FL314D1 FL314D1 FL314D1 | UEL314D1 UEL314-211D1 UEL314-212D1 | 23,400 | 15,300 |
| 75 2 15/16 3 | UELFL315D1 UELFL315-215D1 UELFL315-300D1 | 320 12 19/32 | 260 10 15/16 | 30 1 3/16 | 66 2 19/32 | 35 1 3/8 | 101.7 4 | 100 3.937 | 113 4.449 | 37.3 1.469 | M30 1 1/8 | FL315D1 FL315D1 FL315D1 | UEL315D1 UEL315-215D1 UEL315-300D1 | 25,500 | 17,400 |
| 80 3 1/8 3 3/16 | UELFL316D1 UELFL316-302D1 UELFL316-303D1 | 355 13 31/32 | 285 11 7/32 | 32 1 1/4 | 68 2 11/16 | 38 1 1/2 | 103.9 4 3/32 | 106.4 4.189 | 119 4.685 | 40.5 1.594 | M33 1 1/4 | FL316D1 FL316D1 FL316D1 | UEL316D1 UEL316-302D1 UEL316-303D1 | 27,600 | 19,500 |
| 85 3 1/4 | UELFL317D1 UELFL317-304D1 | 370 14 9/16 | 300 11 13/16 | 32 1 1/4 | 74 2 29/32 | 38 1 1/2 | 111.45 4 25/64 | 109.5 4.311 | 127 5.000 | 42.05 1.656 | M33 1 1/4 | FL317D1 FL317D1 | UEL317D1 UEL317-304D1 | 29,800 | 21,800 |
| 90 3 7/16 3 1/2 | UELFL318D1 UELFL318-307D1 UELFL318-308D1 | 385 15 5/32 | 315 12 63/64 | 36 1 13/32 | 76 3 | 38 1 1/2 | 116.25 4 37/64 | 115.9 4.563 | 133 5.236 | 43.65 1.719 | M33 1 1/4 | FL318D1 FL318D1 FL318D1 | UEL318D1 UEL318-307D1 UEL318-308D1 | 32,000 | 24,100 |
| 95 3 3/4 | UELFL319D1 UELFL319-312D1 | 405 15 15/16 | 330 13 | 40 1 9/16 | 94 3 11/16 | 41 1 39/64 | 142.4 5 39/64 | 122.3 4.815 | 140 5.512 | 38.9 1.531 | M36 1 3/8 | FL319D1 FL319D1 | UEL319D1 UEL319-312D1 | 34,500 | 26,600 |
| 100 3 15/16 4 | UELFL320D1 UELFL320-315D1 UELFL320-400D1 | 440 17 5/16 | 360 14 11/64 | 40 1 9/16 | 94 3 11/16 | 44 1 47/64 | 137.6 5 27/64 | 128.6 5.063 | 146 5.748 | 50 1.969 | M39 1 1/2 | FL320D1 FL320D1 FL320D1 | UEL320D1 UEL320-315D1 UEL320-400D1 | 39,000 | 31,500 |
| 105 | UELFL321D1 | 440 | 360 | 40 | 94 | 44 | 150.3 | 139.7 | 157 | 48.4 | M39 | FL321D1 | UEL321D1 | 41,500 | 34,500 |
| 110 | UELFL322D1 | 470 | 390 | 42 | 96 | 44 | 152.1 | 141.3 | 168 | 49.2 | M39 | FL322D1 | UEL322D1 | 46,000 | 40,500 |

Units: Millimeters
INCHES

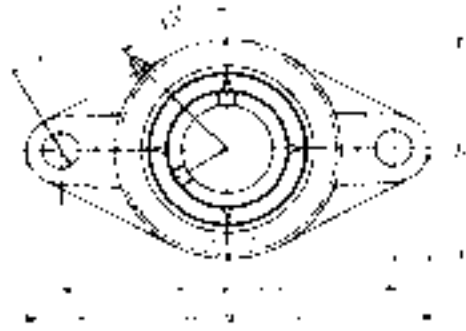


FLANGED UNITS - CAST HOUSING (TWO BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|---|--------------------|------------------|-------------|----------------|---------------|----------------|------------------|---------------|--------------|----------------|-------------|--|--|--------------------------|-----------|
| | | a | e | g | l | s | b | z | L | Di | n | | | | Dynamic C | Static Co |
| 20 3/4 | UELFLU204D1 UELFLU204-012D1 | 113 4 7/16 | 90 3 35/64 | 15 19/32 | 29.5 1 5/32 | 11.5 29/64 | 61 2 13/32 | 45.6 1 51/64 | 43.7 1.720 | 33.3 1.31 | 17.1 .673 | M10 5/16 | FLU204D1 FLU204D1 | UEL204D1 UEL204-012D1 | 2,890 | 1,500 |
| 25 1 13/16 7/8 1 15/16 1 | UELFLU205D1 UELFLU205-013D1 UELFLU205-014D1 UELFLU205-015D1 UELFLU205-100D1 | 125 4 29/32 | 99 3 57/64 | 15 19/32 | 30 1 3/16 | 11.5 29/64 | 70 2 3/4 | 45.9 1 13/16 | 44.4 1.748 | 38.1 1.50 | 17.5 .689 | M10 3/8 | FLU205D1 FLU205D1 FLU205D1 FLU205D1 | UEL205D1 UEL205-013D1 UEL205-014D1 UEL205-015D1 UEL205-100D1 | 3,150 | 1,770 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | UELFLU206D1 UELFLU206-101D1 UELFLU206-102D1 UELFLU206-103D1 UELFLU206-104D1 | 142 5 19/32 | 116.5 4 19/32 | 16 5/8 | 33 1 5/16 | 11.5 29/64 | 83 3 9/32 | 50.1 1 31/32 | 48.4 1.906 | 44.5 1.75 | 18.3 .720 | M10 3/8 | FLU206D1 FLU206D1 FLU206D1 FLU206D1 | UEL206D1 UEL206-101D1 UEL206-102D1 UEL206-103D1 UEL206-104D1 | 4,400 | 2,540 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UELFLU207D1 UELFLU207-104D1 UELFLU207-105D1 UELFLU207-106D1 UELFLU207-107D1 | 156 6 5/32 | 130 5 1/8 | 17 21/32 | 36 1 13/32 | 14 35/64 | 96 3 29/32 | 53.3 2 3/32 | 51.1 2.012 | 55.6 2.19 | 18.8 .740 | M12 7/16 | FLU207D1 FLU207D1 FLU207D1 FLU207D1 | UEL207D1 UEL207-104D1 UEL207-105D1 UEL207-106D1 UEL207-107D1 | 5,750 | 3,440 |
| 40 1 1/2 1 9/16 | UELFLU208D1 UELFLU208-108D1 UELFLU208-109D1 | 172 6 25/32 | 143.5 5 21/32 | 17 21/32 | 39 1 17/32 | 14 35/64 | 105 4 1/8 | 58.9 2 5/16 | 56.3 2.217 | 60.2 2.37 | 21.4 .843 | M12 7/16 | FLU208D1 FLU208D1 FLU208D1 | UEL208D1 UEL208-108D1 UEL208-109D1 | 6,550 | 4,000 |
| 45 1 5/8 1 11/16 1 3/4 | UELFLU209D1 UELFLU209-110D1 UELFLU209-111D1 UELFLU209-112D1 | 180 7 3/32 | 148.5 5 27/32 | 18 23/32 | 40 1 9/16 | 16 5/8 | 111 4 3/8 | 58.9 2 5/16 | 56.3 2.217 | 63.5 2.50 | 21.4 .843 | M14 1/2 | FLU209D1 FLU209D1 FLU209D1 FLU209D1 | UEL209D1 UEL209-110D1 UEL209-111D1 UEL209-112D1 | 7,350 | 4,590 |
| 50 1 13/16 1 7/8 1 15/16 2 | UELFLU210D1 UELFLU210-113D1 UELFLU210-114D1 UELFLU210-115D1 UELFLU210-200D1 | 190 7 15/32 | 157 6 3/16 | 20 25/32 | 46 1 13/16 | 18 45/64 | 116 4 9/16 | 66.1 2 39/64 | 62.7 2.469 | 69.9 2.75 | 24.6 .969 | M16 1/2 | FLU210D1 FLU210D1 FLU210D1 FLU210D1 | UEL210D1 UEL210-113D1 UEL210-114D1 UEL210-115D1 UEL210-200D1 | 7,900 | 5,220 |
| 55 2 2 1/16 2 1/8 2 3/16 | UELFLU211D1 UELFLU211-200D1 UELFLU211-201D1 UELFLU211-202D1 UELFLU211-203D1 | 217 8 17/32 | 184 7 1/4 | 21 13/16 | 49 1 15/16 | 18 45/64 | 134 5 9/32 | 74.6 2 15/16 | 71.4 2.811 | 76.2 3.00 | 27.8 1.094 | M16 9/16 | FLU211D1 FLU211D1 FLU211D1 FLU211D1 | UEL211D1 UEL211-200D1 UEL211-201D1 UEL211-202D1 UEL211-203D1 | 9,750 | 6,570 |
| 60 2 1/4 2 3/8 2 7/16 | UELFLU212D1 UELFLU212-204D1 UELFLU212-206D1 UELFLU212-207D1 | 235 9 1/4 | 202 7 61/64 | 21 13/16 | 53 2 3/32 | 18 45/64 | 138 5 7/16 | 80.8 3 3/16 | 77.8 3.063 | 84.1 3.31 | 31 1.220 | M16 9/16 | FLU212D1 FLU212D1 FLU212D1 FLU212D1 | UEL212D1 UEL212-204D1 UEL212-206D1 UEL212-207D1 | 11,800 | 8,100 |
| 65 2 1/2 | UELFLU213D1 UELFLU213-208D1 | 248 9 3/4 | 210 8 17/64 | 22 7/8 | 59 2 5/16 | 20.5 13/16 | 152 5 31/32 | 89.55 3 17/32 | 85.7 3.374 | 97.0 3.82 | 34.15 1.344 | M18 5/8 | FLU213D1 FLU213D1 | UEL213D1 UEL213-208D1 | 12,900 | 9,000 |
| 70 2 11/16 2 3/4 | UELFLU214D1 UELFLU214-211D1 UELFLU214-212D1 | 257 10 1/8 | 216 8 1/2 | 22 7/8 | 62 2 7/16 | 20.5 13/16 | 159 6 1/4 | 89.55 3 17/32 | 85.7 3.374 | 97.0 3.82 | 34.15 1.344 | M18 5/8 | FLU214D1 FLU214D1 FLU214D1 | UEL214D1 UEL214-211D1 UEL214-212D1 | 14,000 | 9,900 |
| 75 2 15/16 3 | UELFLU215D1 UELFLU215-215D1 UELFLU215-300D1 | 266 10 15/32 | 225 8 55/64 | 22 7/8 | 65 2 9/16 | 20.5 13/16 | 165 6 1/2 | 95.7 3 49/64 | 92 3.622 | 102 4.02 | 37.3 1.469 | M18 5/8 | FLU215D1 FLU215D1 FLU215D1 | UEL215D1 UEL215-215D1 UEL215-300D1 | 14,900 | 11,130 |

NTN
SERIES
AELFL2
ECCENTRIC
LOCKING
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RELUBE
TYPE

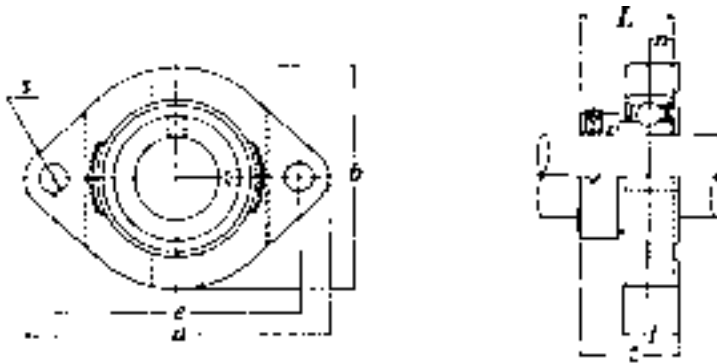
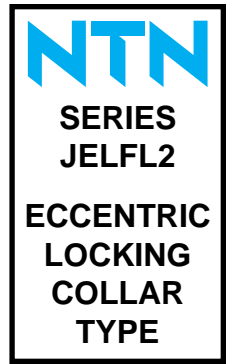
Units: Millimeters
 INCHES



Flanged Units - Cast Housing (2 Bolt)

| Shaft Dia. | Complete Pillow Block Number | Nominal Dimensions | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|------------|------------------------------|--------------------|----------|----------|----------|----------|----------|-----------|-----------|----------|-----------|----------------|----------------|--------------------------|------------------|
| | | <i>a</i> | <i>e</i> | <i>g</i> | <i>l</i> | <i>s</i> | <i>z</i> | <i>Bi</i> | <i>Di</i> | <i>n</i> | | | | <i>Dynamic C</i> | <i>Static Co</i> |
| 20 | AELFL204D1 | 113 | 90 | 11 | 25.5 | 12 | 38.5 | 31 | 33.3 | 7.5 | M10 | FL204D1 | AEL204D1 | 2,890 | 1,500 |
| 3/4 | AELFL204-012D1 | 4 7/16 | 3 17/32 | 7/16 | 1 | 15/32 | 1 33/64 | 1.219 | 1.31 | 0.295 | 3/8 | FL204D1 | AEL204-012D1 | | |
| 25 | AELFL205D1 | 130 | 99 | 13 | 27 | 16 | 40 | 31 | 38.1 | 7.5 | M14 | FL205D1 | AEL205D1 | 3,150 | 1,770 |
| 13/16 | AELFL205-013D1 | 5 1/8 | 3 29/32 | 1/2 | 1 1/16 | 5/8 | 1 9/16 | 1.219 | 1.50 | 0.295 | 1/2 | FL205D1 | AEL205-013D1 | | |
| 7/8 | AELFL205-014D1 | | | | | | | | | | | FL205D1 | AEL205-014D1 | | |
| 15/16 | AELFL205-015D1 | | | | | | | | | | | FL205D1 | AEL205-015D1 | | |
| 1 | AELFL205-100D1 | | | | | | | | | | | FL205D1 | AEL205-100D1 | | |
| 30 | AELFL206D1 | 148 | 117 | 13 | 31 | 16 | 44.8 | 35.7 | 44.5 | 9 | M14 | FL206D1 | AEL206D1 | 4,400 | 2,540 |
| 1 1/16 | AELFL206-101D1 | 5 13/16 | 4 19/32 | 1/2 | 1 7/32 | 5/8 | 1 49/64 | 1.406 | 1.75 | 0.354 | 1/2 | FL206D1 | AEL206-101D1 | | |
| 1 1/8 | AELFL206-102D1 | | | | | | | | | | | FL206D1 | AEL206-102D1 | | |
| 1 3/16 | AELFL206-103D1 | | | | | | | | | | | FL206D1 | AEL206-103D1 | | |
| 1 1/4 | AELFL206-104D1 | | | | | | | | | | | FL206D1 | AEL206-104D1 | | |
| 35 | AELFL207D1 | 161 | 130 | 15 | 34 | 16 | 48.4 | 38.9 | 55.6 | 9.5 | M14 | FL207D1 | AEL207D1 | 5,750 | 3,440 |
| 1 1/4 | AELFL207-104D1 | 6 11/16 | 5 1/8 | 19/32 | 1 11/32 | 5/8 | 1 29/32 | 1.531 | 2.19 | 0.374 | 1/2 | FL207D1 | AEL207-104D1 | | |
| 1 5/16 | AELFL207-105D1 | | | | | | | | | | | FL207D1 | AEL207-105D1 | | |
| 1 3/8 | AELFL207-106D1 | | | | | | | | | | | FL207D1 | AEL207-106D1 | | |
| 1 7/16 | AELFL207-107D1 | | | | | | | | | | | FL207D1 | AEL207-107D1 | | |
| 40 | AELFL208D1 | 175 | 144 | 15 | 36 | 16 | 53.6 | 43.7 | 60.2 | 11 | M14 | FL208D1 | AEL208D1 | 6,550 | 4,000 |
| 1 1/2 | AELFL208-108D1 | 6 7/8 | 5 21/32 | 19/32 | 1 13/32 | 5/8 | 2 7/64 | 1.719 | 2.37 | 0.433 | 1/2 | FL208D1 | AEL208-108D1 | | |
| 1 9/16 | AELFL208-109D1 | | | | | | | | | | | FL208D1 | AEL208-109D1 | | |
| 45 | AELFL209D1 | 188 | 148 | 16 | 38 | 19 | 54.8 | 43.7 | 63.5 | 11 | M16 | FL209D1 | AEL209D1 | 7,350 | 4,590 |
| 1 5/8 | AELFL209-110D1 | 7 13/32 | 5 13/16 | 5/8 | 1 1/2 | 3/4 | 2 5/32 | 1.719 | 2.50 | 0.433 | 5/8 | FL209D1 | AEL209-110D1 | | |
| 1 11/16 | AELFL209-111D1 | | | | | | | | | | | FL209D1 | AEL209-111D1 | | |
| 1 3/4 | AELFL209-112D1 | | | | | | | | | | | FL209D1 | AEL209-112D1 | | |
| 50 | AELFL210D1 | 197 | 157 | 16 | 40 | 19 | 54.8 | 43.7 | 69.90 | 11 | M16 | FL210D1 | AEL210D1 | 7,900 | 5,220 |
| 1 13/16 | AELFL210-113D1 | 7 3/4 | 6 3/16 | 5/8 | 1 9/16 | 3/4 | 2 5/32 | 1.719 | 2.75 | 0.433 | 5/8 | FL210D1 | AEL210-113D1 | | |
| 1 7/8 | AELFL210-114D1 | | | | | | | | | | | FL210D1 | AEL210-114D1 | | |
| 1 15/16 | AELFL210-115D1 | | | | | | | | | | | FL210D1 | AEL210-115D1 | | |

Units: Millimeters
INCHES

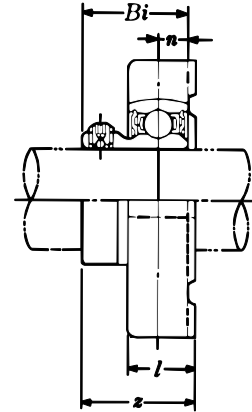
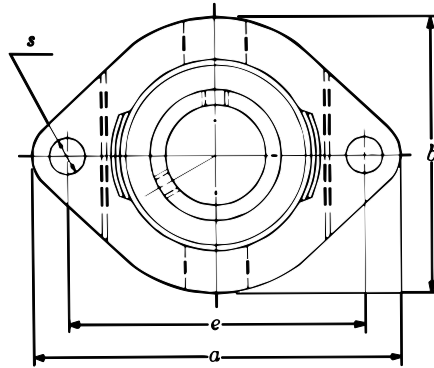


FLANGED UNITS - CAST HOUSING (TWO BOLT)

| Shaft Diameter | Complete Flanged Unit Number D ₁ | Nominal Dimensions | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|--|--------------------|----------------|-------------|----------------|---------------|-----------------|---------------|--------------|-------------|--------------------|--|----------------|--------------------------|--|
| | | a | e | s | b | l | z | L | n | Dynamic C | | | | Static C ₀ | |
| 20 3/4 | JELFL204D1W3 JELFL204-012D1W3 | 113 4 7/16 | 90 3 35/64 | 12 15/32 | 60 2 3/8 | 25.5 1 | 38.5 1 33/64 | 31.0 1.220 | 7.5 .295 | M10 5/16 | FL204D1 FL204D1 | JEL204D1W3 JEL204-012D1W3 | 2,890 | 1,500 | |
| 25 13/16 7/8 15/16 1 | JELFL205D1W3 JELFL205-013D1W3 JELFL205-014D1W3 JELFL205-015D1W3 JELFL205-100D1W3 | 130 5 1/8 | 99 3 57/64 | 16 5/8 | 68 2 11/16 | 27 1 1/16 | 39.5 1 9/16 | 31.0 1.220 | 7.5 .295 | M14 1/2 | FL205D1 FL205D1 | JEL205D1W3 JEL205-013D1W3 JEL205-014D1W3 JEL205-015D1W3 JEL205-100D1W3 | 3,150 | 1,770 | |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | JELFL206D1W3 JELFL206-101D1W3 JELFL206-102D1W3 JELFL206-103D1W3 JELFL206-104D1W3 | 148 5 13/16 | 117 4 39/64 | 16 5/8 | 80 3 5/12 | 31 1 7/32 | 44.7 1 49/64 | 35.7 1.406 | 9 .354 | M14 1/2 | FL206D1 FL206D1 | JEL206D1W3 JEL206-101D1W3 JEL206-102D1W3 JEL206-103D1W3 JEL206-104D1W3 | 4,400 | 2,540 | |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | JELFL207D1W3 JELFL207-104D1W3 JELFL207-105D1W3 JELFL207-106D1W3 JELFL207-107D1W3 | 161 6 11/32 | 130 5 1/8 | 16 5/8 | 90 3 17/32 | 34 1 11/32 | 48.4 1 29/32 | 38.9 1.531 | 9.5 .374 | M14 1/2 | FL207D1 FL207D1 | JEL207D1W3 JEL207-104D1W3 JEL207-105D1W3 JEL207-106D1W3 JEL207-107D1W3 | 5,750 | 3,440 | |
| 40 1 1/2 1 9/16 | JELFL208D1W3 JELFL208-108D1W3 JELFL208-109D1W3 | 175 6 7/8 | 144 5 43/64 | 16 5/8 | 100 3 15/16 | 36 1 11/32 | 53.7 2 7/16 | 43.7 1.720 | 11 .433 | M14 1/2 | FL208D1 FL208D1 | JEL208D1W3 JEL208-108D1W3 JEL208-109D1W3 | 6,550 | 4,000 | |
| 45 1 5/8 1 11/16 1 3/4 | JELFL209D1W3 JELFL209-110D1W3 JELFL209-111D1W3 JELFL209-112D1W3 | 188 7 13/32 | 148 5 53/64 | 19 3/4 | 108 4 1/4 | 38 1 1/2 | 54.7 2 5/32 | 43.7 1.720 | 11 .433 | M16 5/8 | FL209D1 FL209D1 | JEL209D1W3 JEL209-110D1W3 JEL209-111D1W3 JEL209-112D1W3 | 7,350 | 4,590 | |
| 50 1 13/16 1 7/8 1 15/16 2 | JELFL210D1W3 JELFL210-113D1W3 JELFL210-114D1W3 JELFL210-115D1W3 JELFL210-220D1W3 | 197 7 3/4 | 157 6 3/16 | 19 3/4 | 115 4 17/32 | 40 19/16 | 54.7 2 5/32 | 43.7 1.720 | 11 .433 | M16 5/8 | FL210D1 FL210D1 | JEL210D1W3 JEL210-113D1W3 JEL210-114D1W3 JEL210-115D1W3 JEL210-220D1W3 | 7,900 | 5,220 | |
| 55 2 2 1/16 2 1/8 2 3/16 | JELFL211D1W3 JELFL211-200D1W3 JELFL211-201D1W3 JELFL211-202D1W3 JELFL211-203D1W3 | 224 8 13/16 | 184 7 61/64 | 19 3/4 | 130 5 1/8 | 43 1 11/16 | 61.4 2 27/64 | 48.4 1.906 | 12 .472 | M16 5/8 | FL211D1 FL211D1 | JEL211D1W3 JEL211-200D1W3 JEL211-201D1W3 JEL211-202D1W3 JEL211-203D1W3 | 9,750 | 6,570 | |
| 60 2 1/4 2 5/16 2 3/8 | JELFL212D1W3 JELFL212-204D1W3 JELFL212-205D1W3 JELFL212-206D1W3 | 250 9 27/32 | 202 7 61/64 | 23 29/32 | 140 5 1/2 | 48 1 7/8 | 68.6 2 45/64 | 53.1 2.091 | 13.5 .531 | M20 3/4 | FL212D1 FL212D1 | JEL212D1W3 JEL212-204D1W3 JEL212-205D1W3 JEL212-206D1W3 | 11,800 | 8,100 | |



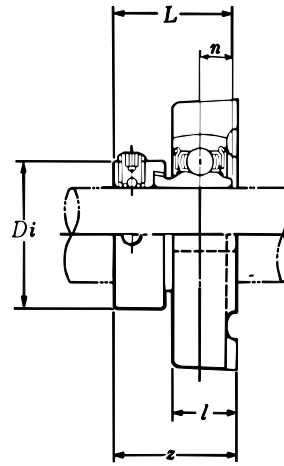
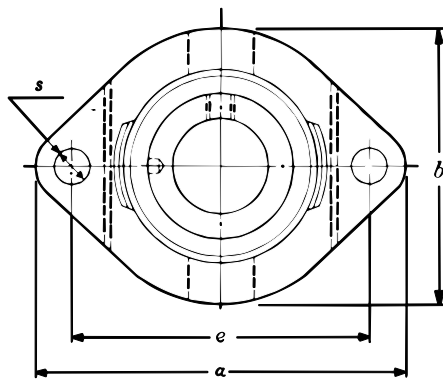
Units: Millimeters
INCHES



FLANGED UNITS - CAST HOUSING (TWO BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|--|--------------------|----------------|--------------|-------------|----------------|----------------|-------------|-------------|------------|----------------------------------|---|----------------|--------------------------|--|
| | | a | e | l | s | b | z | Bi | n | Dynamic C | | | | Static C _n | |
| 12 ½ | ASFD201 ASFD201-008 | 81 3 ¾ | 63 2 15/32 | 15 1 9/32 | 7 7/32 | 59 2 5/16 | 24.5 3 1/32 | 22 .866 | 6 .236 | M6 ¼ | FD201 FD201 | AS201 AS201-008 | 2,160 | 1,040 | |
| 15 9/16 5/8 | ASFD202 ASFD202-009 ASFD202-010 | 81 3 ¾ | 63 2 15/32 | 15 1 9/32 | 7 7/32 | 59 2 5/16 | 24.5 3 1/32 | 22 .866 | 6 .236 | M6 ¼ | FD201 FD201 FD201 | AS202 AS202-009 AS202-010 | 2,160 | 1,040 | |
| 17 1 1/16 | ASFD203 *ASFD203-011 | 81 3 ¾ | 63 2 15/32 | 15 1 9/32 | 7 7/32 | 59 2 5/16 | 24.5 3 1/32 | 22 .866 | 6 .236 | M6 ¼ | FD201 FD201 | AS203 AS203-011 | 2,160 | 1,040 | |
| 20 ¾ | ASFD204 ASFD204-012 | 90 3 17/32 | 71 2 25/32 | 17 2 1/32 | 10 25/64 | 67 2 5/8 | 27.5 1 5/64 | 25 .984 | 7 .276 | M8 5/16 | FD204 FD204 | AS204 AS204-012 | 2,890 | 1,500 | |
| 25 1 3/16 7/8 1 5/16 1 | ASFD205 ASFD205-013 ASFD205-014 ASFD205-015 ASFD205-100 | 95 3 ¾ | 76 3 | 17 2 1/32 | 10 25/64 | 71 2 25/32 | 29 1 9/64 | 27 1.063 | 7.5 .295 | M8 5/16 | FD205 FD205 FD205 FD205 | AS205 AS205-013 AS205-014 AS205-015 AS205-100 | 3,150 | 1,770 | |
| 30 1 1/16 1 1/8 1 3/16 1 ¼ | ASFD206 ASFD206-101 ASFD206-102 ASFD206-103 *ASFD206-104 | 113 4 7/16 | 90 3 17/32 | 21 1 3/16 | 12 15/32 | 84 3 5/16 | 33 1 19/64 | 29 1.142 | 8 .315 | M10 3/8 | FD206 FD206 FD206 FD206 | AS206 AS206-101 AS206-102 AS206-103 AS206-104 | 4,400 | 2,540 | |
| 35 1 ¼ 1 5/16 1 3/8 1 7/16 | ASFD207 ASFD207-104 ASFD207-105 ASFD207-106 *ASFD207-107 | 125 4 29/32 | 100 3 15/16 | 22 7/8 | 12 15/32 | 94 3 1 1/16 | 38 1 ½ | 34 1.339 | 8.5 .335 | M10 3/8 | FD207 FD207 FD207 FD207 | AS207 AS207-104 AS207-105 AS207-106 AS207-107 | 5,750 | 3,440 | |

Remarks: 1) If relubricatable type is needed, please order with suffix "A-", "D1", ex. A-ASFD201D1



Units: Millimeters
INCHES



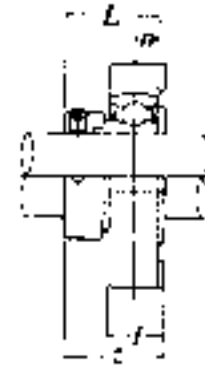
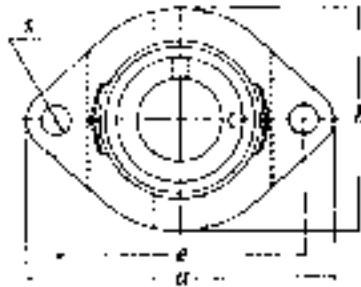
FLANGED UNITS - CAST HOUSING (TWO BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|--|--------------------|----------------|-------------|--------------|---------------|--------------|---------------|-------------|------------|----------------------------------|--|--------------------------|-----------|
| | | a | e | s | l | b | Di | L | n | | | | Dynamic C | Static Co |
| 12 ½ | AELFD201 AELFD201-008 | 81 3 ⅜ | 63 2 15/32 | 7 9/32 | 15 1 9/32 | 59 2 5/16 | 29 1.14 | 28.6 1.126 | 6.5 .256 | M6 ¼ | FD201 FD201 | AEL201 AEL201-008 | 2,160 | 1,040 |
| 15 9/16 5/8 | AELFD202 AELFD202-009 AELFD202-010 | 81 3 3/16 | 63 2 15/32 | 7 9/32 | 15 1 9/32 | 59 2 5/16 | 29 1.14 | 28.6 1.126 | 6.5 .256 | M6 ¼ | FD201 FD201 FD201 | AEL202 AEL202-009 AEL202-010 | 2,160 | 1,040 |
| 17 1 1/16 | AELFD203 AELFD203-011 | 81 3 3/16 | 63 2 15/32 | 7 9/32 | 15 1 9/32 | 59 2 5/16 | 29 1.14 | 28.6 1.126 | 6.5 .256 | M6 ¼ | FD201 FD201 | AEL203 AEL203-011 | 2,160 | 1,040 |
| 20 ¾ | AELFD204 AELFD204-012 | 90 3 17/32 | 71 2 25/32 | 10 25/64 | 17 2 1/32 | 67 2 5/8 | 33.3 1.31 | 31 1.220 | 7.5 .295 | M8 5/16 | FD204 FD204 | AEL204 AEL204-012 | 2,890 | 1,500 |
| 25 13/16 7/8 15/16 1 | AELFD205 AELFD205-013 AELFD205-014 AELFD205-015 AELFD205-100 | 95 3 ¾ | 76 3 | 10 25/64 | 17 2 1/32 | 71 2 25/32 | 38.1 1.50 | 31 1.220 | 7.5 .295 | M8 5/16 | FD205 FD205 FD205 FD205 | AEL205 AEL205-013 AEL205-014 AEL205-015 AEL205-100 | 3,150 | 1,770 |
| 30 1 1/16 1 1/8 1 3/16 1 ¼ | AELFD206 AELFD206-101 AELFD206-102 AELFD206-103 AELFD206-104 | 113 4 7/16 | 90 3 17/32 | 12 15/32 | 21 1 3/16 | 84 3 5/16 | 44.5 1.75 | 35.7 1.406 | 9 .354 | M10 3/8 | FD206 FD206 FD206 FD206 | AEL206 AEL206-101 AEL206-102 AEL206-103 AEL206-104 | 4,400 | 2,540 |
| 35 1 ¼ 1 5/16 1 3/8 1 7/16 | AELFD207 AELFD207-104 AELFD207-105 AELFD207-106 AELFD207-107 | 125 4 29/32 | 100 3 15/16 | 12 15/32 | 22 7/8 | 94 3 11/16 | 55.6 2.19 | 38.9 1.531 | 9.5 .374 | M10 3/8 | FD207 FD207 FD207 FD207 | AEL207 AEL207-104 AEL207-105 AEL207-106 AEL207-107 | 5,750 | 3,440 |

Remarks: 1) If relubricatable type is needed, please order with suffix "A-", "D1", ex. A-AELFD201D1

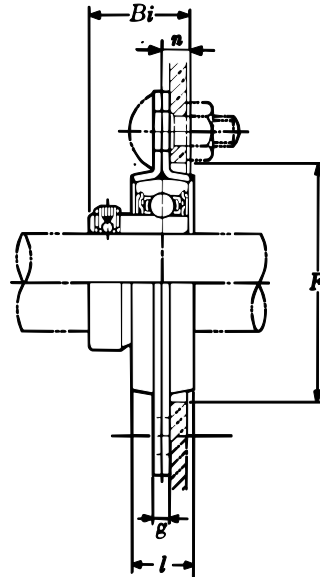
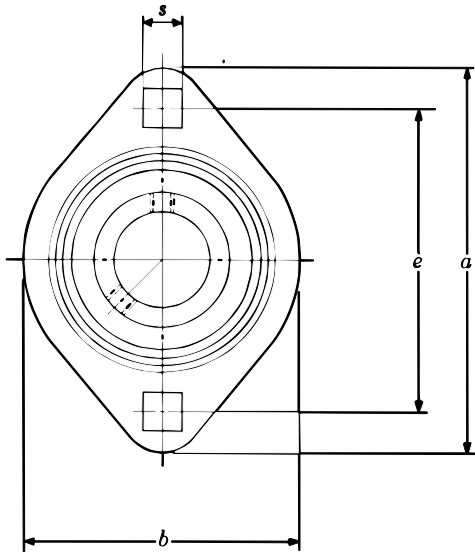
NTN
SERIES
JELFD2
ECENTRIC
LOCKING
COLLAR
TYPE

Units: Millimeters
 INCHES



FLANGED UNITS - CAST HOUSING (TWO BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|--|--------------------|----------------|-------------|---------------|---------------|-----------------|--------------|---------------|-------------|------------|----------------------------------|--|--------------------------|-----------|
| | | a | e | s | b | l | z | Di | L | n | | | | Dynamic C | Static Co |
| 12 1/2 | JELFD201 JELFD201-008 | 81 3 3/16 | 63 2 15/32 | 7 9/32 | 59 2 5/16 | 15 19/32 | 30.6 1 13/64 | 29 1.14 | 28.6 1.126 | 6.5 .256 | M6 1/4 | FD201 FD201 | JEL201 JEL201-008 | 2,160 | 1,030 |
| 15 9/16 5/8 | JELFD202 JELFD202-009 JELFD202-010 | 81 3 3/16 | 63 2 15/32 | 7 9/32 | 59 2 5/16 | 15 19/32 | 30.6 1 13/64 | 29 1.14 | 28.6 1.126 | 6.5 .256 | M6 1/4 | FD201 FD201 FD201 | JEL202 JEL202-009 JEL202-010 | 2,160 | 1,030 |
| 17 1 1/16 | JELFD203 JELFD203-011 | 81 3 3/16 | 63 2 15/32 | 7 9/32 | 59 2 5/16 | 15 19/32 | 30.6 1 13/64 | 29 1.14 | 28.6 1.126 | 6.5 .256 | M6 1/4 | FD201 FD201 | JEL203 JEL203-011 | 2,160 | 1,030 |
| 20 3/4 | JELFD204 JELFD204-012 | 90 3 17/32 | 71 2 25/32 | 10 25/64 | 67 2 5/8 | 17 2 1/32 | 33 1 19/64 | 33.3 1.31 | 31 1.220 | 7.5 .295 | M8 5/16 | FD204 FD204 | JEL204 JEL204-012 | 2,890 | 1,500 |
| 25 1 3/16 7/8 15/16 1 | JELFD205 JELFD205-013 JELFD205-014 JELFD205-015 JELFD205-100 | 95 3 3/4 | 76 3 | 10 25/64 | 71 2 25/32 | 17 2 1/32 | 33 1 19/64 | 38.1 1.50 | 31 1.220 | 7.5 .295 | M8 5/16 | FD205 FD205 FD205 FD205 | JEL205 JEL205-013 JEL205-014 JEL205-015 JEL205-100 | 3,150 | 1,770 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | JELFD206 JELFD206-101 JELFD206-102 JELFD206-103 JELFD206-104 | 113 4 7/16 | 90 3 17/32 | 12 15/32 | 84 3 5/16 | 21 1 13/16 | 38.7 1 17/32 | 44.5 1.75 | 35.7 1.406 | 9 .354 | M10 3/8 | FD206 FD206 FD206 FD206 | JEL206 JEL206-101 JEL206-102 JEL206-103 JEL206-104 | 4,400 | 2,540 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | JELFD207 JELFD207-104 JELFD207-105 JELFD207-106 JELFD207-107 | 125 4 29/32 | 100 3 15/16 | 12 15/32 | 94 3 11/16 | 22 7/8 | 41.9 1 21/32 | 55.6 2.19 | 38.9 1.531 | 9.5 .374 | M10 3/8 | FD207 FD207 FD207 FD207 | JEL207 JEL207-104 JEL207-105 JEL207-106 JEL207-107 | 5,750 | 3,450 |



Units: Millimeters
INCHES



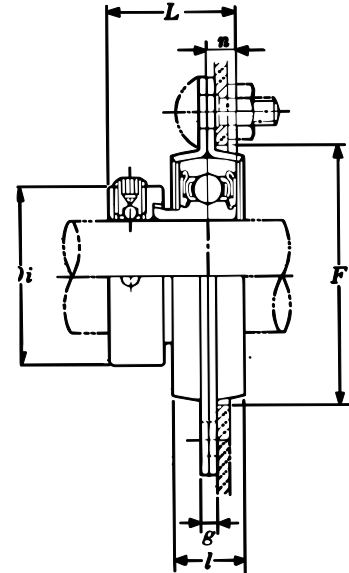
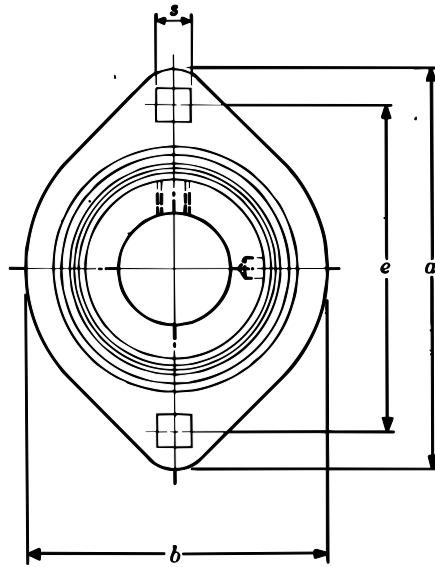
FLANGED UNITS - PRESSED STEEL HOUSING (TWO BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | | Max. Radial Load (lbs) |
|--------------------------------------|--|--------------------|----------------|-------------|------------|-------------|-------------|-------------|---------------|------------|--|---|--------------------------|--------------|------------------------|
| | | a | e | g | s | l | Bi | n | (min) F | | | | Dynamic C | Static C_0 | |
| 12 ½ | ASPFL201 ASPFL201-008 | 81 3 ¾ | 63 2 15/32 | 4 .157 | 7 9/32 | 14 9/16 | 22 .866 | 6 .236 | 49 1 15/16 | M6 ¼ | PFL203 PFL203 | AS201 AS201-008 | 2,160 | 1,040 | 600 |
| 15 9/16 5/8 | ASPFL202 ASPFL202-009 ASPFL202-010 | 81 3 ¾ | 63 2 15/32 | 4 .157 | 7 9/32 | 14 9/16 | 22 .866 | 6 .236 | 49 1 15/16 | M6 ¼ | PFL203 PFL203 PFL203 | AS202 AS202-009 AS202-010 | 2,160 | 1,040 | 600 |
| 17 1 1/16 | ASPFL203 ASPFL203-011 | 81 3 ¾ | 63 2 15/32 | 4 .157 | 7 9/32 | 14 9/16 | 22 .866 | 6 .236 | 49 1 15/16 | M6 ¼ | PFL203 PFL203 | AS203 AS206-011 | 2,160 | 1,040 | 600 |
| 20 ¾ | ASPFL204 ASPFL204-012 | 90 3 17/32 | 71 2 25/32 | 4 .157 | 9 23/64 | 16 5/8 | 25 .984 | 7 .276 | 56 2 7/32 | M8 5/16 | PFL204 PFL204 | AS204 AS204-012 | 2,890 | 1,500 | 660 |
| 25 1 3/16 7/8 15/16 1 | ASPFL205 ASPFL205-013 ASPFL205-014 ASPFL205-015 ASPFL205-100 | 95 3 ¾ | 76 3 | 4 .157 | 9 23/64 | 18 23/32 | 27 1.063 | 7.5 .295 | 60 2 ¾ | M8 5/16 | PFL205 PFL205 PFL205 PFL205 | AS205 AS205-013 AS205-014 AS205-015 AS205-100 | 3,150 | 1,770 | 880 |
| 30 1 1/16 1 1/8 1 3/16 | ASPFL206 ASPFL206-101 ASPFL206-102 ASPFL206-103 ASPFL206-104 | 113 4 7/16 | 90 3 17/32 | 5.2 .205 | 11 7/16 | 18 23/32 | 29 1.142 | 8 .315 | 71 2 25/32 | M10 ¾ | PFL206 PFL206 PFL206 PFL206 PFL206 | AS206 AS206-101 AS206-102 AS206-103 AS206-104 | 4,400 | 2,540 | 1,100 |
| 35 1 ¼ 1 5/16 1 ¾ 1 7/16 | ASPFL207 ASPFL207-104 ASPFL207-105 ASPFL207-106 ASPFL207-107 | 122 4 13/16 | 100 3 15/16 | 5.2 .205 | 11 7/16 | 20 25/32 | 34 1.339 | 8.5 .335 | 81 3 3/16 | M10 ¾ | PFL207 PFL207 PFL207 PFL207 PFL207 | AS207 AS207-104 AS207-105 AS207-106 AS207-107 | 5,750 | 3,440 | 1,300 |

Axial load should be less than 1/3 of radial load.

NTN
SERIES
AELPFL2
ECCENTRIC
LOCKING
COLLAR
TYPE

Units: **Millimeters**
INCHES

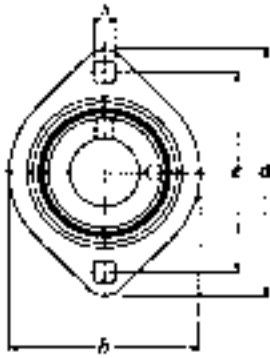


FLANGED UNITS - PRESSED STEEL HOUSING (TWO BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | | Max. Radial Load (lbs) |
|--|---|--------------------|----------------|-------------|------------|-------------|---------------|--------------|---------------|-------------|---------------|------------|--|--|--------------------------|-----------|------------------------|
| | | a | e | g | s | l | b | Di | L | n | (min) F | | | | Dynamic C | Static Co | |
| 12 1/2 | AELPFL201 AELPFL201-008W3 | 81 3 3/16 | 63 2 15/32 | 4 .157 | 7 9/32 | 14 9/16 | 59 2 5/16 | 29 1.14 | 28.6 1.126 | 6.5 .256 | 49 1 15/16 | M6 1/4 | PFL203 PFL203 | AEL201 AEL201-088W3 | 2,160 | 1,040 | 600 |
| 15 9/16 5/8 | AELPFL202 AELPFL202-009W3 AELPFL202-010W3 | 81 3 3/16 | 63 2 15/32 | 4 .157 | 7 9/32 | 14 9/16 | 59 2 5/16 | 29 1.14 | 28.6 1.126 | 6.5 .256 | 49 1 15/16 | M6 1/4 | PFL203 PFL203 PFL203 | AEL202 AEL202-009W3 AEL202-010W3 | 2,160 | 1,040 | 600 |
| 17 11/16 | AELPFL203 AELPFL203-011W3 | 81 3 3/16 | 63 2 15/32 | 4 .157 | 7 9/32 | 14 9/16 | 59 2 5/16 | 29 1.14 | 28.6 1.126 | 6.5 .256 | 49 1 15/16 | M6 1/4 | PFL203 PFL203 | AEL203 AEL203-011W3 | 2,160 | 1,040 | 600 |
| 20 3/4 | AELPFL204 AELPFL204-012W3 | 90 3 17/32 | 71 2 25/32 | 4 .157 | 9 23/64 | 16 5/8 | 67 2 5/8 | 33.3 1.31 | 31 1.220 | 7.5 .295 | 56 2 7/32 | M8 5/16 | PFL204 PFL204 | AEL204 AEL204-012W3 | 2,890 | 1,500 | 660 |
| 25 13/16 7/8 15/16 1 | AELPFL205 AELPFL205-013W3 AELPFL205-014W3 AELPFL205-015W3 AELPFL205-100W3 | 95 3 3/4 | 76 3 | 4 .157 | 9 23/64 | 18 23/32 | 71 2 25/32 | 38.1 1.50 | 31 1.220 | 7.5 .295 | 60 2 3/8 | M8 5/16 | PFL205 PFL205 PFL205 PFL205 PFL205 | AEL205 AEL205-013W3 AEL205-014W3 AEL205-015W3 AEL205-100W3 | 3,150 | 1,770 | 880 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | AELPFL206 AELPFL206-101W3 AELPFL206-102W3 AELPFL206-103W3 AELPFL206-104W3 | 113 4 7/16 | 90 3 17/32 | 5.2 .205 | 11 7/16 | 18 23/32 | 84 3 5/16 | 44.5 1.75 | 35.7 1.406 | 9 .354 | 71 2 25/32 | M10 3/8 | PFL206 PFL206 PFL206 PFL206 PFL206 | AEL206 AEL206-101W3 AEL206-102W3 AEL206-103W3 AEL206-104W3 | 4,400 | 2,540 | 1,100 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | AELPFL207 AELPFL207-104W3 AELPFL207-105W3 AELPFL207-106W3 AELPFL207-107W3 | 122 4 13/16 | 100 3 15/16 | 5.2 .205 | 11 7/16 | 20 25/32 | 94 3 11/16 | 55.6 2.19 | 38.9 1.531 | 9.5 .374 | 81 3 3/16 | M10 3/8 | PFL207 PFL207 PFL207 PFL207 PFL207 | AEL207 AEL207-104W3 AEL207-105W3 AEL207-106W3 AEL207-107W3 | 5,750 | 3,440 | 1,300 |

Axial load should be less than 1/3 of radial load.

Units: Millimeters
INCHES



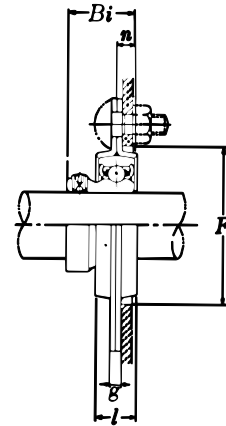
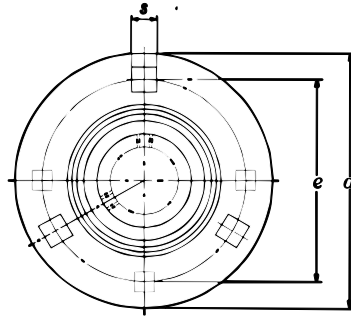
FLANGED UNITS - PRESSED STEEL HOUSING (TWO BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | | Max. Radial Load (lbs) |
|--|---|--------------------|----------------|-------------|------------|-------------|---------------|--------------|---------------|-------------|---------------|------------|--------------------------------------|--|--------------------------|-----------------------|------------------------|
| | | a | e | g | s | l | b | Di | L | n | (min) F | | | | Dynamic C | Static C ₀ | |
| 12 1/2 | JELPFL201 JELPFL201-008 | 81 3 3/16 | 63 2 15/32 | 4 .157 | 7 9/32 | 14 9/16 | 59 2 5/16 | 29 1.14 | 28.6 1.126 | 6.5 .256 | 49 1 15/16 | M6 1/4 | PFL203 JEL201-088 | JEL201 | 2,160 | 1,030 | 600 |
| 15 9/16 5/8 | JELPFL202 JELPFL202-009 JELPFL202-010 | 81 3 3/16 | 63 2 15/32 | 4 .157 | 7 9/32 | 14 9/16 | 59 2 5/16 | 29 1.14 | 28.6 1.126 | 6.5 .256 | 49 1 15/16 | M6 1/4 | PFL203 PFL203 PFL203 | JEL202 JEL202-009 JEL202-010 | 2,160 | 1,030 | 600 |
| 17 1 1/16 | JELPFL203 JELPFL203-011 | 81 3 3/16 | 63 2 15/32 | 4 .157 | 7 9/32 | 14 9/16 | 59 2 5/16 | 29 1.14 | 28.6 1.126 | 6.5 .256 | 49 1 15/16 | M6 1/4 | PFL203 PFL203 | JEL203 JEL203-011 | 2,160 | 1,030 | 600 |
| 20 3/4 | JELPFL204 JELPFL204-012 | 90 3 17/32 | 71 2 25/32 | 4 .157 | 9 23/64 | 16 5/8 | 67 2 5/8 | 33.3 1.31 | 31 1.220 | 7.5 .295 | 56 2 7/32 | M8 5/16 | PFL204 PFL204 | JEL204 JEL204-012 | 2,890 | 1,500 | 660 |
| 25 1 3/16 7/8 15/16 1 | JELPFL205 JELPFL205-013 JELPFL205-014 JELPFL205-015 JELPFL205-100 | 95 3 3/4 | 76 3 | 4 .157 | 9 23/64 | 18 23/32 | 71 2 29/32 | 38.1 1.50 | 31 1.220 | 7.5 .295 | 60 2 3/8 | M8 5/16 | PFL205 PFL205 PFL205 PFL205 | JEL205 JEL205-013 JEL205-014 JEL205-015 JEL205-100 | 3,150 | 1,770 | 880 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | JELPFL206 JELPFL206-101 JELPFL206-102 JELPFL206-103 JELPFL206-104 | 113 4 7/16 | 90 3 17/32 | 5.2 .205 | 11 7/16 | 18 23/32 | 84 3 5/16 | 44.5 1.75 | 35.7 1.406 | 9 .354 | 71 2 25/32 | M10 3/8 | PFL206 PFL206 PFL206 PFL206 | JEL206 JEL206-101 JEL206-102 JEL206-103 JEL206-104 | 4,400 | 2,540 | 1,100 |
| 35 1 1/4 1 9/16 1 3/8 1 7/16 | JELPFL207 JELPFL207-104 JELPFL207-105 JELPFL207-106 JELPFL207-107 | 122 4 13/16 | 100 3 15/16 | 5.2 .205 | 11 7/16 | 20 25/32 | 94 3 11/16 | 55.6 2.19 | 38.9 1.531 | 9.5 .374 | 81 3 3/16 | M10 3/8 | PFL207 PFL207 PFL207 PFL207 | JEL207 JEL207-104 JEL207-105 JEL207-106 JEL207-107 | 5,750 | 3,450 | 1,300 |

Axial load should be less than 1/3 of radial load.



Units: Millimeters
INCHES

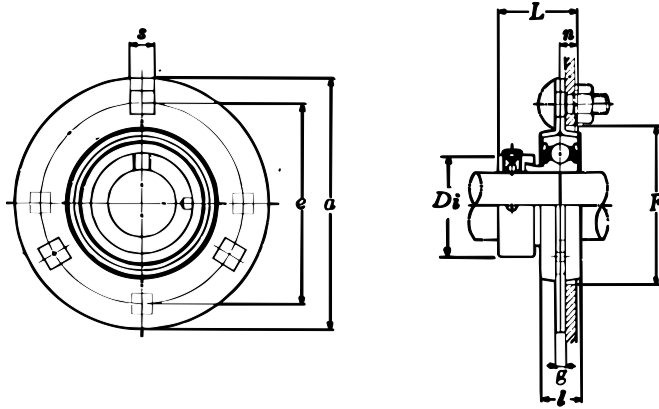


FLANGED UNITS - PRESSED STEEL HOUSING (THREE BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | | Max. Radial Load (lbs) |
|--|---|--------------------|----------------|-------------|------------|-------------|-------------|-------------|---------------|------------|----------------------------------|---|--------------------------|-----------------------|------------------------|
| | | a | e | g | s | l | Bi | n | (min) F | | | | Dynamic C | Static C ₀ | |
| 12 ½ | ASPF201 ASPF201-008 | 81 3 ¾ | 63 2 15/32 | 4 .157 | 7 9/32 | 14 9/16 | 22 .866 | 6 .236 | 49 1 15/16 | M6 ¼ | PF203 PF203 | AS201 AS201-008 | 2,160 | 1,040 | 600 |
| 15 9/16 5/8 | ASPF202 ASPF202-009 ASPF202-010 | 81 3 ¾ | 63 2 15/32 | 4 .157 | 7 9/32 | 14 9/16 | 22 .866 | 6 .236 | 49 1 15/16 | M6 ¼ | PF203 PF203 PF203 | AS202 AS202-009 AS202-010 | 2,160 | 1,040 | 600 |
| 17 1 1/16 | ASPF203 ASPF203-011 | 81 3 ¾ | 63 2 15/32 | 4 .157 | 7 9/32 | 14 9/16 | 22 .866 | 6 .236 | 49 1 15/16 | M6 ¼ | PF203 PF203 | AS203 AS203-011 | 2,160 | 1,040 | 600 |
| 20 ¾ | ASPF204 ASPF204-012 | 90 3 17/32 | 71 2 29/32 | 4 .157 | 9 23/64 | 16 5/8 | 25 .984 | 7 .276 | 56 2 7/32 | M8 5/16 | PF204 PF204 | AS204 AS204-012 | 2,890 | 1,500 | 660 |
| 25 1 3/16 7/8 1 1/16 1 | ASPF205 ASPF205-013 ASPF205-014 ASPF205-015 ASPF205-100 | 95 3 ¾ | 76 3 | 4 .157 | 9 23/64 | 18 23/32 | 27 1.063 | 7.5 .295 | 60 2 ¾ | M8 5/16 | PF205 PF205 PF205 PF205 | AS205 AS205-013 AS205-014 AS205-015 AS205-100 | 3,150 | 1,770 | 880 |
| 30 1 1/16 1 1/8 1 3/16 1 ¼ | ASPF206 ASPF206-101 ASPF206-102 ASPF206-103 ASPF206-104 | 113 4 7/16 | 90 3 17/32 | 5.2 .205 | 11 7/16 | 18 23/32 | 29 1.142 | 8 .315 | 71 2 25/32 | M10 ¾ | PF206 PF206 PF206 PF206 | AS206 AS206-101 AS206-102 AS206-103 AS206-104 | 4,400 | 2,540 | 1,100 |
| 35 1 ¼ 1 5/16 1 ¾ 1 7/16 | ASPF207 ASPF207-104 ASPF207-105 ASPF207-106 ASPF207-107 | 122 4 13/16 | 100 3 15/16 | 5.2 .205 | 11 7/16 | 20 25/32 | 34 1.339 | 8.5 .335 | 81 3 3/16 | M10 ¾ | PF207 PF207 PF207 PF207 | AS207 AS207-104 AS207-105 AS207-106 AS207-107 | 5,750 | 3,440 | 1,300 |
| 40 1 ½ 1 9/16 | ASPF208 ASPF208-108 ASPF208-109 | 148 5 13/16 | 119 4 11/16 | 6.8 .268 | 14 9/16 | 21 13/16 | 38 1.496 | 9 .354 | 91 3 9/16 | M12 ½ | PF208 PF208 PF208 | AS208 AS208-108 AS208-109 | 6,550 | 4,000 | 1,500 |

Axial load should be less than 1/3 of radial load.

Units: Millimeters
INCHES



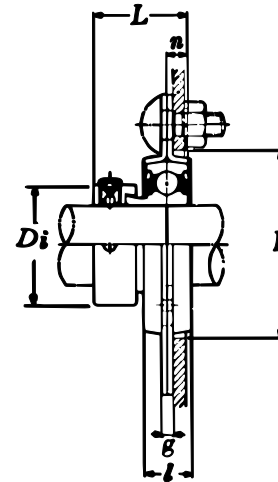
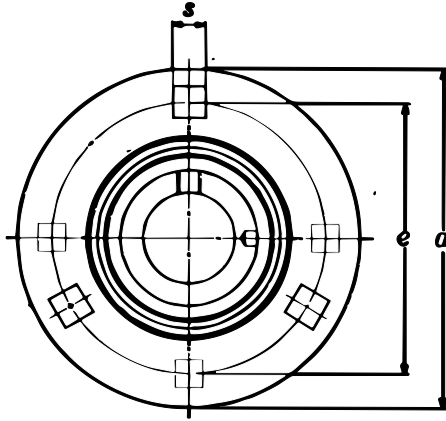
FLANGED UNITS - PRESSED STEEL HOUSING (THREE BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | | Max. Radial Load (lbs) |
|--|--|--------------------|----------------|-------------|------------|--------------|--------------|-------------|---------------|------------|----------------------------------|--|--------------------------|-----------------------|------------------------|
| | | a | e | g | s | l | Bi | n | (min) F | | | | Dynamic C | Static C ₀ | |
| 12 ½ | AELPF201 AELPF201-008W3 | 81 3 ⅜ | 63 2 15/32 | 4 .157 | 7 9/32 | 14 9/16 | 29 1.14 | 6.5 .256 | 49 1 15/16 | M6 ¼ | PF203 | AEL201 AEL201-008W3 | 2160 | 1040 | 600 |
| 15 9/16 5/8 | AELPF202 AELPF202-009W3 AELPF202-010W3 | 81 3 ⅜ | 63 2 15/32 | 4 .157 | 7 9/32 | 14 9/16 | 29 1.14 | 6.5 .256 | 49 1 15/16 | M6 ¼ | PF203 PF203 PF203 | AEL202 AEL202-009W3 AEL202-010W3 | 2160 | 1040 | 600 |
| 17 1 1/16 | AELPF203 AELPF203-011W3 | 81 3 ⅜ | 63 2 15/32 | 4 .157 | 7 9/32 | 14 9/16 | 29 1.14 | 6.5 .256 | 49 1 15/16 | M6 ¼ | PF203 PF203 | AEL203 AEL203-011W3 | 2160 | 1040 | 600 |
| 20 ¾ | AELPF204 AELPF204-012W3 | 90 3 17/32 | 71 2 25/32 | 4 .157 | 9 23/64 | 16 5/8 | 33.3 1.31 | 7.5 .295 | 56 2 7/32 | M8 5/16 | PF204 PF204 | AEL204 AEL204-012W3 | 2890 | 1500 | 660 |
| 25 1 3/16 7/8 15/16 1 | AELPF205 AELPF205-013W3 AELPF205-014W3 AELPF205-015W3 AELPF205-100W3 | 95 3 ¾ | 76 3 | 4 .157 | 9 23/64 | 18 23/32 | 38.1 1.50 | 7.5 .295 | 60 2 ¾ | M8 5/16 | PF205 PF205 PF205 PF205 | AEL205 AEL205-013W3 AEL205-014W3 AEL205-015W3 AEL205-100W3 | 3150 | 1770 | 880 |
| 30 1 1/16 1 1/8 1 3/16 1 ¼ | AELPF206 AELPF206-101W3 AELPF206-102W3 AELPF206-103W3 AELPF206-104W3 | 113 4 7/16 | 90 3 17/32 | 5.2 .205 | 11 7/16 | 18 23/32 | 44.5 1.75 | 9 .354 | 71 2 25/32 | M10 ¾ | PF206 PF206 PF206 PF206 | AEL206 AEL206-101W3 AEL206-102W3 AEL206-103W3 AEL206-104W3 | 4400 | 2540 | 1100 |
| 35 1 ¼ 1 5/16 1 ¾ 1 7/16 | AELPF207 AELPF207-104W3 AELPF207-105W3 AELPF207-106W3 AELPF207-107W3 | 122 4 13/16 | 100 3 15/16 | 5.2 .205 | 11 7/16 | 20 25/32 | 55.6 2.19 | 9.5 .374 | 81 3 3/16 | M10 ¾ | PF207 PF207 PF207 PF207 | AEL207 AEL207-104W3 AEL207-105W3 AEL207-106W3 AEL207-107W3 | 5750 | 3440 | 1300 |
| 40 1 ½ 1 9/16 | AELPF208 AELPF208-108W3 AELPF208-109W3 | 148 5 13/16 | 119 4 11/16 | 6.8 .268 | 14 9/16 | 21 1 1/16 | 60 2.36 | 11 .433 | 91 3 3/16 | M12 ½ | PF208 PF208 PF208 | AEL208 AEL208-108W3 AEL208-109W3 | 6550 | 4000 | 1500 |

Axial load should be less than 1/3 of radial load.
AELPF208 has four bolt holes.

NTN
SERIES
JELPF2
ECCENTRIC
LOCKING
COLLAR
TYPE

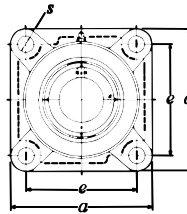
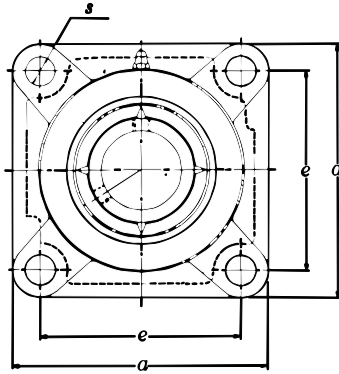
Units: **Millimeters**
INCHES



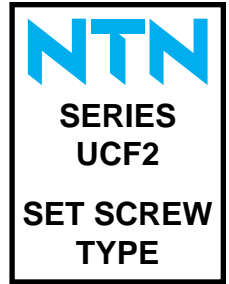
FLANGED UNITS - PRESSED STEEL HOUSING (THREE BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | | Max. Radial Load (lbs) |
|--|--|--------------------|----------------|-------------|------------|--------------|--------------|---------------|-------------|---------------|------------|----------------------------------|--|----------------|--------------------------|------|------------------------|
| | | a | e | g | s | l | Di | L | n | (min) F | Dynamic C | | | | Static Co | | |
| 12 ½ | JELPF201 JELPF201-008 | 81 3 ¾ | 63 2 15/32 | 4 .157 | 7 7/32 | 14 9/16 | 29 1.14 | 28.6 1.126 | 6.5 .256 | 49 1 15/16 | M6 ¼ | PF203 PF203 | JEL201 JEL201-008 | 2160 | 1030 | 600 | |
| 15 9/16 5/8 | JELPF202 JELPF202-009 JELPF202-010 | 81 3 ¾ | 63 2 15/32 | 4 .157 | 7 7/32 | 14 9/16 | 29 1.14 | 28.6 1.126 | 6.5 .256 | 49 1 15/16 | M6 ¼ | PF203 PF203 PF203 | JEL202 JEL202-009 JEL202-010 | 2160 | 1030 | 600 | |
| 17 1 1/16 | JELPF203 JELPF203-011 | 81 3 ¾ | 63 2 15/32 | 4 .157 | 7 7/32 | 14 9/16 | 29 1.14 | 28.6 1.126 | 6.5 .256 | 49 1 15/16 | M6 ¼ | PF203 PF203 | JEL203 JEL203-011 | 2160 | 1030 | 600 | |
| 20 ¾ | JELPF204 JELPF204-012 | 90 3 17/32 | 71 2 25/32 | 4 .157 | 9 23/64 | 16 5/8 | 33.3 1.31 | 31 1.220 | 7.5 .295 | 56 2 7/32 | M8 5/16 | PF204 PF204 | JEL204 JEL204-012 | 2890 | 1500 | 660 | |
| 25 13/16 7/8 15/16 1 | JELPF205 JELPF205-013 JELPF205-014 JELPF205-015 JELPF205-100 | 95 3 ¾ | 76 3 | 4 .157 | 9 23/64 | 18 23/32 | 38.1 1.50 | 31 1.220 | 7.5 .295 | 60 2 3/8 | M8 5/16 | PF205 PF205 PF205 PF205 | JEL205 JEL205-013 JEL205-014 JEL205-015 JEL205-100 | 3150 | 1770 | 880 | |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | JELPF206 JELPF206-101 JELPF206-102 JELPF206-103 JELPF206-104 | 113 4 1/16 | 90 3 17/32 | 5.2 .205 | 11 7/16 | 18 23/32 | 44.5 1.75 | 35.7 1.406 | 9 .354 | 71 2 25/32 | M10 3/8 | PF206 PF206 PF206 PF206 | JEL206 JEL206-101 JEL206-102 JEL206-103 JEL206-104 | 4400 | 2540 | 1100 | |
| 35 1 ¼ 1 5/16 1 3/8 1 7/16 | JELPF207 JELPF207-104 JELPF207-105 JELPF207-106 JELPF207-107 | 122 4 13/16 | 100 3 15/16 | 5.2 .205 | 11 7/16 | 20 25/32 | 55.6 2.19 | 38.9 1.531 | 9.5 .374 | 81 3 3/16 | M10 3/8 | PF207 PF207 PF207 PF207 | JEL207 JEL207-104 JEL207-105 JEL207-106 JEL207-107 | 5750 | 3450 | 1300 | |
| 40 1 ½ 1 9/16 | JELPF208 JELPF208-108 JELPF208-109 | 148 5 13/16 | 119 4 11/16 | 6.8 .268 | 14 9/16 | 21 1 1/16 | 60 2.36 | 43.7 1.720 | 11 .433 | 91 3 9/16 | M12 ½ | PF208 PF208 PF208 | JEL208 JEL208-108 JEL208-109 | 6550 | 4000 | 1500 | |

Axial load should be less than 1/3 of radial load.
 JELPF208 has four bolt holes.



Units: Millimeters
INCHES



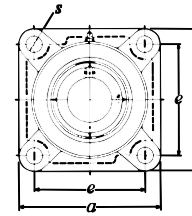
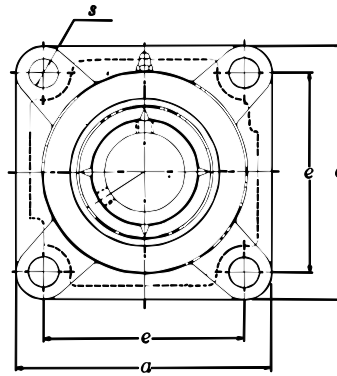
FLANGED UNITS - CAST HOUSING (FOUR BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|---|--------------------|---------------|--------------|---------------|-------------|-----------------|---------------|--------------|------------|--|---|--------------------------|-----------------------|
| | | a | e | g | l | s | z | Bi | n | | | | Dynamic C | Static C ₀ |
| 12 ½ | UCF201D1 UCF201-008D1 | 86 3 ¾ | 64 2 33/64 | 11 7/16 | 25.5 1 | 12 15/32 | 33.3 1 5/16 | 31 1.220 | 12.7 .500 | M10 ¾ | F204D1 F204D1 | UC201D1 UC201-008D1 | 2,890 | 1,500 |
| 15 9/16 5/8 | UCF202D1 UCF202-009D1 UCF202-010D1 | 86 3 ¾ | 64 2 33/64 | 11 7/16 | 25.5 1 | 12 15/32 | 33.3 1 5/16 | 31 1.220 | 12.7 .500 | M10 ¾ | F204D1 F204D1 F204D1 | UC202D1 UC202-009D1 UC202-010D1 | 2,890 | 1,500 |
| 17 1 1/16 | UCF203D1 UCF203-011D1 | 86 3 ¾ | 64 2 33/64 | 11 7/16 | 25.5 1 | 12 15/32 | 33.3 1 5/16 | 31 1.220 | 12.7 .500 | M10 ¾ | F204D1 F204D1 | UC203D1 UC203-011D1 | 2,890 | 1,500 |
| 20 ¾ | UCF204D1 UCF204-012D1 | 86 3 ¾ | 64 2 33/64 | 11 7/16 | 25.5 1 | 12 15/32 | 33.3 1 5/16 | 31 1.220 | 12.7 .500 | M10 ¾ | F204D1 F204D1 | UC204D1 UC204-012D1 | 2,890 | 1,500 |
| 25 1 3/16 7/8 1 5/16 1 | UCF205D1 UCF205-013D1 UCF205-014D1 UCF205-015D1 UCF205-100D1 | 95 3 ¾ | 70 2 ¾ | 13 ½ | 27 1 1/16 | 12 15/32 | 35.7 1 13/32 | 34 1.339 | 14.3 .563 | M10 ¾ | F205D1 F205D1 F205D1 F205D1 F205D1 | UC205D1 UC205-013D1 UC205-014D1 UC205-015D1 UC205-100D1 | 3,150 | 1,770 |
| 30 1 1/16 1 1/8 1 3/16 1 ¼ | UCF206D1 UCF206-101D1 UCF206-102D1 UCF206-103D1 *UCF206-104D1 | 108 4 ¼ | 83 3 17/64 | 13 ½ | 31 1 7/32 | 12 15/32 | 40.2 1 37/64 | 38.1 1.500 | 15.9 .626 | M10 ¾ | F206D1 F206D1 F206D1 F206D1 F206D1 | UC206D1 UC206-101D1 UC206-102D1 UC206-103D1 UC206-104D1 | 4,400 | 2,540 |
| 35 1 ¼ 1 9/16 1 ¾ 1 7/16 | UCF207D1 UCF207-104D1 UCF207-105D1 UCF207-106D1 *UCF207-107D1 | 117 4 19/32 | 92 3 5/8 | 15 1 9/32 | 34 1 11/32 | 14 35/64 | 44.4 1 ¾ | 42.9 1.689 | 17.5 .689 | M12 ½ | F207D1 F207D1 F207D1 F207D1 F207D1 | UC207D1 UC207-104D1 UC207-105D1 UC207-106D1 UC207-107D1 | 5,750 | 3,440 |
| 40 1 ½ 1 9/16 | UCF208D1 UCF208-108D1 UCF208-109D1 | 130 5 ½ | 102 4 1/64 | 15 1 9/32 | 36 1 13/32 | 16 5/8 | 51.2 2 1/64 | 49.2 1.937 | 19 .748 | M14 ½ | F208D1 F208D1 F208D1 | UC208D1 UC208-108D1 UC208-109D1 | 6,550 | 4,000 |
| 45 1 5/8 1 11/16 1 ¾ | UCF209D1 UCF209-110D1 UCF209-111D1 UCF209-112D1 | 137 5 13/32 | 105 4 9/64 | 16 5/8 | 38 1 ½ | 16 5/8 | 52.2 2 1/16 | 49.2 1.937 | 19 .748 | M14 ½ | F209D1 F209D1 F209D1 F209D1 | UC209D1 UC209-110D1 UC209-111D1 UC209-112D1 | 7,350 | 4,590 |
| 50 1 13/16 1 7/8 1 15/16 2 | UCF210D1 UCF210-113D1 UCF210-114D1 UCF210-115D1 UCF210-200D1 | 143 5 5/8 | 111 4 3/8 | 16 5/8 | 40 1 9/16 | 16 5/8 | 54.6 2 5/32 | 51.6 2.031 | 19 .748 | M14 ½ | F210D1 F210D1 F210D1 F210D1 F210D1 | UC210D1 UC210-113D1 UC210-114D1 UC210-115D1 UC210-200D1 | 7,900 | 5,220 |
| 55 2 2 1/16 2 1/8 2 3/16 | UCF211D1 UCF211-200D1 UCF211-201D1 UCF211-202D1 UCF211-203D1 | 162 6 3/8 | 130 5 1/8 | 18 23/32 | 43 1 11/16 | 19 ¾ | 58.4 2 19/64 | 55.6 2.189 | 22.2 .874 | M16 5/8 | F211D1 F211D1 F211D1 F211D1 F211D1 | UC211D1 UC211-200D1 UC211-201D1 UC211-202D1 UC211-203D1 | 9,750 | 6,570 |

Continued on next page.

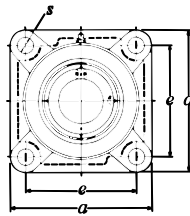
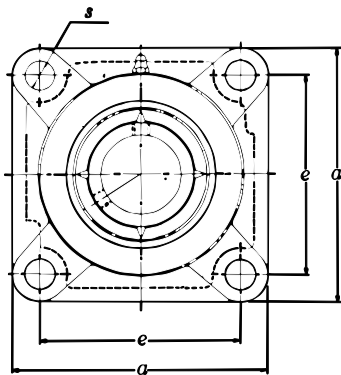
NTN
SERIES
UCF2
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TYPE

Units: Millimeters
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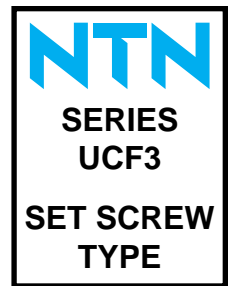


FLANGED UNITS - CAST HOUSING (FOUR BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--------------------------------|---|--------------------|----------------|-------------|---------------|-------------|-----------------|---------------|---------------|------------|--------------------------------------|--|--------------------------|-----------------------|
| | | a | e | g | l | s | z | Bi | n | | | | Dynamic C | Static C ₀ |
| 60 2 1/4 2 3/8 2 7/16 | UCF212D1 UCF212-204D1 UCF212-206D1 *UCF212-207D1 | 175 6 7/8 | 143 5 5/8 | 18 23/32 | 48 1 7/8 | 19 3/4 | 68.7 2 45/64 | 65.1 2.563 | 25.4 1.000 | M16 5/8 | F212D1 F212D1 F212D1 F212D1 | UC212D1 UC212-204D1 UC212-206D1 UC212-207D1 | 11,800 | 8,100 |
| 65 2 1/2 | UCF213D1 UCF213-208D1 | 187 7 3/8 | 149 5 55/64 | 22 7/8 | 50 1 31/32 | 19 3/4 | 69.7 2 3/4 | 65.1 2.563 | 25.4 1.000 | M16 5/8 | F213D1 F213D1 | UC213D1 UC213-208D1 | 12,900 | 9,000 |
| 70 2 11/16 2 3/4 | UCF214D1 UCF214-211D1 UCF214-212D1 | 193 7 19/32 | 152 5 63/64 | 22 7/8 | 54 2 1/8 | 19 3/4 | 75.4 2 31/32 | 74.6 2.937 | 30.2 1.189 | M16 5/8 | F214D1 F214D1 F214D1 | UC214D1 UC214-211D1 UC214-212D1 | 14,000 | 9,900 |
| 75 2 15/16 3 | UCF215D1 UCF215-215D1 UCF215-300D1 | 200 7 7/8 | 159 6 17/64 | 22 7/8 | 56 2 7/32 | 19 3/4 | 78.5 3 3/32 | 77.8 3.063 | 33.3 1.311 | M16 5/8 | F215D1 F215D1 F215D1 | UC215D1 UC215-215D1 UC215-300D1 | 14,900 | 11,100 |
| 80 3 1/8 | UCF216D1 UCF216-302D1 | 208 8 3/16 | 165 6 1/2 | 22 7/8 | 58 2 9/32 | 23 29/32 | 83.3 3 9/32 | 82.6 3.252 | 33.3 1.311 | M20 3/4 | F216D1 F216D1 | UC216D1 UC216-302D1 | 16,300 | 11,900 |
| 85 3 1/4 | UCF217D1 UCF217-304D1 | 220 8 21/32 | 175 6 57/64 | 24 15/16 | 63 2 15/32 | 23 29/32 | 87.6 3 29/64 | 85.7 3.374 | 34.1 1.343 | M20 3/4 | F217D1 F217D1 | UC217D1 UC217-304D1 | 18,700 | 14,400 |
| 90 3 1/2 | UCF218D1 UCF218-308D1 | 235 9 1/4 | 187 7 23/64 | 24 15/16 | 68 2 11/16 | 23 29/32 | 96.3 3 51/64 | 96 3.780 | 39.7 1.563 | M20 3/4 | F218D1 F218D1 | UC218D1 UC218-308D1 | 21,600 | 16,100 |



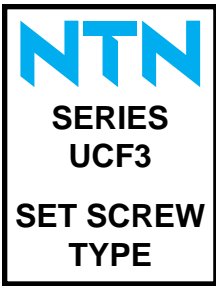
Units: Millimeters
INCHES



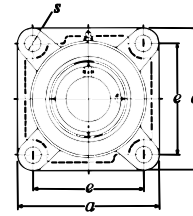
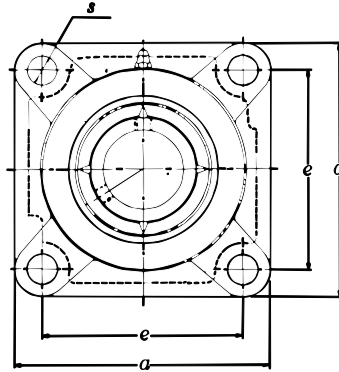
FLANGED UNITS - CAST HOUSING (FOUR BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|--|--------------------|----------------|--------------|---------------|--------------|---------------|-------------|-------------|------------|--|---|--------------------------|-----------|
| | | a | e | g | l | s | z | Bi | n | | | | Dynamic C | Static Co |
| 25 7/8 15/16 1 | UCF305D1 UCF305-014D1 UCF305-015D1 UCF305-100D1 | 110 4 11/32 | 80 3 5/32 | 13 1/2 | 29 1 5/32 | 16 5/8 | 39 1 17/32 | 38 1.496 | 15 .591 | M14 1/2 | F305D1 F305D1 F305D1 F305D1 | UC305D1 UC305-014D1 UC305-015D1 UC305-100D1 | 4,750 | 2,460 |
| 30 1 1/8 1 3/16 | UCF306D1 UCF306-102D1 UCF306-103D1 | 125 4 29/32 | 95 3 47/64 | 15 19/32 | 32 1 1/4 | 16 5/8 | 44 1 47/64 | 43 1.693 | 17 .669 | M14 1/2 | F306D1 F306D1 F306D1 | UC306D1 UC306-102D1 UC306-103D1 | 6,000 | 3,400 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UCF307D1 UCF307-104D1 UCF307-105D1 UCF307-106D1 UCF307-107D1 | 135 5 5/16 | 100 3 15/16 | 16 5/8 | 36 1 13/32 | 19 3/4 | 49 1 59/64 | 48 1.890 | 19 .748 | M16 5/8 | F307D1 F307D1 F307D1 F307D1 F307D1 | UC307D1 UC307-104D1 UC307-105D1 UC307-106D1 UC307-107D1 | 7,500 | 4,300 |
| 40 1 1/2 | UCF308D1 UCF308-108D1 | 150 5 29/32 | 112 4 13/32 | 17 21/32 | 40 1 9/16 | 19 3/4 | 56 2 13/64 | 52 2.047 | 19 .748 | M16 5/8 | F308D1 F308D1 | UC308D1 UC308-108D1 | 9,150 | 5,400 |
| 45 1 5/8 1 11/16 1 3/4 | UCF309D1 UCF309-110D1 UCF309-111D1 UCF309-112D1 | 160 6 5/16 | 125 4 59/64 | 18 23/32 | 44 1 23/32 | 19 3/4 | 60 2 23/64 | 57 2.244 | 22 .866 | M16 5/8 | F309D1 F309D1 F309D1 F309D1 | UC309D1 UC309-110D1 UC309-111D1 UC309-112D1 | 11,900 | 7,200 |
| 50 1 7/8 1 15/16 | UCF310D1 UCF310-114D1 UCF310-115D1 | 175 6 7/8 | 132 5 13/64 | 19 3/4 | 48 1 7/8 | 23 29/32 | 67 2 41/64 | 61 2.402 | 22 .866 | M20 3/4 | F310D1 F310D1 F310D1 | UC310D1 UC310-114D1 UC310-115D1 | 13,900 | 8,600 |
| 55 2 2 1/8 2 3/16 | UCF311D1 UCF311-200D1 UCF311-202D1 UCF311-203D1 | 185 7 9/32 | 140 5 33/64 | 20 25/32 | 52 2 1/16 | 23 29/32 | 71 2 51/64 | 66 2.598 | 25 .984 | M20 3/4 | F311D1 F311D1 F311D1 F311D1 | UC311D1 UC311-200D1 UC311-202D1 UC311-203D1 | 16,100 | 10,100 |
| 60 2 1/4 2 3/8 2 7/16 | UCF312D1 UCF312-204D1 UCF312-206D1 UCF312-207D1 | 195 7 11/16 | 150 5 29/32 | 22 7/8 | 56 2 7/32 | 23 29/32 | 78 3 5/64 | 71 2.795 | 26 1.024 | M20 3/4 | F312D1 F312D1 F312D1 F312D1 | UC312D1 UC312-204D1 UC312-206D1 UC312-207D1 | 18,400 | 11,700 |
| 65 2 1/2 | UCF313D1 UCF313-208D1 | 208 8 3/16 | 166 6 17/32 | 22 7/8 | 58 2 9/32 | 23 29/32 | 78 3 5/64 | 75 2.953 | 30 1.181 | M20 3/4 | F313D1 F313D1 | UC313D1 UC313-208D1 | 20,800 | 13,400 |
| 70 2 11/16 2 3/4 | UCF314D1 UCF314-211D1 UCF314-212D1 | 226 8 29/32 | 178 7 | 25 31/32 | 61 2 13/32 | 25 63/64 | 81 3 3/16 | 78 3.071 | 33 1.299 | M22 7/8 | F314D1 F314D1 F314D1 | UC314D1 UC314-211D1 UC314-212D1 | 23,400 | 15,300 |
| 75 2 15/16 3 | UCF315D1 UCF315-215D1 UCF315-300D1 | 236 9 9/32 | 184 7 1/4 | 25 31/32 | 66 2 19/32 | 25 63/64 | 89 3 1/2 | 82 3.228 | 32 1.260 | M22 7/8 | F315D1 F315D1 F315D1 | UC315D1 UC315-215D1 UC315-300D1 | 25,500 | 17,400 |
| 80 3 1/8 3 3/16 | UCF316D1 UCF316-302D1 UCF316-303D1 | 250 9 27/32 | 196 7 23/32 | 27 1 1/16 | 68 2 11/16 | 31 1 7/32 | 90 3 35/64 | 86 3.386 | 34 1.339 | M27 1 | F316D1 F316D1 F316D1 | UC316D1 UC316-302D1 UC316-303D1 | 27,600 | 19,500 |

Continued on next page.

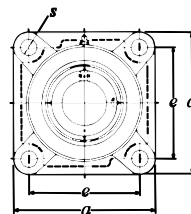
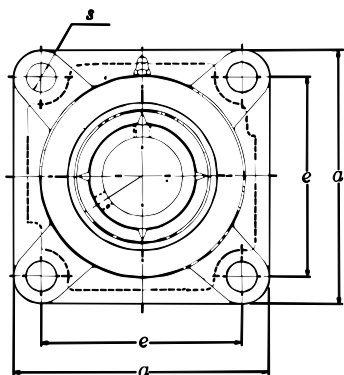


Units: Millimeters
INCHES



FLANGED UNITS - CAST HOUSING (FOUR BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|-----------------------|--|--------------------|----------------|--------------|---------------|--------------|----------------|--------------|-------------|--------------|----------------------------|---------------------------------------|--------------------------|-----------------------------|
| | | <i>a</i> | <i>e</i> | <i>g</i> | <i>l</i> | <i>s</i> | <i>z</i> | <i>Bi</i> | <i>n</i> | | | | Dynamic <i>C</i> | Static <i>C₀</i> |
| 85 3 1/4 | UCF317D1 UCF317-304D1 | 260 10 1/4 | 204 8 1/32 | 27 1 1/16 | 74 2 29/32 | 31 1 7/32 | 100 3 15/16 | 96 3.780 | 40 1.575 | M27 1 | F317D1 F317D1 | UC317D1 UC317-304D1 | 29,800 | 21,800 |
| 90 3 7/16 3 1/2 | UCF318D1 UCF318-307D1 UCF318-308D1 | 280 11 1/32 | 216 8 1/2 | 30 1 3/16 | 76 3 | 35 1 3/8 | 100 3 15/16 | 96 3.780 | 40 1.575 | M30 1 1/8 | F318D1 F318D1 F318D1 | UC318D1 UC318-307D1 UC318-308D1 | 32,000 | 24,100 |
| 95 3 3/4 | UCF319D1 UCF319-312D1 | 290 11 13/32 | 228 8 31/32 | 30 1 3/16 | 94 3 11/16 | 35 1 3/8 | 121 4 49/64 | 103 4.055 | 41 1.614 | M30 1 1/8 | F319D1 F319D1 | UC319D1 UC319-312D1 | 34,500 | 26,600 |
| 100 3 15/16 4 | UCF320D1 UCF320-315D1 UCF320-400D1 | 310 12 7/32 | 242 9 17/32 | 32 1 1/4 | 94 3 11/16 | 38 1 1/2 | 125 4 59/64 | 108 4.252 | 42 1.654 | M33 1 1/4 | F320D1 F320D1 F320D1 | UC320D1 UC320-315D1 UC320-400D1 | 39,000 | 31,500 |
| 105 | UCF321D1 | 310 | 242 | 32 | 94 | 38 | 127 | 112 | 44 | M33 | F321D1 | UC321D1 | 41,500 | 34,500 |
| 110 | UCF322D1 | 340 | 266 | 35 | 96 | 41 | 131 | 117 | 46 | M36 | F322D1 | UC322D1 | 46,000 | 40,500 |
| 120 | UCF324D1 | 370 | 290 | 40 | 110 | 41 | 140 | 126 | 51 | M36 | F324D1 | UC324D1 | 46,500 | 41,500 |
| 130 | UCF326D1 | 410 | 320 | 45 | 115 | 41 | 146 | 135 | 54 | M36 | F326D1 | UC326D1 | 51,500 | 48,000 |
| 140 | UCF328D1 | 450 | 350 | 55 | 125 | 41 | 161 | 145 | 59 | M36 | F328D1 | UC328D1 | 57,000 | 55,500 |



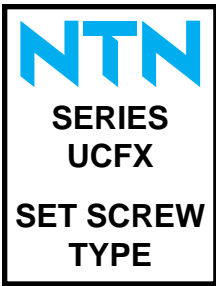
Units: Millimeters
INCHES



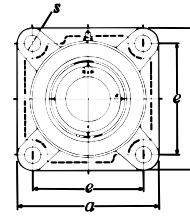
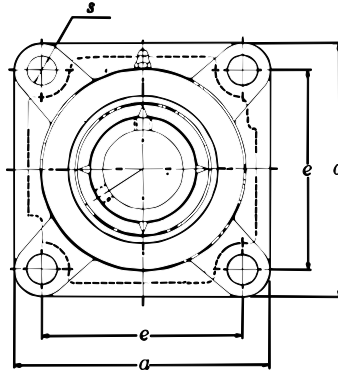
FLANGED UNITS - CAST HOUSING (FOUR BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|--|--------------------|----------------|-------------|---------------|-------------|-----------------|---------------|---------------|------------|--------------------------------------|--|--------------------------|-----------------------|
| | | a | e | g | l | s | z | Bi | n | | | | Dynamic C | Static C ₀ |
| 25 1 1/16 7/8 15/16 1 | UCFX05D1 UCFX05-013D1 UCFX05-014D1 UCFX05-015D1 UCFX05-100D1 | 108 4 1/4 | 83 3 17/64 | 13 1/2 | 30 1 3/16 | 12 15/32 | 40.2 1 37/64 | 38.1 1.500 | 15.9 .626 | M10 3/8 | FX05D1 FX05D1 FX05D1 FX05D1 | UCX05D1 UCX05-013D1 UCX05-014D1 UCX05-015D1 UCX05-100D1 | 4,390 | 2,540 |
| 30 1 1/8 1 1/8 1 3/16 1 1/4 | UCFX06D1 UCFX06-101D1 UCFX06-102D1 UCFX06-103D1 UCFX06-104D1 | 117 4 19/32 | 92 3 5/8 | 14 9/16 | 34 1 11/32 | 16 5/8 | 44.4 1 3/4 | 42.9 1.689 | 17.5 .689 | M14 1/2 | FX06D1 FX06D1 FX06D1 FX06D1 | UCX06D1 UCX06-101D1 UCX06-102D1 UCX06-103D1 UCX06-104D1 | 5,780 | 3,440 |
| 35 1 5/16 1 3/8 1 7/16 | UCFX07D1 UCFX07-105D1 UCFX07-106D1 UCFX07-107D1 | 130 5 1/8 | 102 4 1/64 | 14 9/16 | 38 1 1/2 | 16 5/8 | 51.2 2 1/64 | 49.2 1.937 | 19 .748 | M14 1/2 | FX07D1 FX07D1 FX07D1 | UCX07D1 UCX07-105D1 UCX07-106D1 UCX07-107D1 | 6,550 | 4,000 |
| 40 1 1/2 1 9/16 | UCFX08D1 UCFX08-108D1 UCFX08-109D1 | 137 5 13/32 | 105 4 9/64 | 14 9/16 | 40 1 9/16 | 19 3/4 | 52.2 2 1/16 | 49.2 1.937 | 19 .748 | M16 5/8 | FX08D1 FX08D1 FX08D1 | UCX08D1 UCX08-108D1 UCX08-109D1 | 7,310 | 4,590 |
| 45 1 5/8 1 11/16 1 3/4 1 13/16 | UCFX09D1 UCFX09-110D1 UCFX09-111D1 UCFX09-112D1 UCFX09-113D1 | 143 5 5/8 | 111 4 3/8 | 14 9/16 | 40 1 9/16 | 19 3/4 | 55.6 2 3/16 | 51.6 2.031 | 19 .748 | M16 5/8 | FX09D1 FX09D1 FX09D1 FX09D1 | UCX09D1 UCX09-110D1 UCX09-111D1 UCX09-112D1 UCX09-113D1 | 7,870 | 5,220 |
| 50 1 7/8 1 15/16 2 | UCFX10D1 UCFX10-114D1 UCFX10-115D1 UCFX10-200D1 | 162 6 3/8 | 130 5 1/8 | 20 25/32 | 44 1 23/32 | 19 3/4 | 59.4 2 11/32 | 55.6 2.189 | 22.2 .874 | M16 5/8 | FX10D1 FX10D1 FX10D1 | UCX10D1 UCX10-114D1 UCX10-115D1 UCX10-200D1 | 9,780 | 6,570 |
| 55 2 1/16 2 1/8 2 3/16 2 1/4 2 5/16 | UCFX11D1 UCFX11-201D1 UCFX11-202D1 UCFX11-203D1 UCFX11-204D1 UCFX11-205D1 | 175 6 7/8 | 143 5 5/8 | 20 25/32 | 49 1 15/16 | 19 3/4 | 68.7 2 45/64 | 65.1 2.563 | 25.4 1.000 | M16 5/8 | FX11D1 FX11D1 FX11D1 FX11D1 | UCX11D1 UCX11-201D1 UCX11-202D1 UCX11-203D1 UCX11-204D1 UCX11-205D1 | 11,810 | 8,100 |
| 60 2 3/8 2 7/16 | UCFX12D1 UCFX12-206D1 UCFX12-207D1 | 187 7 3/8 | 149 5 55/64 | 21 13/16 | 59 2 5/16 | 19 3/4 | 73.7 2 29/32 | 65.1 2.563 | 25.4 1.000 | M16 5/8 | FX12D1 FX12D1 FX12D1 | UCX12D1 UCX12-206D1 UCX12-207D1 | 12,930 | 9,000 |
| 65 2 1/2 2 3/16 | UCFX13D1 UCFX13-208D1 UCFX13-209D1 | 187 7 3/8 | 149 5 55/64 | 21 13/16 | 59 2 5/16 | 19 3/4 | 78.4 3 3/32 | 74.6 2.937 | 30.2 1.189 | M16 5/8 | FX13D1 FX13D1 FX13D1 | UCX13D1 UCX13-208D1 UCX13-209D1 | 13,940 | 9,900 |
| 70 2 5/8 2 11/16 2 3/4 | UCFX14D1 UCFX14-210D1 UCFX14-211D1 UCFX14-212D1 | 197 7 3/4 | 152 5 53/64 | 24 15/16 | 60 2 3/8 | 23 29/32 | 81.5 3 13/64 | 77.8 3.063 | 33.3 1.311 | M20 3/4 | FX14D1 FX14D1 FX14D1 | UCX14D1 UCX14-210D1 UCX14-211D1 UCX14-212D1 | 14,840 | 11,130 |

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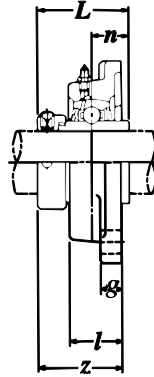
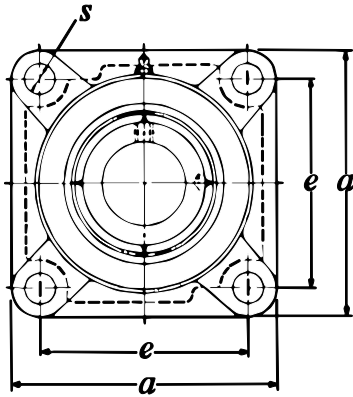
Units: Millimeters
INCHES



FLANGED UNITS - CAST HOUSING (FOUR BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|--|--------------------|----------------|--------------|---------------|--------------|------------------|----------------|---------------|------------|--------------------------------------|---|--------------------------|-----------------------------|
| | | <i>a</i> | <i>e</i> | <i>g</i> | <i>l</i> | <i>s</i> | <i>z</i> | <i>Bi</i> | <i>n</i> | | | | Dynamic <i>C</i> | Static <i>C_o</i> |
| 75 2 13/16 2 7/8 2 15/16 3 | UCFX15D1 UCFX15-213D1 UCFX15-214D1 UCFX15-215D1 UCFX15-300D1 | 197 7 3/4 | 152 5 63/64 | 24 1 5/16 | 68 2 11/16 | 23 29/32 | 89.3 3 33/64 | 82.6 3.252 | 33.3 1.311 | M20 3/4 | FX15D1 FX15D1 FX15D1 FX15D1 | UCX15D1 UCX15-213D1 UCX15-214D1 UCX15-215D1 UCX15-300D1 | 16,310 | 11,920 |
| 80 3 1/8 3 3/16 3 1/4 | UCFX16D1 UCFX16-302D1 UCFX16-303D1 UCFX16-304D1 | 214 8 7/16 | 171 6 47/64 | 24 1 5/16 | 70 2 3/4 | 23 29/32 | 91.6 3 39/64 | 85.7 3.374 | 34.1 1.343 | M20 3/4 | FX16D1 FX16D1 FX16D1 FX16D1 | UCX16D1 UCX16-302D1 UCX16-303D1 UCX16-304D1 | 18,780 | 14,390 |
| 85 3 5/16 3 7/16 | UCFX17D1 UCFX17-305D1 UCFX17-307D1 | 214 8 7/16 | 171 6 47/64 | 24 1 5/16 | 70 2 3/4 | 23 29/32 | 96.3 3 51/64 | 96 3.780 | 39.7 1.563 | M20 M20 | FX17D1 FX17D1 FX17D1 | UCX17D1 UCX17-305D1 UCX17-307D1 | 21,590 | 16,080 |
| 90 3 1/2 | UCFX18D1 UCFX18-308D1 | 214 8 7/16 | 171 6 47/64 | 24 1 5/16 | 76 3 | 23 29/32 | 106.1 4 11/64 | 104 4.094 | 42.9 1.689 | M20 3/4 | FX18D1 FX18D1 | UCX18D1 UCX18-308D1 | 24,520 | 18,440 |
| 100 3 7/8 3 15/16 4 | UCFX20D1 UCFX20-314D1 UCFX20-315D1 UCFX20-400D1 | 268 10 9/16 | 211 8 5/16 | 31 1 7/32 | 97 3 13/16 | 31 1 7/32 | 127.3 5 1/64 | 117.5 4.626 | 49.2 1.937 | M27 1 | FX20D1 FX20D1 FX20D1 FX20D1 | UCX20D1 UCX20-314D1 UCX20-315D1 UCX20-400D1 | 29,910 | 23,620 |

Units: Millimeters
INCHES

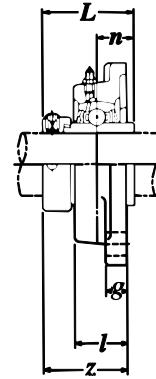
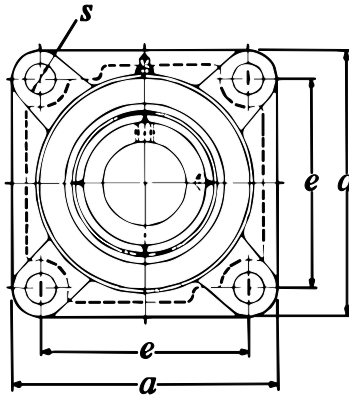


FLANGED UNITS - CAST HOUSING (FOUR BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|--|--------------------|----------------|-------------|---------------|-------------|------------------|---------------|---------------|----------------|-------------|--|--|--------------------------|-----------------------|
| | | a | e | g | l | s | z | L | Di | n | | | | Dynamic C | Static C ₀ |
| 20 3/4 | UEL204D1 UEL204-012D1 | 86 3 3/8 | 64 2 33/64 | 11 7/16 | 25.5 1 | 12 15/32 | 41.6 1 41/64 | 43.7 1.720 | 33 1.299 | 17.1 .673 | M10 5/16 | F204D1 F204D1 | UEL204D1 UEL204-012D1 | 2,890 | 1,500 |
| 25 1 3/16 7/8 1 1/8 1 1/4 | UEL205D1 UEL205-013D1 UEL205-014D1 UEL205-015D1 UEL205-100D1 | 95 3 3/4 | 70 2 3/4 | 13 1/2 | 27 1 1/16 | 12 15/32 | 42.9 1 11/16 | 44.4 1.748 | 38 1.496 | 17.5 .689 | M10 3/8 | F205D1 F205D1 F205D1 F205D1 F205D1 | UEL205D1 UEL205-013D1 UEL205-014D1 UEL205-015D1 UEL205-100D1 | 3,150 | 1,770 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | UEL206D1 UEL206-101D1 UEL206-102D1 UEL206-103D1 UEL206-104D1 | 108 4 1/4 | 83 3 17/64 | 13 1/2 | 31 1 7/32 | 12 15/32 | 48.1 1 57/64 | 48.4 1.906 | 44.5 1.752 | 18.3 .720 | M10 3/8 | F206D1 F206D1 F206D1 F206D1 F206D1 | UEL206D1 UEL206-101D1 UEL206-102D1 UEL206-103D1 UEL206-104D1 | 4,400 | 2,540 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UEL207D1 UEL207-104D1 UEL207-105D1 UEL207-106D1 UEL207-107D1 | 117 4 13/32 | 92 3 5/8 | 15 19/32 | 34 1 11/32 | 14 35/64 | 51.3 2 1/64 | 51.1 2.012 | 55.5 2.185 | 18.8 .740 | M12 7/16 | F207D1 F207D1 F207D1 F207D1 F207D1 | UEL207D1 UEL207-104D1 UEL207-105D1 UEL207-106D1 UEL207-107D1 | 5,750 | 3,440 |
| 40 1 1/2 1 5/16 | UEL208D1 UEL208-108D1 UEL208-109D1 | 130 5 1/8 | 102 4 1/64 | 15 19/32 | 36 1 13/32 | 16 5/8 | 55.9 2 1/64 | 56.3 2.217 | 60 2.362 | 21.4 .843 | M14 1/2 | F207D1 F208D1 F208D1 | UEL208D1 UEL208-108D1 UEL208-109D1 | 6,550 | 4,000 |
| 45 1 5/8 1 11/16 1 3/4 | UEL209D1 UEL209-110D1 UEL209-111D1 UEL209-112D1 | 137 5 13/32 | 105 4 9/64 | 16 5/8 | 38 1 1/2 | 16 5/8 | 56.9 2 1/64 | 56.3 2.217 | 63.5 2.500 | 21.4 .843 | M14 1/2 | F209D1 F209D1 F209D1 F209D1 | UEL209D1 UEL209-110D1 UEL209-111D1 UEL209-112D1 | 7,350 | 4,590 |
| 50 1 13/16 1 7/8 1 15/16 2 | UEL210D1 UEL210-113D1 UEL210-114D1 UEL210-115D1 UEL210-200D1 | 143 5 5/8 | 111 4 3/8 | 16 5/8 | 40 1 9/16 | 16 5/8 | 60.1 2 23/64 | 62.7 2.469 | 69.5 2.736 | 24.6 .969 | M14 1/2 | F210D1 F210D1 F210D1 F210D1 F210D1 | UEL210D1 UEL210-113D1 UEL210-114D1 UEL210-115D1 UEL210-200D1 | 7,900 | 5,220 |
| 55 2 2 1/16 2 1/8 2 3/16 | UEL211D1 UEL211-200D1 UEL211-201D1 UEL211-202D1 UEL211-203D1 | 162 6 3/8 | 130 5 1/8 | 18 23/32 | 43 1 11/16 | 19 3/4 | 68.6 2 45/64 | 71.4 2.811 | 76 2.992 | 27.8 1.094 | M16 9/16 | F211D1 F211D1 F211D1 F211D1 F211D1 | UEL211D1 UEL211-200D1 UEL211-201D1 UEL211-202D1 UEL211-203D1 | 9,750 | 6,570 |
| 60 2 1/4 2 3/8 2 7/16 | UEL212D1 UEL212-204D1 UEL212-206D1 UEL212-207D1 | 175 6 7/8 | 143 5 5/8 | 18 23/32 | 48 1 7/8 | 19 3/4 | 75.8 2 63/64 | 77.8 3.063 | 84 3.307 | 31 1.220 | M16 9/16 | F212D1 F212D1 F212D1 F212D1 | UEL212D1 UEL212-204D1 UEL212-206D1 UEL212-207D1 | 11,800 | 8,100 |
| 65 2 1/2 | UEL213D1 UEL213-208D1 | 187 7 3/8 | 149 5 55/64 | 22 7/8 | 50 1 31/32 | 19 3/4 | 81.55 3 13/64 | 85.7 3.374 | 97 3.819 | 34.15 1.344 | M16 9/16 | F213D1 F213D1 | UEL213D1 UEL213-208D1 | 12,900 | 9,000 |
| 70 2 11/16 2 3/4 | UEL214D1 UEL214-211D1 UEL214-212D1 | 193 7 19/32 | 152 5 63/64 | 22 7/8 | 54 2 1/8 | 19 3/4 | 82.55 3 1/4 | 85.7 3.374 | 97 3.819 | 34.15 1.344 | M16 9/16 | F214D1 F214D1 F214D1 | UEL214D1 UEL214-211D1 UEL214-212D1 | 14,000 | 9,900 |
| 75 2 15/16 3 | UEL215D1 UEL215-215D1 UEL215-300D1 | 200 7 7/8 | 159 6 17/64 | 22 7/8 | 56 2 7/32 | 19 3/4 | 88.7 3 31/64 | 92 3.622 | 102 4.016 | 37.3 1.469 | M16 9/16 | F215D1 F215D1 F215D1 | UEL215D1 UEL215-215D1 UEL215-300D1 | 14,900 | 11,130 |

NTN
SERIES
UELF3
ECCENTRIC
LOCKING
COLLAR
TYPE

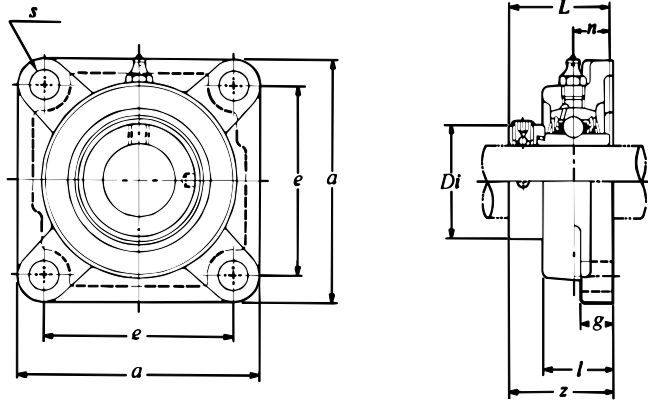
Units: Millimeters
 INCHES



FLANGED UNITS - CAST HOUSING (FOUR BOLT)

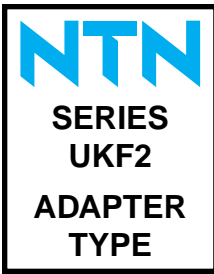
| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|---|--------------------|----------------|--------------|---------------|--------------|-------------------|----------------|---------------|----------------|--------------|--|--|--------------------------|-----------------------|
| | | a | e | g | l | s | z | L | Di | n | | | | Dynamic C | Static C ₀ |
| 25 7/8 1 1/16 1 | UELF305D1 UELF305-014D1 UELF305-015D1 UELF305-100D1 | 110 4 11/32 | 80 3 5/32 | 13 1/2 | 29 1 1/32 | 16 5/8 | 46.1 1 13/16 | 46.8 1.843 | 42.8 1.685 | 16.7 .657 | M14 1/2 | F305D1 F305D1 F305D1 F305D1 | UEL305D1 UEL305-014D1 UEL305-015D1 UEL305-100D1 | 4,750 | 2,460 |
| 30 1 1/8 1 3/16 | UELF306D1 UELF306-102D1 UELF306-103D1 | 125 4 29/32 | 95 3 47/64 | 15 19/32 | 32 1 1/4 | 16 5/8 | 50.5 1 63/64 | 50 1.969 | 50 1.969 | 17.5 .689 | M14 1/2 | F306D1 F306D1 F306D1 | UEL306D1 UEL306-102D1 UEL306-103D1 | 6,000 | 3,400 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UELF307D1 UELF307-104D1 UELF307-105D1 UELF307-106D1 UELF307-107D1 | 135 5 5/16 | 100 3 15/16 | 16 5/8 | 36 1 13/32 | 19 3/4 | 53.3 2 3/32 | 51.6 2.031 | 55 2.165 | 18.3 .720 | M16 5/8 | F307D1 F307D1 F307D1 F307D1 F307D1 | UEL307D1 UEL307-104D1 UEL307-105D1 UEL307-106D1 UEL307-107D1 | 7,500 | 4,300 |
| 40 1 1/2 | UELF308D1 UELF308-108D1 | 150 5 29/32 | 112 4 13/32 | 17 2 1/32 | 40 1 9/16 | 19 3/4 | 60.3 2 3/8 | 57.1 2.248 | 63.5 2.500 | 19.8 .780 | M16 5/8 | F308D1 F308D1 | UEL308D1 UEL308-108D1 | 9,150 | 5,400 |
| 45 1 5/8 1 11/16 1 3/4 | UELF309D1 UELF309-110D1 UELF309-111D1 UELF309-112D1 | 160 6 5/16 | 125 4 59/64 | 18 23/32 | 44 1 23/32 | 19 3/4 | 63.9 2 39/64 | 58.7 2.311 | 70 2.756 | 19.8 .780 | M16 5/8 | F309D1 F309D1 F309D1 F309D1 | UEL309D1 UEL309-110D1 UEL309-111D1 UEL309-112D1 | 11,900 | 7,200 |
| 50 1 7/8 1 15/16 | UELF310D1 UELF310-114D1 UELF310-115D1 | 175 6 7/8 | 132 5 13/64 | 19 3/4 | 48 1 7/8 | 23 29/32 | 70 2 3/4 | 66.6 2.622 | 76.2 3.000 | 24.6 .969 | M20 3/4 | F310D1 F310D1 F310D1 | UEL310D1 UEL310-114D1 UEL310-115D1 | 13,900 | 8,600 |
| 55 2 2 1/8 2 3/16 | UELF311D1 UELF311-200D1 UELF311-202D1 UELF311-203D1 | 185 7 9/32 | 140 5 33/64 | 20 25/32 | 52 2 1/16 | 23 29/32 | 75.2 2 61/64 | 73 2.874 | 83 3.268 | 27.8 1.094 | M20 3/4 | F311D1 F311D1 F311D1 F311D1 | UEL311D1 UEL311-200D1 UEL311-202D1 UEL311-203D1 | 16,100 | 10,100 |
| 60 2 1/4 2 3/8 2 7/16 | UELF312D1 UELF312-204D1 UELF312-206D1 UELF312-207D1 | 195 7 11/16 | 150 5 29/32 | 22 7/8 | 56 2 7/32 | 23 29/32 | 81.45 3 13/64 | 79.4 3.126 | 89 3.504 | 30.95 1.219 | M20 3/4 | F312D1 F312D1 F312D1 F312D1 | UEL312D1 UEL312-204D1 UEL312-206D1 UEL312-207D1 | 18,400 | 11,700 |
| 65 2 1/2 | UELF313D1 UELF313-208D1 | 208 8 3/16 | 166 6 17/32 | 22 7/8 | 58 2 9/32 | 23 29/32 | 86.15 3 25/64 | 85.7 3.374 | 97 3.819 | 32.55 1.281 | M20 3/4 | F313D1 F313D1 | UEL313D1 UEL313-208D1 | 20,800 | 13,400 |
| 70 2 11/16 2 3/4 | UELF314D1 UELF314-211D1 UELF314-212D1 | 226 8 29/32 | 178 7 | 25 3 1/32 | 61 2 19/32 | 25 63/64 | 93.95 3 45/64 | 92.1 3.626 | 102 4.016 | 34.15 1.344 | M22 7/8 | F314D1 F314D1 F314D1 | UEL314D1 UEL314-211D1 UEL314-212D1 | 23,400 | 15,300 |
| 75 2 15/16 3 | UELF315D1 UELF315-215D1 UELF315-300D1 | 236 9 9/32 | 184 7 1/4 | 25 3 1/32 | 66 2 19/32 | 25 63/64 | 101.7 4 | 100 3.937 | 113 4.449 | 37.3 1.469 | M22 7/8 | F315D1 F315D1 F315D1 | UEL315D1 UEL315-215D1 UEL315-300D1 | 25,500 | 17,400 |
| 80 3 1/8 3 3/16 | UELF316D1 UELF316-302D1 UELF316-303D1 | 250 9 27/32 | 196 7 23/32 | 27 1 1/16 | 68 2 11/16 | 31 1 7/32 | 103.9 4 3/32 | 106.4 4.189 | 119 4.685 | 40.5 1.594 | M27 1 | F316D1 F316D1 F316D1 | UEL316D1 UEL316-302D1 UEL316-303D1 | 27,600 | 19,500 |
| 85 3 1/4 | UELF317D1 UELF317-304D1 | 260 10 1/4 | 204 8 1/32 | 27 1 1/16 | 74 2 29/32 | 31 1 7/32 | 111.45 4 29/64 | 109.5 4.311 | 127 5.000 | 42.05 1.656 | M27 1 | F317D1 F317D1 | UEL317D1 UEL317-304D1 | 29,800 | 21,800 |
| 90 3 7/16 3 1/2 | UELF318D1 UELF318-307D1 UELF318-308D1 | 280 11 1/32 | 216 8 1/2 | 30 1 3/16 | 76 3 | 35 1 3/8 | 116.25 4 37/64 | 115.9 4.563 | 133 5.236 | 43.65 1.719 | M30 1 1/8 | F318D1 F318D1 F318D1 | UEL318D1 UEL318-307D1 UEL318-308D1 | 32,000 | 24,100 |
| 95 3 3/4 | UELF319D1 UELF319-312D1 | 290 11 13/32 | 228 8 31/32 | 30 1 3/16 | 94 3 11/16 | 35 1 3/8 | 142.4 5 39/64 | 122.3 4.815 | 140 5.512 | 38.9 1.531 | M30 1 1/8 | F319D1 F319D1 | UEL319D1 UEL319-312D1 | 34,500 | 26,600 |
| 100 3 15/16 4 | UELF320D1 UELF320-315D1 UELF320-400D1 | 310 12 7/32 | 242 9 17/32 | 32 1 1/4 | 94 3 11/16 | 38 1 1/2 | 137.6 5 27/64 | 128.6 5.063 | 146 5.748 | 50 1.969 | M33 1 1/4 | F320D1 F320D1 F320D1 | UEL320D1 UEL320-315D1 UEL320-400D1 | 39,000 | 31,500 |
| 105 | UELF321D1 | 310 | 242 | 32 | 94 | 38 | 150.3 | 139.7 | 157 | 48.4 | M33 | F321D1 | UEL321D1 | 41,500 | 34,500 |
| 110 | UELF322D1 | 340 | 266 | 35 | 96 | 41 | 152.1 | 141.3 | 168 | 49.2 | M36 | F322D1 | UEL322D1 | 46,000 | 40,500 |

Units: Millimeters
INCHES



FLANGED UNITS - CAST HOUSING (FOUR BOLT)

| Shaft Dia. | Complete Flanged Unit Number | Nominal Dimensions | | | | | | | | | Bolt Size | Housing Number | Bearing Number | Basic Load Ratings (lbs) | |
|--|--|--------------------|----------------|-------------|---------------|---------------|------------------|---------------|--------------|----------------|-------------|--|--|--------------------------|-----------|
| | | a | e | g | l | s | z | L | Di | n | | | | Dynamic C | Static Co |
| 20 3/4 | UEL204D1 UEL204-012D1 | 86 3 3/8 | 63.5 2 1/2 | 15 1 1/8 | 29.5 1 1/8 | 11.5 25/64 | 45.6 1 5/8 | 43.7 1.720 | 33.3 1.31 | 17.1 .673 | M10 5/16 | FU204D1 FU204D1 | UEL204D1 UEL204-012D1 | 2,890 | 1,500 |
| 25 1 1/16 7/8 1 1/8 1 | UEL205D1 UEL205-013D1 UEL205-014D1 UEL205-015D1 UEL205-100D1 | 96 3 25/32 | 70 2 3/4 | 15 1 1/8 | 30 1 3/16 | 11.5 29/64 | 45.9 1 13/16 | 44.4 1.748 | 38.1 1.50 | 17.5 .689 | M10 3/8 | FU205D1 FU205D1 FU205D1 FU205D1 | UEL205D1 UEL205-013D1 UEL205-014D1 UEL205-015D1 UEL205-100D1 | 3,150 | 1,770 |
| 30 1 1/8 1 1/8 1 3/16 1 1/4 | UEL206D1 UEL206-101D1 UEL206-102D1 UEL206-103D1 UEL206-104D1 | 109 4 5/32 | 82.5 3 1/4 | 16 5/8 | 33 1 1/8 | 11.5 29/64 | 50.1 1 31/32 | 48.4 1.906 | 44.5 1.75 | 18.3 .720 | M10 3/8 | FU206D1 FU206D1 FU206D1 FU206D1 | UEL206D1 UEL206-101D1 UEL206-102D1 UEL206-103D1 UEL206-104D1 | 4,400 | 2,540 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UEL207D1 UEL207-104D1 UEL207-105D1 UEL207-106D1 UEL207-107D1 | 118 4 21/32 | 92 3 5/8 | 17 21/32 | 36 1 13/32 | 14 35/64 | 53.3 2 3/32 | 51.1 2.012 | 55.6 2.19 | 18.8 .740 | M12 7/16 | FU207D1 FU207D1 FU207D1 FU207D1 | UEL207D1 UEL207-104D1 UEL207-105D1 UEL207-106D1 UEL207-107D1 | 5,750 | 3,440 |
| 40 1 1/2 1 9/16 | UEL208D1 UEL208-108D1 UEL208-109D1 | 131 5 5/32 | 101.5 4 | 17 21/32 | 39 1 17/32 | 14 35/64 | 58.9 2 5/16 | 56.3 2.217 | 60.2 2.37 | 21.4 .843 | M12 7/16 | FU207D1 FU208D1 FU208D1 | UEL208D1 UEL208-108D1 UEL208-109D1 | 6,550 | 4,000 |
| 45 1 5/8 1 11/16 1 3/4 | UEL209D1 UEL209-110D1 UEL209-111D1 UEL209-112D1 | 137 5 13/32 | 105 4 9/64 | 18 23/32 | 40 1 9/16 | 16 5/8 | 58.9 2 5/16 | 56.3 2.217 | 63.5 2.50 | 21.4 .843 | M14 1/2 | FU209D1 FU209D1 FU209D1 | UEL209D1 UEL209-110D1 UEL209-111D1 UEL209-112D1 | 7,350 | 4,590 |
| 50 1 13/16 1 7/8 1 15/16 2 | UEL210D1 UEL210-113D1 UEL210-114D1 UEL210-115D1 UEL210-200D1 | 144 5 21/32 | 111 4 3/8 | 20 25/32 | 46 1 13/16 | 18 45/64 | 66.1 2 39/64 | 62.7 2.469 | 69.9 2.75 | 24.6 .969 | M16 1/2 | FU210D1 FU210D1 FU210D1 FU210D1 | UEL210D1 UEL210-113D1 UEL210-114D1 UEL210-115D1 UEL210-200D1 | 7,900 | 5,220 |
| 55 2 2 1/16 2 1/8 2 3/16 | UEL211D1 UEL211-200D1 UEL211-201D1 UEL211-202D1 UEL211-203D1 | 163 6 13/32 | 130 5 1/8 | 21 13/16 | 49 1 15/16 | 18 45/64 | 74.6 2 15/16 | 71.4 2.811 | 76.2 3.00 | 27.8 1.094 | M16 9/16 | FU211D1 FU211D1 FU211D1 FU211D1 | UEL211D1 UEL211-200D1 UEL211-201D1 UEL211-202D1 UEL211-203D1 | 9,750 | 6,570 |
| 60 2 1/4 2 3/8 2 7/16 | UEL212D1 UEL212-204D1 UEL212-206D1 UEL212-207D1 | 175 6 7/8 | 143 5 5/8 | 21 13/16 | 53 2 3/32 | 18 45/64 | 80.8 3 3/16 | 77.8 3.063 | 84.1 3.31 | 31 1.220 | M16 9/16 | FU212D1 FU212D1 FU212D1 | UEL212D1 UEL212-204D1 UEL212-206D1 UEL212-207D1 | 11,800 | 8,100 |
| 65 2 1/2 | UEL213D1 UEL213-208D1 | 187 7 3/8 | 149 5 59/64 | 22 7/8 | 59 2 3/16 | 20.5 13/16 | 89.55 3 17/32 | 85.7 3.374 | 97.0 3.82 | 34.15 1.344 | M18 5/8 | FU213D1 FU213D1 | UEL213D1 UEL213-208D1 | 12,900 | 9,000 |
| 70 2 11/16 2 3/4 | UEL214D1 UEL214-211D1 UEL214-212D1 | 193 7 19/32 | 152 5 63/64 | 22 7/8 | 62 2 7/16 | 20.5 13/16 | 89.55 3 17/32 | 85.7 3.374 | 97.0 3.82 | 34.15 1.344 | M18 5/8 | FU214D1 FU214D1 | UEL214D1 UEL214-211D1 UEL214-212D1 | 14,000 | 9,900 |
| 75 2 15/16 3 | UEL215D1 UEL215-215D1 UEL215-300D1 | 200 7 7/8 | 159 6 17/64 | 22 7/8 | 65 2 9/16 | 20.5 13/16 | 95.7 3 49/64 | 92 3.622 | 102 4.02 | 37.3 1.469 | M18 5/8 | FU215D1 FU215D1 | UEL215D1 UEL215-215D1 UEL215-300D1 | 14,900 | 11,130 |



Units: Millimeters
INCHES



FLANGED UNITS - CAST HOUSING (4 BOLT)

| Shaft Dia. | Unit Number 1) 2) 3) | Nominal Dimensions | | | | | | | | | Bolt Size mm inch | Housing Number | Bearing and Adapter Number | Basic Load Ratings (lbs) | |
|---------------------------------|---|--------------------|---------------|---------------|-------------|---------------|-------------|-----------------|-------------|---------------|-------------------------|----------------|---|--------------------------|-----------------------------|
| | | <i>a</i> | <i>e</i> | <i>i</i> | <i>g</i> | <i>l</i> | <i>s</i> | <i>z</i> | <i>L</i> | <i>F min</i> | | | | <i>Dynamic C</i> | <i>Static C₀</i> |
| 20 3/4 | UKF205D1 ; H 2305X UKF205D1 ; HE2305 | 95 3 3/4 | 70 2 3/4 | 16 5/8 | 13 1/2 | 27 1 1/16 | 12 15/32 | 35.5 1 25/64 | 35 1.378 | 30 1 3/16 | M10 3/8 | F205D1 | UK205D1 ; H 2305X UK205D1 ; HE2305 | 3,150 | 1,770 |
| 25 7/8 1 | UKF206D1 ; H 2306X UKF206D1 ; HS2306 UKF206D1 ; HE2306X | 108 4 1/4 | 83 3 9/32 | 18 45/64 | 13 1/2 | 31 1 7/32 | 12 15/32 | 39 1 17/32 | 38 1.496 | 36 1.406 | M10 3/8 | F206D1 | UK206D1 ; H 2306X UK206D1 ; HS2306 UK206D1 ; HE2306X | 4,400 | 2,540 |
| 30 1 1/8 | UKF207D1 ; H 2307X UKF207D1 ; HS2307 | 117 4 19/32 | 92 3 5/8 | 19 3/4 | 15 19/32 | 34 1 11/32 | 14 35/64 | 42.5 1 43/64 | 43 1.693 | 40 1 9/16 | M12 1/2 | F207D1 | UK207D1 ; H 2307X UK207D1 ; HS2307 | 5,750 | 3,440 |
| 35 1 1/4 1 3/8 | UKF208D1 ; HE2308X UKF208D1 ; H 2308X UKF208D1 ; HS2308X | 130 5 1/8 | 102 4 1/32 | 21 53/64 | 15 19/32 | 36 1 13/32 | 16 5/8 | 46.5 1 53/64 | 46 1.811 | 46 1 13/16 | M14 1/2 | F208D1 | UK208D1 ; H 2308X UK208D1 ; HE2308X UK208D1 ; HS2308X | 6,550 | 4,000 |
| 40 1 7/16 1 1/2 1 5/8 | UKF209D1 ; H 2309X UKF209D1 ; HA2309 UKF209D1 ; HE2309X UKF209D1 ; HS2309X | 137 5 13/32 | 105 4 1/8 | 22 55/64 | 16 5/8 | 38 1 1/2 | 16 5/8 | 48.5 1 29/32 | 50 1.969 | 52 2 1/16 | M14 1/2 | F209D1 | UK209D1 ; H 2309X UK209D1 ; HA2309 UK209D1 ; HE2309X UK209D1 ; HS2309X | 7,350 | 4,600 |
| 45 1 9/8 1 11/16 1 3/4 | UKF210D1 ; H 2310X UKF210D1 ; HS2310 UKF210D1 ; HA2310 UKF210D1 ; HE2310X | 143 5 5/8 | 111 4 3/8 | 22 55/64 | 16 5/8 | 40 1 9/16 | 16 5/8 | 50 1 31/32 | 55 2.165 | 57 2 1/4 | M14 1/2 | F210D1 | UK210D1 ; H 2310X UK210D1 ; HS2310 UK210D1 ; HA2310 UK210D1 ; HE2310X | 7,900 | 5,200 |
| 50 1 7/8 1 15/16 2 | UKF211D1 ; H 2311X UKF211D1 ; HS2311 UKF211D1 ; HA2311 UKF211D1 ; HE2311XY | 162 6 3/8 | 130 5 1/8 | 25 63/64 | 18 23/32 | 43 1 11/16 | 19 3/4 | 54.5 2 9/64 | 59 2.323 | 64 2 17/32 | M16 5/8 | F211D1 | UK211D1 ; H 2311X UK211D1 ; HS2311 UK211D1 ; HA2311 UK211D1 ; HE2311XY | 9,750 | 6,550 |
| 55 2 1/8 | UKF212D1 ; H 2312X UKF212D1 ; HS2312 | 175 6 7/8 | 143 5 5/8 | 29 1 9/64 | 18 23/32 | 48 1 7/8 | 19 3/4 | 61 2 13/32 | 62 2.441 | 69 2 23/32 | M16 5/8 | F212D1 | UK212D1 ; H 2312X UK212D1 ; HS2312 | 11,800 | 8,150 |
| 60 2 3/16 2 1/4 2 3/8 | UKF213D1 ; H 2313X UKF213D1 ; HA2313 UKF213D1 ; HE2313 UKF213D1 ; HS2313 | 187 7 3/8 | 149 5 7/8 | 30 1 3/16 | 22 7/8 | 50 1 7/32 | 19 3/4 | 64 2 33/64 | 65 2.559 | 74 2 29/32 | M16 5/8 | F213D1 | UK213D1 ; H 2313X UK213D1 ; HA2313 UK213D1 ; HE2313 UK213D1 ; HS2313 | 12,900 | 9,000 |
| 65 2 7/16 2 1/2 | UKF215D1 ; H 2315X UKF215D1 ; HA2315 UKF215D1 ; HE2315 | 200 7 7/8 | 159 6 1/4 | 34 1 11/32 | 22 7/8 | 56 2 7/32 | 19 3/4 | 71 2 51/64 | 73 2.874 | 84 3 5/16 | M16 5/8 | F215D1 | UK215D1 ; H 2315X UK215D1 ; HA2315 UK215D1 ; HE2315 | 14,900 | 11,100 |
| 70 2 11/16 2 3/4 | UKF216D1 ; H 2316X UKF216D1 ; HA2316 UKF216D1 ; HE2316 | 208 8 3/16 | 165 6 1/2 | 34 1 11/32 | 22 7/8 | 58 2 9/32 | 23 29/32 | 73.5 2 57/64 | 78 3.071 | 90 3 17/32 | M20 3/4 | F216D1 | UK216D1 ; H 2316X UK216D1 ; HA2316 UK216D1 ; HE2316 | 16,300 | 11,900 |
| 75 2 15/16 3 | UKF217D1 ; H 2317X UKF217D1 ; HA2317 UKF217D1 ; HE2317 | 220 8 21/32 | 175 6 7/8 | 36 1 27/64 | 24 15/16 | 63 2 15/32 | 23 29/32 | 77 3 1/32 | 82 3.228 | 95 3 3/4 | M20 3/4 | F217D1 | UK217D1 ; H 2317X UK217D1 ; HA2317 UK217D1 ; HE2317 | 18,700 | 14,300 |
| 80 3 3/16 | UKF218D1 ; H 2318X UKF218D1 ; HA2318 | 235 9 1/4 | 187 7 3/8 | 40 1 37/64 | 24 15/16 | 68 2 11/16 | 23 29/32 | 81.5 3 13/64 | 86 3.386 | 102 4 1/32 | M20 3/4 | F218D1 | UK218D1 ; H 2318X UK218D1 ; HA2318 | 21,600 | 16,100 |

- 1) These numbers indicate re-lubricatable type. If maintenance free type is needed, please order without suffix "D1".
- 2) Adapter number with suffix "X" means a narrow slot type adapter sleeve. In this case the lock washer with the straight inner prong should be used.
- 3) For HE2311XY, screw thread pitch different from the standard is applied, because of the thin thread section of sleeve. To distinguish it, a suffix "Y" is added.

Note: Please refer to NTN Engineering for grease fitting details.



Bearing Series

UCFL2 SERIES

UCFL201D1..... 1.3

Complete Flanged Unit Number

Weight (lbs)

| FLANGED UNITS | | | LBS. | | | |
|---------------------|----------------------|-------|-----------------------|------|----------------------|------|
| UCFL2 SERIES | UCFL311-203D1 | 12.0 | UELFL210-113D1 | 5.1 | UELFLU206-102D1 | 2.4 |
| UCFL201D1..... 1.3 | UCFL312D1 | 17.0 | UELFL210-114D1 | 5.1 | UELFLU206-103D1 | 2.4 |
| UCFL201-008D1 | UCFL312-204D1 | 17.0 | UELFL210-115D1 | 5.1 | UELFLU206-104D1 | 2.4 |
| UCFL202D1 | UCFL312-206D1 | 17.0 | UELFL210-200D1 | 5.1 | UELFLU207D1 | 3.1 |
| UCFL202-009D1 | UCFL312-207D1 | 17.0 | UELFL211D1 | 7.3 | UELFLU207-104D1 | 3.1 |
| UCFL202-010D1 | UCFL313D1 | 22.0 | UELFL211-200D1 | 7.3 | UELFLU207-105D1 | 3.1 |
| UCFL203D1 | UCFL313-208D1 | 22.0 | UELFL211-201D1 | 7.3 | UELFLU207-106D1 | 3.1 |
| UCFL203-011D1 | UCFL314D1 | 26.0 | UELFL211-202D1 | 7.3 | UELFLU207-107D1 | 3.1 |
| UCFL204D1 | UCFL314-211D1 | 26.0 | UELFL211-203D1 | 7.3 | UELFLU208D1 | 4.0 |
| UCFL204-012D1 | UCFL314-212D1 | 26.0 | UELFL212D1 | 9.5 | UELFLU208-108D1 | 4.0 |
| UCFL205D1 | UCFL315D1 | 26.0 | UELFL212-204D1 | 9.5 | UELFLU208-109D1 | 4.0 |
| UCFL205-013D1 | UCFL315-215D1 | 26.0 | UELFL212-206D1 | 9.5 | UELFLU209D1 | 4.6 |
| UCFL205-014D1 | UCFL315-300D1 | 26.0 | UELFL212-207D1 | 9.5 | UELFLU209-110D1 | 4.6 |
| UCFL205-015D1 | UCFL316D1 | 35.0 | UELFL213D1 | 12.0 | UELFLU209-111D1 | 4.6 |
| UCFL205-100D1 | UCFL316-302D1 | 35.0 | UELFL213-208D1 | 12.0 | UELFLU209-112D1 | 4.6 |
| UCFL206D1 | UCFL316-303D1 | 35.0 | UELFL214D1 | 13.0 | UELFLU210D1 | 5.5 |
| UCFL206-101D1 | UCFL317D1 | 40.0 | UELFL214-211D1 | 13.0 | UELFLU210-113D1 | 5.5 |
| UCFL206-102D1 | UCFL317-304D1 | 40.0 | UELFL214-212D1 | 13.0 | UELFLU210-114D1 | 5.5 |
| UCFL206-103D1 | UCFL318D1 | 46.0 | UELFL215D1 | 14.0 | UELFLU210-115D1 | 5.5 |
| UCFL206-104D1 | UCFL318-307D1 | 46.0 | UELFL215-215D1 | 14.0 | UELFLU210-200D1 | 5.5 |
| UCFL207D1 | UCFL318-308D1 | 46.0 | UELFL215-300D1 | 14.0 | UELFLU211D1 | 7.7 |
| UCFL207-104D1 | UCFL319D1 | 57.0 | UELFL3 SERIES | | UELFLU211-200D1 | 7.7 |
| UCFL207-105D1 | UCFL319-312D1 | 57.0 | UELFL305D1 | 2.4 | UELFLU211-201D1 | 7.7 |
| UCFL207-106D1 | UCFL320D1 | 68.0 | UELFL305-014D1 | 2.4 | UELFLU211-202D1 | 7.7 |
| UCFL207-107D1 | UCFL320-315D1 | 68.0 | UELFL305-015D1 | 2.4 | UELFLU211-203D1 | 7.7 |
| UCFL208D1 | UCFL320-400D1 | 68.0 | UELFL305-100D1 | 2.4 | UELFLU212D1 | 9.9 |
| UCFL208-108D1 | UCFL321D1 | 71.0 | UELFL306D1 | 3.5 | UELFLU212-204D1 | 9.9 |
| UCFL208-109D1 | UCFL322D1 | 86.0 | UELFL306-102D1 | 3.5 | UELFLU212-206D1 | 9.9 |
| UCFL209D1 | UCFL324D1 | 115.0 | UELFL306-103D1 | 3.5 | UELFLU212-207D1 | 9.9 |
| UCFL209-110D1 | UCFL326D1 | 141.0 | UELFL307D1 | 4.4 | UELFLU213D1 | 12.0 |
| UCFL209-111D1 | UCFL328D1 | 196.0 | UELFL307-104D1 | 4.4 | UELFLU213-208D1 | 12.0 |
| UCFL209-112D1 | UCFLX SERIES | | UELFL307-105D1 | 4.4 | UELFLU214D1 | 13.0 |
| UCFL210D1 | UCFLX05D1 | 2.2 | UELFL307-106D1 | 4.4 | UELFLU214-211D1 | 13.0 |
| UCFL210-113D1 | UCFLX05-013D1 | 2.2 | UELFL307-107D1 | 4.4 | UELFLU214-212D1 | 13.0 |
| UCFL210-114D1 | UCFLX05-014D1 | 2.2 | UELFL308D1 | 5.7 | UELFLU215-215D1 | 15.0 |
| UCFL210-115D1 | UCFLX05-015D1 | 2.2 | UELFL308-108D1 | 5.7 | UELFLU215-210D1 | 15.0 |
| UCFL210-200D1 | UCFLX05-100D1 | 2.2 | UELFL309D1 | 7.9 | UELFLU215-300D1 | 15.0 |
| UCFL211D1 | UCFLX06D1 | 3.3 | UELFL309-110D1 | 7.9 | AELFL2 SERIES | |
| UCFL211-200D1 | UCFLX06-101D1 | 3.3 | UELFL309-111D1 | 7.9 | AELFL204D1 | 1.2 |
| UCFL211-201D1 | UCFLX06-102D1 | 3.3 | UELFL309-112D1 | 7.9 | AELFL204-012D1 | 1.2 |
| UCFL211-202D1 | UCFLX06-103D1 | 3.3 | UELFL310D1 | 10.0 | AELFL205D1 | 1.5 |
| UCFL211-203D1 | UCFLX06-104D1 | 3.3 | UELFL310-114D1 | 10.0 | AELFL205-013D1 | 1.5 |
| UCFL212D1 | UCFLX07D1 | 4.4 | UELFL310-115D1 | 10.0 | AELFL205-014D1 | 1.5 |
| UCFL212-204D1 | UCFLX07-105D1 | 4.4 | UELFL311D1 | 12.0 | AELFL205-015D1 | 1.5 |
| UCFL212-206D1 | UCFLX07-106D1 | 4.4 | UELFL311-200D1 | 12.0 | AELFL205-100D1 | 1.5 |
| UCFL212-207D1 | UCFLX07-107D1 | 4.4 | UELFL311-202D1 | 12.0 | AELFL206D1 | 2.1 |
| UCFL213D1 | UCFLX08D1 | 4.9 | UELFL311-203D1 | 12.0 | AELFL206-101D1 | 2.1 |
| UCFL213-208D1 | UCFLX08-108D1 | 4.9 | UELFL312D1 | 14.0 | AELFL206-102D1 | 2.1 |
| UCFL214D1 | UCFLX08-109D1 | 4.9 | UELFL312-204D1 | 14.0 | AELFL206-103D1 | 2.1 |
| UCFL214-211D1 | UCFLX09D1 | 5.3 | UELFL312-206D1 | 14.0 | AELFL206-104D1 | 2.1 |
| UCFL214-212D1 | UCFLX09-110D1 | 5.3 | UELFL312-207D1 | 14.0 | AELFL207D1 | 2.8 |
| UCFL215D1 | UCFLX09-111D1 | 5.3 | UELFL313D1 | 18.0 | AELFL207-104D1 | 2.8 |
| UCFL215-215D1 | UCFLX09-112D1 | 5.3 | UELFL313-208D1 | 18.0 | AELFL207-105D1 | 2.8 |
| UCFL215-300D1 | UCFLX09-113D1 | 5.3 | UELFL314D1 | 21.0 | AELFL207-106D1 | 2.8 |
| UCFL215D1 | UCFLX10D1 | 7.5 | UELFL314-211D1 | 21.0 | AELFL207-107D1 | 2.8 |
| UCFL216-302D1 | UCFLX10-114D1 | 7.5 | UELFL314-212D1 | 21.0 | AELFL208D1 | 3.6 |
| UCFL217D1 | UCFLX10-115D1 | 7.5 | UELFL315D1 | 24.0 | AELFL208-108D1 | 3.6 |
| UCFL217-304D1 | UCFLX10-200D1 | 7.5 | UELFL315-215D1 | 24.0 | AELFL208-109D1 | 3.6 |
| UCFL218D1 | UELFL2 SERIES | | UELFL315-300D1 | 24.0 | AELFL209D1 | 4.3 |
| UCFL218-308D1 | UELFL204D1 | 1.3 | UELFL316D1 | 31.0 | AELFL209-110D1 | 4.5 |
| UCFL3 SERIES | UELFL204-012D1 | 1.3 | UELFL316-302D1 | 31.0 | AELFL209-111D1 | 4.3 |
| UCFL305D1 | UELFL205D1 | 1.5 | UELFL316-303D1 | 31.0 | AELFL209-112D1 | 4.3 |
| UCFL305-014D1 | UELFL205-013D1 | 1.5 | UELFL317D1 | 35.0 | AELFL210D1 | 4.8 |
| UCFL305-015D1 | UELFL205-014D1 | 1.5 | UELFL317-304D1 | 35.0 | AELFL210-113D1 | 4.8 |
| UCFL305-100D1 | UELFL205-015D1 | 1.5 | UELFL318D1 | 42.0 | AELFL210-114D1 | 4.8 |
| UCFL306D1 | UELFL205-100D1 | 1.5 | UELFL318-307D1 | 42.0 | AELFL210-115D1 | 4.8 |
| UCFL306-102D1 | UELFL206D1 | 2.2 | UELFL318-308D1 | 42.0 | JELFL2 SERIES | |
| UCFL306-103D1 | UELFL206-101D1 | 2.2 | UELFL319D1 | 53.0 | JELFL204D1 | 1.2 |
| UCFL307D1 | UELFL206-102D1 | 2.2 | UELFL319-312D1 | 53.0 | JELFL204-012D1 | 1.2 |
| UCFL307-104D1 | UELFL206-103D1 | 2.2 | UELFL320D1 | 64.0 | JELFL205D1 | 1.5 |
| UCFL307-105D1 | UELFL206-104D1 | 2.2 | UELFL320-315D1 | 64.0 | JELFL205-013D1 | 1.5 |
| UCFL307-106D1 | UELFL207D1 | 2.9 | UELFL320-400D1 | 64.0 | JELFL205-014D1 | 1.5 |
| UCFL307-107D1 | UELFL207-104D1 | 2.9 | UELFL321D1 | 66.0 | JELFL205-015D1 | 1.5 |
| UCFL308D1 | UELFL207-105D1 | 2.9 | UELFL322D1 | 79.0 | JELFL205-100D1 | 1.5 |
| UCFL308-108D1 | UELFL207-106D1 | 2.9 | UELFLU2 SERIES | | JELFL206D1 | 2.1 |
| UCFL309D1 | UELFL207-107D1 | 2.9 | UELFLU204D1 | 1.3 | JELFL206-101D1 | 2.1 |
| UCFL309-110D1 | UELFL208D1 | 3.7 | UELFLU204-012D1 | 1.3 | JELFL206-102D1 | 2.1 |
| UCFL309-111D1 | UELFL208-108D1 | 3.7 | UELFLU205D1 | 1.8 | JELFL206-103D1 | 2.1 |
| UCFL309-112D1 | UELFL208-109D1 | 3.7 | UELFLU205-013D1 | 1.8 | JELFL206-104D1 | 2.1 |
| UCFL310D1 | UELFL209D1 | 4.4 | UELFLU205-014D1 | 1.8 | JELFL207D1 | 2.8 |
| UCFL310-114D1 | UELFL209-110D1 | 4.4 | UELFLU205-015D1 | 1.8 | JELFL207-104D1 | 2.8 |
| UCFL310-115D1 | UELFL209-111D1 | 4.4 | UELFLU205-100D1 | 1.8 | JELFL207-105D1 | 2.8 |
| UCFL311D1 | UELFL209-112D1 | 4.4 | UELFLU206D1 | 2.4 | JELFL207-106D1 | 2.8 |
| UCFL311-200D1 | UELFL210D1 | 5.1 | UELFLU206-101D1 | 2.4 | JELFL207-107D1 | 2.8 |
| UCFL311-202D1 | | | | | | |



Bearing Series

UCFL2 SERIES

UCFL201D1.....

1.3

Complete Flanged Unit Number

Weight (lbs)

| FLANGED UNITS | | LBS. | | | |
|----------------------|-----|----------------------|-----|--------------------|------|
| JELFL208D1..... | 3.6 | JELPFL206-104..... | 1.1 | JELPF207-105..... | 1.8 |
| JELFL208-108D1..... | 3.6 | JELPFL207..... | 1.5 | JELPF207-106..... | 1.8 |
| JELFL208-109D1..... | 3.6 | JELPFL207-104..... | 1.5 | JELPF207-107..... | 1.9 |
| JELFL209D1..... | 4.3 | JELPFL207-105..... | 1.5 | JELPF208..... | 2.9 |
| JELFL209-110D1..... | 4.5 | JELPFL207-106..... | 1.5 | JELPF208-108..... | 2.9 |
| JELFL209-111D1..... | 4.3 | JELPFL207-107..... | 1.5 | JELPF208-109..... | 2.9 |
| JELFL209-112D1..... | 4.3 | ASPF2 SERIES | | UCF2 SERIES | |
| JELFL210D1..... | 4.8 | ASPF201..... | 0.4 | UCF201D1..... | 1.5 |
| JELFL210-113D1..... | 4.8 | ASPF201-008..... | 0.4 | UCF201-008D1..... | 1.5 |
| JELFL210-114D1..... | 4.8 | ASPF202..... | 0.4 | UCF202D1..... | 1.5 |
| JELFL210-115D1..... | 4.8 | ASPF202-009..... | 0.4 | UCF202-009D1..... | 1.5 |
| JELFL210D1..... | 5.1 | ASPF202-010..... | 0.4 | UCF202-010D1..... | 1.5 |
| JELFL210-113D1..... | 5.1 | ASPF203..... | 0.4 | UCF203D1..... | 1.3 |
| JELFL210-114D1..... | 5.1 | ASPF203-011..... | 0.4 | UCF203-011D1..... | 1.3 |
| JELFL210-115D1..... | 5.1 | ASPF204..... | 0.7 | UCF204D1..... | 1.3 |
| JELFL210-200D1..... | 5.1 | ASPF204-012..... | 0.7 | UCF204-012D1..... | 1.3 |
| JELFL211D1..... | 7.3 | ASPF205..... | 0.7 | UCF205D1..... | 1.8 |
| JELFL211-200D1..... | 7.3 | ASPF205-013..... | 0.7 | UCF205-013D1..... | 1.8 |
| JELFL211-201D1..... | 7.3 | ASPF205-014..... | 0.7 | UCF205-014D1..... | 1.8 |
| JELFL211-202D1..... | 7.3 | ASPF205-015..... | 0.7 | UCF205-015D1..... | 1.8 |
| JELFL211-203D1..... | 7.3 | ASPF205-100..... | 0.7 | UCF205-100D1..... | 1.8 |
| JELFL212D1..... | 9.5 | ASPF206..... | 1.1 | UCF206D1..... | 2.2 |
| JELFL212-204D1..... | 9.5 | ASPF206-101..... | 1.1 | UCF206-101D1..... | 2.2 |
| JELFL212-206D1..... | 9.5 | ASPF206-102..... | 1.1 | UCF206-102D1..... | 2.2 |
| ASFD2 SERIES | | ASPF206-103..... | 1.1 | UCF206-103D1..... | 2.2 |
| ASFD201..... | 0.7 | ASPF206-104..... | 1.1 | UCF206-104D1..... | 2.2 |
| ASFD201-008..... | 0.7 | ASPF207..... | 1.5 | UCF207D1..... | 3.1 |
| ASFD202..... | 0.7 | ASPF207-104..... | 1.5 | UCF207-104D1..... | 3.1 |
| ASFD202-009..... | 0.7 | ASPF207-105..... | 1.5 | UCF207-105D1..... | 3.1 |
| ASFD202-010..... | 0.7 | ASPF207-106..... | 1.5 | UCF207-106D1..... | 3.1 |
| ASFD203..... | 0.7 | ASPF207-107..... | 1.5 | UCF207-107D1..... | 3.1 |
| ASFD203-011..... | 0.7 | ASPF208..... | 2.4 | UCF208D1..... | 4.0 |
| ASFD204..... | 0.9 | ASPF208-108..... | 2.4 | UCF208-108D1..... | 4.0 |
| ASFD204-012..... | 0.9 | ASPF208-109..... | 2.4 | UCF208-109D1..... | 4.0 |
| ASFD205..... | 1.1 | AELPF2 SERIES | | UCF209D1..... | 4.9 |
| ASFD205-013..... | 1.1 | AELPF201..... | 0.4 | UCF209-110D1..... | 4.9 |
| ASFD205-014..... | 1.1 | AELPF201-008..... | 0.4 | UCF209-111D1..... | 4.9 |
| ASFD205-015..... | 1.1 | AELPF202..... | 0.4 | UCF209-112D1..... | 4.9 |
| ASFD205-100..... | 1.1 | AELPF202-009..... | 0.4 | UCF210D1..... | 5.3 |
| ASFD206D1..... | 1.8 | AELPF202-010..... | 0.4 | UCF210-113D1..... | 5.3 |
| ASFD206-101..... | 1.8 | AELPF203..... | 0.4 | UCF210-114D1..... | 5.3 |
| ASFD206-102..... | 1.8 | AELPF203-011..... | 0.4 | UCF210-115D1..... | 5.3 |
| ASFD206-103..... | 1.8 | AELPF204..... | 0.7 | UCF210-200D1..... | 5.3 |
| ASFD206-104..... | 1.8 | AELPF204-012..... | 0.7 | UCF211D1..... | 7.9 |
| ASFD207..... | 2.0 | AELPF205..... | 0.9 | UCF211-200D1..... | 7.9 |
| ASFD207-104..... | 2.0 | AELPF205-013..... | 0.9 | UCF211-201D1..... | 7.9 |
| ASFD207-105..... | 2.0 | AELPF205-014..... | 0.9 | UCF211-202D1..... | 7.9 |
| ASFD207-106..... | 2.0 | AELPF205-015..... | 0.9 | UCF211-203D1..... | 7.9 |
| ASFD207-107..... | 2.0 | AELPF205-100..... | 0.9 | UCF212D1..... | 9.7 |
| AELFD2 SERIES | | AELPF206..... | 1.3 | UCF212-204D1..... | 9.7 |
| AELFD201..... | 0.7 | AELPF206-101..... | 1.3 | UCF212-206D1..... | 9.7 |
| AELFD201-008..... | 0.7 | AELPF206-102..... | 1.3 | UCF212-207D1..... | 9.7 |
| AELFD202..... | 0.7 | AELPF206-103..... | 1.3 | UCF213D1..... | 12.0 |
| AELFD202-009..... | 0.7 | AELPF206-104..... | 1.3 | UCF213-208D1..... | 12.0 |
| AELFD202-010..... | 0.7 | AELPF207..... | 1.8 | UCF214D1..... | 13.0 |
| AELFD203..... | 0.7 | AELPF207-104..... | 1.8 | UCF214-211D1..... | 13.0 |
| AELFD203-011..... | 0.7 | AELPF207-105..... | 1.8 | UCF214-212D1..... | 13.0 |
| AELFD204..... | 1.1 | AELPF207-106..... | 1.8 | UCF215D1..... | 15.0 |
| AELFD204-012..... | 1.1 | AELPF207-107..... | 1.9 | UCF215-215D1..... | 15.0 |
| AELFD205..... | 1.1 | AELPF208..... | 2.9 | UCF215-300D1..... | 15.0 |
| AELFD205-013..... | 1.1 | AELPF208-108..... | 2.9 | UCF216D1..... | 18.0 |
| AELFD205-014..... | 1.1 | AELPF208-109..... | 2.9 | UCF216-302D1..... | 18.0 |
| AELFD205-015..... | 1.1 | JELPF2 SERIES | | UCF217D1..... | 21.0 |
| AELFD205-100..... | 1.1 | JELPF201..... | 0.4 | UCF217-304D1..... | 21.0 |
| AELFD206..... | 1.8 | JELPF201-008..... | 0.4 | UCF218D1..... | 24.0 |
| AELFD206-101..... | 1.8 | JELPF202..... | 0.4 | UCF218-308D1..... | 24.0 |
| AELFD206-102..... | 1.8 | JELPF202-009..... | 0.4 | UCF3 SERIES | |
| AELFD206-103..... | 1.8 | JELPF202-010..... | 0.4 | UCF305D1..... | 2.4 |
| AELFD206-104..... | 1.8 | JELPF203..... | 0.4 | UCF305-014D1..... | 2.4 |
| AELFD207..... | 2.2 | JELPF203-011..... | 0.4 | UCF305-015D1..... | 2.4 |
| AELFD207-104..... | 2.2 | JELPF204..... | 0.7 | UCF305-100D1..... | 2.4 |
| AELFD207-105..... | 2.2 | JELPF204-012..... | 0.7 | UCF306D1..... | 3.5 |
| AELFD207-106..... | 2.2 | JELPF205..... | 0.9 | UCF306-102D1..... | 3.5 |
| AELFD207-107..... | 2.2 | JELPF205-013..... | 0.9 | UCF306-103D1..... | 3.5 |
| JELFD2 SERIES | | JELPF205-014..... | 0.9 | UCF307D1..... | 4.4 |
| JELFD201..... | 0.7 | JELPF205-015..... | 0.9 | UCF307-104D1..... | 4.4 |
| JELFD201-008..... | 0.7 | JELPF205-100..... | 0.9 | UCF307-105D1..... | 4.4 |
| JELFD202..... | 0.7 | JELPF206..... | 1.3 | UCF307-106D1..... | 4.4 |
| JELFD202-009..... | 0.7 | JELPF206-101..... | 1.3 | UCF307-107D1..... | 4.4 |
| JELFD202-010..... | 0.7 | JELPF206-102..... | 1.3 | UCF308D1..... | 6.0 |
| JELFD203..... | 0.7 | JELPF206-103..... | 1.3 | UCF308-10BD1..... | 6.0 |
| JELFD203-011..... | 0.7 | JELPF206-104..... | 1.3 | UCF309D1..... | 7.5 |
| JELFD204..... | 1.1 | JELPF207..... | 1.8 | UCF309-110D1..... | 7.5 |
| JELFD204-012..... | 1.1 | JELPF207-104..... | 1.8 | UCF309-111D1..... | 7.5 |



Bearing Series

UCFL2 SERIES

UCFL201D1..... 1.3

Complete Flanged Unit Number

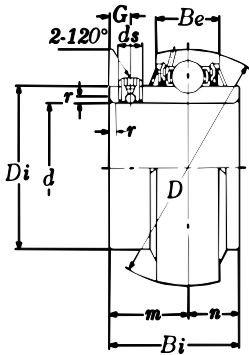
Weight (lbs)

| FLANGED UNITS | | LBS. |
|----------------------|-------|------|
| UCF309-112D1..... | 7.5 | |
| UCF31001..... | 9.9 | |
| UCF310-114D1..... | 9.9 | |
| UCF310-115D1..... | 9.9 | |
| UCF311D1..... | 12.0 | |
| UCF311-200D1..... | 12.0 | |
| UCF311-202D1..... | 12.0 | |
| UCF311-203D1..... | 12.0 | |
| UCF312D1..... | 14.0 | |
| UCF312-204D1..... | 14.0 | |
| UCF312-206D1..... | 14.0 | |
| UCF312-207D1..... | 14.0 | |
| UCF313D1..... | 17.0 | |
| UCF313-208D1..... | 17.0 | |
| UCF314D1..... | 21.0 | |
| UCF314-211D1..... | 21.0 | |
| UCF314-212D1..... | 21.0 | |
| UCF315D1..... | 26.0 | |
| UCF315-215D1..... | 26.0 | |
| UCF315-300D1..... | 26.0 | |
| UCF316D1..... | 31.0 | |
| UCF316-302D1..... | 31.0 | |
| UCF316-303D1..... | 31.0 | |
| UCF317D1..... | 35.0 | |
| UCF317-304D1..... | 35.0 | |
| UCF318D1..... | 42.0 | |
| UCF318-307D1..... | 42.0 | |
| UCF318-308D1..... | 42.0 | |
| UCF319D1..... | 49.0 | |
| UCF319-312D1..... | 49.0 | |
| UCF320D1..... | 57.0 | |
| UCF320-315D1..... | 57.0 | |
| UCF320-400D1..... | 57.0 | |
| UCF321D1..... | 60.0 | |
| UCF322D1..... | 84.0 | |
| UCF324D1..... | 110.0 | |
| UCF326D1..... | 146.0 | |
| UCF328D1..... | 198.0 | |
| UCFX SERIES | | |
| UCFX05D1..... | 2.2 | |
| UCFX05-013D1..... | 2.2 | |
| UCFX05-014D1..... | 2.2 | |
| UCFX05-015D1..... | 2.2 | |
| UCFX05-100D1..... | 2.2 | |
| UCFX06D1..... | 3.7 | |
| UCFX06-101D1..... | 3.7 | |
| UCFX06-102D1..... | 3.7 | |
| UCFX06-103D1..... | 3.7 | |
| UCFX06-104D1..... | 3.7 | |
| UCFX07D1..... | 4.6 | |
| UCFX07-105D1..... | 4.6 | |
| UCFX07-106D1..... | 4.6 | |
| UCFX07-107D1..... | 4.6 | |
| UCFX08D1..... | 5.3 | |
| UCFX08-108D1..... | 5.3 | |
| UCFX08-109D1..... | 5.3 | |
| UCFX09D1..... | 5.5 | |
| UCFX09-110D1..... | 5.5 | |
| UCFX09-111D1..... | 5.5 | |
| UCFX09-112D1..... | 5.5 | |
| UCFX09-113D1..... | 5.5 | |
| UCFX10D1..... | 8.6 | |
| UCFX10-114D1..... | 8.6 | |
| UCFX10-115D1..... | 8.6 | |
| UCFX10-200D1..... | 6.6 | |
| UCFX11D1..... | 11.0 | |
| UCFX11-201D1..... | 11.0 | |
| UCFX11-202D1..... | 11.0 | |
| UCFX11-203D1..... | 11.0 | |
| UCFX11-204D1..... | 11.0 | |
| UCFX11-205D1..... | 11.0 | |
| UCFX12D1..... | 11.0 | |
| UCFX12-206D1..... | 11.0 | |
| UCFX12-207D1..... | 11.0 | |
| UCFX13D1..... | 12.0 | |
| UCFX13-208D1..... | 12.0 | |
| UCFX13-209D1..... | 12.0 | |
| UCFX14D1..... | 16.0 | |
| UCFX14-210D1..... | 16.0 | |
| UCFX14-211D1..... | 16.0 | |
| UCFX14-212D1..... | 16.0 | |
| UCFX15D1..... | 18.0 | |
| UCFX15-213D1..... | 18.0 | |
| UCFX15-214D1..... | 18.0 | |
| UCFX15-215D1..... | 18.0 | |
| UCFX15-300D1..... | 18.0 | |
| UCFX16-302D1..... | 22.0 | |
| UCFX16-303D1..... | 22.0 | |
| UCFX16-304D1..... | 22.0 | |
| UCFX17D1..... | 24.0 | |
| UCFX17-305D1..... | 24.0 | |
| UCFX17-307D1..... | 24.0 | |
| UCFX18D1..... | 24.0 | |
| UCFX18-308D1..... | 24.0 | |
| UCFX20D1..... | 37.0 | |
| UCFX20-314D1..... | 37.0 | |
| UCFX20-315D1..... | 37.0 | |
| UCFX20-400D1..... | 37.0 | |
| UELF2 SERIES | | |
| UELF204D1..... | 1.5 | |
| UELF204-012D1..... | 1.5 | |
| UELF205D1..... | 1.8 | |
| UELF205-013D1..... | 1.8 | |
| UELF205-014D1..... | 1.8 | |
| UELF205-015D1..... | 1.8 | |
| UELF205-100D1..... | 1.8 | |
| UELF206D1..... | 2.6 | |
| UELF206-101D1..... | 2.6 | |
| UELF206-102D1..... | 2.6 | |
| UELF206-103D1..... | 2.6 | |
| UELF206-104D1..... | 2.6 | |
| UELF207D1..... | 3.5 | |
| UELF207-104D1..... | 3.5 | |
| UELF207-105D1..... | 3.5 | |
| UELF207-106D1..... | 3.5 | |
| UELF207-107D1..... | 3.5 | |
| UELF208D1..... | 4.2 | |
| UELF208-108D1..... | 4.2 | |
| UELF208-109D1..... | 4.2 | |
| UELF209D1..... | 5.1 | |
| UELF209-110D1..... | 5.1 | |
| UELF209-111D1..... | 5.1 | |
| UELF209-112D1..... | 5.1 | |
| UELF210D1..... | 5.7 | |
| UELF210-113D1..... | 5.7 | |
| UELF210-114D1..... | 5.7 | |
| UELF210-115D1..... | 5.7 | |
| UELF210-200D1..... | 5.7 | |
| UELF211D1..... | 8.4 | |
| UELF211-200D1..... | 8.4 | |
| UELF211-201D1..... | 8.4 | |
| UELF211-202D1..... | 8.4 | |
| UELF211-203D1..... | 8.4 | |
| UELF212D1..... | 11.0 | |
| UELF212-204D1..... | 11.0 | |
| UELF212-206D1..... | 11.0 | |
| UELF212-207D1..... | 11.0 | |
| UELF213D1..... | 13.0 | |
| UELF213-208D1..... | 13.0 | |
| UELF214D1..... | 14.0 | |
| UELF214-211D1..... | 14.0 | |
| UELF214-212D1..... | 14.0 | |
| UELF215D1..... | 16.0 | |
| UELF215-215D1..... | 16.0 | |
| UELF215-300D1..... | 16.0 | |
| UELF3 SERIES | | |
| UELF305D1..... | 2.6 | |
| UELF305-D14D1..... | 2.6 | |
| UELF305-015D1..... | 2.6 | |
| UELF305-100D1..... | 2.6 | |
| UELF306D1..... | 3.7 | |
| UELF306-102D1..... | 3.7 | |
| UELF306-103D1..... | 3.7 | |
| UELF307D1..... | 4.4 | |
| UELF307-104D1..... | 4.4 | |
| UELF307-105D1..... | 4.4 | |
| UELF307-106D1..... | 4.4 | |
| UELF307-107D1..... | 4.4 | |
| UELF308D1..... | 6.2 | |
| UELF308-106D1..... | 6.2 | |
| UELF309D1..... | 7.9 | |
| UELF309-110D1..... | 7.9 | |
| UELF309-111D1..... | 7.9 | |
| UELF309-112D1..... | 7.9 | |
| UELF310D1..... | 10.0 | |
| UELF310-114D1..... | 10.0 | |
| UELF310-115D1..... | 10.0 | |
| UELF311D1..... | 13.0 | |
| UELF311-200D1..... | 13.0 | |
| UELF311-202D1..... | 13.0 | |
| UELF311-203D1..... | 13.0 | |
| UELF312D1..... | 15.0 | |
| UELF312-204D1..... | 15.0 | |
| UELF312-206D1..... | 15.0 | |
| UELF312-207D1..... | 15.0 | |
| UELF313D1..... | 18.0 | |
| UELF313-208D1..... | 18.0 | |
| UELF314D1..... | 22.0 | |
| UELF314-211D1..... | 22.0 | |
| UELF314-212D1..... | 22.0 | |
| UELF315D1..... | 26.0 | |
| UELF315-215D1..... | 26.0 | |
| UELF315-300D1..... | 26.0 | |
| UELF316D1..... | 35.0 | |
| UELF316-302D1..... | 35.0 | |
| UELF316-303D1..... | 35.0 | |
| UELF317D1..... | 37.0 | |
| UELF317-304D1..... | 37.0 | |
| UELF318D1..... | 46.0 | |
| UELF318-307D1..... | 46.0 | |
| UELF318-308D1..... | 46.0 | |
| UELF319D1..... | 51.0 | |
| UELF319-312D1..... | 51.0 | |
| UELF320D1..... | 62.0 | |
| UELF320-315D1..... | 62.0 | |
| UELF320-400D1..... | 62.0 | |
| UELF321D1..... | 64.0 | |
| UELF322D1..... | 88.0 | |
| UELFU2 SERIES | | |
| UELFU204D1..... | 1.8 | |
| UELFU204-012D1..... | 1.8 | |
| UELFU205D1..... | 2.0 | |
| UELFU205-013D1..... | 2.0 | |
| UELFU205-01401..... | 2.0 | |
| UELFU205-01501..... | 2.0 | |
| UELFU205-100D1..... | 2.0 | |
| UELFU206D1..... | 2.9 | |
| UELFU206-101D1..... | 2.9 | |
| UELFU206-102D1..... | 2.9 | |
| UELFU206-104D1..... | 2.9 | |
| UELFU207D1..... | 4.0 | |
| UELFU207-104D1..... | 4.0 | |
| UELFU207-105D1..... | 4.0 | |
| UELFU207-106D1..... | 4.0 | |
| UELFU207-107D1..... | 4.0 | |
| UELFU208D1..... | 4.6 | |
| UELFU208-108D1..... | 4.6 | |
| UELFU208-109D1..... | 4.6 | |
| UELFU209D1..... | 5.5 | |
| UELFU209-110D1..... | 5.5 | |
| UELFU209-111D1..... | 5.5 | |
| UELFU209-112D1..... | 5.5 | |
| UELFU210D1..... | 6.4 | |
| UELFU210-113D1..... | 6.4 | |
| UELFU210-11401..... | 6.4 | |
| UELFU210-115D1..... | 6.4 | |
| UELFU210-200D1..... | 6.4 | |
| UELFU211D1..... | 9.3 | |
| UELFU211-200D1..... | 9.3 | |
| UELFU211-20101..... | 9.3 | |
| UELFU211-202D1..... | 9.3 | |
| UELFU211-203D1..... | 9.3 | |
| UELFU212D1..... | 11.0 | |
| UELFU212-204D1..... | 11.0 | |
| UELFU212-206D1..... | 11.0 | |
| UELFU212-207D1..... | 11.0 | |
| UELFU213D1..... | 13.0 | |
| UELFU213-208D1..... | 13.0 | |
| UELFU214D1..... | 13.0 | |
| UELFU214-211D1..... | 13.0 | |
| UELFU214-212D1..... | 13.0 | |
| UELFU215D1..... | 17.0 | |
| UELFU215-215D1..... | 17.0 | |
| UELFU215-300D1..... | 17.0 | |
| UKF2SERIES | | |
| UKF205;H2305X..... | 1.8 | |
| UKF205;HE2305..... | 1.8 | |
| UKF206;H2306X..... | 2.4 | |
| UKF206;HS2306..... | 2.4 | |
| UKF206;HE2306X..... | 2.4 | |
| UKF207;H2307X..... | 3.3 | |
| UKF207;HS2307..... | 3.3 | |
| UKF208;H2308X..... | 4.2 | |
| UKF208;HE2308X..... | 4.2 | |
| UKF209;HS2308X..... | 4.2 | |
| UKF209;H2309X..... | 5.1 | |
| UKF209;HA2309..... | 5.1 | |
| UKF209;HE2309X..... | 5.1 | |
| UKF209;HS2309X..... | 5.1 | |
| UKF210;H2310X..... | 5.7 | |
| UKF210;HS2310..... | 5.7 | |
| UKF210;HE2310X..... | 5.7 | |
| UKF210;HA2310..... | 5.7 | |
| UKF211;H2311X..... | 8.4 | |
| UKF211;HS2311..... | 8.4 | |
| UKF211;HA2311..... | 8.4 | |
| UKF211;HE2311XY..... | 8.4 | |
| UKF212;H2313X..... | 9.9 | |
| UKF212;HS2312..... | 9.9 | |
| UKF212;HE2313..... | 9.9 | |
| UKF212;HA2313..... | 12 | |
| UKF213;H2313..... | 12 | |
| UKF213;HS2313..... | 12 | |
| UKF213;HE2313..... | 12 | |
| UKF213;HA2313..... | 12 | |
| UKF215;H2315X..... | 16 | |
| UKF215;HE2315..... | 16 | |
| UKF215;HA2315..... | 16 | |
| UKF215;HS2315..... | 16 | |
| UKF216;H2316X..... | 19 | |
| UKF216;HE2316..... | 19 | |
| UKF216;HA2316..... | 19 | |
| UKF216;HS2316..... | 19 | |
| UKF217;H2317..... | 22 | |
| UKF217;HA2317..... | 22 | |
| UKF217;HE2317..... | 22 | |
| UKF218;H2318X..... | 26 | |
| UKF218;HA2318..... | 26 | |

Continued next page ...



Units: Millimeters
INCHES



BALL BEARING INSERTS

| Bore d | Bearing Number | Nominal Dimensions | | | | | | | | Socket Set Screw ds | Basic Load Ratings (lbs) | |
|--|---|--------------------|---------------|-------------|-------------|---------------|---------------|-------------|----------------|------------------------------|-----------------------------|--------------------------|
| | | D | Bi | Be | r | n | m | G | Di | | Dynamic C | Static C ₀ |
| 12 ½ | UC201D1 UC201-008D1 | 47 1.8504 | 31 1.220 | 18 .709 | 1 .039 | 12.7 .500 | 18.3 .720 | 4.5 .177 | 29.6 1.165 | M5 X 0.8 10-32UNF | 2,890 | 1,500 |
| 15 ⅝ ⅞ | UC202D1 UC202-009D1 UC202-010D1 | 47 1.8504 | 31 1.220 | 18 .709 | 1 .039 | 12.7 .500 | 18.3 .720 | 4.5 .177 | 29.6 1.165 | M5 X 0.8 10-32UNF | 2,890 | 1,500 |
| 17 1 1/16 | UC203D1 UC203-011D1 | 47 1.8504 | 31 1.220 | 18 .709 | 1 .039 | 12.7 .500 | 18.3 .720 | 4.5 .177 | 29.6 1.165 | M5 X 0.8 10-32UNF | 2,890 | 1,500 |
| 20 ¾ | UC204D1 UC204-012D1 | 47 1.8504 | 31 1.220 | 18 .709 | 1.5 .059 | 12.7 .500 | 18.3 .720 | 4.5 .177 | 29.6 1.165 | M5 X 0.8 10-32UNF | 2,890 | 1,500 |
| 25 1 3/16 7/8 1 1/8 1 | UC205D1 UC205-013D1 UC205-014D1 UC205-015D1 UC205-100D1 | 52 2.0472 | 34 1.339 | 18 .709 | 1.5 .059 | 14.3 .563 | 19.7 .776 | 5 .197 | 33.9 1.335 | M5 X 0.8 10-32UNF | 3,150 | 1,760 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | UC206D1 UC206-101D1 UC206-102D1 UC206-103D1 * UC206-104D1 | 62 2.4409 | 38.1 1.500 | 20 .787 | 1.5 .059 | 15.9 .626 | 22.2 .874 | 5 .197 | 40.8 1.606 | M6 X 0.75 ¼-28UNF | 4,400 | 2,540 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UC207D1 UC207-104D1 UC207-105D1 UC207-106D1 * UC207-107D1 | 72 2.8346 | 42.9 1.689 | 22 .866 | 2 .079 | 17.5 .689 | 25.4 1.000 | 6 .236 | 46.8 1.843 | M6 X 0.75 ¼-28UNF | 5,750 | 3,440 |
| 40 1 1/2 1 9/16 | UC208D1 UC208-108D1 UC208-109D1 | 80 3.1496 | 49.2 1.937 | 24 .945 | 2 .079 | 19 .748 | 30.2 1.189 | 8 .315 | 53 2.087 | M8 X 1 5/16-24UNF | 6,550 | 4,000 |
| 45 1 5/8 1 11/16 1 3/4 | UC209D1 UC209-110D1 UC209-111D1 UC209-112D1 | 85 3.3465 | 49.2 1.937 | 24 .945 | 2 .079 | 19 .748 | 30.2 1.189 | 8 .315 | 57.5 2.264 | M8 X 1 5/16-24UNF | 7,350 | 4,590 |
| 50 1 13/16 1 7/8 1 15/16 2 | UC210D1 UC210-113D1 UC210-114D1 UC210-115D1 UC210-200D1 | 90 3.5433 | 51.6 2.031 | 25 .984 | 2 .079 | 19 .748 | 32.6 1.283 | 9 .354 | 62.4 2.457 | M8 X 1 5/16-24UNF | 7,900 | 5,220 |
| 55 2 2 1/16 2 1/8 2 3/16 | UC211D1 UC211-200D1 UC211-201D1 UC211-202D1 UC211-203D1 | 100 3.9370 | 55.6 2.189 | 27 1.063 | 2.5 .098 | 22.2 .874 | 33.4 1.315 | 9 .354 | 69 2.717 | M8 X 1 5/16-24UNF | 9,750 | 6,560 |
| 60 2 1/4 2 3/8 2 7/16 | UC212D1 UC212-204D1 UC212-206D1 * UC212-207D1 | 110 4.3307 | 65.1 2.563 | 30 1.181 | 2.5 .098 | 25.4 1.000 | 39.7 1.563 | 10 3.94 | 77 3.031 | M10 X 1.25 ¾-24UNF | 11,800 | 8,100 |
| 65 2 1/2 | UC213D1 UC213-208D1 | 120 4.7244 | 65.1 2.563 | 32 1.260 | 2.5 .098 | 25.4 1.000 | 39.7 1.563 | 10 .394 | 82.5 3.248 | M10 X 1.25 ¾-24UNF | 12,900 | 9,000 |
| 70 2 11/16 2 3/4 | UC214D1 UC214-211D1 UC214-212D1 | 125 4.9213 | 74.6 2.937 | 33 1.299 | 2.5 .098 | 30.2 1.189 | 44.4 1.748 | 12 .472 | 87 3.425 | M10 X 1.25 ¾-24UNF | 14,000 | 9,900 |
| 75 2 15/16 3 | UC215D1 UC215-215D1 UC215-300D1 | 130 5.1181 | 77.8 3.063 | 34 1.339 | 2.5 .098 | 33.3 1.311 | 44.5 1.752 | 12 .472 | 93 3.661 | M10 X 1.25 ¾-24UNF | 14,900 | 11,100 |
| 80 3 1/8 | UC216D1 UC216-302D1 | 140 5.5118 | 82.6 3.252 | 35 1.378 | 3 .118 | 33.3 1.311 | 49.3 1.941 | 12 .472 | 98.1 3.862 | M10 X 1.25 ¾-24UNF | 16,300 | 11,900 |
| 85 3 1/4 | UC217D1 UC217-304D1 | 150 5.9055 | 85.7 3.374 | 36 1.417 | 3 .118 | 34.1 1.343 | 51.6 2.031 | 12 .472 | 106.1 4.177 | M12 X 1.5 ½-20UNF | 18,700 | 14,400 |
| 90 3 1/2 | UC218D1 UC218-308D1 | 160 6.2992 | 96 3.780 | 37 1.457 | 3 .118 | 39.7 1.563 | 56.3 2.217 | 12 .472 | 111.6 4.394 | M12 X 1.5 ½-20UNF | 21,600 | 16,100 |

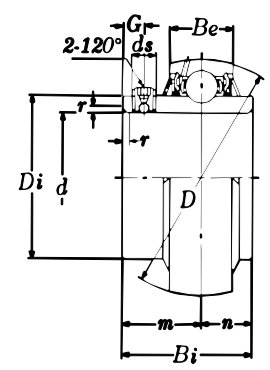
"A-" at front of part number to denote Ultraclass insert.

BALL BEARING INSERTS

Units: Millimeters
INCHES



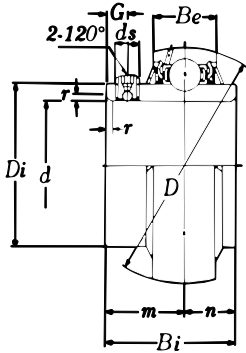
| Bore <i>d</i> | Bearing Number | Nominal Dimensions | | | | | | | | Socket Set Screw <i>ds</i> | Basic Load Ratings (lbs) | |
|--|---|--------------------|--------------|-------------|-------------|-------------|-------------|------------|----------------|-------------------------------|--------------------------|--------------------------------|
| | | <i>D</i> | <i>Bi</i> | <i>Be</i> | <i>r</i> | <i>n</i> | <i>m</i> | <i>G</i> | <i>Di</i> | | Dynamic <i>C</i> | Static <i>C₀</i> |
| 25 1 1/8 15/16 1 | UC305D1 UC305-014D1 UC305-015D1 UC305-100D1 | 62 2.4409 | 38 1.496 | 20 .787 | 2 .079 | 15 .591 | 23 .906 | 6 .236 | 36.8 1.449 | M6 X 0.75 1/4-28UNF | 4,750 | 2,460 |
| 30 1 1/8 1 3/16 | UC306D1 UC306-102D1 UC306-103D1 | 72 2.8346 | 43 1.693 | 23 .906 | 2 .079 | 17 .669 | 26 1.024 | 6 .236 | 44.9 1.768 | M6 X 0.75 1/4-28UNF | 6,000 | 3,400 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UC307D1 UC307-104D1 UC307-105D1 UC307-106D1 UC307-107D1 | 80 3.1496 | 48 1.890 | 25 .984 | 2.5 .098 | 19 .748 | 29 1.142 | 8 .315 | 49.4 1.945 | M8 X 1 5/16-24UNF | 7,500 | 4,300 |
| 40 1 1/2 | UC308D1 UC308-108D1 | 90 3.5433 | 52 2.047 | 27 1.063 | 2.5 .098 | 19 .748 | 33 1.299 | 10 .394 | 56 2.205 | M10 X 1.25 3/8-24UNF | 9,150 | 5,400 |
| 45 1 5/8 1 11/16 1 3/4 | UC309D1 UC309-110D1 UC309-111D1 UC309-112D1 | 100 3.9370 | 57 2.244 | 29 1.142 | 2.5 .098 | 22 .866 | 35 1.378 | 10 .394 | 63.5 2.500 | M10 X 1.25 3/8-24UNF | 11,900 | 7,200 |
| 50 1 7/8 1 15/16 | UC310D1 UC310-114D1 UC310-115D1 | 110 4.3307 | 61 2.402 | 32 1.260 | 3 .118 | 22 .866 | 39 1.535 | 12 .472 | 70.6 2.780 | M12 X 1.5 1/2-20UNF | 13,900 | 8,660 |
| 55 2 2 1/8 2 3/16 | UC311D1 UC311-200D1 UC311-202D1 UC311-203D1 | 120 4.7244 | 66 2.598 | 34 1.339 | 3 .118 | 25 .984 | 41 1.614 | 12 .472 | 76.6 3.016 | M12 X 1.5 1/2-20UNF | 16,100 | 10,100 |
| 60 2 1/4 2 3/8 2 7/16 | UC312D1 UC312-204D1 UC312-206D1 UC312-207D1 | 130 5.1181 | 71 2.795 | 36 1.417 | 3.5 .138 | 26 1.024 | 45 1.772 | 12 .472 | 82.7 3.256 | M12 X 1.5 1/2-20UNF | 18,400 | 11,700 |
| 65 2 1/2 | UC313D1 UC313-208D1 | 140 5.5118 | 75 2.953 | 39 1.535 | 3.5 .138 | 30 1.181 | 45 1.772 | 12 .472 | 88.2 3.472 | M12 X 1.5 1/2-20UNF | 20,800 | 13,400 |
| 70 2 11/16 2 3/4 | UC314D1 UC314-211D1 UC314-212D1 | 150 5.9055 | 78 3.071 | 41 1.614 | 3.5 .138 | 33 1.299 | 45 1.772 | 12 .472 | 94.8 3.732 | M12 X 1.5 1/2-20UNF | 23,400 | 15,300 |
| 75 2 15/16 3 | UC315D1 UC315-215D1 UC315-300D1 | 160 6.2992 | 82 3.228 | 43 1.693 | 3.5 .138 | 32 1.260 | 50 1.969 | 14 .551 | 101.3 3.988 | M14 X 1.5 9/16-18UNF | 25,500 | 17,400 |
| 80 3 1/8 3 3/16 | UC316D1 UC316-302D1 UC316-303D1 | 170 6.6929 | 86 3.386 | 45 1.772 | 3.5 .138 | 34 1.339 | 52 2.047 | 14 .551 | 107.9 4.248 | M14 X 1.5 9/16-18UNF | 27,600 | 19,500 |
| 85 3 1/4 | UC317D1 UC317-304D1 | 180 7.0866 | 96 3.780 | 47 1.850 | 4 .157 | 40 1.575 | 56 2.205 | 16 .630 | 114.4 4.504 | M16 X 1.5 5/8-18UNF | 29,800 | 21,800 |
| 90 3 7/16 3 1/2 | UC318D1 UC318-307D1 UC318-308D1 | 190 7.4803 | 96 3.780 | 49 1.929 | 4 .157 | 40 1.575 | 56 2.205 | 16 .630 | 120.9 4.760 | M16 X 1.5 5/8-18UNF | 32,000 | 24,100 |
| 95 3 3/4 | UC319D1 UC319-312D1 | 200 7.8740 | 103 4.055 | 51 2.008 | 4 .157 | 41 1.614 | 62 2.441 | 16 .630 | 127.5 5.020 | M16 X 1.5 5/8-18UNF | 34,500 | 26,600 |
| 100 3 15/16 4 | UC320D1 UC320-315D1 UC320-400D1 | 215 8.4646 | 108 4.252 | 55 2.165 | 4 .157 | 42 1.654 | 66 2.598 | 18 .709 | 135.6 5.339 | M18 X 1.5 5/8-18UNF | 39,000 | 31,500 |
| 105 | UC321D1 | 225 | 112 | 57 | 4 | 44 | 68 | 18 | 142.1 | M18 X 1.5 | 41,400 | 34,500 |
| 110 | UC322D1 | 240 | 117 | 59 | 4 | 46 | 71 | 18 | 151.7 | M18 X 1.5 | 46,100 | 40,500 |
| 120 | UC324D1 | 260 | 126 | 63 | 4 | 51 | 75 | 18 | 165.2 | M18 X 1.5 | 46,600 | 41,500 |
| 130 | UC326D1 | 280 | 135 | 67 | 5 | 54 | 81 | 20 | 178.3 | M20 X 1.5 | 51,500 | 48,000 |
| 140 | UC328D1 | 300 | 145 | 71 | 5 | 59 | 86 | 20 | 190.4 | M20 X 1.5 | 56,900 | 55,500 |



"A-" at front of part number to denote Ultraclass insert.

NTN
SERIES
UCX
SET SCREW
TYPE

Units: **Millimeters**
INCHES



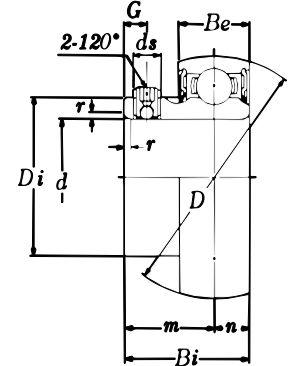
BALL BEARING INSERTS

| Bore <i>d</i> | Bearing Number | Nominal Dimensions | | | | | | | | Socket Set Screw ds | Basic Load Ratings (lbs) | |
|--|---|--------------------|----------------|-------------|-------------|---------------|---------------|------------|----------------|------------------------------|-----------------------------|--------------------------------|
| | | <i>D</i> | <i>Bi</i> | <i>Be</i> | <i>r</i> | <i>n</i> | <i>m</i> | <i>G</i> | <i>Di</i> | | Dynamic <i>C</i> | Static <i>C₀</i> |
| 25 1 3/16 7/8 15/16 1 | UCX05D1 UCX25-013D1 UCX05-014D1 UCX05-015D1 UCX05-100D1 | 62 2.4409 | 38.1 1.500 | 20 .787 | 1.5 .059 | 15.9 .626 | 22.2 .874 | 5 .197 | 40.8 1.606 | M6 X 0.75 1/4-28UNF | 4,400 | 2,540 |
| 30 1 1/16 1 1/8 1 3/16 | UCX06D1 UCX06-101D1 UCX06-102D1 UCX06-102D1 | 72 2.8346 | 42.9 1.689 | 22 .866 | 1.5 .059 | 17.5 .689 | 25.4 1.000 | 6 .236 | 46.8 1.843 | M8 X 1 5/16-24UNF | 5,750 | 3,440 |
| 35 1 5/16 1 3/8 1 7/16 | UCX07D1 UCX07-105D1 UCX07-106D1 UCX07-107D1 | 80 3.1496 | 49.2 1.937 | 24 .945 | 2 .079 | 19 .748 | 30.2 1.189 | 8 .315 | 53 2.087 | M8 X 1 5/16-24UNF | 6,550 | 4,000 |
| 40 1 1/2 1 9/16 | UCX08D1 UCX08-108D1 UCX08-109D1 | 85 3.3465 | 49.2 1.937 | 24 .945 | 2 .079 | 19 .748 | 30.2 1.189 | 8 .315 | 57.5 2.264 | M8 X 1 5/16-24UNF | 7,350 | 4,590 |
| 45 1 5/8 1 11/16 1 3/4 | UCX09D1 UCX09-110D1 UCX09-111D1 UCX09-112D1 | 90 3.5433 | 51.6 2.031 | 25 .984 | 2 .079 | 19 .748 | 32.6 1.283 | 9 .354 | 62.4 2.457 | M10 X 1.25 3/8-24UNF | 7,900 | 5,220 |
| 50 1 7/8 1 15/16 | UCX10D1 UCX10-114D1 UCX10-115D1 | 100 3.9370 | 55.6 2.189 | 27 1.063 | 2 .079 | 22.2 .874 | 33.4 1.315 | 9 .354 | 69 2.717 | M10 X 1.25 3/8-24UNF | 9,750 | 6,560 |
| 55 2 1/16 2 1/8 2 3/16 | UCX11D1 UCX11-201D1 UCX11-202D1 UCX11-203D1 | 110 4.3307 | 65.1 2.563 | 30 1.181 | 2.5 .098 | 25.4 1.000 | 39.7 1.563 | 10 .394 | 77 3.031 | M10 X 1.25 3/8-24UNF | 11,800 | 8,100 |
| 60 2 3/8 2 7/16 | UCX12D1 UCX12-206D1 UCX12-207D1 | 120 4.7244 | 65.1 2.563 | 32 1.260 | 2.5 .098 | 25.4 1.000 | 39.7 1.563 | 10 .394 | 82.5 3.248 | M10 X 1.25 3/8-24UNF | 12,900 | 9,000 |
| 65 2 1/2 2 9/16 | UCX13D1 UCX13-208D1 UCX13-209D1 | 125 4.9213 | 74.6 2.937 | 33 1.299 | 2.5 .098 | 30.2 1.189 | 44.4 1.748 | 12 .472 | 87 3.425 | M12 X 1.5 1/2-20UNF | 14,000 | 9,900 |
| 70 2 5/8 2 11/16 2 3/4 | UCX14D1 UCX14-210D1 UCX14-211D1 UCX14-212D1 | 130 5.1181 | 77.8 3.063 | 34 1.339 | 2.5 .098 | 33.3 1.311 | 44.5 1.752 | 12 .472 | 93 3.661 | M12 X 1.5 1/2-20UNF | 14,900 | 11,100 |
| 75 2 13/16 2 7/8 2 15/16 3 | UCX15D1 UCX15-213D1 UCX15-214D1 UCX15-215D1 UCX15-300D1 | 140 5.5118 | 82.6 3.252 | 35 1.378 | 2.5 .098 | 33.3 1.311 | 49.3 1.941 | 12 .472 | 98.1 3.862 | M12 X 1.5 1/2-20UNF | 16,300 | 11,900 |
| 80 3 1/8 3 3/16 | UCX16D1 UCX16-302D1 UCX16-303D1 | 150 5.9055 | 85.7 3.374 | 36 1.417 | 3 .118 | 34.1 1.343 | 51.6 2.031 | 12 .472 | 106.1 4.177 | M12 X 1.5 1/2-20UNF | 18,700 | 14,400 |
| 85 3 5/16 3 7/16 | UCX17D1 UCX17-305D1 UCX17-307D1 | 160 6.2992 | 96 3.780 | 37 1.457 | 3 .118 | 39.7 1.563 | 56.3 2.217 | 12 .472 | 111.6 4.394 | M12 X 1.5 1/2-20UNF | 21,600 | 16,100 |
| 90 3 1/2 | UCX18D1 UCX18-308D1 | 170 6.6929 | 104 4.094 | 39 1.535 | 3 .118 | 42.9 1.689 | 61.1 2.406 | 14 .551 | 118.2 4.654 | M14 X 1.5 9/16-18UNF | 24,500 | 18,400 |
| 100 3 7/8 3 15/16 4 | UCX20D1 UCX20-314D1 UCX20-315D1 UCX20-400D1 | 190 7.4803 | 117.5 4.626 | 44 1.732 | 3.5 .138 | 49.2 1.937 | 68.3 2.689 | 16 .630 | 131.3 5.169 | M16 X 1.5 5/8-18UNF | 29,900 | 23,600 |

"A-" at front of part number to denote Ultraclass insert.

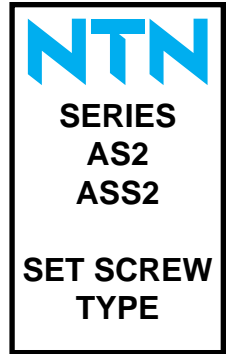
BALL BEARING INSERTS – AS2 SERIES

| Bore <i>d</i> | Bearing Number | Nominal Dimensions | | | | | | | | Socket Set Screw <i>ds</i> | Basic Load Ratings (lbs) | | |
|--------------------------------|---|--------------------|-------------|------------|-------------|-------------|---------------|-------------|---------------|-------------------------------|--------------------------|--------------------------------|-------|
| | | <i>D</i> | <i>Bi</i> | <i>Be</i> | <i>r</i> | <i>n</i> | <i>m</i> | <i>G</i> | <i>Di</i> | | Dynamic <i>C</i> | Static <i>C₀</i> | |
| 12 ½ | AS201 AS201-008 | 40 1.5748 | 22 .866 | 12 .472 | 1 .039 | 6 .236 | 16 .630 | 4.2 .165 | 24.4 .961 | 24.4 10-32UNF | M5 X 0.8 | 2,160 | 1,030 |
| 15 ⅞ ⅝ | AS202 AS202-009 AS202-010 | 40 1.5748 | 22 .866 | 12 .472 | 1 .039 | 6 .236 | 16 .630 | 4.2 .165 | 24.4 .961 | 24.4 10-32UNF | M5 X 0.8 | 2,160 | 1,030 |
| 17 ⅞ ⅝ | AS203 * AS203-011 | 40 1.5748 | 22 .866 | 12 .472 | 1 .039 | 6 .236 | 16 .630 | 4.2 .165 | 24.4 .961 | 24.4 10-32UNF | M5 X 0.8 | 2,160 | 1,030 |
| 20 ¾ | AS204 AS204-012 | 47 1.8504 | 25 .984 | 14 .551 | 1.5 .059 | 7 .276 | 18 .708 | 4.2 .165 | 29.6 1.165 | 29.6 10-32UNF | M5 X 0.8 | 2,890 | 1,500 |
| 25 1 ⅜ 7/8 1 ⅝ 1 | AS205 AS205-013 AS205-014 AS205-015 AS205-100 | 52 2.0472 | 27 1.063 | 15 .591 | 1.5 .059 | 7.5 .295 | 19.5 .768 | 5 .197 | 33.9 1.335 | 33.9 10-32UNF | M5 X 0.8 | 3,150 | 1,760 |
| 30 1 ⅞ 1 ⅝ 1 ¾ 1 ¼ | AS206 AS206-101 AS206-102 AS206-103 * AS206-104 | 62 2.4409 | 29 1.142 | 16 .630 | 1.5 .059 | 8 .315 | 21 .827 | 5 .197 | 40.8 1.606 | 40.8 ¼-28UNF | M6 X 0.75 | 4,400 | 2,540 |
| 35 1 ¾ 1 ⅝ 1 ⅜ 1 ⅞ | AS207 AS207-104 AS207-105 AS207-106 * AS207-107 | 72 2.8349 | 34 1.339 | 17 .669 | 2 .079 | 8.5 .335 | 25.5 1.004 | 6 .236 | 46.8 1.843 | 46.8 ¼-28UNF | M6 X 0.75 | 5,750 | 3,440 |
| 40 1 ½ 1 ⅞ | AS208 AS208-108 AS208-109 | 80 3.1496 | 38 1.496 | 18 .709 | 2 .079 | 9 .354 | 29 1.142 | 8 .315 | 53 2.087 | 53 ⅝-24UNF | M8 X 1 | 6,540 | 4,000 |



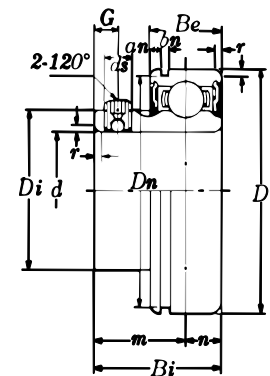
AS2

Units: Millimeters
INCHES

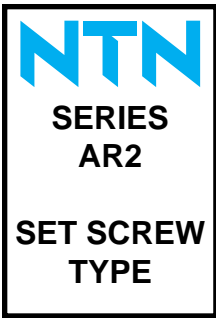


BALL BEARING INSERTS – ASS2 SERIES

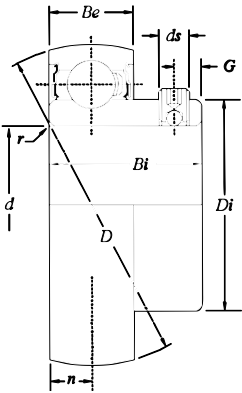
| Bore <i>d</i> | Bearing Number | Nominal Dimensions | | | | | | | | | | | Socket Set Screw <i>ds</i> | Basic Load Ratings (lbs) | |
|--------------------------------|---|--------------------|-------------|------------|-------------|-------------|---------------|-------------|---------------|----------------|--------------|--------------|-------------------------------|--------------------------|--------------------------------|
| | | <i>D</i> | <i>Bi</i> | <i>Be</i> | <i>r</i> | <i>n</i> | <i>m</i> | <i>G</i> | <i>Di</i> | <i>Dn</i> | <i>an</i> | <i>bn</i> | | Dynamic <i>C</i> | Static <i>C₀</i> |
| 12 ½ | ASS201N ASS201-008N | 40 1.5748 | 22 .866 | 12 .472 | 1 .039 | 6 .236 | 16 .630 | 4.2 .165 | 24.4 .961 | 38.1 1.500 | 1.98 .078 | 1.5 .059 | M5 X 0.8 | 2,160 | 1,030 |
| 15 ⅞ ⅝ | ASS202N ASS202-009N ASS202-010N | 40 1.5748 | 22 .866 | 12 .472 | 1 .039 | 6 .236 | 16 .630 | 4.2 .165 | 24.4 .961 | 38.1 1.500 | 1.98 .078 | 1.5 .059 | M5 X 0.8 | 2,160 | 1,030 |
| 17 ⅞ ⅝ | ASS203N * ASS203-011N | 40 1.5748 | 22 .866 | 12 .472 | 1 .039 | 6 .236 | 16 .630 | 4.2 .165 | 24.4 .961 | 38.1 1.500 | 1.98 .078 | 1.5 .059 | M5 X 0.8 | 2,160 | 1,030 |
| 20 ¾ | ASS204N ASS204-012N | 47 1.8504 | 25 .984 | 14 .551 | 1.5 .059 | 7 .276 | 18 .708 | 4.2 .165 | 29.6 1.165 | 44.6 1.756 | 2.38 .094 | 1.5 .059 | M5 X 0.8 | 2,890 | 1,500 |
| 25 1 ⅜ 7/8 1 ⅝ 1 | ASS205N ASS205-013N ASS205-014N ASS205-015N ASS205-100N | 52 2.0472 | 27 1.063 | 15 .591 | 1.5 .059 | 7.5 .295 | 19.5 .768 | 5 .197 | 33.9 1.335 | 49.73 1.958 | 2.38 .094 | 1.5 .059 | M5 X 0.8 | 3,150 | 1,760 |
| 30 1 ⅞ 1 ⅝ 1 ¾ 1 ¼ | ASS206N ASS206-101N ASS206-102N ASS206-103N * ASS206-104N | 62 2.4409 | 29 1.142 | 16 .630 | 1.5 .059 | 8 .315 | 21 .827 | 5 .197 | 40.8 1.606 | 59.61 2.347 | 3.18 .125 | 2.05 .081 | M6 X 0.75 | 4,400 | 2,540 |
| 35 1 ¾ 1 ⅝ 1 ⅜ 1 ⅞ | ASS207N ASS207-104N ASS207-105N ASS207-106N * ASS207-107N | 72 2.8349 | 34 1.339 | 17 .669 | 2 .079 | 8.5 .335 | 25.5 1.004 | 6 .236 | 46.8 1.843 | 68.81 2.709 | 3.18 .125 | 2.05 .081 | M6 X 0.75 | 5,750 | 3,440 |
| 40 1 ½ 1 ⅞ | ASS208N ASS208-108N ASS208-109N | 80 3.1496 | 38 1.496 | 18 .709 | 2 .079 | 9 .354 | 29 1.142 | 8 .315 | 53 2.087 | 76.81 3.024 | 3.18 .125 | 2.05 .081 | M8 X 1 | 6,540 | 4,000 |



ASS2



Units: **Millimeters**
INCHES



BALL BEARING INSERTS

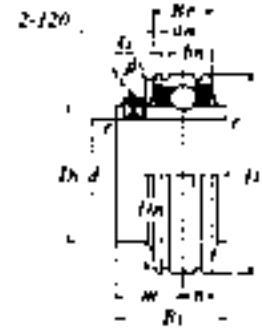
| Bore <i>d</i> | Bearing Number | Nominal Dimensions | | | | | | | Socket Set Screw <i>ds</i> | Basic Load Ratings (lbs) | |
|--|---|--------------------|----------------|-------------|--------------|--------------|------------|----------------|-------------------------------|--------------------------|--------------------------------|
| | | <i>D</i> | <i>Bi</i> | <i>Be</i> | <i>r</i> | <i>n</i> | <i>G</i> | <i>Di</i> | | Dynamic <i>C</i> | Static <i>C₀</i> |
| 12 ½ | AR201 AR201-008 | 40 1.5748 | 22.5 .8858 | 13 .5118 | 1 .0394 | 6.5 .2559 | 5 .1969 | 24.4 .9606 | M6 X 0.75 ¼-28UNF | 1,370 | 615 |
| 15 ⅞ 5/8 | AR202 AR202-009 AR202-010 | 40 1.5748 | 22.5 .8858 | 13 .5118 | 1 .0394 | 6.5 .2559 | 5 .1969 | 24.4 .9606 | M6 X 0.75 ¼-28UNF | 1,740 | 805 |
| 17 1 1/16 | AR203 AR203-011 | 40 1.5748 | 22.5 .8858 | 13 .5118 | 1 .0394 | 6.5 .2559 | 5 .1969 | 24.4 .9606 | M6 X 0.75 ¼-28UNF | 2,160 | 1,030 |
| 20 ¾ | AR204 AR204-012 | 47 1.8504 | 25.5 1.0039 | 15 .5906 | 1.5 .0591 | 7.5 .2953 | 5 .1969 | 29.6 1.1654 | M6 X 0.75 ¼-28UNF | 2,890 | 1,500 |
| 25 1 3/16 7/8 1 1/16 1 | AR205 AR205-013 AR205-014 AR205-015 AR205-100 | 52 2.0472 | 27 1.0630 | 15 .5906 | 1.5 .0591 | 7.5 .2953 | 5 .1969 | 33.9 1.3346 | M6 X 0.75 ¼-28UNF | 3,150 | 1,770 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | AR206 AR206-101 AR206-102 AR206-103 AR206-104 | 62 2.4409 | 30 1.1811 | 18 .7087 | 1.5 .0591 | 9 .3543 | 5 .1969 | 40.8 1.6063 | M6 X 0.75 ¼-28UNF | 4,400 | 2,540 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | AR207 AR207-104 AR207-105 AR207-106 AR207-107 | 72 2.8346 | 35 1.3780 | 19 .7480 | 2 .0787 | 9.5 .3740 | 6 .2362 | 46.8 1.8425 | M6 X 0.75 ¼-28UNF | 5,750 | 3,450 |
| 40 1 1/2 1 9/16 | AR208 AR208-108 AR208-109 | 80 3.1496 | 40 1.5748 | 22 .8661 | 2 .0787 | 11 .4331 | 8 .3150 | 53 2.0866 | M8 X 1 5/16-24UNF | 6,550 | 4,000 |
| 45 1 5/8 1 11/16 1 3/4 | AR209 AR209-110 AR209-111 AR209-112 | 85 3.3465 | 41.5 1.6339 | 22 .8661 | 2 .0787 | 11 .4331 | 8 .3150 | 57.5 2.2638 | M8 X 1 5/16-24UNF | 7,350 | 4,600 |
| 50 1 13/16 1 7/8 1 15/16 2 | AR210 AR210-113 AR210-114 AR210-115 AR210-200 | 90 3.5433 | 43 1.6929 | 22 .8661 | 2 .0787 | 11 .4331 | 9 .3543 | 62.4 2.4567 | M8 X 1 5/16-24UNF | 7,900 | 5,200 |

BALL BEARING INSERTS

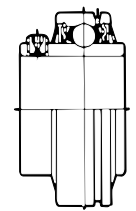
Units: Millimeters
INCHES



| Bore <i>d</i> | Bearing Number | Nominal Dimensions | | | | | | | | | | | Socket Set Screw <i>ds</i> | Basic Load Ratings (lbs) | |
|----------------------------|--|--------------------|---------------|-------------|-------------|---------------|---------------|-------------|---------------|----------------|-------------|--------------|-------------------------------------|-----------------------------|--------------------------------|
| | | <i>D</i> | <i>Bi</i> | <i>Be</i> | <i>r</i> | <i>n</i> | <i>m</i> | <i>G</i> | <i>Di</i> | <i>Dn</i> | <i>an</i> | <i>bn</i> | | Dynamic <i>C</i> | Static <i>C₀</i> |
| 12 ½ | UCS201D1N UCS201-008D1N | 47 1.8504 | 31 1.220 | 18 .079 | 1 .039 | 12.7 .500 | 18.3 .720 | 4.5 .177 | 29.6 1.165 | 44.6 1.756 | 3.2 .126 | 1.5 .059 | M5 X 0.8 10-32UNF | 2,890 | 1,500 |
| 15 ⅝ ⅞ | UCS202D1N UCS202-009D1N UCS202-010D1N | 47 1.8504 | 31 1.220 | 18 .709 | 1 .039 | 12.7 .500 | 18.3 .720 | 4.5 .177 | 29.6 1.165 | 44.6 1.756 | 3.2 .126 | 1.5 .059 | M5 X 0.8 10-32UNF | 2,890 | 1,500 |
| 17 ⅞ | UCS203D1N UCS203-011D1N | 47 1.8504 | 31 1.220 | 18 .709 | 1 .039 | 12.7 .500 | 18.3 .720 | 4.5 .177 | 29.6 1.165 | 44.6 1.756 | 3.2 .126 | 1.5 .059 | M5 X 0.8 10-32UNF | 2,890 | 1,500 |
| 20 ¾ | UCS204D1N UCS204-012D1N | 47 1.8504 | 31 1.220 | 18 .709 | 1.5 .059 | 12.7 .500 | 18.3 .720 | 4.5 .177 | 29.6 1.165 | 44.6 1.756 | 3.2 .126 | 1.5 .059 | M5 X 0.8 10-32UNF | 2,890 | 1,500 |
| 25 1⅜ 7/8 1⅝ 1 | UCS205D1N UCS205-013D1N UCS205-014D1N UCS205-015D1N UCS205-100D1N | 52 2.0472 | 34 1.339 | 18 .709 | 1.5 .059 | 14.3 .563 | 19.7 .776 | 5 .197 | 33.9 1.335 | 49.73 1.958 | 3.2 .126 | 1.5 .059 | M5 X 0.8 10-32UNF | 3,150 | 1,760 |
| 30 1⅞ 1⅝ 1⅜ | UCS206D1N UCS206-101D1N UCS206-102D1N UCS206-103D1N | 62 2.4409 | 38.1 1.500 | 20 .787 | 1.5 .059 | 15.9 .626 | 22.2 .874 | 5 .197 | 40.8 1.606 | 59.61 2.347 | 3.5 .138 | 2.05 .081 | M6 X 0.75 ¼-28UNF | 4,400 | 2,540 |
| 35 1⅞ 1⅝ 1⅜ 1⅞ | UCS207D1N UCS207-104D1N UCS207-105D1N UCS207-106D1N *UCS207-107D1N | 72 2.8346 | 42.9 1.689 | 22 .866 | 2 .079 | 17.5 .689 | 25.4 1.000 | 6 .236 | 46.8 1.843 | 68.81 2.709 | 3.7 .146 | 2.05 .081 | M6 X 0.75 ¼-28UNF | 5,750 | 3,440 |
| 40 1½ 1⅞ | UCS208D1N UCS208-108D1N UCS208-109D1N | 80 3.1496 | 49.2 1.937 | 24 .945 | 2 .079 | 19 .748 | 30.2 1.189 | 8 .315 | 53 2.087 | 76.81 3.024 | 3.7 .146 | 2.05 .081 | M8 X 1 ⅝-24UNF | 6,550 | 4,000 |
| 45 1⅝ 1⅞ 1¾ | UCS209D1N UCS209-110D1N UCS209-111D1N UCS209-112D1N | 85 3.3465 | 49.2 1.937 | 24 .945 | 2 .079 | 19 .748 | 30.2 1.189 | 8 .315 | 57.5 2.264 | 81.81 3.221 | 3.7 .146 | 2.05 .081 | M8 X 1 ⅝-24UNF | 7,350 | 4,590 |
| 50 1⅞ 1⅝ 1⅞ | UCS210D1N UCS210-113D1N UCS210-114D1N UCS210-115D1N | 90 3.5433 | 51.6 2.031 | 25 .984 | 2 .079 | 19 .748 | 32.6 1.283 | 9 .354 | 62.4 2.457 | 86.79 3.417 | 4 .157 | 2.85 .112 | M8 X 1 ⅝-24UNF | 7,900 | 5,220 |
| 55 2 2⅞ 2⅝ 2⅞ | UCS211D1N UCS211-200D1N UCS211-201D1N UCS211-202D1N UCS211-203D1N | 100 3.9370 | 55.6 2.189 | 27 1.063 | 2.5 .098 | 22.2 .874 | 33.4 1.315 | 9 .354 | 69 2.717 | 96.8 3.811 | 4.5 .177 | 2.85 .112 | M8 X 1 ⅝-24UNF | 9,750 | 6,560 |
| 60 2¼ 2⅝ 2⅞ | UCS212D1 UCS212-204D1 UCS212-206D1 *UCS212-207D1 | 110 4.3307 | 65.1 2.563 | 30 1.181 | 2.5 .098 | 25.4 1.000 | 39.7 1.563 | 10 .394 | 77 3.031 | — — | — — | — — | M10 X 1.25 ⅝-24UNF | 11,800 | 8,100 |
| 65 2½ | UCS213D1 UCS213-208D1 | 120 4.7244 | 65.1 2.563 | 32 1.260 | 2.5 .098 | 25.4 1.000 | 39.7 1.563 | 10 .394 | 82.5 3.248 | — — | — — | — — | M10 X 1.25 ⅝-24UNF | 12,900 | 9,000 |
| 70 | UCS214D1 | 125 | 74.6 | 33 | 2.5 | 30.2 | 44.4 | 12 | 87 | — | — | — | M10 X 1.25 | 14,000 | 9,900 |
| 75 | UCS215D1 | 130 | 77.8 | 34 | 2.5 | 33.3 | 44.5 | 12 | 93 | — | — | — | M10 X 1.25 | 14,900 | 11,100 |
| 80 | UCS216D1 | 140 | 82.6 | 35 | 3 | 33.3 | 49.3 | 12 | 98.1 | — | — | — | M10 X 1.25 | 16,300 | 11,900 |
| 85 | UCS217D1 | 150 | 85.7 | 36 | 3 | 34.1 | 51.6 | 12 | 106.1 | — | — | — | M12 X 1.5 | 18,700 | 14,300 |
| 90 | UCS218D1 | 160 | 96 | 37 | 3 | 39.7 | 56.3 | 12 | 111.6 | — | — | — | M12 X 1.5 | 21,600 | 16,100 |



UCS...D1N

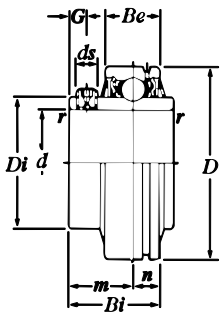


UCS...D1



Units: Millimeters
INCHES

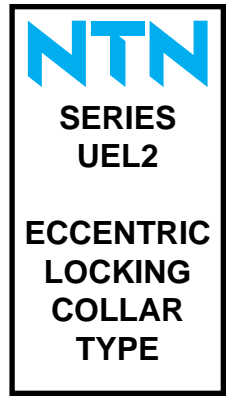
BALL BEARING INSERTS



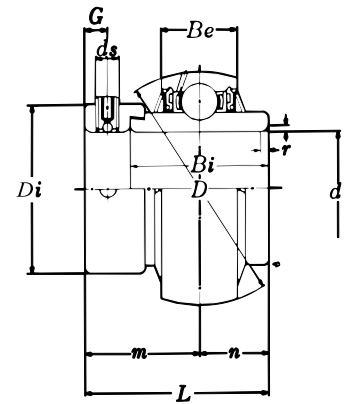
| Bore <i>d</i> | Bearing Number | Nominal Dimensions | | | | | | | | Socket Set Screw <i>ds</i> | Basic Load Ratings (lbs) | |
|--|--|--------------------|--------------|-------------|-------------|-------------|-------------|------------|----------------|-------------------------------------|-----------------------------|--------------------------------|
| | | <i>D</i> | <i>Bi</i> | <i>Be</i> | <i>r</i> | <i>n</i> | <i>m</i> | <i>G</i> | <i>Di</i> | | Dynamic <i>C</i> | Static <i>C₀</i> |
| 25 7/8 15/16 1 | UCS305D1 UCS305-014D1 UCS305-015D1 UCS305-100D1 | 62 2.4409 | 38 1.496 | 20 .787 | 2 .079 | 15 .591 | 23 .906 | 6 .236 | 36.8 1.449 | M6 X 0.75 1/4-28UNF | 4,770 | 2,450 |
| 30 1 1/8 1 3/16 | UCS306D1 UCS306-102D1 UCS306-103D1 | 72 2.8346 | 43 1.693 | 23 .906 | 2 .079 | 17 .669 | 26 1.024 | 6 .236 | 44.9 1.768 | M6 X 0.75 1/4-28UNF | 6,000 | 3,370 |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | UCS307D1 UCS307-104D1 UCS307-105D1 UCS307-106D1 UCS307-107D1 | 80 3.1496 | 48 1.890 | 25 .984 | 2.5 .098 | 19 .748 | 29 1.142 | 8 .315 | 49.4 1.945 | M8 X 1 5/16-24UNF | 7,530 | 4,290 |
| 40 1 1/2 | UCS308D1 UCS308-108D1 | 90 3.5433 | 52 2.047 | 27 1.063 | 2.5 .098 | 19 .748 | 33 1.299 | 10 .394 | 56 2.205 | M10 X 1.25 3/8-24UNF | 9,100 | 5,400 |
| 45 1 5/8 1 11/16 1 3/4 | UCS309D1 UCS309-110D1 UCS309-111D1 UCS309-112D1 | 100 3.9370 | 57 2.244 | 29 1.142 | 2.5 .098 | 22 .866 | 35 1.378 | 10 .394 | 63.5 2.500 | M10 X 1.25 3/8-24UNF | 11,900 | 7,200 |
| 50 1 7/8 1 15/16 | UCS310D1 UCS310-114D1 UCS310-115D1 | 110 4.3307 | 61 2.402 | 32 1.260 | 3 .118 | 22 .866 | 39 1.535 | 12 .472 | 70.6 2.780 | M12 X 1.5 1/2-20UNF | 13,900 | 8,660 |
| 55 2 2 1/8 2 3/16 | UCS311D1 UCS311-200D1 UCS311-202D1 UCS311-203D1 | 120 4.7244 | 66 2.598 | 34 1.339 | 3 .118 | 25 .984 | 41 1.614 | 12 .472 | 76.6 3.016 | M12 X 1.5 1/2-20UNF | 16,100 | 10,100 |
| 60 2 1/4 2 3/8 2 7/16 | UCS312D1 UCS312-204D1 UCS312-206D1 UCS312-207D1 | 130 5.1181 | 71 2.795 | 36 1.417 | 3.5 .138 | 26 1.024 | 45 1.772 | 12 .472 | 82.7 3.256 | M12 X 1.5 1/2-20UNF | 18,400 | 11,700 |
| 65 2 1/2 | UCS313D1 UCS313-208D1 | 140 5.5118 | 75 2.953 | 39 1.535 | 3.5 .138 | 30 1.181 | 45 1.772 | 12 .472 | 88.2 3.472 | M12 X 1.5 1/2-20UNF | 20,800 | 13,500 |
| 70 2 11/16 2 3/4 | UCS314D1 UCS314-211D1 UCS314-212D1 | 150 5.9055 | 78 3.071 | 41 1.614 | 3.5 .138 | 33 1.299 | 45 1.772 | 12 .472 | 94.8 3.732 | M12 X 1.5 1/2-20UNF | 23,400 | 15,300 |
| 75 2 15/16 3 | UCS315D1 UCS315-215D1 UCS315-300D1 | 160 6.2992 | 82 3.228 | 43 1.693 | 3.5 .138 | 32 1.260 | 50 1.969 | 14 .551 | 101.3 3.988 | M14 X 1.5 9/16-18UNF | 25,400 | 17,300 |
| 80 3 1/8 3 3/16 | UCS316D1 UCS316-302D1 UCS316-303D1 | 170 6.6929 | 86 3.386 | 45 1.772 | 3.5 .138 | 34 1.339 | 52 2.047 | 14 .551 | 107.9 4.248 | M14 X 1.5 9/16-18UNF | 27,700 | 19,400 |
| 85 3 1/4 | UCS317D1 UCS317-304D1 | 180 7.0866 | 96 3.780 | 47 1.850 | 4 .157 | 40 1.575 | 56 2.205 | 16 .630 | 114.4 4.504 | M16 X 1.5 5/8-18UNF | 29,900 | 21,800 |
| 90 3 7/16 3 1/2 | UCS318D1 UCS318-307D1 UCS318-308D1 | 190 7.4803 | 96 3.780 | 49 1.929 | 4 .157 | 40 1.575 | 56 2.205 | 16 .630 | 120.9 4.760 | M16 X 1.5 5/8-18UNF | 32,100 | 24,100 |
| 95 3 3/4 | UCS319D1 UCS319-312D1 | 200 7.8740 | 103 4.055 | 51 2.008 | 4 .157 | 41 1.614 | 62 2.441 | 16 .630 | 127.5 5.020 | M16 X 1.5 5/8-18UNF | 34,400 | 26,800 |
| 100 3 15/16 4 | UCS320D1 UCS320-315D1 UCS320-400D1 | 215 8.4646 | 108 4.252 | 55 2.165 | 4 .157 | 42 1.654 | 66 2.598 | 18 .709 | 135.6 5.339 | M18 X 1.5 5/8-18UNF | 38,900 | 31,700 |
| 105 | UCS321D1 | 225 | 112 | 57 | 4 | 44 | 68 | 18 | 142.1 | M18 X 1.5 | 41,400 | 34,400 |
| 110 | UCS322D1 | 240 | 117 | 59 | 4 | 46 | 71 | 18 | 151.7 | M18 X 1.5 | 46,100 | 40,200 |
| 120 | UCS324D1 | 260 | 126 | 63 | 4 | 51 | 75 | 18 | 165.2 | M18 X 1.5 | 46,500 | 41,600 |
| 130 | UCS326D1 | 280 | 135 | 67 | 5 | 54 | 81 | 20 | 178.3 | M20 X 1.5 | 51,500 | 48,100 |
| 140 | UCS328D1 | 300 | 145 | 71 | 5 | 59 | 86 | 20 | 190.4 | M20 X 1.5 | 56,900 | 55,300 |

BALL BEARING INSERTS

Units: **Millimeters**
INCHES



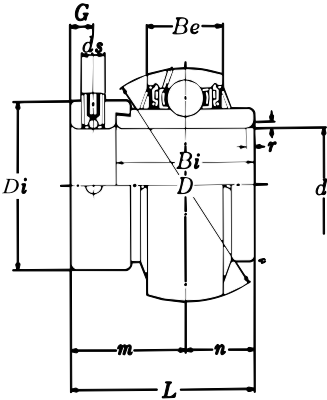
| Bore d | Bearing Number | Nominal Dimensions | | | | | | | | | Socket Set Screw ds | Basic Load Ratings (lbs) | |
|--|--|--------------------|---------------|---------------|-------------|-------------|----------------|----------------|-------------|--------------|------------------------------|-----------------------------|--------------------------|
| | | D | L | Bi | Be | r | n | m | G | Di | | Dynamic C | Static C ₀ |
| 20 ¾ | UEL204D1 UEL204-012D1 | 47 1.8504 | 43.7 1.720 | 34.2 1.346 | 18 .709 | 1.5 .059 | 17.1 .672 | 26.6 1.047 | 4.8 .189 | 33 1.31 | M6 X 0.75 ¼-28UNF | 2,890 | 1,500 |
| 25 1 3/16 7/8 1 1/16 1 | UEL205D1 UEL205-013D1 UEL205-014D1 UEL205-015D1 UEL205-100D1 | 52 2.0472 | 44.4 1.748 | 34.9 1.374 | 18 .709 | 1.5 .059 | 17.5 .688 | 26.9 1.059 | 4.8 .189 | 38 1.50 | M6 X 0.75 ¼-28UNF | 3,150 | 1,760 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | UEL206D1 UEL206-101D1 UEL206-102D1 UEL206-103D1 UEL206-104D1 | 62 2.4409 | 48.4 1.906 | 36.5 1.437 | 20 .787 | 1.5 .059 | 18.3 .719 | 30.1 1.185 | 6 .236 | 44.5 1.75 | M8 X 1 5/16-24UNF | 4,400 | 2,540 |
| 35 1 1/4 1 5/8 1 3/8 1 7/8 | UEL207D1 UEL207-104D1 UEL207-105D1 UEL207-106D1 UEL207-107D1 | 72 2.8346 | 51.1 2.012 | 37.6 1.480 | 22 .866 | 2 .079 | 18.8 .742 | 32.3 1.272 | 6.8 .268 | 55.5 2.19 | M10 X 1.25 ¾-24UNF | 5,750 | 3,440 |
| 40 1 1/2 1 9/16 | UEL208D1 UEL208-108D1 UEL208-109D1 | 80 3.1496 | 56.3 2.217 | 42.8 1.685 | 24 .945 | 2 .079 | 21.4 .844 | 34.9 1.374 | 6.8 .268 | 60 2.37 | M10 X 1.25 ¾-24UNF | 6,550 | 4,000 |
| 45 1 5/8 1 11/16 1 3/4 | UEL209D1 UEL209-110D1 UEL209-111D1 UEL209-112D1 | 85 3.3465 | 56.3 2.217 | 42.8 1.685 | 24 .945 | 2 .079 | 21.4 .844 | 34.9 1.374 | 6.8 .268 | 63.5 2.50 | M10 X 1.25 ¾-24UNF | 7,350 | 4,590 |
| 50 1 13/16 1 7/8 1 15/16 2 | UEL210D1 UEL210-113D1 UEL210-114D1 UEL210-115D1 UEL210-200D1 | 90 3.5433 | 62.7 2.469 | 49.2 1.937 | 25 .984 | 2 .079 | 24.6 .969 | 38.1 1.500 | 6.8 .268 | 69.5 2.74 | M10 X 1.25 ¾-24UNF | 7,900 | 5,220 |
| 55 2 2 1/16 2 1/8 2 3/16 | UEL211D1 UEL211-200D1 UEL211-201D1 UEL211-202D1 UEL211-203D1 | 100 3.9370 | 71.4 2.811 | 55.5 2.185 | 27 1.063 | 2.5 .098 | 27.8 1.094 | 43.6 1.717 | 8 .315 | 76 3.00 | M10 X 1.25 ¾-24UNF | 9,750 | 6,560 |
| 60 2 1/4 2 3/8 2 7/16 | UEL212D1 UEL212-204D1 UEL212-206D1 UEL212-207D1 | 110 4.3307 | 77.8 3.063 | 61.9 2.437 | 30 1.181 | 2.5 .098 | 31 1.219 | 46.8 1.843 | 8 .315 | 84 3.31 | M10 X 1.25 ¾-24UNF | 11,800 | 8,100 |
| 65 2 1/2 | UEL213D1 UEL213-208D1 | 120 4.7244 | 85.7 3.374 | 68.3 2.689 | 32 1.260 | 2.5 .098 | 34.15 1.344 | 51.55 2.030 | 8.7 .343 | 97 3.819 | M10 X 1.25 ¾-24UNF | 12,900 | 9,000 |
| 70 2 11/16 2 3/4 | UEL214D1 UEL214-211D1 UEL214-212D1 | 125 4.9213 | 85.7 3.374 | 68.3 2.689 | 33 1.299 | 2.5 .098 | 34.15 1.344 | 51.55 2.030 | 8.7 .343 | 97 3.819 | M10 X 1.25 ¾-24UNF | 13,900 | 9,900 |
| 75 2 15/16 3 | UEL215D1 UEL215-215D1 UEL215-300D1 | 130 5.1181 | 92 3.622 | 74.6 2.937 | 34 1.339 | 2.5 .098 | 37.3 1.469 | 54.7 2.154 | 8.7 .343 | 102 4.016 | M10 X 1.25 ¾-24UNF | 14,800 | 11,100 |



"A-" at front of part number to denote Ultraclass insert.

NTN
SERIES
UEL3
ECCENTRIC
LOCKING
COLLAR
TYPE

Units: **Millimeters**
INCHES



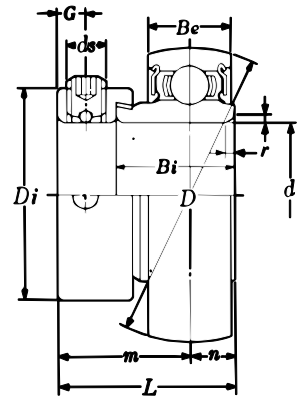
BALL BEARING INSERTS

| Bore <i>d</i> | Bearing Number | Nominal Dimensions | | | | | | | | | Socket Set Screw <i>ds</i> | Basic Load Ratings (lbs) | |
|--|--|--------------------|----------------|---------------|-------------|-------------|----------------|----------------|--------------|---------------|-------------------------------------|-----------------------------|----------------------|
| | | <i>D</i> | <i>L</i> | <i>Bi</i> | <i>Be</i> | <i>r</i> | <i>n</i> | <i>m</i> | <i>G</i> | <i>Di</i> | | <i>C</i> | <i>C₀</i> |
| 25 7/8 15/16 1 | UEL305D1 UEL305-014D1 UEL305-015D1 UEL305-100D1 | 62 2.4409 | 46.8 1.843 | 34.9 1.374 | 20 .787 | 2 .079 | 16.7 .657 | 30.1 1.185 | 6 .236 | 42.8 1.685 | M8 X 1 5/16-24UNF | 4,770 | 2,450 |
| 30 1 1/8 1 3/8 | UEL306D1 UEL306-102D1 UEL306-103D1 | 72 2.8346 | 50 1.969 | 36.5 1.437 | 23 .906 | 2 .079 | 17.5 .689 | 32.5 1.280 | 6.7 .264 | 50 1.969 | M8 X 1 5/16-24UNF | 6,000 | 3,370 |
| 35 1 1/4 1 5/8 1 3/4 1 7/8 | UEL307D1 UEL307-104D1 UEL307-105D1 UEL307-106D1 UEL307-107D1 | 80 3.1496 | 51.6 2.031 | 38.1 1.500 | 25 .984 | 2.5 .098 | 18.3 .720 | 33.3 1.311 | 6.7 .264 | 55 2.165 | M8 X 1 5/16-24UNF | 7,530 | 4,290 |
| 40 1 1/2 | UEL308D1 UEL308-108D1 | 90 3.5433 | 57.1 2.248 | 41.3 1.626 | 27 1.063 | 2.5 .098 | 19.8 .780 | 37.3 1.469 | 8 .315 | 63.5 2.500 | M10 X 1.25 3/8-24UNF | 9,100 | 5,400 |
| 45 1 5/8 1 11/16 1 3/4 | UEL309D1 UEL309-110D1 UEL309-111D1 UEL309-112D1 | 100 3.9370 | 58.7 2.311 | 42.9 1.689 | 29 1.142 | 2.5 .098 | 19.8 .780 | 38.9 1.531 | 8 .315 | 70 2.756 | M10 X 1.25 3/8-24UNF | 11,900 | 7,200 |
| 50 1 7/8 1 15/16 | UEL310D1 UEL310-114D1 UEL310-115D1 | 110 4.3307 | 66.6 2.622 | 49.2 1.937 | 32 1.260 | 3 .118 | 24.6 .969 | 42 1.654 | 8.7 .343 | 76.2 3.000 | M10 X 1.25 3/8-24UNF | 13,900 | 8,660 |
| 55 2 2 1/8 2 3/8 | UEL311D1 UEL311-200D1 UEL311-202D1 UEL311-203D1 | 120 4.7244 | 73 2.874 | 55.6 2.189 | 34 1.339 | 3 .118 | 27.8 1.094 | 45.2 1.780 | 8.7 .343 | 83 3.268 | M10 X 1.25 3/8-24UNF | 16,100 | 10,100 |
| 60 2 1/4 2 3/8 2 7/8 | UEL312D1 UEL312-204D1 UEL312-206D1 UEL312-207D1 | 130 5.1181 | 79.4 3.126 | 61.9 2.437 | 36 1.417 | 3.5 .138 | 30.95 1.219 | 48.45 1.907 | 8.7 .343 | 89 3.504 | M10 X 1.25 3/8-24UNF | 18,400 | 11,700 |
| 65 2 1/2 | UEL313D1 UEL313-208D1 | 140 5.5118 | 85.7 3.374 | 65.1 2.563 | 39 1.535 | 3.5 .138 | 32.55 1.281 | 53.15 2.093 | 10.3 .406 | 97 3.819 | M12 X 1.5 1/2-20UNF | 20,800 | 13,500 |
| 70 2 11/16 2 3/4 | UEL314D1 UEL314-211D1 UEL314-212D1 | 150 5.9055 | 92.1 3.626 | 68.3 2.689 | 41 1.614 | 3.5 .138 | 34.15 1.344 | 57.95 2.281 | 10.3 .406 | 102 4.016 | M12 X 1.5 1/2-20UNF | 23,400 | 15,300 |
| 75 2 15/16 3 | UEL315D1 UEL315-215D1 UEL315-300D1 | 160 6.2992 | 100 3.937 | 74.6 2.937 | 43 1.693 | 3.5 .138 | 37.3 1.469 | 62.7 2.469 | 12.7 .500 | 113 4.449 | M16 X 1.5 5/8-18UNF | 25,400 | 17,300 |
| 80 3 1/8 3 3/8 | UEL316D1 UEL316-302D1 UEL316-303D1 | 170 6.6929 | 106.4 4.189 | 81 3.189 | 45 1.772 | 3.5 .138 | 40.5 1.594 | 65.9 2.594 | 12.7 .500 | 119 4.685 | M16 X 1.5 5/8-18UNF | 27,700 | 19,400 |
| 85 3 1/4 | UEL317D1 UEL317-304D1 | 180 7.0866 | 109.5 4.311 | 84.1 3.311 | 47 1.850 | 4 .157 | 42.05 1.656 | 67.45 2.656 | 12.7 .500 | 127 5.000 | M16 X 1.5 5/8-18UNF | 29,900 | 21,800 |
| 90 3 7/16 3 1/2 | UEL318D1 UEL318-307D1 UEL318-308D1 | 190 7.4803 | 115.9 4.563 | 87.3 3.437 | 49 1.929 | 4 .157 | 43.65 1.719 | 72.25 2.844 | 14.3 .563 | 133 5.236 | M20 X 1.5 3/4-16UNF | 32,100 | 24,100 |
| 95 3 3/4 | UEL319D1 UEL319-312D1 | 200 7.8740 | 122.3 4.815 | 93.7 3.689 | 51 2.008 | 4 .157 | 38.9 1.531 | 83.4 3.283 | 14.3 .563 | 140 5.512 | M20 X 1.5 3/4-16UNF | 34,400 | 26,800 |
| 100 3 15/16 4 | UEL320D1 UEL320-315D1 UEL320-400D1 | 215 8.4646 | 128.6 5.063 | 100 3.937 | 55 2.165 | 4 .157 | 50 1.969 | 78.6 3.094 | 14.3 .563 | 146 5.748 | M20 X 1.5 3/4-16UNF | 38,900 | 31,700 |
| 105 | UEL321D1 | 225 | 139.7 | 104.8 | 57 | 4 | 48.4 | 91.3 | 17.5 | 157 | M20 X 1.5 | 41,400 | 34,400 |
| 110 | UEL322D1 | 240 | 141.3 | 106.4 | 59 | 4 | 49.2 | 92.1 | 17.5 | 168 | M20 X 1.5 | 46,100 | 40,200 |

"A-" at front of part number to denote Ultraclass insert.

BALL BEARING INSERTS – AEL2 SERIES

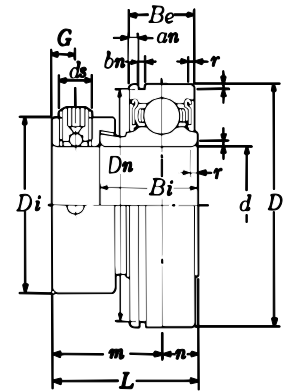
| Bore <i>d</i> | Bearing Number | Nominal Dimensions | | | | | | | | | | Socket Set Screw <i>ds</i> | Basic Load Ratings (lbs) | |
|--|--|--------------------|---------------|---------------|------------|-------------|-------------|---------------|-------------|---------------|---------------------|-------------------------------|--------------------------------|-------|
| | | <i>D</i> | <i>L</i> | <i>Bi</i> | <i>Be</i> | <i>r</i> | <i>n</i> | <i>m</i> | <i>G</i> | <i>Di</i> | Dynamic <i>C</i> | | Static <i>C₀</i> | |
| 12 ½ | AEL201 AEL201-008 | 40 1.5748 | 28.6 1.126 | 19 .748 | 12 .472 | 0.6 .024 | 6.5 .256 | 22.1 .870 | 4.8 .189 | 29 1.14 | 4.8 1.14 | M6 X 0.75 ¼-28UNF | 2,160 | 1,030 |
| 15 9/16 5/8 | AEL202 AEL202-009 AEL202-010 | 40 1.5748 | 28.6 1.126 | 19 .748 | 12 .472 | 0.6 .024 | 6.5 .256 | 22.1 .870 | 4.8 .189 | 29 1.14 | 4.8 1.14 | M6 X 0.75 ¼-28UNF | 2,160 | 1,030 |
| 17 11/16 | AEL203 AEL203-011 | 40 1.5748 | 28.6 1.126 | 19 .748 | 12 .472 | 0.6 .024 | 6.5 .256 | 22.1 .870 | 4.8 .189 | 29 1.14 | 4.8 1.14 | M6 X 0.75 ¼-28UNF | 2,160 | 1,030 |
| 20 ¾ | AEL204 AEL204-012 | 47 1.8504 | 31 1.219 | 21.5 .846 | 14 .551 | 1 .039 | 7.5 .295 | 23.5 .924 | 4.8 .189 | 33 1.31 | 4.8 1.31 | M6 X 0.75 ¼-28UNF | 2,890 | 1,500 |
| 25 19/16 7/8 15/16 1 | AEL205 AEL205-013 AEL205-014 AEL205-015 AEL205-100 | 52 2.0472 | 31 1.219 | 21.5 .846 | 15 .591 | 1 .039 | 7.5 .295 | 23.5 .924 | 4.8 .189 | 38 1.50 | 4.8 1.50 | M6 X 0.75 ¼-28UNF | 3,150 | 1,760 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | AEL206 AEL206-101 AEL206-102 AEL206-103 AEL206-104 | 62 2.4409 | 35.7 1.406 | 23.8 .937 | 16 .630 | 1 .039 | 9 .354 | 26.7 1.052 | 6 .236 | 44.5 1.75 | 6 1.75 | M8 X 1 5/16-24UNF | 4,400 | 2,540 |
| 35 1 ¼ 1 5/16 1 3/8 1 7/16 | AEL207 AEL207-104 AEL207-105 AEL207-106 AEL207-107 | 72 2.8346 | 38.9 1.531 | 25.4 1.000 | 17 .669 | 1.5 .059 | 9.5 .374 | 29.4 1.157 | 6.8 .268 | 55.5 2.19 | 6.8 2.19 | M10 X 1.25 ¾-24UNF | 5,750 | 3,440 |
| 40 1 ½ 1 9/16 | AEL208 AEL208-108 AEL208-109 | 80 3.1496 | 43.7 1.719 | 30.2 1.189 | 18 .709 | 1.5 .059 | 11 .433 | 32.7 1.286 | 6.8 .268 | 60 2.37 | 6.8 2.37 | M10 X 1.25 ¾-24UNF | 6,550 | 4,000 |
| 45 1 5/8 1 11/16 | AEL209 AEL209-110 AEL209-111 | 85 3.4640 | 43.7 1.720 | 30.2 1.189 | 19 .748 | 1.5 .059 | 11 .433 | 32.7 1.287 | 6.8 .268 | 63.5 2.50 | 6.8 2.50 | M10 X 1.25 ¾-24UNF | 7,350 | 4,600 |
| 50 1 13/16 1 7/8 1 15/16 2 | AEL210W3 AEL210-113 AEL210-114 AEL210-115 AEL210-200 | 90 3.5433 | 43.7 1.720 | 30.2 1.189 | 20 .787 | 1.5 .059 | 11 .433 | 32.7 1.287 | 6.8 .268 | 69.5 2.736 | 6.8 2.736 | M10 X 1.25 ¾-24UNF | 7,900 | 5,200 |
| 55 2 | AEL211 AEL211-200 | 100 3.937 | 48.4 1.906 | 32.5 1.280 | 21 .827 | 2 .079 | 12 .472 | 36.4 1.433 | 8 .315 | 76 2.992 | 8 2.992 | M10 X 1.25 ¾-24UNF | 9,750 | 6,550 |



AEL2

BALL BEARING INSERTS – AELS2 SERIES

| Bore <i>d</i> | Bearing Number | Nominal Dimensions | | | | | | | | | | | | Socket Set Screw <i>ds</i> | Basic Load Ratings (lbs) | |
|--|--|--------------------|---------------|---------------|------------|-------------|-------------|---------------|-------------|---------------|---------------|--------------|--------------|-------------------------------|--------------------------|--------------------------------|
| | | <i>D</i> | <i>L</i> | <i>Bi</i> | <i>Be</i> | <i>r</i> | <i>n</i> | <i>m</i> | <i>G</i> | <i>Di</i> | <i>Dn</i> | <i>an</i> | <i>bn</i> | | Dynamic <i>C</i> | Static <i>C₀</i> |
| 12 ½ | AELS201N AELS201-008N | 40 1.5748 | 28.6 1.126 | 19 .748 | 12 .472 | 0.6 .024 | 6.5 .256 | 22.1 .870 | 4.8 .189 | 29 1.14 | 38.1 1.500 | 1.98 .078 | 1.5 .059 | M6 X 0.75 ¼-28UNF | 2,160 | 1,030 |
| 15 9/16 5/8 | AELS202N AELS202-009N AELS202-010N | 40 1.5748 | 28.6 1.126 | 19 .748 | 12 .472 | 0.6 .024 | 6.5 .256 | 22.1 .870 | 4.8 .189 | 29 1.14 | 38.1 1.500 | 1.98 .078 | 1.5 .059 | M6 X 0.75 ¼-28UNF | 2,160 | 1,030 |
| 17 11/16 | AELS203N AELS203-011N | 40 1.5748 | 28.6 1.126 | 19 .748 | 12 .472 | 0.6 .024 | 6.5 .256 | 22.1 .870 | 4.8 .189 | 29 1.14 | 38.1 1.500 | 1.98 .078 | 1.5 .059 | M6 X 0.75 ¼-28UNF | 2,160 | 1,030 |
| 20 ¾ | AELS204N AELS204-012N | 47 1.8504 | 31 1.219 | 21.5 .846 | 14 .551 | 1 .039 | 7.5 .295 | 23.5 .924 | 4.8 .189 | 33 1.31 | 44.6 1.756 | 2.38 .094 | 1.5 .059 | M6 X 0.75 ¼-28UNF | 2,890 | 1,500 |
| 25 19/16 7/8 15/16 1 | AELS205N AELS205-013N AELS205-014N AELS205-015N AELS205-100N | 52 2.0472 | 31 1.219 | 21.5 .846 | 15 .591 | 1 .039 | 7.5 .295 | 23.5 .924 | 4.8 .189 | 38 1.50 | 49.7 1.958 | 2.38 .094 | 1.5 .059 | M6 X 0.75 ¼-28UNF | 3,150 | 1,760 |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | AELS206N AELS206-101N AELS206-102N AELS206-103N AELS206-104N | 62 2.4409 | 35.7 1.406 | 23.8 .937 | 16 .630 | 1 .039 | 9 .354 | 26.7 1.052 | 6 .236 | 44.5 1.75 | 59.6 2.347 | 3.18 .125 | 2.05 .081 | M8 X 1 5/16-24UNF | 4,400 | 2,540 |
| 35 1 ¼ 1 5/16 1 3/8 1 7/16 | AELS207N AELS207-104N AELS207-105N AELS207-106N AELS207-107N | 72 2.8346 | 38.9 1.531 | 25.4 1.000 | 17 .669 | 1.5 .059 | 9.5 .374 | 29.4 1.157 | 6.8 .268 | 55.5 2.19 | 68.8 2.709 | 3.18 .125 | 2.05 .081 | M10 X 1.25 ¾-24UNF | 5,750 | 3,440 |
| 40 1 ½ 1 9/16 | AELS208N AELS208-108N AELS208-109N | 80 3.1496 | 43.7 1.719 | 30.2 1.189 | 18 .709 | 1.5 .059 | 11 .433 | 32.7 1.286 | 6.8 .268 | 60 2.37 | 76.8 3.024 | 3.18 .125 | 2.05 .081 | M10 X 1.25 ¾-24UNF | 6,550 | 4,000 |
| 45 1 5/8 1 11/16 1 3/4 | AELS209N AELS209-110N AELS209-111N AELS209-112N | 85 3.4645 | 43.7 1.720 | 30.2 1.189 | 19 .748 | 1.5 .059 | 11 .433 | 32.7 1.286 | 6.8 .268 | 63.5 2.50 | 81.8 3.221 | 3.18 .125 | 2.05 .081 | M10 X 1.25 ¾-24UNF | 7,350 | 4,600 |
| 50 1 13/16 1 7/8 1 15/16 2 | AELS210N AELS210-113N AELS210-114N AELS210-115N AELS210-200N | 90 3.5433 | 43.7 1.720 | 30.2 1.189 | 20 .787 | 2.0 .079 | 1.5 .059 | 32.7 1.286 | 6.8 .268 | 69.5 2.73 | 86.7 3.417 | 3.18 .125 | 2.85 .112 | M10 X 1.25 ¾-24UNF | 7,900 | 5,200 |
| 55 2 | AELS211N AELS211-200N | 100 3.9370 | 48.4 1.906 | 32.5 1.279 | 21 .826 | 2.3 .091 | 2.3 .091 | 36.4 1.433 | 8.0 .315 | 76.0 2.992 | 96.8 3.811 | 3.18 .125 | 2.85 .112 | M10 X 1.25 ¾-24UNF | 9,750 | 6,550 |



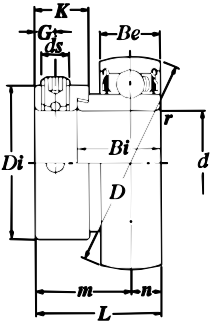
AELS2

Units: Millimeters
INCHES



NTN
SERIES
JEL2
ECCENTRIC
LOCKING
COLLAR
TYPE

Units: **Millimeters**
INCHES



BALL BEARING INSERTS

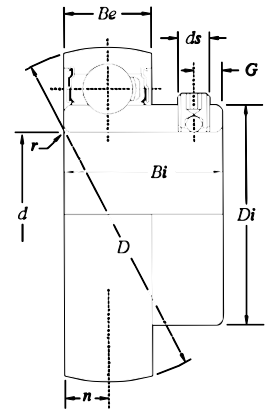
| Bore <i>d</i> | Bearing Number | Nominal Dimensions | | | | | | | | | | Socket Set Screw <i>ds</i> | Basic Load Ratings (lbs) | |
|--|--|--------------------|---------------|---------------|-------------|-------------|--------------|---------------|-------------|---------------|-------------------------|-------------------------------------|--------------------------------|--|
| | | <i>D</i> | <i>L</i> | <i>Bi</i> | <i>Be</i> | <i>r</i> | <i>n</i> | <i>m</i> | <i>G</i> | <i>Di</i> | Dynamic <i>C</i> | | Static <i>C₀</i> | |
| 12 ½ | JEL201 JEL201-008 | 40 1.5748 | 28.6 1.126 | 19 .748 | 13 .512 | 1 .039 | 6.5 .256 | 22.1 .870 | 4.8 .189 | 29 1.142 | M6 X 0.75 ¼-28UNF | 2,160 | 1,030 | |
| 15 9/16 5/8 | JEL202 JEL202-009 JEL202-010 | 40 1.5748 | 28.6 1.126 | 19 .748 | 13 .512 | 1 .039 | 6.5 .256 | 22.1 .870 | 4.8 .189 | 29 1.142 | M6 X 0.75 ¼-28UNF | 2,160 | 1,030 | |
| 17 11/16 | JEL203 JEL203-011 | 40 1.5748 | 28.6 1.126 | 19 .748 | 13 .512 | 1 .039 | 6.5 .256 | 22.1 .870 | 4.8 .189 | 29 1.142 | M6 X 0.75 ¼-28UNF | 2,160 | 1,030 | |
| 20 ¾ | JEL204 JEL204-012 | 47 1.8504 | 31.0 1.220 | 21.5 .846 | 15 .591 | 1.5 .059 | 7.5 .295 | 23.5 .925 | 4.8 .189 | 33 1.299 | M6 X 0.75 ¼-28UNF | 2,890 | 1,500 | |
| 25 13/16 7/8 15/16 1 | JEL205 JEL205-013 JEL205-014 JEL205-015 JEL205-100 | 52 2.0472 | 31.0 1.220 | 21.5 .846 | 15 .591 | 1.5 .059 | 7.5 .295 | 23.5 .925 | 4.8 .189 | 38 1.496 | M6 X 0.75 ¼-28UNF | 3,150 | 1,770 | |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | JEL206 JEL206-101 JEL206-102 JEL206-103 JEL206-104 | 62 2.4409 | 35.7 1.406 | 23.8 .937 | 18 .709 | 1.5 .059 | 9 .354 | 26.7 1.051 | 6 .236 | 44.5 1.752 | M8 X 1 5/16-24UNF | 4,400 | 2,540 | |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | JEL207 JEL207-104 JEL207-105 JEL207-106 JEL207-107 | 72 2.8346 | 38.9 1.531 | 25.4 1.000 | 19 .748 | 2 .079 | 9.5 .374 | 29.4 1.157 | 6.8 .268 | 55.5 2.185 | M10 X 1.25 3/8-24UNF | 5,750 | 3,450 | |
| 40 1 1/2 1 9/16 | JEL208 JEL208-108 JEL208-109 | 80 3.1496 | 43.7 1.720 | 30.2 1.189 | 22 .866 | 2 .079 | 11 .433 | 32.7 1.287 | 6.8 .268 | 60 2.362 | M10 X 1.25 3/8-24UNF | 6,550 | 4,000 | |
| 45 1 1/16 1 11/16 1 3/4 | JEL209 JEL209-110 JEL209-111 JEL209-112 | 85 3.3465 | 43.7 1.720 | 30.2 1.189 | 22 .866 | 2 .079 | 11 .433 | 32.7 1.287 | 6.8 .268 | 63.5 2.50 | M10 X 1.25 3/8-24UNF | 7,380 | 4,580 | |
| 50 1 7/8 1 15/16 | JEL210 JEL210-114 JEL210-115 | 90 3.5433 | 43.7 1.720 | 30.2 1.189 | 22 .866 | 2 .079 | 11 .433 | 32.7 1.287 | 6.8 .268 | 69.5 2.74 | M10 X 1.25 3/8-24UNF | 7,930 | 5,220 | |
| 55 2 2 3/16 | JEL211 JEL211-200 JEL211-203 | 100 3.9370 | 48.4 1.906 | 32.5 1.280 | 24 .945 | 2.5 .098 | 12 .472 | 36.4 1.433 | 8 .315 | 76 3.00 | M10 X 1.25 3/8-24UNF | 9,810 | 6,570 | |
| 60 2 1/4 | JEL212 JEL212-204 | 110 4.3307 | 53.1 2.091 | 37.2 1.465 | 27 1.063 | 2.5 .098 | 13.5 .531 | 39.6 1.559 | 8 .315 | 84 3.31 | M10 X 1.25 3/8-24UNF | 11,800 | 8,150 | |

BALL BEARING INSERTS

Units: **Millimeters**
INCHES



| Bore <i>d</i> | Bearing Number | Nominal Dimensions | | | | | | | | | | Socket Set Screw <i>ds</i> | Basic Load Ratings (lbs) | |
|--|--|--------------------|---------------|----------------|-------------|-------------|----------------|---------------|-------------|--------------|-------------------------|-------------------------------------|--------------------------------|--|
| | | <i>D</i> | <i>L</i> | <i>Bi</i> | <i>Be</i> | <i>r</i> | <i>n</i> | <i>m</i> | <i>G</i> | <i>Di</i> | Dynamic <i>C</i> | | Static <i>C₀</i> | |
| 20 ¾ | REL204 REL204-012 | 47 1.8504 | 43.7 1.720 | 34.2 1.3465 | 15 .591 | 1.5 .059 | 17.1 .673 | 26.6 1.047 | 4.8 .189 | 33 1.31 | M6 X 0.75 ¼-28UNF | 2,890 | 1,500 | |
| 25 1 3/16 7/8 1 5/16 1 | REL205 REL205-013 REL205-014 REL205-015 REL205-100 | 52 2.0472 | 44.4 1.748 | 34.9 1.3740 | 15 .591 | 1.5 .059 | 17.45 .687 | 26.9 1.061 | 4.8 .189 | 38 1.50 | M6 X 0.75 ¼-28UNF | 3,150 | 1,770 | |
| 30 1 1/16 1 1/8 1 3/16 1 1/4 | REL206 REL206-101 REL206-102 REL206-103 REL206-104 | 62 2.4409 | 48.4 1.906 | 36.5 1.4370 | 18 .709 | 1.5 .059 | 18.25 .719 | 30.2 1.188 | 6 .236 | 44.5 1.75 | M8 X 1 5/16-24UNF | 4,400 | 2,540 | |
| 35 1 1/4 1 5/16 1 3/8 1 7/16 | REL207 REL207-104 REL207-105 REL207-106 REL207-107 | 72 2.8346 | 51.1 2.012 | 37.6 1.4803 | 19 .748 | 2 .079 | 18.8 .740 | 32.3 1.272 | 6.8 .268 | 55.5 2.19 | M10 X 1.25 3/8-28UNF | 5,750 | 3,450 | |
| 40 1 1/2 1 9/16 | REL208 REL208-108 REL208-109 | 80 3.1496 | 56.3 2.217 | 42.8 1.6850 | 22 .866 | 2 .079 | 21.4 .843 | 34.9 1.375 | 6.8 .268 | 60 2.37 | M10 X 1.25 3/8-28UNF | 6,550 | 4,000 | |
| 45 1 5/8 1 11/16 1 3/4 | REL209 REL209-110 REL209-111 REL209-112 | 85 3.3465 | 56.3 2.217 | 42.8 1.6850 | 22 .866 | 2 .079 | 21.4 .843 | 34.9 1.375 | 6.8 .268 | 63.5 2.50 | M10 X 1.25 3/8-28UNF | 7,350 | 4,600 | |
| 50 1 13/16 1 7/8 1 15/16 2 | REL210 REL210-113 REL210-114 REL210-115 REL210-200 | 90 3.5433 | 62.7 2.469 | 49.2 1.9370 | 22 .866 | 2 .079 | 24.6 .969 | 38.1 1.501 | 6.8 .268 | 69.5 2.74 | M10 X 1.25 3/8-28UNF | 7,900 | 5,200 | |
| 55 2 2 1/16 2 1/8 2 3/16 | REL211 REL211-200 REL211-201 REL211-202 REL211-203 | 100 3.9370 | 71.4 2.811 | 55.5 2.1850 | 24 .945 | 2.5 .098 | 27.75 1.093 | 43.7 1.719 | 8 .315 | 76 3.00 | M10 X 1.25 3/8-28UNF | 9,750 | 6,550 | |
| 60 2 1/4 2 5/16 2 3/8 2 7/16 | REL212 REL212-204 REL212-205 REL212-206 REL212-207 | 110 4.3307 | 77.8 3.063 | 61.9 2.4370 | 27 1.063 | 2.5 .098 | 30.95 1.219 | 46.9 1.845 | 8 .315 | 84 3.31 | M10 X 1.25 3/8-28UNF | 11,800 | 8,150 | |





Units: Millimeters
INCHES

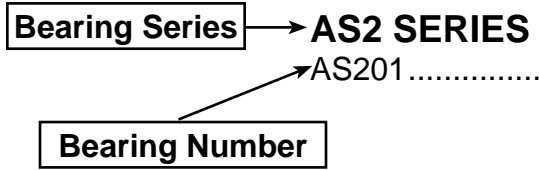


| BALL BEARING INSERTS | | | | | | | | | | | |
|-------------------------------|-------------------------------|--------------------|----------|-----------------------|-----------------------|-----------------------|----------|----------|-----------------------|-----------------------------|---------------------------------|
| Bore <i>d</i> ₁ | Bearing and adapter number | Nominal dimensions | | | | | | | | Basic Load Ratings (lbs) | |
| | | <i>d</i> | <i>D</i> | <i>B</i> _i | <i>B</i> _e | <i>D</i> _i | <i>L</i> | <i>C</i> | <i>D</i> ₃ | Dynamic <i>C</i> | Static <i>C</i> ₀ |
| 20 | UK205D1 ; H 2305X | 25 | 52 | 23 | 18 | 33.9 | 35 | 8 | 38 | 3,150 | 1,770 |
| 3/4 | UK205D1 ; HE2305 | 0.9843 | 2.0472 | 0.906 | 0.709 | 1.335 | 1.378 | 0.315 | 1.496 | | |
| 25 | UK206D1 ; H 2306X | 30 | 62 | 26 | 20 | 40.8 | 38 | 8 | 45 | 4,400 | 2,540 |
| 7/8 | UK206D1 ; HS2306 | 1.1811 | 2.4409 | 1.024 | 0.787 | 1.606 | 1.496 | 0.315 | 1.772 | | |
| 1 | UK206D1 ; HE2306X | | | | | | | | | | |
| 30 | UK207D1 ; H 2307X | 35 | 72 | 29 | 22 | 46.8 | 43 | 9 | 52 | 5,750 | 3,450 |
| 1 1/8 | UK207D1 ; HS2307 | 1.3780 | 2.8346 | 1.142 | 0.866 | 1.843 | 1.693 | 0.354 | 2.047 | | |
| 35 | UK208D1 ; H 2308X | 40 | 80 | 31 | 24 | 53 | 46 | 10 | 58 | 6,550 | 4,000 |
| 1 1/4 | UK208D1 ; HE2308X | 1.5748 | 3.1496 | 1.220 | 0.945 | 2.087 | 1.811 | 0.394 | 2.283 | | |
| 1 3/8 | UK208D1 ; HS2308X | | | | | | | | | | |
| 40 | UK209D1 ; H 2309X | 45 | 85 | 31 | 24 | 57.5 | 50 | 11 | 65 | 7,350 | 4,600 |
| 1 7/16 | UK209D1 ; HA2309 | 1.7717 | 3.3465 | 1.220 | 0.945 | 2.264 | 1.969 | 0.433 | 2.559 | | |
| 1 1/2 | UK209D1 ; HE2309X | | | | | | | | | | |
| 1 5/8 | UK209D1 ; HS2309X | | | | | | | | | | |
| 45 | UK210D1 ; H 2310X | 50 | 90 | 32 | 25 | 62.4 | 55 | 12 | 70 | 7,900 | 5,200 |
| 1 5/8 | UK210D1 ; HS2310 | 1.9685 | 3.5433 | 1.260 | 0.984 | 2.457 | 2.165 | 0.472 | 2.756 | | |
| 1 11/16 | UK210D1 ; HA2310 | | | | | | | | | | |
| 1 3/4 | UK210D1 ; HE2310X | | | | | | | | | | |
| 50 | UK211D1 ; H 2311X | 55 | 100 | 35 | 27 | 69 | 59 | 12 | 75 | 9,750 | 6,550 |
| 1 7/8 | UK211D1 ; HS2311 | 2.1654 | 3.937 | 1.378 | 1.063 | 2.717 | 2.323 | 0.472 | 2.953 | | |
| 1 15/16 | UK211D1 ; HA2311 | | | | | | | | | | |
| 2 | UK211D1 ; HE2311XY | | | | | | | | | | |
| 55 | UK212D1 ; H 2312X | 60 | 110 | 38 | 30 | 77 | 62 | 13 | 80 | 11,800 | 8,150 |
| 2 1/8 | UK212D1 ; HS2312X | 2.3622 | 4.3307 | 1.496 | 1.181 | 3.031 | 2.441 | 0.512 | 3.150 | | |
| 60 | UK213D1 ; H 2313X | 65 | 120 | 40 | 32 | 82.5 | 65 | 14 | 85 | 12,900 | 9,000 |
| 2 3/16 | UK213D1 ; HA2313 | 2.5591 | 7.7244 | 1.575 | 1.260 | 3.248 | 2.559 | 0.551 | 3.346 | | |
| 2 1/4 | UK213D1 ; HE2313 | | | | | | | | | | |
| 2 3/8 | UK213D1 ; HS2313 | | | | | | | | | | |
| 65 | UK215D1 ; H 2315X | 75 | 130 | 44 | 34 | 93 | 73 | 15 | 98 | 14,900 | 11,100 |
| 2 7/16 | UK215D1 ; HA2315 | 2.9528 | 5.1181 | 1.732 | 1.339 | 3.661 | 2.874 | 0.591 | 3.858 | | |
| 2 1/2 | UK215D1 ; HE2315 | | | | | | | | | | |
| 70 | UK216D1 ; H 2316X | 80 | 140 | 45 | 35 | 98.1 | 78 | 17 | 105 | 16,300 | 11,900 |
| 2 11/16 | UK216D1 ; HA2316 | 3.1496 | 5.5118 | 1.772 | 1.378 | 3.862 | 3.071 | 0.669 | 4.134 | | |
| 2 3/4 | UK216D1 ; HE2316 | | | | | | | | | | |
| 75 | UK217D1 ; H 2317X | 85 | 150 | 50 | 36 | 106.1 | 82 | 18 | 110 | 18,700 | 14,300 |
| 2 15/16 | UK217D1 ; HA2317 | 3.3465 | 5.9055 | 1.905 | 1.417 | 4.177 | 3.228 | 0.709 | 4.331 | | |
| 3 | UK217D1 ; HE2317 | | | | | | | | | | |
| 80 | UK218D1 ; H 2318X | 90 | 160 | 60 | 37 | 111.6 | 86 | 18 | 120 | 21,600 | 16,100 |
| 3 3/16 | UK218D1 ; HA2318 | 3.5433 | 6.2992 | 2.362 | 1.457 | 4.394 | 3.386 | 0.709 | 4.724 | | |

These numbers indicate re-lubricatable type. If maintenance free type is needed, please order without suffix "D1".

Adapter number with suffix "X" means a narrow slot type adapter sleeve. In this case the lock washer with the straight inner prong should be used.

For HE2311XY, screw thread pitch different from the standard is applied, because of the thin thread section of sleeve. To distinguish it, a suffix "Y" is added.



BALL BEARING INSERTS **LBS.**

| | | | | | | |
|--------------------|---------------------|------|------------------------|------|----------------------|-------|
| AS2 SERIES | AEL206-101..... | .74 | JEL210..... | 1.86 | UK213D1: HE2313..... | 4.70 |
| AS201..... | AEL206-102..... | .73 | JEL210-114..... | 1.99 | UK213D1: HS2313..... | 4.38 |
| AS201-008..... | AEL206-103..... | .66 | JEL210-115..... | 1.91 | UK215D1: H2315X..... | 5.64 |
| AS202..... | AEL206-104..... | .61 | JEL211..... | 2.51 | UK215D1: HA2315..... | 6.04 |
| AS202-009..... | AEL207..... | 1.08 | JEL211-200..... | 2.78 | UK215D1: HE2315..... | 5.84 |
| AS202-010..... | AEL207-104..... | 1.15 | JEL211-203..... | 2.47 | UK216D1: H2316X..... | 7.12 |
| AS203..... | AEL207-105..... | 1.10 | JEL212..... | 3.48 | UK216D1: HA2316..... | 7.38 |
| AS203-011..... | AEL207-106..... | 1.04 | JEL212-204..... | 3.70 | UK216D1: HE2316..... | 7.14 |
| AS204..... | AEL207-107..... | .98 | AR SERIES | | UK217D1: H2317X..... | 8.66 |
| AS204-012..... | AEL208..... | 1.46 | AR201..... | .23 | UK217D1: HA2317..... | 8.73 |
| AS205..... | AEL208-108..... | 1.41 | AR201-008..... | .22 | UK217D1: HE2317..... | 8.46 |
| AS205-013..... | AEL208-109..... | 1.34 | AR202..... | .21 | UK218D1: H2318X..... | 10.45 |
| AS205-014..... | AELS2 SERIES | | AR202-009..... | .21 | UK218D1: HA2318..... | 11.00 |
| AS205-015..... | AELS201N..... | .26 | AR202-010..... | .20 | REL SERIES | |
| AS205-100..... | AELS201-008N..... | .26 | AR203..... | .19 | REL204..... | .35 |
| AS206..... | AELS202N..... | .24 | AR203-011..... | .19 | REL204-012..... | .38 |
| AS206-101..... | AELS202-009N..... | .26 | AR204..... | .31 | REL205..... | .40 |
| AS206-102..... | AELS202-010N..... | .24 | AR204-012..... | .33 | REL205-013..... | .49 |
| AS206-103..... | AELS203N..... | .22 | AR205..... | .35 | REL205-014..... | .46 |
| AS206-104..... | AELS203-011N..... | .23 | AR205-013..... | .42 | REL205-015..... | .42 |
| AS207..... | AELS204N..... | .37 | AR205-014..... | .40 | REL205-100..... | .38 |
| AS207-104..... | AELS204-012N..... | .35 | AR205-015..... | .38 | REL206..... | .66 |
| AS207-105..... | AELS205N..... | .44 | AR205-100..... | .33 | REL206-101..... | .75 |
| AS207-106..... | AELS205-013N..... | .51 | AR206..... | .60 | REL206-102..... | .71 |
| AS207-107..... | AELS205-014N..... | .48 | AR206-101..... | .66 | REL206-103..... | .66 |
| AS208..... | AELS205-015N..... | .45 | AR206-102..... | .64 | REL206-104..... | .60 |
| AS208-108..... | AELS205-100N..... | .42 | AR206-103..... | .60 | REL207..... | .93 |
| AS208-109..... | AELS206N..... | .68 | AR206-104..... | .55 | REL207-104..... | 1.04 |
| ASS2 SERIES | AELS206-101N..... | .74 | AR207..... | .88 | REL207-105..... | .99 |
| ASS201N..... | AELS206-102N..... | .73 | AR207-104..... | .99 | REL207-106..... | .93 |
| ASS201-008N..... | AELS206-103N..... | .66 | AR207-105..... | .93 | REL207-107..... | .88 |
| ASS202N..... | AELS206-104N..... | .61 | AR207-106..... | .88 | REL208..... | 1.28 |
| ASS202-009N..... | AELS207N..... | 1.08 | AR207-107..... | .84 | REL208-108..... | 1.37 |
| ASS202-010N..... | AELS207-104N..... | 1.15 | AR208..... | 1.24 | REL208-109..... | 1.30 |
| ASS203N..... | AELS207-105N..... | 1.10 | AR208-108..... | 1.32 | REL209..... | 1.37 |
| ASS203-011N..... | AELS207-106N..... | 1.04 | AR208-109..... | 1.26 | REL209-110..... | 1.54 |
| ASS204N..... | AELS207-107N..... | .98 | AR209..... | 1.35 | REL209-111..... | 1.54 |
| ASS204-012N..... | AELS208N..... | 1.46 | AR209-110..... | 1.52 | REL209-112..... | 1.39 |
| ASS205N..... | AELS208-108N..... | 1.41 | AR209-111..... | 1.46 | REL210..... | 1.61 |
| ASS205-013N..... | AELS208-109N..... | 1.34 | AR209-112..... | 1.37 | REL210-113..... | 1.85 |
| ASS205-014N..... | JEL2 SERIES | | AR210..... | 1.48 | REL210-114..... | 1.76 |
| ASS205-015N..... | JEL201..... | .26 | AR210-113..... | 1.70 | REL210-115..... | 1.65 |
| ASS205-100N..... | JEL201-008..... | .25 | AR210-114..... | 1.61 | REL210-200..... | 1.57 |
| ASS206N..... | JEL202..... | .22 | AR210-115..... | 1.52 | REL211..... | 2.25 |
| ASS206-101N..... | JEL202-009..... | .24 | AR210-200..... | 1.43 | REL211-200..... | 2.58 |
| ASS206-102N..... | JEL202-010..... | .22 | UK2 SERIES | | REL211-201..... | 2.47 |
| ASS206-103N..... | JEL203..... | .20 | UK205D1: H2305X..... | .55 | REL211-202..... | 2.34 |
| ASS206-104N..... | JEL203-011..... | .20 | UK205D1: HE2305..... | .57 | REL211-203..... | 2.21 |
| ASS207N..... | JEL204..... | .35 | UK206D1: H2306X..... | .79 | REL212..... | 3.13 |
| ASS207-104N..... | JEL204-012..... | .37 | UK206D1: HS2306..... | .86 | REL212-204..... | 3.42 |
| ASS207-105N..... | JEL205..... | .42 | UK206D1: HE2306X..... | .78 | REL212-205..... | 3.26 |
| ASS207-106N..... | JEL205-013..... | .50 | UK207D1: H2307X..... | 1.27 | REL212-206..... | 3.11 |
| ASS207-107N..... | JEL205-014..... | .47 | UK207D1: HS2307..... | 1.30 | REL212-207..... | 2.93 |
| ASS208N..... | JEL205-015..... | .44 | UK208D1: H2308X..... | 1.63 | UC2 SERIES | |
| ASS208-108N..... | JEL205-100..... | .41 | UK208D1: HE2308X..... | 1.77 | UC201D1..... | .46 |
| ASS208-109N..... | JEL206..... | .71 | UK208D1: HS2308X..... | 1.63 | UC201-008D1..... | .46 |
| AEL2 SERIES | JEL206-101..... | .78 | UK209D1: H2309X..... | 1.83 | UC202D1..... | .44 |
| AEL201..... | JEL206-102..... | .73 | UK209D1: HA2309..... | 2.01 | UC202-009D1..... | .44 |
| AEL201-008..... | JEL206-103..... | .69 | UK209D1: HE2309X..... | 1.93 | UC202-010D1..... | .42 |
| AEL202..... | JEL206-104..... | .64 | UK209D1: HS2309X..... | 1.76 | UC203D1..... | .40 |
| AEL202-009..... | JEL207..... | 1.10 | UK210D1: H2310X..... | 2.14 | UC203-011D1..... | .39 |
| AEL202-010..... | JEL207-104..... | 1.22 | UK210D1: HS2310..... | 2.38 | UC204D1..... | .37 |
| AEL203..... | JEL207-105..... | 1.16 | UK210D1: HA2310..... | 2.28 | UC204-012D1..... | .39 |
| AEL203-011..... | JEL207-106..... | 1.11 | UK210D1: HE2310X..... | 2.18 | UC205D1..... | .44 |
| AEL204..... | JEL207-107..... | 1.05 | UK211D1: H2311X..... | 2.78 | UC205-013D1..... | .53 |
| AEL204-012..... | JEL208..... | 1.43 | UK211D1: HS2311..... | 2.96 | UC205-014D1..... | .51 |
| AEL205..... | JEL208-108..... | 1.53 | UK211D1: HA2311..... | 2.84 | UC205-015D1..... | .46 |
| AEL205-013..... | JEL208-109..... | 1.46 | UK211D1: HE2311XY..... | 2.70 | UC205-100D1..... | .44 |
| AEL205-014..... | JEL209..... | 1.69 | UK212D1: H2312X..... | 3.51 | UC206D1..... | .73 |
| AEL205-015..... | JEL209-110..... | 1.87 | UK212D1: HS2312..... | 3.60 | UC206-101D1..... | .82 |
| AEL205-100..... | JEL209-111..... | 1.79 | UK213D1: H2313X..... | 4.41 | UC206-102D1..... | .77 |
| AEL206..... | JEL209-112..... | 1.72 | UK213D1: HA2313X..... | 4.86 | UC206-103D1..... | .73 |



Bearing Series

AS2 SERIES

AS201.....

.22

Bearing Number

Weight (lbs)

BALL BEARING INSERTS

LBS.

Table listing bearing models and weights for UC206-104D1 through UCX13D1.

Table listing bearing models and weights for UCX13-208D1 through UC320-315D1.

Table listing bearing models and weights for UCS201D1N through UCS308-108D1.

Table listing bearing models and weights for UCS309D1 through UEL211-200D1.



| BALL BEARING INSERTS | | LBS. |
|----------------------|------|------|
| UEL211-201D1 | 3.12 | |
| UEL211-202D1 | 3.02 | |
| UEL211-203D1 | 2.90 | |
| UEL212D1 | 4.12 | |
| UEL212-204D1 | 4.38 | |
| UEL212-206D1 | 4.05 | |
| UEL212-207D1 | 3.88 | |
| UEL3 SERIES | | |
| UEL305D1 | .95 | |
| UEL305-014D1 | 1.05 | |
| UEL305-015D1 | 1.01 | |
| UEL305-100D1 | .96 | |
| UEL306D1 | 1.52 | |
| UEL306-102D1 | 1.51 | |
| UEL306-103D1 | 1.45 | |
| UEL307D1 | 1.76 | |
| UEL307-104D1 | 1.92 | |
| UEL307-105D1 | 1.84 | |
| UEL307-106D1 | 1.77 | |
| UEL307-107D1 | 1.69 | |
| UEL308D1 | 2.38 | |
| UEL308-108D1 | 2.58 | |
| UEL309D1 | 3.20 | |
| UEL309-110D1 | 3.36 | |
| UEL309-111D1 | 3.26 | |
| UEL309-112D1 | 3.15 | |
| UEL310D1 | 4.10 | |
| UEL310-114D1 | 4.29 | |
| UEL310-115D1 | 4.15 | |
| UEL311D1 | 5.16 | |
| UEL311-200D1 | 5.58 | |
| UEL311-202D1 | 5.25 | |
| UEL311-203D1 | 5.08 | |
| UEL312D1 | 6.48 | |
| UEL312-204D1 | 6.80 | |
| UEL312-206D1 | 6.48 | |
| UEL312-207D1 | 6.19 | |
| UEL313D1 | 8.09 | |
| UEL313-208D1 | 8.49 | |
| UEL314D1 | 9.70 | |
| UEL314-211D1 | 10.2 | |
| UEL314-212D1 | 9.96 | |
| UEL315D1 | 11.8 | |
| UEL315-215D1 | 12.7 | |
| UEL315-300D1 | 12.5 | |
| UEL316D1 | 14.8 | |
| UEL316-302D1 | 14.6 | |
| UEL316-303D1 | 14.9 | |
| UEL317D1 | 17.6 | |
| UEL317-304D1 | 17.7 | |
| UEL318D1 | 20.1 | |
| UEL318-307D1 | 20.7 | |
| UEL318-308D1 | 20.2 | |
| UEL319D1 | 22.9 | |
| UEL319-312D1 | 22.6 | |
| UEL320D1 | 28.7 | |
| UEL320-315D1 | 27.6 | |
| UEL320-400D1 | 27.0 | |
| UEL321D1 | 32.2 | |
| UEL322D1 | 37.9 | |



Bearing Series → **AS2 SERIES**

AS201..... 11,000

Bearing Number

Speed Limit (RPMs)

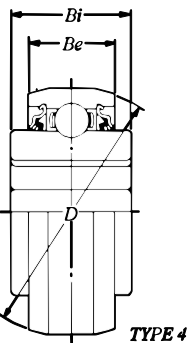
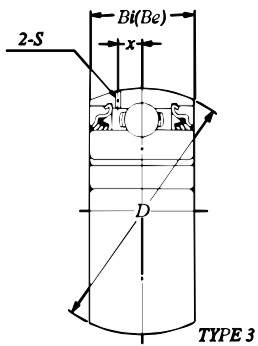
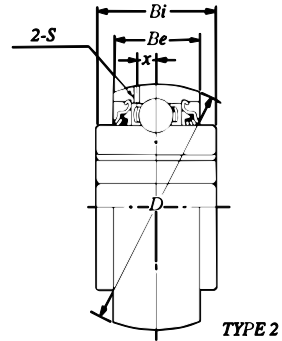
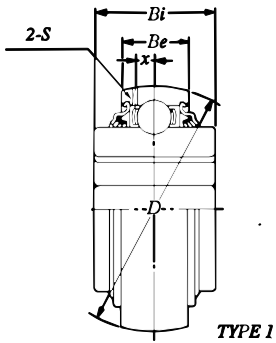
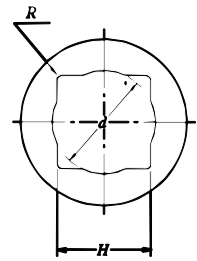
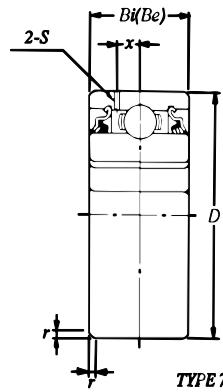
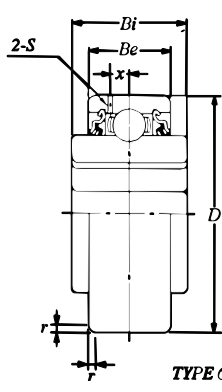
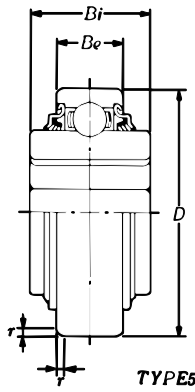
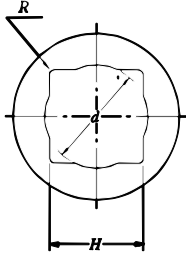
BALL BEARING INSERTS

RPMs

| | | | | | | | |
|-------------------|-------|--------------------|--------|--------------------|-------|--------------------|-------|
| UC206-104D1..... | 4,900 | UC314D1..... | 2,100 | UCS3 SERIES | | UEL208-109D1..... | 3,700 |
| UC207D1..... | 4,200 | UC314-211D1..... | 2,100 | UCS305D1..... | 5,400 | UEL209D1..... | 3,500 |
| UC207-104D1..... | 4,200 | UC314-212D1..... | 2,100 | UCS305-014D1..... | 5,400 | UEL209-110D1..... | 3,500 |
| UC207-105D1..... | 4,200 | UC315D1..... | 1,900 | UCS305-015D1..... | 5,400 | UEL209-111D1..... | 3,500 |
| UC207-106D1..... | 4,200 | UC315-215D1..... | 1,900 | UCS305-100D1..... | 5,400 | UEL209-112D1..... | 3,500 |
| UC207-107D1..... | 4,200 | UC315-300D1..... | 1,900 | UCS306D1..... | 4,400 | UEL210D1..... | 3,100 |
| UC208D1..... | 3,700 | UC316D1..... | 1,800 | UCS306-102D1..... | 4,400 | UEL210-113D1..... | 3,100 |
| UC208-108D1..... | 3,700 | UC316-302D1..... | 1,800 | UCS306-103D1..... | 4,400 | UEL210-114D1..... | 3,100 |
| UC208-109D1..... | 3,700 | UC316-303D1..... | 1,800 | UCS307D1..... | 4,000 | UEL210-115D1..... | 3,100 |
| UC209D1..... | 3,500 | UC317D1..... | 1,700 | UCS307-104D1..... | 4,000 | UEL210-200D1..... | 3,100 |
| UC209-110D1..... | 3,500 | UC317-304D1..... | 1,700 | UCS307-105D1..... | 4,000 | UEL211D1..... | 2,900 |
| UC209-111D1..... | 3,500 | UC318D1..... | 1,600 | UCS307-106D1..... | 4,000 | UEL211-200D1..... | 2,900 |
| UC209-112D1..... | 3,500 | UC318-307D1..... | 1,600 | UCS307-107D1..... | 4,000 | UEL211-201D1..... | 2,900 |
| UC210D1..... | 3,100 | UC318-308D1..... | 1,600 | UCS308D1..... | 3,500 | UEL211-202D1..... | 2,900 |
| UC210-113D1..... | 3,100 | UC319D1..... | 1,500 | UCS308-108D1..... | 3,500 | UEL211-203D1..... | 2,900 |
| UC210-114D1..... | 3,100 | UC319-312D1..... | 1,500 | UCS309D1..... | 3,100 | UEL212D1..... | 2,500 |
| UC210-115D1..... | 3,100 | UC320D1..... | 1,500 | UCS309-110D1..... | 3,100 | UEL212-204D1..... | 2,500 |
| UC210-200D1..... | 3,100 | UC320-315D1..... | 1,500 | UCS309-111D1..... | 3,100 | UEL212-206D1..... | 2,500 |
| UC211D1..... | 2,900 | UC320-400D1..... | 1,500 | UCS309-112D1..... | 3,100 | UEL212-207D1..... | 2,500 |
| UC211-200D1..... | 2,900 | UC321D1..... | 1,400 | UCS310D1..... | 2,800 | UEL3 SERIES | |
| UC211-201D1..... | 2,900 | UC322D1..... | 1,300 | UCS310-114D1..... | 2,800 | UEL305D1..... | 5,400 |
| UC211-202D1..... | 2,900 | UCS2 SERIES | | UCS310-115D1..... | 2,800 | UEL305-014D1..... | 5,400 |
| UC211-203D1..... | 2,900 | UCS201D1N..... | 11,000 | UCS311D1..... | 2,600 | UEL305-015D1..... | 5,400 |
| UC212D1..... | 2,500 | UCS201-008D1N..... | 11,000 | UCS311-200D1..... | 2,600 | UEL305-100D1..... | 5,400 |
| UC212-204D1..... | 2,500 | UCS202D1N..... | 10,000 | UCS311-202D1..... | 2,600 | UEL306D1..... | 4,400 |
| UC212-206D1..... | 2,500 | UCS202-009D1N..... | 10,000 | UCS311-203D1..... | 2,600 | UEL306-102D1..... | 4,400 |
| UC212-207D1..... | 2,500 | UCS202-010D1N..... | 10,000 | UCS312D1..... | 2,400 | UEL306-103D1..... | 4,400 |
| UC213D1..... | 2,400 | UCS203D1N..... | 8,000 | UCS312-204D1..... | 2,400 | UEL307D1..... | 4,000 |
| UC213-208D1..... | 2,400 | UCS203D1N..... | 8,000 | UCS312-204D1..... | 2,400 | UEL307-104D1..... | 4,000 |
| UC214D1..... | 2,300 | UCS203-011D1N..... | 8,000 | UCS312-207D1..... | 2,400 | UEL307-105D1..... | 4,000 |
| UC214-211D1..... | 2,300 | UCS204D1N..... | 6,700 | UCS313D1..... | 2,200 | UEL307-106D1..... | 4,000 |
| UC214-212D1..... | 2,300 | UCS204-012D1N..... | 6,700 | UCS313-208D1..... | 2,200 | UEL307-107D1..... | 4,000 |
| UC215D1..... | 2,100 | UCS205D1N..... | 5,900 | UCS314D1..... | 2,100 | UEL308D1..... | 3,500 |
| UC215-215D1..... | 2,100 | UCS205-013D1N..... | 5,900 | UCS314-211D1..... | 2,100 | UEL308-108D1..... | 3,500 |
| UC215-300D1..... | 2,100 | UCS205-014D1N..... | 5,900 | UCS314-212D1..... | 2,100 | UEL309D1..... | 3,100 |
| UC216D1..... | 2,000 | UCS205-015D1N..... | 5,900 | UCS315D1..... | 1,900 | UEL309-110D1..... | 3,100 |
| UC216-302D1..... | 2,000 | UCS205-100D1N..... | 5,900 | UCS315-215D1..... | 1,900 | UEL309-111D1..... | 3,100 |
| UC217D1..... | 1,900 | UCS206D1N..... | 4,900 | UCS316D1..... | 1,800 | UEL309-112D1..... | 3,100 |
| UC217-304D1..... | 1,900 | UCS206-101D1N..... | 4,900 | UCS316-302D1..... | 1,800 | UEL310D1..... | 2,800 |
| UC218D1..... | 1,700 | UCS206-102D1N..... | 4,900 | UCS316-303D1..... | 1,800 | UEL310-114D1..... | 2,800 |
| UC218-308D1..... | 1,700 | UCS206-103D1N..... | 4,900 | UCS317D1..... | 1,700 | UEL310-115D1..... | 2,800 |
| UC3 SERIES | | UCS207D1N..... | 4,200 | UCS317D1..... | 1,700 | UEL311D1..... | 2,600 |
| UC305D1..... | 5,400 | UCS207-104D1N..... | 4,200 | UCS317-304D1..... | 1,700 | UEL311-200D1..... | 2,600 |
| UC305-014D1..... | 5,400 | UCS207-105D1N..... | 4,200 | UCS318D1..... | 1,600 | UEL311-202D1..... | 2,600 |
| UC305-015D1..... | 5,400 | UCS207-106D1N..... | 4,200 | UCS318-307D1..... | 1,600 | UEL311-203D1..... | 2,600 |
| UC305-100D1..... | 5,400 | UCS207-107D1N..... | 4,200 | UCS318-308D1..... | 1,600 | UEL312D1..... | 2,400 |
| UC306D1..... | 4,400 | UCS208D1N..... | 3,700 | UCS319D1..... | 1,500 | UEL312-204D1..... | 2,400 |
| UC306-102D1..... | 4,400 | UCS208-108D1N..... | 3,700 | UCS319-312D1..... | 1,500 | UEL312-206D1..... | 2,400 |
| UC306-103D1..... | 4,400 | UCS208-109D1N..... | 3,700 | UCS320D1..... | 1,500 | UEL312-207D1..... | 2,400 |
| UC307D1..... | 4,000 | UCS209D1N..... | 3,500 | UCS320-315D1..... | 1,500 | UEL313D1..... | 2,200 |
| UC307-104D1..... | 4,000 | UCS209-110D1N..... | 3,500 | UCS320-400D1..... | 1,500 | UEL313-208D1..... | 2,200 |
| UC307-105D1..... | 4,000 | UCS209-111D1N..... | 3,500 | UCS321D1..... | 1,400 | UEL314D1..... | 2,100 |
| UC307-106D1..... | 4,000 | UCS209-112D1N..... | 3,500 | UCS322D1..... | 1,300 | UEL314-211D1..... | 2,100 |
| UC307-107D1..... | 4,000 | UCS210D1N..... | 3,100 | UEL2 SERIES | | UEL314-212D1..... | 2,100 |
| UC308D1..... | 3,500 | UCS210-113D1N..... | 3,100 | UEL204D1..... | 6,700 | UEL315D1..... | 1,900 |
| UC308-108D1..... | 3,500 | UCS210-114D1N..... | 3,100 | UEL204-012D1..... | 6,700 | UEL315-215D1..... | 1,900 |
| UC309D1..... | 3,100 | UCS210-115D1N..... | 3,100 | UEL205D1..... | 5,900 | UEL315-300D1..... | 1,900 |
| UC309-110D1..... | 3,100 | UCS211D1N..... | 2,900 | UEL205-013D1..... | 5,900 | UEL316D1..... | 1,800 |
| UC309-111D1..... | 3,100 | UCS211-200D1N..... | 2,900 | UEL205-014D1..... | 5,900 | UEL316-302D1..... | 1,800 |
| UC309-112D1..... | 3,100 | UCS211-201D1N..... | 2,900 | UEL205-015D1..... | 5,900 | UEL316-303D1..... | 1,800 |
| UC310D1..... | 2,800 | UCS211-202D1N..... | 2,900 | UEL205-100D1..... | 5,900 | UEL317D1..... | 1,700 |
| UC310-114D1..... | 2,800 | UCS211-203D1N..... | 2,900 | UEL206D1..... | 4,900 | UEL317-304D1..... | 1,700 |
| UC310-115D1..... | 2,800 | UCS212D1..... | 2,500 | UEL206-101D1..... | 4,900 | UEL318D1..... | 1,600 |
| UC311D1..... | 2,600 | UCS212-204D1..... | 2,500 | UEL206-102D1..... | 4,900 | UEL318-307D1..... | 1,600 |
| UC311-200D1..... | 2,600 | UCS212-206D1..... | 2,500 | UEL206-103D1..... | 4,900 | UEL318-308D1..... | 1,600 |
| UC311-202D1..... | 2,600 | UCS212-207D1..... | 2,500 | UEL206-104D1..... | 4,900 | UEL319D1..... | 1,500 |
| UC311-203D1..... | 2,600 | UCS213D1..... | 2,400 | UEL207D1..... | 4,200 | UEL319-312D1..... | 1,500 |
| UC312D1..... | 2,400 | UCS213-208D1..... | 2,400 | UEL207-104D1..... | 4,200 | UEL320D1..... | 1,500 |
| UC312-204D1..... | 2,400 | UCS214D1..... | 2,300 | UEL207-105D1..... | 4,200 | UEL320-315D1..... | 1,500 |
| UC312-206D1..... | 2,400 | UCS215D1..... | 2,100 | UEL207-106D1..... | 4,200 | UEL320-400D1..... | 1,500 |
| UC312-207D1..... | 2,400 | UCS216D1..... | 2,000 | UEL207-107D1..... | 4,200 | UEL321D1..... | 1,400 |
| UC313D1..... | 2,200 | UCS217D1..... | 1,900 | UEL208D1..... | 3,700 | UEL322D1..... | 1,300 |
| UC313-208D1..... | 2,200 | UCS218D1..... | 1,700 | UEL208-108D1..... | 3,700 | | |



Units: INCHES

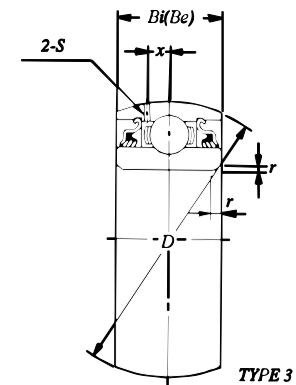
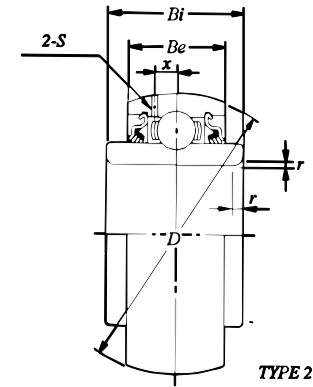
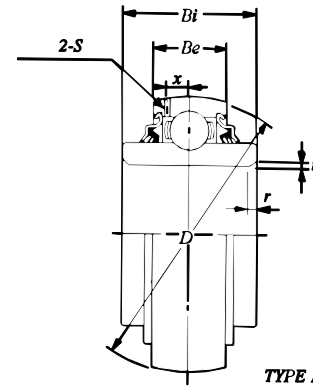
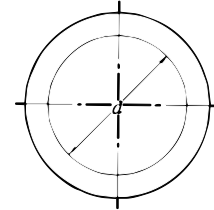
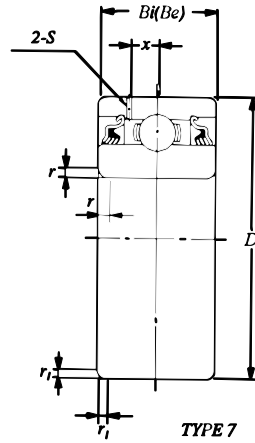
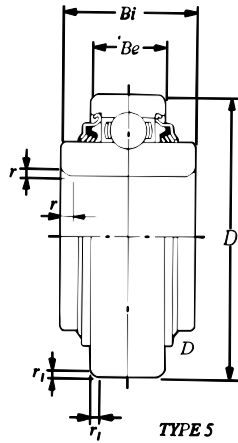
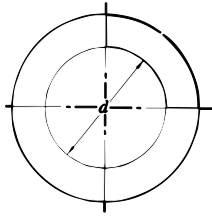


DISC HARROW BEARINGS

| Bearing No. | Type | Shaft Size | Sq. Bore Dim. ±.005 H | Max. d | Max. R | Outside Diameter D | Ring Widths | | r | s | x | Basic Load Ratings (lbs) | | Weight (lbs) |
|----------------|------|------------|-----------------------|--------|--------|--------------------|-------------|-------|------|------|------|--------------------------|----------------|--------------|
| | | | | | | | Be | Bi | | | | C _D | C _S | |
| 4AS08-7/8 | 4 | 7/8 | .9050 | .961 | .089 | 3.4385/3.4375 | 1.189 | 1.437 | — | — | — | 6,500 | 4,000 | 2.02 |
| 1AS08-1 | 1 | 1 | 1.0300 | 1.094 | .089 | 3.1496/3.1491 | .709 | 1.437 | — | — | — | 6,500 | 4,000 | 1.38 |
| 2AS08-1 | 2 | 1 | 1.0300 | 1.094 | .089 | 3.1496/3.1491 | 1.189 | 1.437 | — | — | — | 6,500 | 4,000 | 1.68 |
| 4AS08-1 | 4 | 1 | 1.0300 | 1.094 | .089 | 3.4385/3.4375 | 1.189 | 1.437 | — | — | — | 6,500 | 4,000 | 1.94 |
| 1AS08-1 1/8 | 1 | 1 1/8 | 1.1800 | 1.236 | .089 | 3.1496/3.1491 | .709 | 1.437 | — | — | — | 6,500 | 4,000 | 1.27 |
| 2AS08-1 1/8 | 2 | 1 1/8 | 1.1800 | 1.236 | .089 | 3.1496/3.1491 | 1.189 | 1.437 | — | — | — | 6,500 | 4,000 | 1.57 |
| 2AS08-1 1/8 D1 | 2 | 1 1/8 | 1.1800 | 1.236 | .089 | 3.1496/3.1491 | 1.189 | 1.437 | — | .087 | .260 | 6,500 | 4,000 | 1.57 |
| 4AS08-1 1/8 | 4 | 1 1/8 | 1.1800 | 1.236 | .089 | 3.4385/3.4375 | 1.189 | 1.437 | — | — | — | 6,500 | 4,000 | 1.83 |
| 1AS08-1 1/2 D1 | 1 | 1 1/2 | 1.1811 | 1.252 | .089 | 3.1496/3.1491 | .827 | 1.437 | — | .087 | .260 | 6,500 | 4,000 | 1.27 |
| 2AS09-1 1/4 D1 | 2 | 1 1/4 | 1.2900 | 1.370 | .089 | 3.3465/3.3459 | 1.189 | 1.437 | — | .087 | .264 | 7,350 | 4,600 | 1.75 |
| 4AS09-1 1/4 | 4 | 1 1/4 | 1.2900 | 1.370 | .089 | 3.4424/3.4346 | 1.189 | 1.437 | — | — | — | 7,350 | 4,600 | 1.81 |
| 2AS10-1 1/8 | 2 | 1 1/8 | 1.1800 | 1.236 | .089 | 3.5433/3.5427 | 1.189 | 1.437 | — | — | — | 7,900 | 5,200 | 2.13 |
| 3AS10-1 1/8 | 3 | 1 1/8 | 1.1800 | 1.236 | .089 | 3.5433/3.5427 | 1.189 | 1.189 | — | — | — | 7,900 | 5,200 | 1.90 |
| 1AS11-1 1/2 D1 | 1 | 1 1/2 | 1.5311 | 1.622 | .089 | 3.9370-3.9364 | .984 | 1.750 | — | .098 | .299 | 9,750 | 6,550 | 2.56 |
| 3AS11-1 1/2 | 3 | 1 1/2 | 1.5311 | 1.622 | .089 | 3.9370-3.9364 | 1.311 | 1.311 | — | — | — | 9,750 | 6,550 | 2.40 |
| 3AS11-1 1/2 D1 | 3 | 1 1/2 | 1.5311 | 1.622 | .089 | 3.9370-3.9364 | 1.311 | 1.311 | — | .098 | .299 | 9,750 | 6,550 | 2.40 |
| 4AS11-1 1/2 | 4 | 1 1/2 | 1.5311 | 1.622 | .089 | 4.1250/4.1200 | 1.437 | 1.750 | — | — | — | 9,750 | 6,550 | 3.20 |
| 3AS14-2D1 | 3 | 2 | 2.0551 | 2.161 | .157 | 4.9213/4.9205 | 1.563 | 1.563 | — | .118 | .370 | 14,000 | 9,900 | 4.30 |
| 5AS08-1 1/8 | 5 | 1 1/8 | 1.1800 | 1.236 | .089 | 3.1496/3.1491 | .709 | 1.437 | .079 | — | — | 6,550 | 4,000 | 1.27 |
| 6AS08-1 1/8 D1 | 6 | 1 1/8 | 1.1800 | 1.236 | .089 | 3.1496/3.1491 | 1.189 | 1.437 | .079 | .087 | .264 | 6,550 | 4,000 | 1.57 |
| 6AS09-1 1/4 | 6 | 1 1/4 | 1.2900 | 1.370 | .089 | 3.3460/3.3450 | 1.189 | 1.437 | .079 | — | — | 7,350 | 4,600 | 1.75 |
| 6AS09-1 1/4 D1 | 6 | 1 1/4 | 1.2900 | 1.370 | .089 | 3.3460/3.3450 | 1.189 | 1.437 | .079 | .087 | .260 | 7,350 | 4,600 | 1.75 |
| 7AS10-1 1/8 D1 | 7 | 1 1/8 | 1.1800 | 1.236 | .089 | 3.5433/3.5427 | 1.189 | 1.189 | .079 | 0.87 | .264 | 7,900 | 5,200 | 1.90 |
| 6AS11-1 1/2 V1 | 6 | 1 1/2 | 1.5311 | 1.622 | .089 | 4.0000/3.9990 | 1.437 | 1.750 | .098 | — | — | 9,750 | 6,550 | 3.06 |
| 7AS11-1 1/2 | 7 | 1 1/2 | 1.5311 | 1.622 | .089 | 3.9370/3.9364 | 1.311 | 1.311 | .098 | — | — | 9,750 | 6,550 | 2.40 |
| 7AS11-1 1/2 D1 | 7 | 1 1/2 | 1.5311 | 1.622 | .089 | 3.9370/3.9364 | 1.311 | 1.311 | .098 | .098 | .299 | 9,750 | 6,550 | 2.40 |

Ring width tolerances are:
 Sizes up to and including AS110 +.000 to -.005
 AS11 through A14, +.000 to -.006

Units: INCHES

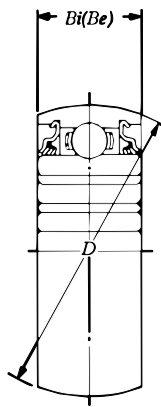
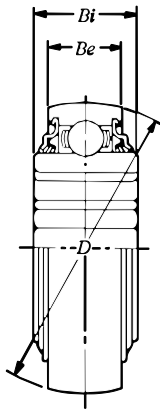
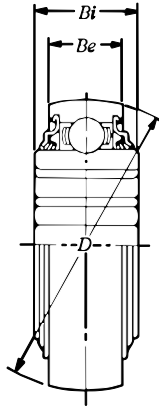
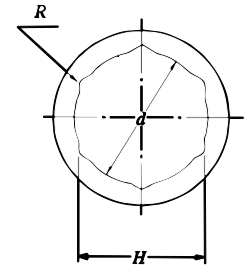
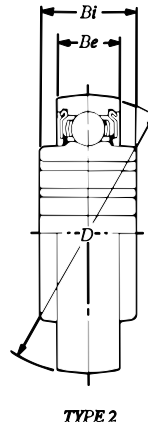
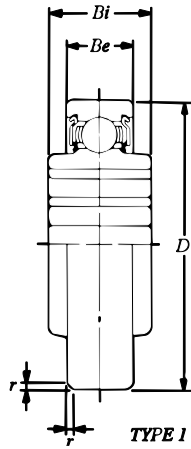


DISC HARROW BEARINGS

| Bearing No. | Type | Bore <i>d</i> | Outside Diameter <i>D</i> | Ring Widths | | <i>r</i> | <i>r_i</i> | <i>s</i> | <i>x</i> | Basic Load Ratings (lbs) | | Weight (lbs) |
|------------------|------|------------------|------------------------------|-------------|-----------|----------|----------------------|----------|----------|--------------------------|-----------------------------|--------------|
| | | | | <i>Be</i> | <i>Bi</i> | | | | | Dynamic <i>C</i> | Static <i>C_o</i> | |
| 1AC08-1 3/16 | 1 | 1.1880/1.1875 | 3.1496/3.1491 | .709 | 1.189 | .079 | — | — | — | 6,550 | 4,000 | 1.22 |
| 2AC08-1 1/2D1 | 2 | 1.5005/1.5000 | 3.1496/3.1491 | 1.189 | 1.689 | .079 | — | .087 | .260 | 6,550 | 4,000 | 1.60 |
| 1AC09D1V1 | 1 | 1.7776/1.7717 | 3.3465/3.3459 | .866 | 1.437 | .079 | — | .087 | .264 | 7,350 | 4,600 | 1.30 |
| 3AC09 | 3 | 1.7717/1.7712 | 3.3465/3.3459 | 1.189 | 1.189 | .079 | — | — | — | 7,350 | 4,600 | 1.44 |
| 3AC09D1 | 3 | 1.7717/1.7712 | 3.3465/3.3459 | 1.189 | 1.189 | .079 | — | .087 | .284 | 7,350 | 4,600 | 1.44 |
| 3AC09-1 1/2 | 3 | 1.5350/1.5250 | 3.3465/3.3459 | 1.189 | 1.189 | .079 | — | — | — | 7,350 | 4,600 | 1.58 |
| 3AC09-1 1/2D1 | 3 | 1.5350/1.5250 | 3.3465/3.3459 | 1.189 | 1.189 | .079 | — | .087 | .264 | 7,350 | 4,600 | 1.58 |
| 3AC10-1 3/4 | 3 | 1.7850/1.7750 | 3.5433/3.5427 | 1.189 | 1.189 | .079 | — | — | — | 7,900 | 5,200 | 1.68 |
| 3AC10-1 3/4D1 | 3 | 1.7850/1.7750 | 3.5433/3.5427 | 1.189 | 1.189 | .079 | — | .087 | .264 | 7,900 | 5,200 | 1.68 |
| 3AC10-1 15/16 | 3 | 1.9380/1.9375 | 3.5433/3.5427 | 1.189 | 1.189 | .079 | — | — | — | 7,900 | 5,200 | 1.57 |
| 3AC10-1 15/16D1 | 3 | 1.9380/1.9375 | 3.5433/3.5427 | 1.189 | 1.189 | .079 | — | .087 | .264 | 7,900 | 5,200 | 1.57 |
| 1AC11-2 3/16D1V1 | 1 | 2.1939/2.1880 | 3.9370/3.9364 | .984 | 1.563 | .098 | — | .098 | .299 | 9,750 | 6,550 | 1.92 |
| 3AC11-2 3/16 | 3 | 2.1880/2.1874 | 3.9370/3.9364 | 1.311 | 1.311 | .098 | — | — | — | 9,750 | 6,550 | 2.11 |
| 3AC11-2 3/16D1 | 3 | 2.1880/2.1874 | 3.9370/3.9364 | 1.311 | 1.311 | .098 | — | .098 | .299 | 9,750 | 6,550 | 2.11 |
| 3AC14D1 | 3 | 2.7559/2.7553 | 4.9213/4.9205 | 1.563 | 1.563 | .098 | — | .118 | .370 | 14,000 | 9,900 | 3.44 |
| 5AC10-1 15/16 | 5 | 1.9380/1.9375 | 3.5433/3.5427 | .787 | 1.937 | .079 | .079 | — | — | 7,900 | 5,200 | 1.62 |
| 7AC10-1 15/16 | 7 | 1.9380/1.9375 | 3.5433/3.5427 | 1.189 | 1.189 | .079 | .079 | — | — | 7,900 | 5,200 | 1.57 |
| 7AC11-2 3/16D1 | 7 | 2.1880/2.1874 | 3.9370/3.9364 | 1.311 | 1.311 | .098 | .098 | .098 | .299 | 9,750 | 6,550 | 2.11 |

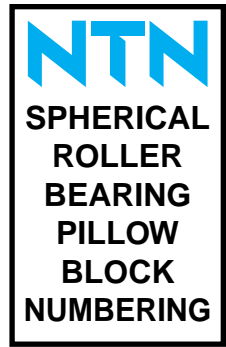


Units: INCHES

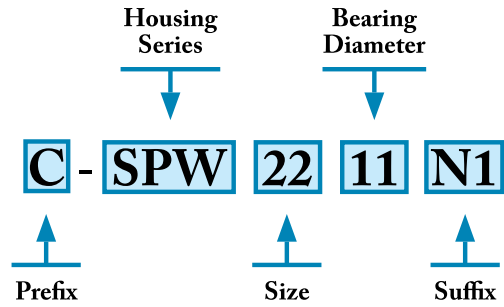


HEX BORE BEARINGS

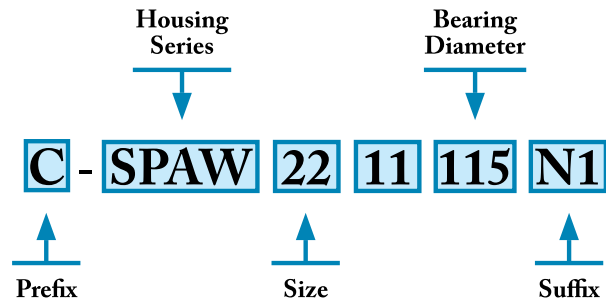
| Bearing No. | Type | Shaft Size | Hex Bore +0.005 -0.000 H | Max. | | Outside Diameter D | Ring Widths ±.005 | | r | Basic Load Ratings (lbs) | | Weight (lbs) |
|---------------|------|------------|-----------------------------------|-------|------|-----------------------|----------------------|-------|------|--------------------------|-----------|--------------|
| | | | | d | R | | Be | Bi | | Dynamic C | Static Co | |
| 1AH04-1 1/16 | 1 | 1 1/16 | .695 | .713 | .010 | 1.8504/1.8499 | .551 | .827 | .059 | 2,890 | 1,500 | .289 |
| 1AH05-7/8 | 1 | 7/8 | .876 | .898 | .010 | 2.0472/2.0467 | .591 | 1.000 | .059 | 3,150 | 1,770 | .379 |
| 2AH05-7/8 | 2 | 7/8 | .876 | .898 | .010 | 2.0472/2.0467 | .591 | 1.000 | — | 3,150 | 1,770 | .379 |
| 1AH06-1 | 1 | 1 | 1.001 | 1.028 | .010 | 2.4409/2.4404 | .630 | .945 | .059 | 4,400 | 2,540 | .558 |
| 2AH06-1 | 2 | 1 | 1.001 | 1.028 | .010 | 2.4409/2.4404 | .630 | .945 | — | 4,400 | 2,540 | .558 |
| 2AH07-1 1/8 | 2 | 1 1/8 | 1.126 | 1.154 | .010 | 2.8346/2.8341 | .669 | 1.484 | — | 5,750 | 3,450 | 1.02 |
| 2AH08-1 1/4V2 | 2 | 1 1/4 | 1.260 | 1.287 | .010 | 3.1496/3.1491 | .709 | 1.437 | — | 6,550 | 4,000 | 1.28 |
| 2AH09-1 1/2 | 2 | 1 1/2 | 1.501 | 1.535 | .010 | 3.3465/3.3459 | .748 | 1.181 | — | 7,350 | 4,600 | 1.22 |
| 3AH10-1 5/8V2 | 3 | 1 5/8 | 1.626 | 1.665 | .010 | 3.5433/3.5427 | 1.189 | 1.189 | — | 7,900 | 5,200 | 1.63 |



Metric Series



Inch Series



1. PREFIX

C: Taconite service seals
 CM: Taconite service seal + end cover

2. HOUSING SERIES

SPW: Sealed spherical pillow block, metric with inch shaft dimension
 SPAW: Sealed spherical pillow block, inch*
 SFCW: Sealed spherical flanged block, metric
 SAF: Split pillow block, cast iron housing
 SAFS: Split pillow block, cast steel housing
 PSAF: Split pillow block, cast iron, 4 bolt option
 FSPAW: Sealed pillow block, inch, 4 bolt option

3. BEARING

W22xx: MX-W222xx Series sealed spherical roller bearing

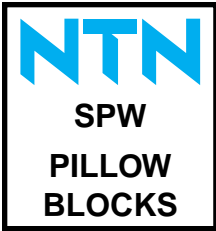
4. Bore Diameter (-Xnn)

X: Number of inches
 nn: Number of 1/16 inches
 e.g.: -115 indicates a 1-15/16" bore

5. SUFFIX

N1: Ductile cast iron housing
 F: Solid base
 G: One stabilizing ring included

* SPAW dimensionally the same as SAF housing



Units: Millimeters
INCHES

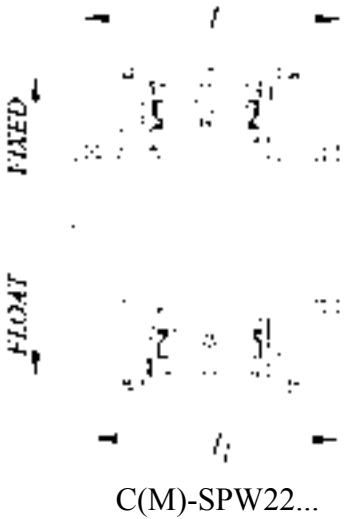


2 Bolt Base Solid Base

SPW22...

SPW PILLOW BLOCKS

| Shaft Diameter <i>d</i> Inches | Complete Pillow Block Number | Pillow Block Housing | Bearing Number | Basic Load Ratings (lbs) | | Adaptaer Locknut and Lockwasher | Weight (lbs) |
|--------------------------------------|--|--|--|--------------------------------------|---------------------------------------|--|----------------------|
| | | | | <i>Dynamic C</i> | <i>Static Co</i> | | |
| 1 15/16 50 2 | SPW2211-115N1 SPW2211N1 SPW2211-200N1 | SP211N1 SP211N1 SP211N1 | MX-W22211BLLKC3 MX-W22211BLLKC3 MX-W22211BLLKC3 | 21,000 21,000 21,000 | 24,700 24,700 24,700 | HA2311M1 H2311XM1 HE2311XYM1 | 13 13 13 |
| 2 3/16 2 1/4 60 2 3/8 | SPW2213-203N1 SPW2213-204N1 SPW2213N1 SPW2213-206N1 | SP213N1 SP213N1 SP213N1 SP213N1 | MX-W22213BLLKC3 MX-W22213BLLKC3 MX-W22213BLLKC3 MX-W22213BLLKC3 | 32,000 32,000 32,000 32,000 | 40,000 40,000 40,000 40,000 | HA2313M1 HE2313XM1 H2313XM1 HS2313XM1 | 18 18 18 18 |
| 2 7/16 2 1/2 65 | SPW2215-207N1 SPW2215-208N1 SPW2215N1 | SP215N1 SP215N1 SP215N1 | MX-W22215BLLKC3 MX-W22215BLLKC3 MX-W22215BLLKC3 | 37,500 37,500 37,500 | 50,000 50,000 50,000 | HA2315M1 HE2315XM1 H2315XM1 | 20 20 20 |
| 2 15/16 75 3 | SPW2217-215N1 SPW2217N1 SPW2217-300N1 | SP217N1 SP217N1 SP217N1 | MX-W22217BLLKC3 MX-W22217BLLKC3 MX-W22217BLLKC3 | 46,500 46,500 46,500 | 61,000 61,000 61,000 | HA2317XM1 H2317XM1 HE2317XM1 | 31 31 31 |
| 3 7/16 3 1/2 90 100 | SPW2220-307N1 SPW2220-308N1 SPW2220N1 SPW2222N1 | SP220N1 SP220N1 SP220N1 SP222N1 | MX-W22220BLLKC3 MX-W22220BLLKC3 MX-W22220BLLKC3 MX-W22222BLLKC3 | 69,500 69,500 69,500 92,000 | 92,000 92,000 92,000 128,000 | HA2320M1 HE2320XM1 H2320XM1 H2322XM1 | 54 54 54 71 |
| 3 15/16 4 | SPW2222-315N1 SPW2222-400N1 | SP222N1 SP222N1 | MX-W22222BLLKC3 MX-W22222BLLKC3 | 92,000 92,000 | 128,000 128,000 | HA2322M1 HE2322XM1 | 71 71 |
| 4 3/16 4 1/4 110 | SPW2224-403N1 SPW2224-404N1 SPW2224N1 | SP224N1 SP224N1 SP224N1 | MX-W22224BLLKC3 MX-W22224BLLKC3 MX-W22224BLLKC3 | 109,000 109,000 109,000 | 157,000 157,000 157,000 | HA2324M1 HE2324M1 H2324XM1 | 84 84 84 |
| 4 7/16 4 1/2 115 | SPW2226-407N1 SPW2226-408N1 SPW2226N1 | SP226N1 SP226N1 SP226N1 | MX-W22226BLLKC3 MX-W22226BLLKC3 MX-W22226BLLKC3 | 127,000 127,000 127,000 | 176,000 176,000 176,000 | HA2326M1 HE2326M1 H2326M1 | 101 101 101 |
| 125 4 15/16 5 | SPW2228N1 SPW2228-415N1 SPW2228-500N1 | SP228N1 SP228N1 SP228N1 | MX-W22228BLLKC3 MX-W22228BLLKC3 MX-W22228BLLKC3 | 153,000 153,000 153,000 | 218,000 218,000 218,000 | H2328M1 HA2328M1 HE2328M1 | 118 118 118 |
| 5 7/16 5 1/2 140 | SPW2232-507N1 SPW2232-508N1 SPW2232N1 | SP232N1 SP232N1 SP232N1 | MX-W22232BLLKC3 MX-W22232BLLKC3 MX-W22232BLLKC3 | 196,000 196,000 196,000 | 290,000 290,000 290,000 | HA2332M1 HE2332M1 H2332M1 | 171 171 171 |



How to Order

Example: When you order one SPW2220N1, you will receive an assembly consisting of one SP220N1 Pillow Block Housing, one MX-W22220BLLKC3 Bearing, and one H2320XM1 Adapter.

To order a solid base housing, add suffix F to the part number (example: SPW2220FN1).

When C-SPW2220N1 or CM-SPW2220N1 are specified, external covers will be supplied with the unit.

Example: "C" prefix - 2 taconite service seals

"CM" prefix - 1 taconite service seal, 1 end cover

Notes: Taconite service seals for which dimensions are shown are standard. For dimensions and availability of non-standard taconite service seals, consult NTN Engineering.

All units are supplied in float arrangement and may be converted to fixed by relocation of a snap ring.

All bearing inserts are supplied prelubricated with Shell Alvania™ 3 grease.

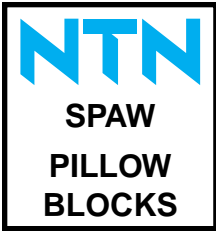
Solid base housings may be drilled for 2 or 4 bolt arrangement.

Grease fittings are provided with all units.

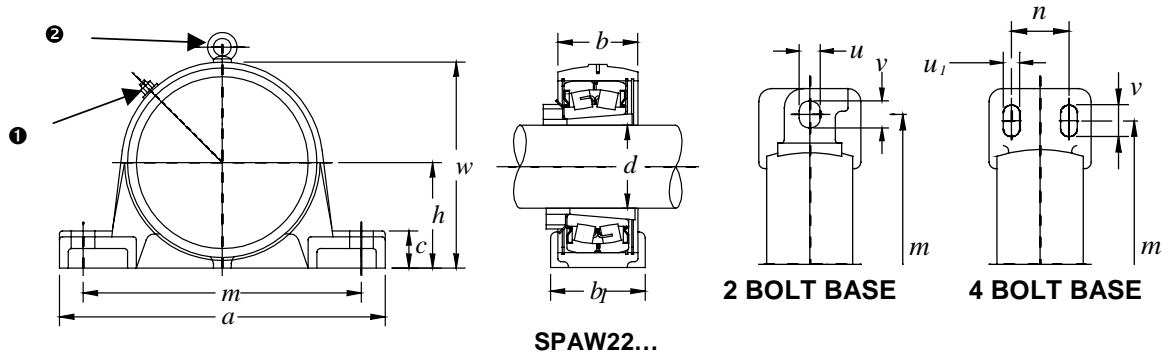
An eye bolt is provided on housings SP228N1 and SP23N1.

SPW PILLOW BLOCKS

| Complete Pillow Block Number | Dimensions (Millimeters) | | | | | | | | | | | | | Set Bolts | |
|------------------------------|--------------------------|----------|----------|-----------|----------|----------|-----------|----------|----------|----------|-----------|----------|----------|-----------|-----------|
| | <i>h</i> | <i>a</i> | <i>b</i> | <i>b1</i> | <i>c</i> | <i>m</i> | <i>m1</i> | <i>n</i> | <i>w</i> | <i>l</i> | <i>l1</i> | <i>u</i> | <i>v</i> | (2 req'd) | (4 req'd) |
| SPW2211-115N1 | 70 | 255 | 62 | 70 | 28 | 210 | 200 | 40 | 136 | 120 | 114 | 18 | 23 | M16 | M12 |
| SPW2211N1 | 70 | 255 | 62 | 70 | 28 | 210 | 200 | 40 | 136 | 120 | 114 | 18 | 23 | M16 | M12 |
| SPW2211-200N1 | 70 | 255 | 62 | 70 | 28 | 210 | 200 | 40 | 136 | 120 | 114 | 18 | 23 | M16 | M12 |
| SPW2213-203N1 | 80 | 275 | 70 | 80 | 30 | 230 | 220 | 48 | 157 | 138 | 126 | 18 | 23 | M16 | M12 |
| SPW2213-204N1 | 80 | 275 | 70 | 80 | 30 | 230 | 220 | 48 | 157 | — | — | 18 | 23 | M16 | M12 |
| SPW2213N1 | 80 | 275 | 70 | 80 | 30 | 230 | 220 | 48 | 157 | — | — | 18 | 23 | M16 | M12 |
| SPW2213-206N1 | 80 | 275 | 70 | 80 | 30 | 230 | 220 | 48 | 157 | — | — | 18 | 23 | M16 | M12 |
| SPW2215-207N1 | 80 | 280 | 72 | 80 | 30 | 230 | 220 | 48 | 163 | 132 | 123 | 18 | 23 | M16 | M12 |
| SPW2215-208N1 | 80 | 280 | 72 | 80 | 30 | 230 | 220 | 48 | 163 | — | — | 18 | 23 | M16 | M12 |
| SPW2215N1 | 80 | 280 | 72 | 80 | 30 | 230 | 220 | 48 | 163 | — | — | 18 | 23 | M16 | M12 |
| SPW2217-216N1 | 95 | 320 | 80 | 90 | 32 | 260 | 252 | 52 | 192 | 156 | 146 | 22 | 27 | M20 | M16 |
| SPW2217N1 | 95 | 320 | 80 | 90 | 32 | 260 | 252 | 52 | 192 | — | — | 22 | 27 | M20 | M16 |
| SPW2217-300N1 | 95 | 320 | 80 | 90 | 32 | 260 | 252 | 52 | 192 | — | — | 22 | 27 | M20 | M16 |
| SPW2220-307N1 | 112 | 380 | 95 | 110 | 40 | 320 | 300 | 66 | 226 | 185 | 175 | 26 | 32 | M24 | M16 |
| SPW2220-308N1 | 112 | 380 | 95 | 110 | 40 | 320 | 300 | 66 | 226 | — | — | 26 | 32 | M24 | M16 |
| SPW2220N1 | 112 | 380 | 95 | 110 | 40 | 320 | 300 | 66 | 226 | — | — | 26 | 32 | M24 | M16 |
| SPW2222N1 | 125 | 410 | 100 | 120 | 45 | 350 | 320 | 74 | 252 | — | — | 26 | 32 | M24 | M16 |
| SPW2222-315N1 | 125 | 410 | 100 | 120 | 45 | 350 | 320 | 74 | 252 | 198 | 185 | 26 | 32 | M24 | M16 |
| SPW2222-400N1 | 125 | 410 | 100 | 120 | 45 | 350 | 320 | 74 | 252 | — | — | 26 | 32 | M24 | M16 |
| SPW2224-403N1 | 140 | 410 | 105 | 120 | 45 | 350 | 330 | 74 | 274 | 203 | 190 | 26 | 32 | M24 | M16 |
| SPW2224-404N1 | 140 | 410 | 105 | 120 | 45 | 350 | 330 | 74 | 274 | — | — | 26 | 32 | M24 | M16 |
| SPW2224N1 | 140 | 410 | 105 | 120 | 45 | 350 | 330 | 74 | 274 | — | — | 26 | 32 | M24 | M16 |
| SPW2226-407N1 | 150 | 445 | 115 | 130 | 50 | 380 | 370 | 80 | 293 | 219 | 206 | 28 | 36 | M24 | M20 |
| SPW2226-408N1 | 150 | 445 | 115 | 130 | 50 | 380 | 370 | 80 | 293 | — | — | 28 | 36 | M24 | M20 |
| SPW2226N1 | 150 | 445 | 115 | 130 | 50 | 380 | 370 | 80 | 293 | — | — | 28 | 36 | M24 | M20 |
| SPW2228N1 | 150 | 500 | 120 | 150 | 50 | 420 | 400 | 80 | 305 | — | — | 33 | 42 | M30 | M24 |
| SPW2228-415N1 | 150 | 500 | 120 | 150 | 50 | 420 | 400 | 80 | 305 | 232 | 219 | 33 | 42 | M30 | M24 |
| SPW2228-500N1 | 150 | 500 | 120 | 150 | 50 | 420 | 400 | 80 | 305 | — | — | 33 | 42 | M30 | M24 |
| SPW2232-507N1 | 170 | 550 | 135 | 160 | 60 | 470 | 450 | 90 | 340 | 260 | 247 | 33 | 42 | M30 | M24 |
| SPW2232-508N1 | 170 | 550 | 135 | 160 | 60 | 470 | 450 | 90 | 340 | — | — | 33 | 42 | M30 | M24 |
| SPW2232N1 | 170 | 550 | 135 | 160 | 60 | 470 | 450 | 90 | 340 | — | — | 33 | 42 | M30 | M24 |

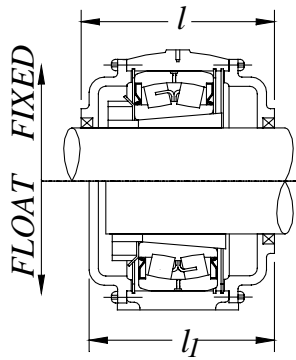


Units: Millimeters
INCHES



SPAW PILLOW BLOCKS

| Shaft Diameter <i>d</i> Inches | Complete Pillow Block Number | Flange Block Housing | Bearing Number | Basic Load Ratings (lbs) | | Adaptaer Locknut and Lockwasher | Weight (lbs) |
|--|------------------------------|----------------------|-----------------|--------------------------|------------------|---------------------------------|--------------|
| | | | | <i>Dynamic C</i> | <i>Static Co</i> | | |
| 1 ¹⁵ / ₁₆ 50 2 | SPAW2211-115N1 | SPA211N1 | MX-W22211BLLKC3 | 21,000 | 24,700 | HA2311M1 | 13 |
| | SPAW2211N1 | SPA211N1 | MX-W22211BLLKC3 | 21,000 | 24,700 | H2311XM1 | 13 |
| | SPAW2211-200N1 | SPA211N1 | MX-W22211BLLKC3 | 21,000 | 24,700 | HE2311XYM1 | 13 |
| 2 ³ / ₁₆ | SPAW2213-203N1 | SPA213N1 | MX-W22213BLLKC3 | 32,000 | 40,000 | HA2313M1 | 18 |
| | FSPA2213-203N1 | FSPA213N1 | MX-W22213BLLKC3 | 32,000 | 40,000 | HA2313M1 | 18 |
| 2 ¹ / ₄ | SPAW2213-204N1 | SPA213N1 | MX-W22213BLLKC3 | 32,000 | 40,000 | HE2313XM1 | 18 |
| | FSPA2213-204N1 | FSPA213N1 | MX-W22213BLLKC3 | 32,000 | 40,000 | HE2313XM1 | 18 |
| 60 | SPAW2213N1 | SPA213N1 | MX-W22213BLLKC3 | 32,000 | 40,000 | H2313XM1 | 18 |
| | FSPA2213N1 | FSPA213N1 | MX-W22213BLLKC3 | 32,000 | 40,000 | H2313XM1 | 18 |
| 2 ³ / ₈ | SPAW2213-206N1 | SPA213N1 | MX-W22213BLLKC3 | 32,000 | 40,000 | HS2313XM1 | 18 |
| | FSPA2213-206N1 | FSPA213N1 | MX-W22213BLLKC3 | 32,000 | 40,000 | HS2313XM1 | 18 |
| 2 ⁷ / ₁₆ | SPAW2215-207N1 | SPA215N1 | MX-W22215BLLKC3 | 37,500 | 50,000 | HA2315M1 | 20 |
| | FSPA2215-207N1 | FSPA215N1 | MX-W22215BLLKC3 | 37,500 | 50,000 | HA2315M1 | 20 |
| 2 ¹ / ₂ | SPAW2215-208N1 | SPA215N1 | MX-W22215BLLKC3 | 37,500 | 50,000 | HE2315XM1 | 20 |
| | FSPA2215-208N1 | FSPA215N1 | MX-W22215BLLKC3 | 37,500 | 50,000 | HE2315XM1 | 20 |
| 65 | SPAW2215N1 | SPA215N1 | MX-W22215BLLKC3 | 37,500 | 50,000 | H2315XM1 | 20 |
| | FSPA2215N1 | FSPA215N1 | MX-W22215BLLKC3 | 37,500 | 50,000 | H2315XM1 | 20 |
| 2 ¹⁵ / ₁₆ | SPAW2217-215N1 | SPA217N1 | MX-W22217BLLKC3 | 46,500 | 61,000 | HA2317XM1 | 31 |
| | FSPA2217-215N1 | FSPA217N1 | MX-W22217BLLKC3 | 46,500 | 61,000 | HA2317XM1 | 31 |
| 75 | SPAW2217N1 | SPA217N1 | MX-W22217BLLKC3 | 46,500 | 61,000 | H2317XM1 | 31 |
| | FSPA2217N1 | FSPA217N1 | MX-W22217BLLKC3 | 46,500 | 61,000 | H2317XM1 | 31 |
| 3 | SPAW2217-300N1 | SPA217N1 | MX-W22217BLLKC3 | 46,500 | 61,000 | HE2317XM1 | 31 |
| | FSPA2217-300N1 | FSPA217N1 | MX-W22217BLLKC3 | 46,500 | 61,000 | HE2317XM1 | 31 |
| 3 ⁷ / ₁₆ | SPAW2220-307N1 | SPA220N1 | MX-W22220BLLKC3 | 69,500 | 92,000 | HA2320M1 | 54 |
| | FSPA2220-307N1 | FSPA220N1 | MX-W22220BLLKC3 | 69,500 | 92,000 | HA2320M1 | 54 |
| 3 ¹ / ₂ | SPAW2220-308N1 | SPA220N1 | MX-W22220BLLKC3 | 69,500 | 92,000 | HE2320XM1 | 54 |
| | FSPA2220-308N1 | FSPA220N1 | MX-W22220BLLKC3 | 69,500 | 92,000 | HE2320XM1 | 54 |
| 90 | SPAW2220N1 | SPA220N1 | MX-W22220BLLKC3 | 69,500 | 92,000 | H2320XM1 | 54 |
| | FSPA2220N1 | FSPA220N1 | MX-W22220BLLKC3 | 69,500 | 92,000 | H2320XM1 | 54 |
| 100 | SPAW2222N1 | SPA222N1 | MX-W22222BLLKC3 | 92,000 | 128,000 | H2322XM1 | 71 |
| 3 ¹⁵ / ₁₆ | SPAW2222-315N1 | SPA222N1 | MX-W22222BLLKC3 | 92,000 | 128,000 | HA2322XM1 | 71 |
| | SPAW2222-400N1 | SPA222N1 | MX-W22222BLLKC3 | 92,000 | 128,000 | HE2322XM1 | 71 |
| 4 ³ / ₁₆ | SPAW2224-403N1 | SPA224N1 | MX-W22224BLLKC3 | 109,000 | 157,000 | HA2324M1 | 84 |
| | SPAW2224-404N1 | SPA224N1 | MX-W22224BLLKC3 | 109,000 | 157,000 | HE2324M1 | 84 |
| 110 | SPAW2224N1 | SPA224N1 | MX-W22224BLLKC3 | 109,000 | 157,000 | H2324XM1 | 84 |
| 4 ⁷ / ₁₆ | SPAW2226-407N1 | SPA226N1 | MX-W22226BLLKC3 | 127,000 | 176,000 | HA2326M1 | 101 |
| | SPAW2226-408N1 | SPA226N1 | MX-W22226BLLKC3 | 127,000 | 176,000 | HE2326M1 | 101 |
| 115 | SPAW2226N1 | SPA226N1 | MX-W22226BLLKC3 | 127,000 | 176,000 | H2326M1 | 101 |
| 125 | SPAW2228N1 | SPA228N1 | MX-W22228BLLKC3 | 153,000 | 218,000 | H2328M1 | 118 |
| | SPAW2228-415N1 | SPA228N1 | MX-W22228BLLKC3 | 153,000 | 218,000 | HA2328M1 | 118 |
| 4 ¹⁵ / ₁₆ | SPAW2228-500N1 | SPA228N1 | MX-W22228BLLKC3 | 153,000 | 218,000 | HE2328M1 | 118 |
| | SPAW2232-507N1 | SPA232N1 | MX-W22232BLLKC3 | 196,000 | 290,000 | HA2332M1 | 171 |
| 5 ⁷ / ₁₆ | SPAW2232-508N1 | SPA232N1 | MX-W22232BLLKC3 | 196,000 | 290,000 | HE2332M1 | 171 |
| | SPAW2232N1 | SPA232N1 | MX-W22232BLLKC3 | 196,000 | 290,000 | H2332M1 | 171 |
| 140 | SPAW2232N1 | SPA232N1 | MX-W22232BLLKC3 | 196,000 | 290,000 | H2332M1 | 171 |



C(M)-SPAW22...

How to Order

Example: When you order one SPAW2220-307N1, you will receive an assembly consisting of one SPA220N1 Pillow Block Housing, one MX-W22220BLLKC3 Bearing, and one HA2320M1 Adapter.

When C-SPAW2220N1 or CM-SPAW2220N1 are specified, external covers will be supplied with the unit.

Example: "C" prefix - 2 taconite service seals
"CM" prefix - 1 taconite service seal, 1 end cover

Notes: Taconite service seals for which dimensions are shown are standard. For dimensions and availability of non-standard taconite service seals, consult NTN Engineering.

All units are supplied in float arrangement and may be converted to fixed by relocation of a snap ring.

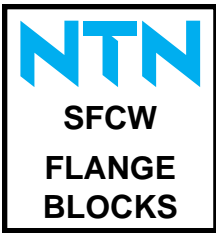
All bearing inserts are supplied prelubricated with Shell Alvania™ 3 grease.

Grease fittings are provided with all units.

An eye bolt is provided on housings SPA28N1 and SPA32N1.

SPAW PILLOW BLOCKS

| Complete Pillow Block Number | Dimensions (Inches) | | | | | | | | | | | | | Set Bolts | |
|------------------------------|---------------------|----------|----------|-----------|----------|----------|----------|----------|----------|-----------|----------|----------|---------|-----------|---|
| | <i>h</i> | <i>a</i> | <i>b</i> | <i>b1</i> | <i>c</i> | <i>m</i> | <i>n</i> | <i>w</i> | <i>l</i> | <i>l1</i> | <i>u</i> | <i>v</i> | Size | No. | |
| SPAW2211-115N1 | 2 3/4 | 9.606 | 2.441 | 2.756 | 1.102 | 7 5/8 | - | 5.354 | 4.724 | 4.488 | 0.709 | - | 7/8 | 5/8 | 2 |
| SPAW2211N1 | 2 3/4 | 9.606 | 2.441 | 2.756 | 1.102 | 7 5/8 | - | 5.354 | 4.724 | 4.488 | 0.709 | - | 7/8 | 5/8 | 2 |
| SPAW2211-200N1 | 2 3/4 | 9.606 | 2.441 | 2.756 | 1.102 | 7 5/8 | - | 5.354 | 4.724 | 4.488 | 0.709 | - | 7/8 | 5/8 | 2 |
| SPAW2213-203N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | 0.709 | - | 1 5/16 | 5/8 | 2 |
| FSPAW2213-203N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | - | 0.591 | 1 5/16 | 1/2 | 4 |
| SPAW2213-204N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | 0.709 | - | 1 5/16 | 5/8 | 2 |
| FSPAW2213-204N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | - | 0.591 | 1 5/16 | 1/2 | 4 |
| SPAW2213N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | 0.709 | - | 1 5/16 | 5/8 | 2 |
| FSPAW2213N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | - | 0.591 | 1 5/16 | 1/2 | 4 |
| SPAW2213-206N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | 0.709 | - | 1 5/16 | 5/8 | 2 |
| FSPAW2213-206N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | - | 0.591 | 1 5/16 | 1/2 | 4 |
| SPAW2215-207N1 | 3 1/4 | 11.024 | 2.835 | 3.110 | 1.299 | 9 1/8 | 1 7/8 | 6.535 | 5.197 | 4.843 | 0.709 | - | 1 1/8 | 5/8 | 2 |
| FSPAW2215-207N1 | 3 1/4 | 11.024 | 2.835 | 3.110 | 1.299 | 9 1/8 | 1 7/8 | 6.535 | 5.197 | 4.843 | - | 0.591 | 1 1/8 | 1/2 | 4 |
| SPAW2215-208N1 | 3 1/4 | 11.024 | 2.835 | 3.110 | 1.299 | 9 1/8 | 1 7/8 | 6.535 | 5.197 | 4.843 | 0.709 | - | 1 1/8 | 5/8 | 2 |
| FSPAW2215-208N1 | 3 1/4 | 11.024 | 2.835 | 3.110 | 1.299 | 9 1/8 | 1 7/8 | 6.535 | 5.197 | 4.843 | - | 0.591 | 1 1/8 | 1/2 | 4 |
| SPAW2215N1 | 3 1/4 | 11.024 | 2.835 | 3.110 | 1.299 | 9 1/8 | 1 7/8 | 6.535 | 5.197 | 4.843 | 0.709 | - | 1 1/8 | 5/8 | 2 |
| FSPAW2215N | 3 1/4 | 11.024 | 2.835 | 3.110 | 1.299 | 9 1/8 | 1 7/8 | 6.535 | 5.197 | 4.843 | - | 0.591 | 1 1/8 | 1/2 | 4 |
| SPAW2217-215N1 | 3 3/4 | 12.598 | 3.150 | 3.504 | 1.260 | 10 7/16 | 2 1/8 | 7.559 | 6.142 | 5.748 | 0.866 | - | 1 5/16 | 3/4 | 2 |
| FSPAW2217-215N1 | 3 3/4 | 12.598 | 3.150 | 3.504 | 1.260 | 10 7/16 | 2 1/8 | 7.559 | 6.142 | 5.748 | - | 0.709 | 1 5/16 | 5/8 | 4 |
| SPAW2217N1 | 3 3/4 | 12.598 | 3.150 | 3.504 | 1.260 | 10 7/16 | 2 1/8 | 7.559 | 6.142 | 5.748 | 0.866 | - | 1 5/16 | 3/4 | 2 |
| FSPAW2217N1 | 3 3/4 | 12.598 | 3.150 | 3.504 | 1.260 | 10 7/16 | 2 1/8 | 7.559 | 6.142 | 5.748 | - | 0.709 | 1 5/16 | 5/8 | 4 |
| SPAW2217-300N1 | 3 3/4 | 12.598 | 3.150 | 3.504 | 1.260 | 10 7/16 | 2 1/8 | 7.559 | 6.142 | 5.748 | 0.866 | - | 1 5/16 | 3/4 | 2 |
| FSPAW2217-300N1 | 3 3/4 | 12.598 | 3.150 | 3.504 | 1.260 | 10 7/16 | 2 1/8 | 7.559 | 6.142 | 5.748 | - | 0.709 | 1 5/16 | 5/8 | 4 |
| SPAW2220-307N1 | 4 1/2 | 14.961 | 3.740 | 4.331 | 1.654 | 12 3/8 | 2 3/8 | 8.976 | 7.283 | 6.890 | 1.024 | - | 1 5/8 | 7/8 | 2 |
| FSPAW2220-307N1 | 4 1/2 | 14.961 | 3.740 | 4.331 | 1.654 | 12 3/8 | 2 3/8 | 8.976 | 7.283 | 6.890 | - | 0.866 | 1 5/8 | 3/4 | 4 |
| SPAW2220-308N1 | 4 1/2 | 14.961 | 3.740 | 4.331 | 1.654 | 12 3/8 | 2 3/8 | 8.976 | 7.283 | 6.890 | 1.024 | - | 1 5/8 | 7/8 | 2 |
| FSPAW2220-308N1 | 4 1/2 | 14.961 | 3.740 | 4.331 | 1.654 | 12 3/8 | 2 3/8 | 8.976 | 7.283 | 6.890 | - | 0.866 | 1 5/8 | 3/4 | 4 |
| SPAW2220N1 | 4 1/2 | 14.961 | 3.740 | 4.331 | 1.654 | 12 3/8 | 2 3/8 | 8.976 | 7.283 | 6.890 | 1.024 | - | 1 5/8 | 7/8 | 2 |
| FSPAW2220N1 | 4 1/2 | 14.961 | 3.740 | 4.331 | 1.654 | 12 3/8 | 2 3/8 | 8.976 | 7.283 | 6.890 | - | 0.866 | 1 5/8 | 3/4 | 4 |
| SPAW2222N1 | 4 15/16 | 16.496 | 3.937 | 4.764 | 1.772 | 13 9/16 | 2 3/4 | 10.315 | 7.795 | 7.283 | - | 0.866 | 1 11/16 | 3/4 | 4 |
| SPAW2222-315N1 | 4 15/16 | 16.496 | 3.937 | 4.764 | 1.772 | 13 9/16 | 2 3/4 | 10.315 | 7.795 | 7.283 | - | 0.866 | 1 11/16 | 3/4 | 4 |
| SPAW2222-400N1 | 4 15/16 | 16.496 | 3.937 | 4.764 | 1.772 | 13 9/16 | 2 3/4 | 10.315 | 7.795 | 7.283 | - | 0.866 | 1 11/16 | 3/4 | 4 |
| SPAW2224-403N1 | 5 1/4 | 16.496 | 4.134 | 4.764 | 1.496 | 13 7/8 | 2 3/4 | 10.512 | 7.992 | 7.480 | - | 0.866 | 1 3/8 | 3/4 | 4 |
| SPAW2224-404N1 | 5 1/4 | 16.496 | 4.134 | 4.764 | 1.496 | 13 7/8 | 2 3/4 | 10.512 | 7.992 | 7.480 | - | 0.866 | 1 3/8 | 3/4 | 4 |
| SPAW2224N1 | 5 1/4 | 16.496 | 4.134 | 4.764 | 1.496 | 13 7/8 | 2 3/4 | 10.512 | 7.992 | 7.480 | - | 0.866 | 1 3/8 | 3/4 | 4 |
| SPAW2226-407N1 | 6 | 18.386 | 4.528 | 5.118 | 2.047 | 15 5/16 | 3 1/4 | 11.614 | 8.622 | 8.110 | - | 0.945 | 1 9/16 | 7/8 | 4 |
| SPAW2226-408N1 | 6 | 18.386 | 4.528 | 5.118 | 2.047 | 15 5/16 | 3 1/4 | 11.614 | 8.622 | 8.110 | - | 0.945 | 1 9/16 | 7/8 | 4 |
| SPAW2226N1 | 6 | 18.386 | 4.528 | 5.118 | 2.047 | 15 5/16 | 3 1/4 | 11.614 | 8.622 | 8.110 | - | 0.945 | 1 9/16 | 7/8 | 4 |
| SPAW2228N1 | 6 | 20.118 | 4.724 | 5.866 | 2.047 | 16 9/16 | 3 3/8 | 12.087 | 9.134 | 8.622 | - | 1.024 | 1 9/16 | 1 | 4 |
| SPAW2228-415N1 | 6 | 20.118 | 4.724 | 5.866 | 2.047 | 16 9/16 | 3 3/8 | 12.087 | 9.134 | 8.622 | - | 1.024 | 1 9/16 | 1 | 4 |
| SPAW2228-500N1 | 6 | 20.118 | 4.724 | 5.866 | 2.047 | 16 9/16 | 3 3/8 | 12.087 | 9.134 | 8.622 | - | 1.024 | 1 9/16 | 1 | 4 |
| SPAW2232-507N1 | 6 11/16 | 22.008 | 5.315 | 6.260 | 2.362 | 18 5/16 | 3 3/4 | 13.386 | 10.236 | 9.724 | - | 1.024 | 1 15/16 | 1 | 4 |
| SPAW2232-508N1 | 6 11/16 | 22.008 | 5.315 | 6.260 | 2.362 | 18 5/16 | 3 3/4 | 13.386 | 10.236 | 9.724 | - | 1.024 | 1 15/16 | 1 | 4 |
| SPAW2232N1 | 6 11/16 | 22.008 | 5.315 | 6.260 | 2.362 | 18 5/16 | 3 3/4 | 13.386 | 10.236 | 9.724 | - | 1.024 | 1 15/16 | 1 | 4 |



Units: Millimeters
INCHES



SFCW22...

SFCW FLANGE BLOCKS

| Shaft Diameter <i>d</i> Inches | Complete Flange Block Number | Flange Block Housing | Bearing Number | Basic Load Ratings (lbs) | | Adaptaer Locknut and Lockwasher | Weight (lbs) |
|--------------------------------------|------------------------------|----------------------|-----------------|--------------------------|------------------|---------------------------------|--------------|
| | | | | <i>Dynamic C</i> | <i>Static Co</i> | | |
| 1 15/16 50 2 | SFCW2211-115N1 | SFC211N1 | MX-W22211BLLKC3 | 21,000 | 24,700 | HA2311M1 | 19 |
| | SFCW2211N1 | SFC211N1 | MX-W22211BLLKC3 | 21,000 | 24,700 | H2311XM1 | 19 |
| | SFCW2211-200N1 | SFC211N1 | MX-W22211BLLKC3 | 21,000 | 24,700 | HE2311XYM1 | 19 |
| 2 3/16 2 1/4 60 2 3/8 | SFCW2213-203N1 | SFC213N1 | MX-W22213BLLKC3 | 32,000 | 40,000 | HA2313M1 | 23 |
| | SFCW2213-204N1 | SFC213N1 | MX-W22213BLLKC3 | 32,000 | 40,000 | HE2313XM1 | 23 |
| | SFCW2213N1 | SFC213N1 | MX-W22213BLLKC3 | 32,000 | 40,000 | H2313XM1 | 23 |
| 2 3/8 SFCW2213-206N1 | SFCW2213-206N1 | SFC213N1 | MX-W22213BLLKC3 | 32,000 | 40,000 | HS2313XM1 | 23 |
| | SFCW2215-207N1 | SFC215N1 | MX-W22215BLLKC3 | 37,500 | 50,000 | HA2315M1 | 27 |
| | SFCW2215-208N1 | SFC215N1 | MX-W22215BLLKC3 | 37,500 | 50,000 | HE2315XM1 | 27 |
| 2 7/16 2 1/8 65 SFCW2215N1 | SFCW2215N1 | SFC215N1 | MX-W22215BLLKC3 | 37,500 | 50,000 | H2315XM1 | 27 |
| | SFCW2217-216N1 | SFC217N1 | MX-W22217BLLKC3 | 46,500 | 61,000 | HA2317XM1 | 34 |
| | SFCW2217N1 | SFC217N1 | MX-W22217BLLKC3 | 46,500 | 61,000 | H2317XM1 | 34 |
| 2 15/16 75 3 SFCW2217-300N1 | SFCW2217-300N1 | SFC217N1 | MX-W22217BLLKC3 | 46,500 | 61,000 | HE2317XM1 | 34 |
| | SFCW2220-307N1 | SFC220N1 | MX-W22220BLLKC3 | 69,500 | 92,000 | HA2320M1 | 61 |
| | SFCW2220-308N1 | SFC220N1 | MX-W22220BLLKC3 | 69,500 | 92,000 | HE2320XM1 | 61 |
| 3 1/2 90 SFCW2220N1 | SFCW2220N1 | SFC220N1 | MX-W22220BLLKC3 | 69,500 | 92,000 | H2320XM1 | 61 |
| | SFCW2222N1 | SFC222N1 | MX-W22222BLLKC3 | 92,000 | 128,000 | H2322XM1 | 82 |
| | SFCW2222-315N1 | SFC222N1 | MX-W22222BLLKC3 | 92,000 | 128,000 | HA2322M1 | 82 |
| 3 15/16 4 SFCW2222-400N1 | SFCW2222-400N1 | SFC222N1 | MX-W22222BLLKC3 | 92,000 | 128,000 | HE2322XM1 | 82 |
| | SFCW2224-403N1 | SFC224N1 | MX-W22224BLLKC3 | 109,000 | 157,000 | HA2324M1 | — |
| | SFCW2224-404N1 | SFC224N1 | MX-W22224BLLKC3 | 109,000 | 157,000 | HE2324M1 | — |
| 4 3/16 4 1/4 110 SFCW2224N1 | SFCW2224N1 | SFC224N1 | MX-W22224BLLKC3 | 109,000 | 157,000 | H2324XM1 | — |
| | SFCW2226-407N1 | SFC226N1 | MX-W22226BLLKC3 | 127,000 | 176,000 | HA2326M1 | 112 |
| | SFCW2226-408N1 | SFC226N1 | MX-W22226BLLKC3 | 127,000 | 176,000 | HE2326M1 | 112 |
| 4 7/16 4 1/2 115 SFCW2226N1 | SFCW2226N1 | SFC226N1 | MX-W22226BLLKC3 | 127,000 | 176,000 | H2326M1 | 112 |
| | SFCW2228N1 | SFC228N1 | MX-W22228BLLKC3 | 153,000 | 218,000 | H2328M1 | — |
| | SFCW2228-415N1 | SFC228N1 | MX-W22228BLLKC3 | 153,000 | 218,000 | HA2328M1 | — |
| 4 15/16 5 SFCW2228-500N1 | SFCW2228-500N1 | SFC228N1 | MX-W22228BLLKC3 | 153,000 | 218,000 | HE2328M1 | — |
| | SFCW2232-507N1 | SFC232N1 | MX-W22232BLLKC3 | 196,000 | 290,000 | HA2332M1 | — |
| | SFCW2232-508N1 | SFC232N1 | MX-W22232BLLKC3 | 196,000 | 290,000 | HE2332M1 | — |
| 5 7/16 5 1/2 140 SFCW2232N1 | SFCW2232N1 | SFC232N1 | MX-W22232BLLKC3 | 196,000 | 290,000 | H2332M1 | — |



How to Order

Example: When you order one SFCW2220N1, you will receive an assembly consisting of one SFC220N1 Flange Block Housing, one MX-W2220BLLKC3 Bearing, and one H2320XM1 Adapter.

When C-SFCW2220N1 or CM-SFCW2220N1 are specified, external covers will be supplied with the unit.

Example: "C" prefix - 1 taconite service seal (dimension *l*)

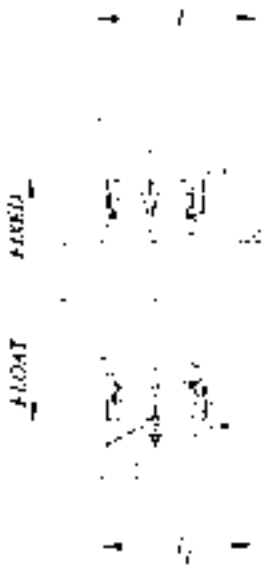
"CM" prefix - 1 end cover (dimension *l1*)

Notes: Taconite service seals for which dimensions are shown are standard. For dimensions and availability of non-standard taconite service seals, consult NTN Engineering.

All units are supplied in float arrangement and may be converted to fixed by relocation of a snap ring.

All bearing inserts are supplied prelubricated with Shell Alvania™ 3 grease.

Grease fittings are provided with all units.



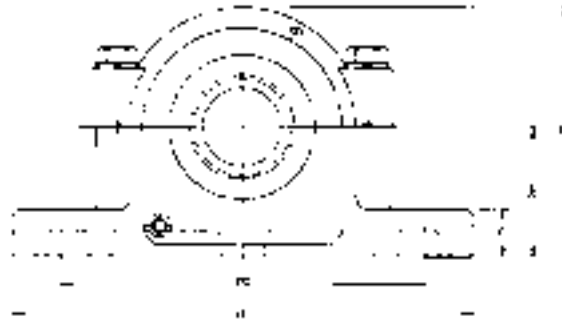
C(M)-SFCW22...

| SFCW FLANGE BLOCKS | | | | | | | | | |
|------------------------------|--------------------------|----------|----------|----------|----------|----------|----------|-----------|----------|
| Complete Flange Block Number | Dimensions (Millimeters) | | | | | | | | |
| | <i>a</i> | <i>b</i> | <i>c</i> | <i>m</i> | <i>f</i> | <i>j</i> | <i>l</i> | <i>l1</i> | <i>s</i> |
| SFCW2211-115N1 | 200 | 62 | 19 | 165 | 130 | 25 | 91 | 85 | 14 |
| SFCW2211N1 | 200 | 62 | 19 | 165 | 130 | 25 | — | — | 14 |
| SFCW2211-200N1 | 200 | 62 | 19 | 165 | 130 | 25 | — | — | 14 |
| SFCW2213-203N1 | 240 | 70 | 24 | 190 | 155 | 25 | 104 | 92 | 14 |
| SFCW2213-204N1 | 240 | 70 | 24 | 190 | 155 | 25 | — | — | 14 |
| SFCW2213N1 | 240 | 70 | 24 | 190 | 155 | 25 | — | — | 14 |
| SFCW2213-206N1 | 240 | 70 | 24 | 190 | 155 | 25 | — | — | 14 |
| SFCW2215-207N1 | 255 | 72 | 24 | 215 | 170 | 32 | 102 | 93 | 17 |
| SFCW2215-208N1 | 255 | 72 | 24 | 215 | 170 | 32 | — | — | 17 |
| SFCW2215N1 | 255 | 72 | 24 | 215 | 170 | 32 | — | — | 17 |
| SFCW2217-216N1 | 270 | 80 | 27 | 240 | 190 | 32 | 118 | 108 | 17 |
| SFCW2217N1 | 270 | 80 | 27 | 240 | 190 | 32 | — | — | 17 |
| SFCW2217-300N1 | 270 | 80 | 27 | 240 | 190 | 32 | — | — | 17 |
| SFCW2220-307N1 | 330 | 95 | 29 | 280 | 230 | 38 | 140 | 130 | 20 |
| SFCW2220-308N1 | 330 | 95 | 29 | 280 | 230 | 38 | — | — | 20 |
| SFCW2220N1 | 330 | 95 | 29 | 280 | 230 | 38 | — | — | 20 |
| SFCW2222N1 | 365 | 100 | 32 | 310 | 255 | 42 | — | — | 20 |
| SFCW2222-315N1 | 365 | 100 | 32 | 310 | 255 | 42 | 149 | 136 | 20 |
| SFCW2222-400N1 | 365 | 100 | 32 | 310 | 255 | 42 | — | — | 20 |
| SFCW2224-403N1 | 400 | 105 | 32 | 330 | 275 | 42 | 154 | 141 | 23 |
| SFCW2224-404N1 | 400 | 105 | 32 | 330 | 275 | 42 | — | — | 23 |
| SFCW2224N1 | 400 | 105 | 32 | 330 | 275 | 42 | — | — | 23 |
| SFCW2226-407N1 | 416 | 115 | 32 | 355 | 290 | 42 | 167 | 154 | 23 |
| SFCW2226-408N1 | 416 | 115 | 32 | 355 | 290 | 42 | — | — | 23 |
| SFCW2226N1 | 416 | 115 | 32 | 355 | 290 | 42 | — | — | 23 |
| SFCW2228N1 | 450 | 120 | 45 | 385 | 310 | 56 | — | — | 35 |
| SFCW2228-415N1 | 450 | 120 | 45 | 385 | 310 | 56 | 174 | 163 | 35 |
| SFCW2228-500N1 | 450 | 120 | 45 | 385 | 310 | 56 | — | — | 35 |
| SFCW2232-507N1 | 520 | 135 | 45 | 435 | 360 | 65 | 195 | 185 | 35 |
| SFCW2232-508N1 | 520 | 135 | 45 | 435 | 360 | 65 | — | — | 35 |
| SFCW2232N1 | 520 | 135 | 45 | 435 | 360 | 65 | — | — | 35 |

NTN

**SERIES
SAF 225
SAF 226**

**ADAPTER
MOUNTING**



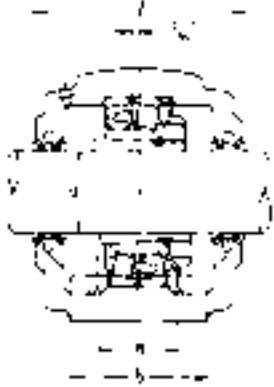
SAF PILLOW BLOCKS

| Shaft Diameter d_1 Inches | Complete Pillow Block Number | Pillow Block Housing | Bearing Number | PILLOW BLOCK COMPONENT NUMBERS | | Adapter Locknut and Lockwasher | Triple Seal Ring (2 required) | Stabilizing Ring (1 required) |
|-----------------------------------|------------------------------|----------------------|----------------|--------------------------------|--------------|--------------------------------|-------------------------------|-------------------------------|
| | | | | Basic Load Ratings (lbs) | | | | |
| | | | | Dynamic C | Static C_0 | | | |
| 1 7/16 | SAF22509 | SAF509 | 22209CKD1 | 18,600 | 21,400 | SNW09 | LER17 | SR 85X6 |
| 1 11/16 | SAF22510 | SAF510 | 22210CKD1 | 19,300 | 23,000 | SNW10 | LER20 | SR 90X6.5 |
| 1 15/16 | SAF22511 | SAF511 | 22211BKD1 | 21,000 | 24,700 | SNW11 | LER24 | SR100X6 |
| 2 3/16 | SAF22513 | SAF513 | 22213BKD1 | 32,000 | 40,500 | SNW13 | LER29 | SR120X10 |
| 2 7/16 | SAF22515 | SAF515 | 22215BKD1 | 37,000 | 50,000 | SNW15 | LER37 | SR130X10 |
| 2 11/16 | SAF22516 | SAF516 | 22216BKD1 | 40,500 | 53,500 | SNW16 | LER44 | SR140X10 |
| 2 15/16 | SAF22517 | SAF517 | 22217BKD1 | 46,500 | 61,500 | SNW17 | LER53 | SR150X10 |
| 3 3/16 | SAF22518 | SAF518 | 22218BKD1 | 57,500 | 77,500 | SNW18 | LER69 | SR160X10 |
| 3 7/16 | SAF22520 | SAF520 | 22220BKD1 | 70,000 | 92,500 | SNW20 | LER102 | SR180X10 |
| 3 11/16 | SAF22522 | SAF522 | 22222BKD1 | 92,500 | 128,000 | SNW22 | LER109 | SR200X10 |
| 4 3/16 | SAF22524 | SAF524 | 22224BKD1 | 109,000 | 158,000 | SNW24 | LER113 | SR215X10 |
| 4 7/16 | SAF22526 | SAF526 | 22226BKD1 | 127,000 | 176,000 | SNW26 | LER117 | SR230X10 |
| 4 11/16 | SAF22528 | SAF528 | 22228BKD1 | 153,000 | 218,000 | SNW28 | LER122 | SR250X10 |
| 5 3/16 | SAF22530 | SAF530 | 22230BKD1 | 174,000 | 262,000 | SNW30 | LER125 | SR270X10 |
| 5 7/16 | SAF22532 | SAF532 | 22232BKD1 | 195,000 | 290,000 | SNW32 | LER130 | SR290X10 |
| 5 11/16 | SAF22534 | SAF534 | 22234BKD1 | 225,000 | 340,000 | SNW34 | LER140 | SR310X10 |
| 6 7/16 | SAF22536 | SAF536 | 22236BK | 233,000 | 360,000 | SNW36 | LER148 | SR320X10 |
| 6 11/16 | SAF22538 | SAF538 | 22238BK | 260,000 | 410,000 | SNW38 | LER155 | SR340X10 |
| 7 3/16 | SAF22540 | SAF540 | 22240BK | 295,000 | 450,000 | SNW40 | LER159 | SR360X10 |
| 7 11/16 | SAF22544 | SAF544 | 22244BK | 350,000 | 545,000 | SNW44 | LER167 | SR400X10 |

SAF PILLOW BLOCKS

| Shaft Diameter d_1 Inches | Complete Pillow Block Number | Pillow Block Housing | Bearing Number | PILLOW BLOCK COMPONENT NUMBERS | | Adapter Locknut and Lockwasher | Triple Seal Ring (2 required) | Stabilizing Ring (1 required) |
|-----------------------------------|------------------------------|----------------------|----------------|--------------------------------|--------------|--------------------------------|-------------------------------|-------------------------------|
| | | | | Basic Load Ratings (lbs) | | | | |
| | | | | Dynamic C | Static C_0 | | | |
| 1 7/16 | SAF22609 | SAF609 | 22309CKD1 | 33,000 | 37,500 | SNW109 | LER17 | SR100X6 |
| 1 11/16 | SAF22610 | SAF610 | 22310CKD1 | 42,000 | 47,500 | SNW110 | LER20 | SR110X8 |
| 1 15/16 | SAF22611 | SAF611 | 22311BKD1 | 46,000 | 52,500 | SNW111 | LER24 | SR120X10 |
| 2 3/16 | SAF22613 | SAF613 | 22313BKD1 | 59,500 | 71,000 | SNW113 | LER32 | SR140X8.5 |
| 2 7/16 | SAF22615 | SAF615 | 22315BKD1 | 74,000 | 92,000 | SNW115 | LER37 | SR160X10 |
| 2 11/16 | SAF22616 | SAF616 | 22316BKD1 | 86,000 | 105,000 | SNW116 | LER44 | SR170X10 |
| 2 15/16 | SAF22617 | SAF617 | 22317BKD1 | 93,500 | 115,000 | SNW117 | LER184 | SR180X10 |
| 3 3/16 | SAF22618 | SAF618 | 22318BKD1 | 107,000 | 132,000 | SNW118 | LER188 | SR190X9.5 |
| 3 7/16 | SAF22620 | SAF620 | 22320BKD1 | 136,000 | 169,000 | SNW120 | LER102 | SR215X9.5 |
| 3 11/16 | SAF22622 | SAF622 | 22322BKD1 | 167,000 | 209,000 | SNW122 | LER109 | SR240X9.5 |
| 4 3/16 | SAF22624 | SAF624 | 22324BKD1 | 198,000 | 252,000 | SNW124 | LER113 | SR260X9.5 |
| 4 7/16 | SAF22626 | SAF626 | 22326BKD1 | 221,000 | 282,000 | SNW126 | LER117 | SR280X9.5 |
| 4 11/16 | SAF22628 | SAF628 | 22328BKD1 | 250,000 | 320,000 | SNW128 | LER122 | SR300X9.5 |
| 5 3/16 | SAF22630 | SAF630 | 22330BK | 281,000 | 385,000 | SNW130 | LER125 | SR320X9.5 |
| 5 7/16 | SAF22632 | SAF632 | 22332BK | 315,000 | 440,000 | SNW132 | LER130 | SR340X9.5 |
| 5 11/16 | SAF22634 | SAF634 | 22334BK | 340,000 | 480,000 | SNW134 | LER140 | SR360X10 |
| 6 7/16 | SAF22636 | SAF636 | 22336BK | 385,000 | 565,000 | SNW136 | LER148 | SR380X10 |
| 6 11/16 | SAF22638 | SAF638 | 22338BK | 415,000 | 615,000 | SNW138 | LER155 | SR400X10 |

HOW TO ORDER



Example: When you order one SAF22520, you will receive a package containing one SAF520 Pillow Block Housing, one No. 22220BKD1 Bearing and one SNW20 Adapter. All units are supplied with two Triple Seal Rings and a Stabilizing Ring. If you specify SAF22520M3, the required end cover will be included. Always specify shaft size. The same example applies when you order SAF22620.

A pillow block housing number includes one housing and two triple seal rings automatically. Suffix G on a pillow block housing number means one stabilizing ring is also included.

NOTE: For cast steel pillow blocks in 22500(22200) Series (SAFS), see pages 150 and 151.

| SAF PILLOW BLOCKS | | | | | | | | | | | |
|------------------------------|---------------------|--------|-------|--------|--------|--------|-------|-----------|--------|-----------|--------|
| Complete Pillow Block Number | Dimensions (Inches) | | | | | | | | | Set Bolts | |
| | h | a | b | c | m | | n | w | l | Size | Number |
| | | | | | max. | min. | | | | | |
| SAF22509 | 2 1/4 | 8 1/4 | 2 3/8 | 1 3/16 | 7 | 6 1/4 | — | 4 3/8 | 3 5/8 | 1/2 | 2 |
| SAF22510 | 2 1/2 | 8 1/4 | 2 3/8 | 1 5/16 | 7 | 6 1/2 | — | 4 3/4 | 3 5/8 | 1/2 | 2 |
| SAF22511 | 2 3/4 | 9 5/8 | 2 3/4 | 1 5/16 | 7 7/8 | 7 3/8 | — | 5 1/4 | 3 7/8 | 5/8 | 2 |
| SAF22513 | 3 | 11 | 3 1/8 | 1 | 9 1/2 | 8 1/8 | — | 5 15/16 | 4 1/2 | 5/8 | 2 |
| SAF22515 | 3 1/4 | 11 1/4 | 3 1/8 | 1 1/8 | 9 5/8 | 8 5/8 | — | 6 3/8 | 4 3/4 | 5/8 | 2 |
| SAF22516 | 3 1/2 | 13 | 3 1/2 | 1 3/16 | 11 | 9 5/8 | — | 6 7/8 | 4 7/8 | 3/4 | 2 |
| SAF22517 | 3 3/4 | 13 | 3 1/2 | 1 1/4 | 11 | 9 7/8 | — | 7 5/16 | 5 | 3/4 | 2 |
| SAF22518 | 4 | 13 3/4 | 3 7/8 | 1 5/16 | 11 5/8 | 10 3/8 | — | 7 3/4 | 5 3/4 | 3/4 | 2 |
| SAF22520 | 4 1/2 | 15 1/4 | 4 3/8 | 1 3/4 | 13 1/8 | 11 5/8 | — | 8 3/4 | 6 | 7/8 | 2 |
| SAF22522 | 4 15/16 | 16 1/2 | 4 3/4 | 2 | 14 1/2 | 12 5/8 | 2 3/4 | 9 5/8 | 6 1/2 | 3/4 | 4 |
| SAF22524 | 5 1/4 | 16 1/2 | 4 3/4 | 2 1/8 | 14 1/2 | 13 1/4 | 2 3/4 | 10 1/4 | 7 3/8 | 3/4 | 4 |
| SAF22526 | 6 | 18 3/8 | 5 1/8 | 2 3/8 | 16 | 14 5/8 | 3 1/4 | 11 1/2 | 8 | 7/8 | 4 |
| SAF22528 | 6 | 20 1/8 | 5 7/8 | 2 3/8 | 17 1/8 | 16 | 3 3/8 | 11 3/4 | 7 5/8 | 1 | 4 |
| SAF22530 | 6 5/16 | 21 1/4 | 6 1/4 | 2 1/2 | 18 1/4 | 17 | 3 3/4 | 12 1/2 | 8 3/8 | 1 | 4 |
| SAF22532 | 6 1 1/16 | 22 | 6 1/4 | 2 5/8 | 19 1/4 | 17 3/8 | 3 3/4 | 13 5/16 | 8 3/4 | 1 | 4 |
| SAF22534 | 7 1/16 | 24 3/4 | 6 3/4 | 2 3/4 | 21 5/8 | 19 3/8 | 4 1/4 | 14 3/16 | 9 5/8 | 1 | 4 |
| SAF22536 | 7 1/2 | 26 3/4 | 7 1/8 | 3 | 23 5/8 | 20 7/8 | 4 5/8 | 14 7/8 | 10 | 1 | 4 |
| SAF22538 | 7 7/8 | 28 | 7 1/2 | 3 1/8 | 24 3/8 | 21 5/8 | 4 1/2 | 15 1 1/16 | 10 3/4 | 1 1/4 | 4 |
| SAF22540 | 8 1/4 | 29 1/2 | 8 | 3 3/8 | 25 | 22 1/2 | 5 | 16 1/2 | 11 1/4 | 1 1/4 | 4 |
| SAF22544 | 9 1/2 | 32 3/4 | 8 3/4 | 3 3/4 | 27 7/8 | 24 3/4 | 5 1/4 | 18 5/8 | 12 | 1 1/2 | 4 |

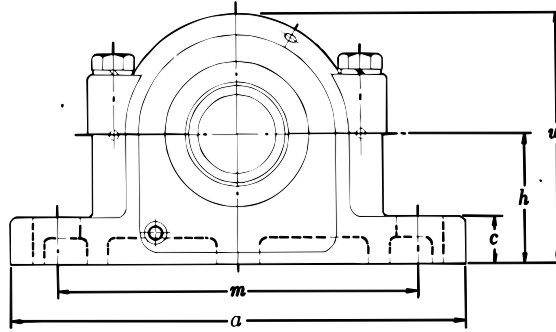
| SAF PILLOW BLOCKS | | | | | | | | | | | |
|------------------------------|---------------------|--------|-------|--------|--------|--------|-------|-----------|--------|-----------|--------|
| Complete Pillow Block Number | Dimensions (Inches) | | | | | | | | | Set Bolts | |
| | h | a | b | c | m | | n | w | l | Size | Number |
| | | | | | max. | min. | | | | | |
| SAF22609 | 2 3/4 | 9 5/8 | 2 3/4 | 1 | 7 7/8 | 7 3/8 | — | 5 5/16 | 4 1/4 | 5/8 | 2 |
| SAF22610 | 3 | 10 5/8 | 2 3/4 | 1 1/8 | 9 | 7 3/4 | — | 5 13/16 | 4 5/8 | 5/8 | 2 |
| SAF22611 | 3 1/4 | 11 | 3 1/8 | 1 3/16 | 9 1/2 | 8 1/8 | — | 6 3/16 | 4 7/8 | 5/8 | 2 |
| SAF22613 | 3 1/2 | 13 | 3 1/2 | 1 1/4 | 11 | 9 5/8 | — | 6 15/16 | 5 3/8 | 3/4 | 2 |
| SAF22615 | 4 | 13 3/4 | 3 7/8 | 1 5/16 | 11 5/8 | 10 3/8 | — | 7 13/16 | 6 1/4 | 3/4 | 2 |
| SAF22616 | 4 1/4 | 14 1/4 | 3 7/8 | 1 5/16 | 12 5/8 | 10 5/8 | — | 8 1/4 | 6 1/2 | 3/4 | 2 |
| SAF22617 | 4 1/2 | 15 1/4 | 4 3/8 | 1 3/4 | 13 1/8 | 11 5/8 | — | 8 3/4 | 6 3/4 | 7/8 | 2 |
| SAF22618 | 4 3/4 | 15 1/2 | 4 3/8 | 2 | 13 1/2 | 12 | 2 1/4 | 9 3/16 | 6 7/8 | 3/4 | 4 |
| SAF22620 | 5 1/4 | 16 1/2 | 4 3/4 | 2 1/8 | 14 1/2 | 13 1/4 | 2 3/4 | 10 1/4 | 7 3/8 | 3/4 | 4 |
| SAF22622 | 6 | 18 3/8 | 5 1/8 | 2 3/8 | 16 | 14 5/8 | 3 1/4 | 11 1/2 | 8 | 7/8 | 4 |
| SAF22624 | 6 5/16 | 21 1/4 | 6 1/4 | 2 1/2 | 18 1/4 | 17 | 3 3/4 | 12 1/2 | 8 3/8 | 1 | 4 |
| SAF22626 | 6 1 1/16 | 22 | 6 1/4 | 2 5/8 | 19 1/4 | 17 3/8 | 3 3/4 | 13 5/16 | 8 3/4 | 1 | 4 |
| SAF22628 | 7 1/16 | 24 3/4 | 6 3/4 | 2 3/4 | 21 5/8 | 19 3/8 | 4 1/4 | 14 3/16 | 9 3/8 | 1 | 4 |
| SAF22630 | 7 1/2 | 26 3/4 | 7 1/8 | 3 | 23 5/8 | 20 7/8 | 4 5/8 | 14 7/8 | 9 3/4 | 1 | 4 |
| SAF22632 | 7 7/8 | 28 | 7 1/2 | 3 1/8 | 24 3/8 | 21 5/8 | 4 1/2 | 15 1 1/16 | 10 5/8 | 1 1/4 | 4 |
| SAF22634 | 8 1/4 | 29 1/2 | 8 | 3 3/8 | 25 | 22 1/2 | 5 | 16 1/2 | 11 1/4 | 1 1/4 | 4 |
| SAF22636 | 8 7/8 | 31 1/4 | 8 1/4 | 3 1/2 | 26 5/8 | 24 | 5 1/4 | 17 3/4 | 11 3/8 | 1 1/4 | 4 |
| SAF22638 | 9 1/2 | 32 3/4 | 8 3/4 | 3 3/4 | 27 7/8 | 24 3/4 | 5 1/4 | 18 5/8 | 12 | 1 1/2 | 4 |



**SERIES
SAF222
SAF223**

**CYLINDRICAL
BORE
MOUNTING**

Units: **Millimeters**
INCHES

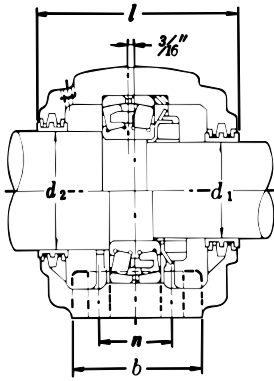


SAF PILLOW BLOCKS

| Shaft Diameter Inches | | Complete Pillow Block Number | Pillow Block Housing | Bearing Number | Basic Load Ratings (lbs) | | Locknut | Lock-washer | Triple Seal Ring | | Stabilizing Ring (1 required) |
|-----------------------|---------|------------------------------|----------------------|----------------|--------------------------|--------------|---------|-------------|-----------------------|-----------------------|-------------------------------|
| d_2 | d_1 | | | | Dynamic C | Static C_o | | | d_2 Shaft (1 req'd) | d_1 Shaft (1 req'd) | |
| 3 3/8 | 3 | SAF22216 | SAF216 | 22216BD1 | 40,500 | 53,500 | AN16A | W16 | LER82 | LER54 | SR140X10 |
| 3 15/16 | 3 3/16 | SAF22217 | SAF217 | 22217BD1 | 46,500 | 61,500 | AN17A | W17 | LER89 | LER63 | SR150X10 |
| 4 1/8 | 3 3/8 | SAF22218 | SAF218 | 22218BD1 | 57,500 | 77,500 | AN18A | W18 | LER96 | LER72 | SR160X10 |
| 4 1/2 | 3 13/16 | SAF22220 | SAF220 | 22220BD1 | 70,000 | 92,500 | AN20A | W20 | LER118 | LER106 | SR180X10 |
| 4 7/8 | 4 3/16 | SAF22222 | SAF222 | 22222BD1 | 92,500 | 128,000 | AN22A | W22 | LER121 | LER113 | SR200X10 |
| 5 5/16 | 4 9/16 | SAF22224 | SAF224 | 22224BD1 | 109,000 | 158,000 | AN24A | W24 | LER127 | LER119 | SR215X10 |
| 5 7/8 | 4 15/16 | SAF22226 | SAF226 | 22226BD1 | 127,000 | 176,000 | AN26A | W26 | LER136 | LER122 | SR230X10 |
| 6 1/4 | 5 5/16 | SAF22228 | SAF228 | 22228BD1 | 153,000 | 218,000 | AN28A | W28 | LER144 | LER127 | SR250X10 |
| 6 3/8 | 5 3/4 | SAF22230 | SAF230 | 22230BD1 | 174,000 | 262,000 | AN30A | W30 | LER151 | LER134 | SR270X10 |
| 7 | 6 1/16 | SAF22232 | SAF232 | 22232BD1 | 195,000 | 290,000 | AN32A | W32 | LER156 | LER142 | SR290X10 |
| 7 7/16 | 6 7/16 | SAF22234 | SAF234 | 22234BD1 | 225,000 | 340,000 | AN34A | W34 | LER161 | LER148 | SR310X10 |
| 7 13/16 | 6 7/8 | SAF22236 | SAF236 | 22236B | 233,000 | 360,000 | AN36A | W36 | LER165 | LER154 | SR320X10 |
| 8 3/8 | 7 1/4 | SAF22238 | SAF238 | 22238B | 260,000 | 410,000 | AN38A | W38 | LER171 | LER160 | SR340X10 |
| 8 3/4 | 7 5/8 | SAF22240 | SAF240 | 22240B | 295,000 | 450,000 | AN40A | W40 | LER175 | LER164 | SR360X10 |
| 9 3/16 | 8 5/16 | SAF22244 | SAF244 | 22244B | 350,000 | 545,000 | N44 | W44 | LER179 | LER170 | SR400X10 |

SAF PILLOW BLOCKS

| Shaft Diameter Inches | | Complete Pillow Block Number | Pillow Block Housing | Bearing Number | Basic Load Ratings (lbs) | | Locknut | Lock-washer | Triple Seal Ring | | Stabilizing Ring (1 required) |
|-----------------------|---------|------------------------------|----------------------|----------------|--------------------------|--------------|---------|-------------|-----------------------|-----------------------|-------------------------------|
| d_2 | d_1 | | | | Dynamic C | Static C_o | | | d_2 Shaft (1 req'd) | d_1 Shaft (1 req'd) | |
| 1 15/16 | 1 7/16 | SAF22308 | SAF308 | 22308CD1 | 27,200 | 28,800 | N08 | W08 | LER24 | LER17 | SR 90X6.5 |
| 2 1/8 | 1 11/16 | SAF22309 | SAF309 | 22309CD1 | 33,000 | 37,500 | N09 | W09 | LER28 | LER20 | SR100X6 |
| 2 3/8 | 1 7/8 | SAF22310 | SAF310 | 22310CD1 | 42,000 | 47,500 | N10 | W10 | LER35 | LER23 | SR110X8 |
| 2 9/16 | 2 1/16 | SAF22311 | SAF311 | 22311BD1 | 46,000 | 52,500 | N11 | W11 | LER40 | LER27 | SR120X10 |
| 2 7/8 | 2 1/4 | SAF22312 | SAF312 | 22312BD1 | 53,000 | 60,500 | N12 | W12 | LER47 | LER33 | SR130X10 |
| 3 1/16 | 2 7/16 | SAF22313 | SAF313 | 22313BD1 | 59,500 | 71,000 | N13 | W13 | LER55 | LER37 | SR140X8.5 |
| 3 1/4 | 2 5/8 | SAF22314 | SAF314 | 22314BD1 | 72,500 | 85,000 | N14 | W14 | LER64 | LER43 | SR150X10 |
| 3 7/16 | 2 13/16 | SAF22315 | SAF315 | 22315BD1 | 74,000 | 92,000 | AN15A | W15 | LER79 | LER46 | SR160X10 |
| 3 5/8 | 3 | SAF22316 | SAF316 | 22316BD1 | 86,000 | 105,000 | AN16A | W16 | LER84 | LER60 | SR170X10 |
| 3 15/16 | 3 3/16 | SAF22317 | SAF317 | 22317BD1 | 93,500 | 115,000 | AN17A | W17 | LER109 | LER188 | SR180X10 |
| 4 1/8 | 3 3/8 | SAF22318 | SAF318 | 22318BD1 | 107,000 | 132,000 | AN18A | W18 | LER112 | LER191 | SR190X9.5 |
| 4 1/2 | 3 13/16 | SAF22320 | SAF320 | 22320BD1 | 136,000 | 169,000 | AN20A | W20 | LER118 | LER106 | SR215X9.5 |
| 4 7/8 | 4 3/16 | SAF22322 | SAF322 | 22322BD1 | 167,000 | 209,000 | AN22A | W22 | LER121 | LER113 | SR240X9.5 |
| 5 5/16 | 4 9/16 | SAF22324 | SAF324 | 22324BD1 | 198,000 | 252,000 | AN24A | W24 | LER127 | LER119 | SR260X9.5 |
| 5 7/8 | 4 15/16 | SAF22326 | SAF326 | 22326BD1 | 221,000 | 282,000 | AN26A | W26 | LER136 | LER122 | SR280X9.5 |
| 6 1/4 | 5 5/16 | SAF22328 | SAF328 | 22328BD1 | 250,000 | 320,000 | AN28A | W28 | LER144 | LER127 | SR300X9.5 |
| 6 3/8 | 5 3/4 | SAF22330 | SAF330 | 22330B | 281,000 | 385,000 | AN30A | W30 | LER151 | LER134 | SR320X9.5 |
| 7 | 6 1/16 | SAF22332 | SAF332 | 22332B | 315,000 | 440,000 | AN32A | W32 | LER156 | LER142 | SR340X9.5 |
| 7 7/16 | 6 7/16 | SAF22334 | SAF334 | 22334B | 340,000 | 480,000 | AN34A | W34 | LER161 | LER148 | SR360X10 |
| 7 13/16 | 6 7/8 | SAF22336 | SAF336 | 22336B | 385,000 | 565,000 | AN36A | W36 | LER165 | LER154 | SR380X10 |
| 8 3/8 | 7 1/4 | SAF22338 | SAF338 | 22338B | 415,000 | 615,000 | AN38A | W38 | LER171 | LER160 | SR400X10 |



HOW TO ORDER

Example: When you order one SAF22220, you will receive a package containing one SAF220 Pillow Block Housing, one No. 22220BD1 Bearing, one No. AN20A Locknut and one No. W20 Lockwasher. All units are supplied with two Triple Seal Rings and a Stabilizing Ring. If you specify SAF22220M3, the required end cover will be included. Always specify shaft size. The same example applies when you order SAF22320.

A pillow block housing number includes one housing and two triple seal rings automatically. Suffix G on a pillow block housing number means one stabilizing ring is also included.

| SAF PILLOW BLOCKS | | | | | | | | | | | |
|------------------------------|---------------------|--------|-------|--------|--------|--------|-------|----------|--------|-----------|--------|
| Complete Pillow Block Number | Dimensions (Inches) | | | | | | | | | Set Bolts | |
| | h | a | b | c | m | | n | w | l | Size | Number |
| | | | | | max. | min. | | | | | |
| SAF22216 | 3 1/2 | 13 | 3 1/2 | 1 1/4 | 11 | 9 5/8 | — | 6 15/16 | 5 3/8 | 3/4 | 2 |
| SAF22217 | 3 3/4 | 13 | 3 1/2 | 1 1/4 | 11 | 9 7/8 | — | 7 3/8 | 5 3/8 | 3/4 | 2 |
| SAF22218 | 4 | 13 3/4 | 3 7/8 | 1 5/16 | 11 5/8 | 10 3/8 | — | 7 13/16 | 6 1/4 | 3/4 | 2 |
| SAF22220 | 4 1/2 | 15 1/4 | 4 3/8 | 1 3/4 | 13 1/8 | 11 5/8 | — | 8 3/4 | 6 | 7/8 | 2 |
| SAF22222 | 4 15/16 | 16 1/2 | 4 3/4 | 2 | 14 1/2 | 12 5/8 | 2 3/4 | 9 5/8 | 6 1/2 | 3/4 | 4 |
| SAF22224 | 5 1/4 | 16 1/2 | 4 3/4 | 2 1/8 | 14 1/2 | 13 1/4 | 2 3/4 | 10 1/4 | 7 3/8 | 3/4 | 4 |
| SAF22226 | 6 | 18 3/8 | 5 1/8 | 2 3/8 | 16 | 14 5/8 | 3 1/4 | 11 1/2 | 8 | 7/8 | 4 |
| SAF22228 | 6 | 20 1/8 | 5 7/8 | 2 3/8 | 17 1/8 | 16 | 3 3/8 | 11 3/4 | 7 5/8 | 1 | 4 |
| SAF22230 | 6 5/16 | 21 1/4 | 6 1/4 | 2 1/2 | 18 1/4 | 17 | 3 3/4 | 12 1/2 | 8 3/8 | 1 | 4 |
| SAF22232 | 6 11/16 | 22 | 6 1/4 | 2 5/8 | 19 1/4 | 17 3/8 | 3 3/4 | 13 5/16 | 8 3/4 | 1 | 4 |
| SAF22234 | 7 1/16 | 24 3/4 | 6 3/4 | 2 3/4 | 21 5/8 | 19 3/8 | 4 1/4 | 14 3/16 | 9 5/8 | 1 | 4 |
| SAF22236 | 7 1/2 | 26 3/4 | 7 1/8 | 3 | 23 5/8 | 20 7/8 | 4 5/8 | 14 7/8 | 10 | 1 | 4 |
| SAF22238 | 7 7/8 | 28 | 7 1/2 | 3 1/8 | 24 3/8 | 21 5/8 | 4 1/2 | 15 11/16 | 10 3/4 | 1 1/4 | 4 |
| SAF22240 | 8 1/4 | 29 1/2 | 8 | 3 3/8 | 25 | 22 1/2 | 5 | 16 1/2 | 11 1/4 | 1 1/4 | 4 |
| SAF22244 | 9 1/2 | 32 3/4 | 8 3/4 | 3 3/4 | 27 7/8 | 24 3/4 | 5 1/4 | 18 5/8 | 12 | 1 1/2 | 4 |

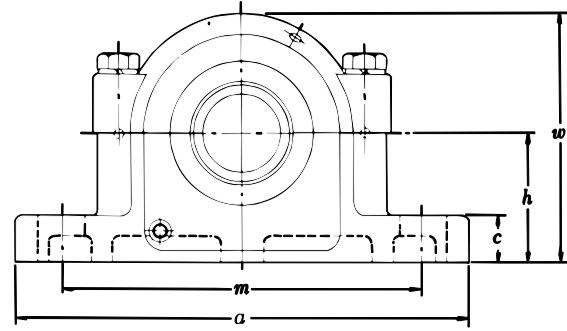
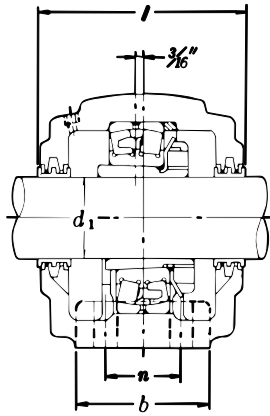
| SAF PILLOW BLOCKS | | | | | | | | | | | |
|------------------------------|---------------------|--------|-------|--------|--------|--------|-------|----------|--------|-----------|--------|
| Complete Pillow Block Number | Dimensions (Inches) | | | | | | | | | Set Bolts | |
| | h | a | b | c | m | | n | w | l | Size | Number |
| | | | | | max. | min. | | | | | |
| SAF22308 | 2 1/2 | 8 1/4 | 2 3/8 | 1 | 7 | 6 1/2 | — | 4 13/16 | 4 | 1/2 | 2 |
| SAF22309 | 2 3/4 | 9 5/8 | 2 3/4 | 1 | 7 7/8 | 7 3/8 | — | 5 5/16 | 4 1/4 | 5/8 | 2 |
| SAF22310 | 3 | 10 5/8 | 2 3/4 | 1 1/8 | 9 | 7 3/4 | — | 5 13/16 | 4 5/8 | 5/8 | 2 |
| SAF22311 | 3 1/4 | 11 | 3 1/8 | 1 3/16 | 9 1/2 | 8 1/8 | — | 6 3/16 | 5 | 5/8 | 2 |
| SAF22312 | 3 1/4 | 11 1/4 | 3 1/8 | 1 3/16 | 9 5/8 | 8 5/8 | — | 6 3/8 | 5 1/4 | 5/8 | 2 |
| SAF22313 | 3 1/2 | 13 | 3 1/2 | 1 1/4 | 11 | 9 5/8 | — | 6 15/16 | 5 3/8 | 3/4 | 2 |
| SAF22314 | 3 3/4 | 13 | 3 1/2 | 1 1/4 | 11 | 9 7/8 | — | 7 3/8 | 5 3/8 | 3/4 | 2 |
| SAF22315 | 4 | 13 3/4 | 3 7/8 | 1 5/16 | 11 5/8 | 10 3/8 | — | 7 13/16 | 6 1/4 | 3/4 | 2 |
| SAF22316 | 4 1/4 | 14 1/4 | 3 7/8 | 1 5/16 | 12 5/8 | 10 5/8 | — | 8 1/4 | 6 1/2 | 3/4 | 2 |
| SAF22317 | 4 1/2 | 15 1/4 | 4 3/8 | 1 3/4 | 13 1/8 | 11 5/8 | — | 8 3/4 | 6 3/4 | 7/8 | 2 |
| SAF22318 | 4 3/4 | 15 1/2 | 4 3/8 | 2 | 13 1/2 | 12 | 2 1/4 | 9 3/16 | 6 7/8 | 3/4 | 4 |
| SAF22320 | 5 1/4 | 16 1/2 | 4 3/4 | 2 1/8 | 14 1/2 | 13 1/4 | 2 3/4 | 10 1/4 | 7 3/8 | 3/4 | 4 |
| SAF22322 | 6 | 18 3/8 | 5 1/8 | 2 3/8 | 16 | 14 5/8 | 3 1/4 | 11 1/2 | 8 | 7/8 | 4 |
| SAF22324 | 6 5/16 | 21 1/4 | 6 1/4 | 2 1/2 | 18 1/4 | 17 | 3 3/4 | 12 1/2 | 8 3/8 | 1 | 4 |
| SAF22326 | 6 11/16 | 22 | 6 1/4 | 2 5/8 | 19 1/4 | 17 3/8 | 3 3/4 | 13 5/16 | 8 3/4 | 1 | 4 |
| SAF22328 | 7 1/16 | 24 3/4 | 6 3/4 | 2 3/4 | 21 5/8 | 19 3/8 | 4 1/4 | 14 3/16 | 9 3/8 | 1 | 4 |
| SAF22330 | 7 1/2 | 26 3/4 | 7 1/8 | 3 | 23 5/8 | 20 7/8 | 4 5/8 | 14 7/8 | 9 3/4 | 1 | 4 |
| SAF22332 | 7 7/8 | 28 | 7 1/2 | 3 1/8 | 24 3/8 | 21 5/8 | 4 1/2 | 15 11/16 | 10 3/4 | 1 1/4 | 4 |
| SAF22334 | 8 1/4 | 29 1/2 | 8 | 3 3/8 | 25 | 22 1/2 | 5 | 16 1/2 | 11 1/4 | 1 1/4 | 4 |
| SAF22336 | 8 7/8 | 31 1/4 | 8 1/4 | 3 5/8 | 26 5/8 | 24 | 5 1/4 | 18 1/2 | 11 1/4 | 1 1/4 | 4 |
| SAF22338 | 9 1/2 | 32 3/4 | 8 3/4 | 3 3/4 | 27 7/8 | 24 3/4 | 5 1/4 | 18 5/8 | 12 | 1 1/2 | 4 |



**SERIES
SAFS225
ADAPTER
MOUNTING**

**SAFS222
CYLINDRICAL
BORE
MOUNTING**

Units: **Millimeters**
INCHES



SAFS 225

SAFS PILLOW BLOCKS

| Shaft Diameter d_1 Inches | Complete Pillow Block Number | Pillow Block Housing | Bearing Number | PILLOW BLOCK COMPONENT NUMBERS | | | | |
|-----------------------------------|------------------------------|----------------------|----------------|--------------------------------|--------------|--------------------------------|-------------------------------|-------------------------------|
| | | | | Basic Load Ratings (lbs) | | Adapter Locknut and Lockwasher | Triple Seal Ring (2 required) | Stabilizing Ring (1 required) |
| | | | | Dynamic C | Static C_o | | | |
| 1 7/16 | SAFS22509 | SAFS509 | 22209CKD1 | 18,600 | 21,400 | SNW09 | LER17 | SR 85X6 |
| 1 11/16 | SAFS22510 | SAFS510 | 22210CKD1 | 19,300 | 23,000 | SNW10 | LER20 | SR 90X6.5 |
| 1 15/16 | SAFS22511 | SAFS511 | 22211BKD1 | 21,000 | 24,700 | SNW11 | LER24 | SR100X6 |
| 2 3/16 | SAFS22513 | SAFS513 | 22213BKD1 | 32,000 | 40,500 | SNW13 | LER29 | SR120X10 |
| 2 7/16 | SAFS22515 | SAFS515 | 22215BKD1 | 37,000 | 50,000 | SNW15 | LER37 | SR130X10 |
| 2 11/16 | SAFS22516 | SAFS516 | 22216BKD1 | 40,500 | 53,500 | SNW16 | LER44 | SR140X10 |
| 2 15/16 | SAFS22517 | SAFS517 | 22217BKD1 | 46,500 | 61,500 | SNW17 | LER53 | SR150X10 |
| 3 3/16 | SAFS22518 | SAFS518 | 22218BKD1 | 57,500 | 77,500 | SNW18 | LER69 | SR160X10 |
| 3 7/16 | SAFS22520 | SAFS520 | 22220BKD1 | 70,000 | 92,500 | SNW20 | LER75 | SR180X10 |
| 3 15/16 | SAFS22522 | SAFS522 | 22222BKD1 | 92,500 | 128,000 | SNW22 | LER93 | SR200X10 |
| 4 3/16 | SAFS22524 | SAFS524 | 22224BKD1 | 109,000 | 158,000 | SNW24 | LER113 | SR215X10 |
| 4 7/16 | SAFS22526 | SAFS526 | 22226BKD1 | 127,000 | 176,000 | SNW26 | LER117 | SR230X10 |
| 4 15/16 | SAFS22528 | SAFS528 | 22228BKD1 | 153,000 | 218,000 | SNW28 | LER122 | SR250X10 |
| 5 3/16 | SAFS22530 | SAFS530 | 22230BKD1 | 174,000 | 262,000 | SNW30 | LER125 | SR270X10 |
| 5 7/16 | SAFS22532 | SAFS532 | 22232BKD1 | 195,000 | 290,000 | SNW32 | LER130 | SR290X10 |
| 5 15/16 | SAFS22534 | SAFS534 | 22234BKD1 | 225,000 | 340,000 | SNW34 | LER140 | SR310X10 |
| 6 7/16 | SAFS22536 | SAFS536 | 22236BK | 233,000 | 360,000 | SNW36 | LER148 | SR320X10 |
| 6 15/16 | SAFS22538 | SAFS538 | 22238BK | 260,000 | 410,000 | SNW38 | LER224 | SR340X10 |
| 7 3/16 | SAFS22540 | SAFS540 | 22240BK | 295,000 | 450,000 | SNW40 | LER228 | SR360X10 |
| 7 15/16 | SAFS22544 | SAFS544 | 22244BK | 350,000 | 545,000 | SNW44 | LER236 | SR400X10 |

SAFS PILLOW BLOCKS

| Shaft Diameter Inches | | Complete Pillow Block Number | Pillow Block Housing | Bearing Number | PILLOW BLOCK COMPONENT NUMBERS | | | | | | |
|--------------------------|---------|------------------------------|----------------------|----------------|--------------------------------|--------------|---------|-------------|-----------------------|-----------------------|-------------------------------|
| | | | | | Basic Load Ratings (lbs) | | Locknut | Lock-washer | Triple Seal Ring | | Stabilizing Ring (1 required) |
| | | | | | Dynamic C | Static C_o | | | d_2 Shaft (1 req'd) | d_1 Shaft (1 req'd) | |
| 3 5/8 | 3 | SAFS22216 | SAFS216 | 22216BD1 | 40,500 | 53,500 | AN16A | W16 | LER 82 | LER 54 | SR140X10 |
| 3 15/16 | 3 3/16 | SAFS22217 | SAFS217 | 22217BD1 | 46,500 | 61,500 | AN17A | W17 | LER89 | LER 63 | SR150X10 |
| 4 1/8 | 3 3/8 | SAFS22218 | SAFS218 | 22218BD1 | 57,500 | 77,500 | AN18A | W18 | LER96 | LER 72 | SR160X10 |
| 4 1/2 | 3 13/16 | SAFS22220 | SAFS220 | 22220BD1 | 70,000 | 92,500 | AN20A | W20 | LER205 | LER 87 | SR180X10 |
| 4 7/8 | 4 3/16 | SAFS22222 | SAFS222 | 22222BD1 | 92,500 | 128,000 | AN22A | W22 | LER121 | LER113 | SR200X10 |
| 5 1/16 | 4 9/16 | SAFS22224 | SAFS224 | 22224BD1 | 109,000 | 158,000 | AN24A | W24 | LER127 | LER119 | SR215X10 |
| 5 7/8 | 4 15/16 | SAFS22226 | SAFS226 | 22226BD1 | 127,000 | 176,000 | AN26A | W26 | LER136 | LER122 | SR230X10 |
| 6 1/4 | 5 5/16 | SAFS22228 | SAFS228 | 22228BD1 | 153,000 | 218,000 | AN28A | W28 | LER144 | LER127 | SR250X10 |
| 6 5/8 | 5 3/4 | SAFS22230 | SAFS230 | 22230BD1 | 174,000 | 262,000 | AN30A | W30 | LER151 | LER134 | SR270X10 |
| 7 | 6 1/16 | SAFS22232 | SAFS232 | 22232BD1 | 195,000 | 290,000 | AN32A | W32 | LER156 | LER142 | SR290X10 |
| 7 7/16 | 6 7/16 | SAFS22234 | SAFS234 | 22234BD1 | 225,000 | 340,000 | AN34A | W34 | LER161 | LER148 | SR310X10 |
| 7 13/16 | 6 7/8 | SAFS22236 | SAFS236 | 22236B | 233,000 | 360,000 | AN36A | W36 | LER165 | LER154 | SR320X10 |
| 8 3/8 | 7 1/4 | SAFS22238 | SAFS238 | 22238B | 260,000 | 410,000 | AN38A | W38 | LER240 | LER229 | SR340X10 |
| 8 3/4 | 7 5/8 | SAFS22240 | SAFS240 | 22240B | 295,000 | 450,000 | AN40A | W40 | LER244 | LER233 | SR360X10 |
| 9 1/16 | 8 5/16 | SAFS22244 | SAFS244 | 22244B | 350,000 | 545,000 | N44 | W44 | LER248 | LER239 | SR400X10 |

HOW TO ORDER

Example No. 1: When you order one SAFS22520, you will receive a package containing one SAFS520 Pillow Block Housing, one No. 22220BKD1 Bearing and one SNW20 Adapter.

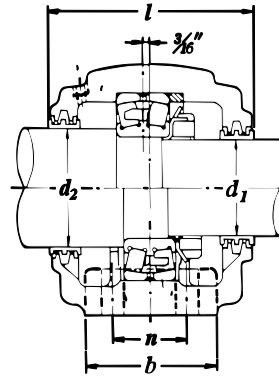
Example No. 2: When you order one SAFS22220, you will receive a package containing one SAFS220 Pillow Block Housing, one No. 22220BD1 Bearing, one No. AN20A Locknut and one No. W20 Lockwasher.

For both of the above examples:

All units are supplied with two Triple Seal Rings and a Stabilizing Ring. If you specify SAFS22520M3, the required end cover will be included. Always specify shaft size.

A pillow block housing number includes one housing and two triple seal rings automatically. Suffix G on a pillow block housing number means one stabilizing ring is also included.

Units: Millimeters
INCHES



SAFS 222



| SAFS PILLOW BLOCKS | | | | | | | | | | | |
|------------------------------|---------------------|----------|----------|----------|----------|--------|----------|----------|----------|-----------|--------|
| Complete Pillow Block Number | Dimensions (Inches) | | | | | | | | | Set Bolts | |
| | <i>h</i> | <i>a</i> | <i>b</i> | <i>c</i> | <i>m</i> | | <i>n</i> | <i>w</i> | <i>l</i> | Size | Number |
| | | | | | max. | min. | | | | | |
| SAFS22509 | 2 1/4 | 8 1/4 | 2 3/8 | 7/8 | 7 | 6 1/4 | — | 4 7/16 | 3 5/8 | 1/2 | 2 |
| SAFS22510 | 2 1/2 | 8 1/4 | 2 3/8 | 1 | 7 | 6 1/2 | — | 4 13/16 | 4 | 1/2 | 2 |
| SAFS22511 | 2 3/4 | 9 5/8 | 2 3/4 | 1 | 7 7/8 | 7 3/8 | — | 5 5/16 | 4 1/4 | 5/8 | 2 |
| SAFS22513 | 3 | 11 | 3 1/8 | 1 | 9 1/2 | 8 1/8 | — | 5 15/16 | 5 | 5/8 | 2 |
| SAFS22515 | 3 1/4 | 11 1/4 | 3 1/8 | 1 3/16 | 9 5/8 | 8 5/8 | — | 6 3/8 | 5 1/4 | 5/8 | 2 |
| SAFS22516 | 3 1/2 | 13 | 3 1/2 | 1 1/4 | 11 | 9 5/8 | — | 6 15/16 | 5 3/8 | 3/4 | 2 |
| SAFS22517 | 3 3/4 | 13 | 3 1/2 | 1 1/4 | 11 | 9 7/8 | — | 7 3/8 | 5 3/8 | 3/4 | 2 |
| SAFS22518 | 4 | 13 3/4 | 3 7/8 | 1 5/16 | 11 5/8 | 10 3/8 | — | 7 13/16 | 6 1/4 | 3/4 | 2 |
| SAFS22520 | 4 1/2 | 15 1/4 | 4 3/8 | 1 1/2 | 13 1/8 | 11 5/8 | — | 8 7/8 | 6 3/4 | 7/8 | 2 |
| SAFS22522 | 4 15/16 | 16 1/2 | 4 3/4 | 1 5/8 | 14 1/2 | 12 5/8 | 2 3/4 | 9 11/16 | 7 1/4 | 3/4 | 4 |
| SAFS22524 | 5 1/4 | 16 1/2 | 4 3/4 | 1 3/4 | 14 1/2 | 13 1/4 | 2 3/4 | 10 1/4 | 7 3/8 | 3/4 | 4 |
| SAFS22526 | 6 | 18 3/8 | 5 1/8 | 1 7/8 | 16 | 14 5/8 | 3 1/4 | 11 9/16 | 8 | 7/8 | 4 |
| SAFS22528 | 6 | 20 1/8 | 5 7/8 | 1 15/16 | 17 1/8 | 16 | 3 3/8 | 12 | 7 5/8 | 1 | 4 |
| SAFS22530 | 6 5/16 | 21 1/4 | 6 1/4 | 2 | 18 1/4 | 17 | 3 3/4 | 12 11/16 | 8 3/8 | 1 | 4 |
| SAFS22532 | 6 11/16 | 22 | 6 1/4 | 2 | 19 1/4 | 17 3/8 | 3 3/4 | 13 9/16 | 8 3/4 | 1 | 4 |
| SAFS22534 | 7 1/16 | 24 3/4 | 6 3/4 | 2 1/8 | 21 5/8 | 19 3/8 | 4 1/4 | 14 9/16 | 9 5/8 | 1 | 4 |
| SAFS22536 | 7 1/2 | 26 3/4 | 7 1/8 | 2 1/8 | 23 5/8 | 20 7/8 | 4 5/8 | 15 5/16 | 10 | 1 | 4 |
| SAFS22538 | 7 7/8 | 28 | 7 1/2 | 2 3/8 | 24 3/8 | 21 5/8 | 4 1/2 | 16 3/16 | 10 5/8 | 1 1/4 | 4 |
| SAFS22540 | 8 1/4 | 29 1/2 | 8 | 2 3/8 | 25 | 22 1/2 | 5 | 17 3/16 | 11 1/8 | 1 1/4 | 4 |
| SAFS22544 | 9 1/2 | 32 3/4 | 8 3/4 | 2 3/4 | 27 7/8 | 24 3/4 | 5 1/4 | 19 7/16 | 11 7/8 | 1 1/2 | 4 |

| SAFS PILLOW BLOCKS | | | | | | | | | | | |
|------------------------------|---------------------|----------|----------|----------|----------|--------|----------|----------|----------|-----------|--------|
| Complete Pillow Block Number | Dimensions (Inches) | | | | | | | | | Set Bolts | |
| | <i>h</i> | <i>a</i> | <i>b</i> | <i>c</i> | <i>m</i> | | <i>n</i> | <i>w</i> | <i>l</i> | Size | Number |
| | | | | | max. | min. | | | | | |
| SAFS22216 | 3 1/2 | 13 | 3 1/2 | 1 1/4 | 11 | 9 5/8 | — | 6 15/16 | 5 3/8 | 3/4 | 2 |
| SAFS22217 | 3 3/4 | 13 | 3 1/2 | 1 1/4 | 11 | 9 7/8 | — | 7 3/8 | 5 3/8 | 3/4 | 2 |
| SAFS22218 | 4 | 13 3/4 | 3 7/8 | 1 5/16 | 11 5/8 | 10 3/8 | — | 7 13/16 | 6 1/4 | 3/4 | 2 |
| SAFS22220 | 4 1/2 | 15 1/4 | 4 3/8 | 1 1/2 | 13 1/8 | 11 5/8 | — | 8 7/8 | 6 3/4 | 7/8 | 2 |
| SAFS22222 | 4 15/16 | 16 1/2 | 4 3/4 | 1 5/8 | 14 1/2 | 12 5/8 | 2 3/4 | 9 11/16 | 7 1/4 | 3/4 | 4 |
| SAFS22224 | 5 1/4 | 16 1/2 | 4 3/4 | 1 3/4 | 14 1/2 | 13 1/4 | 2 3/4 | 10 1/4 | 7 3/8 | 3/4 | 4 |
| SAFS22226 | 6 | 18 3/8 | 5 1/8 | 1 7/8 | 16 | 14 5/8 | 3 1/4 | 11 9/16 | 8 | 7/8 | 4 |
| SAFS22228 | 6 | 20 1/8 | 5 7/8 | 1 15/16 | 17 1/8 | 16 | 3 3/8 | 12 | 7 5/8 | 1 | 4 |
| SAFS22230 | 6 5/16 | 21 1/4 | 6 1/4 | 2 | 18 1/4 | 17 | 3 3/4 | 12 11/16 | 8 3/8 | 1 | 4 |
| SAFS22232 | 6 11/16 | 22 | 6 1/4 | 2 | 19 1/4 | 17 3/8 | 3 3/4 | 13 9/16 | 8 3/4 | 1 | 4 |
| SAFS22234 | 7 1/16 | 24 3/4 | 6 3/4 | 2 1/8 | 21 5/8 | 19 3/8 | 4 1/4 | 14 9/16 | 9 5/8 | 1 | 4 |
| SAFS22236 | 7 1/2 | 26 3/4 | 7 1/8 | 2 1/8 | 23 5/8 | 20 7/8 | 4 5/8 | 15 5/16 | 10 | 1 | 4 |
| SAFS22238 | 7 7/8 | 28 | 7 1/2 | 2 3/8 | 24 3/8 | 21 5/8 | 4 1/2 | 16 3/16 | 10 5/8 | 1 1/4 | 4 |
| SAFS22240 | 8 1/4 | 29 1/2 | 8 | 2 3/8 | 25 | 22 1/2 | 5 | 17 3/16 | 11 1/8 | 1 1/4 | 4 |
| SAFS22244 | 9 1/2 | 32 3/4 | 8 3/4 | 2 3/4 | 27 7/8 | 24 3/4 | 5 1/4 | 19 7/16 | 11 7/8 | 1 1/4 | 4 |

NTN Bearings

**TECHNICAL
INFORMATION**



TECHNICAL INFORMATION

Bearing Materials

The reliability and high capacity of NTN ball and roller bearings is the result of developments in metallurgy, manufacturing techniques, and our strict methods of quality control.

Contact surfaces of the bearing rings and rolling elements are subjected to repeated heavy stresses, yet must be able to maintain high precision and rotational accuracy. To accomplish this, the rings and rolling elements must be made of material that has high hardness, is resistant to rolling fatigue, is wear resistant and has good dimensional stability.

High carbon chromium bearing steel, which can be deep hardened, and case hardened steel with a hardened carburized outer layer are used for the rings and rolling elements of standard bearings. Case hardened steels have excellent shock resistance properties and are often used where impact loads are present.

The most common cause of fatigue cracking in bearings is the inclusion of non-metallic impurities in the bearing material. By using clean materials, the rolling fatigue life of the bearing is lengthened. For all its bearings, NTN uses steel of the highest cleanliness, and refined by a vacuum degassing process.

Bearing cage materials must have the strength to withstand rotational vibrations and shock loads. These materials must also have a low friction coefficient, be light weight, and be able to withstand bearing operating temperatures. Common cage materials are low carbon steel, bronze/brass alloy, or injection molded plastic. For additional information, please contact your NTN representative.

Handling & Installation

Improper handling practices prior to and during installation can easily damage the performance and precision built into NTN ball and roller bearings. It is necessary that certain precautions are taken to prevent such damage.

The most important factor to keep in mind when handling bearings is cleanliness. NTN bearings are assembled under immaculate conditions, then carefully packaged for protection against contamination and oxidation. A strong effort should be made to keep the bearings in this condition prior to final assembly. The bearing package should remain closed until ready for immediate installation. If it is necessary to unwrap bearings before that, they should be placed in a clean, dry area. Do not stack unpackaged bearings.

Bearings should be installed in an area where a clean atmosphere exists. Dirty conditions in the bearing installation area can easily lead to contamination and a premature failure. In addition, assembly benches and tools must be kept clean to prevent contaminants such as dust, grit and steel chips from entering the bearing. It is much easier to keep a bearing clean than it is to wash it clean enough for service.

The shaft, housing and other machine elements should be cleaned and inspected prior to bearing installation. The bearing mounting must be properly designed from a functional standpoint, and must have correct shaft and housing fits and shoulder heights. The design should be such that the bearings can be installed as easily as possible.

Proper assembly procedures and tools such as arbor presses, pullers, and sleeves will not only facilitate assembly, but will also avoid damage to the bearings. When a bearing is pressed on a shaft, the inner ring must be started squarely. A "cocked" ring may score the shaft and damage the bearing. The pressure must be applied directly on the ring being mounted. The bearing must not be tapped in place with direct blows on the bearing ring. The preferred practice is to place a sleeve between the bearing ring and the hammer and to tap the sleeve lightly all around. (Illustration A)

Sometimes a larger size bearing must be heated so that it can be more easily assembled on a shaft. A convenient method of doing this is to insert a heat source

such as a light bulb in the bore of the bearing, avoiding direct contact until the inner ring has expanded sufficiently. Another method is to heat the bearing in a bath of hot oil. The oil must be clean, and the temperature should not exceed 250° F. Higher temperatures may cause the oil to decompose and the bearing to lose its proper hardness.

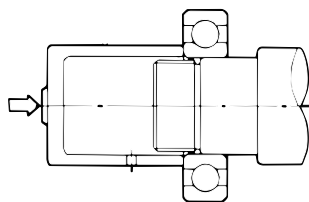


Fig. 15.1 Press mounting of inner ring

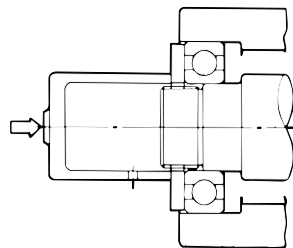


Fig. 15.2 Press mounting of inner and outer rings simultaneously

Illustration A

Running Test

After mounting, a running test should be performed to ensure that the bearing has been properly installed. The shaft or housing is first rotated by hand. If no problems are observed, a low speed, no load power test is performed. If no abnormalities are detected at this point, the load and speed are gradually increased to operating conditions. If any unusual noise, vibration or temperature rise is observed during the test, the procedure should be stopped and the installation examined.

Under normal conditions, bearing temperature rises with rotation and then reaches a stable operating temperature. If the temperature continues to rise and does not level off, or if there is a sudden temperature rise, or if the temperature is unusually high, the bearing should be inspected.

Dismounting

Bearings are often removed as part of periodic inspection procedures, or during the replacement of other parts. The shaft and housing are almost always reinstalled, and the bearings themselves are often reused. Because of this, the same guidelines for cleanliness in mounting apply to dismounting. (Illustration B)

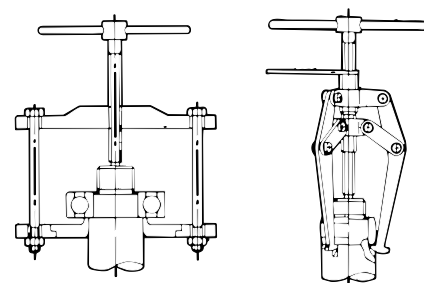


Fig. 15.12 Puller dismounting

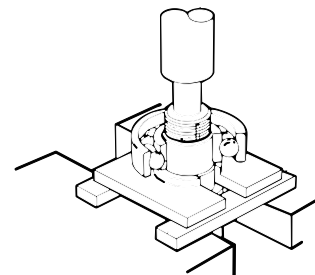


Fig. 15.13 Press dismounting

Illustration B



TECHNICAL INFORMATION

Lubrication

Bearing lubricants are of two basic types: oil or grease. The purpose of bearing lubrication is to prevent direct metal to metal contact between the various rolling and sliding elements. This is accomplished through the formation of a thin film on the contact surfaces, and is necessary for the following reasons:

- Friction and wear reduction
- Dissipation of heat generated within the bearing
- Prolonged bearing life
- Prevention of rust
- Protection from foreign material entering bearing

Grease lubricants are composed of either a mineral oil base or a synthetic oil base combined with a thicken-

ing agent. Grease type lubricants are relatively easy to handle, and require only the simplest sealing devices. A suitable grease should remain mechanically and chemically stable at operating temperature. It should not thicken, harden, separate, or become acid or alkaline to any marked degree.

Oil consists of either petroleum fluids refined from crude oil or synthetic fluids produced by chemical synthesis. Generally, oil lubrication is better suited for high speed and high temperature applications than grease lubrication. Oil lubrication is especially effective for those applications requiring the bearing generated heat (or heat applied to the bearing from other sources) to be dissipated. For additional lubrication information, please contact your NTN representative.

COMMON GREASE CODES AND NAMES

| NTN Code | Brand | Military Specs. | Temp. Range | Thickener | Oil |
|----------|----------------------------|-----------------|--------------------|---------------|---------------|
| 2AS | Shell Alvania 2S | MIL-G-18709A | -30° F to +230° F | Lithium | Petroleum |
| 9B | Mobil 28 | MIL-G-81322 | -80° F to +350° F | Synthetic | Synthetic |
| 5C | Chevron SRI-2 | MIL-G-3545C | -20° F to +350° F | Polyurea | Petroleum |
| 1D | LX40 (DuPont Krytox 240AB) | MIL-G-38220 | -40° F to +450° F | Fluorotelomer | Fluorotelomer |
| 1E | Exxon Andok C | — | -30° F to +250° F | Sodium | Petroleum |
| 4E | Exxon Andok 260 | MIL-G-3545 | -20° F to +275° F | Sodium | Petroleum |
| 4M | Dow-Corning DC 44M | MIL-G-15719A | -40° F to +400° F | Lithium | Silicone |
| 5S | Shell Aero Shell 7 | MIL-G-23827A | -100° F to +250° F | Microgel | Diester |
| 3W | Texaco Regal AFB 2 | MIL-G-24139 | -30° F to +230° F | Lithium | Petroleum |
| L627 | Exxon Polyrex EM | — | -20° F to +350° F | Polyurea | Mineral |
| 5K | Kyodo Yushi Multemp SRL | — | -40° F to +300° F | Lithium | — |

ANALYSIS OF BEARING OPERATING PROBLEMS

The following table lists some common types of bearing operating problems, probable causes, and suggested corrective measures. If these suggestions do not correct the trouble, call your **NTN** Representative for assistance.



**TECHNICAL
INFORMATION**

| Trouble | Observed Characteristic | Probable Cause | Corrective Action |
|--------------------|---|---|---|
| NOISE | High pitch, steady tone | Excessive axial load | Correct outer ring fit in housing and/or shoulder location to allow thermal expansion. |
| | | Excessive radial load | Use correct fit of inner ring on shaft. For radial bearings, use bearing with greater internal clearance. For pre-loaded paired bearings, use lighter preload. |
| | | Misalignment | Correct alignment. |
| | Low pitch, continuous or intermittent | Too much clearance in bearing | Use correct shaft fit. For radial bearings, use bearing with less internal clearance. For preloaded paired bearings, use heavier preload. |
| | | Bearing brinelled | Replace bearing, avoid brinelling. |
| | | Raceways pitted due to dirt | Wash all parts, replace with new bearing, use clean lubricant, improve seals. |
| | | Resonant vibration of machine structure | Stiffen or sound-deaden thin panels and large flat surfaces. |
| | Intermittent squeal or high pitch noise | Balls skidding | Provide thrust preload spring. Use thinner grease. For radial bearings, use bearing with less internal clearance. For preloaded paired bearings, check for correct preload. |
| | | Shaft rubbing housing | Correct seals and machine parts. |
| | Intermittent rumbles, rattles, clicks, etc. | Too much clearance in bearing | Correct shaft fit. For radial bearings, use adjusting spring or bearing with less internal clearance. For preloaded paired bearings, check for correct preload. |
| | | Dirt in bearing | Wash all parts, replace with new bearing if necessary, use clean lubricant, improve seals. |
| | | Loose machine parts | Tighten all fans, pulleys, closures, spacers, slingers etc. |
| TEMPERATURE | High after first start | Grease redistribution | Allow machine to cool. Restart. |
| | Continuously high during operation | Churning of lubricant | Use lower oil level, less grease, stiffer grease. |
| | | No lubricant | Add lubricant. |
| | | Excessive axial load | Check outer ring fit in housing and/or shoulder location to allow thermal expansion. |
| | | Excessive radial load | Use correct fit of inner ring on shaft. For radial bearings, use bearing with greater internal clearance. For preloaded paired bearings, use lighter preload. |
| | | Bearing misaligned | Correct machine parts and alignment procedures. |
| | | Excessive seal drag | Use different type of seal. |

Continued next page ...

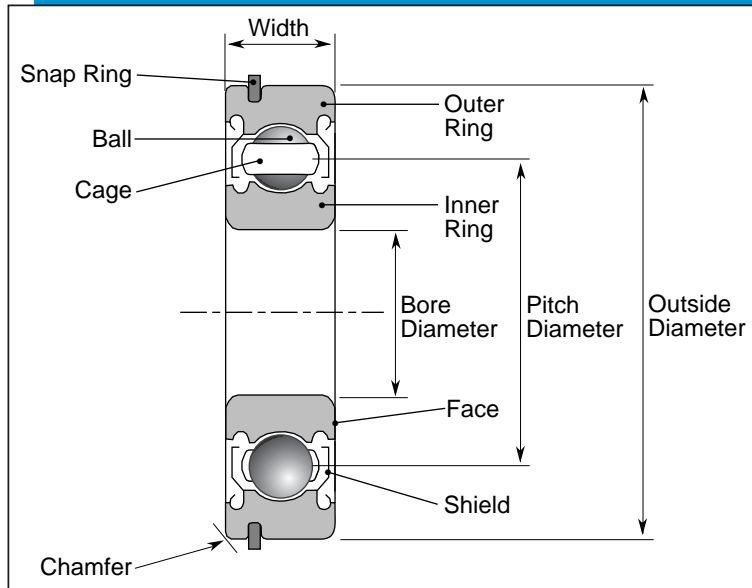


**TECHNICAL
INFORMATION**

| Trouble | Observed Characteristic | Probable Cause | Corrective Action |
|-----------------------------------|--|---------------------------------------|---|
| EXCESSIVE VIBRATION | During acceleration or deceleration periods | Critical speeds of machine components | Stiffen shaft or other machine components to avoid critical speeds. |
| | During operation at fixed speeds | Unbalanced rotating parts | Dynamically balance rotating parts. |
| | | Shaft bent | Straighten and re-balance. |
| | | Cams, gears, linkage | Adjust, improve or redesign. |
| | | Misalignment | Correct machine parts. |
| | | Bearing brinelled | Replace bearing, avoid brinelling. |
| RUNOUT | Shaft does not run true. Shaft binds when rotated by hand. | Shaft bent | Straighten shaft and re-balance. |
| | | Bearing misaligned | Correct machine parts and alignment procedures. |
| | | Bearing rings out of square | Check squareness of shaft and housing shoulders, spacers and flingers, etc. |
| | | Dirt | Wash all parts, replace with new bearing if necessary, use clean lubricant, improve seals. |
| | | Machine deflection | Stiffen machine members. |
| INNER RING WEARS LOOSE ON SHAFT | Wear of the shaft seat | Incorrect shaft fit | Use recommended shaft fit. |
| | | Poor shaft finish | Smooth turn or grind shaft to size after metalspraying or chrome plating. |
| OUTER RING WEARS LOOSE IN HOUSING | Wear in housing bore | Housing fit too loose | Use recommended housing fit. |
| | | Unbalanced forces | Dynamically balance rotating parts. Clamp outer ring faces. Use cylindrical roller bearing and press fit outer and inner rings. |
| | | Poor finish | Bore or grind housing I.D. oversize, press in a bushing and finish bore or grind to size. |
| | | Soft housing material | Use steel liners. Work-harden bore. |

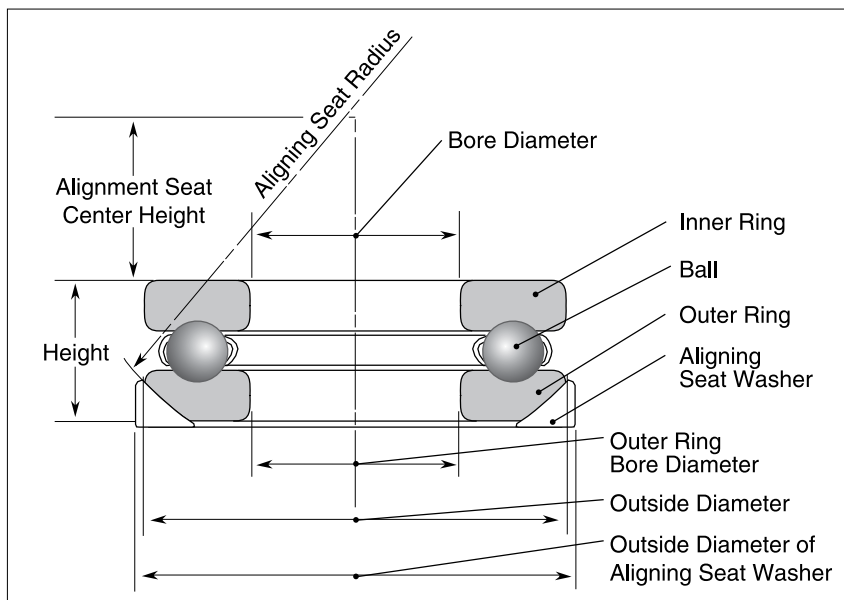
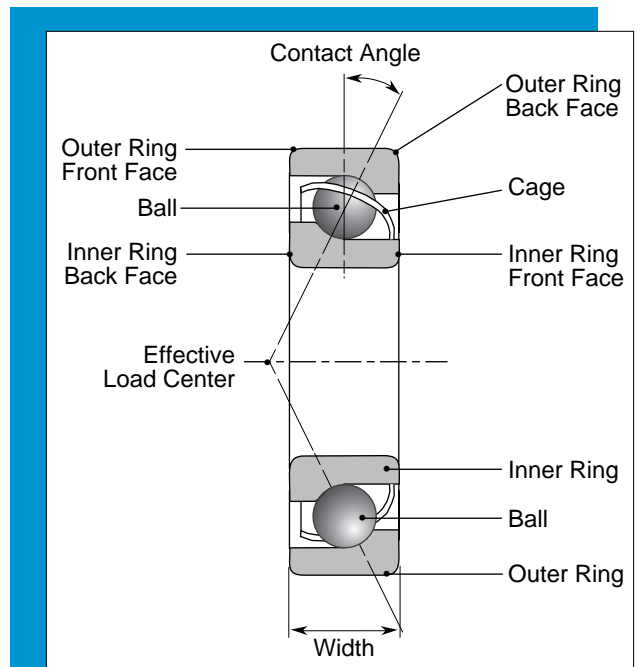


**TECHNICAL
INFORMATION
BEARING
NOMENCLATURE**



**SINGLE ROW DEEP
GROOVE BALL BEARING**

**SINGLE ROW ANGULAR
CONTACT BALL BEARING**

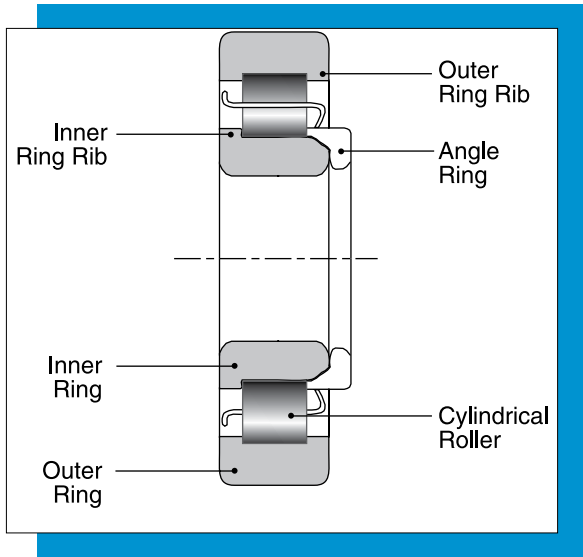
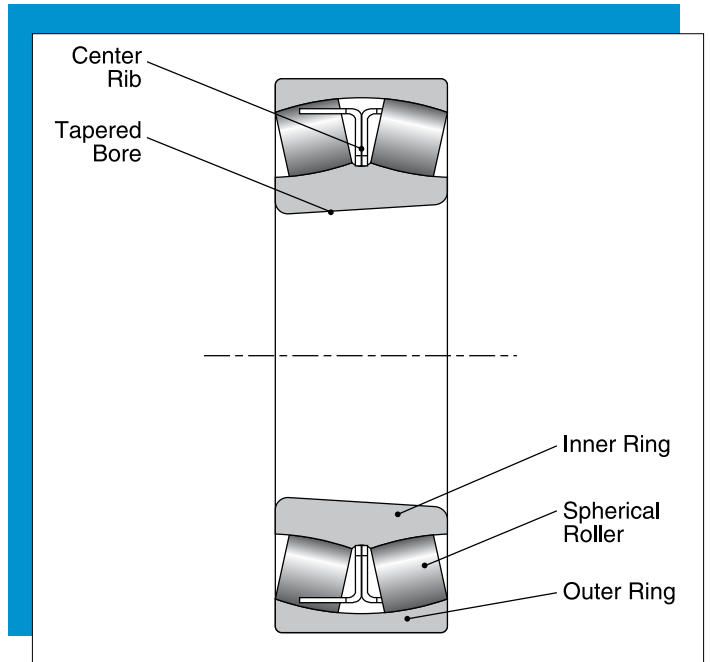


**SINGLE DIRECTION
THRUST BALL BEARING**



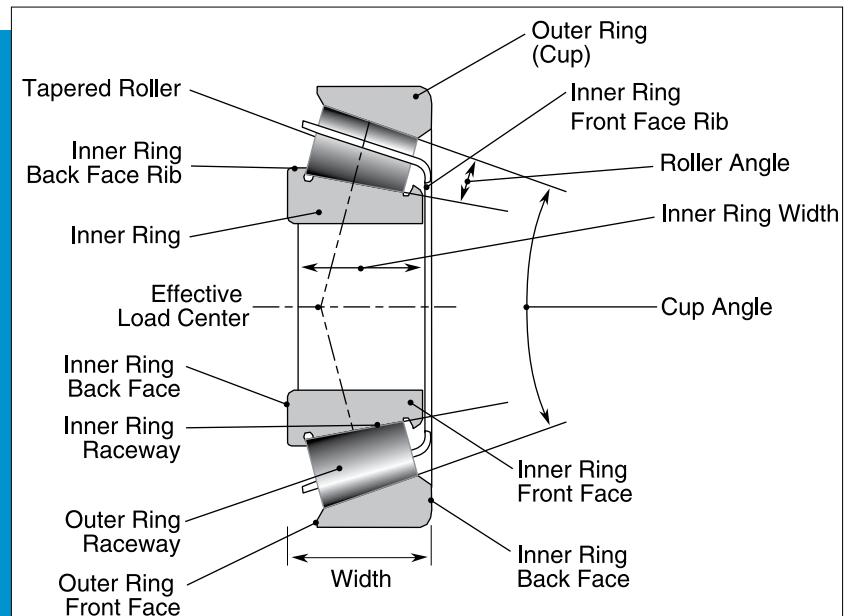
**TECHNICAL
INFORMATION
BEARING
NOMENCLATURE**

SPHERICAL ROLLER BEARING

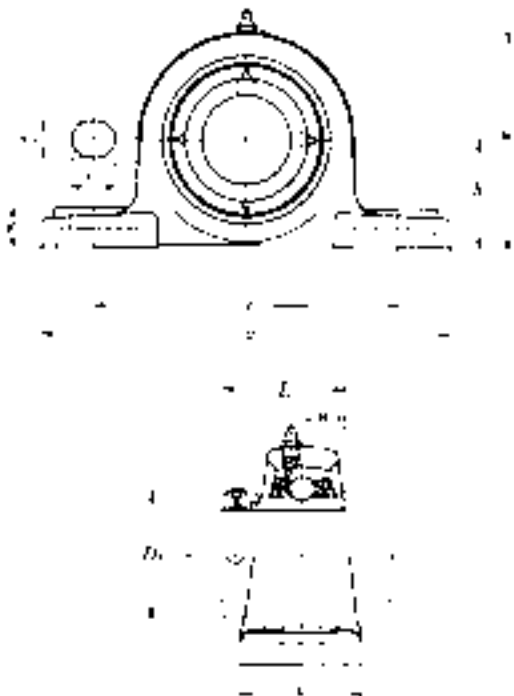


CYLINDRICAL ROLLER BEARING

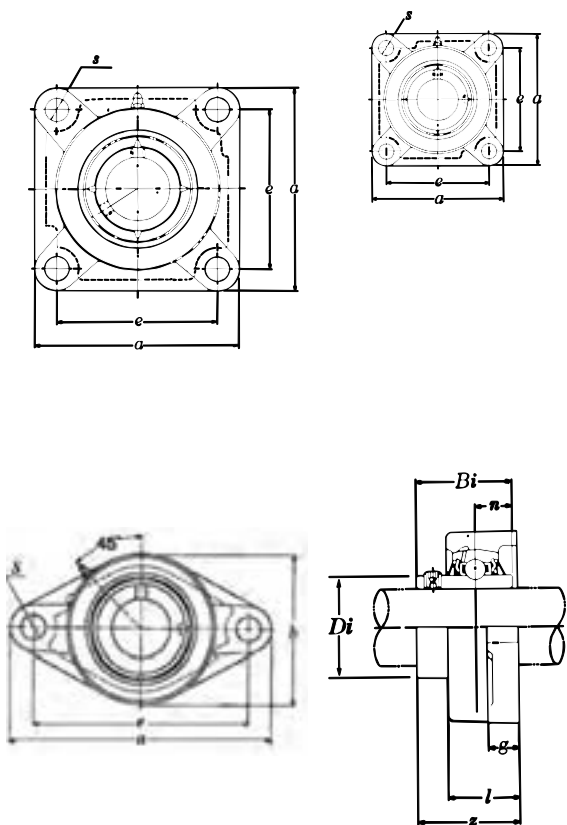
TAPERED ROLLER BEARING



PILLOW BLOCKS



FLANGE UNITS



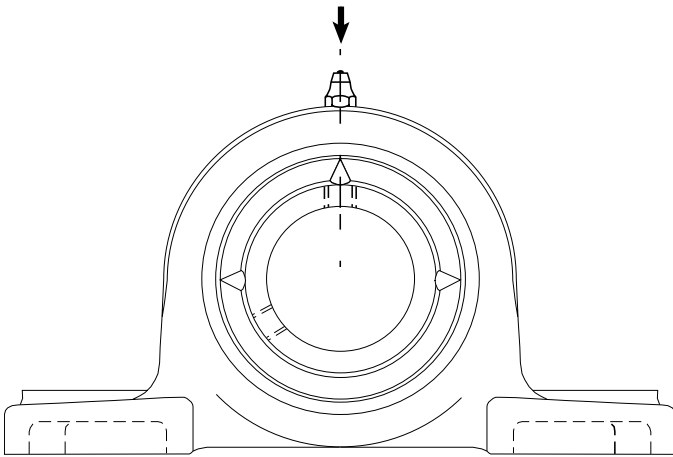
BEARING UNIT DIMENSION NOMENCLATURE

- a = Total housing length
- b = Total housing width – flange units
- e = Bolt hole center-to-center distance
- s_1, s_2 = Bolt hole size, pillow blocks
- s = Bolt hole size, flange units
- Z = Total housing plus bearing depth
- l = Total housing depth – flange units
- i = Bearing ball center to housing rear depth
- N = Bearing ball center to bearing inner ring face
- B_i = Total bearing unit depth – flange units
- g = Flange depth and bolt hole depth
- w = Total bearing unit height – pillow blocks
- h = Bearing unit base to bearing bore center (Center Height) Pillow Blocks

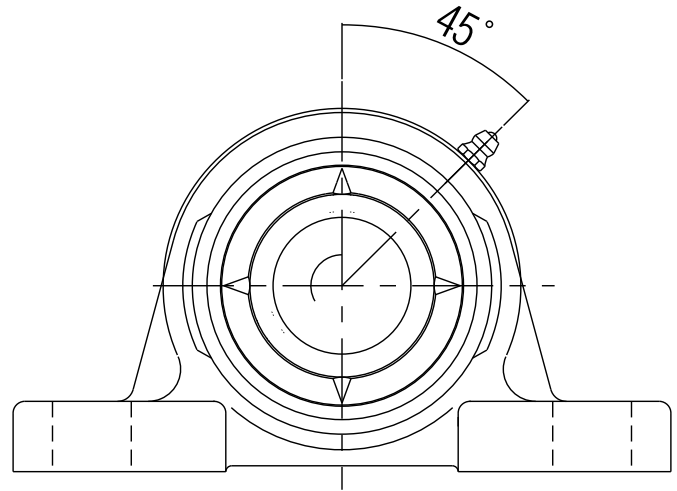


TECHNICAL
INFORMATION
BEARING
NOMENCLATURE

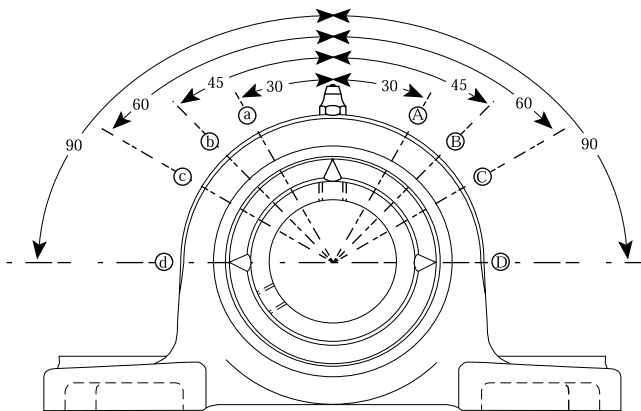
STANDARD GREASE FITTINGS



45° GREASE FITTINGS



QUASI-STANDARD GREASE FITTINGS



LOCATION OF GREASE FITTING

| Position | Direction | Rotation | Suffix |
|----------|--------------------|----------|--------|
| Ⓐ | *Clockwise | 30° | (10) |
| Ⓑ | Clockwise | 45° | (11) |
| Ⓒ | Clockwise | 60° | (12) |
| Ⓓ | Clockwise | 90° | (13) |
| Ⓐ | **Counterclockwise | 30° | (14) |
| Ⓑ | Counterclockwise | 45° | (15) |
| Ⓒ | Counterclockwise | 60° | (16) |
| Ⓓ | Counterclockwise | 90° | (17) |

*,** Facing NTN Brand Marking on the housing.

Example: UCP205D1 (11) grease fitting on the location capital "B."



BEARING RATINGS

The following load rating information applies to radial, angular contact and tapered roller bearings, but not specifically to thrust bearings. When determining load ratings, remember that all ratings are not absolute.

STATIC LOAD RATING

The static load rating is the Radial load that will cause a certain amount of immediate damage to the internal operating surfaces of the bearing. This level of surface damage is acceptable in most cases but in some demanding situations may cause too much noise, so a much lower load limitation may be necessary. A higher load may be feasible if subsequent noise is not intolerable.

Actual noise levels are very dependent upon speed so if the speed is low, more surface damage can be accepted. Also, tolerable noise levels vary depending upon the application.

The static load rating has nothing to do with allowable Axial or Thrust loading. In most cases, axial ratings are much lower than those in this catalog so please consult NTN when such loads approach 25% of this rating.

DYNAMIC LOAD RATING

The dynamic load rating has no direct significance other than that it is a number which, along with speed, must be used in an equation to calculate theoretical bearing life. Load usage of this magnitude is usually very inappropriate. Life will be too short and the bearing may become noisy if the static load rating is exceeded. The rating can be used to compare different bearings if the life equations that apply to them are the same.

LIMITING SPEEDS

Limiting speeds are shown for oil and grease and contact seals when appropriate. However, many factors are omitted in this simplified rating that can affect the actual limit in a given case. Although many applications can run at much higher speeds, it is prudent to take precautions and consult NTN when speeds exceed 75% of the limit.



**TECHNICAL
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FITTING PRACTICE

The following five tables list the most likely suggestions for shaft and housing bore diameters for the more popular bearing series. The values in the tables provide the allowable deviations from the nominal diameters for most normal conditions.

UNUSUAL CONDITIONS

Different fits may be required for unusual conditions of loading, speed, temperature, housing or shaft material, wall thickness, vibration, poor surface finish and so on. For example, tighter fits are required for heavy loads, vibration, hollow shafts or thin housings, light alloy or plastic housings, etc. Consult NTN when in doubt.

ROTATING LOADS

The tables assume that the direction of load is constant. Where load rotates, reverse the rotating and stationary fits.

EFFECT ON CLEARANCES

The fits shown will usually work well with standard or C3 clearance bearings. Minor fit differences of .0001" or .0002" can usually be ignored but greater differences may require the use of other clearance classes.

AN EXAMPLE to illustrate the use of the tables:

A 6218 ball bearing has a **nominal** 90mm bore and a **nominal** inch bore of 3.5433". Assuming normal conditions, its shaft size is found in table 1. The 5th column, shows +7 to +1. These deviations applied to the **nominal** 3.5433" give a shaft size range of 3.5440" to 3.5434".



**TECHNICAL
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STANDARD SHAFT SIZES
Deviation from Nominal Sizes in Units of 0.0001 inch

| TABLE 1 – METRIC RADIAL BEARINGS | | | | | | | | | | | | | |
|---|-----|---------|---------|------------------|------|------------------|------|----------------|----|-----|-----|---------------|-----|
| Nominal Bearing Bore | | | | Radial Loads | | | | | | | | | |
| | | | | Pure Axial Loads | | Stationary Shaft | | Rotating Shaft | | | | | |
| mm | | inch | | | | | | max | | min | | Ball Bearings | |
| | | | | over | incl | over | incl | | | | | max | min |
| 3 | 6 | 0.1181 | 0.2362 | +2 | -1 | -2 | -5 | +1 | -1 | | | | |
| 6 | 10 | 0.2362 | 0.3937 | +3 | -1 | -2 | -6 | +2 | -1 | | | | |
| 10 | 18 | 0.3937 | 0.7087 | +3 | -1 | -2 | -7 | +2 | -1 | +4 | 0 | | |
| 18 | 30 | 0.7087 | 1.1811 | +4 | -2 | -3 | -8 | +4 | +1 | +4 | +1 | | |
| 30 | 40 | 1.1811 | 1.5748 | +4 | -2 | -4 | -10 | +5 | +1 | +5 | +1 | +5 | +1 |
| 40 | 50 | 1.5748 | 1.9685 | +4 | -2 | -4 | -10 | +5 | +1 | +8 | +4 | +8 | +4 |
| 50 | 65 | 1.9685 | 2.5591 | +5 | -3 | -4 | -11 | +6 | +1 | +9 | +4 | +9 | +4 |
| 65 | 80 | 2.5591 | 3.1496 | +5 | -3 | -4 | -11 | +6 | +1 | +9 | +4 | +12 | +4 |
| 80 | 100 | 3.1496 | 3.9370 | +5 | -4 | -5 | -13 | +7 | +1 | +11 | +5 | +14 | +5 |
| 100 | 120 | 3.9370 | 4.7244 | +5 | -4 | -5 | -13 | +7 | +1 | +14 | +5 | +18 | +9 |
| 120 | 140 | 4.7244 | 5.5118 | +6 | -4 | -6 | -15 | +8 | +1 | +16 | +6 | +20 | +11 |
| 140 | 180 | 5.5118 | 7.0866 | +6 | -4 | -6 | -15 | +8 | +1 | +20 | +11 | +27 | +17 |
| 180 | 250 | 7.0866 | 9.8425 | +6 | -5 | -6 | -17 | +9 | +2 | +24 | +12 | +31 | +20 |
| 250 | 280 | 9.8425 | 11.0236 | +6 | -6 | -7 | -19 | +11 | +2 | +26 | +13 | +35 | +22 |
| 280 | 315 | 11.0236 | 12.4016 | +6 | -6 | -7 | -19 | +11 | +2 | +26 | +13 | +51 | +39 |

| TABLE 2 – TAPERED ROLLER BEARINGS (INCH SERIES) | | | | | | |
|--|------|----------------|-----|------------------|-----|--|
| Nominal Bearing Bore | | Rotating Shaft | | Stationary Shaft | | |
| over | incl | max | min | max | min | |
| 0 | 3 | +15 | +10 | 0 | -5 | |
| 3 | 12 | +25 | +15 | 0 | -10 | |
| 12 | 24 | +50 | +30 | 0 | -20 | |

"J" prefix tapers are metric - see above.

| TABLE 3 – INSERT BEARINGS SET SCREW & LOCKING COLLAR TYPES | | | | | | | |
|---|------|-----------|-----|--------------|-----|------------|-----|
| Nominal Bearing Bore (Inches) | | Low Speed | | Medium Speed | | High Speed | |
| over | incl | max | min | max | min | max | min |
| 0 | .7 | 0 | -10 | 0 | -7 | +7 | +3 |
| .7 | 1.2 | 0 | -13 | 0 | -8 | +7 | +3 |
| 1.2 | 2.0 | 0 | -15 | 0 | -10 | +10 | +4 |
| 2.0 | 3.2 | 0 | -18 | 0 | -12 | +12 | +4 |
| 3.2 | 4.8 | 0 | -21 | 0 | -14 | +14 | +5 |
| Speed = Bore x RPM | | 2500 max | | 3500 max | | 7000 max | |



**TECHNICAL
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STANDARD HOUSING BORE SIZES
Deviation from Nominal Sizes in Units of 0.0001 inch

| TABLE 4 – METRIC RADIAL BEARINGS | | | | | | | | | | | |
|---|------|---------|---------|--------------------|-----|--------------|-----|------------------|-----|-------------------|-----|
| Nominal Bearing O.D. | | | | Stationary Housing | | | | Rotating Housing | | | |
| mm | | Inch | | Normal | | Heated Shaft | | Normal | | Thin Wall Housing | |
| over | incl | over | incl | max | min | max | min | max | min | max | min |
| 10 | 18 | 0.3937 | 0.7087 | +7 | 0 | +10 | +3 | -2 | -9 | -4 | -11 |
| 18 | 30 | 0.7087 | 1.1811 | +8 | 0 | +11 | +3 | -3 | -11 | -5 | -13 |
| 30 | 50 | 1.1811 | 1.9685 | +10 | 0 | +14 | +4 | -3 | -13 | -6 | -16 |
| 50 | 80 | 1.9685 | 3.1496 | +12 | 0 | +16 | +4 | -3 | -15 | -9 | -21 |
| 80 | 120 | 3.1496 | 4.7244 | +14 | 0 | +19 | +5 | -4 | -18 | -11 | -25 |
| 120 | 180 | 4.7244 | 7.0866 | +16 | 0 | +22 | +6 | -6 | -22 | -12 | -28 |
| 180 | 250 | 7.0866 | 9.8425 | +18 | 0 | +24 | +6 | -8 | -26 | -14 | -32 |
| 250 | 315 | 9.8425 | 12.4016 | +20 | 0 | +27 | +7 | -8 | -28 | -14 | -34 |
| 315 | 400 | 12.4016 | 15.7480 | +22 | 0 | +29 | +7 | -8 | -30 | -17 | -39 |
| 400 | 500 | 15.7480 | 19.6850 | +25 | 0 | +33 | +8 | -9 | -34 | -19 | -44 |

| TABLE 5 – TAPERED ROLLER BEARINGS (INCH SERIES) | | | | | |
|--|------|--------------------|-----|------------------|-----|
| Nominal Cup O.D. Inch | | Stationary Housing | | Rotating Housing | |
| over | incl | max | min | max | min |
| 0 | 3 | +10 | 0 | -5 | -15 |
| 3 | 5 | +10 | 0 | -10 | -20 |
| 5 | 12 | +20 | 0 | -10 | -20 |
| 12 | 24 | +30 | +10 | -10 | -20 |

"J" prefix tapers are metric - see above.

NTN Bearings

Tolerance Tables, Clearance Tables and Interchange Data



TOLERANCES

Definitions pertaining to tolerance limits for boundary dimensions, various runouts, and internal clearance are given in AFBMA Standard 4, ANSI B3.4: Tolerance Definitions and Gaging Practice. The tolerance limits listed in this Standard refer exclusively to these concepts.

SYMBOLS COMMON TO RADIAL BEARINGS AND THRUST BEARINGS

| | | |
|--------------|---|--|
| d | = | Basic bore diameter |
| D | = | Basic outside diameter |
| V_{dp} | = | Single radial plane bore diameter variation |
| V_{Dp} | = | Single radial plane outside diameter variation |
| $r_{a\ max}$ | = | Largest shaft and housing fillets which the bearing chamfer must clear |
| r_s | = | Single chamfer dimension of a ring |
| $r_{s\ min}$ | = | Low limit of r |
| $r_{s\ max}$ | = | High limit of r |

SYMBOLS APPLICABLE TO RADIAL BEARINGS

| | | |
|-----------|---|---|
| B | = | Basic width of an individual inner ring; also of an individual outer ring when both rings have the same basic width |
| B_s | = | Single width of an inner ring; also that of an outer ring when both rings have the same basic width |
| V_{dmp} | = | Mean single plane bore diameter variation |
| V_{Dmp} | = | Single plane mean outside diameter deviations |
| K_1 | = | Radial runout of an inner ring raceway |
| K_e | = | Radial runout of an outer ring raceway |
| S_d | = | Reference side runout with bore of an inner ring |
| S_D | = | Outside cylindrical surface runout with reference side of an outer ring |
| S_{ia} | = | Assembled bearing inner ring (or cone back face) runout with raceway |
| S_{ea} | = | Assembled bearing outer ring (or cup back face) runout with raceway |
| V_{Bs} | = | Width variation of an inner ring; also that of an outer ring when both rings have the same basic width |

SYMBOLS APPLICABLE TO SINGLE DIRECTION THRUST BEARINGS

| | | |
|-------|---|--|
| H | = | Basic bearing height |
| H_m | = | Actual bearing height |
| A_i | = | Raceway runout with flat seat face of shaft washer |
| A_e | = | Raceway runout with flat seat face of housing washer |

TOLERANCE CLASS ABEC-1, RBEC-1

Tolerance limits for:

Metric ball and roller bearings (except tapered roller bearings) conforming to basic boundary plans.



Table 1 (Tolerance Limits in 0.0001 inch)

| INNER RING | | | | | | | | | | | | | | |
|--------------------------|-------|---------|---------|---------------------------|------|--|-------|--|------|--|--|------|--|------|
| BASIC BORE DIAMETER d | | | | BORE Allowable Deviations | | SINGLE RADIAL PLANE BORE DIAMETER VARIATION V _{dp} | | SINGLE PLANE MEAN BORE DIAMETER DEVIATIONS V _{dmp} | | RADIAL RUNOUT K _{ra} Max. | WIDTH Allowable Deviations from B | | | |
| mm | | inch | | Low | High | Diameter Series | | Max. | Max. | | Normal Single Bearings B _s | | Modified Single Bearings B _s | |
| Over | Incl. | Over | Incl. | | | 0.1 | 2,3,4 | | | High | Low | High | Low | High |
| 2.5 | 10 | .0984 | .3937 | -3 | +0 | 3 | 2.5 | 2.5 | 3 | +0 | -50 | +0 | -100 | |
| 10 | 18 | .3937 | .7087 | -3 | +0 | 3 | 2.5 | 2.5 | 4 | +0 | -50 | +0 | -100 | |
| 18 | 30 | .7087 | 1.1811 | -4 | +0 | 3 | 2.5 | 2.5 | 5 | +0 | -50 | +0 | -100 | |
| 30 | 50 | 1.1811 | 1.9685 | -5 | +0 | 4 | 3 | 3 | 6 | +0 | -50 | +0 | -100 | |
| 50 | 80 | 1.9685 | 3.1496 | -6 | +0 | 4.5 | 3.5 | 3.5 | 8 | +0 | -60 | +0 | -150 | |
| 80 | 120 | 3.1496 | 4.7244 | -8 | +0 | 7.5 | 4.5 | 4.5 | 10 | +0 | -80 | +0 | -150 | |
| 120 | 180 | 4.7244 | 7.0866 | -10 | +0 | 10 | 6 | 6 | 12 | +0 | -100 | +0 | -200 | |
| 180 | 250 | 7.0866 | 9.8425 | -12 | +0 | 12 | 7.5 | 7.5 | 16 | +0 | -120 | +0 | -200 | |
| 250 | 315 | 9.8425 | 12.4015 | -14 | +0 | 15 | 9 | 9 | 20 | +0 | -140 | +0 | -200 | |
| 315 | 400 | 12.4015 | 15.7480 | -16 | +0 | 17 | 10 | 10 | 24 | +0 | -160 | +0 | -250 | |
| 400 | 500 | 15.7480 | 19.6850 | -18 | +0 | 20 | 12 | 12 | 26 | +0 | -180 | — | — | |
| 500 | 630 | 19.6850 | 24.8031 | -20 | +0 | 22 | 13 | 13 | 28 | +0 | -200 | — | — | |
| 630 | 800 | 24.8031 | 31.4961 | -30 | +0 | 25 | 15 | 15 | 32 | +0 | -300 | — | — | |
| 800 | 1000 | 31.4961 | 39.3701 | -40 | +0 | — | — | — | 35 | +0 | -400 | — | — | |
| 1000 | 1250 | 39.3701 | 49.2126 | -50 | +0 | — | — | — | — | +0 | -500 | — | — | |
| 1250 | 1600 | 49.2126 | 62.9921 | -60 | +0 | — | — | — | — | +0 | -600 | — | — | |
| 1600 | 2000 | 62.9921 | 78.7402 | -80 | +0 | — | — | — | — | +0 | -800 | — | — | |

| OUTER RING | | | | | | | | | | | | |
|-----------------------------|-------|---------|---------|---|------|---------------|-------|--------------------------------|--|--|--|--|
| BASIC OUTSIDE DIAMETER D | | | | SINGLE RADIAL PLANE OUTSIDE DIAMETER VARIATION V _{Dp} | | | | | SINGLE PLANE MEAN OUTSIDE DIAMETER VARIATION V _{Dmp} | RADIAL RUNOUT K _{ra} Max. | WIDTH LIMITS | |
| mm | | inch | | All Bearings | | Open Bearings | | Bearings with Shields or Seals | Max. | K _{ra} Max. | | |
| Over | Incl. | Over | Incl. | High | Low | 0.1 | 2,3,4 | 2,3,4 | | | | |
| 6 | 18 | .2362 | .7087 | +0 | -3 | 3 | 2.5 | 4 | 2.5 | 6 | Identical to those of inner ring of the same bearing | |
| 18 | 30 | .7087 | 1.1811 | +0 | -4 | 3.5 | 3 | 4.5 | 3 | 6 | | |
| 30 | 50 | 1.1811 | 1.9685 | +0 | -5 | 4.5 | 3 | 6.5 | 3 | 8 | | |
| 50 | 80 | 1.9685 | 3.1496 | +0 | -5 | 5 | 4 | 8 | 4 | 10 | | |
| 80 | 120 | 3.1496 | 4.7244 | +0 | -6 | 7.5 | 4.5 | 10 | 4.5 | 14 | | |
| 120 | 150 | 4.7244 | 5.9055 | +0 | -8 | 9 | 5.5 | 12 | 5.5 | 16 | | |
| 150 | 180 | 5.9055 | 7.0866 | +0 | -10 | 12 | 7.5 | 15 | 7.5 | 18 | | |
| 180 | 250 | 7.0866 | 9.8425 | +0 | -12 | 15 | 9 | — | 9 | 20 | | |
| 250 | 315 | 9.8425 | 12.4015 | +0 | -14 | 17 | 10 | — | 10 | 24 | | |
| 315 | 400 | 12.4015 | 15.7480 | +0 | -16 | 20 | 12 | — | 12 | 28 | | |
| 400 | 500 | 15.7480 | 19.6850 | +0 | -18 | 22 | 13 | — | 13 | 32 | | |
| 500 | 630 | 19.6850 | 24.8031 | +0 | -20 | 25 | 15 | — | 15 | 40 | | |
| 630 | 800 | 24.8031 | 31.4961 | +0 | -30 | 37 | 22 | — | 22 | 47 | | |
| 800 | 1000 | 31.4961 | 39.3701 | +0 | -40 | 49 | 30 | — | 30 | 55 | | |
| 1000 | 1250 | 39.3701 | 49.2126 | +0 | -50 | — | — | — | — | 64 | | |
| 1250 | 1600 | 49.2126 | 62.9921 | +0 | -65 | — | — | — | — | 76 | | |
| 1600 | 2000 | 62.9921 | 78.7402 | +0 | -80 | — | — | — | — | 90 | | |
| 2000 | 2500 | 78.7402 | 98.4252 | +0 | -100 | — | — | — | — | — | | |

Bore tolerance limits do not apply to tapered bore inner rings.

This refers to a ball bearing on which one or both sides are modified so two or more bearings can be mounted side by side as a unit.

Applies before mounting and after removal of internal or external snap ring.

No values have been established for diameter series 0 and 1.



TOLERANCE CLASS ABEC-5, RBEC-5

Tolerance limits for:

Metric ball and roller bearings (except instrument bearings and tapered roller bearings) conforming to basic boundary plans.

Table 2 (Tolerance Limits in 0.0001 inch)

| INNER RING | | | | | | | | | | | | | | | | |
|----------------------------|-------|---------|---------|--|---------------|--|---------------------------------------|--|------|--------|-----------------------------------|--------------------------------------|-------------------------------|------|---|------|
| BASIC BORE DIAMETER d | | | | BORE Allowable Deviations from d | | SINGLE RADIAL PLANE BORE DIAMETER VARIATION V_{dp} | | SINGLE PLANE MEAN BORE DIAMETER DEVIATIONS V_{dmp} | | RUNOUT | | | WIDTH | | | |
| | | | | | | | | | | Radial | Reference Side With Bore | Raceway With Reference Side | Allowable Deviations from B | | Variation of B_s in Individual Ring V_{Bs} | |
| | | | | K_{ia} Max. | S_d Max. | S_{ia} Max. | Normal Single Bearings B_s | Modified Single Bearings B_s | High | | | | Low | High | | Low |
| Over | Incl. | Over | Incl. | Low | High | Bearings of Diameter Series 4,3,2,1,0 Max | | Max | | | | High | Low | High | Low | Max. |
| .6 | 10 | .0236 | .3937 | -2 | +0 | 2 | 1.5 | 1 | 1.5 | 3 | 3 | +0 | -16 | +0 | -100 | 2 |
| 10 | 18 | .3937 | .7087 | -2 | +0 | 2 | 1.5 | 1 | 1.5 | 3 | 3 | +0 | -32 | +0 | -100 | 2 |
| 18 | 30 | .7087 | 1.1811 | -2 | +0 | 2.5 | 2 | 1 | 1.5 | 3 | 3 | +0 | -50 | +0 | -100 | 2 |
| 30 | 50 | 1.1811 | 1.9685 | -2 | +0 | 3 | 2.5 | 1.5 | 2.0 | 3 | 3 | +0 | -50 | +0 | -100 | 2 |
| 50 | 80 | 1.9685 | 3.1496 | -3 | +0 | 3.5 | 3 | 2 | 2.0 | 3 | 3 | +0 | -60 | +0 | -100 | 2 |
| 80 | 120 | 3.1496 | 4.7244 | -3 | +0 | 4 | 3 | 2 | 2.5 | 3 | 4 | +0 | -80 | +0 | -150 | 3 |
| 120 | 180 | 4.7244 | 7.0866 | -4 | +0 | 5 | 4 | 3 | 3.0 | 4 | 4 | +0 | -100 | +0 | -150 | 3 |
| 180 | 250 | 7.0866 | 9.8425 | -5 | +0 | 6 | 4.5 | 3 | 4.0 | 4 | 5 | +0 | -120 | +0 | -200 | 4 |
| 250 | 315 | 9.8425 | 12.4015 | -5 | +0 | 7 | 5.5 | 3.5 | 5.0 | 5 | 6 | +0 | -140 | +0 | -200 | 5 |
| 315 | 400 | 12.4015 | 15.7480 | -6 | +0 | 9 | 7 | 4.5 | 5.0 | 5 | 7 | +0 | -160 | +0 | -250 | 5 |

| OUTER RING | | | | | | | | | | | | | | |
|-------------------------------|-------|---------|---------|---|---------------|--|-----------|-----------|------------------|---|--------------------------------------|-----------|-----|---|
| BASIC OUTSIDE DIAMETER D | | | | SINGLE RADIAL PLANE OUTSIDE DIAMETER VARIATION V_{dp} | | | | | RUNOUT | | | WIDTH | | |
| | | | | | | | | | Radial | Cylindrical Surface with Reference Side | Raceway with Reference Side | Limits | | Variation of B_s in Individual Ring V_{Bs} |
| | | | | All Bearings | Open Bearings | Bearings with Shields or Seals Diameter Series | High | Low | | | | Max | Max | |
| Over | Incl. | Over | Incl. | High | Low | 7,8,9 | 0,1,2,3,4 | 4,3,2,1,0 | K_{ea} Max. | S_D Max. | S_{ea} Max. | | | Max. |
| 2.5 | 6 | .0984 | .2362 | +0 | -2 | 2 | 1.5 | 1 | 2 | 3 | 3 | Identical | 2 | |
| 6 | 18 | .2362 | .7087 | +0 | -2 | 2 | 1.5 | 1 | 2 | 3 | 3 | 2 | 2 | |
| 18 | 30 | .7087 | 1.1811 | +0 | -2 | 2.5 | 2 | 1 | 2 | 3 | 3 | to those | 2 | |
| 30 | 50 | 1.1811 | 1.9685 | +0 | -2 | 3 | 2 | 1.5 | 2 | 3 | 3 | 2 | 2 | |
| 50 | 80 | 1.9685 | 3.1496 | +0 | -3 | 3.5 | 3 | 2 | 3 | 3 | 4 | of inner | 2 | |
| 80 | 120 | 3.1496 | 4.7244 | +0 | -3 | 4 | 3 | 2 | 4 | 3 | 5 | 3 | 3 | |
| 120 | 150 | 4.7244 | 5.9055 | +0 | -4 | 4.5 | 3 | 2.5 | 4 | 4 | 5 | ring of | 3 | |
| 150 | 180 | 5.9055 | 7.0866 | +0 | -5 | 5 | 4 | 3 | 5 | 4 | 6 | 3 | 3 | |
| 180 | 250 | 7.0866 | 9.8425 | +0 | -5 | 6 | 4.5 | 3 | 5 | 4 | 6 | 4 | 4 | |
| 250 | 315 | 9.8425 | 12.4015 | +0 | -5 | 7 | 5.5 | 3.5 | 6 | 5 | 7 | the same | 5 | |
| 315 | 400 | 12.4015 | 15.7480 | +0 | -6 | 8 | 6 | 4 | 7 | 5 | 8 | 5 | 5 | |
| 400 | 500 | 15.7480 | 19.6850 | +0 | -7 | 9 | 6.5 | 4.5 | 8 | 6 | 9 | bearing | 6 | |
| 500 | 630 | 19.6850 | 24.8031 | +0 | -8 | 11 | 8.5 | 5.5 | 9 | 6 | 10 | 6 | 6 | |

For Instrument Ball Bearing tolerances see AFBMA Standard 12, ANSI B3.10.

Bore tolerance limits do not apply to tapered bore inner rings.

Does not apply to roller bearings or self-aligning ball bearings.

This refers to a ball bearing on which one or both sides are modified so two or more bearings can be mounted side by side as a unit.

For bearings with shields or seals of diameter series 9 and 8, D_s is not restricted.

Applies to bearings of width series 1 or narrower.

No values have been established for capped bearings.

TOLERANCE CLASS ABEC-7

Tolerance limits for:

Metric radial and angular contact ball bearings (except instrument bearings).



Table 3 (Tolerance Limits in 0.0001 inch)

| INNER RING | | | | | | | | | | | | | | | | |
|----------------------------|-------|--------|---------|--|------|--|-----------|---|--------|--------------------------|-----------------------------|-----------------------------|------|---------------------------------------|------|-----|
| BASIC BORE DIAMETER d | | | | SINGLE PLANE MEAN OUTER DIAMETER DEVIATION Basic Bearings d_{mp} | | SINGLE RADIAL PLANE BORE DIAMETER VARIATION V_{dp} Bearings of Diameter Series | | SINGLE PLANE MEAN BORE DIAMETER DEVIATIONS V_{amp} | RUNOUT | | | WIDTH | | | | |
| | | | | | | 7,8,9 | 0,1,2,3,4 | | Radial | Reference Side With Bore | Raceway With Reference Side | Allowable Deviations from B | | Variation of B_s in Individual Ring | | |
| Over | Incl. | Over | Incl. | Low | High | Max | | Max. | Max. | Max. | High | Low | High | Low | High | Low |
| .6 | 10 | .0236 | .3937 | -1.5 | +0 | 1.5 | 1 | 1 | 1.0 | 1.0 | 1.0 | +0 | -16 | +0 | -100 | 1.0 |
| 10 | 18 | .3937 | .7087 | -1.5 | +0 | 1.5 | 1 | 1 | 1.0 | 1.0 | 1.0 | +0 | -32 | +0 | -100 | 1.0 |
| 18 | 30 | .7087 | 1.1811 | -1.5 | +0 | 2 | 1.5 | 1 | 1.0 | 1.5 | 1.5 | +0 | -50 | +0 | -100 | 1.0 |
| 30 | 50 | 1.1811 | 1.9685 | -2.0 | +0 | 2.5 | 2 | 1 | 1.5 | 1.5 | 1.5 | +0 | -50 | +0 | -100 | 1.0 |
| 50 | 80 | 1.9685 | 3.1496 | -2.0 | +0 | 3 | 2 | 1.5 | 1.5 | 2.0 | 1.5 | +0 | -60 | +0 | -100 | 1.5 |
| 80 | 120 | 3.1496 | 4.7244 | -2.5 | +0 | 3 | 2.5 | 1.5 | 2.0 | 2.0 | 2.0 | +0 | -80 | +0 | -150 | 1.5 |
| 120 | 180 | 4.7244 | 7.0866 | -3.0 | +0 | 4 | 3 | 2 | 3.0 | 3.0 | 3.0 | +0 | -100 | +0 | -150 | 2.0 |
| 180 | 250 | 7.0866 | 9.8425 | -4.0 | +0 | 4.5 | 3.5 | 2.5 | 3.0 | 3.0 | 3.0 | +0 | -120 | +0 | -200 | 2.0 |
| 250 | 315 | 9.8425 | 12.4015 | -5.0 | +0 | — | — | — | 4.0 | 4.0 | 4.0 | +0 | -140 | +0 | -200 | 3.0 |

| OUTER RING | | | | | | | | | | | | | | |
|-------------------------------|-------|-----------------|---------|--|---------------|-------|--------------------------------|-----------|---------------|---|-----------------------------|--------|---------------------------------------|---|
| BASIC OUTSIDE DIAMETER D | | | | SINGLE RADIAL PLANE OUTSIDE DIAMETER VARIATION V_{dp} | | | | | RUNOUT | | | WIDTH | | |
| | | | | All Bearings | Open Bearings | | Bearings with Shields or Seals | | Radial | Cylindrical Surface with Reference Side | Raceway with Reference Side | Limits | Variation of B_s in Individual Ring | |
| Bearings of Diameter Series | | Diameter Series | | | | | | | | | | | | |
| Over | Incl. | Over | Incl. | High | Low | 7,8,9 | 0,1,2,3,4 | 4,3,2,1,0 | K_{ca} Max. | S_D Max. | S_{ca} Max. | | | |
| 2.5 | 6 | .0984 | .2362 | +0 | -2 | 1.5 | 1 | 1 | 2 | 1.5 | 1.5 | 1 | Identical | 1 |
| 6 | 18 | .2362 | .7087 | +0 | -2 | 1.5 | 1 | 1 | 1.5 | 1.5 | 1.5 | 2 | | |
| 18 | 30 | .7087 | 1.1811 | +0 | -2 | 2 | 1.5 | 1 | 1.5 | 1.5 | 1.5 | 2 | of inner | 1 |
| 30 | 50 | 1.1811 | 1.9685 | +0 | -2 | 2.5 | 2 | 1 | 2.0 | 1.5 | 2 | 2 | | |
| 50 | 80 | 1.9685 | 3.1496 | +0 | -2 | 3 | 2 | 1.5 | 2.0 | 1.5 | 2 | 2 | the same | 3 |
| 80 | 120 | 3.1496 | 4.7244 | +0 | -3 | 3 | 2.5 | 1.5 | 2.0 | 2.0 | 2 | 2 | | |
| 120 | 150 | 4.7244 | 5.9055 | +0 | -4 | 3.5 | 3 | 2 | 3.0 | 2.0 | 3 | 3 | 3 | 3 |
| 150 | 180 | 5.9055 | 7.0866 | +0 | -4 | 4 | 3 | 2 | 3.0 | 2.0 | 3 | 3 | | |
| 180 | 250 | 7.0866 | 9.8425 | +0 | -4 | 4.5 | 3 | 2.5 | 4.0 | 3.0 | 4 | 4 | 5 | 3 |
| 250 | 315 | 9.8425 | 12.4015 | +0 | -5 | 5 | 4 | 3 | 4.0 | 3.0 | 4 | 4 | | |
| 315 | 400 | 12.4015 | 15.7480 | +0 | -5 | 6 | 4.5 | 3 | 5.0 | 4.0 | 5 | 5 | 4 | 4 |
| 400 | 500 | 15.7480 | 19.6850 | +0 | -6 | — | — | — | 5.0 | 4.0 | 5 | 5 | | |

For Instrument Ball Bearing tolerances see AFBMA Standard 12, ANSI B3.10.

Does not apply to self-aligning ball bearings.

This refers to a ball bearing on which one or both sides are modified so two or more bearings can be mounted side by side as a unit.

For bearings with shields or seals of diameter series 9 and 8, D_s is not restricted.

Applies to bearings of width series 1 or narrower.

No values have been established for capped bearings.



TOLERANCE CLASS ABEC-9

Tolerance limits for:

Metric radial and angular contact ball bearings (except instrument bearings).

Table 4 (Tolerance Limits in 0.0001 inch)

| INNER RING | | | | | | | | | | | | | | |
|---------------------------------|-------|--------|--------|---|---|------------------|--------------------------|-----------------------------|-----------------------------|------|------------------------|--------------------------|---|--|
| BASIC BORE DIAMETER <i>d</i> | | | | SINGLE RADIAL PLANE BORE DIAMETER VARIATION V_{dp} | SINGLE PLANE MEAN BORE DIAMETER DEVIATIONS V_{dmp} | RUNOUT | | | WIDTH | | | | Variation of B_s in Individual Ring V_{Bs} Max. | |
| mm | | inch | | | | Radial | Reference Side With Bore | Raceway With Reference Side | Allowable Deviations from B | | Normal Single Bearings | Modified Single Bearings | | |
| Over | Incl. | Over | Incl. | Max | Max | K_{ia} Max. | S_d Max. | S_{ia} Max. | High | Low | | High | Low | |
| .6 | 10 | .0236 | .3937 | 1 | .5 | .5 | .5 | .5 | +0 | -10 | +0 | -100 | .5 | |
| 10 | 18 | .3937 | .7087 | 1 | .5 | .5 | .5 | .5 | +0 | -32 | +0 | -100 | .5 | |
| 18 | 30 | .7087 | 1.1811 | 1 | .5 | 1.0 | .5 | 1.0 | +0 | -50 | +0 | -100 | .5 | |
| 30 | 50 | 1.1811 | 1.9685 | 1 | .5 | 1.0 | .5 | 1.0 | +0 | -50 | +0 | -100 | .5 | |
| 50 | 80 | 1.9685 | 3.1496 | 1.5 | 1 | 1.0 | .5 | 1.0 | +0 | -60 | +0 | -100 | .5 | |
| 80 | 120 | 3.1496 | 4.7244 | 2 | 1 | 1.0 | 1.0 | 1.0 | +0 | -80 | +0 | -150 | 1.0 | |
| 120 | 150 | 4.7244 | 5.9055 | 3 | 1.5 | 1.0 | 1.0 | 1.0 | +0 | -100 | +0 | -150 | 1.0 | |
| 150 | 180 | 5.9055 | 7.0866 | 3 | 1.5 | 2.0 | 1.5 | 2.0 | +0 | -120 | +0 | -200 | 1.5 | |
| 180 | 250 | 7.0866 | 9.8425 | 3 | 1.5 | 2.0 | 1.5 | 2.0 | +0 | -140 | +0 | -200 | 1.5 | |

| OUTER RING | | | | | | | | | | | | | | |
|------------------------------------|-------|---------|---------|--|-----------|------------------|---|-----------------------------|--------------|----------|---|-----|--|--|
| BASIC OUTSIDE DIAMETER <i>D</i> | | | | SINGLE RADIAL PLANE OUTSIDE DIAMETER VARIATION | | RUNOUT | | | WIDTH | | Variation of B_s in Individual Ring V_{Bs} Max. | | | |
| mm | | inch | | V_{Dp} | V_{dmp} | Radial | Outside Cylindrical Surface with Reference Side | Raceway with Reference Side | Limits | | | | | |
| Over | Incl. | Over | Incl. | Max | | K_{ea} Max. | S_D Max. | S_{ea} Max. | | | | | | |
| 2.5 | 18 | .0984 | .7087 | 1 | .5 | .5 | .5 | .5 | Identical to | .5 | | | | |
| 18 | 30 | .7087 | 1.1811 | 1.5 | 1 | 1.0 | .5 | 1.0 | | those of | .5 | | | |
| 30 | 50 | 1.1811 | 1.9685 | 1.5 | 1 | 1.0 | .5 | 1.0 | | | inner ring | .5 | | |
| 50 | 80 | 1.9685 | 3.1496 | 1.5 | 1 | 1.5 | .5 | 1.5 | of the same | | | .5 | | |
| 80 | 120 | 3.1496 | 4.7244 | 2 | 1 | 2.0 | 1.0 | 2.0 | | bearing | | 1.0 | | |
| 120 | 150 | 4.7244 | 5.9055 | 2 | 1 | 2.0 | 1.0 | 2.0 | | | bearing | 1.0 | | |
| 150 | 180 | 5.9055 | 7.0866 | 3 | 1.5 | 2.0 | 1.0 | 2.0 | bearing | | | 1.0 | | |
| 180 | 250 | 7.0866 | 9.8425 | 3 | 1.5 | 2.5 | 1.5 | 2.5 | | bearing | | 1.5 | | |
| 250 | 315 | 9.8425 | 12.4015 | 3 | 1.5 | 2.5 | 1.5 | 2.5 | | | bearing | 1.5 | | |
| 315 | 400 | 12.4015 | 15.7480 | 4 | 2 | 3.0 | 2.5 | 3.0 | bearing | | | 2.5 | | |

Applies to bearings of metric width series 1 or narrower.

Does not apply to self-aligning ball bearings.

This refers to a ball bearing on which one or both sides are modified so two or more bearings can be mounted side by side as a unit.

These limits apply before seals or shields are inserted.

For Instrument Ball Bearing tolerances see AFBMA Standard 12, ANSI B3.10.

No values have been established for capped bearings.

Tolerance Limits for Dimensions and Runout.

There is only one class of tolerances established for thrust ball bearings.

They conform with those adopted by ISO (ISO Recommendation R199).

Tolerance Limits for:

Metric single direction thrust ball bearings (of dimensions conforming to the basic plan for boundary dimensions of single direction, metric thrust bearings).



Table 5 (Tolerance Limits in 0.0001 inch)

| THRUST BALL BEARINGS | | | | | | | | | | | | | | | |
|---------------------------------|-------|---------|---------|--|------|--|---|------|------------------------------------|-------|---------|---------|--|-----|--|
| BASIC BORE DIAMETER <i>d</i> | | | | SHAFT WASHER Allowable Deviations from <i>d</i> | | BOTH INDIVIDUAL WASHERS Raceway Runout with Flat Seat Face <i>A₁, A_e</i> | BEARING HEIGHT Allowable Deviations from H <i>H_m</i> | | BASIC OUTSIDE DIAMETER <i>D</i> | | | | HOUSING WASHER Allowable Deviations from <i>D</i> | | |
| mm | | inch | | <i>d_s</i> | | Max. | <i>H_m</i> | | mm | | inch | | <i>D_s</i> | | |
| Over | Incl. | Over | Incl. | Low | High | | High | Low | Over | Incl. | Over | Incl. | High | Low | |
| 0 | 18 | .0000 | .7087 | -3 | +2 | 4 | +0 | -30 | 10 | 18 | .3937 | .7087 | +0 | -4 | |
| 18 | 30 | .7087 | 1.1811 | -4 | +3 | 4 | +0 | -30 | 18 | 30 | .7087 | 1.1811 | +0 | -5 | |
| 30 | 50 | 1.1811 | 1.9685 | -5 | +4 | 4 | +0 | -39 | 30 | 50 | 1.1811 | 1.9685 | +0 | -6 | |
| 50 | 80 | 1.9685 | 3.1496 | -6 | +5 | 4 | +0 | -49 | 50 | 80 | 1.9685 | 3.1496 | +0 | -7 | |
| 80 | 120 | 3.1496 | 4.7244 | -8 | +6 | 6 | +0 | -59 | 80 | 120 | 3.1496 | 4.7244 | +0 | -9 | |
| 120 | 180 | 4.7244 | 7.0866 | -10 | +7 | 6 | +0 | -69 | 120 | 180 | 4.7244 | 7.0866 | +0 | -10 | |
| 180 | 250 | 7.0866 | 9.8425 | -12 | +9 | 8 | +0 | -79 | 180 | 250 | 7.0866 | 9.8425 | +0 | -12 | |
| 250 | 315 | 9.8425 | 12.4015 | -14 | +10 | 10 | +0 | -89 | 250 | 315 | 9.8425 | 12.4015 | +0 | -14 | |
| 315 | 400 | 12.4015 | 15.7480 | -16 | +11 | 12 | +0 | -118 | 315 | 400 | 12.4015 | 15.7480 | +0 | -16 | |
| 400 | 500 | 15.7480 | 19.6850 | -18 | +13 | 12 | — | — | 400 | 500 | 15.7480 | 19.6850 | +0 | -18 | |
| 500 | 630 | 19.6850 | 24.8031 | -20 | +14 | 14 | — | — | 500 | 630 | 19.6850 | 24.8031 | +0 | -20 | |
| 630 | 800 | 24.8031 | 31.4961 | -30 | +15 | 16 | — | — | 630 | 800 | 24.8031 | 31.4961 | +0 | -30 | |
| 800 | 1000 | 31.4961 | 39.3701 | -40 | +17 | 18 | — | — | 800 | 1000 | 31.4961 | 39.3701 | +0 | -40 | |
| 1000 | 1250 | 39.3701 | 49.2126 | -49 | +19 | 20 | — | — | 1000 | 1250 | 39.3701 | 49.2126 | +0 | -49 | |
| | | | | | | | | | 1250 | 1600 | 49.2126 | 62.9921 | +0 | -59 | |



Tolerance Limits for:
Metric series tapered roller bearings.

Table 6 (Tolerance Limits in 0.001 mm)

| INNER RING | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|-------|-----------------|-----|-----------|-----|---------|-----|----------------|------|-----------|------|---------|------|-----------------------------------|------|---------|------|--|------|-------------|------|------------------------------|-----|------|-----|
| Bore Diameter d nominal mm | | Bore Diameter | | | | | | | | | | | | Width B Deviations (Inner Ring) | | | | Bearing Width T Deviations (Overall) | | | | Radial Run-Out R_i Maximum | | | |
| | | dm Deviations | | | | | | d Deviations | | | | | | Class 0,6,5 | | Class 4 | | Class 0 | | Class 6,5,4 | | Class | | | |
| | | Class 0 KB | | Class 6,5 | | Class 4 | | Class 0 KB | | Class 6,5 | | Class 4 | | High | Low | High | Low | High | Low | High | Low | High | Low | 0 | 6 |
| Over | Incl. | High | Low | High | Low | High | Low | Max. | Min. | Max. | Min. | Max. | Min. | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low |
| 10 | 18 | 0 | -8 | 0 | -7 | 0 | -5 | +3 | -11 | +1 | -8 | 0 | -5 | 0 | -200 | 0 | -200 | +200 | -200 | +200 | 0 | 15 | 7 | 3.5 | 2.5 |
| 18 | 30 | 0 | -10 | 0 | -8 | 0 | -6 | +3 | -13 | +1 | -9 | 0 | -6 | 0 | -200 | 0 | -200 | +200 | -200 | +200 | 0 | 18 | 8 | 4 | 3 |
| 30 | 50 | 0 | -12 | 0 | -10 | 0 | -8 | +3 | -15 | +1 | -11 | 0 | -8 | 0 | -240 | 0 | -240 | +200 | -200 | +200 | 0 | 20 | 10 | 5 | 4 |
| 50 | 80 | 0 | -15 | 0 | -12 | 0 | -9 | +4 | -19 | +2 | -14 | 0 | -9 | 0 | -300 | 0 | -300 | +200 | -200 | +200 | 0 | 25 | 10 | 5 | 4 |
| 80 | 120 | 0 | -20 | 0 | -15 | 0 | -10 | +5 | -25 | +3 | -18 | 0 | -10 | 0 | -400 | 0 | -400 | +300 | -300 | +200 | -200 | 30 | 13 | 6 | 5 |
| 120 | 180 | 0 | -25 | 0 | -18 | 0 | -13 | +6 | -31 | +3 | -21 | 0 | -13 | 0 | -500 | 0 | -500 | +400 | -400 | +350 | -250 | 35 | 18 | 8 | 6 |
| 180 | 250 | 0 | -30 | 0 | -22 | 0 | -15 | +8 | -38 | +4 | -26 | 0 | -15 | 0 | -600 | 0 | -600 | +500 | -500 | +350 | -250 | 50 | 20 | 10 | 8 |
| 250 | 315 | 0 | -35 | — | — | — | — | +9 | -44 | — | — | — | — | 0 | -700 | — | — | +600 | -600 | — | — | 60 | — | — | — |
| 315 | 400 | 0 | -40 | — | — | — | — | +10 | -50 | — | — | — | — | 0 | -800 | — | — | +700 | -700 | — | — | 70 | — | — | — |

Table 6-A (Tolerance Limits in 0.0001 inch)

| INNER RING | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---------|-----------------|-------|-----------|------|---------|------|----------------|-------|-----------|-------|---------|------|-----------------------------------|--------|---------|--------|--|--------|-------------|-------|------------------------------|-----|------|-----|
| Bore Diameter d nominal inch | | Bore Diameter | | | | | | | | | | | | Width B Deviations (Inner Ring) | | | | Bearing Width T Deviations (Overall) | | | | Radial Run-Out R_i Maximum | | | |
| | | dm Deviations | | | | | | d Deviations | | | | | | Class 0,6,5 | | Class 4 | | Class 0 | | Class 6,5,4 | | Class | | | |
| | | Class 0 KB | | Class 6,5 | | Class 4 | | Class 0 KB | | Class 6,5 | | Class 4 | | High | Low | High | Low | High | Low | High | Low | High | Low | 0 | 6 |
| Over | Incl. | High | Low | High | Low | High | Low | Max. | Min. | Max. | Min. | Max. | Min. | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low |
| .3937 | .7087 | 0 | -3.1 | 0 | -2.8 | 0 | -2.0 | +1.2 | -4.3 | +4 | -3.1 | 0 | -2.0 | 0 | -78.7 | 0 | -78.7 | +78.7 | -78.7 | +78.7 | 0 | 5.9 | 2.8 | 1.4 | 1.0 |
| .7087 | 1.1811 | 0 | -3.9 | 0 | -3.1 | 0 | -2.4 | +1.2 | -5.1 | +4 | -3.5 | 0 | -2.4 | 0 | -78.7 | 0 | -78.7 | +78.7 | -78.7 | +78.7 | 0 | 7.1 | 3.1 | 1.6 | 1.2 |
| 1.1811 | 1.9685 | 0 | -4.7 | 0 | -3.9 | 0 | -3.1 | +1.2 | -5.9 | +4 | -4.3 | 0 | -3.1 | 0 | -94.5 | 0 | -94.5 | +78.7 | -78.7 | +78.7 | 0 | 7.9 | 3.9 | 2.0 | 1.6 |
| 1.9685 | 3.1496 | 0 | -5.9 | 0 | -4.7 | 0 | -3.5 | +1.6 | -7.5 | +8 | -5.5 | 0 | -3.5 | 0 | -118.1 | 0 | -118.1 | +78.7 | -78.7 | +78.7 | 0 | 9.8 | 3.9 | 2.0 | 1.6 |
| 3.1496 | 4.7244 | 0 | -7.9 | 0 | -5.9 | 0 | -3.9 | +2.0 | -9.8 | +1.2 | -7.1 | 0 | -3.9 | 0 | -157.5 | 0 | -157.5 | +118.1 | -118.1 | +78.7 | -78.7 | 11.8 | 5.1 | 2.4 | 2.0 |
| 4.7244 | 7.0866 | 0 | -9.8 | 0 | -7.1 | 0 | -5.1 | +2.4 | -12.2 | +1.2 | -8.3 | 0 | -5.1 | 0 | -196.9 | 0 | -196.9 | +157.5 | -157.5 | +137.8 | -98.4 | 13.8 | 7.1 | 3.1 | 2.4 |
| 7.0866 | 9.8425 | 0 | -11.8 | 0 | -8.7 | 0 | -5.9 | +3.1 | -15.0 | +1.6 | -10.2 | 0 | -5.9 | 0 | -236.2 | 0 | -236.2 | +196.5 | -196.5 | +137.8 | -98.4 | 19.7 | 7.9 | 3.9 | 3.1 |
| 9.8425 | 12.4016 | 0 | -13.8 | — | — | — | — | +3.5 | -17.3 | — | — | — | — | 0 | -275.6 | — | — | +236.2 | -236.2 | — | — | 23.6 | — | — | — |
| 12.4016 | 15.7480 | 0 | -15.7 | — | — | — | — | +3.9 | -19.7 | — | — | — | — | 0 | -315.0 | — | — | +275.6 | -275.6 | — | — | 27.6 | — | — | — |

dm is defined as the arithmetical mean of the largest and the smallest single diameter of the bore obtained by two-point measurements.

The values of deviation of d are valid for two-point measurements only.

Deviations of d for Class 0 apply only to diameter series 0, 2 and 3, and do not apply to either of the following cases: over 40 mm of d in diameter series 0, or over 180 mm of d in diameter series 2.

Deviations of d for Class 6 apply only to diameter series 0, 2 and 3, and do not apply to the case of over 60 mm of d in diameter series 0.

Deviations of d for Class 5 apply only to diameter series 0, 2 and 3.

KB is the symbol for limit deviations of dm and d for Class 0.

REMARKS:

The high deviations of bore diameter specified in this table do not apply within a distance of twice the nominal ring chamfer dimension from the ring face.

Table 7 (Tolerance Limits in 0.001 mm)

| OUTER RING | | | | | | | | | | | | | | | | | |
|---|-------|---------------------------------|-----|-----------|-----|---------|-----|---------------------|------|-----------|------|---------|------|------------------------|---------|---------|---------|
| Outside Diameter <i>D</i> Nominal mm | | BEARING OUTSIDE DIAMETER | | | | | | | | | | | | Radial Run-Out Re Max. | | | |
| | | <i>D_m</i> Deviations | | | | | | <i>D</i> Deviations | | | | | | | | | |
| | | Class O hB | | Class 6,5 | | Class 4 | | Class O hB | | Class 6,5 | | Class 4 | | Class 0 | Class 6 | Class 5 | Class 4 |
| Over | Incl. | High | Low | High | Low | High | Low | Max. | Min. | Max. | Min. | Max. | Min. | | | | |
| 18 | 30 | +0 | -9 | +0 | -8 | +0 | -6 | +2 | -11 | +1 | -9 | +0 | -6 | 18 | 9 | 6 | 4 |
| 30 | 50 | +0 | -11 | +0 | -9 | +0 | -7 | +3 | -14 | +2 | -11 | +0 | -7 | 20 | 10 | 7 | 5 |
| 50 | 80 | +0 | -13 | +0 | -11 | +0 | -9 | +4 | -17 | +2 | -13 | +0 | -9 | 25 | 13 | 8 | 5 |
| 80 | 120 | +0 | -15 | +0 | -13 | +0 | -10 | +5 | -20 | +2 | -15 | +0 | -10 | 35 | 18 | 10 | 6 |
| 120 | 150 | +0 | -18 | +0 | -15 | +0 | -11 | +6 | -24 | +3 | -18 | +0 | -11 | 40 | 20 | 11 | 7 |
| 150 | 180 | +0 | -25 | +0 | -18 | +0 | -13 | +7 | -32 | +3 | -21 | +0 | -13 | 45 | 23 | 13 | 8 |
| 180 | 250 | +0 | -30 | +0 | -20 | +0 | -15 | +8 | -38 | +4 | -24 | +0 | -15 | 50 | 25 | 15 | 10 |
| 250 | 315 | +0 | -35 | +0 | -25 | +0 | -18 | +9 | -44 | +4 | -29 | +0 | -18 | 60 | 30 | 18 | 11 |
| 315 | 400 | +0 | -40 | +0 | -28 | +0 | -20 | +10 | -50 | +5 | -33 | +0 | -20 | 70 | 35 | 20 | 13 |
| 400 | 500 | +0 | -45 | — | — | — | — | +12 | -57 | — | — | — | — | 80 | — | — | — |
| 500 | 630 | +0 | -50 | — | — | — | — | +14 | -64 | — | — | — | — | 100 | — | — | — |

Table 7-A (Tolerance Limits in 0.0001 inch)

| OUTER RING | | | | | | | | | | | | | | | | | |
|---|---------|---------------------------------|-------|-----------|-------|---------|------|---------------------|-------|-----------|-------|---------|------|------------------------|---------|---------|---------|
| Outside Diameter <i>D</i> Nominal inch | | BEARING OUTSIDE DIAMETER | | | | | | | | | | | | Radial Run-Out Re Max. | | | |
| | | <i>D_m</i> Deviations | | | | | | <i>D</i> Deviations | | | | | | | | | |
| | | Class O hB | | Class 6,5 | | Class 4 | | Class O hB | | Class 6,5 | | Class 4 | | Class 0 | Class 6 | Class 5 | Class 4 |
| Over | Incl. | High | Low | High | Low | High | Low | Max. | Min. | Max. | Min. | Max. | Min. | | | | |
| .7087 | 1.1811 | +0 | -3.5 | +0 | -3.1 | +0 | -2.4 | + .8 | -4.3 | + .4 | -3.5 | +0 | -2.4 | 7.1 | 3.5 | 2.4 | 1.6 |
| 1.1811 | 1.9685 | +0 | -4.3 | +0 | -3.5 | +0 | -2.8 | +1.2 | -5.5 | + .8 | -4.3 | +0 | -2.8 | 7.9 | 3.9 | 2.8 | 2.0 |
| 1.9685 | 3.1496 | +0 | -5.1 | +0 | -4.3 | +0 | -3.5 | +1.6 | -6.7 | + .8 | -5.1 | +0 | -3.5 | 9.8 | 5.1 | 3.1 | 2.0 |
| 3.1496 | 4.7244 | +0 | -5.9 | +0 | -5.1 | +0 | -3.9 | +2.0 | -7.9 | + .8 | -5.9 | +0 | -3.9 | 13.8 | 7.1 | 3.9 | 2.4 |
| 4.7244 | 5.9055 | +0 | -7.1 | +0 | -5.9 | +0 | -4.3 | +2.4 | -9.4 | +1.2 | -7.1 | +0 | -4.3 | 15.7 | 7.9 | 4.3 | 2.8 |
| 5.9055 | 7.0866 | +0 | -9.8 | +0 | -7.1 | +0 | -5.1 | +2.8 | -12.6 | +1.2 | -8.3 | +0 | -5.1 | 17.7 | 9.1 | 5.1 | 3.1 |
| 7.0866 | 9.8425 | +0 | -11.8 | +0 | -7.9 | +0 | -5.9 | +3.1 | -15.0 | +1.6 | -9.4 | +0 | -5.9 | 19.7 | 9.8 | 5.9 | 3.9 |
| 9.8425 | 12.4016 | +0 | -13.8 | +0 | -9.8 | +0 | -7.1 | +3.5 | -17.3 | +1.6 | -11.4 | +0 | -7.1 | 23.6 | 11.8 | 7.1 | 4.3 |
| 12.4016 | 15.7480 | +0 | -15.7 | +0 | -11.0 | +0 | -7.9 | +3.9 | -19.7 | +2.0 | -13.0 | +0 | -7.9 | 27.6 | 13.8 | 7.9 | 5.1 |
| 15.7480 | 19.6850 | +0 | -17.7 | — | — | — | — | +4.7 | -22.4 | — | — | — | — | 31.5 | — | — | — |
| 19.6850 | 24.8031 | +0 | -19.7 | — | — | — | — | +5.5 | -25.2 | — | — | — | — | 39.4 | — | — | — |

D_m is defined as the arithmetical mean of the largest and the smallest single diameter of the outside surface obtained by two-point measurements.

hB is the symbol for limit deviations of *DM* and *D* for Class 0.

The values of deviation of *D* are valid for two-point measurements only.

Deviations of *D* for Class 0 apply only to diameter series 0, 2 and 3, and do not apply to either of the following cases: over 80 mm of *D* in diameter series 0, or over 315 mm of *D* in diameter series 2.

Deviations of *D* for Class 6 apply only to diameter series 0, 2 and 3, and do not apply to the case of over 95 mm of *D* in diameter series 0.

REMARKS:

The low deviations of outside diameter specified in this table do not apply within a distance of twice the nominal ring chamfer dimensions from the ring face.



Tolerance limits for:
Tapered roller bearings with "J" prefixed part numbers.

Table 8

| Cone Bore | | | | Class K | | | | Class N | | | | Class C | | | | Class B | | | |
|-----------|---------|------|-------|------------|-----|---------|-----|------------|-----|---------|-----|------------|-----|---------|-----|------------|-----|---------|-----|
| inch | | mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | |
| Over | Incl. | Over | Incl. | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low |
| .3937 | .7087 | 10 | 18 | +0 | -5 | +0 | -13 | +0 | -5 | +0 | -13 | +0 | -4 | +0 | -10 | +0 | -3 | +0 | -8 |
| .7087 | 1.1811 | 18 | 30 | +0 | -5 | +0 | -13 | +0 | -5 | +0 | -13 | +0 | -4 | +0 | -10 | +0 | -3 | +0 | -8 |
| 1.1811 | 1.9685 | 30 | 50 | +0 | -5 | +0 | -13 | +0 | -5 | +0 | -13 | +0 | -4 | +0 | -10 | +0 | -4 | +0 | -10 |
| 1.9685 | 3.1496 | 50 | 80 | +0 | -6 | +0 | -15 | +0 | -6 | +0 | -15 | +0 | -5 | +0 | -13 | +0 | -4 | +0 | -10 |
| 3.1496 | 4.7244 | 80 | 120 | +0 | -8 | +0 | -20 | +0 | -8 | +0 | -20 | +0 | -5 | +0 | -13 | +0 | -4 | +0 | -10 |
| 4.7244 | 7.0866 | 120 | 180 | +0 | -10 | +0 | -25 | +0 | -10 | +0 | -25 | +0 | -5 | +0 | -13 | +0 | -4 | +0 | -10 |
| 7.0866 | 9.8425 | 180 | 250 | +0 | -12 | +0 | -30 | +0 | -12 | +0 | -30 | +0 | -6 | +0 | -15 | +0 | -5 | +0 | -13 |
| 9.8425 | 12.4016 | 250 | 315 | +0 | -14 | +0 | -35 | +0 | -14 | +0 | -35 | +0 | -7 | +0 | -18 | +0 | -5 | +0 | -13 |

Table 9

| Cup O.D. | | | | Class K | | | | Class N | | | | Class C | | | | Class B | | | |
|----------|---------|------|-------|------------|-----|---------|-----|------------|-----|---------|-----|------------|-----|---------|-----|------------|------|---------|-----|
| inch | | mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | |
| Over | Incl. | Over | Incl. | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low |
| .7087 | 1.1811 | 18 | 30 | +0 | -8 | +0 | -20 | +0 | -8 | +0 | -20 | +0 | -3 | +0 | -8 | +0 | -3 | +0 | -8 |
| 1.1811 | 1.9685 | 30 | 50 | +0 | -8 | +0 | -20 | +0 | -8 | +0 | -20 | +0 | -4 | +0 | -10 | +0 | -2 | +0 | -8 |
| 1.9685 | 3.1496 | 50 | 80 | +0 | -8 | +0 | -20 | +0 | -8 | +0 | -20 | +0 | -4 | +0 | -10 | +0 | -3.5 | +0 | -9 |
| 3.1496 | 4.7244 | 80 | 120 | +0 | -8 | +0 | -20 | +0 | -8 | +0 | -20 | +0 | -5 | +0 | -13 | +0 | -4 | +0 | -10 |
| 4.7244 | 5.9055 | 120 | 150 | +0 | -10 | +0 | -25 | +0 | -10 | +0 | -25 | +0 | -5 | +0 | -13 | +0 | -4 | +0 | -10 |
| 5.9055 | 7.0866 | 150 | 180 | +0 | -10 | +0 | -25 | +0 | -10 | +0 | -25 | +0 | -5 | +0 | -13 | +0 | -4 | +0 | -10 |
| 7.0866 | 9.8425 | 180 | 250 | +0 | -12 | +0 | -30 | +0 | -12 | +0 | -30 | +0 | -6 | +0 | -15 | +0 | -5 | +0 | -13 |
| 9.8425 | 12.4016 | 250 | 315 | +0 | -16 | +0 | -40 | +0 | -16 | +0 | -40 | +0 | -8 | +0 | -20 | +0 | -6 | +0 | -15 |
| 12.4016 | 15.7480 | 315 | 400 | +0 | -16 | +0 | -40 | +0 | -16 | +0 | -40 | +0 | -8 | +0 | -20 | - | - | - | - |
| 15.7480 | 19.6850 | 400 | 500 | +0 | -20 | +0 | -50 | +0 | -20 | +0 | -50 | +0 | -10 | +0 | -25 | - | - | - | - |

Table 10

| Cone Bore | | | | Class K | | | | Class N | | | | Class C | | | | Class B | | | |
|-----------|---------|------|-------|------------|-----|---------|------|------------|-----|---------|-----|------------|------|---------|------|------------|------|---------|------|
| inch | | mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | |
| Over | Incl. | Over | Incl. | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low |
| .3937 | .7087 | 10 | 18 | +79 | -0 | +200 | -0 | +39 | -0 | +100 | -0 | +79 | -79 | +200 | -200 | +79 | -79 | +200 | -200 |
| .7087 | 1.1811 | 18 | 30 | +79 | -0 | +200 | -0 | +39 | -0 | +100 | -0 | +79 | -79 | +200 | -200 | +79 | -79 | +200 | -200 |
| 1.1811 | 1.9685 | 30 | 50 | +79 | -0 | +200 | -0 | +39 | -0 | +100 | -0 | +79 | -79 | +200 | -200 | +79 | -79 | +200 | -200 |
| 1.9685 | 3.1496 | 50 | 80 | +79 | -0 | +200 | -0 | +39 | -0 | +100 | -0 | +79 | -79 | +200 | -200 | +79 | -79 | +200 | -200 |
| 3.1496 | 4.7244 | 80 | 120 | +79 | -79 | +200 | -200 | +39 | -0 | +100 | -0 | +79 | -79 | +200 | -200 | +79 | -79 | +200 | -200 |
| 4.7244 | 7.0866 | 120 | 180 | +79 | -79 | +200 | -200 | +59 | -0 | +150 | -0 | +79 | -98 | +200 | -250 | +79 | -98 | +200 | -250 |
| 7.0866 | 9.8425 | 180 | 250 | +79 | -79 | +200 | -200 | +59 | -0 | +150 | -0 | +79 | -118 | +200 | -300 | +79 | -118 | +200 | -300 |
| 9.8425 | 12.4016 | 250 | 315 | +79 | -79 | +200 | -200 | +79 | -0 | +200 | -0 | +79 | -118 | +200 | -300 | +79 | -118 | +200 | -300 |

Table 11

| CONE WIDTH TOLERANCES | | | | | | | | | | | | | | | | | | | |
|-----------------------|---------|------|-------|------------|-----|---------|------|------------|-----|---------|-----|------------|------|---------|------|------------|------|---------|------|
| Cone Bore | | | | Class K | | | | Class N | | | | Class C | | | | Class B | | | |
| inch | | mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | |
| Over | Incl. | Over | Incl. | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low |
| .3937 | .7087 | 10 | 18 | +0 | -39 | +0 | -100 | +0 | -20 | +0 | -50 | +0 | -79 | +0 | -200 | +0 | -79 | +0 | -200 |
| .7087 | 1.1811 | 18 | 30 | +0 | -39 | +0 | -100 | +0 | -20 | +0 | -50 | +0 | -79 | +0 | -200 | +0 | -79 | +0 | -200 |
| 1.1811 | 1.9685 | 30 | 50 | +0 | -39 | +0 | -100 | +0 | -20 | +0 | -50 | +0 | -79 | +0 | -200 | +0 | -79 | +0 | -200 |
| 1.9685 | 3.1496 | 50 | 80 | +0 | -59 | +0 | -150 | +0 | -20 | +0 | -50 | +0 | -118 | +0 | -300 | +0 | -118 | +0 | -300 |
| 3.1496 | 4.7244 | 80 | 120 | +0 | -59 | +0 | -150 | +0 | -20 | +0 | -50 | +0 | -118 | +0 | -300 | +0 | -118 | +0 | -300 |
| 4.7244 | 7.0866 | 120 | 180 | +0 | -79 | +0 | -200 | +0 | -20 | +0 | -50 | +0 | -118 | +0 | -300 | +0 | -118 | +0 | -300 |
| 7.0866 | 9.8425 | 180 | 250 | +0 | -79 | +0 | -200 | +0 | -20 | +0 | -50 | +0 | -138 | +0 | -350 | +0 | -138 | +0 | -350 |
| 9.8425 | 12.4016 | 250 | 315 | +0 | -79 | +0 | -200 | +0 | -20 | +0 | -50 | +0 | -138 | +0 | -350 | +0 | -138 | +0 | -350 |

Table 12

| CUP WIDTH TOLERANCES | | | | | | | | | | | | | | | | | | | |
|----------------------|---------|------|-------|------------|------|---------|------|------------|-----|---------|------|------------|------|---------|------|------------|------|---------|------|
| Cup O.D. | | | | Class K | | | | Class N | | | | Class C | | | | Class B | | | |
| inch | | mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | |
| Over | Incl. | Over | Incl. | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low |
| .7087 | 1.1811 | 18 | 30 | +0 | -59 | +0 | -150 | +0 | -39 | +0 | -100 | +0 | -59 | +0 | -150 | +0 | -59 | +0 | -150 |
| 1.1811 | 1.9685 | 30 | 50 | +0 | -59 | +0 | -150 | +0 | -39 | +0 | -100 | +0 | -59 | +0 | -150 | +0 | -59 | +0 | -150 |
| 1.9685 | 3.1496 | 50 | 80 | +0 | -59 | +0 | -150 | +0 | -39 | +0 | -100 | +0 | -59 | +0 | -150 | +0 | -59 | +0 | -150 |
| 3.1496 | 4.7244 | 80 | 120 | +0 | -79 | +0 | -200 | +0 | -39 | +0 | -100 | +0 | -79 | +0 | -200 | +0 | -79 | +0 | -200 |
| 4.7244 | 5.9055 | 120 | 150 | +0 | -79 | +0 | -200 | +0 | -39 | +0 | -100 | +0 | -79 | +0 | -200 | +0 | -79 | +0 | -200 |
| 5.9055 | 7.0866 | 150 | 180 | +0 | -79 | +0 | -200 | +0 | -39 | +0 | -100 | +0 | -98 | +0 | -250 | +0 | -98 | +0 | -250 |
| 7.0866 | 9.8425 | 180 | 250 | +0 | -98 | +0 | -250 | +0 | -39 | +0 | -100 | +0 | -98 | +0 | -250 | +0 | -98 | +0 | -250 |
| 9.8425 | 12.4016 | 250 | 315 | +0 | -98 | +0 | -250 | +0 | -39 | +0 | -100 | +0 | -118 | +0 | -300 | +0 | -118 | +0 | -300 |
| 12.4016 | 15.7480 | 315 | 400 | +0 | -98 | +0 | -250 | +0 | -39 | +0 | -100 | +0 | -118 | +0 | -300 | - | - | - | - |
| 15.7480 | 19.6850 | 400 | 500 | +0 | -118 | +0 | -300 | +0 | -39 | +0 | -100 | +0 | -138 | +0 | -350 | - | - | - | - |

Table 13

| ASSEMBLED BEARING MAXIMUM RADIAL RUNOUT | | | | | | | | | | | |
|---|---------|------|-------|------------|---------|------------|---------|------------|---------|------------|---------|
| Cup O.D. | | | | Class K | | Class N | | Class C | | Class B | |
| Inch | | mm | | .0001 inch | .001 mm | .0001 inch | .001 mm | .0001 inch | .001 mm | .0001 inch | .001 mm |
| Over | Incl. | Over | Incl. | | | | | | | | |
| .7087 | 1.1811 | 18 | 30 | 12 | 30 | 12 | 30 | 2 | 5 | 1 | 2.5 |
| 1.1811 | 1.9685 | 30 | 50 | 12 | 30 | 12 | 30 | 2.4 | 6 | 1 | 2.5 |
| 1.9685 | 3.1496 | 50 | 80 | 12 | 30 | 12 | 30 | 2.4 | 6 | 1.4 | 3.5 |
| 3.1496 | 4.7244 | 80 | 120 | 16 | 40 | 16 | 40 | 2.4 | 6 | 1.4 | 3.5 |
| 4.7244 | 5.9055 | 120 | 150 | 16 | 40 | 16 | 40 | 2.8 | 7 | 1.4 | 3.5 |
| 5.9055 | 7.0866 | 150 | 180 | 16 | 40 | 16 | 40 | 3 | 8 | 1.5 | 4 |
| 7.0866 | 9.8425 | 180 | 250 | 20 | 50 | 20 | 50 | 4 | 10 | 2 | 5 |
| 9.8425 | 12.4016 | 250 | 315 | 20 | 50 | 20 | 50 | 4.3 | 11 | 2 | 5 |
| 12.4016 | 15.7480 | 315 | 400 | 20 | 50 | 20 | 50 | 5 | 13 | - | - |
| 15.7480 | 19.6850 | 400 | 500 | 25 | 65 | 25 | 65 | 7 | 18 | - | - |



Tolerance limits for:
Inch series tapered roller bearings.

Table 14

| Cone Bore | | | | Class 4 | | | | Class 3 | | | | Class 0 | | | | Class 00 | | | |
|-----------|-------|--------|--------|------------|-----|---------|-----|------------|-----|---------|-----|------------|-----|---------|-----|------------|-----|---------|-----|
| inch | | mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | |
| Over | Incl. | Over | Incl. | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low |
| — | 3 | — | 76.2 | +5 | -0 | +13 | -0 | +5 | -0 | +13 | -0 | 5 | -0 | +13 | -0 | +3 | -0 | +8 | 0 |
| 3 | 12 | 76.2 | 304.8 | +10 | -0 | +25 | -0 | +5 | -0 | +13 | -0 | 5 | -0 | +13 | -0 | +3 | -0 | +8 | 0 |
| 12 | 24 | 304.8 | 609.6 | +20 | -0 | +51 | -0 | +10 | -0 | +25 | -0 | — | — | — | — | — | — | — | — |
| 24 | 36 | 609.6 | 914.4 | +30 | -0 | +76 | -0 | +15 | -0 | +38 | -0 | — | — | — | — | — | — | — | — |
| 36 | 48 | 914.4 | 1219.2 | +40 | -0 | +102 | -0 | +20 | -0 | +51 | -0 | — | — | — | — | — | — | — | — |
| 48 | — | 1219.2 | — | +50 | -0 | +127 | -0 | +30 | -0 | +76 | -0 | — | — | — | — | — | — | — | — |

Table 15

| Cup O.D. | | | | Class 4 | | | | Class 3 | | | | Class 0 | | | | Class 00 | | | |
|----------|-------|--------|--------|------------|-----|---------|-----|------------|-----|---------|-----|------------|-----|---------|-----|------------|-----|---------|-----|
| inch | | mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | |
| Over | Incl. | Over | Incl. | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low |
| — | 12 | — | 304.8 | +10 | -0 | +25 | -0 | +5 | -0 | +13 | -0 | +5 | -0 | +13 | -0 | +3 | -0 | +8 | -0 |
| 12 | 24 | 304.8 | 609.6 | +20 | -0 | +51 | -0 | +10 | -0 | +25 | -0 | — | — | — | — | — | — | — | — |
| 24 | 36 | 609.6 | 914.4 | +30 | -0 | +76 | -0 | +15 | -0 | +38 | -0 | — | — | — | — | — | — | — | — |
| 36 | 48 | 914.4 | 1219.2 | +40 | -0 | +102 | -0 | +20 | -0 | +51 | -0 | — | — | — | — | — | — | — | — |
| 48 | — | 1219.2 | — | +50 | -0 | +127 | -0 | +30 | -0 | +76 | -0 | — | — | — | — | — | — | — | — |

Table 16

| Cone Bore | | | | Cup O.D. | | | | Class 4 | | | | Class 3 | | | | Class 0, 00 | | | |
|-----------|-------|-------|-------|------------|-----|---------|------|------------|------|---------|------|------------|------|---------|------|-------------|-----|---------|------|
| inch | | mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | | .0001 inch | | .001 mm | |
| Over | Incl. | Over | Incl. | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low |
| — | 4 | — | 101.6 | — | — | — | — | +80 | -0 | +203 | -0 | +80 | -80 | +203 | -203 | +80 | -80 | +203 | -203 |
| 4 | 12 | 101.6 | 304.8 | — | — | — | — | +140 | -1 | +356 | -254 | +80 | -80 | +203 | -203 | +80 | -80 | +203 | -203 |
| 12 | 24 | 304.8 | 609.6 | — | -20 | — | -508 | +150 | -150 | +381 | -381 | +80 | -80 | +203 | -203 | — | — | — | — |
| 12 | 24 | 304.8 | 609.6 | +20 | — | +508 | — | +150 | -150 | +381 | -381 | +150 | -150 | +381 | -381 | — | — | — | — |
| 24 | — | 609.6 | — | — | — | — | — | +150 | -150 | +381 | -381 | +150 | -150 | +381 | -381 | — | — | — | — |

Table 17

| Cup O.D. | | | | Class 4 | | Class 3 | | Class 0 | | Class 00 | |
|----------|-------|-------|-------|------------|---------|------------|---------|------------|---------|------------|---------|
| inch | | mm | | .0001 inch | .001 mm | .0001 inch | .001 mm | .0001 inch | .001 mm | .0001 inch | .001 mm |
| Over | Incl. | Over | Incl. | | | | | | | | |
| — | 12 | — | 304.8 | 20 | 51 | 3 | 8 | 1.5 | 4 | .75 | 2 |
| 12 | 24 | 304.8 | 609.6 | 20 | 51 | 7 | 18 | — | — | — | — |
| 24 | 36 | 609.6 | 914.4 | 30 | 76 | 20 | 51 | — | — | — | — |
| 36 | — | 914.4 | — | 30 | 76 | 30 | 76 | — | — | — | — |

Standard tolerance values for radial internal clearance of single row deep groove ball bearings with cylindrical bore.



Table 18 (Clearance Limits in 0.001 mm)

| SINGLE ROW DEEP GROOVE BALL BEARINGS (CYLINDRICAL BORE) | | | | | | | | | |
|--|--------------|-------------------------------------|-------------|-----------------------|-------------|--|-------------|------------------------------------|-------------|
| Nominal Bore d mm | | C2 Less than Normal Clearance | | — Normal Clearance | | C3 Greater than Normal Clearance | | C4 Greater than C3 Clearance | |
| <i>Over</i> | <i>Incl.</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> |
| — | 2.5 | — | 6 | 4 | 11 | 10 | 20 | — | — |
| 2.5 | 10.0 | — | 7 | 2 | 13 | 8 | 23 | — | — |
| 10.0 | 18.0 | — | 9 | 3 | 18 | 11 | 25 | 18 | 33 |
| 18.0 | 24.0 | — | 10 | 5 | 20 | 13 | 28 | 20 | 36 |
| 24.0 | 30.0 | — | 11 | 5 | 20 | 13 | 28 | 23 | 41 |
| 30.0 | 40.0 | — | 11 | 6 | 20 | 15 | 33 | 28 | 46 |
| 40.0 | 50.0 | — | 11 | 6 | 23 | 18 | 36 | 30 | 51 |
| 50.0 | 65.0 | — | 15 | 8 | 28 | 23 | 43 | 38 | 61 |
| 65.0 | 80.0 | — | 15 | 10 | 30 | 25 | 51 | 46 | 71 |
| 80.0 | 100.0 | — | 18 | 12 | 36 | 30 | 58 | 53 | 84 |
| 100.0 | 120.0 | — | 20 | 15 | 41 | 36 | 66 | 61 | 97 |
| 120.0 | 140.0 | — | 23 | 18 | 48 | 41 | 81 | 71 | 114 |
| 140.0 | 160.0 | — | 23 | 18 | 53 | 46 | 91 | 81 | 130 |
| 160.0 | 180.0 | — | 25 | 20 | 61 | 53 | 102 | 91 | 147 |
| 180.0 | 200.0 | — | 30 | 25 | 71 | 63 | 117 | 107 | 163 |

Table 18-A (Clearance Limits in 0.0001 inch)

| SINGLE ROW DEEP GROOVE BALL BEARINGS (CYLINDRICAL BORE) | | | | | | | | | |
|--|--------------|----------------------------------|-------------|-----------------------|-------------|-------------------------------------|-------------|------------------------------------|-------------|
| Nominal Bore d inch | | C2 Less than Normal Clearance | | — Normal Clearance | | C3 Greater than Normal Clearance | | C4 Greater than C3 Clearance | |
| <i>Over</i> | <i>Incl.</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> |
| — | .0984 | — | 2.4 | 1.6 | 4.3 | 3.9 | 7.9 | — | — |
| .0984 | .3937 | — | 2.8 | .8 | 5.1 | 3.1 | 9.1 | — | — |
| .3937 | .7087 | — | 3.5 | 1.2 | 7.1 | 4.3 | 9.8 | 7.1 | 13.0 |
| .7087 | .9449 | — | 3.9 | 2.0 | 7.9 | 5.1 | 11.0 | 7.9 | 14.2 |
| .9449 | 1.1811 | — | 4.3 | 2.0 | 7.9 | 5.1 | 11.0 | 9.1 | 16.1 |
| 1.1811 | 1.5748 | — | 4.3 | 2.4 | 7.9 | 5.9 | 13.0 | 11.0 | 18.1 |
| 1.5748 | 1.9685 | — | 4.3 | 2.4 | 9.1 | 7.1 | 14.2 | 11.8 | 20.1 |
| 1.9685 | 2.5591 | — | 5.9 | 3.1 | 11.0 | 9.1 | 16.9 | 15.0 | 24.0 |
| 2.5591 | 3.1496 | — | 5.9 | 3.9 | 11.8 | 9.8 | 20.1 | 18.1 | 28.0 |
| 3.1496 | 3.9370 | — | 7.1 | 4.7 | 14.2 | 11.8 | 22.8 | 20.9 | 33.1 |
| 3.9370 | 4.7244 | — | 7.9 | 5.9 | 16.1 | 14.2 | 26.0 | 24.0 | 38.2 |
| 4.7244 | 5.5118 | — | 9.1 | 7.1 | 18.9 | 16.1 | 31.9 | 28.0 | 44.9 |
| 5.5118 | 6.2993 | — | 9.1 | 7.1 | 20.9 | 18.1 | 35.8 | 31.9 | 51.2 |
| 6.2992 | 7.0866 | — | 9.8 | 7.9 | 24.0 | 20.9 | 40.2 | 35.8 | 57.9 |
| 7.0866 | 7.8740 | — | 11.8 | 9.8 | 28.0 | 24.8 | 46.1 | 42.1 | 64.2 |

RADIAL CLEARANCE COMPENSATION VALUES

Table 19 (Clearance Limits in 0.001 mm)

| Nominal Bore d mm | | | Measuring Load (kg) | Clearance | | | |
|-------------------------|--------------|-----|---------------------------|-----------|--------|----|----|
| <i>Over</i> | <i>Incl.</i> | | | C2 | Normal | C3 | C4 |
| 10 | 18 | 2.5 | 3~4 | 4 | 4 | 4 | |
| 18 | 50 | 5 | 4~5 | 5 | 6 | 6 | |

Table 19-A (Clearance Limits in 0.0001 inch)

| Nominal Bore d inch | | | Measuring Load (lbs) | Clearance | | | |
|---------------------------|--------------|-----|----------------------------|-----------|--------|-----|----|
| <i>Over</i> | <i>Incl.</i> | | | C2 | Normal | C3 | C4 |
| .3937 | .7087 | 5.5 | 1.2~1.6 | 1.6 | 1.6 | 1.6 | |
| .7087 | 1.9685 | 11 | 1.6~2.0 | 2.0 | 2.4 | 2.4 | |

REMARKS:

When measuring radial internal clearance, a slight amount of elastic deformation of the bearing occurs. The resulting measured clearance is slightly larger than the true clearance, and must be accounted for. These compensation values are given in tables 19 and 19-A.



Standard tolerance values for radial internal clearance of cylindrical roller bearings with cylindrical bore and interchangeable component.

Table 20 (Clearance Limits in 0.001 mm)

| CYLINDRICAL ROLLER BEARINGS (cylindrical bore; interchangeable component) | | | | | | | | | | | |
|---|--------------|-------------------------------------|------------|------------------|------------|--|------------|------------------------------------|------------|------------------------------------|------------|
| Nominal Bore <i>d</i> mm | | C2 Less than Normal Clearance | | Normal Clearance | | C3 Greater than Normal Clearance | | C4 Greater than C3 Clearance | | C5 Greater than C4 Clearance | |
| <i>Over</i> | <i>Incl.</i> | <i>Min</i> | <i>Max</i> | <i>Min</i> | <i>Max</i> | <i>Min</i> | <i>Max</i> | <i>Min</i> | <i>Max</i> | <i>Min</i> | <i>Max</i> |
| — | 10 | 0 | 25 | 20 | 45 | 35 | 60 | 50 | 75 | — | — |
| 10 | 24 | 0 | 25 | 20 | 45 | 35 | 60 | 50 | 75 | 65 | 90 |
| 24 | 30 | 0 | 25 | 20 | 45 | 35 | 60 | 50 | 75 | 70 | 95 |
| 30 | 40 | 5 | 30 | 25 | 50 | 45 | 70 | 60 | 85 | 80 | 105 |
| 40 | 50 | 5 | 35 | 30 | 60 | 50 | 80 | 70 | 100 | 95 | 125 |
| 50 | 65 | 10 | 40 | 40 | 70 | 60 | 90 | 80 | 110 | 110 | 140 |
| 65 | 80 | 10 | 45 | 40 | 75 | 65 | 100 | 90 | 125 | 130 | 165 |
| 80 | 100 | 15 | 50 | 50 | 85 | 75 | 110 | 105 | 140 | 155 | 190 |
| 100 | 120 | 15 | 55 | 50 | 90 | 85 | 125 | 125 | 165 | 180 | 220 |
| 120 | 140 | 15 | 60 | 60 | 105 | 100 | 145 | 145 | 190 | 200 | 245 |
| 140 | 160 | 20 | 70 | 70 | 120 | 115 | 165 | 165 | 215 | 225 | 275 |
| 160 | 180 | 25 | 75 | 75 | 125 | 120 | 170 | 170 | 220 | 250 | 300 |
| 180 | 200 | 35 | 90 | 90 | 145 | 140 | 195 | 195 | 250 | 275 | 330 |
| 200 | 225 | 45 | 105 | 105 | 165 | 160 | 220 | 220 | 280 | 305 | 365 |
| 225 | 250 | 45 | 110 | 110 | 175 | 170 | 235 | 235 | 300 | 330 | 395 |
| 250 | 280 | 55 | 125 | 125 | 195 | 190 | 260 | 260 | 330 | 370 | 440 |
| 280 | 315 | 55 | 130 | 130 | 205 | 200 | 275 | 275 | 350 | 410 | 485 |
| 315 | 355 | 65 | 145 | 145 | 225 | 225 | 305 | 305 | 385 | 455 | 535 |
| 355 | 400 | 100 | 190 | 190 | 280 | 280 | 370 | 370 | 460 | 510 | 600 |
| 400 | 450 | 110 | 210 | 210 | 310 | 310 | 410 | 410 | 510 | 565 | 665 |
| 450 | 500 | 110 | 220 | 220 | 330 | 330 | 440 | 440 | 550 | 625 | 735 |

Table 20-A (Clearance Limits in 0.0001 inch)

| CYLINDRICAL ROLLER BEARINGS (cylindrical bore; interchangeable component) | | | | | | | | | | | |
|---|--------------|-------------------------------------|------------|------------------|------------|--|------------|------------------------------------|------------|------------------------------------|------------|
| Nominal Bore <i>d</i> inch | | C2 Less than Normal Clearance | | Normal Clearance | | C3 Greater than Normal Clearance | | C4 Greater than C3 Clearance | | C5 Greater than C4 Clearance | |
| <i>Over</i> | <i>Incl.</i> | <i>Min</i> | <i>Max</i> | <i>Min</i> | <i>Max</i> | <i>Min</i> | <i>Max</i> | <i>Min</i> | <i>Max</i> | <i>Min</i> | <i>Max</i> |
| — | 0.3937 | 0.000 | 9.843 | 7.874 | 17.717 | 13.780 | 23.622 | 19.685 | 29.528 | — | — |
| 0.3937 | 0.9449 | 0.000 | 9.843 | 7.874 | 17.717 | 13.780 | 23.622 | 19.685 | 29.528 | 25.591 | 35.433 |
| 0.9449 | 1.1811 | 0.000 | 9.843 | 7.874 | 17.717 | 13.780 | 23.622 | 19.685 | 29.528 | 27.559 | 37.402 |
| 1.1811 | 1.5748 | 1.969 | 11.811 | 9.843 | 19.685 | 17.717 | 27.559 | 23.622 | 33.465 | 31.496 | 41.339 |
| 1.5748 | 1.9685 | 1.969 | 13.780 | 11.811 | 23.622 | 19.685 | 31.496 | 27.559 | 39.370 | 37.402 | 49.213 |
| 1.9685 | 2.5591 | 3.937 | 15.748 | 15.748 | 27.559 | 23.622 | 35.433 | 31.496 | 43.307 | 43.307 | 55.118 |
| 2.5591 | 3.1496 | 3.937 | 17.717 | 15.748 | 29.528 | 25.591 | 43.307 | 35.433 | 49.213 | 51.181 | 64.961 |
| 3.1496 | 3.9370 | 5.906 | 19.685 | 19.685 | 33.465 | 29.528 | 43.307 | 41.339 | 55.118 | 61.024 | 74.803 |
| 3.9370 | 4.7244 | 5.906 | 21.654 | 19.685 | 35.433 | 33.465 | 49.213 | 49.213 | 64.961 | 70.866 | 86.614 |
| 4.7244 | 5.5118 | 5.906 | 23.622 | 23.622 | 41.339 | 39.370 | 57.087 | 57.087 | 74.803 | 78.740 | 96.457 |
| 5.5118 | 6.2992 | 7.874 | 27.559 | 27.559 | 47.244 | 45.276 | 64.961 | 64.961 | 84.646 | 88.583 | 108.268 |
| 6.2992 | 7.0866 | 9.843 | 29.528 | 29.528 | 49.213 | 47.244 | 66.929 | 66.929 | 86.614 | 98.425 | 118.110 |
| 7.0866 | 7.8740 | 13.780 | 35.433 | 35.433 | 57.087 | 55.118 | 76.772 | 76.772 | 98.425 | 108.268 | 129.921 |
| 7.8740 | 8.8583 | 17.717 | 41.339 | 41.339 | 64.961 | 62.992 | 86.614 | 86.614 | 110.236 | 120.079 | 143.701 |
| 8.8583 | 9.8425 | 17.717 | 43.307 | 43.307 | 68.898 | 66.929 | 92.520 | 92.520 | 118.110 | 129.921 | 155.512 |
| 9.8425 | 11.0236 | 21.654 | 49.213 | 49.213 | 76.772 | 74.803 | 102.362 | 102.362 | 129.921 | 145.669 | 173.228 |
| 11.0236 | 12.4016 | 21.654 | 51.181 | 51.181 | 80.709 | 78.740 | 108.268 | 108.268 | 137.795 | 161.417 | 190.945 |
| 12.4016 | 13.9764 | 25.591 | 57.087 | 57.087 | 88.583 | 88.583 | 120.079 | 120.079 | 151.575 | 179.134 | 210.630 |
| 13.9764 | 15.7480 | 39.370 | 74.803 | 74.803 | 110.236 | 110.236 | 145.669 | 145.669 | 181.102 | 200.787 | 236.220 |
| 15.7480 | 17.7165 | 43.307 | 82.677 | 82.677 | 122.047 | 122.047 | 161.417 | 161.417 | 200.787 | 222.441 | 261.811 |
| 17.7165 | 19.6850 | 43.307 | 86.614 | 86.614 | 129.921 | 129.921 | 173.228 | 173.228 | 216.535 | 246.063 | 289.370 |

Standard tolerance values for radial internal clearance of cylindrical roller bearings with cylindrical bore and non-interchangeable component*

*(NA suffix designates non-interchangeable component)



Table 21 (Clearance Limits in 0.001 mm)

| CYLINDRICAL ROLLER BEARINGS (cylindrical bore; non-interchangeable component) | | | | | | | | | | | | | |
|---|-------|------------------------------------|------|--|------|---------------------------|------|---|------|---------------------------------------|------|---------------------------------------|------|
| Nominal Bore d mm | | C1 NA Less than C2 Clearance | | C2 NA Less than Normal Clearance | | NA Normal Clearance | | C3 NA Greater than Normal Clearance | | C4 NA Greater than C3 Clearance | | C5 NA Greater than C4 Clearance | |
| Over | Incl. | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High |
| 18 | 24 | 5 | 10 | 10 | 20 | 20 | 30 | 35 | 45 | 45 | 55 | 65 | 75 |
| 24 | 30 | 5 | 10 | 10 | 25 | 25 | 35 | 40 | 50 | 50 | 60 | 70 | 80 |
| 30 | 40 | 5 | 12 | 12 | 25 | 25 | 40 | 45 | 55 | 55 | 70 | 80 | 95 |
| 40 | 50 | 5 | 15 | 15 | 30 | 30 | 45 | 50 | 65 | 65 | 80 | 95 | 110 |
| 50 | 65 | 5 | 15 | 15 | 35 | 35 | 50 | 55 | 75 | 75 | 90 | 110 | 130 |
| 65 | 80 | 10 | 20 | 20 | 40 | 40 | 60 | 70 | 90 | 90 | 110 | 130 | 150 |
| 80 | 100 | 10 | 25 | 25 | 45 | 45 | 70 | 80 | 105 | 105 | 125 | 155 | 180 |
| 100 | 120 | 10 | 25 | 25 | 50 | 50 | 80 | 95 | 120 | 120 | 145 | 180 | 205 |
| 120 | 140 | 15 | 30 | 30 | 60 | 60 | 90 | 105 | 135 | 135 | 160 | 200 | 230 |
| 140 | 160 | 15 | 35 | 35 | 65 | 65 | 100 | 115 | 150 | 150 | 180 | 225 | 260 |
| 160 | 180 | 15 | 35 | 35 | 75 | 75 | 110 | 125 | 165 | 165 | 200 | 250 | 285 |
| 180 | 200 | 20 | 40 | 40 | 80 | 80 | 120 | 140 | 180 | 180 | 220 | 275 | 315 |
| 200 | 225 | 20 | 45 | 45 | 90 | 90 | 135 | 155 | 200 | 200 | 240 | 305 | 350 |
| 225 | 250 | 25 | 50 | 50 | 100 | 100 | 150 | 170 | 215 | 215 | 265 | 330 | 380 |
| 250 | 280 | 25 | 55 | 55 | 110 | 110 | 165 | 185 | 240 | 240 | 295 | 370 | 420 |
| 280 | 315 | 30 | 60 | 60 | 120 | 120 | 180 | 205 | 265 | 265 | 325 | 410 | 470 |
| 315 | 355 | 30 | 65 | 65 | 135 | 135 | 200 | 225 | 295 | 295 | 360 | 455 | 520 |
| 355 | 400 | 35 | 75 | 75 | 150 | 150 | 225 | 255 | 330 | 330 | 405 | 510 | 585 |
| 400 | 450 | 45 | 85 | 85 | 170 | 170 | 255 | 285 | 370 | 370 | 455 | 565 | 650 |
| 450 | 500 | 50 | 95 | 95 | 190 | 190 | 285 | 315 | 410 | 410 | 505 | 625 | 720 |

Table 21-A (Clearance Limits in 0.0001 inch)

| CYLINDRICAL ROLLER BEARINGS (cylindrical bore; non-interchangeable component) | | | | | | | | | | | | | |
|---|---------|------------------------------------|------|--|------|---------------------------|-------|---|-------|---------------------------------------|-------|---------------------------------------|-------|
| Nominal Bore d inch | | C1 NA Less than C2 Clearance | | C2 NA Less than Normal Clearance | | NA Normal Clearance | | C3 NA Greater than Normal Clearance | | C4 NA Greater than C3 Clearance | | C5 NA Greater than C4 Clearance | |
| Over | Incl. | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High |
| .7087 | .9449 | 2.0 | 3.9 | 3.9 | 7.9 | 7.9 | 11.8 | 13.6 | 17.7 | 17.7 | 21.7 | 25.6 | 29.5 |
| .9449 | 1.1811 | 2.0 | 3.9 | 3.9 | 9.8 | 9.8 | 13.8 | 15.7 | 19.7 | 19.7 | 23.6 | 27.6 | 31.5 |
| 1.1811 | 1.5748 | 2.0 | 4.7 | 4.7 | 9.8 | 9.8 | 15.7 | 17.7 | 21.7 | 21.7 | 27.6 | 31.5 | 37.4 |
| 1.5748 | 1.9685 | 2.0 | 5.9 | 5.9 | 11.8 | 11.8 | 17.7 | 19.7 | 25.6 | 25.6 | 31.5 | 37.4 | 43.3 |
| 1.9685 | 2.5591 | 2.0 | 5.9 | 5.9 | 13.8 | 13.8 | 19.7 | 21.7 | 29.5 | 29.5 | 35.4 | 43.3 | 51.2 |
| 2.5591 | 3.1496 | 3.9 | 7.9 | 7.9 | 15.7 | 15.7 | 23.6 | 27.6 | 35.4 | 35.4 | 43.3 | 51.2 | 59.1 |
| 3.1496 | 3.9370 | 3.9 | 9.8 | 9.8 | 17.7 | 17.7 | 27.6 | 31.5 | 41.3 | 41.3 | 49.2 | 61.0 | 70.9 |
| 3.9370 | 4.7244 | 3.9 | 9.8 | 9.8 | 19.7 | 19.7 | 31.5 | 37.4 | 47.2 | 47.2 | 57.1 | 70.9 | 80.7 |
| 4.7244 | 5.5118 | 5.9 | 11.8 | 11.8 | 23.6 | 23.6 | 35.4 | 41.3 | 53.1 | 53.1 | 63.0 | 78.7 | 90.6 |
| 5.5118 | 6.2992 | 5.9 | 13.8 | 13.8 | 25.6 | 25.6 | 39.4 | 45.3 | 59.1 | 59.1 | 70.9 | 88.6 | 102.4 |
| 6.2992 | 7.0866 | 5.9 | 13.8 | 13.8 | 29.5 | 29.5 | 43.3 | 49.2 | 65.0 | 65.0 | 78.7 | 98.4 | 112.2 |
| 7.0866 | 7.8740 | 7.9 | 15.7 | 15.7 | 31.5 | 31.5 | 47.2 | 55.1 | 70.9 | 70.9 | 86.6 | 108.3 | 124.0 |
| 7.8740 | 8.8583 | 7.9 | 17.7 | 17.7 | 35.4 | 35.4 | 53.1 | 61.0 | 78.7 | 78.7 | 94.5 | 120.1 | 137.8 |
| 8.8583 | 9.8425 | 9.8 | 19.7 | 19.7 | 39.4 | 39.4 | 59.1 | 66.9 | 84.6 | 84.6 | 104.3 | 129.9 | 149.6 |
| 9.8425 | 11.0236 | 9.8 | 21.7 | 21.7 | 43.3 | 43.3 | 65.0 | 72.8 | 94.5 | 94.5 | 116.1 | 145.7 | 165.4 |
| 11.0236 | 12.4016 | 11.8 | 23.6 | 23.6 | 47.2 | 47.2 | 70.9 | 80.7 | 104.3 | 104.3 | 128.0 | 161.4 | 185.0 |
| 12.4016 | 13.9764 | 11.8 | 25.6 | 25.6 | 53.1 | 53.1 | 78.7 | 88.6 | 116.1 | 116.1 | 141.7 | 179.1 | 204.7 |
| 13.9764 | 15.7480 | 13.8 | 29.5 | 29.5 | 59.1 | 59.1 | 88.6 | 100.4 | 129.9 | 129.9 | 159.4 | 200.8 | 230.3 |
| 15.7480 | 17.7165 | 17.7 | 33.5 | 33.5 | 66.9 | 66.9 | 100.4 | 112.2 | 145.7 | 145.7 | 179.1 | 222.4 | 255.9 |
| 17.7165 | 19.6850 | 19.7 | 37.4 | 37.4 | 74.8 | 74.8 | 112.2 | 124.0 | 161.4 | 161.4 | 198.8 | 246.1 | 283.5 |



Standard tolerance values for radial internal clearance of spherical roller bearings with cylindrical bore.

Table 22 (Clearance Limits in 0.001 mm)

| SPHERICAL ROLLER BEARINGS (cylindrical bore) | | | | | | | | | |
|--|--------------|-------------------------------------|-------------|-----------------------|-------------|--|-------------|------------------------------------|-------------|
| Nominal Bore <i>d</i> mm | | C2 Less than Normal Clearance | | — Normal Clearance | | C3 Greater than Normal Clearance | | C4 Greater than C3 Clearance | |
| <i>Over</i> | <i>Incl.</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> |
| 30 | 40 | 15 | 30 | 30 | 45 | 45 | 60 | 60 | 80 |
| 40 | 50 | 20 | 35 | 35 | 55 | 55 | 75 | 75 | 100 |
| 50 | 65 | 20 | 40 | 40 | 65 | 65 | 90 | 90 | 120 |
| 65 | 80 | 30 | 50 | 50 | 80 | 80 | 110 | 110 | 145 |
| 80 | 100 | 35 | 60 | 60 | 100 | 100 | 135 | 135 | 180 |
| 100 | 120 | 40 | 75 | 75 | 120 | 120 | 160 | 160 | 210 |
| 120 | 140 | 50 | 95 | 95 | 145 | 145 | 190 | 190 | 240 |
| 140 | 160 | 60 | 110 | 110 | 170 | 170 | 220 | 220 | 280 |
| 160 | 180 | 65 | 120 | 120 | 180 | 180 | 240 | 240 | 310 |
| 180 | 200 | 70 | 130 | 130 | 200 | 200 | 260 | 260 | 340 |
| 200 | 225 | 80 | 140 | 140 | 220 | 220 | 290 | 290 | 380 |
| 225 | 250 | 90 | 150 | 150 | 240 | 240 | 320 | 320 | 420 |
| 250 | 280 | 100 | 170 | 170 | 260 | 260 | 350 | 350 | 460 |
| 280 | 315 | 110 | 190 | 190 | 280 | 280 | 370 | 370 | 500 |
| 315 | 355 | 120 | 200 | 200 | 310 | 310 | 410 | 410 | 550 |
| 355 | 400 | 130 | 220 | 220 | 340 | 340 | 450 | 450 | 600 |
| 400 | 450 | 140 | 240 | 240 | 370 | 370 | 500 | 500 | 660 |
| 450 | 500 | 140 | 260 | 260 | 410 | 410 | 550 | 550 | 720 |
| 500 | 560 | 150 | 280 | 280 | 440 | 440 | 600 | 600 | 780 |
| 560 | 630 | 170 | 310 | 310 | 480 | 480 | 650 | 650 | 850 |
| 630 | 710 | 190 | 350 | 350 | 530 | 530 | 700 | 700 | 920 |
| 710 | 800 | 210 | 390 | 390 | 580 | 580 | 770 | 770 | 1010 |
| 800 | 900 | 230 | 430 | 430 | 650 | 650 | 860 | 860 | 1120 |
| 900 | 1000 | 260 | 480 | 480 | 710 | 710 | 930 | 930 | 1220 |

Table 22-A (Clearance Limits in 0.0001 inch)

| SPHERICAL ROLLER BEARINGS (cylindrical bore) | | | | | | | | | |
|--|--------------|-------------------------------------|-------------|-----------------------|-------------|--|-------------|------------------------------------|-------------|
| Nominal Bore <i>d</i> inch | | C2 Less than Normal Clearance | | — Normal Clearance | | C3 Greater than Normal Clearance | | C4 Greater than C3 Clearance | |
| <i>Over</i> | <i>Incl.</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> |
| 1.1811 | 1.5748 | 5.9 | 11.8 | 11.8 | 17.7 | 17.7 | 23.6 | 23.6 | 31.5 |
| 1.5748 | 1.9685 | 7.9 | 13.8 | 13.8 | 21.7 | 21.7 | 29.5 | 29.5 | 39.4 |
| 1.9685 | 2.5591 | 7.9 | 15.7 | 15.7 | 25.6 | 25.6 | 35.4 | 35.4 | 47.2 |
| 2.5591 | 3.1496 | 11.8 | 19.7 | 19.7 | 31.5 | 31.5 | 43.3 | 43.3 | 57.1 |
| 3.1496 | 3.9370 | 13.8 | 23.6 | 23.6 | 39.4 | 39.4 | 53.1 | 53.1 | 70.9 |
| 3.9370 | 4.7244 | 15.7 | 29.5 | 29.5 | 47.2 | 47.2 | 63.0 | 63.0 | 82.7 |
| 4.7244 | 5.5118 | 19.7 | 37.4 | 37.4 | 57.1 | 57.1 | 74.8 | 74.8 | 94.5 |
| 5.5118 | 6.2992 | 23.6 | 43.3 | 43.3 | 66.9 | 66.9 | 86.6 | 86.6 | 110.2 |
| 6.2992 | 7.0866 | 25.6 | 47.2 | 47.2 | 70.9 | 70.9 | 94.5 | 94.5 | 122.0 |
| 7.0866 | 7.8740 | 27.6 | 51.2 | 51.2 | 78.7 | 78.7 | 102.4 | 102.4 | 133.9 |
| 7.8740 | 8.8583 | 31.5 | 55.1 | 55.1 | 86.6 | 86.6 | 114.2 | 114.2 | 149.6 |
| 8.8583 | 9.8425 | 35.4 | 59.1 | 59.1 | 94.5 | 94.5 | 126.0 | 126.0 | 165.4 |
| 9.8425 | 11.0236 | 39.4 | 66.9 | 66.9 | 102.4 | 102.4 | 137.8 | 137.8 | 181.1 |
| 11.0236 | 12.4016 | 43.3 | 74.8 | 74.8 | 110.2 | 110.2 | 145.7 | 145.7 | 196.9 |
| 12.4016 | 13.9764 | 47.2 | 78.7 | 78.7 | 122.0 | 122.0 | 161.4 | 161.4 | 216.5 |
| 13.9764 | 15.7480 | 51.2 | 86.6 | 86.6 | 133.9 | 133.9 | 177.2 | 177.2 | 236.2 |
| 15.7480 | 17.7165 | 55.1 | 94.5 | 94.5 | 145.7 | 145.7 | 196.9 | 196.9 | 259.8 |
| 17.7165 | 19.6850 | 55.1 | 102.4 | 102.4 | 161.4 | 161.4 | 216.5 | 216.5 | 283.5 |
| 19.6850 | 22.0472 | 59.1 | 110.2 | 110.2 | 173.2 | 173.2 | 236.2 | 236.2 | 307.1 |
| 22.0472 | 24.8031 | 66.9 | 122.0 | 122.0 | 189.0 | 189.0 | 255.9 | 255.9 | 334.6 |
| 24.8031 | 27.9528 | 74.8 | 137.8 | 137.8 | 208.7 | 208.7 | 275.6 | 275.6 | 362.2 |
| 27.9528 | 31.4961 | 82.7 | 153.5 | 153.5 | 228.3 | 228.3 | 303.1 | 303.1 | 397.6 |
| 31.4961 | 35.4331 | 90.6 | 169.3 | 169.3 | 255.9 | 255.9 | 338.6 | 338.6 | 440.9 |
| 35.4331 | 39.3701 | 102.4 | 189.0 | 189.0 | 279.5 | 279.5 | 366.1 | 366.1 | 480.3 |



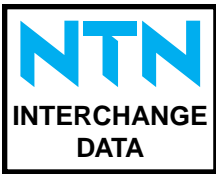
Standard tolerance values for radial internal clearance of spherical roller bearings with tapered bore.

Table 23 (Clearance Limits in 0.001 mm)

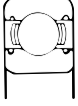


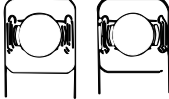
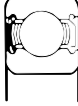
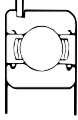
| SPHERICAL ROLLER BEARINGS (TAPERED BORE) | | | | | | | | | |
|--|--------------|-------------------------------------|-------------|-----------------------|-------------|--|-------------|------------------------------------|-------------|
| Nominal Bore <i>d</i> mm | | C2 Less than Normal Clearance | | — Normal Clearance | | C3 Greater than Normal Clearance | | C4 Greater than C3 Clearance | |
| <i>Over</i> | <i>Incl.</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> |
| 30 | 40 | 25 | 35 | 35 | 50 | 50 | 65 | 65 | 85 |
| 40 | 50 | 30 | 45 | 45 | 60 | 60 | 80 | 80 | 100 |
| 50 | 65 | 40 | 55 | 55 | 75 | 75 | 95 | 95 | 120 |
| 65 | 80 | 50 | 70 | 70 | 95 | 95 | 120 | 120 | 150 |
| 80 | 100 | 55 | 80 | 80 | 110 | 110 | 140 | 140 | 180 |
| 100 | 120 | 65 | 100 | 100 | 135 | 135 | 170 | 170 | 220 |
| 120 | 140 | 80 | 120 | 120 | 160 | 160 | 200 | 200 | 260 |
| 140 | 160 | 90 | 130 | 130 | 180 | 180 | 230 | 230 | 300 |
| 160 | 180 | 100 | 140 | 140 | 200 | 200 | 260 | 260 | 340 |
| 180 | 200 | 110 | 160 | 160 | 220 | 220 | 290 | 290 | 370 |
| 200 | 225 | 120 | 180 | 180 | 250 | 250 | 320 | 320 | 410 |
| 225 | 250 | 140 | 200 | 200 | 270 | 270 | 350 | 350 | 450 |
| 250 | 280 | 150 | 220 | 220 | 300 | 300 | 390 | 390 | 490 |
| 260 | 315 | 170 | 240 | 240 | 330 | 330 | 430 | 430 | 540 |
| 315 | 355 | 190 | 270 | 270 | 360 | 360 | 470 | 470 | 590 |
| 355 | 400 | 210 | 300 | 300 | 400 | 400 | 520 | 520 | 650 |
| 400 | 450 | 230 | 330 | 330 | 440 | 440 | 570 | 570 | 720 |
| 450 | 500 | 260 | 370 | 370 | 490 | 490 | 630 | 630 | 790 |
| 500 | 560 | 290 | 410 | 410 | 540 | 540 | 680 | 680 | 870 |
| 560 | 630 | 320 | 460 | 460 | 600 | 600 | 760 | 760 | 980 |
| 630 | 710 | 350 | 510 | 510 | 670 | 670 | 850 | 850 | 1090 |
| 710 | 800 | 390 | 570 | 560 | 750 | 750 | 960 | 960 | 1220 |
| 800 | 900 | 440 | 640 | 640 | 840 | 840 | 1070 | 1070 | 1370 |
| 900 | 1000 | 490 | 710 | 710 | 930 | 930 | 1190 | 1190 | 1520 |

Table 23-A (Clearance Limits in 0.0001 inch)

| SPHERICAL ROLLER BEARINGS (TAPERED BORE) | | | | | | | | | |
|--|--------------|-------------------------------------|-------------|-----------------------|-------------|--|-------------|------------------------------------|-------------|
| Nominal Bore <i>d</i> inch | | C2 Less than Normal Clearance | | — Normal Clearance | | C3 Greater than Normal Clearance | | C4 Greater than C3 Clearance | |
| <i>Over</i> | <i>Incl.</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> | <i>Low</i> | <i>High</i> |
| 1.1811 | 1.5748 | 9.8 | 13.8 | 13.8 | 19.7 | 19.7 | 25.6 | 25.6 | 33.5 |
| 1.5748 | 1.9685 | 11.8 | 17.7 | 17.7 | 23.6 | 23.6 | 31.5 | 31.5 | 39.4 |
| 1.9685 | 2.5591 | 15.7 | 21.7 | 21.7 | 29.5 | 29.5 | 37.4 | 37.4 | 47.2 |
| 2.5591 | 3.1496 | 19.7 | 27.6 | 27.6 | 37.4 | 37.4 | 47.2 | 47.2 | 59.1 |
| 3.1496 | 3.9370 | 21.7 | 31.5 | 31.5 | 43.3 | 43.3 | 55.1 | 55.1 | 70.9 |
| 3.9370 | 4.7244 | 25.6 | 39.4 | 39.4 | 53.1 | 53.1 | 66.9 | 66.9 | 86.6 |
| 4.7244 | 5.5118 | 31.5 | 47.2 | 47.2 | 63.0 | 63.0 | 78.7 | 78.7 | 102.4 |
| 5.5118 | 6.2992 | 35.4 | 51.2 | 51.2 | 70.9 | 70.9 | 90.6 | 90.6 | 118.1 |
| 6.2992 | 7.0866 | 39.4 | 55.1 | 55.1 | 78.7 | 78.7 | 102.4 | 102.4 | 133.9 |
| 7.0866 | 7.8740 | 43.3 | 63.0 | 63.0 | 86.6 | 86.6 | 114.2 | 114.2 | 145.7 |
| 7.8740 | 8.8583 | 47.2 | 70.9 | 70.9 | 98.4 | 98.4 | 126.0 | 126.0 | 161.4 |
| 8.8583 | 9.8425 | 55.1 | 78.7 | 78.7 | 106.3 | 106.3 | 137.8 | 137.8 | 177.2 |
| 9.8425 | 11.0236 | 59.1 | 86.6 | 86.6 | 118.1 | 118.1 | 153.5 | 153.5 | 192.9 |
| 11.0236 | 12.4016 | 66.9 | 94.5 | 94.5 | 129.9 | 129.9 | 169.3 | 169.3 | 212.6 |
| 12.4016 | 13.9764 | 74.8 | 106.3 | 106.3 | 141.7 | 141.7 | 185.0 | 185.0 | 232.3 |
| 13.9764 | 15.7480 | 82.7 | 118.1 | 118.1 | 157.5 | 157.5 | 204.7 | 204.7 | 255.9 |
| 15.7480 | 17.7165 | 90.6 | 129.9 | 129.9 | 173.2 | 173.2 | 224.4 | 224.4 | 283.5 |
| 17.7165 | 19.6850 | 102.4 | 145.7 | 145.7 | 192.9 | 192.9 | 248.0 | 248.0 | 311.0 |
| 19.6850 | 22.0472 | 114.2 | 161.4 | 161.4 | 212.6 | 212.6 | 267.7 | 267.7 | 342.5 |
| 22.0472 | 24.8031 | 126.0 | 181.1 | 181.1 | 236.2 | 236.2 | 299.2 | 299.2 | 385.8 |
| 24.8031 | 27.9528 | 137.8 | 200.8 | 200.8 | 263.8 | 263.8 | 334.6 | 334.6 | 429.1 |
| 27.9528 | 31.4961 | 153.5 | 224.4 | 224.4 | 295.3 | 295.3 | 378.0 | 378.0 | 480.3 |
| 31.4961 | 35.4331 | 173.2 | 252.0 | 252.0 | 330.7 | 330.7 | 421.3 | 421.3 | 539.4 |
| 35.4331 | 39.3701 | 192.9 | 279.5 | 279.5 | 366.1 | 366.1 | 468.5 | 468.5 | 598.4 |



SEALS, SHIELDS, AND SNAP RINGS

| |  |  |  |  |  |  |
|---------------|---|---|---|--|---|---|
| | Open type | Single shielded | Double shielded | Double sealed | Single shielded sealed | With snap ring |
| NTN Suffix | Z | ZZ | LLB or LLU | LBZ or LUZ | NR | |
| BARDEN Suffix | S | SS | FF | — | — | |
| BCA Suffix | S | SS | DD | DS | L | |
| FAFNIR Suffix | D | DD | PP | PD | G | |
| FAG Suffix | Z | ZZ | 2RS | RSZ | NR | |
| MRC Suffix | F | FF | ZZ | ZF | G | |
| NDH Prefix | 7 | 77 | 99 | 97 | 4 | |
| NSK Suffix | Z | ZZ | VV OR DDU | VZ OR DUZ | NR | |
| SKF Suffix | Z | ZZ | 2RS | RSZ | NR | |

SUFFIXES FOR SUPER PRECISION BEARINGS

| MFG | ABEC-3 ISO CLASS 6 | ABEC-5 ISO CLASS 5 | ABEC-7 ISO CLASS 4 | ABEC-9 ISO CLASS 2 |
|--------|-----------------------|-----------------------|-----------------------|-----------------------|
| NTN | P6 | P5 | P4 | P2 |
| BARDEN | — | ABEC5 | ABEC7 | ABEC9 |
| FAFNIR | M* | V* | MM* | MMX* |
| FAG | P6 | P5 | P4 | P2 |
| MRC | — | ABEC-5 | ABEC-7 | ABEC-9 |
| NDH | 3 | 5 | 7 | 9 |
| NSK | P6 | P5 | P4 | P2 |
| SKF | P6 | P5 | P4 | PA9A |

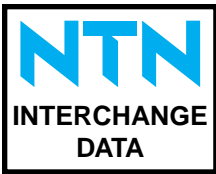
* These are prefixes

RADIAL BALL BEARINGS

| NTN | BARDEN | BCA | FAFNIR | FAG | MRC | NDH | NSK | SKF |
|-------|--------|-------|--------|--------|---------|-------|------|--------|
| 634 | 34K | 34 | 34K | 634 | 34 | 34 | R4B | |
| 635 | 35K | 35 | 35K | 635 | 35 | 35 | R5B | |
| 626 | 36K | 36 | 36K | 626 | 36 | 36 | R6B | |
| 627 | 37K | 37 | 37K | 627 | 37 | 37 | R7 | |
| 608 | 38K | 38 | 38K | 608 | 38 | 38 | R8 | |
| 629 | 39K | 39 | 39K | 629 | 39 | 39 | R9 | |
| 6000 | 100K | 100 | 9100K | 6000 | 100KS | 3L00 | 6000 | |
| 6200 | 200 | 200 | 200K | 6200 | 200S | 3200 | 6200 | |
| 6300 | — | 300 | 300K | 6300 | 300S | 3300 | 6300 | |
| BL200 | — | 1200 | 200W | 200 | 200M | 1200 | 200 | |
| BL300 | — | 1300 | 300W | 300 | 300M | 1300 | 300 | |
| 8000 | — | 8000 | 30KL | 8000 | 30FS | 8000 | — | — |
| 87000 | — | 87000 | 30KLD | 87000 | 30FSF | 87000 | — | — |
| 88000 | — | 88000 | 30KLL | 88000 | 30FFS | 88000 | — | — |
| 8500 | — | 8500 | 200KL | 8500 | 200FS | 8500 | — | — |
| 87500 | — | 87500 | 200KLD | 87500 | 200FSF | 87500 | — | — |
| 88500 | — | 88500 | 200KLL | 88500 | 200FFS | 88500 | — | — |
| 63200 | 9200 | — | W200PP | S3500 | 200SFFC | — | — | 462200 |
| 63300 | 9300 | — | W300PP | S3600 | 300SFFC | — | — | 462300 |
| 6900 | — | — | 9300K | 61900 | 1900S | 3LL00 | 6900 | 61900 |
| R2 | — | — | 33K3 | R2 | R-2 | R2 | R2 | — |
| RA2 | SR2A | — | 33K4 | RA2 | R-2A | R2A | R2A | EE-0 |
| R3 | SR3K | — | 33K5 | R3 | R-3 | R3 | R3 | EE-1 |
| RA3Z | SR3S | — | 33KD5 | R3-Z | R-3-FM | 7R3 | R3Z | — |
| R188 | SR188K | — | — | — | — | — | R188 | — |
| EE2 | SR4A | — | S1K | R4A | R-4A-4 | R4A | EE2 | EE-2 |
| EE3 | SR6K | — | S3K | R6 | R-6 | R6 | EE3 | EE-3 |
| R4 | SR4K | R4SS | S1K7 | R4 | R-4 | R4 | R4 | — |
| RA4Z | SR4AS | — | S1KD | R4-A-Z | R-4-AF | 7R4A | R4Z | — |
| R6Z | SR6S | R6SS | S3KD | R6-Z | R-6-F | 7R6 | R6Z | — |
| R8Z | SR8S | R8SS | S5KD | R8-Z | R-8-F | 7R8 | R8Z | — |
| R10Z | SR10S | R10S | S7KD | R10-Z | R-10-F | 7R10 | R10Z | — |
| R12Z | — | R12S | S8KD | R12-Z | R-12-F | 7R12 | R12Z | — |
| R14Z | — | R14S | — | R14-Z | R-14-F | 7R14 | R14Z | — |
| R16Z | — | R16S | — | R16-Z | R-16-F | 7R16 | R16Z | — |
| R18Z | — | — | — | R18-Z | R-18-F | 7R18 | R18Z | — |
| R20Z | — | — | — | R20-Z | — | 7R20 | R20Z | — |

ANGULAR AND SELF ALIGNING BALL BEARINGS

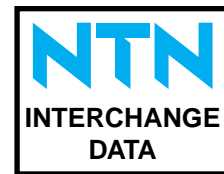
| NTN | BARDEN | BCA | FAFNIR | FAG | MRC | NDH | NSK | SKF |
|------|--------|------|--------|------|--------|-------|------|------|
| 7000 | 2100H | — | 7100PW | 7000 | 7100KR | 0L00 | 7000 | 7100 |
| 7200 | 2200H | 7200 | 7200PW | 7200 | 7200 | 20200 | 7200 | 7200 |
| 7300 | 2300H | 7300 | 7300PW | 7300 | 7300 | 20300 | 7300 | 7300 |
| 3200 | — | 5200 | 5200 | 3200 | 5200 | 5200 | — | 5200 |
| 5200 | — | — | — | — | — | — | 5200 | — |
| 3300 | — | 5300 | 5300 | 3300 | 5300 | 5300 | — | 5300 |
| 5300 | — | — | — | — | — | — | 5300 | — |
| 1200 | — | — | L200 | 1200 | — | 2500 | 1200 | 1200 |
| 2200 | — | — | L6200 | 2200 | — | — | 2200 | 2200 |
| 1300 | — | — | L300 | 1300 | — | 2600 | 1300 | 1300 |
| 2300 | — | — | L6300 | 2300 | — | — | 2300 | 2300 |



| CYLINDRICAL ROLLER BEARINGS | | | | | | | |
|-----------------------------|--------------|--------|----------|--------|---------|--------|------------|
| NTN | BCA or BOWER | FAG | NDH | NSK | ROLLWAY | SKF | TORRINGTON |
| NU1000 | — | NU1000 | A1000WB | NU1000 | — | NU1000 | — |
| NU200 | MA1200EL | NU200 | A1200WB | NU200 | MUC200 | NU200 | 000RU02 |
| NJ200 | MR1200EL | NJ200 | R1200WB | NJ200 | MUL200 | NJ200 | 000RJ02 |
| NH200 | — | — | PR1200WB | NH200 | MR200 | NH200 | — |
| NUP200 | MSN1200EX | NUP200 | — | NUP200 | MU200 | NUP200 | 000RT02 |
| N200 | MU1200CL | N200 | BU1200Z | N200 | MCS200 | N200 | 000RN02 |
| NF200 | MU1200DL | NF200 | BU1200L | NF200 | ML200 | NF200 | 000RF02 |
| NU2200 | — | NU2200 | — | NU2200 | — | NU2200 | — |
| NU300 | MA1300EL | NU300 | A1300WB | NU300 | MUC300 | NU300 | 000RU03 |
| NU2300 | — | NU2300 | — | NU2300 | — | NU2300 | — |
| NN3000 | — | NN3000 | — | NN3000 | — | NN3000 | — |

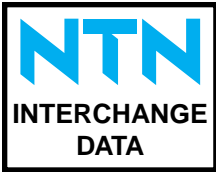
| SPHERICAL ROLLER BEARINGS | | | | | |
|---------------------------|-------|---------------|-------|-------|------------|
| NTN | FAG | PTC- LINKBELT | NSK | SKF | TORRINGTON |
| 23900 | 23900 | — | 23900 | 23900 | 23900 |
| 23000 | 23000 | 23000LB | 23000 | 23000 | 23000 |
| 24000 | 24000 | — | 24000 | 24000 | 24000 |
| 23100 | 23100 | 23100LB | 23100 | 23100 | 23100 |
| 24100 | 24100 | — | 24100 | 24100 | 24100 |
| 22200 | 22200 | 22200LB | 22200 | 22200 | 22200 |
| 23200 | 23200 | 23200LB | 23200 | 23200 | 23200 |
| 21300 | 21300 | — | 21300 | 21300 | 21300 |
| 22300 | 22300 | 22300LB | 22300 | 22300 | 22300 |
| 29300 | 29300 | — | 29300 | 29300 | 29300 |
| 29400 | 29400 | — | 29400 | 29400 | 29400 |

| THRUST BALL BEARINGS | | | | | | | |
|----------------------|-------|---------|--------|-------|-------|-------|-------|
| NTN | AETNA | ANDREWS | FAFNIR | FAG | MRC | NSK | SKF |
| 51100 | — | 51100 | — | 51100 | — | 51100 | 51100 |
| 51200 | — | 51200 | — | 51200 | — | 51200 | 51200 |
| 900 | 1100 | 900 | N1800 | — | 1100F | — | 900 |
| 2900 | 1000 | 2900 | 1500 | — | 2900 | — | 2900 |



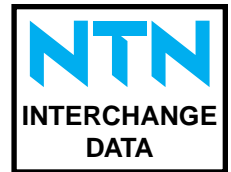
| MOUNTED UNITS AND INSERT BEARINGS | | | | | | | |
|-----------------------------------|----------|-------|---------|-------|--------------|------------|--------|
| NTN | HUB-CITY | DODGE | FAFNIR | NSK | PTC-LINKBELT | SEALMASTER | SKF |
| UCP | PB251* | SC | RASC | UCP | P3-U | NP | SY |
| UCPL | PB250 | SCB | — | — | PL3-U | S-500M | — |
| UEL | PB221 | SX | RAS | EWP | P3-Y | — | — |
| UELPL | PB220 | SXB | RAK | — | PL3-Y | — | SYH-X |
| UCPX | PB350 | SCM | RAKH | — | — | MP | — |
| ASPP | — | SL | — | UBPP | — | SSP | — |
| ASRPP | — | — | — | UBPPR | — | LRP | — |
| AELPP | — | SLX | PB | ENPP | — | — | SP |
| AELRPP | — | — | RPB | — | — | — | SRP |
| UCF | FB250* | SC | RCJC | UCF | F3-U | SF | FY |
| UCFL | FB260 | SC | RCJTC | UCFL | FX3-U | SFT | — |
| UELFU | FB220 | SX | RCJ | — | F3-Y | — | FY-X |
| UELFU | FB230 | SX | RCJT | — | FX3-Y | — | — |
| UCFX | FB350 | SCM | RCJO | — | — | MSF | — |
| UCFLX | — | SCM | — | — | — | MSFT | — |
| AELFD | — | — | FLCT | — | — | — | — |
| ASPF | — | SL | — | UBPF | — | SSF | — |
| ASPFL | — | SL | — | UBPFL | — | SSFT | — |
| AELPF | — | SLX | RA | ENPF | — | — | FP |
| AELPFL | — | SLX | RAT | ENPFL | — | — | FTP |
| AS | B100 | — | — | UB | — | L | — |
| AEL | B200 | — | RA-NPPB | EN | W200U | — | 478200 |
| UC | B250 | — | GC-KRRB | UC | UG200NL | 2-000 | 479200 |
| UEL | B220 | — | G-KRRB | EW | YG200N | — | 477200 |
| UCX | B350 | — | — | — | — | 3-000 | — |
| ASS | — | — | — | — | — | SL | — |
| AELS | — | — | RA-NPP | — | WB200U | — | — |
| UCS | — | — | GC-KRRG | UR | UBG200NL | ER | — |
| UELS | — | — | G-KRR | — | YGB200N | — | — |

| SAF and SAFS PILLOW BLOCKS | | | |
|----------------------------|--------------|-----------|------------|
| NTN | PTC-LINKBELT | SKF | TORRINGTON |
| SAF22500 | P-LB6800(F)H | SAF22500 | SAF22500A |
| SAF22600 | P-LB6900(F)H | SAF22600 | SAF22600A |
| SAF22200 | P-LB7800(F)H | SAF22200 | SAF22200 |
| SAF22300 | P-LB7900(F)H | SAF22300 | SAF22300 |
| SAF22500B6 | P-LB6800FH | FSAF22500 | FSAF22500A |
| SAFS22500 | PK-LB6800FH | SAFS22500 | SAFS22500A |
| SAFS22200 | PK-LB7800FH | SAFS22200 | SAFS22200 |



| DISC HARROW BEARINGS | | | |
|----------------------|------------|-----------|------------|
| NTN | FAFNIR | NDH | BCA |
| 1AS08-7/8 | W208PPB13 | AS4508FF | DS208TT13 |
| 4AS08-7/8 | W208PPB11 | AS4508FC | DS208TT11 |
| 4AS08-7/8 | W208PPB18 | AS4508H | DS208TT11A |
| 1AS08-1 | W208PPB6 | AS4508BK | DS208TT6 |
| 1AS08-1D1 | GW208PPB6 | RAS4508AE | DS208TTR6 |
| 2AS08-1 | W208PPB9 | AS4508BE | DS208TT9 |
| 4AS08-1 | — | AS4508AC | DS208TTB |
| 1AS08-1.1/8 | W208PPB5 | AS4508BJ | DS208TT5 |
| 2AS08-1.1/8 | W208PPB8 | AS4508EF | DS208TT8 |
| 2AS08-1.1/8D1 | GW208PPB8 | RAS4508EF | DS208TTR8 |
| 4AS08-1.1/8 | W208PPB12 | AS4508BC | DS208TT12B |
| 4AS08-1.1/8 | W208PPB19 | AS4508F | DS208TT12A |
| 1AS08-1.5/32D1 | GW208PPB5 | — | DS208TTR5 |
| 2AS09-1.1/4 | W209PPB5 | AS4509A | DS209TT5 |
| 4AS09-1.1/4 | W209PPB7 | AS4509AC | DS209TT7 |
| 2AS10-1.1/8 | W210PPB6 | — | — |
| 3AS10-1.1/8 | W210PPB4 | — | DS210TT4 |
| 3AS11-1.1/2 | W211PPB3 | AS4511BE | DS211TT3 |
| 3AS11-1.1/2D1 | GW211PPB3 | RAS4511BE | DS211TTR3 |
| 4AS11-1.1/2 | W211PPB6 | AS4511AC | DS11TT6 |
| 3AS14-2.1/32D1 | GW214PPB4 | — | — |
| 5AS08-1.1/8 | W208PP5 | AS4508BH | DC208TT5 |
| 6AS08-1.1/8 | W208PP8 | AS4508BD | DC208TT8 |
| 6AS09-1.1/4 | — | AS4509AD | DC209TT5 |
| 6AS09-1.1/4D1 | — | RAS4509AD | DC209TTR5 |
| 7AS10-1.1/8D1 | GW210PP4 | RAS4510B | DC210TTR4 |
| 6AS11-1.1/2V1 | W211PP5 | AS4511AE | DC211TT5 |
| 7AS11-1.1/2 | W211PP3 | AS4511BD | DC211TT3 |
| 7AS11-1.1/2D1 | GW211PP3 | RAS4511BD | DC211TTR3 |
| 1AC08-1.3/16 | W208PPB7 | — | DS208TT7 |
| 2AC08-1.1/2 | W208PPB2 | — | DS208TT2A |
| 1AC09D1V1 | GW209PPB11 | — | DS209TTR10 |
| 3AC09 | W209PPB2 | AS4509BE | DS209TT2 |
| 3AC09D1 | GW209PPB2 | RAS4509BE | DS209TTR2 |
| 3AC09-1.1/2 | W209PPB4 | AS4509BD | DS209TT4 |
| 3AC09-1.1/2D1 | GW209PPB4 | RAS4509BD | DS209TTR4 |
| 3AC10-1.3/4 | W210PPB5 | — | DS210TT5 |
| 3AC10-1.3/4D1 | GW210PPB5 | — | DS210TTR5 |
| 3AC10-1.15/16 | W210PPB2 | — | DS210TT2 |
| 3AC10-1.15/16D1 | GW210PPB2 | — | DS210TTR2 |
| 1AC11-2.3/16D1V1 | GW211PPB9 | — | DS211TTR9 |
| 3AC11-2.3/16 | W211PPB2 | — | DS211TT2 |
| 3AC11-2.3/16D1 | GW211PPB2 | — | DS211TTR2 |
| 3AC14D1 | GW214PPB2 | — | — |
| 5AC10-1.15/16V1 | RM1115K | 3210B | DC210 |
| 7AC10-1.15/16 | W210PP2 | — | DC210TT2 |
| 7AC11-2.3/16D1 | GW211PP2 | RAS4511C | DC211TTR2 |

HEX BORE BEARINGS



| NTN | FAFNIR | NDH | BCA |
|---------------|-----------|--------|----------|
| 1AH04-11/16 | 204KRR2 | — | — |
| 1AH05-7/8 | 205KRR2 | — | HPC014GP |
| 2AH05-7/8 | 205KRRB2 | — | HPS014GP |
| 1AH06-1 | 206KRR6 | 88506J | HPC100GP |
| 2AH06-1 | 206KRRB6 | 88506H | HPS100GP |
| 2AH06-1D1 | G206KRRB6 | — | — |
| 2AH07-1.1/8 | 207KRRB9 | — | HPS102GP |
| 2AH08-1.1/4V2 | W208PPB16 | — | — |
| 2AH09-1.1/2 | 209KRRB2 | — | — |



ENGLISH/METRIC CONVERSION CHART

| WEIGHT | | | |
|--------------------|----------------------------|--------------------|----------------------------|
| 1 ounce | = 28.35 grams (g) | 1 gram | = .03527 ounces (oz.) |
| 1 ounce | = .02835 kilograms (kg) | 1 gram | = .002205 pounds (lb.) |
| 1 ounce | = .0625 pounds (lb.) | 1 kilogram | = 35.274 ounces (oz.) |
| 1 pound | = 16 ounces (oz.) | 1 kilogram | = 2.2046 pounds (lb.) |
| 1 pound | = 453.6 grams (g) | 1 kg per sq. cm | = 14.223 lb. per sq. inch |
| 1 pound | = .4536 kilograms (kg) | 1 kg per sq. meter | = .2048 lb. per sq. foot |
| 1 lb. per sq. inch | = .070307 kg per sq. cm | 1 kg per sq. meter | = 1.8433 lb. per sq. yard |
| 1 lb. per sq. foot | = 4.8824 kg per sq. meter | 1 g per cu. cm | = .57803 oz. per cu. inch |
| 1 lb. per sq. yard | = .54249 kg per sq. meter | 1 kg per cu. meter | = .062428 lb. per cu. foot |
| 1 oz per cu. inch | = 1.7300 g per cu. cm | | |
| 1 lb. per cu. foot | = 16.019 kg per cu. meters | | |

| LENGTH | | | |
|----------------|---------------------------|------------------|-----------------------|
| 1 inch | = 25.400 millimeters (mm) | 1 millimeter | = .03937 inches (in.) |
| 1 inch | = 2.54 centimeters (cm) | 1 centimeter | = .3937 inches (in.) |
| 1 inch | = .08333 feet (ft.) | 1 centimeter | = .01094 yards (yd.) |
| 1 inch | = .02778 yards (yd.) | 1 meter | = 3.2809 feet (ft.) |
| 1 foot | = 12 inches (in.) | 1 meter | = 1.0936 yards (yd.) |
| 1 foot | = .333 yards (yd.) | 1 kilometer (km) | = 3,281 feet (ft.) |
| 1 foot | = .30481 meters (m) | 1 kilometer (km) | = 1,094 yards (yd.) |
| 1 yard | = 36 inches (in.) | 1 kilometer (km) | = .6214 statute mile |
| 1 yard | = 3 feet (ft.) | | |
| 1 yard | = 91.44 centimeters (cm) | | |
| 1 yard | = .9144 meters (m) | | |
| 1 statute mile | = 5,280 feet (ft.) | | |
| 1 statute mile | = 1,760 yards (yd.) | | |
| 1 statute mile | = 1.6093 kilometers (km) | | |

| AREA | | | |
|------------|--------------------------|------------------|---------------------|
| 1 sq. inch | = 6.4516 sq. centimeters | 1 sq. centimeter | = .15500 sq. inches |
| 1 sq. inch | = .00694 sq. feet | 1 sq. centimeter | = .00108 sq. feet |
| 1 sq. foot | = 144 sq. inches | 1 sq. meter | = 10.764 sq. feet |
| 1 sq. foot | = 929.03 sq. centimeters | 1 sq. meter | = 1.196 sq. yards |
| 1 sq. foot | = .1111 sq. yards | | |
| 1 sq. foot | = .092903 sq. meters | | |
| 1 sq. yard | = 9 sq. feet | | |
| 1 sq. yard | = .83612 sq. meters | | |

| VOLUME | | | |
|------------|--------------------------|------------------|------------------------|
| 1 cu. inch | = .0005787 cu. feet | 1 cu. centimeter | = .06102 cu. inches |
| 1 cu. inch | = .017316 quarts (qt.) | 1 cu. meter | = 61,023 cu. inches |
| 1 cu. inch | = .004329 gallons (gal.) | 1 cu. meter | = 35.31 cu. feet |
| 1 cu. inch | = 16.39 cu. centimeters | 1 cu. meter | = 1.30873 cu. yards |
| 1 cu. inch | = .00001639 cu. meters | 1 liter | = 61.017 cu. inches |
| 1 cu. inch | = .0164 liters (l) | 1 liter | = .03531 cu. feet |
| 1 cu. foot | = 1,728 cu. inches | 1 liter | = 2.11327 pints (pt.) |
| 1 cu. foot | = .0370 cu. yards | 1 liter | = 1.057 quarts (qt.) |
| 1 cu. foot | = 29.9222 quarts (qt.) | 1 liter | = .2642 gallons (gal.) |
| 1 cu. foot | = 7.481 gallons (gal.) | | |
| 1 cu. foot | = .0283 cu. meters | | |
| 1 cu. foot | = 28.32 liters (l) | | |
| 1 cu. yard | = 27 cu. feet | | |
| 1 cu. yard | = .76410 cu. meters | | |
| 1 pint | = .50 quarts (qt.) | | |
| 1 pint | = .4732 liters (l) | | |
| 1 quart | = 2 pints (pt.) | | |
| 1 quart | = .25 gallons | | |
| 1 quart | = 57.75 cu. inches | | |
| 1 quart | = .03342 cu. feet | | |
| 1 quart | = .9464 liters (l) | | |
| 1 gallon | = 231 cu. inches | | |
| 1 gallon | = .1337 cu. feet | | |
| 1 gallon | = 4 quarts (qt.) | | |

| ENERGY AND POWER | | | |
|--------------------|-----------------------------|-----------------|--------------------------------|
| 1 foot-pound | = .13826 kilogrammeter | 1 kilogrammeter | = 7.2330 foot-pounds (ft.-lb.) |
| 1 foot-pound | = .001285 Btu | 1 Btu | = 778.2 foot pounds (ft.-lb.) |
| 1 ft.-lb. per sec. | = .00182 horsepower (hp.) | 1 Btu per min. | = .02358 horsepower (hp.) |
| 1 ft.-lb. per min. | = .0000303 horsepower (hp.) | 1 kilowatt | = 1.341 horsepower (hp.) |
| 1 horsepower | = 550 ft.-lb. per sec. | | |
| 1 horsepower | = 33,000 ft.-lb. per min. | | |
| 1 horsepower | = 42.41 Btu per min. | | |
| 1 horsepower | = .7457 kilowatts (kw) | | |



DECIMAL EQUIVALENTS

| 2,4 | 8 | 16 | 32 | 64 | Decimal | Inches | mm | mm | Inches |
|-----|-----|-------|-------|-------|-------------------------------|---------|---------------------------------|----------------------|--|
| | | | 1/32 | 1/64 | .015625 .031250 | | .3969 .7938 | 26 27 | 1.02362 1.06299 |
| | | 1/16 | | 3/64 | .046875 .062500 | .039370 | 1 1.1906 1.5875 | 28 29 30 | 1.10236 1.14173 1.18110 |
| | | | 3/32 | 5/64 | .078125 | .078740 | 1.9844 2 | 31 32 | 1.22047 1.25984 |
| | | | | 7/64 | .093750 .109375 | | 2.3812 2.7781 | 33 34 | 1.29921 1.33858 |
| | 1/8 | | | | .118110 | .118110 | 3 | 35 | 1.37795 |
| | | | 5/32 | 9/64 | .125000 .140625 .156250 | | 3.1750 3.5719 3.9688 | 36 37 38 | 1.41732 1.45669 1.49606 |
| | | | | 11/64 | .171875 | .157480 | 4 4.3656 | 39 40 | 1.53543 1.57480 |
| | | 3/16 | | | .187500 | .196850 | 4.7625 5 | 41 42 | 1.61417 1.65354 |
| | | | 7/32 | 13/64 | .203125 .218750 .234375 | | 5.1594 5.5562 5.9531 | 43 44 45 | 1.69291 1.73228 1.77165 |
| 1/4 | | | | | .236220 | | 6 6.3500 6.7469 | 46 47 48 | 1.81102 1.85039 1.88976 |
| | | | 9/32 | 17/64 | .250000 .265625 | .275591 | 7 7.1438 | 49 50 | 1.92913 1.96850 |
| | | 5/16 | | 19/64 | .296875 .312500 | | 7.5406 7.9375 | 51 52 | 2.00787 2.04724 |
| | | | | 21/64 | .328125 .343750 | .314961 | 8 8.3344 8.7312 | 53 54 55 | 2.08661 2.12598 2.16535 |
| | 3/8 | | | 23/64 | .359375 .375000 .390625 | .354331 | 9 9.1281 9.5250 9.9219 | 56 57 58 59 | 2.20472 2.24409 2.28346 2.32283 |
| | | | | 25/64 | .393701 | | 10 | 60 | 2.36220 |
| | | 7/16 | 13/32 | 27/64 | .406250 .421875 | .433071 | 10.3188 10.7156 11 | 61 62 63 | 2.40157 2.44094 2.48031 |
| | | | | 29/64 | .437500 .453125 | | 11.1125 11.5094 | 64 65 | 2.51969 2.55906 |
| 1/2 | | | 15/32 | 31/64 | .468750 | .472441 | 11.9062 12 | 66 67 | 2.59843 2.63780 |
| | | | | | .484375 .500000 | | 12.3031 12.7000 | 68 69 | 2.67717 2.71654 |
| | | | | | .511811 | | 13 | 70 | 2.75591 |
| | | 9/16 | 17/32 | 33/64 | .515625 .531250 .546875 | .551181 | 13.0969 13.4938 13.8906 | 71 72 73 | 2.79528 2.83465 2.87402 |
| | | | | 35/64 | .562500 | | 14 14.2875 | 74 75 | 2.91339 2.95276 |
| | | 5/8 | 19/32 | 37/64 | .578125 | .590551 | 14.6844 15 | 76 77 | 2.99213 3.03150 |
| | | | | 39/64 | .593750 .609375 .625000 | | 15.0812 15.4781 15.8750 | 78 79 80 | 3.07087 3.11024 3.14961 |
| | | | 21/32 | 41/64 | .629921 | | 16 16.2719 | 81 82 | 3.18898 3.22835 |
| | | | | | .656250 | .669291 | 16.6688 17 | 83 84 | 3.26772 3.30708 |
| | | | | 43/64 | .671875 | | 17.0656 | 85 | 3.34646 |
| | | 11/16 | | 45/64 | .687500 .703125 | .708661 | 17.4625 17.8594 | 86 87 | 3.38583 3.42520 |
| | | | 23/32 | 47/64 | .718750 .734375 | | 18 18.2562 18.6531 | 88 89 90 | 3.46457 3.50394 3.54331 |
| 3/4 | | | | | .748031 | | 19 19.0500 | 91 92 | 3.58268 3.62205 |
| | | | | 49/64 | .750000 .765625 .781250 | .787402 | 19.4469 19.8438 | 93 94 | 3.66142 3.70079 |
| | | | | | | | 20 | 95 | 3.74016 |
| | | 13/16 | | 51/64 | .796875 .812500 | .826772 | 20.2406 20.6375 | 96 97 | 3.77953 3.81890 |
| | | | 27/32 | 53/64 | .828125 .843750 | | 21 21.0344 21.4312 | 98 99 100 | 3.85827 3.89764 3.93701 |
| | 7/8 | | | 55/64 | .859375 | .866142 | 21.8281 22 | 110 120 | 4.33071 4.72441 |
| | | | | 57/64 | .875000 .890625 | | 22.2250 22.6219 | 130 140 | 5.11811 5.51181 |
| | | | | | .905512 | | 23 | 150 | 5.90551 |
| | | 15/16 | 29/32 | 59/64 | .906250 .921875 .937500 | .944882 | 23.0188 23.4156 23.8125 | 160 170 180 | 6.29921 6.69291 7.08661 |
| | | | | 61/64 | .953125 | | 24 24.2094 | 190 200 | 7.48031 7.87402 |
| | | | 31/32 | | .968750 | .984252 | 24.6062 25 | 210 220 | 8.26772 8.66142 |
| | | | | 63/64 | .984375 | | 25.0031 | 230 | 9.05512 |

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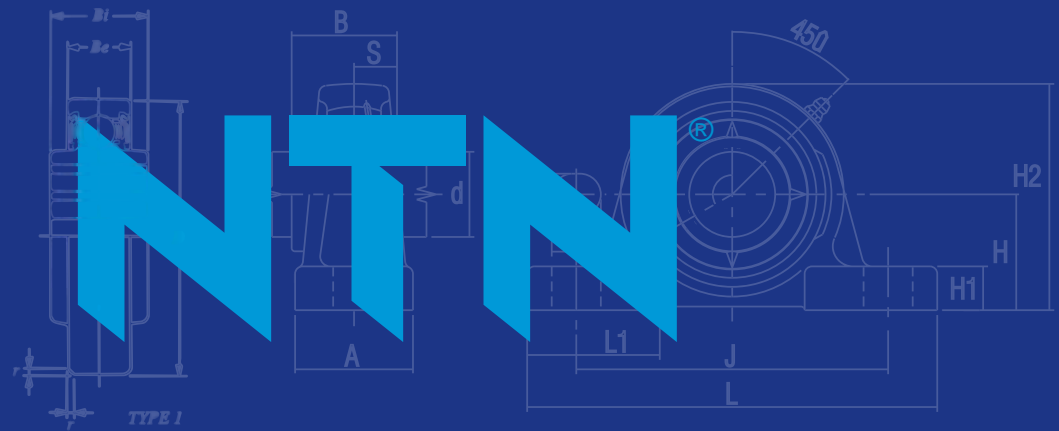
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