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UNIFIED™ SAF

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Bearing Reference Guide

E-Family Roller Bearings

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FEATURES/BENEFITS

DODGE UNIFIED SAF and SDAF Pillow Blocks

BEARINGS

Spherical Roller Bearing - 22200, 22300, 23000, 23100 and 23200, tapered bore for adapter mount and straight bore for direct mount.

SPLIT-SPHER Bearing

Complete split replacement for an adapter mounted 22200. Compatible with UNIFIED SAF. Available in inch bores.

SHAFT SIZES

Available for shaft sizes 1-7/16" - 15-3/4" and 40 mm-140 mm in adapter mount. Additional sizes offered in direct mount. Pillow blocks are available in 200, 300, 500 and 600 series.

DIMENSIONS

UNIFIED SAF and SDAF pillow blocks match standard SAF and SDAF inch dimensions.

PLUS YOU GET BUILT-IN DESIGN ADVANCEMENTS

With DODGE UNIFIED SAF and SDAF pillow blocks, you benefit from a housing that has capabilities for harsh environments that competitive pillow blocks do not have.



VIRTUALLY EVERY FEATURE YOU EVER WANTED IN YOUR PILLOW BLOCK

- Cast-in dimples locate drill holes for lube fittings, vents, sensors and mounting modifications.
- Housing base is threaded to accept four Grade 5 cap bolts for added strength. Cap bolts match base bolts for one-wrench installation.
- Standard housings have two oversized drains adaptable to circulating oil systems.
- Pry slots allow easy separation of the pillow block.

NOTE: Instruction manuals for all Dodge bearings are available on www.dodge-pt.com



FEATURES/BENEFITS

Bearing Reference Guide

E-Family Roller Bearings

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UNIFIED SAF

DODGE UNIFIED SAF and SDAF Pillow Blocks



Cast iron, closed-end housings offer greater protection in high pressure washdown environments. Available from stock.



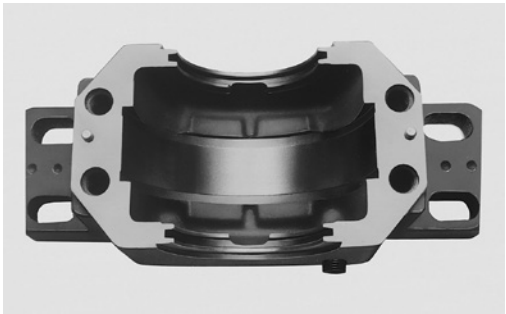
Standard modifications for wet and harsh environments include nylon coating, epoxy paints and nickel plating, as well as stainless steel hardware.



Solid cast iron feet increase strength in both two and four-bolt styles.



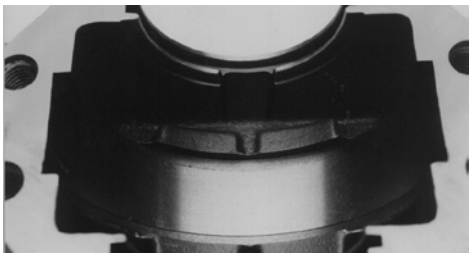
New drop-in TRIPLE-TECT Seal makes seal installation easier



Large capacity oil sump lowers operating temperatures, undercut bearing seat allows full lateral travel of expansion bearing, prevents stabilizer ring from binding, makes installation easy.



Exclusive oil-equalization passage simplifies maintenance. Pillow block can be drained completely from either side.



Oil return slots are cast into the interior seal grooves to keep lubricants in. This allows oil in the seal grooves to return to the oil sump instead of leaking.



Offset dowels with matched numbers on cap and base joint simplify correct assembly.



FEATURES/BENEFITS

DODGE UNIFIED SAF with SPLIT-SPHER Bearing

SPLIT-SPHER BEARINGS FROM DODGE INCREASE PRODUCTION AND REDUCE DOWNTIME

The SPLIT-SPHER bearing is quick to install. Simplified bearing installation puts equipment back into operation faster and keeps production moving.

HERE'S WHY!

DODGE offers a split-race spherical bearing that fits SAF housings and replaces bearing and adapter assemblies. It's a real cost-saver in every case where the shaft must be stripped of components to permit sliding the new bearing onto its proper shaft location.

DIMENSIONS ARE STANDARD.

The DODGE SPLIT-SPHER bearing has the same O.D. dimensions as a standard spherical bearing. This means you can use a SPLIT-SPHER pillow block on the inaccessible end of a shaft and a standard pillow block on the accessible end. DODGE offers the only split-race bearings made to standard SAF pillow block dimensions.

Also, if needed, the backing dimension of the SPLIT-SPHER block can be increased by shimming to meet the requirements of any roller bearing it replaces.

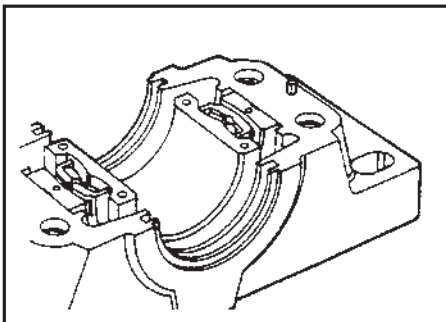
REDUCE REPLACEMENT TIME UP TO 50%.

To replace a standard spherical roller bearing with a SPLIT-SPHER insert, remove the cap, elevate the shaft enough to support the load and burn off the failed bearing and adapter with a torch.

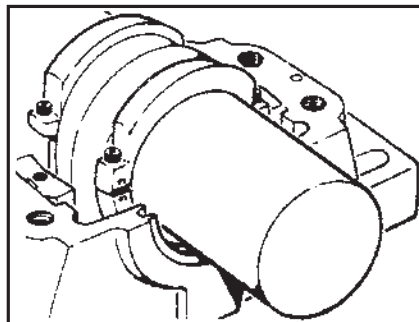
The DODGE SPLIT-SPHER replacement lower halves can then be slipped under the shaft, along with the split seals. Bolt the upper halves in place, lower the shaft and replace the cap. There's no need to remove any other shaft-mounted components or move motors and other bulky machinery.



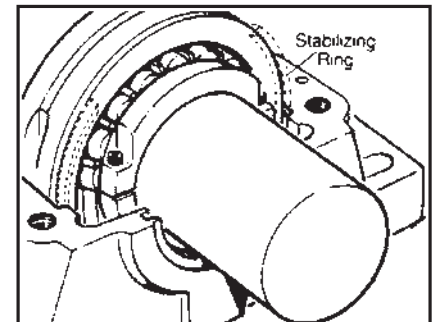
The SPLIT-SPHER insert is easy to install!



1. Slightly elevate shaft, cut off old bearing and slip lower halves of SPLIT-SPHER rings and roller assembly beneath shaft



2. Bolt upper half of inner ring to lower half



3. Place upper half of roller assembly in position and bolt on upper half of outer ring. Lower shaft and replace housing cap.

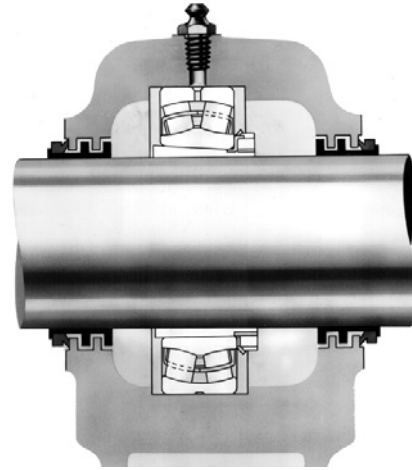


FEATURES/BENEFITS

SAF-XT Spherical Roller Bearings



The SAF-XT Pillow Block Housing is designed for typical SAF dimensional interchangeability, complete with such desirable features as 4-bolt caps, cap removal pry slots, elongated bolt holes, and dimpled feet for doweling. In addition to these features the SAF-XT housing also incorporates a better grease purging/sealing system for extra protection of the bearing in a hostile environment.



The SAF-XT pillow block has only one grease fitting. Bearings with costly, comparably effective auxiliary seals have up to three grease fittings. The single fitting speeds up lubrication, reduces chance for voids. Complete fill, bearing action, and configuration of reservoir assure maximum purging effectiveness. Grease relief channels result in self-centering positive contact seal. These factors make SAF-XT blocks easy to lubricate.

SAFS



DODGE SAFS cast steel pillow blocks mount 22200K series spherical roller bearings on 2-7/16" - 8" shafts.

These pillow blocks are well suited for applications requiring either grease or oil lubrication where adapter mounting is preferred and limited thrust loads are experienced. Cast steel housings provide greater resistance to impact and shock loading than the more economical cast iron pillow blocks. (SPLIT-SPHER

bearing and seals may also be installed in SAFS housings. See page B15-76 through B15-81 .)

SAFS pillow blocks are furnished complete with the TRIPLE-TECT combination labyrinth and face rubbing seals. LER triple ring seals are available as an alternate seal for SAFS pillow blocks. Where required, purgeable auxiliary seals and end closures are also available.



SPECIFICATION

Housing

Grade 30 cast iron is the standard housing material except on SAFS housings. When steel housings are required, the SAFS bearing line is recommended.

SPECIAL DRILLING

The standard offering includes a W33 lube hole and fitting, along with a cap vent hole. UNIFIED Bearings also come standard with dual oversized drain holes in the base. Additional holes may be drilled to meet customer specifications for lube, vent and sensor locations. To order, specify holes required from chart on page B15-126 and add to the end of the description. Order by description instead of part number. Minimum order quantities will be required for this special drilling.

SPECIAL FINISHES

A variety of finishes are available for extra corrosion resistance. The standard finish is a water based U.S.D.A. approved paint. When special finishes are specified,

DODGE recommends the use of stainless steel cap bolts and grease fittings. To order, specify the “type of finish” required and “stainless bolts and fittings” at the end of the description. Order by description for special finishes.

BEARINGS

Standard bearings offered are 22200 and 22300 series metal caged, double row, spherical bearings with C3 fits in both direct and adapter mounts (shaft sizes larger than 8” are standard with C0 fit). Other double row spherical bearing series are available on request including 23000 and 23200 in both direct and adapter mount. Self aligning ball bearing series 1200, 1300 and 2200 in both adapter and direct mount are available on request. To order, specify bearing “series” or “fit” at the end of the description.

For applications requiring modifications not listed, we encourage you to contact our Application Engineering Department for Bearings at 864-284-5700 during the hours of 8:00 a.m. and 5:00 p.m. Eastern time.

HOW TO ORDER

Inch

DODGE UNIFIED Spherical Bearings are housed and sealed general purpose, high capacity double row spherical roller bearings. Bearings may be mounted on shafts with adapters, or they may be mounted directly, using interference fits.

The standard material used in housings is ASTM A48 Class 30 Cast iron. Steel versions are also available in the SAFS line on page B15-61 Housings may be modified to suit customer requirements for mounting, venting, lubricating or monitoring of the bearing. Housing designs are available for performance in extreme harsh environments through the use of cast closed ends, nylon coating and stainless steel hardware.

A wide variety of standard seals is available including labyrinth and rubbing seals and combinations of the two. DODGE TRIPLE-TECT and Drop-in TRIPLE-TECT seals are recommended for general purpose applications

because of their superior combination sealing action. More information on seals is shown on page B15-19.

Locking devices, including tapered adapters and locking washers and nuts, are available to accommodate both commercial and precision machined shafting.

How to Order Dodge UNIFIED Bearings

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

When part numbers are not shown, the product may be specified by description. This method is used when ordering units that include modifications/options. To order by description, use the nomenclature key shown on page B15-8 and add any special instructions to the end of the description for options not covered by the nomenclature.

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NOMENCLATURE



Complete Pillow Block - Inch

P2B - 515 - USAF - 207 - TT

| | HOUSING STYLE | BEARING SERIES AND HOUSING SIZE | TYPE OF MOUNTED BEARING | SIZE INCHES | SEAL TYPE |
|--------|---|---|---|--|--|
| P2B - | 2 Bolt Base Pillow Block, Cast Iron, Both Ends Open | 2XX - For Direct Mount 22200 Series Bearing | USAF - UNIFIED SAF Pillow Block (Inch Dimensions) | 207 - Inches & 16ths 2 = 2" 07 = 7/16" 107 = 1-7/16" 111 = 1-11/16" 115 = 1-15/16" 203 = 2-3/16" 207 = 2-7/16" 208 = 2-1/2" 211 = 2-11/16" 212 = 2-3/4" 215 = 2-15/16" 300 = 3" 303 = 3-3/16" 307 = 3-7/16" 308 = 3-1/2" 315 = 3-15/16" 400 = 4" 403 = 4-3/16" 407 = 4-7/16" 408 = 4-1/2" 415 = 4-15/16" 500 = 5" 503 = 5-3/16" 507 = 5-7/16" 508 = 5-1/2" 515 = 5-15/16" 600 = 6" 607 = 6-7/16" 608 = 6-1/2" 615 = 6-15/16" 700 = 7" 703 = 7-3/16" 708 = 7-1/2" 715 = 7-15/16" 800 = 8" 807 = 8-7/16" 808 = 8-1/2" 815 = 8-15/16" 900 = 9" 907 = 9-7/16" 908 = 9-1/2" 915 = 9-15/16" 1000 = 10" 1007 = 10-7/16" 1008 = 10-1/2" | TT - TRIPLE-TECT LER - Metal Labyrinth SS - Split Non-Metallic Labyrinth TTDN - Drop-In TRIPLE-TECT AUX - Auxiliary (Taconite) EC - End Closure |
| P4B - | 4 Bolt Base Pillow Block, Cast Iron, Both Ends Open | 3XX - For Direct Mount 22300 Series Bearing | USDAF - UNIFIED SDAF Pillow Block | | |
| CP2B - | 2 Bolt Base Pillow Block, Cast Iron, One End Closed | 5XX - For Adapter Mounted 22200K Series Bearing | SS - SPLIT-SPHER Pillow Block | | |
| CP4B - | 4 Bolt Base Pillow Block, Cast Iron, One End Closed | 6XX - For Adapter Mounted 22300K Series Bearing | | | |
| | | OXX - For Adapter Mounted 23000K Series Bearing | | | |

For monitor equipped pillow blocks a C preceding the pillow block designation indicates closed ends

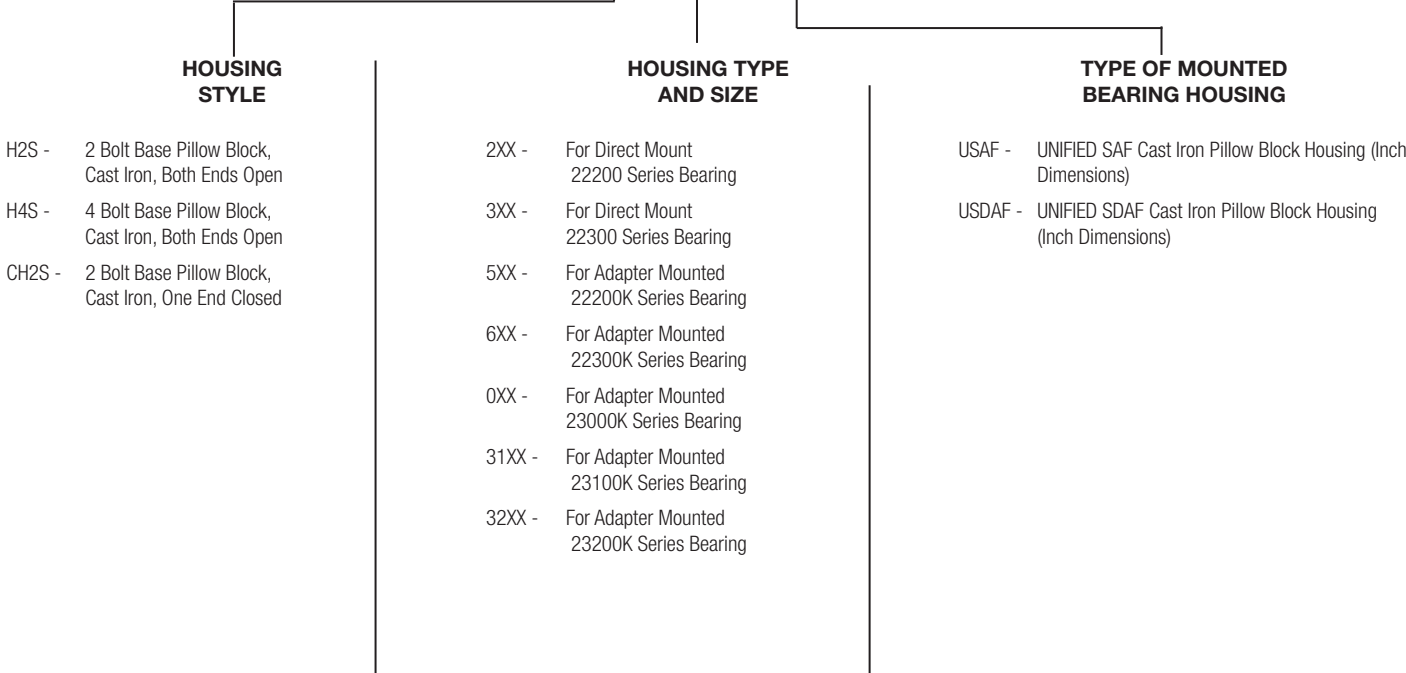
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NOMENCLATURE

Housing Only (Housing and Stab Ring) Inch

H4S - 515 - USAF

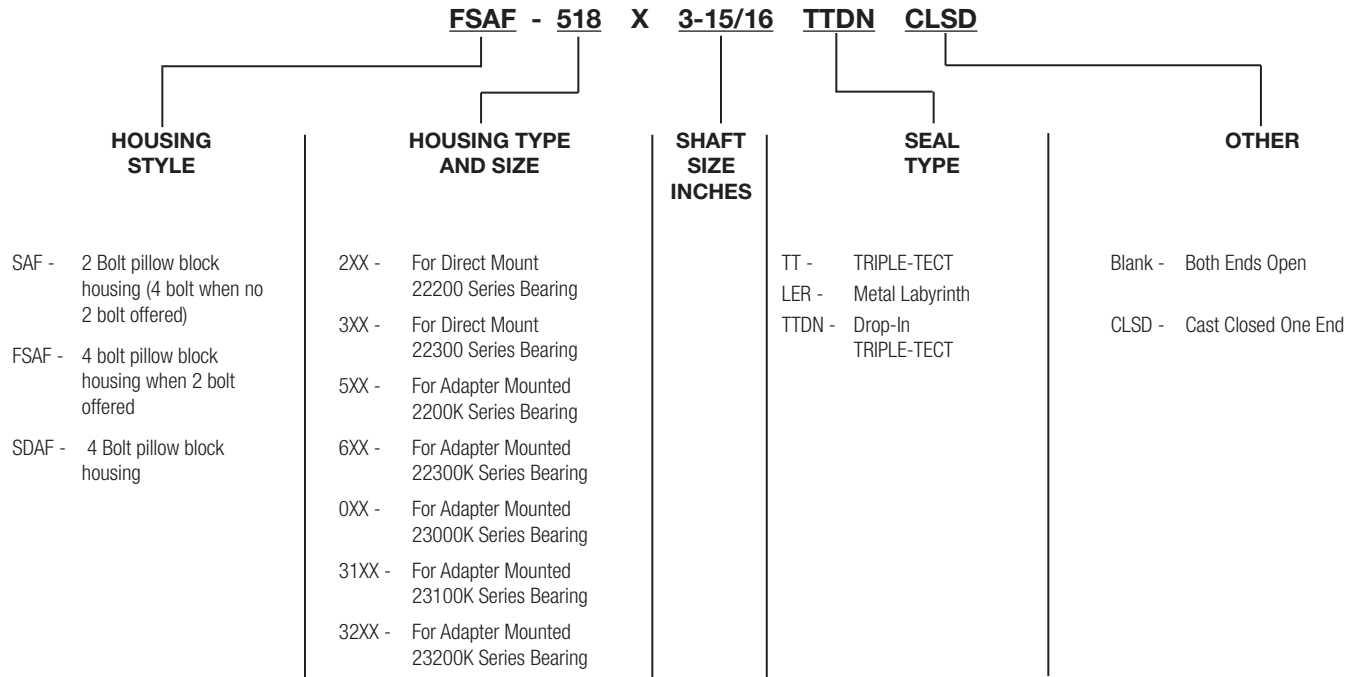


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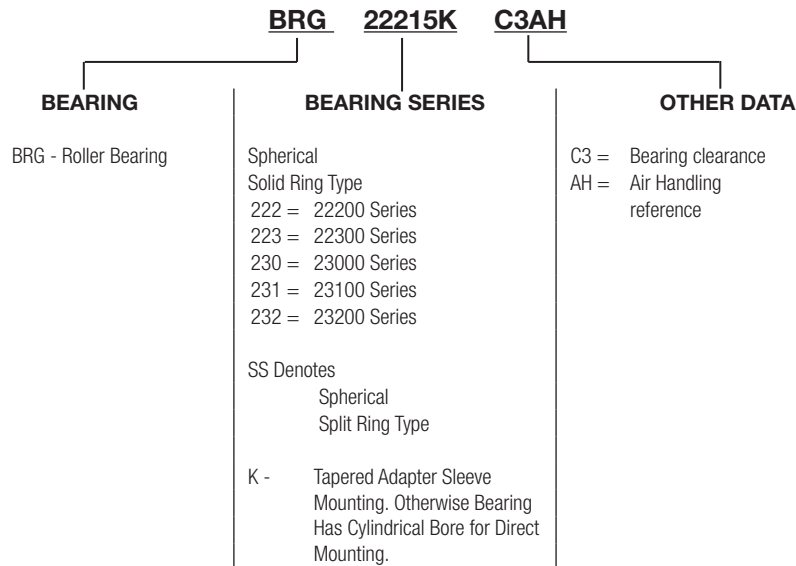


NOMENCLATURE

Housing Assembly (Housing and Stab Ring and Seals) - Inch



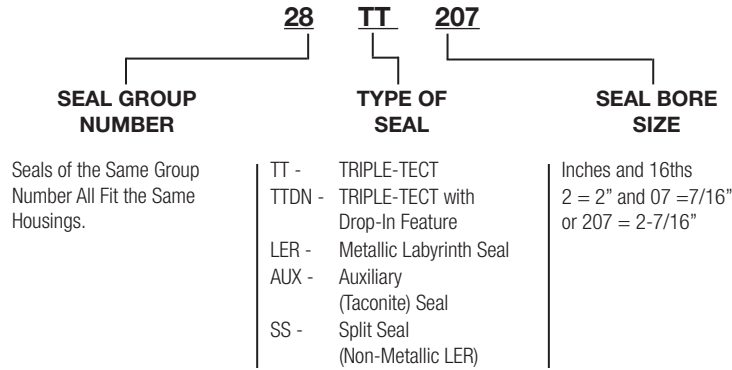
Bearing



NOMENCLATURE



Seals - Inch



| Seal Group Number & Shaft Size | Fits Housing Sizes | Seal Group Number & Shaft Size | Fits Housing Sizes | Seal Group Number & Shaft Size | Fits Housing Sizes |
|--------------------------------|---------------------|--------------------------------|---------------------|--------------------------------|--------------------|
| 08-107 | 308, 509 & 609 | 50-315 | 522 & 622 | 78-715 | 544 |
| 10-111 | 309, 510 & 610 | 50-400 | 522 & 622 | 78-800 | 544 |
| 12-114 | 310 | 52-403 | 222, 322, 524 & 624 | 80-805 | 244 |
| 12-115 | 308, 511 & 611 | 54-407 | 526 & 626 | 80-806 | 238 & 338 |
| 14-201 | 311 | 54-408 | 220, 320, 526 & 626 | 82-812 | 240 |
| 14-202 | 309 | 54-409 | 224 & 324 | 84-907 | 052 |
| 14-203 | 513 & 613 | 56-414 | 222 & 322 | 84-908 | 052 |
| 14-204 | 312 | 56-415 | 226, 326, 528 & 628 | 84-909 | 244 |
| 18-206 | 310 | 56-500 | 528 & 628 | 90-807 | 048 |
| 20-207 | 515 & 615 | 58-503 | 530 & 630 | 90-808 | 048 |
| 20-208 | 515 & 615 | 58-505 | 224, 324, 228 & 328 | 90-815 | 048 |
| 22-207 | 313 | 60-507 | 532 & 632 | 90-900 | 048 |
| 22-209 | 311 | 60-508 | 532 & 632 | 92-915 | 056 |
| 22-210 | 314 | 62-512 | 230 & 330 | 92-1000 | 056 |
| 24-211 | 516 & 616 | 62-514 | 226 & 236 | 94-1007 | 056L |
| 24-212 | 516 & 616 | 64-515 | 534 & 634 | 94-1008 | 056L |
| 24-213 | 215 & 315 | 64-600 | 534 & 634 | 96-1015 | 060, 3160, 3260 |
| 26-214 | 312 | 64-601 | 232 & 332 | 96-1100 | 060, 3160, 3260 |
| 28-215 | 517 & 617 | 66-604 | 228 & 328 | 98-1107 | 064 |
| 28-300 | 216, 316, 517 & 617 | 68-607 | 234, 334 & 536 | 98-1108 | 064 |
| 28-301 | 313 | 68-608 | 536 | 100-1115 | 064L, 3164, 3264 |
| 32-303 | 217 & 317 | 70-610 | 230 & 330 | 100-1200 | 064L, 3164, 3264 |
| 32-304 | 314 | 72-614 | 236 | 102-1207 | 068, 168, 268 |
| 34-303 | 518 | 72-615 | 538 & 638 | 104-1215 | 072 |
| 36-306 | 218 | 72-700 | 232, 332, 538 & 638 | 104-1300 | 072 |
| 38-307 | 215 & 315 | 74-703 | 540 | 106-1307 | 072L, 3172 |
| 38-310 | 216 & 316 | 74-704 | 238 & 338 | 106-1308 | 072L, 3172 |
| 42-315 | 217 & 317 | 76-707 | 234 & 334 | 108-1315 | 076, 3176 |
| 44-402 | 218 | 76-708 | 544S | 108-1400 | 076, 3176 |
| 46-307 | 520 & 620 | 76-710 | 240 | 110-1500 | 80 |
| 46-308 | 520 & 620 | 78-713 | 236 | 112-1512 | 84 |
| 50-313 | 220 & 320 | | | | |

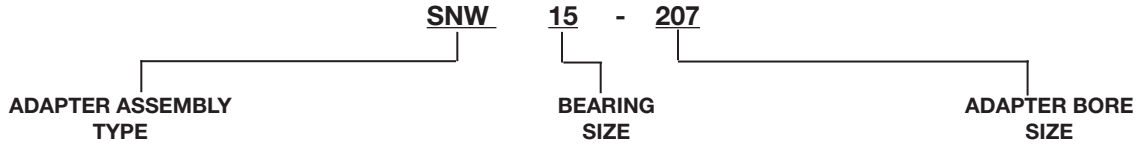
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NOMENCLATURE



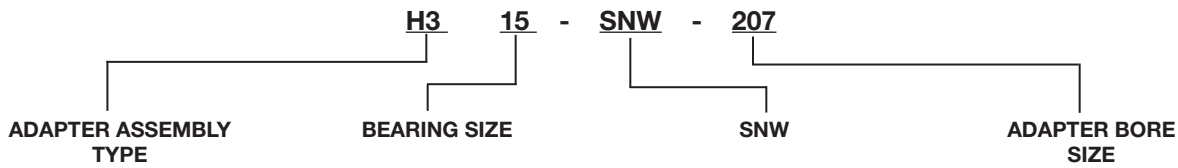
Adapter Assemblies - Inch



SNW = Sleeve, Nut and Washer Assembly thru 44 (8 inch) Size
 SNP = Sleeve, Nut and Lockplate Assembly 048 (8-7/16") and Larger Sizes

Up to 8" shaft size last two digits of bearing numerical description.
 For larger sizes last four digits.

Inches and 16ths
 2 = 2" and 07 = 7/16" or
 207 = 2-7/16"
 See size listing page
 B15-10



H3 Adapter Series for 22200K Series Bearings thru 4" Bore Size
 H31 Adapter Series for 22200K & 23100K Series Bearings Greater Than 4"
 H23 Adapter Series for 22300K Series Bearings
 H32 Adapter Series for 23200K Series Bearings

Last two digits of bearing numerical description.

SNW = Sleeve, Nut and Washer Assembly thru 544 (8") Size
 SNP = Sleeve Nut and Plate Assembly from 048 thru 084, 3156 thru 3176, & 3252 thru 3268

Inches and 16ths
 2 = 2" and 07 = 7/16" or
 207 = 2-7/16"
 See size listing page
 B15-10

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SELECTION

UNIFIED Pillow Block - Spherical Roller Bearings

(USAF 500, 600, 200, 300 SERIES AND USDAF 23000, 23100, 23200)

DODGE UNIFIED 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 UNIFIED Spherical Roller Bearings have been applied successfully even when these limits have been exceeded under controlled operating conditions. Contact DODGE Application Engineering (864-284-5700) 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 B15-15 for USAF) 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. Where substantial radial loads are also present, it is advisable to calculate actual L₁₀ life to assure that it meets the requirements.

| RPM | 20-200 | 201-2000 | Over 2000 |
|-------------------------|--------|----------|-----------|
| RECOMMENDED THRUST LOAD | C/20 | C/40 | C/60 |

The shaft tolerances recommended below are adequate for adaptor mounted bearings. 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 B15-24 and 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 plummer blocks.

NOTE: Spherical bearings require a radial load at least equal to the thrust load for proper operation ($F_a/F_R = 1$). If the thrust load exceeds this limit, consult Application Engineering.

SHAFT TOLERANCES

| Shaft Size | Shaft Tolerance, Inches |
|-------------------|-------------------------|
| Up To 1-1/2" | +0.000 -0.002" |
| 1-9/16 to 2-1/2" | +0.000 -0.003" |
| 2-5/8 to 4" | +0.000 -0.004" |
| 4-3/16 to 6" | +0.000 -0.005" |
| 6-7/16" and above | +0.000 -0.006" |

* Use the smaller of this value or the adaptor maximum allowable thrust load list in Table 1.

SELECTING BEARING SUPPORTING RADIAL LOADS ONLY

1. Define L₁₀ Life Hours desired.
2. Establish bearing radial load, F_R
F_R = P for Pure Radial Load Conditions
P = Equivalent radial load, lbs
The DODGE program BEST™★ can be used to find application loads.
3. Establish RPM.

Using the easy selection Table 2, page B15-16, under the RPM column, find the equivalent radial load that equals or is 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.

★ 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. This interactive program is available at www.ptwizard.com under the Product Section area.

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SELECTION

UNIFIED Pillow Block - Spherical Roller Bearings

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

At the intersection of the 950 RPM column and the 30,000 hours L_{10} life row, the equivalent radial load of 4555 lbs. exceeds the 4000 lbs. application radial load for shaft size 1-7/16 adapter mount (22309K series bearing) and for shaft size 45 mm direct mount (22309 series bearing). Also, the equivalent radial load of 4877 lbs. exceeds the 4000 lbs. application radial load for shaft size 2-3/16" adapter mount (22213K series bearing) and for shaft size 65mm direct mount (22213 series bearing). Therefore, the follow bearings can be used to meet the application conditions of the above example:

- | | |
|--------------------------|----------------|
| 1. 1-7/16" adapter mount | 22309K bearing |
| 2. 45 mm direct mount | 22309 bearing |
| | OR |
| 3. 2-3/16" adapter mount | 22213K bearing |
| 4. 65 mm direct mount | 22213 bearing |

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 B15-15 the **C** value equal to or greater than the **C** value just calculated. The bore size on the far left represents the minimum shaft size selection. Check that the application RPM does not exceed the MAX. RPM on Table 1, page B15-15. Also check that the radial load does not exceed the Maximum Allowable Slip Fit Radial Load shown on Table 1. 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, page B15-15 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.

Equation 1

The equivalent radial load $P = XF_R + YF_A$

Where:

- P = Equivalent radial load, lbs.
- F_R = Radial load, lbs.
- 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)★

Calculate F_A/F_R and compare to e for the selected bore size. Determine X and Y from Table 1 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.

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 (864-284-5700) during the hours of 8:00 a.m. and 5:00 p.m. Eastern Time.

AXIAL EXPANSION CAPABILITY

Axial expansion capability for UNIFIED SAF 500, 600, 200 and 300 pillow blocks is shown on B15-25. DODGE supplies all UNIFIED pillow block housings with the appropriate stabilizing ring. When the stabilizing ring is used, the pillow block becomes a non-expansion pillow block. Not using the stabilizing ring allows shaft and bearing axial expansion. Proper mounting of the stabilizing ring is shown on housing dimension pages.



SELECTION

UNIFIED Pillow Block - Spherical Roller Bearings

Table 1: Radial & Thrust Factors For USAF Spherical Bearings

| Shaft Size | | Bearing Series | e | $F_R/F_R \leq e$ | | $F_R/F_R > e$ | | Adapter Maximum Allowable Thrust Load Pound † | Dynamic Capacity (C) Pounds | Static Capacity (Co) Lbs. | Maximum RPM | |
|------------------------|-----------------|----------------|-----|------------------|-----|---------------|-----|---|-----------------------------|---------------------------|-------------|------|
| Adapter Mounted Inches | Direct Mount mm | | | X | Y | X | Y | | | | Grease | Oil |
| - | 40 | 22308 | .36 | 1 | 1.9 | 0.67 | 2.8 | - | 35,500 | 33,500 | 4300 | 5300 |
| 1-7/16 | --- | 22209 | .26 | 1 | 2.6 | 0.67 | 3.9 | 698 | 24,500 | 23,600 | 5600 | 7000 |
| | 45 | 22309 | .36 | 1 | 1.9 | 0.67 | 2.8 | 1092 | 42,500 | 41,500 | 3800 | 4800 |
| 1-11/16 | --- | 22210 | .24 | 1 | 2.8 | 0.67 | 4.2 | 775 | 26,000 | 26,500 | 5300 | 6700 |
| | 50 | 22310 | .36 | 1 | 1.9 | 0.67 | 2.8 | 1348 | 51,000 | 50,000 | 3400 | 4300 |
| 1-15/16 | --- | 22211 | .23 | 1 | 2.9 | 0.67 | 4.4 | 927 | 31,500 | 32,500 | 4500 | 5600 |
| | 55 | 22311 | .36 | 1 | 1.9 | 0.67 | 2.8 | 1672 | 60,000 | 58,500 | 3200 | 4000 |
| | 60 | 22312 | .35 | 1 | 1.9 | 0.67 | 3 | - | 69,500 | 69,500 | 2800 | 3600 |
| 2-3/16 | --- | 22213 | .24 | 1 | 2.8 | 0.67 | 4.2 | 1359 | 45,500 | 47,500 | 3800 | 4500 |
| | 65 | 22313 | .34 | 1 | 2 | 0.67 | 3 | 2104 | 78,000 | 81,500 | 2600 | 3400 |
| | 70 | 22314 | .34 | 1 | 2 | 0.67 | 3 | - | 86,500 | 86,500 | 2400 | 3200 |
| 2-7/16 | 75 | 22215 | .22 | 1 | 3.1 | 0.67 | 4.6 | 1568 | 48,000 | 53,000 | 3400 | 4300 |
| 2-1/2 | | 22315 | .34 | 1 | 2 | 0.67 | 3 | 2782 | 100,000 | 102,000 | 2200 | 3000 |
| 2-11/16 | 80 | 22216 | .22 | 1 | 3.1 | 0.67 | 4.7 | 1780 | 56,000 | 60,000 | 3200 | 4000 |
| | | 22316 | .34 | 1 | 2 | 0.67 | 3 | 3128 | 112,000 | 114,000 | 2200 | 3000 |
| 2-15/16 | 85 | 22217 | .22 | 1 | 3.1 | 0.67 | 4.5 | 2063 | 68,000 | 73,500 | 3000 | 3800 |
| | | 22317 | .33 | 1 | 2 | 0.67 | 3 | 3438 | 122,000 | 125,000 | 2000 | 2800 |
| 3-3/16 | 90 | 22218 | .23 | 1 | 2.9 | 0.67 | 4.3 | 2429 | 78,000 | 85,000 | 2600 | 3400 |
| 3-7/16 | 100 | 22220 | .24 | 1 | 2.8 | 0.67 | 4.2 | 3102 | 96,500 | 106,000 | 2200 | 3000 |
| | | 22320 | .34 | 1 | 2 | 0.67 | 3 | 4920 | 183,000 | 208,000 | 1700 | 2200 |
| 3-15/16 | 110 | 22222 | .25 | 1 | 2.7 | 0.67 | 4 | 3931 | 122,000 | 134,000 | 2000 | 2800 |
| | | 22322 | .33 | 1 | 2.1 | 0.67 | 3.1 | 5934 | 212,000 | 240,000 | 1500 | 1900 |
| 4-3/16 | 120 | 22224 | .25 | 1 | 2.7 | 0.67 | 4 | 4693 | 143,000 | 166,000 | 1900 | 2400 |
| | | 22324 | .33 | 1 | 2.1 | 0.67 | 3.1 | 6959 | 240,000 | 265,000 | 1400 | 1800 |
| 4-7/16 | 130 | 22226 | .26 | 1 | 2.6 | 0.67 | 3.9 | 5610 | 170,000 | 200,000 | 1800 | 2200 |
| | | 22326 | .33 | 1 | 2.1 | 0.67 | 3.1 | 8152 | 280,000 | 310,000 | 1300 | 1700 |
| 4-15/16 | 140 | 22228 | .25 | 1 | 2.7 | 0.67 | 4 | 6419 | 196,000 | 236,000 | 1700 | 2200 |
| | | 22328 | .34 | 1 | 2 | 0.67 | 3 | 9628 | 325,000 | 365,000 | 1200 | 1600 |
| 5-3/16 | 150 | 22230 | .25 | 1 | 2.7 | 0.67 | 4 | 7383 | 228,000 | 275,000 | 1600 | 2000 |
| | | 22330 | .33 | 1 | 2 | 0.67 | 3 | 10923 | 365,000 | 415,000 | 1100 | 1500 |
| 5-7/16 | 160 | 22232 | .26 | 1 | 2.6 | 0.67 | 3.9 | 8630 | 260,000 | 315,000 | 1500 | 1800 |
| | | 22332 | .37 | 1 | 1.8 | 0.67 | 2.7 | 12298 | 325,000 | 365,000 | 1000 | 1400 |
| 5-15/16 | 170 | 22234 | .26 | 1 | 2.6 | 0.67 | 3.9 | 9858 | 309,000 | 355,000 | 1300 | 1700 |
| | | 22334 | .37 | 1 | 1.8 | 0.67 | 2.7 | 13755 | 360,000 | 475,000 | 950 | 1300 |
| 6-7/16 | 180 | 22236 | .25 | 1 | 2.7 | 0.67 | 4 | 10437 | 305,000 | 375,000 | 1300 | 1600 |
| | | 22336 | .37 | 1 | 1.8 | 0.67 | 2.7 | 15291 | 405,000 | 475,000 | 900 | 1100 |
| 6-15/16 | 190 | 22238 | .28 | 1 | 2.4 | 0.67 | 3.6 | 11786 | 270,000 | 415,000 | 1200 | 1300 |
| | | 22338 | .37 | 1 | 1.8 | 0.67 | 2.7 | 16910 | 415,000 | 570,000 | 850 | 1100 |
| 7-3/16 | 200 | 22240 | .29 | 1 | 2.3 | 0.67 | 3.5 | 13215 | 300,000 | 450,000 | 1100 | 1200 |
| 7-1/2 | 220 | 22244 | .29 | 1 | 2.3 | 0.67 | 3.5 | 16020 | 365,000 | 550,000 | 950 | 1000 |
| 7-15/16 | | | 1 | | | | | | | | | |
| 8-7/16 | - | 23048 | .25 | 1 | 2.7 | 0.67 | 4.1 | 14887 | 260,000 | 490,000 | 950 | 1000 |
| 8-1/2 | | | 1 | | | | | | | | | |
| 8-15/16, 9 | | | 1 | | | | | | | | | |
| 9-7/16 | - | 23052 | .26 | 1 | 2.6 | 0.67 | 3.9 | 18232 | 340,000 | 630,000 | 900 | 950 |
| 9-1/2 | | | 1 | | | | | | | | | |
| 9-15/16, 10 | - | 23056 | .25 | 1 | 2.7 | 0.67 | 4.1 | 20000 | 345,000 | 670,000 | 850 | 900 |
| 10-7/16 | | | 1 | | | | | | | | | |
| 10-1/2 | | | 1 | | | | | | | | | |

If the thrust load exceeds adapter maximum allowable thrust load, auxiliary methods of carrying thrust are required.

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|---------------------------------|--|----------------------------|-------------------------------------|

SELECTION



UNIFIED Pillow Block - Spherical Roller Bearings

Table 2: Selection Table for UNIFIED SAF Pillow Blocks

| Adapter Mount (Inches) | Direct Mount (mm) | Bearing Series | L ₁₀ Life Hours | Allowable Equivalent Radial Load Rating (Lbs.) at Various Revolutions Per Minute | | | | | | | | | | | | | | | |
|------------------------|-------------------|----------------|----------------------------|--|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|------|-------|
| | | | | 50 | 100 | 250 | 500 | 750 | 950 | 1,300 | 1,500 | 1,800 | 2,000 | 2,600 | 3,000 | 3,200 | 3,400 | 4500 | 5,600 |
| 2 -15/16 3 | 85 | 22217 | 10,000 | 24,512 | 19,910 | 15,125 | 12,285 | 10,878 | 10,133 | 9,223 | 8,836 | 8,365 | 8,105 | 7,492 | 7,177 | 7,039 | 6,912 | | |
| | | | 30,000 | 17,629 | 14,320 | 10,878 | 8,836 | 7,824 | 7,288 | 6,634 | 6,355 | 6,017 | 5,829 | 5,388 | 5,162 | 5,063 | 4,971 | | |
| | | | 60,000 | 14,320 | 11,631 | 8,836 | 7,177 | 6,355 | 5,920 | 5,388 | 5,162 | 4,887 | 4,735 | 4,377 | 4,193 | 4,112 | 4,038 | | |
| | 85 | 22317 | 10,000 | 43,977 | 35,720 | 27,135 | 22,041 | 19,516 | 18,180 | 16,548 | 15,852 | 15,008 | 14,541 | 13,441 | | | | | |
| | | | 30,000 | 31,629 | 25,691 | 19,516 | 15,852 | 14,037 | 13,076 | 11,901 | 11,401 | 10,794 | 10,459 | 9,667 | | | | | |
| | | | 60,000 | 25,691 | 20,868 | 15,852 | 12,876 | 11,401 | 10,621 | 9,667 | 9,261 | 8,768 | 8,495 | 7,852 | | | | | |
| 3-3/16 | 90 | 22218 | 10,000 | 28,116 | 22,838 | 17,349 | 14,092 | 12,478 | 11,623 | 10,580 | 10,135 | 9,596 | 9,297 | 8,593 | 8,232 | 8,074 | 7,929 | | |
| | | | 30,000 | 20,222 | 16,425 | 12,478 | 10,135 | 8,974 | 8,360 | 7,609 | 7,289 | 6,901 | 6,687 | 6,180 | 5,921 | 5,807 | 5,703 | | |
| | | | 60,000 | 16,425 | 13,342 | 10,135 | 8,232 | 7,289 | 6,790 | 6,180 | 5,921 | 5,606 | 5,431 | 5,020 | 4,809 | 4,717 | 4,632 | | |
| 3-7/16 3-1/2 | 100 | 22220 | 10,000 | 34,785 | 28,254 | 21,464 | 17,434 | 15,437 | 14,380 | 13,089 | 12,539 | 11,871 | 11,502 | 10,631 | 10,185 | | | | |
| | | | 30,000 | 25,018 | 20,321 | 15,437 | 12,539 | 11,103 | 10,343 | 9,414 | 9,018 | 8,538 | 8,273 | 7,646 | 7,325 | | | | |
| | | | 60,000 | 20,321 | 16,506 | 12,539 | 10,185 | 9,018 | 8,401 | 7,646 | 7,325 | 6,935 | 6,719 | 6,211 | 5,950 | | | | |
| | 100 | 22320 | 10,000 | 65,966 | 53,581 | 40,703 | 33,061 | 29,275 | 27,270 | 24,821 | 23,778 | 22,513 | 21,812 | | | | | | |
| | | | 30,000 | 47,444 | 38,536 | 29,275 | 23,778 | 21,055 | 19,613 | 17,852 | 17,102 | 16,192 | 15,688 | | | | | | |
| | | | 60,000 | 38,536 | 31,301 | 23,778 | 19,314 | 17,102 | 15,931 | 14,500 | 13,891 | 13,152 | 12,742 | | | | | | |
| 3-15/16 4 | 110 | 22222 | 10,000 | 43,977 | 35,720 | 27,135 | 22,041 | 19,516 | 18,180 | 16,548 | 15,852 | 15,008 | 14,541 | 13,441 | | | | | |
| | | | 30,000 | 31,629 | 25,691 | 19,516 | 15,852 | 14,037 | 13,076 | 11,901 | 11,401 | 10,794 | 10,459 | 9,667 | | | | | |
| | | | 60,000 | 25,691 | 20,868 | 15,852 | 12,876 | 11,401 | 10,621 | 9,667 | 9,261 | 8,768 | 8,495 | 7,852 | | | | | |
| | 110 | 22322 | 10,000 | 76,419 | 62,072 | 47,153 | 38,300 | 33,914 | 31,592 | 28,755 | 27,546 | 26,080 | | | | | | | |
| | | | 30,000 | 54,962 | 44,643 | 33,914 | 27,546 | 24,391 | 22,722 | 20,681 | 19,812 | 18,758 | | | | | | | |
| | | | 60,000 | 44,643 | 36,262 | 27,546 | 22,375 | 19,812 | 18,456 | 16,798 | 16,092 | 15,236 | | | | | | | |
| 4-3/16 | 120 | 22224 | 10,000 | 51,547 | 41,869 | 31,806 | 25,835 | 22,876 | 21,310 | 19,396 | 18,581 | 17,592 | 17,045 | | | | | | |
| | | | 30,000 | 37,074 | 30,113 | 22,876 | 18,581 | 16,453 | 15,326 | 13,950 | 13,364 | 12,652 | 12,259 | | | | | | |
| | | | 60,000 | 30,113 | 24,460 | 18,581 | 15,092 | 13,364 | 12,449 | 11,331 | 10,855 | 10,277 | 9,957 | | | | | | |
| | 120 | 22324 | 10,000 | 86,512 | 70,270 | 53,381 | 43,359 | 38,393 | 35,764 | 32,553 | 31,185 | 29,525 | | | | | | | |
| | | | 30,000 | 62,222 | 50,540 | 38,393 | 31,185 | 27,613 | 25,723 | 23,413 | 22,429 | 21,235 | | | | | | | |
| | | | 60,000 | 50,540 | 41,051 | 31,185 | 25,330 | 22,429 | 20,893 | 19,017 | 18,218 | 17,248 | | | | | | | |
| 4-7/16 4-1/2 | 130 | 22226 | 10,000 | 61,279 | 49,774 | 37,812 | 30,712 | 27,195 | 25,333 | 23,058 | 22,089 | 20,913 | 20,263 | | | | | | |
| | | | 30,000 | 44,074 | 35,799 | 27,195 | 22,089 | 19,559 | 18,220 | 16,584 | 15,887 | 15,041 | 14,573 | | | | | | |
| | | | 60,000 | 35,799 | 29,078 | 22,089 | 17,942 | 15,887 | 14,799 | 13,470 | 12,904 | 12,217 | 11,837 | | | | | | |
| | 130 | 22326 | 10,000 | 100,931 | 81,981 | 62,278 | 50,585 | 44,792 | 41,725 | 37,978 | 36,382 | | | | | | | | |
| | | | 30,000 | 72,592 | 58,963 | 44,792 | 36,382 | 32,215 | 30,010 | 27,315 | 26,167 | | | | | | | | |
| | | | 60,000 | 58,963 | 47,893 | 36,382 | 29,551 | 26,167 | 24,375 | 22,186 | 21,254 | | | | | | | | |
| 4-15/16 5 | 140 | 22228 | 10,000 | 70,652 | 57,387 | 43,594 | 35,410 | 31,354 | 29,208 | 26,585 | 25,467 | 24,112 | 23,362 | | | | | | |
| | | | 30,000 | 50,814 | 41,274 | 31,354 | 25,467 | 22,551 | 21,007 | 19,120 | 18,317 | 17,342 | 16,802 | | | | | | |
| | | | 60,000 | 41,274 | 33,525 | 25,467 | 20,686 | 18,317 | 17,063 | 15,530 | 14,878 | 14,086 | 13,648 | | | | | | |
| | 140 | 22328 | 10,000 | 117,152 | 95,157 | 72,287 | 58,715 | 51,990 | 48,431 | 44,082 | 42,229 | | | | | | | | |
| | | | 30,000 | 84,258 | 68,439 | 51,990 | 42,229 | 37,393 | 34,833 | 31,705 | 30,372 | | | | | | | | |
| | | | 60,000 | 68,439 | 55,590 | 42,229 | 34,301 | 30,372 | 28,293 | 25,752 | 24,670 | | | | | | | | |
| 5-3/16 | 150 | 22230 | 10,000 | 82,187 | 66,756 | 50,712 | 41,191 | 36,473 | 33,976 | 30,925 | 29,625 | 28,049 | 27,176 | | | | | | |
| | | | 30,000 | 59,111 | 48,013 | 36,473 | 29,625 | 26,232 | 24,436 | 22,242 | 21,307 | 20,173 | 19,545 | | | | | | |
| | | | 60,000 | 48,013 | 38,998 | 29,625 | 24,063 | 21,307 | 19,849 | 18,066 | 17,307 | 16,386 | 15,876 | | | | | | |
| | 150 | 22330 | 10,000 | 131,571 | 106,869 | 81,184 | 65,942 | 58,389 | 54,392 | 49,507 | | | | | | | | | |
| | | | 30,000 | 94,629 | 76,862 | 58,389 | 47,427 | 41,995 | 39,120 | 35,607 | | | | | | | | | |
| | | | 60,000 | 76,862 | 62,432 | 47,427 | 38,522 | 34,110 | 31,775 | 28,922 | | | | | | | | | |

Note: Dark Shaded Areas Require Circulating Oil
Light Shaded Areas Require Static Oil

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Bearing Reference Guide
E-Family Roller Bearings
Specialty Tapered Products
S-2000
UNISPHERE II
IMPERIAL
UNIFIED SAF

SELECTION



UNIFIED Pillow Block - Spherical Roller Bearings

Table 2: Selection Table for UNIFIED SAF Pillow Blocks

| Shaft Size | | Bearing Series | L ₁₀ Life Hours | Allowable Equivalent Radial Load Rating (Lbs.) at Various Revolutions Per Minute | | | | | | | | | | | | | | | | |
|---------------------------------------|-------------------|----------------|----------------------------|--|---------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|------|-------|--|
| Adapter Mount (Inches) | Direct Mount (mm) | | | 50 | 100 | 250 | 500 | 750 | 950 | 1,300 | 1,500 | 1,800 | 2,000 | 2,600 | 3,000 | 3,200 | 3,400 | 4500 | 5,600 | |
| 5- 7/16 5-1/2 | 160 | 22232 | 10,000 | 93,722 | 76,126 | 57,829 | 46,972 | 41,592 | 38,745 | 35,265 | 33,783 | 31,985 | | | | | | | | |
| | | | 30,000 | 67,407 | 54,751 | 41,592 | 33,783 | 29,914 | 27,866 | 25,364 | 24,298 | 23,004 | | | | | | | | |
| | | | 60,000 | 54,751 | 44,472 | 33,783 | 27,441 | 24,298 | 22,634 | 20,602 | 19,736 | 18,685 | | | | | | | | |
| | 160 | 22332 | 10,000 | 117,152 | 95,157 | 72,287 | 58,715 | 51,990 | 48,431 | 44,082 | | | | | | | | | | |
| | | | 30,000 | 84,258 | 68,439 | 51,990 | 42,229 | 37,393 | 34,833 | 31,705 | | | | | | | | | | |
| | | | 60,000 | 68,439 | 55,590 | 42,229 | 34,301 | 30,372 | 28,293 | 25,752 | | | | | | | | | | |
| 5- 15/16 6 | 170 | 22234 | 10,000 | 108,140 | 87,837 | 66,726 | 54,199 | 47,991 | 44,706 | 40,691 | 38,981 | | | | | | | | | |
| | | | 30,000 | 77,777 | 63,175 | 47,991 | 38,981 | 34,516 | 32,153 | 29,266 | 28,036 | | | | | | | | | |
| | | | 60,000 | 63,175 | 51,314 | 38,981 | 31,662 | 28,036 | 26,117 | 23,771 | 22,772 | | | | | | | | | |
| | 170 | 22334 | 10,000 | 129,768 | 105,405 | 80,071 | 65,038 | 57,589 | 53,647 | 48,829 | | | | | | | | | | |
| | | | 30,000 | 93,332 | 75,809 | 57,589 | 46,777 | 41,420 | 38,584 | 35,119 | | | | | | | | | | |
| | | | 60,000 | 75,809 | 61,576 | 46,777 | 37,995 | 33,643 | 31,340 | 28,525 | | | | | | | | | | |
| 6- 7/16 6-1/2 | 180 | 22236 | 10,000 | 109,943 | 89,301 | 67,838 | 55,102 | 48,791 | 45,451 | 41,369 | 39,631 | | | | | | | | | |
| | | | 30,000 | 79,073 | 64,227 | 48,791 | 39,631 | 35,092 | 32,689 | 29,753 | 28,503 | | | | | | | | | |
| | | | 60,000 | 64,227 | 52,169 | 39,631 | 32,190 | 28,503 | 26,552 | 24,167 | 23,152 | | | | | | | | | |
| 6- 15/16 7 | 190 | 22238 | 10,000 | 97,326 | 79,053 | 60,054 | 48,779 | 43,192 | 40,235 | 36,622 | | | | | | | | | | |
| | | | 30,000 | 69,999 | 56,857 | 43,192 | 35,083 | 31,065 | 28,938 | 26,339 | | | | | | | | | | |
| | | | 60,000 | 56,857 | 46,182 | 35,083 | 28,496 | 25,232 | 23,505 | 21,394 | | | | | | | | | | |
| | 190 | 22338 | 10,000 | 149,594 | 121,508 | 92,305 | 74,975 | 66,388 | 61,843 | | | | | | | | | | | |
| | | | 30,000 | 107,591 | 87,391 | 66,388 | 53,923 | 47,747 | 44,479 | | | | | | | | | | | |
| | | | 60,000 | 87,391 | 70,984 | 53,923 | 43,799 | 38,783 | 36,128 | | | | | | | | | | | |
| 7-3/16 | 200 | 22240 | 10,000 | 108,140 | 87,837 | 66,726 | 54,199 | 47,991 | 44,706 | | | | | | | | | | | |
| | | | 30,000 | 77,777 | 63,175 | 47,991 | 38,981 | 34,516 | 32,153 | | | | | | | | | | | |
| | | | 60,000 | 63,175 | 51,314 | 38,981 | 31,662 | 28,036 | 26,117 | | | | | | | | | | | |
| 7- 1/2 7- 15/16 8 | 220 | 22244 | 10,000 | 131,571 | 106,869 | 81,184 | 65,942 | 58,389 | 54,392 | | | | | | | | | | | |
| | | | 30,000 | 94,629 | 76,862 | 58,389 | 47,427 | 41,995 | 39,120 | | | | | | | | | | | |
| | | | 60,000 | 76,862 | 62,432 | 47,427 | 38,522 | 34,110 | 31,775 | | | | | | | | | | | |
| 8- 7/16 8- 1/2 8- 15/16, 9 | 23048 | 10,000 | 93,722 | 76,126 | 57,829 | 46,972 | 41,592 | 38,745 | | | | | | | | | | | | |
| | | 30,000 | 67,407 | 54,751 | 41,592 | 33,783 | 29,914 | 27,866 | | | | | | | | | | | | |
| | | 60,000 | 54,751 | 44,472 | 33,783 | 27,441 | 24,298 | 22,634 | | | | | | | | | | | | |
| 9- 7/16 9- 1/2 | 23052 | 10,000 | 122,559 | 99,549 | 75,623 | 61,425 | 54,390 | 50,666 | | | | | | | | | | | | |
| | | 30,000 | 88,147 | 71,598 | 54,390 | 44,178 | 39,118 | 36,440 | | | | | | | | | | | | |
| | | 60,000 | 71,598 | 58,155 | 44,178 | 35,884 | 31,774 | 29,599 | | | | | | | | | | | | |
| 9- 15/16 10 10- 7/16 10- 1/2 | 23056 | 10,000 | 124,361 | 101,013 | 76,735 | 62,328 | 55,190 | | | | | | | | | | | | | |
| | | 30,000 | 89,444 | 72,651 | 55,190 | 44,828 | 39,694 | | | | | | | | | | | | | |
| | | 60,000 | 72,651 | 59,011 | 44,828 | 36,412 | 32,241 | | | | | | | | | | | | | |

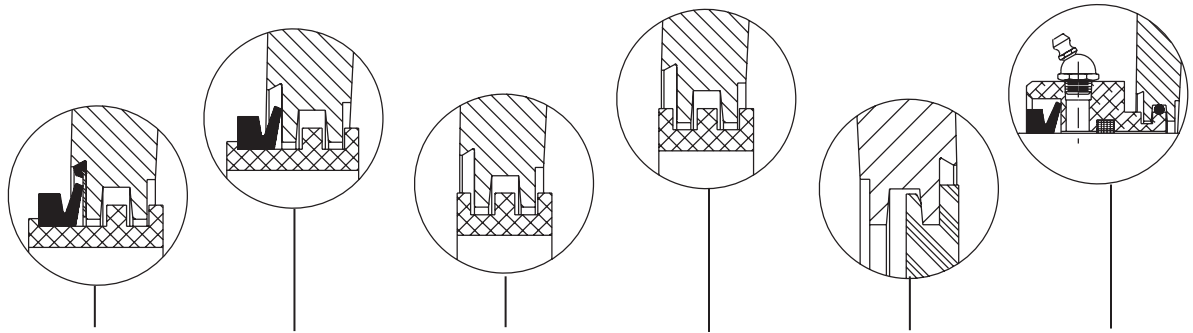
Note: Dark Shaded Areas Require Circulating Oil
Light Shaded Areas Require Static Oil

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SELECTION

UNIFIED SAF Bearing Seals



| ENVIRONMENT/ APPLICATION | DROP IN TRIPLE-TECT SEAL | TRIPLE-TECT LABYRINTH & FACE RUBBING SEAL | SPLIT LER LABYRINTH SEAL | LER LABYRINTH SEAL | END COVER | AUXILIARY TACONITE SEAL |
|---------------------------------|--------------------------------|---|--------------------------------|--------------------------|--------------------|-------------------------------|
| | USAF/USN SAF-XT | USAF/USN SAF-XT | USAF/USN SAF-XT | USAF/USN SAF-XT | USAF/USN SAF-XT | USAF/USN SAF-XT |
| Dusty/Dirty | + | + | ▲ | ▲ | ++ | + |
| Wet/Moisture Laden | + | + | O | O | ++ | + |
| High Pressure Power Washdown | ▲ | ▲ | O | O | ++ | + |
| ☆ High Temperature | O | O | O | + | ▲ | O |
| ★ High Speed | + | + | + | ++ | NS | O |
| Chemical | ▲ | ▲ | O | O | ▲ | ▲ |
| Misalignment | + | + | + | + | NS | ▲ |

++ Very Good

+ Good

▲ Questionable (Depends On Condition: Consult DODGE Engineering)

O Not Recommended

NS Not Seal Limited

Notes:

☆ High Temperature is above 200°F

★ Consideration Of High Speed Can Be A Function Of Type And Bearing Design

DROP-IN TRIPLE TECT SEAL

The patented Drop-In TRIPLE-TECT Seal has all the sealing features of the standard TRIPLE-TECT except it is pre-assembled at the factory for quick and easy field assembly. The Drop-In TRIPLE-TECT Seal assembly consists of a seal ring, v-ring seal and stainless metal seal with rubber bead.

While lowering the shaft bearing and seal assembly into the housing base, the stainless metal seal with rubber bead fits in the outboard “v-shaped” housing groove.

The stainless metal seal gives superior sealing surface to the v-ring and positions the v-ring for easy cap to base housing assembly.



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SELECTION

UNIFIED SAF Bearing Lubrication

SELECTING LUBRICATION

DODGE UNIFIED pillow blocks are lubricated by the user at installation. DODGE UNIFIED bearings are specially designed to handle either grease or oil lubrication.

GREASE LUBRICATION:

DODGE UNIFIED bearings are designed to meet the rigorous demands of dirty, dusty or wet environments. In order to properly protect bearings during installation, pack the bearing insert 100% full of grease immediately after properly mounting the bearing on the shaft. If the RPM of the application falls between 20% and 80% of maximum RPM (Table 1, page B15-15), pack the lower half of the housing one-third to one-half full. If the RPM of the application is less than 20% of maximum RPM, pack bearing housing cavity 100% full. If the RPM exceeds 80% of maximum RPM, do not add grease in the lower half of the housing or in the cap.

At each re-greasing cycle, for applications up to 80% of maximum RPM, slowly add grease until fresh grease is seen purging at the seals. Re-greasing should be done while running. Remote re-greasing lines should be added to avoid endangering personnel. If the RPM is greater than 80% of maximum RPM, add 4 strokes of a handgun at each re-greasing cycle for bores

up to 2. For bores greater than 2 up to 5, add 8 strokes of a handgun at each re-greasing cycle. For bores greater than 5 up to 10-1/2, add 16 strokes of a handgun at each re-greasing cycle. For bores greater than 10-1/2, and up to 12-1/2 add 32 strokes of a handgun at each re-greasing cycle. For bores greater than 12-1/2 up to 15-3/4 add 64 strokes of a handgun at each re-greasing cycle. For units running above 80% of maximum RPM, running temperature should be monitored. If a drastic change in running temperature is noted, DODGE recommends removing the used grease completely and recharging with fresh grease per the above instructions. For warning before catastrophic failure, see DODGE Smart Bearing Package on page B15-54

Select a grease with a viscosity at an operating temperature which will provide full film lubrication (see Table 3 below). Use a 50°F to 100°F increase in bearing temperature above ambient, depending on RPM and load. Use Table 4, page B15-21 as a general guide for re-greasing the bearings. A small amount of grease at frequent intervals is preferable to a large amount of grease at infrequent intervals. For special applications involving high speeds, high loads, or very low speeds, consult DODGE Application Engineering (864-284-5700) during the hours of 8:00 a.m. and 5:00 p.m. Eastern Time.

Table 3: Viscosity Of Oil, Or Oil In Grease

| DN Δ | Viscosity for Loads Up To 18% of Dyn. Cap.* (SUS @ Oper. Temp.) | CST | DN Δ | Viscosity for Loads Up To 18% of Dyn. Cap.* (SUS. @ Oper. Temp.) | CST |
|------|---|-----|------|--|-----|
| 100 | 3500 | 700 | 1400 | 625 | 140 |
| 200 | 3150 | 680 | 1600 | 525 | 120 |
| 300 | 2750 | 590 | 1800 | 450 | 95 |
| 400 | 2375 | 500 | 2000 | 400 | 85 |
| 500 | 2000 | 460 | 3000 | 300 | 63 |
| 600 | 1750 | 360 | 4000 | 200 | 43 |
| 700 | 1500 | 320 | 5000 | 150 | 32 |
| 800 | 1300 | 280 | 6000 | 130 | 28 |
| 900 | 1075 | 220 | 7000 | 110 | 22 |
| 1000 | 900 | 140 | 8000 | 100 | 20 |

Δ DN = Bore Diameter (ins) x RPM

* For loads above 18% of dynamic capacity, an EP grease with viscosity selected from above is recommended



SELECTION

UNIFIED SAF Bearing Lubrication

OIL LUBRICATION

DODGE UNIFIED bearings are designed to accept oil lubrication. Oil lubrication is normally required at high speeds as well as high loads, or whenever heat from an external source is flowing into the bearing. Oil lubrication may be static or circulating. With static oil, fill the bearing cavity with oil up to the center line of the lowest roller. This height is identified as W and is shown on pages B15-22, B15-23, B15-37, B15-39, B15-63, B15-97, B15-105, and B15-117. Mount an oil sight gauge in the drilled and tapped hole on the side of the pillow block for visual indication of this level. The oil level may drop or rise during

operation depending on the direction of rotation of the bearing. Both the static oil level and the running oil level should be marked on the oil sight gauge and properly identified. Oil should be replaced at least semiannually. For circulating oil, the oil flow rate and size of factory drilled and tapped return drains are shown in Table 5, up to 8 bore. The viscosity of the oil should be selected based on the guidelines shown on Table 3, page B15-20. If the RPM of the application is within the specifications of this catalog, and if the temperature of the bearings is 80°F to 100°F or greater above ambient, a lighter viscosity oil may be required.

Table 4: Re-Greasing Intervals, Months*, Based On 12 Hours Per Day, 150-F Max.

| Shaft Size | | RPM | | | | | | | | |
|--------------------|------------------|-----|-----|-----|------|------|------|------|------|------|
| Adapter Mtg. (in.) | Direct Mtg. (mm) | 250 | 500 | 750 | 1000 | 1250 | 1500 | 2000 | 2500 | 3000 |
| 1-7/16 - 1-15/16 | 40-55 | 8 | 6 | 4 | 3 | 2 | 1 | .50 | .50 | .25 |
| 2-3/16 | 60-65 | 7 | 5 | 3 | 2 | 1 | 1 | .50 | .25 | .25 |
| 2-7/16 - 3 | 70-85 | 6 | 4 | 3 | 2 | 1 | .50 | .25 | .25 | |
| 3-3/16 - 3-1/2 | 90-100 | 5 | 3 | 2 | 1 | .50 | .50 | .25 | | |
| 3-15/16 - 4-1/2 | 110-130 | 4 | 3 | 2 | 1 | .50 | .25 | | | |
| 4-15/16 - 5-1/2 | 140-160 | 3 | 2 | 1 | .50 | .25 | | | | |
| 5-15/16 - 7-3/16 | 170-200 | 2 | 1 | 1 | .50 | | | | | |
| 7-1/2 - 9-1/2 | 220 | 1 | 1 | .50 | | | | | | |
| 9-15/16 - 10-1/2 | - | 1 | .50 | | | | | | | |
| 10-15/16 - 12-1/2 | - | 1 | .50 | | | | | | | |
| 12-15/16 - 15-3/4 | - | .50 | .25 | | | | | | | |

* For continuous operations, 24 hours per day, decrease greasing interval by 50%

| | | | |
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UNIFIED SAF Circulating Oil

Table 5: Circulating Oil Flow Rates, Drain Hole Sizes, Thermocouple Location And Vibration Sensor Location

| Shaft Size | | | | USAF Housing Designation | | | | Circulating Oil Flow* | | Static Oil Level Inches W** | | Drain Hole, Dry Sump*** | | | Thermocouple Hole | | Vibration ▲ Sensor Hole | |
|------------------------|--------------------|-------------------------|--------------------|--------------------------|-----|-----|-----|--|---|-----------------------------|------------------|-------------------------|----------|--------|-------------------|-------------------|-------------------------|-------------------|
| 500 Adptr Mntg. Inches | 200 Drct. Mntg. mm | 600 Adptr. Mntg. Inches | 300 Drct. Mntg. mm | | | | | Amount Sufficient for Normal Lubrication | Maximum Amount for Heat Dissipation Due to External Heat Source | 500 & 200 Series | 600 & 300 Series | Location Inches | | | Location Inches | Wall Thck. Inches | Location Inches | Wall Thck. Inches |
| | | | | | | | | | | | | Gal./Min | Gal./Min | X | | | | |
| 1-7/16 | - | - | - | 509 | - | - | - | .0025 | .070 | 0.92 | - | 1.09 | 0.63 | 1-8/27 | 0.25 | 0.38 | 1.56 | 1.31 |
| 1-11/16 | - | - | 40 | 510 | - | - | 308 | .0030 | .090 | 1.09 | 1.19 | 1.35 | 1.18 | 1-8/27 | 0.27 | 0.30 | 1.14 | 0.97 |
| 1-15/16 | - | 1-7/16 | 45 | 511 | - | 609 | 309 | .0040 | .100 | 1.16 | 1.28 | 1.31 | 0.83 | 1-8/27 | 0.28 | 0.53 | 1.89 | 1.13 |
| - | - | 1-11/16 | 50 | - | - | 610 | 310 | .0045 | .120 | - | 1.38 | | | | | | | |
| 2-3/16 | - | 1-15/16 | 55 | 513 | - | 611 | 311 | .0050 | .150 | 1.11 | 1.44 | 1.66 | 0.78 | 1-8/27 | 0.34 | 0.58 | 2.02 | 1.13 |
| 2-7/16 | 75 | - | 60 | 515 | 215 | - | 312 | .0060 | .175 | 1.16 | 1.31 | 1.78 | 0.88 | 1/4-18 | 0.36 | 0.63 | 2.25 | 1.19 |
| 2-11/16 | 80 | 2-3/16 | 65 | 516 | 216 | 613 | 313 | .0065 | .195 | 1.25 | 1.41 | 1.97 | 0.95 | 1/4-18 | 0.31 | 0.50 | 2.28 | 1.52 |
| 2-15/16 | 85 | - | 70 | 517 | 217 | - | 314 | .0075 | .200 | 1.38 | 1.47 | 2.13 | 1.06 | 3/8-18 | 0.41 | 0.67 | 2.50 | 1.44 |
| 3-3/16 | 90 | 2-7/16 | 75 | 518 | 218 | 615 | 315 | .0080 | .250 | 1.47 | 1.59 | 2.25 | 1.13 | 3/8-18 | 0.44 | 0.61 | 2.72 | 1.45 |
| - | - | 2-11/16 | 80 | - | - | 616 | 316 | .0100 | .260 | 1.69 | 1.69 | 2.28 | 1.17 | 3/8-18 | 0.53 | 0.66 | 2.73 | 1.47 |
| 3-7/16 | 100 | 2-15/16 | 85 | 520 | 220 | 617 | 317 | .0110 | .350 | 1.64 | 1.75 | 2.63 | 1.25 | 3/8-18 | 0.53 | 0.70 | 3.08 | 1.67 |

* Based on oil temperature of 130°F - 150°F & oil level at center line of lowest roller. For maximum oil flow values, both drains should be used.

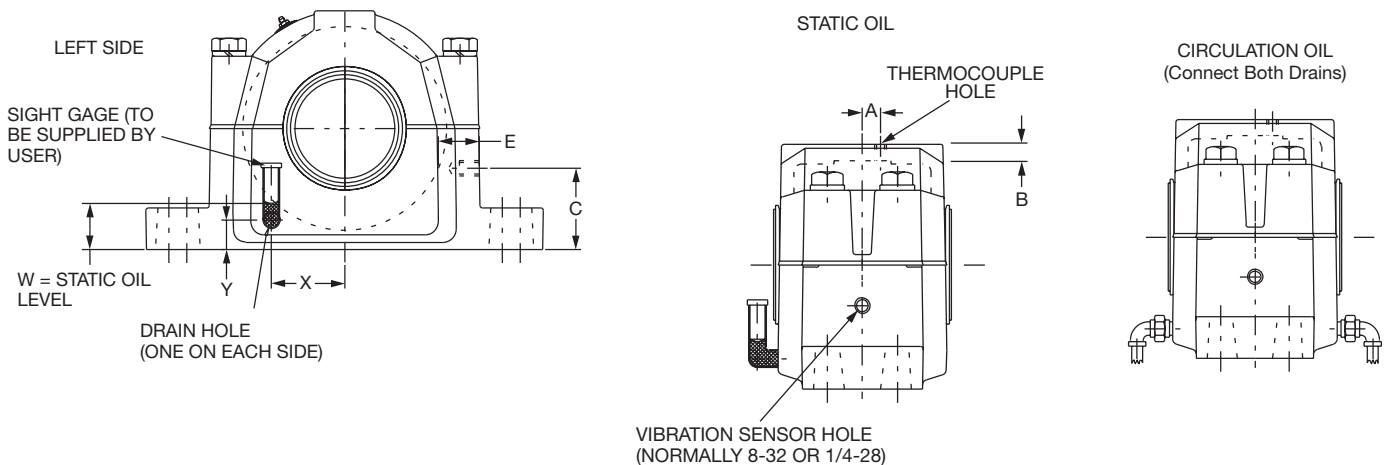
Mount block with drain holes on right side of block center line when rotation is CCW, unless cast closed end.

Mount block with drain holes on left side of block center line when rotation is CW.

** Static oil level is measured from bottom of block base to meniscus on oil sight gauge. (Non-rotating mode)

*** For wet sump, consult DODGE Application Engineering.

▲ For vibration sensors supplied by the user.



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UNIFIED SAF Circulating Oil

Table 5 (continued): Circulating Oil Flow Rates, Drain Hole Sizes, Thermocouple Location And Vibration Sensor Location

| Shaft Size | | | | USAF Housing Designation | | | | Circulating Oil Flow* | | Static Oil Level Inches W** | | Drain Hole, Dry Sump *** | | | Thermocouple Hole | | Vibration ▲ Sensor Hole | |
|------------------------|--------------------|-------------------------|--------------------|--------------------------|--------|-------|------|---|--|-----------------------------|------------------|--------------------------|------|------|-------------------|-------------------|-------------------------|-------------------|
| 500 Adptr Mntg. Inches | 200 Drct. Mntg. mm | 600 Adptr. Mntg. Inches | 300 Drct. Mntg. mm | | | | | Amount Suf- ficient for Normal Lubrication Gal./Min | Maximum Amount for Heat Dissipation Due to External Heat Source Gal./Min | 500 & 200 Series | 600 & 300 Series | Location Inches | | Size | Location Inches | Wall Thck. Inches | Location Inches | Wall Thck. Inches |
| | | | | | | | | | | | | X | Y | | | | | |
| 3-15/16 4 | 110 | - | - | 522 222 - - | 0.015 | 0.42 | 1.80 | | 2.88 | 1.34 | 3/8-18 | 0.53 | 0.53 | 3.36 | 1.72 | | | |
| 4-3/16 | 120 | 3-7/16 3-1/2 | 100 | 524 224 620 320 | 0.0175 | 0.48 | 1.84 | 2.03 | 2.19 | 1.38 | 1/2-14 | 0.69 | 0.77 | 3.38 | 1.86 | | | |
| 4-7/16 4-1/2 | 130 | 3-15/16 4 | 110 | 526 226 622 322 | 0.019 | 0.55 | 2.34 | 2.41 | 2.31 | 1.63 | 1/2-14 | 0.75 | 1.00 | 4.03 | 2.16 | | | |
| 4-15/16 5 | 140 | - | - | 528 228 - - | 0.023 | 0.6 | 2.03 | - | 3.68 | 1.47 | 1/2-14 | 0.75 | 0.89 | 4.03 | 2.16 | | | |
| 5-3/16 | 150 | 4-3/16 | 120 | 530 230 624 324 | 0.025 | 0.75 | 2.03 | 2.38 | 3.59 | 1.36 | 1/2-14 | 0.81 | 0.88 | 4.34 | 2.25 | | | |
| 5-7/16 5-1/2 | 160 | 4-7/16 4-1/2 | 130 | 532 232 626 326 | 0.03 | 0.8 | 2.09 | 2.44 | 4.03 | 1.33 | 1/2-14 | 0.91 | 0.92 | 4.52 | 2.22 | | | |
| 5-15/16 6 | 170 | 4-15/16 5 | 140 | 534 234 628 328 | 0.035 | 0.85 | 2.19 | 2.56 | 4.16 | 1.33 | 1/2-14 | 1.00 | 1.39 | 4.97 | 2.70 | | | |
| 6-7/16 6-1/2 | 180 | 5-3/16 | 150 | 536 236 630 330 | 0.037 | 0.875 | 2.42 | 2.63 | 4.22 | 1.63 | 1/2-14 | 1.00 | 1.33 | 5.25 | 2.75 | | | |
| 6-15/16 7 | 190 | 5-7/16 5-1/2 | 160 | 538 238 632 332 | 0.039 | 1 | 2.53 | 2.69 | 4.75 | 1.61 | 1/2-14 | 1.13 | 1.25 | 5.50 | 2.75 | | | |
| 7-3/16 | 200 | 5-15/16 6 | 170 | 540 240 634 334 | 0.042 | 1 | 2.47 | 2.75 | 4.91 | 1.53 | 1/2-14 | 1.13 | 1.25 | 5.81 | 2.84 | | | |
| 7-1/2 | 220 | 6-15/16 7 | 190 | 544S 244 638 338 | 0.05 | 1.4 | 3.25 | 2.38 | 5.44 | 2.03 | 1/2-14 | 1.19 | 1.50 | 6.63 | 2.36 | | | |
| 7-15/16 8 | | - | | 544 | | | | | | | | | | | | | | |

* Based on oil temperature of 130°F - 150°F & oil level at center line of lowest roller. For maximum oil flow values, both drains should be used.

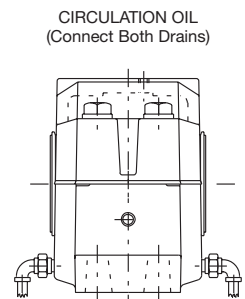
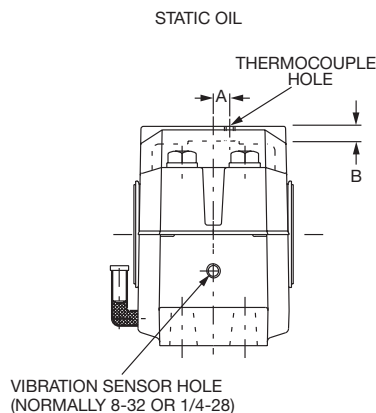
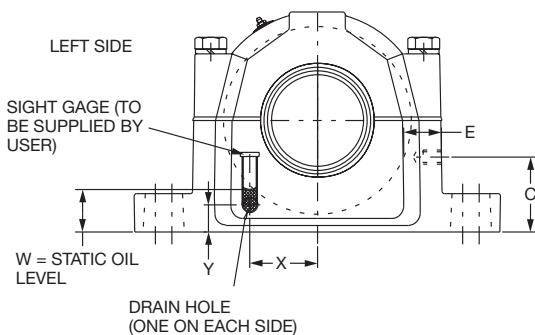
Mount block with drain holes on right side of block center line when rotation is CCW, unless cast closed end.

Mount block with drain holes on left side of block center line when rotation is CW.

** Static oil level is measured from bottom of block base to meniscus on oil sight gauge. (Non-rotating mode)

*** For wet sump, consult DODGE Application Engineering.

▲ For vibration sensors supplied by the user.



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UNIFIED SAF Housing Ratings

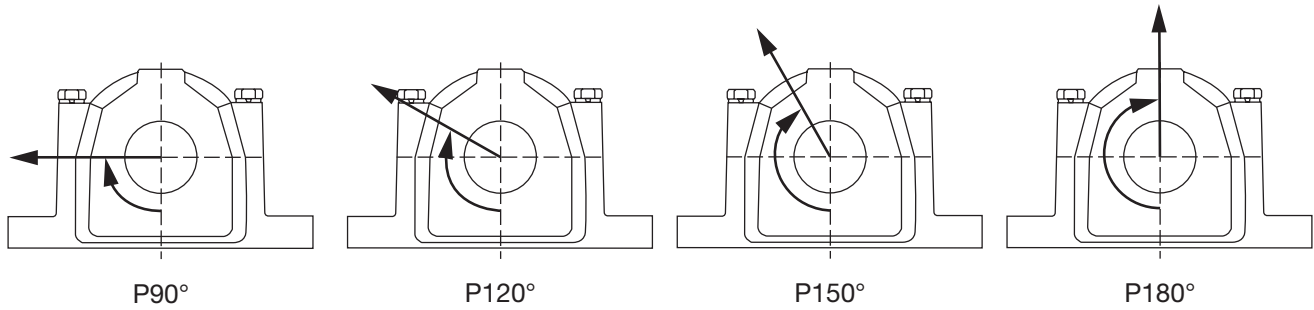


Table 6: USAF Housing Ratings And Cap Bolt Ratings*

| Pillow Block Designation | | | | Recommended Housing Cap Loads ♦ | | | | Recommended Cap Bolt Loads | | | Cap Bolt Information ♦ | | |
|--------------------------|------|------|------|---------------------------------|----------|----------|----------|----------------------------|----------|----------|------------------------|----------------|-----------|
| USAF | USAF | USAF | USAF | P90 lb. | P120 lb. | P150 lb. | P180 lb. | P120 lb. | P150 lb. | P180 lb. | Cap Bolt (No.) Size | Torque (Ft-Lb) | SAE Grade |
| 509 | | | | 6600 | 4200 | 3600 | 4600 | 19800 | 11300 | 9900 | (4) 3/8-16 | 24-30 | 5 |
| 510 | | | 308 | 7800 | 5000 | 4400 | 5400 | 19800 | 11300 | 9900 | (4) 3/8-16 | 24-30 | 5 |
| 511 | | 610 | 310 | 11400 | 7165 | 6575 | 7875 | 27120 | 15600 | 13560 | (4) 7/16-14 | 40-50 | 5 |
| 513 | | 611 | 311 | 13360 | 8260 | 7680 | 9200 | 27120 | 15600 | 13560 | (4) 7/16-14 | 40-50 | 5 |
| 515 | 215 | | 312 | 13360 | 8260 | 7680 | 9220 | 36200 | 20800 | 18100 | (4) 1/2-13 | 60-75 | 5 |
| 516 | 216 | 613 | 313 | 12800 | 8000 | 7400 | 8900 | 57600 | 33000 | 28800 | (4) 5/8-11 | 120-150 | 5 |
| 517 | 217 | | 314 | 13600 | 9200 | 8400 | 10200 | 57600 | 33000 | 28800 | (4) 5/8-11 | 120-150 | 5 |
| 518 | 218 | 615 | 315 | 17500 | 11350 | 10200 | 12100 | 57600 | 33000 | 28800 | (4) 5/8-11 | 120-150 | 5 |
| | | 616 | 316 | 17600 | 12000 | 10500 | 12200 | 57600 | 33000 | 28800 | (4) 5/8-11 | 120-150 | 5 |
| 520 | 220 | 617 | 317 | 22500 | 14200 | 12660 | 14700 | 85200 | 48900 | 42600 | (4) 3/4-10 | 208-260 | 5 |
| 522 | 222 | | | 28100 | 17500 | 15500 | 17800 | 85200 | 48900 | 42600 | (4) 3/4-10 | 208-260 | 5 |
| 524 | 224 | 620 | 320 | 24500 | 15400 | 13700 | 15800 | 85200 | 48900 | 42600 | (4) 3/4-10 | 208-260 | 5 |
| 526 | 226 | 622 | 322 | 28970 | 18000 | 15900 | 18300 | 11800 | 67800 | 59000 | (4) 7/8-9 | 320-430 | 5 |
| 528 | 228 | | | 35800 | 22100 | 19400 | 22300 | 154400 | 88700 | 77200 | (4) 1-8 | 512-640 | 5 |
| 530 | 230 | 624 | 324 | 40000 | 24700 | 21600 | 25000 | 154400 | 88700 | 77200 | (4) 1-8 | 512-640 | 5 |
| 532 | 232 | 626 | 326 | 40200 | 24800 | 21700 | 25100 | 154400 | 88700 | 77200 | (4) 1-8 | 512-640 | 5 |
| 534 | 234 | 628 | 328 | 52000 | 32200 | 28200 | 33000 | 154400 | 88700 | 77200 | (4) 1-8 | 512-640 | 5 |
| 536 | 236 | 630 | 330 | 78200 | 49200 | 43300 | 52800 | 154400 | 88700 | 77200 | (4) 1-8 | 512-640 | 5 |
| 538 | 238 | 632 | 332 | 80600 | 50800 | 44800 | 54800 | 215200 | 123000 | 107600 | (4) 1-1/4-7 | 896-1120 | 5 |
| 540 | 240 | 634 | 334 | 83800 | 53000 | 46700 | 57500 | 215200 | 123000 | 107600 | (4) 1-1/4-7 | 896-1120 | 5 |
| 544 | 244 | 638 | 338 | 101800 | 65600 | 58200 | 73800 | 312000 | 179000 | 156000 | (4) 1-1/2-6 | 1560-1950 | 5 |
| 048 | | | | 83800 | 53000 | 46700 | 54800 | 215200 | 123000 | 107600 | (4) 1-1/4-7 | 896-1120 | 5 |
| 052 | | | | 101800 | 65600 | 58200 | 73800 | 312000 | 179000 | 156000 | (4) 1-1/2-6 | 1560-1950 | 5 |
| 056 | | | | 110200 | 71800 | 64000 | 82100 | 312000 | 179000 | 156000 | (4) 1-1/2-6 | 1560-1950 | 5 |

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

- 1) The pillow block base bolts must have high strength (Grade 8) bolts and be properly tightened to mounting structure.
- 2) Stop bars (shear strips) must be used against the pillow 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.

♦ For USDAF housing and Cap Bolt Ratings consult DODGE Application Engineering (864-284-5700).

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SELECTION



UNIFIED SAF Expansion Capabilities

Table 7: UNIFIED 500, 200, 600 And 300 Series And Split-Spher Pillow Blocks Total Expansion Capability

| Shaft Size | | | | USAF Housing Designation | | | | Total Expansion, Inches |
|-------------------------|--------------------|-------------------------|--------------------|--------------------------|-----|------|------|-------------------------|
| 500 Adptr. Mntg. Inches | 200 Drct. Mntg. mm | 600 Adptr. Mntg. Inches | 300 Drct. Mntg. mm | | | | | |
| 1-7/16 | - | - | - | 509 | - | - | - | 1/4 |
| 1-11/16 | - | - | 40 | 510 | - | - | 308 | 1/4 |
| 1-15/16 | - | 1-7/16 | 45 | 511 | - | 609 | 309 | 1/4 |
| - | - | 1-11/16 | 50 | - | - | 610 | 310 | 7/16 |
| 2-3/16 | - | 1-15/16 | 55 | 513 | - | 611* | 311* | 5/16 |
| 2-7/16 | 75 | - | 60 | 515 | 215 | - | 312 | 1/4 |
| 2-1/2 | | | | | | | | |
| 2-11/16 | 80 | 2-7/16 | 65 | 516 | 216 | 613 | 313 | 3/8 |
| 2-3/4 | | | | | | | | |
| 2-15/16 | 85 | - | 70 | 517 | 217 | - | 314 | 3/8 |
| 3 | | | | | | | | |
| 3-3/16 | 90 | 2-7/16 | 75 | 518 | 218 | 615 | 315 | 3/8 |
| - | - | 2-1/2 | | | | | | |
| - | - | 2-11/16 | 80 | - | - | 616 | 316 | 3/8 |
| - | - | 2-3/4 | | | | | | |
| 3-7/16 | 100 | 2-15/16 | 85 | 520 | 220 | 617 | 317 | 3/8 |
| 3-1/2 | | 3 | | | | | | |
| 3-15/16, 4 | 110 | | | 522 | 222 | | | 3/8 |
| 4-3/16 | 120 | 3-7/16 | 100 | 524 | 224 | 620 | 320 | 3/8 |
| | | 3-1/2 | | | | | | |
| 4-7/16, 4-1/2 | 130 | 3-15/16, 4 | 110 | 526 | 226 | 622 | 322 | 3/8 |
| 4-15/16 | 140 | | | 528 | 228 | | | 3/8 |
| 5 | | | | | | | | |
| 5-3/16 | 150 | 4-3/16 | 120 | 530 | 230 | 624 | 324 | 3/8 |
| 5-7/16 | 160 | 4-7/16, 4-1/2 | 130 | 532 | 232 | 626 | 326 | 3/8 |
| 5-1/2 | | | | | | | | |
| 5-15/16 | 170 | 4-15/16, 5 | 140 | 534 | 234 | 628 | 328 | 3/8 |
| 6 | | | | | | | | |
| 6-7/16 | 180 | 5-3/16 | 150 | 536 | 236 | 630 | 330 | 3/8 |
| 6-1/2 | | | | | | | | |
| 6-15/16 | 190 | 5-7/16 | 160 | 538 | 238 | 632 | 332 | 3/8 |
| 7 | | 5-1/2 | | | | | | |
| 7-3/16 | 200 | 5-15/16, 6 | 170 | 540 | 240 | 634 | 334 | 3/8 |
| 7-1/2, | 220 | 6-15/16 | | 544S | | | | |
| | | 7 | 190 | | 244 | 638 | 338 | 3/8 |
| 7-15/16 | | - | | 544 | | | | |
| 8 | | | | | | | | |
| 8-7/16, 8-1/2 | - | - | - | 048 | - | - | - | 5/8 |
| 8-15/16, 9 | | | | | | | | |
| 9-7/16, 9-1/2 | - | - | - | 052 | - | - | - | 9/16 |
| 9-15/16, 10 | - | - | - | 056 | - | - | - | 1-5/8 |
| 10-7/16 | - | - | - | 056L | - | - | - | 1-5/8 |
| 10-1/2 | | | | | | | | |

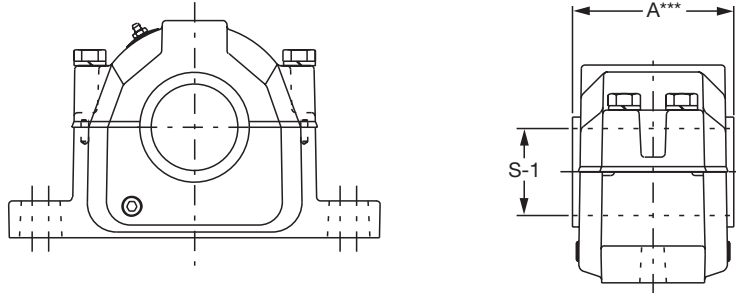
* 1/4 Total Expansion

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SELECTION/DIMENSIONS



USAF 500 Adapter Mount Pillow Block with TRIPLE-TECT Seal Assembly 500 SERIES OPEN END HOUSING



| Shaft Dia S-1 | Complete Pillow Block Part No. | Housing W/ Stab Ring Part No. | Bearing Part No. | Dynamic Capacity (C), lbs. | Max RPM (Grease) |
|------------------|--------------------------------|-------------------------------|-----------------------|----------------------------|------------------|
| 1-7/16 | P2B509-USAF-107TT 043015 | H2S-509-USAF 043995 | BRG22209KC3 422134 | 24,500 | 5,600 |
| 1-11/16 | P2B510-USAF-111TT 043048 | H2S-510-USAF 043996 | BRG22210KC3 422137 | 26,000 | 5,300 |
| 1-15/16 | P2B511-USAF-115TT 043248 | H2S-511-USAF 043997 | BRG22211KC3 422123 | 31,500 | 4,500 |
| 2-3/16 | P2B513-USAF-203TT 043249 | H2S-513-USAF 043998 | BRG22213KC3 422124 | 45,500 | 3,800 |
| | P4B513-USAF-203TT 039579 | H4S-513-USAF 039669 | BRG22213KC3 422124 | | |
| 2-7/16 | P2B515-USAF-207TT 041860 | H2S-515-USAF 044000 | BRG22215KC3 422001 | 48,000 | 3,400 |
| | P4B515-USAF-207TT 041861 | H4S-515-USAF 044003 | BRG22215KC3 422001 | | |
| 2-1/2 | P2B515-USAF-208TT 041862 | H2S-515-USAF 044000 | BRG22215KC3 422001 | 48,000 | 3,400 |
| | P4B515-USAF-208TT 041863 | H4S-515-USAF 044003 | BRG22215KC3 422001 | | |
| 2-11/16 | P2B516-USAF-211TT 042406 | H2S-516-USAF 044198 | BRG22216KC3 422003 | 56,000 | 3,200 |
| | P4B516-USAF-211TT 044015 | H4S-516-USAF 044007 | BRG22216KC3 422003 | | |
| 2-3/4 | P2B516-USAF-212TT 042409 | H2S-516-USAF 044198 | BRG22216KC3 422003 | 56,000 | 3,200 |
| | P4B516-USAF-212TT 042423 | H4S-516-USAF 044007 | BRG22216KC3 422003 | | |
| 2-15/16 | P2B517-USAF-215TT 041864 | H2S-517-USAF 044010 | BRG22217KC3 422005 | 68,000 | 3,000 |
| | P4B517-USAF-215TT 041865 | H4S-517-USAF 044013 | BRG22217KC3 422005 | | |
| 3 | P2B517-USAF-300TT 041866 | H2S-517-USAF 044010 | BRG22217KC3 422005 | 68,000 | 3,000 |
| | P4B517-USAF-300TT 041867 | H4S-517-USAF 044013 | BRG22217KC3 422005 | | |
| 3-3/16 | P2B518-USAF-303TT 042422 | H2S-518-USAF 044199 | BRG22218KC3 422007 | 78,000 | 2,600 |
| | P4B518-USAF-303TT 044115 | H4S-518-USAF 044114 | BRG22218KC3 422007 | | |

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SELECTION/DIMENSIONS

USAF 500 Adapter Mount Pillow Block with TRIPLE-TECT Seal Assembly 500 SERIES OPEN END HOUSING

| Shaft Dia S-1 | SNW Part No. | TRIPLE-TECT Part No. | TTDN Part No. | #LER Part No. | Aux Part No. | End Cover Part No. |
|------------------|--------------|----------------------|---------------|---------------|--------------|--------------------|
| 1-7/16 | H309-SNW-107 | 08TT107 | --- | 08LER107 | | EC08 |
| | 046350 | 043578 | | 042193 | | |
| 1-11/16 | H310-SNW-111 | 10TT111 | --- | 10LER111 | | EC10 |
| | 046351 | 043579 | | *042199 | | |
| 1-15/16 | H311-SNW-115 | 12TT115 | 12TTDN115 | 12LER115 | 12AUX115 | EC12 |
| | 046352 | 043540 | 039852 | 042512 | 041687 | 040702 |
| 2-3/16 | H313-SNW-203 | 14TT203 | 14TTDN203 | 14LER203 | 14AUX203 | EC14 |
| | 046353 | 043541 | 039853 | 042513 | 041688 | 040703 |
| | H313-SNW-203 | 14TT203 | 14TTDN203 | 14LER203 | 14AUX203 | EC14 |
| | 046353 | 043541 | 039853 | 042513 | 041688 | 040703 |
| 2-7/16 | H315-SNW-207 | 20TT207 | 20TTDN207 | 20LER207 | 20AUX207 | EC20 |
| | 046354 | 043542 | 039538 | 042514 | 042380 | 040704 |
| | H315-SNW-207 | 20TT207 | 20TTDN207 | 20LER207 | 20AUX207 | EC20 |
| | 046354 | 043542 | 039538 | 042514 | 042380 | 040704 |
| 2-1/2 | H315-SNW-208 | 20TT208 | 20TTDN208 | 20LER208 | 20AUX208 | EC20 |
| | 046355 | 043543 | 039854 | 042515 | 040890 | 040704 |
| | H315-SNW-208 | 20TT208 | 20TTDN208 | 20LER208 | 20AUX208 | EC20 |
| | 046355 | 043543 | 039854 | 042515 | 040890 | 040704 |
| 2-11/16 | H316-SNW-211 | 24TT211 | 24TTDN211 | 24LER211 | 24AUX211 | EC24 |
| | 046356 | 043544 | 039855 | 042516 | 042381 | 040705 |
| | H316-SNW-211 | 24TT211 | 24TTDN211 | 24LER211 | 24AUX211 | EC24 |
| | 046356 | 043544 | 039855 | 042516 | 042381 | 040705 |
| 2-3/4 | H316-SNW-212 | 24TT212 | 24TTDN212 | 24LER212 | 24AUX212 | EC24 |
| | 046357 | 043545 | 039856 | 042517 | 040891 | 040705 |
| | H316-SNW-212 | 24TT212 | 24TTDN212 | 24LER212 | 24AUX212 | EC24 |
| | 046357 | 043545 | 039856 | 042517 | 040891 | 040705 |
| 2-15/16 | H317-SNW-215 | 28TT215 | 28TTDN215 | 28LER215 | 28AUX215 | EC28 |
| | 046358 | 043546 | 039530 | 042518 | 042382 | 040706 |
| | H317-SNW-215 | 28TT215 | 28TTDN215 | 28LER215 | 28AUX215 | EC28 |
| | 046358 | 043546 | 039530 | 042518 | 042382 | 040706 |
| 3 | H317-SNW-300 | 28TT300 | 28TTDN300 | 28LER300 | 28AUX300 | EC28 |
| | 046359 | 043547 | 039857 | 042519 | 040918 | 040706 |
| | H317-SNW-300 | 28TT300 | 28TTDN300 | 28LER300 | 28AUX300 | EC28 |
| | 046359 | 043547 | 039857 | 042519 | 040918 | 040706 |
| 3-3/16 | H318-SNW-303 | 34TT303 | 34TTDN303 | 34LER303 | 34AUX303 | EC34 |
| | 046360 | 043548 | 039858 | 042520 | 040892 | 040707 |
| | H318-SNW-303 | 34TT303 | 34TTDN303 | 34LER303 | 34AUX303 | EC34 |
| | 046360 | 043548 | 039858 | 042520 | 040892 | 040707 |

NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.

If an * appears by the part number, the LER seal is manufactured from Steel.

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SELECTION/DIMENSIONS



USAF 500 Adapter Mount Pillow Block with TRIPLE-TECT Seal Assembly 500 SERIES OPEN END HOUSING

| Shaft Dia S-1 | Complete Pillow Block Part No. | Housing W/ Stab Ring Part No. | Bearing Part No. | Dynamic Capacity (C), lbs. | Max RPM (Grease) |
|------------------|--------------------------------|-------------------------------|-----------------------|----------------------------|------------------|
| 3-7/16 | P2B520-USAF-307TT 041868 | H2S-520-USAF 044020 | BRG22220KC3 422009 | 96,500 | 2,200 |
| | P4B520-USAF-307TT 041869 | H4S-520-USAF 044023 | BRG22220KC3 422009 | | |
| 3-1/2 | P2B520-USAF-308TT 041870 | H2S-520-USAF 044020 | BRG22220KC3 422009 | 96,500 | 2,200 |
| | P4B520-USAF-308TT 041871 | H4S-520-USAF 044023 | BRG22220KC3 422009 | | |
| 3-15/16 | P4B522-USAF-315TT 041872 | H4S-522-USAF 044025 | BRG22222KC3 422011 | 122,000 | 2,000 |
| 4 | P4B522-USAF-400TT 041873 | H4S-522-USAF 044025 | BRG22222KC3 422011 | 122,000 | 2,000 |
| 4-3/16 | P4B524-USAF-403TT 042431 | H4S-524-USAF 044202 | BRG22224KC3 422013 | 143,000 | 1,900 |
| 4-7/16 | P4B526-USAF-407TT 041874 | H4S-526-USAF 044031 | BRG22226KC3 422015 | 170,000 | 1,800 |
| 4-1/2 | P4B526-USAF-408TT 041875 | H4S-526-USAF 044031 | BRG22226KC3 422015 | 170,000 | 1,800 |
| 4-15/16 | P4B528-USAF-415TT 041876 | H4S-528-USAF 044034 | BRG22228KC3 422017 | 196,000 | 1,700 |
| 5 | P4B528-USAF-500TT 041877 | H4S-528-USAF 044034 | BRG22228KC3 422017 | 196,000 | 1,700 |
| 5-3/16 | P4B530-USAF-503TT 042438 | H4S-530-USAF 044203 | BRG22230KC3 422019 | 228,000 | 1,600 |
| 5-7/16 | P4B532-USAF-507TT 041878 | H4S-532-USAF 044040 | BRG22232KC3 422021 | 260,000 | 1,500 |
| 5-1/2 | P4B532-USAF-508TT 041879 | H4S-532-USAF 044040 | BRG22232KC3 422021 | 260,000 | 1,500 |
| 5-15/16 | P4B534-USAF-515TT 041880 | H4S-534-USAF 044043 | BRG22234KC3 422023 | 300,000 | 1,300 |
| 6 | P4B534-USAF-600TT 041881 | H4S-534-USAF 044043 | BRG22234KC3 422023 | 300,000 | 1,300 |
| 6-7/16 | P4B536-USAF-607TT 041882 | H4S-536-USAF 044046 | BRG22236KC3 422025 | 305,000 | 1,300 |
| 6-1/2 | P4B536-USAF-608TT 041883 | H4S-536-USAF 044046 | BRG22236KC3 422025 | 305,000 | 1,300 |
| 6-15/16 | P4B538-USAF-615TT 041884 | H4S-538-USAF 044049 | BRG22238KC3 422027 | 270,000 | 1,200 |
| 7 | P4B538-USAF-700TT 041885 | H4S-538-USAF 044049 | BRG22238KC3 422027 | 270,000 | 1,200 |
| 7-3/16 | P4B540-USAF-703TT 039606 | H4S-540-USAF 039681 | BRG22240KC3 422064 | 300,000 | 900 |
| 7-1/2 | P4B544-USAF-708TT 042445 | H4S-544S-USAF 044054 | BRG22244KC3 422029 | 365,000 | 950 |
| 7-15/16 | P4B544-USAF-715TT 041886 | H4S-544-USAF 044055 | BRG22244KC3 422029 | 365,000 | 950 |

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SELECTION/DIMENSIONS

USAF 500 Adapter Mount Pillow Block with TRIPLE-TECT Seal Assembly 500 SERIES OPEN END HOUSING

| Shaft Dia S-1 | SNW Part No. | TRIPLE-TECT Part No. | TTDN Part No. | #LER Part No. | Aux Part No. | End Cover Part No. |
|---------------|-------------------------|----------------------|---------------------|--------------------|---------------------|--------------------|
| 3-7/16 | H320-SNW-307 046361 | 46TT307 043549 | 46TTDN307 039859 | 46LER307 042521 | 46AUX307 042383 | EC46 040708 |
| | H320-SNW-307 046361 | 46TT307 043549 | 46TTDN307 039859 | 46LER307 042521 | 46AUX307 042383 | EC46 040708 |
| 3-1/2 | H320-SNW-308 046362 | 46TT308 043550 | 46TTDN308 039860 | 46LER308 042522 | 46AUX308 040919 | EC46 040708 |
| | H320-SNW-308 046362 | 46TT308 043550 | 46TTDN308 039860 | 46LER308 042522 | 46AUX308 040919 | EC46 040708 |
| 3-15/16 | H322-SNW-315 046363 | 50TT315 043551 | 50TTDN315 039861 | 50LER315 042523 | 50AUX315 042384 | EC50 040709 |
| 4 | H322-SNW-400 046364 | 50TT400 043552 | 50TTDN400 039862 | 50LER400 042524 | 50AUX400 040893 | EC50 040709 |
| 4-3/16 | H3124-SNW-403 046430 | 52TT403 043553 | 52TTDN403 039863 | 52LER403 042525 | 52AUX403 044360 | EC52 040710 |
| 4-7/16 | H3126-SNW-407 046431 | 54TT407 043554 | 54TTDN407 039864 | 54LER407 042526 | 54AUX407 042385 | EC54 040711 |
| 4-1/2 | H3126-SNW-408 046432 | 54TT408 043555 | 54TTDN408 039865 | 54LER408 042527 | 54AUX408 042386 | EC54 040711 |
| 4-15/16 | H3128-SNW-415 046433 | 56TT415 043556 | 56TTDN415 039866 | 56LER415 042528 | 56AUX415 042387 | EC56 040712 |
| 5 | H3128-SNW-500 046434 | 56TT500 043557 | 56TTDN500 039867 | 56LER500 042529 | 56AUX500 040894 | EC562 040712 |
| 5-3/16 | SNW30X503 043618 | 58TT503 043558 | --- | 58LER503 042530 | | EC58 040713 |
| 5-7/16 | SNW32X507 043619 | 60TT507 043559 | --- | 60LER507 042531 | 60AUX507 042388 | EC60 040714 |
| 5-1/2 | SNW32X508 043634 | 60TT508 043574 | --- | 60LER508 042532 | 60AUX508 040895 | EC60 040714 |
| 5-15/16 | SNW34X515 043620 | 64TT515 043560 | --- | 64LER515 042533 | 64AUX515 042389 | EC64 040681 |
| 6 | SNW34X600 043621 | 64TT600 043561 | --- | 64LER600 042534 | 64AUX600 041646 | EC64 040681 |
| 6-7/16 | SNW36X607 043622 | 68TT607 043562 | --- | 68LER607 042535 | 68AUX607 042390 | EC68 040682 |
| 6-1/2 | SNW36X608 043623 | 68TT608 043563 | --- | 68LER608 042536 | 68AUX608 042391 | EC68 040682 |
| 6-15/16 | SNW38X615 043624 | 72TT615 043564 | --- | 72LER615 042537 | 72AUX615 042392 | EC72 040683 |
| 7 | SNW38X700 043625 | 72TT700 043565 | --- | 72LER700 042538 | 72AUX700 043109 | EC72 040683 |
| 7-3/16 | SNW40X703 046545 | 74TT703 046421 | --- | 74LER703 043386 | 74AUX703 040690 | --- |
| 7-1/2 | SNW44X708 043627 | 76TT708 043567 | --- | 76LER708 042539 | 76AUX708 040896 | EC76 040684 |
| 7-15/16 | SNW44X715 043626 | 78TT715 043566 | --- | 78LER715 042540 | 78AUX715 042393* | EC78 040685 |

NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.
If an * appears by the part number, the LER seal is manufactured from Steel.

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SELECTION/DIMENSIONS



USAF 500 Adapter Mount Pillow Block with TRIPLE-TECT Seal Assembly 500 SERIES OPEN END HOUSING

| Shaft Dia S-1 | Complete Pillow Block Part No. | Housing W/ Stab Ring Part No. | Bearing Part No. | Dynamic Capacity (C), lbs. | Max RPM (Grease) |
|---------------|--------------------------------|-------------------------------|-----------------------|----------------------------|------------------|
| 8 | P4B544-USAF-800TT 041887 | H4S-544-USAF 044055 | BRG22244KC3 422029 | 365,000 | 950 |
| 8-7/16 | P4B048-USAF-807TT 042447 | H4S-048-USAF 044200 | BRG23048KC3 422031 | 260,000 | 950 |
| 8-1/2 | P4B048-USAF-808TT 042448 | H4S-048-USAF 044200 | BRG23048KC3 422031 | 260,000 | 950 |
| 8-15/16 | P4B048-USAF-815TT 042449 | H4S-048-USAF 044200 | BRG23048KC3 422031 | 260,000 | 950 |
| 9 | P4B048-USAF-900TT 042453 | H4S-048-USAF 044200 | BRG23048KC3 422031 | 260,000 | 950 |
| 9-7/16 | P4B052-USAF-907TT 042454 | H4S-052-USAF 422542 | BRG23052KC3 422543 | 340,000 | 900 |
| 9-1/2 | P4B052-USAF-908TT 422544 | H4S-052-USAF 422542 | BRG23052KC3 422543 | 340,000 | 900 |
| 9-15/16 | P4B056-USAF-915TT 042458 | H4S-056-USAF 422560 | BRG23056KC3 422030 | 345,000 | 850 |
| 10 | P4B056-USAF-1000TT 041628 | H4S-056-USAF 422560 | BRG23056KC3 422030 | 345,000 | 850 |
| 10-7/16 | P4B056-USAF-1007TT 042463 | H4S-056L-USAF 044201 | BRG23056KC3 422030 | 345,000 | 850 |
| 10-1/2 | P4B056-USAF-1008TT 042464 | H4S-056L-USAF 044201 | BRG23056KC3 422030 | 345,000 | 850 |

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SELECTION/DIMENSIONS

USAF 500 Adapter Mount Pillow Block with TRIPLE-TECT Seal Assembly 500 SERIES OPEN END HOUSING

| Shaft Dia S-1 | SNW Part No. | TRIPLE-TECT Part No. | TTDN Part No. | #LER Part No. | Aux Part No. | End Cover Part No. |
|---------------|------------------------|----------------------|---------------|----------------------|----------------------|--------------------|
| 8 | SNW44X800 043628 | 78TT800 043568 | --- | 78LER800 042541* | 78AUX800 042394* | EC78 040685 |
| 8-7/16 | SNP3048X807 043629 | 90TT807 043569 | --- | 90LER807 042542* | 90AUX807 040897* | EC90 042368 |
| 8-1/2 | SNP3048X808 043630 | 90TT808 043570 | --- | 90LER808 042543* | 90AUX808 040898* | EC90 042368 |
| 8-15/16 | SNP3048X815 043631 | 90TT815 043571 | --- | 90LER815 042544* | | EC90 042368 |
| 9 | SNP3048X900 043632 | 90TT900 043572 | --- | 90LER900 042545* | 90AUX900 040995* | EC90 042368 |
| 9-7/16 | SNP3052X907 043585 | 84TT907 043538 | --- | 84LER907 042510* | 84AUX907 040900* | EC84 422606 |
| 9-1/2 | SNP3052X908 422538 | 84TT908 422545 | --- | 84LER908 422594 | 84AUX908 040901* | EC84 422606 |
| 9-15/16 | SNP3056X915 043586 | 92TT915 043575 | --- | 92LER915 042511* | | EC92 042369 |
| 10 | SNP3056X1000 043633 | 92TT1000 043573 | --- | 92LER1000 041082* | 92AUX1000 042395* | EC92 042369 |
| 10-7/16 | SNP3056X1007 043580 | 94TT1007 047940 | --- | 94LER1007 042036* | | EC94 040689 |
| 10-1/2 | SNP3056X1008 422567 | 94TT1008 047941 | --- | 94LER1008 422573* | 94AUX1008 042396* | EC94 040689 |

NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.
If an * appears by the part number, the LER seal is manufactured from Steel.

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SELECTION/DIMENSIONS



USAF 500 Adapter Mount Pillow Block with TRIPLE-TECT Seal Assembly 500 SERIES CAST CLOSED HOUSING

| Shaft Dia S-1 | Complete Pillow Block Part No. | Housing Part No.** | Bearing Part No. | Dynamic Capacity (C), lbs. | Max RPM (Grease) | SNW Part No. | 1-7/16" - 4-15/16" Seals | | | |
|---------------|--------------------------------|-------------------------------|-------------------------|----------------------------|------------------|------------------------|--------------------------|------------------------------|--------------------|-----------------------|
| | | | | | | | TRIPLE-TECT Part No. | Drop In TRIPLE-TECT Part No. | # LER Part No. | Aux Taconite Part No. |
| 1-7/16 | CP2B509-USAF-107TT 039575 | CH2S-509-USAF 039665 | BRG22209KC3 422134 | 24,500 | 5,600 | H309-SNW-107 046350 | 08TT107 043578 | --- | 08LER107 042193 | |
| | 1-11/16 | CP2B510--USAF-111TT 039576 | CH2S-510-USAF 039666 | BRG22210KC3 422137 | 26,000 | 5,300 | H310-SNW-111 046351 | 10TT111 043579 | --- | 10LER111 042199 |
| 1-15/16 | CP2B511-USAF-115TT 039577 | CH2S-511-USAF 039667 | BRG22211KC3 422123 | 31,500 | 4,500 | H311-SNW-115 046352 | 12TT115 043540 | 12TTDN115 039852 | 12LER115 042512 | 12AUX115 041687 |
| 2-3/16 | CP2B513-USAF-203TT 039578 | CH2S-513-USAF 039668 | BRG22213KC3 422124 | 45,500 | 3,800 | H313-SNW-203 046353 | 14TT203 043541 | 14TTDN203 039853 | 14LER203 042513 | 14AUX203 041688 |
| | CP4B513-USAF-203TT 039580 | CH4S-513-USAF 039670 | BRG22213KC3 422124 | 45,500 | 3,800 | H313-SNW-203 046353 | 14TT203 043541 | 14TTDN203 039853 | 14LER203 042513 | 14AUX203 041688 |
| 2-7/16 | CP2B515-USAF-207TT 039581 | CH2S-515-USAF 039544 | BRG22215KC3 422001 | 48,000 | 3,400 | H315-SNW-207 046354 | 20TT207 043542 | 20TTDN207 039538 | 20LER207 042514 | 20AUX207 042380 |
| | CP4B515-USAF-207TT 039582 | CH4S-515-USAF 039545 | BRG22215KC3 422001 | 48,000 | 3,400 | H315-SNW-207 046354 | 20TT207 043542 | 20TTDN207 039538 | 20LER207 042514 | 20AUX207 042380 |
| 2-1/2 | CP2B515-USAF-208TT 039583 | CH2S-515-USAF 039544 | BRG22215KC3 422001 | 48,000 | 3,400 | H315-SNW-208 046355 | 20TT208 043543 | 20TTDN208 039854 | 20LER208 042515 | 20AUX208 040890 |
| | CP4B515-USAF-208TT 039584 | CH4S-515-USAF 039545 | BRG22215KC3 422001 | 48,000 | 3,400 | H315-SNW-208 046355 | 20TT208 043543 | 20TTDN208 039854 | 20LER208 042515 | 20AUX208 040890 |
| 2-11/16 | CP2B516-USAF-211TT 039585 | CH2S-516-USAF 039671 | BRG22216KC3 422003 | 56,000 | 3,200 | H316-SNW-211 046356 | 24TT211 043544 | 24TTDN211 039855 | 24LER211 042516 | 24AUX211 042381 |
| | CP4B516-USAF-211TT 039586 | CH4S-516-USAF 039672 | BRG22216KC3 422003 | 56,000 | 3,200 | H316-SNW-211 046356 | 24TT211 043544 | 24TTDN211 039855 | 24LER211 042516 | 24AUX211 042381 |
| 2-3/4 | CP2B516-USAF-212TT 039587 | CH2S-516-USAF 039671 | BRG22216KC3 422003 | 56,000 | 3,200 | H316-SNW-212 046357 | 24TT212 043545 | 24TTDN212 039856 | 24LER212 042517 | 24AUX212 040891 |
| | CP4B516-USAF-212TT 039588 | CH4S-516-USAF 039672 | BRG22216KC3 422003 | 56,000 | 3,200 | H316-SNW-212 046357 | 24TT212 043545 | 24TTDN212 039856 | 24LER212 042517 | 24AUX212 040891 |
| 2-15/16 | CP2B517-USAF-215TT 039589 | CH2S-517-USAF 039508 | BRG22217KC3 422005 | 68,000 | 3,000 | H317-SNW-215 046358 | 28TT215 043546 | 28TTDN215 039530 | 28LER215 042518 | 28AUX215 042382 |
| | CP4B517-USAF-215TT 039590 | CH4S-517-USAF 039509 | BRG22217KC3 422005 | 68,000 | 3,000 | H317-SNW-215 046358 | 28TT215 043546 | 28TTDN215 039530 | 28LER215 042518 | 28AUX215 042382 |
| 3 | CP2B517-USAF-300TT 039591 | CH2S-517-USAF 039508 | BRG22217KC3 422005 | 68,000 | 3,000 | H317-SNW-300 046359 | 28TT300 043547 | 28TTDN300 039857 | 28LER300 042519 | 28AUX300 040918 |
| | CP4B517-USAF-300TT 039592 | CH4S-517-USAF 039509 | BRG22217KC3 422005 | 68,000 | 3,000 | H317-SNW-300 046359 | 28TT300 043547 | 28TTDN300 039857 | 28LER300 042519 | 28AUX300 040918 |
| 3-3/16 | CP2B518-USAF-303TT 039593 | CH2S-518-USAF 039673 | BRG22218KC3 422007 | 78,000 | 2,600 | H318-SNW-303 046360 | 34TT303 043548 | 34TTDN303 039858 | 34LER303 042520 | 34AUX303 040892 |
| | CP4B518-USAF-303TT 039594 | CH4S-518-USAF 039674 | BRG22218KC3 422007 | 78,000 | 2,600 | H318-SNW-303 046360 | 34TT303 043548 | 34TTDN303 039858 | 34LER303 042520 | 34AUX303 040892 |
| 3-7/16 | CP2B520-USAF-307TT 039595 | CH2S-520-USAF 039675 | BRG22220KC3 422009 | 96,500 | 2,200 | H320-SNW-307 046361 | 46TT307 043549 | 46TTDN307 039859 | 46LER307 042521 | 46AUX307 042383 |
| | CP4B520-USAF-307TT 039596 | CH4S-520-USAF 039676 | BRG22220KC3 422009 | 96,500 | 2,200 | H320-SNW-307 046361 | 46TT307 043549 | 46TTDN307 039859 | 46LER307 042521 | 46AUX307 042383 |

Note: LER seals are made from Aluminum unless otherwise noted by the * symbol.

If an * appears by the part number, the LER seal is manufactured from Steel.

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SELECTION/DIMENSIONS



USAF 500 Adapter Mount Pillow Block with TRIPLE-TECT Seal Assembly 500 SERIES CAST CLOSED HOUSING

| Shaft Dia S-1 | Complete Pillow Block Part No. | Housing Part No.** | Bearing Part No. | Dynamic Capacity (C) Lbs. | Max RPM Ler (Grease) | Snw Part No. | 5" - 10-1/2" Seals | | | |
|---------------|--------------------------------|-------------------------|-----------------------|---------------------------|----------------------|-------------------------|----------------------|------------------------------|--------------------|-----------------------|
| | | | | | | | Triple Tect Part No. | Drop In Triple Tect Part No. | # Ler Part No. | Aux Taconite Part No. |
| 3-1/2 | CP2B520-USAF-308TT 039597 | CH2S-520-USAF 039675 | BRG22220KC3 422009 | 96,500 | 2,200 | H320-SNW-308 046362 | 46TT308 043550 | 46TTDN308 039860 | 46LER308 042522 | 46AUX308 040919 |
| | CP4B520-USAF-308TT 039598 | CH4S-520-USAF 039676 | BRG22220KC3 422009 | 96,500 | 2,200 | H320-SNW-308 046362 | 46TT308 043550 | 46TTDN308 039860 | 46LER308 042522 | 46AUX308 040919 |
| 3-15/16 | CP4B522-USAF-305TT 039599 | CH4S-522-USAF 039677 | BRG22222KC3 422011 | 122,000 | 2,000 | H322-SNW-315 046363 | 50TT315 043551 | 50TTDN315 039861 | 50LER315 042523 | 50AUX315 042384 |
| 4 | CP4B522-USAF-400TT 039600 | CH4S-522-USAF 039677 | BRG22222KC3 422011 | 122,000 | 2,000 | H322-SNW-400 046364 | 50TT400 043552 | 50TTDN400 039862 | 50LER400 042524 | 50AUX400 040893 |
| 4-3-16 | CP4B524-USAF-403TT 039601 | CH4S-524-USAF 039678 | BRG22224KC3 422013 | 143,000 | 1,900 | H3124-SNW-403 046430 | 52TT403 043553 | 52TTDN403 039863 | 52LER403 042525 | 52AUX403 044360 |
| 4-7/16 | CP4B526-USAF-407TT 039602 | CH4S-526-USAF 039679 | BRG22226KC3 422015 | 170,000 | 1,800 | H3126-SNW-407 046431 | 54TT407 043554 | 54TTDN407 039864 | 54LER407 042526 | 54AUX407 042385 |
| 4-1/2 | CP4B526-USAF-408TT 039603 | CH4S-526-USAF 039679 | BRG22226KC3 422015 | 170,000 | 1,800 | H3126-SNW-408 046432 | 54TT408 043555 | 54TTDN408 039865 | 54LER408 042527 | 54AUX408 042386 |
| 4-15/16 | CP4B528-USAF-415TT 039604 | CH4S-528-USAF 039680 | BRG22228KC3 422017 | 196,000 | 1,700 | H3128-SNW-415 046433 | 56TT415 043556 | 56TTDN415 039866 | 56LER415 042528 | 56AUX415 042387 |
| 5 | CP4B528-USAF-500TT 039605 | CH4S-528-USAF 039680 | BRG22228KC3 422017 | 196,000 | 1,700 | H3128-SNW-500 046434 | 56TT500 043557 | 56TTDN500 039867 | 56LER500 042529 | 56AUX500 040894 |
| 5-3/16 | CP4B530-USAF-503TT 039138 | CH4S-530-USAF 039217 | BRG2223KC3 422019 | 228,000 | 1,600 | SNW30X503 043618 | 58TT503 043558 | --- | 58LER503 042530 | |
| 5-7/16 | CP4B532-USAF-507TT 039141 | CH4S-532-USAF 039218 | BRG22232KC3 422021 | 260,000 | 1,500 | SNW32X507 043619 | 60TT507 043559 | --- | 60LER507 042531 | 60AUX507 |
| 5-1/2 | CP4B532-USAF-508TT 039142 | CH4S-532-USAF 039218 | BRG22232KC3 422021 | 260,000 | 1,500 | SNW32X508 043634 | 60TT508 043574 | --- | 60LER508 042532 | 60AUX508 040895 |
| 5-15/16 | CP4B534-USAF-515TT 039147 | CH4S-534-USAF 039219 | BRG22234KC3 422023 | 300,000 | 1,300 | SNW34X515 043620 | 64TT515 043560 | --- | 64LER515 042533 | 64AUX515 042389 |
| 6 | CP4B534-USAF-600TT 039148 | CH4S-534-USAF 039219 | BRG22234KC3 422023 | 300,000 | 1,300 | SNW34X600 043621 | 64TT600 043561 | --- | 64LER600 042534 | 64AUX600 041646 |
| 6-7/16 | CP4B536-USAF-607TT 039151 | CH4S-536-USAF 039220 | BRG22236KC3 422025 | 305,000 | 1,300 | SNW36X607 043622 | 68TT607 042562 | --- | 68LER607 042535 | 68AUX607 042390 |
| 6-1/2 | CP4B536-USAF-608TT 039152 | CH4S-536-USAF 039220 | BRG22236KC3 422025 | 305,000 | 1,300 | SNW36X608 043623 | 68TT608 043563 | --- | 68LER608 042536 | 68AUX608 042391 |
| 6-15/16 | CP4B538-USAF-615TT 039155 | CH4S-538-USAF 039221 | BRG22238KC3 422027 | 270,000 | 1,200 | SNW38X615 043624 | 72TT615 043564 | --- | 72LER615 042537 | 72AUX615 042392 |
| 7 | CP4B538-USAF-700TT 039156 | CH4S-538-USAF 039221 | BRG22238KC3 422027 | 270,000 | 1,200 | SNW38X700 043625 | 72TT700 043565 | --- | 72LER700 042538 | 72AUX700 043109 |
| 7-3/16 | CP4B540-USAF-703TT 039159 | CH4S-540-USAF 039222 | BRG22240KC3 422064 | 300,000 | 900 | SNW40X703 046545 | 74TT703 046421 | --- | 74LER703 043386 | 74AUX703 040690 |
| 7-1/2 | CP4B544-USAF-708TT 039160 | CH4S-544-USAF 039223 | BRG22244KC3 422029 | 365,000 | 950 | SNW44X708 043627 | 76TT708 043567 | --- | 76LER708 042539 | 76AUX708 040896 |
| 7-15/16 | CP4B544-USAF-715TT 039163 | CH4S-544-USAF 039224 | BRG22244KC3 422029 | 365,000 | 950 | SNW44X715 043626 | 78TT715 043566 | --- | 78LER715 042540 | 78AUX715 042393* |

NOTE: LER seals are made from aluminum unless otherwise noted by the * symbol.

If an * appears by the part number, the LER seal is manufactured from steel.

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SELECTION/DIMENSIONS

USAF 500 Adapter Mount Pillow Block with TRIPLE-TECT Seal Assembly 500 SERIES CAST CLOSED HOUSING

| Shaft Dia S-1 | Complete Pillow Block Part No. | Housing Part No.** | Bearing Part No. | Dynamic Capacity (C) Lbs. | Max RPM LER (Grease) | SNW Part No. | 5" - 10-1/2" Seals | | | |
|------------------|--------------------------------|--------------------------|-----------------------|---------------------------|----------------------|------------------------|----------------------|------------------------------|----------------------|-----------------------|
| | | | | | | | Triple Tect Part No. | Drop In Triple Tect Part No. | # LER Part No. | Aux Taconite Part No. |
| 8 | CP4B544-USAF-800TT 039164 | CH4S-544-USAF 039224 | BRG22244KC3 422029 | 365,000 | 950 | SNW44X800 043628 | 78TT800 043568 | --- | 78LER800 042541* | 78AUX800 042394* |
| 8-7/16 | CP4B048-USAF-807TT 039165 | CH4S-048-USAF 039225 | BRG23048KC3 422031 | 260,000 | 800 | SNP3048X807 043629 | 90TT807 043569 | --- | 90LER807 042542* | 90AUX807 040897* |
| 8-1/2 | CP4B048-USAF-808TT 039166 | CH4S-048-USAF 039225 | BRG23048KC3 422031 | 260,000 | 800 | SNP3048X808 043630 | 90TT808 043570 | --- | 90LER808 042543* | 90AUX808 040898* |
| 8-15/16 | CP4B048-USAF-815TT 039167 | CH4S-048-USAF 039225 | BRG23048KC3 422031 | 260,000 | 800 | SNP3048X815 043631 | 90TT815 043571 | --- | 90LER815 042544* | |
| 9 | CP4B048-USAF-900TT 039168 | CH4S-048-USAF 039225 | BRG23048KC3 422031 | 260,000 | 800 | SNP3048X900 043632 | 90TT900 043572 | --- | 90LER900 042545* | 90AUX900 040995* |
| 9-7/16 | CP4B052-USAF-907TT 039169 | CH4S-052-USAF 039226 | BRG23052KC3 422543 | 340,000 | 750 | SNP3052X907 043585 | 84TT907 043538 | --- | 84LER907 042510* | 84AUX907 040900* |
| 9-1/2 | CP4B052-USAF-908TT 039170 | CH4S-052-USAF 039226 | BRG23052KC3 422543 | 340,000 | 750 | SNP3052X908 422538 | 84TT908 422545 | --- | 84LER908 042594* | 84AUX908 040901* |
| 9-15/16 | CP4B056-USAF-915TT 039171 | CH4S-056-USAF 039227 | BRG23056KC3 422030 | 345,000 | 700 | SNP3056X915 043586 | 92TT915 043575 | --- | 92LER915 042511* | |
| 10 | CP4B056-USAF-1000TT 039172 | CH4S-056-USAF 039227 | BRG23056KC3 422030 | 345,000 | 700 | SNP3056X1000 043633 | 92TT1000 043573 | --- | 92LER1000 041082* | 92AUX1000 042395* |
| 10-7/16 | CP4B056-USAF-1007TT 039173 | CH4S-056L-USAF 039228 | BRG23056KC3 422030 | 345,000 | 700 | SNP3056X1007 043580 | 94TT1007 047940 | --- | 94LER1007 042036* | |
| 10-1/2 | CP4B056-USAF-1008TT 039174 | CH4S-056L-USAF 039228 | BRG23056KC3 422030 | 345,000 | 700 | SNP3056X1008 422567 | 94TT1008 047941 | --- | 94LER1008 422573* | 94AUX1008 042396* |

NOTE: LER seals are made from aluminum unless otherwise noted by the * symbol.
If an * appears by the part number, the LER seal is manufactured from steel.

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SELECTION/DIMENSIONS

USAF 500 Adapter Mount Pillow Block Housing

| S-1 Shaft Size (Inch) | Housing | 500 Housing † | | | | | | | |
|-----------------------|---------|---------------|-------------------|----------|-------------------|--------------------|-------------------|----------|-------------------|
| | | Thru Housing | | | | Closed End Housing | | | |
| | | 2-Bolt | | 4-Bolt | | 2-Bolt | | 4-Bolt | |
| | | Part No. | Approx. Wt. (Lbs) | Part No. | Approx. Wt. (Lbs) | Part No. | Approx. Wt. (Lbs) | Part No. | Approx. Wt. (Lbs) |
| 1-7/16 | 509 | 043995 | 9.5 | - | - | 039665 | 10.0 | - | - |
| 1-11/16 | 510 | 043996 | 11.3 | - | - | 039666 | 12.1 | - | - |
| 1-15/16 | 511 | 043997 | 15.6 | 039762 | 22.5 | 039667 | 16.5 | - | 23.5 |
| 2-3/16 | 513 | 043998 | 21.4 | 039669 | 22.5 | 039668 | 22.4 | 039670 | 23.5 |
| 2-7/16 | 515 | 044000 | 24.8 | 044003 | 26.4 | 039544 | 26.6 | 039545 | 27.9 |
| 2-1/2 | | | | | | | | | |
| 2-11/16 | 516 | 044198 | 28.0 | 044007 | 28.0 | 039671 | 29.0 | 039672 | 29.0 |
| 2-3/4 | | | | | | | | | |
| 2-15/16 | 517 | 044010 | 34.7 | 044013 | 38.3 | 039508 | 37.0 | 039509 | 40.6 |
| 3 | | | | | | | | | |
| 3-3/16 | 518 | 044199 | 36.8 | 044114 | 37.2 | 039673 | 40.7 | 039674 | 41.2 |
| 3-7/16 | 520 | 044020 | 61.2 | 044023 | 61.8 | 039675 | 65.3 | 039676 | 65.9 |
| 3-1/2 | | | | | | | | | |
| 3-15/16 | 522 | - | - | 044025 | 78.9 | - | - | 039677 | 84.0 |
| 4-3/16 | 524 | - | - | 044202 | 90.6 | - | - | 039678 | 96.1 |
| 4-7/16 | 526 | - | - | 044031 | 121.6 | - | - | 039679 | 128.2 |
| 4-1/2 | | | | | | | | | |
| 4-15/16 | 528 | - | - | 044034 | 152.2 | - | - | 039680 | 162.2 |
| 5-3/16 | 530 | - | - | 044203 | 170.5 | - | - | 039217 | 182.3 |
| 5-7/16 | 532 | - | - | 044040 | 220.1 | - | - | 039218 | 235.2 |
| 5-1/2 | | | | | | | | | |
| 5-15/16 | 534 | - | - | 044043 | 269.9 | - | - | 039219 | 282.8 |
| 6-7/16 | 536 | - | - | 044046 | 328.5 | - | - | 039220 | 349.7 |
| 6-1/2 | | | | | | | | | |
| 6-15/16 | 538 | - | - | 044049 | 384.7 | - | - | 039221 | 409.4 |
| 7-3/16 | 540 | - | - | 039681 | 393.0 | - | - | 039222 | 403.0 |
| 7-1/2 | 544S | - | - | 044054 | 624.0 | - | - | 039223 | 634.0 |
| 7-15/16 | 544 | - | - | 044055 | 621.0 | - | - | 039224 | 631.0 |
| 8-7/16 | 048 | - | - | 044200 | 386.0 | - | - | 039225 | 412.2 |
| 8-1/2 | | | | | | | | | |
| 8-15/16 | | | | | | | | | |
| 9-7/16 | 052 | - | - | 422542 | 575.0 | - | - | 039226 | 590.4 |
| 9-1/2 | | | | | | | | | |
| 9-15/16 | 056 | - | - | 422560 | 692.0 | - | - | 039227 | 722.6 |
| 10-7/16 | 056L | - | - | 044201 | 690.0 | - | - | 039228 | 720.0 |
| 10-1/2 | | | | | | | | | |

† Includes Stabilizing Ring(s)

| | | | |
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Bearing Reference Guide
 E-Family Roller Bearings
 Specialty Tapered Products
 S-2000
 UNISPHERE II
 IMPERIAL
 UNIFIED SAF

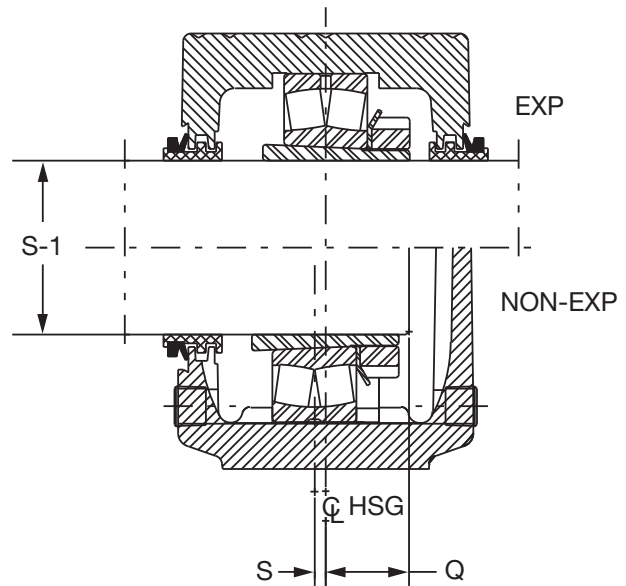
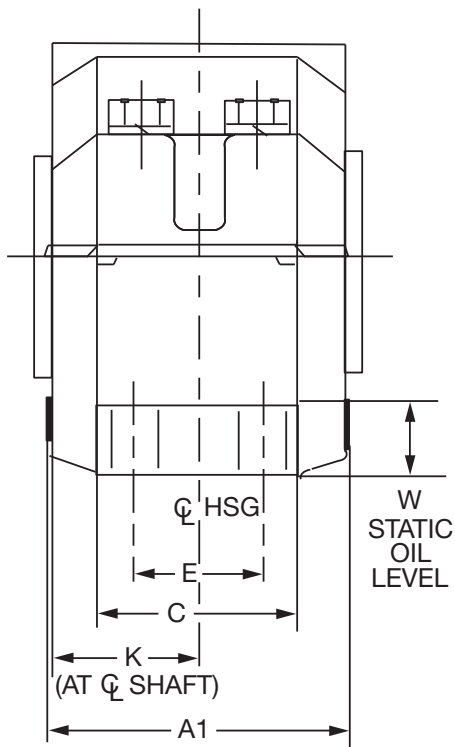
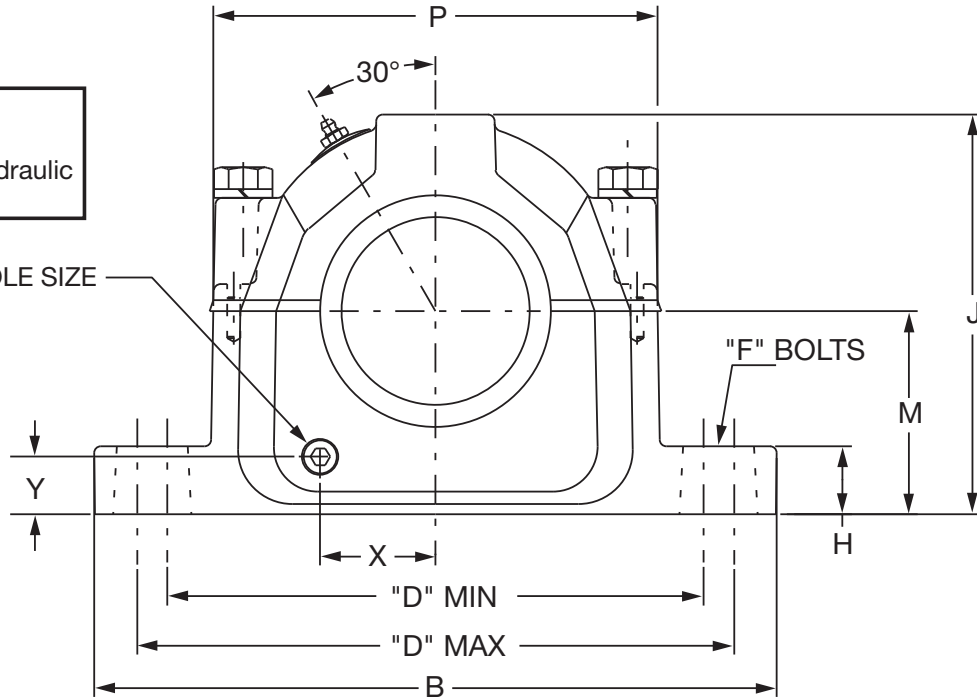
SELECTION/DIMENSIONS



USAF 500 Housing Dimensions

LUBE NOTE:
All Sizes Use A
1/8-27 NPT Hydraulic
Grease Fitting

DRAIN HOLE SIZE



| | | | |
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SELECTION/DIMENSIONS

USAF 500 Housing Dimensions

| S-1 Shaft Size | Housing | A1▲ | B | C | D | | | | E | F | |
|----------------------|---------|------|-------|------|--------|-------|--------|-------|------|-----------|--------|
| | | | | | 2-Bolt | | 4-Bolt | | | Bolt Dia. | |
| | | | | | Min | Max | Min | Max | | 2-Bolt | 4-Bolt |
| 1-7/16 | 509 | 3.88 | 8.25 | 2.38 | 6.25 | 7.00 | - | - | - | 1/2 | |
| 1-11/16 | 510 | 4.06 | 8.25 | 2.34 | 6.50 | 7.00 | - | - | - | 1/2 | |
| 1-15/16 | 511 | 4.25 | 9.63 | 2.75 | 7.38 | 8.25 | - | - | - | 5/8 | |
| 2-3/16 | 513 | 4.64 | 11.00 | 3.13 | 8.50 | 9.50 | 8.13 | 9.50 | 1.88 | 5/8 | 1/2 |
| 2-7/16 2-1/2 | 515 | 5.20 | 11.13 | 3.13 | 8.63 | 9.63 | 8.63 | 9.63 | 1.88 | 5/8 | 1/2 |
| 2-11/16 2-3/4 | 516 | 5.44 | 12.59 | 3.50 | 9.63 | 11.00 | 9.63 | 11.00 | 2.13 | 3/4 | 5/8 |
| 2-15/16 3 | 517 | 5.39 | 12.59 | 3.50 | 9.88 | 11.00 | 9.88 | 11.00 | 2.13 | 3/4 | 5/8 |
| 3-3/16 | 518 | 6.16 | 13.63 | 3.88 | 10.25 | 11.75 | 10.38 | 11.63 | 2.13 | 3/4 | 5/8 |
| 3-7/16 3-1/2 | 520 | 6.39 | 15.36 | 4.34 | 11.63 | 13.13 | 11.63 | 13.13 | 2.38 | 7/8 | 3/4 |
| 3-15/16 4 | 522 | 7.16 | 16.50 | 4.75 | - | - | 12.59 | 14.50 | 2.75 | - | 3/4 |
| 4-3/16 | 524 | 8.05 | 16.50 | 4.72 | - | - | 13.25 | 14.50 | 2.75 | - | 3/4 |
| 4-7/16 4-1/2 | 526 | 8.27 | 18.38 | 5.13 | - | - | 14.50 | 16.00 | 3.25 | - | 7/8 |
| 4-15/16 5 | 528 | 8.77 | 19.69 | 5.88 | - | - | 15.63 | 17.38 | 3.38 | - | 1 |

| S-1 Shaft Size | Housing | H | J | K | M | P | Q ★ | S ● | W Static Oil Level | X | Y | Drain Hole Size |
|----------------------|---------|------|-------|------|------|-------|--------|--------|-----------------------------|------|------|-----------------------|
| 1-7/16 | 509 | 0.88 | 4.30 | 1.78 | 2.25 | 4.88 | 1.03 | 0.13 | 0.92 | 1.09 | 0.63 | 1/8-27NPSI |
| 1-11/16 | 510 | 1.03 | 4.59 | 1.88 | 2.50 | 5.13 | 1.11 | 0.13 | 1.08 | 1.25 | 0.81 | 1/8-27NPSI |
| 1-15/16 | 511 | 1.03 | 5.25 | 1.97 | 2.75 | 5.78 | 1.20 | 0.13 | 1.16 | 1.94 | 0.83 | 1/8-27NPSI |
| 2-3/16 | 513 | 1.03 | 5.94 | 2.16 | 3.00 | 6.50 | 1.38 | 0.16 | 1.11 | 1.66 | 0.78 | 1/8-27NPSI |
| 2-7/16 2-1/2 | 515 | 1.25 | 6.44 | 2.31 | 3.25 | 7.06 | 1.39 | 0.13 | 1.16 | 1.78 | 0.88 | 1/4-18NPSF |
| 2-11/16 2-3/4 | 516 | 1.06 | 6.75 | 2.42 | 3.50 | 7.94 | 1.44 | 0.18 | 1.25 | 1.97 | 0.95 | 1/4-18NPSF |
| 2-15/16 3 | 517 | 1.25 | 7.38 | 2.47 | 3.75 | 8.19 | 1.50 | 0.19 | 1.38 | 2.13 | 1.06 | 3/8-18NPSF |
| 3-3/16 | 518 | 1.44 | 7.75 | 2.84 | 4.00 | 8.66 | 1.72 | 0.19 | 1.47 | 2.50 | 1.13 | 3/8-18NPSF |
| 3-7/16 3-1/2 | 520 | 1.66 | 8.75 | 3.16 | 4.50 | 9.78 | 1.92 | 0.19 | 1.64 | 2.63 | 1.25 | 3/8-18NPSF |
| 3-15/16 4 | 522 | 1.78 | 9.41 | 3.30 | 4.94 | 10.59 | 2.09 | 0.19 | 1.80 | 2.88 | 1.34 | 3/8-18NPSF |
| 4-3/16 | 524 | 1.50 | 10.25 | 3.64 | 5.25 | 11.25 | 2.28 | 0.19 | 1.84 | 3.19 | 1.38 | 1/2-14NPSF |
| 4-7/16 4-1/2 | 526 | 2.06 | 11.53 | 3.75 | 6.00 | 12.41 | 2.47 | 0.19 | 2.34 | 3.31 | 1.63 | 1/2-14NPSF |
| 4-15/16 5 | 528 | 2.06 | 11.81 | 4.00 | 6.00 | 13.25 | 2.45 | 0.19 | 2.03 | 3.63 | 1.47 | 1/2-14NPSF |

- ▲ Housing width with drain plugs
 - ★ Distance shaft should extend beyond housing centerline if pillow block is closed end style
 - Non-expansion bearing offset from centerline. For expansion bearing S = 0
- Dowel hole locations for Precision Positioning, see Page B15-24 - B15-25

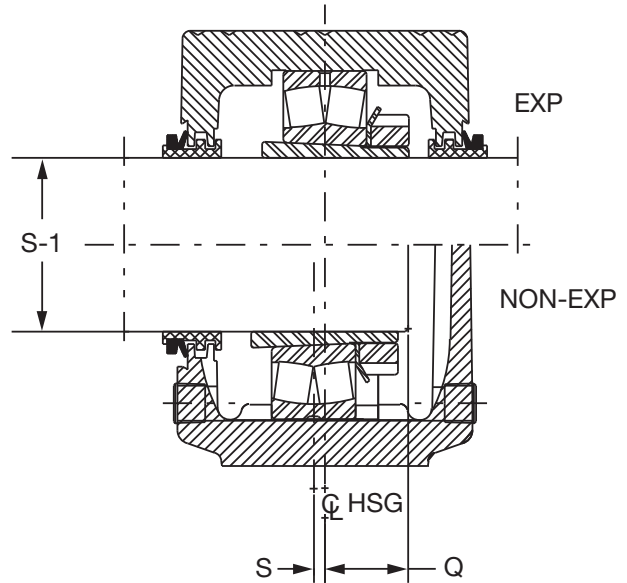
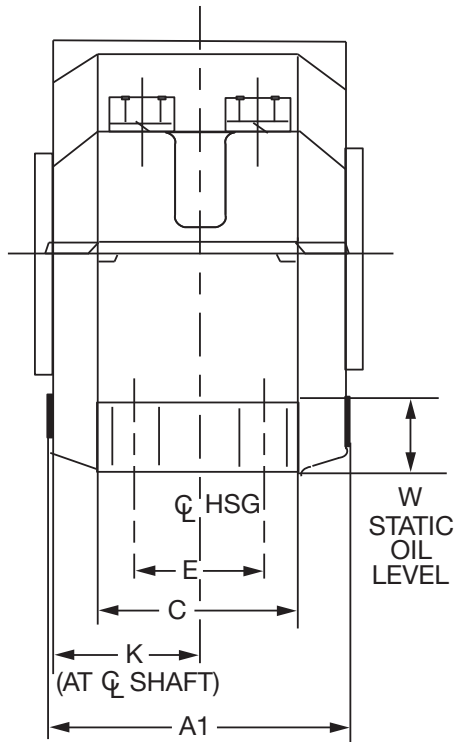
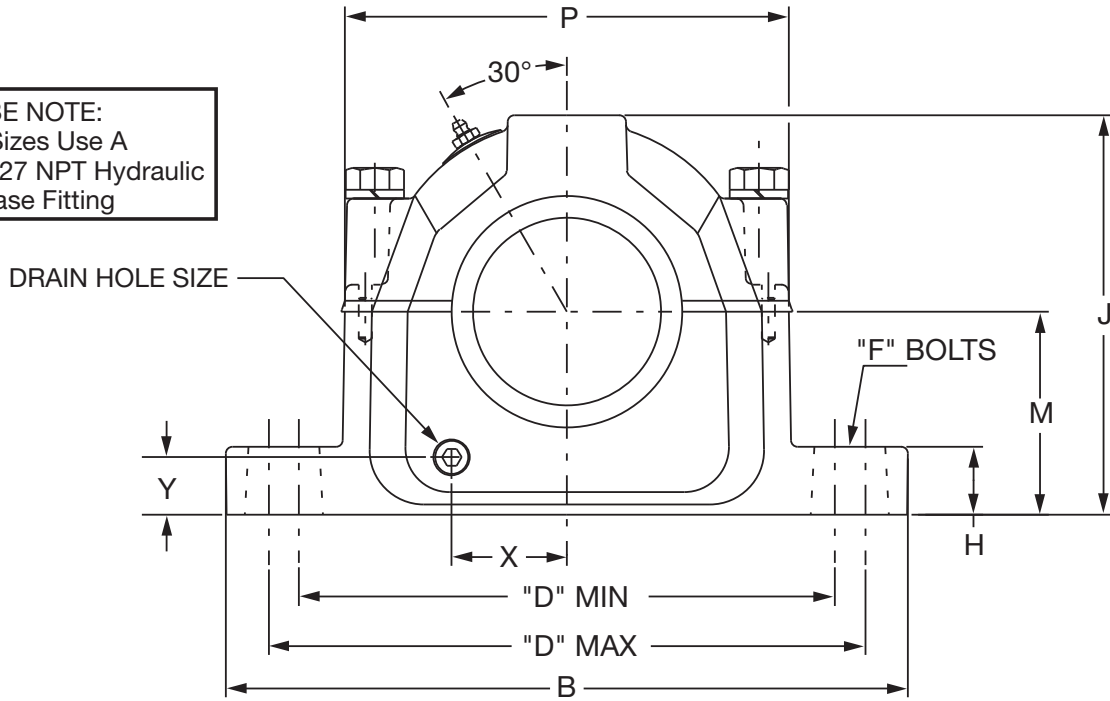
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SELECTION/DIMENSIONS



USAF 500 Housing Dimensions

LUBE NOTE:
All Sizes Use A
1/8-27 NPT Hydraulic
Grease Fitting



| | | | |
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SELECTION/DIMENSIONS

USAF 500 Housing Dimensions

| S-1 Shaft Size | Housing | A1▲ | B | C | D | | | | E | F | |
|---------------------------------|---------|-------|-------|------|--------|-----|--------|-------|------|-----------|--------|
| | | | | | 2-Bolt | | 4-Bolt | | | Bolt Dia. | |
| | | | | | Min | Max | Min | Max | | 2-Bolt | 4-Bolt |
| 5-3/16 | 530 | 9.36 | 20.88 | 6.25 | - | - | 16.75 | 18.25 | 3.75 | - | 1 |
| 5-7/16 5-1/2 | 532 | 9.92 | 21.66 | 6.25 | - | - | 17.38 | 19.25 | 3.75 | - | 1 |
| 5-15/16 6 | 534 | 9.91 | 24.75 | 6.75 | - | - | 19.38 | 21.63 | 4.25 | - | 1 |
| 6-7/16 6-1/2 | 536 | 10.41 | 26.75 | 7.13 | - | - | 20.88 | 23.63 | 4.63 | - | 1 |
| 6-15/16 7 | 538 | 10.81 | 28.00 | 7.50 | - | - | 21.63 | 24.38 | 4.50 | - | 1-1/4 |
| 7-3/16 | 540 | 11.53 | 28.75 | 8.00 | - | - | 22.50 | 25.00 | 5.00 | - | 1-1/4 |
| 7-1/2 | 544S | 12.30 | 32.75 | 8.80 | - | - | 24.75 | 27.88 | 5.25 | - | 1-1/2 |
| 7-15/16 8 | 544 | | | | | | | | | | |
| 8-7/16 8-1/2 8-15/16 9 | 048 | 11.53 | 28.75 | 8.00 | - | - | 22.50 | 25.00 | 5.00 | - | 1-1/4 |
| 9-7/16 9-1/2 | 052 | 12.30 | 32.75 | 8.88 | - | - | 24.75 | 27.88 | 5.25 | - | 1-1/2 |
| 9-15/16 10 | 056 | 13.66 | 34.25 | 9.00 | - | - | 26.25 | 29.50 | 5.50 | - | 1-1/2 |
| 10-7/16 10-1/2 | 056L | | | | | | | | | | |

| S-1 Shaft Size | Housing | H | J | K | M | P | Q ★ | S ● | W Static Oil Level | X | Y | Drain Hole Size |
|---------------------------------|---------|------|-------|------|------|-------|--------|--------|--------------------------|------|------|-----------------------|
| 5-3/16 | 530 | 2.38 | 12.50 | 4.33 | 6.31 | 14.31 | 2.45 | 0.19 | 2.03 | 3.59 | 1.33 | 1/2-14NPSF |
| 5-7/16 5-1/2 | 532 | 2.34 | 13.31 | 4.63 | 6.69 | 14.91 | 2.97 | 0.19 | 2.09 | 4.03 | 1.33 | 1/2-14NPSF |
| 5-15/16 6 | 534 | 2.88 | 14.56 | 4.63 | 7.06 | 16.81 | 3.13 | 0.19 | 2.19 | 4.16 | 1.33 | 1/2-14NPSF |
| 6-7/16 6-1/2 | 536 | 3.00 | 15.13 | 4.88 | 7.50 | 17.19 | 3.16 | 0.19 | 2.42 | 4.22 | 1.63 | 1/2-14NPSF |
| 6-15/16 7 | 538 | 3.13 | 15.81 | 5.06 | 7.88 | 18.00 | 3.30 | 0.19 | 2.53 | 4.75 | 1.61 | 1/2-14NPSF |
| 7-3/16 | 540 | 3.38 | 16.63 | 5.44 | 8.25 | 19.00 | 3.50 | 0.19 | 2.47 | 4.91 | 1.53 | 1/2-14NPSF |
| 7-1/2 | 544S | 3.75 | 18.88 | 5.81 | 9.50 | 21.25 | 3.73 | 0.19 | 3.25 | 5.44 | 2.03 | 1/2-14NPSF |
| 7-15/16 8 | 544 | | | | | | | | | | | |
| 8-7/16 8-1/2 8-15/16 9 | 48 | 3.38 | 16.63 | 5.44 | 8.25 | 19.00 | 3.56 | 0.00 | 2.25 | - | - | - |
| 9-7/16 9-1/2 | 52 | 3.75 | 18.88 | 5.81 | 9.50 | 21.25 | 3.88 | 0.00 | 2.89 | - | - | - |
| 9-15/16 10 | 56 | 4.00 | 20.00 | 6.38 | 9.88 | 22.31 | 4.00 | 0.00 | 2.36 | - | - | - |
| 10-7/16 10-1/2 | 056L | | | | | | | | | | | |

- ▲ Housing width with drain plugs
- ★ Distance shaft should extend beyond housing centerline if pillow block is closed end style
- Non-expansion bearing offset from centerline. For expansion bearing S = 0

| | | | |
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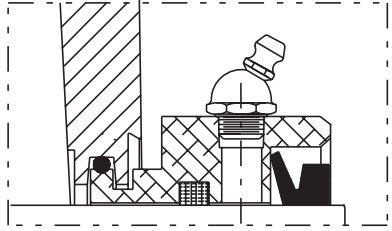
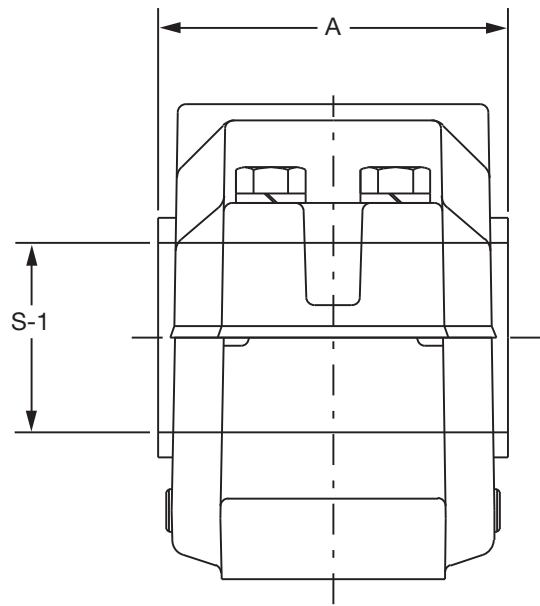
Bearing Reference Guide
 E-Family Roller Bearings
 Specialty Tapered Products
 S-2000
 UNISPHERE II
 IMPERIAL
 UNIFIED SAF

SELECTION/DIMENSIONS

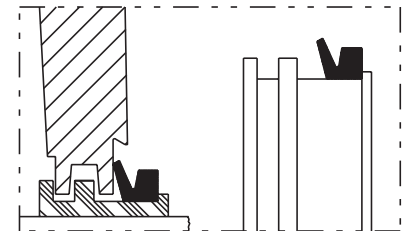


USAF 500 Pillow Block Seals

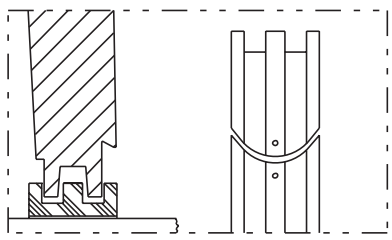
LENGTH THRU BORE W/SEALS



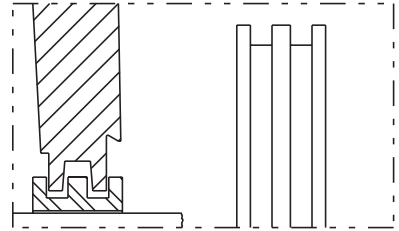
AUXILIARY TACONITE Seal
For dusty environments and low to moderate speeds



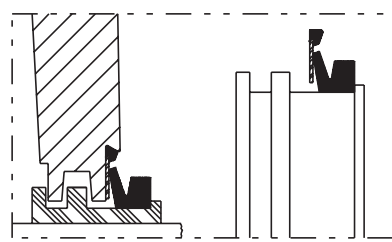
TRIPLE-TECT Seal
General purpose seal for wet or dirty environments



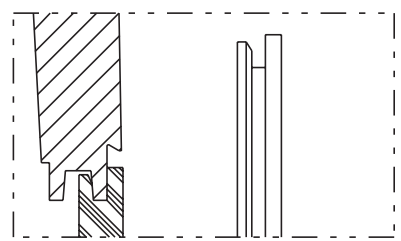
SPLIT Seal
Permits easy installation in hard-to-reach applications without removing shaft. Non-metallic split LER. See page B11-80 for SPLIT Seal part numbers



LER SEAL
High speed seal for relatively clean environments



DROP-IN TRIPLE-TECT Seal
DODGE exclusive. popular TRIPLE-TECT features with simplified installation.



END COVER Seal
Allows use of open shaft housing as closed-end

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SELECTION/DIMENSIONS



USAF 500 Pillow Block Seals

| 500 Seals - Inch | | | | | | | | | | | |
|-----------------------------|---------|---------------|---------------------|----------------------------------|------------------------------|--------------------------------|--------------|-------|-------|-------|-------|
| S-1 Shaft size (Inch) | Housing | Seal Group | Part Numbers | | | | | A | | | |
| | | | Triple-Tect (TT) | Triple-Tect Drop-in (TTDN) | #Metal Labyrinth (LER) | Auxiliary Taconite (AUX) | End Cover | TT | TTDN | LER | AUX |
| 1-7/16 | 509 | 8 | 043578 | - | 042193 | 041685 | 040700 | 3.97 | 3.97 | 3.42 | 6.56 |
| 1-11/16 | 510 | 10 | 043579 | - | 042199 | 041686 | 040701 | 4.14 | 4.14 | 3.61 | 6.73 |
| 1-15/16 | 511 | 12 | 043540 | 039852 | 042512 | 041687 | 040702 | 4.34 | 4.34 | 3.83 | 6.69 |
| 2-3/16 | 513 | 14 | 043541 | 039853 | 042513 | 041688 | 040703 | 4.72 | 4.72 | 4.19 | 7.56 |
| 2-7/16 | 515 | 20 | 043542 | 039538 | 042514 | 042380 | 040704 | 4.94 | 4.94 | 4.47 | 7.47 |
| 2-1/2 | | | 043543 | 039854 | 042515 | 040890 | 040704 | | | | |
| 2-11/16 | 516 | 24 | 043544 | 039855 | 042516 | 042381 | 040705 | 5.33 | 5.33 | 4.72 | 7.72 |
| 2-3/4 | | | 043545 | 039856 | 042517 | 040891 | 040705 | | | | |
| 2-15/16 | 517 | 28 | 043546 | 039530 | 042518 | 042382 | 040706 | 5.44 | 5.44 | 4.83 | 7.95 |
| 3 | | | 043547 | 039857 | 042519 | 040918 | 040706 | | | | |
| 3-3/16 | 518 | 34 | 043548 | 039858 | 042520 | 040892 | 040707 | 6.20 | 6.20 | 5.70 | 8.27 |
| 3-7/16 | 520 | 46 | 043549 | 039859 | 042521 | 042383 | 040708 | 6.78 | 6.78 | 6.19 | 9.06 |
| 3-1/2 | | | 043550 | 039860 | 042522 | 040919 | 040708 | | | | |
| 3-15/16 | 522 | 50 | 043551 | 039861 | 042523 | 042384 | 040709 | 7.06 | 7.13 | 6.59 | 9.05 |
| 4 | | | 043552 | 039862 | 042524 | 040893 | 040709 | | | | |
| 4-3/16 | 524 | 52 | 043553 | 039863 | 042525 | 044360 | 040710 | 7.91 | 7.59 | 7.31 | - |
| 4-7/16 | 526 | 54 | 043554 | 039864 | 042526 | 042385 | 040711 | 8.08 | 8.08 | 7.50 | 10.63 |
| 4-1/2 | | | 043555 | 039865 | 042527 | 042386 | 040711 | | | | |
| 4-15/16 | 528 | 56 | 043556 | 039866 | 042528 | 042387 | 040712 | 8.47 | 8.47 | 7.88 | 11.13 |
| 5 | | | 043557 | 039867 | 042529 | 040894 | 040712 | | | | |
| 5-3/16 | 530 | 58 | 043558 | - | 042530 | - | 040713 | 9.28 | 9.28 | 8.70 | - |
| 5-7/16 | 532 | 60 | 043559 | - | 042531 | 042388 | 040714 | 9.78 | 9.78 | 9.20 | 11.95 |
| 5-1/2 | | | 043574 | - | 042532 | 040895 | 040714 | | | | |
| 5-15/16 | 534 | 64 | 043560 | - | 042533 | 042389 | 040681 | 9.83 | 9.83 | 9.13 | 11.88 |
| 6 | | | 043561 | - | 042534 | 041646 | 040681 | | | | |
| 6-7/16 | 536 | 68 | 043562 | - | 042535 | 042390 | 040682 | 10.39 | 10.39 | 9.69 | 12.94 |
| 6-1/2 | | | 043563 | - | 042536 | 042391 | 040682 | | | | |
| 6-15/16 | 538 | 72 | 043564 | - | 042537 | 042392 | 040683 | 10.69 | 10.69 | 9.98 | 13.23 |
| 7 | | | 043565 | - | 042538 | 043109 | 040683 | | | | |
| 7-3/16 | 540 | 74 | 046421 | - | 043386 | 040690 | 040691 | 11.44 | - | 10.72 | 15.28 |
| 7-1/2 | 544S | 76 | 043567 | - | 042539 | 040896 | 040684 | 12.13 | 12.13 | 11.34 | 15.97 |
| 7-15/16 | 544 | 78 | 043566 | - | 042540 | 042393 | 040685 | | | | |
| 8 | | | 043568 | - | 042541* | 042394 | 040685 | | | | |
| 8-7/16 | 048 | 90 | 043569 | - | 042542* | 040897 | 042368 | 12.06 | - | 11.72 | 15.53 |
| 8-1/2 | | | 043570 | - | 042543* | 040898 | 042368 | | | | |
| 8-15/16 | | | 043571 | - | 042544* | 040899 | 042368 | | | | |
| 9 | | | 043572 | - | 042545* | 040995 | 042368 | | | | |
| 9-7/16 | 052 | 84 | 043538 | - | 042510* | 040900 | 422606 | 12.77 | - | 11.41 | 16.22 |
| 9-1/2 | | | 422545 | - | 422594* | 040901 | 422606 | | | | |
| 9-15/16 | 056 | 92 | 043575 | - | 042511* | - | 042369 | 13.92 | - | 12.66 | 17.13 |
| 10 | | | 043573 | - | 041082* | 042395 | 042369 | | | | |
| 10-7/16 | 056L | 94 | 047940 | - | 042036* | - | 042397 | 14.05 | - | 12.66 | 17.13 |
| 10-1/2 | | | 047941 | - | 422573* | 042396 | 042397 | | | | |

NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.

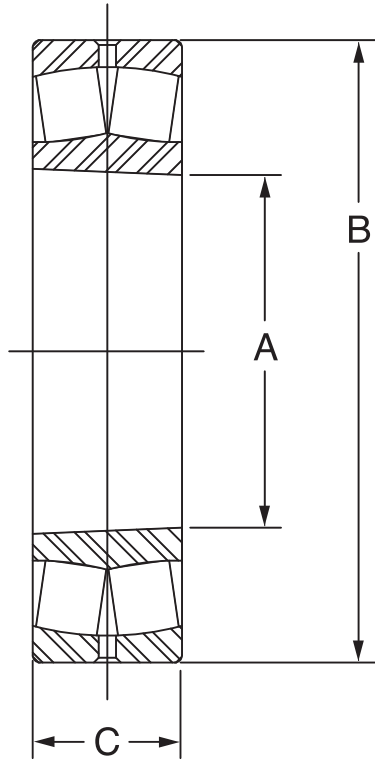
If an * appears by the part number, the LER seal is manufactured from Steel.

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SELECTION/DIMENSIONS



USAF 22200K and 23000K Spherical Roller Bearings



| | | | |
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SELECTION/DIMENSIONS

USAF 22200K and 23000K Spherical Roller Bearings

| S-1 Shaft Size (Inch) | Housing | Bearing No. | Part No. | Approx. Wt. (Lbs) | A Inch (mm) | B Inch (mm) | C Inch (mm) |
|---------------------------------|-------------|-------------|---------------|-------------------|---------------|---------------|--------------|
| 1-7/16 | 509 | 22209K | 422134 | 1.2 | 1.7717 (45) | 3.3465 (85) | .9055 (23) |
| 1-11/16 | 510 | 22210K | 422137 | 1.3 | 1.9685 (50) | 3.5233 (90) | .9055 (23) |
| 1-15/16 | 511 | 22211K | 422123 | 1.8 | 2.1654 (55) | 3.9370 (100) | .9843 (25) |
| 2-3/16 | 513 | 22213K | 422124 | 3.2 | 2.5591 (65) | 4.7244 (120) | 1.2205 (31) |
| 2-7/16 2-1/2 | 515 | 22215K | 422001 | 3.6 | 2.9528 (75) | 5.1181 (130) | 1.2205 (31) |
| 2-11/16 2-3/4 | 516 | 22216K | 422003 | 4.4 | 3.1496 (80) | 5.5188 (140) | 1.2992 (33) |
| 2-15/16 3 | 517 | 22217K | 422005 | 5.5 | 3.3465 (85) | 5.9055 (150) | 1.4173 (36) |
| 3-3/16 | 518 | 22218K | 422007 | 7.0 | 3.5433 (90) | 6.2992 (160) | 1.5748 (40) |
| 3-7/16 3-1/2 | 520 | 22220K | 422009 | 10.4 | 3.9370 (100) | 7.0866 (180) | 1.8110 (46) |
| 3-15/16 4 | 522 | 22222K | 422011 | 14.9 | 4.3307 (110) | 7.8740 (200) | 2.0866 (53) |
| 4-3/16 | 524 | 22224K | 422013 | 18.7 | 4.7244 (120) | 8.4646 (215) | 2.2865 (58) |
| 4-7/16 4-1/2 | 526 | 22226K | 422015 | 23.4 | 5.1181 (130) | 9.0551 (230) | 2.5197 (64) |
| 4-15/16 5 | 528 | 22228K | 422017 | 29.5 | 5.5118 (140) | 9.8425 (250) | 2.6772 (68) |
| 5-3/16 | 530 | 22230K | 422019 | 37.5 | 5.9055 (150) | 10.6299 (270) | 2.8740 (73) |
| 5-7/16 5-1/2 | 532 | 22232K | 422021 | 48.1 | 6.2992 (160) | 11.4173 (290) | 3.1496 (80) |
| 5-15/16 6 | 534 | 22234K | 422023 | 58.0 | 6.6929 (170) | 12.2047 (310) | 3.3858 (86) |
| 6-7/16 6-1/2 | 536 | 22236K | 422025 | 60.8 | 7.0866 (180) | 12.5984 (320) | 3.3858 (86) |
| 6-15/16 7 | 538 | 22238K | 422027 | 78.9 | 7.4803 (190) | 13.3858 (340) | 3.6220 (92) |
| 7-3/16 7-1/2 | 540 544S | 22240K | 422064 | 94.1 | 7.8740 (200) | 14.1732 (360) | 3.8583 (98) |
| 7-15/16 8 | 544 | | 422029 | 129.0 | 8.6614 (220) | 14.7480 (400) | 4.2520 (108) |
| 8-7/16 8-1/2 8-15/16 9 | 048 | 23048K | 422031 | 73.4 | 9.4488 (240) | 14.1732 (360) | 3.6220 (92) |
| 9-7/16 9-1/2 | 052 | 23052K | 422543 | 106.0 | 10.2362 (260) | 15.7480 (400) | 4.0945 (104) |
| 9-15/16 10 | 056 | 23056K | 422030 | 114.0 | 11.0236 (280) | 16.5354 (430) | 4.1732 (106) |
| 10-7/16 10-1/2 | 056L | | | | | | |

Bearing Reference Guide

E-Family Roller Bearings

Specialty Tapered Products

S-2000

UNISPHERE II

IMPERIAL

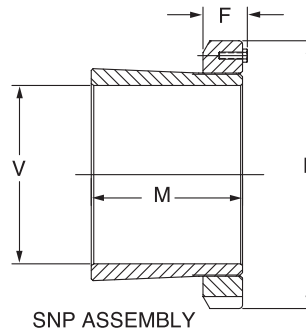
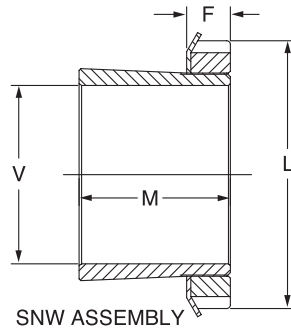
UNIFIED SAF

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SELECTION/DIMENSIONS



USAF 500 Adaptor Assembly (SNW)



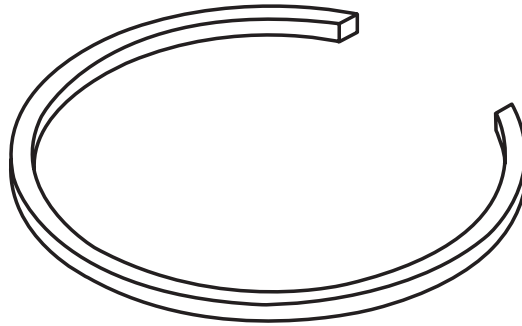
| V Shaft Dia. (In) | Housing | SNW/SNP Number | Part Number | Approx Wt. (Lbs) | L (in.) | F Max (in.) | M (in.) |
|-------------------|---------|----------------|---------------|------------------|---------|-------------|---------|
| 1-7/16 | 509 | H309-SNW-107 | 046350 | 1.0 | 2.53 | 0.52 | 1.58 |
| 1-11/16 | 510 | H310-SNW-111 | 046351 | 1.0 | 2.69 | 0.58 | 1.77 |
| 1-15/16 | 511 | H311-SNW-115 | 046352 | 0.8 | 2.97 | 0.58 | 1.85 |
| 2-3/16 | 513 | H313-SNW-203 | 046353 | 1.6 | 3.38 | 0.64 | 2.10 |
| 2-7/16 | 515 | H315-SNW-207 | 046354 | 2.6 | 3.88 | 0.69 | 2.29 |
| 2-1/2 | | H315-SMW-208 | 046355 | 2.3 | | | |
| 2-11/16 | 516 | H316-SNW-211 | 046356 | 2.6 | 4.16 | 0.69 | 2.37 |
| 2-3/4 | | H316-SNW-212 | 046357 | 2.6 | | | |
| 2-15/16 | 517 | H317-SNW-215 | 046358 | 3.0 | 4.41 | 0.72 | 2.47 |
| 3 | | H317-SNW-300 | 046359 | 2.5 | | | |
| 3-3/16 | 518 | H318-SNW-303 | 046360 | 3.1 | 4.66 | 0.80 | 2.63 |
| 3-7/16 | 520 | H320-SNW-307 | 046361 | 4.6 | 5.19 | 0.83 | 2.87 |
| 3-1/2 | | H320-SNW-308 | 046362 | 4.4 | | | |
| 3-15/16 | 522 | H322-SNW-315 | 046363 | 5.6 | 5.72 | 0.86 | 3.19 |
| 4 | | H322-SNW-400 | 046364 | 5.0 | | | |
| 4-3/16 | 524 | H3124-SNW-403 | 046430 | 6.5 | 6.12 | 0.92 | 3.47 |
| 4-7/16 | 526 | H3126-SNW-407 | 046431 | 9.2 | 6.75 | 0.95 | 3.76 |
| 4-1/2 | | H3126-SNW-408 | 046432 | 8.6 | | | |
| 4-15/16 | 528 | H3128-SNW-415 | 046433 | 10.0 | 7.09 | 1.02 | 3.97 |
| 5 | | H3128-SNW-500 | 046434 | 9.0 | | | |
| 5-3/16 | 530 | SNW30-503 | 043618 | 12.7 | 7.69 | 1.08 | 4.22 |
| 5-7/16 | 532 | SNW32-507 | 043619 | 15.9 | 8.06 | 1.14 | 4.57 |
| 5-1/2 | | SNW32-508 | 043634 | 15.0 | | | |
| 5-15/16 | 534 | SNW34-515 | 043620 | 17.6 | 8.66 | 1.23 | 4.83 |
| 6 | | SNW34-600 | 043621 | 17.0 | | | |
| 6-7/16 | 536 | SNW36-607 | 043622 | 17.0 | 9.06 | 1.27 | 5.02 |
| 6-1/2 | | SNW36-608 | 043623 | 18.0 | | | |
| 6-15/16 | 538 | SNW38-615 | 043624 | 18.0 | 9.47 | 1.30 | 5.26 |
| 7 | | SNW38-700 | 043625 | 17.0 | | | |
| 7-3/16 | 540 | SNW40-703 | 046545 | 30.7 | 9.84 | 1.36 | 5.48 |
| 7-1/2 | 544S | SNW44-708 | 043627 | 30.2 | 11.00 | 1.42 | 5.90 |
| 7-15/16 | 544 | SNW44-715 | 043626 | 36.0 | | | |
| 8 | | SNW44-800 | 043628 | 34.7 | | | |
| 8-7/16 | 048 | SNP048-807 | 043629 | 38.0 | 11.44 | 1.73 | 5.44 |
| 8-1/2 | | SNP048-808 | 043630 | 30.0 | | | |
| 8-15/16 | | SNP048-815 | 043631 | 28.0 | | | |
| 9 | | SNP048-900 | 043632 | 22.0 | | | |
| 9-7/16 | 052 | SNP052-907 | 043585 | 41.1 | 12.19 | 1.80 | 6.02 |
| 9-1/2 | | SNP052-908 | 422538 | 40.0 | | | |
| 9-15/16 | 056 | SNP056-915 | 043586 | 43.7 | 13.00 | 1.89 | 6.19 |
| 10 | | SNP056-1000 | 043633 | 42.0 | | | |
| 10-7/16 | 056L | SNP056-1007 | 043580 | 30.0 | | | |
| 10-1/2 | | SNP056-1008 | 422567 | 28.0 | | | |

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SELECTION/DIMENSIONS

USAF Stabilizing Rings



| Housing | Stab. Ring No. | Stab. Ring Part No. ▲ |
|--------------|----------------|--------------------------|
| 509 | 9-9 | 041987 |
| 510 | 10-8 | 042335 |
| 511 | 11-9 | 042315 |
| 513 | 13-0 | 042316 |
| 515/215 | 15-0 | 041174 |
| 516/216 | 16-13 | 041172 |
| 517/217 | 17-14 | 041175 |
| 518/218 | 18-15 | 041173 |
| 520/220 | 20-17 | 041176 |
| 522/222 | 22-19 | 041177 |
| 524/224 | 24-20 | 041185 |
| 526/226 | 26-0 | 041178 |
| 528/228 | 28-0 | 041179 |
| 530/230 | 30-0 | 041186 |
| 532/232 | 32-0 | 041180 |
| 534/234 | 34-0 | 041181 |
| 536/236 | 36-30 | 041184 |
| 538/238 | 38-32 | 041182 |
| 540/240 | 40-34 | 046639 |
| 544S/544/244 | 44-38 | 041183 |
| * 048 | A8897 | 041161 |
| * 052 | A8898 | 422554 |
| * 056/056L | A8819 | 041213 |

| Housing | Stab. Ring No. | Stab. Ring Part No. ▲ |
|---------|----------------|--------------------------|
| 308 | 10-8 | 042335 |
| 609/309 | 11-9 | 042315 |
| 610/310 | 0-10 | 046642 |
| 611/311 | 6-11 | 046632 |
| 312 | 15-0 | 041174 |
| 613/313 | 16-13 | 041172 |
| 314 | 17-14 | 041175 |
| 615/315 | 18-15 | 041173 |
| 616/316 | 19-16 | 046643 |
| 617/317 | 20-17 | 041176 |
| 620/320 | 24-20 | 041185 |
| 622/322 | 0-22 | 046635 |
| 624/324 | 0-24 | 046634 |
| 626/326 | 0-26 | 046637 |
| 628/328 | 0-28 | 046638 |
| 630/330 | 36-30 | 041184 |
| 632/332 | 38-32 | 041182 |
| 634/334 | 40-34 | 046639 |
| 638/338 | 44-38 | 041183 |

* Two stabilizing rings required per housing

▲ Part numbers for reference only. Housings come equipped with stabilizing rings enclosed

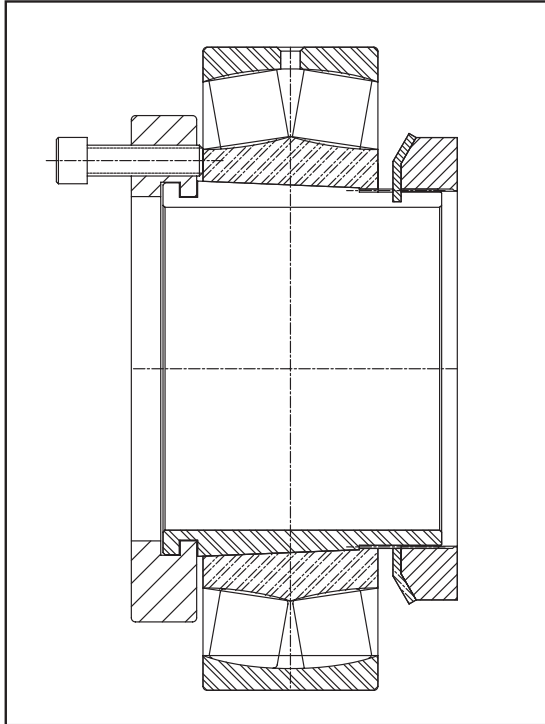
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SELECTION/DIMENSIONS



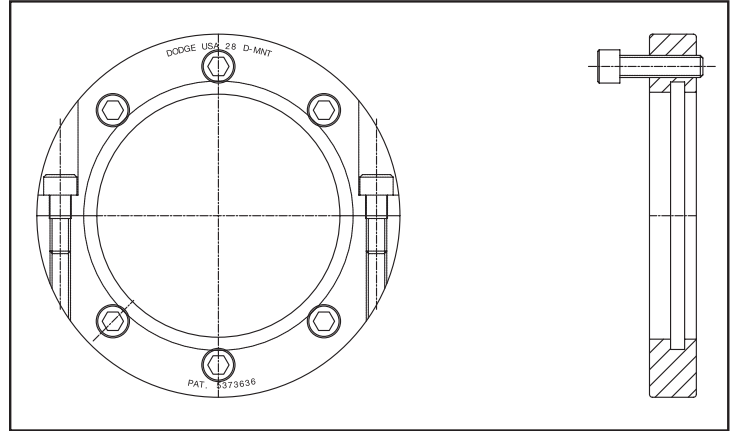
USAF/SN D-Mount Adapter System

1. Saves time removing bearing from shaft!
2. Reduces the use of blue flame torches!
3. Increases uptime!
4. Lowers maintenance costs!

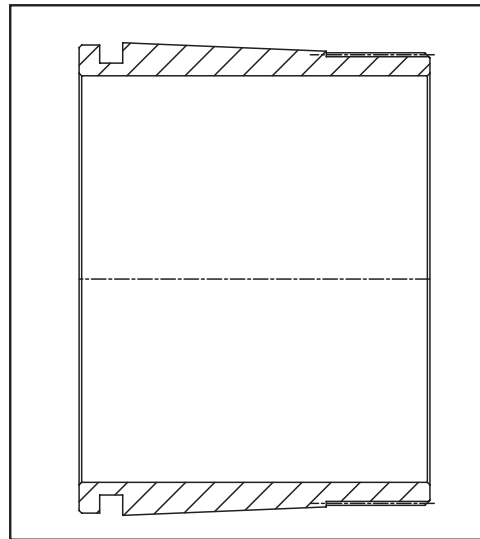


D-MOUNT TOOL - SNW - BEARING WITH TOOL ASSEMBLED READY TO REMOVE BEARING

For use on 22209K through 22244K size bearings



D-MOUNT TOOL



D-MOUNT ADAPTER SLEEVE

HOW IT WORKS

Split D-Mount tool is mounted on D-Mount adapter and uses socket head cap screws to force the inner ring off the taper to unlock the bearing from the adapter sleeve. No additional space allowance is required.

This adapter sleeve is used in place of the standard adapter sleeve.

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SELECTION/DIMENSIONS

D-MOUNT Adapter System SAF/SN Mounted Bearings PART NUMBERS AND DESCRIPTION

| Part No. | Description-Inch |
|---|------------------|
| D-Mount Adapter with Removal Feature-USAF500 | |
| 046960 | DH09-SNW-107 |
| 046961 | DH10-SNW-111 |
| 046962 | DH11-SNW-115 |
| 046963 | DH13-SNW-203 |
| 046964 | DH15-SNW-207 |
| 046965 | DH15-SNW-208 |
| 046966 | DH16-SNW-211 |
| 046967 | DH1 6-SNW-212 |
| 046968 | DH17-SNW-215 |
| 046969 | DH17-SNW-300 |
| 046970 | DH18-SNW-303 |
| 046971 | DH20-SNW-307 |
| 046972 | DH20-SNW-308 |
| 046973 | DH22-SNW-315 |
| 046974 | DH22-SNW-400 |
| 046975 | DH24-SNW-403 |
| 046976 | DH26-SNW-407 |
| 046977 | DH26-SNW-408 |
| 046978 | DH28-SNW-415 |
| 046979 | DH28-SNW-500 |
| 046980 | DH30-SNW-503 |
| 046981 | DH32-SNW-507 |
| 046982 | DH32-SNW-508 |
| 046983 | DH34-SNW-515 |
| 046984 | DH34-SNW-600 |
| 046985 | DH36-SNW-607 |
| 046986 | DH36-SNW-608 |
| 046987 | DH38-SNW-615 |
| 046988 | DH38-SNW-700 |
| 046989 | DH40-SNW-703 |
| 046991 | DH44-SNW-708 |
| 046992 | DH44-SNW-715 |
| 046993 | DH44-SNW-800 |

* Made to order.

| Part No. | Description-Metric |
|--|--------------------|
| D-Mount Adapter with Removal Feature-USN500 | |
| 047815 * | DH09-SNW-40M |
| 047816 * | DH10-SNW-45M |
| 047817 * | DH11-SNW-50M |
| 047818 * | DH12-SNW-55M |
| 047819 * | DH13-SNW-60M |
| 047820 * | DH15-SNW-65M |
| 047821 * | DH16-SNW-70M |
| 047822 * | DH17-SNW-75M |
| 047823 * | DH18-SNW-80M |
| 047824 * | DH19-SNW-85M |
| 047825 * | DH20-SNW-90M |
| 047826 * | DH22-SNW-100M |
| 047827 * | DH24-SNW-110M |
| 047828 * | DH26-SNW-115M |
| 047829 * | DH28-SNW-125M |
| 047830 * | DH30-SNW-135M |
| 047831 * | DH32-SNW-140M |

NOTE: The D-MOUNT Adapter Sleeve SNW Assembly should be used in place of the standard SNW assembly during installation. The D-MOUNT tool will be needed during removal.

| Part No. | Description |
|--------------------------------------|-----------------|
| D-Mount Adapter Removal Tools | |
| 046872 | D-MOUNT TOOL 09 |
| 046873 | D-MOUNT TOOL 10 |
| 046874 | D-MOUNT TOOL 11 |
| 046850 | D-MOUNT TOOL 12 |
| 046875 | D-MOUNT TOOL 13 |
| 046876 | D-MOUNT TOOL 15 |
| 046877 | D-MOUNT TOOL 16 |
| 046878 | D-MOUNT TOOL 17 |
| 046879 | D-MOUNT TOOL 18 |
| 046851 | D-MOUNT TOOL 19 |
| 046880 | D-MOUNT TOOL 20 |
| 046881 | D-MOUNT TOOL 22 |
| 046882 | D-MOUNT TOOL 24 |
| 046883 | D-MOUNT TOOL 26 |
| 046884 | D-MOUNT TOOL 28 |
| 046885 | D-MOUNT TOOL 30 |
| 046886 | D-MOUNT TOOL 32 |
| 046887 | D-MOUNT TOOL 34 |
| 046891 | D-MOUNT TOOL 36 |
| 046892 | D-MOUNT TOOL 38 |
| 046893 | D-MOUNT TOOL 40 |
| 046894 | D-MOUNT TOOL 44 |

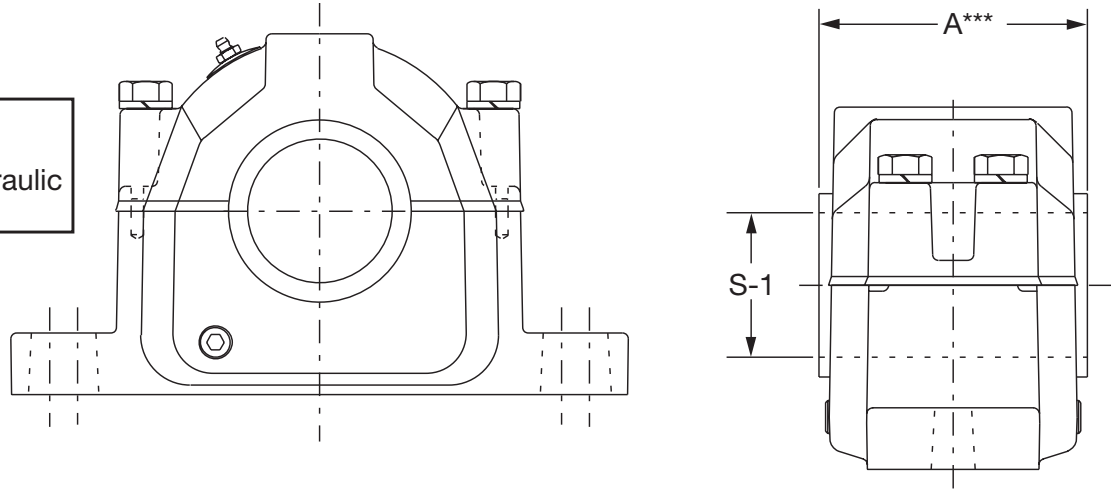
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SELECTION/DIMENSIONS



USAF 500 Air Handling Pillow Blocks with TRIPLE-TECT Seals

LUBE NOTE:
All Sizes Use A
1/8-27 NPT Hydraulic
Grease Fitting



| Shaft Dia S-1 | Complete Pillow Block Part No. | Housing W/ Stab Ring Part No. | Bearing Part No. | Dynamic Capacity (C), lbs. | Max Rpm (Grease) | SNW Part No. | TRIPLE-TECT Part No. | End Cover Part No. |
|------------------|--------------------------------|-------------------------------|-------------------------|----------------------------|------------------|------------------------|----------------------|--------------------|
| 1-7/16 | P2B509-USAF-107TTAH 039100 | H2S-509-USAF 043995 | BRG22209KC3AH 422980 | 24,500 | 5,600 | H309-SNW-107 046350 | 08TT107 043578 | EC08 040700 |
| 1-11/16 | P2B510-USAF-111TTAH 039101 | H2S-510-USAF 043996 | BRG22210KC3AH 422981 | 26,000 | 5,300 | H310-SNW-111 046351 | 10TT111 043579 | EC10 040701 |
| 1-15/16 | P2B511-USAF-115TTAH 039102 | H2S-511-USAF 043997 | BRG22211KC3AH 422982 | 31,500 | 4,500 | H311-SNW-115 046352 | 12TT115 043540 | EC12 040702 |
| 2-3/16 | P2B513-USAF-203TTAH 039103 | H2S-513-USAF 043998 | BRG22213KC3AH 422983 | 45,500 | 3,800 | H313-SNW-203 046353 | 14TT203 043541 | EC14 040703 |
| | P4B513-USAF-203TTAH 039113 | H4S-513-USAF 039669 | BRG22213KC3AH 422983 | 45,500 | 3,800 | H313-SNW-203 046353 | 14TT203 043541 | EC14 040703 |
| 2-7/16 | P2B515-USAF-207TTAH 039104 | H2S-515-USAF 044000 | BRG22215KC3AH 422984 | 48,000 | 3,400 | H315-SNW-207 046354 | 20TT207 043542 | EC20 040704 |
| | P4B515-USAF-207TTAH 039114 | H4S-515-USAF 044003 | BRG22215KC3AH 422984 | 48,000 | 3,400 | H315-SNW-207 046354 | 20TT207 043542 | EC20 040704 |
| 2-1/2 | P2B515-USAF-208TTAH 039105 | H2S-515-USAF 044000 | BRG22215KC3AH 422984 | 48,000 | 3,400 | H315-SNW-208 046355 | 20TT208 043543 | EC20 040704 |
| | P4B515-USAF-208TTAH 039115 | H4S-515-USAF 044003 | BRG22215KC3AH 422984 | 48,000 | 3,400 | H315-SNW-208 046355 | 20TT208 043543 | EC20 040704 |
| 2-11/16 | P2B516-USAF-211TTAH 039106 | H2S-516-USAF 044198 | BRG22216KC3AH 422985 | 56,000 | 3,200 | H316-SNW-211 046356 | 24TT211 043544 | EC24 040705 |
| | P4B516-USAF-211TTAH 039116 | H4S-516-USAF 044007 | BRG22216KC3AH 422985 | 56,000 | 3,200 | H316-SNW-211 046356 | 24TT211 043544 | EC24 040705 |
| 2-3/4 | P2B516-USAF-212TTAH 039107 | H2S-516-USAF 044198 | BRG22216KC3AH 422985 | 56,000 | 3,200 | H316-SNW-212 046357 | 24TT212 043545 | EC24 040705 |
| | P4B516-USAF-212TTAH 039117 | H4S-516-USAF 044007 | BRG22216KC3AH 422985 | 56,000 | 3,200 | H316-SNW-212 046357 | 24TT212 043545 | EC24 040705 |
| 2-15/16 | P2B517-USAF-215TTAH 039108 | H2S-517-USAF 044010 | BRG22217KC3AH 422986 | 68,000 | 3,000 | H317-SNW-215 046358 | 28TT215 043546 | EC28 040706 |
| | P4B517-USAF-215TTAH 039118 | H4S-517-USAF 044013 | BRG22217KC3AH 422986 | 68,000 | 3,000 | H317-SNW-215 046358 | 28TT215 043546 | EC28 040706 |

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SELECTION/DIMENSIONS



USAF 500 Air Handling Pillow Blocks with TRIPLE-TECT Seals

Bearing Reference Guide

E-Family Roller Bearings

Specialty Tapered Products

S-2000

UNISPHERE II

IMPERIAL

UNIFIED SAF

| Shaft Dia S-1 | Complete Pillow Block Part No. | Housing W/ Stab Ring Part No. | Bearing Part No. | Dynamic Capacity (C), lbs. | Max Rpm (Grease) | SNW Part No. | TRIPLE-TECT Part No. | End Cover Part No. |
|---------------|--------------------------------|-------------------------------|-------------------------|----------------------------|------------------|-------------------------|----------------------|--------------------|
| 3 | P2B517-USAF-300TTAH 039109 | H2S-517-USAF 044010 | BRG22217KC3AH 422986 | 68,000 | 3,000 | H317-SNW-300 046359 | 28TT300 043547 | EC28 040706 |
| | P4B517-USAF-300TTAH 039119 | H4S-517-USAF 044013 | BRG22217KC3AH 422986 | 68,000 | 3,000 | H317-SNW-300 046359 | 28TT300 043547 | EC28 040706 |
| 3-3/16 | P2B518-USAF-303TTAH 039110 | H2S-518-USAF 044199 | BRG22218KC3AH 422987 | 78,000 | 2,600 | H318-SNW-303 046360 | 34TT303 043548 | EC34 040707 |
| | P4B518-USAF-303TTAH 039120 | H4S-518-USAF 044114 | BRG22218KC3AH 422987 | 78,000 | 2,600 | H318-SNW-303 046360 | 34TT303 043548 | EC34 040707 |
| 3-7/16 | P2B520-USAF-307TTAH 039111 | H2S-520-USAF 044020 | BRG22220KC3AH 422988 | 96,500 | 2,200 | H320-SNW-307 046361 | 46TT307 043549 | EC46 040708 |
| | P4B520-USAF-307TTAH 039121 | H4S-520-USAF 044023 | BRG22220KC3AH 422988 | 96,500 | 2,200 | H320-SNW-307 046361 | 46TT307 043549 | EC46 040708 |
| 3-1/2 | P2B520-USAF-308TTAH 039112 | H2S-520-USAF 044020 | BRG22220KC3AH 422988 | 96,500 | 2,200 | H320-SNW-308 046362 | 46TT308 043550 | EC46 040708 |
| | P4B520-USAF-308TTAH 039122 | H4S-520-USAF 044023 | BRG22220KC3AH 422988 | 96,500 | 2,200 | H320-SNW-308 046362 | 46TT308 043550 | EC46 040708 |
| 3-15/16 | P4B522-USAF-315TTAH 039123 | H4S-522-USAF 044025 | BRG22222KC3AH 422989 | 122,000 | 2,000 | H322-SNW-315 046363 | 50TT315 043551 | EC50 040709 |
| 4 | P4B522-USAF-400TTAH 039124 | H4S-522-USAF 044025 | BRG22222KC3AH 422989 | 122,000 | 2,000 | H322-SNW-400 046364 | 50TT400 043552 | EC50 040709 |
| 4-3/16 | P4B524-USAF-403TTAH 039125 | H4S-524-USAF 044202 | BRG22224KC3AH 422990 | 143,000 | 1,900 | H3124-SNW-403 046430 | 52TT403 043553 | EC52 040710 |
| 4-7/16 | P4B526-USAF-407TTAH 039126 | H4S-526-USAF 044031 | BRG22226KC3AH 422991 | 170,000 | 1,800 | H3126-SNW-407 046431 | 54TT407 043554 | EC54 040711 |
| 4-1/2 | P4B526-USAF-408TTAH 039127 | H4S-526-USAF 044031 | BRG22226KC3AH 422991 | 170,000 | 1,800 | H3126-SNW-408 046432 | 54TT408 043555 | EC54 040711 |
| 4-15/16 | P4B528-USAF-415TTAH 039128 | H4S-528-USAF 044034 | BRG22228KC3AH 422992 | 196,000 | 1,700 | H3128-SNW-415 046433 | 56TT415 043556 | EC56 040712 |
| 5 | P4B528-USAF-500TTAH 039129 | H4S-528-USAF 044034 | BRG22228KC3AH 422992 | 196,000 | 1,700 | H3128-SNW-500 046434 | 56TT500 043557 | EC56 040712 |

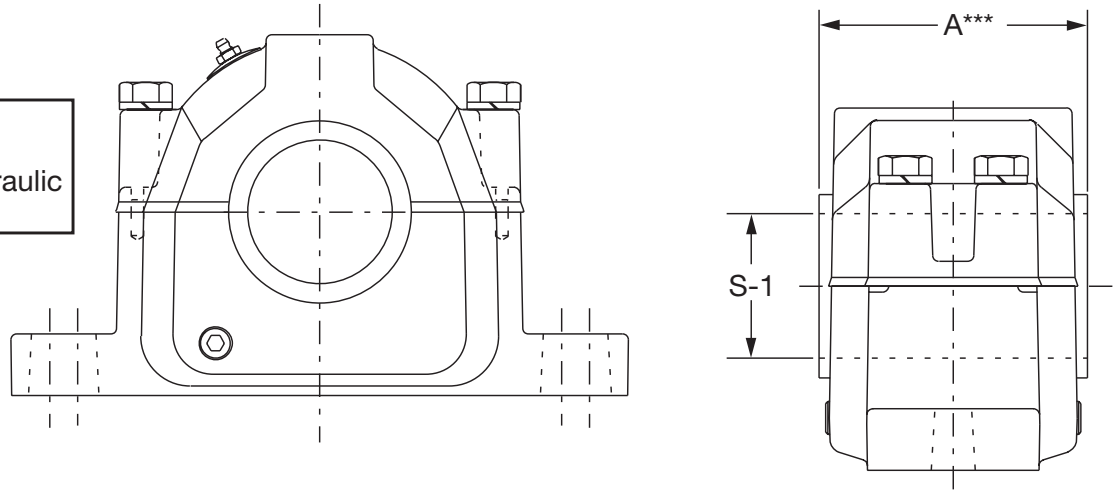
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SELECTION/DIMENSIONS



USAF 500 Air Handling Pillow Blocks with LER Seals

LUBE NOTE:
All Sizes Use A
1/8-27 NPT Hydraulic
Grease Fitting



| Shaft Dia S-1 | Complete Pillow Block Part No. | Housing W/ Stab Ring Part No. | Bearing Part No. | Dynamic Capacity (C), lbs. | Max Rpm LER (Grease) | SNW Part No. | # LER Part No. | End Cover Part No. |
|------------------|--------------------------------|-------------------------------|-----------------------|----------------------------|----------------------|------------------------|----------------------|--------------------|
| 1-7/16 | P2B509-USAF-107LERAH 035762 | H2S-509-USAF 043995 | BRG22209KC3 422980 | 24,500 | 5,600 | H309-SNW-107 046350 | 08LER107 042193 | EC08 040700 |
| 1-11/16 | P2B510-USAF-111LERAH 035763 | H2S-510-USAF 043996 | BRG22210KC3 422981 | 26,000 | 5,300 | H310-SNW-111 046351 | 10LER111 042199 * | EC10 040701 |
| 1-15/16 | P2B511-USAF-115LERAH 035764 | H2S-511-USAF 043997 | BRG22211KC3 422982 | 31,500 | 4,500 | H311-SNW-115 046352 | 12LER115 042512 | EC12 040702 |
| 2-3/16 | P2B513-USAF-203LERAH 035765 | H2S-513-USAF 043998 | BRG22213KC3 422983 | 45,500 | 3,800 | H313-SNW-203 046353 | 14LER203 042513 | EC14 040703 |
| | P4B513-USAF-203LERAH 035775 | H4S-513-USAF 039669 | BRG22213KC3 422983 | 45,500 | 3,800 | H313-SNW-203 046353 | 14LER203 042513 | EC14 040703 |
| 2-7/16 | P2B515-USAF-207LERAH 035766 | H2S-515-USAF 044000 | BRG22215KC3 422984 | 48,000 | 3,400 | H315-SNW-207 046354 | 20LER207 042514 | EC20 040704 |
| | P4B515-USAF-207LERAH 035776 | H4S-515-USAF 044003 | BRG22215KC3 422984 | 48,000 | 3,400 | H315-SNW-207 046354 | 20LER207 042514 | EC20 040704 |
| 2-1/2 | P2B515-USAF-208LERAH 035767 | H2S-515-USAF 044000 | BRG22215KC3 422984 | 48,000 | 3,400 | H315-SNW-208 046355 | 20LER208 042515 | EC20 040704 |
| | P4B515-USAF-208LERAH 035777 | H4S-515-USAF 044003 | BRG22215KC3 422984 | 48,000 | 3,400 | H315-SNW-208 046355 | 20LER208 042515 | EC20 040704 |
| 2-11/16 | P2B516-USAF-211LERAH 035768 | H2S-516-USAF 044198 | BRG22216KC3 422985 | 56,000 | 3,200 | H316-SNW-211 046356 | 24LER211 042516 | EC24 040705 |
| | P4B516-USAF-211LERAH 035778 | H4S-516-USAF 044007 | BRG22216KC3 422985 | 56,000 | 3,200 | H316-SNW-211 046356 | 24LER211 042516 | EC24 040705 |
| 2-3/4 | P2B516-USAF-212LERAH 035769 | H2S-516-USAF 044198 | BRG22216KC3 422985 | 56,000 | 3,200 | H316-SNW-212 046357 | 24LER212 042517 | EC24 040705 |
| | P4B516-USAF-212LERAH 035779 | H4S-516-USAF 044007 | BRG22216KC3 422985 | 56,000 | 3,200 | H316-SNW-212 046357 | 24LER212 042517 | EC24 040705 |
| 2-15/16 | P2B517-USAF-215LERAH 035770 | H2S-517-USAF 044010 | BRG22217KC3 422986 | 68,000 | 3,000 | H317-SNW-215 046358 | 28LER215 042518 | EC28 040706 |
| | P4B517-USAF-215LERAH 035780 | H4S-517-USAF 044013 | BRG22217KC3 422986 | 68,000 | 3,000 | H317-SNW-215 046358 | 28LER215 042518 | EC28 040706 |

NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.
If an * appears by the part number, the LER seal is manufactured from Steel.

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SELECTION/DIMENSIONS

USAF 500 Air Handling Pillow Blocks with LER Seals

Bearing Reference Guide

E-Family Roller Bearings

Specialty Tapered Products

S-2000

UNISPHERE II

IMPERIAL

UNIFIED SAF

| Shaft Dia S-1 | Complete Pillow Block Part No. | Housing W/ Stab Ring Part No. | Bearing Part No. | Dynamic Capacity (C), lbs. | Max Rpm LER (Grease) | SNW Part No. | # LER Part No. | End Cover Part No. |
|---------------|--------------------------------|-------------------------------|-----------------------|----------------------------|----------------------|-------------------------|--------------------|--------------------|
| 3 | P2B517-USAF-300LERAH 035771 | H2S-517-USAF 044010 | BRG22217KC3 422986 | 68,000 | 3,000 | H317-SNW-300 046359 | 28LER300 042519 | EC28 040706 |
| | P4B517-USAF-300LERAH 035781 | H4S-517-USAF 044013 | BRG22217KC3 422986 | 68,000 | 3,000 | H317-SNW-300 046359 | 28LER300 042519 | EC28 040706 |
| 3-3/16 | P2B518-USAF-303LERAH 035772 | H2S-518-USAF 044199 | BRG22218KC3 422987 | 78,000 | 2,600 | H318-SNW-303 046360 | 34LER303 042520 | EC34 040707 |
| | P4B518-USAF-303LERAH 035782 | H4S-518-USAF 044114 | BRG22218KC3 422987 | 78,000 | 2,600 | H318-SNW-303 046360 | 34LER303 042520 | EC34 040707 |
| 3-7/16 | P2B520-USAF-307LERAH 035773 | H2S-520-USAF 044020 | BRG22220KC3 422988 | 96,500 | 2,200 | H320-SNW-307 046361 | 46LER307 042521 | EC46 040708 |
| | P4B520-USAF-307LERAH 035783 | H4S-520-USAF 044023 | BRG22220KC3 422988 | 96,500 | 2,200 | H320-SNW-307 046361 | 46LER307 042521 | EC46 040708 |
| 3-1/2 | P2B520-USAF-308LERAH 035774 | H2S-520-USAF 044020 | BRG22220KC3 422988 | 96,500 | 2,200 | H320-SNW-308 046362 | 46LER308 042522 | EC46 040708 |
| | P4B520-USAF-308LERAH 035784 | H4S-520-USAF 044023 | BRG22220KC3 422988 | 96,500 | 2,200 | H320-SNW-308 046362 | 46LER308 042522 | EC46 040708 |
| 3-15/16 | P4B522-USAF-315LERAH 035785 | H4S-522-USAF 044025 | BRG22222KC3 422989 | 122,000 | 2,000 | H322-SNW-315 046363 | 50LER315 042523 | EC50 040709 |
| 4 | P4B522-USAF-400LERAH 035786 | H4S-522-USAF 044025 | BRG22222KC3 422989 | 122,000 | 2,000 | H322-SNW-400 046364 | 50LER400 042524 | EC50 040709 |
| 4-3/16 | P4B524-USAF-403LERAH 035787 | H4S-524-USAF 044202 | BRG22224KC3 422990 | 143,000 | 1,900 | H3124-SNW-403 046430 | 52LER403 042525 | EC52 040710 |
| 4-7/16 | P4B526-USAF-407LERAH 035788 | H4S-526-USAF 044031 | BRG22226KC3 422991 | 170,000 | 1,800 | H3126-SNW-407 046431 | 54LER407 042526 | EC54 040711 |
| 4-1/2 | P4B526-USAF-408LERAH 035789 | H4S-526-USAF 044031 | BRG22226KC3 422991 | 170,000 | 1,800 | H3126-SNW-408 046432 | 54LER408 042527 | EC54 040711 |
| 4-15/16 | P4B528-USAF-415LERAH 035790 | H4S-528-USAF 044034 | BRG22228KC3 422992 | 196,000 | 1,700 | H3128-SNW-415 046433 | 56LER415 042528 | EC56 040712 |
| 5 | P4B528-USAF-500LERAH 035791 | H4S-528-USAF 044034 | BRG22228KC3 422992 | 196,000 | 1,700 | H3128-SNW-500 046434 | 56LER500 042529 | EC56 040712 |

NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.
If an * appears by the part number, the LER seal is manufactured from Steel.

| | | | |
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SELECTION/DIMENSIONS

DODGE USAF Air Handling Bearing Assemblies Using 12XX Series Self Aligning Double Row Ball Bearing

| Shaft Size | Housing Series | Housing Part No. | | Bearing | | SNW Part No. | Seal Part No. # LER (2-Req) | Stab Ring For Fixed Units | | |
|------------|----------------|------------------|--------|----------|-------------|--------------|-----------------------------|---------------------------|---------|----------|
| | | 2-Bolt | 4-Bolt | Part No. | Description | | | Description | Qty Req | Part No. |
| 1-7/16 | 509 | 043995 | --- | 052637 | 1209K.C3 | 046350 | 042193 | SR-9-0 | 1 | 058902 |
| 1-11/16 | 510 | 043996 | --- | 052638 | 1210K.C3 | 046351 | 042199 * | SR-10-8 | 1 | 058903 |
| 1-15/16 | 511 | 043997 | --- | 052639 | 1211K.C3 | 046352 | 042512 | SR-11-9 | 1 | 058699 |
| 2-3/16 | 513 | 043998 | 039669 | 052640 | 1213K.C3 | 046353 | 042513 | SR-13 | 2 | 042316 |
| 2-7/16 | 515 | 044000 | 044003 | 052641 | 1215K.C3 | 046354 | 042514 | SR-15-0 | 2 | 058904 |
| 2-11/16 | 516 | 044198 | 044007 | 052642 | 1216K.C3 | 046356 | 042516 | SR-1516 | 2 | 058905 |
| 2-15/16 | 517 | 044010 | 044013 | 052643 | 1217K.C3 | 046358 | 042518 | SR-1517 | 2 | 058906 |
| 3-3/16 | 518 | 044199 | 044114 | 052570 | 1218K.C3 | 046360 | 042520 | SR-1518 | 2 | 058907 |
| 3-7/16 | 520 | 044020 | 044023 | 052644 | 1220K.C3 | 046361 | 042521 | SR-1520 | 2 | 058908 |
| 3-15/16 | 522 | --- | 044025 | 051841 | 1222K.C3 | 046363 | 042523 | SR-1522 | 2 | 058909 |

Standard AH housings come with stabilizing ring for fixing spherical roller bearings.

With the use of the 12xx series ball bearings, if a fixed bearing is required, special stabilizing rings are needed.

Remove standard stab ring, which comes with housing, and replace with the above ball bearing stab rings.

The 4-3/16" unit is not available as fixed unit due to non-standard stab ring width. (2) special width.503-.057" would be needed.

In cases where two stab rings are needed, one should be placed on each side of the bearing.

* DODGE USAF Air Handling Bearing Assemblies use the USAF 500 Series Housings. See Page B15-36 - B15-39 for dimensions

NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.

If an * appears by the part number, the LER seal is manufactured from Steel.

STABILIZING RING DIMENSIONS

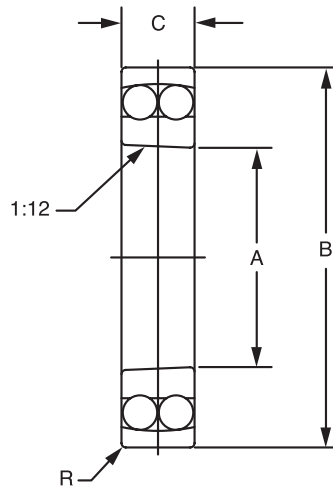
| Stab Ring | |
|-----------|-----------|
| O.D. | Width |
| 3.31 | .382-.386 |
| 3.51 | .382-.386 |
| 3.9 | .382-.386 |
| 4.68 | .311-.315 |
| 5.08 | .236-.232 |
| 5.47 | .326-.330 |
| 5.87 | .346-.350 |
| 6.26 | .386-.390 |
| 7.04 | .425-.429 |
| 7.83 | .484-.488 |

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SELECTION/DIMENSIONS

DODGE USAF Air Handling 1200 Series Self-Aligning Ball Bearing



| Shaft Size | Bearing Series | e | F _A /F _R ≤ e | F _A /F _R > e | Dynamic Capacity C | Static Capacity C ₀ | Maximum RPM | |
|------------|----------------|------|------------------------------------|------------------------------------|--------------------|--------------------------------|-------------|------|
| | | | Y | Y | | | Grease | Oil |
| 107 | 1209 | 0.21 | 3.0 | 4.7 | 4900 | 1660 | 7500 | 9000 |
| 111 | 1210 | 0.20 | 3.2 | 4.9 | 5100 | 1830 | 7000 | 8500 |
| 115 | 1211 | 0.19 | 3.3 | 5.1 | 6000 | 2240 | 6300 | 7500 |
| 203 | 1213 | 0.18 | 3.6 | 5.5 | 6950 | 2800 | 5300 | 6300 |
| 207 | 1215 | 0.17 | 3.6 | 5.6 | 8800 | 3450 | 4800 | 5600 |
| 211 | 1216 | 0.16 | 3.9 | 6.0 | 9000 | 3800 | 4300 | 5000 |
| 215 | 1217 | 0.17 | 3.7 | 5.8 | 11000 | 4550 | 4000 | 4800 |
| 303 | 1218 | 0.17 | 3.7 | 5.8 | 12900 | 5300 | 3800 | 4500 |
| 307 | 1220 | 0.18 | 3.6 | 5.5 | 15600 | 6700 | 3200 | 3800 |
| 315 | 1222 | 0.17 | 3.6 | 5.6 | 19600 | 8650 | 2800 | 3400 |
| 403 | 1224 | 0.20 | 3.11 | 4.81 | 27000 | 11800 | 2800 | 3400 |

NOTE:

$P_{eq} = F_R + YFA$ when $F_A / F_R \leq e$

$P_{eq} = 0.65 F_R + YFA$ when $F_A / F_R > e$

$$L_{10} = \left(\frac{C}{P}\right)^3 \times \left(\frac{16667}{RPM}\right)$$

NOTE: For more information, see Page B15-36 thru B15-39

| Shaft | Housing | Bearing No | A | | B | | C | | R | |
|-------|---------|------------|--------|------|--------|------|---------|------|-------|------|
| | | | Inch | (mm) | Inch | (mm) | Inch | (mm) | Inch | (mm) |
| 107 | 509 | 1209K.C3 | 1.7717 | 45 | 3.3465 | 85 | 0.7480 | 19 | 0.043 | 1.1 |
| 111 | 510 | 1210K.C3 | 1.9685 | 50 | 3.5433 | 90 | 0.7874 | 20 | 0.043 | 1.1 |
| 115 | 511 | 1211K.C3 | 2.1654 | 55 | 3.9370 | 100 | 0.8268 | 21 | 0.059 | 1.5 |
| 203 | 513 | 1213K.C3 | 2.5591 | 65 | 4.7244 | 120 | 0.9055 | 23 | 0.059 | 1.5 |
| 207 | 515 | 1215K.C3 | 2.9528 | 75 | 5.1181 | 130 | 0.9843 | 25 | 0.059 | 1.5 |
| 211 | 516 | 1216K.C3 | 3.1496 | 80 | 5.5118 | 140 | 1.0236 | 26 | 0.079 | 2.0 |
| 215 | 517 | 1217K.C3 | 3.3465 | 85 | 5.9055 | 150 | 1.1024 | 28 | 0.079 | 2.0 |
| 303 | 518 | 1218K.C3 | 3.5433 | 90 | 6.2992 | 160 | 1.1811 | 30 | 0.079 | 2.0 |
| 307 | 520 | 1220K.C3 | 3.9370 | 100 | 7.0866 | 180 | 11.3386 | 34 | 0.083 | 2.1 |
| 315 | 522 | 1222K.C3 | 4.3307 | 110 | 7.8740 | 200 | 1.4960 | 38 | 0.083 | 2.1 |
| 403 | 524 | 1224K.C3 | 4.7244 | 120 | 8.4646 | 215 | 1.6535 | 42 | 0.083 | 2.1 |

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SELECTION/DIMENSIONS

How to Order USAF Smart Stock Selections

Step 1: The Housing Choices

All smart housings feature an embedded thermocouple.

When speed is monitored, select cast-closed end.

For temperature and/or vibration monitoring without speed, both sides open may be selected

For speed, as well as temperature and vibration monitoring, select cast closed end.

Stab rings are included with all housings.

| Size | Housing Series | 4B Both Sides Open Part No. | 4B Cast Close End Part No. |
|------|----------------|-----------------------------|----------------------------|
| 207 | 515 | 067501 | 067503 |
| 215 | 517 | 067509 | 067511 |
| 307 | 520 | 067517 | 067519 |
| 315 | 522 | 067520 | 067521 |
| 407 | 526 | 055572 | 055654 |
| 415 | 528 | 055734 | 055906 |
| 515 | 534 | 057958 | 055881 |
| 615 | 538 | 055876 | 057966 |

Step 2: The Sensor Choices

For speed monitoring use AC prox

AND/OR For temperature monitoring, use thermocouple transmitter

| USAF Sensor Kits | Part No. |
|--|----------|
| AC Prox | 055940 |
| Thermocouple Transmitter | 055931 |
| 4 - 20 ma Accelerometer and Thermocouple | 067576 |

Step 3: Other Parts You Will Need To Order

If monitoring speed, you will need a special SNW. If you are not monitoring speed, you can use a standard SNW. Special SNW's feature a modified nut with prox targets

| Bearings | | | Adapters | | | Seals | | | | |
|----------|----------------|----------|----------|----------------------|-----------------------|-------|----------------------|------------------------------|--------------|-------------------|
| Size | Bearing Series | Part No. | Size | Special SNW Part No. | Standard SNW Part No. | Size | TRIPLE-TECT Part No. | Drop-In TRIPLE-TECT Part No. | LER Part No. | Taconite Part No. |
| 207 | 22215K | 422001 | 207 | 055740 | 046354 | 207 | 043542 | 039538 | 042514 | 042380 |
| 215 | 22217K | 422005 | 215 | 055710 | 046358 | 215 | 043546 | 039530 | 042518 | 042382 |
| 307 | 22220K | 422009 | 307 | 055714 | 046361 | 307 | 043549 | 039859 | 042521 | 042383 |
| 315 | 22222K | 422011 | 315 | 055712 | 046363 | 315 | 043551 | 039861 | 042523 | 042384 |
| 407 | 22226K | 422015 | 407 | 055716 | 046431 | 407 | 043554 | 039864 | 042526 | 042385 |
| 415 | 22228K | 422017 | 415 | 055907 | 046433 | 415 | 043556 | 039866 | 042528 | 042387 |
| 515 | 22234K | 422023 | 515 | 055898 | 043620 | 515 | 043560 | N/A | 042533 | 042389 |
| 615 | 22238K | 422027 | 615 | 067326 | 043624 | 615 | 043564 | N/A | 042537 | 042392 |

For additional details on DODGE Smart Bearings, see brochure DMR 2026-6

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SELECTION/DIMENSIONS

SAF-XT and SAFS Spherical Roller Bearings

DODGE SAF-XT, and SAFS Spherical Roller Bearings have the capacity to carry heavy radial loads, thrust 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 when these limits have been exceeded under controlled operating conditions. Contact DODGE Application Engineering (864-284-5700) for applications which exceed the recommendations of this catalog.

Select a bearing from the SAF-XT, and SAFS Spherical Roller Bearing Selection Chart having a radial load rating at the operating speed equal to or greater than the calculated Equivalent Radial Load for a desired L_{10} life. This simple method is all that is required for the majority of general applications and provides for occasional average shock loads.

L_{10} Hours Life - The life which may be expected from at least 90% of a given group of bearings operating under identical conditions.

For L_{10} hours life other than those listed in the selection chart, multiply the Equivalent Radial Load by one of the following factors. For 20,000 L_{10} hours life use factor of .88; 40,000, 1.09; 60,000, 1.23; 80,000, 1.34. Then select a bearing from the bold face (30,000) L_{10} ratings only in the selection chart having a rating equal to or greater than this value.

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 L_{10} life. Where substantial radial load is also present, it is advisable to calculate actual L_{10} life to assure that it meets the requirements. The maximum thrust load should not exceed SAF-XT adapter maximum allowable thrust load (Table 8 on page B15-57) nor the pillow block limits shown on page B15-58. The effectiveness of the shaft attachment to carry thrust load depends on proper tightening of the adapter and shaft deflections.

| RPM | 20-200 | 201 - 2000 | Over2000 |
|-------------------------|--------|------------|----------|
| RECOMMENDED THRUST LOAD | C/20 | C/40 | C/60 |

* Compare thrust load to adapter maximum allowed thrust load. If this value is exceeded, auxiliary method of carrying thrust load is required.

The shaft tolerances recommended (page B15-9) are adequate for normal radial and radial/thrust load applications. 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, consult DODGE Applications Engineering for recommendations. 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.

To determine the L_{10} hours life for loads and RPM's not listed, use the following equation:

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

Where:

C = Dynamic Capacity (Table 14 on page B15-76), lbs.

P = Equivalent Radial Load, lbs.

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SELECTION/DIMENSIONS

SAF-XT/SAFS Bearings

When the load on a two row roller bearing is solely a radial load with no thrust (axial) load, the load is shared equally by both rows of rollers and the equivalent radial load (P) is equal to the actual radial load. However, when a thrust load is applied, 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 8 converts the actual applied loads to an equivalent radial load having the same effect on the life of the bearing as a radial load of this magnitude.

Equation 1

The equivalent radial load $P = XFR + YFA$

Where:

P = Equivalent radial load, lbs

F_R = Radial load, lbs.

F_A = Thrust (axial) load, lbs. (** See Note below)

e = Thrust load or radial load factor (Table 14)

X = Radial load factor (Table 14)

Y = Thrust load factor (Table 14)

To find X and Y, first calculate F_A/F_R and compare to e. Determine X and Y from Table 10: Light thrust F_A/F_R less than or equal to e or heavy thrust F_A/F_R greater than e.

Substitute all known values into the equivalent radial load equation. P (equivalent radial load) thus determined 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 expanded rating table on B15-58 and B15-59.

****NOTE:** Spherical bearings require a radial load at least equal to the thrust load for proper operation $F_A/F_R = 1$. If the thrust load exceeds this limit, consult DODGE Application Engineering.

L_{10} Life Adjustment - The calculated L_{10} life obtained from the above procedure is subject to life adjustment factors in accordance with ABMA standards. Consult DODGE Application Engineering for assistance.

Bearing Reference Guide

E-Family Roller Bearings

Specialty Tapered Products

S-2000

UNISPHERE II

IMPERIAL

UNIFIED SAF

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SELECTION/DIMENSIONS

SAF-XT/SAFS Bearings

Table 8: Radial and Thrust Factors

| Shaft Size Inch | Basic Bearing Description | e | $F_A/F_R \leq e$ | | $F_A/F_R \geq e$ | | ★ Adapter. Max. Allow. Thrust Load F_A (LBS.) | Dynamic Capacity (C) Lbs. | Static Capacity Co Lbs. | Max. Rpm | |
|------------------------------|---------------------------|------|------------------|------|------------------|------|---|---------------------------|-------------------------|----------|-------|
| | | | X | Y | X | Y | | | | Grease | Oil ▲ |
| 1-15/16 | 22211K | 0.23 | 1.00 | 2.90 | 0.67 | 4.30 | 927 | 31,500 | 32,500 | 4500 | 5600 |
| 2-3/16 | 22213K | 0.24 | 1.00 | 2.80 | 0.67 | 4.20 | 1359 | 45,500 | 47,500 | 3800 | 4500 |
| 2-7/16, 2-1/2 | 22215K | 0.22 | 1.00 | 3.10 | 0.67 | 4.60 | 1568 | 48,000 | 53,000 | 3400 | 4300 |
| 2-11/16, 2-3/4 | 22216K | 0.22 | 1.00 | 3.10 | 0.67 | 4.60 | 1780 | 56,000 | 60,000 | 3200 | 4000 |
| 2-15/16, 3 | 22217K | 0.22 | 1.00 | 3.00 | 0.67 | 4.50 | 2063 | 68,000 | 73,500 | 3000 | 3800 |
| 3-3/16 | 22218K | 0.23 | 1.00 | 2.90 | 0.67 | 4.30 | 2429 | 78,000 | 85,000 | 2600 | 3400 |
| 3-7/16, 3-1/2 | 22220K | 0.24 | 1.00 | 2.80 | 0.67 | 4.20 | 3102 | 96,500 | 106,000 | 2200 | 3000 |
| 3-15/16, 4 | 22222K | 0.25 | 1.00 | 2.70 | 0.67 | 4.10 | 3931 | 122,000 | 134,000 | 2000 | 2800 |
| 4-3/16 | 22224K | 0.25 | 1.00 | 2.70 | 0.67 | 4.00 | 4693 | 143,000 | 166,000 | 1900 | 2400 |
| 4-7/16, 4-1/2 | 22226K | 0.26 | 1.00 | 2.60 | 0.67 | 3.90 | 5610 | 170,000 | 200,000 | 1800 | 2200 |
| 4-15/16, 5 | 22228K | 0.25 | 1.00 | 2.70 | 0.67 | 4.00 | 6419 | 196,000 | 236,000 | 1700 | 2000 |
| 5-3/16 | 22230K | 0.25 | 1.00 | 2.70 | 0.67 | 4.00 | 7383 | 228,000 | 275,000 | 1600 | 1900 |
| 5-7/16, 5-1/2 | 22232K | 0.26 | 1.00 | 2.60 | 0.67 | 3.90 | 8630 | 260,000 | 315,000 | 1500 | 1800 |
| 5-15/16, 6 | 22234K | 0.26 | 1.00 | 2.60 | 0.67 | 3.90 | 9858 | 300,000 | 355,000 | 1300 | 1700 |
| 6-7/16, 6-1/2 | 22236K | 0.25 | 1.00 | 2.70 | 0.67 | 4.00 | 10437 | 305,000 | 375,000 | 1300 | 1600 |
| 6-15/16, 7 | 22238K | 0.28 | 1.00 | 2.40 | 0.67 | 3.60 | 11786 | 270,000 | 415,000 | 1200 | 1300 |
| 7-1/2, 7-15/16, 8 | 22244K | 0.29 | 1.00 | 2.30 | 0.67 | 3.50 | 16020 | 365,000 | 550,000 | 950 | 1000 |
| 8-7/16, 8-1/2, 8-15/16, 9 | 23048K | 0.25 | 1.00 | 2.70 | 0.67 | 4.10 | 14887 | 260,000 | 490,000 | 800 | 1000 |
| 9-7/16, 9-1/2 | 23052K | 0.26 | 1.00 | 2.60 | 0.67 | 3.90 | 18232 | 340,000 | 630,000 | 750 | 950 |
| 9-15/16, 10, 10-7/16, 10-1/2 | 23056K | 0.25 | 1.00 | 2.70 | 0.67 | 4.10 | 20012 | 345,000 | 670,000 | 700 | 900 |

Comparing Spherical to Tapered Roller Bearing: The dynamic capacity C (spherical) and C90 (taper) are not to the same base. To compare basic dynamic capacities multiply C x .259 and compare to C90. To select and then compare, use the complete selection procedure for each bearing and then compare

- ▲ For shaft size 1-7/16 through 4-3/16 inclusive TRIPLE-TECT seals will perform like LER seals when operating above the grease speed limit
- ★ If thrust load exceeds adapter maximum allowable thrust load, auxiliary method of carrying thrust load required.

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SELECTION/DIMENSIONS

SAF-XT and SAFS Spherical Roller Bearings

Table 9: Selection Table

| Shaft Size | | L ₁₀ Life Hours | Allowable Equivalent Radial Load Rating (Lbs.) at Various Revolutions Per Minute | | | | | | | | | | | | | | | |
|------------------------------|-------------------|----------------------------------|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Adapter Mount (Inches) | Bearing Series | | 50 | 100 | 250 | 500 | 750 | 950 | 1,300 | 1,500 | 1,800 | 2,000 | 2,600 | 3,000 | 3,200 | 3,400 | 4500 | 5,600 |
| 1-15/16 | 22211 | 10,000 | 11,355 | 9,223 | 7,006 | 5,691 | 5,039 | 4,694 | 4,273 | 4,093 | 3,875 | 3,755 | 3,470 | 3,325 | 3,261 | 3,202 | 2,944 | 2,757 |
| | | 30,000 | 8,167 | 6,633 | 5,039 | 4,093 | 3,624 | 3,376 | 3,073 | 2,944 | 2,787 | 2,700 | 2,496 | 2,391 | 2,345 | 2,303 | 2,117 | 1,983 |
| | | 60,000 | 6,633 | 5,388 | 4,093 | 3,325 | 2,944 | 2,742 | 2,496 | 2,391 | 2,264 | 2,193 | 2,027 | 1,942 | 1,905 | 1,871 | 1,720 | 1,611 |
| 2-3/16 | 22213 | 10,000 | 16,401 | 13,322 | 10,120 | 8,220 | 7,279 | 6,780 | 6,171 | 5,912 | 5,597 | 5,423 | 5,013 | 4,802 | 4,710 | 4,625 | 4,252 | |
| | | 30,000 | 11,796 | 9,581 | 7,279 | 5,912 | 5,235 | 4,877 | 4,439 | 4,252 | 4,026 | 3,901 | 3,605 | 3,454 | 3,388 | 3,327 | 3,058 | |
| | | 60,000 | 9,581 | 7,783 | 5,912 | 4,802 | 4,252 | 3,961 | 3,605 | 3,454 | 3,270 | 3,168 | 2,928 | 2,805 | 2,752 | 2,702 | 2,484 | |
| 2-7/16 2-1/2 | 22215 | 10,000 | 17,302 | 14,054 | 10,676 | 8,672 | 7,679 | 7,153 | 6,511 | 6,237 | 5,905 | 5,721 | 5,288 | 5,066 | 4,969 | 4,879 | | |
| | | 30,000 | 12,444 | 10,108 | 7,679 | 6,237 | 5,523 | 5,145 | 4,683 | 4,486 | 4,247 | 4,115 | 3,803 | 3,644 | 3,574 | 3,509 | | |
| | | 60,000 | 10,108 | 8,210 | 6,237 | 5,066 | 4,486 | 4,179 | 3,803 | 3,644 | 3,450 | 3,342 | 3,089 | 2,959 | 2,903 | 2,850 | | |
| 2-11/16 2-3/4 | 22216 | 10,000 | 20,186 | 16,396 | 12,456 | 10,117 | 8,958 | 8,345 | 7,596 | 7,276 | 6,889 | 6,675 | 6,170 | 5,910 | 5,797 | 5,692 | | |
| | | 30,000 | 14,518 | 11,793 | 8,958 | 7,276 | 6,443 | 6,002 | 5,463 | 5,233 | 4,955 | 4,801 | 4,437 | 4,251 | 4,169 | 4,094 | | |
| | | 60,000 | 11,793 | 9,579 | 7,276 | 5,910 | 5,233 | 4,875 | 4,437 | 4,251 | 4,025 | 3,899 | 3,604 | 3,453 | 3,387 | 3,325 | | |
| 2-15/16 3 | 22217 | 10,000 | 24,512 | 19,910 | 15,125 | 12,285 | 10,878 | 10,133 | 9,223 | 8,836 | 8,365 | 8,105 | 7,492 | 7,177 | 7,039 | 6,912 | | |
| | | 30,000 | 17,629 | 14,320 | 10,878 | 8,836 | 7,824 | 7,288 | 6,634 | 6,355 | 6,017 | 5,829 | 5,388 | 5,162 | 5,063 | 4,971 | | |
| | | 60,000 | 14,320 | 11,631 | 8,836 | 7,177 | 6,355 | 5,920 | 5,388 | 5,162 | 4,887 | 4,735 | 4,377 | 4,193 | 4,112 | 4,038 | | |
| 3-3/16 | 22218 | 10,000 | 28,116 | 22,838 | 17,349 | 14,092 | 12,478 | 11,623 | 10,580 | 10,135 | 9,596 | 9,297 | 8,593 | 8,232 | 8,074 | 7,929 | | |
| | | 30,000 | 20,222 | 16,425 | 12,478 | 10,135 | 8,974 | 8,360 | 7,609 | 7,289 | 6,901 | 6,687 | 6,180 | 5,921 | 5,807 | 5,703 | | |
| | | 60,000 | 16,425 | 13,342 | 10,135 | 8,232 | 7,289 | 6,790 | 6,180 | 5,921 | 5,606 | 5,431 | 5,020 | 4,809 | 4,717 | 4,632 | | |
| 3-7/16 3-1/2 | 22220 | 10,000 | 34,785 | 28,254 | 21,464 | 17,434 | 15,437 | 14,380 | 13,089 | 12,539 | 11,871 | 11,502 | 10,631 | 10,185 | | | | |
| | | 30,000 | 25,018 | 20,321 | 15,437 | 12,539 | 11,103 | 10,343 | 9,414 | 9,018 | 8,538 | 8,273 | 7,646 | 7,325 | | | | |
| | | 60,000 | 20,321 | 16,506 | 12,539 | 10,185 | 9,018 | 8,401 | 7,646 | 7,325 | 6,935 | 6,719 | 6,211 | 5,950 | | | | |
| 3-15/16 4 | 22222 | 10,000 | 43,977 | 35,720 | 27,135 | 22,041 | 19,516 | 18,180 | 16,548 | 15,852 | 15,008 | 14,541 | 13,441 | | | | | |
| | | 30,000 | 31,629 | 25,691 | 19,516 | 15,852 | 14,037 | 13,076 | 11,901 | 11,401 | 10,794 | 10,459 | 9,667 | | | | | |
| | | 60,000 | 25,691 | 20,868 | 15,852 | 12,876 | 11,401 | 10,621 | 9,667 | 9,261 | 8,768 | 8,495 | 7,852 | | | | | |
| 4-3/16 | 22224 | 10,000 | 51,547 | 41,869 | 31,806 | 25,835 | 22,876 | 21,310 | 19,396 | 18,581 | 17,592 | 17,045 | | | | | | |
| | | 30,000 | 37,074 | 30,113 | 22,876 | 18,581 | 16,453 | 15,326 | 13,950 | 13,364 | 12,652 | 12,259 | | | | | | |
| | | 60,000 | 30,113 | 24,460 | 18,581 | 15,092 | 13,364 | 12,449 | 11,331 | 10,855 | 10,277 | 9,957 | | | | | | |
| 4-7/16 4-1/2 | 22226 | 10,000 | 61,279 | 49,774 | 37,812 | 30,712 | 27,195 | 25,333 | 23,058 | 22,089 | 20,913 | 20,263 | | | | | | |
| | | 30,000 | 44,074 | 35,799 | 27,195 | 22,089 | 19,559 | 18,220 | 16,584 | 15,887 | 15,041 | 14,573 | | | | | | |
| | | 60,000 | 35,799 | 29,078 | 22,089 | 17,942 | 15,887 | 14,799 | 13,470 | 12,904 | 12,217 | 11,837 | | | | | | |
| 4-15/16 5 | 22228 | 10,000 | 70,652 | 57,387 | 43,594 | 35,410 | 31,354 | 29,208 | 26,585 | 25,467 | 24,112 | 23,362 | | | | | | |
| | | 30,000 | 50,814 | 41,274 | 31,354 | 25,467 | 22,551 | 21,007 | 19,120 | 18,317 | 17,342 | 16,802 | | | | | | |
| | | 60,000 | 41,274 | 33,525 | 25,467 | 20,686 | 18,317 | 17,063 | 15,530 | 14,878 | 14,086 | 13,648 | | | | | | |
| 5-3/16 | 22230 | 10,000 | 82,187 | 66,756 | 50,712 | 41,191 | 36,473 | 33,976 | 30,925 | 29,625 | 28,049 | 27,176 | | | | | | |
| | | 30,000 | 59,111 | 48,013 | 36,473 | 29,625 | 26,232 | 24,436 | 22,242 | 21,307 | 20,173 | 19,545 | | | | | | |
| | | 60,000 | 48,013 | 38,998 | 29,625 | 24,063 | 21,307 | 19,849 | 18,066 | 17,307 | 16,386 | 15,876 | | | | | | |
| 5-7/16 5-1/2 | 22232 | 10,000 | 93,722 | 76,126 | 57,829 | 46,972 | 41,592 | 38,745 | 35,265 | 33,783 | 31,985 | | | | | | | |
| | | 30,000 | 67,407 | 54,751 | 41,592 | 33,783 | 29,914 | 27,866 | 25,364 | 24,298 | 23,004 | | | | | | | |
| | | 60,000 | 54,751 | 44,472 | 33,783 | 27,441 | 24,298 | 22,634 | 20,602 | 19,736 | 18,685 | | | | | | | |

Note: Dark Shaded Areas Require Circulating Oil

Light Shaded Areas Require Static Oil

| | | | |
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SELECTION/DIMENSIONS

SAF-XT and SAFS Spherical Roller Bearings

Table 9 (Continued): Selection Table

| Shaft Size | | L ₁₀ Life Hours | Allowable Equivalent Radial Load Rating (Lbs.) at Various Revolutions Per Minute | | | | | | | | | | | | | | | | | |
|--------------------------------------|----------------|----------------------------|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|-------|-------|-------|-------|-------|------|-------|--|--|
| Adapter Mount (Inches) | Bearing Series | | 50 | 100 | 250 | 500 | 750 | 950 | 1,300 | 1,500 | 1,800 | 2,000 | 2,600 | 3,000 | 3,200 | 3,400 | 4500 | 5,600 | | |
| 5 -15/16 6 | 22234 | 10,000 | 108,140 | 87,837 | 66,726 | 54,199 | 47,991 | 44,706 | 40,691 | 38,981 | | | | | | | | | | |
| | | 30,000 | 77,777 | 63,175 | 47,991 | 38,981 | 34,516 | 32,153 | 29,266 | 28,036 | | | | | | | | | | |
| | | 60,000 | 63,175 | 51,314 | 38,981 | 31,662 | 28,036 | 26,117 | 23,771 | 22,772 | | | | | | | | | | |
| 6 -7/16 6 1/2 | 22236 | 10,000 | 109,943 | 89,301 | 67,838 | 55,102 | 48,791 | 45,451 | 41,369 | 39,631 | | | | | | | | | | |
| | | 30,000 | 79,073 | 64,227 | 48,791 | 39,631 | 35,092 | 32,689 | 29,753 | 28,503 | | | | | | | | | | |
| | | 60,000 | 64,227 | 52,169 | 39,631 | 32,190 | 28,503 | 26,552 | 24,167 | 23,152 | | | | | | | | | | |
| 6 -15/16 7 | 22238 | 10,000 | 97,326 | 79,053 | 60,054 | 48,779 | 43,192 | 40,235 | 36,622 | | | | | | | | | | | |
| | | 30,000 | 69,999 | 56,857 | 43,192 | 35,083 | 31,065 | 28,938 | 26,339 | | | | | | | | | | | |
| | | 60,000 | 56,857 | 46,182 | 35,083 | 28,496 | 25,232 | 23,505 | 21,394 | | | | | | | | | | | |
| 7 -3/16 | 22240 | 10,000 | 108,140 | 87,837 | 66,726 | 54,199 | 47,991 | 44,706 | | | | | | | | | | | | |
| | | 30,000 | 77,777 | 63,175 | 47,991 | 38,981 | 34,516 | 32,153 | | | | | | | | | | | | |
| | | 60,000 | 63,175 | 51,314 | 38,981 | 31,662 | 28,036 | 26,117 | | | | | | | | | | | | |
| 7 -1/2 7 -15/16 8 | 22244 | 10,000 | 131,571 | 106,869 | 81,184 | 65,942 | 58,389 | 54,392 | | | | | | | | | | | | |
| | | 30,000 | 94,629 | 76,862 | 58,389 | 47,427 | 41,995 | 39,120 | | | | | | | | | | | | |
| | | 60,000 | 76,862 | 62,432 | 47,427 | 38,522 | 34,110 | 31,775 | | | | | | | | | | | | |
| 8 -7/16 8 -15/16 9 | 23048 | 10,000 | 93,722 | 76,126 | 57,829 | 46,972 | 41,592 | 38,745 | | | | | | | | | | | | |
| | | 30,000 | 67,407 | 54,751 | 41,592 | 33,783 | 29,914 | 27,866 | | | | | | | | | | | | |
| | | 60,000 | 54,751 | 44,472 | 33,783 | 27,441 | 24,298 | 22,634 | | | | | | | | | | | | |
| 9 -7/16 9-1/2 | 23052 | 10,000 | 122,559 | 99,549 | 75,623 | 61,425 | 54,390 | 50,666 | | | | | | | | | | | | |
| | | 30,000 | 88,147 | 71,598 | 54,390 | 44,178 | 39,118 | 36,440 | | | | | | | | | | | | |
| | | 60,000 | 71,598 | 58,155 | 44,178 | 35,884 | 31,774 | 29,599 | | | | | | | | | | | | |
| 9 -15/16 10 10 -7/16 10-1/2 | 23056 | 10,000 | 124,361 | 101,013 | 76,735 | 62,328 | 55,190 | | | | | | | | | | | | | |
| | | 30,000 | 89,444 | 72,651 | 55,190 | 44,828 | 39,694 | | | | | | | | | | | | | |
| | | 60,000 | 72,651 | 59,011 | 44,828 | 36,412 | 32,241 | | | | | | | | | | | | | |

Note: Dark Shaded Areas Require Circulating Oil
Light Shaded Areas Require Static Oil

| | | | |
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SELECTION/DIMENSIONS



Pillow Block Housing Permissible Thrust Load*

(lbs Maximum)

| Shaft Size - Inches | HSG. No. | Bearing Type | | | |
|------------------------------|----------|--------------|--------|--------|--------|
| | | SAF-XT | | SAFS | |
| | | 2-Bolt | 4-Bolt | 2-Bolt | 4-Bolt |
| 1-3/16 | 507 | - | - | 2900 | - |
| 1-7/16 | 509 | - | - | 3100 | - |
| 1-11/16 | 510 | - | - | 2800 | - |
| 1-15/16 | 511 | 4700 | - | 4600 | - |
| 2-3/16 | 513 | 4800 | - | 4800 | - |
| 2-7/16, 2-1/2 | 515 | 4500 | 5600 | 4500 | 5600 |
| 2-11/16, 2-3/4 | 516 | 6900 | 9300 | 6900 | 9300 |
| 2-15/16, 3 | 517 | 6500 | 8700 | 6500 | 8700 |
| 3-3/16 | 518 | 6600 | 9000 | 6600 | 9000 |
| 3-7/16, 3-1/2 | 520 | 5500 | 13400 | 5500 | 13400 |
| 3-15/16, 4 | 522 | - | 13300 | - | 13300 |
| 4-3/16 | 524 | - | 12500 | - | 12500 |
| 4-7/16, 4-1/2 | 526 | - | 9700 | - | 9800 |
| 4-15/16, 5 | 528 | - | 14700 | - | 14700 |
| 5-3/16 | 530 | - | 14800 | - | 14800 |
| 5-7/16, 5-1/2 | 532 | - | 14000 | - | 14000 |
| 5-15/16, 6 | 534 | - | 14400 | - | 14300 |
| 6-7/16, 6-1/2 | 536 | - | 14200 | - | 14300 |
| 6-15/16, 7 | 538 | - | 22800 | - | 22800 |
| 7-1/2, 7-15/16, 8 | 544 | - | 32000 | - | 32000 |
| 8-7/16, 8-1/2, 8-15/16, 9 | 48 | - | 23000 | - | 23000 |
| 9-7/16, 9-1/2 | 52 | - | 32000 | - | 32000 |
| 9-15/16, 10, 10-7/16, 10-1/2 | 56 | - | 55000 | - | 59000 |

- When utilizing heavy thrust loads on pillow block housings, the installation will require proper mounting procedures.
 - The pillow block base bolts must be of adequate strength (Grade 8) and properly tightened to the mounting structure.
 - The use of stop bars (shear strips) against pillow block mounting base is required.
 - Shaft shoulder, snap rings or thrust collars should be used to locate the inner ring on the shaft.
 - In all cases where thrust loads are large, the L_{10} Life of the bearing should be checked for proper selection and life requirements.
- * Spherical bearings require a radial load at least equal to the thrust load for proper operation $F_R/F_T \leq 1$. If the thrust load exceeds this limit, consult DODGE Application Engineering.

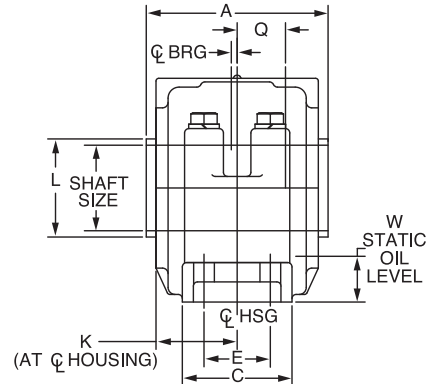
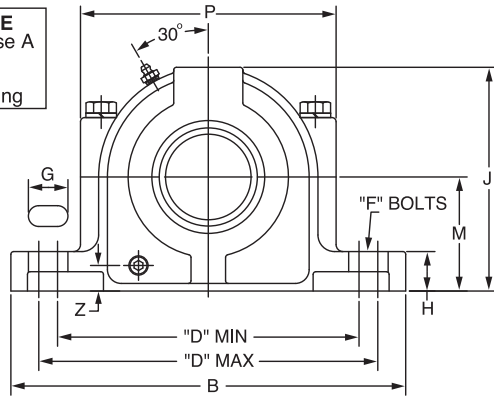
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SELECTION/DIMENSIONS

SAFS Steel Housing Pillow Blocks (22200K/2300K ADAPTER MOUNT BEARING)

LUBE NOTE
All Sizes Use A
1/8-27 NPT
Hydraulic
Grease Fitting



| Shaft Size Inch ▲ | Housing No. | Part Numbers | | | | Approx. Wt. lbs. | A with Seals | | | B | C |
|-------------------------|-------------|-------------------------|--------------|-------------------------|--------------|------------------|------------------|----------|-------|-------|------|
| | | SAFS 2-Bolt | | SAFS 4-Bolt | | | Std. TRIPLE-TECT | Optional | | | |
| | | Complete Pillow Block ★ | Housing Only | Complete Pillow Block ★ | Housing Only | | | LER/ER | Aux. | | |
| 2-7/16 | 515 | 042400 | 042425 | 042410 | 042428 | 24 | 5.16 | 4.67 | 7.44 | 11.25 | 3.13 |
| 2-1/2 | 515 | 042401 | 042425 | 042411 | 042428 | | | | | | |
| 2-11/16 | 516 | 042407 | 044231 | 042408 | 044232 | 32 | 5.42 | 4.80 | 7.63 | 13.00 | 3.50 |
| 2-3/4 | 516 | 042420 | 044231 | 042421 | 044232 | | | | | | |
| 2-15/16 | 517 | 042402 | 042433 | 042412 | 042436 | 35 | 5.61 | 4.98 | 7.80 | 13.00 | 3.50 |
| 3 | 517 | 042403 | 042433 | 042413 | 042436 | | | | | | |
| 3-3/16 | 518 | 042424 | 044233 | 042430 | 044234 | 44 | 6.14 | 5.63 | 8.00 | 13.75 | 3.88 |
| 3-7/16 | 520 | 042404 | 042440 | 042414 | 042443 | | | | | | |
| 3-1/2 | 520 | 042405 | 042440 | 042415 | 042443 | 74 | 6.41 | 5.81 | 8.50 | 15.25 | 4.38 |
| 3-15/16 | 522 | - | - | 042416 | 042450 | | | | | | |
| 4 | 522 | - | - | 042417 | 042450 | 97 | 6.86 | 6.38 | 8.64 | 16.50 | 4.75 |
| 4-3/16 | 524 | - | - | 042432 | 044235 | 120 | 8.03 | 7.44 | 8.89 | 16.50 | 4.75 |
| 4-7/16 | 526 | - | - | 042568 | 042455 | | | | | | |
| 4-1/2 | 526 | - | - | 042575 | 042455 | 160 | 8.47 | 7.88 | 9.45 | 18.38 | 5.13 |
| 4-15/16 | 528 | - | - | 042569 | 042460 | | | | | | |
| 5 | 528 | - | - | 042576 | 042460 | 175 | 8.09 | 7.50 | 10.33 | 20.13 | 5.88 |
| 5-3/16 | 530 | - | - | 042439 | 044236 | | | | | | |
| 5-7/16 | 532 | - | - | 042570 | 042465 | 245 | 9.22 | 8.63 | 10.45 | 22.00 | 6.25 |
| 5-1/2 | 532 | - | - | 042577 | 042465 | | | | | | |
| 5-15/16 | 534 | - | - | 042571 | 042469 | 310 | 9.91 | 9.13 | 11.88 | 24.75 | 6.75 |
| 6 | 534 | - | - | 042578 | 042469 | | | | | | |
| 6-7/16 | 536 | - | - | 042572 | 042468 | 345 | 10.34 | 9.63 | 11.39 | 26.75 | 7.13 |
| 6-1/2 | 536 | - | - | 042579 | 042468 | | | | | | |
| 6-15/16 | 538 | - | - | 042573 | 042472 | 400 | 10.84 | 10.13 | 11.16 | 28.00 | 7.50 |
| 7 | 538 | - | - | 042580 | 042472 | | | | | | |
| 7-1/2 | 544 | - | - | 042446 | 042477 | 640 | 12.09 | 11.63 | 13.20 | 32.75 | 8.75 |
| 7-15/16 | 544 | - | - | 042581 | 042477 | | | | | | |
| 8 | 544 | - | - | 042574 | 042477 | | | | | | |

★ Includes: (1) housing with Spacers, (1) Standard Spherical Bearing, (1) SNW Assembly (SNP above 8") and (2) TRIPLE-TECT Seals unless otherwise noted.

▲ Sizes not listed will be quoted on application
SAFS 2-Bolt Pillow Block (P2B-SAFS - - -)
SAFS 4-Bolt Pillow Block (P4B-SAFS - - -)

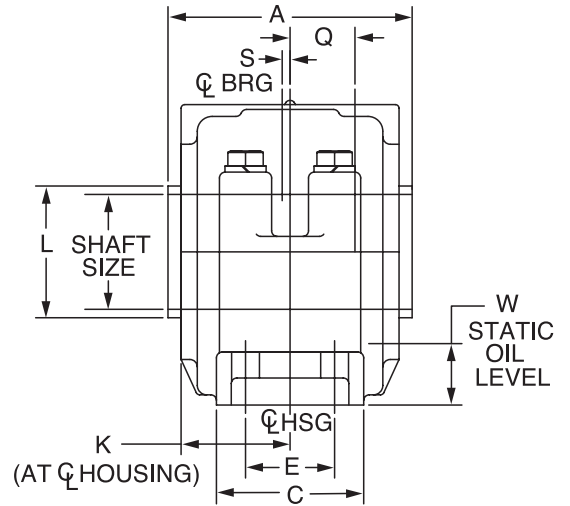
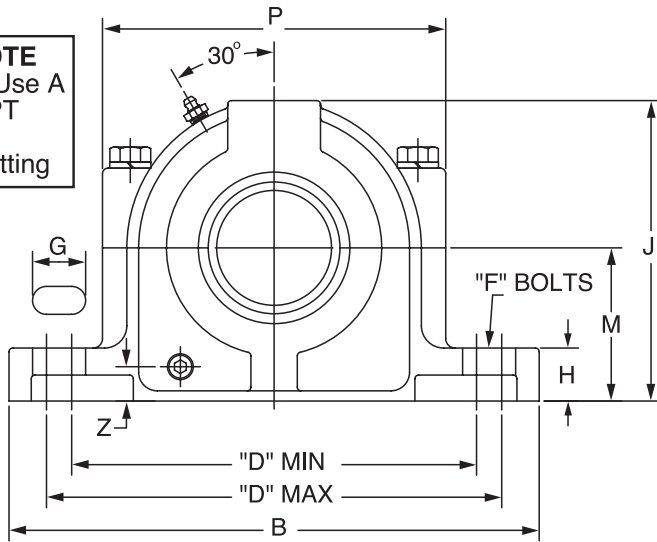
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SELECTION/DIMENSIONS



SAFS Steel Housing Pillow Blocks

LUBE NOTE
 All Sizes Use A
 1/8-27 NPT
 Hydraulic
 Grease Fitting



| | | | |
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SELECTION/DIMENSIONS



SAFS Steel Housing Pillow Blocks

| Shaft Size Inch | Dimension | | | | E | Bolt Dia. | | G | H | J | K | L ■ | M | P | Q ◆ | S ★ | W | Z |
|-----------------------|-----------|-------|--------|-------|------|-----------|-------|----------------------|------|-------|------|--------------|------|-------|--------|--------|------|------|
| | D | | | | | F | | | | | | | | | | | | |
| | 2-Bolt | | 4-Bolt | | | 2B | 4B | | | | | | | | | | | |
| | Min. | Max. | Min. | Max. | | | | | | | | | | | | | | |
| 2-7/16 2-1/2 | 8.75 | 9.50 | 8.63 | 9.63 | 1.88 | 5/8 | 1/2 | 1.13 | 1.25 | 6.44 | 2.31 | 2.80 | 3.25 | 7.06 | 1.34 | 0.13 | 1.16 | 0.63 |
| 2-11/16 2-3/4 | 10.13 | 10.63 | 9.88 | 10.88 | 2.13 | 3/4 | 5/8 | 1.25 | 1.50 | 6.88 | 2.38 | 3.17 | 3.50 | 8.00 | 1.47 | 0.19 | 1.25 | 0.63 |
| 2-15/16 3 | 10.25 | 10.75 | 10.00 | 11.00 | 2.13 | 3/4 | 5/8 | 1.13, 2B 1.25, 4B | 1.50 | 7.38 | 2.47 | 3.42 | 3.75 | 8.25 | 1.56 | 0.19 | 1.38 | 0.75 |
| 3-3/16 | 10.75 | 11.25 | 10.50 | 11.50 | 2.13 | 3/4 | 5/8 | 1.25 | 1.63 | 7.75 | 2.75 | 3.69 | 4.00 | 8.25 | 1.70 | 0.19 | 1.47 | 0.69 |
| 3-7/16 3-1/2 | 11.88 | 12.63 | 11.75 | 12.75 | 2.38 | 7/8 | 3/4 | 1.38 | 1.75 | 8.75 | 2.91 | 3.83 | 4.50 | 9.81 | 1.89 | 0.19 | 1.64 | 0.94 |
| 3-15/16 4 | - | - | 12.88 | 14.13 | 2.75 | - | 3/4 | 1.50 | 2.00 | 9.63 | 3.13 | 4.33 | 4.94 | 10.63 | 2.08 | 0.19 | 1.80 | 1.13 |
| 4-3/16 | - | - | 13.25 | 14.50 | 2.75 | - | 3/4 | 1.50 | 1.75 | 10.25 | 3.66 | 4.59 | 5.25 | 11.50 | 2.22 | 0.19 | 1.84 | 1.00 |
| 4-7/16 4-1/2 | - | - | 14.50 | 16.00 | 3.25 | - | 7/8 | 1.75 | 2.50 | 11.56 | 3.88 | 4.94 | 6.00 | 12.81 | 2.41 | 0.19 | 2.34 | 1.28 |
| 4-15/16 5 | - | - | 15.63 | 17.38 | 3.78 | - | 1 | 2.00 | 2.50 | 12.00 | 3.69 | 5.36 | 6.00 | 13.56 | 2.53 | 0.19 | 2.03 | 1.19 |
| 5-3/16 | - | - | 16.75 | 18.50 | 3.75 | - | 1 | 2.00 | 2.50 | 12.81 | 4.06 | 5.77 | 6.31 | 14.50 | 2.69 | 0.19 | 2.03 | 1.19 |
| 5-7/16 5-1/2 | - | - | 17.38 | 19.13 | 3.75 | - | 1 | 2.00 | 2.75 | 13.69 | 4.25 | 5.88 | 6.69 | 15.13 | 2.89 | 0.19 | 2.09 | 1.22 |
| 5-15/16 6 | - | - | 19.38 | 21.63 | 4.25 | - | 1 | 2.00 | 2.88 | 14.56 | 4.63 | 6.44 | 7.06 | 16.81 | 3.13 | 0.19 | 2.19 | 1.56 |
| 6-7/16 6-1/2 | - | - | 21.38 | 23.13 | 4.63 | - | 1 | 2.00 | 3.00 | 15.25 | 4.81 | 6.80 | 7.50 | 17.19 | 3.08 | 0.19 | 2.42 | 1.09 |
| 6-15/16 7 | - | - | 22.13 | 23.88 | 4.50 | - | 1-1/4 | 2.25 | 3.13 | 16.13 | 5.13 | 7.38 | 7.88 | 17.08 | 3.23 | 0.19 | 2.53 | 1.31 |
| 7-1/2 7-15/16 8 | - | - | 25.13 | 27.88 | 5.25 | - | 1-1/2 | 3.00 | 3.88 | 19.25 | 5.75 | 7.44 8.33 | 9.50 | 20.75 | 3.64 | 0.19 | 3.25 | 1.88 |

- ◆ Distance shaft should extend beyond housing centerline of pillow block is closed end style.
- ★ Non-expansion bearing offset from centerline. For Expansion Bearing S = 0.
- Based on TRIPLE-TECT seals.

Bearing Reference Guide

E-Family Roller Bearings

Specialty Tapered Products

S-2000

UNISPHERE II

IMPERIAL

UNIFIED SAF

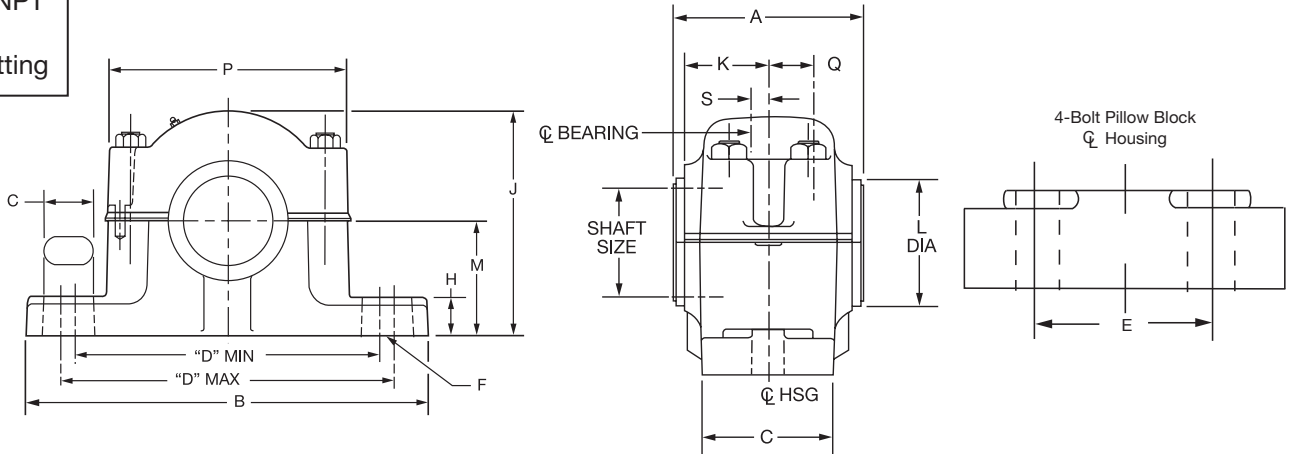
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SELECTION/DIMENSIONS

SAF-XT Pillow Blocks - 2-Bolt Base (22200K Adapter Mount Bearings)

LUBE NOTE:
All Sizes Use
A 1/8-27 NPT
Hydraulic
Grease Fitting



(22200K Adapter Mount Bearing)

| Shaft Size ▲ Inch | Complete Pillow Block Desig SAF-XT | Part No. ★ | Wt. | A | | | B | C | D | | Bolt Dia. F | G | H | J | K | L ▼ | M | P | Q ◆ | S CL of Housing to CL of Bearing | |
|-------------------------|------------------------------------|------------|------|------------------|----------|------|-------|------|-------|-------|-------------|------|------|------|------|------|------|------|------|----------------------------------|----------------|
| | | | | Std. TRIPLE-TECT | Optional | | | | Min. | Max. | | | | | | | | | | Exp. Block | Non-Exp. Block |
| | | | | | LER | AUX. | | | | | | | | | | | | | | | |
| 1-15/16 | 22511 | 042001 | 17.3 | 4.14 | 3.6.3 | 5.55 | 9.63 | 2.75 | 7.50 | 7.75 | 5/8 | 0.88 | 0.94 | 5.25 | 1.84 | 2.30 | 2.75 | 5.63 | 0.97 | 0.19 | 0.30 |
| 2-3/16 | 22513 | 042002 | 23.8 | 4.53 | 4.00 | 5.81 | 11.00 | 3.13 | 8.25 | 9.38 | 5/8 | 1.31 | 1.00 | 5.94 | 2.03 | 2.55 | 3.00 | 6.41 | 1.13 | 0.25 | 0.39 |
| 2-7/16 | 22515 | 042003 | 29.7 | 4.91 | 4.42 | 7.44 | 11.25 | 3.13 | 8.75 | 9.50 | 5/8 | 1.12 | 1.25 | 6.44 | 2.19 | 2.80 | 3.25 | 7.00 | 1.20 | 0.16 | 0.27 |
| 2-1/2 | | 042004 | 29.6 | | | | | | | | | | | | | | | | | | |
| 2-11/16 | 22516 | 042005 | 36.3 | 5.23 | 4.61 | 7.63 | 13.00 | 3.50 | 10.13 | 10.63 | 3/4 | 1.12 | 1.50 | 6.88 | 2.28 | 3.69 | 3.50 | 7.94 | 1.28 | 0.19 | 0.38 |
| 2-3/4 | | 042006 | 36.1 | | | | | | | | | | | | | | | | | | |
| 2-15/16 | 22517 | 042007 | 42.3 | 5.48 | 4.86 | 7.88 | 13.00 | 3.50 | 10.25 | 10.75 | 3/4 | 1.12 | 1.50 | 7.38 | 2.41 | 3.42 | 3.75 | 7.94 | 1.38 | 0.19 | 0.38 |
| 3 | | 042008 | 42.1 | | | | | | | | | | | | | | | | | | |
| 3-3/16 | 22518 | 042009 | 52.5 | 5.95 | 5.44 | 8.00 | 13.75 | 3.88 | 10.75 | 11.25 | 3/4 | 1.12 | 1.63 | 7.75 | 2.66 | 3.69 | 4.00 | 8.44 | 1.41 | 0.30 | 0.48 |
| 3-7/16 | 22520 | 042010 | 69.5 | 6.22 | 5.63 | 8.50 | 15.25 | 4.38 | 11.88 | 12.63 | 7/8 | 1.38 | 1.75 | 8.75 | 2.75 | 3.83 | 4.50 | 9.44 | 1.53 | 0.38 | 0.56 |
| 3-1/2 | | 042011 | 69.2 | | | | | | | | | | | | | | | | | | |

▲ Sizes not listed will be quoted on application.

★ Furnished unless otherwise specified. Includes (1) Housing with Spacer, (1) Standard Spherical Bearing, (1) SNW Assembly and (2) TRIPLE-TECT Seals.

◆ Distance shaft should extend beyond housing centerline (C₁) if pillow block is closed end style.

▼ Dimensions shown with TRIPLE-TECT seals installed.

NOTE: SAF-XT Pillow Blocks use UNIFIED adaptors, seals and bearings. All UNIFIED 500 Series accessories are available for use with SAF-XT except Drop-In TRIPLE-TECT and SPLIT-SPHER which are UNIFIED exclusives.

| | | | |
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SELECTION/DIMENSIONS

SAF-XT Pillow Blocks - 4-Bolt Base (22200K/23000K Adapter Mount Bearings)

| Shaft Size ▲ Inch | Complete Pillow Block Design SAF-XT | Part No. ★ P4B-SFXT | Wt. | A | | | B | C | D | | E | Bolt Dia. F | G | H | J | K | L ▼ | M | P | Q ◆ | S C _L of Housing to C _L of Bearing Exp Non-Exp | |
|-------------------------|-------------------------------------|---------------------------|-------|---------------------|----------|-------|-------|-------|-------|-------|------|-------------|------|-------|-------|------|--------|------|-------|--------|--|------|
| | | | | Std. TRIPLE-TECT | Optional | | | | Min. | Max. | | | | | | | | | | | | |
| | | | | | LER | AUX. | | | | | | | | | | | | | | | | |
| 2-7/16 | 22515 | 042015 | 29.7 | 4.91 | 4.42 | 7.44 | 11.25 | 3.13 | 8.63 | 9.63 | 1.88 | 1/2 | 1.13 | 1.25 | 6.44 | 2.19 | 2.80 | 3.25 | 7.00 | 1.20 | 0.16 | 0.27 |
| 2-1/2 | | 042016 | 29.6 | | | | | | | | | | | | | | | | | | | |
| 2-11/16 | 22516 | 042017 | 36.3 | 5.23 | 4.61 | 7.63 | 13.00 | 3.50 | 9.08 | 10.88 | 2.13 | 5/8 | 1.25 | 1.50 | 6.88 | 2.28 | 3.17 | 3.50 | 7.94 | 1.28 | 0.19 | 0.38 |
| 2-3/4 | | 042030 | 36.1 | | | | | | | | | | | | | | | | | | | |
| 2-15/16 | 22517 | 042019 | 42.3 | 5.48 | 4.86 | 7.88 | 13.00 | 3.50 | 10.00 | 11.00 | 2.13 | 5/8 | 1.25 | 1.50 | 7.38 | 2.41 | 3.42 | 3.75 | 7.94 | 1.38 | 0.19 | 0.38 |
| 3 | | 042020 | 42.1 | | | | | | | | | | | | | | | | | | | |
| 3-3/16 | 22518 | 042021 | 52.5 | 5.95 | 5.44 | 8.00 | 13.75 | 3.88 | 10.50 | 11.50 | 2.13 | 5/8 | 1.25 | 1.63 | 7.75 | 2.66 | 3.69 | 4.00 | 8.44 | 1.41 | 0.59 | 0.48 |
| 3-7/16 | | 042022 | 69.5 | | | | | | | | | | | | | | | | | | | |
| 3-1/2 | 22520 | 042023 | 69.2 | 6.22 | 5.63 | 8.50 | 15.25 | 4.38 | 11.75 | 12.75 | 2.38 | 3/4 | 1.38 | 1.75 | 8.75 | 2.75 | 3.83 | 4.50 | 9.44 | 1.53 | 0.38 | 0.56 |
| 3-15/16 | | 042024 | 92.9 | | | | | | | | | | | | | | | | | | | |
| 4 | 22522 | 042025 | 92.6 | 6.80 | 6.31 | 8.64 | 16.50 | 4.75 | 12.88 | 14.13 | 2.75 | 3/4 | 1.50 | 2.00 | 9.63 | 3.03 | 4.33 | 4.94 | 10.56 | 1.73 | 0.38 | 0.55 |
| 4-3/16 | | 042270 | 101.8 | | | | | | | | | | | | | | | | | | | |
| 4-7/16 | 22526 | 042271 | 148 | 7.41 | 6.81 | 9.45 | 18.38 | 5.13 | 14.50 | 16.00 | 3.25 | 7/8 | 1.75 | 2.50 | 11.69 | 3.28 | 4.94 | 6.00 | 11.63 | 1.95 | 0.45 | 0.64 |
| 4-1/2 | | 042272 | 147.7 | | | | | | | | | | | | | | | | | | | |
| 4-15/16 | 22528 | 042273 | 173.9 | 7.66 | 7.06 | 10.33 | 20.13 | 5.88 | 15.63 | 17.38 | 3.38 | 1 | 2.00 | 23.50 | 12.13 | 3.41 | 5.36 | 6.00 | 12.44 | 2.05 | 0.50 | 0.69 |
| 5 | | 042274 | 173.6 | | | | | | | | | | | | | | | | | | | |
| 5-3/16 | 22530 | 042282 | 215 | 7.97 | 7.38 | 10.64 | 21.25 | 6.25 | 16.75 | 18.50 | 3.75 | 1 | 2.00 | 2.50 | 12.31 | 3.56 | 5.77 | 6.31 | 13.56 | 2.14 | 0.56 | 0.75 |
| 5-7/16 | | 042283 | 245 | | | | | | | | | | | | | | | | | | | |
| 5-1/2 | 22532 | 042284 | 244 | 8.28 | 7.69 | 10.45 | 22.00 | 6.25 | 17.38 | 19.13 | 3.75 | 1 | 2.00 | 2.75 | 13.69 | 3.72 | 5.88 | 6.69 | 14.19 | 2.33 | 0.58 | 0.77 |
| 5-15/16 | | 042303 | 300 | | | | | | | | | | | | | | | | | | | |
| 6 | 22534 | 042304 | 299 | 8.66 | 7.94 | 10.70 | 24.75 | 6.75 | 19.63 | 21.38 | 4.25 | 1 | 2.00 | 2.88 | 14.56 | 3.84 | 6.44 | 7.06 | 16.31 | 2.47 | 0.58 | 0.78 |
| 6-7/16 | | 042305 | 372 | | | | | | | | | | | | | | | | | | | |
| 6-1/2 | 22536 | 042306 | 371 | 8.84 | 8.13 | 11.39 | 26.75 | 7.13 | 21.38 | 23.13 | 4.63 | 1 | 2.00 | 3.00 | 15.25 | 3.94 | 6.80 | 7.50 | 17.88 | 2.53 | 0.55 | 0.75 |
| 6-15/16 | | 042307 | 407 | | | | | | | | | | | | | | | | | | | |
| 7 | 22538 | 042308 | 406 | 9.34 | 8.63 | 11.47 | 28.00 | 7.50 | 22.13 | 23.88 | 4.50 | 1-1/4 | 2.25 | 3.13 | 16.00 | 4.19 | 7.38 | 7.88 | 18.31 | 2.61 | 0.63 | 0.81 |
| 7-1/2 | | 042309 | 626 | | | | | | | | | | | | | | | | | | | |
| 7-15/16 | 22544 | 042370 | 625 | 10.66 | 9.94 | 13.20 | 32.75 | 8.75 | 25.13 | 27.88 | 5.25 | 1-1/2 | 3.00 | 3.88 | 19.25 | 4.84 | 7.94 | 9.50 | 20.63 | 2.92 | 0.72 | 0.72 |
| 8 | | 042371 | 624 | | | | | | | | | | | | | | | | | | | |
| 8-7/16 | 23048 | 042372† | 408 | 10.50 | 9.06 | 12.58 | 28.75 | 8.00 | 22.50 | 25.00 | 5.00 | 1-1/4 | 2.75 | 3.25 | 17.06 | 4.41 | 9.33 | 8.25 | 18.31 | 2.94 | 0.78 | 0.78 |
| 8-1/2 | | 042373 | 407 | | | | | | | | | | | | | | | | | | | |
| 8-15/16 | | 042374 | 406 | | | | | | | | | | | | | | | | | | | |
| 9 | | 042375 | 405 | | | | | | | | | | | | | | | | | | | |
| 9-7/16 | 23052 | 042377 | 624 | 10.36 | 9.94 | 13.45 | 32.75 | 8.75 | 25.13 | 27.89 | 5.25 | 1-1/2 | 3.00 | 3.88 | 19.25 | 4.84 | 9.98 | 9.50 | 20.63 | 3.22 | 0.70 | 0.70 |
| 9-1/2 | | 422556 | | | | | | | | | | | | | | | | | | | | |
| 9-15/16 | 2356 | 042378 • | 707 | 13.77 | 12.50 | 15.70 | 32.00 | 11.25 | 25.75 | 27.75 | 7.25 | 1-3/4 | 2.88 | 4.00 | 19.88 | 6.16 | 10.38 | 9.50 | 20.75 | 3.81 | 0.88 | 0.88 |
| 10 | | 042376 | | | | | | | | | | | | | | | | | | | | |
| 10-7/16 | | 042379 • | | | | | | | | | | | | | | | | | | | | |
| 10-1/2 | | 422572 • | | | | | | | | | | | | | | | | | | | | |

- ▲ Sizes not listed will be quoted on application.
- ◆ Distance shaft should extend beyond housing centerline (C_L) if pillow block is closed end style.
- ★ Includes (1) Housing with Spacer, (1) Standard Spherical Bearing, (1) SNW Assembly (SNP above 8,) and (2) TRIPLE-TECT Seals unless otherwise noted.
- ▼ Dimensions shown with TRIPLE-TECT seals installed.
- Made-To-Order - Consult DODGE for delivery
- † Assembled to order. Consult DODGE for delivery

NOTE: SAF-XT Pillow Blocks use USAF 500 adaptors, seals, and bearings. Part numbers for these individual components can be found on Pages B15-26 thru B15-39.
All USAF 500 Series accessories are available for use with SAF-XT except Drop-In TRIPLE-TECT seals and SPLIT-SPHER components which are UNIFIED exclusives

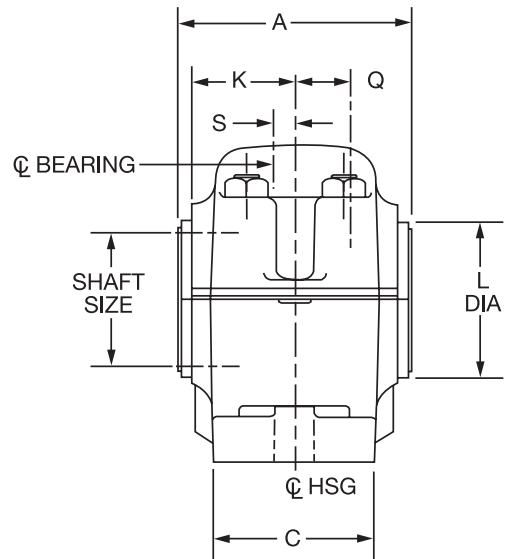
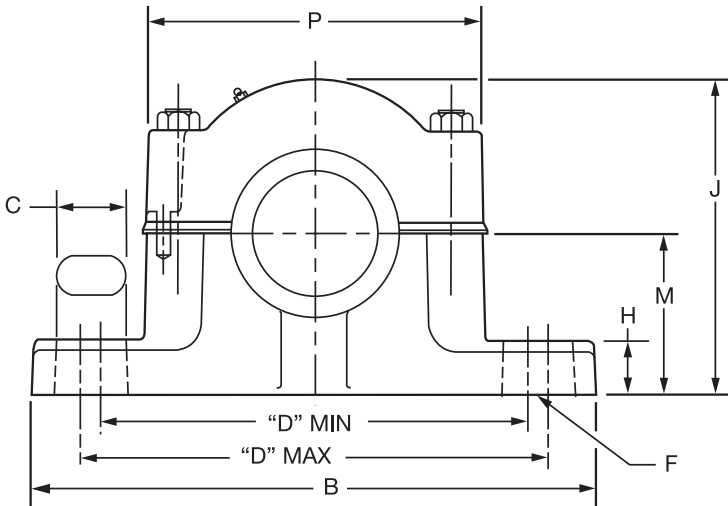
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SELECTION/DIMENSIONS



SAF-XT Pillow Blocks Housing

LUBE NOTE:
 All Sizes Use
 A 1/8-27 NPT
 Hydraulic Grease
 Fitting



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SELECTION/DIMENSIONS



SAF-XT Pillow Blocks Housing

| S-1 Size Inch (mm) | Shaft Housing | 2-Bolt | | 4-Bolt | |
|--------------------------|------------------|----------------|-----------------------|----------------|--------------------|
| | | Part Number | Approx. Wt. (lbs.) | Part Number | Approx. Wt. lbs |
| 1-15/16 | 511 | 042100 | 13.75 | - | - |
| 2-3/16 | 513 | 042103 | 18.00 | - | - |
| (55,60) | 513M | 046323 | 18.00 | - | - |
| 2-7/16, 2-1/2 | 515 | 042106 | 22.75 | 042109 | 22 |
| (65) | 515M | 046324 | 22.00 | 046325 | 22 |
| 2-11/16 | 516 | 042111 | 30.5 | 042114 | 30 |
| 2-3/4 | | | | | |
| 2-15/16 | 517 | 042116 | 31.5 | 042119 | 32 |
| 3 | | | | | |
| 3-3/16 | 518 | 042121 | 38 | 042124 | 40 |
| 3-7/16 | 520 | 042126 | 51.5 | 042129 | 52 |
| 3-1/2 | | | | | |
| 3-15/16 | 522 | - | - | 042131 | 68 |
| 4 | | | | | |
| 4-3/16 | 524 | - | - | 042134 | 70 |
| (110) | 524M | - | - | 046326 | |
| 4-7/16 | 526 | - | - | 042137 | 108 |
| 4-1/2 | | | | | |
| 4-15/16 | 528 | - | - | 042140 | 143 |
| 5 | | | | | |
| 5-3/16 | 530 | - | - | 042143 | 120 |
| 5-7/16 | 532 | - | - | 042146 | 168 |
| 5-1/2 | | | | | |
| 5-15/16 | 534 | - | - | 042149 | 220 |
| 6 | | | | | |
| 6-7/16 | 536 | - | - | 042152 | 266 |
| 6-1/2 | | | | | |
| 6-15/16 | 538 | - | - | 042155 | 295 |
| 7 | | | | | |
| 7-1/2 | 544S | - | - | 042167 | 443 |
| 7-15/16 | 544 | - | - | 042158 | 443 |
| 8 | | | | | |
| 8-7/16, 8-1/2 | 48 | - | - | 042161 | 308 |
| 8-15/16, 9 | | | | | |
| 9-7/16 | 52 | - | - | 422555 | 440 |
| 9-1/2 | | | | | |
| 9-15/16 | 56 | - | - | 042164 | 549 |
| 10 | | | | | |
| 10-7/16 | 056L | - | - | 422571 | 620 |
| 10-1/2 | | | | | |

Bearing Reference
Guide

E-Family Roller
Bearings

Specialty Tapered
Products

S-2000

UNISPHERE II

IMPERIAL

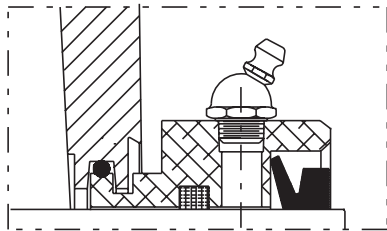
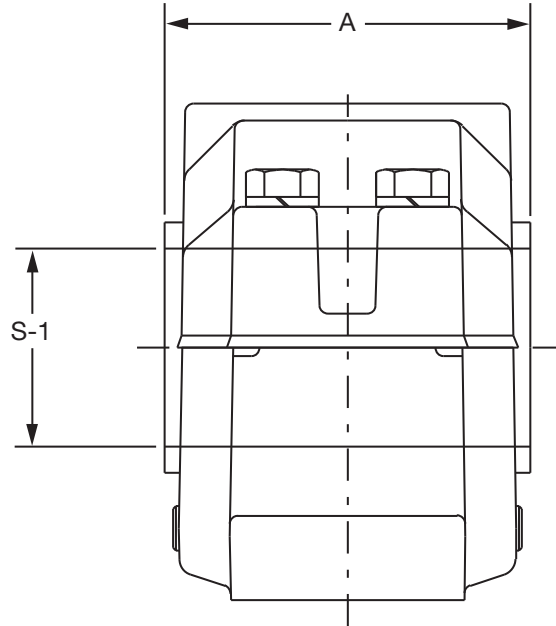
UNIFIED SAF

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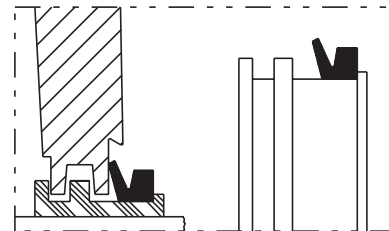


SAF-XT & SAFS Pillow Block Seals

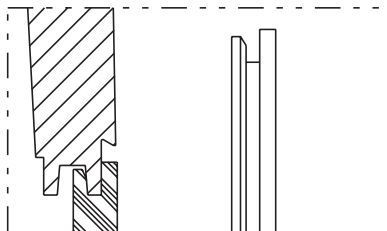
LENGTH THRU BORE W/SEALS



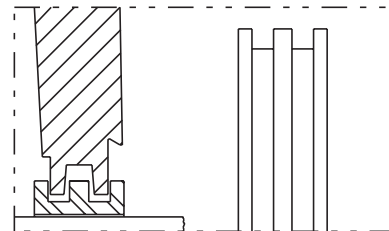
AUXILIARY TACONITE Seal
For dusty environments and low to moderate speeds



TRIPLE-TECT Seal
General purpose seal for wet or dirty environments



END COVER Seal
Allows use of open shaft housing as closed-end



LER SEAL
High speed seal for relatively clean environments

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SPECIFICATION/HOW TO ORDER
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SELECTION
PAGE B15-13



SELECTION/DIMENSIONS

SAF-XT & SAFS Pillow Block Seals

| 500 Seals - Inch | | | | | | |
|-----------------------|---------|------------|------------------|-------------------------|--------------------------|-----------|
| S-1 Shaft Size (Inch) | Housing | Seal Group | Part Numbers | | | |
| | | | TRIPLE-TECT (TT) | # Metal Labyrinth (LER) | Auxiliary Taconite (AUX) | End Cover |
| 1-15/16 | 511 | 12 | 043540 | 042512 | 041687 | 040702 |
| 2-3/16 | 513 | 14 | 043541 | 042513 | 041688 | 040703 |
| 2-7/16 | 515 | 20 | 043542 | 042514 | 042380 | 040704 |
| 2-1/2 | | | 043543 | 042515 | 040890 | 040704 |
| 2-11/16 | 516 | 24 | 043544 | 042516 | 042381 | 040705 |
| 2-3/4 | | | 043545 | 042517 | 040891 | 040705 |
| 2-15/16 | 517 | 28 | 043546 | 042518 | 042382 | 040706 |
| 3 | | | 043547 | 042519 | 040918 | 040706 |
| 3-3/16 | 518 | 34 | 043548 | 042520 | 040892 | 040707 |
| 3-7/16 | 520 | 46 | 043549 | 042521 | 042383 | 040708 |
| 3-1/2 | | | 043550 | 042522 | 040919 | 040708 |
| 3-15/16 | 522 | 50 | 043551 | 042523 | 042384 | 040709 |
| 4 | | | 043552 | 042524 | 040893 | 040709 |
| 4-3/16 | 524 | 52 | 043553 | 042525 | 044360 | 040710 |
| 4-7/16 | 526 | 54 | 043554 | 042526 | 042385 | 040711 |
| 4-1/2 | | | 043555 | 042527 | 042386 | 040711 |
| 4-15/16 | 528 | 56 | 043556 | 042528 | 042387 | 040712 |
| 5 | | | 043557 | 042529 | 040894 | 040712 |
| 5-3/16 | 530 | 58 | 043558 | 042530 | - | 040713 |
| 5-7/16 | 532 | 60 | 043559 | 042531 | 042388 | 040714 |
| 5-1/2 | | | 043574 | 042532 | 040895 | 040714 |
| 5-15/16 | 534 | 64 | 043560 | 042533 | 042389 | 040681 |
| 6 | | | 043561 | 042534 | 041646 | 040681 |
| 6-7/16 | 536 | 68 | 043562 | 042535 | 042390 | 040682 |
| 6-1/2 | | | 043563 | 042536 | 042391 | 040682 |
| 6-15/16 | 538 | 72 | 043564 | 042537 | 042392 | 040683 |
| 7 | | | 043565 | 042538 | 043109 | 040683 |
| 7-3/16 | 540 | 74 | 046421 | 043386 | 040690 | 040691 |
| 7-1/2 | 544S | 76 | 043567 | 042539 | 040896 | 040684 |
| 7-15/16 | 544 | 78 | 043566 | 042540 | 042393 | 040685 |
| 8 | | | 043568 | 042541* | 042394 | 040685 |
| 8-7/16 | 048 | 90 | 043569 | 042542* | 040897 | 042368 |
| 8-1/2 | | | 043570 | 042543* | 040898 | 042368 |
| 8-15/16 | | | 043571 | 042544* | 040899 | 042368 |
| 9 | | | 043572 | 042545* | 040995 | 042368 |
| 9-7/16 | 052 | 84 | 043538 | 042510* | 040900 | 422606 |
| 9-1/2 | | | 422594 | 042594* | 040901 | 422606 |
| 9-15/16 | 056 | 92 | 043575 | 042511* | - | 042369 |
| 10 | | | 043573 | 041082* | 042395 | 042369 |
| 10-7/16 | 056L | 94 | 047940 | 042036* | - | 042397 |
| 10-1/2 | | | 047941 | 422573* | 042396 | 042397 |

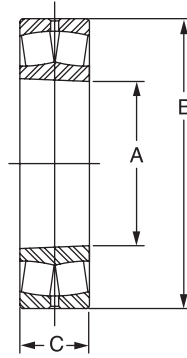
NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.
If an * appears by the part number, the LER seal is manufactured from Steel.

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SELECTION/DIMENSIONS



SAF-XT & SAFS 22200K and 23000K Spherical Roller Bearings



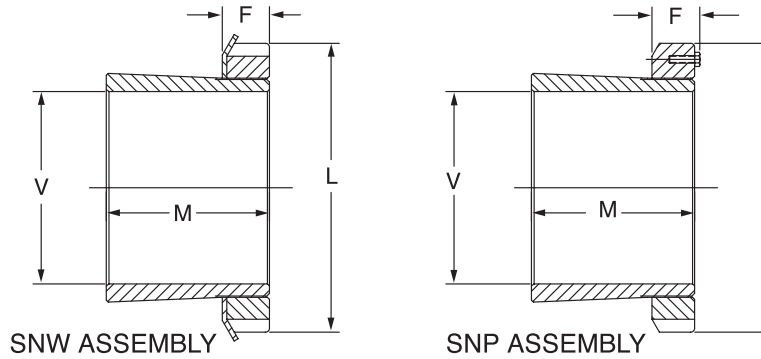
| S-1 Shaft Size (Inch) | Housing | Bearing No. | Part No. | Approx. Wt. (lbs) | A Inch (mm) | B Inch (mm) | C Inch (mm) |
|---------------------------------|---------|-------------|---------------|-------------------|---------------|---------------|--------------|
| 1-15/16 | 511 | 22211K | 422123 | 1.8 | 2.1654 (55) | 3.9370 (100) | .9843 (25) |
| 2-3/16 | 513 | 22213K | 422124 | 3.2 | 2.5591 (65) | 4.7244 (120) | 1.2205 (31) |
| 2-7/16 2-1/2 | 515 | 22215K | 422001 | 3.6 | 2.9528 (75) | 5.1181 (130) | 1.2205 (31) |
| 2-11/16 2-3/4 | 516 | 22216K | 422003 | 4.4 | 3.1496 (80) | 5.5188 (140) | 1.2992 (33) |
| 2-15/16 3 | 517 | 22217K | 422005 | 5.5 | 3.3465 (85) | 5.9055 (150) | 1.4173 (36) |
| 3-3/16 | 518 | 22218K | 422007 | 7.0 | 3.5433 (90) | 6.2992 (160) | 1.5748 (40) |
| 3-7/16 3-1/2 | 520 | 22220K | 422009 | 10.4 | 3.9370 (100) | 7.0866 (180) | 1.8110 (46) |
| 3-15/16 4 | 522 | 22222K | 422011 | 14.9 | 4.3307 (110) | 7.8740 (200) | 2.0866 (53) |
| 4-3/16 | 524 | 22224K | 422013 | 18.7 | 4.7244 (120) | 8.4646 (215) | 2.2865 (58) |
| 4-7/16 4-1/2 | 526 | 22226K | 422015 | 23.4 | 5.1181 (130) | 9.0551 (230) | 2.5197 (64) |
| 4-15/16 5 | 528 | 22228K | 422017 | 29.5 | 5.5118 (140) | 9.8425 (250) | 2.6772 (68) |
| 5-3/16 | 530 | 22230K | 422019 | 37.5 | 5.9055 (150) | 10.6299 (270) | 2.8740 (73) |
| 5-7/16 5-1/2 | 532 | 22232K | 422021 | 48.1 | 6.2992 (160) | 11.4173 (290) | 3.1496 (80) |
| 5-15/16 6 | 534 | 22234K | 422023 | 58.0 | 6.6929 (170) | 12.2047 (310) | 3.3858 (86) |
| 6-7/16 6-1/2 | 536 | 22236K | 422025 | 60.8 | 7.0866 (180) | 12.5984 (320) | 3.3858 (86) |
| 6-15/16 7 | 538 | 22238K | 422027 | 78.9 | 7.4803 (190) | 13.3858 (340) | 3.6220 (92) |
| 7-3/16 | 540 | 22240K | 422064 | 94.1 | 7.8740 (200) | 14.1732 (360) | 3.8583 (98) |
| 7-1/2 | 544S | 22244K | 422029 | 129.0 | 8.6614 (220) | 14.7480 (400) | 4.2520 (108) |
| 7-15/16 8 | 544 | | | | | | |
| 8-7/16 8-1/2 8-15/16 9 | 048 | 23048K | 422031 | 73.4 | 9.4488 (240) | 14.1732 (360) | 3.6220 (92) |
| 9-7/16 9-1/2 | 052 | 23052K | 422543 | 106.0 | 10.2362 (260) | 15.7480 (400) | 4.0945 (104) |
| 9-15/16 10 | 056 | 23056K | 422030 | 114.0 | 11.0236 (280) | 16.5354 (430) | 4.1732 (106) |
| 10-7/16 10-1/2 | 056L | | | | | | |

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SELECTION/DIMENSIONS

SAF-XT & SAFS Adaptor Assembly (SNW)



| V Shaft Dia. (In) | Housing | SNW/SNP Number | Part Number | Approx Wt. (Lbs) | L (in.) | F Max (in.) | M (in.) |
|----------------------|---------|-------------------|----------------|---------------------|------------|----------------|------------|
| 1-15/16 | 511 | H311-SNW-115 | 046352 | 0.8 | 2.97 | 0.58 | 1.85 |
| 2-3/16 | 513 | H313-SNW-203 | 046353 | 1.6 | 3.38 | 0.64 | 2.10 |
| 2-7/16 | 515 | H315-SNW-207 | 046354 | 2.6 | 3.88 | 0.69 | 2.29 |
| 2-1/2 | | H315-SMW-208 | 046355 | 2.3 | | | |
| 2-11/16 | 516 | H316-SNW-211 | 046356 | 2.6 | 4.16 | 0.69 | 2.37 |
| 2-3/4 | | H316-SNW-212 | 046357 | 2.6 | | | |
| 2-15/16 | 517 | H317-SNW-215 | 046358 | 3.0 | 4.41 | 0.72 | 2.47 |
| 3 | | H317-SNW-300 | 046359 | 2.5 | | | |
| 3-3/16 | 518 | H318-SNW-303 | 046360 | 3.1 | 4.66 | 0.80 | 2.63 |
| 3-7/16 | 520 | H320-SNW-307 | 046361 | 4.6 | 5.19 | 0.83 | 2.87 |
| 3-1/2 | | H320-SNW-308 | 046362 | 4.4 | | | |
| 3-15/16 | 522 | H322-SNW-315 | 046363 | 5.6 | 5.72 | 0.86 | 3.19 |
| 4 | | H322-SNW-400 | 046364 | 5.0 | | | |
| 4-3/16 | 524 | H3124-SNW-403 | 046430 | 6.5 | 6.12 | 0.92 | 3.47 |
| 4-7/16 | 526 | H3126-SNW-407 | 046431 | 9.2 | 6.75 | 0.95 | 3.76 |
| 4-1/2 | | H3126-SNW-408 | 046432 | 8.6 | | | |
| 4-15/16 | 528 | H3128-SNW-415 | 046433 | 10.0 | 7.09 | 1.02 | 3.97 |
| 5 | | H3128-SNW-500 | 046434 | 9.0 | | | |
| 5-3/16 | 530 | SNW30-503 | 043618 | 12.7 | 7.69 | 1.08 | 4.22 |
| 5-7/16 | 532 | SNW32-507 | 043619 | 15.9 | 8.06 | 1.14 | 4.57 |
| 5-1/2 | | SNW32-508 | 043634 | 15.0 | | | |
| 5-15/16 | 534 | SNW34-515 | 043620 | 17.6 | 8.66 | 1.23 | 4.83 |
| 6 | | SNW34-600 | 043621 | 17.0 | | | |
| 6-7/16 | 536 | SNW36-607 | 043622 | 17.0 | 9.06 | 1.27 | 5.02 |
| 6-1/2 | | SNW36-608 | 043623 | 18.0 | | | |
| 6-15/16 | 538 | SNW38-615 | 043624 | 18.0 | 9.47 | 1.30 | 5.26 |
| 7 | | SNW38-700 | 043625 | 17.0 | | | |
| 7-3/16 | 540 | SNW40-703 | 046545 | 30.7 | 9.84 | 1.36 | 5.48 |
| 7-1/2 | 544S | SNW44-708 | 043627 | 30.2 | 11.00 | 1.42 | 5.90 |
| 7-15/16 | 544 | SNW44-715 | 043626 | 36.0 | | | |
| 8 | | SNW44-800 | 043628 | 34.7 | | | |
| 8-7/16 | 048 | SNP048-807 | 043629 | 38.0 | 11.44 | 1.73 | 5.44 |
| 8-1/2 | | SNP048-808 | 043630 | 30.0 | | | |
| 8-15/16 | | SNP048-815 | 043631 | 28.0 | | | |
| 9 | | SNP048-900 | 043632 | 22.0 | | | |
| 9-7/16 | 052 | SNP052-907 | 043585 | 41.1 | 12.19 | 1.80 | 6.02 |
| 9-1/2 | | SNP052-908 | 422538 | 40.0 | | | |
| 9-15/16 | 056 | SNP056-915 | 043586 | 43.7 | 13.00 | 1.89 | 6.19 |
| 10 | | SNP056-1000 | 043633 | 42.0 | | | |
| 10-7/16 | 056L | SNP056-1007 | 043580 | 30.0 | 13.00 | 1.89 | 6.19 |
| 10-1/2 | | SNP056-1008 | 422567 | 28.0 | | | |

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SELECTION/DIMENSIONS

Pillow Block SPLIT-SPHER™ Roller Bearings (USAF 500 SERIES)

DODGE SPLIT-SPHER 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 (864-284-5700) 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 11 on page B15-70), lbs.
P = Equivalent Radial Load, lbs.

(See Equation 1 on page B15-74 for definition of P)

GENERAL

Heavy Service - For heavy shock loads, frequent shock loads, or severe vibrations, increase the Equivalent Radial Load up to 50% (according to severity of conditions) 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. Where substantial radial load is also present, it is advisable to calculate actual L₁₀ life to assure that the bearing meets the requirements.

| RPM | 20-200 | 201 - 2000 | Over2000 |
|-------------------------|--------|------------|----------|
| RECOMMENDED THRUST LOAD | C/20 | C/40 | C/60 |

The shaft tolerances recommended below are adequate for normal radial and radial/thrust load applications. 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 B15-21 for maximum values.** Spherical bearings require a radial load at least equal to the thrust load for proper operation. It is advisable to calculate actual L₁₀ life to assure adequate conditions (normally at least 30,000 hours life). 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.

SHAFT TOLERANCES

| Shaft Sizes, Inches | Tolerance, Inches |
|---------------------|-------------------|
| Up to 1-1/2" | +.000 - .002" |
| 1-9/16 to 2-1/2" | +.000 - .003" |
| 2-5/8 to 4" | +.000 - .004" |
| 4-7/16 to 6" | +.000 - .005" |

* Use the smaller of this value or the maximum allowable thrust load listed in Table 10.

NOTE: Polyamide cages may limit bearing operating temperature.



SELECTION/DIMENSIONS

Selecting Bearings - Supporting Radial Loads Only

1. Define the desired L_{10} Life in Hours.
2. Establish bearing radial load, F_R .
3. Establish RPM.
4. Calculate the equivalent radial load.
 $(P = F_R \times 1.1\# = \text{Equivalent radial load})$
 (The DODGE program BEST ♦ can be used to find application loads.)

Using the easy selection Table 12 on page B15-75, under the RPM column find the equivalent load that equals or is slightly higher than the application radial load multiplied by a 1.1 factor 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 = 4,000 lbs.
 3. RPM = 950

At the intersection of the 950 RPM column and the 30,000 hours L_{10} life row, the equivalent radial load of 4445 lbs. exceeds the 4400 lbs. (4000×1.1) application equivalent radial load for shaft size 2-7/16" - 2-1/2". A SPLIT-SPHER bearing with shaft size of 2-7/16" - 2-1/2" may be used for this application.

- The application factor, 1.1, compensates for the gaps and relief area on either side of the gaps. At no time should F_R or P exceed 20% of the Dynamic Capacity C .
- ♦ 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. This interactive program is available at www.ptwizard.com under the Product Section area.

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 .

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

$(P = F_R \times 1.1\bullet = \text{Equivalent Radial Load})$

Since the L_{10} , RPM, and F_R are known, solve for C . Select from the dynamic capacity column on Table 11 on page B15-74 the C value equal to or just greater than the C value just calculated. The bore size on the far left represents the minimum shaft size selection. Check that the application RPM does not exceed the MAX. RPM on Table 10. When selecting an L_{10} life of less than 30,000 hours, particular attention must be given to shaft deflection and proper lubricant selection.

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SELECTION/DIMENSIONS

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 11 on page B15-74 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.

Equation 1

The equivalent radial load $P = (XFR + YFA) \times 1.1$

Where:

P = Equivalent radial load, lbs

F_R = Radial load, lbs

F_A = Thrust (axial) load, lbs (** See Note below)

e = Thrust load or radial load factor (Table 11)

X = Radial load factor (Table 11)

Y = Thrust load factor (Table 11)

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 10 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 chart.

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 (864-284-5700).

AXIAL EXPANSION CAPABILITY

The axial expansion capability of SPLIT-SPHER Pillow Blocks is the same as the UNIFIED 500 pillow blocks. See Table 7 on page B15-25.

- The application factor, 1.1, compensates for the gaps and relief area on either side of the gaps. At no time should F_R or P exceed 20% of the Dynamic Capacity C

Table 11: SPLIT-SPHER Bearings Radial & Thrust Factor

| Shaft Size Inches | Replaces Bearing Series | e | $F_A/F_R \leq e$ | | $F_A/F_R > e$ | | Max. Allow. Thrust Load F_A Lbs. | Dynamic* Capacity (C) Pounds | Max. RPM (Grease) |
|-------------------|-------------------------|------|------------------|------|---------------|------|------------------------------------|------------------------------|-------------------|
| | | | X | Y | X | Y | | | |
| 2-3/16 | 22213K | 0.24 | 1 | 2.80 | 0.67 | 4.20 | 1200 | 35,000 | 2600 |
| 2-7/16 | 22215K | 0.24 | 1 | 2.80 | 0.67 | 4.20 | 1200 | 41,500 | 2350 |
| 2-15/16 - 3 | 22217K | 0.22 | 1 | 3.10 | 0.67 | 4.60 | 1700 | 45,000 | 2200 |
| 3-3/16 | 22218K | 0.22 | 1 | 2.90 | 0.67 | 4.60 | 1700 | 52,000 | 2100 |
| 3-7/16 | 22220K | 0.23 | 1 | 2.80 | 0.67 | 4.30 | 1700 | 71,000 | 1700 |
| 3-15/16 - 4 | 22222K | 0.24 | 1 | 2.80 | 0.67 | 4.20 | 3100 | 90,000 | 1450 |
| 4-7/16 | 22226K | 0.25 | 1 | 2.70 | 0.67 | 4.00 | 3100 | 132,000 | 1200 |
| 4-15/16 | 22228K | 0.26 | 1 | 2.60 | 0.67 | 3.90 | 3100 | 153,000 | 1100 |
| 5-7/16 | 22232K | 0.25 | 1 | 2.70 | 0.67 | 4.00 | 5000 | 204,000 | 1000 |
| 5-15/16 - 6 | 22234K | 0.26 | 1 | 2.60 | 0.67 | 3.90 | 5000 | 232,000 | 950 |

* At no time load on a SPLIT-SPHER bearing should exceed 20% of the Dynamic Capacity C.

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SELECTION/DIMENSIONS



Table 12: Selection Table For SPLIT-SPHER Spherical Roller Bearings

| Shaft Size Inches | L ₁₀ Life Hrs. | Allowable Equivalent Radial Load Rating (Lbs.) At Various Revolutions Per Minute | | | | | | | | | | | | | |
|-------------------|---------------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|
| | | 50 | 100 | 250 | 375 | 450 | 800 | 950 | 1100 | 1200 | 1300 | 1700 | 2100 | 2350 | 2600 |
| 2-3/16 | 10000 | 7000 | 7000 | 7000 | 6990 | 6620 | 5570 | 5290 | 5060 | 4930 | 4815 | 4440 | 4170 | 4030 | 3910 |
| | 30000 | 7000 | 7000 | 5680 | 5030 | 4760 | 4005 | 3805 | 3640 | 3545 | 3465 | 3195 | 3000 | 2900 | 2810 |
| | 50000 | 7000 | 6415 | 4870 | 4315 | 4085 | 3435 | 3265 | 3125 | 3045 | 2970 | 2740 | 2570 | 2485 | 2415 |
| | 100000 | 6415 | 5210 | 3955 | 3505 | 3315 | 2790 | 2650 | 2535 | 2470 | 2415 | 2225 | 2090 | 2020 | 1960 |
| 2-7/16 | 10000 | 8300 | 8300 | 8300 | 8175 | 7740 | 6510 | 6185 | 5920 | 5765 | 5630 | 5195 | 4875 | 4710 | |
| | 30000 | 8300 | 8300 | 6640 | 5880 | 5565 | 4685 | 4445 | 4255 | 4145 | 4050 | 3735 | 3505 | 3390 | |
| | 50000 | 8300 | 7495 | 5695 | 5045 | 4775 | 4015 | 3815 | 3650 | 3555 | 3475 | 3205 | 3005 | 2905 | |
| | 100000 | 7495 | 6090 | 4625 | 4095 | 3880 | 3265 | 3100 | 2965 | 2890 | 2820 | 2600 | 2445 | 2360 | |
| 2-15/16 3 | 10000 | 9000 | 9000 | 9000 | 8860 | 8390 | 7060 | 705 | 6415 | 6250 | 6105 | 5630 | 5285 | | |
| | 30000 | 9000 | 9000 | 7200 | 6375 | 6035 | 5080 | 4820 | 4615 | 4495 | 4390 | 4050 | 3800 | | |
| | 50000 | 9000 | 8130 | 6175 | 5470 | 5175 | 4355 | 4135 | 3960 | 3855 | 3765 | 3475 | 3260 | | |
| | 100000 | 8130 | 6605 | 5015 | 4440 | 4205 | 3540 | 3360 | 3215 | 3135 | 3060 | 2820 | 2650 | | |
| 3-3/16 | 10000 | 10400 | 10400 | 10400 | 10240 | 9695 | 8160 | 7750 | 7415 | 7225 | 7055 | 6505 | 6105 | | |
| | 30000 | 10400 | 10400 | 8320 | 7365 | 6975 | 5870 | 5575 | 5335 | 5195 | 5070 | 4680 | 4390 | | |
| | 50000 | 10400 | 9395 | 7135 | 6320 | 5980 | 5035 | 4780 | 4575 | 4455 | 4350 | 4015 | 3770 | | |
| | 100000 | 9395 | 7630 | 5795 | 5130 | 4860 | 4090 | 3885 | 3715 | 3620 | 3535 | 3260 | 3060 | | |
| 3-7/16 | 10000 | 14200 | 14200 | 14200 | 13985 | 13240 | 11140 | 10580 | 10125 | 9865 | 9630 | 8885 | | | |
| | 30000 | 14200 | 14200 | 11355 | 10055 | 9520 | 8010 | 7610 | 7280 | 7095 | 6925 | 6390 | | | |
| | 50000 | 14200 | 12825 | 9745 | 8630 | 8170 | 6875 | 6530 | 6245 | 6085 | 5940 | 5480 | | | |
| | 100000 | 12825 | 10420 | 7915 | 7010 | 6635 | 5585 | 5300 | 5075 | 4945 | 4825 | 4455 | | | |
| 3-15/16 4 | 10000 | 18000 | 18000 | 18000 | 17725 | 16780 | 14120 | 13410 | 12835 | 12505 | 12205 | | | | |
| | 30000 | 18000 | 18000 | 14395 | 12750 | 12070 | 10155 | 9645 | 9230 | 8995 | 8780 | | | | |
| | 50000 | 18000 | 16260 | 12350 | 10935 | 10355 | 8715 | 8275 | 7920 | 7715 | 7530 | | | | |
| | 100000 | 16260 | 13205 | 10030 | 8885 | 8410 | 7075 | 6720 | 6430 | 6265 | 6120 | | | | |
| 4-7/16 | 10000 | 26400 | 26400 | 26400 | 25995 | 24615 | 20710 | 19670 | 18825 | 18340 | | | | | |
| | 30000 | 26400 | 26400 | 21115 | 18695 | 17700 | 14895 | 14145 | 13540 | 13190 | | | | | |
| | 50000 | 26400 | 23845 | 18115 | 16040 | 15185 | 12780 | 12135 | 11615 | 11315 | | | | | |
| | 100000 | 23845 | 19370 | 14715 | 13030 | 12335 | 10380 | 9860 | 9435 | 9190 | | | | | |
| 4-15/16 | 10000 | 30600 | 30600 | 30600 | 30130 | 28530 | 24005 | 22800 | 21820 | | | | | | |
| | 30000 | 30600 | 30600 | 24475 | 21670 | 20520 | 17265 | 16400 | 15690 | | | | | | |
| | 50000 | 30600 | 27640 | 20995 | 18590 | 17605 | 14810 | 14070 | 13460 | | | | | | |
| | 100000 | 27640 | 22450 | 17055 | 15100 | 14300 | 12030 | 11425 | 10935 | | | | | | |
| 5-7/16 | 10000 | 40800 | 40800 | 40800 | 40175 | 38040 | 32010 | 30400 | | | | | | | |
| | 30000 | 40800 | 40800 | 32635 | 28895 | 27360 | 23020 | 21865 | | | | | | | |
| | 50000 | 40800 | 36855 | 27995 | 24790 | 23470 | 19750 | 18755 | | | | | | | |
| | 100000 | 36855 | 29935 | 22740 | 20135 | 19065 | 16040 | 15235 | | | | | | | |
| 5-15/16 6 | 10000 | 46400 | 46400 | 46400 | 45690 | 43260 | 36400 | 34570 | | | | | | | |
| | 30000 | 46400 | 46400 | 37115 | 32860 | 31115 | 26180 | 24865 | | | | | | | |
| | 50000 | 46400 | 41915 | 31840 | 28195 | 26690 | 22460 | 21330 | | | | | | | |
| | 100000 | 41915 | 34045 | 25860 | 22900 | 21680 | 18245 | 17325 | | | | | | | |

Bearing Reference Guide

E-Family Roller Bearings

Specialty Tapered Products

S-2000

UNISPHERE II

IMPERIAL

UNIFIED SAF

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SELECTION/DIMENSIONS



Selecting Lubrication

DODGE SPLIT-SPHER Roller Bearings are lubricated by the user at installation. DODGE SPLIT-SPHER Roller Bearings can be run with either grease or oil lubrication.

Grease Lubrication:

In order to properly protect the bearing during installation, pack the bearing insert 100% full of grease immediately after properly mounting the bearing on the shaft. If the RPM of the application falls between 20% and 80% of maximum RPM (Table 11 on page B15-74), pack the lower half of the housing one-third to one-half full. If the RPM of the application is less than 20% of maximum RPM, pack bearing housing cavity 100% full. If the RPM exceeds 80% of maximum RPM, do not add grease in the lower half of the housing nor in the cap.

At each re-greasing cycle, for applications up to 80% of maximum RPM, slowly add grease until fresh grease is seen purging at the seals. Re-greasing should be done while running. Remote re-greasing lines should be added to avoid endangering

personnel. If the RPM is greater than 80% of maximum RPM, add 4 strokes of a handgun at each re-greasing cycle for bores up to 2". For bores greater than 2", up to 5", add 8" strokes of a handgun at each re-greasing cycle. For bores greater than 5", up to 6", add 16 strokes of a handgun at each re-greasing cycle. For units running above 80% of maximum RPM, running temperature should be monitored. If a drastic change in running temperature is noted, DODGE recommends removing the used grease completely and recharging with fresh grease per the above instructions. For warning before catastrophic failure, see DODGE Temperature Monitor Package on page B15-54.

Select a grease with a viscosity at an operating temperature which will provide full film lubrication (see Table 12). Use a 50°F to 100°F increase in bearing temperature above ambient, depending on RPM and load. Use Table 13 on page B15-76 as a general guide for re-greasing the bearings. A small amount of grease at frequent intervals is preferable to a large amount of grease at infrequent intervals. For special applications involving high speeds, high loads, or very low speeds, consult DODGE Application Engineering (864-284-5700).

Table 13: Viscosity Of Oil In Grease

| DN Δ | Viscosity for Loads Up To 18% of Dyn. Cap. ♦ (SUS @ Oper. Temp.) | DN Δ | Viscosity for Loads Up To 18% of Dyn. Cap. ♦ (SUS. @ Oper. Temp.) |
|---------|--|---------|---|
| 100 | 3500 | 1400 | 625 |
| 200 | 3150 | 1600 | 525 |
| 300 | 2750 | 1800 | 450 |
| 400 | 2375 | 2000 | 400 |
| 500 | 2000 | 3000 | 300 |
| 600 | 1750 | 4000 | 200 |
| 700 | 1500 | 5000 | 150 |
| 800 | 1300 | 6000 | 130 |
| 900 | 1075 | 7000 | 110 |
| 1000 | 900 | 8000 | 100 |

Δ DN = Bore Diameter (inches) x RPM

♦ For loads above 18% of dynamic capacity, an EP grease with the viscosity selected from above is recommended.

**Table 14: Re-Greasing Intervals (Months*)
(Based on 12 Hours per Day, 150-F Max.)**

| Shaft Size (inch) | RPM | | | | | | | |
|----------------------|-----|-----|-----|-----|------|------|------|------|
| | 250 | 500 | 750 | 100 | 1250 | 1500 | 2000 | 2500 |
| 1-7/16 - 1-15/16 | 8 | 6 | 4 | 3 | 2 | 1 | .50 | .50 |
| 2-3/16 | 7 | 5 | 3 | 2 | 1 | 1 | .50 | .25 |
| 2-7/16 - 3 | 6 | 4 | 3 | 2 | 1 | .50 | .25 | .25 |
| 3-3/16 - 3-1/2 | 5 | 3 | 2 | 1 | .50 | .50 | .25 | |
| 3-15/16 - 4-7/16 | 4 | 3 | 2 | 1 | .50 | .25 | | |
| 4-15/16 - 5-1/2 | 3 | 2 | 1 | .50 | .25 | | | |
| 5-15/16 - 6 | 2 | 1 | 1 | .50 | | | | |

* For continuous operation, 24 hrs./day, reduce the re-greasing intervals by half.

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SELECTION/DIMENSIONS



USAF 500 SPLIT-SPHER Pillow Block

| Shaft Dia S-1 | Complete Pillow Block Part No. | Housing W/ Stab Ring Part No. | Bearing Part No. | Dynamic Capacity (C), lbs. | Max RPM (Grease) | Split LER Seal |
|---------------|--------------------------------|-------------------------------|----------------------|----------------------------|------------------|-------------------|
| 2-3/16 | P2B13-SS-203 043958 | H2S-513-USAF 043998 | BRG13SS203 043393 | 32,500 | 2,600 | 14SS203 043501 |
| | P4B13-SS-203 046110 | H4S-513-USAF 039669 | BRG13SS203 043393 | 32,500 | 2,600 | 14SS203 043501 |
| 2-7/16 | P2B15-SS-207 043959 | H2S-515-USAF 044000 | BRG15SS207 043400 | 39,000 | 2,350 | 20SS207 043502 |
| | P4B15-SS-207 043964 | H4S-515-USAF 044003 | BRG15SS207 043400 | 39,000 | 2,350 | 20SS207 043502 |
| 2-11/16 | P2B16-SS-211 043960 | H2S-516-USAF 044198 | BRG16SS211 043401 | 40,500 | 2,300 | 24SS211 043504 |
| | P4B16-SS-211 043965 | H4S-516-USAF 044007 | BRG16SS211 043401 | 40,500 | 2,300 | 24SS211 043504 |
| 2-15/16 | P2B17-SS-215 043961 | H2S-517-USAF 044010 | BRG17SS215 043402 | 41,500 | 2,200 | 28SS215 043506 |
| | P4B17-SS-215 043966 | H4S-517-USAF 044013 | BRG17SS215 043402 | 41,500 | 2,200 | 28SS215 043506 |
| 3-3/16 | P2B18-SS-303 043962 | H2S-518-USAF 044199 | BRG18SS303 043403 | 47,500 | 2,000 | 34SS303 043508 |
| | P4B18-SS-303 043967 | H4S-518-USAF 044114 | BRG18SS303 043403 | 47,500 | 2,000 | 34SS303 043508 |
| 3-7/16 | P2B20-SS-307 043963 | H2S-520-USAF 044020 | BRG20SS307 043404 | 64,000 | 1,700 | 46SS307 043509 |
| | P4B20-SS-307 043968 | H4S-520-USAF 044023 | BRG20SS307 043404 | 64,000 | 1,700 | 46SS307 043509 |
| 3-15/16 | P4B22-SS-315 043969 | H4S-522-USAF 044025 | BRG22SS315 043405 | 80,000 | 1,450 | 50SS315 043511 |
| 4 | P4B22-SS-400 043970 | H4S-522-USAF 044025 | BRG22SS400 043406 | 80,000 | 1,450 | 50SS400 043512 |
| 4 3/16 | P4B24-SS-403 043971 | H4S-524-USAF 044202 | BRG24SS403 043421 | 102,000 | 1,300 | 52SS403 043513 |
| 4-7/16 | P4B26-SS-407 043972 | H4S-526-USAF 044031 | BRG26SS407 043407 | 120,000 | 1,200 | 54SS407 043514 |
| 4-15/16 | P4B28-SS-415 043974 | H4S-528-USAF 044034 | BRG28SS415 043408 | 143,000 | 1,100 | 56SS415 043516 |
| 5-7/16 | P4B32-SS-507 043976 | H4S-532-USAF 044040 | BRG32SS507 043410 | 190,000 | 950 | 60SS507 043519 |
| 5-15/16 | P4B34-SS-515 043977 | H4S-534-USAF 044043 | BRG34SS515 043411 | 216,000 | 900 | 64SS515 043520 |
| 6 | P4B34-SS-600 043978 | H4S-534-USAF 044043 | BRG34SS600 043412 | 216,000 | 900 | 64SS600 043521 |

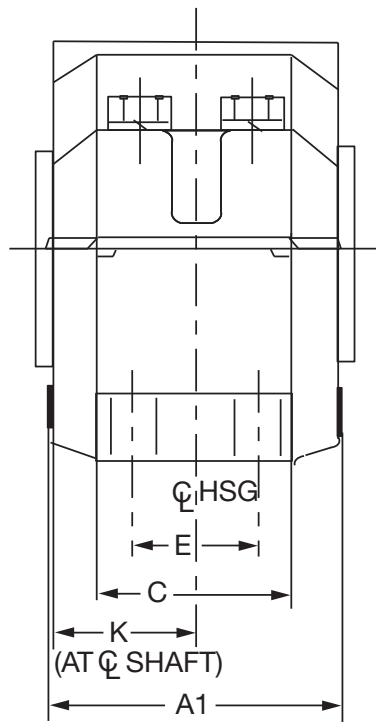
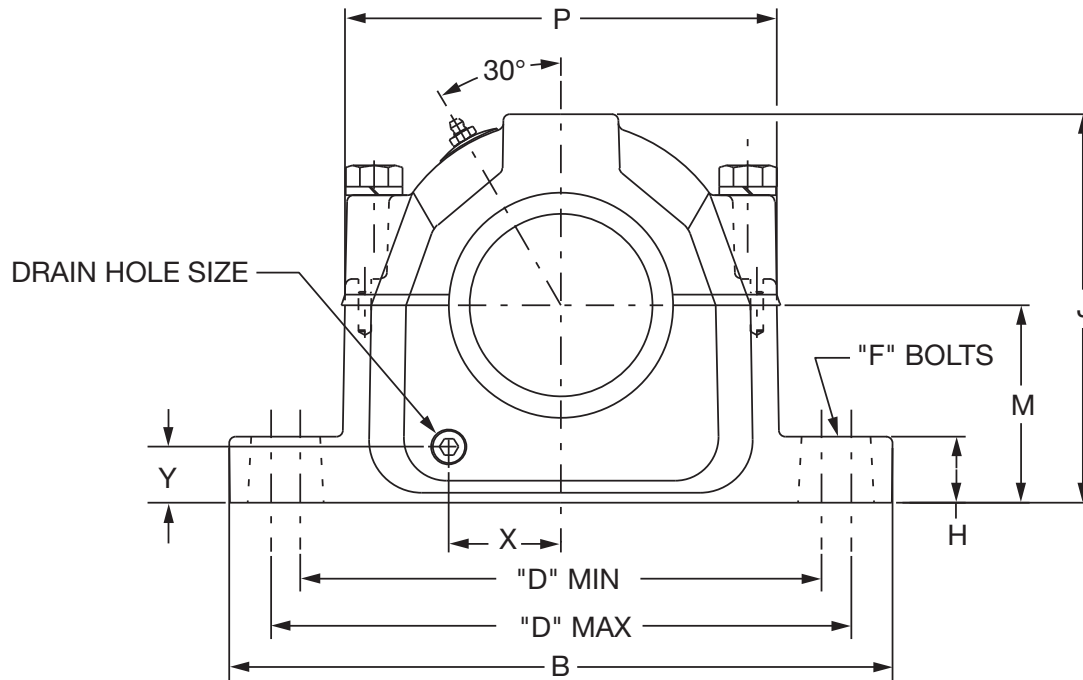
NOTE: Ratings Per FAG Catalog

| | | | |
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SELECTION/DIMENSIONS



USAF 500 SPLIT-SPHER Housing Dimensions



| | | | |
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SELECTION/DIMENSIONS

USAF 500 SPLIT-SPHER Housing Dimensions

| S-1 Shaft Size | Housing | ▲ A1 | B | C | D | | | | E |
|----------------|---------|------|-------|------|--------|-------|--------|-------|------|
| | | | | | 2-Bolt | | 4-Bolt | | |
| 2-3/16 | 513 | 4.64 | 11.00 | 3.13 | 8.13 | 9.50 | 8.13 | 9.50 | 1.88 |
| 2-7/16 | 515 | 5.20 | 11.13 | 3.13 | 8.63 | 9.63 | 8.63 | 9.63 | 1.88 |
| 2-11/16 | 516 | 5.44 | 12.59 | 3.50 | 9.63 | 11.00 | 9.63 | 11.00 | 2.13 |
| 2-15/16 | 517 | 5.39 | 12.59 | 3.50 | 9.88 | 11.00 | 9.88 | 11.00 | 2.13 |
| 3-3/16 | 518 | 6.16 | 13.63 | 3.88 | 10.25 | 11.75 | 10.38 | 11.63 | 2.13 |
| 3-7/16 | 520 | 6.78 | 15.36 | 4.34 | 11.63 | 13.13 | 11.63 | 13.13 | 2.38 |
| 3-15/16 4 | 522 | 7.08 | 16.50 | 4.75 | - | - | 12.59 | 14.50 | 2.75 |
| 4-7/16 | 526 | 8.27 | 18.38 | 5.13 | - | - | 14.50 | 16.00 | 3.25 |
| 4-15/16 | 528 | 8.77 | 19.69 | 5.88 | - | - | 15.63 | 17.38 | 3.38 |
| 5-7/16 | 532 | 9.92 | 21.66 | 6.75 | - | - | 17.38 | 19.25 | 3.75 |
| 5-15/16 6 | 534 | 9.72 | 24.75 | 6.75 | - | - | 19.38 | 21.63 | 4.25 |

| S-1 Shaft Size | Housing | F | | H | J | K | M | P |
|----------------|---------|--------|--------|------|-------|------|------|-------|
| | | 2-Bolt | 4-Bolt | | | | | |
| 2-3/16 | 513 | 5/8 | 1/2 | 1.03 | 5.94 | 2.16 | 3.00 | 6.50 |
| 2-7/16 | 515 | 5/8 | 1/2 | 1.25 | 6.44 | 2.31 | 3.25 | 7.06 |
| 2-11/16 | 516 | 3/4 | 5/8 | 1.06 | 6.75 | 2.42 | 3.50 | 7.94 |
| 2-15/16 | 517 | 3/4 | 5/8 | 1.25 | 7.38 | 2.47 | 3.75 | 8.19 |
| 3-3/16 | 518 | 3/4 | 5/8 | 1.44 | 7.75 | 2.84 | 4.00 | 8.66 |
| 3-7/16 | 520 | 7/8 | 3/4 | 1.66 | 8.75 | 3.16 | 4.50 | 9.78 |
| 3-15/16 4 | 522 | - | 3/4 | 1.78 | 9.41 | 3.30 | 4.94 | 10.59 |
| 4-7/16 | 526 | - | 7/8 | 2.06 | 11.53 | 3.75 | 6.00 | 12.41 |
| 4-15/16 | 528 | - | 1 | 2.06 | 11.81 | 4.00 | 6.00 | 13.25 |
| 5-7/16 | 532 | - | 1 | 2.34 | 13.31 | 4.63 | 6.69 | 14.91 |
| 5-15/16 6 | 534 | - | 1 | 2.88 | 14.56 | 4.63 | 7.06 | 16.81 |

- ▲ Housing width with drain plugs
- ◆ Distance shaft should extend beyond housing centerline if pillow block is closed end style
- Non-expansion bearing offset from centerline.

Dowel hole locations for Precision Positioning, see Page B15-126 - B15-127

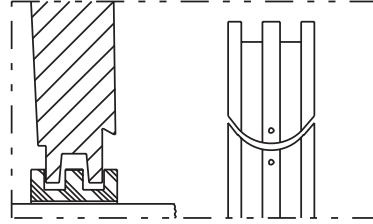
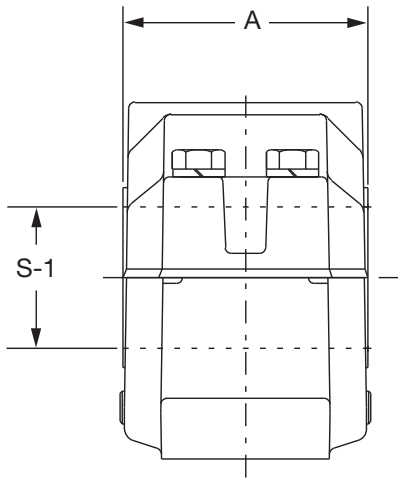
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SELECTION/DIMENSIONS



USAF 500 SPLIT-SPHER Pillow Block Seals

LENGTH THRU BORE W/SEALS



SPLIT Seal

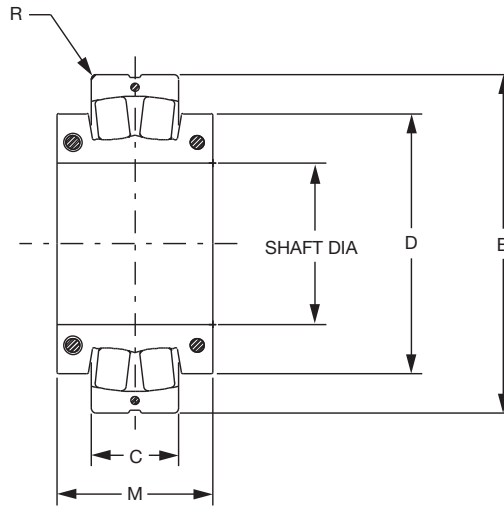
Permits easy installation in hard-to-reach applications without removing shaft.
Non-metallic split LER.

| S-1 Shaft Size Inch | Housing | Seal Group | Seal Part Number | A |
|---------------------|---------|------------|------------------|------|
| 2-3/16 | 513 | 14 | 043501 | 4.72 |
| 2-7/16 | 515 | 20 | 043502 | 4.47 |
| 2-11/16 | 516 | 24 | 043504 | 4.72 |
| 2-15/16 | 517 | 28 | 043506 | 4.83 |
| 3-3/16 | 518 | 34 | 043508 | 5.70 |
| 3-7/16 | 520 | 46 | 043509 | 6.19 |
| 3-15/16 | 522 | 50 | 043511 | 6.59 |
| 4 | | | 043512 | |
| 4-3/16 | 524 | 52 | 043513 | 7.31 |
| 4-7/16 | 526 | 54 | 043514 | 7.50 |
| 4-15/16 | 528 | 56 | 043516 | 7.88 |
| 5-7/16 | 532 | 60 | 043519 | 9.20 |
| 5-15/16 | 534 | 64 | 043520 | 9.13 |
| 6 | | | 043521 | |
| 6-7/16 | 536 | 68 | 043522 | 9.69 |



SELECTION/DIMENSIONS

USAF 22200 SPLIT-SPHER Roller Bearings



| Shaft Dia. Inch | Housing | Bearing Descriptive No. | Bearing Part No. | Approx. Weight (Lbs) | B Inch (mm) | C Inch (mm) | M Inch (mm) | D Inch | R Inch |
|-----------------|---------|-------------------------|------------------|----------------------|---------------|-------------|--------------|--------|--------|
| 2-3/16 | 513 | 22213SS203 | 043393 | 5.07 | 4.7244 (120) | 1.2205 (31) | 2.1654 (55) | 3.3464 | 0.06 |
| 2-7/16 | 515 | 22215SS207 | 043400 | 5.73 | 5.1181 (130) | 1.2205 (31) | 2.3622 (60) | 3.4646 | 0.06 |
| 2-11/16 | 516 | 22216SS211 | 043401 | 7.12 | 5.5118 (140) | 1.2992 (33) | 2.4409 (62) | 3.701 | 0.08 |
| 2-15/16 | 517 | 22217SS215 | 043402 | 9.04 | 5.9055 (150) | 1.4173 (36) | 2.6772 (68) | 4.0157 | 0.08 |
| 3-3/16 | 518 | 22218SS303 | 043403 | 10.1 | 6.2992 (160) | 1.5748 (40) | 2.7559 (70) | 4.4094 | 0.08 |
| 3-7/16 | 520 | 22220SS307 | 043404 | 14.2 | 7.0866 (180) | 1.811 (46) | 2.9921 (76) | 4.6457 | 0.08 |
| 3-15/16 4 | 522 | 22222SS315 | 043405 | 22.0 | 7.874 (200) | 2.0866 (53) | 3.622 (92) | 5.4331 | 0.08 |
| | | 22222SS400 | 043406 | 22.0 | | | | | |
| 4-7/16 | 526 | 22226SS407 | 043407 | 32.2 | 9.0551 (230) | 2.5197 (64) | 4.0945 (104) | 5.9842 | 0.12 |
| 4-15/16 | 528 | 22228SS415 | 043408 | 43.2 | 9.8425 (250) | 2.6772 (68) | 4.3307 (110) | 6.6929 | 0.12 |
| 5-7/16 | 532 | 22232SS507 | 043410 | 69.4 | 11.4173 (290) | 3.1496 (80) | 4.8819 (124) | 7.4016 | 0.12 |
| 5-15/16 6 | 534 | 22234SS515 | 043411 | 82.2 | 12.2047 (310) | 3.3858 (86) | 5.0394 (128) | 7.9527 | 0.12 |
| | | 22234SS600 | 043412 | 82.2 | | | | | |

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SELECTION/DIMENSIONS

USDAF Pillow Block - Spherical Roller Bearings

Table 15: Radial & Thrust Factors For USDAF Spherical Bearings

| 23000K SERIES | | | | | | | | | | |
|----------------------------|----------------|------|------------------------------------|------|------------------------------------|------|--|----------------------------|----------|-----|
| Shaft Size (in.) | Bearing Series | e | F _A /F _R ≤ e | | F _A /F _R > e | | Adapter Maximum Allowable Thrust Load, lbs.* | Dynamic Capacity (C), lbs. | Max. RPM | |
| | | | X | Y | X | Y | | | Grease | Oil |
| 10-15/16,11 | 23060K | 0.25 | 1 | 2.70 | 0.67 | 4 | 23,875 | 440,000 | 630 | 800 |
| 11-7/16,11-1/2,11-15/16,12 | 23064K | 0.25 | 1 | 2.70 | 0.67 | 4.10 | 26,114 | 455,000 | 600 | 750 |
| 12-7/16,12-1/2 | 23068K | 0.25 | 1 | 2.70 | 0.67 | 4 | 30,498 | 530,000 | 560 | 700 |
| 12-15/16,13,13-7/16,13-1/2 | 23072K | 0.25 | 1 | 2.70 | 0.67 | 4.10 | 32,535 | 550,000 | 530 | 670 |
| 13-15/16,14 | 23076K | 0.24 | 1 | 2.80 | 0.67 | 4.20 | 34,598 | 570,000 | 500 | 630 |
| 15 | 23080K | 0.24 | 1 | 2.80 | 0.67 | 4.10 | 39,926 | 680,000 | 450 | 560 |
| 15-3/4 | 23084K | 0.24 | 1 | 2.80 | 0.67 | 4.20 | 42,489 | 710,000 | 450 | 560 |
| 23100K SERIES | | | | | | | | | | |
| 9-7/16,9-1/2 | 23152K | 0.33 | 1 | 2 | 0.67 | 3 | 19,985 | 490,000 | 670 | 850 |
| 10-7/16,10-1/2 | 23156K | 0.32 | 1 | 2.10 | 0.67 | 3.20 | 27,571 | 530,000 | 630 | 800 |
| 10-15/16,11 | 23160K | 0.33 | 1 | 2.10 | 0.67 | 3.10 | 32,373 | 600,000 | 600 | 750 |
| 11-15/16,12 | 23164K | 0.34 | 1 | 2 | 0.67 | 2.90 | 37,984 | 720,000 | 530 | 670 |
| 12-7/16,12-1/2 | 23168K | 0.34 | 1 | 2 | 0.67 | 2.90 | 43,568 | 830,000 | 500 | 630 |
| 13-7/16,13-1/2 | 23172K | 0.33 | 1 | 2.10 | 0.67 | 3.10 | 45,617 | 850,000 | 480 | 600 |
| 13-15/16,14 | 23176K | 0.32 | 1 | 2.10 | 0.67 | 3.20 | 49,719 | 915,000 | 450 | 560 |
| 23200K SERIES | | | | | | | | | | |
| 8-15/16,9 | 23248K | 0.37 | 1 | 1.80 | 0.67 | 2.70 | 25,891 | 560,000 | 700 | 900 |
| 9-7/16,9-1/2 | 23252K | 0.37 | 1 | 1.80 | 0.67 | 2.70 | 30,511 | 655,000 | 630 | 800 |
| 10-7/16,10-1/2 | 23256K | 0.36 | 1 | 1.90 | 0.67 | 2.80 | 33,236 | 680,000 | 600 | 750 |
| 10-7/16,11 | 23260K | 0.37 | 1 | 1.80 | 0.67 | 2.70 | 38,847 | 780,000 | 560 | 700 |
| 11-15/16,12 | 23264K | 0.37 | 1 | 1.80 | 0.67 | 2.70 | 44,890 | 865,000 | 530 | 670 |
| 12-7/16,12-1/2 | 23268K | 0.38 | 1 | 1.80 | 0.67 | 2.70 | 51,365 | 1,000,000 | 480 | 600 |

If the thrust load exceeds adapter maximum allowable thrust load, auxiliary methods of carrying thrust are required.

SELECTION/DIMENSIONS



USDAF Adapter Mount Pillow Block

| Shaft Dia | Housing | Open Housing Part No.** | Closed Housing Part No.** | Bearing Part No. | Dynamic Capacity (C), lbs. | Max RPM LER (Grease) | SNP Part No. | TRIPLE-TECT Part No. | # LER Part No. | Aux Part No. |
|-----------|---------|--------------------------|---------------------------|------------------|----------------------------|----------------------|---------------------------|----------------------|----------------------|----------------------|
| 8-15/16 | 3248 | H4S-USDAF-3248 037464 | CH4S-USDAF-3248 037465 | 23248K 422511 | 560,000 | 700 | H3248-SNP-815 047628 | 90TT815 *043571 | 90LER815 042544 | 90AUX815 040899 |
| | | H4S-USDAF-3248 037464 | CH4S-USDAF-3248 037465 | 23248K 422511 | 560,000 | 700 | H3248-SNP-900 047629 | 90TT900 043572 | 90LER900 *042545 | 90AUX900 040995 |
| 9-7/16 | 3152 | H4S-USDAF-3152 037461 | CH4S-USDAF-3152 037462 | 23152K 421294 | 490,000 | 670 | H3152-SNP-907 047630 | 84TT908 043538 | 84LER907 *042510 | 84AUX907 040900 |
| | 3252 | H4S-USDAF-3252 037442 | CH4S-USDAF-3252 037443 | 23252K 421290 | 665,000 | 630 | H3252-SNP-907 047646 | 84TT907 043538 | 84LER907 *042510 | 84AUX907 040900 |
| 9-1/2 | 3152 | H4S-USDAF-3152 037461 | CH4S-USDAF-3152 037462 | 23152K 421294 | 490,000 | 670 | H3152-SNP-908 047631 | 84TT908 422545 | 84LER908 *422594 | 84AUX908 040901 |
| | 3252 | H4S-USDAF-3252 037442 | CH4S-USDAF-3252 037443 | 23252K 421290 | 655,000 | 630 | H3252-SNP-908 047647 | 84TT908 422545 | 84LER908 *422594 | 84AUX908 040901 |
| 10-7/16 | 3156 | H4S-USDAF-3156 037432 | CH4S-USDAF-3156 037433 | 23156K 421285 | 530,000 | 630 | H3156SNP-1007 045431 | 94TT1007 047940 | 94LER1007 *042036 | 94AUX1007 045778 |
| | 3256 | H4S-USDAF-3256 037444 | CH4S-USDAF-3256 037446 | 23256K 421291 | 680,000 | 600 | H325-SNP-1007 047648 | 94TT1007 047940 | 94LER1007 *042036 | 94AUX1007 045778 |
| 10-1/2 | 3156 | H4S-USDAF-3156 037432 | CH4S-USDAF-3156 037433 | 23156K 421285 | 530,000 | 630 | H3156-SNP-1008 047637 | 94TT1008 047941 | 94LER1008 *422573 | 94AUX1008 042396 |
| | 3256 | H4S-USDAF-3256 037444 | CH4S-USDAF-3256 037446 | 23256K 421291 | 680,000 | 600 | H3256-SNP-1008 047649 | 94TT1008 047941 | 94LER1008 *422573 | 94AUX1008 042396 |
| 10-15/16 | 060 | H4S-USDAF-060 422580 | CH4S-USDAF-060 037426 | 23060K 422582 | 440,000 | 630 | H3060-SNP-1015 043581 | 96TT1015 047942 | 96LER1015 *042037 | 96AUX1015 045781 |
| | 3160 | H4S-USDAF-3160 037434 | CH4S-USDAF-3160 037435 | 23160K 421286 | 600,000 | 600 | H3160-SNP-1015 047638 | 96TT1015 047942 | 96LER1015 *042037 | 96AUX1015 045781 |
| | 3260 | H4S-USDAF-3260 037447 | CH4S-USDAF-3260 037448 | 23260K 421292 | 780,000 | 560 | H3260-SNP-1015 047678 | 96TT1015 047942 | 96LER1015 *042037 | 96AUX1015 045781 |
| 11 | 060 | H4S-USDAF-060 422580 | CH4S-USDAF-060 037426 | 23060K 422582 | 440,000 | 630 | H3060-SNP-1100 422576 | 96TT1100 047943 | 96LER1100 *422588 | 96AUX1100 044440 |
| | 3160 | H4S-USDAF-3160 037434 | CH4S-USDAF-3160 037435 | 23160K 421286 | 600,000 | 600 | H3160-SNP-1100 045464 | 96TT1100 047943 | 96LER1100 *422588 | 96AUX1100 044440 |
| | 3260 | H4S-USDAF-3260 037447 | CH4S-USDAF-3260 037448 | 23260K 421292 | 780,000 | 560 | H3260-SNP-1100 047679 | 96TT1100 047943 | 96LER1100 *422588 | 96AUX1100 044440 |
| 11-7/16 | 064 | H4S-USDAF-064 422502 | CH4S-USDAF-064 037427 | 23064K 422531 | 455,000 | 600 | H3064-SNP-1107 043582 | 98TT1107 047944 | 98LER1107 *042038 | 98AUX1107 045784 |
| 11-1/2 | 064 | H4S-USDAF-064 422502 | CH4S-USDAF-064 037427 | 23064K 422531 | 455,000 | 600 | H3064-SNP-1108 043583 | 98TT1108 047945 | 98ER1108 *042039 | 98AUX1107 045787 |
| 11-15/16 | 064L | H4S-USDAF-064L 422529 | CH4S-USDAF-064L 037428 | 23064K 422531 | 455,000 | 600 | H3064L-SNP-1115 043584 | 100TT1115 047946 | 100ER1115 *042040 | 100AUX1115 045790 |
| | 3164 | H4S-USDAF-3164 037436 | CH4S-USDAF-3164 037437 | 23164K 421287 | 720,000 | 530 | H3164-SNP-1115 047639 | 100TT1115 047946 | 100ER1115 *042040 | 100AUX1115 045790 |
| | 3264 | H4S-USDAF-3264 037449 | CH4S-USDAF-3264 037450 | 23264K 422844 | 865,000 | 530 | H3264-SNP-1115 047680 | 100TT1115 047946 | 100ER1115 *042040 | 100AUX1115 045790 |

NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.

If an * appears by the part number, the LER seal is manufactured from Steel.

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SELECTION/DIMENSIONS



USDAF Adapter Mount Pillow Block

| Shaft Dia | Housing | Open Housing Part No.** | Closed Housing Part No.** | Bearing Part No. | Dynamic Capacity (C), lbs. | Max RPM LER (Grease) | SNP Part No. | TRIPLE-TEGT Part No. | # LER Part No. | Aux Part No. |
|-----------|---------|--------------------------|---------------------------|------------------|----------------------------|----------------------|---------------------------|----------------------|----------------------|----------------------|
| 12 | 064L | H4S-USDAF-064L 422529 | CH4S-USDAF-064L 037428 | 23064K 422531 | 455,000 | 600 | H3064L-SNP-1200 422525 | 100TT1200 047947 | 100ER1200 *422535 | 100AUX1200 045793 |
| | 3164 | H4S-USDAF-3164 037436 | CH4S-USDAF-3164 037437 | 23164K 421287 | 720,000 | 530 | H3164-SNP-1200 050531 | 100TT1200 047947 | 100ER1200 *422535 | 100AUX1200 045793 |
| | 3264 | H4S-USDAF-3264 037449 | CH4S-USDAF-3264 037450 | 23264K 422844 | 865,000 | 530 | H3264-SNP-1200 422843 | 100TT1200 047947 | 100ER1200 *422535 | 100AUX1200 045793 |
| 12-7/16 | 068 | H4S-USDAF-068 035183 | CH4S-USDAF-068 035185 | 23068K 421282 | 530,000 | 560 | H3064-SNP-1207 047632 | 102TT1207 047948 | 102ER1207 *046498 | 102AUX1207 046567 |
| | 3168 | H4S-USDAF-3168 035945 | CH4S-USDAF-3168 035946 | 23168K 052081 | 830,000 | 500 | H3168-SNP-1207 047641 | 102TT1207 047948 | 102ER1207 *046498 | 102AUX1207 046567 |
| | 3268 | H4S-USDAF-3268 037451 | CH4S-USDAF-3268 037452 | 23268K 421293 | 1,000,000 | 480 | H328-SNP-1207 047681 | 102TT1207 047948 | 102ER1207 *046498 | 102AUX1207 046567 |
| 12-1/2 | 068 | H4S-USDAF-068 035183 | CH4S-USDAF-068 035185 | 23068K 421282 | 530,000 | 560 | H3068-SNP-1208 047635 | 102TT1208 047949 | 102ER1208 *046499 | 102AUX1208 046568 |
| | 3168 | H4S-USDAF-3168 035945 | CH4S-USDAF-3168 035946 | 23168K 052081 | 830,000 | 500 | H31680-SNP-1208 047642 | 102TT1208 047949 | 102ER1208 *046499 | 102AUX1208 046568 |
| | 3268 | H4S-USDAF-3268 037451 | CH4S-USDAF-3268 037452 | 23268K 421293 | 1,000,000 | 480 | H3268-SNP-1208 047682 | 102TT1208 047949 | 102ER1208 *046499 | 102AUX1208 046568 |
| 12-15/16 | 072 | H4S-USDAF-072 044164 | CH4S-USDAF-072 037429 | 23072K 422036 | 550,000 | 530 | H3072-SNP-1215 043635 | 104TT1215 047950 | 104ER1215 *042090 | 102AUX1215 045796 |
| 13 | 072 | H4S-USDAF-072 044164 | CH4S-USDAF-072 037429 | 23072K 422036 | 550,000 | 530 | H3072-SNP-1300 043636 | 104TT1300 047951 | 072ER1300 *042091 | 104AUX1300 045799 |
| 13-7/16 | 072L | H4S-USDAF-072L 044165 | CH4S-USDAF-072L 037430 | 23072K 422036 | 550,000 | 530 | H3072L-SNP-1307 043637 | 106TT1307 047952 | 106ER1307 *042092 | 106AUX1307 045802 |
| | 3172 | H4S-USDAF-3172 037438 | CH4S-USDAF-3172 037439 | 23172K 421288 | 850,000 | 480 | H3172-SNP-1307 047643 | 106TT1307 047952 | 106ER1307 *042092 | 106AUX1307 045802 |
| 13-1/2 | 072L | H4S-USDAF-072L 044165 | CH4S-USDAF-072L 037430 | 23072 422036 | 550,000 | 530 | H3072L-SNP-1308 043638 | 106TT1308 047953 | 106ER1308 *042093 | 106AUX1308 045805 |
| | 3172 | H4S-USDAF-3172 037438 | CH4S-USDAF-3172 037439 | 23172K 421288 | 850,000 | 480 | H3172-SNP-1308 045434 | 106TT1308 047953 | 106ER1308 *042093 | 106AUX1308 045805 |
| 13-15/16 | 076 | H4S-USDAF-076 044166 | CH4S-USDAF-076 037431 | 23076K 422054 | 570,000 | 500 | H3076-SNP-1315 043639 | 108TT1315 047954 | 108ER1315 *042094 | 108AUX1315 045808 |
| | 3176 | H4S-USDAF-3176 037440 | CH4S-USDAF-3176 037441 | 23176K 421289 | 915,000 | 450 | H3176-SNP-1315 047644 | 108TT1315 047954 | 108ER1315 *042094 | 108AUX1315 045808 |
| 14 | 076 | H4S-USDAF-076 044166 | CH4S-USDAF-076 037431 | 23076K 422054 | 570,000 | 500 | H3076-SNP-1400 043640 | 108TT1400 047955 | 108ER1400 *042095 | 108AUX1400 046569 |
| | 3176 | H4S-USDAF-3176 037440 | CH4S-USDAF-3176 037441 | 23176K 421289 | 915,000 | 450 | H3176-SNP-1400 047645 | 108TT1400 047955 | 108ER1400 *042095 | 108AUX1400 046569 |
| 15 | 080 | H4S-USDAF-080 035417 | CH4S-USDAF-080 035418 | 23080K 421283 | 680,000 | 450 | H3080-SNP-1500 040830 | 110TT1500 047956 | 110ER1500 *050474 | 110AUX1500 046570 |
| 15-3/4 | 84 | H4S-USDAF-084 035943 | CH4S-USDAF-084 035944 | 23084K 421284 | 710,000 | 450 | H3084-SNP-1512 047636 | 112TT1512 047957 | 112ER1512 *046566 | 112AUX1512 046572 |

NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.

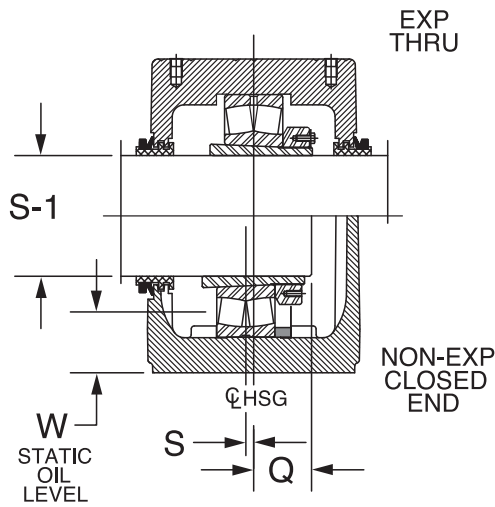
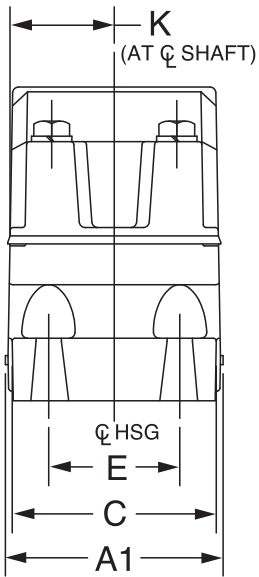
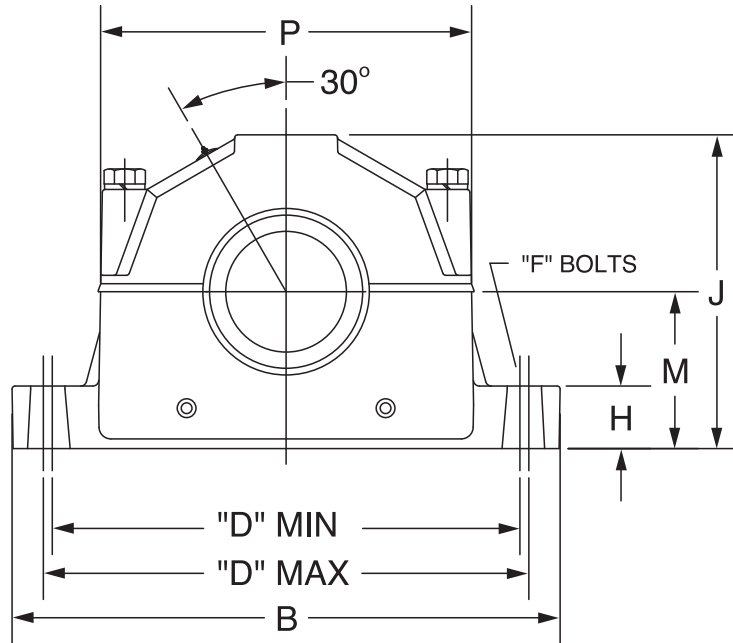
If an * appears by the part number, the LER seal is manufactured from Steel.

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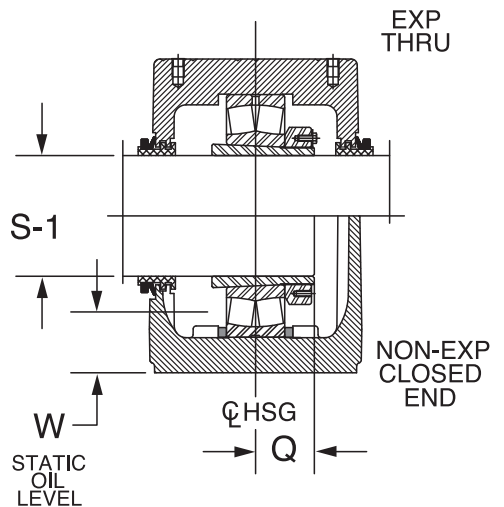
SELECTION/DIMENSIONS



USDAF Housing Dimensions



23000 SERIES
(REQUIRES (1) STABILIZING RING)



23100, 23200 SERIES
(REQUIRES (2) STABILIZING RINGS)

| | | | |
|---------------------------------|--|----------------------------|--------------------------|
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SELECTION/DIMENSIONS

USDAF Housing Dimensions

| S-1 Shaft Size | Housing | Bearing Number | A1 ▲ | B | C | D | | E | F Base Bolt Size 4-Req'd | H | | | | | | | | |
|-------------------|------------|------------------|-------|-------|-------|-------|-------|------|--------------------------|------|-------|-------|-------|-------|-------|-------|-------|------|
| | | | | | | Min | Max | | | | | | | | | | | |
| 8-15/16 9 | 3248 | 23248K | 14.28 | 35.00 | 13.75 | 29.00 | 30.50 | 8.75 | 1-5/8 | 3.75 | | | | | | | | |
| 9-7/16 | 3152 | 23152K | | | | | | | | | | | | | | | | |
| 9-1/2 | 3252 | 23252K | | | | | | | | | | | | | | | | |
| 10-7/16 | 3156 | 23156K | | | | | | | | | | | | | | | | |
| 10-1/2 | 3256 | 23256K | | | | | | | | | | | | | | | | |
| 10-15/16 11 | 60 3160 | 23060K 23160K | | | | | | | | | | | | | | | | |
| 11-7/16 11-1/2 | 64 | 23064K | 16.36 | 38.25 | 14.75 | 31.63 | 34.63 | 9.00 | 1-5/8 | 3.38 | | | | | | | | |
| 11-15/16 12 | 064L | | | | | | | | | | | | | | | | | |
| 12-7/16 12-1/2 | 68 | 23068K | | | | | | | | | 15.85 | 39.00 | 15.25 | 32.00 | 34.00 | 10.00 | 1-7/8 | 4.19 |

| S-1 Shaft Size | Housing | Bearing Number | J | K | M | P | Q ★ | S • | Total Exp. | | | | |
|-------------------|------------|------------------|-------|------|-------|-------|-------|------|------------|-------|------|------|-----|
| 8-15/16 9 | 3248 | 23248K | 20.88 | 6.83 | 10.25 | 23.94 | 4.88 | 0.00 | 3/8 | | | | |
| 9-7/16 | 3152 | 23152K | | | | | 4.63 | | 3/8 | | | | |
| 9-1/2 | 3252 | 23252K | | | | | 5.42 | 3/4 | | | | | |
| 10-7/16 | 3156 | 23156K | | | | | 5.00 | 3/4 | | | | | |
| 10-1/2 | 3256 | 23256K | | | | | 4.58 | 3/4 | | | | | |
| 10-15/16 11 | 60 3160 | 23060K 23160K | | | | | 23.44 | 7.72 | 12.00 | 26.50 | 4.31 | 0.19 | 3/8 |
| 11-7/16 11-1/2 | 64 | 23064K | 5.33 | 0.00 | 3/4 | | | | | | | | |
| 11-15/16 12 | 064L | | 4.45 | 0.19 | 3/8 | | | | | | | | |
| 12-7/16 12-1/2 | 68 | 23068K | 24.00 | 7.47 | 12.00 | 26.38 | | | | | 4.81 | 0.19 | 3/8 |

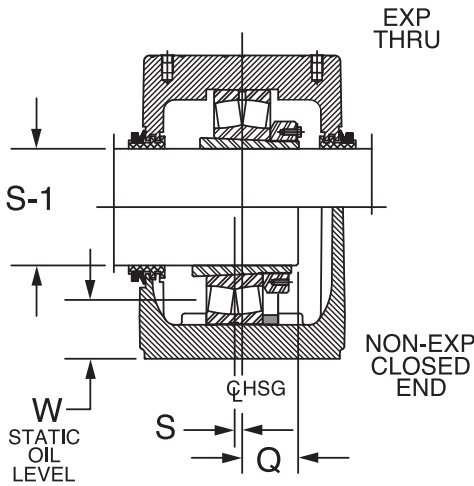
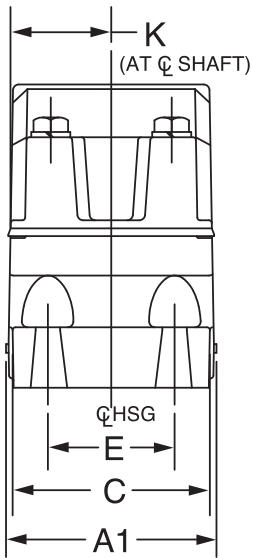
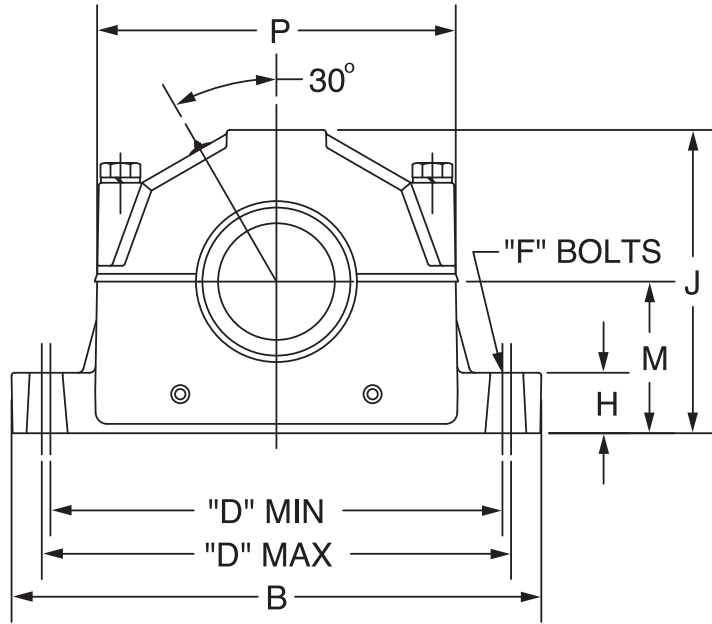
- ▲ Housing Width With Drain Plugs
- ★ Distance Shaft Should Extend Beyond Housing Centerline If Pillow Block Is Closed End Style
- Non-expansion Bearing Offset From Centerline. For Expansion Bearing S = 0

| | | | |
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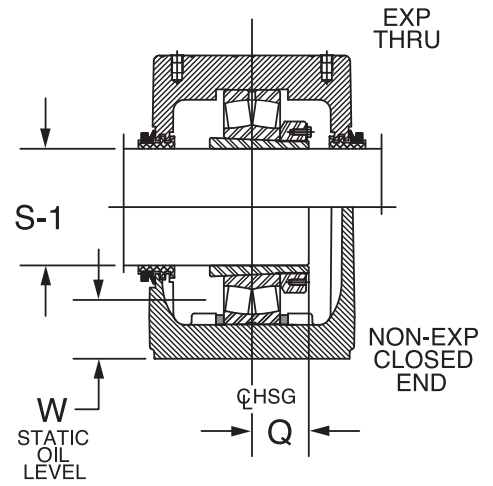
SELECTION/DIMENSIONS



USDAF Housing Dimensions



23000 SERIES
(REQUIRES (1) STABILIZING RING)



23100, 23200 SERIES
(REQUIRES (2) STABILIZING RINGS)

| | | | |
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SELECTION/DIMENSIONS

USDAF Housing Dimensions

| S-1 Shaft Size | Housing | Bearing Number | A1 ▲ | B | C | D | | E | F Base Bolt Size 4-Req'd | H |
|-------------------|--------------|------------------|-------|-------|-------|-------|-------|-------|--------------------------|------|
| | | | | | | Min | Max | | | |
| 10-15/16 11 | 3260 | 23260K | 16.98 | 41.75 | 15.75 | 35.00 | 36.50 | 10.25 | 1-7/8 | 4.50 |
| 11-15/16 12 | 3164 | 23164K | | | | | | | | |
| 12-15/16 13 | 072 | 23072K | | | | | | | | |
| 13-7/16 13-1/2 | 072L | | | | | | | | | |
| 13-15/16 14 | 076 | 23076K | 18.31 | 43.58 | 17.75 | 36.75 | 38.25 | 10.75 | 2 | 5.00 |
| 11-15/16 12 | 3264 | 23264K | | | | | | | | |
| 12-7/16 12-1/2 | 3168 3268 | 23168K 23268K | | | | | | | | |
| 13-7/16 13-1/2 | 3172 | 23172K | | | | | | | | |
| 13-15/16 14 | 3176 | 23176K | | | | | | | | |
| 15 15-3/4 | 080 084 | 23080K 23084K | | | | | | | | |

| S-1 Shaft Size | Housing | Bearing Number | J | K | M | P | Q ★ | S • | Total Exp. |
|-------------------|--------------|------------------|-------|------|-------|-------|------|------|------------|
| 10-15/16 11 | 3260 | 23260K | 25.75 | 8.16 | 12.81 | 29.13 | 5.95 | 0.00 | 3/4 |
| 11-15/16 12 | 3164 | 23164K | | | | | 5.72 | 0.00 | 3/4 |
| 12-15/16 13 | 072 | 23072K | | | | | 4.81 | 0.19 | 3/8 |
| 13-7/16 13-1/2 | 072L | | | | | | 3/8 | | |
| 13-15/16 14 | 076 | 23076K | 28.00 | 8.70 | 14.00 | 31.13 | 5.95 | 0.19 | 3/8 |
| 11-15/16 12 | 3264 | 23264K | | | | | 6.22 | 0.00 | 1/2 |
| 12-7/16 12-1/2 | 3168 3268 | 23168K 23268K | | | | | 6.00 | 0.00 | 1/2 |
| 13-7/16 13-1/2 | 3172 | 23172K | | | | | 6.66 | 0.00 | 1/2 |
| 13-15/16 14 | 3176 | 23176K | | | | | 6.14 | 0.00 | 3/4 |
| 15 15-3/4 | 080 084 | 23080K 23084K | | | | | 6.31 | 0.00 | 3/4 |
| | | | 29.00 | 8.75 | 14.50 | 33.17 | 5.36 | 0.19 | 3/8 |
| | | | | | | | 5.39 | 0.19 | 3/8 |

- ▲ Housing Width With Drain Plugs
- ★ Distance Shaft Should Extend Beyond Housing Centerline If Pillow Block Is Closed End Style
- Non-expansion Bearing Offset From Centerline. For Expansion Bearing S = 0

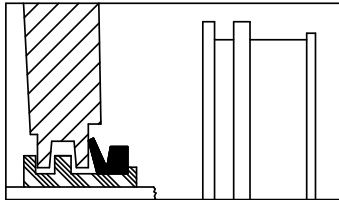
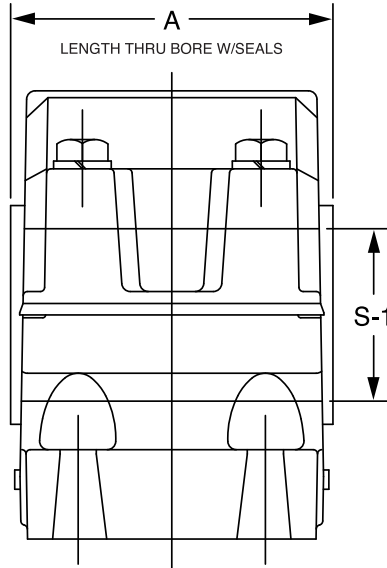
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Bearing Reference Guide
 E-Family Roller Bearings
 Specialty Tapered Products
 S-2000
 UNISPHERE II
 IMPERIAL
 UNIFIED SAF

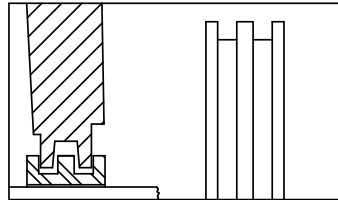
SELECTION/DIMENSIONS



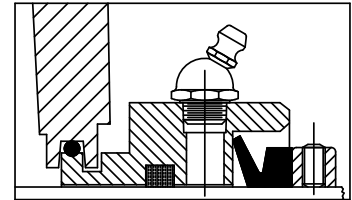
USDAF Pillow Block Seals



TRIPLE-TECT SEAL
General purpose seal for wet or dirty environments



LER SEAL
High speed seal for relatively clean environments



AUXILIARY TACONITE SEAL
For dusty environments and low to moderate speeds

| | | | |
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SELECTION/DIMENSIONS



USDAF Pillow Block Seals - Inch

| S-1 Shaft Size (Inch) | Housing | Seal Group | Part Numbers | | | A | | |
|-----------------------|------------|------------|------------------|----------------------|------------------|-------|-------|----------------|
| | | | TRIPLE-TECT (TT) | Metal Labyrinth (ER) | Auxiliary (AUX) | TT | ER | AUX* |
| 10-15/16 11 | 060 | 96 | 047942 047943 | 042037 422588 | 045781 044440 | 16.53 | 15.25 | 19.84 19.59 |
| 11-7/16 11-1/2 | 064 | 98 | 047944 047945 | 042038 042039 | 045784 045787 | | | 16.09 |
| 11-15/16 2 | 064L | 100 | 047946 047947 | 042040 422535 | 045790 045793 | 17.44 | 16.23 | |
| 12-7/16 12-1/2 | 068 | 102 | 047948 047949 | 046498 046499 | 046567 046568 | | | 17.44 |
| 12-15/16 13 | 072 | 104 | 047950 047951 | 042090 042091 | 045796 045799 | 18.63 | 17.42 | |
| 13-7/16 13-1/2 | 072L | 106 | 047952 047953 | 042092 042093 | 045802 045805 | | | 18.63 |
| 13-15/16 14 | 076 | 108 | 047954 047955 | 042094 042095 | 045808 046569 | 13.86 | 13.44 | |
| 15 15-3/4 | 080 084 | 110 112 | 047956 047957 | 050474 046566 | 046570 046572 | | | 16.53 |
| 9-7/16 9-1/2 | 3152 | 84 | 043538 422545 | 042510 422594 | 040900 040901 | 16.53 | 15.25 | |
| 10-7/16 10-1/2 | 3156 | 94 | 047940 047941 | 042036 422573 | 045778 042396 | | | 17.44 |
| 10-15/16 11 | 3160 | 96 | 047942 047943 | 042037 422588 | 045781 044440 | 18.63 | 17.36 | |
| 11-15/16 12 | 3164 | 100 | 047946 047947 | 042040 422535 | 045790 045793 | | | 18.63 |
| 12-7/16 12-1/2 | 3168 | 102 | 047948 047949 | 046498 046499 | 046567 046568 | 14.78 | 13.44 | |
| 13-7/16 13-1/2 | 3172 | 106 | 047952 047953 | 042092 042093 | 045802 045805 | | | 15.48 |
| 13-15/16 14 | 3176 | 108 | 047954 047955 | 042094 042095 | 045808 046569 | 16.53 | 15.17 | |
| 8-15/16 9 | 3248 | 90 | 043571 043572 | 042544 042545 | 040899 040995 | | | 17.44 |
| 9-7/16 | 3252 | 84 | 043538 422545 | 042510 422594 | 040900 040901 | 18.63 | 17.36 | |
| 10-7/16 10-1/2 | 3256 | 94 | 047940 047941 | 042036 422573 | 045778 042396 | | | 18.63 |
| 10-15/16 11 | 3260 | 96 | 047942 047943 | 042037 422588 | 045781 044440 | 18.63 | 17.36 | |
| 11-15/16 12 | 3264 | 100 | 047946 047947 | 042040 422535 | 045790 045793 | | | 17.36 |
| 12-7/16 12-1/2 | 3268 | 102 | 047948 047949 | 046498 046499 | 046557 046568 | | | |

* Includes Collar

Bearing Reference Guide

E-Family Roller Bearings

Specialty Tapered Products

S-2000

UNISPHERE II

IMPERIAL

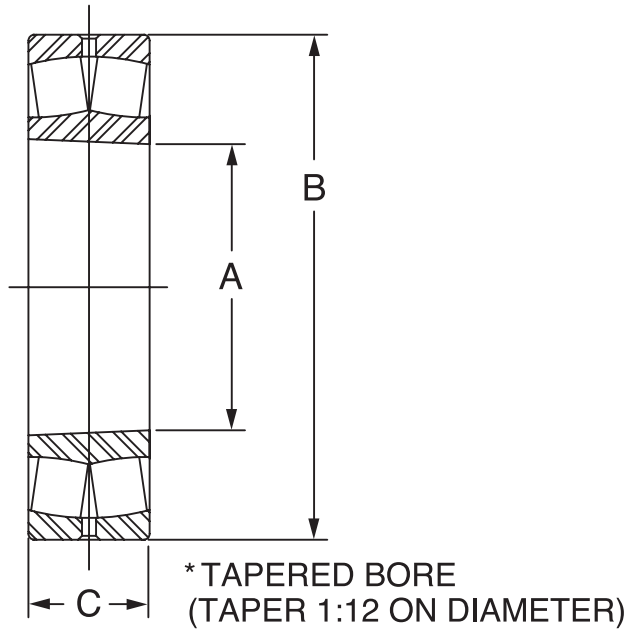
UNIFIED SAF

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SELECTION/DIMENSIONS



USDAF 23000, 23100, 23200 Spherical Roller Bearings



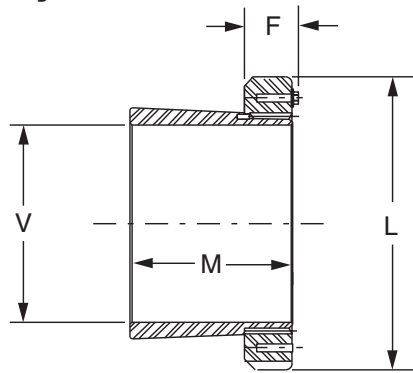
| Housing | Bearing Number | Part Number | Approx. Weight (lbs) | A* inch (mm) | B inch (mm) | C inch (mm) |
|----------|----------------|---------------|----------------------|--------------|--------------|-------------|
| 060 | 23060K | 422582 | 150 | 11.8110(300) | 18.1102(460) | 4.6457(118) |
| 064/064L | 23064K | 422531 | 161 | 12.5984(320) | 18.8976(480) | 4.7638(121) |
| 068 | 23068K | 421282 | 218 | 13.3858(340) | 20.4724(520) | 5.2362(133) |
| 072/072L | 23072K | 422036 | 226 | 14.1732(360) | 21.2598(540) | 5.2756(134) |
| 076 | 23076K | 422054 | 240 | 14.9606(380) | 22.0472(560) | 5.3150(135) |
| 080 | 23080K | 421283 | 309 | 15.7480(400) | 23.6220(600) | 5.8268(148) |
| 084 | 20384K | 421284 | 330 | 16.5354(420) | 24.4094(620) | 5.9055(150) |
| 3152 | 23152K | 421294 | 192 | 10.2362(260) | 17.3228(440) | 5.6693(144) |
| 3156 | 23156K | 421285 | 205 | 11.0236(280) | 18.1102(460) | 5.7488(146) |
| 3160 | 23160K | 421286 | 268 | 11.8110(300) | 19.6850(500) | 6.2992(160) |
| 3164 | 23164K | 421287 | 350 | 12.5984(320) | 21.2598(540) | 6.9291(176) |
| 3168 | 23168K | 052081 | 440 | 13.3858(340) | 22.8346(580) | 7.4803(190) |
| 3172 | 23172K | 421288 | 463 | 14.1732(360) | 23.6220(600) | 7.5590(192) |
| 3176 | 23176K | 421289 | 487 | 14.9606(380) | 24.4094(620) | 7.6378(194) |
| 3248 | 23248K | 422511 | 225 | 9.4488(240) | 17.3228(440) | 6.2992(160) |
| 3252 | 23252K | 421290 | 295 | 10.2362(260) | 18.8976(480) | 6.8504(174) |
| 3256 | 23256K | 421291 | 311 | 11.0236(280) | 19.6850(500) | 6.9291(176) |
| 3260 | 23260K | 421292 | 405 | 11.8110(300) | 21.2598(540) | 7.5590(192) |
| 3264 | 23264K | 422844 | 519 | 12.5984(320) | 22.8346(580) | 8.1890(208) |
| 3268 | 23268K | 421293 | 629 | 13.3858(340) | 24.4094(620) | 8.8189(224) |

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SELECTION/DIMENSIONS



USDAF SNP Adapter Assembly



| Housing | Bearing Number | SNP Number | Part Number | Approx Weight (Lbs) | V Shaft Size (In.) | L (In.) | F Max (In.) | M (In.) |
|---------|----------------|----------------|---------------|---------------------|--------------------|---------|-------------|---------|
| 60 | 23060K | SNP3060-1015 | 043581 | 59.0 | 10-15/16 | 14.19 | 1.94 | 6.72 |
| | | SNP3060-1100 | 422576 | 56.8 | 11 | | | |
| 64 | 23064K | SNP3064-1107 | 043582 | 82.7 | 11-7/16 | 15.01 | 2.03 | 6.94 |
| | | SNP3064-1108 | 043583 | 80.5 | 11-1/2 | | | |
| 064L | | SNP3064-1115 | 043584 | 65.0 | 11-15/16 | | | |
| | | SNP3064-1200 | 422525 | 62.5 | 12 | | | |
| 68 | 23068K | SNP3068-1207 | 047632 | 78.0 | 12-7/16 | 15.76 | 2.16 | 7.53 |
| | | SNP3068-1208 | 047635 | 75.4 | 12-1/2 | | | |
| 72 | 23072K | SNP3072-1215 | 043635 | 107.7 | 12-15/16 | 16.51 | 2.16 | 7.57 |
| | | SNP3072-1300 | 043636 | 105.0 | 13 | | | |
| 072L | | SNP3072-1307 | 043637 | 86.0 | 13-7/16 | | | |
| | | SNP3072-1308 | 043638 | 83.2 | 13-1/2 | | | |
| 76 | 23076K | SNP3076-1315 | 043639 | 94.3 | 13-15/16 | 17.76 | 2.36 | 7.73 |
| | | SNP3076-1400 | 043640 | 91.5 | 14 | | | |
| 80 | 23080K | SNP3080-1500 | 040830 | 100.0 | 15 | 18.51 | 2.52 | 8.4 |
| 84 | 23084K | SNP3084-1512 | 047636 | 105.0 | 15-3/4 | 19.32 | 2.52 | 8.49 |
| 3152 | 23152K | SNP3152-907 | 047630 | 44.0 | 9-7/16 | 12.19 | 1.77 | 7.58 |
| | | SNP3152-908 | 047631 | 42.0 | 9-1/2 | | | |
| 3156 | 23156K | H3156-SNP-1007 | 045431 | 30.06 | 10-7/16 | 13.01 | 1.85 | 7.76 |
| | | H3156-SNP-1008 | 047637 | 28.4 | 10-1/2 | | | |
| 3160 | 23160K | H3160-SNP-1015 | 047638 | 65.0 | 10-15/16 | 14.19 | 1.94 | 8.37 |
| | | H3160-SNP-1100 | 045464 | 62.4 | 11 | | | |
| 3164 | 23164K | H3164-SNP-1115 | 047639 | 74.0 | 11-15/16 | 15.01 | 2.03 | 9.1 |
| | | H3164-SNP-1200 | 050531 | 71.0 | 12 | | | |
| 3168 | 23168K | H3168-SNP-1207 | 047641 | 117.2 | 12-7/16 | 15.76 | 2.16 | 9.78 |
| | | H3168-SNP-1208 | 047642 | 113.8 | 12-1/2 | | | |
| 3172 | 23172K | H3172-SNP-1307 | 047643 | 120.0 | 13-7/16 | 16.51 | 2.16 | 9.85 |
| | | H3172-SNP-1308 | 045434 | 116.3 | 13-1/2 | | | |
| 3176 | 23176K | H3176-SNP-1315 | 047644 | 125.0 | 13-15/16 | 17.76 | 2.36 | 10.06 |
| | | H3176-SNP-1400 | 047645 | 121.1 | 14 | | | |
| 3248 | 23248K | SNP-148-815 | 047628 | 48.5 | 8-15/16 | 11.44 | 1.7 | 8.1 |
| | | SNP-148-900 | 047629 | 46.5 | 9 | | | |
| 3252 | 23252K | H3252-SNP-907 | 047646 | 54.5 | 9-7/16 | 12.19 | 1.75 | 8.76 |
| | | H3252-SNP-908 | 047647 | 52.2 | 9-1/2 | | | |
| 3256 | 23256K | H3256-SNP-1007 | 047648 | 59.0 | 10-7/16 | 13.01 | 1.85 | 8.94 |
| | | H3256-SNP-1008 | 047649 | 56.4 | 10-1/2 | | | |
| 3260 | 23260K | H3260-SNP-1015 | 047678 | 69.5 | 10-15/16 | 14.19 | 1.94 | 9.63 |
| | | H3260-SNP-1100 | 047679 | 65.5 | 11 | | | |
| 3264 | 23264K | H3264-SNP-1115 | 047680 | 98.0 | 11-15/16 | 15.01 | 2.03 | 10.36 |
| | | H3264-SNP-1200 | 422843 | 94.5 | 12 | | | |
| 3268 | 23268K | H3268-SNP-1207 | 047681 | 132.1 | 12-7/16 | 15.76 | 2.16 | 11.12 |
| | | H3268-SNP-1208 | 047682 | 128.2 | 12-1/2 | | | |

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SELECTION/DIMENSIONS



USAF 600 Adapter Mount Pillow Block with TRIPLE-TECT Seal Assembly

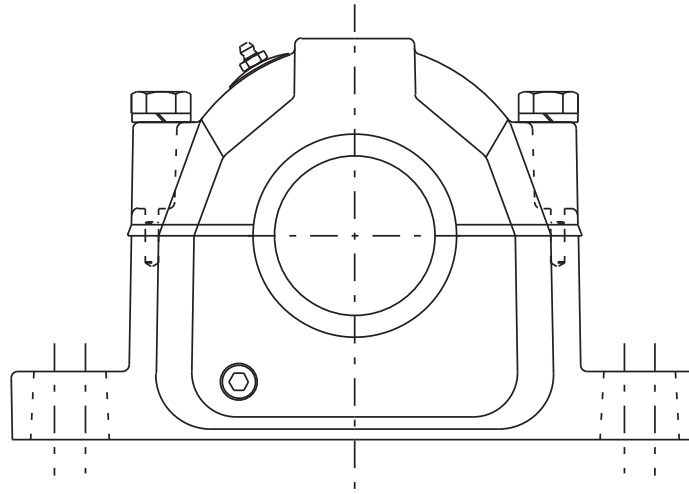


Table 17: Radial & Thrust Factors For USAF Spherical Bearings

| Shaft Size | | Bearing Series | e | F _A /F _R ≤ e | | F _A /F _R > e | | Adapter Maximum Allowable Thrust Load Pound † | Dynamic Capacity (C) Pounds | Static Capacity (C ₀) Lbs. | Maximum RPM | |
|------------------------|-----------------|----------------|-----|------------------------------------|-----|------------------------------------|-----|---|-----------------------------|--|-------------|------|
| Adapter Mounted Inches | Direct Mount mm | | | X | Y | X | Y | | | | Grease | Oil |
| 1-11/16 | 50 | 22310 | .36 | 1 | 1.9 | 0.67 | 2.8 | 1348 | 51,000 | 50,000 | 3400 | 4300 |
| 1-15/16 | 55 | 22311 | .36 | 1 | 1.9 | 0.67 | 2.8 | 1672 | 60,000 | 58,500 | 3200 | 4000 |
| | 60 | 22312 | .35 | 1 | 1.9 | 0.67 | 3 | - | 69,500 | 69,500 | 2800 | 3600 |
| 2-3/16 | 65 | 22313 | .34 | 1 | 2 | 0.67 | 3 | 2104 | 78,000 | 81,500 | 2600 | 3400 |
| | 70 | 22314 | .34 | 1 | 2 | 0.67 | 3 | - | 86,500 | 86,500 | 2400 | 3200 |
| 2-7/16 | 75 | 22315 | .34 | 1 | 2 | 0.67 | 3 | 2782 | 100,000 | 102,000 | 2200 | 3000 |
| 2-11/16 | 80 | 22316 | .34 | 1 | 2 | 0.67 | 3 | 3128 | 112,000 | 114,000 | 2200 | 3000 |
| 2-15/16 | 85 | 22317 | .33 | 1 | 2 | 0.67 | 3 | 3438 | 122,000 | 125,000 | 2000 | 2800 |
| 3-7/16 | 100 | 22320 | .34 | 1 | 2 | 0.67 | 3 | 4920 | 183,000 | 208,000 | 1700 | 2200 |
| 3-15/16 | 110 | 22322 | .33 | 1 | 2.1 | 0.67 | 3.1 | 5934 | 212,000 | 240,000 | 1500 | 1900 |
| 4-3/16 | 120 | 22324 | .33 | 1 | 2.1 | 0.67 | 3.1 | 6959 | 240,000 | 265,000 | 1400 | 1800 |
| 4-7/16 | 130 | 22326 | .33 | 1 | 2.1 | 0.67 | 3.1 | 8152 | 280,000 | 310,000 | 1300 | 1700 |
| 4-15/16 | 140 | 22328 | .34 | 1 | 2 | 0.67 | 3 | 9628 | 325,000 | 365,000 | 1200 | 1600 |
| 5-3/16 | 150 | 22330 | .33 | 1 | 2 | 0.67 | 3 | 10923 | 365,000 | 415,000 | 1100 | 1500 |
| 5-7/16 | 160 | 22332 | .37 | 1 | 1.8 | 0.67 | 2.7 | 12298 | 325,000 | 365,000 | 1000 | 1400 |
| 5-15/16 6 | 170 | 22334 | .37 | 1 | 1.8 | 0.67 | 2.7 | 13755 | 360,000 | 475,000 | 950 | 1300 |
| 6-15/16 7 | 190 | 22338 | .28 | 1 | 2.4 | 0.67 | 3.6 | 11786 | 415,000 | 570,000 | 1200 | 1300 |
| | | | .37 | 1 | 1.8 | 0.67 | 2.7 | 16910 | | | 850 | 1100 |

If the thrust load exceeds adapter maximum allowable thrust load, auxiliary methods of carrying thrust are required.

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SELECTION/DIMENSIONS



USAF 600 Adapter Mount Pillow Block with TRIPLE-TECT Seal Assembly

| Shaft Dia S-1 | Complete Pillow Block Part # | Housing W/ Stab Ring Part No. | Bearing Part No. | Dynamic Capacity (C), lbs.ʹ | Max RPM (Grease) | SNW Part No. | TRIPLE-TECT Part No. | TTDN Part No. | # LER Part No. | End Cover |
|---------------|------------------------------|-------------------------------|-----------------------|-----------------------------|------------------|-------------------------|----------------------|---------------------|----------------------|----------------|
| 1-11/16 | P2B610-USAF-111TT 035929 | H2S-610-USAF 035431 | BRG22310KC3 423372 | 42,500 | 3,400 | H2310-SNW-111 046680 | 10TT111 043579 | --- | 10LER111 * 042199 | EC10 040701 |
| 1-15/16 | P2B611-USAF-115TT 039404 | H2S-611-USAF 039760 | BRG22311KC3 423102 | 50,000 | 3,200 | H2311-SNW-115 046551 | 12TT115 043540 | 12TTDN115 039582 | 12LER115 042512 | EC12 040702 |
| | P4B611-USAF-115TT 039413 | H4S-611-USAF 039762 | BRG22311KC3 423102 | 50,000 | 3,200 | H2311-SNW-115 046551 | 12TT115 043540 | 12TTDN115 039582 | 12LER115 042512 | EC12 040702 |
| 2-3/16 | P2B613-USAF-203TT 039405 | H2S-613-USAF 039764 | BRG22313KC3 423104 | 65,500 | 2,600 | H2313-SNW-203 046552 | 14TT203 043541 | 14TTDN203 039583 | 14LER203 042513 | EC14 040703 |
| | P4B613-USAF-203TT 039414 | H4S-613-USAF 039766 | BRG22313KC3 423104 | 65,500 | 2,600 | H2313-SNW-203 046552 | 14TT203 043541 | 14TTDN203 039583 | 14LER203 042513 | EC14 040703 |
| 2-7/16 | P2B615-USAF-207TT 039406 | H2S-615-USAF 039768 | BRG22315KC3 423106 | 83,000 | 2,200 | H2315-SNW-207 046553 | 20TT207 043542 | 20TTDN207 039538 | 20LER207 042514 | EC20 040704 |
| | P4B615-USAF-207TT 039415 | H4S-615-USAF 039770 | BRG22315KC3 423106 | 83,000 | 2,200 | H2315-SNW-207 046553 | 20TT207 043542 | 20TTDN207 039538 | 20LER207 042514 | EC20 040704 |
| 2-11/16 | P2B616-USAF-211TT 035930 | H2S-616-USAF 035432 | BRG22316KC3 423373 | 93,000 | 2,200 | H2316-SNW-211 046682 | 24TT211 043544 | 24TTDN211 039855 | 24LER211 042516 | EC24 040705 |
| | P4B616-USAF-211TT 035931 | H4S-616-USAF 035433 | BRG22316KC3 423373 | 93,000 | 2,200 | H2316-SNW-211 046682 | 24TT211 043544 | 24TTDN211 039855 | 24LER211 042516 | EC24 040705 |
| 2-15/16 | P2B617-USAF-215TT 039407 | H2S-617-USAF 039772 | BRG22317KC3 423108 | 102,000 | 2,000 | H2317-SNW-215 046554 | 28TT215 043546 | 28TTDN215 039530 | 28LER215 042518 | EC28 040706 |
| | P4B617-USAF-215TT 039416 | H4S-617-USAF 039774 | BRG22317KC3 423108 | 102,000 | 2,000 | H2317-SNW-215 046554 | 28TT215 043546 | 28TTDN215 039530 | 28LER215 042518 | EC28 040706 |
| 3-7/16 | P4B620-USAF-307TT 039417 | H4S-620-USAF 039776 | BRG22320KC3 423110 | 146,000 | 1,700 | H2320-SNW-307 046555 | 46TT307 043549 | 46TTDN307 039859 | 46LER307 042521 | EC46 040708 |
| 4-3/16 | P4B624-USAF-403TT 039419 | H4S-624-USAF 039780 | BRG22324KC3 422140 | 204,000 | 1,400 | H2324-SNW-403 046557 | 52TT403 043553 | 52TTDN403 039863 | 52LER403 042525 | EC52 040710 |
| 4-7/16 | P4B626-USAF-407TT 039420 | H4S-626-USAF 039781 | BRG22326KC3 423114 | 236,000 | 1,300 | H2326-SNW-407 046558 | 54TT407 043554 | 54TTDN407 039864 | 54LER407 042526 | EC54 040711 |
| 4-15/16 | P4B628-USAF-415TT 039421 | H4S-628-USAF 039553 | BRG22328KC3 422035 | 275,000 | 1,200 | H2328-SNW-415 046559 | 56TT415 043556 | 56TTDN415 039866 | 56LER415 042528 | EC56 040712 |
| 5-3/16 | P4B630-USAF-503TT 039422 | H4S-630-USAF 039782 | BRG22330KC3 423116 | 310,000 | 1,100 | H2330-SNW-503 046560 | 58TT503 043558 | --- | 58LER503 042530 | EC58 040713 |
| 5-7/16 | P4B632-USAF-507TT 039423 | H4S-632-USAF 039783 | BRG22332KC3 423118 | 325,000 | 1,000 | H2332-SNW-507 046561 | 60TT507 043559 | --- | 60LER507 042531 | EC60 040714 |
| 5-15/16 | P4B634-USAF-515TT 039424 | H4S-634-USAF 039784 | BRG22334KC3 423120 | 360,000 | 950 | H2332-SNW-515 046562 | 64TT515 043560 | --- | 64LER515 042533 | EC64 040681 |
| 6 | P4B634-USAF-600TT 039425 | H4S-634-USAF 039784 | BRG22334KC3 423120 | 360,000 | 950 | H2334-SNW-600 046563 | 64TT600 043561 | --- | 64LER600 042534 | EC64 040681 |
| 6-15/16 | P4B638-USAF-615TT 039426 | H4S-638-USAF 039785 | BRG22338KC3 423122 | 415,000 | 850 | H2338-SNW-615 046564 | 72TT615 043564 | --- | 72LER615 042537 | EC72 040683 |
| 7 | P4B638-USAF-700TT 039427 | H4S-638-USAF 039785 | BRG22338KC3 423122 | 415,000 | 850 | H2338-SNW-700 046565 | 72TT700 043565 | --- | 72LER700 042538 | EC72 040683 |

NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.

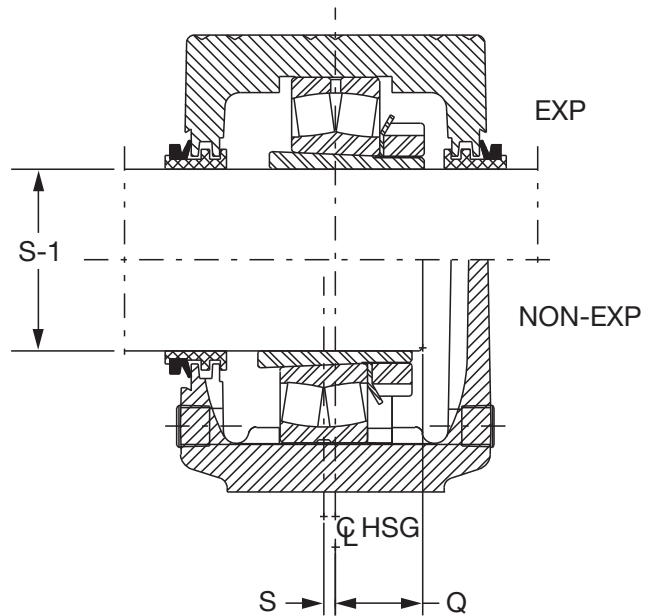
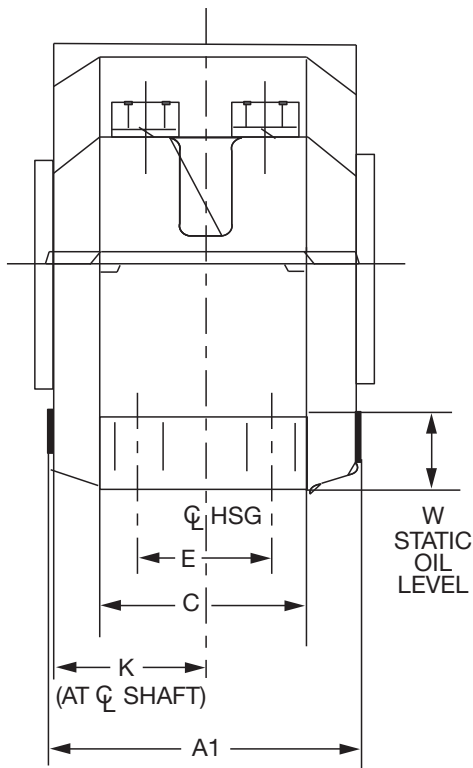
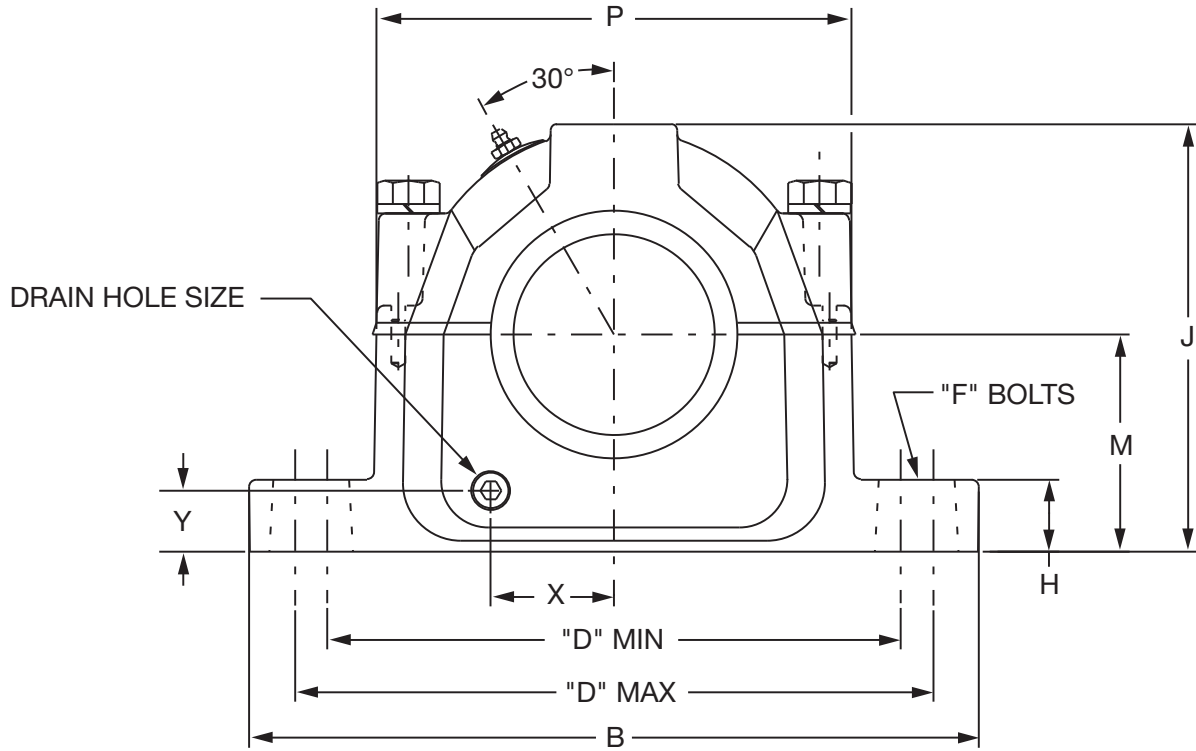
If an * appears by the part number, the LER seal is manufactured from Steel.

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SELECTION/DIMENSIONS



USAF 600 Housing Dimensions - Inch



| | | | |
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SELECTION/DIMENSIONS

USAF 600 Housing Dimensions - Inch

| S1 Shaft Size | Housing | A1 ▲ | B | C | D | | | | E | F | |
|---------------------|---------|---------|-------|------|--------|-------|--------|-------|------|-----------|--------|
| | | | | | 2-Bolt | | 4-Bolt | | | Bolt Dia. | |
| | | | | | Min | Max | Min | Max | | 2-Bolt | 4-Bolt |
| 1-11/16 | 610 | 4.70 | 10.63 | 2.75 | 7.75 | 9.00 | - | - | - | 5/8 | - |
| 1-15/16 | 611 | 4.64 | 11.00 | 3.38 | 8.13 | 9.50 | 8.13 | 9.50 | 1.88 | 5/8 | 1/2 |
| 2-3/16 | 613 | 5.44 | 12.59 | 3.50 | 9.63 | 11.00 | 9.63 | 11.00 | 2.13 | 3/4 | 5/8 |
| 2-7/16 | 615 | 6.16 | 13.63 | 3.88 | 10.25 | 11.75 | 10.38 | 11.63 | 2.13 | 3/4 | 5/8 |
| 2-11/16 | 616 | 6.38 | 14.17 | 3.88 | 10.88 | 12.38 | 10.63 | 12.50 | 2.13 | 3/4 | 5/8 |
| 2-15/16 | 617 | 6.78 | 15.36 | 4.34 | 11.63 | 13.13 | 11.63 | 13.13 | 2.38 | 7/8 | 3/4 |
| 3-7/16 | 620 | 8.05 | 16.50 | 4.72 | - | - | 13.25 | 14.50 | 2.75 | - | 3/4 |
| 4-3/16 | 624 | 9.36 | 20.88 | 6.25 | - | - | 16.75 | 18.25 | 3.75 | - | 1 |
| 4-7/16 | 626 | 9.92 | 21.66 | 6.25 | - | - | 17.38 | 19.25 | 3.75 | - | 1 |
| 4-15/16 | 628 | 9.91 | 24.75 | 6.75 | - | - | 19.38 | 21.63 | 4.25 | - | 1 |
| 5-3/16 | 630 | 10.41 | 26.75 | 7.13 | - | - | 20.88 | 23.63 | 4.63 | - | 1 |
| 5-7/16 | 632 | 10.81 | 28.00 | 7.50 | - | - | 21.63 | 24.38 | 4.50 | - | 1-1/4 |
| 5-15/16 6 | 634 | 11.53 | 28.75 | 8.00 | - | - | 22.50 | 25.00 | 5.00 | - | 1-1/4 |
| 6-15/16 7 | 638 | 12.30 | 32.75 | 8.88 | - | - | 24.75 | 27.88 | 5.25 | - | 1-1/2 |

| S-1 Shaft Size | Housing | H | J | K | M | P | Q ★ | S ● | W Static Oil Level | X | Y | Drain Hole Size |
|----------------------|---------|------|-------|------|------|-------|--------|--------|--------------------------|------|------|-----------------------|
| 1-11/16 | 610 | 1.41 | 5.72 | 2.20 | 3.00 | 6.13 | 1.38 | 0.22 | 1.38 | 1.53 | 0.98 | 1/8-27NPSI |
| 1-15/16 | 611 | 1.28 | 6.19 | 2.16 | 3.25 | 6.50 | 1.42 | 0.13 | 1.44 | 1.66 | 1.03 | 1/8-27NPSI |
| 2-3/16 | 613 | 1.06 | 6.75 | 2.42 | 3.50 | 7.44 | 1.98 | 0.19 | 1.41 | 1.97 | 0.95 | 1/4-18NPSF |
| 2-7/16 | 615 | 1.44 | 7.75 | 2.84 | 4.00 | 8.66 | 1.77 | 0.19 | 1.59 | 2.25 | 1.13 | 3/8-18NPSF |
| 2-11/16 | 616 | 1.22 | 8.25 | 2.95 | 4.25 | 9.03 | 1.83 | 0.19 | 1.69 | 2.38 | 1.17 | 3/8-18NPSF |
| 2-15/16 | 617 | 1.66 | 8.75 | 3.16 | 4.50 | 9.78 | 1.91 | 0.19 | 1.75 | 2.63 | 1.25 | 3/8-18NPSF |
| 3-7/16 | 620 | 1.50 | 10.25 | 3.64 | 5.25 | 11.25 | 2.30 | 0.19 | 2.03 | 3.19 | 1.38 | 1/2-14NPSF |
| 4-3/16 | 624 | 2.38 | 12.50 | 4.33 | 6.31 | 14.94 | 2.64 | 0.19 | 2.38 | 3.59 | 1.33 | 1/2-14NPSF |
| 4-7/16 | 626 | 2.34 | 13.31 | 4.63 | 6.69 | 14.91 | 2.84 | 0.19 | 2.44 | 4.03 | 1.33 | 1/2-14NPSF |
| 4-15/16 | 628 | 2.88 | 14.56 | 4.63 | 7.06 | 16.81 | 3.09 | 0.19 | 2.56 | 4.16 | 1.33 | 1/2-14NPSF |
| 5-3/16 | 630 | 3.00 | 15.13 | 4.88 | 7.50 | 17.19 | 3.27 | 0.19 | 2.63 | 4.22 | 1.63 | 1/2-14NPSF |
| 5-7/16 | 632 | 3.13 | 15.81 | 5.26 | 7.88 | 18.00 | 3.44 | 0.19 | 2.69 | 4.75 | 1.61 | 1/2-14NPSF |
| 5-15/16 6 | 634 | 3.38 | 16.63 | 5.44 | 8.25 | 19.00 | 3.59 | 0.19 | 2.75 | 4.91 | 1.53 | 1/2-14NPSF |
| 6-15/16 7 | 638 | 3.75 | 18.88 | 5.81 | 9.50 | 21.25 | 3.89 | 0.19 | 3.38 | 5.44 | 2.03 | 1/2-14NPSF |

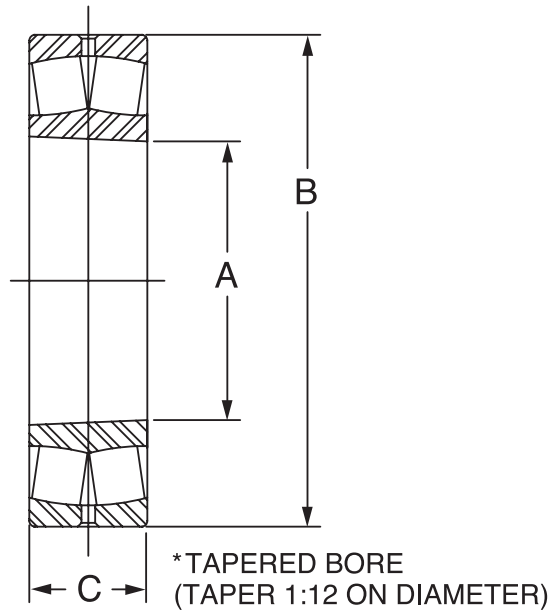
- ▲ Housing width with drain plugs
- ★ Distance shaft should extend beyond housing centerline if pillow block is closed end style
- Non-expansion bearing offset from centerline. For expansion bearing S = 0.

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SELECTION/DIMENSIONS



USAF 22300K Spherical Roller Bearings



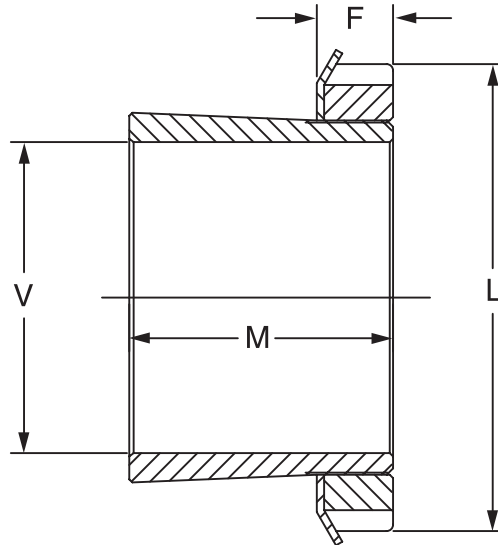
| Shaft Size (Inch) | Housing | Bearing No. | Part No. | Approx. Wt (lbs) | A* | B | C |
|----------------------|---------|----------------|---------------|---------------------|--------------|---------------|--------------|
| | | | | | Inch (mm) | Inch (mm) | Inch (mm) |
| 1-7/16 | 609 | 22309K | 423100 | 3.0 | 1.7717 (45) | 3.9370 (100) | 1.4171 (36) |
| 1-11/16 | 610 | 22310K | 423372 | 3.9 | 1.9685 (50) | 4.3307 (110) | 1.5748 (40) |
| 1-15/16 | 611 | 22311K | 423102 | 5.1 | 2.1654 (55) | 4.7244 (120) | 1.6929 (43) |
| 2-3/16 | 613 | 22313K | 423104 | 7.8 | 2.5591 (65) | 5.5118 (140) | 1.8898 (48) |
| 2-7/16 | 615 | 22315K | 423106 | 11.5 | 2.9528 (75) | 6.2992 (160) | 2.1654 (55) |
| 2-11/16 | 616 | 22316K | 423373 | 13.1 | 3.1496 (80) | 6.6929 (170) | 2.2835 (58) |
| 2-15/16 | 617 | 22317K | 423108 | 15.7 | 3.3465 (85) | 7.0866 (180) | 2.3622 (60) |
| 3-7/16 | 620 | 22320K | 423110 | 28.0 | 3.9370 (100) | 8.4646 (215) | 2.8740 (73) |
| 3-15/16 | 622 | 22322K | 423112 | 38.8 | 4.3307 (110) | 9.4488 (240) | 3.1496 (80) |
| 4-3/16 | 624 | 22324K | 422140 | 48.3 | 4.7244 (120) | 10.2362 (260) | 3.3858 (86) |
| 4-7/16 | 626 | 22326K | 423114 | 59.7 | 5.1181 (130) | 11.0236 (280) | 3.6614 (93) |
| 4-15/16 | 628 | 22328K | 422035 | 75.4 | 5.5118 (140) | 11.8110 (300) | 4.0157 (102) |
| 5-3/16 | 630 | 22330K | 423116 | 90.4 | 5.9055 (150) | 12.5984 (320) | 4.2520 (108) |
| 5-7/16 | 632 | 22332K | 423118 | 113.0 | 6.2992 (160) | 13.3858 (340) | 4.4882 (114) |
| 5-15/16 6 | 634 | 22334K | 423120 | 132.0 | 6.6929 (170) | 14.1732 (360) | 4.7244 (120) |
| 6-15/16 7 | 638 | 22338K | 423122 | 179.0 | 7.4803 (190) | 15.7480 (400) | 5.1969 (132) |

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SELECTION/DIMENSIONS



USAF 600 Adapter Assembly (SNW)



| V Shaft Dia. (Inch) | Housing | Adapter Number | Part Number | Aprox. Wt (Lbs) | L (in) | F Max (In) | M (In) |
|---------------------|---------|----------------|---------------|-----------------|--------|------------|--------|
| 1-7/16 | 609 | H2309-107 | 046550 | 0.63 | 2.53 | 0.52 | 1.97 |
| 1-11/16 | 610 | H2310-111 | 046680 | 0.80 | 2.69 | 0.58 | 2.17 |
| 1-15/16 | 611 | H2311-115 | 046551 | 0.86 | 2.97 | 0.58 | 2.32 |
| 2-3/16 | 613 | H2313-203 | 046552 | 1.50 | 3.38 | 0.64 | 2.56 |
| 2-7/16 | 615 | H2315-207 | 046553 | 2.55 | 3.88 | 0.69 | 2.87 |
| 2-11/16 | 616 | H2316-211 | 046682 | 3.00 | 4.16 | 0.69 | 3.07 |
| 2-15/16 | 617 | H2317-215 | 046554 | 3.20 | 4.41 | 0.72 | 3.23 |
| 3-7/16 | 620 | H2320-307 | 046555 | 5.30 | 5.19 | 0.83 | 3.82 |
| 3-15/16 | 622 | H2322-315 | 046556 | 5.75 | 5.72 | 0.86 | 4.13 |
| 4-3/16 | 624 | H2324-403 | 046557 | 7.4 | 6.12 | 0.92 | 4.41 |
| 4-7/16 | 626 | H2326-407 | 046558 | 10.7 | 6.75 | 0.95 | 4.76 |
| 4-15/16 | 628 | H2328-415 | 046559 | 12.0 | 7.09 | 1.02 | 5.16 |
| 5-3/16 | 630 | H2330-503 | 046560 | 15.6 | 7.69 | 1.08 | 5.47 |
| 5-7/16 | 632 | H2332-507 | 046561 | 21.7 | 8.06 | 1.14 | 5.79 |
| 5-15/16 | 634 | H2334-515 | 046562 | 22.0 | 8.66 | 1.23 | 8.06 |
| 6 | | H2334-600 | 046563 | 21.0 | | | |
| 6-15/16 | 638 | H2338-615 | 046564 | 22.9 | 9.47 | 1.30 | 6.65 |
| 7 | | H2338-700 | 046565 | 21.6 | | | |

Bearing Reference Guide

E-Family Roller Bearings

Specialty Tapered Products

S-2000

UNISPHERE II

IMPERIAL

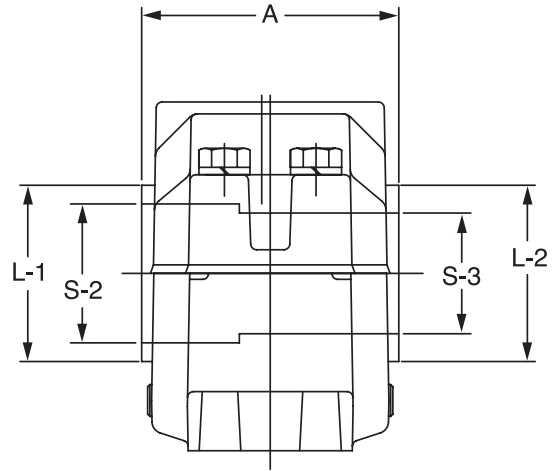
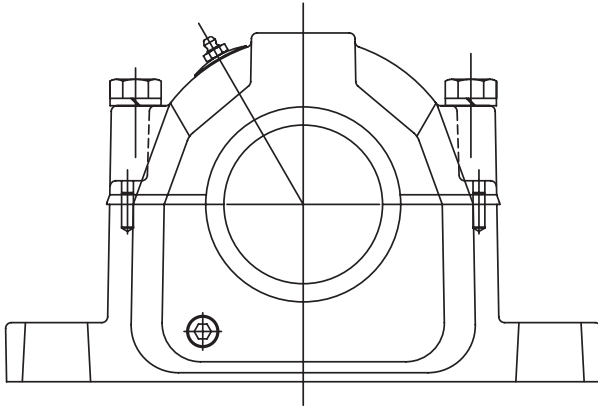
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SELECTION/DIMENSIONS



USAF 200 Direct Mount Pillow Block with TRIPLE-TECT Seal Assembly



| | | | |
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SELECTION/DIMENSIONS

USAF 200 Direct Mount Pillow Block with TRIPLE-TECT Seal Assembly

| Shaft Dia. | | Bearing Bore mm. | Complete Pillow Block Part # | Housing Part No.** | Bearing Part No. | Dynamic Capacity (C), lbs. | Max RPM (Grease) | Locknut Part No. |
|------------|---------|------------------|------------------------------|------------------------|----------------------|----------------------------|------------------|------------------|
| S-2 | S-3 | | | | | | | |
| 3-7/16 | 2-13/16 | 75 | P2B215-USAF-307TT 039175 | H2S-215-USAF 039682 | BRG22215C3 421265 | 48,000 | 3,400 | AN15 460901 |
| | | | P4B215-USAF-307TT 039177 | H4S-215-USAF 039684 | BRG22215C3 421265 | 48,000 | 3,400 | AN15 460901 |
| 3-5/8 | 3 | 80 | P2B216-USAF-310TT 039179 | H2S-216-USAF 039686 | BRG22216C3 421266 | 56,000 | 3,200 | AN16 460902 |
| | | | P4B216-USAF-310TT 039181 | H4S-216-USAF 039688 | BRG22216C3 421266 | 56,000 | 3,200 | AN16 460902 |
| 3-15/16 | 3-3/16 | 85 | P2B217-USAF-315TT 039183 | H2S-217-USAF 039690 | BRG22217C3 421267 | 68,000 | 3,000 | AN17 460903 |
| | | | P4B217-USAF-315TT 039185 | H4S-217-USAF 039692 | BRG22217C3 421267 | 68,000 | 3,000 | AN17 460903 |
| 4-1/8 | 3-3/8 | 90 | P2B218-USAF-402TT 039187 | H2S-218-USAF 039694 | BRG22218C3 421268 | 78,000 | 2,600 | AN18 460904 |
| | | | P4B218-USAF-402TT 039189 | H4S-218-USAF 039696 | BRG22218C3 421268 | 78,000 | 2,600 | AN18 460904 |
| 4-1/2 | 3-13/16 | 100 | P2B220-USAF-408TT 039191 | H2S-220-USAF 039698 | BRG22220C3 421269 | 96,500 | 2,200 | AN20 460905 |
| | | | P4B220-USAF-408TT 039193 | H4S-220-USAF 039700 | BRG22220C3 421269 | 96,500 | 2,200 | AN20 460905 |
| 4-7/8 | 4-3/16 | 110 | P4B222-USAF-414TT 039195 | H4S-222-USAF 039702 | BRG22222C3 421270 | 122,000 | 2,000 | AN22 460906 |
| 5-5/16 | 4-9/16 | 120 | P4B224-USAF-505TT 039197 | H4S-224-USAF 039704 | BRG22224C3 421271 | 143,000 | 1,900 | AN24 041071 |
| 5-7/8 | 4-15/16 | 130 | P4B226-USAF-514TT 039199 | H4S-226-USAF 039706 | BRG22226C3 421272 | 170,000 | 1,800 | AN26 041064 |
| 6-1/4 | 5-5/16 | 140 | P4B228-USAF-604TT 039201 | H4S-228-USAF 039708 | BRG22228C3 421273 | 196,000 | 1,700 | AN28 041065 |
| 6-5/8 | 5-3/4 | 150 | P4B230-USAF-610TT 039203 | H4S-230-USAF 039710 | BRG22230C3 421274 | 228,000 | 1,600 | AN30 041072 |
| 7 | 6-1/16 | 160 | P4B232-USAF-700TT 039205 | H4S-232-USAF 039711 | BRG22232C3 421275 | 260,000 | 1,500 | AN32 041066 |
| 7-7/16 | 6-7/16 | 170 | P4B234-USAF-707TT 039207 | H4S-234-USAF 039712 | BRG22234C3 421276 | 308,000 | 1,300 | AN34 041067 |
| 7-13/16 | 6-7/8 | 180 | P4B236-USAF-713TT 039209 | H4S-236-USAF 039713 | BRG22236C3 421277 | 308,000 | 1,300 | AN36 041070 |
| 8-3/8 | 7-1/4 | 190 | P4B238-USAF-806TT 039211 | H4S-238-USAF 039714 | BRG22238C3 421278 | 270,000 | 1,200 | AN38 041068 |
| 8-3/4 | 7-5/8 | 200 | P4B240-USAF-812TT 039213 | H4S-240-USAF 039715 | BRG22240C3 421279 | 300,000 | 900 | AN40 040838 |
| 9-9/16 | 8-5/16 | 220 | P4B244-USAF-909TT 039215 | H4S-244-USAF 039716 | BRG22244C3 421280 | 365,000 | 950 | AN44 041069 |

Bearing Reference Guide

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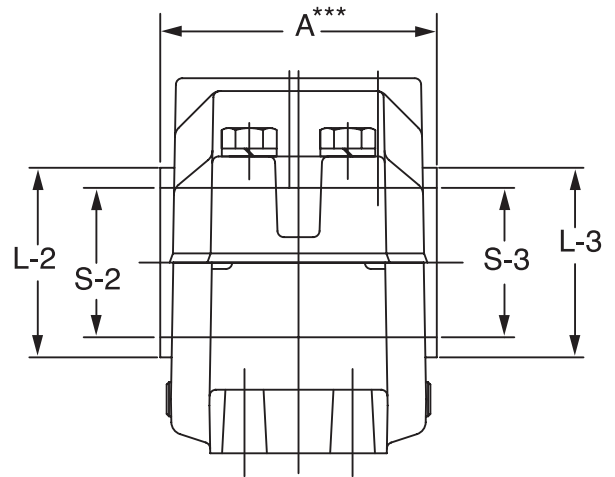
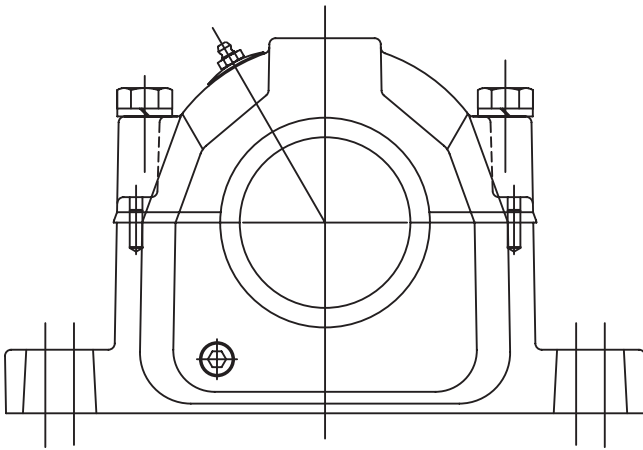
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SELECTION/DIMENSIONS



USAF 200 Direct Mount Pillow Block With TRIPLE-TECT Seal Assembly



| | | | |
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SELECTION/DIMENSIONS

USAF 200 Direct Mount Pillow Block With TRIPLE-TECT Seal Assembly

| Shaft Dia. | | Bearing Bore mm. | Lock washer Part No. | TRIPLE-TECT Part No. | | TTDN Part No. | | # LER Part No. | | End Cover Part No. |
|------------|---------|------------------|----------------------|----------------------|---------|---------------|-----------|----------------|-----------|--------------------|
| S-2 | S-3 | | | S2 | S3 | S2 | S3 | S2 | S3 | |
| 3-7/16 | 2-13/16 | 75 | W15 | 38TT307 | 24TT213 | 38TTDN307 | 24TTDN213 | 38LER307 | 24LER213 | EC24 |
| | | | 419150 | 046401 | 046400 | 039568 | 039289 | *045928 | *045927 | 040705 |
| | | | W15 | 38TT307 | 24TT213 | 38TTDN307 | 24TTDN213 | 38LER307 | 24LER213 | EC24 |
| | | | 419150 | 046401 | 046400 | 039568 | 039289 | 045928 | 045927 | 040705 |
| 3-5/8 | 3 | 80 | W16 | 38TT310 | 28TT300 | 38TTDN310 | 28TTDN300 | 38LER310 | 28LER300 | EC28 |
| | | | 419152 | 046402 | 043547 | 039291 | 039857 | 045931 | 042519 | 040706 |
| | | | W16 | 38TT310 | 28TT300 | 38TTDN310 | 28TTDN300 | 38LER310 | 28LER300 | EC28 |
| | | | 419152 | 046402 | 043547 | 039291 | 039857 | 045931 | 042519 | 040706 |
| 3-15/16 | 3-3/16 | 85 | W17 | 42TT315 | 32TT303 | 42TTDN315 | 32TTDN303 | 42LER315 | 32LER303 | EC32 |
| | | | 419154 | 046404 | 046403 | 039515 | 039292 | 042089 | 042088 | 057260 |
| | | | W17 | 42TT315 | 32TT303 | 42TTDN315 | 32TTDN303 | 42LER315 | 32LER303 | EC32 |
| | | | 419154 | 046404 | 046403 | 039515 | 039292 | 042089 | 042088 | 057260 |
| 4-1/8 | 3-3/8 | 90 | W18 | 44TT402 | 36TT306 | --- | --- | 44LER402 | 36LER306 | --- |
| | | | 419156 | 046406 | 046405 | --- | --- | *045936 | *045934 | --- |
| | | | W18 | 44TT402 | 36TT306 | --- | --- | 44LER402 | 36LER306 | --- |
| | | | 419156 | 046406 | 046405 | --- | --- | *045936 | *045934 | --- |
| 4-1/2 | 3-13/16 | 100 | W20 | 54TT408 | 50TT313 | --- | --- | 54LER408 | 50LER313 | EC50 |
| | | | 419158 | 043555 | 046407 | --- | --- | 042527 | 045939 | 040709 |
| | | | W20 | 54TT408 | 50TT313 | --- | --- | 54LER408 | 50LER313 | EC50 |
| | | | 419158 | 043555 | 046407 | --- | --- | 042527 | 045939 | 040709 |
| 4-7/8 | 4-3/16 | 110 | W22 | 56TT414 | 52TT403 | 56TTDN414 | 52TTDN403 | 56LER414 | 52LER403 | EC52 |
| | | | 419160 | 046408 | 043553 | 039297 | 039863 | 042098 | 042525 | 040710 |
| 5-5/16 | 4-9/16 | 120 | W24 | 58TT510 | 54TT409 | --- | --- | 58LER505 | 54LER409 | EC54 |
| | | | 419162 | 046411 | 046409 | --- | --- | 042248 | 045943 | 040711 |
| 5-7/8 | 4-18/16 | 130 | W26 | 62TT514 | 56TT415 | --- | --- | 62LER514 | 56LER415 | EC56 |
| | | | 419164 | 046410 | 043556 | --- | --- | 042085 | 042528 | 040712 |
| 6-1/4 | 5-5/16 | 140 | W28 | 66TT604 | 58TT505 | --- | --- | 66LER604 | 58LER505 | EC58 |
| | | | 419166 | 046412 | 046411 | --- | --- | 042249 | 042248 | 040713 |
| 6-5/8 | 5-3/4 | 150 | W30 | 70TT610 | 62TT512 | --- | --- | 70LER610 | 62LER512 | --- |
| | | | 419168 | 046414 | 046413 | --- | --- | 045951 | 045949 | --- |
| 7 | 6-1/16 | 160 | W32 | 72TT700 | 64TT601 | --- | --- | 72LER700 | 64LER601 | EC64 |
| | | | 419170 | 043565 | 046415 | --- | --- | 042538 | 045953 | 040681 |
| 7-7/16 | 6-7/16 | 170 | W34 | 76TT707 | 68TT607 | --- | --- | 76LER707 | 68LER607 | EC68 |
| | | | 419172 | 046416 | 043562 | --- | --- | 042049 | 042535 | 040682 |
| 7-13/16 | 6-7/8 | 180 | W36 | 78TT711 | 72TT614 | --- | --- | 78LER711 | 72LER614 | EC72 |
| | | | 419174 | 046417 | 046418 | --- | --- | 042221 | 042220 | 040683 |
| 8-3/8 | 7-1/4 | 190 | W38 | 80TT806 | 74TT704 | --- | --- | *80LER806 | *74LER704 | EC74 |
| | | | 419176 | 046420 | 046419 | --- | --- | 042031 | 042032 | 040691 |
| 8-3/4 | 7-5/8 | 200 | W40 | 82TT812 | 76TT710 | --- | --- | *82LER812 | *76LER710 | EC7 |
| | | | 419171 | 046423 | 046422 | --- | --- | 045956 | 045955 | 040684 |
| 9-9/16 | 8-5/16 | 220 | W44 | 84TT909 | 80TT805 | --- | --- | *84LER909 | *80LER805 | --- |
| | | | 419178 | 046425 | 046424 | --- | --- | 042029 | 042028 | --- |

NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.

If an * appears by the part number, the LER seal is manufactured from Steel.

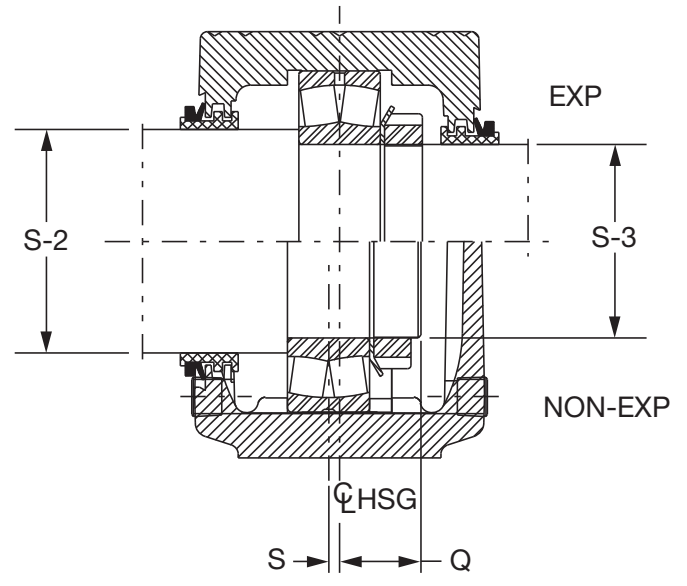
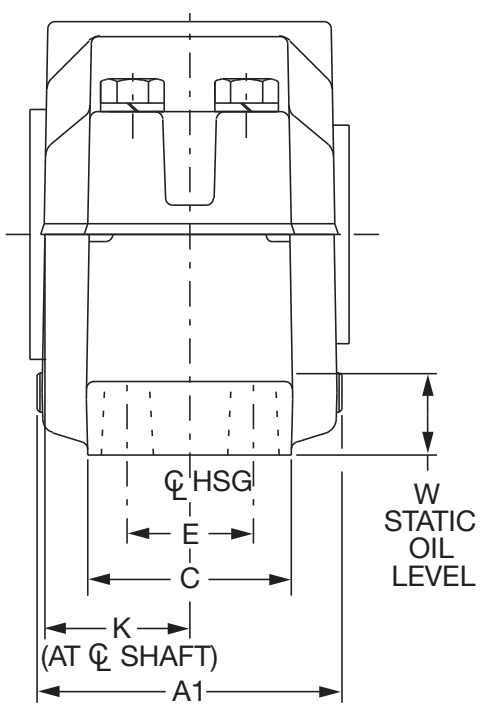
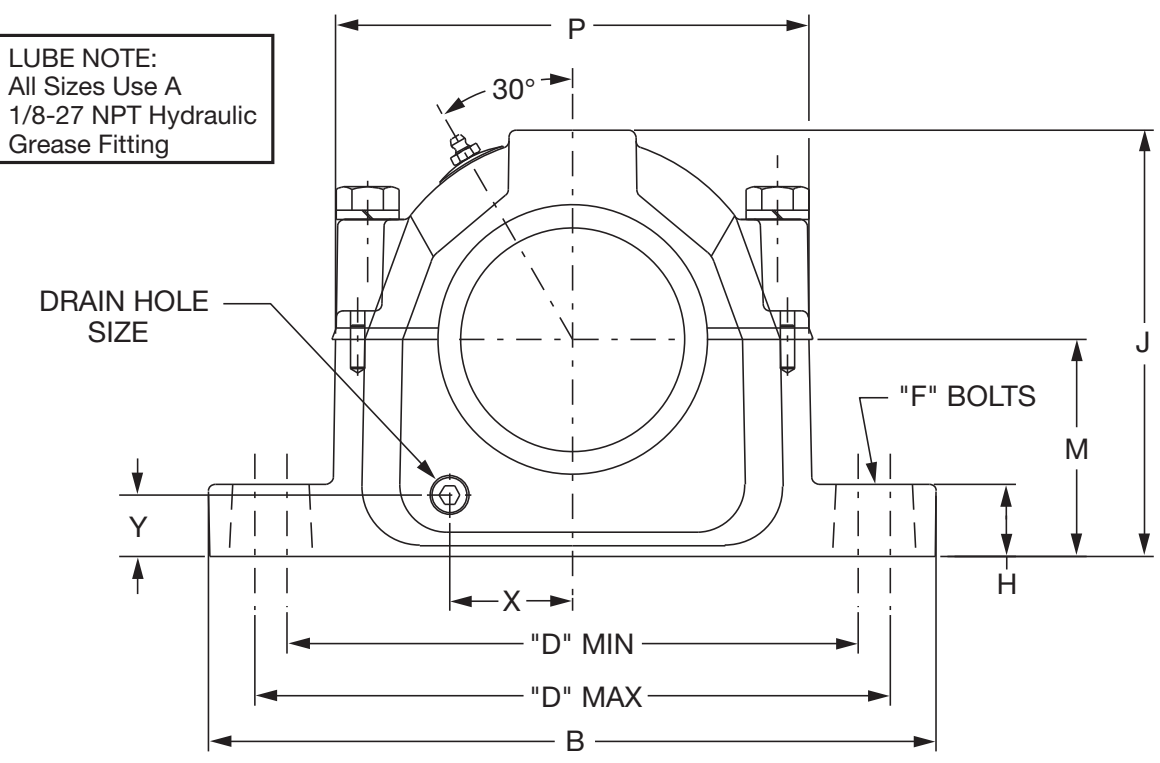
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SELECTION/DIMENSIONS

USAF 200 Housing Dimensions - Inch

LUBE NOTE:
All Sizes Use A
1/8-27 NPT Hydraulic
Grease Fitting



| | | | |
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SELECTION/DIMENSIONS

USAF 200 Housing Dimensions - Inch

| S-2 Shaft Size | S-3 Shaft Size | Housing | A1 ▲ | B | C | D | | | | E | F | |
|----------------|----------------|---------|-------|-------|------|--------|-------|--------|-------|------|-----------|-------|
| | | | | | | 2-Bolt | | 4-Bolt | | | Bolt Dia. | |
| | | | | | | Min | Max | Min | Max | | H | J |
| 3-7/16 | 2-13/16 | 215 | 5.20 | 11.13 | 3.13 | 8.63 | 9.68 | 8.63 | 9.63 | 1.88 | 5/8 | 1/2 |
| 3-5/8 | 3 | 216 | 5.44 | 12.59 | 3.50 | 9.63 | 11.00 | 9.68 | 11.00 | 2.13 | 3/4 | 5/8 |
| 3-15/16 | 3-3/16 | 217 | 5.39 | 12.59 | 3.50 | 9.88 | 11.00 | 9.88 | 11.00 | 2.13 | 3/4 | 5/8 |
| 4-1/8 | 3-3/8 | 218 | 6.16 | 13.63 | 3.88 | 10.25 | 11.75 | 10.38 | 11.63 | 2.13 | 3/4 | 5/8 |
| 4-1/2 | 3-13/16 | 220 | 6.78 | 15.36 | 4.34 | 11.63 | 13.13 | 11.63 | 13.13 | 2.38 | 7/8 | 3/4 |
| 4-7/8 | 4-3/16 | 222 | 7.08 | 16.50 | 4.75 | - | - | 12.59 | 14.50 | 2.75 | - | 3/4 |
| 5-5/16 | 4-9/16 | 224 | 8.05 | 16.50 | 4.72 | - | - | 13.25 | 14.50 | 2.75 | - | 3/4 |
| 5-7/8 | 4-15/16 | 226 | 8.27 | 18.58 | 5.13 | - | - | 14.50 | 16.00 | 3.25 | - | 7/8 |
| 6-1/4 | 5-5/16 | 228 | 8.77 | 19.69 | 5.88 | - | - | 15.63 | 17.38 | 3.38 | - | 1 |
| 6-5/8 | 5-3/4 | 230 | 9.36 | 20.88 | 6.25 | - | - | 16.75 | 18.25 | 3.75 | - | 1 |
| 7 | 6-1/16 | 232 | 9.92 | 21.66 | 6.25 | - | - | 17.38 | 19.25 | 3.75 | - | 1 |
| 7-7/16 | 6-7/16 | 234 | 9.91 | 24.75 | 6.75 | - | - | 19.38 | 21.63 | 4.25 | - | 1 |
| 7-13/16 | 6-7/8 | 236 | 10.41 | 26.75 | 7.13 | - | - | 20.88 | 23.63 | 4.63 | - | 1 |
| 8-3/8 | 7-1/4 | 238 | 10.81 | 28.00 | 7.50 | - | - | 21.63 | 24.88 | 4.50 | - | 1-1/4 |
| 8-3/4 | 7-5/8 | 240 | 11.53 | 28.75 | 8.00 | - | - | 22.50 | 25.00 | 5.00 | - | 1-1/4 |
| 9-9/16 | 8-5/16 | 244 | 12.30 | 32.75 | 8.88 | - | - | 24.75 | 27.88 | 5.25 | - | 1-1/2 |

| S-2 Shaft Size | S-3 Shaft Size | Housing | H | J | K | M | P | Q ★ | S ● | W Static Oil Level | X | Y | Drain Hole Size |
|----------------|----------------|---------|------|-------|------|------|-------|------|------|--------------------|------|------|-----------------|
| 3-7/16 | 2-13/16 | 215 | 1.25 | 6.44 | 2.31 | 3.25 | 7.06 | 1.39 | 0.13 | 1.16 | 1.78 | 0.88 | 1/4-18NPSF |
| 3-5/8 | 3 | 216 | 1.06 | 6.75 | 2.42 | 3.50 | 7.94 | 1.44 | 0.19 | 1.25 | 1.97 | 0.95 | 1/4-18NPSF |
| 3-15/16 | 3-3/16 | 217 | 1.25 | 7.38 | 2.47 | 3.75 | 8.19 | 1.50 | 0.19 | 1.38 | 1.13 | 1.06 | 3/8-18NPSF |
| 4-1/8 | 3-3/8 | 218 | 1.44 | 7.75 | 2.84 | 4.00 | 8.66 | 1.72 | 0.19 | 1.47 | 1.25 | 1.13 | 3/8-18NPSF |
| 4-1/2 | 3-13/16 | 220 | 1.66 | 8.75 | 3.16 | 4.50 | 9.78 | 1.92 | 0.19 | 1.64 | 2.63 | 1.25 | 3/8-18NPSF |
| 4-7/8 | 4-3/16 | 222 | 1.78 | 9.41 | 3.30 | 4.94 | 10.59 | 2.09 | 0.19 | 1.80 | 2.88 | 1.34 | 3/8-18NPSF |
| 5-5/16 | 4-9/16 | 224 | 1.50 | 10.25 | 3.64 | 5.25 | 11.25 | 2.28 | 0.19 | 1.84 | 3.19 | 1.38 | 1/2-14NPSF |
| 5-7/8 | 4-15/16 | 226 | 2.06 | 11.53 | 3.75 | 6.00 | 12.41 | 2.47 | 0.19 | 1.34 | 3.31 | 1.63 | 1/2-14NPSF |
| 6-1/4 | 5-5/16 | 228 | 2.06 | 11.81 | 4.00 | 6.00 | 13.25 | 2.45 | 0.19 | 2.03 | 3.63 | 1.47 | 1/2-14NPSF |
| 6-5/8 | 5-3/4 | 230 | 2.38 | 12.50 | 4.33 | 6.31 | 14.31 | 2.61 | 0.19 | 2.03 | 3.59 | 1.33 | 1/2-14NPSF |
| 7 | 6-1/16 | 232 | 2.34 | 13.31 | 4.63 | 6.69 | 14.91 | 2.91 | 0.19 | 2.09 | 4.03 | 1.33 | 1/2-14NPSF |
| 7-7/16 | 6-7/16 | 234 | 2.88 | 14.56 | 4.63 | 7.06 | 16.81 | 3.13 | 0.19 | 2.19 | 4.16 | 1.33 | 1/2-14NPSF |
| 7-13/16 | 6-7/8 | 236 | 3.00 | 15.13 | 4.88 | 7.50 | 17.19 | 3.16 | 0.19 | 2.42 | 4.22 | 1.63 | 1/2-14NPSF |
| 8-3/8 | 7-1/4 | 238 | 3.13 | 15.81 | 5.06 | 7.88 | 18.00 | 3.30 | 0.19 | 2.53 | 4.75 | 1.61 | 1/2-14NPSF |
| 8-3/4 | 7-5/8 | 240 | 3.38 | 16.63 | 5.44 | 8.25 | 19.00 | 3.50 | 0.19 | 2.47 | 4.91 | 1.53 | 1/2-14NPSF |
| 9-9/16 | 8-5/16 | 244 | 3.75 | 18.88 | 5.81 | 9.50 | 21.25 | 3.42 | 0.19 | 3.25 | 5.44 | 2.03 | 1/2-14NPSF |

▲ Housing width with drain plugs

★ Distance shaft should extend beyond housing centerline if pillow block is closed end style

● Non-expansion bearing offset from centerline. For expansion bearing S = 0.

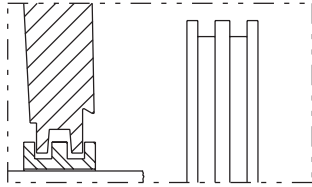
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SELECTION/DIMENSIONS

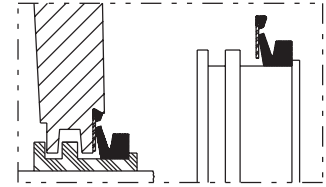
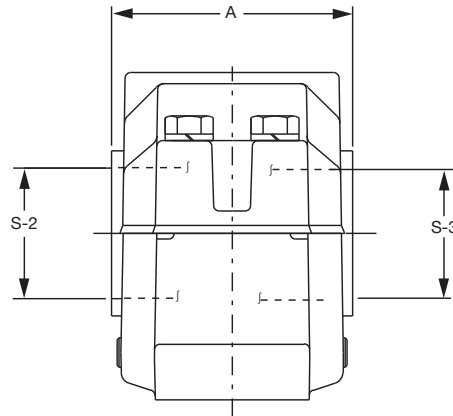


USAF 200 Pillow Block Seals

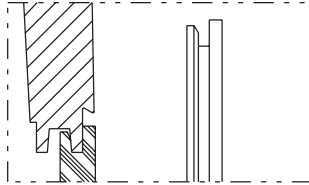
LENGTH THRU BORE W/SEALS



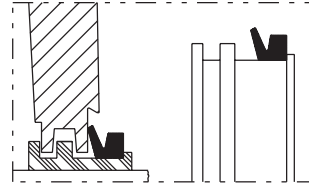
LER SEAL
High speed seal for relatively clean environments



DROP-IN TRIPLE-TECT Seal
DODGE exclusive. popular TRIPLE-TECT features with simplified installation.



END COVER Seal
Allows use of open shaft housing as closed-end



TRIPLE-TECT Seal
General purpose seal for wet or dirty environments

| S-2 Shaft Size (Inch) | S-3 Shaft Size (Inch) | Housing | Seal Group | | Part Number | | | | | | | A | | |
|-----------------------|-----------------------|---------|------------|----|------------------|--------|----------------------------|--------|------------------------|---------|--------------------|-----------|-------------|------------|
| | | | | | TRIPLE-TECT (TT) | | TRIPLE-TECT Drop-in (TTDN) | | #Metal Labyrinth (LER) | | End Cover Part No. | TT (Inch) | TTDN (Inch) | LER (Inch) |
| | | | | | S-2 | S-3 | S-2 | S-3 | S-2 | S-3 | S-3 | | | |
| 3-7/16 | 2-13/16 | 215 | 33 | 24 | 046401 | 046400 | 039568 | 039289 | *045928 | *045927 | 040705 | 5.09 | 5.09 | 4.47 |
| 3-5/8 | 3 | 216 | 38 | 28 | 046402 | 043547 | 039291 | 039857 | 045931 | 042519 | 040706 | 5.33 | 5.33 | 4.72 |
| 3-15/16 | 3-3/16 | 217 | 42 | 32 | 046404 | 046403 | 039515 | 039292 | 042089 | 042088 | - | 5.44 | 5.44 | 4.83 |
| 4-1/8 | 3-3/8 | 218 | 44 | 36 | 046406 | 046405 | - | - | *045936 | *045934 | - | 6.27 | 6.27 | 5.70 |
| 4-1/2 | 3-13/16 | 220 | 54 | 50 | 043555 | 046407 | - | - | 042527 | 045939 | 040709 | 6.84 | 6.84 | 6.31 |
| 4-7/8 | 4-3/16 | 222 | 56 | 52 | 046408 | 043553 | 039297 | 039863 | 042098 | 042525 | 040710 | 7.19 | 7.19 | 6.59 |
| 5-5/16 | 4-9/16 | 224 | 58 | 54 | 046411 | 046409 | - | - | 042248 | 045943 | 040711 | 7.91 | 7.91 | 7.31 |
| 5-7/8 | 4-15/16 | 226 | 62 | 56 | 046410 | 043556 | - | - | 042085 | 042528 | 040712 | 8.14 | 8.14 | 7.50 |
| 6-1/4 | 5-5/16 | 228 | 66 | 58 | 046412 | 046411 | - | - | 042249 | 042248 | 040713 | 8.53 | 8.53 | 7.88 |
| 6-5/8 | 5-3/4 | 230 | 70 | 62 | 046414 | 046413 | - | - | 045951 | 045949 | - | 9.41 | 9.41 | 8.70 |
| 7 | 6-1/16 | 232 | 72 | 64 | 043565 | 046415 | - | - | 042538 | 045953 | 040681 | 9.91 | 9.91 | 9.20 |
| 7-7/16 | 6-7/16 | 234 | 76 | 68 | 046416 | 043562 | - | - | 042049 | 042535 | 040682 | 9.83 | 9.83 | 9.13 |
| 7-13/16 | 6-7/8 | 236 | 78 | 72 | 046417 | 046418 | - | - | 042221 | 042220 | 040683 | 10.41 | 10.41 | 9.69 |
| 8-3/8 | 7-1/4 | 238 | 80 | 74 | 046420 | 046419 | - | - | *042031 | *042032 | - | 11.00 | 11.00 | 9.98 |
| 8-3/4 | 7-5/8 | 240 | 82 | 76 | 046423 | 046422 | - | - | *045956 | *045955 | 040684 | 11.78 | 11.78 | 10.72 |
| 9-9/16 | 8-5/16 | 244 | 84 | 80 | 046425 | 046424 | - | - | *042029 | *042028 | 040687 | 12.30 | 12.30 | 11.41 |

NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.

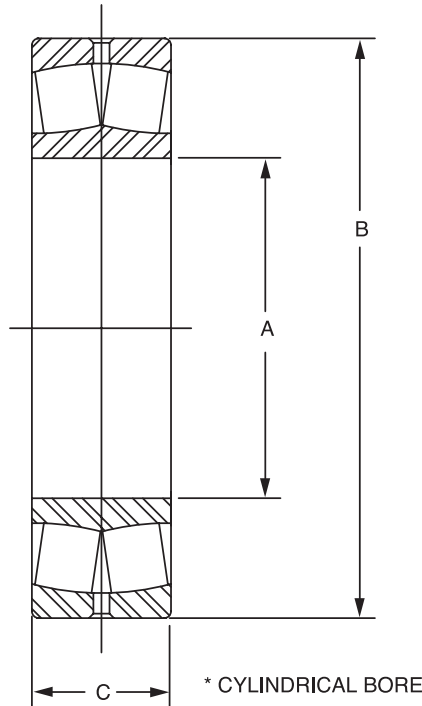
If an * appears by the part number, the LER seal is manufactured from Steel.

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SELECTION/DIMENSIONS

USAF 22200 Spherical Roller Bearings



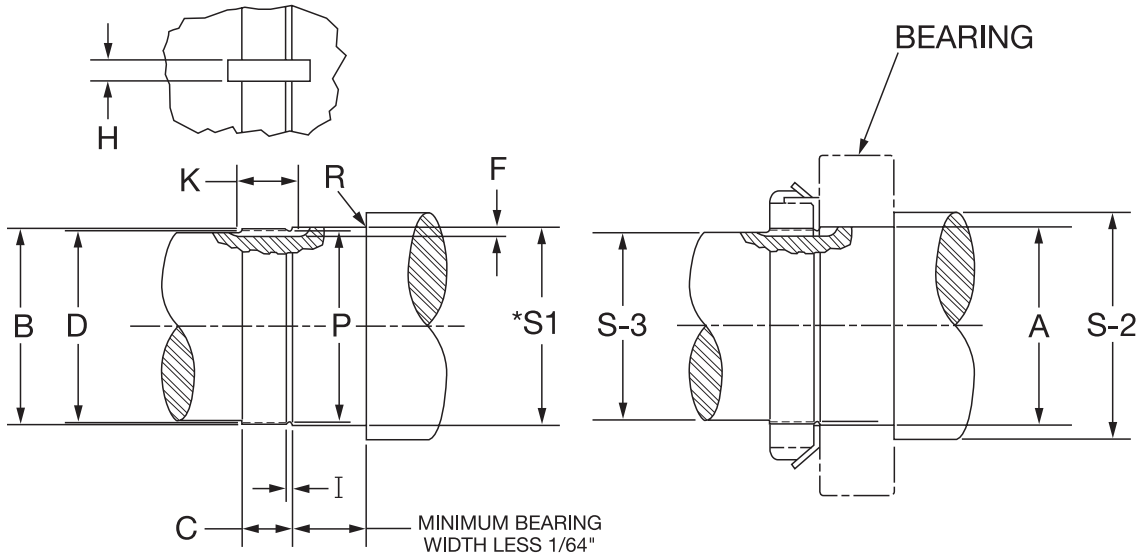
| Bearing Bore mm | Housing | Bearing No. | Part No. | Approx. Wt. (lbs) | A Inch (mm) | B Inch (mm) | C Inch (mm) |
|--------------------|---------|----------------|---------------|----------------------|----------------|----------------|----------------|
| 75 | 215 | 22215 | 421265 | 3.6 | 2.9528 (75) | 5.1181 (130) | 1.2205 (31) |
| 80 | 216 | 22216 | 421266 | 4.4 | 3.1496 (80) | 5.5118 (140) | 1.2992 (33) |
| 85 | 217 | 22217 | 421267 | 5.5 | 3.3465 (85) | 5.9055 (150) | 1.4173 (36) |
| 90 | 218 | 22218 | 421268 | 7.1 | 3.5433 (90) | 6.2992 (160) | 1.5748 (40) |
| 100 | 220 | 22220 | 421269 | 10.4 | 3.9370 (100) | 7.0866 (180) | 1.8110 (46) |
| 110 | 222 | 22222 | 421270 | 14.8 | 4.3307 (110) | 7.8740 (200) | 2.0866 (53) |
| 120 | 224 | 22224 | 421271 | 18.7 | 4.7244 (120) | 8.4646 (215) | 2.2835 (58) |
| 130 | 226 | 22226 | 421272 | 23.1 | 5.1181 (130) | 9.0551 (230) | 2.5197 (64) |
| 140 | 228 | 22228 | 421273 | 29.8 | 5.5118 (140) | 9.8425 (250) | 2.6772 (68) |
| 150 | 230 | 22230 | 421274 | 35.5 | 5.9055 (150) | 10.6299 (270) | 2.8740 (73) |
| 160 | 232 | 22232 | 421275 | 47.8 | 6.2992 (160) | 11.4173 (290) | 3.1496 (80) |
| 170 | 234 | 22234 | 421276 | 58.0 | 6.6929 (170) | 12.2047 (310) | 3.3858 (86) |
| 180 | 236 | 22236 | 421277 | 60.8 | 7.0866 (180) | 12.5984 (320) | 3.3858 (86) |
| 190 | 238 | 22238 | 421278 | 82.2 | 7.4803 (190) | 13.3858 (340) | 3.6220 (92) |
| 200 | 240 | 22240 | 421279 | 97.9 | 7.8740 (200) | 14.1732 (360) | 3.8583 (98) |
| 220 | 244 | 22244 | 421280 | 135.0 | 8.6614 (220) | 15.7480 (400) | 4.2520 (108) |

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SELECTION/DIMENSIONS



USAF 200 Series Bearing Shaft Details



| Nominal Bearing Bore Dia. (mm) | Shaft Bearing Seat Diameters (Inch) | | | | | |
|--------------------------------|-------------------------------------|--------|----------|-----------|--------|----------|
| | Normal Load | | | High Load | | |
| | * S-1 | | Mean Fit | * S-1 | | Mean Fit |
| | Max | Min | | Max | Min | |
| 75 | 2.9540 | 2.9532 | .0011T | 2.9543 | 2.9536 | .0014T |
| 80 | 3.1508 | 3.1501 | .0012T | 3.1511 | 3.1504 | .0015T |
| 85 | 3.3479 | 3.3470 | .0014T | 3.3484 | 3.3475 | .0019T |
| 90 | 3.5447 | 3.5438 | | 3.5452 | 3.5443 | |
| 95 | 3.7416 | 3.7407 | | 3.7421 | 3.7412 | |
| 100 | 3.9384 | 3.9375 | | 3.9389 | 3.9380 | |
| 105 | 4.1353 | 4.1344 | | 4.1358 | 4.1349 | |
| 110 | 4.3321 | 4.3312 | .0016T | 4.3326 | 4.3317 | .0022T |
| 120 | 4.7258 | 4.7249 | | 4.7263 | 4.7254 | |
| 125 | 4.9229 | 4.9219 | | 4.9235 | 4.9225 | |
| 130 | 5.1197 | 5.1187 | | 5.1203 | 5.1193 | |
| 140 | 5.5134 | 5.5124 | | 5.5140 | 5.5130 | |
| 150 | 5.9071 | 5.9061 | .0019T | 5.9077 | 5.9067 | .0026T |
| 160 | 6.3008 | 6.2998 | | 6.3014 | 6.3004 | |
| 170 | 6.6945 | 6.6935 | | 6.6951 | 6.6941 | |
| 180 | 7.0882 | 7.0872 | | 7.0888 | 7.0878 | |
| 190 | 7.4821 | 7.4809 | | 7.4829 | 7.4817 | |
| 200 | 7.8758 | 7.8746 | .0032T | 7.8772 | 7.8760 | |
| 220 | 8.6632 | 8.6620 | | 8.6646 | 8.6634 | |

Normal Load
P/C = 0.10 TO 0.18

High Load
P/C > 0.18

Where: P= Equivalent dynamic load on the bearing (lbs.)
C= Basic dynamic load rating of bearing (lbs.)

| | | | |
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USAF 200 Series Bearing Shaft Details

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USAF 22200 BEARING SHAFT DIMENSIONS - INCH

| Housing | Locknut & Washer Kit Part No. | A Brg Bore | S-2 | S-3 | Keyway | | | R Max Radius |
|---------|-------------------------------|-----------------|---------|---------|------------------|------------------|---------------------|--------------|
| | | | | | F Depth +1/64 -0 | H Width +1/64 -0 | K Full Depth Length | |
| 215 | 046756 | 2.9528 (75mm) | 3-7/16 | 2-13/16 | 1/8 | 5/16 | 15/16 | 0.059 |
| 216 | 046757 | 3.1496 (80 mm) | 3-5/8 | 3 | 1/8 | 3/8 | 15/16 | 0.079 |
| 217 | 046758 | 3.3465 (85 mm) | 3-15/16 | 3-3/16 | 1/8 | 3/8 | 31/32 | 0.079 |
| 218 | 046759 | 3.5433 (90 mm) | 4-1/8 | 3-3/8 | 5/32 | 3/8 | 1-1/16 | 0.079 |
| 220 | 046760 | 3.9370 (100 mm) | 4-1/2 | 3-13/16 | 5/32 | 3/8 | 1-3/16 | 0.079 |
| 222 | 046761 | 4.3307 (110 mm) | 4-7/8 | 4-3/16 | 3/16 | 3/8 | 1-7/32 | 0.079 |
| 224 | 046762 | 4.7244 (120 mm) | 5-5/16 | 4-9/16 | 3/16 | 3/8 | 1-1/4 | 0.079 |
| 226 | 046763 | 5.1181 (130 mm) | 5-7/8 | 4-15/16 | 3/16 | 1/2 | 1-5/16 | 0.098 |
| 228 | 046764 | 5.5118 (140 mm) | 6-1/4 | 5-5/16 | 3/16 | 5/8 | 1-3/8 | 0.098 |
| 230 | 046765 | 5.9055 (150 mm) | 6-5/8 | 5-3/4 | 7/32 | 5/8 | 1-1/2 | 0.098 |
| 232 | 046766 | 6.2992 (160 mm) | 7 | 6-1/16 | 15/64 | 5/8 | 1-9/16 | 0.098 |
| 234 | 046767 | 6.6929 (170 mm) | 7-7/16 | 6-7/16 | 15/64 | 3/4 | 1-19/32 | 0.118 |
| 236 | 046768 | 7.0866 (180 mm) | 7-13/16 | 6-7/8 | 15/64 | 3/4 | 1-5/8 | 0.118 |
| 238 | 046769 | 7.4803 (190 mm) | 8-3/8 | 7-1/4 | 15/64 | 3/4 | 1-21/32 | 0.118 |
| 240 | 046770 | 7.8740 (200 mm) | 8-3/4 | 7-5/8 | 15/64 | 7/8 | 1-23/32 | 0.118 |
| 244 | 046771 | 8.6614 (220 mm) | 9-9/16 | 8-5/16 | 3/8 | 1-1/16 | 1-9/16 | 0.118 |

USAF 22200 BEARING SHAFT DIMENSIONS - INCH

| Housing | Threads Per Inch | B Thread Major Dia | | D Thread Pitch Dia | | C Thread Length +1/64 -0 | I Thread Relief +1/64 -0 | P † Thread Relief DIA. |
|---------|------------------|--------------------|--------|--------------------|--------|--------------------------|--------------------------|------------------------|
| | | Max | Min | Max | Min | | | |
| | | 215 | 12 | 2.9330 | 2.9218 | | | |
| 216 | 12 | 3.1370 | 3.1258 | 3.0829 | 3.0770 | 11/16 | 5/32 | 3.0035 |
| 217 | 12 | 3.3400 | 3.3288 | 3.2859 | 3.2800 | 23/32 | 5/32 | 3.2065 |
| 218 | 12 | 3.5270 | 3.5158 | 3.4729 | 3.4655 | 13/16 | 5/32 | 3.3935 |
| 220 | 12 | 3.9180 | 3.9068 | 3.8639 | 3.8565 | 7/8 | 5/32 | 3.7845 |
| 222 | 12 | 4.325 | 4.3138 | 4.2709 | 4.2626 | 29/32 | 5/32 | 4.1915 |
| 224 | 12 | 4.716 | 4.7048 | 4.6619 | 4.6536 | 15/16 | 5/32 | 4.5825 |
| 226 | 12 | 5.106 | 5.0948 | 5.0519 | 5.0436 | 1 | 5/32 | 4.9725 |
| 228 | 12 | 5.497 | 5.4858 | 5.4429 | 5.4346 | 1-1/16 | 5/32 | 5.3635 |
| 230 | 12 | 5.888 | 5.8768 | 5.8339 | 5.8256 | 1-1/8 | 5/32 | 5.7545 |
| 232 | 8 | 6.284 | 6.2688 | 6.2028 | 6.1937 | 1-3/16 | 1/4 | 6.0993 |
| 234 | 8 | 6.659 | 6.6438 | 6.5778 | 6.5687 | 1-7/32 | 1/4 | 6.4743 |
| 236 | 8 | 7.066 | 7.0508 | 6.9848 | 6.9757 | 1-1/4 | 1/4 | 6.8813 |
| 238 | 8 | 7.472 | 7.4568 | 7.3908 | 7.3817 | 1-9/32 | 1/4 | 7.2873 |
| 240 | 8 | 7.847 | 7.8318 | 7.7658 | 7.7544 | 1-11/32 | 1/4 | 7.6623 |
| 244 | 8 | 8.628 | 8.6128 | 8.5468 | 8.5347 | 1-3/8 | 1/4 | 8.4433 |

† Tolerance ±.005 through 2.6672 dia.; ±.010 for larger sizes

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USAF 200 Series Locknuts & Washers

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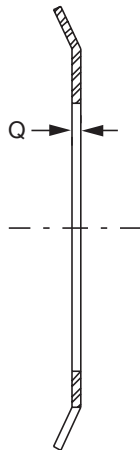
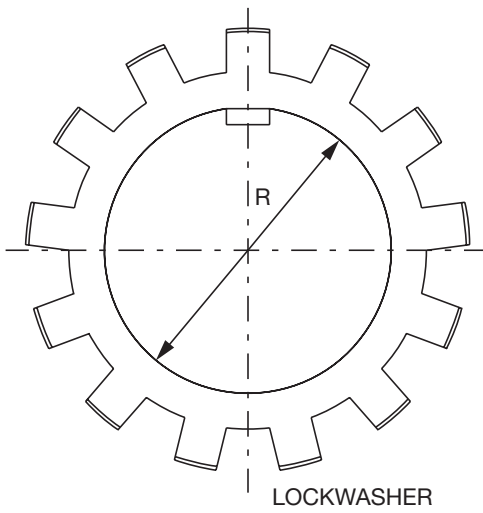
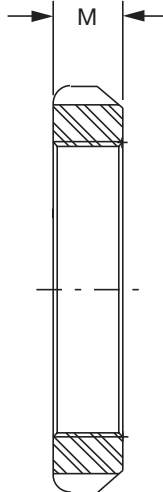
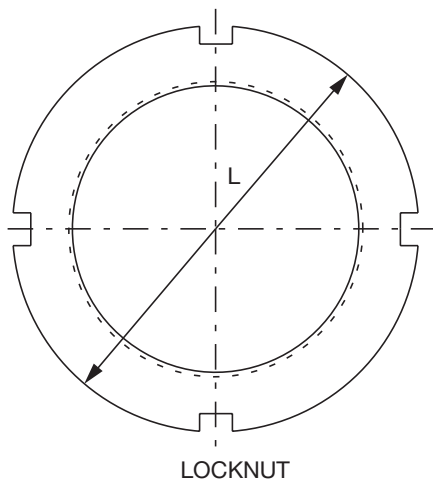
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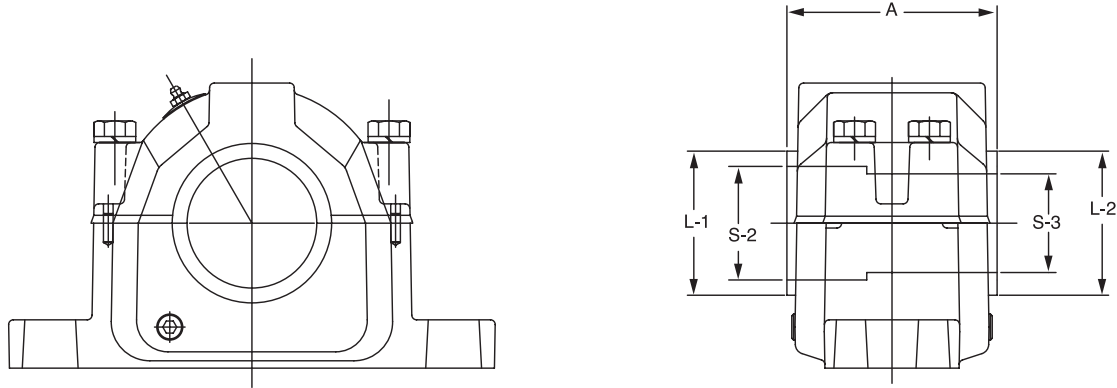
| Housing | Locknut | | Lockwasher | | L Inch | M Inch | R Inch | Q Inch |
|---------|----------|---------------|------------|---------------|-----------|-----------|-----------|-----------|
| | Descrip. | Part No. | Descrip. | Part No. | | | | |
| 215 | AN15 | 460901 | W15 | 419150 | 3.88 | 0.59 | 2.988 | 0.072 |
| 216 | AN16 | 460902 | W16 | 419152 | 4.16 | 0.59 | 3.192 | 0.072 |
| 217 | AN17 | 460903 | W17 | 419154 | 4.41 | 0.62 | 3.410 | 0.072 |
| 218 | AN18 | 460904 | W18 | 419156 | 4.66 | 0.69 | 3.597 | 0.094 |
| 220 | AN20 | 460905 | W20 | 419158 | 5.19 | 0.75 | 4.003 | 0.094 |
| 222 | AN22 | 460906 | W22 | 419160 | 5.72 | 0.78 | 4.410 | 0.125 |
| 224 | AN24 | 041071 | W24 | 419162 | 6.12 | 0.81 | 4.816 | 0.125 |
| 226 | AN26 | 041064 | W26 | 419164 | 6.75 | 0.88 | 5.209 | 0.125 |
| 228 | AN28 | 041065 | W28 | 419166 | 7.09 | 0.94 | 5.600 | 0.125 |
| 230 | AN30 | 041072 | W30 | 419168 | 7.69 | 0.97 | 6.001 | 0.156 |
| 232 | AN32 | 041066 | W32 | 419170 | 8.06 | 1.03 | 6.407 | 0.156 |
| 234 | AN34 | 041067 | W34 | 419172 | 8.66 | 1.06 | 6.782 | 0.156 |
| 236 | AN36 | 041070 | W36 | 419174 | 9.06 | 1.09 | 7.189 | 0.156 |
| 238 | AN38 | 041068 | W38 | 419176 | 9.47 | 1.12 | 7.595 | 0.156 |
| 240 | AN40 | 040838 | W40 | 419171 | 9.84 | 1.19 | 8.000 | 0.156 |
| 244 | N44 | 041069 | W44 | 419178 | 11.00 | 1.25 | 8.719 | 0.156 |

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SELECTION/DIMENSIONS



USAF 300 Direct Mount Pillow Block With TRIPLE-TECT Seal Assembly



| Shaft Dia. | | Bearing Bore mm. | Complete Pillow Block Part No. | Housing Part No.** | Bearing Part No. | Dynamic Capacity (C), lbs.** | Max Rpm (Grease) | Shaft Locknut Part No. |
|------------|---------|------------------|--------------------------------|------------------------|----------------------|------------------------------|------------------|------------------------|
| S-2 | S-3 | | | | | | | |
| 1-15/16 | 1-7/16 | 40 | P2B308-USAF-115TT 039355 | H2S-308-USAF 039717 | BRG22308C3 423124 | 35,500 | 4,300 | N08 407305 |
| 2-1/8 | 1-11/16 | 45 | P2B309-USAF-202TT 039356 | H2S-309-USAF 039719 | BRG22309C3 423125 | 42,500 | 3,800 | N09 419187 |
| 2-3/8 | 1-7/8 | 50 | P2B310-USAF-206TT 035915 | H2S-310-USAF 035437 | BRG22310C3 423143 | 51,000 | 3,400 | N10 419188 |
| 2-9/16 | 2-1/16 | 55 | P2B311-USAF-209TT 039357 | H2S-311-USAF 039721 | BRG22311C3 423126 | 60,000 | 3,200 | N11 419184 |
| | | | P4B311-USAF-209TT 039371 | H4S-311-USAF 039723 | BRG22311C3 423126 | 60,000 | 3,200 | N11 419184 |
| 2-7/8 | 2-1/4 | 60 | P2B312-USAF-214TT 039358 | H2S-312-USAF 039725 | BRG22312C3 423127 | 69,500 | 2,800 | N12 407302 |
| | | | P4B312-USAF-214TT 039372 | H4S-312-USAF 039727 | BRG22312C3 423127 | 69,500 | 2,800 | N12 407302 |
| 3-1/6 | 2-7/16 | 65 | P2B313-USAF-301TT 039359 | H2S-313-USAF 039729 | BRG22313C3 423128 | 78,000 | 2,600 | N13 419185 |
| | | | P4B313-USAF-301TT 039373 | H4S-313-USAF 039731 | BRG22313C3 423128 | 78,000 | 2,600 | N13 419185 |
| 3-1/4 | 2-5/8 | 70 | P2B314-USAF-304TT 039360 | H2S-314-USAF 039733 | BRG22314C3 423129 | 86,500 | 2,400 | N14 407036 |
| | | | P4B314-USAF-304TT 039374 | H4S-314-USAF 039735 | BRG22314C3 423129 | 86,500 | 2,400 | N14 407036 |
| 3-7/16 | 2-13/16 | 75 | P2B315-USAF-307TT 039361 | H2S-315-USAF 039737 | BRG22315C3 423130 | 100,000 | 2,200 | AN15 460901 |
| | | | P4B315-USAF-307TT 039375 | H4S-315-USAF 039739 | BRG22315C3 423130 | 100,000 | 2,200 | AN15 460901 |
| 3-5/8 | 3 | 80 | P2B316-USAF-310TT 035916 | H2S-316-USAF 035438 | BRG22316C3 423144 | 112,000 | 2,200 | AN16 460902 |
| | | | P4B316-USAF-310TT 035917 | H4S-316-USAF 035439 | BRG22316C3 423144 | 112,000 | 2,200 | AN16 460902 |
| 3-15/16 | 3-3/16 | 85 | P2B317-USAF-315TT 039362 | H2S-317-USAF 039741 | BRG22317C3 423131 | 122,000 | 2,000 | AN17 460903 |
| | | | P4B317-USAF-315TT 039376 | H4S-317-USAF 039743 | BRG22317C3 423131 | 122,000 | 2,000 | AN17 460903 |

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USAF 300 Direct Mount Pillow Block With TRIPLE-TECT Seal Assembly

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| Shaft Dia. | | Bearing Bore mm. | Lockwasher Part No. | TRIPLE-TECT Part No. | | TTDN Part No. | | # LER Part No. | | End Cover Part No. |
|------------|---------|------------------|---------------------|----------------------|---------|---------------|-----------|----------------|----------|--------------------|
| S-2 | S-3 | | | S-2 | S-3 | S2 | S3 | S-2 | S-3 | |
| 1-15/16 | 1-7/16 | 40 | W08 | 12TT115 | 08TT107 | --- | --- | 12LER115 | 08LER107 | EC-08 040700 |
| | | | 419151 | 043540 | 043578 | | | 042512 | 042193 | |
| 2-1/8 | 1-11/16 | 45 | W09 | 14TT202 | 10TT111 | --- | --- | 14LER202 | 10LER111 | EC-10 040701 |
| | | | 419180 | 046464 | 043579 | | | *046472 | *042199 | |
| 2-3/8 | 1-7/8 | 50 | W10 | 18TT206 | 12TT114 | --- | --- | 18LER206 | 12LER114 | EC-12 040702 |
| | | | 419181 | 046166 | 046167 | | | 046175 | 046176 | |
| 2-9/16 | 2-1/16 | 55 | W11 | 22TT209 | 14TT201 | 22TTDN209 | 14TTDN201 | 22LER209 | 14LER201 | EC-14 040703 |
| | | | 419182 | 046466 | 046463 | 035748 | 035745 | *046474 | *046471 | |
| 2-7/8 | 2-1/4 | 60 | W12 | 26TT214 | 14TT204 | 26TTDN214 | 14TTDN204 | 26LER214 | 14LER204 | EC-14 040703 |
| | | | 419008 | 046468 | 046465 | 035750 | 035747 | 046476 | 046473 | |
| 3-1/6 | 2-7/16 | 65 | W13 | 28TT301 | 22TT207 | 28TTDN301 | 22TTDN207 | 28LER301 | 22LER207 | --- |
| | | | 419183 | 046469 | 046168 | 035751 | 035744 | *046477 | *046177 | |
| 3-1/4 | 2-5/8 | 70 | W14 | 32TT304 | 22TT210 | 32TTDN304 | 22TTDN210 | 32LER304 | 22LER210 | --- |
| | | | 419153 | 046470 | 046467 | 035752 | 035749 | 046478 | 046475 | |
| 3-7/16 | 2-13/16 | 75 | W15 | 38TT307 | 24TT213 | 38TTDN307 | 24TTDN213 | 38LER307 | 24LER213 | EC24 040705 |
| | | | 419150 | 046401 | 046400 | 039568 | 039289 | *045928 | *045927 | |
| 3-5/8 | 3 | 80 | W16 | 38TT310 | 28TT300 | 38TTDN310 | 28TTDN300 | 38LER310 | 28LER300 | EC28 040706 |
| | | | 419152 | 046402 | 042547 | 039291 | 039857 | 045931 | 042519 | |
| 3-15/16 | 3-3/16 | 85 | W17 | 42TT315 | 32TT303 | 42TTDN315 | 32TTDN303 | 42LER315 | 32LER303 | --- |
| | | | 419154 | 046404 | 046403 | 039515 | 039292 | 042089 | 042088 | |

NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.

If an * appears by the part number, the LER seal is manufactured from Steel.

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SELECTION/DIMENSIONS

USAF 300 Direct Mount Pillow Block With TRIPLE-TECT Seal Assembly

| Shaft Dia. | | Bearing Bore mm. | Complete Pillow Block Part No. | Housing Part No.** | Bearing Part No. | Dynamic Capacity (C), lbs. | Max Rpm (Grease) | Locknut Part No. |
|------------|---------|------------------|--------------------------------|------------------------|----------------------|----------------------------|------------------|------------------|
| S-2 | S-3 | | | | | | | |
| 4-1/2 | 3-13/16 | 100 | P4B320-USAF-408TT 039377 | H4S-320-USAF 039745 | BRG22320C3 423132 | 146,000 | 1,700 | AN204 060905 |
| 4-7/8 | 4-3/16 | 110 | P4B322-USAF-414TT 039378 | H4S-322-USAF 039747 | BRG22322C3 423133 | 180,000 | 1,500 | AN224 060906 |
| 5-5/16 | 4-9/16 | 120 | P4B324-USAF-505TT 039380 | H4S-324-USAF 039749 | BRG22324C3 423134 | 204,000 | 1,400 | AN24 041071 |
| 5-7/8 | 4-15/16 | 130 | P4B326-USAF-514TT 039381 | H4S-326-USAF 039750 | BRG22326C3 423135 | 236,000 | 1,300 | AN26 041064 |
| 6-1/4 | 5-5/16 | 140 | P4B328-USAF-604TT 039382 | H4S-328-USAF 039751 | BRG22328C3 423136 | 275,000 | 1,200 | AN28 041065 |
| 6-5/8 | 5-3/4 | 150 | P4B330-USAF-610TT 039383 | H4S-330-USAF 039752 | BRG22330C3 423137 | 310,000 | 1,100 | AN30 041072 |
| 7 | 6-1/16 | 160 | P4B332-USAF-700TT 039384 | H4S-332-USAF 039753 | BRG22332C3 423138 | 325,000 | 1,000 | AN32 041066 |
| 7-7/16 | 6-7/16 | 170 | P4B334-USAF-707TT 039385 | H4S-334-USAF 039754 | BRG22334C3 423139 | 360,000 | 950 | AN34 041067 |
| 8-3/8 | 7-1/4 | 190 | P4B338-USAF-806TT 039386 | H4S-338-USAF 039755 | BRG22338C3 423140 | 415,000 | 850 | AN38 041068 |

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SELECTION/DIMENSIONS

USAF 300 Direct Mount Pillow Block With TRIPLE-TECT Seal Assembly

| Shaft Dia. | | Bearing Bore mm. | Lock-washer Part No. | TRIPLE-TECT Part No. | | TTDN Part No. | | # LER Part No. | | End Cover Part No. |
|------------|---------|------------------|----------------------|----------------------|---------|---------------|-----------|----------------|----------|--------------------|
| S2 | S3 | | | S-2 | S-3 | S-2 | S-3 | S2 | S3 | |
| 4-1/2 | 3-13/16 | 100 | W20 | 54TT408 | 50TT313 | --- | --- | 54LER408 | 50LER313 | EC50 |
| | | | 419158 | 043555 | 046407 | | | 042527 | 045939 | |
| 4-7/8 | 4-3/16 | 110 | W22 | 56TT414 | 52TT403 | 56TTDN414 | 52TTDN403 | 56LER414 | 52LER403 | EC52 |
| | | | 419160 | 046408 | 043553 | 039297 | 039863 | 042098 | 042525 | 040710 |
| 5-5/16 | 4-9/16 | 120 | W24 | 58TT510 | 54TT409 | --- | --- | 58LER505 | 54LER409 | EC54 |
| | | | 419162 | 046411 | 046409 | | | 042248 | 045943 | 040711 |
| 5-7/8 | 4-15/16 | 130 | W26 | 62TT514 | 56TT415 | --- | --- | 62LER514 | 56LER415 | EC56 |
| | | | 419164 | 046410 | 043556 | | | 042085 | 042528 | 040712 |
| 6-1/4 | 5-5/16 | 140 | W28 | 66TT604 | 58TT505 | --- | --- | 66LER604 | 58LER505 | EC58 |
| | | | 419166 | 046412 | 046411 | | | 042249 | 042248 | 040713 |
| 6-5/8 | 5-3/4 | 150 | W30 | 70TT610 | 62TT512 | --- | --- | 70LER610 | 62LER512 | --- |
| | | | 419168 | 046414 | 046413 | | | 045951 | 045949 | --- |
| 7 | 6-1/16 | 160 | W32 | 72TT700 | 64TT601 | --- | --- | 72LER700 | 64LER601 | EC64 |
| | | | 419170 | 043565 | 046415 | | | 042538 | 045953 | 040681 |
| 7-7/16 | 6-7/16 | 170 | W34 | 76TT707 | 68TT607 | --- | --- | 76LER707 | 68LER607 | EC68 |
| | | | 419172 | 046416 | 043562 | | | 042049 | 042535 | 040682 |
| 8-3/8 | 7-1/4 | 190 | W38 | 80TT806 | 74TT704 | --- | --- | 80LER806 | 74LER704 | EC74 |
| | | | 419176 | 046420 | 046419 | | | *042031 | *042032 | 040691 |

NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.

If an * appears by the part number, the LER seal is manufactured from Steel.

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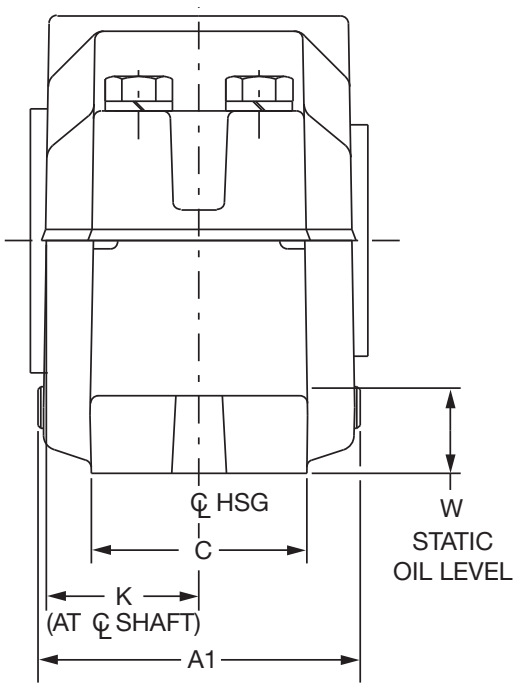
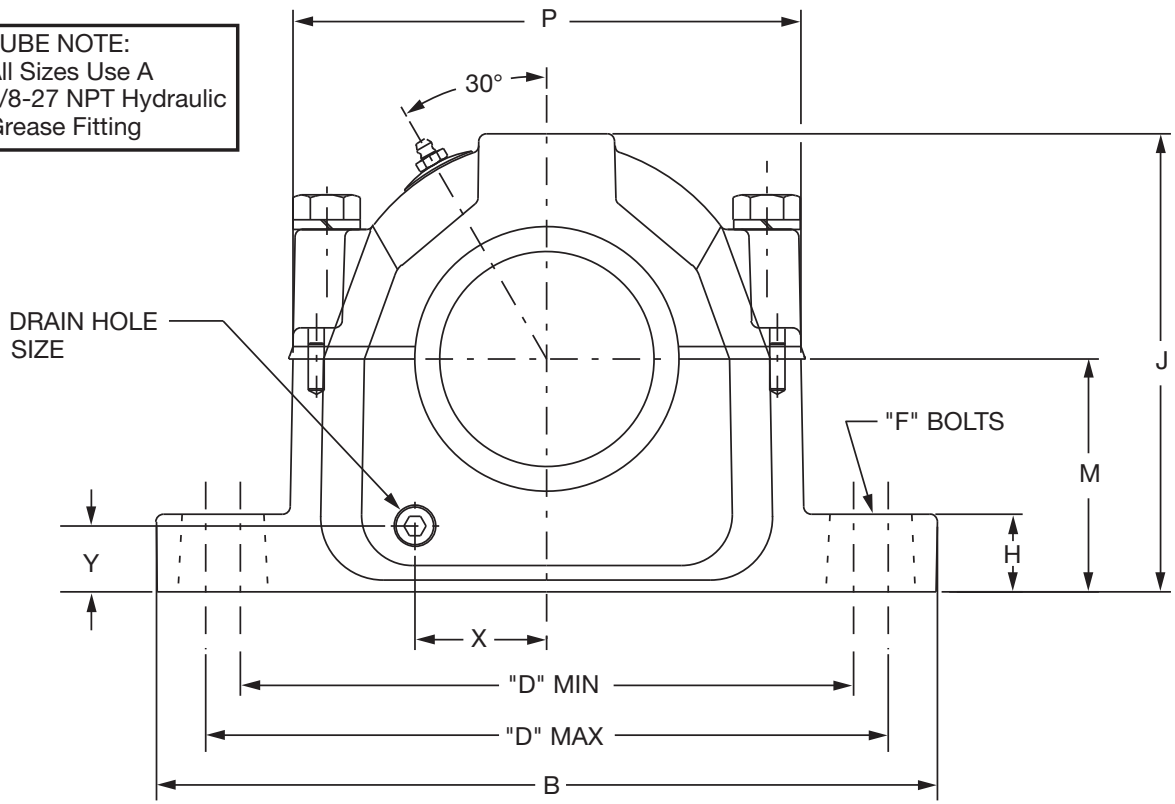
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SELECTION/DIMENSIONS



USAF 300 Housing Dimensions - Inch

LUBE NOTE:
All Sizes Use A
1/8-27 NPT Hydraulic
Grease Fitting



| | | | |
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SELECTION/DIMENSIONS

USAF 300 Housing Dimensions - Inch

| S-2 Shaft Size | S-3 Shaft Size | Housing | A1 ▲ | B | C | D | | | | E | F | |
|----------------|----------------|---------|-------|-------|------|--------|-------|--------|-------|------|-----------|--------|
| | | | | | | 2-Bolt | | 4-Bolt | | | Bolt Dia. | |
| | | | | | | Min | Max | Min | Max | | 2-Bolt | 4-Bolt |
| 1-15/16 | 1-7/16 | 308 | 4.06 | 8.25 | 2.34 | 6.50 | 7.00 | - | - | - | 1/2 | - |
| 2-1/8 | 1-11/16 | 309 | 4.25 | 9.63 | 2.75 | 7.38 | 8.25 | - | - | - | 5/8 | - |
| 2-3/8 | 1-7/8 | 310 | 4.70 | 10.63 | 2.75 | 7.75 | 9.00 | - | - | - | 5/8 | - |
| 2-9/16 | 2-1/16 | 311 | 4.64 | 11.00 | 3.13 | 8.13 | 9.50 | 8.13 | 9.50 | 1.88 | 5/8 | 1/2 |
| 2-7/8 | 2-1/4 | 312 | 5.20 | 11.13 | 3.13 | 8.63 | 9.63 | 8.63 | 9.63 | 1.88 | 5/8 | 1/2 |
| 3-1/16 | 2-7/16 | 313 | 5.44 | 12.59 | 3.50 | 9.63 | 11.00 | 9.63 | 11.00 | 2.13 | 3/4 | 5/8 |
| 3-1/4 | 2-5/8 | 314 | 5.39 | 12.59 | 3.50 | 9.88 | 11.00 | 9.88 | 11.00 | 2.13 | 3/4 | 5/8 |
| 3-7/16 | 2-13/16 | 315 | 6.16 | 13.63 | 3.88 | 10.25 | 11.75 | 10.38 | 11.63 | 2.13 | 3/4 | 5/8 |
| 3-5/8 | 3 | 316 | 6.38 | 14.17 | 3.88 | 10.88 | 12.38 | 10.63 | 12.50 | 2.13 | 3/4 | 5/8 |
| 3-15/16 | 3-3/16 | 317 | 6.78 | 15.36 | 4.34 | 11.63 | 13.13 | 11.63 | 13.13 | 2.38 | 7/8 | 3/4 |
| 4-1/2 | 3-13/16 | 320 | 8.05 | 16.50 | 4.72 | - | - | 13.25 | 14.50 | 2.75 | - | 3/4 |
| 4-7/8 | 4-3/16 | 322 | 8.27 | 18.38 | 5.13 | - | - | 14.50 | 16.00 | 3.25 | - | 7/8 |
| 5-5/16 | 4-9/16 | 324 | 9.36 | 20.88 | 6.25 | - | - | 16.75 | 18.25 | 3.75 | - | 1 |
| 5-7/8 | 4-15/16 | 326 | 9.92 | 21.66 | 6.25 | - | - | 17.38 | 19.25 | 3.75 | - | 1 |
| 6-1/4 | 5-5/16 | 328 | 9.91 | 24.75 | 6.75 | - | - | 19.38 | 21.63 | 4.25 | - | 1 |
| 6-5/8 | 5-3/4 | 330 | 10.41 | 26.75 | 7.13 | - | - | 20.88 | 23.63 | 4.63 | - | 1 |
| 7 | 6-1/16 | 332 | 10.81 | 28.00 | 7.50 | - | - | 21.63 | 24.38 | 4.50 | - | 1-1/4 |
| 7-7/16 | 6-7/16 | 334 | 11.53 | 28.75 | 8.00 | - | - | 22.50 | 25.00 | 5.00 | - | 1-1/4 |
| 8-3/8 | 7-1/4 | 338 | 12.30 | 32.75 | 8.88 | - | - | 24.75 | 27.88 | 5.25 | - | 1-1/2 |

| S-2 Shaft Size | S-3 Shaft Size | Housing | H | J | K | M | P | Q ★ | S ● | W Static Oil Level | X | Y | Drain Hole Size |
|----------------|----------------|---------|------|-------|------|------|-------|------|------|--------------------|------|------|-----------------|
| 1-15/16 | 1-7/16 | 308 | 1.03 | 4.58 | 1.88 | 2.50 | 5.13 | 1.17 | 0.13 | 1.19 | 1.25 | 0.81 | 1/8-27NPSI |
| 2-1/8 | 1-11/16 | 309 | 1.03 | 5.25 | 1.97 | 2.75 | 5.78 | 1.23 | 0.13 | 1.28 | 1.94 | 0.83 | 1/8-27NPSI |
| 2-3/8 | 1-7/8 | 310 | 1.41 | 5.72 | 2.20 | 3.00 | 6.13 | 1.38 | 0.22 | 1.38 | 1.53 | 0.95 | 1/8-27NPSI |
| 2-9/16 | 2-1/16 | 311 | 1.03 | 5.94 | 2.16 | 3.00 | 6.50 | 1.42 | 0.13 | 1.44 | 1.66 | 0.78 | 1/8-27NPSI |
| 2-7/8 | 2-1/4 | 312 | 1.25 | 6.44 | 2.31 | 3.25 | 7.06 | 1.52 | 0.13 | 1.31 | 1.78 | 0.88 | 1/4-18NPSF |
| 3-1/16 | 2-7/16 | 313 | 1.06 | 6.75 | 2.42 | 3.50 | 7.94 | 1.58 | 0.19 | 1.41 | 1.97 | 0.95 | 1/4-18NPSF |
| 3-1/4 | 2-5/8 | 314 | 1.25 | 7.38 | 2.47 | 3.75 | 8.19 | 1.64 | 0.19 | 1.47 | 1.13 | 1.06 | 3/8-18NPSF |
| 3-7/16 | 2-13/16 | 315 | 1.44 | 7.75 | 2.84 | 4.00 | 8.66 | 1.77 | 0.19 | 1.59 | 1.25 | 1.13 | 3/8-18NPSF |
| 3-5/8 | 3 | 316 | 1.22 | 8.25 | 2.95 | 4.25 | 9.03 | 1.83 | 0.19 | 1.69 | 2.38 | 1.17 | 3/8-18NPSF |
| 3-15/16 | 3-3/16 | 317 | 1.66 | 8.75 | 3.16 | 4.50 | 9.78 | 1.91 | 0.19 | 1.75 | 2.63 | 1.25 | 3/8-18NPSF |
| 4-1/2 | 3-13/16 | 320 | 1.50 | 10.25 | 3.64 | 5.25 | 11.25 | 2.30 | 0.19 | 2.03 | 3.19 | 1.38 | 1/2-14NPSF |
| 4-7/8 | 4-3/16 | 322 | 2.06 | 11.53 | 3.75 | 6.00 | 12.41 | 2.50 | 0.19 | 2.41 | 3.31 | 1.63 | 1/2-14NPSF |
| 5-5/16 | 4-9/16 | 324 | 2.38 | 12.50 | 4.33 | 6.31 | 14.31 | 2.64 | 0.19 | 2.38 | 3.59 | 1.33 | 1/2-14NPSF |
| 5-7/8 | 4-15/16 | 326 | 2.34 | 13.31 | 4.63 | 6.69 | 14.91 | 2.84 | 0.19 | 2.44 | 4.03 | 1.33 | 1/2-14NPSF |
| 6-1/4 | 5-5/16 | 328 | 2.88 | 14.56 | 4.63 | 7.06 | 16.81 | 3.09 | 0.19 | 2.56 | 4.16 | 1.33 | 1/2-14NPSF |
| 6-5/8 | 5-3/4 | 330 | 3.00 | 15.13 | 4.88 | 7.50 | 17.19 | 3.27 | 0.19 | 2.63 | 4.22 | 1.63 | 1/2-14NPSF |
| 7 | 6-1/16 | 332 | 3.13 | 15.81 | 5.06 | 7.88 | 18.00 | 3.44 | 0.19 | 2.69 | 4.75 | 1.61 | 1/2-14NPSF |
| 7-7/16 | 6-7/16 | 334 | 3.38 | 16.63 | 5.44 | 8.25 | 19.00 | 3.59 | 0.19 | 2.75 | 4.91 | 1.58 | 1/2-14NPSF |
| 8-3/8 | 7-1/4 | 338 | 3.75 | 18.88 | 5.81 | 9.50 | 21.25 | 3.89 | 0.19 | 3.38 | 5.44 | 2.03 | 1/2-14NPSF |

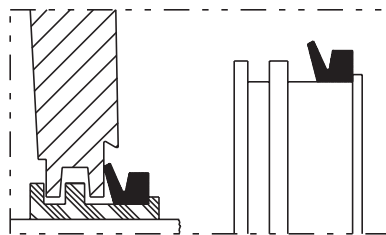
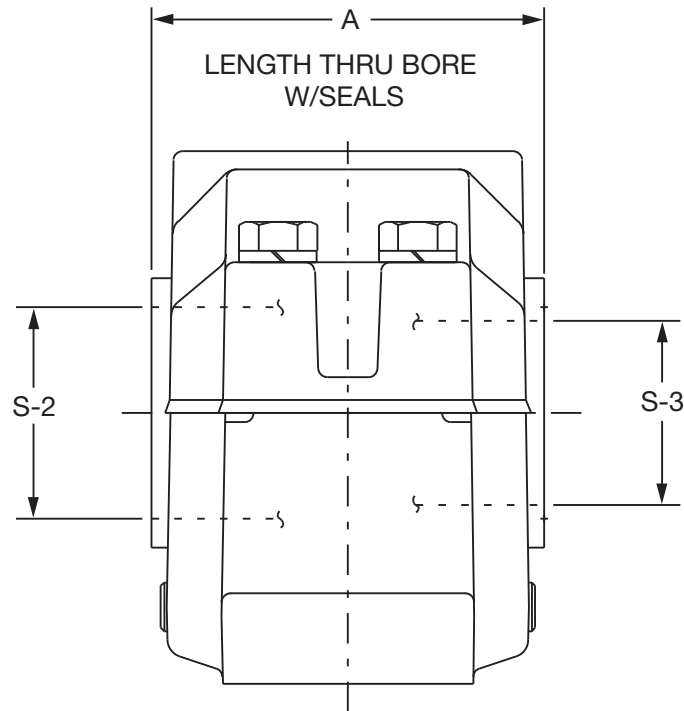
- ▲ Housing width with drain plugs. Length thru bore page B15-118.
- ★ Distance shaft should extend beyond housing centerline if pillow block is closed end style
- Non-expansion bearing offset from centerline. For expansion bearing S = 0.

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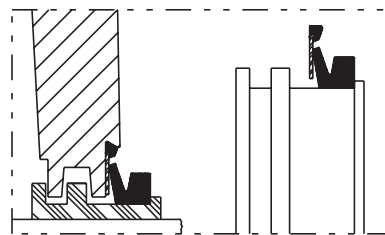
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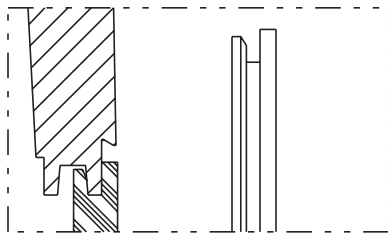
USAF 300 Pillow Block Seals



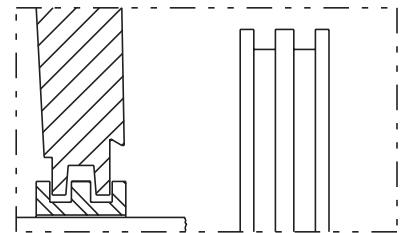
TRIPLE-TECT Seal
General purpose seal for wet or dirty environments



DROP-IN TRIPLE-TECT Seal
DODGE exclusive. Popular TRIPLE-TECT features simplify installation.



END COVER Seal
Allows use of open shaft housing as closed-end



LER Seal
High speed seal for relatively clean environments

| | | | |
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SELECTION/DIMENSIONS

USAF 300 Pillow Block Seals

| S-2 Shaft Size (Inch) | S-3 Shaft Size (Inch) | Housing | Seal Group | | Part Number | | | | | | | A | | |
|-----------------------|-----------------------|---------|------------|----|------------------|--------|----------------------------|--------|-------------------------|---------|-----------|-----------|-------------|------------|
| | | | | | TRIPLE-TECT (TT) | | TRIPLE-TECT Drop-In (TTDN) | | # Metal Labyrinth (LER) | | End Cover | TT (Inch) | TTDN (Inch) | LER (Inch) |
| | | | | | S-2 | S-3 | S-2 | S-3 | S-2 | S-3 | S-3 | | | |
| 1-15/16 | 1-7/16 | 308 | 12 | 8 | 043540 | 043578 | - | - | 042512 | 042193 | 040700 | 4.19 | 4.19 | 3.64 |
| 2-1/8 | 1-11/16 | 309 | 14 | 10 | 046464 | 043579 | - | - | *046472 | *042199 | 040701 | 4.36 | 4.36 | 3.83 |
| 2-3/8 | 1-7/8 | 310 | 18 | 12 | 046166 | 046167 | - | - | 046175 | 046176 | 040702 | 4.81 | 4.81 | 4.28 |
| 2-9/16 | 2-1/16 | 311 | 22 | 14 | 046466 | 046463 | 035748 | 035745 | *046474 | *046471 | 040703 | 4.80 | 4.80 | 4.19 |
| 2-7/8 | 2-1/4 | 312 | 26 | 14 | 046468 | 046465 | 035750 | 035747 | 046476 | 046473 | 040703 | 5.02 | 5.02 | 4.42 |
| 3-1/16 | 2-7/16 | 313 | 28 | 22 | 046469 | 046168 | 035751 | 035744 | *046477 | *046177 | - | 5.34 | 5.34 | 4.69 |
| 3-1/4 | 2-5/8 | 314 | 32 | 22 | 046470 | 046467 | 035752 | 035749 | 046478 | 046475 | - | 5.44 | 5.44 | 4.80 |
| 3-7/16 | 2-13/16 | 315 | 38 | 24 | 046401 | 046400 | 039290 | 039289 | *045928 | *045927 | 040705 | 6.20 | 6.20 | 5.59 |
| 3-5/8 | 3 | 316 | 38 | 28 | 046402 | 043547 | 039291 | 039857 | 045931 | 042519 | 040706 | 6.42 | 6.42 | 5.81 |
| 3-15/16 | 3-3/16 | 317 | 42 | 32 | 046404 | 046403 | 039515 | 039292 | 042089 | 042088 | - | 6.39 | 6.39 | 6.17 |
| 4-1/2 | 3-13/16 | 320 | 54 | 50 | 043555 | 046407 | - | - | 042527 | 045939 | 040709 | 7.86 | 7.86 | 7.33 |
| 4-7/8 | 4-3/16 | 322 | 56 | 52 | 046408 | 043553 | 039297 | 039863 | 042098 | 042525 | 040710 | 8.09 | 8.09 | 7.50 |
| 5-5/16 | 4-9/16 | 324 | 58 | 54 | 046411 | 046409 | - | - | 042248 | 045943 | 040711 | 9.28 | 9.28 | 8.69 |
| 5-7/8 | 4-15/16 | 326 | 62 | 56 | 046410 | 043556 | - | - | 042085 | 042528 | 040712 | 9.84 | 9.84 | 9.20 |
| 6-1/4 | 5-5/16 | 328 | 66 | 58 | 046412 | 046411 | - | - | 042249 | 042248 | 040713 | 9.78 | 9.78 | 9.13 |
| 6-5/8 | 5-3/4 | 330 | 70 | 62 | 046414 | 046413 | - | - | 045951 | 045949 | - | 10.39 | 10.39 | 9.70 |
| 7 | 6-1/16 | 332 | 72 | 64 | 043565 | 046415 | - | - | *042538 | *045953 | 040681 | 10.69 | 10.69 | 9.98 |
| 7-7/16 | 6-7/16 | 334 | 76 | 68 | 046416 | 043562 | - | - | 042049 | 042535 | 040682 | 11.44 | 11.44 | 10.73 |
| 8-3/8 | 7-1/4 | 338 | 80 | 74 | 046420 | 046419 | - | - | 042031 | 042032 | - | 12.44 | 12.44 | 11.70 |

NOTE: LER seals are made from Aluminum unless otherwise noted by the * symbol.
If an * appears by the part number, the LER seal is manufactured from Steel.

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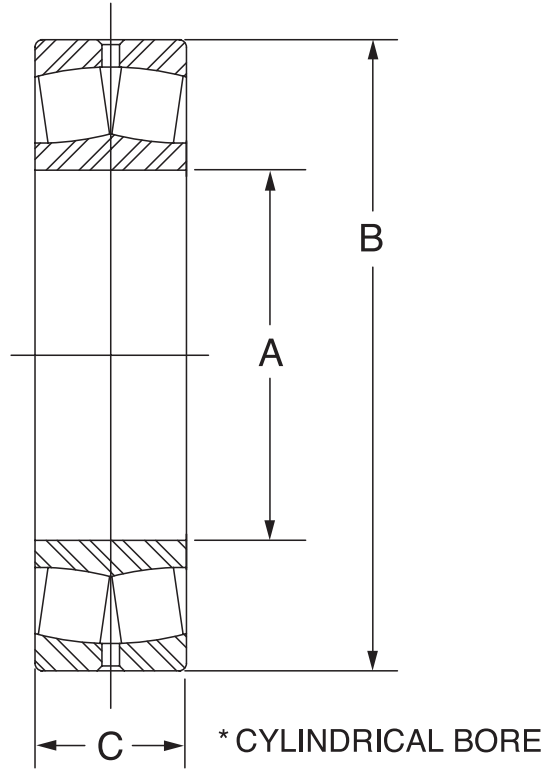
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SELECTION/DIMENSIONS



USAF 22300 Spherical Roller Bearings



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USAF 22300 Spherical Roller Bearings

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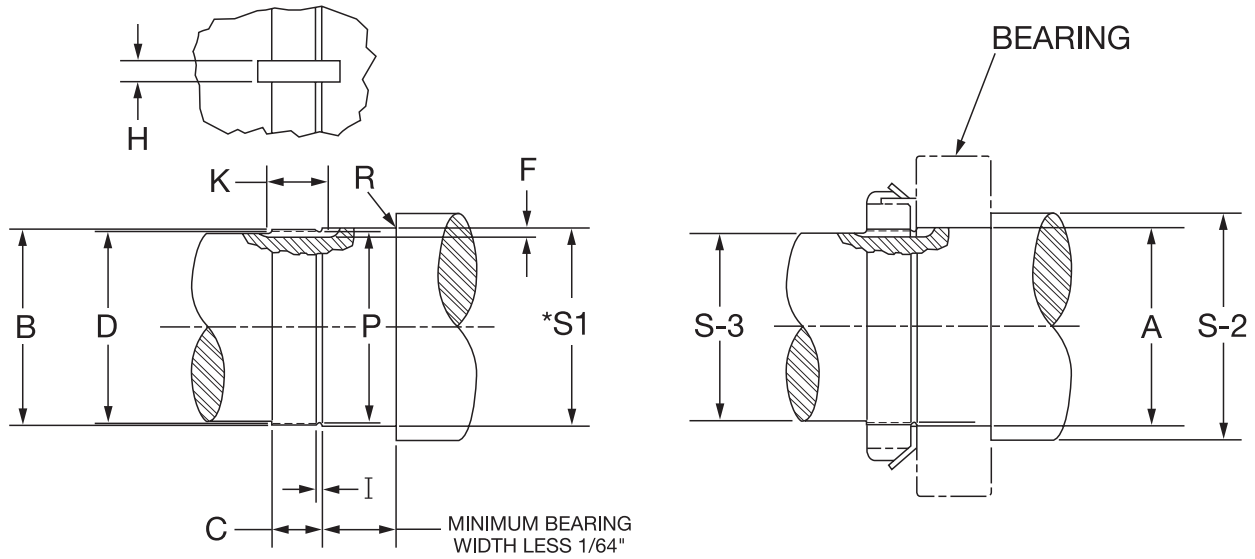
| Shaft Size Under Brg. mm | Housing | Bearing No | Part No | Approx. Wt (Lbs.) | A Inch | B Inch | C Inch |
|--------------------------|---------|------------|---------------|-------------------|--------------|---------------|--------------|
| 40 | 308 | 22308 | 423124 | 2.3 | 1.5748 (40) | 3.5433 (90) | 1.2992 (33) |
| 45 | 309 | 22309 | 423125 | 3.0 | 1.7717 (45) | 3.9370 (100) | 1.4173 (36) |
| 50 | 310 | 22310 | 423143 | 3.9 | 1.9685 (50) | 4.3307 (110) | 1.5758 (40) |
| 55 | 311 | 22311 | 423126 | 5.1 | 2.1654 (55) | 4.7244 (120) | 1.6929 (43) |
| 60 | 312 | 22312 | 423127 | 6.5 | 2.3622 (60) | 5.1181 (130) | 1.8110 (46) |
| 65 | 313 | 22313 | 423128 | 7.8 | 2.5591 (65) | 5.5118 (140) | 1.8898 (48) |
| 70 | 314 | 22314 | 423129 | 9.3 | 2.7559 (70) | 5.9055 (150) | 2.0079 (51) |
| 75 | 315 | 22315 | 423130 | 11.5 | 2.9528 (75) | 6.2992 (160) | 2.1654 (55) |
| 80 | 316 | 22316 | 423144 | 13.1 | 3.1496 (80) | 6.6929 (170) | 2.2835 (58) |
| 85 | 317 | 22317 | 423131 | 15.7 | 3.3465 (85) | 7.0866 (180) | 2.3622 (60) |
| 100 | 320 | 22320 | 423132 | 28.0 | 3.9370 (100) | 8.4646 (215) | 2.8740 (73) |
| 110 | 322 | 22322 | 423133 | 38.8 | 4.3307 (110) | 9.4488 (240) | 3.1496 (80) |
| 120 | 324 | 22324 | 423134 | 48.3 | 4.7244 (120) | 10.2362 (260) | 3.3858 (86) |
| 130 | 326 | 22326 | 423135 | 59.7 | 5.1181 (130) | 11.0236 (280) | 3.6614 (93) |
| 140 | 328 | 22328 | 423136 | 75.4 | 5.5118 (140) | 11.8110 (300) | 4.0157 (102) |
| 150 | 330 | 2230 | 423137 | 90.4 | 5.9055 (150) | 12.5984 (320) | 4.2520 (108) |
| 160 | 332 | 22332 | 423138 | 113.0 | 6.2992 (160) | 13.3858 (350) | 4.4882 (114) |
| 170 | 334 | 22334 | 423139 | 132.0 | 6.6929 (170) | 14.1732 (360) | 4.7244 (120) |
| 190 | 338 | 22338 | 423140 | 179.0 | 7.4803 (190) | 15.7480 (400) | 5.1969 (132) |

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SELECTION/DIMENSIONS



USAF 300 Series Bearing Shaft Details



| Nominal Bearing Bore Dia. (mm) | Shaft Bearing Seat Diameters (Inch) | | | | | |
|--------------------------------|-------------------------------------|--------|----------|-----------|--------|----------|
| | Normal Load | | | High Load | | |
| | * S-1 | | Mean Fit | * S-1 | | Mean Fit |
| | Max | Min | | Max | Min | |
| 40 | 1.5758 | 1.5752 | .0009T | 1.5761 | 1.5655 | .0012T |
| 45 | 1.7727 | 1.7721 | | 1.7730 | 1.7724 | |
| 50 | 1.9697 | 1.9689 | .0011T | 1.9700 | 1.9693 | .0014T |
| 55 | 2.1666 | 2.1658 | | 2.1669 | 2.1662 | |
| 60 | 2.3634 | 2.3626 | | 2.3637 | 2.3630 | |
| 65 | 2.5603 | 2.5595 | | 2.5606 | 2.5599 | |
| 70 | 2.7571 | 2.7563 | | 2.7574 | 2.7567 | |
| 75 | 2.9540 | 2.9532 | | 2.9543 | 2.9536 | |
| 80 | 3.1508 | 3.1501 | .0012T | 3.1511 | 3.1504 | .0015T |
| 85 | 3.3479 | 3.3470 | .0014T | 3.3484 | 3.3475 | .0019T |
| 100 | 3.9384 | 3.9375 | | 3.9389 | 3.9380 | |
| 110 | 4.3321 | 4.3312 | | 4.3326 | 4.3317 | |
| 120 | 4.7258 | 4.7249 | | 4.7263 | 4.7254 | |
| 130 | 5.1197 | 5.1187 | .0016T | 5.1203 | 5.1193 | .0022T |
| 140 | 5.5134 | 5.5124 | | 5.5140 | 5.5130 | |
| 150 | 5.9071 | 5.9061 | | 5.9077 | 5.9067 | |
| 160 | 6.3008 | 6.2998 | | 6.3014 | 6.3004 | |
| 170 | 6.6945 | 6.6935 | | 6.6951 | 6.6941 | |
| 190 | 7.4821 | 7.4809 | | .0019T | 7.4829 | |

Normal Load
P/C = 0.10 TO 0.18

High Load
P/C > 0.18

Where P = Equivalent dynamic load on the bearing (lbs.)
C = Basic dynamic load rating of bearing (lbs.)

| | | | |
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SELECTION/DIMENSIONS

USAF 300 Series Bearing Shaft Details

| Housing | Locknut & Washer Kit Part No. | A Brg Bore | S-2 | S-3 | Keyway | | | |
|---------|-------------------------------|-----------------|---------|---------|-------------------|-------------------|---------------------|--------------|
| | | | | | F Depth +1/64 - 0 | H Width +1/64 - 0 | K Full Depth Length | R Max Radius |
| 308 | 046751 | 1.5748 (40 mm) | 1-15/16 | 1-7/16 | 3/32 | 5/16 | 21/32 | 0.059 |
| 309 | 046752 | 1.7717 (45 mm) | 2-1/8 | 1-11/16 | 3/32 | 5/16 | 11/16 | 0.059 |
| 310 | 046753 | 1.9685 (50 mm) | 2-3/8 | 1-7/8 | 3/32 | 5/16 | 3/4 | 0.079 |
| 311 | 046754 | 2.1654 (55 mm) | 2-9/16 | 2-1/16 | 1/8 | 5/16 | 3/4 | 0.079 |
| 312 | 046772 | 2.3622 (60 mm) | 2-7/8 | 2-1/4 | 1/8 | 5/16 | 25/32 | 0.079 |
| 313 | 046755 | 2.5591 (65 mm) | 3-1/16 | 2-7/16 | 1/8 | 5/16 | 13/16 | 0.079 |
| 314 | 046773 | 2.7559 (70 mm) | 3-1/4 | 2-5/8 | 1/8 | 5/16 | 29/32 | 0.079 |
| 315 | 046756 | 2.9528 (75 mm) | 3-7/16 | 2-13/16 | 1/8 | 5/16 | 15/16 | 0.079 |
| 316 | 046757 | 3.1496 (80 mm) | 3-5/8 | 3 | 1/8 | 3/8 | 15/16 | 0.079 |
| 317 | 046758 | 3.3465 (85 mm) | 3-15/16 | 3-3/16 | 1/8 | 3/8 | 31/32 | 0.098 |
| 320 | 046760 | 3.9370 (100 mm) | 4-1/2 | 3-13/16 | 5/32 | 3/8 | 1-3/16 | 0.098 |
| 322 | 046761 | 4.3307 (110 mm) | 4-7/8 | 4-3/16 | 3/16 | 3/8 | 1-7/32 | 0.098 |
| 324 | 046762 | 4.7244 (120 mm) | 5-5/16 | 4-9/16 | 3/16 | 3/8 | 1-1/4 | 0.098 |
| 326 | 046763 | 5.1181 (130 mm) | 5-7/8 | 4-15/16 | 3/16 | 1/2 | 1-5/16 | 0.118 |
| 328 | 046764 | 5.5118 (140 mm) | 6-1/4 | 5-5/16 | 3/16 | 5/8 | 1-3/8 | 0.118 |
| 330 | 046765 | 5.9055 (150 mm) | 6-5/8 | 5-3/4 | 7/32 | 5/8 | 1-1/2 | 0.118 |
| 332 | 046766 | 6.2992 (160 mm) | 7 | 6-1/16 | 15/64 | 5/8 | 1-9/16 | 0.118 |
| 334 | 046767 | 6.6929 (170 mm) | 7-7/16 | 6-7/16 | 15/64 | 3/4 | 1-19/32 | 0.118 |
| 338 | 046769 | 7.4803 (190 mm) | 8-3/8 | 7-1/4 | 15/64 | 3/4 | 1-21/32 | 0.157 |

| Housing | Threads Per Inch | B Thread Major Dia | | D Thread Pitch Dia | | C Thread Length +1/64 - 0 | I Thread Relief +1/64 - 0 | P† Thread Relief Dia. |
|---------|------------------|--------------------|--------|--------------------|--------|---------------------------|---------------------------|-----------------------|
| | | Max | Min | Max | Min | | | |
| | | 308 | 18 | 1.5630 | 1.5548 | | | |
| 309 | 18 | 1.7670 | 1.7588 | 1.7309 | 1.7204 | 17/32 | 1/8 | 1.6832 |
| 310 | 18 | 1.9670 | 1.9588 | 1.9309 | 1.9264 | 19/32 | 1/8 | 1.8832 |
| 311 | 18 | 2.1570 | 2.1488 | 2.1209 | 2.1159 | 19/32 | 1/8 | 2.0732 |
| 312 | 18 | 2.3600 | 2.3518 | 2.3239 | 2.3188 | 5/8 | 1/8 | 2.2762 |
| 313 | 18 | 2.5480 | 2.5398 | 2.5119 | 2.5068 | 21/32 | 1/8 | 2.4642 |
| 314 | 18 | 2.7510 | 2.7428 | 2.7149 | 2.7098 | 21/32 | 1/8 | 2.6672 |
| 315 | 12 | 2.9330 | 2.9218 | 2.8789 | 2.8735 | 11/16 | 5/32 | 2.7995 |
| 316 | 12 | 3.1370 | 3.1258 | 3.0829 | 3.0770 | 11/16 | 5/32 | 3.0035 |
| 317 | 12 | 3.3400 | 3.3288 | 3.2859 | 3.2800 | 23/32 | 5/32 | 3.2065 |
| 320 | 12 | 3.9180 | 3.9068 | 3.8639 | 3.8565 | 7/8 | 5/32 | 3.7845 |
| 322 | 12 | 4.325 | 4.3138 | 4.2709 | 4.2626 | 29/32 | 5/32 | 4.1915 |
| 324 | 12 | 4.716 | 4.7048 | 4.6619 | 4.6536 | 15/16 | 5/32 | 4.5825 |
| 326 | 12 | 5.106 | 5.0948 | 5.0519 | 5.0436 | 1 | 5/32 | 4.9725 |
| 328 | 12 | 5.497 | 5.4858 | 5.4429 | 5.4346 | 1-1/16 | 5/32 | 5.3635 |
| 330 | 12 | 5.888 | 5.8768 | 5.8339 | 5.8256 | 1-1/8 | 5/32 | 5.7545 |
| 332 | 8 | 6.284 | 6.2688 | 6.2028 | 6.1937 | 1-3/16 | 1/4 | 6.0993 |
| 334 | 8 | 6.659 | 6.6438 | 6.5778 | 6.5687 | 1-7/32 | 1/4 | 6.4743 |
| 338 | 8 | 7.472 | 7.4568 | 7.3908 | 7.3817 | 1-9/32 | 1/4 | 7.2873 |

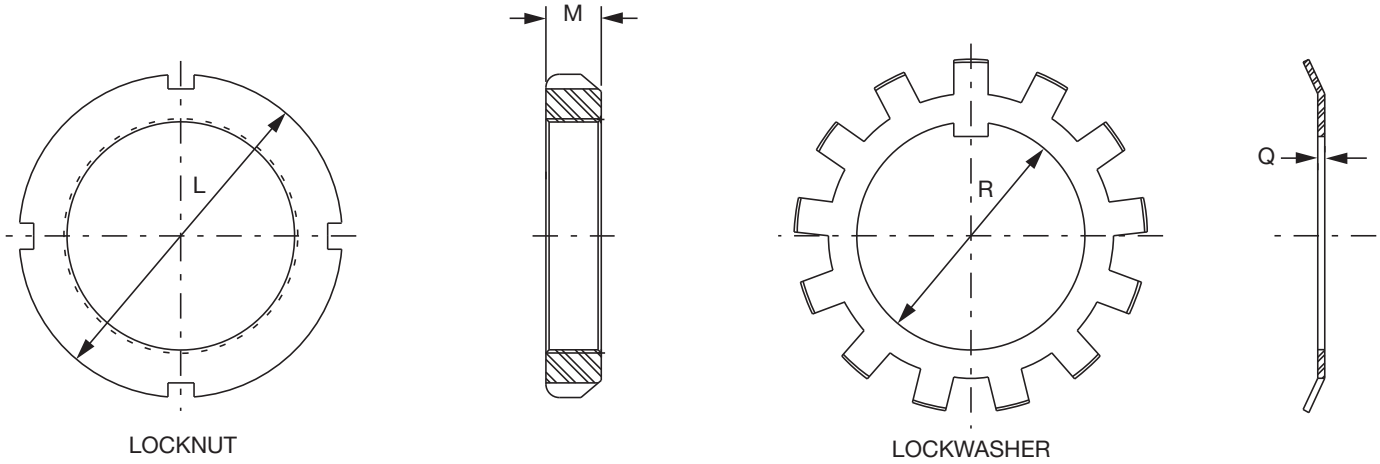
† Tolerance ±.005 through 2.6672 dia; ±.010 for larger sizes

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SELECTION/DIMENSIONS



USAF 300 Series Bearing Locknut & Washers



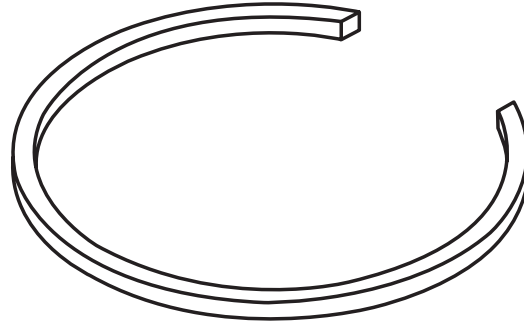
| Housing | Locknut | | Lockwasher | | L (Inch) | M (Inch) | R (Inch) | Q (Inch) |
|---------|----------|----------|------------|----------|-------------|-------------|-------------|-------------|
| | Descrip. | Part No. | Descrip. | Part No. | | | | |
| 308 | N08 | 407305 | W08 | 419151 | 2.25 | 0.44 | 1.583 | 0.048 |
| 309 | N09 | 419187 | W09 | 419180 | 2.53 | 0.44 | 1.792 | 0.048 |
| 310 | N10 | 419188 | W10 | 419181 | 2.69 | 0.50 | 1.992 | 0.048 |
| 311 | N11 | 419184 | W11 | 419182 | 2.97 | 0.50 | 2.182 | 0.053 |
| 312 | N12 | 407302 | W12 | 419008 | 3.16 | 0.53 | 2.400 | 0.053 |
| 313 | N13 | 419185 | W13 | 419183 | 3.38 | 0.56 | 2.588 | 0.053 |
| 314 | N14 | 407306 | W14 | 419153 | 3.62 | 0.56 | 2.791 | 0.053 |
| 315 | AN15 | 460901 | W15 | 419150 | 3.88 | 0.59 | 2.988 | 0.072 |
| 316 | AN16 | 460902 | W16 | 419152 | 4.16 | 0.59 | 3.192 | 0.072 |
| 317 | AN17 | 460903 | W17 | 419154 | 4.41 | 0.62 | 3.410 | 0.072 |
| 320 | AN20 | 460905 | W20 | 419158 | 5.19 | 0.75 | 4.003 | 0.094 |
| 322 | AN22 | 460906 | W22 | 419160 | 5.72 | 0.78 | 4.410 | 0.125 |
| 324 | AN24 | 041071 | W24 | 419162 | 6.12 | 0.81 | 4.816 | 0.125 |
| 326 | AN26 | 041064 | W26 | 419164 | 6.75 | 0.88 | 5.209 | 0.125 |
| 328 | AN28 | 041065 | W28 | 419166 | 7.09 | 0.94 | 5.600 | 0.125 |
| 330 | AN30 | 041072 | W30 | 419168 | 7.69 | 0.97 | 6.001 | 0.156 |
| 332 | AN32 | 041066 | W32 | 419170 | 8.06 | 1.03 | 6.407 | 0.156 |
| 334 | AN34 | 041067 | W34 | 419172 | 8.66 | 1.06 | 6.782 | 0.156 |
| 338 | AN38 | 041068 | W38 | 419176 | 9.47 | 1.12 | 7.595 | 0.156 |

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SELECTION/DIMENSIONS



USAF Stabilizing Rings



| Housing | Stab. Ring No. | Stab. Ring Part No. |
|--------------|----------------|---------------------|
| | | ▲ |
| 509 | 9-9 | 041987 |
| 510 | 10-8 | 042335 |
| 511 | 11-9 | 042315 |
| 513 | 13-0 | 042316 |
| 515/215 | 15-0 | 041174 |
| 516/216 | 16-13 | 041172 |
| 517/217 | 17-14 | 041175 |
| 518/218 | 18-15 | 041173 |
| 520/220 | 20-17 | 041176 |
| 522/222 | 22-19 | 041177 |
| 524/224 | 24-20 | 041185 |
| 526/226 | 26-0 | 041178 |
| 528/228 | 28-0 | 041179 |
| 530/230 | 30-0 | 041186 |
| 532/232 | 32-0 | 041180 |
| 534/234 | 34-0 | 041181 |
| 536/236 | 36-30 | 041184 |
| 538/238 | 38-32 | 041182 |
| 540/240 | 40-34 | 046639 |
| 544S/544/244 | 44-38 | 041183 |
| * 048 | A8897 | 041161 |
| * 052 | A8898 | 422554 |
| * 056/056L | A8819 | 041213 |

| Housing | Stab. Ring No. | Stab. Ring Part No. |
|---------|----------------|---------------------|
| | | ▲ |
| 308 | 10-8 | 042335 |
| 609/309 | 11-9 | 042315 |
| 610/310 | 0-10 | 046642 |
| 611/311 | 6-11 | 046632 |
| 312 | 15-0 | 041174 |
| 613/313 | 16-13 | 041172 |
| 314 | 17-14 | 041175 |
| 615/315 | 18-15 | 041173 |
| 616/316 | 19-16 | 046643 |
| 617/317 | 20-17 | 041176 |
| 620/320 | 24-20 | 041185 |
| 622/322 | 0-22 | 046635 |
| 624/324 | 0-24 | 046634 |
| 626/326 | 0-26 | 046637 |
| 628/328 | 0-28 | 046638 |
| 630/330 | 36-30 | 041184 |
| 632/332 | 38-32 | 041182 |
| 634/334 | 40-34 | 040850 |
| 638/338 | 44-38 | 041183 |

* Two stabilizing rings required per housings

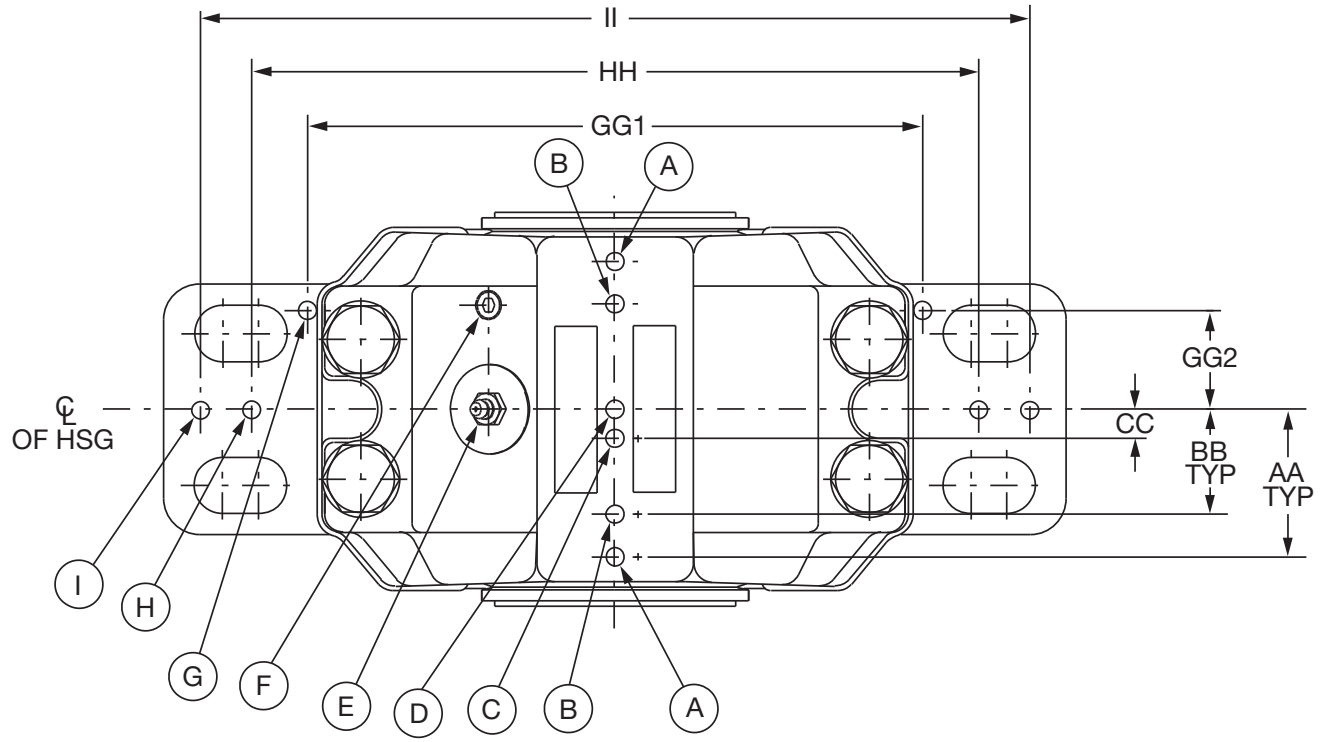
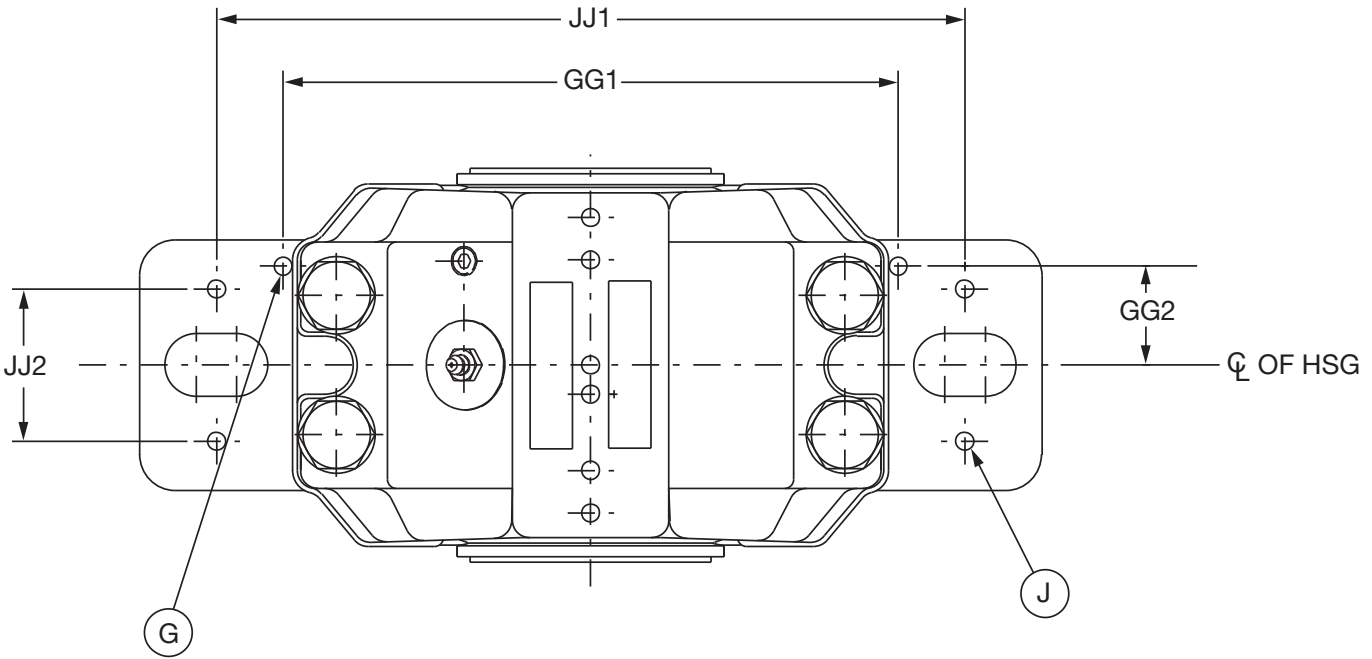
▲ Part numbers for reference only. Housings come equipped with stabilizing rings enclosed

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SELECTION/DIMENSIONS

USAF Pillow Block - 500 & 200 DOWEL PIN, LUBRICATION & MOUNTING HOLE POSITIONS



| | | | |
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SELECTION/DIMENSIONS



USAF Pillow Block - 500 & 200 DOWEL PIN, LUBRICATION & MOUNTING HOLE POSITIONS

| Item | Description |
|------|---|
| A | Optional Seal Grease Location |
| B | Optional Location For Vent, Vibration Pickup And/or Grease Location For Non W33 Grooved Bearing |
| C | Position For Thermocouple Location |
| D | Position For Lubrication Of Bearing With W33 Groove |
| E | Lubrication Port For W33 Groove |
| | Groove Bearing Drilled Standard On Pillow Blocks |
| F | Pre-Drilled And Tap Location For Vent Or Side Lubrication For Bearing Without W33 Groove |
| G | Dowel Pin Location For Metric Plummer Blocks |
| H | Drilling Location For Two Bolt Mounting Or Optional Dowel Pin Location |
| I | Optional Location For Dowel Pin Location |
| J | Drilling Location For Four Bolt Mounting Or Optional Dowel Pin Location |

| USAF Housing | AA | BB | CC | GG1 | GG2 | G Max Dia | HH | H | | II | JJ1 | JJ2 | J | |
|--------------|------|------|------|-------|------|-----------|-------|-----------|-----------|-------|-------|------|-----------|-----------|
| | | | | | | | | Hole Size | Bolt Size | | | | Hole Size | Bolt Size |
| 509 | 1.45 | 0.84 | 0.25 | 5.31 | 0.91 | 15/64 | - | - | - | - | 6.31 | 1.34 | 7/16 | 3/8 |
| 510 | 1.53 | 0.89 | 0.27 | 5.31 | 0.91 | 15/64 | - | - | - | - | 6.31 | 1.34 | 7/16 | 3/8 |
| 511 | 1.66 | 1.00 | 0.28 | 6.69 | 1.06 | 5/16 | - | - | - | - | 7.88 | 1.56 | 9/16 | 1/2 |
| 513 | 1.84 | 1.28 | 0.34 | 7.50 | 1.25 | 5/16 | 9.06 | 11/16 | 5/8 | 10.25 | 8.66 | 1.88 | 9/16 | 1/2 |
| 515/215 | 1.88 | 1.22 | 0.36 | 7.50 | 1.25 | 5/16 | 9.06 | 11/16 | 5/8 | 10.25 | 8.66 | 1.88 | 9/16 | 1/2 |
| 516/216 | 2.03 | 1.38 | 0.31 | 8.59 | 1.38 | 5/16 | 10.25 | 13/16 | 3/4 | 11.59 | 9.94 | 2.06 | 11/16 | 5/8 |
| 517/217 | 2.06 | 1.47 | 0.41 | 8.59 | 1.38 | 5/16 | 10.25 | 13/16 | 3/4 | 11.59 | 9.94 | 2.06 | 11/16 | 5/8 |
| 518/218 | 2.38 | 1.50 | 0.44 | 9.44 | 1.45 | 5/16 | 11.91 | 13/16 | 3/4 | 12.63 | 11.03 | 2.28 | 11/16 | 5/8 |
| 520/220 | 2.09 | 1.72 | 0.53 | 10.25 | 1.61 | 5/16 | 12.59 | 15/16 | 7/8 | 14.36 | 11.81 | 2.59 | 13/16 | 3/4 |
| 522/222 | 2.81 | 1.94 | 0.59 | 11.03 | 1.78 | 15/32 | 13.78 | 15/16 | 7/8 | 15.50 | 12.91 | 2.91 | 13/16 | 3/4 |
| 524/224 | 3.13 | 1.91 | 0.69 | 11.42 | 1.78 | 15/32 | 13.88 | 15/16 | 7/8 | 15.88 | 13.00 | 2.91 | 13/16 | 3/4 |
| 526/226 | 3.25 | 2.09 | 0.75 | 12.78 | 2.05 | 15/32 | 14.97 | 1-1/16 | 1 | 17.38 | 14.56 | 3.09 | 15/16 | 7/8 |
| 528/228 | 3.48 | 2.53 | 0.75 | 13.59 | 2.16 | 15/32 | 16.53 | 1-5/16 | 1-1/4 | 18.69 | 15.75 | 3.63 | 1-1/16 | 1 |
| 530/230 | 3.84 | 2.53 | 0.81 | 14.75 | 2.38 | 15/32 | 17.72 | 1-5/16 | 1-1/4 | 19.50 | 16.94 | 3.94 | 1-1/16 | 1 |
| 532/232 | 4.09 | 2.56 | 0.91 | 15.56 | 2.36 | 15/32 | 18.50 | 1-5/16 | 1-1/4 | 20.28 | 17.72 | 3.94 | 1-1/16 | 1 |
| 534/234 | 4.13 | 3.00 | 1.00 | - | - | - | 20.50 | 1-9/16 | 1-1/2 | 23.38 | - | - | - | - |
| 536/236 | 4.31 | 3.00 | 1.00 | - | - | - | 22.25 | 1-9/16 | 1-1/2 | 25.25 | - | - | - | - |
| 538/238 | 4.50 | 3.13 | 1.13 | - | - | - | 23.00 | 1-9/16 | 1-1/2 | 26.63 | - | - | - | - |
| 540/240 | 4.86 | 3.22 | 1.13 | - | - | - | 23.75 | 1-9/16 | 1-1/2 | 27.25 | - | - | - | - |
| 544/244 | 5.20 | 3.63 | 1.19 | - | - | - | 26.83 | 1-13/16 | 1-3/4 | 30.75 | - | - | - | - |
| 048 | 4.86 | 3.22 | 1.13 | - | - | - | 23.75 | 1-9/16 | 1-1/2 | 27.25 | - | - | - | - |
| 052 | 5.20 | 3.63 | 1.19 | - | - | - | 26.83 | 1-13/16 | 1-3/4 | 30.75 | - | - | - | - |
| 056 | 5.67 | 3.75 | 1.20 | - | - | - | 27.88 | 2-1/16 | 2 | 32.25 | - | - | - | - |

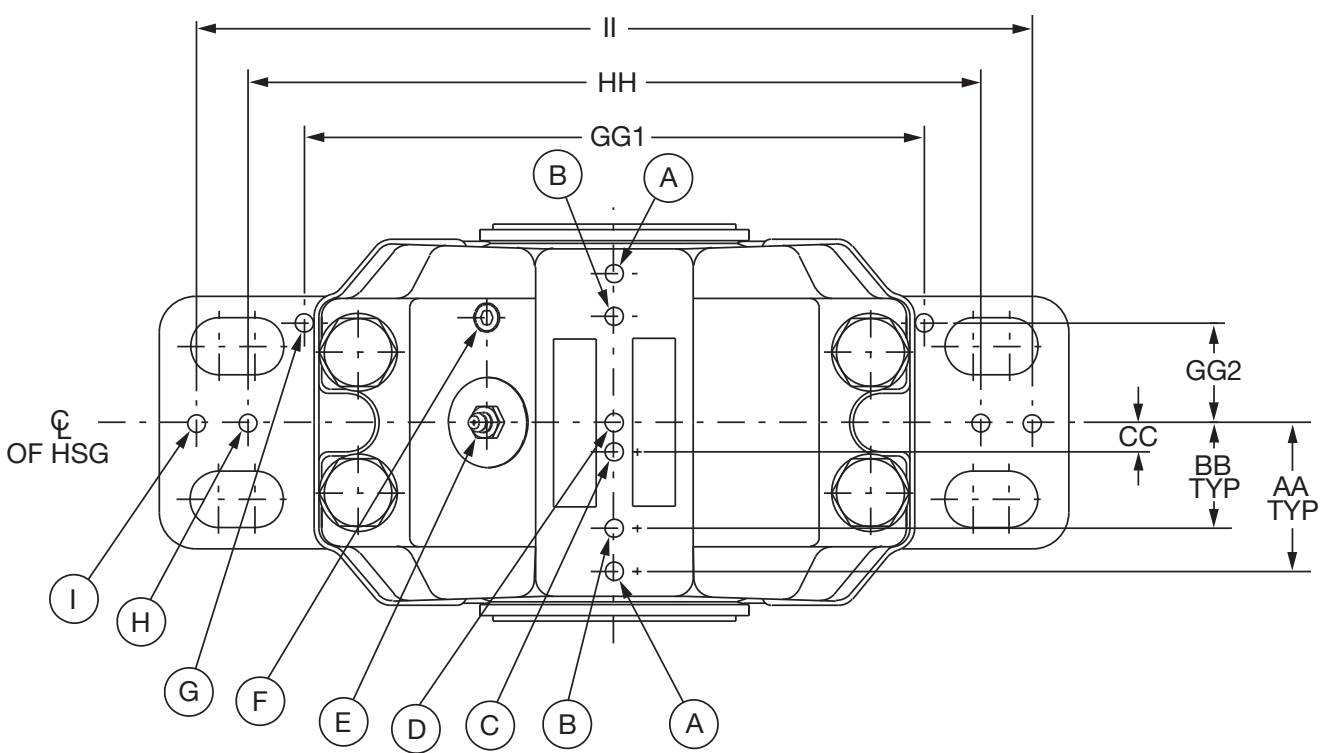
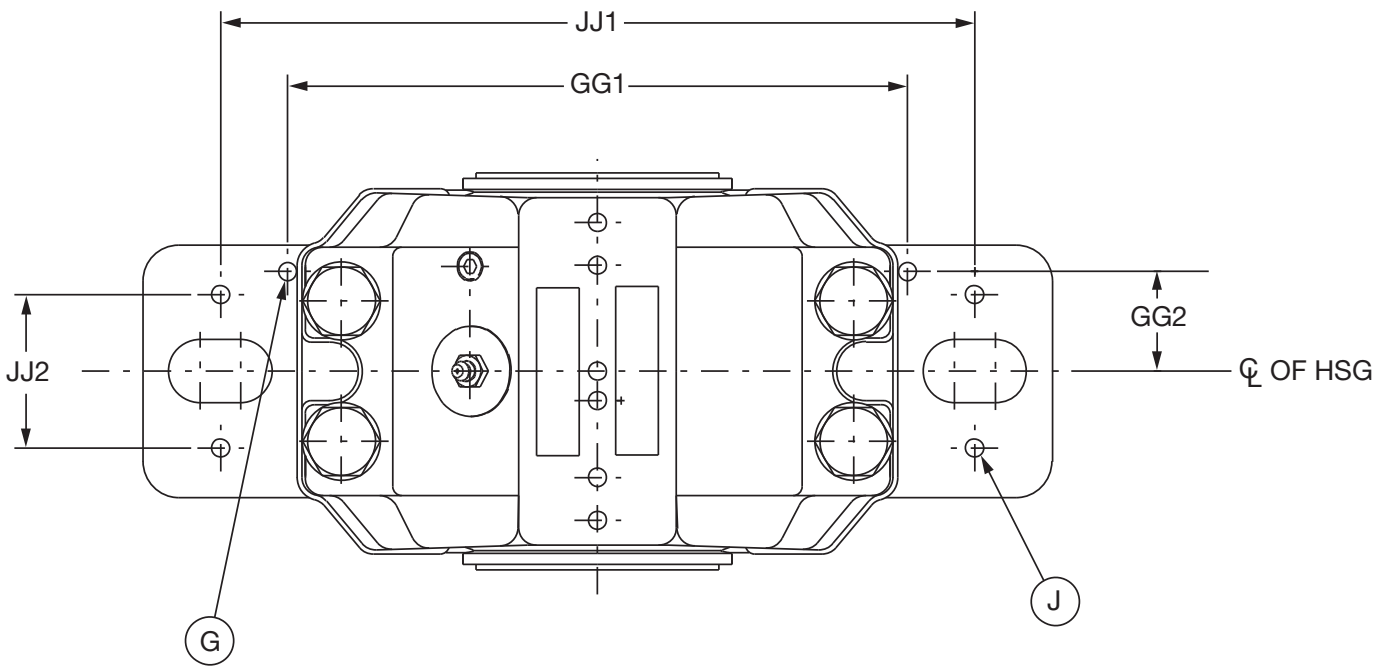
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Bearing Reference Guide
 E-Family Roller Bearings
 Specialty Tapered Products
 S-2000
 UNISPHERE II
 IMPERIAL
 UNIFIED SAF



SELECTION/DIMENSIONS

USAF Pillow Block - 600 & 300 DOWEL PIN, LUBRICATION & MOUNTING HOLE POSITIONS



| | | | |
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SELECTION/DIMENSIONS

USAF Pillow Block - 600 & 300 DOWEL PIN, LUBRICATION & MOUNTING HOLE POSITIONS

| Item | Description |
|------|---|
| A | Optional Seal Grease Location |
| B | Optional Location For Vent, Vibration Pickup And/Or Grease Location For Non W33 Grooved Bearing |
| C | Position For Thermocouple Location |
| D | Position For Lubrication Of Bearing With W33 Groove |
| E | Lubrication Port For W33 Groove |
| | Groove Bearing Drilled Standard On Pillow Blocks |
| F | Pre-Drilled And Tap Location For Vent Or Side Lubrication For Bearing Without W33 Groove |
| G | Dowel Pin Location For Metric Plummer Blocks |
| H | Drilling Location For Two Bolt Mounting Or Optional Dowel Pin Location |
| I | Optional Location For Dowel Pin Location |
| J | Drilling Location For Four Bolt Mounting Or Optional Dowel Pin Location |

| USAF Housing | AA | BB | CC | GG1 | GG2 | G Max Dia | HH | H | | II | JJ1 | JJ2 | J | |
|--------------|------|------|------|-------|------|-----------|-------|-----------|-----------|-------|-------|------|-----------|-----------|
| | | | | | | | | Hole Size | Bolt Size | | | | Hole Size | Bolt Size |
| 308 | 1.53 | 0.89 | 0.27 | 5.31 | 0.91 | 15/64 | - | - | - | - | 6.31 | 1.34 | 7/16 | 3/8 |
| 609/309 | 1.66 | 1.00 | 0.28 | 6.69 | 1.06 | 5/16 | - | - | - | - | 7.88 | 1.56 | 9/16 | 1/2 |
| 610/310 | 1.84 | 1.00 | 0.34 | 6.77 | 1.06 | 5/16 | - | - | - | - | 7.88 | 1.56 | 9/16 | 1/2 |
| 611/311 | 1.84 | 1.56 | 0.34 | 7.50 | 1.25 | 5/16 | 9.06 | 11/16 | 5/8 | 10.25 | 8.66 | 1.88 | 9/16 | 1/2 |
| 312 | 1.88 | 1.22 | 0.36 | 7.50 | 1.25 | 5/16 | 9.06 | 11/16 | 5/8 | 10.25 | 8.66 | 1.88 | 9/16 | 1/2 |
| 613/313 | 2.03 | 1.38 | 0.31 | 8.59 | 1.38 | 5/16 | 10.25 | 13/16 | 3/4 | 11.59 | 9.94 | 2.06 | 11/16 | 5/8 |
| 314 | 2.06 | 1.47 | 0.41 | 8.59 | 1.38 | 5/16 | 10.25 | 13/16 | 3/4 | 11.59 | 9.94 | 2.06 | 11/16 | 5/8 |
| 615/315 | 2.38 | 1.50 | 0.44 | 9.44 | 1.45 | 5/16 | 11.41 | 13/16 | 3/4 | 12.63 | 11.03 | 2.28 | 11/16 | 5/8 |
| 616/316 | 2.53 | 1.63 | 0.53 | 9.44 | 1.45 | 5/16 | 11.41 | 13/16 | 3/4 | 13.00 | 11.03 | 2.28 | 11/16 | 5/8 |
| 617/317 | 2.69 | 1.72 | 0.53 | 10.25 | 1.61 | 5/16 | 12.59 | 15/16 | 7/8 | 14.36 | 11.81 | 2.59 | 13/16 | 3/4 |
| 620/320 | 3.13 | 1.91 | 0.69 | 11.42 | 1.18 | 15/32 | 13.88 | 15/16 | 7/8 | 15.88 | 13.00 | 2.91 | 13/16 | 3/4 |
| 622/322 | 3.25 | 2.09 | 0.75 | 12.78 | 2.05 | 15/32 | 14.99 | 1-1/16 | 1 | 17.38 | 14.56 | 3.16 | 15/16 | 7/8 |
| 624/324 | 3.84 | 2.53 | 0.81 | 14.75 | 2.38 | 15/32 | 17.72 | 1-5/16 | 1-1/4 | 19.50 | 16.94 | 3.94 | 1-1/16 | 1 |
| 626/326 | 4.09 | 2.56 | 0.91 | 15.56 | 2.36 | 15/32 | 18.50 | 1-5/16 | 1-1/4 | 20.28 | 17.72 | 3.94 | 1-1/16 | 1 |
| 628/328 | 4.13 | 3.00 | 1.00 | - | - | - | 20.50 | 1-9/16 | 1-1/2 | 23.38 | - | - | - | - |
| 630/330 | 4.31 | 3.00 | 1.00 | - | - | - | 22.25 | 1-9/16 | 1-1/2 | 25.25 | - | - | - | - |
| 632/332 | 4.50 | 3.13 | 1.13 | - | - | - | 23.00 | 1-9/16 | 1-1/2 | 26.62 | - | - | - | - |
| 634/334 | 4.86 | 3.22 | 1.13 | - | - | - | 23.75 | 1-9/16 | 1-1/2 | 27.25 | - | - | - | - |
| 638/338 | 5.20 | 3.63 | 1.19 | - | - | - | 26.31 | 1-13/16 | 1-3/4 | 30.75 | - | - | - | - |

Bearing Reference Guide
 E-Family Roller Bearings
 Specialty Tapered Products
 S-2000
 UNISPHERE II
 IMPERIAL
 UNIFIED SAF

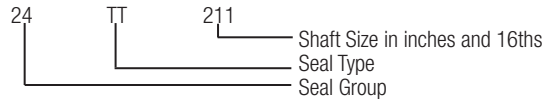
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SELECTION/DIMENSIONS



USAF Housing VS Seal Group Interchange Chart

All DODGE seals are identified as follows:



Seal group numbers identify common housing seal grooves found on different series housings. The standard shaft sizes for various housings are shown.

| Shaft Size | Housing | Seal* Group | Shaft Size | Housing | Seal* Group | Shaft Size | Housing | Seal* Group | Shaft Size | Housing | Seal* Group | | |
|------------|---------|-------------|------------|---------|-------------|------------|---------|-------------|------------|---------|-------------|---------|-------|
| 1-7/16 | 509 | 08 | 3-5/8 | 216 | 38 | 6-1/4 | 228 | 66 | 11-15/16 | 064L | 100 | | |
| | 308 | | | 316 | | | 328 | | | 12 | | 3164 | |
| | 609 | | | 220 | | | 334 | | | 068 | | 3264 | |
| 1-11/16 | 510 | 10 | 3-13/16 | 320 | 50 | 6-7/16 | 234 | 68 | 12-7/16 | 068 | 102 | | |
| | 309 | | | 217 | | | 536 | | | 3168 | | | |
| | 610 | | | 317 | | | 536 | | | 3268 | | | |
| 1-7/8 | 310 | 12 | 3-15/16 | 522 | 50 | 6-5/8 | 230 | 70 | 12-15/16 | 072 | 104 | | |
| 1-15/16 | 511 | | | 622 | | | 6-7/8 | | | 330 | | 13 | 072L |
| | 308 | | | 522 | | | | | | 236 | | 13-7/16 | 072L |
| 2-1/16 | 311 | 14 | 4-1/8 | 218 | 44 | 6-15/16 | 638 | 72 | 13-15/16 | 076 | 108 | | |
| | 2-1/8 | | | 309 | | | 524 | | | 232 | | 14 | 3176 |
| | 2-3/16 | | | 513 | | | 222 | | | 332 | | 15 | 080 |
| 2-1/4 | 613 | 18 | 4-3/16 | 624 | 52 | 7 | 538 | 74 | 15-3/4 | 084 | 112 | | |
| | 312 | | | 322 | | | 638 | | | | | | |
| | 2-3/8 | | | 310 | | | 526 | | | 7-3/16 | | 540 | |
| 2-7/16 | 515 | 20 | 4-7/16 | 626 | 54 | 7-1/4 | 238 | 76 | 7-7/16 | 334 | 84 | | |
| | 615 | | | 220 | | | 338 | | | | | | |
| | 313 | | | 320 | | | 234 | | | | | | |
| 2-1/2 | 515 | 22 | 4-1/2 | 526 | 56 | 7-1/2 | 544S | 78 | 8-5/16 | 244 | 90 | | |
| | 615 | | | 626 | | | 240 | | | 238 | | | |
| | 2-5/8 | | | 314 | | | 224 | | | 240 | | 338 | |
| 2-9/16 | 311 | 24 | 4-9/16 | 324 | 56 | 7-13/16 | 236 | 80 | 8-3/8 | 338 | 90 | | |
| 2-11/16 | 516 | | | 222 | | | 7-15/16 | | | 544 | | 8-7/16 | 048 |
| | 616 | | | 322 | | | 8 | | | 240 | | | 8-1/2 |
| | 2-3/4 | 516 | 226 | 8-5/16 | 244 | 8-3/4 | 240 | | | | | | |
| 2-13/16 | 616 | 26 | 4-15/16 | 326 | 56 | 8-7/16 | 048 | 82 | 8-15/16 | 048 | 90 | | |
| | 215 | | | 528 | | | 9 | | | 3248 | | | |
| | 315 | | | 628 | | | 9-7/16 | | | 052 | | | |
| 2-7/8 | 312 | 28 | 5 | 528 | 58 | 9-1/2 | 3152 | 84 | 9-9/16 | 244 | 92 | | |
| | 2-15/16 | | | 517 | | | 628 | | | 324 | | 3252 | |
| | | | | 617 | | | 530 | | | 328 | | 244 | |
| 3 | 216 | 32 | 5-3/16 | 630 | 60 | 9-15/16 | 56 | 94 | 10-7/16 | 056L | 96 | | |
| | 316 | | | 224 | | | 532 | | | 10 | | | |
| | 517 | | | 228 | | | 632 | | | 3156 | | | |
| 3-1/16 | 617 | 34 | 5-5/16 | 324 | 62 | 10-1/2 | 3256 | 96 | 10-15/16 | 060 | 98 | | |
| | 3-3/16 | | | 518 | | | 328 | | | 9-9/16 | | 244 | |
| | | | | 314 | | | 532 | | | 11-7/16 | | 064 | |
| 3-1/4 | 314 | 36 | 5-1/2 | 632 | 64 | 11-1/2 | 064 | 98 | 11-1/2 | 064 | 98 | | |
| | 3-3/8 | | | 218 | | | 230 | | | 534 | | | |
| | | | | 215 | | | 330 | | | 634 | | | |
| 3-7/16 | 315 | 38 | 5-3/4 | 226 | 62 | 10-15/16 | 060 | 96 | 10-15/16 | 060 | 96 | | |
| | 520 | | | 5-7/8 | | | 226 | | | 11 | | 3160 | |
| | 620 | | | 326 | | | 3260 | | | | | | |
| 3-1/2 | 520 | 46 | 5-15/16 | 534 | 64 | 11-7/16 | 064 | 98 | 11-1/2 | 064 | 98 | | |
| | 620 | | | 6 | | | 534 | | | | | | |
| | 620 | | | 634 | | | 634 | | | | | | |
| | | | 6-1/16 | 232 | 64 | | | | | | | | |
| | | | | 332 | | | | | | | | | |
| | | | | | | | | | | | | | |

Seal groups in 200/300 housing require two seals of different diameters.



SELECTION/DIMENSIONS

DODGE Cool Lube 2 System

Custom Engineered for oil lubricated, mounted bearings on fan applications. The DODGE Cool Lube System provides an attractive and reliable alternative to conventional grease and static oil bearing lubrication methods for industrial fan applications. It is particularly suited for applications where bearing operating temperatures and speeds approach maximum permissible levels and for harsh and dirty environments.

Enhance your spherical roller bearing operation by continuous oil cooling, filtration, and proper oil level maintenance while your fan is running. Eighty percent of all mounted bearing failures are caused by contamination and lubrication issues. The DODGE Cool Lube System helps to minimize this risk.

The DODGE Cool Lube System provides reduced maintenance costs and increased uptime by providing:

- **Bearing Temperature Reduction:** Increases bearing reliability through bearing temperature reduction. Reducing bearing operating temperatures is proven to significantly increase roller bearing fatigue life.
- **Oil Filtration:** Increases Bearing Life and extends maintenance periods through continuous oil filtration. The DODGE Cool Lube System continuously circulates and filters harmful particles from the bearing oil sump.
- **Automatic Oil Level Control:** The DODGE Cool Lube System will maintain the proper oil level within the oil sump.

One Cool Lube system for two (2) mounted bearings:

Dodge Part Numbers with flow meter range of 0.05 to 0.50 GPM

- **063485** for three phase motor
- **063486** for single phase motor
- **078327** for XP (Exp. Proof) three phase motor
- **078328** for 575 VAC three phase motor

Dodge Part Numbers with flow meter range of 0.50 to 4.0 GPM

- **063487** for three phase motor
- **063488** for single phase motor
- **078289** for XP (Exp. Proof) three phase motor
- **078290** for 575 VAC three phase motor



Cool Lube 2 System Specifications:

- 5 Gallon Tank with Removable Cover
- Pump 2.0 GPM Flow
- In-line Filter with Clog Indicator and Clog Auto-Bypass
- 3-way valve to change filter while unit is in operation
- Pump Safety Relief Valve
- Bearing Line Relief Valve
- Filter and Bearing Supply Pressure Gauges
- Air to Oil Heat Exchanger
- Two Supply Line Needle Valves and Flow Meters with flow range 0.05 to 0.50 GPM or 0.5 to 4.0 GPM
- Temperature Gauge
- Oil Sight Gauge
- Reservoir Breather Cap
- Baldor NEMA Motor
- All Components Mounted to a Base Plate

Optional Features:

- 260 Watt Oil Heater with Thermostat sold separately. If required order one of the following:
 - p/n 434725 – 260 watt x 120v Heater
 - p/n 434726 – 260 watt x 240v Heater
- Oil Level Switch
- Temperature/Oil Level Switch Assembly
 - p/n 434941 (sold separately)
- Duplex Dual Filter Arrangement

NOTE: Replacement Filter Part Number **078358**

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SELECTION/DIMENSIONS



DODGE Cool Lube System helps to:

Prevent bearing mechanical distress:

- Lowers internal bearing friction thus decreasing bearing operating temperatures
- Minimizes roller to raceway, metal to metal contact
- Reduces roller skidding damage that can occur in lightly loaded applications
- Supplies lubricant directly to load carrying rolling elements
- Increases lube life due to lower temperatures
- Minimizes cage sliding friction wear
- Minimizes effect of ineffective sealing



Prevent bearing contamination:

- Filters out contamination which has passed through seals
- Helps to remove water contamination due to condensation from bearings if a water absorbing filter is used
- Flushes worn raceway, rollers & cage particles from bearings
- Removes contamination caused during installation



Lower maintenance costs:

- Oil change outs are simple
- No need to break housing cap bolts to clean out old grease
- Oil can be inspected for distress on a regular basis to determine oil PM schedule
- Lower bearing temperatures increase service life
- Lower contamination levels increase service life

Once bearing raceway fatigue begins progression of damage is rapid



At first sign of Damage

After 1,000 Hours

After 1,200 Hours

| | | | |
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