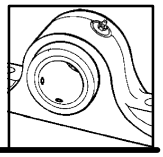
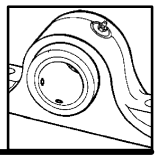
CONTENTS



Type E/DOUBLE–INTERLOCK/Type K/TAF

FEATURES/BENEFITS



Type E/DOUBLE–INTERLOCK/Type K/TAF

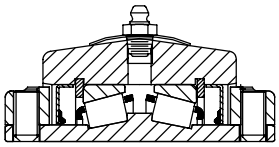
These four product lines have many common features and benefits that are shown on this page. Unique features for each product are shown on the following pages.

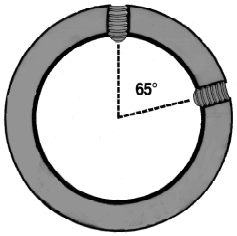
The common components used by all four lines include:

- Bearings
- Seals
- Locking collars
- Bore range

General Features:

- Factory assembled, adjusted and pre-lubricated
- Case hardened rollers and races
- Easy installation and maintenance
- 65 degree set screw angle Springlok collar/flingers—More holding power than 90 or 120 degree
- Single rubber lip contacting seals

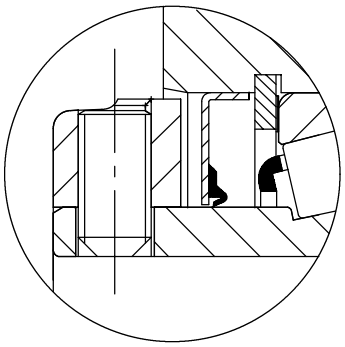




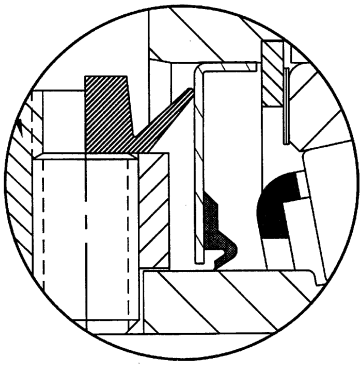
EXCLUSIVE SEALING DESIGNS AND FEATURES

Rolling Elements Never Exposed to Contaminants

- Exclusive “R” Seal features a combination metal shield and positive land riding contacting lip seal. Keeps contaminants out, lubricants in.
- E-TECT Seal option gives extra protection with a combination face rubbing seal in addition to the “R” Seal System. (See page B5–58)
- TIMKEN™ tapered roller bearing inserts allow for combination radial and thrust loads.
- Lip design conforms to cones. Permits grease to purge.
- Close fit oversized collars act as flingers for added protection in dusty or damp environments.



Standard “R” Seal System



E-TECT Seal System

FEATURES/BENEFITS

Type E

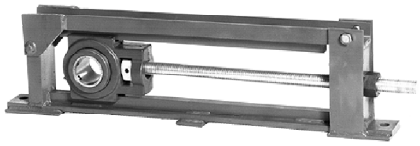
DODGE Type E
One Bearing, One Seal
For Dusty or Damp Environments

- **“E” stands for economy**
- Type E allows easy upgrade from ball bearings
- Interchangeable mounting dimensions with ball bearings
- Moderate price premium vs. ball bearings
- Steel housed pillow blocks available in selected sizes.

The Original DODGE Type E Bearing, Only Better

- Provides added protection against contamination
- Completely assembled, factory adjusted and properly lubricated - **shaft ready**
- Stocked in all configurations
- Extra protection—E-TECT seal option
- Stainless end covers available up to 3″, 75mm bore

Top angle take-ups
$1\frac{3}{4}$ - 4″
45 - 100 mm



Center pull frame
with wide slot take-up
$1\frac{3}{8}$ - 3″
35 - 75mm

Pillow Block
$1\frac{3}{16}$ - 7″
35 - 180 mm

Piloted flange
$1\frac{3}{16}$ - 5″
35 - 125 mm

Flange
$1\frac{3}{16}$ - $4\frac{1}{2}$″
35 - 115 mm

Type K and DOUBLE–INTERLOCK

DODGE Double-Interlock Combines Durability with Mounting Flexibility

Heavy Duty Housing Construction Has Proven Performance

- Offers tapered roller bearing durability in a variety of mounting styles
- Extra protection E-TECT Seal Option
- Special clearances and greases available
- Self aligning
- Factory assembled, adjusted and lubricated - **shaft ready**

Pillow block
1-3/16 - 7″

Flanges
1-3/16 - 5″

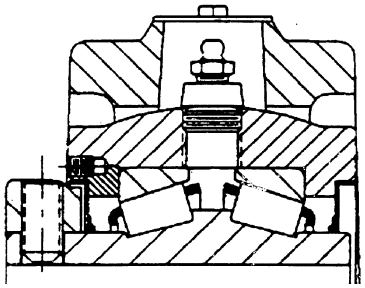
S-1 unit
1-3/16 up to 7″

B-1 unit
1-3/16 up to 5″

D unit
1-3/16 up to 5″

DODGE Type K Fits Where Competitors Won't

Tapered Roller Bearings With Reduced Length Thru Bore

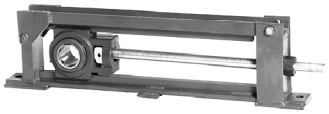


- Reduces length thru bore design in a variety of mounting styles
- Single collar design saves space and installation time
- Allows bearing to be closer to the load for reduced shaft design
- Self-aligning
- Factory assembled, adjusted and lubricated - **shaft ready**
- Same housing as DOUBLE-INTERLOCK

S-1 & B-1 units
1-3/16 - 3-15/16″

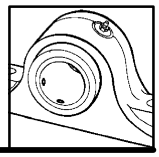
Pillow block
Expansion & non–expansion
1-3/16 - 3-15/16″

Flange Expansion
and Non-expansion
1-3/16 - 3-15/16″



Wide-slot take-up frame
1-3/8 - 3″

Top angle take-ups
1 3/4 - 3 15/16″

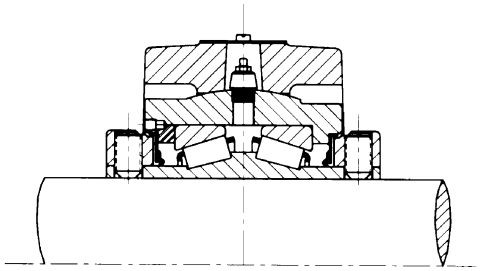


TAF

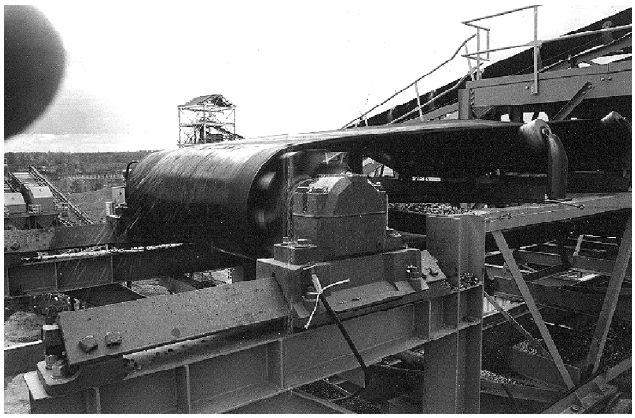
TAF Is A Cost Saving Alternative To SAF Spherical Bearings

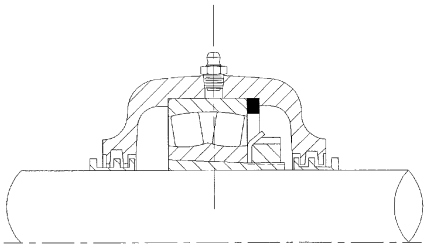
Mounts Fast, Stays Cleaner And Extends Service Life

- **Shaft ready** - mounts six times faster than SAF
- Interchangeable with SAF style pillow blocks
- Self-aligning, factory assembled, adjusted and lubricated
- Available in 1-7/16″ up to 7″ shaft diameters
- Equipped with expansion or non-expansion housing
- E-TECT seal option available up to 7″
- Optional Smart Housings accomodate speed, vibration and temperature sensor kits



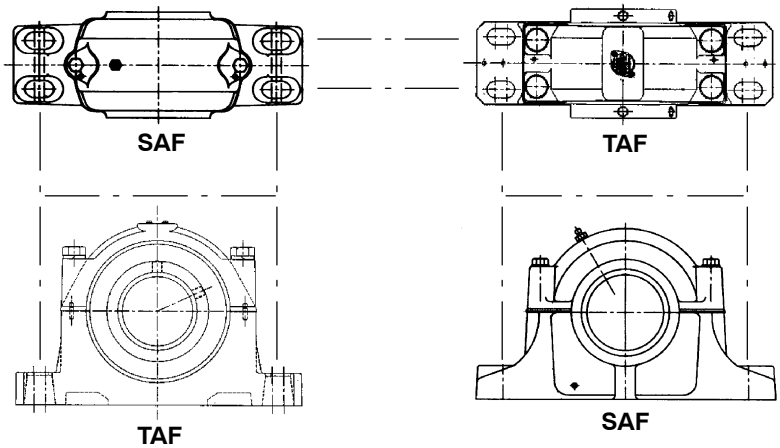
TAF
Self-alignment provided by spherically machined housing.





SAF
Self-alignment provided by insert, limited by seal interference.

TAF Is Interchangeable With SAF Mounting Dimensions



Type K/DOUBLE–INTERLOCK/TAF

DODGE Bearings Save You Time And Money

Compare These DODGE TAF, Type K & DOUBLE-INTERLOCK Bearing Advantages Against Standard SAF Pillow Blocks

Standard SAF

- Four prices
- Up to six packages
- Open bearing
- Feeler gauge required
- Grease required

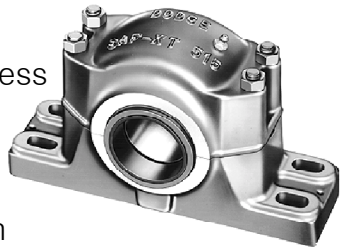
DODGE TAF, Type K and DOUBLE-INTERLOCK

- One price
- Sealed bearing
- Factory adjusted
- Factory lubricated
- **Shaft ready**

Compare Standard SAF and DODGE Sealing Designs

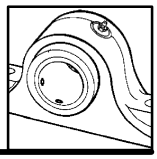
STANDARD SAF

- Seals ride independently of bearing
- Less than 1° static misalignment
- Sealing effectiveness decreases as misalignment increases
- Seals distort when misalignment occurs



DODGE TAF, TYPE K, DOUBLE-INTERLOCK

- Inner unit carries seal
- Up to 5° static misalignment
- Seal and bearing ride together in inner unit
- Seals maintain contact on cones even with misalignment



Type E, Type K, DOUBLE–INTERLOCK and TAF

Type E, Type K, DOUBLE-INTERLOCK and TAF mounted bearings are all general purpose high capacity tapered roller bearings capable of handling any combination of radial and thrust load within the capacity of the bearing.

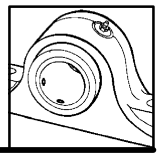
All of these bearings are mounted to the shaft by means of set screw collars having 65 degree set screw spacing for optimum clamping force. The Type E, DOUBLE-INTERLOCK, and TAF mounted bearings have a locking collar at each end of their extended inner races. Type K has a single locking collar. The tapered roller bearings for these mounted bearings all have case carburized inner races (cones), outer races (cups), and rollers.

Bearings are preassembled, prelubricated and factory adjusted. They are normally equipped with land riding contact type seals with a metal deflector guard.

The standard housing material for most of these mounted bearings is ASTM A48 Class 30 Iron having a minimum tensile strength of 30,000 psi. The outer housing for the Type K and DOUBLE-INTERLOCK flange bearings thru 4″ bore size utilize housings made of ductile iron (ASTM A536 Grade 65-45-12) with 65,000 psi tensile strength. Type E pillow blocks are also available with cast steel housing having a tensile strength of 70,000 psi for 2 bolt base thru 3-1/2″ bore size and 4 bolt base from 3-15/16″ thru 5″ bore size on an assembled or order basis.

The Type K, DOUBLE-INTERLOCK pillow blocks and flange bearings plus the TAF pillow blocks all have split outer housings used with completely assembled, lubricated and adjusted inner units simplifying replacement of the bearing in the pillow block or flange bearing. All Type E mounted bearings, Type K take up units and all D units, S-1 units, and B-1 units have solid one piece housings.

SELECTION/DIMENSIONS TYPE E PAGE B5–11/B5–22	SELECTION/DIMENSIONS TYPE K PAGE B5–11/B5–34	SELECTION/DIMENSIONS DOUBLE-INTERLOCK PAGE B5–11/B5–44	SELECTION/DIMENSIONS TAF PAGE B5–11/B5–52



Type E, Type K, DOUBLE–INTERLOCK and TAF

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 ensures accurate order processing.

When part numbers are not shown, the product may be specified by description or part name. This method is used when ordering units that include modifications or options. To order by description, use the nomenclature key shown on page B5–10 and add any special instructions to the end of the description for options not covered by the nomenclature.

SPECIAL BEARING REQUIREMENTS AND SPECIAL LUBRICANTS

DODGE Bearings are factory adjusted and pre-lubricated. For applications where extreme ambient temperatures, high speeds or high loads are expected, a variety of specialty lubricants and adjustments are available. Standard grease provided is Shell Alvania #2 up to 5″, 125mm bore. Above 5″ bore Mobil Mobilux #2EP is standard. High temperature greases available include Moluballoy 896 HT and Mobilith SHC460. Other special lubricatns are available upon request. Special lubricant options usually involve set-up charges and premiums. To order, specify type of lubricant required at the end of the product name or after the standard part number.

Example:

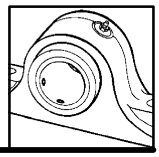
F4B-E-207 except with Mobilith SHC 460 grease and .012 to .015 lateral end play

or

023106 except with Mobilith SHC 460 grease and .012 to .015 lateral end play

OTHER SPECIAL REQUIREMENTS NOT LISTED

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



HOW TO ORDER

TAF Smart Stock Selections *

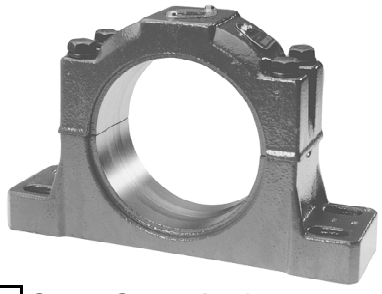
STEP 1: Pick an S1 unit

Shaft Size	Series	Standard Housing Part Numbers If you are monitoring speed only	Drilled Housing Part Numbers For temperature and/or vibration
		Part #	Part #
207	515	**037548**	**053067**
215	517	**037550**	**053628**
317	520	**037551**	**067350**
315	522	**037552**	**054960**
407	526	**037553**	**067352**
415	528	**037554**	**067353**
515	534	**042630**	**067357**
615	538	**042634**	**067234**

When **speed** only will be monitored, select the standard housing.

When **vibration**, and/or **temperature** will be monitored, select the drilled housing.

All housing part numbers shown are 4 bolt base, non expansion.



STEP 2: Pick an S1 unit

Shaft Size	S1 Unit
207	055805
215	055806
307	055807
315	049235
407	055915
415	055840
515	067356
615	067323

Smart S–1 units feature:

Embedded thermocouple drilled and tapped holes for prox covers
Special locking collar with prox targets

STEP 3: The sensor choices

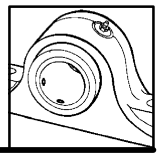
Prox covers		
Shaft Size	**Housing Series**	**Part Number**
207	**515**	**067340**
215	**517**	**067342**
307	**520**	**067343**
315	**522**	**067344**
407	**516**	**067345**
415	**528**	**067346**
515	534	**067347**
615	538	**067348**

*Contact Dodge for sizes not shown

OR For **speed** monitoring, use AC prox and prox cover.
AND/OR DC prox and prox cover.
OR For **temperature** monitoring, use thermocouple transmitter.
For **speed, temperature** and **vibration** monitoring, use EZLINK.
If you want to monitor **speed** through EZLINK,, you'll **also** need to order a cable connector kit, the DC prox, and a prox cover.

TAF Sensor Kits	Part Number
AC Prox	**055943**
DC Prox	**055948**
Thermocouple Transmitter	**055931**
EZLINK	**063636**
Cable Connector Kit	**063694**

SELECTION/DIMENSIONS TYPE E PAGE B5–11/B5–22	SELECTION/DIMENSIONS TYPE K PAGE B5–11/B5–34	SELECTION/DIMENSIONS DOUBLE-INTERLOCK PAGE B5–11/B5–44	SELECTION/DIMENSIONS TAF PAGE B5–11/B5–52



Type E, Type K, DOUBLE–INTERLOCK and TAF

NOMENCLATURE

P2B – D I – 207 – RE*

HOUSING STYLE OPTIONS

- P2B=PILLOW BLOCK 2 BOLT, CAST IRON
- P4B=PILLOW BLOCK 4 BOLT, CAST IRON
- SP2B=PILLOW BLOCK 2 BOLT, CAST STEEL
- SP4B=PILLOW BLOCK 4 BOLT, CAST STEEL
- F4B=FLANGE BEARING 4 BOLT, CAST IRON
- FC=PILOTED FLANGE BEARING (FLANGED CARTRIDGE)
- B1U=B-1 UNIT, CAST IRON
- DU=D UNIT, CAST IRON
- S1U=S-1 UNIT, CAST IRON
- WSTU=WIDE SLOT TAKE UP BEARING, CAST IRON
- TP=TOP ANGLE TAKE UP BEARING, CAST IRON
- H2S=PILLOW BLOCK HOUSING ONLY 2 BOLT, CAST IRON
- H4S=PILLOW BLOCK HOUSING 4 BOLT, CAST IRON

BEARING TYPE OPTIONS

- E=TYPE E
- K=TYPE K
- DI=DOUBLE-INTERLOCK
- TAF=TAF

SIZE

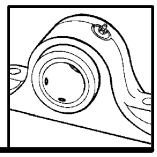
INCHES & 16TH
2=2 INCHES
07=7/16 INCHES
OR
207=2-7/16″

METRIC
060M=60 MILLIMETERS

OTHER OPTIONS

- R=LAND RIDING RUBBING SEAL
- T= E TECT SEAL
- E=EXPANSION TYPE BEARING. IF E DOES NOT APPEAR AFTER SEAL TYPE, THEN BEARING IS NON-EXPANSION TYPE
- SMART = DRILLED FOR SENSOR KITS

SELECTION/DIMENSIONS TYPE E PAGE B5–11/B5–22	SELECTION/DIMENSIONS TYPE K PAGE B5–11/B5–34	SELECTION/DIMENSIONS DOUBLE-INTERLOCK PAGE B5–11/B5–44	SELECTION/DIMENSIONS TAF PAGE B5–11/B5–52



Type E, Type K, DOUBLE–INTERLOCK And TAF Tapered Roller Bearings

DODGE Type E, K, DI and TAF Double Row Tapered 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 tapered roller bearings have been applied successfully even when these limits have been exceeded under controlled operating conditions. Contact DODGE Application Engineering (864) 297-4800 for applications which exceed the recommendations of this catalog.

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

$$L10 = \left(\frac{C_{90}}{P}\right)^{10/3} x \left(\frac{1,500,000}{RPM}\right)$$

Where: C_{90} = Dynamic Capacity (Table 1, pg.B5–14), 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. 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 for pillow blocks. The maximum thrust load should not exceed values shown on Table 3. Where substantial radial load is also present, it is advisable to calculate actual L_{10} life to assure that it meets the requirements. The effectiveness of the shaft attachment to carry thrust load depends on proper tightening of the setscrews, shaft tolerance and shaft deflections. Therefore, it is advisable to use auxiliary thrust carrying devices such as shaft shoulder, snap ring or a thrust collar to locate the bearing under thrust loads heavier than shown below, or where extreme reliability is desired.

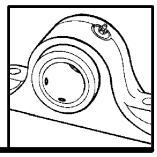
RPM RANGE		20-200	201-2000	over 2000
RECOMMENDED	E, DI, TAF	$C_{90}/4$	$C_{90}/8$	$C_{90}/12$
THRUST LOAD	K	$C_{90}/5$	$C_{90}/8$	$C_{90}/12$

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

The magnitude and direction of both the thrust and radial load must be taken into account when selecting a housing. **When pillow blocks are utilized, heavy loads should be directed through the base. Where uplift loads are involved, see Tables 6, 7, and, pg.B5–19 for maximum values**. Where a load pulls the housing away from the mounting base, both the hold-down bolts and housing must be of adequate strength. Auxiliary load carrying devices such as shear bars are advisable for side or end loading of pillow blocks and radial load for flange units.

SHAFT SIZE	TOLERANCE, INCHES
UP TO 1-1/2″	+.0000-.0005″
1-5/8 TO 4	+.000 -.001″
4-7/6 TO 6	+.000-.0015″
6-7/16-8″	+.000-.002″

NOTE: The L_{10} life calculated using the above formula is subject to life adjustment factors in accordance with ABMA standards described on page B14–45.



Type E, Type K, DOUBLE–INTERLOCK And TAF Tapered Roller Bearings

SELECTING BEARINGS SUPPORTING RADIAL LOADS ONLY

1. Define L_{10} Life Hours desired.

2. Establish bearing radial load, F_R (F_R = P for Pure Radial Load Conditions). The DODGE program BEST™* can be used to find application loads.

3. Establish RPM.

Using the easy selection Table 2, pg. B5–15 find, under the RPM column, 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.

Example: 1. L_{10} Life = 30,000 Hours
2. Radial load = 3800 lbs.
3. RPM = 1,000

At the intersection of the 1,000 RPM column and the 30,000 hours L_{10} life row, the equivalent radial load of 3910 lbs. exceeds the 3800 lbs. radial load for shaft sizes 2-11/16″-3″. A bearing with bore ranging from 2-11/16″ to 3″ may be used for this application.

ALTERNATE METHOD A --- SELECTING A BEARING FOR AN L10 LIFE VALUE NOT SHOWN IN THE EASY SELECTION CHART.

The L_{10} life equation can be rearranged so that the bearing dynamic capacity $\mathbf{C_{90}}$ is identified in terms of L_{10}, RPM and P.

$$C_{90} = \left(\frac{L_{10} \times RPM}{1,500,000}\right)^{0.3} \times P$$

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

Since the L_{10}, RPM, and P are known, solve for C_{90}. Select from the dynamic capacity column on Table 1, pg.B5–14 the C_{90} value equal to or greater than the C_{90} value just calculated. The bore size on the far left represents the bore size selection. Check that the application RPM does not exceed the MAX. RPM on Table 1. Also check that the radial load does not exceed the Maximum Allowable Slip Fit Radial Load shown on Table 1. If it does, a line to line to light press fit of shaft is required. When selecting an L_{10} life of less than 30,000 hours, particular attention must be paid to shaft deflection and proper lubricant selection.

SELECTING BEARINGS SUPPORTING COMBINATION RADIAL AND THRUST LOADS

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

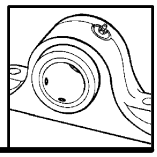
The equivalent radial load $P = XF_R + YF_A$

Where: P= Equivalent radial load, lbs.
F_R= Radial load, lbs.(see Table 1 for allowable slip fit maximum)
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)

To find X and Y, calculate F_A/F_R and compare to **e** for the selected bore size. Determine X and Y from Table 1, pg. B5–14 depending on whether F_A/F_R is equal to or less than **e**, or F_A/F_R is greater than **e**. Substitute all known values into the equivalent radial load equation. P (equivalent radial load) can be used in the life formula to determine L_{10}, or it can be compared to the allowable equivalent radial load ratings for the speed and hours life desired in the easy selection Table 2, pg. B5–15.

*The DODGE Bearing Evaluation and Selection Technique (BEST) is a menu driven computer program that calculates bearing loads, fatigue life and operating temperature for a two bearing shaft system based on user supplied input parameters. To order, call (864) 287-4800.

SELECTION/DIMENSIONS TYPE E PAGE B5–11/B5–22	SELECTION/DIMENSIONS TYPE K PAGE B5–11/B5–34	SELECTION/DIMENSIONS DOUBLE-INTERLOCK PAGE B5–11/B5–44	SELECTION/DIMENSIONS TAF PAGE B5–11/B5–52



Type E, Type K, DOUBLE–INTERLOCK and TAF

SELECTING BEARINGS SUPPORTING ONLY THRUST LOADS

Tapered Roller Bearings perform extremely well under pure thrust load applications. Use $P = YF_A$ for the equivalent radial load. The value of Y is obtained from Table 1, pg. B5–14 for $F_A/F_R > \mathbf{e}$. Substitute Y and F_A into the equivalent load equation. P (equivalent radial load) can be used in the life formula to determine L_{10} or it can be compared to the allowable equivalent radial load ratings for the speed and hours life desired in the easy selection Table 2, pg. B5–15.

LUBRICATION

DODGE E, K, DI, and TAF tapered roller bearings up to 5″ bore are lubricated at the factory with Shell Alvania #2 grease. Above 5″ bore they are lubricated with Mobil Mobilux #2EP. Shell Alvania #2 and Mobil Mobilux #2EP greases are superior industrial greases using a lithium hydroxystearate thickener and highly refined base oil. These greases will adequately handle low and medium speeds with low and medium loads at normal temperatures as defined on Table 5, pg.B5–18. For very low and high speeds, for heavy loads and for low and high temperatures, special greases must be used. Contact DODGE Application Engineering (864) 297-4800. DODGE engineers will recommend bearings and lubricants for the above unusual conditions. DODGE also has the expertise to custom design and build special bearings for your needs. The only maintenance requirement for DODGE Tapered Roller Bearings is periodic relubrication at regular intervals as outlined in the appropriate instruction manuals.

RELUBRICATION SCHEDULE

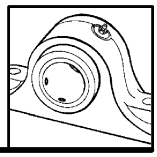
Hours Run per Day	SUGGESTED LUBRICATION PERIOD IN WEEKS							
	1 to 250 RPM	251 to 500 RPM	501 to 750 RPM	751 to 1000 RPM	1001 to 1500 RPM	1501 to 2000 RPM	2001 to 2500 RPM	2501 to 3000 RPM
8	12	12	10	7	5	4	3	2
16	12	7	5	4	2	2	2	1
24	10	5	3	2	1	1	1	1

High Speed Operation --- In the higher speed ranges too much grease will cause overheating. The amount of grease that the bearing will take for particular high speed application can only be determined by experience --- see “Operating Temperature” below. If excess grease in the bearing caused overheating, it will be necessary to remove grease fitting (also drain plug when furnished) to permit excess grease to escape. When establishing a relubrication schedule, note that a small amount of grease at frequent intervals is preferable to a large amount at infrequent intervals.

Operation in Presence of Dust, Water or Corrosive Vapors --- Under these conditions the bearing should contain as much grease as speed will permit, since a full bearing with consequent slight leakage is the best protection against entrance of foreign material. In the higher speed ranges too much grease will cause overheating --- see “High Speed Operation”. In the lower speed ranges, it is advisable to add extra grease to a new bearing before putting into operation. Bearings should be greased as often as necessary (daily if required) to maintain a slight leakage at the seals.

INSTALLATION AND MAINTENANCE

In nearly all applications good design practice requires two bearings supporting the shaft. In cases where three or more bearings are installed, unless precautions are taken to line the bearings up, both vertically and horizontally, it is possible to induce heavy loads. In the case of two bearings, alignment is not as critical, especially with DODGE K, DI, and TAF Tapered Roller Bearings. K, DI, and TAF bearings are designed to allow as much as 2° to 7° of static misalignment depending on bore size. To ensure good alignment, mounting surfaces must be checked for flatness and must lie in the same plane. When tightening base bolts and cap bolts, each bolt should be alternately tightened in incremental torque values until full torque is achieved to prevent the angular shifting of the pillow block that occurs when one bolt is tightened to its full torque. Shimming may be required to minimize misalignment.



Type E, Type K, DOUBLE–INTERLOCK and TAF

TABLE 1 – E, K, DI, AND TAF TAPERED ROLLER BEARINGS RADIAL AND THRUST FACTORS

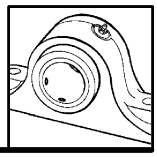
SHAFT SIZE	e	$F_A/F_R \leq e$		$F_A/F_R > e$		DYNAMIC CAPACITY C_{90}*		MAXIMUM RPM	MAXIMUM RPM	MAXIMUM ALLOWABLE SLIP FIT RADIAL LOAD, F_R **, LBS	
		X	Y	X	Y	LBS.	NEWTONS	R-SEAL	E-TECT	E,DI,&TAF	K
1-3/16 1-1/4	.49	.87	1.77	.70	2.14	2,980	13,260	4,490	3,100	3,100	2,100
1-3/8 1-7/16	.46	.87	1.89	.70	2.28	4,760	21,180	3,820	2,675	5,000	3,300
1-1/2 1 5/8 1-11/16	.44	.87	1.96	.70	2.37	6,140	27,320	3,320	2,325	6,400	4,300
1-3/4 1-7/8 1-15/16 2	.33	.87	2.64	.70	3.18	8,070	35,908	3,050	2,135	8,400	5,600
2-3/16	.36	.87	2.38	.70	2.87	8,550	38,044	2,730	1,900	8,900	5,900
2-1/4 2-7/16 2-1/2	.40	.87	2.17	.70	2.63	9,090	40,447	2,420	1,700	9,500	6,300
2-11/16 2-3/4 2-15/16 3	.46	.87	1.87	.70	2.26	9,600	42,716	2,060	1,440	10,000	6,700
3-3/16 3-1/4 3-7/16 3-1/2	.50	.87	1.71	.70	2.07	15,300	68,078	1,640	1,145	16,000	10,500
3-15/16 4	.49	.87	1.77	.70	2.14	21,000	93,440	1,530	1,070	22,000	14,600
4-7/16 4-1/2	.53	.87	1.63	.70	1.97	25,800	114,799	1,360	950	27,000	----
4-15/16 5	.47	.87	1.83	.70	2.21	35,500	157,959	1,200	840	35,000	----
5-7/16 5-15/16 6	.49	.87	1.76	.70	2.12	40,700	181,097	915	640	42,400	----
6-7/16 6-1/2 6-15/16 7	.54	.87	1.61	.70	1.95	69,200	307,910	790	550	72,000	----

Comparing Spherical To Taper Roller Bearings: 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.

* C_{90} – Dynamic capacity based on a rated life of 90 million revolutions or 3000 hours at 500 RPM.

** If load exceeds maximum allowable slip fit radial load, (F_R), line-to-line, to light press fit of shaft required. Application up to maximum slip fit radial load may be applied if recommended shaft tolerances are used.

SELECTION/DIMENSIONS TYPE E PAGE B5–11/B5–22	SELECTION/DIMENSIONS TYPE K PAGE B5–11/B5–34	SELECTION/DIMENSIONS DOUBLE-INTERLOCK PAGE B5–11/B5–44	SELECTION/DIMENSIONS TAF PAGE B5–11/B5–52



Type E, Type K, DOUBLE–INTERLOCK and TAF

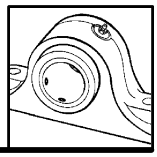
TABLE 2 – EASY SELECTION TABLE TYPE E, K, DI, AND TAF

Shaft Size	L10 Hours Life	Allowable Equivalent Radial Load Rating (Lbs.) at Various Revolutions Per Minute														
		50	100	150	250	500	750	1000	1250	1500	1750	2000	2500	2700	3000	3500
	10,000	4145	3365	2980	2555	2075	1840	1685	1575	1495	1425	1370	1280	1250	1215	1160
1-3/16	**30,000**	**2980**	**2420**	**2145**	**1840**	**1495**	**1320**	**1215**	**1135**	**1075**	**1025**	**985**	**920**	**900**	**870**	**835**
1-1/4	40,000	2735	2220	1965	1685	1370	1215	1110	1010	985	940	905	845	825	800	765
	60,000	2420	1965	1740	1495	1215	1075	985	920	870	835	800	750	730	710	675
	100,000	2075	1685	1495	1280	1040	920	845	790	750	715	685	640	625	610	580
	10,000	6620	5375	4760	4085	3315	2935	2695	2520	2385	2275	2190	2045	2000	1935	1850
1-3/8	**30,000**	**4760**	**3865**	**3425**	**2935**	**2385**	**2110**	**1935**	**1810**	**1715**	**1640**	**1575**	**1470**	**1440**	**1395**	**1330**
1-7/16	40,000	4365	3545	3140	2695	2190	1935	1775	1660	1575	1500	1445	1350	1320	1280	1220
	60,000	3865	3140	2780	2385	1935	1715	1575	1470	1395	1330	1280	1195	1170	1130	1080
	100,000	3315	2695	2385	2045	1660	1470	1350	1260	1195	1140	1095	1025	1000	970	925
	10,000	8535	6935	6140	5265	4280	3790	3475	3250	3075	2940	2820	2640	2580	2500	
1-1/2	**30,000**	**6140**	**4985**	**4415**	**3790**	**3075**	**2725**	**2500**	**2335**	**2215**	**2115**	**2030**	**1900**	**1855**	**1795**	
1-5/8	40,000	5630	4575	4050	3475	2820	2500	2290	2145	2030	1940	1860	1740	1700	1650	
1-11/16	60,000	4985	4050	3585	3075	2500	2215	2030	1900	1795	1715	1650	1540	1505	1460	
	100,000	4280	3475	3075	2640	2145	1900	1740	1630	1540	1470	1415	1325	1290	1250	
	10,000	11220	9115	8070	6925	5625	4980	4565	4270	4045	3860	3710	3470	3390	3285	
1-3/4	**30,000**	**8070**	**6555**	**5805**	**4980**	**4045**	**3580**	**3285**	**3070**	**2910**	**2775**	**2670**	**2495**	**2440**	**2360**	
1-7/8	40,000	7400	6010	5325	4565	3710	3285	3015	2820	2670	2545	2445	2290	2235	2165	
1-15/16	60,000	6555	5325	4715	4045	3285	2910	2670	2495	2360	2255	2165	2025	1980	1920	
2	100,000	5625	4565	4045	3470	2820	2495	2290	2140	2025	1935	1860	1740	1700	1645	
	10,000	11885	9655	8550	7335	5960	5275	4840	4525	4285	4090	3930	3675	2590		
	30,000	**8550**	**6945**	**6150**	**5275**	**4285**	**3795**	**3480**	**3255**	**3080**	**2940**	**2825**	**2645**	**2585**		
2-3/16	40,000	7845	6370	5640	4840	3930	3480	3190	2985	2825	2700	2595	2425	2370		
	60,000	6945	5640	4995	4285	3480	3080	2825	2645	2505	2390	2295	2145	2100		
	100,000	5960	4840	4285	3675	2985	2645	2425	2270	2145	2050	1970	1840	1800		
	10,000	12640	10265	9090	7800	6335	5610	5145	4810	4555	4350	4180	3910			
2-1/4	**30,000**	**9090**	**7385**	**6535**	**5610**	**4555**	**4035**	**3700**	**3460**	**3275**	**3130**	**3005**	**2810**			
2-7/16	40,000	8340	6770	5995	5145	4180	3700	3395	3175	3005	2870	2755	2580			
2-1/2	60,000	7385	5995	5310	4555	3700	3275	3005	2810	2660	2540	2440	2285			
	100,000	6335	5145	4555	3910	3175	2810	2580	2410	2285	2180	2095	1960			

For maximum RPM see Table 1 on page B5–14.

In the shaded area, E, DI, and TAF mounted units require a line-to-line to light press fit of shaft.

In the boxed area, Type K mounted units require a line-to-line to light press fit of shaft.



Type E, Type K, DOUBLE–INTERLOCK and TAF

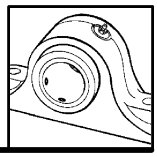
TABLE 2 (continued) – EASY SELECTION TABLE TYPE E, K, DI, AND TAF

Shaft Size	L10 Hours Life	Allowable Equivalent Radial Load Rating (Lbs.) at Various Revolutions Per Minute														
		50	100	150	250	500	750	1000	1250	1500	1750	2000	2500	2700	3000	3500
2-11/16 2-3/4 2-15/16 3	10,000	13345	10840	9600	8235	6690	5925	5435	5080	4810	4595	4415				
	30,000	**9600**	**7795**	**6905**	**5925**	**4810**	**4260**	**3910**	**3655**	**3460**	**3305**	**3175**				
	40.000	8805	7150	6335	5435	4415	3910	3585	3350	3175	3030	2910				
	60,000	7795	6335	5610	4810	3910	3460	3175	2970	2810	2685	2580				
	100,000	6690	5435	4810	4125	3350	2970	2725	2545	2410	2300	2210				
3-3/16 3-1/4 3-7/16 3-1/2	10,000	21370	17280	15300	13125	10665	9440	8660	8100	7670	7320					
	30,000	**15300**	**12425**	**11005**	**9440**	**7670**	**6790**	**7230**	**5825**	**5515**	**5625**					
	40.000	14035	11400	10095	8660	7035	5230	5715	5345	5060	4830					
	60,000	12425	10095	8940	7670	6230	5515	5060	4730	4480	4275					
	100,000	10660	8660	7670	6580	5345	4730	4340	4060	3845	3670					
3-15/16 4	10,000	29200	23715	21000	18015	14635	12955	11885	11115	10525						
	30,000	**21000**	**17055**	**15105**	**12955**	**10525**	**9320**	**8550**	**7995**	**7570**						
	40.000	19265	15645	13855	11885	9655	8550	7840	7335	6945						
	60,000	17055	13855	12270	10525	8550	7570	6945	6495	6150						
	100,000	14635	11885	10525	9030	7335	6495	5955	5570	5275						
4-7/16 4-1/2	10,000	35870	29135	25800	22135	17980	15920	14605	13655							
	30,000	**25800**	**20955**	**18555**	**15920**	**12930**	**11450**	**10500**	**9820**							
	40,000	23665	19225	17020	14605	11860	10500	9635	9010							
	60,000	20955	17020	15070	12930	10500	9300	8530	7980							
	100,000	17980	14605	12930	11095	9010	7980	7320	6845							
4-15/16 5	10,000	49360	40090	35500	30455	24740	21905	20095	18790							
	30,000	**35500**	**28835**	**25530**	**21905**	**17790**	**15755**	**14450**	**13515**							
	40,000	32565	26450	23420	20095	16320	14550	13255	12400							
	60,000	28835	23420	20740	17790	14450	12795	11740	10980							
	100,000	24740	20095	17790	15265	12400	10980	10070	9420							
5-7/16 5-15/16 6	10,000	56590	45965	40700	34915	28360	25115	23035								
	30,000	**40700**	**33060**	**29270**	**25115**	**20400**	**18060**	**16570**								
	40,000	37335	30325	26850	23035	18710	16570	15200								
	60,000	33060	26850	23775	20400	16570	14670	13455								
	100,000	28360	23035	20400	17500	14215	12585	11545								
6-7/16 6-1/2 6-15/16 7	10,000	96215	78150	69200	59365	48220	42700									
	30,000	**69200**	**56205**	**49770**	**42700**	**34680**	**30710**									
	40.000	63480	51560	45655	39170	31815	28170									
	60,000	56205	45655	40425	34680	28170	24945									
	100,000	48220	39170	34680	29755	24170	21400									

For maximum RPM see Table 1 on page B5–14.

In the shaded area, E, DI, and TAF mounted units require a line-to-line to light press fit of shaft.

In the boxed area, Type K mounted units require a line-to-line to light press fit of shaft.



Type E, Type K, DOUBLE–INTERLOCK and TAF

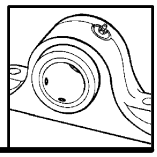
TABLE 3 – PERMISSIBLE THRUST LOAD, LBS. *

SHAFT SIZE INCHES	*E		K/DI		TAF	
	2-Bolt	4-Bolt	2-Bolt	4-Bolt	2-Bolt	4-Bolt
1-3/16	2000		2000			
1-1/4	2000		2000			
1-3/8	2590		2100			
1-7/16	2590		2100		2100	
1-1/2	2590		2100			
1-5/8	2590		2100			
1-11/16	2590		2100		2100	
1-3/4	3454		2900			
1-7/8	3454		2900			
1-15/16	3454		2900		2900	
2	3454		2900			
2-3/16	3454		2900		2900	
2-1/4	3454	3454	3454	3454		
2-7/16	3454	3454	3454	3454	3454	3454
2-1/2	3454	3454	3454	3454	3454	3454
2-11/16	5181	5181	5181	5181	5181	
2-3/4	5181	5181	5181	5181	5181	
2-15/16	5181	5181	5181	5181	5181	5181
3	5181	5181	5181	5181	5181	5181
3-3/16	5181	5181	5181	5181		
3-1/4	5181	5181	5181	5181		
3-7/16	5181	5181	5181	5181	5181	5181
3-1/2	5181	5181	5181	5181	5181	5181
3-15/16		6908		6908		6908
4		6908		6908		6908
4-7/16		6908		6908		6908
4-1/2		6908		6908		6908
4-15/16		6908		6908		6908
5		6908		6908		6908
5-7/16		8635		8635		8635
5-15/16		8635		8635		8635
6		8635		8635		8635
6-7/16		8635		12282		12282
6-1/2		8635		12282		12282
6-15/16		8635		12282		12282
7		8635		12282		12282

Note: The limits above apply to set screw shaft mounting or pillow block over turning force. Under heavy thrust loads it is always wise to use shear bars. At all times the L10 life of the bearing should be checked for proper selection and life requirements. For thrust loads larger than listed or heavy thrus loading on other style housing, contact DODGE Engineering for recommendation.

* Does not include Piloted Flange.

SELECTION/DIMENSIONS TYPE E PAGE B5–11/B5–22	SELECTION/DIMENSIONS TYPE K PAGE B5–11/B5–34	SELECTION/DIMENSIONS DOUBLE-INTERLOCK PAGE B5–11/B5–44	SELECTION/DIMENSIONS TAF PAGE B5–11/B5–52



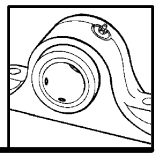
Type E, Type K, DOUBLE–INTERLOCK and TAF

TABLE 4 – K, DI, AND TAF MAXIMUM AXIAL EXPANSION (INCHES)

Bore Size (INCHES)	Type K DOUBLE-INTERLOCK		TAF
	Pillow Block	Flange	
1-3/16 - 1-1/4	.252	--	--
1-3/8 - 1-7/16	.188	.187	.188
1-1/2 - 1-11/16	.188	.187	.188
1-3/4 - 2	.562	.187	.562
2-3/16	.562	.138	.562
2-1/4 - 2-1/2	.562	.312	.562
2-11/16 - 3	.562	.312	.562
3-3/16 - 3-1/2	.562	.312	.562
3-15/16 - 4	.674	.312	.674
4-7/16 - 4-1/2	.674	.812	.674
4-15/16 - 5	.674	.812	.674
5-7/16 - 6	.500	--	.875
6-7/16 - 7	.500	--	.875

TABLE 5 – DEFINITION OF OPERATING CONDITIONS FOR TAPERED ROLLER BEARINGS

LOW SPEED	UP TO 20% OF MAX. RPM (TABLE 1)
MEDIUM SPEED	OVER 20% TO 80% OF MAX. RPM
HIGH SPEED	OVER 80% OF MAX. RPM
LIGHT LOAD	UP TO 30% OF C_{90} (TABLE 1)
NORMAL LOAD	OVER 30% TO 70% OF C_{90}
HEAVY LOAD	OVER 70% OF C_{90}
LOW TEMPERATURE	–100°F TO 20°F
MEDIUM TEMPERATURE	OVER 20°F TO 200°F
HIGH TEMPERATURE	OVER 200°F TO 300°F
VERY HIGH TEMPERATURE	OVER 300°F TO 450°F



Type E, Type K, DOUBLE–INTERLOCK and TAF

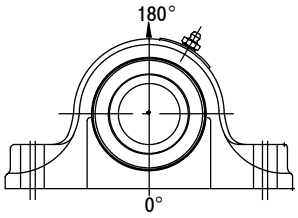
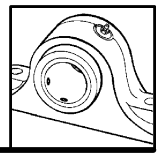


TABLE 6 – HOUSING RATINGS – TYPE E (SOLID HOUSING)

SHAFT SIZE (INCHES)	MAXIMUM RECOMMENDED HOUSING CAP LOADS, LBS. GRAY IRON 180°
1-3/16 - 1-1/4	1,600
1-3/8 - 1-7/16	3,150
1-1/2 - 1-11/16	3,000
1-3/4 - 2	5,150
2-3/16	3,500
2-1/4 - 2-1/2	6,550
2-11/16 - 3	7,000
3-3/16 - 3-1/2	15,700
3-15/16 - 4	16,250
4-7/16 - 4-1/2	21,000
4-15/16 - 5	22,860
5-7/16 - 6	43,600
6-7/16 - 7	46,000

*When utilizing heavy cap loads on pillow block housings, the installation must adhere to the following procedures.
1) The pillow block base bolts must be of Grade 8 strength with hardened washers and properly tightened to the mounting structure.
2) The use of stop bars (shear strips) against 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.



Type E, Type K, DOUBLE–INTERLOCK and TAF

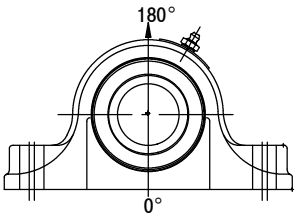


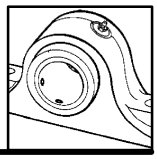
TABLE 7
HOUSING RATINGS
TYPE K AND DI HOUSING (SPLIT HOUSING)

SHAFT SIZE (INCHES)	MAXIMUM RECOMMENDED HOUSING CAP LOADS, LBS. 180°
1-3/16 - 1-1/4	4,300
1-3/8 - 1-7/16	5,060
1-1/2 - 1-11/16	5,940
1-3/4 - 2	8,660
2-3/16	10,100
2-1/4 - 2-1/2	10,100
2-11/16 - 3	11,220
3-3/16 - 3-1/2	16,170
3-15/16 - 4	19,580
4-7/16 - 4-1/2	20,130
4-15/16 - 5	24530
5-7/16 - 6	35,200
6-7/16 - 7	56,000

TABLE 8
HOUSING RATINGS
TAF (SPLIT HOUSING)

SHAFT SIZE (INCHES)	MAXIMUM RECOMMENDED HOUSING CAP LOADS, LBS. 180°
1-7/16	4,600
1-11/16	5,400
1-15/16	7,875
2-3/16	9,200
2-7/16 - 2-1/2	9,220
2-15/16 - 3	10,200
3-7/16 - 3-1/2	14,700
3-15/16 - 4	17,800
4-7/16 - 4-1/2	18,300
4-15/16 - 5	22,300
5-7/16 - 6	30,000
6-7/16 - 6-1/2	30,000
6-15/16 - 7	48,000

*When utilizing heavy cap loads on pillow block housings, the installation must adhere to the following procedures.
1) The pillow block base bolts must be of Grade 8 strength with hardened washers and properly tightened to the mounting structure.
2) The use of stop bars (shear strips) against 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.



Type E, Type K, DOUBLE–INTERLOCK and TAF

MOUNTED BEARINGS

APPLICATION DATA SHEET

Instructions: Complete all applicable information and mail or Fax to DODGE at P.O. Box 499, Greenville, SC 29620, Attn: Engineering, Fax 864-281-2317

DIST. ☐ USER ☐ OEM ☐

Company _____ Date _____

Address _____

Name _____ Phone _____ Fax _____

Type of Equipment (sketch drive on separate sheet) _____

Service Conditions:

Shaft Speed: Normal _____ Maximum _____

Loads: Radial _____ Thrust _____ Shock (frequency) _____

Shaft Size _____ Shaft Tolerance (specify if not commercial) _____

Duty Cycle: Hours/Day _____ Days/Week _____ Weeks/Year _____

Environment:

Ambient Temperature: Summer _____ °F Winter _____ °F

External Heat: Source of Heat _____

Temperature _____ °F Distance from Bearing _____

Air: Clean _____ Contaminated _____ Contamination Type _____

Gas: Clean _____ Contaminated _____ Contamination Type _____

Liquid: Type _____ Concentration _____

Other: (include washdowns) _____

Experience: (If applicable)

Type of Bearing Currently Used: _____

Life Realized _____ Type of Failure _____

Other Pertinent Data:

_____

_____

_____

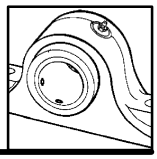
L-10 Hours Rqd: _____

Dimensional Restrictions: Centerline Height _____

Bolt Pattern _____

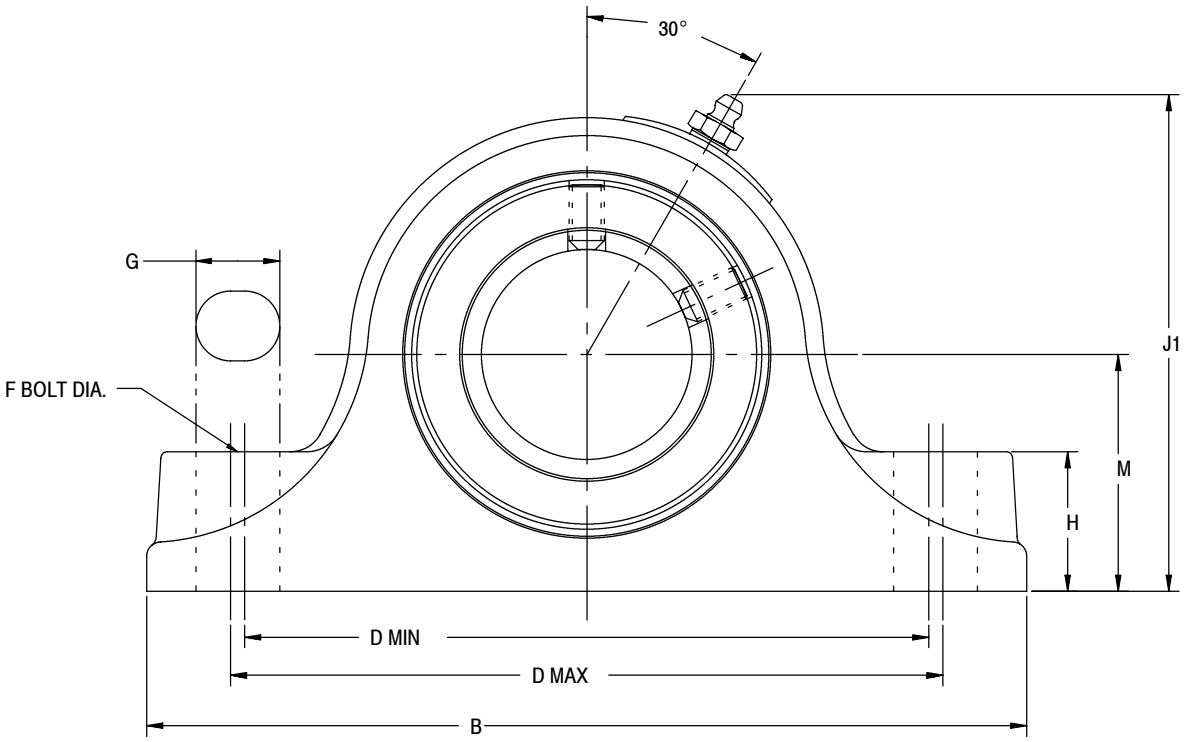
Other _____

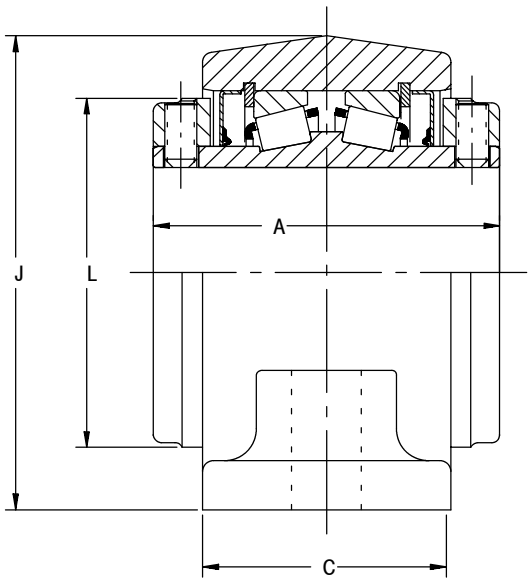
FEATURES/BENEFITS PAGE B5–2	SPECIFICATIONS PAGE B5–7	HOW TO ORDER PAGE B5–8	NOMENCLATURE PAGE B5–10



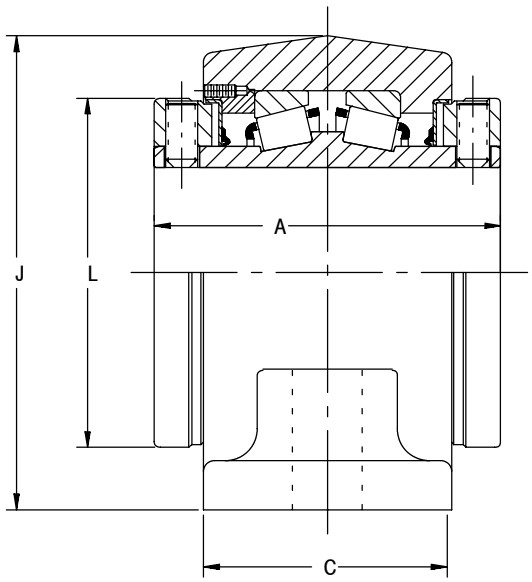
Type E Pillow Block – Inch

2-BOLT BASE



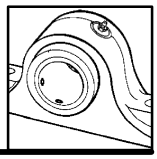


1-3/16″ THRU 3″ CONSTRUCTION



3-3/16″ THRU 3-1/2″ CONSTRUCTION

HOW TO ORDER PAGE B5–8	NOMENCLATURE PAGE B5–10	SELECTION PAGE B5–11	EASY SELECTION PAGE B5–15



Type E Pillow Block – Inch

2-BOLT BASE

GRAY IRON			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-3/16 1-1/4	**023000** **023001**	P2B-E-103R P2B-E-104R	4 4
1-3/8 1-7/16	**023002** **023003**	P2B-E-106R P2B-E-107R	7 7
1-1/2 1-5/8 1-11/16	**023004** **023005** **023006**	P2B-E-108R P2B-E-110R P2B-E-111R	10 10 10
1-3/4 1-7/8 1-15/16 2	**023007** **023008** **023009** **023010**	P2B-E-112R P2B-E-114R P2B-E-115R P2B-E-200R	12 12 12 12
2-3/16	**023011**	P2B-E-203R	15
2-1/4 2-7/16 2-1/2	**023012** **023013** **023014**	P2B-E-204R P2B-E-207R P2B-E-208R	21 20 20
2-11/16 2-3/4 2-15/16 3	**023015** **023016** **023017** **023018**	P2B-E-211R P2B-E-212R P2B-E-215R P2B-E-300R	29 28 27 27
3-3/16 3-1/4 3-7/16 3-1/2	**023019** **023020** **023021** **023022**	P2B-E-303R P2B-E-304R P2B-E-307R P2B-E-308R	48 47 46 45

Consult DODGE For Sizes Not Listed
\+ Non-stock -- Consult DODGE For Delivery

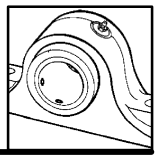
CAST STEEL			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS
1-3/16 1-1/4	**023047+** **023048+**	SP2B-E-103R SP2B-E-104R	4 4
1-3/8 1-7/16	**023049+** **023050+**	SP2B-E-106R SP2B-E-107R	7 7
1-1/2 1-5/8 1-11/16	**023051+** **023052+** **023053+**	SP2B-E-108R SP2B-E-110R SP2B-E-111R	10 10 10
1-3/4 1-7/8 1-15/16 2	**023054+** **023055+** **023056+** **023057+**	SP2B-E-112R SP2B-E-114R SP2B-E-115R SP2B-E-200R	11 11 11 11
2-3/16	**023058+**	SP2B-E-203R	14
2-1/4 2-7/16 2-1/2	**023059+** **023060** **023061+**	SP2B-E-204R SP2B-E-207R SP2B-E-208R	19 19 19
2-11/16 2-3/4 2-15/16 3	**023062+** **023063+** **023064** **023065+**	SP2B-E-211R SP2B-E-212R SP2B-E-215R SP2B-E-300R	26 26 26 26
3-3/16 3-1/4 3-7/16 3-1/2	**023066+** **023067+** **023068** **023069+**	SP2B-E-303R SP2B-E-304R SP2B-E-307R SP2B-E-308R	44 44 44 44

Consult DODGE For Sizes Not Listed.
\+ Non-stock -- Consult DODGE For Delivery

SHAFT SIZE (Inches)	A	B	C	D MIN	D MAX	F BOLT DIA	G	H	J	J1	L	M
1-3/16 1-1/4	2-3/4	6	1-7/8	4-3/4	4-13/16	3/8	19/32	7/8	3	3-9/32	2-1/4	1-1/2
1-3/8 1-7/16	3	7-3/8	2-1/8	5-5/8	5-7/8	1/2	3/4	1-1/8	3-3/4	4	2-3/4	1-7/8
1-1/2 1-5/8 1-11/16	3-3/8	7-7/8	2-3/8	6-1/8	6-3/8	1/2	3/4	1-1/4	4-1/4	4-15/32	3-3/16	2-1/8
1-3/4 1-7/8 1-15/16 2	3-1/2	8-7/8	2-1/2	6-7/8	7-1/8	5/8	7/8	1-5/16	4-1/2	4-11/16	3-7/16	2-1/4
2-3/16	3-3/4	9-5/8	2-5/8	7-5/8	7-7/8	5/8	7/8	1-1/2	5	5-11/64	3-3/4	2-1/2
2-1/4 2-7/16 2-1/2	4	10-1/2	2-7/8	8-3/8	8-5/8	5/8	7/8	1-5/8	5-1/2	5-5/8	4-1/16	2-3/4
2-11/16 2-3/4 2-15/16 3	4-1/2	12	3	9-5/16	9-11/16	3/4	1	1-7/8	6-1/4	6-11/32	4-23/32	3-1/8
3-3/16 3-1/4 3-7/16 3-1/2	5	14	3-1/2	10-13/16	11-3/16	7/8	1-3/16	2-1/4	7-1/2	7-1/2	5-17/32	3-3/4

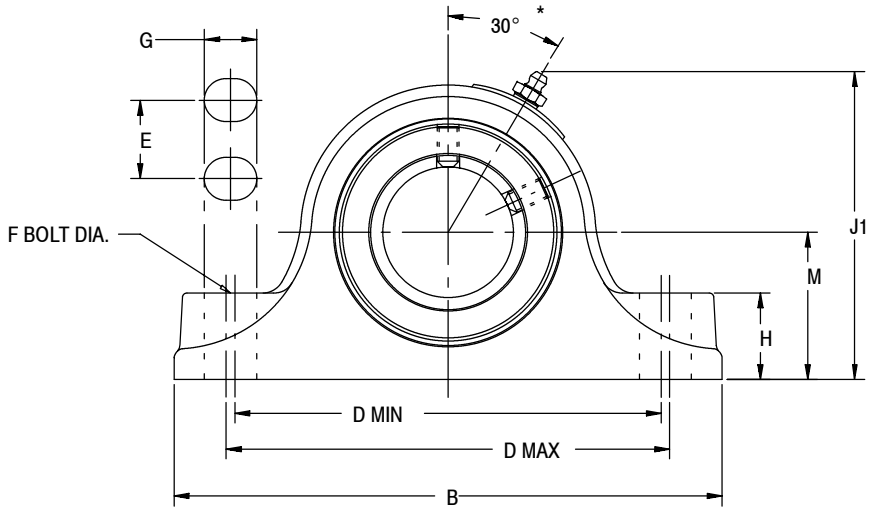
Pre–Dowel Hole Locations For Precision Positioning – See Page B9–30 – B9–31

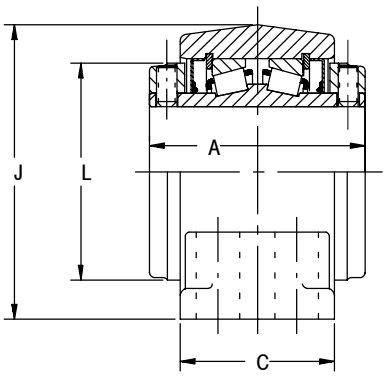
SPECIFICATION PAGE B5–11/B5–7	SELECTION/DIMENSIONS TYPE K PAGE B5–11/B5–34	SELECTION/DIMENSIONS DOUBLE-INTERLOCK PAGE B5–11/B5–44	SELECTION/DIMENSIONS TAF PAGE B5–11/B5–52



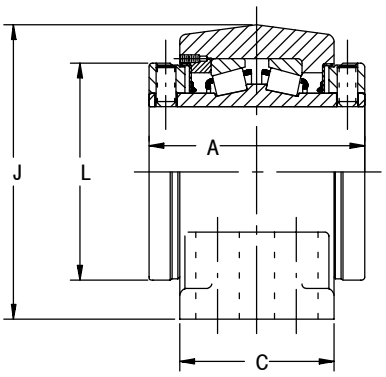
Type E Pillow Block – Inch

4-BOLT BASE

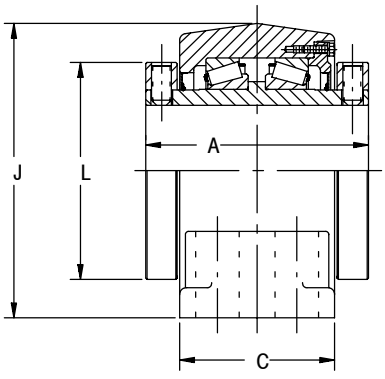




2-$^{1}/_{4}$″ THRU 3″ CONSTRUCTION



3-$^{3}/_{16}$″ THRU 5″ CONSTRUCTION

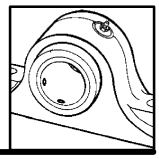


5-$^{7}/_{16}$″ THRU 7″ CONSTRUCTION

* 5-$^{7}/_{16}$″ THRU 7″ - 45°

ENGINEERING/TECHNICAL PAGE B5–17	ACCESSORIES/MODIFICATION PAGE B5–58	SELECTION / E-TECT SEALS PAGE B5–68	EASY SELECTION PAGE B5–15

DODGE®



Type E Pillow Blocks – Inch

4–BOLT BASE

GRAY IRON			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
2-1/4	**023023**	P4B-E-204R	20
2-7/16	**023024**	P4B-E-207R	20
2-1/2	**023025**	P4B-E-208R	19
2-11/16	**023026**	P4B-E-211R	30
2-3/4	**023027**	P4B-E-212R	28
2-15/16	**023028**	P4B-E-215R	28
3	**023029+**	P4B-E-300R	28
3-3/16	**023030+**	P4B-E-303R	47
3-1/4	**023031**	P4B-E-304R	47
3-7/16	**023032**	P4B-E-307R	46
3-1/2	**023033**	P4B-E-308R	45
3-15/16	**023690**	P4B-E-315R	69
4	**023691**	P4B-E-400R	69
4-7/16	**023692**	P4B-E-407R	85
4-1/2	**023693**	P4B-E-408R	85
4-15/16	**023694**	P4B-E-415R	134
5	**023695**	P4B-E-500R	133
5-7/16	**023040**	P4B-E-507R	230
5-15/16	**023041**	P4B-E-515R	250
6	**023042**	P4B-E-600R	245
6-7/16	**023043+**	P4B-E-607R	356
6-1/2	**023044**	P4B-E-608R	350
6-15/16	**023045**	P4B-E-615R	340
7	**023046+**	P4B-E-700R	335

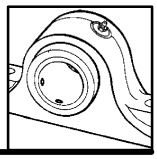
Consult DODGE For Sizes Not Listed.
+ Non-stock -- Consult DODGE For Delivery

CAST STEEL			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
2-1/4	**---------**	---------	---------
2-7/16	**---------**	---------	---------
2-1/2	**---------**	---------	---------
2-11/16	**---------**	---------	---------
2-3/4	**---------**	---------	---------
2-15/16	**---------**	---------	---------
3	**---------**	---------	---------
3-3/16	**---------**	---------	---------
3-1/4	**---------**	---------	---------
3-7/16	**---------**	---------	---------
3-1/2	**---------**	---------	---------
3-15/16	**023070**	SP4B-E-315R	65
4	**023071**	SP4B-E-400R	65
4-7/16	**023072**	SP4B-E-407R	81
4-1/2	**023073**	SP4B-E-408R	81
4-15/16	**023074**	SP4B-E-415R	132
5	**023075**	SP4B-E-500R	132
5-7/16	**---------**	---------	---------
5-15/16	**---------**	---------	---------
6	**---------**	---------	---------
6-7/16	**---------**	---------	---------
6-1/2	**---------**	---------	---------
6-15/16	**---------**	---------	---------
7	**---------**	---------	---------

Consult DODGE For Sizes Not Listed.
+ Non-stock -- Consult DODGE For Delivery

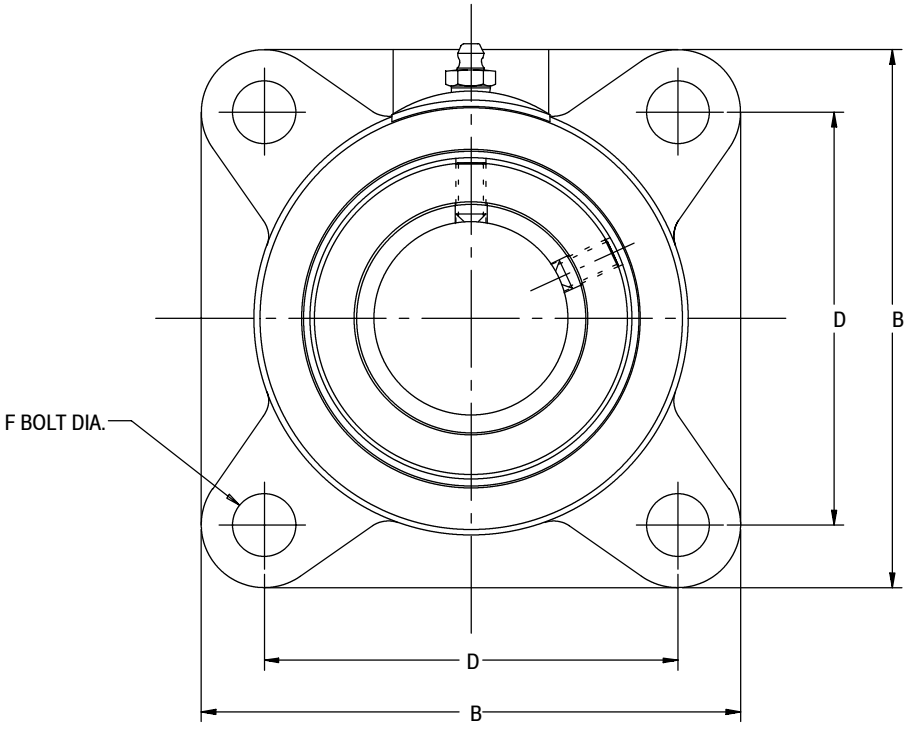
SHAFT SIZE INCHES	A	B	C*	D MIN	D MAX	E	F BOLT DIA	G	H	J	J1	L	M
2-1/4 2-7/16 2-1/2	4	10-1/2	3-1/2	8-5/16	8-11/16	1-7/8	5/8	7/8	1-5/8	5-1/2	5-5/8	4-1/16	2-3/4
2-11/16 2-3/4 2-15/16 3	4-1/2	12	4	9-3/16	9-13/16	2-1/8	5/8	1	1-7/8	6-1/4	6-11/3	4-23/32	3-1/8
3-3/16 3-1/4 3-7/16 3-1/2	5	13-1/2	4-1/2	10-3/4	11-1/4	2-3/8	3/4	1-3/16	2-1/4	7-1/2	7-1/2	5-17/32	3-3/4
3-15/16 4	6-1/4	15-1/4	4-1/2	12-1/4	12-3/4	2-1/4	3/4	1-1/8	2-7/16	8-1/2	8-7/16	6	4-1/4
4-7/16 4-1/2	6-3/4	16-5/8	4-5/8	13-1/4	13-3/4	2-1/2	3/4	1-1/8	2-3/4	9-3/8	9-9/32	6-7/16	4-3/4
4-15/16 5	7-1/4	18-1/2	5-1/8	15-1/4	15-3/4	2-7/8	7/8	1-1/4	3	10-7/8	10-11/16	7-7/16	5-1/2
5-7/16 5-15/16 6	9	22	6-1/4	17-3/8	19-1/8	3-3/4	1	2	3-1/4	13-3/16	----	9-3/8	6-11/16
6-7/16 6-1/2 6-15/16 7	10-1/2	26	7-1/8	21-1/4	23-1/4	4-5/8	1	2	3-11/16	14-15/16	----	11-3/8	7-1/2

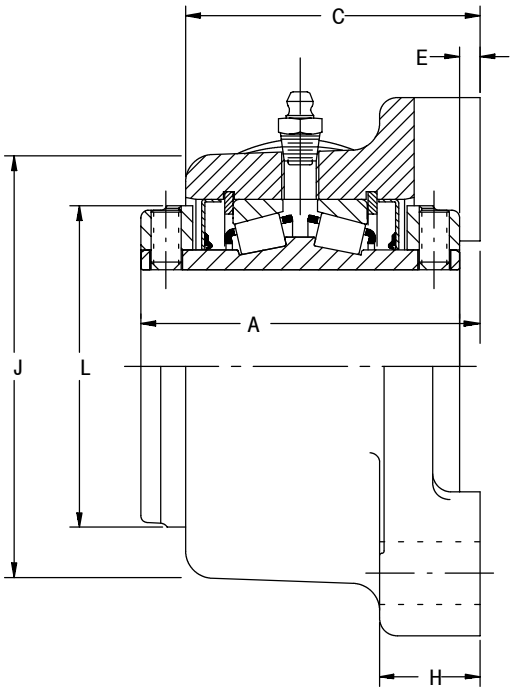
Pre–Dowel Hole Locations For Precision Positioning – See Page B9–30 – B9–31



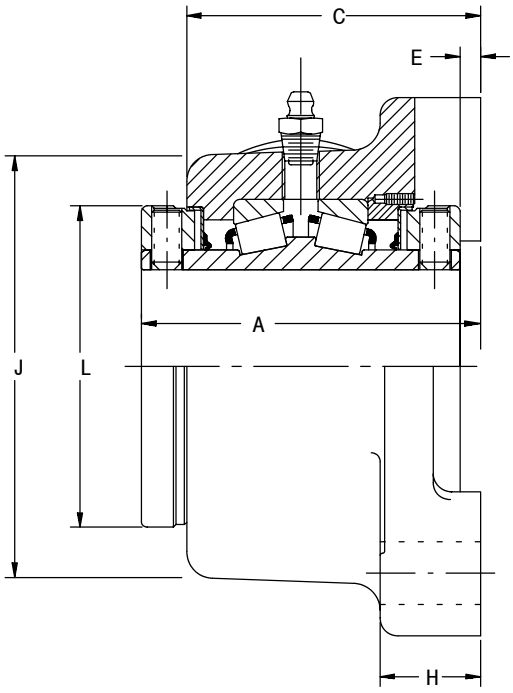
Type E Flange Bearing – Inch

4–BOLT FLANGE



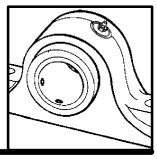


1-$^{3}/_{16}$″ THRU 3″ CONSTRUCTION



3-$^{3}/_{16}$″ THRU 4-$^{1}/_{2}$″ CONSTRUCTION

HOW TO ORDER PAGE B5–8	NOMENCLATURE PAGE B5–10	SELECTION PAGE B5–11	EASY SELECTION PAGE B5–15



Type E Flange Bearing – Inch

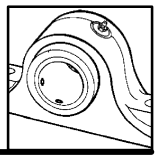
4–BOLT FLANGE

GRAY IRON			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-3/16	**023093**	F4B-E-103R	4
1-1/4	**023094**	F4B-E-104R	4
1-3/8	**023095**	F4B-E-106R	7
1-7/16	**023096**	F4B-E-107R	7
1-1/2	**023097**	F4B-E-108R	11
1-5/8	**023098**	F4B-E-110R	11
1-11/16	**023099**	F4B-E-111R	11
1-3/4	**023100**	F4B-E-112R	12
1-7/8	**023101**	F4B-E-114R	12
1-15/16	**023102**	F4B-E-115R	12
2	**023103**	F4B-E-200R	12
2-3/16	**023104**	F4B-E-203R	15
2-1/4	**023105**	F4B-E-204R	21
2-7/16	**023106**	F4B-E-207R	20
2-1/2	**023107**	F4B-E-208R	19
2-11/16	**023108**	F4B-E-211R	28
2-3/4	**023109**	F4B-E-212R	28
2-15/16	**023110**	F4B-E-215R	27
3	**023111**	F4B-E-300R	26
3-3/16	**023112**	F4B-E-303R	52
3-1/4	**023113+**	F4B-E-304R	51
3-7/16	**023114**	F4B-E-307R	50
3-1/2	**023115**	F4B-E-308R	50
3-15/16	**023116**	F4B-E-315R	75
4	**023117**	F4B-E-400R	75
4-7/16	**023118**	F4B-E-407R	90
4-1/2	**023119+**	F4B-E-408R	90

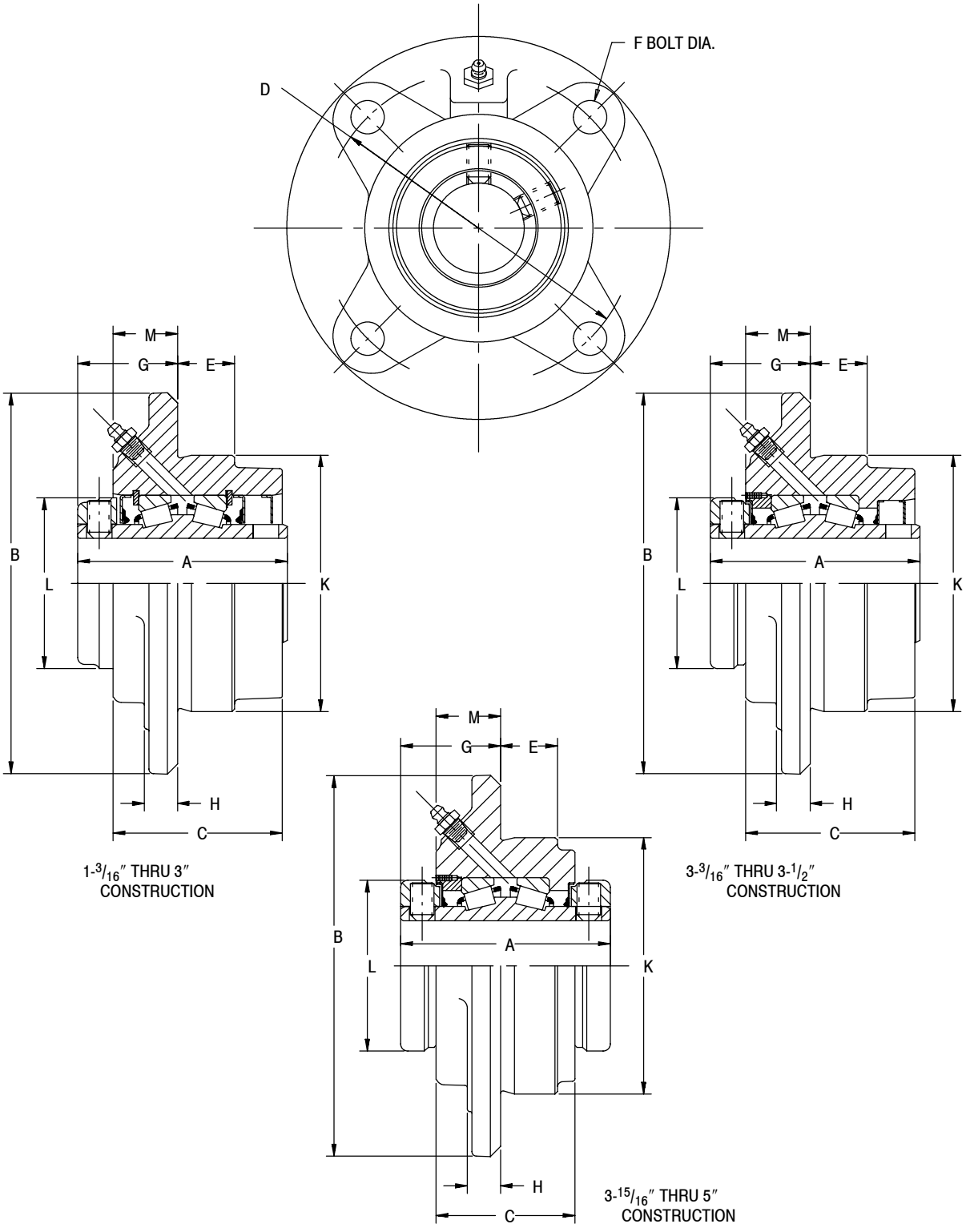
\# Consult DODGE For Sizes Not Listed.
\+ Non-stock -- Consult DODGE For Delivery

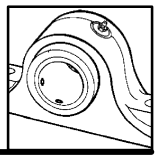
SHAFT SIZE INCHES	A	B	C	D	E	F BOLT	H	J	L
1-3/16 1-1/4	2-13/16	3-3/4	2-11/32	2-7/8	1/16	3/8	1	2-15/16	2-1/4
1-3/8 1-7/16	3-1/16	4-5/8	2-19/32	3-1/2	1/16	1/2	1-1/16	3-1/2	2-3/4
1-1/2 1-5/8 1-11/16	3-1/2	5-3/8	2-31/32	4-1/8	1/8	1/2	1-3/16	4-3/16	3-3/16
1-3/4 1-7/8 1-15/16 2	3-5/8	5-5/8	3-3/32	4-3/8	1/8	1/2	1-3/16	4-7/16	3-7/16
2-3/16	3-7/8	6-1/4	3-9/32	4-7/8	1/8	5/8	1-3/8	4-7/8	3-3/4
2-1/4 2-7/16 2-1/2	4-3/16	6-7/8	3-9/16	5-3/8	3/16	5/8	1-1/2	5-5/16	4-1/16
2-11/16 2-3/4 2-15/16 3	4-11/16	7-3/4	3-15/16	6	3/16	3/4	1-5/8	6	4-23/32
3-3/16 3-1/4 3-7/16 3-1/2	5-1/4	9-1/4	4-1/2	7	1/4	3/4	1-7/8	7-1/4	5-17/32
3-15/16 4	6-1/2	10-1/4	5-5/8	7-3/4	1/4	7/8	2-1/8	8-1/4	6-1/8
4-7/16 4-1/2	7-3/32	10-7/8	5-15/16	8-3/4	11/32	7/8	2-7/16	8-3/4	6-7/16

HOW TO ORDER PAGE B5–8	SELECTION/DIMENSIONS TYPE K PAGE B5–11/B5–34	SELECTION/DIMENSIONS DOUBLE-INTERLOCK PAGE B5–11/B5–44	SELECTION/DIMENSIONS TAF PAGE B5–11/B5–52



Type E Piloted Flange





Type E Piloted Flange

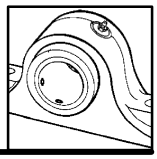
GRAY IRON			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-3/16	**023120**	FC-E-103R	5
1-1/4	**023121**	FC-E-104R	5
1-3/8	**023122**	FC-E-106R	7
1-7/16	**023123**	FC-E-107R	6
1-1/2	**023124**	FC-E-108R	10
1-5/8	**023125**	FC-E-110R	9
1-11/16	**023126**	FC-E-111R	9
1-3/4	**023127**	FC-E-112R	11
1-7/8	**023128**	FC-E-114R	10
1-15/16	**023129**	FC-E-115R	10
2	**023130**	FC-E-200R	10
2-3/16	**023131**	FC-E-203R	14
2-1/4	**023132**	FC-E-204R	18
2-7/16	**023133**	FC-E-207R	18
2-1/2	**023134**	FC-E-208R	17
2-11/16	**023135**	FC-E-211R	27
2-3/4	**023136**	FC-E-212R	27
2-15/16	**023137**	FC-E-215R	25
3	**023138**	FC-E-300R	25
3-3/16	**023139+**	FC-E-303R	44
3-1/4	**023140+**	FC-E-304R	44
3-7/16	**023141**	FC-E-307R	43
3-1/2	**023142**	FC-E-308R	42
3-15/16	**023143**	FC-E-315R	59
4	**023144**	FC-E-400R	58
4-7/16	**023145**	FC-E-407R	110
4-1/2	**023146**	FC-E-408R	110
4-15/16	**023147**	FC-E-415R	130
5	**023148**	FC-E-500R	130

\# Consult DODGE For Sizes Not Listed.
\+ Non-stock -- Consult DODGE For Delivery

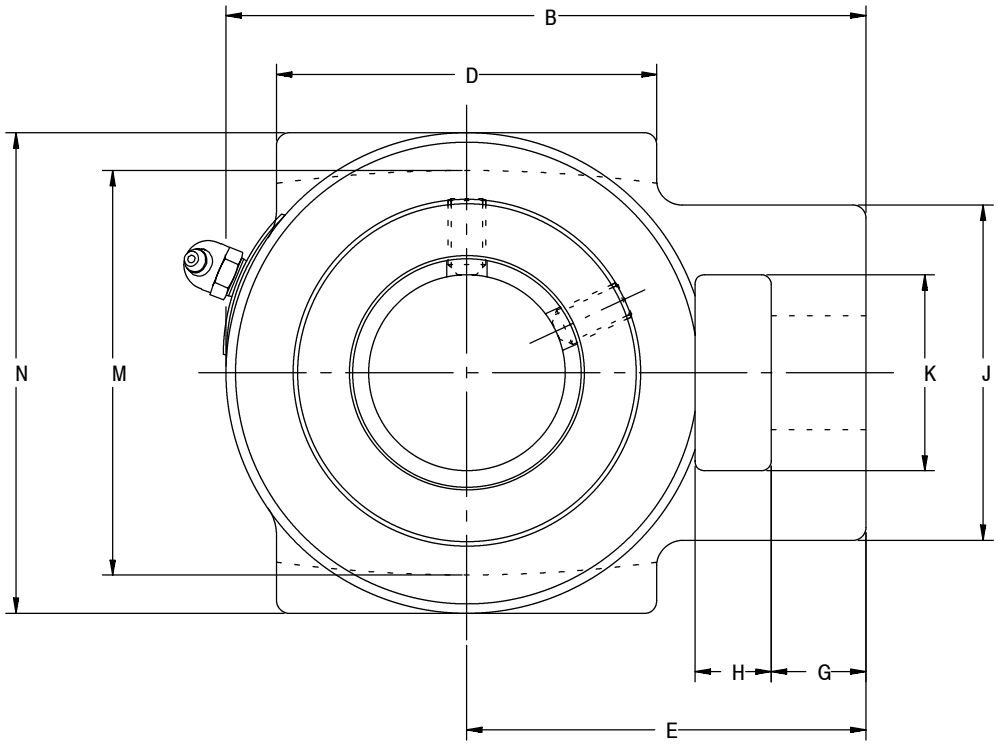
SHAFT SIZE INCHES	A	B	C	D	E	F BOLT#	G	H	K**	L	M
1-3/16 1-1/4	2-3/4	5	2-7/32	4-1/8	3/4	3/8	1-5/16	7/16	3-3/8	2-1/4	27/32
1-3/8 1-7/16	3	5-1/4	2-15/32	4-3/8	7/8	3/8	1-1/2	1/2	3-5/8	2-3/4	1-1/32
1-1/2 1-5/8 1-11/16	3-3/8	6-1/8	2-25/32	5-1/8	1-1/16	7/16	1-9/16	1/2	4-1/4	3-3/16	1-1/32
1-3/4 1-7/8 1-15/16 2	3-1/2	6-3/8	2-29/32	5-3/8	1-3/16	7/16	1-9/16	9/16	4-1/2	3-7/16	1-1/32
2-3/16	3-3/4	7-1/8	3-3/32	6	1-3/16	1/2	1-11/16	9/16	5	3-3/4	1-3/32
2-1/4 2-7/16 2-1/2	4	7-5/8	3-5/16	6-1/2	1-5/16	1/2	1-13/16	5/8	5-1/2	4-1/16	1-3/16
2-11/16 2-3/4 2-15/16 3	4-1/2	8-3/4	3-11/16	7-1/2	1-1/2	5/8	2	3/4	6-3/8	4-23/32	1-1/4
3-3/16 3-1/4 3-7/16 3-1/2	5	10-1/4	4-3/16	8-5/8	1-1/4	3/4	2-7/16	15/16	7-3/8	5-17/32	1-11/16
3-15/16 4	6-1/4	10-7/8	4-1/2	9-3/8	1-1/2	3/4	2-11/16	1	8-1/8	6-1/8	1-13/16
4-7/16 4-1/2	6-3/4	13-1/2	4-5/8	11-3/4	1-1/2	3/4##	3	1	10-1/4	6-7/16	1-15/16
4-15/16 5	7-1/4	14-3/4	5-1/16	12-3/4	1-3/4	7/8##	2-31/32	1-1/4	11	7-7/16	1-7/8

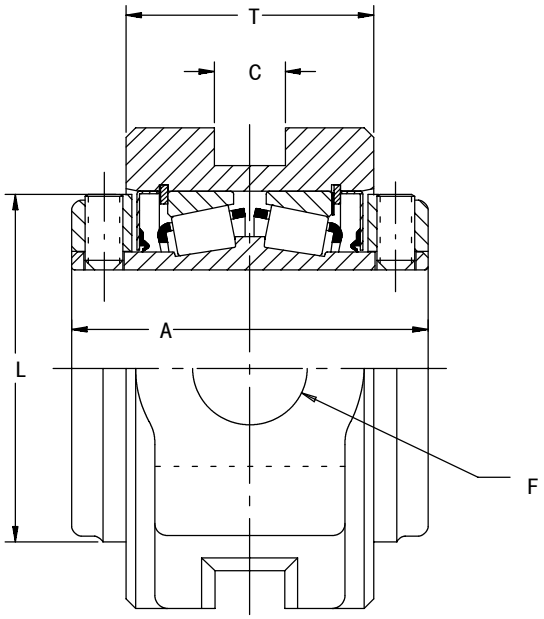
\# (4) Equally Spaced * $1\text{-}3/16$ To $3\text{-}1/2$ - One Collar
Unless Otherwise Noted $3\text{-}15/16$ To 5″ - Two Collars
(6) Bolts Equally Spaced
** +.000 −.002

HOW TO ORDER PAGE B5–8	SELECTION/DIMENSIONS TYPE K PAGE B5–11/B5–34	SELECTION/DIMENSIONS DOUBLE-INTERLOCK PAGE B5–11/B5–44	SELECTION/DIMENSIONS TAF PAGE B5–11/B5–52



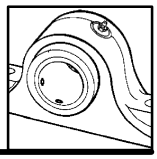
Type E Wide Slot Take–Up Unit – Inch





1-$^{3}/_{8}$″ THRU 3″ CONSTRUCTION

NOMENCLATURE PAGE B5–10	SELECTION PAGE B5–11	EASY SELECTION PAGE B5–15	ENGINEERING/TECHNICAL PAGE B5–17



Type E Wide Slot Take–Up Unit – Inch

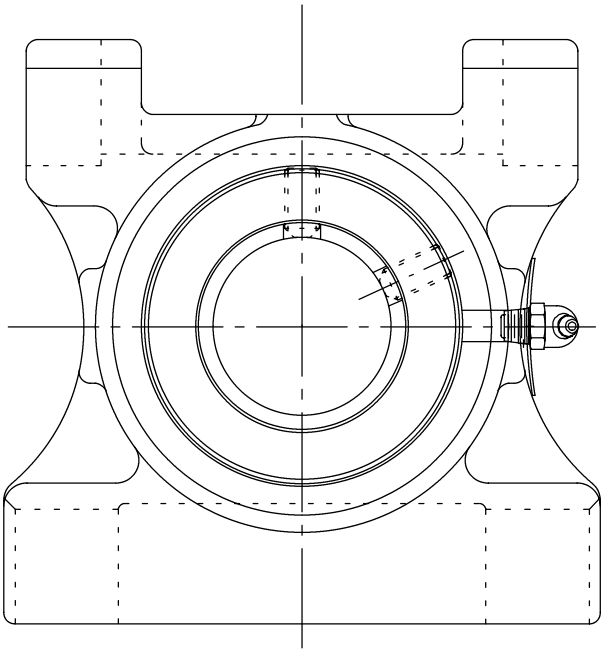
GRAY IRON				
SHAFT SIZE # Inches	**PART NUMBER**	**PART NAME**	**WEIGHT LBS (APPROX)**	**FRAME**
1-3/8	**023076+**	WSTU-E-106R	8	CP308
1-7/16	**023077**	WSTU-E-107R	8	
1-1/2	**023078**	WSTU-E-108R	10	CP400
1-5/8	**023079+**	WSTU-E-110R	10	
1-11/16	**023080**	WSTU-E-111R	10	
1-3/4	**023081+**	WSTU-E-112R	12	CP400
1-7/8	**023082+**	WSTU-E-114R	12	
1-15/16	**023083**	WSTU-E-115R	12	
2	**023084**	WSTU-E-200R	12	
2-3/16	**023085**	WSTU-E-203R	16	CP408
2-1/4	**023086+**	WSTU-E-204R	21	CP502
2-7/16	**023087**	WSTU-E-207R	21	
2-1/2	**023088+**	WSTU-E-208R	21	
2-11/16	**023089+**	WSTU-E-211R	30	CP515
2-3/4	**023090+**	WSTU-E-212R	30	
2-15/16	**023091**	WSTU-E-215R	30	
3	**023092+**	WSTU-E-300R	30	

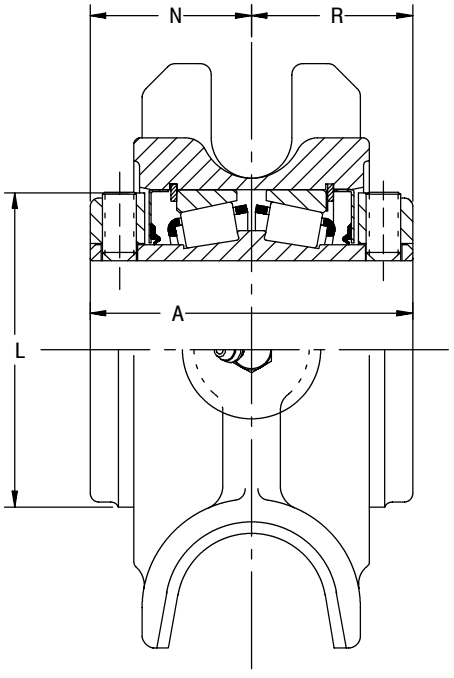
\# Consult DODGE For Sizes Not Listed.
\+ Non-stock -- Consult DODGE For Delivery

SHAFT SIZE INCHES	**A**	**B**	**C**	**D**	**E**	**F SCREW DIA**	**G**	**H**	**J**	**K**	**L**	**M**	**N**	**T**
1-3/8 1-7/16	3	5-3/32	17/32	2-3/4	3-7/32	3/4	11/16	5/8	2-7/16	1-7/16	2-3/4	3-1/2	4-1/8	2-1/16
1-1/2 1-5/8 1-11/16	3-3/8	6	11/16	3-1/4	3-13/16	1	15/16	3/4	3-5/16	1-15/16	3-3/16	4	4-3/4	2-5/16
1-3/4 1-7/8 1-15/16 2	3-1/2	6-5/16	11/16	3-3/4	3-15/16	1	15/16	3/4	3-5/16	1-15/16	3-7/16	4	4-3/4	2-7/16
2-3/16	3-3/4	7-1/8	13/16	3-3/4	4-5/8	1-1/8	1	1–1/4	3-7/8	2-1/4	3-3/4	4-1/2	5-1/4	2-9/16
2-1/4 2-7/16 2-1/2	4	7-13/16	1-1/16	4-1/2	5-1/16	1-1/2	1-1/16	1-1/4	4-1/4	2-1/2	4-1/16	5-1/8	6	2-3/4
2-11/16 2-3/4 2-15/16 3	4-1/2	9-1/8	1-13/16	4-3/4	5-7/8	1-1/2	1-3/8	1-1/2	4-7/8	2-3/4	4-23/32	5-15/16	6-3/4	3

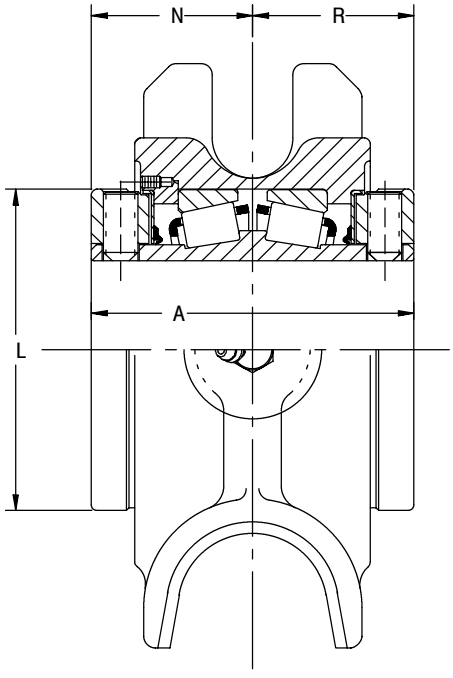
MODIFICATIONS/ACCESSORIES END CLOSURES PAGE B5–58	SELECTION/DIMENSIONS TYPE K PAGE B5–11/B5–34	SELECTION/DIMENSIONS DOUBLE-INTERLOCK PAGE B5–11/B5–44	SELECTION/DIMENSIONS TAF PAGE B5–11/B5–52

Type E TP Take–Up Bearing – Inch



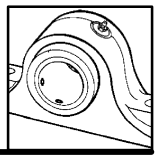


1-3/4″ THRU 3″ CONSTRUCTION



3-3/16″ THRU 4″ CONSTRUCTION

EASY SELECTION PAGE B5–15	FEATURES/BENEFITS PAGE B5–2	SPECIFICATIONS PAGE B5–7	HOW TO ORDER PAGE B5–8

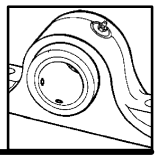


Type E TP Take–Up Bearing – Inch

GRAY IRON			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-3/4	**023149+**	TP-E-112R	14
1-7/8	**023150+**	TP-E-114R	14
1-15/16	**023151**	TP-E-115R	14
2	**023152+**	TP-E-200R	14
2-3/16	**023153**	TP-E-203R	16
2-1/4	**023154+**	TP-E-204R	21
2-7/16	**023155**	TP-E-207R	21
2-1/2	**023156+**	TP-E-208R	21
2-11/16	**023157+**	TP-E-211R	29
2-3/4	**023158+**	TP-E-212R	29
2-15/16	**023159**	TP-E-215R	29
3	**023160+**	TP-E-300R	29
3-3/16	**023161+**	TP-E-303R	43
3-1/4	**023162+**	TP-E-304R	43
3-7/16	**023163**	TP-E-307R	42
3-1/2	**023164+**	TP-E-308R	42
3-15/16	**023165**	TP-E-315R	62
4	**023166+**	TP-E-400R	62

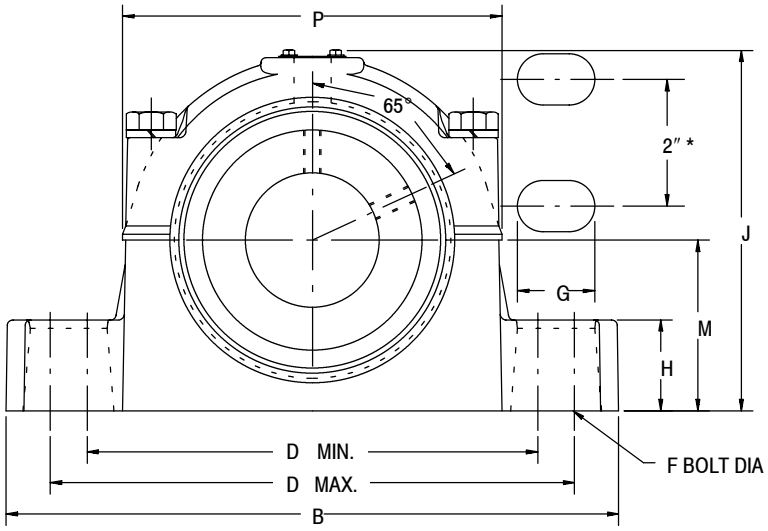
\# Consult DODGE For Sizes Not Listed.
\+ Non-stock -- Consult DODGE For Delivery

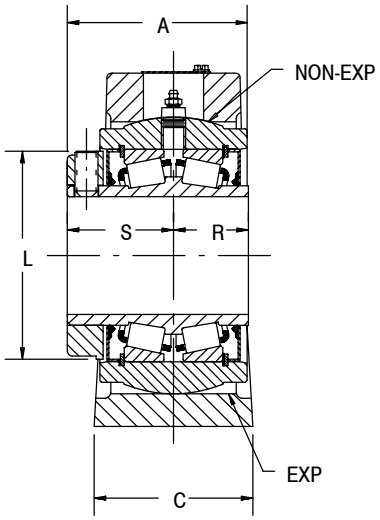
SHAFT SIZE INCHES	FRAME SIZE REF.	A	L	N&R
1-3/4 1-7/8 1-15/16 2	TP10 TP10 TP10 TP10	3-1/2	3-7/16	1-3/4
2-3/16	TP20	3-3/4	3-3/4	1-7/8
2-1/4 2-7/16 2-1/2	TP30 TP30 TP30	4	4-1/16	2
2-11/16 2-3/4 2-15/16 3	TP40 TP40 TP40 TP40	4-1/2	4-23/32	2-1/4
3-3/16 3-1/4 3-7/16 3-1/2	TP50 TP50 TP50 TP50	5	5-7/16	2-1/2
3-15/16 4	TP60 TP60	6-1/4	5-15/16	3-1/8



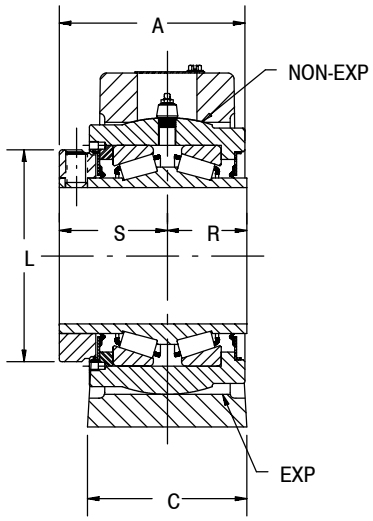
Type K Pillow Blocks

2 & 4 BOLT BASE-INCH*





1-3/16″ THRU 3″ CONSTRUCTION



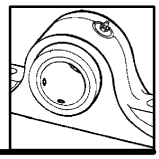
3-3/16″ THRU 3-15/16″ CONSTRUCTION

* 1-3/16 THRU 3-1/2 (2 BOLT BASE)

* 3-15/16 (4 BOLT BASE)

FEATURES/BENEFITS PAGE B5–2	SPECIFICATIONS PAGE B5–7	HOW TO ORDER PAGE B5–8	NOMENCLATURE PAGE B5–10

DODGE®



Type K Pillow Blocks

2 & 4 BOLT BASE-INCH

GRAY IRON* NON-EXPANSION			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-3/16 1-1/4	**023167** **023168**	P2B-K-103R P2B-K-104R	9 9
1-7/16	**023170**	P2B-K-107R	11
1-1/2 1-5/8 1-11/16	**023171** **023172+** **023173**	P2B-K-108R P2B-K-110R P2B-K-111R	15 14 14
1-3/4 1-15/16 2	**023174** **023175** **023176**	P2B-K-112R P2B-K-115R P2B-K-200R	20 19 19
2-3/16	**023177**	P2B-K-203R	24
2-1/4 2-7/16 2-1/2	**023178** **023179** **023180**	P2B-K-204R P2B-K-207R P2B-K-208R	28 28 28
2-11/16 2-3/4 2-15/16 3	**023181** **023182** **023183** **023184**	P2B-K-211R P2B-K-212R P2B-K-215R P2B-K-300R	40 40 39 39
3-7/16 3-1/2	**023186+** **023187**	P2B-K-307R P2B-K-308R	67 66
3-15/16 ▲	**023188**	P4B-K-315R	106

GRAY IRON EXPANSION			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-3/16 1-1/4	**023189** **023190+**	P2B-K-103RE P2B-K-104RE	9 9
1-7/16	**023192**	P2B-K-107RE	11
1-1/2 1-5/8 1-11/16	**023193** **023194+** **023195**	P2B-K-108RE P2B-K-110RE P2B-K-111RE	15 14 14
1-3/4 1-15/16 2	**023196+** **023197** **023198**	P2B-K-112RE P2B-K-115RE P2B-K-200RE	20 19 19
2-3/16	**023199**	P2B-K-203RE	24
2-1/4 2-7/16 2-1/2	**023200** **023201** **023202**	P2B-K-204RE P2B-K-207RE P2B-K-208RE	28 28 28
2-11/16 2-3/4 2-15/16 3	**023203** **023204+** **023205** **023206**	P2B-K-211RE P2B-K-212RE P2B-K-215RE P2B-K-300RE	40 40 39 39
3-7/16 3-1/2	**023208** **023209+**	P2B-K-307RE P2B-K-308RE	67 66
3-15/16▲	**023210**	P4B-K-315RE	106

* Furnished Unless Otherwise Specified
\# Consult DODGE For Sizes Not Listed
\+ Non-stock -- Consult DODGE For Delivery

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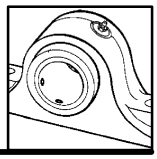
\+ Non-stock -- Consult DODGE For Delivery

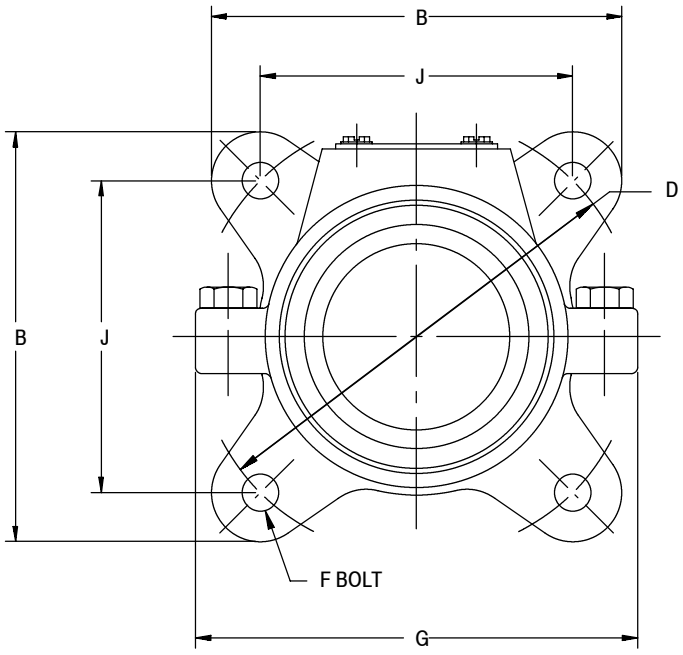
SHAFT SIZE INCHES	A	B	C	D		F BOLT DIA	G	H	J	L	M	P	R	S	EXP*
				MIN.	MAX.										
1-3/16 1-1/4	2-9/32	7-1/2	1-7/8	6	6-3/8	3/8	11/16	1	4-17/32	2-1/4	2-1/8	5	1	1-3/8	3/32
1-3/8 1-7/16	2-35/64	8	2-3/16	6-1/4	6-5/8	1/2	3/4	1-1/4	5-15/64	2-3/4	2-3/8	5-33/64	1-1/32	1-1/2	3/32
1-1/2 1-5/8 1-11/16	2-53/64	9	2-3/8	6-7/8	7-5/8	1/2	1	1-3/8	5-3/4	3-3/16	2-5/8	5-13/16	1-9/16	1-11/16	3/32
1-3/4 1-15/16 2	2-61/64	10	2-17/32	7-3/8	8-7/16	5/8	1-19/64	1-1/2	6-17/64	3-7/16	2-7/8	6-23/64	1-13/64	1-3/4	9/32
2-3/16	3-5/32	11	2-21/32	8-1/16	9-1/4	5/8	1-21/64	1-1/2	6-33/64	3-3/4	3	6-61/64	1-1/4	1-7/8	9/32
2-1/4 2-7/16 2-1/2	3-11/32	12	2-13/16	9-1/4	10-1/4	5/8	1-17/64	1-3/4	7-1/32	4-1/16	3-1/4	7-3/8	1-5/16	2	9/32
2-11/16 2-3/4 2-15/16 3	3-25/32	13-7/16	2-15/16	9-7/8	11-1/2	3/4	1-11/16	2	7-59/64	4-23/32	3-3/4	8-5/16	1-7/16	2-1/4	9/32
3-3/16 3-7/16 3-1/2	4-17/64	16	3-7/16	12-13/16	13-13/16	7/8	1-1/2	2-1/4	9-27/64	5-7/16	4-1/2	10-3/32	1-11/16	2-1/2	9/32
3-15/16 ▲	5-13/32	17-7/16	4-3/4	13-1/8	14-3/4	3/4	1-45/64	2-3/4	10-27/64	5-15/16	5	10-45/64	2-1/8	3-1/8	11/32

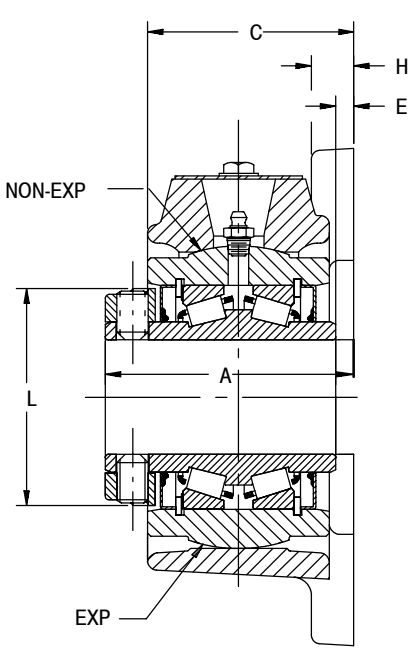
*Exp–total Expansion Divided Equally On Both Sides Of Bearing (Expansion Bearings Only)
▲ 4 Bolt Base (See Page B5–34 For Bolts Spacing)

Dowel Hole Locations For Precision Positioning – See Page B9–30 – B9–31

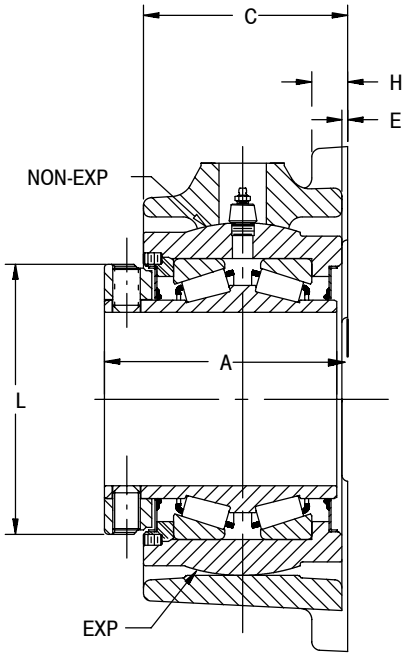


Type K Flange Bearing – Inch



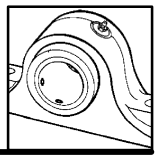


1-$^{3}/_{16}$″ THRU 3″ INTERNAL CONSTRUCTION



3-$^{3}/_{16}$″ THRU 3-$^{15}/_{16}$″ INTERNAL CONSTRUCTION

EASY SELECTION PAGE B5–15	ENGINEERING/TECHNICAL PAGE B5–17	SELECTION PAGE B5–11	



Type K Flange Bearing – Inch

DUCTILE IRON - NON-EXPANSION*			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-1/4	**023212+**	F4B-K-104R	6
1-7/16	**023214**	F4B-K-107R	7
1-1/2	**023215**	F4B-K-108R	12
1-15/16 2	**023219** **023220**	F4B-K-115R F4B-K-200R	14 14
2-3/16	**023221**	F4B-K-203R	17
2-7/16 2-1/2	**023223** **023224+**	F4B-K-207R F4B-K-208R	20 20
2-15/16 3	**023227** **023228+**	F4B-K-215R F4B-K-300R	24 24
3-7/16 3-15/16	**023230** **023232**	F4B-K-307R F4B-K-315R	45 72

DUCTILE IRON - EXPANSION			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-1/4	**023234+**	F4B-K-104RE	6
1-7/16	**023236**	F4B-K-107RE	7
1-1/2	**023237**	F4B-K-108RE	12
1-15/16 2	**023241** **023242**	F4B-K-115RE F4B-K-200RE	14 14
2-3/16	**023243**	F4B-K-203RE	17
2-7/16 2-1/2	**023245** **023246+**	F4B-K-207RE F4B-K-208RE	20 20
2-15/16 3	**023249** **023250+**	F4B-K-215RE F4B-K-300RE	24 24
3-7/16 3-15/16	**023252** **023254**	F4B-K-307RE F4B-K-315RE	45 72

* Furnished Unless Otherwise Specified
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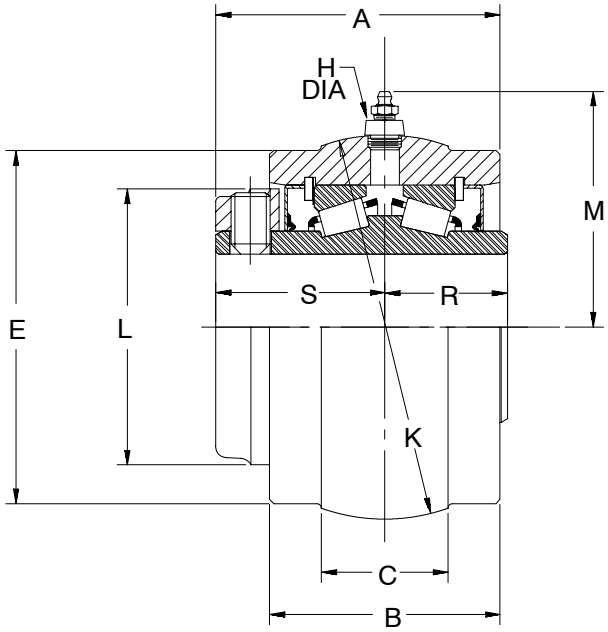
SHAFT SIZE INCHES	A	B	C	D	E	F Bolt Dia.	G	H	J	L	EXP*
1-3/16 1-1/4	2-9/16	5-3/16	2-1/8	5-21/32	3/16	3/8	5-1/4	7/16	4	2-1/4	
1-3/8 1-7/16	2-11/16	5-3/4	2-1/8	6-1/4	5/32	1/2	5-3/4	1/2	4-27/64	2-3/4	3/16
1-1/2 1-5/8 1-11/16	3	6-1/8	2-7/16	6-3/4	5/32	1/2	6-3/4	1/2	4-25/32	3-3/16	3/16
1-3/4 1-15/16 2	3-1/8	6-7/8	2-9/16	7-1/2	5/32	5/8	7-1/4	9/16	5-5/16	3-7/16	3/16
2-3/16	3-5/16	7-3/16	2-23/32	8	5/32	5/8	7-13/16	9/16	5-21/32	3-3/4	3/16
2-1/4 2-7/16 2-1/2	3-9/16	7-5/8	2-59/64	8-1/2	3/16	5/8	8-9/16	5/8	6	4-1/16	5/16
2-11/16 2-3/4 2-15/16 3	4	8-7/8	3-11/32	9-3/4	1/4	3/4	9-1/2	11/16	6-57/64	4-23/32	5/16
3-3/16 3-7/16 3-1/2	4-1/2	10-1/4	3-23/32	11-1/2	1/4	7/8	11-3/8	3/4	8-1/8	5-17/32	5/16
3-15/16	5-1/2	11-7/16	4-5/8	13	1/8	1	12-7/8	13/16	9-3/16	6-1/8	5/16

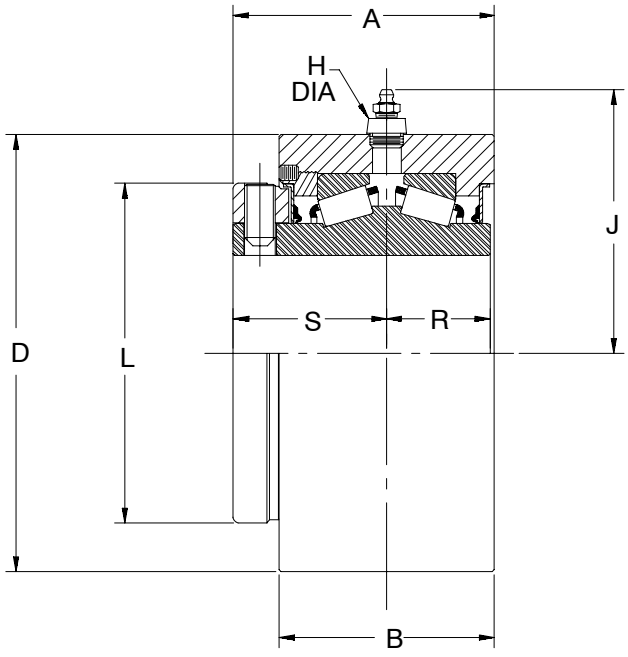
All Dimensions Shown In Inches.

*Exp Total Expansion Divided Equally On Both Sides Of Bearing (Expansion Bearings Only)

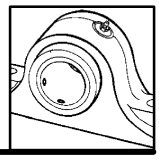
Type K Units – Inch



S-1 UNIT
1-3/16″ THRU 3″ CONSTRUCTION



B-1 UNIT
3-3/16″ THRU 3-15/16″ CONSTRUCTION



SELECTION/DIMENSIONS

Type K Units – Inch

TYPE S-1 UNITS -- GRAY IRON			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-3/16	**023271**	S1U-K-103R	3
1-1/4	**023272+**	S1U-K-104R	3
1-3/8	**023273+**	S1U-K-106R	4
1-7/16	**023274**	S1U-K-107R	4
1-1/2	**023275**	S1U-K-108R	5
1-5/8	**023276+**	S1U-K-110R	5
1-11/16	**023277**	S1U-K-111R	5
1-3/4	**023278+**	S1U-K-112R	7
1-15/16	**023279**	S1U-K-115R	7
2	**023280**	S1U-K-200R	7
2-3/16	**023281**	S1U-K-203R	9
2-1/4	**023282+**	S1U-K-204R	11
2-7/16	**023283**	S1U-K-207R	11
2-1/2	**023284+**	S1U-K-208R	11
2-11/16	**023285+**	S1U-K-211R	15
2-3/4	**023286+**	S1U-K-212R	15
2-15/16	**023287**	S1U-K-215R	15
3	**023288**	S1U-K-300R	15
3-3/16	**023289+**	S1U-K-303R	28
3-7/16	**023290**	S1U-K-307R	28
3-1/2	**023291+**	S1U-K-308R	28
3-15/16	**023292**	S1U-K-315R	40

Consult DODGE For Sizes Not Listed.
\+ Non-stock -- Consult DODGE For Delivery

TYPE B-1 UNITS -- GRAY IRON			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-3/16	**------**	B1U-K-103R	3
1-1/4	**------**	B1U-K-104R	3
1-3/8	**023293+**	B1U-K-106R	4
1-7/16	**023294+**	B1U-K-107R	4
1-1/2	**023295+**	B1U-K-108R	5
1-5/8	**023296+**	B1U-K-110R	5
1-11/16	**023297+**	B1U-K-111R	5
1-3/4	**023298+**	B1U-K-112R	7
1-15/16	**023299+**	B1U-K-115R	7
2	**023300+**	B1U-K-200R	7
2-3/16	**023301+**	B1U-K-203R	9
2-1/4	**023302+**	B1U-K-204R	11
2-7/16	**023303+**	B1U-K-207R	11
2-1/2	**023304+**	B1U-K-208R	11
2-11/16	**023305+**	B1U-K-211R	15
2-3/4	**023306+**	B1U-K-212R	15
2-15/16	**023307+**	B1U-K-215R	15
3	**023308+**	B1U-K-300R	15
3-3/16	**023309+**	B1U-K-303R	28
3-7/16	**023310+**	B1U-K-307R	28
3-1/2	**023311+**	B1U-K-308R	28
3-15/16	**023312+**	B1U-K-315R	40

Consult DODGE For Sizes Not Listed.
\+ Non-stock -- Consult DODGE For Delivery

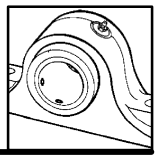
SHAFT SIZE INCHES	A	B	C	D *	E % MACHINE SIDE	E % CAST SIDE	H	J	K **	L	M	R	S
1-3/16 1-1/4	2-5/16	1-7/8	1-1/32	----	2.813	2.88	7/16	----	3.125	2-1/4	2-1/32	1	1-3/8
1-3/8 1-7/16	2-17/32	2-1/16	1-5/32	3-7/16	3.25	3.31	11/16	2-5/8	3.625	2-3/4	2-5/8	1-1/32	1-1/2
1-1/2 1-5/8 1-11/16	2-27/32	2-5/16	1-3/16	3-15/16	3.75	3.82	11/16	2-7/8	4.125	3-3/16	2-13/16	1-5/32	1-11/16
1-3/4 1-15/16 2	2-31/32	2-7/16	1-1/2	4-1/4	4.125	4.18	11/16	3	4.562	3-7/16	3-1/16	1-13/64	1-3/4
2-3/16	3-5/32	2-9/16	1-9/16	4-5/8	4.50	4.63	11/16	3-1/4	5.000	3-3/4	3-1/4	1-1/4	1-7/8
2-1/4 2-7/16 2-1/2	3-3/8	2-3/4	1-7/16	5	4.812	4.87	11/16	3-7/16	5.186	4-1/16	3-3/8	1-5/16	2
2-11/16 2-3/4 2-15/16 3	3-3/4	3	1-7/8	5-7/8	5.563	5.63	11/16	3-7/8	6.061	4-23/32	3-13/16	1-7/16	2-1/4
3-3/16 3-7/16 3-1/2	4-1/4	3-1/2	2	7-1/8	6.813	6.88	11/16	4-1/2	7.373	5-17/32	4-1/2	1-11/16	2-1/2
3-15/16	5-3/8	4-1/2	2-3/8	7-7/8	7.438	7.50	15/16	5-1/2	7.997	6-1/8	5-5/32	2-1/8	3-1/8

***** +.000 - .002″

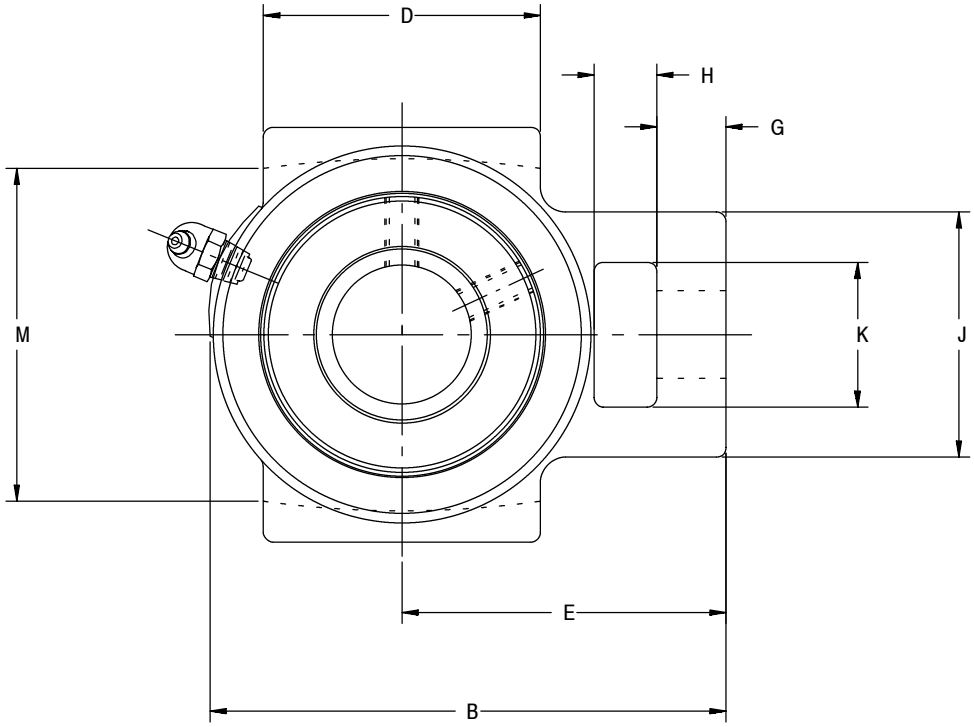
% Machine side of unit is on collar side only.

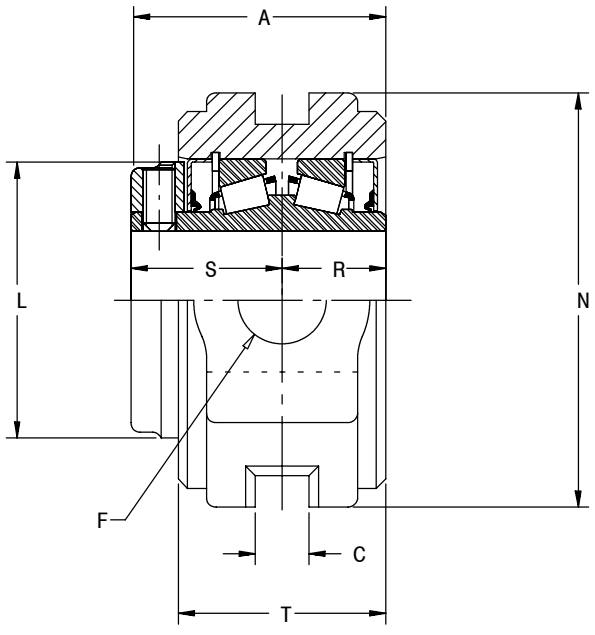
****** +.000 - .001 SIZES 1-$^{3}/_{16}$ THRU 3″
± .0005″ SIZES 3-$^{3}/_{16}$ THRU 3-$^{15}/_{16}$″
ALL DIMENSIONS SHOWN IN INCHES

EASY SELECTION PAGE B5–15	SELECTION/DIMENSIONS TYPE E PAGE B5–11/B5–22	SELECTION/DIMENSIONS DOUBLE-INTERLOCK PAGE B5–11/B5–44	SELECTION/DIMENSIONS TAF PAGE B5–11/B5–52

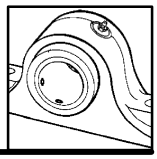


Type K Wide Slot Take–Up Unit – Inch





1-$^{3}/_{8}$″ THRU 3″ CONSTRUCTION



SELECTION/DIMENSIONS

Type K Wide Slot Take–Up Unit – Inch

GRAY IRON				
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)	CP FRAME SIZE
1-7/16	**023256+**	WSTU-K-107R	8	CP308
1-15/16	**023261**	WSTU-K-115R	11	CP400
2-3/16	**023263**	WSTU-K-203R	15	CP408
2-7/16	**023265**	WSTU-K-207R	20	CP502
2-1/2	**023266**	WSTU-K-208R	20	
2-15/16	**023269**	WSTU-K-215R	28	CP515
3	**023270**	WSTU-K-300R	28	

\# Consult DODGE For Sizes Not Listed.
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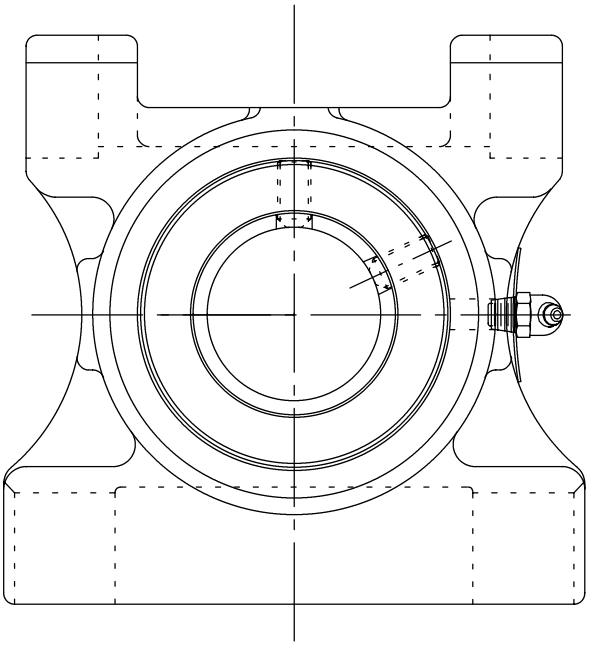
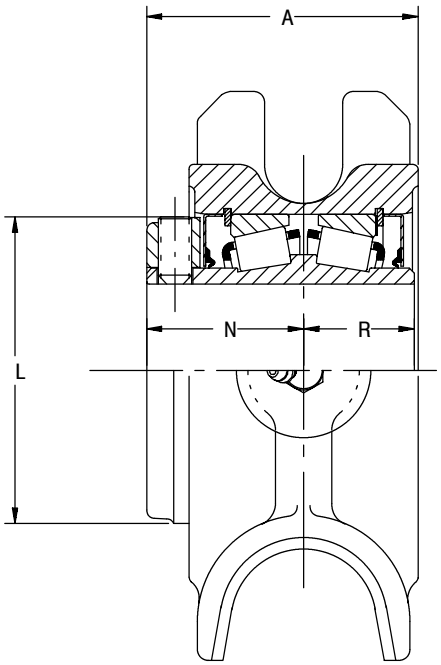
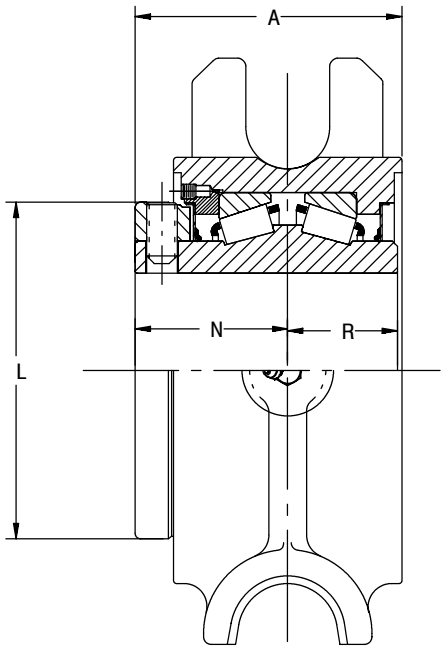
SHAFT SIZE Inches	A	B	C	D	E	F SCREW DIA	G	H	J	K	L	M	N	R	S	T
1-7/16	2-17/32	5-3/32	17/32	2-3/4	3-7/32	3/4	11/16	5/8	2-7/16	1-7/16	2-3/4	3-1/2	4-1/8	1-1/32	1-1/2	2-1/16
1-15/16	2-31/32	6-5/16	11/16	3-3/4	3-15/16	1	15/16	3/4	3-5/16	1-15/16	3-7/16	4	4-3/4	1-13/64	1-3/4	2-7/16
2-3/16	3-5/32	7-1/8	13/16	3-3/4	4-5/8	1-1/8	1	1–1/4	3-7/8	2-1/4	3-3/4	4-1/2	5-1/4	1-1/4	1-7/8	2-9/16
2-7/16 2-1/2	3-3/8	7-13/16	1-1/16	4-1/2	5-1/16	1-1/2	1-1/16	1-1/4	4-1/4	2-1/2	4-1/16	5-1/8	6	1-5/16	2	2-3/4
2-15/16 3	3-3/4	9-1/8	1-13/16	4-3/4	5-7/8	1-1/2	1-3/8	1-1/2	4-7/8	2-3/4	4-23/32	5-15/16	6-3/4	1-7/16	2-1/4	3

Type K TP Take–Up Bearing – Inch



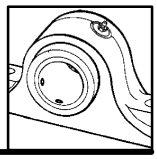


1-3/16″ THRU 3″ INTERNAL CONSTRUCTION



3-3/16″ THRU 3-15/16″ INTERNAL CONSTRUCTION

HOW TO ORDER PAGE B5–8	NOMENCLATURE PAGE B5–10	SELECTION PAGE B5–11	EASY SELECTION PAGE B5–15

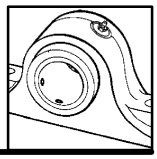


Type K TP Take–Up Bearing – Inch

GRAY IRON			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-15/16	**023314**	TP-K-115R	13
2-3/16	**023316**	TP-K-203R	16
2-7/16	**023318**	TP-K-207R	20
2-15/16	**023322**	TP-K-215R	27
3-7/16	**023325**	TP-K-307R	40
3-15/16	**023327**	TP-K-315R	59

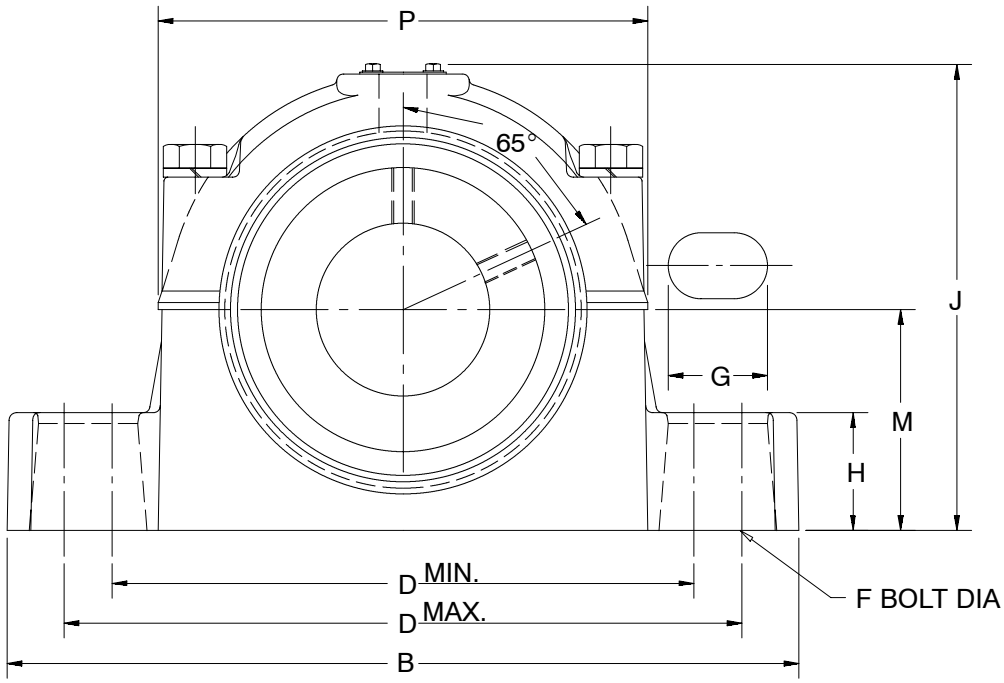
Consult DODGE For Sizes Not Listed.
+ Non-stock -- Consult DODGE For Delivery

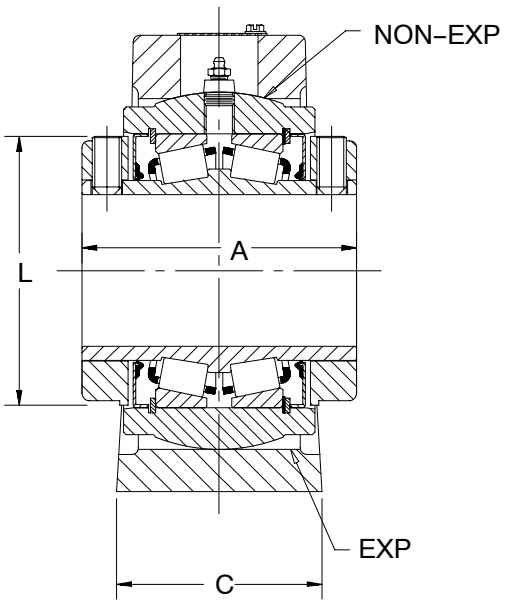
SHAFT SIZE INCHES	FRAME SIZE REF.	A	L	N	R
1-15/16	TP10	3-1/32	3-7/16	1-3/4	1-7/32
2-3/16	TP20	3-3/16	3-3/4	1-7/8	1-1/4
2-7/16	TP30	3-1/2	4-1/16	2	1-5/16
2-15/16	TP40	3-3/4	4-23/32	2-1/4	1-7/16
3-7/16	TP50	4-9/32	5-7/16	2-13/32	1-25/32
3-15/16	TP60	5-1/2	5-15/16	3-1/8	2-1/8



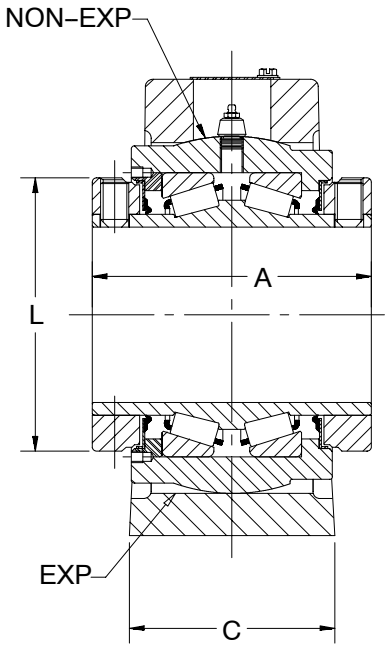
DOUBLE–INTERLOCK Pillow Block – Inch

2-BOLT BASE



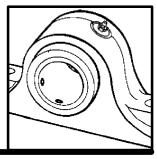


1-$^{3}/_{16}$″ THRU 3″ CONSTRUCTION



3-$^{3}/_{16}$″ THRU 3-$^{1}/_{2}$″ CONSTRUCTION

ENGINEERING/TECHNICAL PAGE B5–17	EASY SELECTION PAGE B5–15	FEATURES/BENEFITS PAGE B5–2	SPECIFICATIONS PAGE B5–7



DOUBLE–INTERLOCK Pillow Block – Inch

2-BOLT BASE

GRAY IRON NON-EXPANSION*					
SHAFT SIZE INCHES#	SHAFT SIZE SYMBOL	PILLOW BLOCK P/N	HOUSING P/N	UNIT P/N	PIL. BLK. WT.,APRX LBS
1-1/4	104	**023329**	**056130**	**023508**	9
1-3/8	106	**023330**	**056132**	**023509**	11
1-7/16	107	**023331**	**056132**	**023510**	11
1-1/2	108	**023332**	**056134**	**023511**	15
1-5/8	110	**023333**	**056134**	**023512**	15
1-11/16	111	**023334**	**056134**	**023513**	15
1-3/4	112	**023335**	**056136**	**023514**	18
1-15/16	115	**023337**	**056136**	**023516**	17
2	200	**023338**	**056136**	**023517**	17
2-3/16	203	**023339**	**056138**	**023518**	25
2-1/4	204	**023340**	**056140**	**023519**	29
2-7/16	207	**023341**	**056140**	**023520**	26
2-1/2	208	**023342**	**056140**	**023521**	26
2-11/16	211	**023343**	**056142**	**023522**	41
2-3/4	212	**023344**	**056142**	**023523**	41
2-15/16	215	**023345**	**056142**	**023524**	40
3	300	**023346**	**056142**	**023525**	40
3-3/16	303	**023347**	**056144**	**023526**	67
3-7/16	307	**023349**	**056144**	**023528**	66
3-1/2	308	**023350**	**056144**	**023529**	66

Description = P2b-di-207r For 2-7/16″ Size
# Consult DODGE For Sizes Not Listed.
* Furnished Unless Otherwise Specified

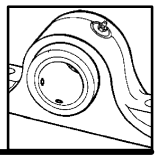
GRAY IRON EXPANSION					
SHAFT SIZE INCHES#	SHAFT SIZE SYMBOL	PILLOW BLOCK P/N	HOUSING P/N	UNIT P/N	PIL. BLK. WT.,APRX LBS
1-1/4	104	**023376**	**056100**	**023508**	9
1-3/8	106	**023377**	**056102**	**023509**	11
1-7/16	107	**023378**	**056102**	**023510**	11
1-1/2	108	**023379**	**056104**	**023511**	15
1-5/8	110	**023380**	**056104**	**023512**	15
1-11/16	111	**023381**	**056104**	**023513**	15
1-3/4	112	**023382**	**056106**	**023514**	18
1-15/16	115	**023384**	**056106**	**023516**	17
2	200	**023385**	**056106**	**023517**	17
2-3/16	203	**023386**	**056108**	**023518**	22
2-1/4	204	**023387**	**056110**	**023519**	29
2-7/16	207	**023388**	**056110**	**023520**	26
2-1/2	208	**023389**	**056110**	**023521**	26
2-11/16	211	**023390**	**056112**	**023522**	42
2-3/4	212	**023391**	**056112**	**023523**	42
2-15/16	215	**023392**	**056112**	**023524**	41
3	300	**023393**	**056112**	**023525**	41
3-3/16	303	**023394**	**056114**	**023526**	69
3-7/16	307	**023396**	**056114**	**023528**	68
3-1/2	308	**023397**	**056114**	**023529**	68

Description = P2b-di-207re For 2-7/16″ Size
# Consult DODGE For Sizes Not Listed.

SHAFT SIZE INCHES	A	B	C	D		F BOLT DIA.	G	H	J	L	M	P	EXP*
				MIN.	MAX.								
1-1/4	2-3/4	7-1/2	1-7/8	6	6-3/8	3/8	43/64	1	4-17/32	2-1/4	2-1/8	5	3/32
1-3/8 1-7/16	3	8	2-11/64	6-1/4	6-5/8	1/2	3/4	1-1/4	5-15/64	2-3/4	2-3/8	5-33/64	3/32
1-1/2 1-5/8 1-11/16	3-3/8	9	2-3/8	6-7/8	7-5/8	1/2	1	1-3/8	5-3/4	3-3/16	2-5/8	5-15/16	3/32
1-3/4 1-15/16 2	3-1/2	10	2-17/32	7-3/8	8-7/16	5/8	1-19/64	1-1/2	6-17/64	3-7/16	2-7/8	6-23/64	9/32
2-3/16	3-3/4	11	2-21/32	8-3/4	9-1/4	5/8	1-21/64	1-1/2	6-33/34	3-3/4	3	6-16/64	9/32
2-1/4 2-7/16 2-1/2	4	12	2-13/16	9-17/64	10-1/4	5/8	1-17/64	1-3/4	7-1/32	4-1/16	3-1/4	7-3/8	9/32
2-11/16 2-3/4 2-15/16 3	4-1/2	13-7/16	2-15/16	9-7/8	11-1/2	3/4	1-11/16	2	7-59/64	4-23/32	3-3/4	8-5/16	9/32
3-3/16 3-7/16 3-1/2	5	16	3-7/16	12-13/16	13-13/16	7/8	1-1/2	2-1/4	9-27/64	5-7/16	4-1/2	10-3/32	9/32

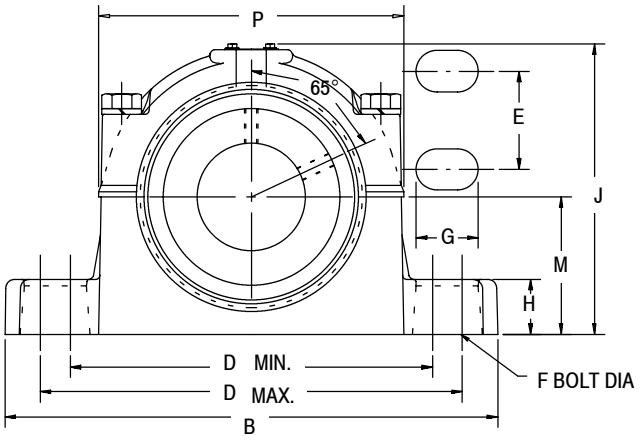
*EXP - Total Expansion Divided Equally On Both Sides Of Bearing (Expansion Bearings Only)

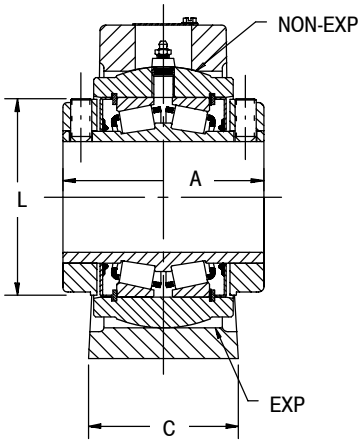
Dowel Hole Locations For Precision Positioning – See Page B9–30 – B9–31



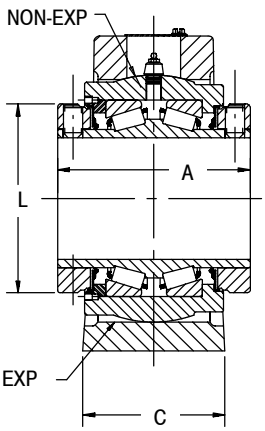
DOUBLE–INTERLOCK Pillow Block – Inch

4-BOLT BASE

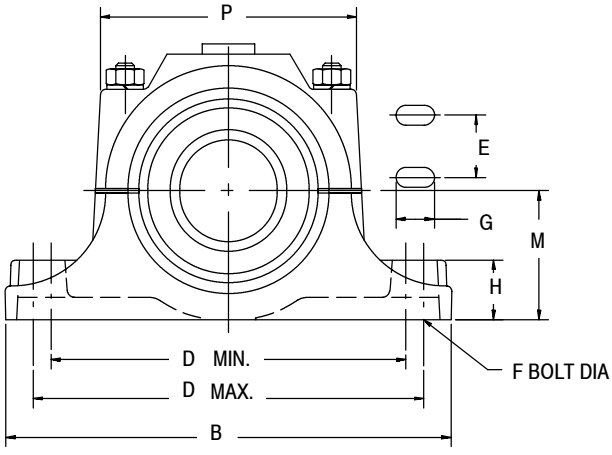


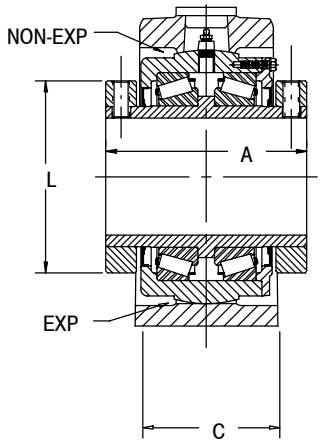


2-$^{1}/_{4}$″ THRU 3″ CONSTRUCTION



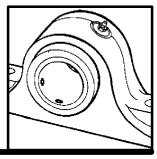
3-$^{3}/_{16}$″ THRU 5″ CONSTRUCTION





5-$^{7}/_{16}$″ THRU 7″ CONSTRUCTION

NOMENCLATURE PAGE B5–10	SELECTION PAGE B5–11	EASY SELECTION PAGE B5–15	ENGINEERING/TECHNICAL PAGE B5–17



DOUBLE–INTERLOCK Pillow Block – Inch

4-BOLT BASE

GRAY IRON NON EXPANSION*					
SHAFT SIZE INCHES#	SHAFT SIZE SYMBOL	PILLOW BLOCK P/N	HSG ASSEM P/N	UNIT P/N	PIL. BLK. WT.,APRX LBS
2-7/16	207	**023352**	**060745**	**023520**	28
2-1/2	208	**023353**	**060745**	**023521**	28
2-11/16	211	**023354**	**060747**	**023522**	38
2-15/16	215	**023356**	**060747**	**023524**	38
3	300	**023357**	**060747**	**023525**	38
3-7/16	307	**023360**	**060749**	**023528**	69
3-1/2	308	**023361**	**060749**	**023529**	69
3-15/16	315	**023362**	**060751**	**023530**	109
4	400	**023363**	**060751**	**023531**	109
4-7/16	407	**023364**	**060753**	**023532**	139
4-1/2	408	**023365**	**060753**	**023533**	135
4-15/16	415	**023366**	**060755**	**023534**	183
5	500	**023367**	**060755**	**023535**	181
5-7/16	507	**023368**	**060579**	**023536**	310
5-15/16	515	**023369**	**060579**	**023537**	299

+ Furnished Unless Otherwise Specified
Description = P4b-di-207r For 2-$^{7}/_{16}$″ Size
# Consult DODGE For Sizes Not Listed.

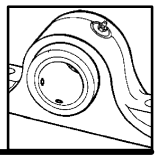
GRAY IRON EXPANSION					
SHAFT SIZE INCHES#	SHAFT SIZE SYMBOL	PILLOW BLOCK P/N	HSG ASSEM P/N	UNIT P/N	PIL. BLK. WT.,APRX LBS
2-7/16	207	**023399**	**060746**	**023520**	28
2-1/2	208	**023400**	**060746**	**023521**	28
2-11/16	211	**023401**	**060748**	**023522**	38
2-15/16	215	**023403**	**060748**	**023524**	38
3	300	**023404**	**060748**	**023525**	38
3-7/16	307	**023407**	**060750**	**023528**	69
3-1/2	308	**023408**	**060750**	**023529**	69
3-15/16	315	**023409**	**060752**	**023530**	110
4	400	**023410**	**060752**	**023531**	110
4-7/16	407	**023411**	**060754**	**023532**	139
4-1/2	408	**023412**	**060754**	**023533**	135
4-15/16	415	**023413**	**060756**	**023534**	181
5	500	**023414**	**060756**	**023535**	179
5-7/16	507	**023415**	**060578**	**023536**	310
5-15/16	515	**023416**	**060578**	**023537**	299

Description = P4b-di-207re For 2-$^{7}/_{16}$″ Size
# Consult DODGE For Sizes Not Listed.

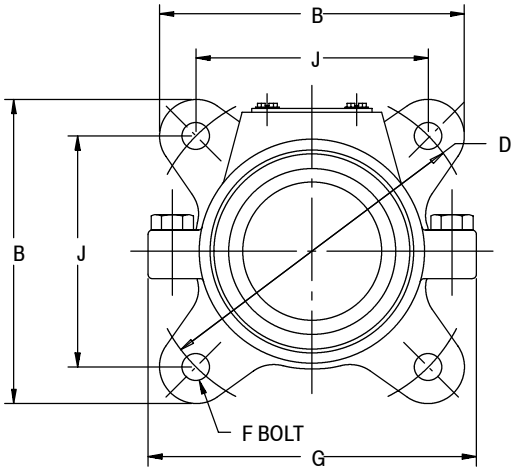
SHAFT SIZE INCHES	A	B	C	D		E	F BOLT DIA	G	H	J	L	M	P	EXP*
				MIN.	MAX									
2-7/16 2-1/2	4	12	3-3/8	9-17/64	10-1/4	1-3/4	1/2	1-1/16	1-3/4	7-1/32	4-1/16	3-1/4	7-3/8	9/32
2-11/16 2-15/16 3	4-1/2	13-7/16	3-3/4	9-7/8	11-1/2	1-7/8	5/8	1-9/16	2	7-7/8	4-23/32	3-3/4	8-5/16	9/32
3-7/16 3-1/2	5	16	4	12-13/16	13-13/16	2	3/4	1-29/64	2-1/4	9-7/16	5-17/32	4-1/2	10-3/32	9/32
3-15/16 4	6-1/4	17-7/16	4-15/32	13-1/8	14-3/4	2	3/4	1-45/64	2-3/4	10-5/16	6-1/8	5	10-45/64	11/32
4-7/16 4-1/2	6-3/4	19	4-5/8	14-3/8	16-1/4	2-1/4	3/4	1-13/16	3	11-9/16	6-7/16	5-3/4	12-29/64	11/32
4-15/16 5	7-1/4	20-1/2	5-1/8	15-1/2	18-1/16	2-1/2	7/8	2-9/32	3-1/4	12-23/32	7-7/16	6-1/4	13-29/64	11/32
5-7/16 5-15/16	9	23-11/16	6-1/4	19	20-5/8	3	1	1-15/16	3-1/2	14-29/64	9-3/8	7-1/8	15-1/8	1/2

*EXP - Total Expansion Divided Equally On Both Sides Of Bearing (Expansion Bearings Only)
Dowel Hole Locations For Precision Positioning – See Page B9–30 – B9–31

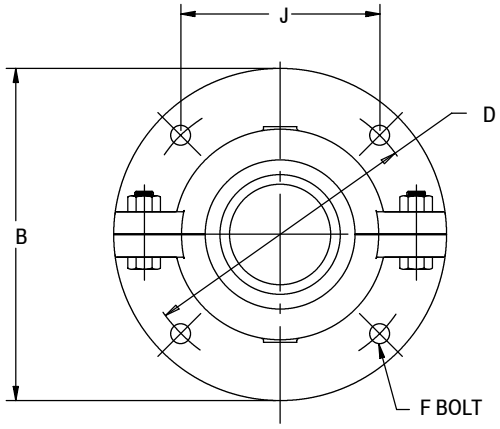
SELECTION/DIMENSIONS TYPE E PAGE B5–11/B5–22	SELECTION/DIMENSIONS TYPE K PAGE B5–11/B5–34	SELECTION/DIMENSIONS TAF PAGE B5–11/B5–52	



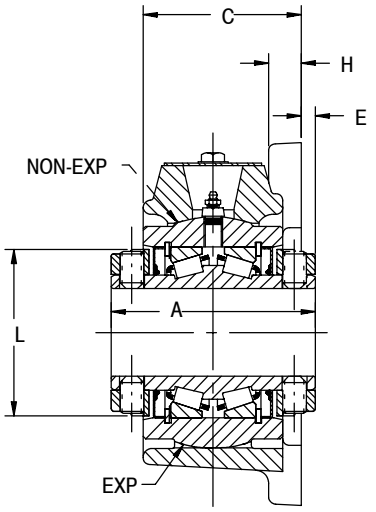
DOUBLE–INTERLOCK Flange Bearing – Inch



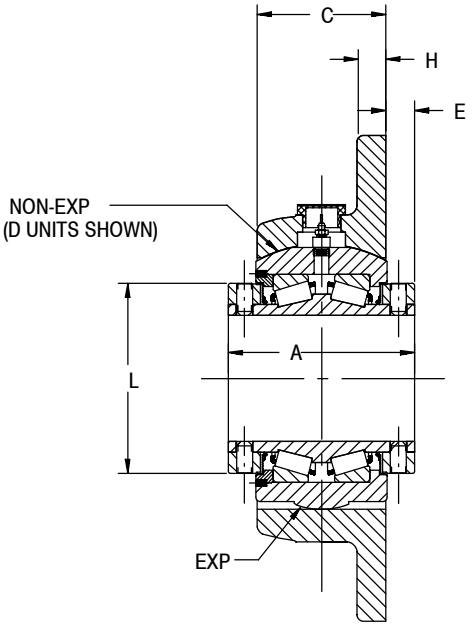
1-$^{3}/_{16}$″ THRU 4″ EXTERNAL CONSTRUCTION



4-$^{7}/_{16}$″ THRU 5″ EXTERNAL CONSTRUCTION



1-$^{3}/_{16}$″ THRU 3″ INTERNAL CONSTRUCTION

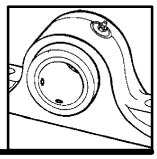


3-$^{3}/_{16}$″ THRU 5″ INTERNAL CONSTRUCTION OF UNIT

4-$^{7}/_{16}$″, 4-$^{1}/_{2}$″, 4-$^{15}/_{16}$″ & 5″
NON-EXPANSION HOUSINGS USE THE D UNIT

3-$^{3}/_{16}$″ THRU 4″ NON-EXPANSION & 3-$^{3}/_{16}$″
THRU 5″ EXPANSION HOUSINGS USE THE S-1 UNIT

EASY SELECTION PAGE B5–15	FEATURES/BENEFITS PAGE B5–2	SPECIFICATIONS PAGE B5–7	HOW TO ORDER PAGE B5–8



DOUBLE–INTERLOCK Flange Bearing – Inch

DUCTILE IRON NON-EXPANSION*			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-7/16	**023425**	F4B-DI-107R	9
1-15/16 2	**023431** **023432**	F4B-DI-115R F4B-DI-200R	15 15
2-3/16	**023433**	F4B-DI-203R	19
2-7/16 2-1/2	**023435** **023436+**	F4B-DI-207R F4B-DI-208R	22 22
2-15/16 3	**023439** **023440+**	F4B-DI-215R F4B-DI-300R	32 31
3-7/16	**023443**	F4B-DI-307R	53
3-15/16	**023445**	F4B-DI-315R	82
4-7/16◇ 4-1/2◇	**023447+** **023448+**	F4B-DI-407R F4B-DI-408R	158 158
4-15/16◇	**023449**	F4B-DI-415R	220

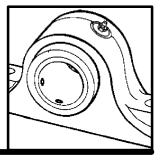
* Furnished Unless Otherwise Specified
\# Consult DODGE For Sizes Not Listed.
\+ Non-stock -- Consult DODGE For Delivery
◇ $4^{7}/_{16}$″ - 5″ Housings Are Made Of Cast Iron

DUCTILE IRON EXPANSION			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-7/16	**023454**	F4B-DI-107RE	9
1-15/16 2	**023460** **023461**	F4B-DI-115RE F4B-DI-200RE	15 15
2-3/16	**023462**	F4B-DI-203RE	19
2-7/16 2-1/2	**023464** **023465+**	F4B-DI-207RE F4B-DI-208RE	22 22
2-15/16 3	**023468** **023469+**	F4B-DI-215RE F4B-DI-300RE	32 31
3-7/16	**023472**	F4B-DI-307RE	53
3-15/16	**023474+**	F4B-DI-315RE	82
4-7/16◇ 4-1/2◇	**023476+** **023477+**	F4B-DI-407RE F4B-DI-408RE	158 158
4-15/16◇	**023478**	F4B-DI-415RE	220

\# Consult DODGE For Sizes Not Listed.
\+ Non-stock -- Consult DODGE For Delivery
◇ $4^{7}/_{16}$″ - 5″ Housings Are Made Of Cast Iron

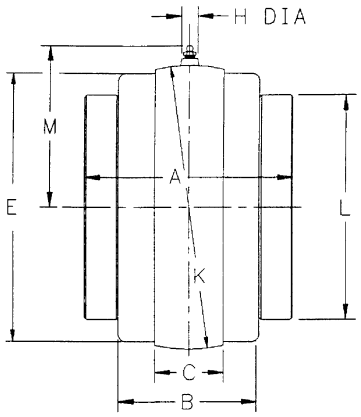
SHAFT SIZE INCHES	A	B	C	D	E	F Bolt Dia.	G	H	J	L
1-7/16	3	5-3/4	2-1/8	6-1/4	5/16	1/2	5-3/4	1/2	4-27/64	2-3/4
1-15/16 2	3-1/2	6-7/8	2-9/16	7-1/2	3/8	5/8	7-1/4	9/16	5-5/16	3-7/16
2-3/16	3-3/4	7-3/16	2-23/32	8	7/16	5/8	7-13/16	9/16	5-21/32	3-3/4
2-7/16 2-1/2	4	7-5/8	2-15/16	8-1/2	7/16	5/8	8-9/16	5/8	6	4-1/16
2-15/16 3	4-1/2	8-7/8	3-11/32	9-3/4	1/2	3/4	9-1/2	11/16	6-57/64	4-23/32
3-7/16	5	10-1/4	3-23/32	11-1/2	1/2	7/8	11-3/8	3/4	8-1/8	5-17/32
3-15/16	6-1/4	11-7/16	4-5/8	13	3/4	1	12-7/8	13/16	9-3/16	6-1/8
4-7/16 4-1/2	6-3/4	17-3/4	4-5/8	15	1-1/16	1	-----	1	10-5/8	6-7/16
4-15/16	7-1/4	19	5	16	1-1/8	1-1/8	-----	1-1/8	11-5/16	7-7/16

NOMENCLATURE PAGE B5–10	SELECTION/DIMENSIONS TYPE E PAGE B5–11/B5–22	SELECTION/DIMENSIONS TYPE K PAGE B5–11/B5–34	SELECTION/DIMENSIONS TAF PAGE B5–11/B5–52



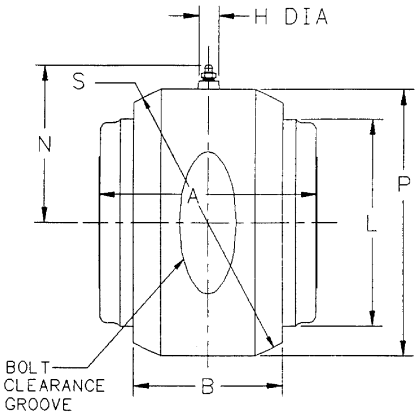
SELECTION/DIMENSIONS

DOUBLE-INTERLOCK Units - Inch



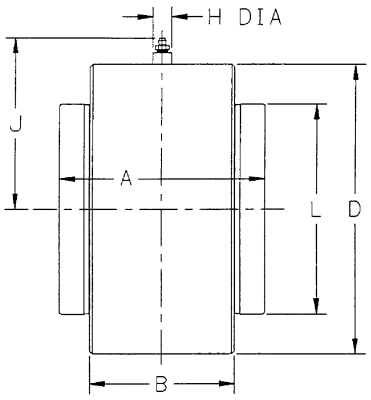
S-1 UNIT

S-1 units can be mounted in a cylindrical bore to accommodate lineal shaft expansion or in a spherical groove to act as an anchor bearing. They are the same quality units which provide the statically self-aligning feature for the DOUBLE-INTERLOCK expansion and non-expansion pillow blocks and expansion flange bearings and 1-3/16″ to 4″ non-expansion flange bearings.



D UNIT

D units require a spherical seat and serve as non-expansion bearings. It is the static self-aligning unit which was formerly used in DOUBLE-INTERLOCK non-expansion flange bearing and pillow blocks thru 5 bore size prior to '78. They are also currently in 4-7/16″ to 5″ flange bearings



B-1 UNIT

B-1 Units can only be used in a cylindrical bore and are often mounted in machines where bored holes can be provided. B-1 units can be used either as a non-expansion or expansion bearing by providing a suitable means of locating the unit axially. B-1 Units will handle slight misalignment requirements. Shaft must be supported by another unit or bearing. For mounting in rotating wheels, the Type C B-1 unit is preferred or consult the factory.

SHAFT SIZE INCHES	A	B	C	D	E		H	J	K	L	M	N	P	S
					MACH. SIDE	CAST SIDE								
1-3/16 1-1/4	2-3/4	1-7/8	11/32	3	2.813	2.88	**	2.32	3.125•	2-1/4	2.03	---	---	---
1-3/8 1-7/6	3	2-1/16	1-5/32	3-7/16	3.250	3.31	11/16	2.54	3.625•	2-3/4	2.64	2-7/8	3-5/8	3.844•
1-1/2 1-5/8 1-11/16	3-3/8	2-5/16	1-3/16	3-15/16	3.750	3.82	11/16	2.79	4.125•	3-3/16	2.89	3-1/8	4-3/32	4.344•
1-3/4 1-7/8 1-15/16 2	3-1/2	2-7/16	1-1/2	4-1/4	4.125	4.18	11/16	2.95	4.562•	3-7/16	3.10	3-1/4	4-7/16	4.656•
2-3/16	3-3/4	2-9/16	1-9/16	45/8	4.500	4.63	11/16	3.13	5.000•	3-3/4	3.32	3-7/16	4-23/32	5.000•
2-1/4 2-7/16 2-1/2	4	2-3/4	1-7/16	5	4.812	4.88	11/16	3.32	5.186•	4-1/16	3.41	3-37/64	5-5/32	5.437•
2-11/16 2-3/4 2-15/16 3	4-1/2	3	1-7/8	5-7/8	5.563	5.63	11/16	3.76	6.061•	4-23/32	3.85	4	5-13/16	6.094•
3-3/16 3-1/4 3-7/16 3-1/2	5	3-1/2	2	7-1/8	6.813	6.88	11/16	4.38	7.373#	5-17/32	4.51	4-11/16	7-7/32	7.500s
3-15/16 4	6-1/4	4-1/2	2-3/8	7-7/8	7.438	7.50	*	5.48	7.997#	6-1/8	5.16	5-1/8	8-1/8	8.375s
4-7/16 41/2	6-3/4	4-5/8	2-3/8	8-3/4	8.313	8.38	*	5.91	8.872#	6-7/16	5.60	5-1/2	8-7/8	9.125s
415/16 5	7-1/4	5-1/8	2-7/8	10-1/8	9.563	9.63	*	6.60	10.184#	7-7/16	6.26	6-3/16	10-1/4	10.500s
5-7/16 5-15/16 6	9	6-1/16	2-7/8	---	11.188	11.19	15/16	---	11.874 ∧	9-3/8	7.10	---	---	---
6-7/16 6-1/2 6-15/16 7	10-1/2	7-1/8	3	---	13.250	13.25	15/16	---	14.248 ∧	11-3/8	8.29	---	---	---

* 11/16″ DIA ON D UNITS; 5/16″ 0N S-1 UNITS AND 3/4 HEX ON B-1 UNITS

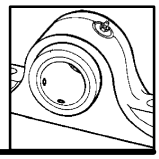
** 11/16″ DIA ON B-1 UNITS; 7/16″ DIA ON S-1 UNITS

• +.000 TO .001″ σ +.000 TO -.002″

#±.0005″

∧ +.000 TO -.003″

MODIFICATION/ACCESSORIES PAGE B5–9	SELECTION PAGE B5–11	EASY SELECTION PAGE B5–15	ENGINEERING/TECHNICAL PAGE B5–17



SELECTION/DIMENSIONS

DOUBLE-INTERLOCK Units-inch

"S-1" UNITS -- GRAY IRON 1-3/16″ thru 3″			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-3/16	**023507**	S1U-DI-103R	3
1-1/4	**023508+**	S1U-DI-104R	4
1-3/8	**023509+**	S1U-DI-106R	5
1-7/16	**023510**	S1U-DI-107R	5
1-1/2	**023511+**	S1U-DI-108R	7
1-5/8	**023512**	S1U-DI-110R	7
1-11/16	**023513**	S1U-DI-111R	7
1-3/4	**023514**	S1U-DI-112R	8
1-7/8	**023515+**	S1U-DI-114R	8
1-15/16	**023516**	S1U-DI-115R	8
2	**023517**	S1U-DI-200R	8
2-3/16	**023518**	S1U-DI-203R	10
2-1/4	**023519+**	S1U-DI-204R	12
2-7/16	**023520**	S1U-DI-207R	11
2-1/2	**023521**	S1U-DI-208R	11
2-11/16	**023522**	S1U-DI-211R	18
2-3/4	**023523+**	S1U-DI-212R	17
2-15/16	**023524**	S1U-DI-215R	17
3	**023525**	S1U-DI-300R	17

\# Consult DODGE For Sizes Not Listed.
\+ Non-stock -- Consult DODGE For Delivery

"D" UNITS -- GRAY IRON			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-3/16	--------	DU-DI-103R	--------
1-1/4	--------	DU-DI-104R	--------
1-3/8	**023480+**	DU-DI-106R	5
1-7/16	**023481**	DU-DI-107R	5
1-1/2	**023482**	DU-DI-108R	8
1-5/8	**023483+**	DU-DI-110R	7
1-11/16	**023484**	DU-DI-111R	7
1-3/4	**023485**	DU-DI-112R	8
1-7/8	**023486+**	DU-DI-114R	8
1-15/16	**023487**	DU-DI-115R	8
2	**023488**	DU-DI-200R	8
2-3/16	**023489**	DU-DI-203R	9
2-1/4	**023490+**	DU-DI-204R	12
2-7/16	**023491**	DU-DI-207R	12
2-1/2	**023492**	DU-DI-208R	12
2-11/16	**023493**	DU-DI-211R	18
2-3/4	**023494**	DU-DI-212R	17
2-15/16	**023495**	DU-DI-215R	16
3	**023496**	DU-DI-300R	16
3-3/16	**023497**	DU-DI-303R	32
3-1/4	**023498+**	DU-DI-304R	31
3-7/16	**023499**	DU-DI-307R	30
3-1/2	**023500**	DU-DI-308R	29
3-15/16	**023501**	DU-DI-315R	46
4	**023502**	DU-DI-400R	43
4-7/16	**023503**	DU-DI-407R	57
4 1/2	**023504+**	DU-DI-408R	64
4-15/16	**023505**	DU-DI-415R	85
5	**023506+**	DU-DI-500R	85

\# Consult DODGE For Sizes Not Listed.
\+ Non-stock -- Consult DODGE For Delivery

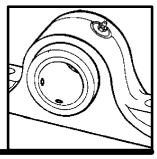
"S-1" UNITS -- GRAY IRON 3-3/16″ thru 7″			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
3-3/16	**023526**	S1U-DI-303R	34
3-1/4	**023527+**	S1U-DI-304R	31
3-7/16	**023528**	S1U-DI-307R	31
3-1/2	**023529+**	S1U-DI-308R	31
3-15/16	**023530**	S1U-DI-315R	43
4	**023531**	S1U-DI-400R	43
4-7/16	**023532**	S1U-DI-407R	57
4 1/2	**023533+**	S1U-DI-408R	64
4-15/16	**023534**	S1U-DI-415R	82
5	**023535+**	S1U-DI-500R	82
5-7/16	**023536**	S1U-DI-507R	159
5-15/16	**023537**	S1U-DI-515R	135
6	**023538**	S1U-DI-600R	128
6-7/16	**023539**	S1U-DI-607R	187
6-1/2	**023540**	S1U-DI-608R	182
6-15/16	**023541**	S1U-DI-615R	180
7	**023542**	S1U-DI-700R	178

\# Consult DODGE For Sizes Not Listed.
\+ Non-stock -- Consult DODGE For Delivery

"B-1" UNITS -- GRAY IRON			
SHAFT SIZE INCHES #	PART NUMBER	PART NAME	WEIGHT LBS (APPROX)
1-3/16	**023543**	BIU-DI-103R	3
1-3/8	**023545**	BIU-DI-106R	5
1-7/16	**023546**	BIU-DI-107R	5
1-1/2	**023547**	BIU-DI-108R	6
1-5/8	**023548+**	BIU-DI-110R	6
1-3/4	**023550**	BIU-DI-112R	8
1-15/16	**023552**	BIU-DI-115R	8
2	**023553**	BIU-DI-200R	7
2-3/16	**023554**	BIU-DI-203R	9
2-7/16	**023556**	BIU-DI-207R	12
2-1/2	**023557**	BIU-DI-208R	11
2-11/16	**023558+**	BIU-DI-211R	17
2-3/4	**023559+**	BIU-DI-212R	17
2-15/16	**023560**	BIU-DI-215R	17
3	**023561**	BIU-DI-300R	17
3-7/16	**023564**	BIU-DI-307R	30
3-1/2	**023565**	BIU-DI-308R	30
3-15/16	**023566**	BIU-DI-315R	45
4	**023567**	BIU-DI-400R	44
4-7/16	**023568**	BIU-DI-407R	58
4 1/2	**023569**	BIU-DI-408R	64
4-15/16	**023570**	BIU-DI-415R	87
5	**023571**	BIU-DI-500R	86

\# Consult DODGE For Sizes Not Listed.
\+ Non-stock -- Consult DODGE For Delivery

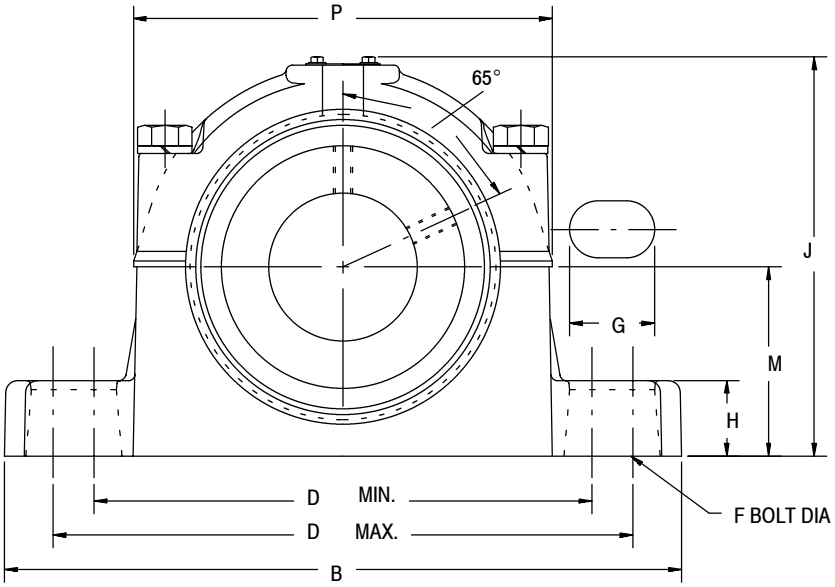
SELECTION/DIMENSIONS TYPE E PAGE B5–11/B5–22	SELECTION/DIMENSIONS TYPE K PAGE B5–11/B5–34	SELECTION/DIMENSIONS DOUBLE-INTERLOCK PAGE B5–11/B5–44	

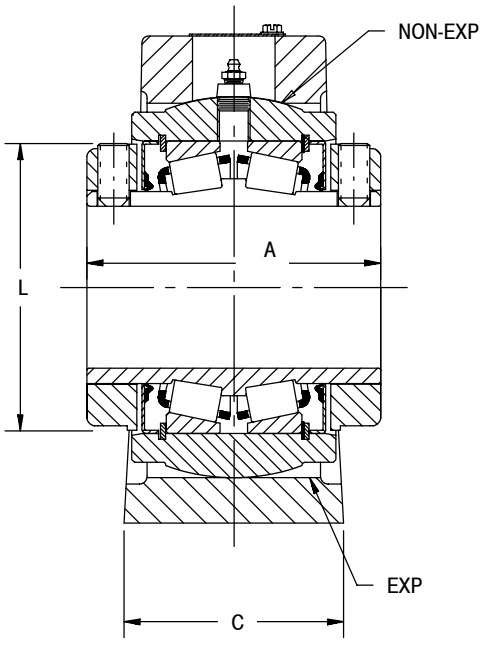


SELECTION/DIMENSIONS

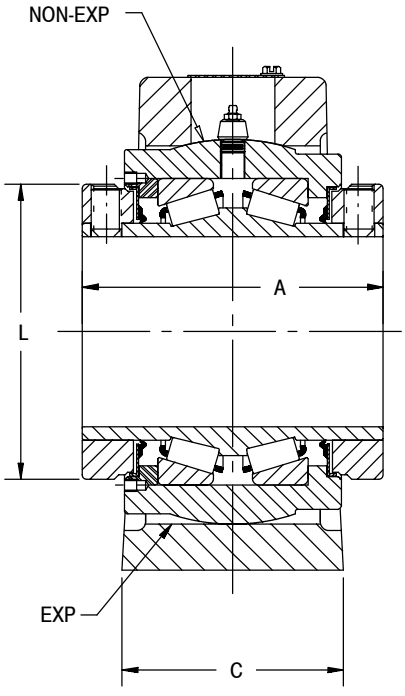
TAF Pillow Block – Inch

2-BOLT BASE



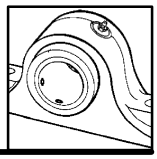


1-$^{7}/_{16}$″ THRU 3″ CONSTRUCTION



3-$^{7}/_{16}$″ THRU 3-$^{1}/_{2}$″ CONSTRUCTION

FEATURES/BENEFITS PAGE B5–2	SPECIFICATIONS PAGE B5–7	HOW TO ORDER PAGE B5–8	NOMENCLATURE PAGE B5–10



SELECTION/DIMENSIONS

TAF Pillow Block – Inch

2-BOLT BASE

GRAY IRON NON-EXPANSION +						
SHAFT SIZE INCHES #	SHAFT SIZE SYMBOL	SAF HOUSING NUMBER	PILLOW BLOCK P/N	HSG ASSEM. P/N	UNIT P/N	PIL. BLK. WT. APRX LBS
1-7/16	107	509	**037580**	**037540**	**037632**	12
1-11/16	111	510	**037581**	**037541**	**037633**	15
1-15/16	115	511	**037582**	**037542**	**037634**	17
2-3/16	203	513	**037583**	**037543**	**037635**	25
2-7/16	207	515	**037584**	**037544**	**037636**	30
2-1/2	208	515	**037585**	**037544**	**037637**	30
2-11/16	211	516	**037586**	**037545**	**037638**	38
2-3/4	212	516	**037587**	**037545**	**037639**	38
2-15/16	215	517	**037588**	**037546**	**037640**	45
3	300	517	**037589**	**037546**	**037641**	44
3-7/16	307	520	**037590**	**037547**	**037642**	71
3-1/2	308	520	**037591**	**037547**	**037643**	70

+ Furnished Unless Otherwise Specified.
Description = P2b-taf-207re For 2-$^{7}/_{16}$″ Size
# Consult DODGE For Sizes Not Shown

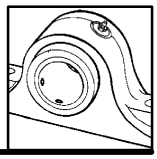
GRAY IRON EXPANSION						
SHAFT SIZE INCHES #	SHAFT SIZE SYMBOL	SAF HOUSING NUMBER	PILLOW BLOCK P/N	HSG ASSEM. P/N	UNIT P/N	PIL. BLK. WT. APRX LBS
1-7/16	107	509	**037592**	**037555**	**037632**	12
1-11/16	111	510	**037593**	**037556**	**037633**	15
1-15/16	115	511	**037594**	**037557**	**037634**	17
2-3/16	203	513	**037595**	**037558**	**037635**	25
2-7/16	207	515	**037596**	**037559**	**037636**	30
2-1/2	208	515	**037597**	**037559**	**037637**	30
2-11/16	211	516	**037598**	**037560**	**037638**	38
2-3/4	212	516	**037599**	**037560**	**037639**	38
2-15/16	215	517	**037600**	**037561**	**037640**	45
3	300	517	**037601**	**037561**	**037641**	44
3-7/16	307	520	**037602**	**037562**	**037642**	71
3-1/2	308	520	**037603**	**037562**	**037643**	70

Description = P2b-taf-207re For 2-$^{7}/_{16}$″ Size
# Consult DODGE For Sizes Not Shown

SHAFT SIZE INCHES	SAF SERIES	A	B	C	D		F BOLT DIA	G	H	J	L	M	P	EXP*
					MIN.	MAX.								
1-7/16	509	3	8-1/4	2-3/16	6-1/4	7	1/2	15/16	7/8	5-7/64	2-3/4	2-1/4	5-33/64	3/32
1-11/16	510	3-3/8	8-1/4	2-3/8	6-1/2	7	1/2	7/8	1-1/32	5-5/8	3-3/16	2-1/2	5-13/16	3/32
1-15/16	511	3-1/2	9-5/8	2-3/4	7-3/8	8-1/4	5/8	1-13/64	1-1/32	6-9/64	3-7/16	2-3/4	6-23/64	9/32
2-3/16	513	3-3/4	11	3-1/4	8-21/32	9-1/2	5/8	1-7/16	1-1/32	6-33/64	3-3/4	3	6-61/64	9/32
2-7/16 2-1/2	515	4	11-1/8	3-1/8	8-5/8	9-5/8	5/8	1-17/64	1-1/4	7-1/32	4-1/16	3-1/4	7-3/8	9/32
2-11/16 2-3/4	516	4-1/2	12-19/32	3-1/2	9-7/8	11	3/4	1-7/16	1-1/4	7-43/64	4-23/32	3-1/2	8-5/16	9/32
2-15/16 3	517	4-1/2	12-19/32	3-1/2	9-7/8	11	3/4	1-7/16	1-1/4	7-59/64	4-23/32	3-3/4	8-5/16	9/32
3-7/16 3-1/2	520	5	14-1/4	4-11/32	11-13/16	13-1/8	7/8	1-21/32	1-21/32	9-27/64	5-5/16	4-1/2	10-3/32	9/32

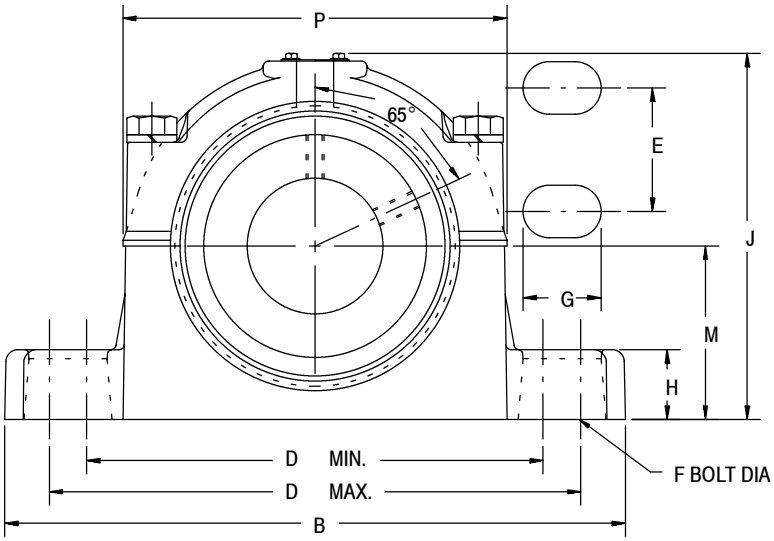
*EXP Total Expansion Divided Equally On Both Sides Of Bearing (Expansion Bearing Only).

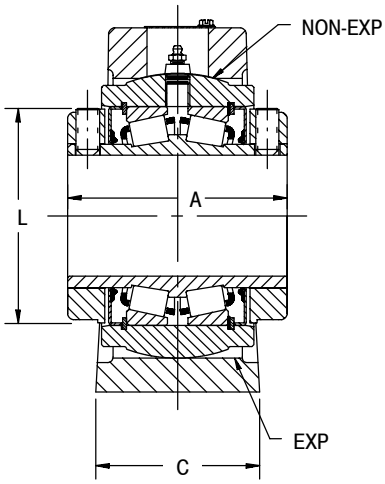
Dowel Hole Locations For Precision Positioning – See Page B9–30 – B9–31



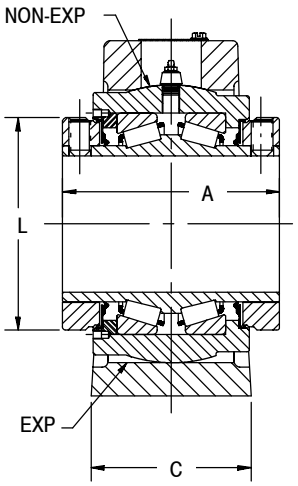
TAF Pillow Block – Inch

4-BOLT BASE-INCH

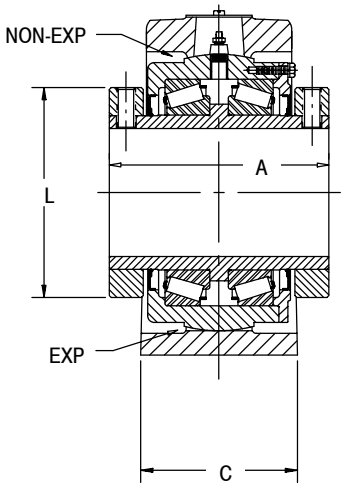




2-$^{7}/_{16}$″ THRU 3″ CONSTRUCTION

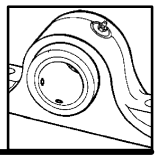


3-$^{7}/_{16}$″ THRU 5″ CONSTRUCTION



5-$^{7}/_{16}$″ THRU 7″ CONSTRUCTION

FEATURES/BENEFITS PAGE B5–2	SPECIFICATIONS PAGE B5–7	HOW TO ORDER PAGE B5–8	NOMENCLATURE PAGE B5–10



SELECTION/DIMENSIONS

TAF Pillow Block – Inch

4-BOLT BASE-INCH

GRAY IRON NON-EXPANSION +						
SHAFT SIZE INCHES #	SHAFT SIZE SYMBOL	SAF HOUSING NUMBER	PILLOW BLOCK P/N	HSG ASSEM. P/N	UNIT P/N	PIL. BLK. WT. APRX LBS
2-7/16 2-1/2	207 208	515 515	**037604** **037605**	**037548** **037548**	**037636** **037637**	30 30
2-11/16 2-3/4	211 212	516 516	**037606** **037607**	**037549** **037549**	**037638** **037639**	38 38
2-15/16 3	215 300	517 517	**037608** **037609**	**037550** **037550**	**037640** **037641**	45 44
3-7/16 3-1/2	307 308	520 520	**037610** **037611**	**037551** **037551**	**037642** **037643**	71 70
3-15/16 4	315 400	522 522	**037612** **037613**	**037552** **037552**	**037644** **037645**	110 110
4-7/16 4-1/2	407 408	526 526	**037614** **037615**	**037553** **037553**	**037646** **037647**	140 140
4-15/16 5	415 500	528 528	**037616** **037617**	**037554** **037554**	**037648** **037649**	180 180
5-7/16	507	532	**023584**	**042628**	**023610**	300
5-15/16 6	515 600	534 534	**023585** **023586**	**042630** **042630**	**023611** **023612**	300 300
6-7/16 6-1/2	607 608	536 536	**023587** **023588**	**042632** **042632**	**023613** **023614**	510 510
6-15/16 7	615 700	538 538	**023589** **023590**	**042634** **042634**	**023615** **023616**	520 520

+ Furnished Unless Otherwise Specified
Description = P4b-taf-207r For 2-7/16″ Size Pillow Block
# Consult DODGE For Sizes Not Shown

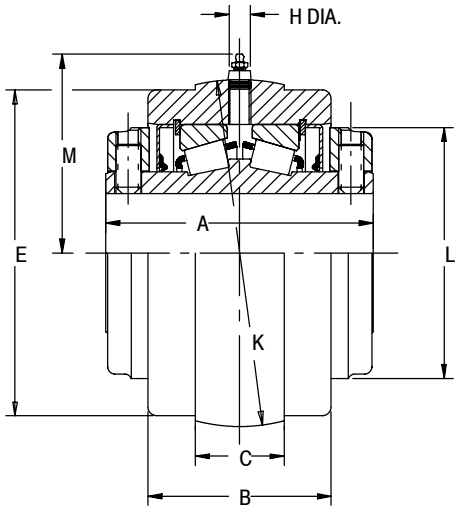
GRAY IRON EXPANSION						
SHAFT SIZE INCHES #	SHAFT SIZE SYMBOL	SAF HOUSING NUMBER	PILLOW BLOCK P/N	HSG ASSEM. P/N	UNIT P/N	PIL. BLK. WT. APRX LBS
2-7/16 2-1/2	207 208	515 515	**037618** **037619**	**037563** **037563**	**037636** **037637**	30 30
2-11/16 2-3/4	211 212	516 516	**037620** **037621**	**037564** **037564**	**037638** **037639**	38 38
2-15/16 3	215 300	517 517	**037622** **037623**	**037565** **037565**	**037640** **037641**	45 44
3-7/16 3-1/2	307 308	520 520	**037624** **037625**	**037566** **037566**	**037642** **037643**	71 70
3-15/16 4	315 400	522 522	**037626** **037627**	**037567** **037567**	**037644** **037645**	110 110
4-7/16 4-1/2	407 408	526 526	**037628** **037629**	**037568** **037568**	**037646** **037647**	140 140
4-15/16 5	415 500	528 528	**037630** **037631**	**037569** **037569**	**037648** **037649**	180 180
5-7/16	507	532	**023603***	**042627***	**023610**	300
5-15/16 6	515 600	534 534	**023604*** **023605***	**042629*** **042629***	**023611** **023612**	300 300
6-7/16 6-1/2	607 608	536 536	**023606*** **023607***	**042631*** **042631***	**023613** **023614**	510 510
6-15/16 7	615 700	538 538	**023608*** **023609***	**042633*** **042633***	**023615** **023616**	520 520

Description = P4b-taf-207re For 2-7/16″ Size Pillow Block
# Consult DODGE For Sizes Not Shown

SHAFT SIZE	SAF SERIES	A	B	C	D		E	F BOLT DIA	G	H	J	L	M	P	EXP*
					MIN.	MAX.									
2-7/16 2-1/2	515	4	11-1/8	3-1/8	8-5/8	9-5/8	1-7/8	1/2	1-1/8	1-1/4	7-1/32	4-1/16	3-1/4	7-3/8	9/32
2-11/16 2-3/4	516	4-1/2	12-19/32	3-1/2	9-7/8	11	2-1/8	5/8	1-21/64	1	7-43/64	4-23/32	3-1/2	8-5/16	9/32
2-15/16 3	517	4-1/2	12-19/32	3-1/2	9-7/8	11	2-1/8	5/8	1-21/64	1-1/4	7-59/64	4-23/32	3-3/4	8-5/16	9/32
3-7/16 3-1/2	520	5	14-1/4	4-11/32	11-13/16	13-1/8	2-3/8	3/4	1-5/8	1-21/32	9-27/64	5-5/16	4-1/2	10-3/32	9/32
3-15/16 4	522	6-1/4	16-1/2	4-3/4	12-19/32	14-1/2	2-3/4	3/4	1-53/64	1-25/32	10-23/64	5-15/16	4-15/16	10-45/64	11/32
4-7/16 4-1/2	526	6-3/4	18-3/8	5-1/8	14-1/2	16	3-1/4	7/8	1-3/4	2-1/16	11-53/64	6-13/32	6	12-29/64	11/32
4-15/16 5	528	7-1/4	19-45/64	5-7/8	15-5/8	17-3/8	3-3/8	1	2	2-1/16	12-37/64	7-13/32	6	13-23/64	11/32
5-7/16	532	9	21– 21/32	6-1/4	17-5/8	19–1/4	3-3/4	1	1 59/64	2-11/32	14	9-3/8	6-11/16	15 1/8	7/8
5-15/16 6	534	9	24-3/4	6 3/4	19	21-9/16	4-1/4	1	2 27/64	2-7/8	14-3/8	9-3/8	7-1/16	15 1/8	7/8
6-7/16 6-1/2	536	10-1/2	26-3/4	7-1/8	21	23-5/8	4-5/8	1	2 7/16	3	16-1/32	11-3/8	7-1/2	18-5/16	7/8
6-15/16 7	538	10-1/2	28	7-1/2	21 5/8	24 3/8	4-1/2	1-1/4	2 3/4	3-1/8	16-3/8	11-3/8	7-7/8	18-5/16	7/8

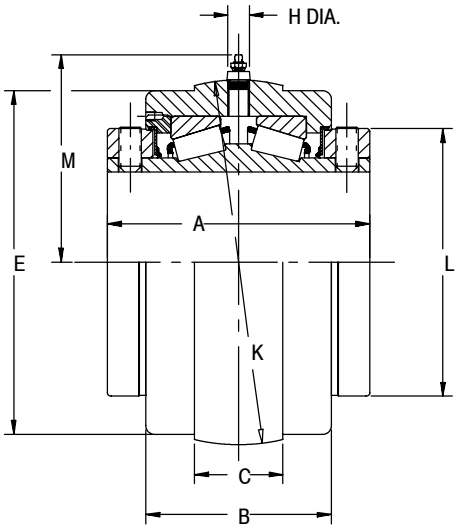
*EXP - Total Expansion Divided Equally On Both Sides Of Bearing (Expansion Bearings Only)
Dowel Hole Locations For Precision Positioning – See Page B9–30 – B9–31

TAF Units – Inch



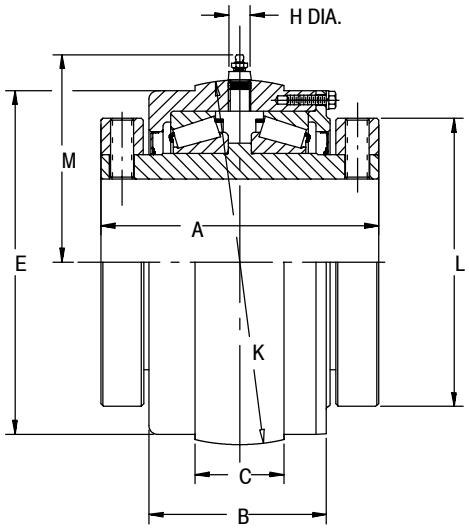
S-1 UNIT

1-7/16″ THRU 3″ CONSTRUCTION



S-1 UNIT

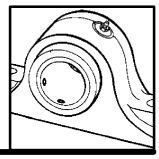
3-3/16″ THRU 5″ CONSTRUCTION



S-1 UNIT

5-7/16″ THRU 7″ CONSTRUCTION

EASY SELECTION PAGE B5–15	ENGINEERING/TECHNICAL PAGE B5–17	MODIFICATION/ACCESSORIES PAGE B5–17	FEATURES/BENEFITS PAGE B5–2



SELECTION/DIMENSIONS

TAF Units – Inch

"S-1" UNITS - GRAY IRON			
SHAFT SIZE # INCHES	**PART NUMBER**	**PART NAME**	**WEIGHT LBS (APPROX)**
1-7/16	**037632**	S1U509-TAF-107	5
1-11/16	**037633**	S1U510-TAF-111	7
1-15/16	**037634**	S1U511-TAF-115	8
2-3/16	**037635**	S1U513-TAF-203	9
2-7/16 2- 1/2	**037636** **037637**	S1U515-TAF-207 S1U515-TAF-208	11 11
2-11/16 2-3/4 2-15/16 3	**037638** **037639+** **037640** **037641**	S1U517-TAF-211 S1U517-TAF-212 S1U517-TAF-215 S1U517-TAF-300	18 17 17 17
3-7/16 3-1/2	**037642** **037643+**	S1U520-TAF-307 S1U520-TAF-307	31 31
3-15/16 4	**037644** **037645**	S1U522-TAF-315 S1U522-TAF-400	43 43
4-7/16 4-1/2	**037646** **037647+**	S1U526-TAF-407 S1U526-TAF-408	57 68
4-15/16 5	**037648** **037649+**	S1U528-TAF-415 S1U528-TAF-500	82 82
5-7/16	**023610**	S1U-TAF-507R	155
5-15/16 6	**023611** **023612**	S1U-TAF-515R S1U-TAF-600R	143 138
6-7/16 6-1/2 6-15/16 7	**023613** **023614** **023615** **023616**	S1U-TAF-607R S1U-TAF-608R S1U-TAF-615R S1U-TAF-700R	187 182 180 178

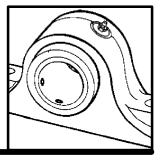
NOTE: TAF inserts below 5–7/16" are not interchangeable with TAF–XT housings. For TAF–XT housings, with shafts of 5" or less, order Double Interlock S–1 units on Page B5–51

SHAFT SIZE INCHES	**A**	**B**	**C**	**E**		**H**	**K**	**L**	**M**
				MACH. SIDE	**CAST SIDE**				
1-7/16	3	2-1/16	1-5/32	3.250	3.31	11/16	3.595•	2-3/4	2.62
1-11/16	3-3/8	2-5/16	1-3/16	3.750	3.81	11/16	4.095•	3-3/16	2.87
1-15/16	3-1/2	2-7/16	1-1/2	4.125	4.18	11/16	4.502•	3-7/16	3.07
2-3/16	3-3/4	2-9/16	1-9/16	4.500	4.56	11/16	4.940•	3-3/4	3.29
2-7/16 2- 1/2	4	2-3/4	1-7/16	4.812	4.88	11/16	5.156•	4-1/16	3.39
2-15/16 3	4-1/2	3	1-7/8	5.563	5.63	11/16	6.001•	4-23/32	3.82
3-7/16 3-1/2	5	3-1/2	2-3/16	6.813	6.88	11/16	7.313*	5-7/16	4.48
3-15/16 4	6-1/4	4-1/2	2-19/32	7.438	7.50	15/16	7.937*	5-15/16	5.13
4-7/16 4-1/2	6-3/4	4-5/8	2-9/16	8.313	8.38	15/16	8.812*	6-13/32	5.57
4-15/16 5	7-1/4	5-1/8	3-1/8	9.563	9.63	15/16	10.124*	7-13/32	6.23
5-7/16 5-15/16 6	9	5-7/8	2-9/16	11.190	11.19	3/4	11.563^	9-3/8	6.94
6-7/16 6-1/2 6-15/16 7	10-1/2	7-1/8	3	13.250	13.25	3/4	13.748^	11-3/8	8.04

•+.000″-.001″ ^+.000″-.003″ * ±.0005

Consult DODGE For Sizes Not Listed + Non–stock –– Consult DODGE For Delivery

SELECTION/DIMENSIONS TYPE E (metric) PAGE B5–61/B5–68	SELECTION/DIMENSIONS TYPE E PAGE B5–11/B5–22	SELECTION/DIMENSIONS DOUBLE-INTERLOCK PAGE B5–11/B5–44	



SELECTION/DIMENSIONS

Type E / Type K / DOUBLE INTERLOCK / TAF

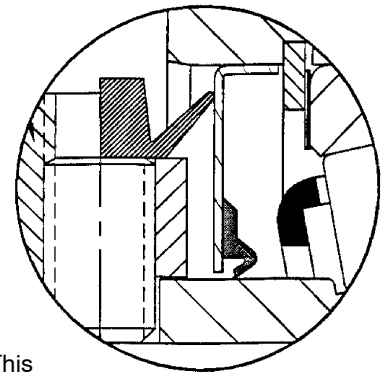
E-TECT SEAL KITSS

SHAFT SIZE INCHES	KIT PART NUMBER
1-3/16 TO 1-1/4	**037650**
1-3/8 TO 1-7/16	**037651**
1-1/2 TO 1-11/16	**037652**
1-3/4 TO 2	**037653**
2-3/16	**037654**
2-1/4 TO 2-1/2	**037655**
2-11/16 TO 3	**037656**
3-3/16 TO 3-1/2	**037657**
3-15/16 TO 4	**037658**
4-7/16 TO 4-1/2	**037659**
4-15/16 TO 5	**037660**
5-7/16 TO 6	**037673****
6-7/16 TO 7	**037674****

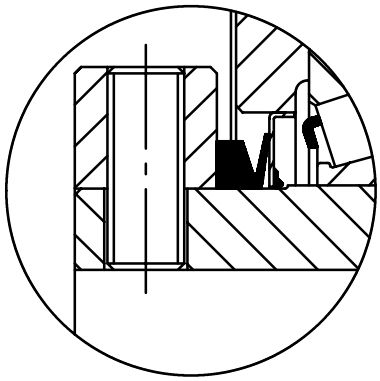
* Kit Includes One Collar, Set Screws And Seal.

** Kit For 5-$^{7}/_{16}$-7″ Consists Of A Modified V-ring Seal. This Seal Can Only Be Used With Bearings Produced After September 1995.

□ Limiting Speed 70% Of Catalog Rating

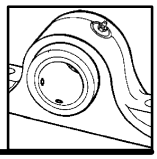


1-3/16 THRU 5″



5-7/16 THRU 7″

SELECTION/DIMENSIONS TYPE E PAGE B5–11/B5–22	SELECTION/DIMENSIONS TYPE K PAGE B5–11/B5–34	SELECTION/DIMENSIONS DOUBLE-INTERLOCK PAGE B5–11/B5–44	SELECTION/DIMENSIONS TAF PAGE B5–11/B5–52

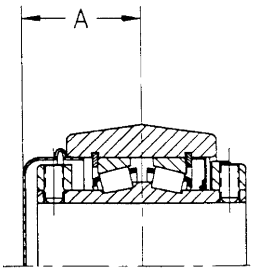


Type E

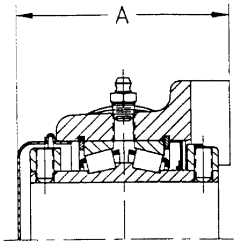
TYPE E END CLOSURE KITS-INCH

SHAFT SIZE Δ Inches	KIT* PART NO.	"A" DIMENSION (INCH)				
		PILLOW BLOCK	FLANGE	PILOT FLANGE	WS TAKE-UP	TP TAKE-UP
1-3/16 TO 1-1/4	**023795**	1-9/16	2-31/32	1-15/32	----	----
1-3/8 TO 1-7/16	**023796**	1-11/32	3-7/32	1-21/32	1-21/32	----
1-1/2 TO 1-11/16	**023797**	1-57/64	3-43/64	1-47/64	1-55/64	----
1-3/4 TO 2	**023798**	1-61/64	3-51/64	1-47/64	1-59/64	1-63/64
2-3/16	**023799**	2-3/32	4-1/16	1-7/8	2-1/16	2-1/16
2-1/4 TO 2-1/2	**023800**	2-1/4	4-3/8	2	2-3/16	2-5/16
2-11/16 TO 3	**023801**	2-7/16	4-7/8	2-3/16	2-7/16	2-7/16

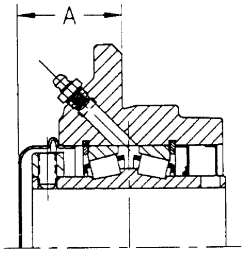
Δ - Consult DODGE For Sizes Not Listed.
* - Kit Includes End Closure And Special Collar.



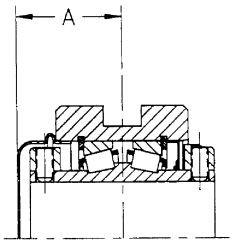
PILLOW BLOCK



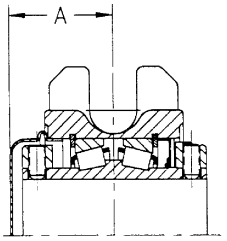
FLANGE



PILOT FLANGE

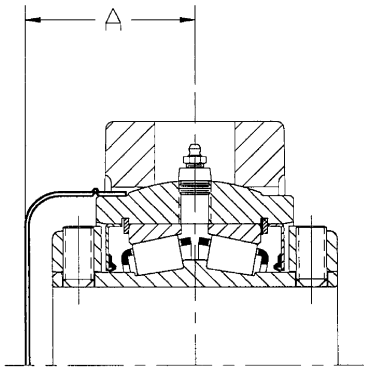


WS TAKE-UP
TYPE E & TYPE K

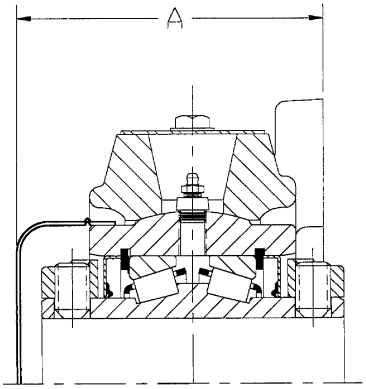


TP TAKE-UP
TYPE E & TYPE K

Type K, DOUBLE–INTERLOCK and TAF End Closures



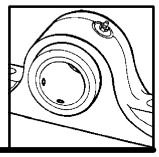
DOUBLE INTERLOCK SHOWN
K, D-I & TAF



DOUBLE INTERLOCK SHOWN
K & D-I

SHAFT SIZE INCHES	PARTs NUMBER	"A" DIMENSION	
		PILLOW BLOCK	FLANGE BEARING
1-3/8 TO 1-7/16	**037681**	1-21/32	2-27/32
1-1/2 TO 1-11/16	**037682**	1-55/64	3-11/64
1-3/4 TO 2	**037683**	1-59/64	3-19/64
2-3/16	**037684**	2-1/16	3-1/2
2-1/4 TO 2-1/2	**037685**	2-3/16	3-3/4
2-11/16 TO 3	**037686**	2-7/16	4-3/16
3-3/16 TO 3-1/2	**037687**	2-11/16	4-15/16
3-5/16 TO 4	**037688**	3-5/16	5-13/16
4-7/16 TO 4-1/2	**037689**	3-9/16	5-7/8
4-15/16 TO 5	**037690**	3-13/16	6-5/16

END CLOSURE MOUNTS ON MACHINED OD SIDE OF S-1 UNIT



Type E - Metric

SELECTION
METRIC TYPE E TAPERED ROLLER BEARINGS

DODGE Type E Double Row Tapered 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 Unitized Type E Roller Bearings have been applied successfully even when these limits have been exceeded under controlled operating conditions. Contact DODGE Application Engineering (864-297-4800) for applications which exceed the recommendations of this catalog.

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

$$\text{L10 Life, Hours} = \left(\frac{C_{90}}{P}\right)^{10/3} X \frac{1,500,000}{RPM}$$

Where: C_{90} = Dynamic Capacity (Table 9), kN
P = Equivalent Radial Load, kN
(See Equation 1 On Page B5–63 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 Application Engineering at 864-297-4800 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. With substantial radial loads also present, it is advisable to calculate actual L_{10} life to assure the bearing meets requirements.

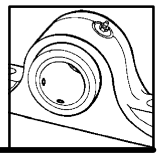
RPM RANGE	20-200	201-2000	over 2000
RECOMMENDED THRUST LOAD	$C_{90}/4$	$C_{90}/8$	$C_{90}/12$

The shaft tolerances recommended below are adequate for the conditions outlined in this catalog. 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 shaft size. **Heavy loads should be directed through the base. Where uplift loads are involved see Table 12 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.

SHAFT TOLERANCES

SHAFT SIZE	TOLERANCE
Up to 35mm	+.000 - .013mm
40 to 100mm	+.000 - .025mm
100-150mm	+.000 - .038mm
160-180mm	+.000 - .051mm



Type E-Metric

SELECTING BEARINGS SUPPORTING RADIAL LOADS ONLY

1. Define the desired L_{10} Life, in Hours
2. Establish bearing radial load, F_R, kN
3. Establish RPM.

F_R = P for Pure Radial Load Conditions.

P=Equivalent radial load, kN

(The Dodge program BEST● can be used to find application loads.)

Using the easy selection Table 10, Page B5–64 under the RPM column find the equivalent 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.

Example: L_{10} Life = 30,000 Hours
Radial load = 18 kN
RPM = 1000

At the intersection of the 1000 RPM column and at the 30,000 hours L_{10} life row, the equivalent radial load of 25 kN exceeds the 18kN application radial load for shaft sizes 80, 85, and 90. Therefore, an 80, 85, or 90mm E bearing can be used to meet the application conditions of the above example:

ALTERNATE METHOD A --SELECTING A BEARING FOR AN L10 LIFE VALUE NOT SHOWN IN THE EASY SELECTION CHART.

The L_{10} life equation can be rearranged so that the bearing dynamic capacity C_{90} is identified in terms of L10, RPM and P.

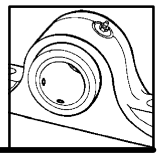
$$C_{90} = \left(\frac{L10 \text{ X } RPM}{1,500,000}\right)^{0.3} \text{X } P$$

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

Since the L_{10}, RPM, and P are known, solve for C_{90}. Select from the dynamic capacity column on Table 9 the C_{90} value equal to or greater than the C_{90} 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 9. When selecting a L10 life of less than 30,000 hours particular attention must be paid to shaft deflection and proper lubricant selection.

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

DIMENSIONS TYPE E (metric) PAGE B5–68	SELECTION/DIMENSIONS TYPE E PAGE B5–11/B5–22		



Type E-Metric

SELECTING BEARINGS SUPPORTING BOTH 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 9 convert the applied thrust load and radial loads to an equivalent radial load having the same effect on the life of the bearing as a radial load of this magnitude.

The equivalent radial load $P = XF_R + YF_A$ (Equation 1)

Where:

- P = Equivalent radial load, kN
- F_R = Radial load, kN
- F_A = Thrust (axial) load, kN
- **e** = Thrust load to radial load factor (Table 9)
- X = Radial load factor (Table 9)
- Y = Thrust load factor (Table 9)

Calculate F_A/F_R and compare to **e** for the selected bore size. Determine X and Y from Table 9 depending on whether F_A/F_R is equal to or less than **e**, or F_A/F_R 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 compared to the allowable equivalent radial load ratings for the speed and hours life desired in the easy selection table.

SELECTING BEARINGS SUPPORTING ONLY THRUST LOADS

Type E tapered roller bearings are well suited to carry pure thrust loads. Follow the same selection procedure used above “Selecting Bearings Supporting Both Radial and Thrust Loads” except the equation $P = XF_R + YF_A$ reduces to $P = YF_A$. (XF_R is equal to zero)

TABLE 9 – RADIAL AND THRUST FACTORS FOR TYPE E TAPERED ROLLER BEARINGS (METRIC)

SHAFT SIZE (MM)	e	$F_A/F_R \leq e$		$F_A/F_R > e$		DYNAMIC CAPACITY C_{90}* kNEWTONS	MAXIMUM RPM	MAXIMUM SLIP FIT RADIAL LOAD, $(F_R)k$ N**
		X	Y	X	Y			
35	.46	.87	1.89	.70	2.28	21.2	3,820	22.2
40	.44	.87	1.96	.70	2.37	27.3	3,320	28.5
45,50	.33	.87	2.64	.70	3.18	35.9	3,050	37.4
55	.35	.87	2.38	.70	2.87	38.0	2,730	39.6
60,65	.40	.87	2.17	.70	2.63	40.4	2,420	42.2
70,75	.45	.87	1.87	.70	2.26	42.7	2,060	44.5
80,85,90	.50	.87	1.71	.70	2.07	68.1	1,640	71.2
100	.49	.87	1.77	.70	2.14	93.4	1,530	98.0
110,115	.53	.87	1.63	.70	1.97	114.8	1,360	120.0
125	.47	.87	1.83	.70	2.21	157.9	1,200	164.6
135,140,150	.49	.87	1.76	.70	2.12	181.1	915	188.6
160,170,180	.54	.87	1.61	.70	1.95	307.9	790	320.2

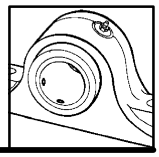
COMPARING SPHERICAL TO TAPER ROLLER BEARING

The dynamic capacity C (spherical) and C_{90} (taper) are not to the same base. To compare basic dynamic capacities, multiply C x .259 and compare to C_{90}.

To select and then compare, use the complete selection procedure for each type bearing and then compare.

* C_{90}---Dynamic capacity based on a rated life of 90 million revolutions or 3000 hours at 500 RPM.

** If load exceeds maximum allowable slip fit radial load (F_R), line to line, to-light press fit of shaft required. Application loads up to maximum slip fit radial load may be applied if recommended shaft tolerances are used.



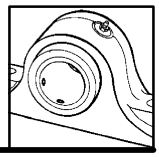
Type E – Metric

TABLE 10 – EASY SELECTION TABLE FOR TYPE E, DOUBLE ROW TAPERED ROLLER BEARINGS (METRIC)

SHAFT SIZE, MM	L10 LIFE, HRS.	ALLOWABLE EQUIVALENT RADIAL LOAD RATING (kN) AT VARIOUS REVOLUTIONS PER MINUTE														
		50	100	150	250	500	750	1000	1250	1500	1750	2000	2500	2700	3000	3500
	10000	30	25	20	20	15	15	10	10	10	10	10	10	10	10	10
	30000	20	15	15	15	10	10	10	10	5	5	5	5	5	5	5
35	40000	20	15	15	10	10	10	5	5	5	5	5	5	5	5	5
	60000	15	15	10	10	10	5	5	5	5	5	5	5	5	5	5
	100000	15	10	10	10	5	5	5	5	5	5	5	5	5	5	5
	10000	35	30	25	25	20	15	15	15	15	15	10	10	10	10	10
	30000	25	20	20	15	15	10	10	10	10	10	10	10	10	5	5
40	40000	25	20	20	15	10	10	10	10	10	10	10	5	5	5	5
	60000	20	20	15	15	10	10	10	10	5	5	5	5	5	5	5
	100000	20	15	15	10	10	10	5	5	5	5	5	5	5	5	5
	10000	55	45	40	35	25	25	20	20	20	20	20	15	15	15	––
45	30000	40	30	30	25	20	15	15	15	15	15	15	10	10	10	––
50	40000	35	30	25	20	20	15	15	15	15	10	10	10	10	10	––
	60000	30	25	25	20	15	15	15	10	10	10	10	10	10	10	––
	100000	25	20	20	15	15	10	10	10	10	10	10	10	10	10	––
	10000	50	40	40	30	25	25	20	20	20	20	15	15	15	15	––
	30000	40	30	25	25	20	15	15	15	15	15	10	10	10	10	––
55	40000	35	30	25	20	15	15	15	15	10	10	10	10	10	10	––
	60000	30	25	20	20	15	15	10	10	10	10	10	10	10	10	––
	100000	25	20	20	15	15	10	10	10	10	10	10	10	10	5	––
	10000	55	45	40	35	30	25	20	20	20	20	20	15	––	––	––
60	30000	40	30	30	25	20	15	15	15	15	15	15	10	––	––	––
65	40000	35	30	25	20	20	15	15	15	15	10	10	10	––	––	––
	60000	30	25	25	20	15	15	15	10	10	10	10	10	––	––	––
	100000	30	20	20	15	15	10	10	10	10	10	10	10	––	––	––
	10000	60	50	40	35	30	25	25	20	20	20	20	––	––	––	––
70	30000	40	35	30	25	20	20	15	15	15	15	15	––	––	––	––
75	40000	40	30	30	25	20	15	15	15	15	15	10	––	––	––	––
	60000	35	30	25	20	15	15	15	15	10	10	10	––	––	––	––
	100000	30	25	20	20	15	15	10	10	10	10	10	––	––	––	––
	10000	95	75	70	60	45	40	40	35	35	30	––	––	––	––	––
80	30000	70	55	50	40	35	30	25	25	25	25	––	––	––	––	––
85	40000	60	50	45	40	30	25	25	25	20	20	––	––	––	––	––
90	60000	55	45	40	35	25	25	20	20	20	20	––	––	––	––	––
	100000	45	40	35	30	25	20	20	20	15	15	––	––	––	––	––
	10000	130	105	95	80	65	55	50	50	45	––	––	––	––	––	––
	30000	95	75	65	55	45	40	40	35	35	––	––	––	––	––	––
100	40000	85	70	60	50	40	40	35	30	30	––	––	––	––	––	––
	60000	75	60	55	45	40	35	30	30	25	––	––	––	––	––	––
	100000	65	50	45	40	30	30	25	25	25	––	––	––	––	––	––

For Maximum Rpm See Table 1 On Page B5–14. In The Shaded Area E, DI & TAF Mounted Units Require Line-To-Line To Light Press Fit To Shaft.

SELECTION/DIMENSIONS E (metric) PAGE B5–61/B5–68	SELECTION/DIMENSIONS TYPE E (INCH) PAGE B5–12	SPECIFICATIONS PAGE B5–7	

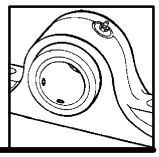


Type E – Metric

TABLE 10 – EASY SELECTION TABLE FOR TYPE E, DOUBLE ROW TAPERED ROLLER BEARINGS (METRIC) (CONT.)

SHAFT SIZE, MM	L10 LIFE, HRS.	ALLOWABLE EQUIVALENT RADIAL LOAD RATING (kN) AT VARIOUS REVOLUTIONS PER MINUTE														
		50	100	150	250	500	750	1000	1250	1500	1750	2000	2500	2700	3000	3500
	10000	160	130	115	100	80	70	65	60	––	––	––	––	––	––	––
110	30000	115	95	80	70	55	50	45	45	––	––	––	––	––	––	––
115	40000	105	85	75	65	50	45	40	40	––	––	––	––	––	––	––
	60000	95	75	65	55	45	40	35	35	––	––	––	––	––	––	––
	100000	80	65	55	50	40	35	30	30	––	––	––	––	––	––	––
	10000	220	180	155	135	110	95	90	85	––	– –	––	––	––	––	––
	30000	155	130	115	95	80	70	65	60	––	––	––	––	––	––	––
125	40000	145	115	105	90	70	65	60	55	––	––	––	––	––	––	––
	60000	130	105	90	80	65	55	50	50	––	––	––	––	––	––	––
	100000	110	90	80	65	55	50	45	40	––	––	––	––	––	––	––
	10000	250	205	180	155	125	110	100	––	––	––	––	––	––	––	––
135	30000	180	145	130	110	90	80	75	––	––	––	––	––	––	––	––
140	40000	165	135	120	100	85	75	65	––	––	––	––	––	––	––	––
150	60000	145	120	105	90	75	65	60	––	––	––	––	––	––	––	––
	100000	125	100	90	75	65	55	50	––	––	––	––	––	––	––	––
	10000	430	345	305	265	215	190	– –	––	––	––	––	––	––	––	––
160	30000	305	250	220	190	155	135	––	––	––	––	––	––	––	––	––
170	40000	280	230	205	175	140	125	––	––	––	––	––	––	––	––	––
180	60000	250	205	180	155	125	110	––	––	––	––	––	––	––	––	––
	100000	215	175	155	130	105	95	––	––	––	––	––	––	––	––	––

For Maximum Rpm See Table 1 On Page B5–14. In The Shaded Area E, DI & TAF Mounted Units Require Line-To-Line To Light Press Fit To Shaft.



Type E

LUBRICATION

DODGE Type E Metric Tapered Roller Bearings are lubricated at the factory with Shell Alvania #2 grease up to 125mm and with Mobilux #2 EP above 125mm. Shell Alvania #2 and Mobilux #2EP grease are superior industrial greases using a lithium hydroxystearate thickener and highly refined base oil. These greases will adequately handle low and medium speeds with low and medium loads at normal temperatures as defined on Table 13. For very low and high speeds, for heavy loads and for low and high temperatures, special greases must be used. Contact DODGE Application Engineering (864) 297-4800. DODGE engineers will recommend bearings and lubricants for the unusual conditions. DODGE also has the expertise to custom design and build special bearings for your needs.

High Speed Operation --- In the higher speed ranges too much grease will cause overheating. The amount of grease that the bearing will take for particular high speed application can only be determined by experience. If excess grease in the bearing caused overheating, it will be necessary to remove grease fitting (also drain plug when furnished) to permit excess grease to escape. When establishing a relubrication schedule, note that a small amount of grease at frequent intervals is preferable to a large amount at infrequent intervals.

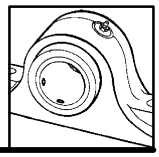
Operation in Presence of Dust, Water or Corrosive Vapors --- Under these conditions the bearing should contain as much grease as speed will permit, since a full bearing with consequent slight leakage is the best protection against entrance of foreign material. In the higher speed ranges too much grease will cause overheating --- see “High Speed Operation”. In the lower speed ranges, it is advisable to add extra grease to a new bearing before putting into operation. Bearings should be greased as often as necessary (daily if required) to maintain a slight leakage at the seals.

INSTALLATION AND MAINTENANCE

In nearly all applications good design practice requires two bearings supporting the shaft. In cases where three or more bearings are installed, unless precautions are taken to line the bearings up, both vertically and horizontally, it is possible to induce heavy loads. To ensure good alignment, mounting surfaces must be checked for flatness and must lie in the same plane. When tightening base bolts and cap bolts, each bolt should be alternately tightened in incremental torque values until full torque is achieved to prevent the angular shifting of the pillow block that occurs when one bolt is tightened to its full torque. Shimming may be required to minimize misalignment.

TABLE 11 – RELUBRICATION SCHEDULE

Hours Run per Day	SUGGESTED LUBRICATION PERIOD IN WEEKS							
	1 to 250 RPM	251 to 500 RPM	501 to 750 RPM	751 to 1000 RPM	1001 to 1500 RPM	1501 to 2000 RPM	2001 to 2500 RPM	2501 to 3000 RPM
8	12	12	10	7	5	4	3	2
16	12	7	5	4	2	2	2	1
24	10	5	3	2	1	1	1	1



Type E – Metric

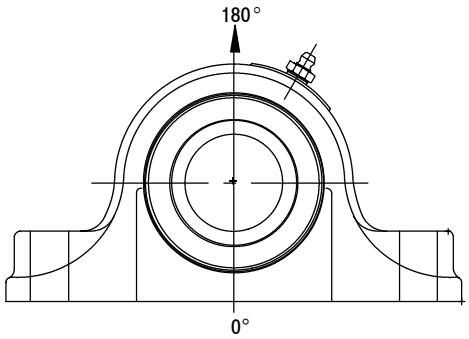
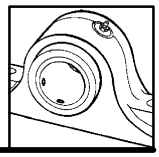


TABLE 12 – TYPE E HOUSING RATINGS, GRAY IRON

BORE SIZE	MAXIMUM HOUSING CAP LOADS, kN
MM	P180
35	14
40	13
45, 50	23
55	16
60, 65	29
70, 75	31
80, 85, 90	70
100	72
110, 115	93
125	116
135, 140, 150	194
160, 170, 180	204

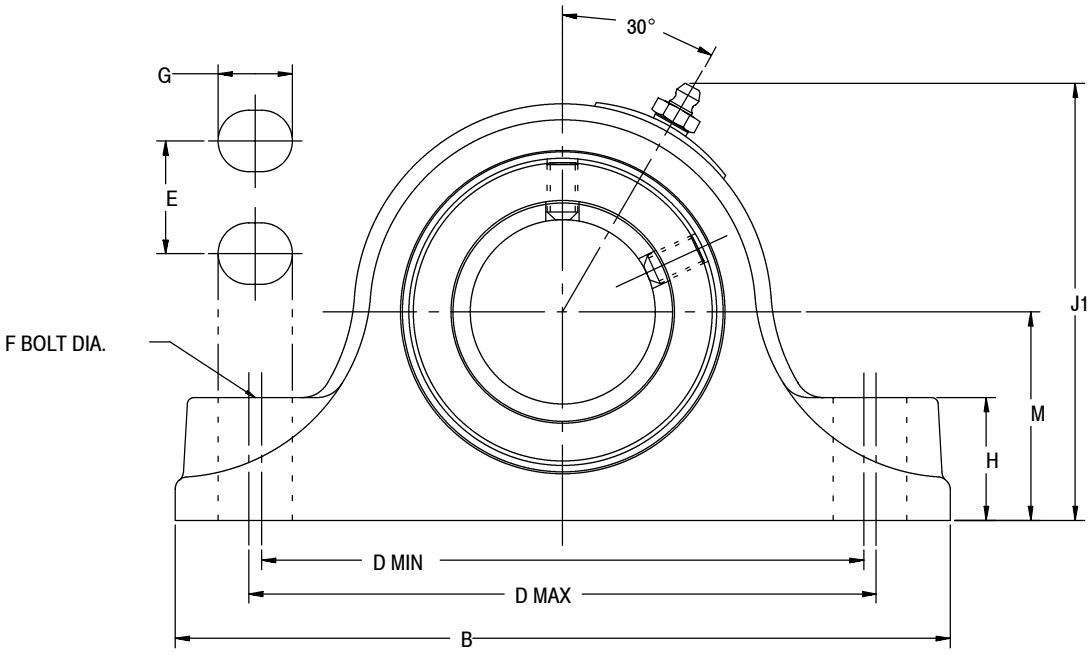
TABLE 13 – DEFINITION OF OPERATING CONDITIONS FOR TAPERED ROLLER BEARINGS

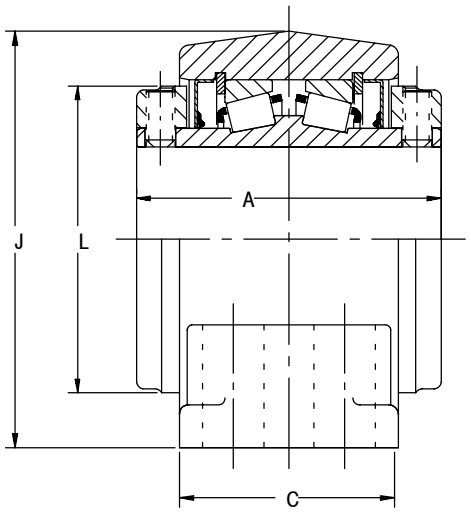
LOW SPEED MEDIUM SPEED HIGH SPEED	UP TO 20% OF MAX. RPM (TABLE 9) OVER 20% TO 80% OF MAX. RPM OVER 80% OF MAX. RPM
LIGHT LOAD NORMAL LOAD HEAVY LOAD	UP TO 30% OF C_{90} (TABLE 9) OVER 30% TO 70% OF C_{90} OVER 70% OF C_{90}
LOW TEMPERATURE MEDIUM TEMPERATURE HIGH TEMPERATURE VERY HIGH TEMPERATURE	-75°C TO - 10°C ABOVE - 10°C TO 100°C ABOVE 100°C TO 150°C ABOVE 150°C TO 230°C



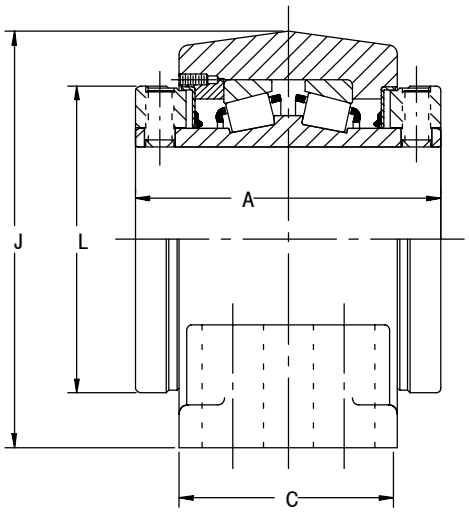
Type E – Plummer Block – Metric

2 & 4 BOLT BASE





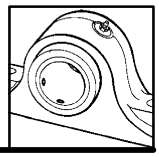
35mm THRU 75mm CONSTRUCTION



80mm THRU 125mm CONSTRUCTION

FEATURES/BENEFITS PAGE B5–2	SELECTION (metric) PAGE B5–61	EASY SELECTION (metric) PAGE B5–64	ENGINEERING/TECH (metric) PAGE B5–66

DODGE®



Type E – Plummer Block – Metric

TYPE E PLUMMER BLOCKS, 2-BOLT BASE

SHAFT SIZE (mm)	A	B	C	D Min.	D Max.	F Bolts	G	H	J	L	M
35mm	76.2	187	54	142.8	149.2	M12	19	29	100	70	47.6
40mm	85.7	181	60	155.5	161.9	M12	19	32	112	81	54
45mm 50mm	88.9	22.5	64	174.6	181	M16	22	33	119	87	57.2
55mm	92.3	244	67	193.7	200	M16	22	38	130	95	63.5
60mm 65mm	101.6	267	73	212.7	219	M16	22	41	142	103	69.9
70mm 75mm	114.3	305	76	236.5	246	M20	27	48	161	120	79.4
80mm 85mm 90mm	127	356	89	274.6	284.2	M24	30	57	191	140	95.3

TYPE E PLUMMER BLOCKS, 4-BOLT BASE

SHAFT SIZE (mm)	A	B	C	D Min.	D Max.	E	F Bolts	G	H	J	L	M
100mm	158.8	387	114	311.2	323.9	57.2	M20	28	62	216	156	108
110mm 115mm	171.5	422	117	336.6	349.3	63.5	M20	28	70	238	164	120.7
125mm	184.2	470	130	387.4	400	73	M24	32	76	276	189	139.7
135mm 140mm 150mm	228.6	559	159	441.3	485.8	95.3	M24	51	83	335	238	169.9
160mm 170mm 180mm	266.7	660	181	539.8	590.6	117.5	M24	51	94	379	289	190.5

TYPE E PLUMMER BLOCKS, 2-BOLT

SHAFT SIZE (mm)	PART NUMBER	PART NAME	WEIGHT LBS. (APPROX.)
35mm	**023620**	P2B-E-035MR	7
40mm	**023621**	P2B-E-040MR	10
45mm	**023622**	P2B-E-045MR	12
50mm	**023623**	P2B-E-050MR	12
55mm	**023624**	P2B-E-055MR	15
60mm	**023625**	P2B-E-060MR	20
65mm	**023626**	P2B-E-065MR	20
70mm	**023627**	P2B-E-070MR	29
75mm	**023628**	P2B-E-075MR	27
80mm	**023629**	P2B-E-080MR	49
85mm	**023630**	P2B-E-085MR	47
90mm	**023631**	P2B-E-090MR	45

TYPE E PLUMMER BLOCKS, 4-BOLT

SHAFT SIZE (mm)	PART NUMBER	PART NAME	WEIGHT LBS. (APPROX.)
100mm	**023632**	P4B-E-100MR	69
110mm	**023633**	P4B-E-110MR	85
115mm	**023634**	P4B-E-115MR	91
125mm	**023635**	P4B-E-125MR	136
135mm	**023636**	P4B-E-135MR	245
140mm	**023637**	P4B-E-140MR	240
150mm	**023638**	P4B-E-150MR	235
160mm	**023639**	P4B-E-160MR	355
170mm	**023640**	P4B-E-170MR	345
180mm	**023641**	P4B-E-180MR	345

NOTES