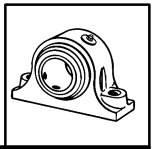
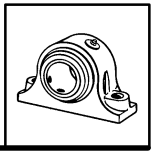


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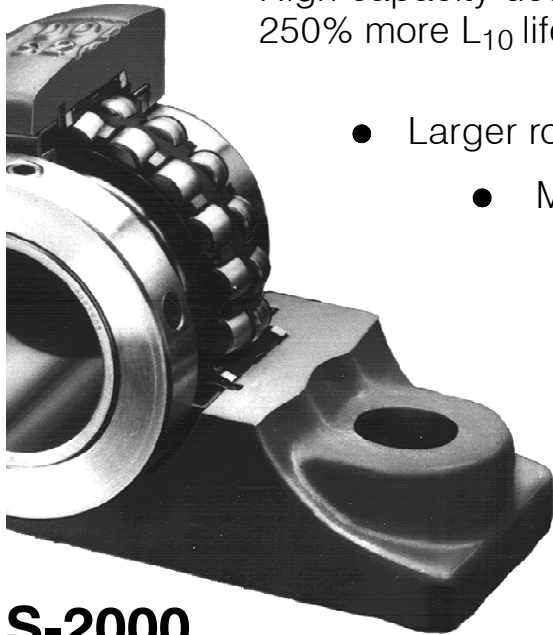


FEATURES/BENEFITS

S-2000, SN-2000 and UNISPHERE II

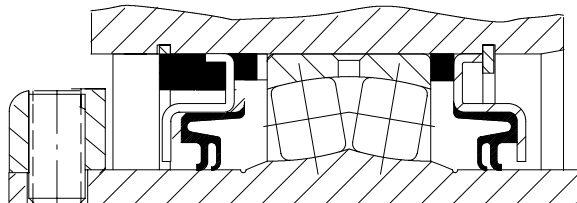
LONGER BEARING LIFE BY DESIGN...

High capacity double row spherical rollers offer up to 250% more L_{10} life than competitive brands.



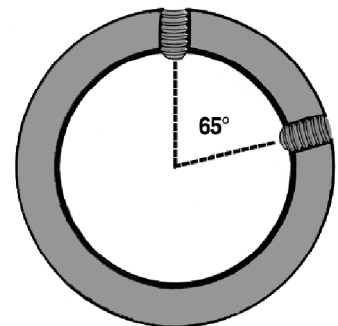
S-2000

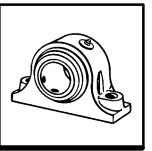
- Larger rollers
 - More contact area
 - Case-carburized inner rings resist cracking
- Static or dynamic misalignment up to 2°
- Expansion capability up to $\frac{1}{4}$ " (6 mm)



INSTALLATION SAVINGS..

- Factory lubed, sealed and adjusted—ready to slip onto the shaft
- 65° Springlok collar mount for increased holding power versus 90° or 120°
- Field convertible from non-expansion to expansion through $3\frac{1}{2}$ "/90 mm
- Elongated bolt holes to facilitate mounting





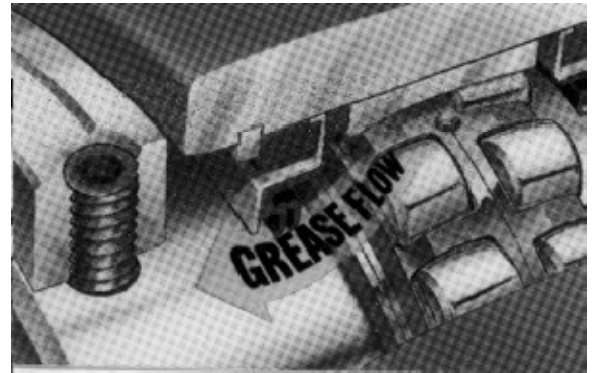
FEATURES/BENEFITS

S-2000, SN-2000 and UNISPHERE II

S-2000/SN-2000 BEARINGS OFFER PATENTED SEAL OPTIONS TO MAXIMIZE BEARING LIFE...

S2R Seals for lower to medium speed

- Hinged double lip rubbing seal for maximum sealing protection
- Nitrile seal material for low coefficient of friction
- Allows misalignment with minimized drag
- Springlok collar acts as flinger

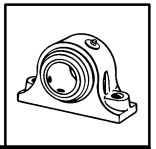


S2S SPRING-DISC™ seals for higher speeds

- Multiple discs spring loaded
- Self-aligning steel rings provide tight labyrinth
- SPRING-DISC holds rings tight against outer seal housing to force grease purge under bore of rings
- Springlok collar acts as flinger



FEATURES/BENEFITS



S-2000, SN-2000 and UNISPHERE II

S-2000



The S-2000 bearing offers a wide variety of compact, gray iron constructions to choose from. All S-2000 bearings include:

- S2R and S2S seal options
- Easy installation features
- Extended life bearings



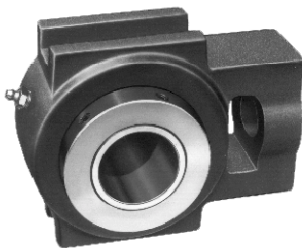
Pillow Blocks

Two-Bolt— $1\frac{1}{8}$ "-4", 40 mm-90 mm
Four-Bolt— $1\frac{7}{8}$ "-5", 40 mm-90 mm



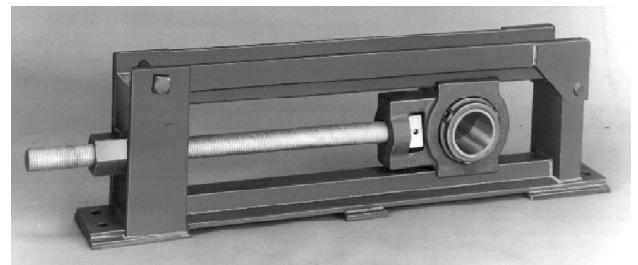
Flange Bearings

Three-Bolt— $1\frac{1}{8}$ "- $1\frac{1}{2}$ "
Four-Bolt— $1\frac{5}{8}$ "-4"
Piloted— $1\frac{1}{8}$ "- $4\frac{15}{16}$ "



Take-Up Bearings

Wide Slot— $1\frac{1}{8}$ "-5", 40 mm-90 mm
TPHU— $1\frac{7}{8}$ "-5"



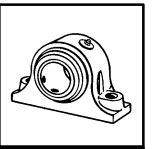
Take-Up Frames

Center Pull & TPHU

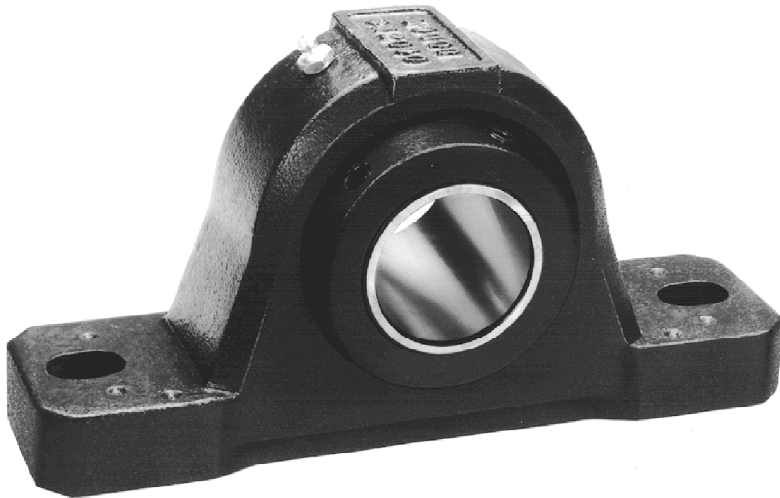
Stainless steel end closures available for added sealing and safety.

FEATURES/BENEFITS

DODGE[®]



S-2000, SN-2000 and UNISPHERE II



SN-2000

SN-2000 bearings are fully metric and meet international standards to provide a slip fit interchange with SN plummer blocks.

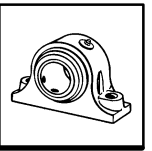
All SN-2000 bearings include S-2000 bearing features, plus...

- Two-bolt plummer blocks available from 30 mm up to 90 mm, 2-3/16" up to 3-7/16".
- Cast-in drilling location dimples for dowels or conversion from two-bolt to four-bolt mounting.
- H7 bearing seats provide 25% tighter bearing support than H8 fits—for improved, higher speed performance.
- Stiff ductile, higher shock resistant iron housing has 65,000 PSI tensile strength and withstands lower ambient temperatures.

THE S-2000/SN-2000 BEARINGS FORMULA

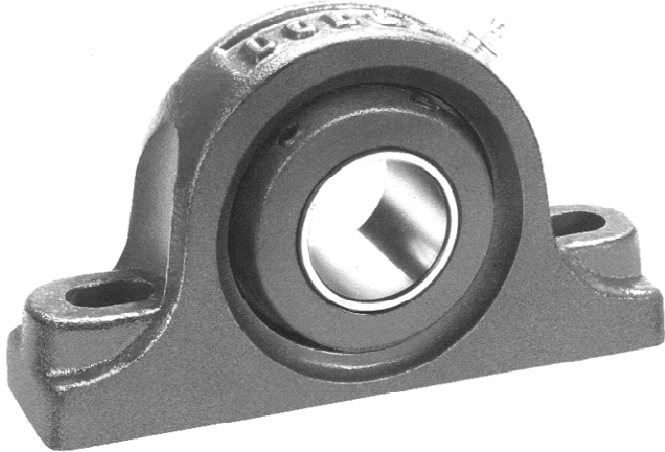
Highest capacity rollers

- + Seals designed to be unaffected by misalignment throughout the full alignment bearing range of $\pm 2^\circ$
- + Factory sealing, lube and adjustment
- = Longer Life



FEATURES/BENEFITS

S-2000, SN-2000 and UNISPHERE II



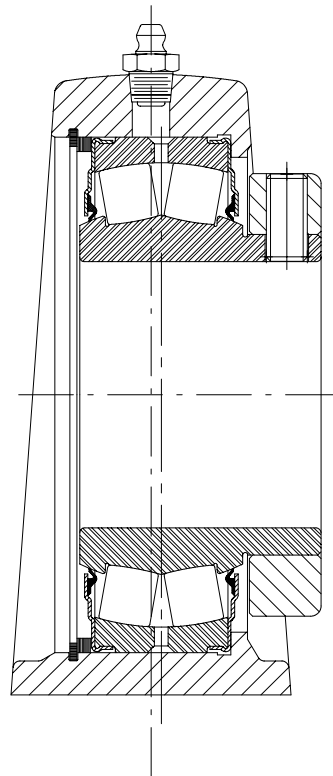
UNISPHERE II

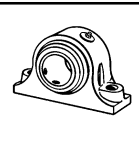
- 2-bolt pillow blocks and 4-bolt flange bearings 1⁷/₁₆" to 4", 40 mm to 90 mm.
- Same rolling elements and installation-ready features as the S-2000 bearing.
- Ductile iron pillow block housing with 65,000 PSI tensile strength is 92% the strength of steel.
- DODGE "R" Seal provides contacting lip protection, crimped to the outer race; maintains sealing effectiveness at maximum misalignment.
- Springlok™ collar mount with 65 setscrew spacing for optimum clamping force.

Dimensionally interchangeable with ball bearings:

- Length through the bore
- Base-to-center height
- Footprint

Approximately five times the rating of a ball bearing





SPECIFICATION

S-2000, SN-2000 and UNISPHERE II

INCH

DODGE Unitized Spherical Bearings, including S-2000, SN-2000 and UNISPHERE II bearings, are general purpose high capacity double row spherical roller bearings. All are mounted in single piece precision machined housings. Bearings are mounted to shafts by means of set screw collars, with 65 degree set screw spacing for maximum clamping force.

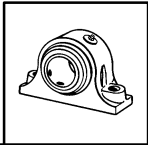
ASTM A48 Class 30 cast iron is the standard material used in S-2000 housings and UNISPHERE II flanged housings. The standard material used in UNISPHERE II

and SN-2000 pillow blocks is ductile iron (ASTM A536 Grade 65-45-12) with 65,000 p.s.i. tensile strength. Housing designs are available for survival in extreme harsh environments, through the use of special finishes and stainless hardware.

Housings are available in a variety of standard configurations, including pillow blocks, flanges, piloted flanges and take-up bearings. Rubbing lip seals are standard on all units. Metal labyrinth seals are available as an option on S-2000 and SN-2000 bearings.



SELECTION PAGE B7-10	S-2000 PAGE B7-18	UNISPHERE II PAGE B7-34	SN-2000 PAGE B7-32
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HOW TO ORDER

S-2000, SN-2000 and UNISPHERE II

There are two ways to specify DODGE Bearings. Most of the product offerings have part numbers with listings shown throughout this catalog. Use of part numbers ensures accurate order processing.

When part numbers are not shown, the product may be specified by description or part name. This method is used when ordering units that include modifications or options. To order by description, use the nomenclature key shown on page B7-9 and add any special instructions to the end of the description for options not covered by the nomenclature.

DODGE Unitized Spherical Bearings are factory adjusted and pre-lubricated. For applications where extreme ambient temperatures, high speeds or high loads are expected, a variety of specialty lubricants is available. Stan-

dard grease provided is Shell Alvania #2. High temperature greases available include Moluballoy 896 HT and Mobilith SHC460. Other special lubricants are available upon request. Special lubricant options usually involve set-up charges, minimum quantities and list price premiums. To order, specify type of lubricant required at the end of the product name or after the standard part number.

Example:

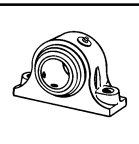
045051 except with Mobilith SHC 460 grease

or

P2BS2103S except with Mobilith SHC 460 grease

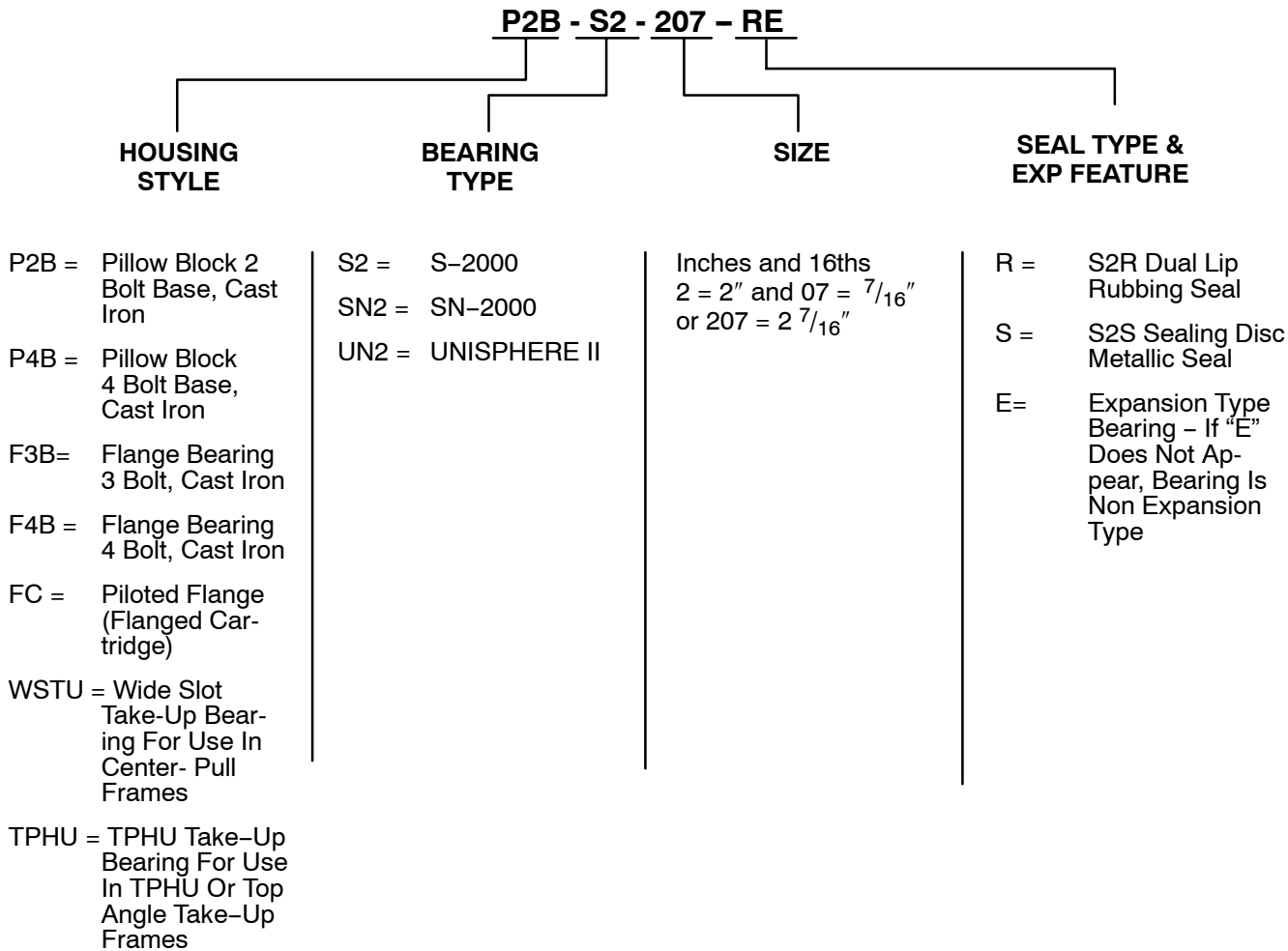
For applications requiring modifications not listed, we encourage you to contact our Application Engineering Department for Bearings at 864-297-4800.

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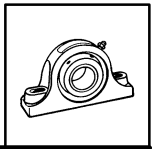


NOMENCLATURE

S-2000, SN-2000 and UNISPHERE II



SELECTION



S-2000, SN-2000, and UNISPHERE II

SPHERICAL ROLLER BEARINGS

DODGE Unitized Spherical Roller Bearings have the capacity to carry heavy radial loads and combined radial and thrust loads. The maximum recommended load which can be applied is limited by various components in the system such as bearing, housing, shaft, shaft attachment, speed and life requirements as listed in this catalog. DODGE spherical roller bearings have been applied successfully even when these limits have been exceeded under controlled operating conditions. Contact DODGE Application Engineering (864-297-4800) for applications which exceed the recommendations of this catalog.

L₁₀ Hours Life — The life which may be expected from at least 90% of a given group of bearings operating under identical conditions.

$$L_{10} \text{ Life, Hours} = \left(\frac{C}{P}\right)^{10/3} \times \left(\frac{16667}{\text{RPM}}\right)$$

Where:

C = Dynamic Capacity (Table 1, page B7-13) lbs.

P = Equivalent Radial Load, lbs.

GENERAL

Heavy Service — For heavy shock loads, frequent shock loads, or severe vibrations, add up to 50% (according to severity of conditions) to the Equivalent Radial Load to obtain a Modified Equivalent Radial Load. Consult DODGE Application Engineering for additional selection assistance.

Thrust load values shown in the table below are recommended as a guide for general applications that will give adequate L₁₀ life. Spherical bearings require a radial load at least equal to the thrust load for proper operation. If the thrust load exceeds this limit, consult Application Engineering. Where substantial radial load is also present, it is advisable to calculate actual L₁₀ life to assure that it meets the requirements. The effectiveness of the shaft

attachment to carry thrust load depends on proper tightening of the set screws, shaft tolerance and shaft deflections. Therefore, it is advisable to use auxiliary thrust carrying devices such as shaft shoulder, snap ring or a thrust collar to locate the bearing under thrust loads heavier than shown below, or where extreme reliability is desired.

RPM RANGE	20-200	201-2000	over 2000
RECOMMENDED THRUST LOAD	C/20	C/40	C/60

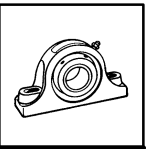
The shaft tolerances recommended below are adequate for normal radial and radial/thrust load applications. The radial load is limited by the attachment to the shaft (see Table 1). Where the applied radial load (F_R) exceeds this limit (maximum allowable slip fit radial load), a snug-to-light press fit of the shaft is required. Since the allowable load, especially at a low speed, is very large, the shaft should be checked to assure adequate shaft strength.

The magnitude and direction of both the thrust and radial load must be taken into account when selecting a housing. **When pillow blocks are utilized, heavy loads should be directed through the base. Where uplift loads are involved, see Tables 5 and 6, pages B7-16 and B7-17 for maximum values.** Where a load pulls the housing away from the mounting base, both the hold-down bolts and housing must be of adequate strength. Auxiliary load carrying devices such as shear bars are advisable for side or end loading of pillow blocks and radial loads for flange units.

SHAFT TOLERANCES

SHAFT SIZE	S-2000, SN-2000, UNISPHERE II
UP TO 1-1/2"	+0.0000 -0.0005"
1-9/16 TO 4"	+0.000 -0.001"
4-7/16 TO 5"	+0.000 -0.0015"

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SELECTION

S-2000, SN-2000, and UNISPHERE II

BEARINGS SUPPORTING RADIAL LOADS ONLY

1. Define L_{10} Life Hours desired.
2. Establish bearing radial load, F_R
($F_R = P$ for Pure Radial Load Conditions).
The DODGE program BEST™* can be used to find application loads.
3. Establish RPM.

Using the easy selection Table 2, page B7-14, find, under the RPM column, the equivalent radial load that equals or is slightly higher than the application radial load for the desired life. The shaft size on the far left will be the minimum shaft size that you can use for your application.

If the desired life is different than the values shown on the chart, use alternate Method A shown below.

- Example:
1. L_{10} Life = 30,000 Hours
 2. Radial load = 4000 lbs.
 3. RPM = 1,000

At the intersection of the 1,000 RPM column and the 30,000 hours L_{10} life row, the equivalent radial load of 4010 lbs. exceeds the 4000 lbs. radial load for shaft sizes $2\frac{3}{8}$ - $2\frac{7}{16}$ ". A bearing with bore ranging from $2\frac{3}{8}$ " to $2\frac{7}{16}$ " may be used for this application.

ALTERNATE METHOD A — SELECTING A BEARING FOR AN L_{10} LIFE VALUE NOT SHOWN IN THE EASY SELECTION CHART.

The L_{10} life equation can be rearranged so that the bearing dynamic capacity C is identified in terms of L_{10} , RPM and P

$$C = \left(\frac{L_{10} \times \text{RPM}}{16667} \right)^{0.3} \times P$$

($P = F_R$ for Pure Radial Load Conditions)

Since the L_{10} , RPM and P are known, solve for C . Select from the dynamic capacity column on Table 1, page B7-13* the C value equal to or greater than the C value just calculated. The bore size on the far left represents the proper bore size selection. Check that the application RPM does not exceed the MAX. RPM on Table 1*. Also check that the radial load does not exceed the Maximum Allowable Slip Fit Radial Load shown on Table 1. If it does, a line to line to light press fit of shaft is required. When selecting an L_{10} life of less than 30,000 hours, particular attention must be paid to shaft deflection and proper lubricant selection.

SELECTING BEARINGS SUPPORTING COMBINATION RADIAL AND THRUST LOADS

When a bearing supports both a radial load and a thrust load, the loading on the two rows is shared unequally depending on the ratio of thrust to radial load. The use of the X (radial factor) and Y (thrust factor) from Table 1* converts the applied thrust load and radial loads to an equivalent radial load having the same effect on the life of the bearing as a radial load of this magnitude.

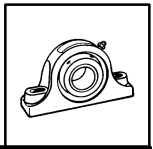
$$P = XF_R + YF_A$$

Where:

- P = Equivalent radial load, lbs.
- F_R = Radial load, lbs. (see Table 1 for allowable slip fit maximum load)
- F_A = Thrust (axial) load, lbs.
- e = Thrust load to radial load factor (Table 1)*
- X = Radial load factor (Table 1)*
- Y = Thrust load factor (Table 1)*

* The DODGE Bearing Evaluation and Selection Technique (BEST) is a menu driven computer program that calculates bearing loads, fatigue life and operating temperature for a two bearing shaft system based on user supplied input parameters. To order, call (864) 297-4800.

UNISPHERE II PAGE B7-34	SN-2000 PAGE B7-32	METRIC PAGE B7-40	
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SELECTION

S-2000, SN-2000, and UNISPHERE II

To find X and Y, calculate F_A/F_R and compare to **e** for the selected bore size. Determine X and Y from Table 1, page B7-13 depending on whether F_A/F_R is equal to or less than **e**, or F_A/F_R is greater than **e**. Substitute all known values into the equivalent radial load equation. P (equivalent radial load) can be used in the life formula to determine L_{10} , or it can be compared to the allowable equivalent radial load ratings for the speed and hours life desired in the easy selection Table 2, page B7-14.

SELECTING BEARINGS SUPPORTING ONLY THRUST LOADS

Spherical Roller Bearings generally are not recommended for pure thrust load applications. However, they will perform satisfactorily under very light pure thrust loads. Consult DODGE Application Engineering (864-297-4800).

SELECTING LUBRICATION

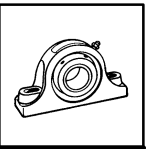
DODGE S-2000, SN-2000, and UNISPHERE II spherical roller bearings are lubricated at the factory with Shell Alvania #2 grease. Shell Alvania #2 grease is a superior industrial grease using a lithium hydroxystearate thickener and highly refined base oil. This grease will adequately handle low and medium speeds with low and medium loads at normal temperatures as defined on Table 4, page B7-15. For very low and high speeds, for heavy loads and for low and high temperatures, special greases must be

used. Contact DODGE Application Engineering (864-297-4800), DODGE engineers will recommend bearings and lubricants for the above unusual conditions. DODGE also has the expertise to custom design and build special bearings for your needs. The only maintenance requirement for DODGE Unitized roller bearings is periodic relubrication at regular intervals as outlined in the appropriate instruction manuals.

MISALIGNMENT CONSIDERATIONS

In nearly all applications good design practice requires two bearings supporting the shaft. In cases where three or more bearings are installed, unless precautions are taken to line the bearings up, both vertically and horizontally, it is possible to induce heavy loads. In the case of two bearings, alignment is not as critical, especially with DODGE Unitized Spherical Roller Bearings. S-2000, SN-2000, and UNISPHERE II bearings are designed to allow a maximum of $\pm 2^\circ$ of static and dynamic misalignment. However, for optimum seal performance, misalignment should be kept under $\pm 0.5^\circ$. To ensure good alignment, mounting surfaces must be checked for flatness and must lie in the same plane. When tightening base bolts, each bolt should be alternately tightened in incremental torque values until full torque is achieved to prevent the angular shifting of the pillow block that occurs when one bolt is tightened to its full torque. Shimming may be required to minimize misalignment.

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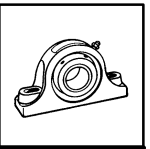
SELECTION

S-2000, SN-2000, and UNISPHERE II

**TABLE 1 – S-2000, SN-2000 AND UNISPHERE II SPHERICAL ROLLER BEARINGS
RADIAL AND THRUST FACTORS**

SHAFT SIZE INCH	BASIC BEARING DESCRIPTION	e	F _A /F _R ≤e		F _A /F _R >e		MAX. ALLOW. SLIP FIT RADIAL LOAD F _R * LBS.	DYNAMIC CAPACITY (C) LBS.	MAXIMUM RPM		
			X	Y	X	Y			S-2000 & SN-2000		UNISPHERE II
									S2S SEAL	S2R SEAL	
1-1/8 1-3/16 1-1/4 1-3/8 1-7/16 1-1/2	22208	.28	1.0	2.4	.67	3.6	3,750	20,800	3,600	2,830	3,000
1-5/8 1-11/16 1-3/4	22209	.26	1.0	2.6	.67	3.9	3,750	20,800	3,360	2,400	2,800
1-7/8 1-15/16 2	22210	.24	1.0	2.8	.67	4.2	4,000	22,000	3,180	2,150	2,625
2-3/16 2-1/4	22211	.23	1.0	2.9	.67	4.3	4,860	27,000	2,700	1,900	2,325
2-3/8 2-7/16 2-1/2	22213	.24	1.0	2.8	.67	4.2	6,840	38,000	2,160	1,700	1,900
2-11/16 2-3/4 2-15/16 3	22215	.22	1.0	3.1	.67	4.6	7,500	41,500	2,040	1,450	1,700
3-3/16 3-1/4 3-7/16 3-1/2	22218	.23	1.0	2.9	.67	4.3	11,500	64,000	1,560	1,250	1,400
3-11/16 3-15/16 4	22220	.24	1.0	2.8	.67	4.2	14,400	80,000	1,320	1,050	1,250
4-7/16 4-1/2	22222	.25	1.0	2.7	.67	4.1	18,400	102,000	1,200	975	—
4-15/16 5	22226	.26	1.0	2.6	.67	3.9	25,700	143,000	1,020	850	—

* If load exceeds "Max. allowable slip fit load," line to line to light press fit of shaft required. Maximum slip fit radial loads apply if recommended shaft sizes are used.



S-2000, SN-2000, and UNISPHERE II

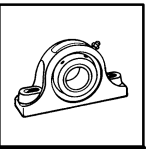
TABLE 3 – S-2000, SN-2000 & UNISPHERE II MAXIMUM AXIAL EXPANSION

S-2000 & SN-2000		UNISPHERE II	
BORE SIZE INCHES	MAXIMUM EXPANSION INCHES	BORE SIZE INCHES	MAXIMUM EXPANSION INCHES
1-1/8 to 1-1/2	1/8	1-7/16 to 1-1/2	1/8
1-5/8 to 1-3/4	1/4	1-11/16 to 1-3/4	1/8
1-7/8 to 2	1/4	1-15/16 to 2	1/8
2-3/16 to 2-1/4	1/4	2-3/16	1/8
2-3/8 to 2-1/2	1/4	2-7/16 to 2-1/2	1/8
2-11/16 to 3	1/4	2-11/16 to 3	1/8
3-3/16 to 3-1/2	1/4	3-7/16 to 3-1/2	1/8
3-11/16 to 4	5/16	3-15/16 to 4	5/32
4-7/16 to 4-1/2	3/8		
4-15/16 to 5	3/8		

TABLE 4 – DEFINITION OF OPERATING CONDITIONS FOR UNITIZED SPHERICAL ROLLER BEARINGS

LOW SPEED MEDIUM SPEED HIGH SPEED	UP TO 20% OF MAX. RPM (TABLE 1) OVER 20% TO 80% OF MAX. RPM OVER 80% OF MAX. RPM
LIGHT LOAD NORMAL LOAD HEAVY LOAD	UP TO 8% OF C (TABLE 1) OVER 8% TO 18% OF C OVER 18% OF C C = DYNAMIC CAPACITY
LOW TEMPERATURE MEDIUM TEMPERATURE HIGH TEMPERATURE VERY HIGH TEMPERATURE	20°F TO -100°F OVER 20°F TO 200°F OVER 200°F TO 300°F OVER 300°F TO 450°F

S-2000 PAGE B7-18	UNISPHERE II PAGE B7-34	SN-2000 PAGE B7-32	METRIC PAGE B7-40
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S-2000, SN-2000, and UNISPHERE II

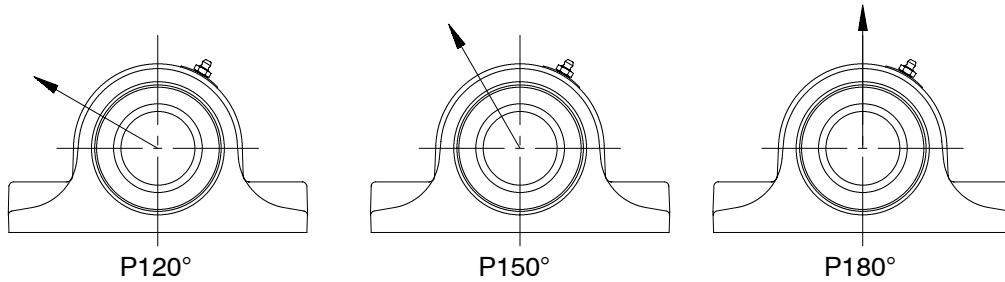


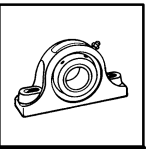
TABLE 5 – S-2000 HOUSING RATINGS, GRAY IRON*

Pillow Block Designation	Max. Recommended Housing Cap Loads		
	P120 lbf	P150 lbf	P180 lbf
S-2000			
S2107 - 2 Bolt	2110	2640	3100
S2111 - 2 Bolt	2380	2980	3500
S2115 - 2 Bolt	3130	3910	4600
S2115 - 4 Bolt	3200	4000	4700
S2203 - 2 Bolt	3330	4160	4900
S2203 - 4 Bolt	3300	4100	4800
S2207 - 2 Bolt	3330	4160	4900
S2207 - 4 Bolt	3810	4760	5600
S2215 - 2 Bolt	4420	5520	6500
S2215 - 4 Bolt	4620	5780	6800
S2307 - 2 Bolt	4620	5780	6800
S2307 - 4 Bolt	4700	5870	6900
S2315 - 2 & 4 Bolt	7500	9350	11000
S2407 - 4 Bolt	9900	12330	14500
S2415 - 4 Bolt	13400	16750	19700

* When utilizing heavy cap loads on pillow block housings, the installation must adhere to the following procedures:

1. The pillow block base bolts must be of **high strength (Grade 8) bolts and properly tightened** to mounting structure.
2. Stop bars (shear strips) should be used against the pillow block where side loads are encountered.
3. In all cases where loads are heavy, the L_{10} life of the bearing should be checked for proper selection and life requirements.

FEATURES/BENEFITS PAGE B7-2	HOW TO ORDER PAGE B7-8	NOMENCLATURE PAGE B7-9	SELECTION PAGE B7-10
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S-2000, SN-2000, and UNISPHERE II

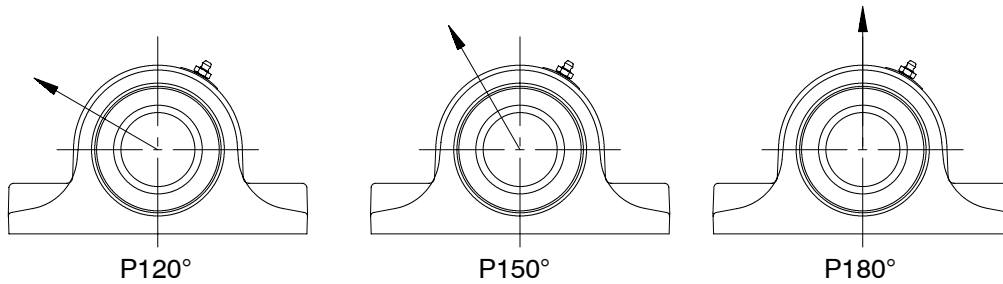


TABLE 6 – UNISPHERE II and SN2000 HOUSING RATINGS, DUCTILE*

Bore Size	Pillow Block Designation	Max. Recommended Housing Cap Loads		
		P120 lbf	P150 lbf	P180 lbf
1-1/8 to 1-1/2	UN2107	5500	6750	8000
1-5/8 to 1-3/4	UN2111	6800	8600	10000
1-7/8 to 2	UN2115	8000	9900	11700
2-3/16 to 2-1/4	UN2203	10200	12500	14800
2-3/8 to 2-1/2	UN2207	10200	12400	14900
2-11/16 to 3	UN2215	12900	15900	18900
3-3/16 to 3-1/2	UN2307	11900	14600	17400
3-11/16 to 4	UN2315	16900	20800	24600
30mm	SN2030	8310	11560	12580
35mm	SN2035	9890	11910	14380
40mm	SN2040	11560	13030	15510
45mm	SN2045	11560	13030	15510
50mm	SN2050	13030	15960	18880
55mm	SN2055	10340	12580	15060
60mm	SN2060	15960	19550	23150
65mm	SN2065	15960	19550	23150
70mm	SN2070	17980	22250	26520
75mm	SN2075	17980	22250	26520
80mm	SN2080	18650	22920	26970
85mm	SN2085	23150	28320	33720
90mm	SN2090	23150	28320	33720

* When utilizing heavy cap loads on plummer block housings, the installation must adhere to the following procedures:

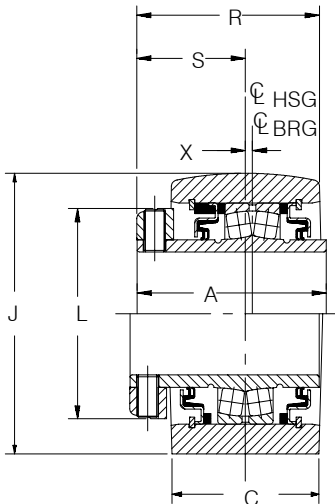
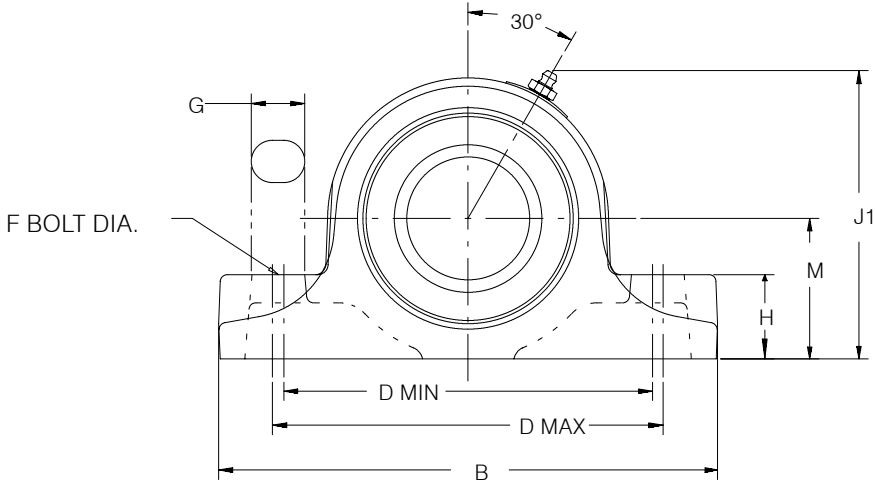
1. The plummer block base bolts must be of **high strength (Grade 8) bolts and properly tightened** to mounting structure.
2. Stop bars (shear strips) should be used against the plummer block where side loads are encountered.
3. In all cases where loads are heavy, the L_{10} life of the bearing should be checked for proper selection and life requirements.

S-2000 PAGE B7-18	UNISPHERE II PAGE B7-34	SN-2000 PAGE B7-32	METRIC PAGE B7-40
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SELECTION/DIMENSIONS

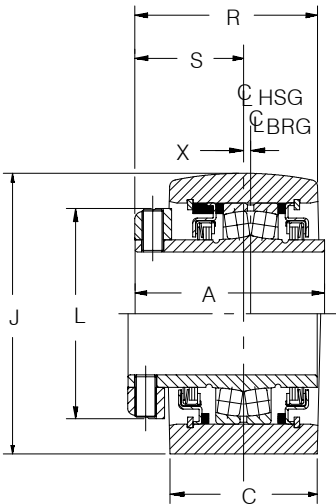
S-2000 Pillow Block – Inch 2-BOLT BASE



NON-EXP

EXP

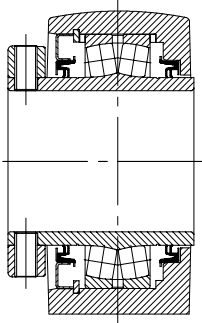
S2R SEALS
1 1/8" thru 3 1/2" Construction



NON-EXP

EXP

S2S SEALS
1 1/8" thru 3 1/2" Construction

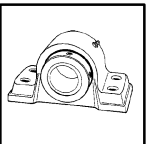


NON-EXP

EXP

3 11/16" thru 4" Construction
(S2R Seals Shown)

<p>FEATURES/BENEFITS PAGE B7-2</p>	<p>HOW TO ORDER PAGE B7-8</p>	<p>NOMENCLATURE PAGE B7-9</p>	<p>SELECTION PAGE B7-10</p>
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SELECTION/DIMENSIONS

S-2000 Pillow Block – Inch 2-BOLT BASE

Shaft Size Inch Δ	S2R SEALS*				S2S SEALS				APPROX. WT./LBS.
	NON-EXPANSION*		EXPANSION		NON-EXPANSION		EXPANSION		
	PART NO.	PART NAME	PART NO.	PART NAME	PART NO.	PART NAME	PART NO.	PART NAME	
1-1/8	----	----	----	----	045050†	P2B-S2-102S	045075†	P2B-S2-102SE	8.3
1-3/16	044609	P2B-S2-103R	044637	P2B-S2-103RE	045051	P2B-S2-103S	045076	P2B-S2-103SE	8.3
1-1/4	044610	P2B-S2-104R	044638	P2B-S2-104RE	045052†	P2B-S2-104S	045077†	P2B-S2-104SE	8.1
1-3/8	044611	P2B-S2-106R	044639	P2B-S2-106RE	045053†	P2B-S2-106S	045078†	P2B-S2-106SE	8
1-7/16	044612	P2B-S2-107R	044640	P2B-S2-107RE	045054	P2B-S2-107S	045079	P2B-S2-107SE	7.9
1-1/2	044613	P2B-S2-108R	044641	P2B-S2-108RE	045055	P2B-S2-108S	045080†	P2B-S2-108SE	7.8
1-5/8	044614†	P2B-S2-110R	044642	P2B-S2-110RE	045056†	P2B-S2-110S	045081†	P2B-S2-110SE	9.8
1-11/16	044615	P2B-S2-111R	044643	P2B-S2-111RE	045057	P2B-S2-111S	045082†	P2B-S2-111SE	9.7
1-3/4	044616	P2B-S2-112R	044644	P2B-S2-112RE	045058	P2B-S2-112S	045083†	P2B-S2-112SE	9.5
1-7/8	044617	P2B-S2-114R	044645†	P2B-S2-114RE	----	----	----	----	11.6
1-15/16	044618	P2B-S2-115R	044646	P2B-S2-115RE	045060	P2B-S2-115S	045085	P2B-S2-115SE	11.4
2	044619	P2B-S2-200R	044647	P2B-S2-200RE	045061	P2B-S2-200S	045086	P2B-S2-200SE	11.1
2-3/16	044620	P2B-S2-203R	044648	P2B-S2-203RE	045062	P2B-S2-203S	045087	P2B-S2-203SE	12
2-1/4	044621	P2B-S2-204R	044649	P2B-S2-204RE	045063†	P2B-S2-204S	045088†	P2B-S2-204SE	12
2-3/8	044622†	P2B-S2-206R	044650†	P2B-S2-206RE	----	----	----	----	18.2
2-7/16	044623	P2B-S2-207R	044651	P2B-S2-207RE	045065	P2B-S2-207S	045090	P2B-S2-207SE	18
2-1/2	044624	P2B-S2-208R	044652	P2B-S2-208RE	045066	P2B-S2-208S	045091†	P2B-S2-208SE	17.8
2-11/16	044625	P2B-S2-211R	044653	P2B-S2-211RE	045067	P2B-S2-211S	045092	P2B-S2-211SE	26.6
2-3/4	044626†	P2B-S2-212R	044654†	P2B-S2-212RE	045068†	P2B-S2-212S	045093†	P2B-S2-212SE	26.3
2-15/16	044627	P2B-S2-215R	044655	P2B-S2-215RE	045069	P2B-S2-215S	045094	P2B-S2-215SE	25.3
3	044628	P2B-S2-300R	044656†	P2B-S2-300RE	045070	P2B-S2-300S	045095†	P2B-S2-300SE	25
3-3/16	044629	P2B-S2-303R	044657	P2B-S2-303RE	045071	P2B-S2-303S	045096	P2B-S2-303SE	33
3-1/4	044630	P2B-S2-304R	044658†	P2B-S2-304RE	----	----	----	----	33
3-7/16	044631	P2B-S2-307R	044659	P2B-S2-307RE	045073	P2B-S2-307S	045098	P2B-S2-307SE	32
3-1/2	044632	P2B-S2-308R	044660	P2B-S2-308RE	045074†	P2B-S2-308S	045099†	P2B-S2-308SE	32
3-11/16	044633	P2B-S2-311R	044661†	P2B-S2-311RE	----	----	----	----	48
3-15/16	044634	P2B-S2-315R	044662	P2B-S2-315RE	042759	P2B-S2-315S	042784	P2B-S2-315SE	48
4	044635	P2B-S2-400R	044663	P2B-S2-400RE	042760	P2B-S2-400S	042785	P2B-S2-400SE	48

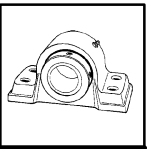
† Assembled-to-order size. Consult DODGE for delivery. Δ Consult DODGE for sizes not listed. * Furnished unless otherwise specified.

S-2000 4-BOLT PILLOW BLOCK DIMENSIONS.

Shaft Size Inch	A	B	C	D		F Bolt Dia.	G	H	J	J1	L	M	R	S	X
				Min.	Max.										
1-1/8 1-3/16 1-1/4 1-3/8 1-7/16 1-1/2	2-15/16	6-7/8	2-13/32	4-13/16	5-3/16	1/2	13/16	1-1/8	3-7/8	4-1/8	2-3/4	1-7/8	2-31/32	1-23/32	1/16
1-5/8 1-11/16 1-3/4	3-3/16	7-3/8	2-33/64	5-5/16	5-11/16	1/2	13/16	1-1/4	4-1/4	4-31/64	3-3/16	2-1/8	3-3/32	1-25/32	1/8
1-7/8 1-15/16 2	3-3/16	8-3/8	2-1/2	6-1/16	6-7/16	5/8	15/16	1-5/16	4-9/16	4-49/64	3-7/16	2-1/4	3-3/32	1-25/32	1/8
2-3/16 2-1/4	3-3/8	8-7/8	2-5/8	6-9/16	6-15/16	5/8	15/16	1-1/2	5	5-3/16	3-3/4	2-1/2	3-5/16	1-15/16	1/8
2-3/8 2-7/16 2-1/2	3-5/8	9-1/4	2-55/64	6-15/16	7-5/16	5/8	15/16	1-5/8	5-11/16	5-13/16	4-1/16	2-3/4	3-9/16	2-1/16	1/8
2-11/16 2-3/4 2-15/16 3	4-1/8	10-7/16	3-5/64	7-15/16	8-5/16	3/4	1-1/16	1-7/8	6-7/16	6-33/64	4-23/32	3-1/4	3-15/16	2-5/16	1/8
3-3/16 3-1/4 3-7/16 3-1/2	4-1/2	13	3-27/64	9-3/8	10-5/8	7/8	1-5/8	2-1/4	7-1/2	7-33/64	5-1/2	3-3/4	4-11/32	2-17/32	1/8
3-11/16 3-15/16 4	5-3/16	15-1/4	3-29/32	10-5/8	12-7/8	1	2-1/4	2-7/16	8-7/16	8-25/64	6-15/32	4-1/4	5-1/8	3-1/16	0

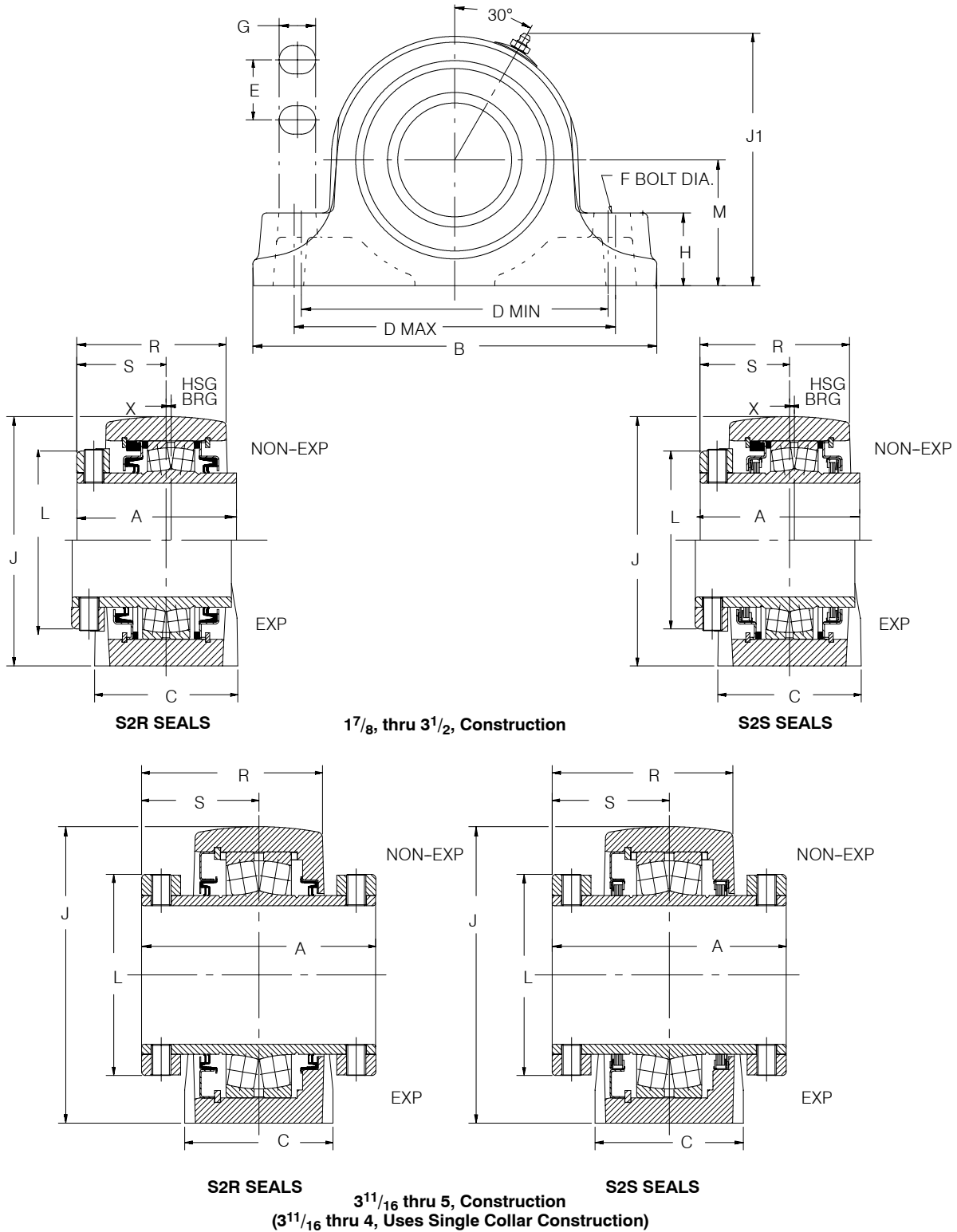
• Dimensions shown are for non-expansion units. The expansion bearing center and housing center are on same centerline.

RATINGS PAGE B7-14	HOUSING RATINGS PAGE B7-16	METRIC PAGE B7-50	
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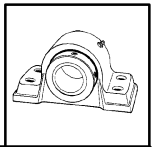
SELECTION/DIMENSIONS

S-2000 Pillow Block – Inch 4-BOLT BASE



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SELECTION/DIMENSIONS



S-2000 Pillow Block – Inch 4-BOLT BASE

Shaft Size Inch △	No. of Collars	S2R SEALS*				S2S SEALS				Approx. Wt./Lbs.
		NON-EXPANSION*		EXPANSION		NON-EXPANSION		EXPANSION		
		PART NO.	PART NAME	PART NO.	PART NAME	PART NO.	PART NAME	PART NO.	PART NAME	
1-15/16 2	1	044665	P4B-S2-115R	044688	P4B-S2-115RE	045101†	P4B-S2-115S	045117†	P4B-S2-115SE	11.7
	1	044666†	P4B-S2-200R	044689†	P4B-S2-200RE	045102†	P4B-S2-200S	045118†	P4B-S2-200SE	11.4
2-3/16 2-1/4	1	044667	P4B-S2-203R	044690†	P4B-S2-203RE	045103†	P4B-S2-203S	045119†	P4B-S2-203SE	13
	1	044668†	P4B-S2-204R	044691†	P4B-S2-204RE	-----	-----	-----	-----	13
2-7/16 2-1/2	1	044670	P4B-S2-207R	044693	P4B-S2-207RE	045106	P4B-S2-207S	045122	P4B-S2-207SE	18.5
	1	044671†	P4B-S2-208R	044694†	P4B-S2-208RE	045107†	P4B-S2-208S	045123†	P4B-S2-208SE	18.3
2-11/16 2-15/16 3	1	044672†	P4B-S2-211R	044695†	P4B-S2-211RE	045108†	P4B-S2-211S	045124†	P4B-S2-211SE	26.8
	1	044674	P4B-S2-215R	044697	P4B-S2-215RE	045110	P4B-S2-215S	045126	P4B-S2-215SE	25.5
	1	044675	P4B-S2-300R	044698	P4B-S2-300RE	045111+	P4B-S2-300S	045127†	P4B-S2-300SE	25.2
3-3/16 3-1/4 3-7/16 3-1/2	1	044676†	P4B-S2-303R	044699†	P4B-S2-303RE	-----	-----	-----	-----	39
	1	044677†	P4B-S2-304R	044700†	P4B-S2-304RE	-----	-----	-----	-----	39
	1	044678	P4B-S2-307R	044701	P4B-S2-307RE	045114	P4B-S2-307S	045130	P4B-S2-307SE	37.5
	1	044679	P4B-S2-308R	044702†	P4B-S2-308RE	045115†	P4B-S2-308S	045131†	P4B-S2-308SE	37.5
3-11/16 3-15/16 4	1	044680†	P4B-S2-311R	044703†	P4B-S2-311RE	-----	-----	-----	-----	55.4
	1	044681	P4B-S2-315R	044704	P4B-S2-315RE	043032	P4B-S2-315S	043007	P4B-S2-315SE	54
	1	044682	P4B-S2-400R	044705†	P4B-S2-400RE	043033	P4B-S2-400S	043008	P4B-S2-400SE	52
4-7/16 4-1/2	2	044683	P4B-S2-407R	044706	P4B-S2-407RE	043034	P4B-S2-407S	043009	P4B-S2-407SE	77
	2	044684	P4B-S2-408R	044707†	P4B-S2-408RE	043035†	P4B-S2-408S	043010	P4B-S2-408SE	77
4-15/16 5	2	044685	P4B-S2-415R	044708	P4B-S2-415RE	043036	P4B-S2-415S	043011	P4B-S2-415SE	115
	2	044686	P4B-S2-500R	044709†	P4B-S2-500RE	043037	P4B-S2-500S	043012	P4B-S2-500SE	115

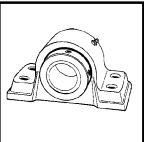
† Assembled to order. Consult DODGE for delivery.
 △ Consult DODGE for sizes not listed.
 * Furnished unless otherwise specified.

S-2000 4-BOLT PILLOW BLOCK DIMENSIONS•

Shaft Size Inch	A	B	C	D		E	F Bolt Dia.	G	H	J	J1	L	M	R	S	X
				Min.	Max.											
1-15/16 2	3-3/16	8-3/8	3-3/16	6-1/16	6-7/16	1-19/32	1/2	13/16	1-5/16	4-9/16	4-23/32	3-7/16	2-1/4	3-3/32	1-25/32	1/8
				6-9/16	6-15/16	1-11/16	1/2	13/16	1-1/2	5	5-1/8	3-3/4	2-1/2	3-5/16	1-15/16	1/8
2-3/16 2-1/4	3-3/8	8-7/8	3-1/4	6-9/16	6-15/16	1-11/16	1/2	13/16	1-1/2	5	5-1/8	3-3/4	2-1/2	3-5/16	1-15/16	1/8
				6-15/16	7-5/16	1-3/4	1/2	13/16	1-5/8	5-11/16	5-49/64	4-1/16	2-3/4	3-9/16	2-1/16	1/8
2-11/16 2-15/16 3	4-1/8	10-7/16	3-3/4	7-15/16	8-5/16	1-7/8	5/8	15/16	1-7/8	6-7/16	6-31/64	4-23/32	3-1/4	3-15/16	2-5/16	1/8
				7-5/16	1-3/4	1/2	13/16	1-5/8	5-11/16	5-49/64	4-1/16	2-3/4	3-9/16	2-1/16	1/8	
				7-15/16	8-5/16	1-7/8	5/8	15/16	1-7/8	6-7/16	6-31/64	4-23/32	3-1/4	3-15/16	2-5/16	1/8
3-3/16 3-1/4 3-7/16 3-1/2	4-1/2	13	4-1/8	9-3/8	10-5/8	2	3/4	1-1/2	2-1/4	7-1/2	7-15/32	5-1/2	3-3/4	4-11/32	2-17/32	1/8
				9-3/8	10-5/8	2	3/4	1-1/2	2-1/4	7-1/2	7-15/32	5-1/2	3-3/4	4-11/32	2-17/32	1/8
				9-3/8	10-5/8	2	3/4	1-1/2	2-1/4	7-1/2	7-15/32	5-1/2	3-3/4	4-11/32	2-17/32	1/8
				9-3/8	10-5/8	2	3/4	1-1/2	2-1/4	7-1/2	7-15/32	5-1/2	3-3/4	4-11/32	2-17/32	1/8
3-11/16 3-15/16 4	5-3/16	15-1/4	4-1/2	12-1/8	12-7/8	2-1/4	3/4	1-1/4	2-7/16	8-7/16	8-23/64	6-15/32	4-1/4	5-1/8	3-1/16	0
				12-1/8	12-7/8	2-1/4	3/4	1-1/4	2-7/16	8-7/16	8-23/64	6-15/32	4-1/4	5-1/8	3-1/16	0
4-7/16 4-1/2	7-1/2	16-1/2	4-3/4	13	14	2-1/2	3/4	1-3/8	2-3/4	9-1/2	9-21/64	6-29/64	4-3/4	5-29/32	3-3/4	0
				13	14	2-1/2	3/4	1-3/8	2-3/4	9-1/2	9-21/64	6-29/64	4-3/4	5-29/32	3-3/4	0
4-15/16 5	8	18-5/8	5-3/8	15	16	2-3/4	7/8	1-1/2	3	11	10-47/64	7-29/64	5-1/2	6-15/32	4	0

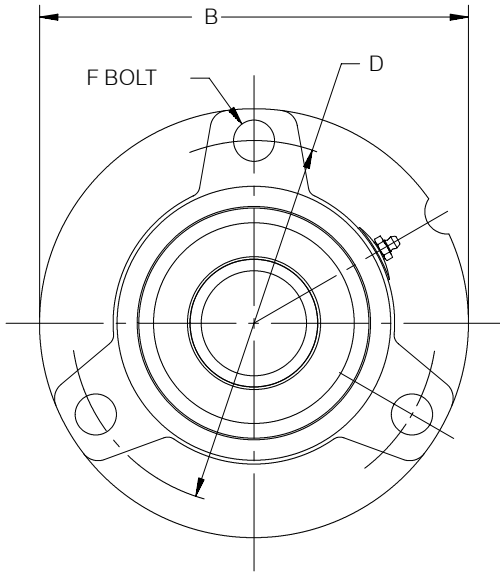
• Dimensions shown are for non-expansion units. The expansion bearing center and housing center are on same centerline.

RATINGS PAGE B7-14	HOUSING RATINGS PAGE B7-16	METRIC PAGE B7-50	
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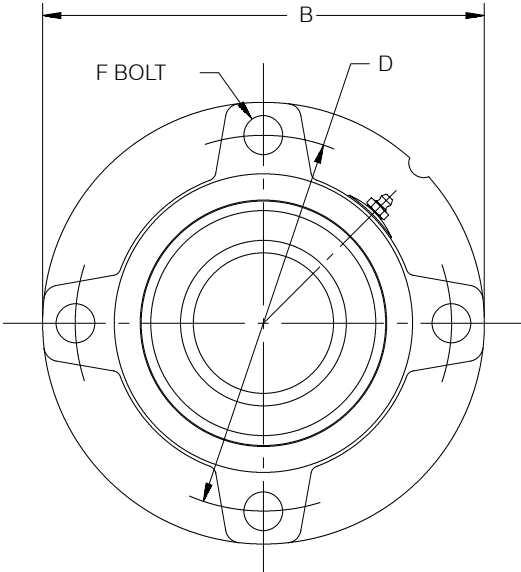


SELECTION/DIMENSIONS

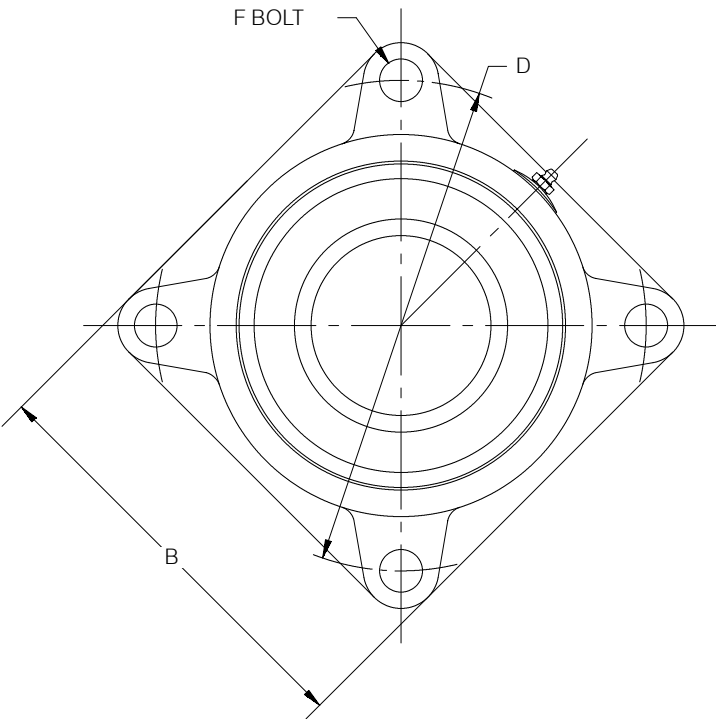
S-2000 Flange Bearing — Inch



1¹/₈" thru 1¹/₂" Construction

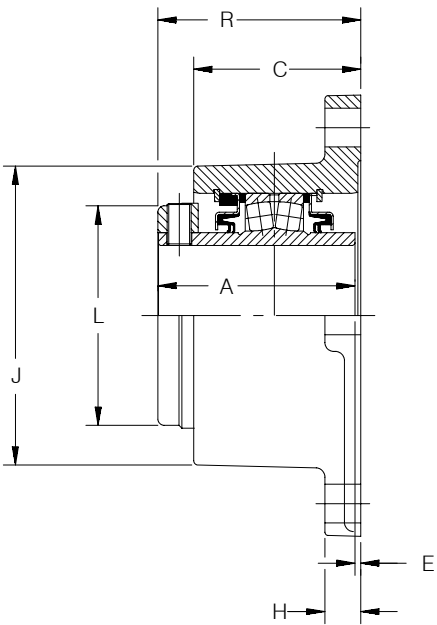


1⁵/₈" thru 3" Construction



3-³/₁₆" thru 4" Construction*

* See pillow block drawings for internal construction of these sizes



**(S2R Seals Shown)
1-¹/₈" thru 3" Construction**

<p>FEATURES/BENEFITS PAGE B7-2</p>	<p>HOW TO ORDER PAGE B7-8</p>	<p>NOMENCLATURE PAGE B7-9</p>	<p>SELECTION PAGE B7-10</p>
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SELECTION/DIMENSIONS

S-2000 Flange Bearing — Inch

Shaft Size Inch Δ	Flange Type	S2R SEALS*				S2S SEALS				Approx. Wt./Lbs.	
		NON-EXPANSION*		EXPANSION		NON-EXPANSION		EXPANSION			
		PART NO.	PART NAME	PART NO.	PART NAME	PART NO.	PART NAME	PART NO.	PART NAME		
1-3/16 1-1/4 1-7/16 1-1/2	3-Bolt Round	044711 044712 044714 044715	F3B-S2-103R F3B-S2-104R F3B-S2-107R F3B-S2-108R	044739 044740† 044742 044743	F3B-S2-103RE F3B-S2-104RE F3B-S2-107RE F3B-S2-108RE	----- 045134† 045136 045137	----- F3B-S2-104S F3B-S2-107S F3B-S2-108S	----- 045159† 045161† 045162†	----- F3B-S2-104SE F3B-S2-107SE F3B-S2-108SE	8 7.9 7.6 7.5	
1-11/16 1-3/4	4-Bolt Round	044717† 044718†	F4B-S2-111R F4B-S2-112R	044745 044746	F4B-S2-111RE F4B-S2-112RE	----- -----	----- -----	----- -----	----- -----	10.8 10.6	
1-7/8 1-15/16 2		044719† 044720 044721	F4B-S2-114R F4B-S2-115R F4B-S2-200R	044747† 044748 044749	F4B-S2-114RE F4B-S2-115RE F4B-S2-200RE	----- 045142 045143	----- F4B-S2-115S F4B-S2-200S	----- 045169† 045168†	----- F4B-S2-115SE F4B-S2-200SE	11.5 11.3 11	
2-3/16 2-1/4		044722 044723†	F4B-S2-203R F4B-S2-204R	044750 044751†	F4B-S2-203RE F4B-S2-204RE	045144† 045145†	F4B-S2-203S F4B-S2-204S	045169† 045170†	F4B-S2-203SE F4B-S2-204SE	13 13	
2-7/16 2-1/2		044725 044726	F4B-S2-207R F4B-S2-208R	044753 044754	F4B-S2-207RE F4B-S2-208RE	045147 -----	F4B-S2-207S -----	045172† -----	F4B-S2-207SE -----	16.5 16.2	
2-11/16 2-3/4 2-15/16 3		044727 044728† 044729 044730	F4B-S2-211R F4B-S2-212R F4B-S2-215R F4B-S2-300R	044755† 044756† 044757 044758	F4B-S2-211RE F4B-S2-212RE F4B-S2-215RE F4B-S2-300RE	----- ----- 045151 -----	----- ----- F4B-S2-215S -----	----- ----- 045176† -----	----- ----- F4B-S2-215SE -----	27.4 27.1 26.1 25.8	
3-1/4 3-7/16 3-1/2		4-Bolt Square	044732† 044733 044734†	F4B-S2-304R F4B-S2-307R F4B-S2-308R	044760† 044761 044762†	F4B-S2-304RE F4B-S2-307RE F4B-S2-308RE	----- 045155 045156†	----- F4B-S2-307S F4B-S2-308S	----- 045180† 045181†	----- F4B-S2-307SE F4B-S2-308SE	38 38 38
3-11/16 3-15/16 4			044735† 044736 044737†	F4B-S2-311R F4B-S2-315R F4B-S2-400R	044763† 044764 044765†	F4B-S2-311RE F4B-S2-315RE F4B-S2-400RE	----- 042919 042920†	----- F4B-S2-315S F4B-S2-400S	----- 042894 042895†	----- F4B-S2-315SE F4B-S2-400SE	53 53 53

† Assembled-to-order size. Consult DODGE for delivery. Δ Consult DODGE for sizes not listed. * Furnished unless otherwise specified.

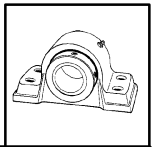
S-2000 FLANGE DIMENSIONS

Shaft Size Inch	A	B	C	D •	E ∅	F Bolt Dia.	H	J	L	R	
										Non-Exp.	Exp.
1-3/16 1-1/4 1-7/16 1-1/2	2-15/16	5-7/8	2-9/16	5	3/32	1/2	1/2	3-3/4	2-3/4	3-1/32	3-3/32
1-11/16 1-3/4	3-3/16	6-3/8	2-3/4	5-1/2	3/32	1/2	1/2	4-1/4	3-3/16	3-9/32	3-13/32
1-7/8 1-15/16 2	3-3/16	6-11/16	2-3/4	5-3/4	3/32	1/2	9/16	4-1/2	3-7/16	3-9/32	3-13/32
2-3/16 2-1/4	3-3/8	7-3/8	2-7/8	6-3/8	1/16	5/8	9/16	4-7/8	3-3/4	3-7/16	3-9/16
2-7/16 2-1/2	3-5/8	7-3/4	3-3/16	6-3/4	3/32	5/8	5/8	5-3/8	4-1/16	3-23/32	3-27/32
2-11/16 2-3/4 2-15/16 3	4-1/8	9-1/4	3-1/2	7-7/8	1/8	3/4	3/4	6-1/4	4-23/32	4-1/4	4-3/8
3-1/4 3-7/16 3-1/2	4-1/2	8-1/4 ◆	3-13/16	9-1/2	3/32	3/4	15/16	7-3/8	5-1/2	4-19/32	4-23/32
3-11/16 3-15/16 4	5-3/16	9-1/4 ◆	4-1/2	10-3/4	5/16	7/8	1-1/8	8-3/8	6-15/32	5-1/2	5-1/2

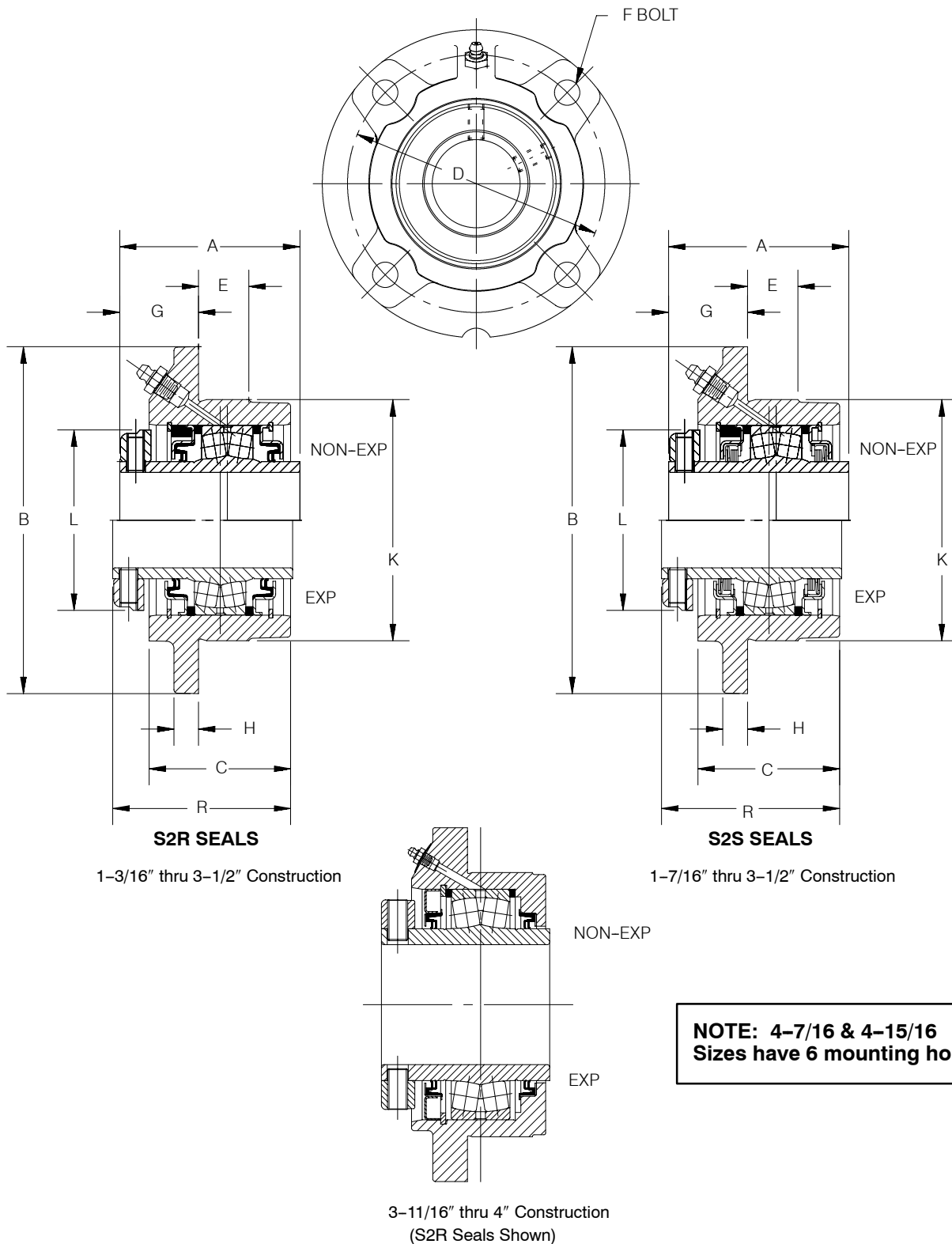
• Bolt Circle Diameter ∅ Dimensions shown are for non-expansion units. ◆ Length of side

RATINGS PAGE B7-14			
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SELECTION/DIMENSIONS

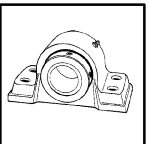


S-2000 Piloted Flange Bearing — Inch



FEATURES/BENEFITS PAGE B7-2	HOW TO ORDER PAGE B7-8	NOMENCLATURE PAGE B7-9	SELECTION PAGE B7-10
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SELECTION/DIMENSIONS



S-2000 Piloted Flange Bearing — Inch

Shaft Size/Inch Δ	S2R SEALS*				S2S SEALS				Approx. Wt./Lbs.
	NON-EXPANSION*		EXPANSION		NON-EXPANSION		EXPANSION		
	PART NO.	PART NAME	PART NO.	PART NAME	PART NO.	PART NAME	PART NO.	PART NAME	
1-3/16	044767	FC-S2-103R	044846†	FC-S2-103RE	-----	-----	-----	-----	5.5
1-1/4	044768	FC-S2-104R	044847†	FC-S2-104RE	-----	-----	-----	-----	6
1-3/8	044769†	FC-S2-106R	044848†	FC-S2-106RE	-----	-----	-----	-----	5.5
1-7/16	044770	FC-S2-107R	044849†	FC-S2-107RE	045186	FC-S2-107S	045211†	FC-S2-107SE	5.3
1-1/2	044771	FC-S2-108R	044850†	FC-S2-108RE	045187	FC-S2-108S	045212†	FC-S2-108SE	
1-5/8	044772†	FC-S2-110R	044851†	FC-S2-110RE	045188†	FC-S2-110S	045213†	FC-S2-110SE	8
1-11/16	044773†	FC-S2-111R	044852†	FC-S2-111RE	045189†	FC-S2-111S	045214†	FC-S2-111SE	8
1-3/4	044774	FC-S2-112R	044853†	FC-S2-112RE	045190	FC-S2-112S	045215†	FC-S2-112SE	8
1-15/16	044776	FC-S2-115R	044855†	FC-S2-115RE	045192	FC-S2-115S	045217†	FC-S2-115SE	9.2
2	044777	FC-S2-200R	044856†	FC-S2-200RE	045193	FC-S2-200S	045218†	FC-S2-200SE	8.9
2-3/16	044778	FC-S2-203R	044857†	FC-S2-203RE	045194	FC-S2-203S	045219†	FC-S2-203SE	12
2-1/4	044779†	FC-S2-204R	044858†	FC-S2-204RE	045195†	FC-S2-204S	045220†	FC-S2-204SE	12
2-3/8	044780†	FC-S2-206R	044859†	FC-S2-206RE	045196†	FC-S2-206S	045221†	FC-S2-206SE	16
2-7/16	044781	FC-S2-207R	044860†	FC-S2-207RE	045197	FC-S2-207S	045222†	FC-S2-207SE	16
2-1/2	044782	FC-S2-208R	044861†	FC-S2-208RE	045198	FC-S2-208S	045223†	FC-S2-208SE	16
2-11/16	044783	FC-S2-211R	044862†	FC-S2-211RE	045199†	FC-S2-211S	045224†	FC-S2-211SE	23.6
2-3/4	044784†	FC-S2-212R	044863†	FC-S2-212RE	-----	-----	-----	-----	23.3
2-15/16	044785	FC-S2-215R	044864†	FC-S2-215RE	045201	FC-S2-215S	045226†	FC-S2-215SE	22
3	044786	FC-S2-300R	044865†	FC-S2-300RE	045202†	FC-S2-300S	045227†	FC-S2-300SE	21.7
3-3/16	044787†	FC-S2-303R	044866†	FC-S2-303RE	-----	-----	-----	-----	35
3-7/16	044789	FC-S2-307R	044868†	FC-S2-307RE	045205	FC-S2-307S	045230†	FC-S2-307SE	35
3-1/2	044790†	FC-S2-308R	044869†	FC-S2-308RE	045206†	FC-S2-308S	045231†	FC-S2-308SE	35
3-11/16	-----	-----	-----	-----	042943†	FC-S2-311S	042968	FC-S2-311SE	47
3-15/16	044792	FC-S2-315R	044871	FC-S2-315RE	042944	FC-S2-315S	042969	FC-S2-315SE	46
4	044793	FC-S2-400R	044872	FC-S2-400RE	042945	FC-S2-400S	042970†	FC-S2-400SE	46
4-7/16	045869	FC-S2-407R	045870	FC-S2-407RE	-----	-----	-----	-----	78
4-15/16	045877	FC-S2-415R	045878	FC-S2-415RE	-----	-----	-----	-----	110

† Assembled-to-order size. Consult DODGE for delivery. Δ Consult DODGE for sizes not listed. * Furnished unless otherwise specified.

S-2000 PILOTED FLANGE DIMENSIONS

Shaft Size/Inch	A°	B	C	D	E	F	G		H	K■	L	R	
							Non-Exp.	Exp				Non-Exp.	Exp.
1-3/16													
1-1/4													
1-3/8	2-15/16	5-1/4	2-1/2	4-3/8	3/4	3/8	1-13/32	1-15/32	1/2	3-5/8	2-3/4	2-31/32	3-1/32
1-7/16													
1-1/2													
1-5/8													
1-11/16	3-3/16	6-1/8	2-1/2	5-1/8	7/8	7/16	1-13/32	1-17/32	1/2	4-1/4	3-3/16	3-1/32	3-5/32
1-3/4													
1-15/16													
2	3-3/16	6-3/8	2-1/2	5-3/8	7/8	7/16	1-13/32	1-17/32	9/16	4-1/2	3-7/16	3-1/32	3-5/32
2-3/16													
2-1/4	3-3/8	7-1/8	2-3/4	6	1	1/2	1-17/32	1-21/32	9/16	5	3-3/4	3-5/16	3-7/16
2-3/8													
2-7/16	3-5/8	7-5/8	3-1/8	6-1/2	1	1/2	1-11/16	1-13/16	5/8	5-1/2	4-1/16	3-5/8	3-3/4
2-1/2													
2-11/16													
2-3/4	4-1/8	8-3/4	3-1/8	7-1/2	1-1/4	5/8	1-27/32	1-31/32	3/4	6-3/8	4-23/32	3-7/8	4
2-15/16													
3													
3-3/16													
3-7/16	4-1/2	10-1/4	3-1/2	8-5/8	1-1/4	3/4	2-5/16	2-7/16	15/16	7-3/8	5-1/2	4-9/32	4-13/32
3-1/2													
3-11/16													
3-15/16	5-3/16	10-7/8	4-1/8	9-3/8	2	3/4	2-21/32	2-21/32	1-1/8	8-1/8	6-15/32	5-1/16	5-1/16
4													
4-7/16▲	7-1/2	13-1/2	4-7/16	11-3/4	1-1/2	3/4	3-27/64	3-35/64	1	10-1/4	6-3/4	5-29/32	6-1/32
4-15/16▲	8	14-3/4	4-15/16	12-3/4	1-3/4	7/8	3-23/64	3-31/64	1-1/4	11	7-7/16	6-27/64	6-35/64

■ +.000 -.002

° Length thru bore

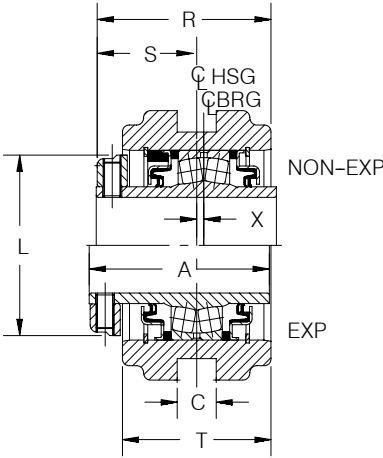
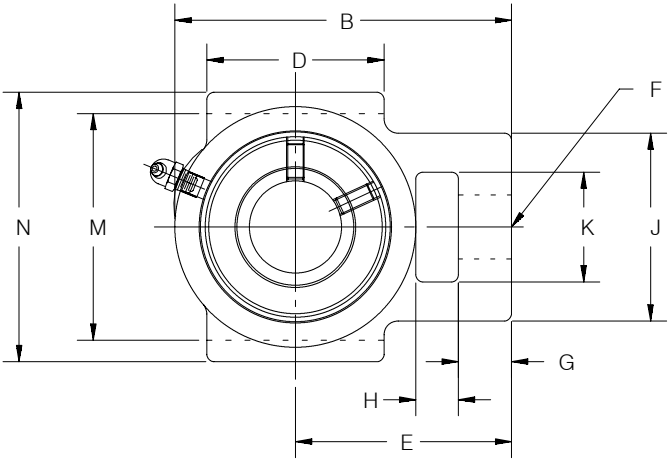
▲ Has 6 mounting holes

RATINGS PAGE B7-14				
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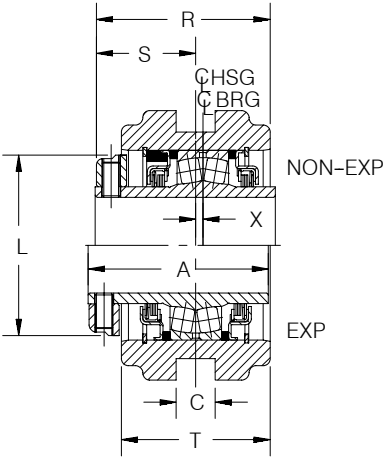
SELECTION/DIMENSIONS

S-2000 Wide Slot Take-up Unit — Inch



S2R SEALS

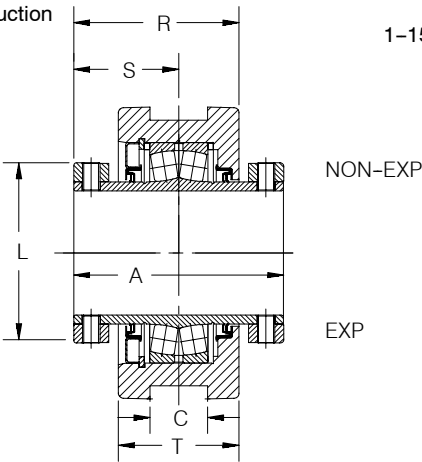
1-1/8" thru 3-1/2" Construction



S2S SEALS

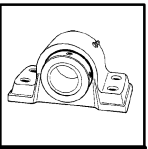
1-15/16" thru 3-1/2" Construction

3¹¹/₁₆" thru 5" Construction
 (3¹¹/₁₆" thru 4" Uses
 Single Collar Construction)
 (S2R Seals Shown)



FEATURES/BENEFITS PAGE B7-2	HOW TO ORDER PAGE B7-8	NOMENCLATURE PAGE B7-9	SELECTION PAGE B7-10
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SELECTION/DIMENSIONS



S-2000 Wide Slot Take-up Unit — Inch

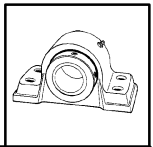
Shaft Size Inch	A	B	C*	D	E	F SCR. DIA.	G	H	J	K
1-1/8, 1-7/16, 1-1/2	2-15/16	5-1/16	17/32	2-3/4	3-3/16	3/4	11/16	5/8	2-7/16	1-7/16
1-11/16 1-3/4	3-3/16	5-15/16	11/16	3-1/8	3-13/16	1	15/16	3/4	3-5/16	1-15/16
1-15/16 2	3-3/16	6-3/16	11/16	3-5/8	3-15/16	1	15/16	3/4	3-5/16	1-15/16
2-3/16 2-1/4	3-3/8	7-1/16	13/16	3-5/8	4-5/8	1-1/8	15/16	1-1/4	3-7/8	2-1/4
2-7/16 2-1/2	3-5/8	7-11/16	1-1/16	4-3/8	5	1-1/4	1-1/16	1-1/4	4-1/4	2-1/2
2-11/16, 2-3/4 2-15/16, 3	4-1/8	8-7/8	1-13/16	4-1/2	5-3/4	1-1/2	1-1/8	1-1/2	4-7/8	2-3/4
3-1/4, 3-7/16, 3-1/2	4-1/2	10-1/16	1-13/16	5-1/2	6-3/8	1-3/4	1-1/16	1-5/8	5-1/8	2-7/8
3-11/16 3-15/16 4	5-3/16	12-9/16	2-1/16	7	8-3/8	2	2-1/16	2-1/8	6	3-3/8
4-7/16 4-1/2	7-1/2	13-3/8	2-1/16	7	8-3/4	2	2	2-1/8	6-3/8	3-3/8
4-15/16 5	8	15-5/8	2-1/16	9	10-5/16	2-1/4	2-1/2	2-1/2	7	3-3/4

Shaft Size Inch	L	M◆	N	R		T	X•	S	
				Non-Exp.	Exp.			Non-Exp.	Exp.
1-1/8, 1-7/16, 1-1/2	2-3/4	3-1/2	4-1/8	2-31/32	3-1/32	2-1/2	1/16	1-23/32	1-25/32
1-11/16 1-3/4	3-3/16	4	4-3/4	3-3/32	3-7/32	2-5/8	1/8	1-25/32	1-29/32
1-15/16 2	3-7/16	4	4-3/4	3-3/16	3-7/32	2-5/8	1/8	1-25/32	1-29/32
2-3/16 2-1/4	3-3/4	4-1/2	5-1/4	3-3/8	3-7/16	2-3/4	1/8	1-15/16	2-1/16
2-7/16 2-1/2	4-1/16	5-1/8	5-7/8	3-5/8	3-11/16	3	1/8	2-1/16	2-3/16
2-11/16, 2-3/4 2-15/16, 3	4-23/32	5-15/16	6-11/16	4-1/8	4-1/8	3-1/4	1/8	2-5/16	2-7/16
3-1/4 3-7/16, 3-1/2	5-1/2	6-13/16	7-13/16	4-1/2	4-1/2	3-5/8	1/8	2-17/32	2-21/32
3-11/16 3-15/16 4	6-15/32	8-5/8	9-7/16	5-1/8	5-1/8	4-1/8	0	3-1/16	3-1/16
4-7/16 4-1/2	6-29/64	9-1/2	10-3/8	5-11/16	5-11/16	4-5/16	0	3-3/4	3-3/4
4-15/16 5	7-29/64	10-1/4	11-1/4	6-15/32	6-15/32	4-15/16	0	4	4

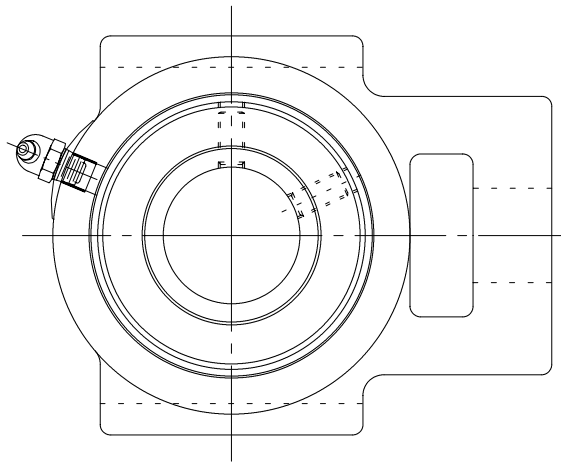
◆ ±.010 Tolerance • Offset of non-expansion bearing to center of housing. ★ ± 1/64 Tolerance

RATINGS PAGE B7-14	PART NUMBERS PAGE B7-28	METRIC PAGE B7-52	
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SELECTION/DIMENSIONS



S-2000 Wide Slot Take-up Unit — Inch



S-2000 WIDE SLOT TAKE-UP BEARINGS-INCH

Shaft Size Inch △	Take-Up Frame No. Ref. ◆	S2R SEALS*				S2S SEALS				Approx. Wt./Lbs.	
		NON-EXPANSION*		EXPANSION		NON-EXPANSION		EXPANSION			
		PART NO.	PART NAME	PART NO. †	PART NAME	PART NO.	PART NAME	PART NO. †	PART NAME		
1-1/8 1-7/16 1-1/2	CP308	044873† 044877 044878	WSTU-S2-102R WSTU-S2-107R WSTU-S2-108R	044960 044964 044965	WSTU-S2-102RE WSTU-S2-107RE WSTU-S2-108RE	----- ----- -----	----- ----- -----	----- ----- -----	----- ----- -----	7 7 7	
1-11/16 1-3/4	CP400	044880 044881†	WSTU-S2-111R WSTU-S2-112R	044967 044968	WSTU-S2-111RE WSTU-S2-112RE	----- -----	----- -----	----- -----	----- -----	9 9	
1-15/16 2		044883 044884	WSTU-S2-115R WSTU-S2-200R	044970 044971	WSTU-S2-115RE WSTU-S2-200RE	045242 -----	WSTU-S2-115S -----	045267 -----	WSTU-S2-115SE -----	10 10	
2-3/16 2-1/4	CP408	044885 044886†	WSTU-S2-203R WSTU-S2-204R	044972 044973	WSTU-S2-203RE WSTU-S2-204RE	045244 -----	WSTU-S2-203S -----	045269 -----	WSTU-S2-203SE -----	14 14	
2-7/16 2-1/2	CP502	044888 044889	WSTU-S2-207R WSTU-S2-208R	044975 044976	WSTU-S2-207RE WSTU-S2-208RE	045247 045248†	WSTU-S2-207S WSTU-S2-208S	045272 045273	WSTU-S2-207SE WSTU-S2-208SE	18 18	
2-11/16 2-3/4 2-15/16 3	CP515	044890† 044891† 044892 044893	WSTU-S2-211R WSTU-S2-212R WSTU-S2-215R WSTU-S2-300R	044977 044978 044979 044980	WSTU-S2-211RE WSTU-S2-212RE WSTU-S2-215RE WSTU-S2-300RE	----- ----- 045251 -----	----- ----- WSTU-S2-215S -----	----- ----- 045276 -----	----- ----- WSTU-S2-215SE -----	25 25 25 25	
3-1/4 3-7/16 3-1/2		CP613	044950† 044951 044952†	WSTU-S2-304R WSTU-S2-307R WSTU-S2-308R	044982 044983 044984	WSTU-S2-304RE WSTU-S2-307RE WSTU-S2-308RE	----- 045255 045256†	----- WSTU-S2-307S WSTU-S2-308S	----- 045280 045281	----- WSTU-S2-307SE WSTU-S2-308SE	38 38 38
3-11/16 3-15/16 4		CP810	----- 044954 044955	----- WSTU-S2-315R WSTU-S2-400R	----- 044986 044987	----- WSTU-S2-315RE WSTU-S2-400RE	043207† 043208 043209	WSTU-S2-311S WSTU-S2-315S WSTU-S2-400S	043487 043218 043488	WSTU-S2-311SE WSTU-S2-315SE WSTU-S2-400SE	50 50 50
4-7/16 4-1/2		CP908	044956 044957†	WSTU-S2-407R WSTU-S2-408R	044988 044989	WSTU-S2-407RE WSTU-S2-408RE	043210 -----	WSTU-S2-407S -----	043489 -----	WSTU-S2-407SE -----	80 80
4-15/16	CP1004	044958	WSTU-S2-415R	044990	WSTU-S2-415RE	043212†	WSTU-S2-415S	043491	WSTU-S2-415SE	115	

† Assembled-to-Order size. Consult DODGE for delivery.

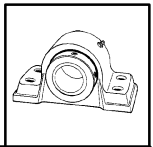
△ Consult DODGE for sizes not listed.

* Furnished unless otherwise specified.

◆ See center pull take-up on page B6-18

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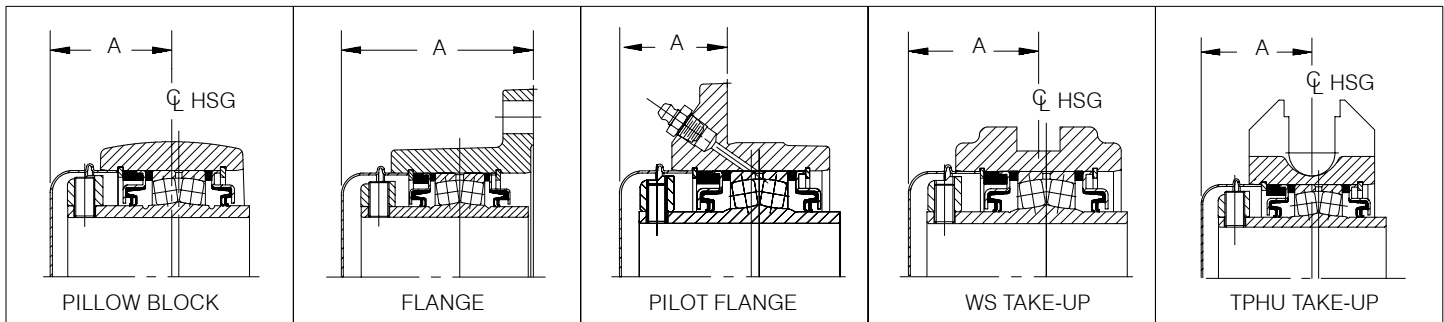
SELECTION/DIMENSIONS



S-2000 End Closures — Inch

SHAFT SIZE INCH Δ	PART NO.	DESCRIPTION
1-1/8 TO 1-1/2	045450	S2CREC08
1-5/8 TO 1-3/4	045451	S2CREC09
1-7/8 TO 2	045452	S2CREC10
2-3/16 & 2-1/4	045453	S2CREC11
2-3/8 TO 2-1/2	045454	S2CREC13
2-11/16 TO 3	045455	S2CREC15
3-3/16 TO 3-1/2	045456	S2CREC18

Δ Consult DODGE for sizes not listed.



SHAFT SIZE INCH Δ	"A" DIMENSION (INCH)				
	PILLOW BLOCK	FLANGE	PILOT FLANGE	WS TAKE-UP	TPHU TAKE-UP
1-1/8 TO 1-1/2	2-1/8	3-7/16	1-13/16	2-1/8	2-1/8
1-5/8 TO 1-3/4	2-5/16	3-13/16	1-15/16	2-5/16	2-5/16
1-7/8 TO 2	2-11/32	3-27/32	1-31/32	2-11/32	2-11/32
2-3/16 & 2-1/4	2-1/2	4	2-3/32	2-1/2	2-1/2
2-3/8 TO 2-1/2	2-39/64	4-17/64	2-15/64	2-39/64	2-39/64
2-11/16 TO 3	2-27/32	4-25/32	2-3/8	2-27/32	2-27/32
3-3/16 TO 3-1/2	3-1/16	5-1/8	2-27/32	3-1/16	3-1/16

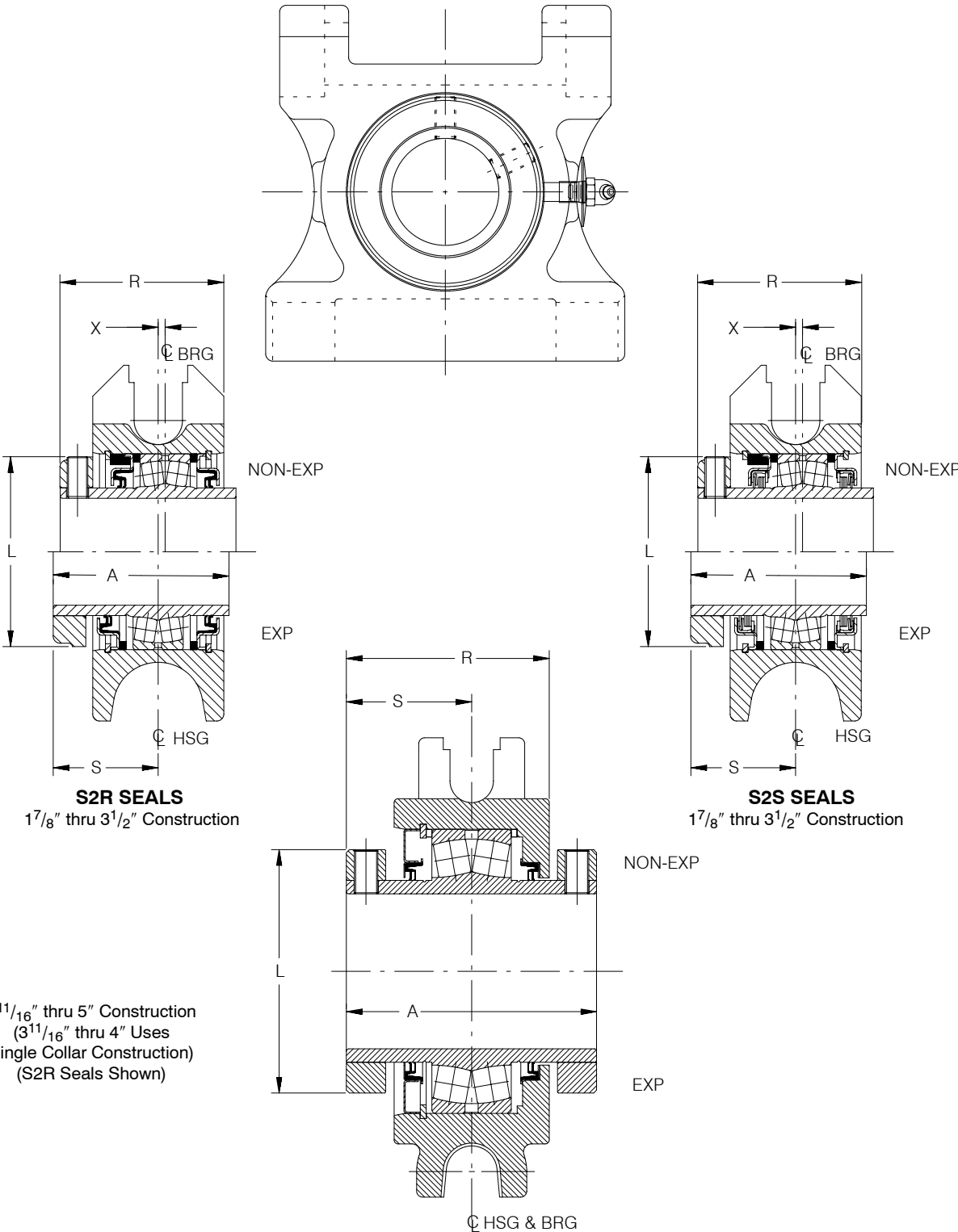
Δ Consult DODGE for sizes not listed.

RATINGS PAGE B7-14	METRIC PAGE B7-52		
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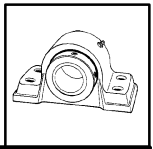


SELECTION/DIMENSIONS

S-2000 TPHU Take-up Bearing — Inch



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SELECTION/DIMENSIONS

S-2000 TPHU Take-up Bearing — Inch

Shaft Size Inch △	TAKE-UP FRAME Ref. No.		S2R SEALS*				Approx. Wt./Lbs.
			NON-EXPANSION*		EXPANSION		
			PART NO.	PART NAME	PART NO. †	PART NAME	
1-15/16	TP10	TPHU110	044993.	TPHU-S2-115R	045017	TPHU-S2-115RE	17.0
2-3/16	TP30	TPHU120	044995	TPHU-S2-203R	045019	TPHU-S2-203RE	21.4
2-7/16	TP40	TPHU130	044998	TPHU-S2-207R	045022	TPHU-S2-207RE	20.7
2-15/16	TP40	TPHU140	045003	TPHU-S2-215R	045026	TPHU-S2-215RE	26.2
3-7/16	TP50	TPHU150	045007	TPHU-S2-307R	045030	TPHU-S2-307RE	40.0
3-15/16	TP60	TPHU160	045010	TPHU-S2-315R	045033	TPHU-S2-315RE	59.8

△ Consult DODGE for sizes not listed.

† Assembled-to-order. Consult DODGE for delivery.

◆ Made to order. Consult DODGE for delivery.

* Furnished unless otherwise specified.

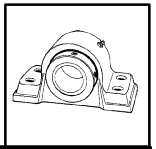
TPHU S-2000 TAKE-UP BEARINGS DIMENSIONS

Shaft Size Inch △	A	L	R		S		X*
			Non-Exp.	Exp	Non-Exp.	Exp.	
1-15/16	3-3/16	3-7/16	2-21/32	3-3/32	1-25/32	1-29/32	1/8
2-3/16	3-3/8	3-3/4	3-5/16	3-7/16	1-15/16	2-1/16	1/8
2-7/16	3-5/8	4-1/16	3-9/16	3-11/16	2-1/16	2-3/16	1/8
2-15/16	4-1/8	4-23/32	3-15/16	4-1/16	2-5/16	2-7/16	1/8
3-7/16	4-1/2	5-1/2	4-11/32	4-15/32	2-17/32	2-21/32	1/8
3-15/16	5-3/16	6-15/32	5-1/8	5-1/8	3-1/16	3-1/16	0

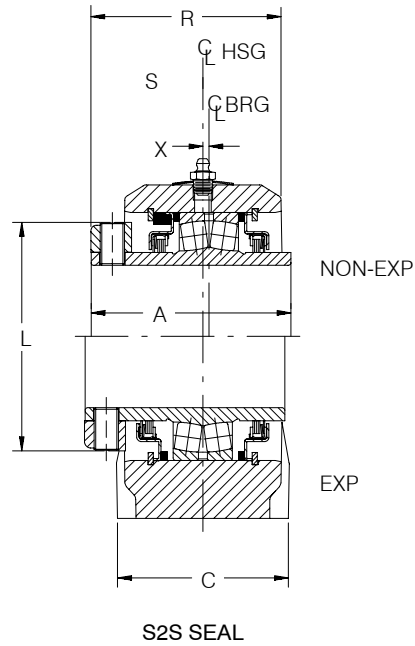
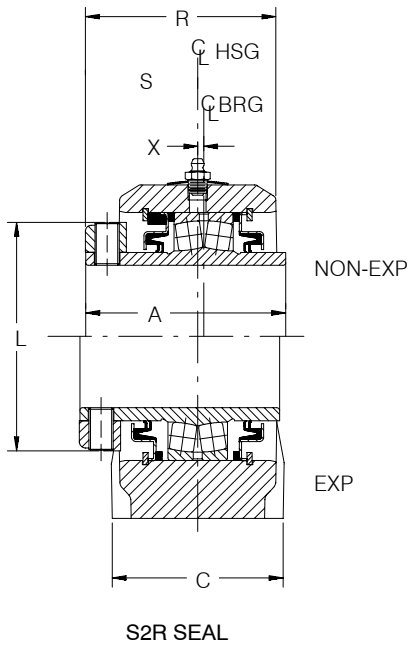
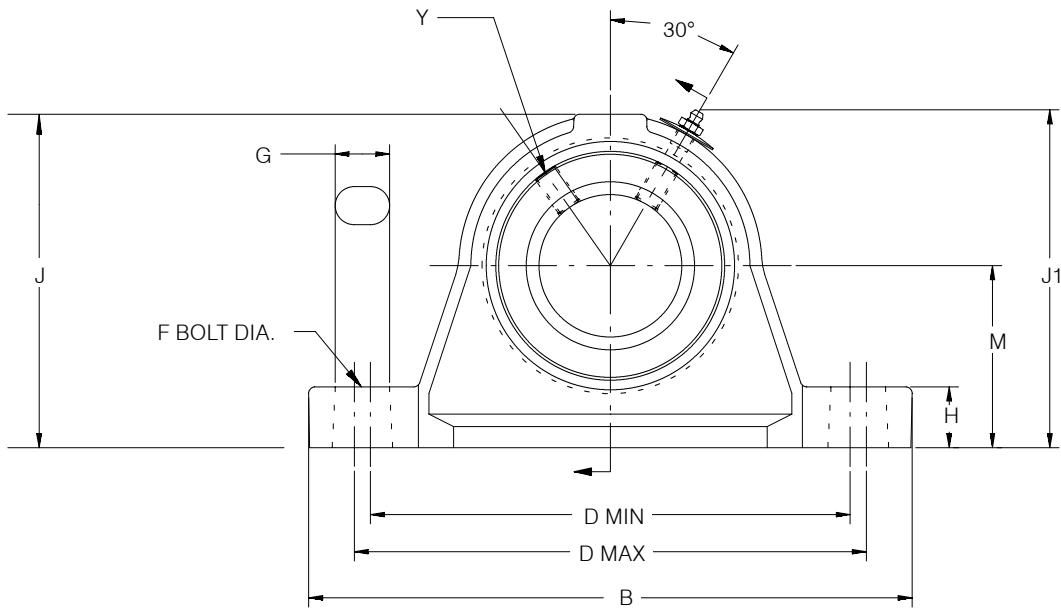
- Offset of non-expansion bearing to center of housing.

RATINGS PAGE B7-14				
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SELECTION/DIMENSIONS

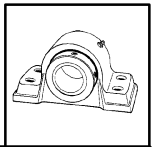


SN-2000 Pillow Block — Inch



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SELECTION/DIMENSIONS



SN-2000 Pillow Block — Inch

Shaft Size Inch	S2R SEALS				Approx. Wt./Lbs.
	NON-EXPANSION*		EXPANSION		
	Part No.	Part Name	Part No.	Part Name	
2-3/16 2-1/4	047712 047713	P2B-SN2-203R P2B-SN2-204R	047737 047738	P2B-SN2-203RE P2B-SN2-204RE	12.00 13.00
2-7/16	047715	P2B-SN2-207R	047740	P2B-SN2-207RE	17.00
2-15/16	047719	P2B-SN2-215R	047744	P2B-SN2-215RE	25.25
3-7/16	047723	P2B-SN2-307R	047748	P2B-SN2-307RE	35.00

* Furnished unless otherwise specified.

Δ Consult DODGE for sizes not listed.

SN-2000 PILLOW BLOCK DIMENSIONS•

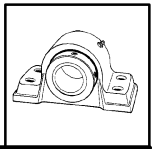
Shaft Size Inch	A mm	B mm	C mm	D		F Bolt Dia. mm	G mm	H mm	J mm	J1 mm	L mm	M mm	R mm	S mm	X* mm	Y Set Screw Size
				Min. mm	Max. mm											
2-3/16 2-1/4	85.7	254	68	203	216	M16	25	30	134	135	95	70	82	49	3.18	3/8-16 x 3/4
2-7/16	92.1	275	79	216	235	M16	28	30	154	157	103	80	92	52	3.18	3/8-16 x 3/4
2-15/16	104.8	316	89	245	268	M20	34	32	174	177	120	95	101	59	3.18	1/2-13 x 7/8
3-7/16	114.3	380	109	314	327	M24	33	40	209	209	140	112	110	64	3.18	1/2-13 x 1

* Offset of non-expansion bearing to center of housing.

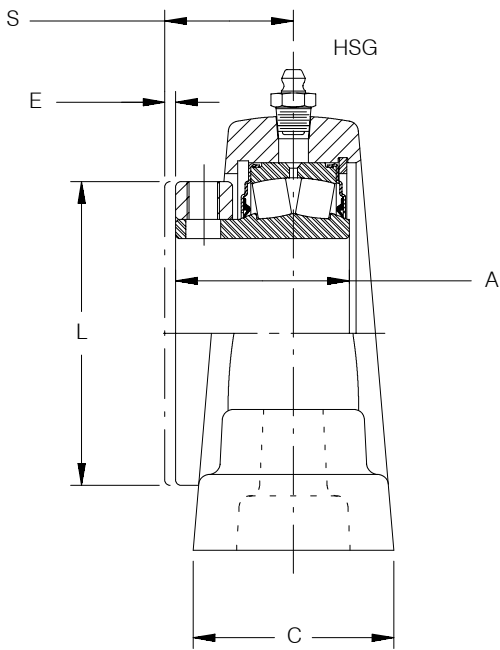
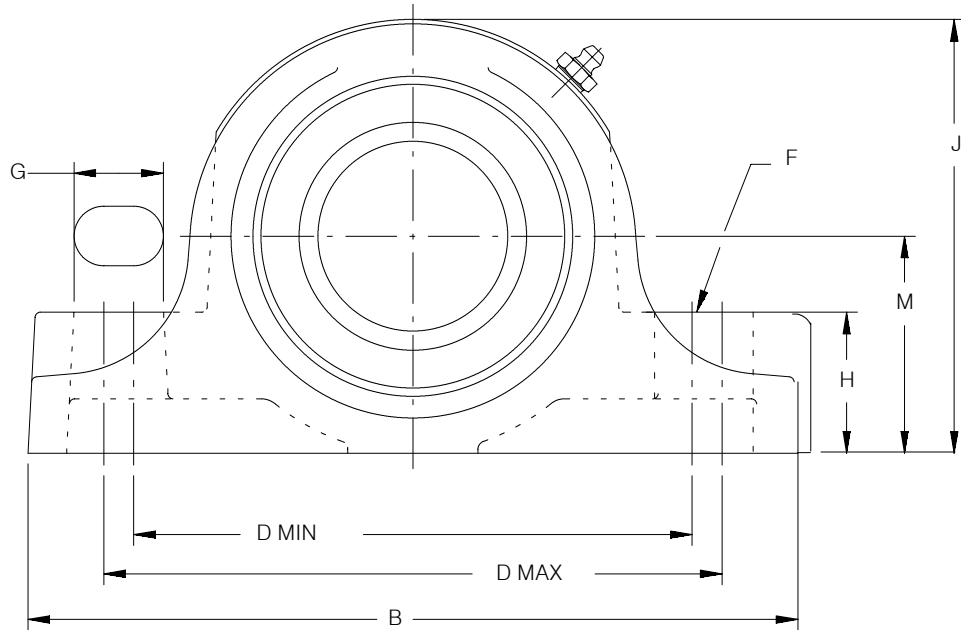
• Dimensions shown are for non-expansion units.

RATINGS PAGE B7-14	HOUSING RATINGS PAGE B7-17	METRIC PAGE B7-54	
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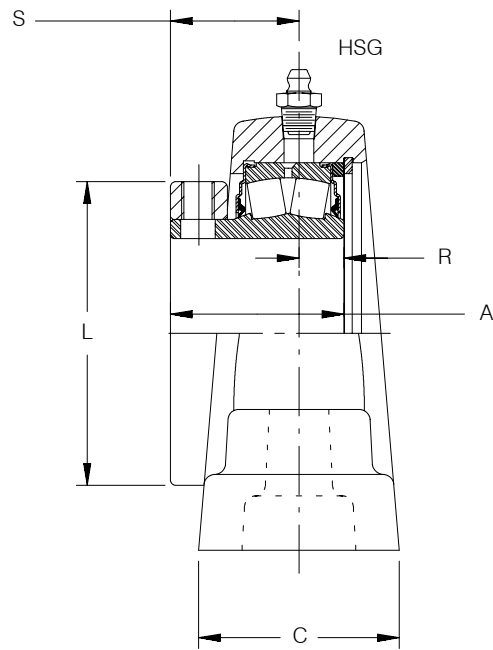
SELECTION/DIMENSIONS



UNISPHERE II Pillow Block Bearing — Inch



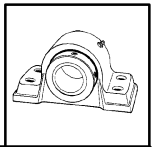
EXPANSION



NON-EXPANSION

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SELECTION/DIMENSIONS



UNISPHERE II Pillow Block Bearing — Inch

Shaft Size Inch △	NON-EXPANSION*		EXPANSION		Approx. Wt./Lbs.
	PART NO.	PART NAME	PART NO.	PART NAME	
1-7/16	048000	P2B-UN2-107	048017	P2B-UN2-107E	5.5
1-1/2	048001	P2B-UN2-108	048018	P2B-UN2-108E	5.4
1-11/16	048002	P2B-UN2-111	048019	P2B-UN2-111E	6.9
1-3/4	048003	P2B-UN2-112	048020	P2B-UN2-112E	6.8
1-15/16	048004	P2B-UN2-115	048021	P2B-UN2-115E	8.0
2	048005	P2B-UN2-200	048022	P2B-UN2-200E	7.6
2-3/16	048006	P2B-UN2-203	048023	P2B-UN2-203E	9.8
2-7/16	048007	P2B-UN2-207	048024	P2B-UN2-207E	13.6
2-1/2	048008	P2B-UN2-208	048025	P2B-UN2-208E	13.4
2-11/16	048009	P2B-UN2-211	048026	P2B-UN2-211E	19.3
2-3/4	048010†	P2B-UN2-212	048027†	P2B-UN2-212E	19.0
2-15/16	048011	P2B-UN2-215	048028	P2B-UN2-215E	18.2
3	048012	P2B-UN2-300	048029	P2B-UN2-300E	18.1
3-7/16	048013	P2B-UN2-307	048030	P2B-UN2-307E	28.4
3-1/2	048014†	P2B-UN2-308	048031†	P2B-UN2-308E	27.0
3-15/16	048015	P2B-UN2-315	048032	P2B-UN2-315E	37.4
4	048016†	P2B-UN2-400	048033	P2B-UN2-400E	37.0

† Assembled to order. Consult DODGE for delivery.

△ Consult DODGE for sizes not listed.

* Furnished unless otherwise specified.

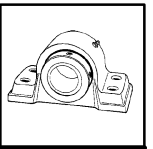
UNISPHERE II — PILLOW BLOCK — DIMENSIONS•

Shaft Size Inch	A	B	C	D		E Total Exp.	F Bolt Dia.	G	H	J	L	M	R	S
				Min.	Max.									
1-7/16 1-1/2	1-11/16	6-7/8	1-61/64	4-11/16	5-1/2	1/8	1/2	31/32	1-3/16	3-7/8	2-3/4	1-7/8	1/2	1-3/16
1-11/16 1-3/4	1-29/32	7-3/8	2-1/16	5-3/16	5-7/8	1/8	1/2	29/32	1-5/16	4-1/4	3	2-1/8	15/32	1-7/16
1-15/16 2	1-29/32	8-3/8	2-1/16	5-15/16	6-11/16	1/8	5/8	1-1/16	1-3/8	4-9/16	3-1/4	2-1/4	15/32	1-7/16
2-3/16	2	8-7/8	2-5/16	6-7/16	7-1/8	1/8	5/8	1-1/32	1-5/8	5	3-1/2	2-1/2	33/64	1-31/64
2-7/16 2-1/2	2-13/64	9-1/4	2-9/16	6-13/16	7-7/16	1/8	5/8	1	1-3/4	5-11/16	4-1/16	2-3/4	21/32	1-35/64
2-11/16 2-3/4 2-15/16 3	2-29/64	10-7/16	2-9/16	7-13/16	8-7/16	1/8	3/4	1-1/8	2-1/4	6-7/16	4-23/32	3-1/4	49/64	1-11/16
3-7/16 3-1/2	2-55/64	13	2-13/16	9-1/4	10-3/4	1/8	7/8	1-11/16	2-1/4	7-1/2	5-1/2	3-3/4	15/16	1-29/32
3-15/16 4	3-21/64	14-1/4	3-5/16	10	11-7/8	5/32	1	2	2-1/2	8-7/16	6-15/32	4-1/8	11/8	2-3/16

- Dimensions shown are for non-expansion units. The expansion bearing center and housing center are on the same centerline.

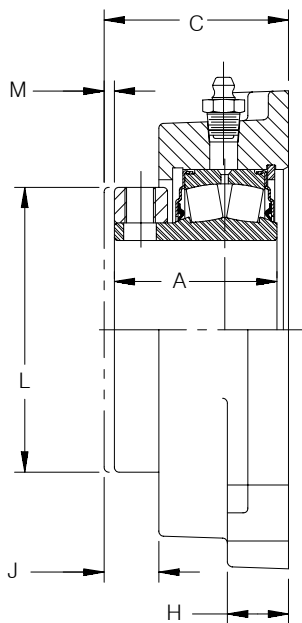
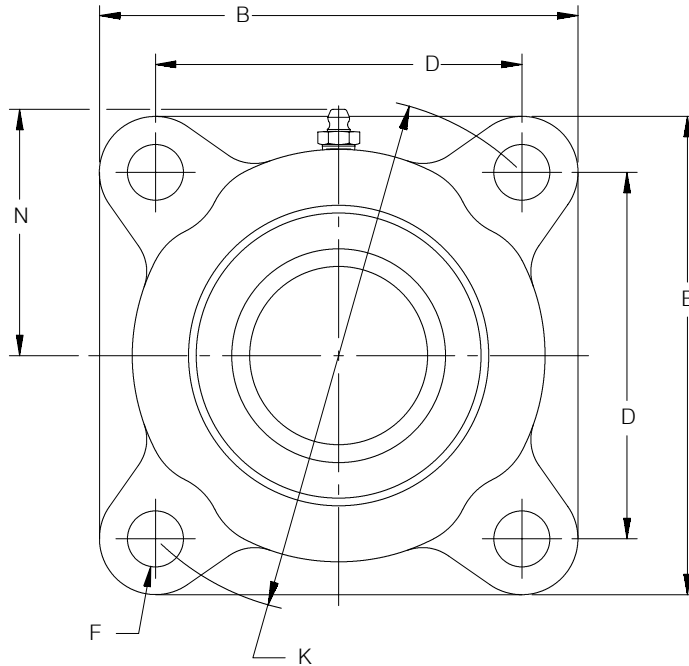
RATINGS PAGE B7-14	HOUSING RATINGS PAGE B7-17	METRIC PAGE B7-58	
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SELECTION/DIMENSIONS

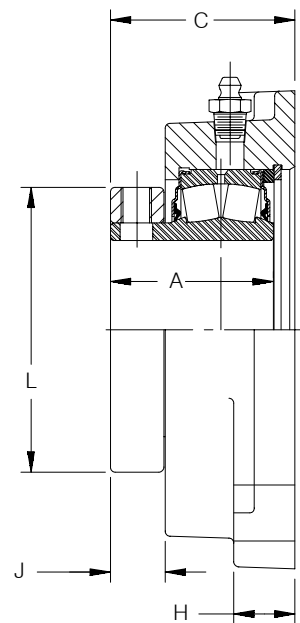


UNISPHERE II Flange Bearing - Inch

4-BOLT



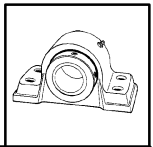
EXPANSION



NON-EXPANSION

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SELECTION/DIMENSIONS



UNISPHERE II Flange Bearing – Inch

4-BOLT

Shaft Size Inch Δ	NON-EXPANSION*		EXPANSION		Approx. Wt./Lbs.
	PART NO.	PART NAME	PART NO.	PART NAME	
1-7/16	048034	F4B-UN2-107	048051	F4B-UN2-107E	5.2
1-1/2	048035	F4B-UN2-108	048052	F4B-UN2-108E	5.1
1-11/16	048036	F4B-UN2-111	048053	F4B-UN2-111E	6.7
1-3/4	048037	F4B-UN2-112	048054	F4B-UN2-112E	6.7
1-15/16	048038	F4B-UN2-115	048055	F4B-UN2-115E	6.9
2	048039	F4B-UN2-200	048056	F4B-UN2-200E	6.7
2-3/16	048040	F4B-UN2-203	048057	F4B-UN2-203E	8.4
2-7/16	048041	F4B-UN2-207	048058	F4B-UN2-207E	10.5
2-1/2	048042	F4B-UN2-208	048059	F4B-UN2-208E	10.4
2-11/16	048043	F4B-UN2-211	048060†	F4B-UN2-211E	17.3
2-3/4	048044	F4B-UN2-212	048061†	F4B-UN2-212E	17.0
2-15/16	048045	F4B-UN2-215	048062	F4B-UN2-215E	16.2
3	048046	F4B-UN2-300	048063	F4B-UN2-300E	15.9
3-7/16	048047	F4B-UN2-307	048064	F4B-UN2-307E	24.7
3-1/2	048048†	F4B-UN2-308	048065†	F4B-UN2-308E	30.0
3-15/16	048049	F4B-UN2-315	048066	F4B-UN2-315E	41.4
4	048050	F4B-UN2-400	048067†	F4B-UN2-400E	41.0

† Assembled to order. Consult DODGE for delivery.

Δ Consult DODGE for sizes not listed.

* Furnished unless otherwise specified.

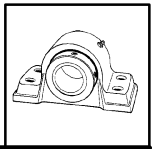
UNISPHERE II 4-BOLT FLANGE DIMENSIONS•

Shaft Size Inch	A	B	C	D	F Bolt Dia.	H	J	K	L	M Total Exp.	N
1-7/16 1-1/2	1-11/16	4-3/4	1-29/32	3-17/32	1/2	3/4	9/16	5	2-3/4	1/8	2-7/16
1-11/16 1-3/4	1-29/32	5-1/8	2-5/32	3-29/32	1/2	3/4	23/32	5-1/2	3	1/8	2-3/4
1-15/16 2	1-29/32	5-5/16	2-11/64	4-1/16	1/2	11/16	45/64	5-3/4	3-1/4	1/8	2-7/8
2-3/16	2	5-7/8	2-17/64	4-1/2	5/8	3/4	43/64	6-3/8	3-1/2	1/8	3-1/16
2-7/16 2-1/2	2-13/64	6-1/8	2-7/16	4-25/32	5/8	1	5/8	6-3/4	4-1/16	1/8	3-3/8
2-11/16 2-3/4 2-15/16 3	2-29/64	7-3/16	2-19/32	5-9/16	3/4	15/16	25/32	7-7/8	4-23/32	1/8	3-13/16
3-7/16 3-1/2	2-55/64	8-11/32	3-5/64	6-23/32	3/4	1-3/16	55/64	9-1/2	5-1/2	1/8	4-5/16
3-15/16 4	3-21/64	9-15/32	3-35/64	7-5/8	7/8	1-1/16	1-3/64	10-3/4	6-15/32	5/32	4-11/16

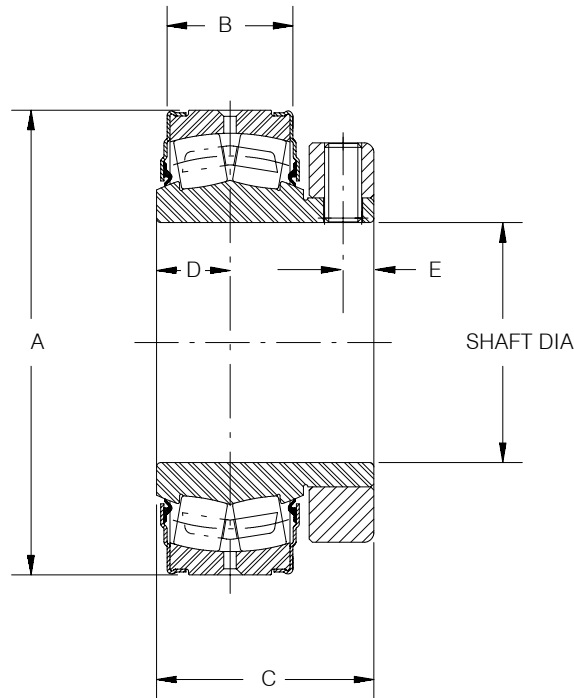
• Dimensions shown are for non-expansion units.

RATINGS PAGE B7-14	METRIC PAGE B7-60		
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SELECTION/DIMENSIONS



UNISPHERE II Bearing Insert With Seal — Inch

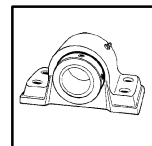


UNISPHERE II BEARING INSERT DIMENSIONS

Shaft Size Inch	A	B	C	D	E
1-7/16 1-1/2	3.1496	.9455	1-11/16	.557	.286
1-11/16 1-3/4	3.3465	.9455	1-29/32	.578	.317
1-15/16 2	3.5433	.9455	1-29/32	.594	.317
2-3/16	3.9370	1.0343	2	.644	.317
2-7/16 2-1/2	4.7244	1.2705	2-13/64	.747	.317
2-11/16 2-3/4 2-15/16 3	5.1181	1.2705	2-29/64	.795	.442
3-7/16 3-1/2	6.2992	1.6243	2-55/64	.974	.442
3-15/16 4	7.0866	1.8610	3-21/64	1.090	.505

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SELECTION/DIMENSIONS



UNISPHERE II Bearing Insert With Seal — Inch

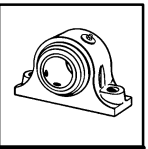
UNISPHERE II BEARING INSERT W/SEALS-INCH

Shaft Size Inch Δ	PART NO. †	PART NAME	Approx. Wt./Lbs.
1-7/16	421243	BRG-UN2-107	1.5
1-1/2	421244	BRG-UN2-108	1.4
1-11/16	421245	BRG-UN2-111	1.6
1-3/4	421246	BRG-UN2-112	1.5
1-15/16	421247	BRG-UN2-115	1.8
2	421248	BRG-UN2-200	1.7
2-3/16	421249	BRG-UN2-203	2.3
2-7/16	421250	BRG-UN2-207	4.1
2-1/2	421251	BRG-UN2-208	3.9
2-11/16	421252	BRG-UN2-211	5.6
2-3/4	421253	BRG-UN2-212	5.4
2-15/16	421254	BRG-UN2-215	4.8
3	421255	BRG-UN2-300	4.6
3-7/16	421256	BRG-UN2-307	9.2
3-1/2	421257	BRG-UN2-308	8.6
3-15/16	421258	BRG-UN2-315	12.4
4	421259	BRG-UN2-400	12.1

† Assembled-to-order size. Consult DODGE for delivery.

Δ Consult DODGE for sizes not listed.

SPECIFICATION HOW TO ORDER



Specification — Metric

DODGE Unitized Spherical Bearings, including S-2000, SN-2000 and UNISPHERE II bearings, are general purpose high capacity double row spherical roller bearings. All are mounted in single piece precision machined housings. Bearings are mounted to shafts by means of set screw collars, with 65 degree set screw spacing for maximum clamping force.

Standard material used in S-2000 housings and UNISPHERE II flanged housings is ASTM A48 Class 30 cast iron. Standard material used in SN-2000 and UNISPHERE II plunger blocks is ductile iron (ASTM A536 Grade 65-45-12) with 65,000 p.s.i. tensile strength. Housing designs are available for survival in extreme harsh environments, through the use of special finishes and stainless hardware.

Rubbing lip seals are standard on all units. Metal labyrinth seals are available as an option on S-2000 and SN-2000 bearings.

HOW TO ORDER

There are two ways to specify DODGE Bearings. Most of the product offerings have part numbers with listings shown throughout this catalog. Use of part numbers ensures accurate order processing.

When part numbers are not shown, the product may be specified by description or part name. This method is

used when ordering units that include modifications or options. To order by description, use the nomenclature key shown on page B7-41 and add any special instructions to the end of the description for options not covered by the nomenclature.

DODGE Unitized Spherical Bearings are factory adjusted and pre-lubricated. For applications where extreme ambient temperatures, high speeds or high loads are expected, a variety of specialty lubricants is available. Standard grease provided is Shell Alvania #2. High temperature greases available include Moluballoy 896 HT and Mobilith SHC460. Other special lubricants are available upon request. Special lubricant options usually involve set-up charges and premiums. To order, specify type of lubricant required at the end of the product name or after the standard part number.

Example:

046041 except with Mobilith SHC 460 grease

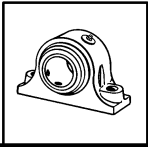
or

P2B-S2-040MS except with Mobilith SHC 460 grease

SPECIAL FINISHES

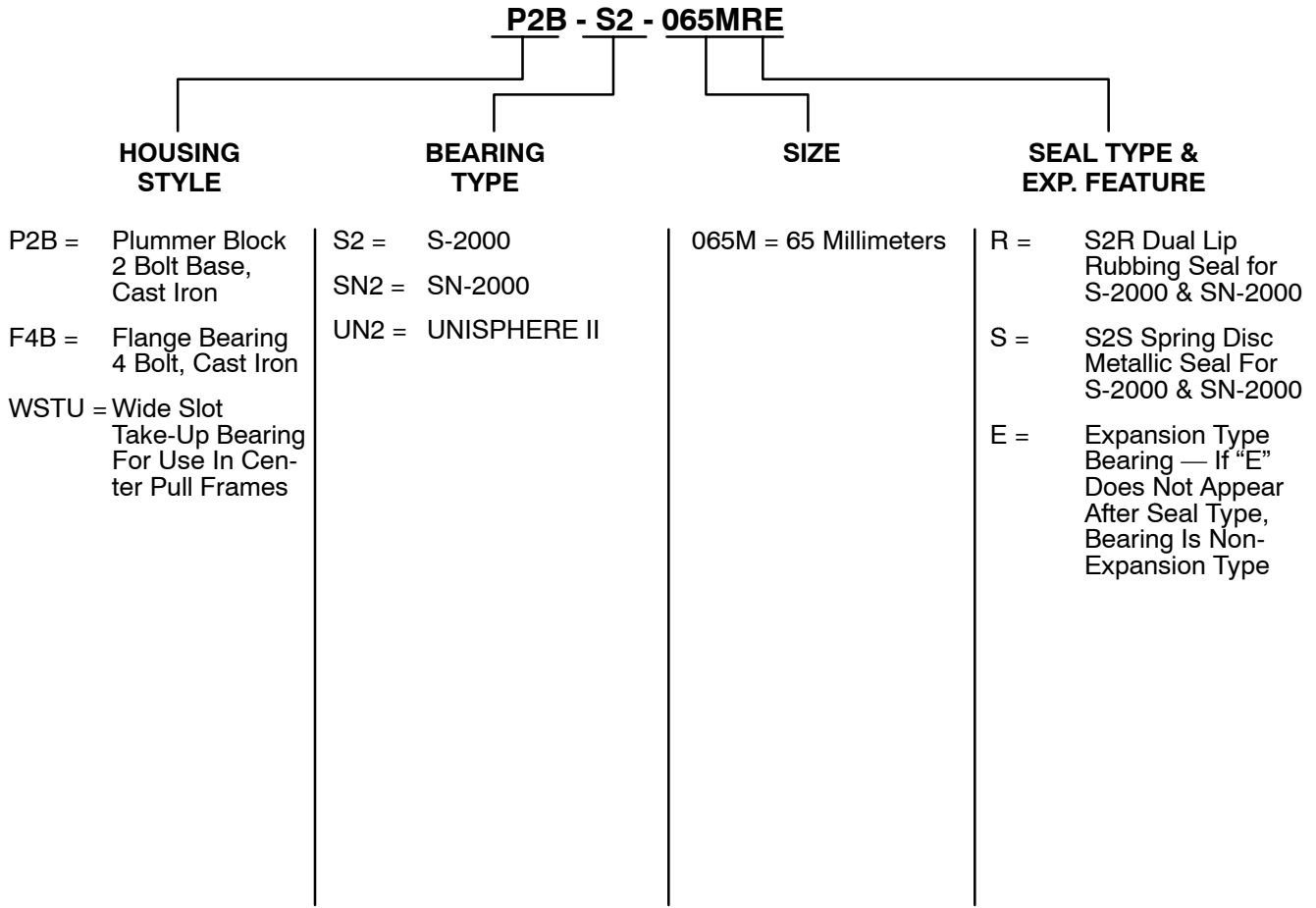
For applications requiring modifications not listed, we encourage you to contact our Customer Order Engineering Department for Bearings at 864-297-4800.

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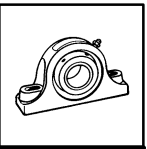


NOMENCLATURE

S-2000, SN-2000 and UNISPHERE II—Metric



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SELECTION

S-2000, SN-2000, AND UNISPHERE II

DODGE UNITIZED Metric Spherical Roller Bearings have the capacity to carry heavy radial loads and combined radial and thrust loads. The maximum recommended load which can be applied is limited by various components in the system such as bearing, housing, shaft, shaft attachment, speed and life requirements as listed in this catalog. DODGE spherical roller bearings have been applied successfully even when these limits have been exceeded under controlled operating conditions. Contact DODGE Application Engineering (864-297-4800) for applications which exceed the recommendations of this catalog.

L₁₀ Hours Life — The fatigue life which may be expected from at least 90% of a given group of bearings operating under identical conditions.

$$L_{10} \text{ Life, Hours} = \left(\frac{C}{P}\right)^{10/3} \times \left(\frac{16667}{\text{RPM}}\right)$$

Where:

- C = Dynamic Capacity (Table 7, page B7-45), kN
- P = Equivalent Radial Load, kN

GENERAL

Heavy Service — For heavy shock loads, frequent shock loads, or severe vibrations, add up to 50% (according to severity of conditions) to the Equivalent Radial Load obtain a Modified Equivalent Radial Load. Consult DODGE Application Engineering for additional selection assistance.

Thrust load values shown in the table below are recommended as a guide for general applications that will give adequate L₁₀ life. Spherical bearings require a radial load at least equal to the thrust load for proper operation. If the thrust load exceeds this limit, consult DODGE Application Engineering. Where substantial radial load is present, it is advisable to calculate actual L₁₀ life to assure that the

bearing meets requirements. The effectiveness of the shaft attachment to carry thrust load depends on proper tightening of the set screws, shaft tolerance and shaft deflections. Therefore, it is advisable to use auxiliary thrust carrying devices such as shaft shoulder snap ring or a thrust collar to locate the bearing under thrust loads heavier than shown below, or where extreme reliability is desired.

RPM RANGE	20-200	201-2000	over 2000
RECOMMENDED THRUST LOAD	C/20	C/40	C/60

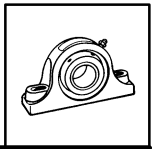
The shaft tolerances recommended below are adequate for normal radial and radial/thrust load applications. The radial load is limited by the attachment to the shaft (see Table 7). Where the applied radial load (F_R) exceeds this limit (maximum allowable slip fit radial load), a snug-to-light press fit of the shaft is required. Since the allowable load, especially at a low speed, is very large, the shaft should be checked to assure adequate shaft strength.

The magnitude and direction of both the thrust and radial load must be taken into account when selecting a housing. **When plummer blocks are utilized, heavy loads should be directed through the base. Where uplift loads are involved, see Tables 11, 12 and 13 for maximum values (pages B7-48 and B7-49).** Where a load pulls the housing away from the mounting base, both the hold-down bolts and housing must be of adequate strength. Auxiliary load carrying devices such as shear bars are advisable for side or end loading of plummer blocks and radial loads for flange units.

SHAFT TOLERANCES

SHAFT SIZE, MM	TOLERANCE, MM
Up to 35mm	+ .0000 - .013mm
40 to 90mm	+ .000 - .025mm

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SELECTION

S-2000, SN-2000, AND UNISPHERE II

SELECTING BEARINGS SUPPORTING RADIAL LOADS ONLY

1. Define the L_{10} Life Hours desired.
2. Establish bearing radial load, F_R
($F_R = P$ for Pure Radial Load Conditions)
The DODGE program BEST★ can be used to find application loads.
3. Establish RPM.

Using the easy selection Table 8 (page B7-46) under the RPM column, find the equivalent radial load that equals or is slightly higher than the application radial load for the desired life. The shaft size on the far left will be the minimum shaft size that you can use for your application.

If the desired life is different than the values shown on the chart, use alternate Method A shown below.

- Example:
1. L_{10} Life = 30,000 Hours
 2. Radial load = 17.5 kN
 3. RPM = 1,000

At the intersection of the 1,000 RPM column and the 30,000 hours L_{10} life row, the equivalent radial load of 18 kN exceeds the 17.5 kN application radial load for shaft sizes 60 & 65 mm. S-2000 bearings, SN-2000 bearings or

UNISPHERE II metric bearings with bores ranging from 60 to 65 mm may be used for this application.

ALTERNATE METHOD A — SELECTING A BEARING FOR AN L_{10} LIFE VALUE NOT SHOWN IN THE EASY SELECTION CHART.

The L_{10} life equation can be rearranged so that the bearing dynamic capacity C is identified in terms of L_{10} , RPM and P .

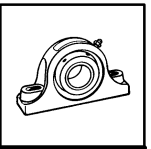
$$C = \left(\frac{L_{10} \times \text{RPM}}{16667} \right)^{0.3} \times P$$

($P = F_R$ for Pure Radial Load Conditions)

Since the L_{10} , RPM and P are known, solve for C . Select from the dynamic capacity column on Table 7, page B7-45 the C value equal to or just greater than the C value just calculated. The bore size on the far left represents the proper bore size selection. Check that the application RPM does not exceed the MAX. RPM on Table 7. Also check that the radial load does not exceed the Maximum Allowable Slip Fit Radial Load shown on Table 7. If it does, a line to line to light press fit of shaft is required. When selecting an L_{10} life of less than 30,000 hours, particular attention must be given to shaft deflection and proper lubricant selection.

★ The DODGE Bearing Evaluation and Selection Technique (BEST) is a menu driven computer program that calculates bearing loads, fatigue life and operating temperature for a two bearing shaft system based on user supplied input parameters. To order, call (864) 297-4800.

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S-2000, SN-2000, AND UNISPHERE II

SELECTING BEARINGS SUPPORTING COMBINATION RADIAL AND THRUST LOADS

When a bearing supports both a radial load and a thrust load, the loading on the two rows is shared unequally depending on the ratio of thrust to radial load. The use of the X (radial factor) and Y (thrust factor) from Table 7, page B7-45 converts the applied thrust load and radial loads to an equivalent radial load having the same effect on the life of the bearing as a radial load of this magnitude.

The equivalent radial load $P = XF_R + YF_A$

Where:

- P = Equivalent radial load, kN.
- F_R = Radial load, kN (see Table 7 for allowable slip fit maximum)
- F_A = Thrust (axial) load, kN (see Note below)
- e = Thrust load to radial load factor (Table 7)
- X = Radial load factor (Table 7)
- Y = Thrust load factor (Table 7)

To find X and Y, calculate F_A/F_R and compare to e for the selected bore size. Determine X and Y from Table 7 depending on whether F_A/F_R is equal to or less than e, or F_A/F_R is greater than e. Substitute all known values into the equivalent radial load equation. P (equivalent radial load) can be used in the life formula to determine L_{10} life in hours, or it can be compared to the allowable equivalent radial load ratings for the speed and hours life desired in the easy selection Table 8, page B7-46.

SELECTING BEARINGS SUPPORTING ONLY THRUST LOADS

Spherical Roller Bearings generally are not recommended for pure thrust load applications. They will perform satisfactorily under very light pure thrust loads. Consult DODGE Application Engineering (864-297-4800).

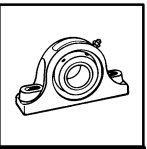
SELECTING LUBRICATION

DODGE S-2000, SN-2000, and UNISPHERE II metric spherical roller bearings are lubricated at the factory with Shell Alvania #2 grease. Shell Alvania #2 grease is a superior industrial grease using a lithium hydroxystearate thickener and highly refined base oil. This grease will adequately handle low and medium speeds with low and medium loads at normal temperatures as defined on Table 10, page B7-47. For very low and high speeds, for heavy loads and for low and high temperatures, special greases must be used. Contact DODGE Application Engineering (864-297-4800), DODGE engineers will recommend bearings and lubricants for the above unusual conditions. DODGE also has the expertise to custom design and build special bearings for your needs. The only maintenance requirement for DODGE Unitized roller bearings is periodic relubrication at regular intervals as outlined in the appropriate instruction manuals.

MISALIGNMENT CONSIDERATIONS

In nearly all applications good design practice requires two bearings supporting the shaft. In cases where three or more bearings are installed, unless precautions are taken to line the bearings up, both vertically and horizontally, it is possible to induce heavy loads. In the case of two bearings, alignment is not as critical, especially with DODGE Unitized Spherical Roller Bearings. S-2000, SN-2000 and UNISPHERE II metric bearings are designed to allow a maximum of $\pm 2^\circ$ of static and dynamic misalignment. However, for optimum seal performance, misalignment should be kept under $\pm 0.5^\circ$. To ensure good alignment, mounting surfaces must be checked for flatness and must lie in the same plane. When tightening base bolts, each bolt should be alternately tightened in incremental torque values until full torque is achieved to prevent the angular shifting of the plummer block that occurs when one bolt is tightened to its full torque. Shimming may be required to minimize misalignment.

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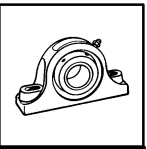
SELECTION

S-2000, SN-2000, AND UNISPHERE II

TABLE 7 – S-2000, SN-2000 AND UNISPHERE II METRIC SPHERICAL ROLLER BEARINGS

SHAFT MM	BASIC BEARING DESCRIPTION	e	F _A /F _R ≤e		F _A /F _R >e		MAX. ALLOW. SLIP FIT RADIAL LOAD F _R * kN	DYNAMIC CAPACITY (C) kN	MAXIMUM RPM		
			X	Y	X	Y			S-2000 & SN-2000		UNISPHERE II
									S2S SEAL	S2R SEAL	
30 35	22208	.28	1.0	2.4	.67	3.6	17	93	3,600	2,830	3,000
40 45	22209	.26	1.0	2.6	.67	3.9	17	93	3,360	2,400	2,800
50	22210	.24	1.0	2.8	.67	4.2	18	98	3,180	2,150	2,625
55	22211	.23	1.0	2.9	.67	4.3	22	120	2,700	1,900	2,325
60 65	22213	.24	1.0	2.8	.67	4.2	30	169	2,160	1,700	1,900
70 75	22215	.22	1.0	3.1	.67	4.6	33	185	2,040	1,450	1,700
80 85 90	22218	.23	1.0	2.9	.67	4.3	51	285	1,560	1,250	1,400

* If load exceeds "Max. allowable slip fit load," line to line to light press fit of shaft required. Maximum slip fit radial loads apply if recommended shaft sizes are used.



SELECTION

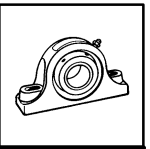
S-2000, SN-2000, AND UNISPHERE II

TABLE 8 – SELECTION TABLE (METRIC)

SHAFT SIZE MM	L ₁₀ HOURS	ALLOWABLE EQUIVALENT RADIAL LOAD RATING (kN) AT VARIOUS REVOLUTIONS PER MINUTE																	
		50	100	150	250	500	750	1000	1200	1250	1350	1500	1750	2000	2600	2750	3000	3250	3500
30	10000	33	27	24	20	16	124	13	12	12	12	12	11	11	10	10	9	9	9
	30000	24	19	17	14	12	10	9	9	9	9	8	8	8	7	7	7	7	7
	40000	22	17	15	13	11	9	9	8	8	8	8	7	7	6	6	6	6	6
35	60000	19	15	14	12	9	8	8	7	7	7	7	6	6	6	6	6	6	5
	100000	16	13	12	10	8	7	6	6	6	6	6	5	5	5	5	5	5	5
40	10000	33	27	24	20	16	14	13	12	12	12	12	11	11	10	10	9		
	30000	24	19	17	14	12	10	9	9	9	9	8	8	8	7	7	7		
	40000	22	17	15	13	11	9	9	8	8	8	8	7	7	6	6	6		
45	60000	19	15	14	12	9	8	8	7	7	7	7	6	6	6	6	6		
	100000	16	13	12	10	8	7	6	6	6	6	6	5	5	5	5	5		
50	10000	35	28	25	21	17	15	14	13	13	13	12	12	11	11	10	10		
	30000	25	20	18	15	12	11	10	9	9	9	9	8	8	7	7	7		
	40000	23	18	16	14	11	10	9	9	8	8	8	8	7	7	7	6		
	60000	20	16	14	12	10	9	8	8	7	7	7	7	6	6	6	6		
	100000	17	14	12	11	8	7	7	6	6	6	6	6	5	5	5	5		
55	10000	43	35	31	26	21	19	17	16	16	16	15	15	14	13	13	12		
	30000	31	25	22	19	15	14	12	12	12	11	11	10	10	9	9	9		
	40000	28	23	20	17	14	12	11	11	11	10	10	10	9	9	8	8		
	60000	25	20	18	15	12	11	10	9	9	9	9	8	8	8	7	7		
	100000	21	17	15	13	11	9	9	8	8	8	8	7	7	6	6	6		
60	10000	61	49	44	37	30	27	24	23	23	22	22	21	20	19	18	18		
	30000	44	35	31	27	22	19	18	17	16	16	15	15	14	13	13	13		
	40000	40	32	29	24	20	18	16	15	15	15	14	14	13	12	12	11		
65	60000	35	29	25	22	18	15	14	13	13	13	13	12	11	11	10	10		
	100000	30	24	22	19	15	13	12	11	11	11	11	10	10	9	9	9		
70	10000	66	54	47	41	33	29	27	25	25	24	24	23	22	20	20	19		
	30000	47	38	34	29	24	21	19	18	18	17	17	16	15	14	14	14		
	40000	43	35	31	27	22	19	18	17	16	16	15	15	14	13	13	13		
75	60000	38	31	28	24	19	17	15	15	14	14	14	13	13	12	11	11		
	100000	33	27	24	20	16	14	13	13	12	12	12	11	11	10	10	9		
80 85 90	10000	102	83	73	63	51	45	41	39	39	38	37	35	34	31	30	30		
	30000	73	60	53	45	37	32	30	28	28	27	26	25	24	22	22	21		
	40000	67	55	48	41	34	30	27	26	25	25	24	23	22	21	20	19		
	60000	60	48	43	37	30	26	24	23	22	22	21	20	19	18	18	17		
	100000	51	41	37	31	25	22	21	19	19	19	18	17	17	16	15	15		

In the light shaded area a line-to-line to light press fit of the shaft is required. Only S-2000S METRIC and SN-2000S (Spring Disc Seals) bearings may be used to the right of the heavy line. UNISPHERE II can also operate in the dark shaded area to the right of the heavy line.

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SELECTION

S-2000, SN-2000, AND UNISPHERE II

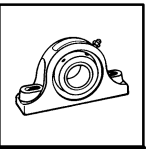
TABLE 9 – S-2000, SN-2000 AND UNISPHERE II METRIC MAXIMUM AXIAL EXPANSION

S-2000		SN-2000		UNISPHERE II	
BORE SIZE mm	MAXIMUM EXPANSION mm	BORE SIZE mm	MAXIMUM EXPANSION mm	BORE SIZE mm	MAXIMUM EXPANSION mm
–	–	30, 35	3.18	–	–
40, 45	6.35	40, 45	6.35	40, 45	3.18
50, 55	6.35	50, 55	6.35	50, 55	3.18
60, 65	6.35	60, 65	6.35	60, 65	3.18
70, 75	6.35	70, 75	6.35	70, 75	3.18
80, 85, 90	6.35	80, 85, 90	6.35	80, 85, 90	3.18

TABLE 10 – DEFINITION OF OPERATING CONDITIONS FOR UNITIZED SPHERICAL ROLLER BEARINGS

LOW SPEED MEDIUM SPEED HIGH SPEED	UP TO 20% OF MAX. RPM (TABLE 7) OVER 20% TO 80% OF MAX. RPM OVER 80% OF MAX. RPM
LIGHT LOAD NORMAL LOAD HEAVY LOAD	UP TO 8% OF C (TABLE 7) OVER 8% TO 18% OF C OVER 18% OF C C = DYNAMIC CAPACITY
LOW TEMPERATURE MEDIUM TEMPERATURE HIGH TEMPERATURE VERY HIGH TEMPERATURE	–10°C TO –75°C OVER –10°C TO 100°C OVER 100°C TO 150°C OVER 150°C TO 230°C

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SELECTION

S-2000, SN-2000, AND UNISPHERE II

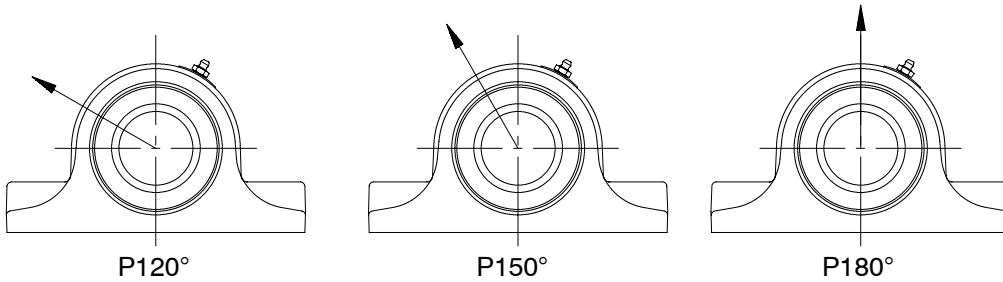


TABLE 11 – METRIC S-2000 HOUSING RATINGS, GRAY IRON*

Plummer Block Designation	Max. Recommended Housing Cap Loads		
	P120 kN	P150 kN	P180 kN
S2040M	9	12	14
S2045M	9	12	14
S2050M	14	17	20
S2055M	15	19	22
S2060M	15	19	22
S2065M	15	19	22
S2070M	20	25	29
S2075M	20	25	29
S2080M	21	26	30
S2085M	21	26	30
S2090M	21	26	30

TABLE 12 – SN-2000 HOUSING RATINGS, DUCTILE*

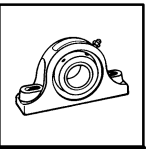
Plummer Block Designation	Max. Recommended Housing Cap Loads		
	P120 kN	P150 kN	P180 kN
SN2030	37	47	56
SN2035	44	53	64
SN2040	47	58	69
SN2045	47	58	69
SN2050	58	71	84
SN2055	46	56	67
SN2060	71	87	103
SN2065	71	87	103
SN2070	80	99	118
SN2075	80	99	118
SN2080	83	102	120
SN2085	103	126	150
SN2090	103	126	150

* When utilizing heavy cap loads on plummer block housings, the installation must adhere to the following procedures:

1. The plummer block base bolts must be of **high strength (Grade 10.9) and properly tightened** to mounting structure.
2. Stop bars (shear strips) should be used against the plummer block where side loads are encountered.
3. In all cases where loads are heavy, the L₁₀ life of the bearing should be checked for proper selection and life requirements.

NOTE: To convert kN to pounds-force, multiply kN by a factor of 225.

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SELECTION

S-2000, SN-2000, AND UNISPHERE II

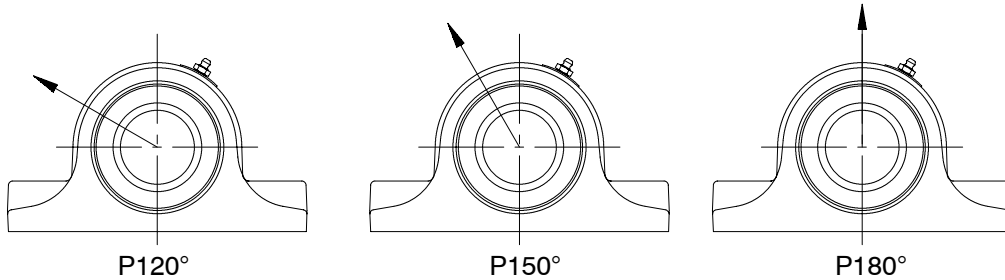


TABLE 13 – METRIC UNISPHERE II HOUSING RATINGS, DUCTILE*

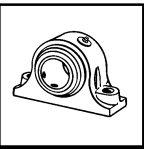
Plummer Block Designation	Max. Recommended Housing Cap Loads		
	P120 kN	P150 kN	P180 kN
UN2040M	31	37	44
UN2045M	31	37	44
UN2050M	35	44	52
UN2055M	45	55	65
UN2060M	45	55	66
UN2065M	45	55	66
UN2070M	57	70	84
UN2075M	57	70	84
UN2080M	53	65	77
UN2085M	53	65	77
UN2090M	53	65	77

* When utilizing heavy cap loads on plummer block housings, the installation must adhere to the following procedures:

1. The plummer block base bolts must be of **high strength (Grade 10.9) and properly tightened** to mounting structure.
2. Stop bars (shear strips) should be used against the plummer block where side loads are encountered.
3. In all cases where loads are heavy, the L_{10} life of the bearing should be checked for proper selection and life requirements.

NOTE: To convert kN to pounds-force, multiply kN by a factor of 225.

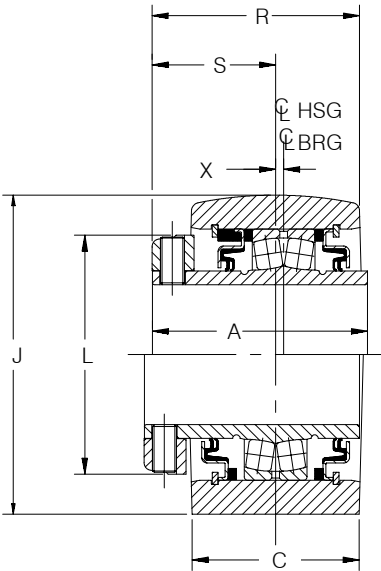
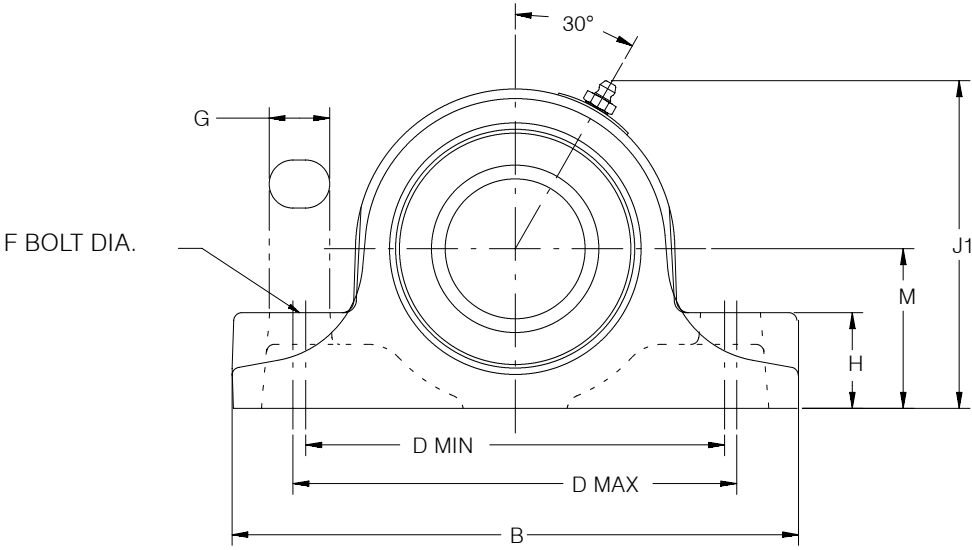
FEATURES/BENEFITS PAGE B7-2	INCH PAGE B7-7	HOW TO ORDER PAGE B7-40	NOMENCLATURE PAGE B7-41
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SELECTION/DIMENSIONS

S-2000 Plummer Block Bearing – Metric

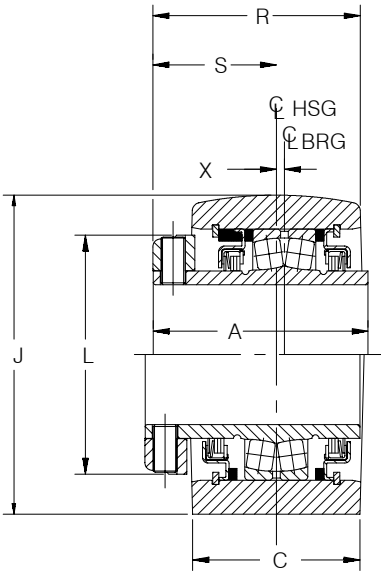
2-BOLT BASE



NON-EXP

EXP

S2R SEAL

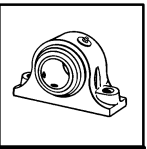


NON-EXP

EXP

S2S SEAL

FEATURES/BENEFITS PAGE B7-2	INCH PAGE B7-18	HOW TO ORDER PAGE B7-40	NOMENCLATURE PAGE B7-41
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SELECTION/DIMENSIONS

S-2000 Plummer Block Bearing – Metric

2-BOLT BASE

Shaft Size Metric △	S-2000R (S2R Seals)*				S-2000S (S2S Seals)				Approx. Wt./Kgs.
	NON-EXPANSION*		EXPANSION		NON-EXPANSION		EXPANSION		
	PART NO.	PART NAME	PART NO.	PART NAME	PART NO. †	PART NAME	PART NO. †	PART NAME	
40 mm	046021	P2B-S2-040MR	046031	P2B-S2-040MRE	----	----	----	----	4.5
45 mm	046022	P2B-S2-045MR	046032	P2B-S2-045MRE	046042	P2B-S2-045MS	046052	P2B-S2-045MSE	4.3
50 mm	046023	P2B-S2-050MR	046033	P2B-S2-050MRE	046043	P2B-S2-050MS	046053	P2B-S2-050MSE	5.1
55 mm	046024	P2B-S2-055MR	046034	P2B-S2-055MRE	----	----	----	----	5.5
60 mm	046025	P2B-S2-060MR	046035	P2B-S2-060MRE	046045	P2B-S2-060MS	046055	P2B-S2-060MSE	8.3
65 mm	046026	P2B-S2-065MR	046036	P2B-S2-065MRE	046046	P2B-S2-065MS	046056	P2B-S2-065MSE	8.1
70 mm	046027	P2B-S2-070MR	046037	P2B-S2-070MRE	046047	P2B-S2-070MS	046057	P2B-S2-070MSE	12.0
75 mm	046028	P2B-S2-075MR	046038	P2B-S2-075MRE	046048	P2B-S2-075MS	046058	P2B-S2-075MSE	11.5
80 mm	046029	P2B-S2-080MR	046039	P2B-S2-080MRE	----	----	----	----	15.5
85 mm	046030	P2B-S2-085MR	046040	P2B-S2-085MRE	----	----	----	----	14.8
90 mm	046101	P2B-S2-090MR	046102	P2B-S2-090MRE	----	----	----	----	14.6

* Furnished unless otherwise specified.

† Assembled to order. Consult DODGE for delivery.

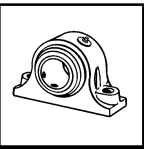
△ Consult DODGE for sizes not listed.

S-2000 2-BOLT PLUMMER BLOCK DIMENSIONS-- METRIC

Shaft Size	A mm	B mm	C mm	D		F Bolt Dia. mm	G mm	H mm	J mm	J1 mm	L mm	M mm	R mm	S mm	X mm
				Min. mm	Max. mm										
40 mm 45 mm	81	187	64	135	145	M12	21	32	108	114	81	54	79	45	3.18
50 mm	81	213	64	154	164	M16	24	33	116	121	87	57.1	79	45	3.18
55 mm	85.7	225	68	167	176	M16	24	38	127	132	95	63.5	84	49	3.18
60 mm 65 mm	92.1	235	72	176	186	M16	24	41	145	148	103	69.8	90	52	3.18
70 mm 75 mm	104.8	265	78	202	211	M20	27	48	164	166	120	82.5	100	59	3.18
80 mm 85 mm 90 mm	114.3	330	87	238	270	M24	41	57	191	191	140	95.2	110	64	3.18

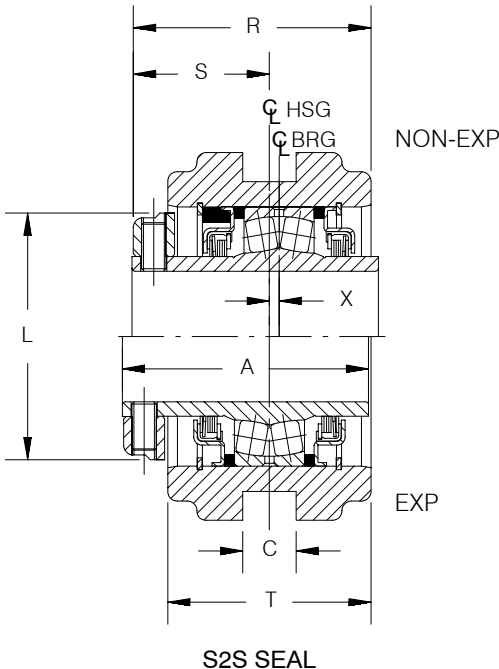
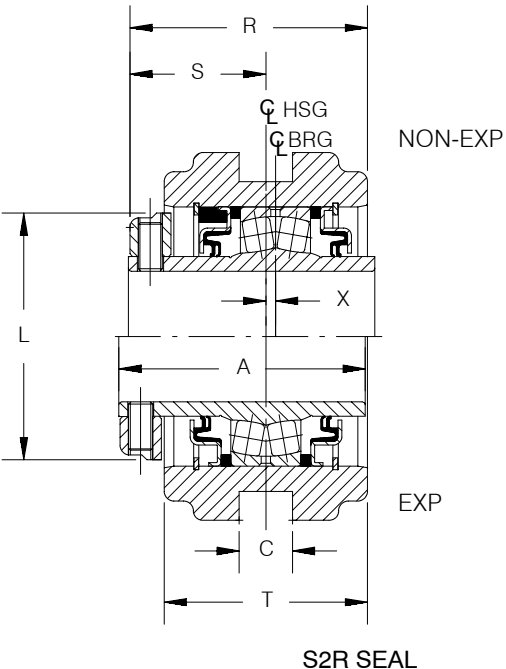
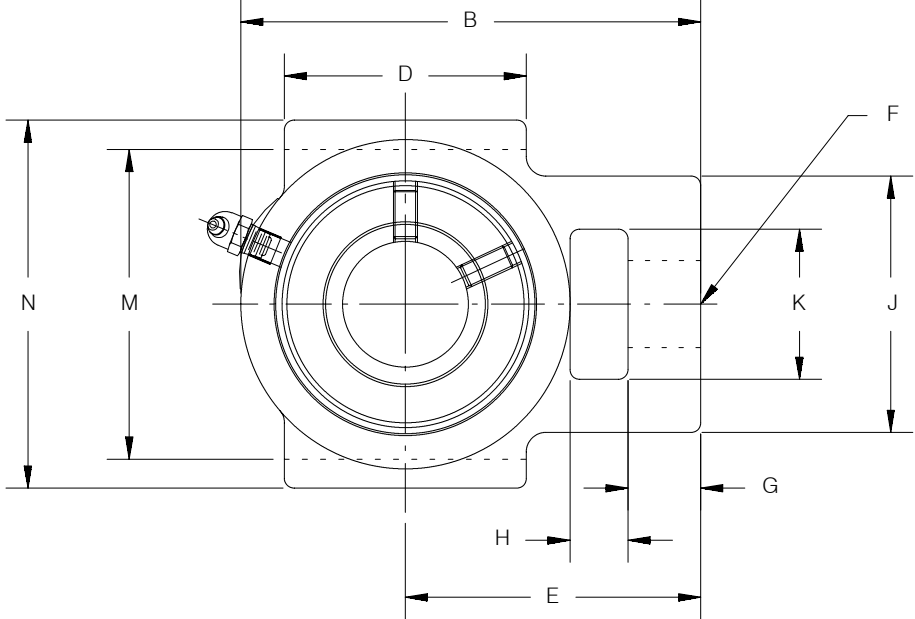
- Dimensions are for non-expansion units. The expansion bearing center and housing center are on same centerline.

SELECTION PAGE B7-42	RATINGS PAGE B7-46	HOUSING RATINGS PAGE B7-48	
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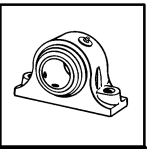
SELECTION/DIMENSIONS

S-2000 Wide Slot Take-up Bearing – Metric



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SELECTION/DIMENSIONS



S-2000 Wide Slot Take-up Bearing – Metric

Shaft Size △	Take-Up Frame No. Ref. ◆	S-2000R (S2R Seals)*				Approx. Wt./Kgs.
		NON-EXPANSION*		EXPANSION		
		PART NO.	PART NAME	PART NO.	PART NAME	
60 mm	CP502	046065	WSTU-S2-060MR	046075	WSTU-S2-060MRE	8.2
65 mm		046066	WSTU-S2-065MR	046076	WSTU-S2-065MRE	
70 mm	CP515	046067	WSTU-S2-070MR	046077	WSTU-S2-070MRE	11.3
75 mm		046068	WSTU-S2-075MR	046078	WSTU-S2-075MRE	
80 mm	CP613	046069	WSTU-S2-080MR	046079	WSTU-S2-080MRE	17.2
85 mm		046070	WSTU-S2-085MR	046080	WSTU-S2-085MRE	
90 mm		046105	WSTU-S2-090MR	046106	WSTU-S2-090MRE	

* Furnished unless otherwise specified.

† Sizes not listed will be priced on applications. Consult DODGE for sizes not listed.

△ Assembled to order. Consult DODGE for delivery.

◆ See center pull take-up on page B6-18

S-2000 WIDE SLOT TAKE-UP DIMENSIONS—METRIC

Shaft Size	A mm	B mm	C+ mm	D mm	E mm	F Scr. Dia. mm	G mm	H mm	J mm	K mm	L mm	M◆ mm	R		N mm	T mm	X• mm	S	
													Non-Exp. mm	Exp. mm				Non-Exp. mm	Exp. mm
60 mm 65 mm	92.1	195	27	111	127	32	27	32	108	64	103	130	92.1	93.7	149	76	3.18	52	56
70 mm 75 mm	104.8	225	46	114	146	38	29	38	124	70	120	151	104.8	104.8	170	83	3.18	59	62
80 mm 85 mm 90 mm	114.3	256	46	140	162	45	27	41	130	73	140	173	114.3	114.3	198	92	3.18	64	68

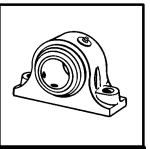
◆ ±0.25 mm Tolerance

+ ±.4 mm Tolerance

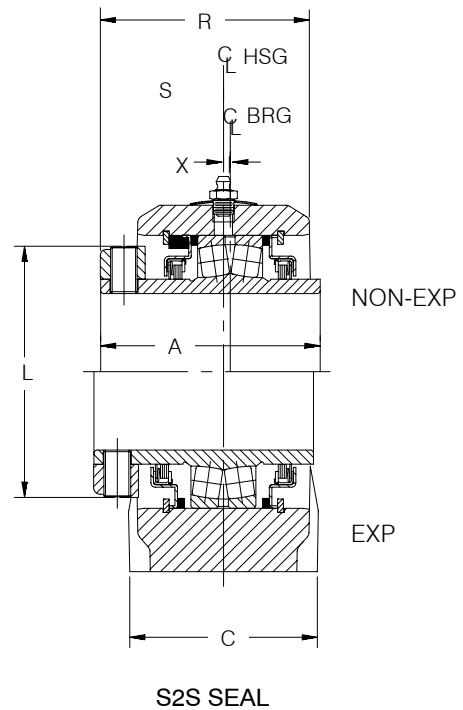
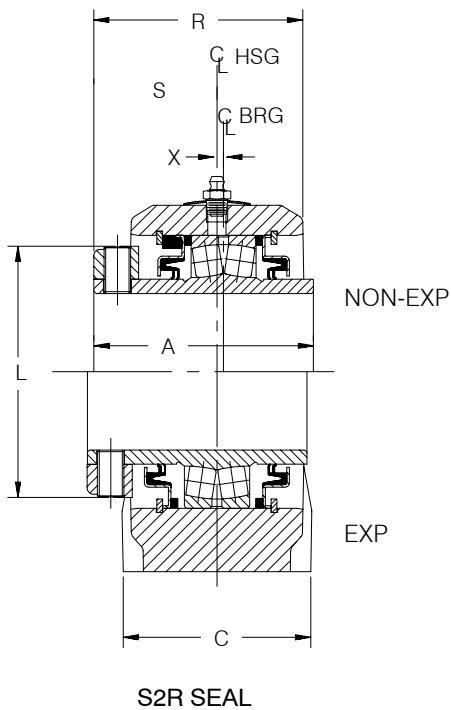
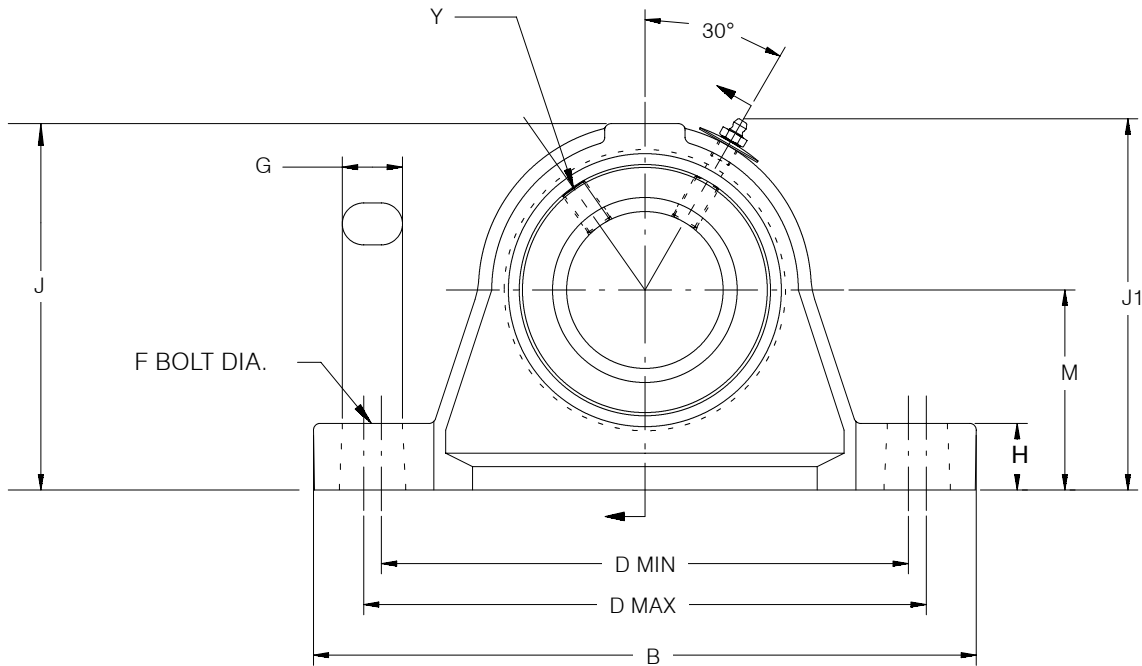
• Offset of non-expansion bearing to center of housing.

SELECTION PAGE B7-42	RATINGS PAGE B7-46		
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SELECTION/DIMENSIONS

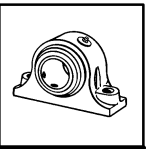


SN-2000 Plummer Block Bearing - Metric



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SELECTION/DIMENSIONS



SN-2000 Plummer Block Bearing – Metric

Shaft Size Δ	SN-2000 (S2R Seals)*				Approx. Wt./Kgs.
	Non-Expansion*		Expansion Type		
	Part No.	Part Name	Part No.	Part Name	
30 mm	046900	P2B-SN2-030MR	046913	P2B-SN2-030MRE	4.0
35 mm	046901	P2B-SN2-035MR	046914	P2B-SN2-035MRE	3.6
40 mm	046902	P2B-SN2-040MR	046915	P2B-SN2-040MRE	4.5
45 mm	046903	P2B-SN2-045MR	046916	P2B-SN2-045MRE	4.5
50 mm	046904	P2B-SN2-050MR	046917	P2B-SN2-050MRE	5.5
55 mm	046905	P2B-SN2-055MR	046918	P2B-SN2-055MRE	6.0
60 mm	046906	P2B-SN2-060MR	046919	P2B-SN2-060MRE	9.0
65 mm	046907	P2B-SN2-065MR	046920	P2B-SN2-065MRE	8.5
70 mm	046908	P2B-SN2-070MR	046921	P2B-SN2-070MRE	13.0
75 mm	046909	P2B-SN2-075MR	046922	P2B-SN2-075MRE	12.5
80 mm	046910	P2B-SN2-080MR	046923	P2B-SN2-080MRE	16.5
85 mm	046911	P2B-SN2-085MR	046924	P2B-SN2-085MRE	16.0
90 mm	046912	P2B-SN2-090MR	046925	P2B-SN2-090MRE	15.7

* Furnished unless otherwise specified.

† Assembled to order. Consult DODGE for delivery.

Δ Consult DODGE for sizes not listed.

SN-2000 PLUMMER BLOCK DIMENSIONS*–METRIC

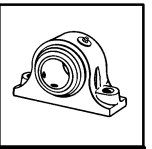
Shaft Size	A mm	B mm	C mm	D		F Bolt Dia. mm	G mm	H mm	J mm	J1 mm	L mm	M mm	R mm	S mm	X • mm	Y Set Screw Size
				Min. mm	Max. mm											
30 mm	74.6	185	52	145	155	M12	20	22	100	106	70	50	73	44	1.6	M8 x 16
35 mm	74.6	205	60	165	175	M12	20	25	111	117	70	60	74	44	1.6	M8 x 16
40 mm 45 mm	81	205	60	166	175	M12	19	25	114	120	81	60	76	45	3.18	M8 x 16
50 mm	81	254	68	203	216	M16	25	28	129	134	87	70	78	45	3.18	M10 x 16
55 mm	85.7	254	68	203	216	M16	25	30	134	135	95	70	82	49	3.18	M10 x 20
60 mm 65 mm	92.1	275	79	216	235	M16	28	30	154	157	103	80	92	52	3.18	M10 x 20
70 mm 75 mm	104.8	316	89	245	268	M20	34	32	174	177	120	95	101	59	3.18	M12 x 25
80 mm	114.3	345	98	279	294	M20	29	35	194	194	140	100	110	64	3.18	M12 x 30
85 mm	114.3	345	99	279	294	M20	29	35	209	209	140	112	110	64	3.18	M12 x 25
90 mm	114.3	380	109	314	327	M24	33	40	209	209	140	112	110	64	3.18	M12 x 25

• Offset of non-expansion bearing to center of housing.

* Dimensions shown are for non-expansion units.

SELECTION PAGE B7-42	RATINGS PAGE B7-46	HOUSING RATINGS PAGE B7-49	
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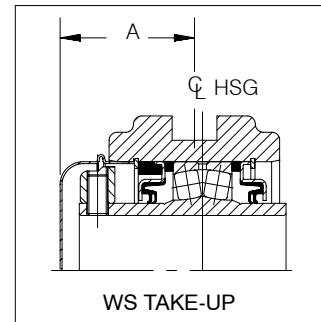
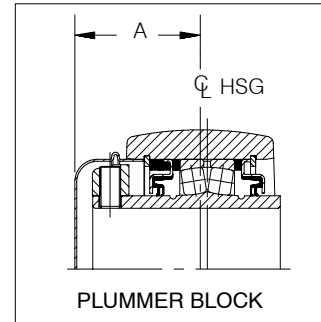
SELECTION/DIMENSIONS



S-2000 End Closures – Metric

SHAFT SIZE (mm) Δ	PART NO.	DESCRIPTION	"A" DIMENSION (mm)	
			PLUMMER BLOCK	WS TAKE-UP
40 & 45	045451	S2CREC09	59	59
50	045452	S2CREC10	60	60
55	045453	S2CREC11	64	64
60 & 65	045454	S2CREC13	66	66
70 & 75	045455	S2CREC15	72	72
80, 85 & 90	045456	S2CREC18	78	78

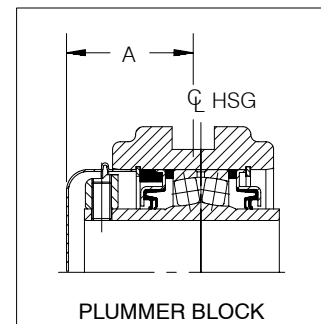
Δ Consult DODGE for sizes not listed.



SN-2000 End Closures – Metric

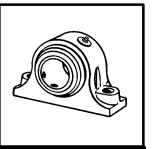
SHAFT SIZE (mm) Δ	PART NO.	DESCRIPTION	"A" DIMENSION (mm)
			PLUMMER BLOCK
30 & 35	045450	S2CREC08	54
40 & 45	045451	S2CREC09	59
50	045452	S2CREC10	60
55	045453	S2CREC11	64
60 & 65	045454	S2CREC13	66
70 & 75	045455	S2CREC15	72
80, 85 & 90	045456	S2CREC18	78

Δ Consult DODGE for sizes not listed.



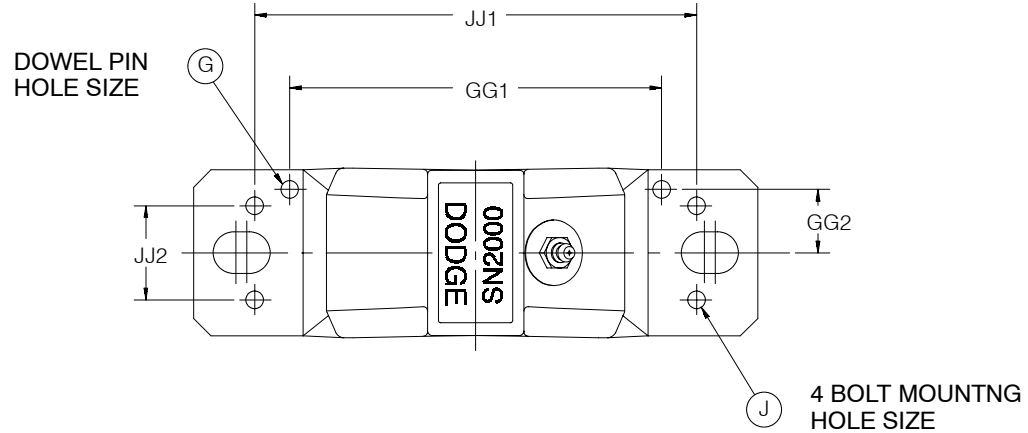
FEATURES/BENEFITS PAGE B7-2	HOW TO ORDER PAGE B7-40	NOMENCLATURE PAGE B7-41	SELECTION PAGE B7-42
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SELECTION/DIMENSIONS



SN-2000 Plummer Block – Metric

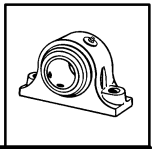
Dowel Pin & Optional Mounting Hole Positions



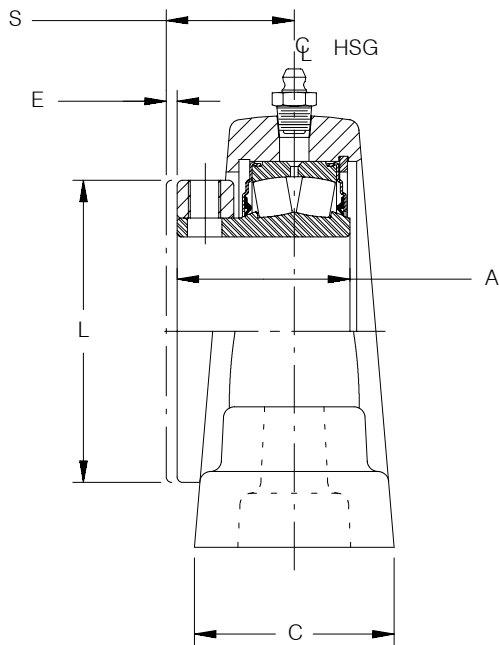
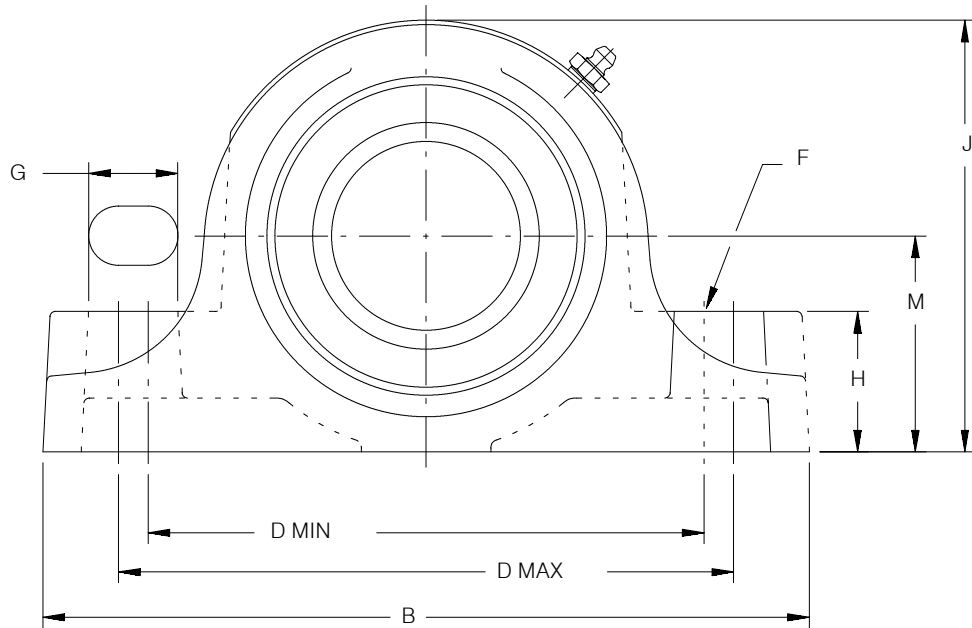
ITEM	DESCRIPTION
G	DOWEL PIN LOCATION FOR METRIC PLUMMER BLOCKS
J	DRILLING LOCATION FOR FOUR BOLT MOUNTING OR OPTIONAL DOWEL PIN LOCATION

SN-2000 SERIES	GG1 mm	GG2 mm	JJ1 mm	JJ2 mm	∅G Max. mm	J mm	
						HOLE SIZE	BOLT SIZE
SN2030M	117	19	—	—	5	—	—
SN2035M	135	23	160	34	6	11	M10
SN2040M	135	23	160	34	6	11	M10
SN2045M	135	23	160	34	6	11	M10
SN2050M	170	27	200	40	8	14	M12
SN2055M	172	27	200	40	8	14	M12
SN2060M	190	32	220	48	8	14	M12
SN2065M	190	32	220	48	8	14	M12
SN2070M	218	35	252	52	8	18	M16
SN2075M	218	35	252	52	8	18	M16
SN2080M	240	37	280	58	8	18	M16
SN2085M	240	37	280	58	8	18	M16
SN2090M	260	41	300	66	8	18	M16

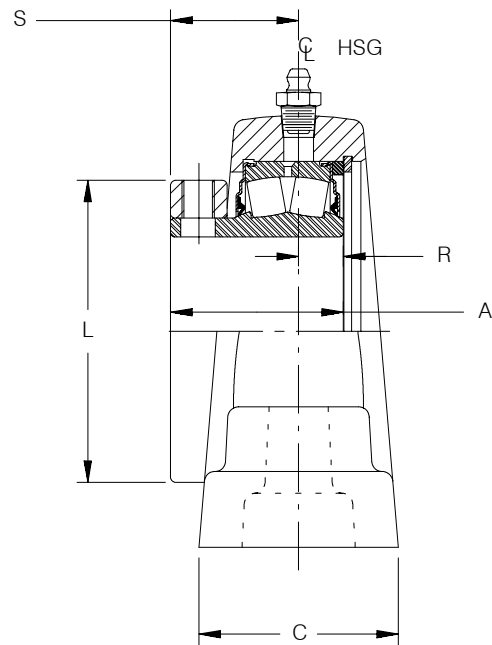
SELECTION/DIMENSIONS



UNISPHERE II Plummer Block Bearing – Metric



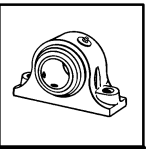
EXPANSION



NON-EXPANSION

<p>FEATURES/BENEFITS PAGE B7-2</p>	<p>INCH PAGE B7-34</p>	<p>HOW TO ORDER PAGE B7-40</p>	<p>NOMENCLATURE PAGE B7-41</p>
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SELECTION/DIMENSIONS



UNISPHERE II Plummer Block Bearing – Metric

Shaft Size Δ	NON-EXPANSION*		EXPANSION		Approximate Weight Kgs.
	PART NO.	PART NAME	PART NO.	PART NAME	
50 mm	048109	P2B-UN2-050M	048124	P2B-UN2-050ME	3.4
55 mm	048110	P2B-UN2-055M	048125	P2B-UN2-055ME	4.4
60 mm	048111	P2B-UN2-060M	048126	P2B-UN2-060ME	6.2
70 mm	048113	P2B-UN2-070M	048128	P2B-UN2-070ME	8.6
75 mm	048114	P2B-UN2-075M	048129	P2B-UN2-075ME	8.3
80 mm	048115	P2B-UN2-080M	048130	P2B-UN2-080ME	12.9
85 mm	048116	P2B-UN2-085M	048131	P2B-UN2-085ME	12.6

† Assembled to order. Consult DODGE for delivery.

Δ Consult DODGE for sizes not listed.

* Furnished unless otherwise specified.

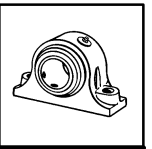
METRIC UNISPHERE II — PLUMMER BLOCK — DIMENSIONS (mm)•

Shaft Size	A mm	B mm	C mm	D		E Total Exp.	F Bolt Dia.	G mm	H mm	J mm	L mm	M mm	R mm	S mm
				Min.	Max.									
50 mm	48	213	52	151	170	3.18	16	27	35	116	83	57.1	12	37
55 mm	51	225	59	164	181	3.18	16	26	41	127	89	63.5	13	38
60 mm	56	235	65	173	189	3.18	16	25	44	144	103	69.8	17	39
70 mm 75 mm	62	265	65	198	214	3.18	20	29	57	164	120	82.5	19	43
80 mm 85 mm	73	330	71	235	273	3.18	22	43	57	190	140	95.2	24	48

- Dimensions shown are for non-expansion units. The expansion bearing center and housing center are on the same centerline.

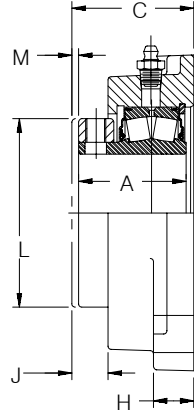
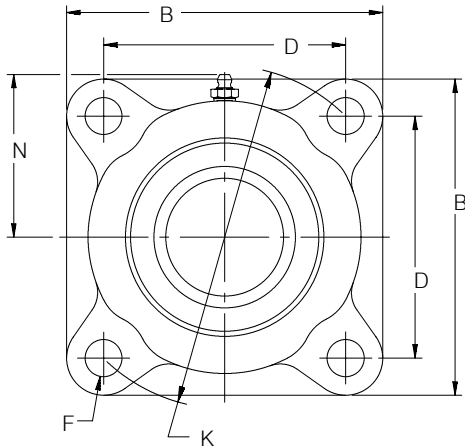
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SELECTION/DIMENSIONS

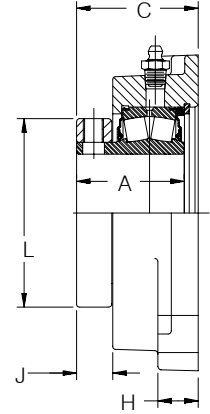


UNISPHERE II Flange – Metric

4-BOLT



EXPANSION



NON-EXPANSION

Shaft Size Δ	NON-EXPANSION*		EXPANSION		Approx. Wt./ Kgs.
	PART NO.	PART NAME	PART NO.	PART NAME	
40 mm	048202	F4B-UN2-040M	048216	F4B-UN2-040ME	3.1
45 mm	048203	F4B-UN2-045M	048217	F4B-UN2-045ME	3.1
50 mm	048204	F4B-UN2-050M	048218	F4B-UN2-050ME	3.0
55 mm	048205	F4B-UN2-055M	048219	F4B-UN2-055ME	3.8
60 mm	048206	F4B-UN2-060M	048220	F4B-UN2-060ME	4.8
65 mm	048207	F4B-UN2-065M	048221	F4B-UN2-065ME	4.6
70 mm	048208	F4B-UN2-070M	048222	F4B-UN2-070ME	8.2
80 mm	048210	F4B-UN2-080M	048224	F4B-UN2-080ME	11.2

† Assembled to order. Consult DODGE for delivery.

Δ Consult DODGE for sizes not listed.

* Furnished unless otherwise specified.

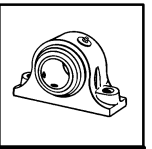
METRIC UNISPHERE II — 4-BOLT FLANGE — DIMENSIONS (mm)•

Shaft Size	A mm	B mm	C mm	D mm	F Bolt Dia.	H mm	J mm	K mm	L mm	M Total Exp.	N mm
40 mm	48	130	55	99	12	19	18	140	76	3.18	70
45 mm											
50 mm	48	135	55	103	12	18	18	146	82	3.18	73
55 mm	51	149	58	114	16	19	17	162	89	3.18	78
60 mm											
65 mm	56	156	62	121	16	25	16	171	103	3.18	86
70 mm	62	183	66	141	20	24	20	200	120	3.18	97
80 mm	73	212	78	171	20	30	22	241	140	3.18	109

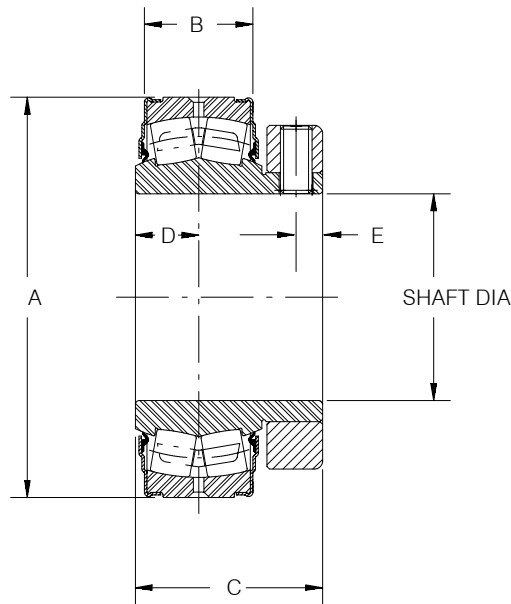
• Dimensions shown are for non-expansion units.

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SELECTION/DIMENSIONS



UNISPHERE II Bearing Insert With Seal – Metric



UNISPHERE II BEARING INSERT W/SEALS–METRIC

Shaft Size Δ	PART NO. †	PART NAME	Approx. Wt./Kgs.
40 mm	421362	BRG-UN2-040	.8
45 mm	421363	BRG-UN2-045	.7
50 mm	421364	BRG-UN2-050	.75
55 mm	421365	BRG-UN2-055	1.06
60 mm	421366	BRG-UN2-060	1.95
65 mm	421367	BRG-UN2-065	1.74
70 mm	421368	BRG-UN2-070	2.37
75 mm	421369	BRG-UN2-075	2.09
80 mm	421370	BRG-UN2-080	4.54
85 mm	421371	BRG-UN2-085	4.2
90 mm	421372	BRG-UN2-090	3.9

UNISPHERE II BEARING INSERT DIMENSIONS–METRIC

Shaft Size	A mm	B mm	C mm	D mm	E mm
40 mm 45 mm	85	24	48	14.7	7.26
50 mm	90	24	48	15.1	8.05
60 mm 65 mm	120	32.2	56	19	8.05
70 mm 75 mm	130	32.3	62	20.2	11.2
80 mm 85 mm 90 mm	160	41.3	73	24.1	11.2

† Assembled-to-order size. Consult DODGE for delivery.

Δ Consult DODGE for sizes not listed.

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NOTES

