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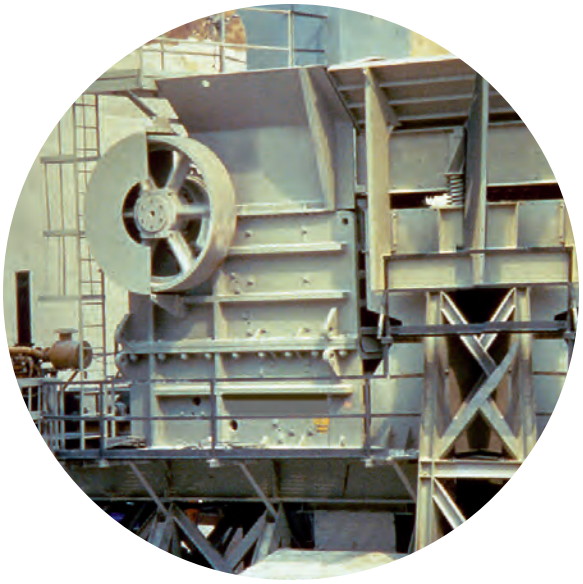
TIMKEN® BALL BEARING HOUSED UNIT CATALOG

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GROW STRONGER WITH TIMKEN

Every day, people around the world count on the strength of Timken. Our expertise in metallurgy, friction management and mechanical power transmission helps them accelerate improvements in productivity and uptime.

We supply products and services that can help keep your operations moving forward, whether you need drive train kits for commercial vehicles, durable housings for bearings in dirty environments, couplings that avoid metal-to-metal contact between motors and gearboxes, repair services for rail bearings, steel for an aircraft engine shaft, or other products and services for your applications.

When you choose Timken, you receive more than high-quality products and services: You gain a worldwide team of highly trained and experienced Timken people committed to working collaboratively with you to improve your business.

Globally, our 20,000 people provide reliable answers for a wide range of operations in manufacturing, mining, medical equipment, aerospace, transportation, oil and gas – and other diverse industries.



INCREASE YOUR EQUIPMENT UPTIME

In addition to high-quality bearings, engineered steel and mechanical power transmission components, we provide valuable integrated products and services. For example, we offer repair services and equipment monitoring equipment that can alert you to problems before they impact your uptime.

Additionally, we offer a broad selection of seals, premium lubricants, lubricators, couplings and chain to keep your operations moving smoothly.

Our 10 technology centers in the United States, Europe and Asia help pioneer tomorrow's innovations with extensive basic and applied scientific research programs. Through internal development and strategic acquisition of innovative companies, we continue to expand our portfolio of highly engineered bearings, steel and components.





RUGGED TIMKEN® HOUSED UNITS HELP PROTECT YOUR BEARINGS

When you choose sturdy Timken housings, your bearings can keep rolling smoothly, even in harsh environments impacted by dirt, debris, water and other contaminants. Timken engineers designed special housings to withstand tough challenges on the job.

Protected inside durable cast iron or steel, our highly engineered Timken® ball and roller bearings work hard to help you manufacture and transport materials, without excessive maintenance due to contaminants.

Choose from our selection of housed units designed with ball, tapered and spherical bearings. Select enhancements like Timken® seals, lubricants and housing covers best suited for each task. Our engineers help you choose the right combination of bearings and accessories to extend bearing life, increase uptime and reduce maintenance costs.

Of course, you can interchange existing products with Timken housed units because our bolt holes and shaft centerline dimensions are designed to conform to industry standards.

Timken® housed units reflect our strengths in metallurgy, engineering and manufacturing. We produce all our bearings in adherence with the Timken Quality Management System for consistency in all our facilities around the world.

TIMKEN® BALL HOUSED UNITS OFFER EASY INSTALLATION, FLEXIBLE OPTIONS

Timken® ball housed units, available in a variety of sizes and types, feature wide-inner-ring ball bearings that provide additional shaft support and locking options. The Timken® wide-inner-ring ball bearing is designed for straight shafts and can be positioned without shoulders, locknuts or adapters.

For easy installation, our ball housed units can be ordered pre-assembled with bearings, housings, seals and locking systems. Choose from pillow blocks, flanged cartridges, take-up units and cylindrical cartridges. Our cast-iron, pressed-steel and other optional materials give you durable choices for the exterior covers. Timken® locking options include set screws, self-locking collars and concentric collars.

Timken® Shaft Guarding Technology™ deters set-screw damage to shafts by placing a hardened band in the groove along the inner ring of the bearing. The set screws press against the band to transfer gripping pressure onto the shaft, preventing nicks, as well as raised-metal or permanent shaft damage. The stainless-steel band resists corrosion on the shaft. This system is particularly helpful for applications where it would be expensive and time-consuming to replace shafts.

TYPICAL INDUSTRIES AND APPLICATIONS

Use Timken ball bearing housed units in agricultural applications, fans, blowers, food processing devices and conveyors.



TIMKEN® TYPE E HOUSED UNITS REPEL CONTAMINANTS, ENHANCE PERFORMANCE

Timken® Type E tapered roller bearing housed units feature double-lip seals and locking collars that protect against water and other contaminants. This double-lip seal design blocks debris and retains grease better than single-lip or triple-lip seals, according to Timken 2012 laboratory tests.

Its cast-iron exterior includes a corrosion-resistant electro-coat finish for the housing and collar, a more durable shield than industry-standard powder coating or black oxide. Set screws with nylon patches reduce back-out, even in rigorous applications.

Premium Timken® tapered roller bearings inside Type E housings are manufactured with advanced technology that results in longer predicted useful bearing life than other housed units with standard bearings. Designed with optimized bearing profiles and improved surface finishes, Timken tapered roller bearings operate efficiently within the housing.

TYPICAL INDUSTRIES AND APPLICATIONS

Use Timken Type E housings for pulp and paper, power generation, mining, cement and aggregate industries. Our Type E housed units also are widely used in equipment for air-handling and treatment of water and waste water. Other common machine applications include mixers, washers, shredders, mills and oven/furnace roller beds.



TIMKEN® SPHERICAL ROLLER BEARING SOLID-BLOCK HOUSED UNITS WITHSTAND HARSH CONDITIONS

Timken® spherical roller bearing solid-block housed units stand up to rugged conditions. Composed of solid steel, they withstand most falling debris and handle up to ±1.5 degrees of misalignment. The steel used in these products is up to two times stronger than cast iron, which may break or pound out in tough applications.

Timken spherical roller bearing solid-block housed units come in five locking configurations: single and double set screws, eccentric locks for reversing applications, tapered-adaptor locks and double-tapered locks.

Choose from three sealing options: labyrinth seals (for high-speed, high-temperature applications) and triple-lip seals made of either nitrile or urethane. Timken® steel auxiliary covers provide an extra layer of protection, and they can be filled with Timken lubricants.

TYPICAL INDUSTRIES AND APPLICATIONS

Use Timken spherical roller bearing solid-block housed units in metals mills, aggregate and cement, mining, power generation, agriculture, pulp, paper, sawmills and other forest industries.



TIMKEN® SAF SPLIT-BLOCK HOUSED UNITS BEAR HEAVY LOADS

Timken® SAF split-block housed units are available in rugged cast iron, ductile iron or cast steel to match a range of industrial environments. Our Timken SAF housed units have separate, matched caps and bases. In larger sizes where housed units are heavier, this split-block design eases installation. Remove the cap using a pry-tool slot for bearing inspection, service and replacement.

Available in a variety of shaft sizes, Timken SAF units offer the choice of tapered-bore design for easy mounting or a straight-bore design for better axial location. The block can be converted from fixed to float by removing the stabilizing ring. Several sealing options protect against contamination, including a standard seal, which is a precision aluminum triple-ring labyrinth seal.

TYPICAL INDUSTRIES AND APPLICATIONS

Use Timken SAF housed bearings in power generation, coal, mining, aggregate, cement, metals, pulp, paper and other forestry operations, water treatment and food processing industries. Applications include warehousing, conveyors, movable bridges/heavy structures, industrial fans and blowers.



TIMKEN® SNT SPLIT PLUMMER BLOCKS CARRY HEAVY LOADS

Timken® SNT split plummer blocks are available in metric sizes. Their rugged cast iron, ductile iron or cast steel designs stand up to a range of industrial environments. Our Timken SNT plummer blocks have separate, matched caps and bases. In larger sizes where plummer blocks are heavier, this split-block design eases installation. Remove the cap using a pry-tool slot for bearing inspection, service and replacement.

Available in a variety of metric shaft sizes, Timken SNT plummer block units offer the choice of tapered-bore design for easy mounting or straight-bore design for better axial location. The block can be converted from fixed to float by adding or removing the locating rings. A variety of sealing options help protect against contamination including all-purpose elastomer seals, deflection-type V-ring seals, precision labyrinth seals and heavy-duty taconite seals for highly contaminated environments.

TYPICAL INDUSTRIES AND APPLICATIONS

Use Timken SNT plummer blocks in power generation (coal), mining, aggregate, cement, metals, pulp, paper and other forestry operations, water treatment and food processing industries. Applications include warehousing, conveyors, bulk material handling and industrial fans and blowers.





HOW TO USE THIS CATALOG

We designed this catalog to help you find the Timken housed units best suited to your specifications.

Timken offers an extensive range of bearings and accessories in both imperial and metric sizes. For your convenience, size ranges are indicated in millimeters and inches. Contact your Timken engineer to learn more about our complete line for the special needs of your application.

This publication contains dimensions, tolerances and load ratings, as well as engineering sections describing fitting practices for shafts and housings, internal clearances, materials and other bearing features. It provides valuable assistance in the initial consideration of the type and characteristics of the bearings that may best suit your particular needs.

ISO and ANSI/ABMA, as used in this publication, refer to the International Organization for Standardization and the American National Standards Institute/American Bearing Manufacturers Association.

Updates are made periodically to this catalog. Visit www.timken.com for the most recent version of the Timken® Housed Unit Catalog.

DISCLAIMER

This catalog is provided solely to give you analysis tools and data to assist you in your product selection. Product performance is affected by many factors beyond the control of Timken. Therefore, you must validate the suitability and feasibility of all product selections for your applications.

Timken products are sold subject to Timken terms and conditions of sale, which include our limited warranty and remedy. You can find these at http://www.timken.com/en-us/purchase/Pages/TermsandConditionsofSale.aspx.

Please consult with your Timken engineer for more information and assistance.

Every reasonable effort has been made to ensure the accuracy of the information in this writing, but no liability is accepted for errors, omissions or for any other reason.

SHELF LIFE AND STORAGE OF GREASE-LUBRICATED BEARINGS AND COMPONENTS

To help you get the most value from our products, Timken provides guidelines for the shelf life of grease-lubricated ball and roller bearings, components and assemblies. Shelf life information is based on Timken and industry test data and experience.

SHELF LIFE POLICY

Shelf life should be distinguished from lubricated bearing/component design life as follows:

- Shelf life of the grease-lubricated bearing/component represents the period of time prior to use or installation.
- The shelf life is a portion of the anticipated aggregate design life. It is impossible to accurately predict design life due to variations in lubricant bleed rates, oil migration, operating conditions, installation conditions, temperature, humidity and extended storage.
- Shelf life values, available from Timken, represent a maximum limit and assume adherence to the storage and handling guidelines suggested in this catalog or by a Timken associate. Deviations from the Timken storage and handling guidelines may reduce shelf life. Any specification or operating practice that defines a shorter shelf life should be used.

Timken cannot anticipate the performance of the grease lubricant after the bearing or component is installed or placed in service.

TIMKEN IS NOT RESPONSIBLE FOR THE SHELF LIFE OF ANY BEARING/COMPONENT LUBRICATED BY ANOTHER PARTY.

European REACH Compliance

Timken lubricants, greases and similar products sold in standalone containers or delivery systems are subject to the European REACH (**R**egistration, **E**valuation, **A**uthorization and Restriction of **CH**emicals) directive. For import into the European Union, Timken can sell and provide only those lubricants and greases that are registered with ECHA (**E**uropean **CH**emical **A**gency). For further information, please contact your Timken engineer.



STORAGE

Timken suggests the following storage guidelines for our finished products (bearings, components and assemblies, referred to as "products"):

- Unless directed otherwise by Timken, products should be kept in their original packaging until they are ready to be placed into service.
- Do not remove or alter any labels or stencil markings on the packaging.
- Products should be stored in such a way that the packaging is not pierced, crushed or otherwise damaged.
- After a product is removed from its packaging, it should be placed into service as soon as possible.
- When removing a product that is not individually packaged from a bulk pack container, the container should be resealed immediately after the product is removed.





- Do not use product that has exceeded its shelf life as defined in the Timken shelf life guidelines statement.
- The storage area temperature should be maintained between 0° C (32° F) and 40° C (104° F); temperature fluctuations should be minimized.
- The relative humidity should be maintained below 60 percent and the surfaces should be dry.
- The storage area should be kept free from airborne contaminants such as, but not limited to, dust, dirt, harmful vapors, etc.
- The storage area should be isolated from undue vibration.
- Extreme conditions of any kind should be avoided.

Due to the fact that Timken is not familiar with your particular storage conditions, we strongly suggest following these guidelines. However, you may be required by circumstances or applicable government requirements to adhere to stricter storage requirements.

Most bearing components typically ship protected with a corrosion-preventive compound that is not a lubricant. These components may be used in oil-lubricated applications without removal of the corrosion-preventive compound. When using some specialized grease lubrications, we advise you to remove the corrosion-preventive compound before packing the bearing components with suitable grease.

We pre-pack most housed unit types in this catalog with general-purpose grease suitable for their normal applications. It may be necessary for you to frequently replenish the grease for optimum performance.

Be careful in selecting lubrication, however, since different lubricants are often incompatible. You may order housed units pre-lubricated with a specified lubrication.

When you receive a bearing or housed unit shipment, do not remove products from their packaging until they are ready for mounting so they do not become corroded or contaminated.

Store bearings and housed units in an appropriate atmosphere so they remain protected for the intended period.

⚠ WARNING

Failure to observe the following warnings could create a risk of death or serious injury.

Proper maintenance and handling practices are critical. Failure to follow selection recommendations and installation instructions and to maintain proper lubrication can result in equipment failure.

Overheated bearings can ignite explosive atmospheres. Special care must be taken to properly select, install, maintain, and lubricate housed unit bearings that are used in or near atmospheres that may contain explosive levels of combustible gases or accumulations of dust such from grain, coal, or other combustible materials. Consult your equipment designer or supplier for installation and maintenance instructions.

⚠ CAUTION

Failure to follow these cautions could create a risk of injury.

Do not use damaged housed units. The use of a damaged housed unit can result in equipment damage and/or injury.

CAUTION

Failure to follow these cautions may result in property damage.

If hammer and bar are used for installation or removal of a part, use a mild steel bar (e.g., 1010 or 1020 grade). Mild steel bars are less likely to cause release of high-speed fragments from the hammer, bar or the part being removed.

Warnings for this product line are in this catalog and posted on www.timken.com/en-us/products/warnings/Pages/TimkenHousedUnitWarnings.aspx.

NOTE

Do not use excessive force when mounting or dismounting the unit.

Follow all tolerance, fit, and torque recommendations.

Always follow the Original Equipment Manufacturer's installation and maintenance guidelines.

Ensure proper alignment.

Never weld housed units.

Do not heat components with an open flame.

Do not operate at bearing temperatures above 121° C (250° F).

A

BALL BEARING HOUSED UNITS

Timken® ball bearing housed units feature a wide-inner-ring ball bearing for additional shaft support. Designed for mounting on straight shafts with a slip fit, these housed units are available in an extensive array of types and sizes to accommodate many industrial applications.

When set screws are used, Timken suggests using Shaft Guarding Technology™, a stainless-steel, hardened band that is inserted in a groove on the inner ring. When the set screws are tightened, they press against the band, tightening the grip on the shaft. Unlike traditional set screws, which can dig into the shaft, there are no nicks, raised metal or permanent shaft damage. The stainless band resists the formation of corrosion on the shaft.

Updates are made periodically to this catalog. Visit www.timken.com for the most recent version of the Timken® Housed Unit Catalog.

TYPICAL INDUSTRIES AND APPLICATIONS

Common industries and applications include agriculture, food processing, fans, blowers, and conveyors.

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ENGINEERING



Antifriction bearings possess capabilities involving broad ranges of speed and many combinations of radial and thrust loads. Other important environmental conditions, such as low and high temperatures, dust and dirt, moisture and unusual conditions, affect bearing operation.

This engineering section is not intended to be comprehensive, but it does serve as a useful guide in bearing selection. Where more complex bearing applications are involved, contact your Timken engineer.

To view the complete engineering catalog, please visit www.timken.com. To order the catalog, please contact your Timken engineer and request a copy of the Timken Engineering Manual, order number 10424.

The following topics are covered within this section:

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Cages A-7
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MATERIALS

TEMPERATURE RANGES, RESISTANCE TO CORROSION AND OTHER OPERATING ENVIRONMENTS

To accommodate the needs of the rapidly expanding industrial world, the capability of bearings in various extreme environments becomes vitally important. No general recommendations can be made to cover all such applications. Each installation must be studied to determine peak and average operating temperatures, length of time at these temperatures, load, oscillation or rotation, and any other factors affecting bearing operation.

RINGS, BALLS AND ROLLERS

Suggested materials for use in rings, balls and rollers at various operating temperatures together with data on chemical composition, hardness and dimensional stability are listed in table A-1 on page A-5. A temperature of 427° C (800° F) is generally the upper limit for successful bearing operating steels. Above 427° C (800° F), or below where lubricant is not permitted, cast or wrought-cobalt alloys are generally used. Although chosen primarily for their good retention of physical properties, they also possess good oxidation resistance at elevated temperatures.

CAGES, SHIELDS AND SEALS

Recommended materials for cages, shields and seals with their temperature capabilities are in table A-3 on page A-7.

DIMENSIONAL STABILITY

Dimensional stability of rings and balls is achieved by tempering the hardened steel until any further growth by transformation of austenite to martensite is balanced by shrinkage from tempering martensite. This balance is never perfect, and some size change will always occur. The amount depends upon the operating time and temperature of the bearings and the composition of and heat-treatment of the steel. The American Bearings Manufacturers Association (ABMA) definition for stabilized rings and balls permits a change of less than 0.0001 inch per inch after exposure to a temperature of 149° C (300° F) for 2500 hours. Rings and balls used at elevated temperatures are defined as stable by ABMA where there is a size change of less than 0.00015 inch per inch after 1500 hours of exposure at temperatures of 232° C, 316° C and 427° C (450° F, 600° F and 800° F).

CORROSION RESISTANCE

Timken developed a premium coating named TDC™ (thin-dense chrome), which has excellent corrosion resistance, as well as other properties leading to improved bearing life. TDC-coated bearings are intended for use in applications where unprotected bearings do not survive. This proprietary coating, emanating from years of research and testing, is a real problem-solver.

Besides its corrosion resistance feature, this coating has a high hardness (HRC 70-72), reduced coefficient of friction and a dense modular texture.

TDC is resistant to most organic and inorganic compounds. The normal thin coating of less than 0.003 mm (0.0001 in.) will outlast 440C stainless steel. The very high hardness, lower coefficient of friction and surface texture provide extra resistance to wear under less-than-ideal lubrication and thus longer bearing life.

Under normal lubrication conditions, TDC-coated races can provide fatigue life that's two times longer than the life of standard bearings.

To order wide-inner-ring ball bearings with TDC-coated races, stainless-steel balls and nylon retainers, specify suffix TDC or TDCF, which includes food safe grease (i.e., G1100KRRB + COL TDCF). This coating also can be readily applied to various types of tapered, cylindrical and spherical roller bearings.

To ensure proper application of TDC, contact your Timken engineer.

In addition to the bearings mentioned above, Timken is able to supply specially coated housing for applications involving particularly harsh environments where Food and Drug Administration (FDA) and United States Department of Agriculture (USDA) regulations apply. These housings, named Survivor® are available as electroless nickel-plated or polymer depending on the situation. The electroless nickel units are required for food processing, medical and other applications and may be ordered by adding an -NT suffix to the part number. The polymer units are similar to the NT units but offer superior protection against corrosion. Add the suffix -PT to the part when ordering.

Both coatings offer excellent protection to a broad variety of corrosive environments and are vulnerable only to a very few aggressive materials.

A complete review of operating conditions is essential before specifying corrosion-resistance housed units and/or thin-dense chrome (TDC) coated bearings. Consult your Timken engineer for comprehensive recommendations.

OTHER CONSIDERATIONS

Installations that operate at high temperatures for extended periods may lose the quality of shaft and housing fits. Carefully machined and heat-treated shafts and housings will minimize trouble from this source.

In some applications, the internal clearance of bearings may be partially absorbed. For example, during the first few seconds of rotation, a massive housing may keep the outer race cooler than the inner race and balls, even if the housing is already at some elevated temperature. Also, during heat soakback, when rotation stops, heat may flow back to the bearing along the shaft. If, while stationary, the effects of heat soakback nullify the radial internal clearance, radial brinelling of the races may occur and the bearing will be rough during subsequent rotation. Bearings with greater internal looseness may be required to compensate for these conditions. Consult your Timken engineer for recommendations.

This table provides standard operating temperatures for common bearing component materials. It should be used for reference purposes only. Other bearing component materials are available on request.

Contact your Timken engineer for further information.

TABLE A-1. OPERATING TEMPERATURES FOR BEARING COMPONENT MATERIALS – RINGS, BALLS AND ROLLERS

Material	Approximate Chemical Analysis %	Temp. °C, (°F)	Hardness HRC	-73° C -100° F	-54° C -65° F	-17° C 0° F	38° C 100° F	93° C 200° F	121° C 250° F	149° C 300° F	204° C 400° F	260° C 500° F	316° C 600° F	371° C 700° F	427° C 800° F
Low-alloy carbon-chromium bearing steels. 52100 and others per ASTM A295	1C 0.5 – 1.5Cr 0.35Mn	**21** (70)	60		STANDARD DIMENSIONAL STABILIZATION <0.0001 in./in dimensional change in 2500 hours at 100° C (212° F). Good oxidation resistance.										
Low-alloy carbon-chromium bearing steels. 52100 and others per ASTM A295	1C 0.5 – 1.5Cr 0.35Mn	**21** (70) **177** (350) **232** (450)	58 56 54	Heat stabilized per FS136. When given a stabilizing heat treatment, A295 steel is suitable for many applications in the 177° – 232° C (350° – 450° F) range; however, it is not as stable dimensionally as it is at temperatures below 177° C (350° F). If utmost stability is required, use materials in the 316° C (600° F) group below.											
Deep-hardening steels for heavy sections per ASTM A485	1C 1 – 1.8Cr 1 – 1.5Mn .06Si	**21** (70) **232** (450) **316** (600)	58 55 52	After heat-treated and tempered, it is stabilized.											
Carburizing steels per ASTM A534 a) low alloy 4118, 8X19, 5019, 8620 (Ni-Moly grades) b) high nickel 3310	Ni-Moly: 0.2C, 0.4-2.0Mn, 0.3-0.8Cr, 0-2.0Ni, 0-0.3Mo .0.1C, 1.5Cr, 0.4Mn, 3.5Ni	**21** (70)	58		Nickel-Moly grades of steel frequently used to achieve extra ductility in inner rings for locking device bearings. 3311 and others used for extra-thick-section rings.										
Corrosion-resistant 440C stainless steel per ASTM A756	1C 18Cr	**21** (70)	58		Excellent corrosion resistance.										
Corrosion-resistant 440C stainless steel per ASTM A756	1C 18Cr	**21** (70) **232** (450) **316** (600)	58 55 52	Heat stabilized for maximum hardness at high temperatures (FS238). Good oxidation resistance at higher temperatures. Note load capacity drops off more rapidly at higher temperatures than M50 shown below, which should be considered if loads are high.											
M-50 medium high speed	4Cr 4Mo 1V 0.8C	**21** (70) **232** (450) **316** (600)	60 59 57	Suggested where stable high hardness at elevated temperature is required.											

NOTE: Bearings have been made of special material for operation at temperatures above 427° C (800° F). Consult your Timken engineer regarding the application. ASTM A295 bearing steels are suitable for many applications up to 212° C (413° F) but are not as dimensionally stable as they are at the temperatures below 100° C (212° F).

INTERNAL CLEARANCE
RADIAL INTERNAL CLEARANCE

The radial internal clearance of radial contact ball bearings can be defined as the average outer ring raceway diameter minus the average inner ring raceway diameter minus twice the ball diameter.

RADIAL BALL BEARINGS

While manufacturing ball bearings, it is standard practice to assemble rings and balls with a specified internal clearance (table A-2). This characteristic is necessary to absorb the effect of press fitting the bearing rings at mounting.

Internal clearance is sometimes utilized to compensate for thermal expansion of bearings, shafts and housings, or to provide a contact angle in the bearing after mounting.

Internal clearance can be measured by gaging either radially or axially.

Radial measurement is accepted as the more significant characteristic because it is more directly related to shaft and housing fits. It also is the method prescribed by the American Bearing Manufacturers Association (ABMA).

Radial internal clearance can be measured mechanically by moving the outer ring horizontally, as shown in fig. A-1. The total movement of the outer ring when the balls are properly seated in the raceways determines the radial internal clearance. Several readings should be taken using different circumferential orientations of the rings to get a comprehensive average reading.

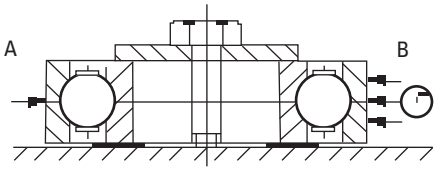


Fig. A-1. Radial internal clearance. A and B are applied forces.

TABLE A-2. LIMITS FOR RADIAL INTERNAL CLEARANCE OF SINGLE-ROW RADIAL CONTACT BALL BEARINGS UNDER NO LOAD (APPLIES TO BEARINGS OF ABEC1 AND ABEC3 TOLERANCES)

All tolerances in micrometers (μm) and ten-thousandths inches (0.0001 in.)

Timken Prefix (ABMA designation) Basic Bore Dia.		H (C2) Acceptance Limits		R (C0) Acceptance Limits[1]		P (C3) Acceptance Limits[1]		J (C4) Acceptance Limits		JJ (C5) Acceptance Limits	
Over	Incl.	Low	High	Low	High	Low	High	Low	High	Low	High
mm	mm	μm in.	μm in.	μm in.	μm in.	μm in.	μm in.	μm in.	μm in.	μm in.	μm in.
2.5	**10**	**0**	**7**	**2**	**13**	**8**	**23**	**14**	**29**	**20**	**37**
		0	3	1	5	3	9	6	11	8	15
10	**18**	**0**	**9**	**3**	**18**	**11**	**25**	**18**	**33**	**25**	**45**
		0	3.5	1	7	4	10	7	13	10	18
18	**24**	**0**	**10**	**5**	**20**	**13**	**28**	**20**	**36**	**28**	**48**
		0	4	2	8	5	11	8	14	11	19
24	**30**	**1**	**11**	**5**	**20**	**13**	**28**	**23**	**41**	**30**	**53**
		0.5	4.5	2	8	5	11	9	16	12	21
30	**40**	**1**	**11**	**6**	**20**	**15**	**33**	**28**	**46**	**40**	**64**
		0.5	4.5	2	8	6	13	11	18	16	25
40	**50**	**1**	**11**	**6**	**23**	**18**	**36**	**30**	**51**	**45**	**73**
		0.5	4.5	2.5	9	7	14	12	20	18	29
50	**65**	**1**	**15**	**8**	**28**	**23**	**43**	**38**	**61**	**55**	**90**
		0.5	6	3.5	11	9	17	15	24	22	35
65	**80**	**1**	**15**	**10**	**30**	**25**	**51**	**46**	**71**	**65**	**105**
		0.5	6	4	12	10	20	18	28	26	41
80	**100**	**1**	**18**	**12**	**36**	**30**	**58**	**53**	**84**	**75**	**120**
		0.5	7	4.5	14	12	23	21	33	30	47
100	**120**	**2**	**20**	**15**	**41**	**36**	**66**	**61**	**97**	**90**	**140**
		1	8	6	16	14	26	24	38	35	55
120	**140**	**2**	**23**	**18**	**48**	**41**	**81**	**71**	**114**	**105**	**160**
		1	9	7	19	16	32	28	45	41	63
140	**160**	**2**	**23**	**18**	**53**	**46**	**91**	**81**	**130**	**120**	**180**
		1	9	7	21	18	36	32	51	47	71
160	**180**	**2**	**25**	**20**	**61**	**53**	**102**	**91**	**147**	**135**	**200**
		1	10	8	24	21	40	36	58	53	79
180	**200**	**2**	**30**	**25**	**71**	**63**	**117**	**107**	**163**	**150**	**230**
		1	12	10	28	25	46	42	64	59	91
200	**240**	**3**	**36**	**30**	**81**	**74**	**137**	**127**	**193**	**183**	**267**
		1	14	12	32	29	54	50	76	72	105
240	**280**	**3**	**41**	**33**	**97**	**86**	**157**	**147**	**224**	**213**	**310**
		1	16	13	38	34	62	58	88	84	122
280	**320**	**5**	**48**	**41**	**114**	**104**	**180**	**170**	**257**	**246**	**353**
		2	19	16	45	41	71	67	101	97	139
320	**370**	**5**	**53**	**46**	**127**	**117**	**208**	**198**	**295**	**284**	**409**
		2	21	18	50	46	82	78	116	112	161
370	**430**	**8**	**64**	**56**	**147**	**137**	**241**	**231**	**340**	**330**	**475**
		3	25	22	58	54	95	91	134	130	187
430	**500**	**10**	**74**	**66**	**170**	**160**	**279**	**269**	**396**	**386**	**551**
		4	29	26	67	63	110	106	156	152	217
500	**570**	**10**	**81**	**74**	**193**	**183**	**318**	**307**	**450**	**439**	**630**
		4	32	29	76	72	125	121	177	173	248
570	**640**	**13**	**91**	**85**	**216**	**206**	**356**	**345**	**505**	**495**	**706**
		5	36	33	85	81	140	136	199	195	278
640	**710**	**20**	**114**	**107**	**239**	**229**	**394**	**384**	**564**	**554**	**780**
		8	45	42	94	90	155	151	222	218	307
710	**800**	**20**	**140**	**130**	**269**	**259**	**445**	**434**	**630**	**620**	**879**
		8	55	51	106	102	175	171	248	244	346
800	**1060**	**28**	**211**	**201**	**353**	**345**	**587**	**577**	**833**	**823**	**1148**
		11	83	79	139	136	231	227	328	324	452

[1]Standard fits for Timken® radial ball bearings. P(C3) for bearing O.D. greater than 52 mm (greater than 25 mm bore).

CAGES

Cages (also referred to as rolling-element retainers) serve several purposes in the proper operation of a rolling-element bearing. Cages separate the rolling elements and prevent rolling-element-on-rolling-element contact and wear. Cages serve to maintain rolling-element spacing in the races of the inner and outer rings of the bearings as the rolling elements pass into and out of the load zones. For handling purposes, cages also can retain the rolling elements on the inner ring assembly to allow for bearing installation.

To meet the needs of the various service requirements of customers, Timken offers two reliable cage types for wide-inner-ring ball bearings – pressed-steel welded cages and molded-nylon finger-type cages.

PRESSED-STEEL WELDED CAGES

This cage type consists of two formed cage halves welded together (fig. A-2). This type of cage is standard for most radial non-filling-slot ball bearings, providing high strength and rigidity, as well as good uniformity of ball-to-pocket clearance. It is suitable for very high-temperature applications, but does not accommodate application misalignment.



Fig. A-2. Pressed-steel welded cage.

MOLDED-NYLON FINGER-TYPE CAGES

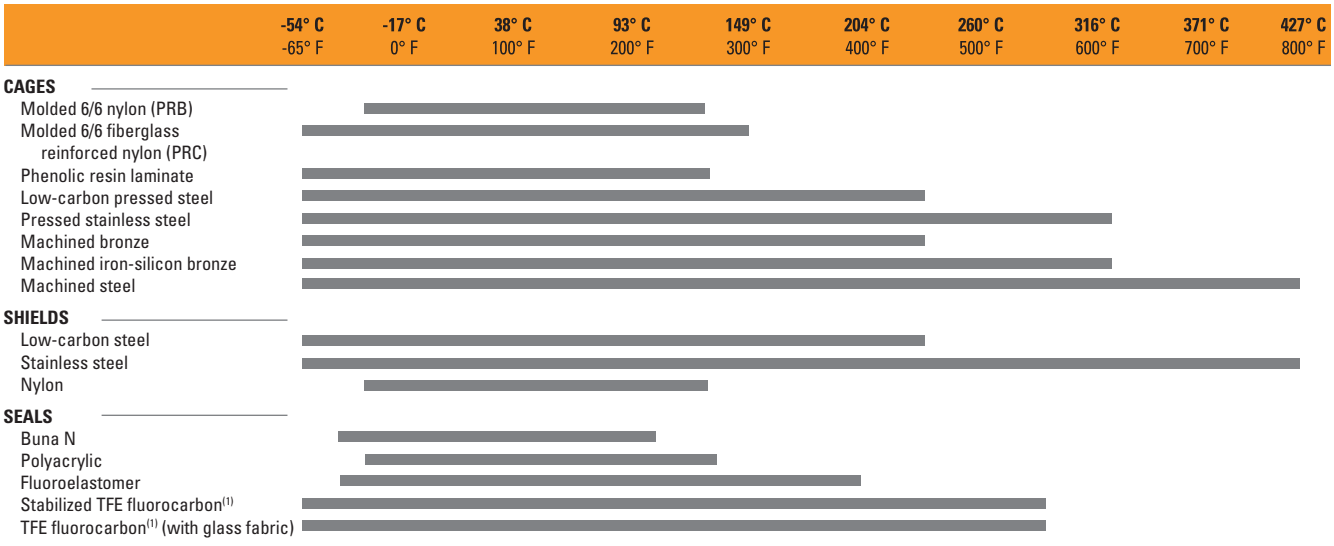
This type of cage consists of a one-piece molded design (fig. A-3). Rolling elements simply snap into place. Used in the majority of wide-inner-ring ball bearings, these cages are molded of nylon 6/6 that is heat-stabilized and moisture-conditioned. The polymer can withstand continuous operating temperatures up to 120° C (250° F) with spikes up to 150° C (300° F) and provides a non-corrosive, self-lubricating material with good resistance to abrasion, wear, most solvents, oils and greases. This cage type can accommodate application misalignment.

Care needs to be exercised when using aggressive lubricants with extreme-pressure (EP) additives in combination with elevated temperatures greater than 107° C (225° F).



Fig. A-3. Molded-nylon cage.

TABLE A-3. OPERATING TEMPERATURES FOR BEARING COMPONENT MATERIALS – CAGES, SHIELDS AND SEALS



(1)Limited life above these temperatures.

LUBRICATION

SPEED CAPABILITY

There is no precise method for determining the maximum speed at which a ball bearing may operate. Bearing characteristics and features of surrounding parts, shafts, housings and other components, as well as basic service conditions, are all variables that are dependent upon each other for continued satisfactory high-speed performance.

The safe operating speed of a ball bearing is often limited by the temperature within the bearing, which, in turn, is dependent upon the temperature surrounding the application, bearing seals, shaft and housing tolerances, auxiliary parts, etc., and the type and amount of lubricant.

Although the speed values shown in the table A-4 are based on many years of research and accumulated data, numerous bearing applications successfully operate with speed ratings in excess of those tabulated. Such applications should be reviewed by your Timken engineer.

The values in the following table may be used as a general guide for determining the safe maximum speed of standard types of wide-inner-ring ball bearings. To obtain the speed rating for any bearing size with inner ring rotation, multiply the bore in millimeters of the basic size bearing by the speed in revolutions per minute.

TABLE A-4. MAXIMUM OPERATING SPEED RECOMMENDATIONS

Timken Series	Maximum dN Values
Industrial Duty	
R series	175000
Y series	175000
Medium Y series	175000
Special Duty	
R-NT series	175000
SAL and SAOL series	275000
RAKH and RAKHL series	175000
Severe Duty	
R-PT series	175000
Y-PT series	175000
L series	250000
T series	500 RPM maximum[1]
Standard Duty	
V series	140000
S series	140000

[1]Please contact your Timken engineer for applications where speeds may exceed 500 RPM.

Example:

Find the maximum operating speed for an LAK1 pillow block.

1. Find the maximum dN value for an LAK1 from the above table.
   250000
2. Find the bore of an LAK1 in millimeter.
   1 in. = 25.4 mm
3. Apply the dN equation.
   dN max. = bearing bore (in.mm) x max. operating speed
   250000 = 25.4 x maximum operating speed
   Max. operating speed = 250000/25.4 = 9840 RPM

Thus, the maximum operating speed for an LAK1 is 9840 RPM.

LUBRICANT SELECTION

The successful application of lubricating fluids on bearings depends on the physical and chemical properties of the lubricant as they pertain to the bearing, its application, installation and general environmental factors.

VISCOSITY

Generally, the most important single property of a lubricating fluid is its viscosity. Viscosity is the measure of the relative resistance of a fluid to flow and is a function of speed and temperature (fig. A-4).

The measurement of viscosity can be made by several different instruments called viscosimeters. A common unit of measure is the Saybolt Universal Second (SUS). This is the time, in seconds, required for 60 cc of a fluid to flow through a standardized orifice under a standard head, at a given temperature. The common temperatures for reporting viscosity are 37.78° C to 98.89° C (100° F to 210° F). The higher the viscosity number, the greater the resistance to flow.

Experience indicates that a lubricating fluid with a viscosity of at least 100 SUS at the operating temperature of the application will be adequate for normal bearing lubrication.

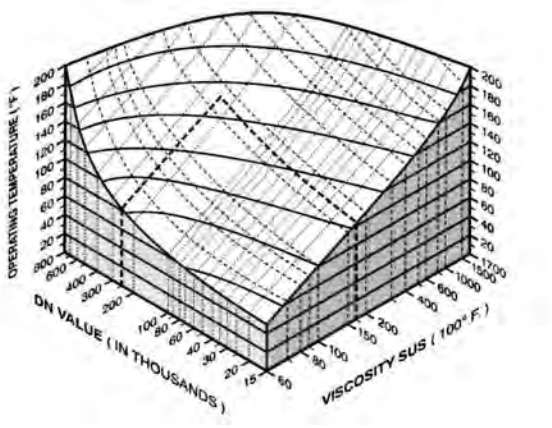


Fig. A-4. Lubrication selection as a function of bearing dN and operating speed.

VISCOSITY INDEX

The ideal oil (as far as viscosity is concerned) would be the same viscosity at all temperatures. All oils become less viscous (thin-out) when heated and more viscous (thickened) when cooled.

However, oils do not vary in viscosity to the same extent. Some thicken or thin more rapidly than others.

The term viscosity index, or VI, is used to rate oils according to their temperature-viscosity behavior.

Oils with the highest viscosity index are more resistant to changes in viscosity with changes in temperature than lower viscosity index oils. Obviously, high viscosity-index lubricants are most suitable for bearing applications experiencing wide temperature variations.

The National Lubricating Grease Institute (NLGI) classification of grease consistency is shown below (table A-5):

TABLE A-5. NLGI CLASSIFICATIONS

NLGI Grease Grades	Penetration No.
0	355-385
1	310-340
2	265-295
3	220-250
4	175-205
5	130-160
6	85-115

POUR POINT

The pour point is the lowest temperature at which a fluid will flow or can be poured. It is important in applications exposed to low temperatures that the lubricating fluid selected has a pour point lower than the minimum ambient temperature.

⚠ WARNING

Failure to observe the following warnings could create a risk of death or serious injury.

Proper maintenance and handling practices are critical. Always follow installation instructions and maintain proper lubrication.

TYPES OF LUBRICATION

Timken understands the importance of friction management. Our line of application- and environment-specific lubricants has been developed by leveraging our knowledge of tribology and antifriction bearings, as well as how these two elements affect overall system performance.

Timken® lubricants help bearings and related components operate effectively in demanding industrial operations. High-temperature, anti-wear and water-resistant additives offer superior protection in challenging environments.

Similar to our bearings, all Timken lubricants are backed by highly trained customer service and technical support associates. Industrial customers turn to Timken for comprehensive friction management solutions. We help customers analyze performance and suggest options that make sense for their unique operating conditions and maintenance intervals.

TABLE A-6. STANDARD BALL-BEARING LUBRICATION

Bearing Type	Grease Type	Grease Temperature Range
Radial bearings (double shielded, and single and double shielded)	Polyurea thickener Petroleum oil	-34.44° C to +135° C (-40° to +275° F)
Wide-inner-ring ball bearings (contact seal types)	Polyurea thickener Petroleum oil	-34.44° C to +135° C (-40° to +275° F)
Wide-inner-ring ball bearings (labyrinth seal types)	Synthetic thickener Synthetic hydrocarbon fluid	-53.89° F to +162.75° C (-65° F to +350° F)

NOTE: Open-type bearings and single-shielded types are not prelubricated. They have a rust-preventative coating only and must be lubricated by the customer or end-user before operation.

Bearings that have been factory pre-lubricated use a high-quality grease. Bearings with contacting lip seals and shields contain No. 2 polyurea base grease. Bearings with non-contacting labyrinth seals (suffix KLL in bearing part number) contain a No. 2 modified clay base grease. For normal conditions of service, these bearings require no further lubrication.

Normal service is considered as operating in a clean, dry environment at temperatures between -34° C to +82° C (-30° F to +180° F) and at dN values (bore in millimeter multiplied by speed in RPM) less than 175000.

If service is considered abnormal due to speed, temperature or exposure to moisture, dirt or corrosive chemicals, periodic relubrication may be advisable. Excessive relubrication may cause high operating temperatures due to grease churning. General guidelines for relubrication are provided in table A-7.

TIMKEN BALL-BEARING PILLOW-BLOCK GREASE

Timken ball-bearing pillow-block grease is an NLGI No. 2 polyurea-thickened grease. It provides outstanding long life and moderately high-temperature lubrication to ball bearings. This grease maintains its mechanical shear stability and provides corrosion resistance, even in the presence of salt water. Timken ball-bearing pillow-block grease features low-noise characteristics and excellent pumpability. This grease does not contain extreme-pressure additives but inhibits rust and oxidation. Operating temperatures range from -40° C to 163° C (-40° F to 400° F). This grease is typically used in lightly loaded ball bearings in pillow blocks and conveyors that operate in high-temperature environments, including kiln and glasswork applications, electric motors, chemical manufacturing and noise-sensitive environments.

SAL/SAOL LUBRICATION

SAL/SAOL housed units are intended for use with oil lubrication and are equipped with a filler cup located on top of the pillow block. Each housing assembly also has an overflow cup and a pipe plug located at the base. These can be interchanged as required to properly locate the overflow cup with respect to shaft rotation. The overflow cup should be placed on the downward side of the shaft rotation. Incorrect placement will cause oil to leak from the overflow cup during operation. Oil should be supplied through the filler cup until overflow is full. Please note to inspect and refill only when the shaft is stationary to avoid overfilling.

Inspection is necessary to determine the frequency of refilling, which is based on a number of factors, including speed, temperature and oil type. To avoid inadequate lubrication, maintain the oil level to the top of the overflow cup.

In general, a high-quality automotive or turbine oil with oxidation inhibitors is recommended. For normal operating conditions, an SAE 30 weight oil or equivalent is adequate. Contact your Timken engineer for abnormal service lubrication recommendations.

SURVIVOR® PT, NT AND PS LUBRICATION

These housed units are specifically designed for use in conditions of corrosion and contamination. The premium bearing insert is factory-prelubricated with aluminum-complex, high-quality, type H1, food-grade grease. This grease is acceptable in applications with incidental food contact.

GENERAL RELUBRICATION SUGGESTIONS

Periodic relubrication is advisable due to the nature of food-grade grease and the corrosive environments for which these units are designed. Consult your equipment manufacturer's operating manual for the relubrication cycle. General guidelines are found in table A-7.

TABLE A-7. GENERAL RELUBRICATION RECOMMENDATIONS FOR GREASED BEARINGS[1]

Condition	Relubrication Interval
Indoor service	Not required
Outdoor service	Two/three times per year
Severe outdoor exposure	Once a month
High contamination/washdown	Once a week

[1]As a guideline, relubricate until the first indication of grease is observed purging from either seal lip.

SINGLE-POINT AND CENTRALIZED MULTI-POINT LUBRICATORS

Proper lubrication is critical to bearing and machine performance. To help prevent damage, Timken G-Power and M-Power single-point lubricators deliver periodic grease to bearings, chains, guideways and other industrial equipment components (fig. A-5). You can choose from gas-powered or electromechanical varieties to meet your operating specifications. C-Power multi-point lubricators are a centralized lubrication system capable of delivering grease to up to six lubrication points (fig. A-6). Oil is not an option for this unit.

G-Power, M-Power and C-Power canisters can be filled with Timken-formulated lubricants or many other types of commercial lubricants. A full line of accessories – including brackets, clamps, brushes, fittings and hose extensions – ease installation and offer a host of mounting options for hard-to-reach locations.



Fig. A-5. G-Power and M-Power lubrication units with activators.



Fig. A-6. C-Power.

LOAD RATINGS AND LIFE CALCULATIONS

RADIAL BALL-BEARING LOAD RATINGS

The load ratings published in this catalog are based on ABMA Standard Section 9, but they are increased to reflect improvements in materials and processing. These ratings are referred to as extended basic dynamic load ratings (C_E). Care must be taken that the extended basic dynamic load ratings only be used in equations containing C_E.

NOTATIONS USED IN THIS SECTION

C_N = Radial load rating of bearings at operating speed N – pounds or newtons = (N_f x C_E)
C_E = Extended basic dynamic load rating – radial ball bearings pounds or newtons
C_o = Basic static load rating – radial ball bearing pounds or newtons[1]
K_T = Relative thrust-load factor – ball bearings
L_f = Life factor
L_r = Fatigue life for reliability level r – hours
N = Operating speed – revolutions per minute (RPM)
N_f = Speed factor
R = Applied radial load on bearing pounds or newtons
P = Equivalent radial load on bearing pounds or newtons
T = Applied thrust load on bearing pounds or newtons
Y = Thrust-load factor
a_1 = Life-adjustment factor for reliability[2]
a_2 = Life-adjustment factor for bearing material[3]
a_3 = Life-adjustment factor for application conditions[4]
f_B = Dynamic load rating adjustment factor for number of adjacently mounted bearings[5]
i_B = Number of adjacently mounted bearings
r = Percent reliability of survival life
μ = Operating viscosity – centistokes
μ_R = Reference viscosity – centistokes

[1] C_E does **not** represent the maximum permissible radial load, which, in general, is equal to C_o, the static radial load ratings.

[2] L_{10} rating life is based upon 90 percent survival of a group of bearings at the specified load and speed. The a_1 value is 1.0 for L_{10} life calculations.

[3] The a_2 value is 1.0 when using typical Timken® bearing steel. Bearings with thin-dense chrome-plated races may use an a_2 factor of 3.0 for calculating life.

[4] The a_3 factor of 1.0 may be acceptable to most users, but the factor can be made up of multiple application factors such as adequate lubrication, alignment, temperature or mounting conditions. ABMA standard suggests and a_3 of 0.456 for insert ball bearings slip fitted to the shaft as a result of possible mounting variation.

[5] f_B = 1.0 for wide-inner-ring ball bearings.

FATIGUE LIFE

Because of the dispersion in the life of identical bearings operating under identical conditions, a statistical result will be obtained for bearing fatigue life. For most calculations, life is expressed as the number of hours that 90 percent of a group of identical bearings will exceed under a given set of conditions, and is referred to as the L_{10} life.

The basic equation for radial ball bearings is:

$$L_r = 16667 \times \frac{a_1 \times a_2 \times a_3}{N} \frac{[f_B \times C_E]^3}{P} \text{ (Hours)} \qquad \text{Formula } \mathbf{1}$$

In life calculations, the first step is to ascertain the equivalent radial load (P) applied to the bearing from the following equations:

R_e = R or P = 0.56R + YT } **use greater value of P,** Formula **2** **3**

Values of Y are selected from table A-8 for the appropriate K_T. For more intermediate values of K_T, Y may be estimated by linear interpolation.

TABLE A-8. REQUIRED Y FACTORS FOR BALL BEARING DYNAMIC EQUIVALENT RADIAL LOADS

K_T	Y
0.015	2.30
0.020	2.22
0.025	2.10
0.030	2.00
0.040	1.86
0.050	1.76
0.060	1.68
0.080	1.57
0.100	1.48
0.120	1.42
0.150	1.34
0.200	1.25
0.250	1.18
0.300	1.13
0.400	1.05
0.500	1.00
0.600	–
0.800	–
1.000	–
1.200	–

For single-row bearings and tandem mountings: $K_T = \frac{T}{i_B Co}$

For double-row and preloaded pair mountings: $K_T = \frac{T}{Co}$

RADIAL BALL BEARING LIFE

The L_{10} (expected minimum life for 90 percent of the bearings of a given size and type in a given population) is calculated by the following formula, which is a condensed version of formula 1.

$$L_{10} = \frac{16700}{N} \left(\frac{C_E}{P}\right)^3 \text{ (Hours)} \qquad \text{Formula } \mathbf{4}$$

The calculation of bearing life also can be performed by using logarithmic factors for rotational speed (N_r) and life (L_f) based on the formula.

$$L_{10} = 500 \left(\frac{C_N}{P}\right)^3 \text{ (Hours)} \qquad \text{Formula } \mathbf{5}$$

In cases where the rating at a specific speed is not listed, determine C_N by $C_N = N_f \times C_E$; thereby:

$$L_{10} = 500 \left(\frac{N_f C_E}{P}\right)^3 \qquad \text{Formula } \mathbf{6}$$

where:

$$N_f = \left(\frac{1}{0.03N}\right)^{3/10} \qquad \text{Formula } \mathbf{7}$$

The speed factor (N_f) can be read directly from scale 1 (fig. A-7).

Scale 2 provides life factors (L_f) for practical life requirements, where:

$$L_f = \frac{C_N}{1.44P} \text{ or } L_f = \frac{N_f(C_E)}{1.44P}$$

Frequently it is necessary to determine the minimum bearing capacity that will meet a specific application requirement. For this purpose, formula 4 is rewritten:

$$C_E = P \left(\frac{N \times L_{10}}{16700}\right)^{1/3} \qquad \text{Formula } \mathbf{8}$$

BEARING LIFE UNDER VARYING LOADS AND SPEEDS

In many applications, bearings are required to run at a number of different loads and speeds. If the different loads and speeds and the portions of time that are in effect are known, the life can be found from the following relation:

$$L_r = \frac{1}{\frac{p_1}{L_{n_1}} + \frac{p_2}{L_{n_2}} + \frac{p_3}{L_{n_3}} + \ldots + \frac{p_n}{L_{n_n}}}$$

Note: $p_1 + p_2 + p_3 + \ldots + p_n = 1.0$

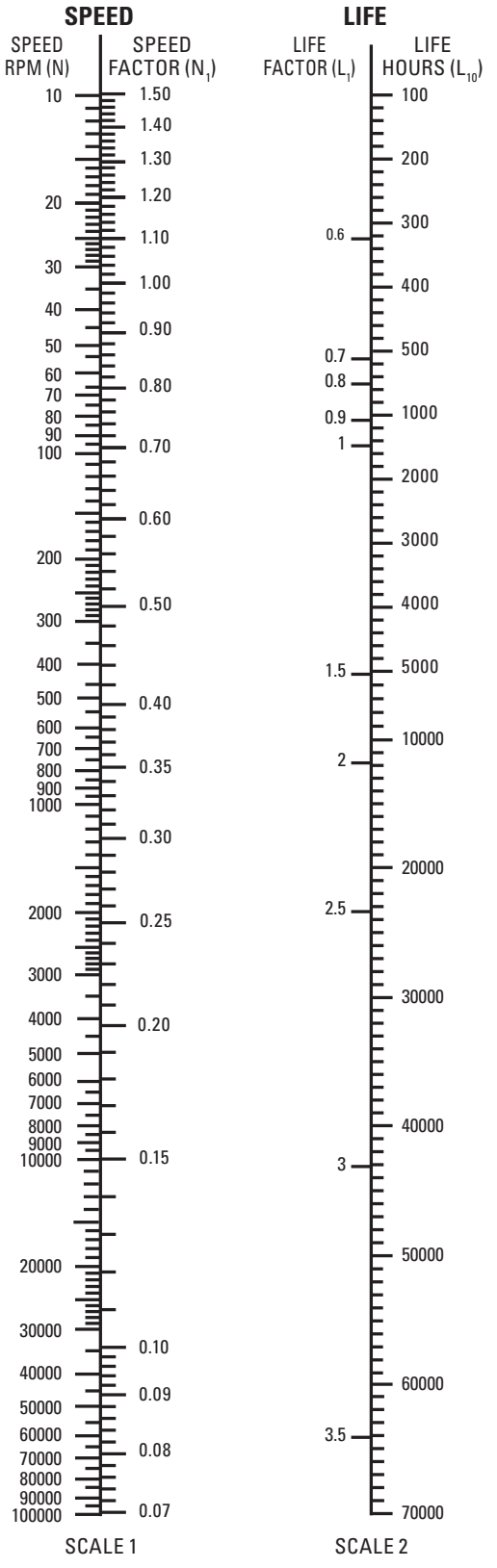


Fig. A-7. Wide-inner-ring ball bearing's speed and life factors.

FREQUENCY COEFFICIENTS

Predictive application maintenance requires knowledge of the frequencies that a bearing can emit, which are based on its specific design. The table below (table A-9) provides the most commonly used coefficients for this purpose. The frequencies are expressed as Orders. To obtain bearing defect frequencies in Hz, multiply the bearing coefficient by the rotating speed in revolutions per second.

Example:

9104-series bearing retainer frequency shaft running at 1200 RPM:

1200 RPM x 1 min/60 seconds x 0.398 = 7.96 Hz.

WIDE-INNER-RING BALL BEARINGS

FTF **Fundamental Train Frequency:** The frequency at which the retainer will operate with inner ring rotation.

BSF **Ball Spin Frequency:** The frequency at which a single defect on a rolling element will be detected.

BPFO **Ball Pass Frequency Outer:** The frequency at which a single defect in the outer race will be detected.

BPFI **Ball Pass Frequency Inner:** The frequency at which a single defect in the inner race will be detected.

OR ROT FTF **Fundamental Train Frequency:** The frequency at which the retainer will operate with outer-ring rotation. Also know as Outer-Ring ROTation.

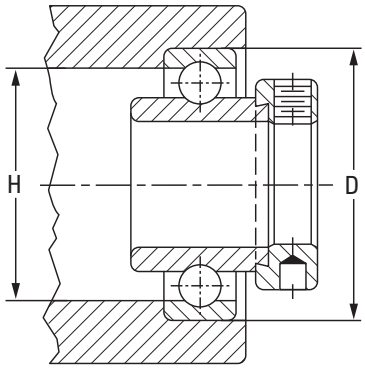
TABLE A-9. FREQUENCY COEFFICIENTS OF WIDE-INNER-RING BALL BEARINGS

Basic Outer-Ring Size	FTF	BSF	BPFO	BPFI	OR ROT FTF
9104	0.398	2.339	3.578	5.422	0.602
9105	0.397	2.328	3.574	5.426	0.603
9106	0.417	2.933	4.588	6.412	0.583
202K	0.391	2.175	3.125	4.875	0.609
203K	0.382	1.994	3.053	4.947	0.618
204K	0.382	1.992	3.052	4.948	0.618
205K	0.397	2.328	3.574	5.426	0.603
206K	0.396	2.311	3.568	5.432	0.604
207K	0.396	2.303	3.565	5.435	0.604
208K	0.394	2.256	3.547	5.453	0.606
209K	0.402	2.461	3.621	5.379	0.598
210K	0.409	2.665	4.093	5.907	0.591
211K	0.408	2.620	4.078	5.922	0.592
212K	0.407	2.584	4.066	5.934	0.593
213K	0.410	2.685	4.099	5.901	0.590
214K	0.410	2.702	4.104	5.896	0.590
215K	0.415	2.850	4.148	5.852	0.585
216K	0.417	2.923	4.585	6.415	0.583
217K	0.412	2.759	4.122	5.878	0.588
219W	0.410	2.692	6.562	9.438	0.590
220W	0.409	2.665	6.549	9.451	0.591

Basic Outer-Ring Size	FTF	BSF	BPFO	BPFI	OR ROT FTF
303K	0.364	1.696	2.545	4.455	0.636
304K	0.368	1.757	2.574	4.426	0.632
305K	0.367	2.328	3.574	5.426	0.603
306K	0.368	1.757	2.574	4.426	0.632
307K	0.376	1.888	3.006	4.994	0.624
308K	0.378	1.925	3.023	4.977	0.622
309K	0.380	1.955	3.037	4.963	0.620
310K	0.381	1.981	3.047	4.953	0.619
311K	0.382	2.002	3.057	4.943	0.618
312K	0.383	2.020	3.064	4.936	0.617
314K	0.385	2.050	3.076	4.924	0.615
315K	0.385	2.062	3.081	4.919	0.615
316K	0.386	2.073	3.086	4.914	0.614
318K	0.387	2.091	3.093	4.907	0.613
318W	0.381	1.982	4.572	7.428	0.619
319W	0.382	1.993	4.198	6.802	0.618
320K	0.384	2.041	3.073	4.927	0.616
320W	0.379	1.946	4.549	7.451	0.621
321W	0.380	1.958	4.557	7.443	0.620
322W	0.382	2.002	4.203	6.797	0.618
326W	0.384	2.036	4.222	6.778	0.616

MOUNTING
STANDARD SERIES MOUNTING DATA

When shafts are selected for use with wide-inner-ring ball bearings, a minimum slip fit is desirable for the most satisfactory mounting. Special shaft limits are required in certain cases and a variety of standard fits can be used, including a press fit. The recommended figures are noted in table A-10. In some applications, it may be permissible to use increased shaft tolerances. In such cases, applications should be forwarded to your Timken engineer for complete recommendations.



Bearing bore tolerances:

½ in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.;
2 ¼ in. – 3 3/16 in., nominal to +0.015 mm, +0.0006 in.;

Recommended shaft tolerances:

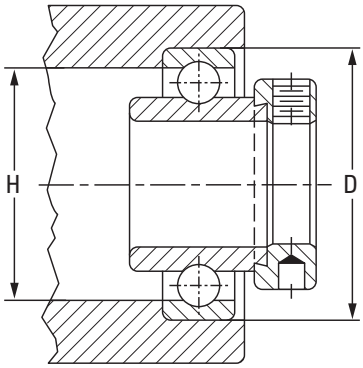
½ in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

TABLE A-10. HOUSING, SHOULDER AND SHAFT DIAMETERS

Bearing No.					Shaft Dia.	Basic Outer-Ring Size	Stationary Housing[1]			Shoulder Dia.	
KRR Type	G-KRR Type	RA-RR Type	GRA-RR Type	GYA-RR Type			Housing Bore D		Mean Fit	H	
							Max.	Min.	Loose	Max.	Min.
					in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.
1008KRR	–	RA008RR	GRA08RR	GYA008RR	½	203	**40.015** 1.5754	**40.000** 1.5748	**0.013** 0.0005	**34.8** 1.37	**34.0** 1.34
–	–	RA009RR	GRA009RR	GYA009RR	9/16						
101KRR(KR)	G1010KRR	RA010RR	GRA010RR	GYA010RR	5/8						
1011KRR	G1011KRR	–	–	–	11/16						
E17KRR	GE17KRR	RAE17RR	GRAE17RR	GYAE17RR	**17**						
1012KRR(KR)	G1012KRR	RA012RR	GRA012RR	GYA012RR	¾	204	**47.015** 1.8510	**47.000** 1.8504	**0.013** 0.0005	**40.9** 1.61	**40.6** 1.60
E20KRR	GE20KRR	RAE20RR	GRAE20RR	GYAE20RR	**20**						
1013KRR	–	RA013RR	GRA013RR	GYA013RR	13/16	205	**52.017** 2.0479	**51.999** 2.0472	**0.015** 0.0006	**46.0** 1.81	**45.7** 1.80
1014KRR	G1014KRR	RA014RR	GRA014RR	GYA014RR	7/8						
1015KRR(KR)	G1015KRR	RA015RR	GRA015RR	GYA015RR	15/16						
1100KRR(KR)	G1100KRR	RA100RR	GRA100RR	GYA100RR	1						
E25KRR	GE25KRR	RAE25RR	GRAE25RR	GYAE25RR	**25**						
–	G1101KRR	RA101RR	GRA101RR	GYA101RR	1 1/16	206	**62.017** 2.4416	**61.999** 2.4409	**0.015** 0.0006	**56.1** 2.21	**54.9** 2.16
1102KRR(KR)	G1102KRR	RA102RR	GRA102RR	GYA102RR	1 1/8						
1103KRR(KR)	G1103KRR	RA103RR	GRA103RR	GYA103RR	1 3/16						
–	–	–	–	GYA103RR2	1 ¼						
E30KRR	GE30KRR	RAE30RR	GRAE30RR	GYAE30RR	**30**						
1104KRR(KR)	G1104KRR	RA104RR	GRA104RR	GYA104RR	1 ¼	207	**72.017** 2.8353	**71.999** 2.8346	**0.015** 0.0006	**65.0** 2.56	**54.9** 2.47
1105KRR	–	RA105RR	GRA105RR	GYA105RR	1 5/16						
1106KRR	G1106KRR	RA106RR	GRA106RR	GYA106RR	1 3/8						
1107KRR(KR)	G1107KRR	RA107RR	GRA107RR	GYA107RR	1 7/16						
E35KRR	GE35KRR	RAE35RR	GRAE35RR	GYAE35RR	**35**						

[1]When the housing revolves in relation to the shaft, the housing bore dimensions shown on page 131 of the Timken Engineering Manual (order no. 10424) should be used. Outer ring tolerances and housing fillet radii correspond to equivalent 200-series single-row radial bearings.

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Bearing No.					Shaft Dia.	Basic Outer-Ring Size	Stationary Housing[1]			Shoulder Dia.	
KRR Type	G-KRR Type	RA-RR Type	GRA-RR Type	GYA-RR Type			Housing Bore D		Mean Fit	H	
							Max.	Min.	Loose	Max.	Min.
					in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.
1108KRR(KR)	G1108KRR	RA108RR	GRA108RR	GYA108RR	1 1/2	208	**80.018** 3.1503	**80.000** 3.1496	**0.015** 0.0006	**72.9** 2.87	**70.6** 2.78
–	–	RA109RR	GRA109RR	GYA109RR	1 9/16						
–	–	–	GRAE40RR	GYAE40RR	**40**						
1110KRR	G1110KRR	RA110RR	GRA110RR	GYA110RR	1 5/8	209	**85.024** 3.3474	**85.001** 3.3465	**0.020** 0.0008	**78.0** 3.07	**75.4** 2.97
1111KRR(KR)	G1111KRR	RA111RR	GRA111RR	GYA111RR	1 11/16						
1112KRR(KR)	G1112KRR	RA112RR	GRA112RR	GYA112RR	1 3/4						
E45KRR	–	–	GRAE45RR	GYAE45RR	**45**						
–	–	RA113RR	GRA113RR	GYA113RR	1 13/16	210	**90.023** 3.5442	**90.000** 3.5433	**0.020** 0.0008	**83.1** 3.27	**81.0** 3.19
1114KRR	–	RA114RR	GRA114RR	GYA114RR	1 7/8						
1115KRR(KR)	G1115KRR	RA115RR	GRA115RR	GYA115RR	1 15/16						
–	–	–	GRA115RR2	–	2						
E50KRR	GE50KRR	RAE50RR	GRAE50RR	GYAE50RR	**50**						
1200KRR(KR)	G1200KRR	RA200RR	GRA200RR	GYA200RR	2	211	**100.023** 3.9379	**100.000** 3.9370	**0.020** 0.0008	**90.9** 3.58	**90.4** 3.56
–	–	RA201RR	GRA201RR	GYA201RR	2 1/16						
1202KRR	–	RA202RR	GRA202RR	GYA202RR	2 1/8						
1203KRR(KR)	G1203KRR	RA203RR	GRA203RR	GYA203RR	2 3/16						
E55KRR	GE55KRR	RAE55RR	GRAE55RR	GYAE55RR	**55**						
1204KRR	–	–	–	–	2 1/4	212	**110.023** 4.3316	**110.000** 4.3307	**0.020** 0.0008	**101.1** 3.98	**98.3** 3.87
1207KRR(KR)	G1207KRR	–	–	–	2 7/16						
E60KRR	GE60KRR	–	–	–	**60**						
1215KRR	–	–	–	–	2 15/16	215	**130.025** 5.1191	**130.000** 5.1181	**0.023** 0.0009	**120.9** 4.76	**116.6** 4.59
E75KRR	–	–	–	–	**75**						

[1]When the housing revolves in relation to the shaft, the housing bore dimensions shown on page 131 of the Timken Engineering Manual (order no. 10424) should be used. Outer ring tolerances and housing fillet radii correspond to equivalent 200-series single-row radial bearings.

SNAP WIRE MOUNTING

KR-KRR SERIES

When shafts are selected for use with wide-inner-ring ball bearings, a minimum slip fit is desirable for the most satisfactory mounting. Special shaft limits are required in certain cases and a variety of standard fits can be used, including a press fit. The recommended figures are noted in table A-11. For requirements, contact your Timken engineer.

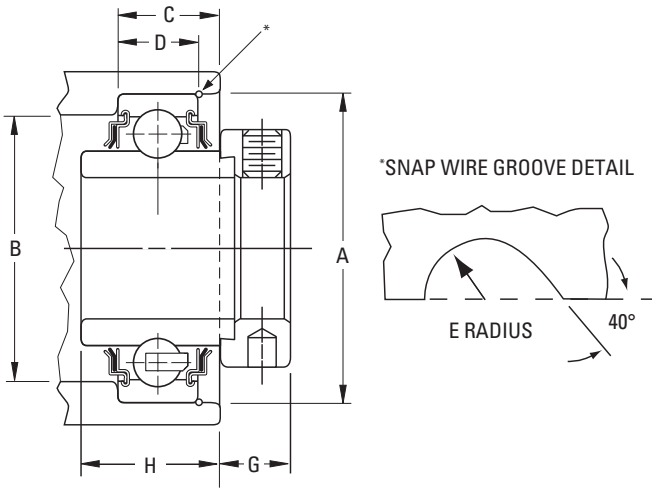
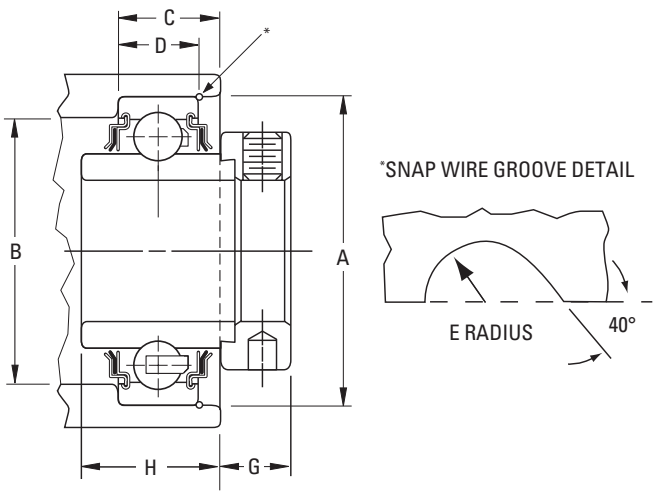


TABLE A-11. R-SEAL STANDARD KR, KRR SERIES

Bearing No.	Shaft Dia.	Basic Outer-Ring Size	Housing Bore		Shoulder Dia.		C	D	Radius	G	H
			Stationary Housing A[1]		B				E		
			Max.	Min.	Max.	Min.					
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.
1008KRR	1/2	203	**40.015** 1.5754	**40.000** 1.5748	**36.6** 1.44	**35.8** 1.41	**17.5** 11/16	**9.1** 23/64	**1.2** 3/64	**11.9** 15/32	**25.4** 1
–	9/16										
1010KRR(KR)	5/8										
1011KRR	11/16										
E17KRR	**17**										
1012KRR(KR)	3/4	204	**47.015** 1.8510	**47.000** 1.8504	**43.7** 1.72	**41.1** 1.62	**19.0** 3/4	**15.1** 19/32	**1.2** 3/64	**14.7** 37/64	**29.0** 1 9/64
E20KRR	**20**										
1013KRR(KR)	13/16	205	**52.017** 2.0479	**51.999** 2.0472	**48.5** 1.91	**46.7** 1.84	**20.6** 13/16	**15.9** 5/8	**1.2** 3/64	**13.9** 35/64	**30.6** 1 13/64
1014KRR	7/8										
1015KRR(KR)	15/16										
1100KRR(KR)	1										
E25KR	**25**										
–	1 1/16	206	**62.017** 2.4416	**61.999** 2.4409	**57.9** 2.28	**56.4** 2.22	**21.4** 27/32	**17.1** 43/64	**1.2** 3/64	**16.7** 21/32	**31.8** 1 1/4
1102KRR(KR)	1 1/8										
1103KRR(KR)	1 3/16										
1103KRR3	1 1/4										
E30KRR	**30**										
1104KRR(KR)	1 1/4	207	**72.017** 2.8353	**71.999** 2.8346	**67.6** 2.66	**64.3** 2.53	**23.0** 29/32	**18.3** 23/32	**1.6** 1/16	**17.9** 45/64	**33.3** 1 15/16
1105KRR	1 5/16										
1106KRR	1 3/8										
1107KRR(KR)	1 7/16										
E35KRR	**35**										

[1]When the housing revolves in relation to the shaft, the housing bore dimensions shown on page 131 of the Timken Engineering Manual (order no. 10424) should be used. Outer ring tolerances and housing fillet radii correspond to equivalent 200-series single-row radial bearings.

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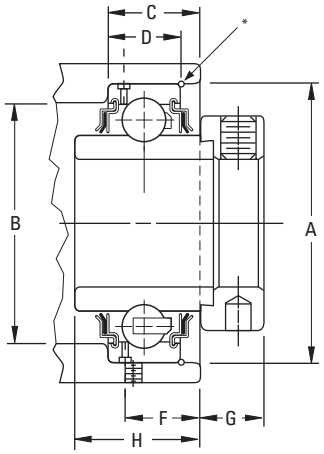
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Bearing No.	Shaft Dia.	Basic Outer-Ring Size	Housing Bore		Shoulder Dia.		C	D	Radius	G	H
			Stationary Housing A[1]		B				E		
			Max.	Min.	Max.	Min.					
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.
1108KRR(KR)	1 1/2	208	**80.078** 3.1503	**80.000** 3.1496	**75.4** 2.97	**71.4** 2.81	**24.6** 31/32	**19.4** 49/64	**1.6** 1/16	**19.4** 49/64	**36.9** 1 29/64
1109KRR	1 9/16										
E40KRR	**40**										
1110KRR	1 5/8	209	**85.024** 3.3474	**85.001** 3.3465	**80.3** 3.16	**77.0** 3.03	**25.4** 1	**20.2** 51/64	**1.6** 1/16	**19.0** 3/4	**37.3** 1 15/32
1111KRR(KR)	1 11/16										
1112KRR(KR)	1 3/4										
E45KRR	**45**										
1114KRR	1 7/8	210	**90.023** 3.5442	**90.000** 3.5433	**83.1** 3.27	**82.3** 3.24	**26.2** 1 1/32	**21.4** 37/32	**1.6** 1/6	**21.8** 55/64	**40.9** 1 39/64
1115KRR(KR)	1 15/16										
E50KRR	**50**										
1200KRR(KR)	2	211	**100.023** 3.9379	**100.000** 3.9370	**93.7** 3.69	**90.4** 3.56	**26.2** 1 1/32	**22.2** 7/8	**1.6** 1/16	**26.2** 1 1/32	**45.2** 1 25/32
1202KRR	2 1/8										
1203KRR(KR)	2 3/16										
E55KRR	**55**										
1204KRR	2 1/4	212	**110.023** 4.3316	**110.000** 4.3307	**101.1** 3.98	**99.6** 3.92	**28.6** 1 1/8	**23.0** 29/32	**1.6** 1/16	**29.4** 1 5/32	**48.4** 1 29/32
1207KRR(KR)	2 7/16										
E60KRR	**60**										

[1]When the housing revolves in relation to the shaft, the housing bore dimensions shown on page 131 of the Timken Engineering Manual (order no. 10424) should be used. Outer ring tolerances and housing fillet radii correspond to equivalent 200-series single-row radial bearings.

G-KRR SERIES

When shafts are selected for use with wide-inner-ring ball bearings, a minimum slip fit is desirable for the most satisfactory mounting. Special shaft limits are required in certain cases and a variety of standard fits can be used, including a press fit. The recommended values are in table A-12. For special requirements, contact your Timken engineer.



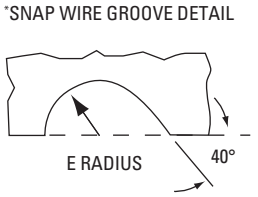


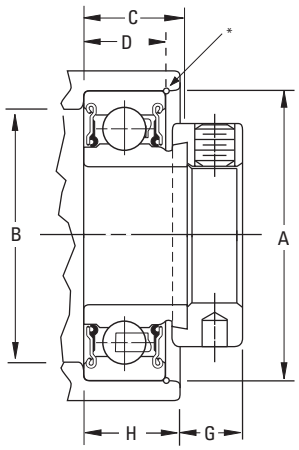
TABLE A-12. R-SEAL STANDARD G-KRR SERIES

Bearing No.	Shaft Dia.	Basic Outer-Ring Size	Housing Bore		Shoulder Dia.		C	D	Radius	F	G	H
			Stationary Housing A[1]		B				E			
			Max.	Min.	Max.	Min.						
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.
G1010KRR	5/8	203	**40.015** 1.5754	**40.000** 1.5748	**36.6** 1.44	**35.8** 1.41	**17.5** 11/16	**13.1** 33/64	**1.2** 3/64	**14.7** 37/64	**11.9** 15/32	**25.4** 1
G1011KRR	11/16											
GE17KRR	**17**											
G1012KRR	3/4	204	**47.015** 1.8510	**47.000** 1.8504	**43.7** 1.72	**41.1** 1.62	**19.0** 3/4	**15.1** 19/32	**1.2** 3/64	**15.9** 5/8	**14.7** 37/64	**29.0** 1 9/64
GE20KRR	**20**											
G1014KRR	7/8	205	**52.017** 2.0479	**51.999** 2.0472	**48.5** 1.91	**46.7** 1.84	**20.6** 13/16	**15.9** 5/8	**1.2** 3/64	**16.7** 21/32	**13.9** 35/64	**30.6** 1 13/64
G1015KRR	15/16											
G1100KRR	1											
GE25KRR	**25**											
G1101KRR	1 1/16	206	**62.017** 2.4416	**61.999** 2.4409	**57.9** 2.28	**56.4** 2.22	**23.8** 15/16	**19.0** 3/4	**1.2** 3/64	**19.8** 25/32	**15.5** 39/64	**32.9** 1 19/64
G1102KRR	1 1/8											
G1103KRR	1 3/16											
GE30KRR	**30**											
G1104KRR	1 1/4	207	**72.017** 2.8353	**71.999** 2.8346	**67.6** 2.66	**64.3** 2.53	**25.4** 1	**20.2** 51/64	**1.6** 1/16	**21.4** 27/32	**16.7** 21/32	**34.5** 1 23/64
G1106KRR	1 3/8											
G1107KRR	1 7/16											
GE35KRR	**35**											
G1108KRR	1 1/2	208	**80.018** 3.1503	**80.000** 3.1496	**75.4** 2.97	**71.4** 2.81	**27.8** 1 3/32	**22.2** 7/8	**1.6** 1/16	**23.8** 15/16	**17.5** 11/16	**38.9** 1 17/32
G1109KRR	1 9/16											
GE40KRR	**40**											
G1110KRR	1 5/8	209	**85.024** 3.3474	**85.001** 3.3465	**80.3** 3.16	**77.0** 3.03	**28.6** 1 1/8	**23.4** 59/64	**1.6** 1/16	**24.2** 31/32	**17.5** 11/16	**38.9** 1 17/32
G1111KRR	1 11/16											
G1112KRR	1 3/4											
GE45KRR	**45**											
G1115KRR	1 15/16	210	**90.023** 3.5442	**90.000** 3.5433	**83.1** 3.27	**82.3** 3.24	**29.4** 1 5/32	**24.2** 61/64	**1.6** 1/16	**24.6** 31/32	**20.2** 51/64	**42.5** 1 43/64
GE50KRR	**50**											
G1200KRR	2	211	**100.023** 3.9379	**100.000** 3.9370	**93.7** 3.69	**90.4** 3.56	**31.8** 1 1/4	**26.2** 1 1/32	**1.6** 1/16	**26.6** 1 3/64	**24.2** 61/64	**47.2** 1 55/64
G1203KRR	2 3/16											
GE55KRR	**55**											

[1]When the housing revolves in relation to the shaft, the housing bore dimensions shown on page 131 of the Timken Engineering Manual (order no. 10424) should be used. Outer ring tolerances and housing fillet radii correspond to equivalent 200-series single-row radial bearings.

RA-RR SERIES

When shafts are selected for use with wide-inner-ring ball bearings, a minimum slip fit is desirable for the most satisfactory mounting. Special shaft limits are required in certain cases and a variety of standard fits can be used, including even a press fit. The recommended values are in table A-13. For special requirements, contact your Timken engineer.



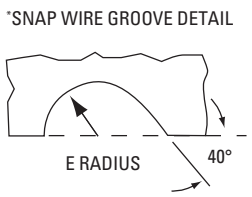
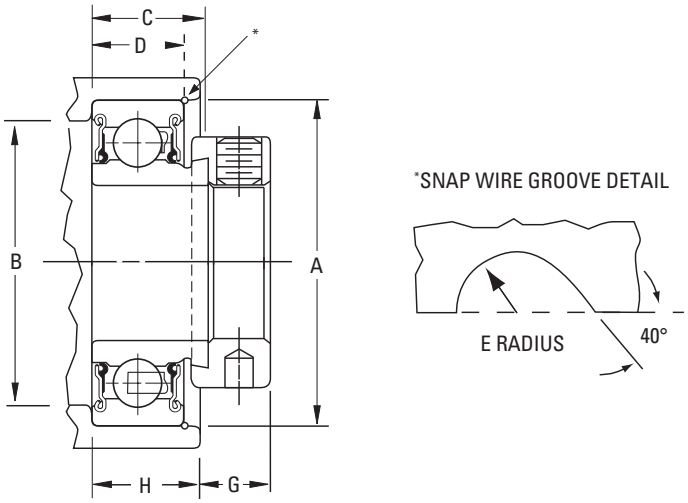


TABLE A-13. RA-RR SERIES, NON-RELUBRICATABLE

Bearing No.	Shaft Dia.	Basic Outer-Ring Size	Housing Bore		Mean Fit Loose	Shoulder Dia.		C	D	H	Radius	G
			Stationary Housing A[1]			B					E	
			Max.	Min.		Max.	Min.					
	in. **mm**		**mm** in.	**mm** in.		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.
RA008RR	1/2	203	**40.015** 1.5754	**40.000** 1.5748	**0.013** 0.0005	**35.1** 1.34	**34.3** 1.31	**19.0** 3/4	**14.3** 9/16	**16.67** 21/32	**1.2** 3/64	**9.5** 3/8
RA009RR	9/16											
RA010RR	5/8											
RAE17RR	**17**											
RA012RR	3/4	204	**47.015** 1.8510	**47.000** 1.8504	**0.013** 0.0005	**40.9** 1.61	**40.6** 1.58	**20.6** 13/16	**15.9** 5/8	**17.07** 43/64	**1.2** 3/64	**10.3** 13/32
RAE20RR	**20**											
RA013RR	13/16	205	**52.017** 2.0479	**51.999** 2.0472	**0.015** 0.0006	**46.0** 1.81	**45.7** 1.78	**20.6** 13/16	**15.9** 5/8	**17.07** 43/64	**1.2** 3/64	**10.3** 13/32
RA014RR	7/8											
RA015RR	15/16											
RA100RR	1											
RAE25RR	**25**											
RA101RR	1 1/16	206	**62.017** 2.4416	**61.999** 2.4409	**0.015** 0.0006	**56.1** 2.21	**54.9** 2.16	**23.8** 15/16	**19.0** 3/4	**20.24** 51/64	**1.2** 3/64	**11.9** 15/32
RA102RR	1 1/8											
RA103RR	1 3/16											
RA103RR2	1 1/4											
RAE30RR	**30**											
RA104RR	1 1/4	207	**72.017** 2.8353	**71.999** 2.8346	**0.015** 0.0006	**65.0** 2.56	**62.7** 2.47	**25.4** 1	**20.6** 13/16	**22.22** 7/8	**1.6** 1/16	**13.5** 17/32
RA105RR	1 5/16											
RA106RR	1 3/8											
RA107RR	1 7/16											
RAE35RR	**35**											
RA108RR	1 1/2	208	**80.018** 3.1503	**80.000** 3.1496	**0.015** 0.0006	**72.9** 2.87	**70.6** 2.78	**28.6** 1 1/8	**23.0** 29/32	**26.19** 1 1/32	**1.6** 1/16	**15.1** 19/32
RA109RR	1 9/16											
RAE40RR	**40**											
RA110RR	1 5/8	209	**85.024** 3.3474	**85.001** 3.3465	**0.020** 0.0008	**78.0** 3.07	**75.4** 2.97	**28.6** 1 1/8	**23.0** 29/32	**26.19** 1 1/32	**1.6** 1/16	**15.1** 19/32
RA111RR	1 11/16											
RA112RR	1 3/4											
RAE45RR	**45**											

[1]When the housing revolves in relation to the shaft, the housing bore dimensions shown on page 131 of the Timken Engineering Manual (order no. 10424) should be used. Outer ring tolerances and housing fillet radii correspond to equivalent 200-series single-row radial bearings.

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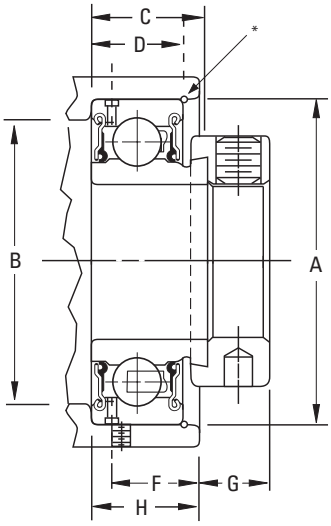
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Bearing No.	Shaft Dia.	Basic Outer-Ring Size	Housing Bore		Mean Fit Loose	Shoulder Dia.		C	D	H	Radius	G
			Stationary Housing A[1]			B						
			Max.	Min.		Max.	Min.					
	in. **mm**		**mm** in.	**mm** in.		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.
RA113RR	1 13/16	210	**90.023** 3.5442	**90.000** 3.5433	**0.020** 0.0008	**83.1** 3.27	**80.5** 3.17	**28.6** 1 1/8	**23.0** 29/32	**26.19** 1 1/32	**1.6** 1/16	**15.1** 19/32
RA114RR	1 7/8											
RA115RR	1 15/16											
RAE50RR	**50**											
RA200RR	2	211	**100.023** 3.9379	**100.000** 3.9370	**0.020** 0.0008	**93.5** 3.68	**90.4** 3.56	**31.0** 1 7/32	**25.4** 1	**28.18** 1 7/64	**1.6** 1/16	**17.5** 11/16
RA201RR	2 1/16											
RA202RR	2 1/8											
RA203RR	2 3/16											
RAE55RR	**55**											

[1]When the housing revolves in relation to the shaft, the housing bore dimensions shown on page 131 of the Timken Engineering Manual (order no. 10424) should be used. Outer ring tolerances and housing fillet radii correspond to equivalent 200-series single-row radial bearings.

GRA-RR SERIES

When shafts are selected for use with wide-inner-ring ball bearings, a minimum slip fit is desirable for the most satisfactory mounting. Special shaft limits are required in certain cases and a variety of standard fits can be used, including even a press fit. The recommended values are in table A-14. For special requirements, contact your Timken engineer.



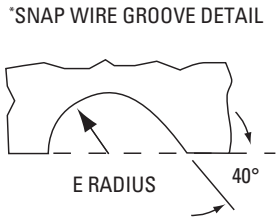


TABLE A-14. GRA-RR SERIES, RELUBRICATABLE

Bearing No.	Shaft Dia.	Basic Outer-Ring Size	Housing Bore		Shoulder Dia.		C	D	H	Radius	F	G
			Stationary Housing A[1]		B					E		
			Max.	Min.	Max.	Min.						
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.
GRA008RR	1/2	203	**40.015** 1.5754	**40.000** 1.5748	**35.1** 1.38	**34.3** 1.35	**19.0** 3/4	**14.3** 9/16	**16.67** 21/32	**1.2** 3/64	**22.32** 0.879	**9.5** 3/8
GRAE17RR	**17**											
GRA012RR	3/4	204	**47.015** 1.8510	**47.000** 1.8504	**40.9** 1.61	**40.6** 1.60	**20.6** 13/16	**15.9** 5/8	**17.07** 43/64	**1.2** 3/64	**25.6** 1.008	**10.3** 13/32
GRAE20RR	**20**											
GRA014RR	7/8	205	**52.017** 2.0479	**51.999** 2.0472	**46.0** 1.81	**45.7** 1.80	**20.6** 13/16	**15.9** 5/8	**17.07** 43/64	**1.2** 3/64	**30.61** 1.205	**10.3** 13/32
GRAE25RR	**25**											
GRA101RR	1 1/16	206	**62.017** 2.4416	**61.999** 2.4409	**56.1** 2.21	**54.9** 2.16	**23.8** 15/16	**19.0** 3/4	**20.24** 51/64	**1.2** 3/64	**37.29** 1.468	**11.9** 15/32
GRAE30RR	**30**											
GRA104RR	1 1/4	207	**72.017** 2.8353	**71.999** 2.8346	**65.0** 2.56	**62.7** 2.47	**25.4** 1	**20.6** 13/16	**22.22** 7/8	**1.6** 1/16	**43.08** 1.696	**13.5** 17/32
GRAE35RR	**35**											

[1]When the housing revolves in relation to the shaft, the housing bore dimensions shown on page 131 of the Timken Engineering Manual (order no. 10424) should be used. Outer ring tolerances and housing fillet radii correspond to equivalent 200-series single-row radial bearings.

INSTALLATION

Ball bearing housed units are available in a wide variety of types and sizes to accommodate a complete range of operating conditions.

These units generally have cast-iron housings and are designed for mounting on straight shafts with a slip fit. The self-locking collar and the set screw inner bearing design provides ease in mounting.

1. Ensure that the shaft is clean, free from burrs, straight and of proper diameter. The bearing should not be mounted on a worn section of the shaft. Using shafts with hardness greater than HRC 45 will reduce effectiveness of locking devices. See table A-15 on page A-23 for recommended shaft tolerances.
2. Align the bearing in its housing and slide the unit into position on the shaft.
3. Bolt housing tightly to its mounting supports using an appropriately sized fastener (table A-17 on page A-23). Flat washers should be used when installing any kind of housed unit. Washers should be properly sized to bolt diameter and should not be an SAE grade, which is smaller.

BALL HOUSED UNITS MAY BE LOCKED INTO POSITION ON SHAFTS USING EITHER OF THE FOLLOWING METHODS

4. **Eccentric locking-collar bearings:** Slide collar over cammed end of inner ring. Rotate collar to engage cams and lock by lightly tapping with drift pin in the direction of shaft rotation. Tighten set screw to recommended torque levels as shown in table A-16 on page A-23.

   In cases where the units are mounted vertically or where they are to assume considerable thrust loading, the unit should be placed so that the collar is forced against the inner ring by the thrust rather than away from it. In these cases, it may be advisable to spot the shaft under the set screw.

   To disassemble, loosen set screw and lightly tap collar in direction opposite shaft rotation.

5. **Set screw locking bearings:** Lock bearing to the shaft by tightening each inner ring set screw incrementally to recommended torque levels as shown in table A-16 on page A-23. For concentric collar units, tighten each collar set screw to recommended torque levels in tables. To disassemble, loosen set screw.

INSTALLATION PROCEDURE FOR HIGH-SPEED OR HIGH-TEMPERATURE SAL/SAOL BEARINGS

6a. Remove housing cover gasket, bearing, spacer ring, endplates and packings. Use care when handling gasket and packings. Slide housing and one endplate along shaft. Ensure that the overflow cup, located at the base of the pillow block, is placed on the downward side of shaft rotation. Slide bearing onto shaft and into housing, with cam side outward (facing open end of housing).

Fixed mounting: Position bearing against housing shoulder and place spacer ring between bearing aligning ring face and housing cover shoulder face.

Float mounting: Position bearing in center of its floating space between housing and housing cover shoulder faces. Do not use spacer ring.

In general, it is preferable for the fixed bearing to be closest to the drive position.

b. Follow step 4 or 5 on this page to secure bearing to shaft.

c. Replace gasket and housing cover.

d. Install packings and endplates. Tighten screws holding endplates to force packings into contact with shaft. This creates an effective seal.

e. To disassemble, reverse the above operations to remove bearing from the shaft.

NOTE

Do not overtighten packings. If considerable heat develops during operation, loosen packings by loosening the screws holding endplate.

⚠ WARNING

Failure to observe the following warnings could create a risk of death or serious injury.

Proper maintenance and handling practices are critical. Always follow installation instructions and maintain proper lubrication.

TECHNICAL DATA

This section provides useful installation details related to shaft tolerance and torque for set screws and bolts.

TABLE A-15. SUGGESTED SHAFT TOLERANCE[1]

Shaft Size		Tolerance
in.	**mm**	
1/2 - 1 15/16	**12.7 - 49.2**	nominal to -0.0005 in. , -0.013 mm
2 - 3 15/16	**50.8 - 100.0**	nominal to -0.0010 in., -0.025 mm
above 4	**101.6**	nominal to -0.0015 in., -0.038 mm

[1]These are for normal service; for heavy loads, high speeds or vertical shaft applications, reduce the suggested shaft tolerance by half.

TABLE A-16. SUGGESTED SET SCREW TIGHTENING TORQUE

Set Screw Size	Standard Steel	Stainless Steel (TDCF inserts)
in.	in. - lbs.	in. - lbs.
#10	35	23
1/4	80	60
5/16	155	122
3/8	275	213
7/16	425	340
mm	**Nm**	**Nm**
M5	**4.0**	**3.1**
M6	**6.6**	**4.9**
M8	**15.3**	**11.5**
M10	**30.0**	**22**
M12	**49.0**	**37**

TABLE A-17. SUGGESTED BOLT MOUNTING TORQUE

Bolt Size	Torque
in.	ft. - lbs.
3/8	27
1/2	65
5/8	130
3/4	230
7/8	573
1	858
1 1/8	1059
mm	**Nm**
M10	**44**
M12	**77**
M16	**192**
M20	**372**

SELECTION GUIDE FOR APPLICATIONS
BALL-BEARING HOUSED UNITS

This is a general guide. For operating conditions outside the ranges identified in table A-18, consult your Timken engineer.

TABLE A-18. APPLICATION FACTOR

(Low) -30000 dN	←	Increasing Speed	→	175000 dN → 250000 dN[1]
-34° C (-30° F)	←	Increasing Temperature	→	+121° C (+250° F) +135° C (275° F)
(Severe)	←	Increasingly Contaminated Environment	→	(Slight) →

[1]Bearing bore (mm) x RPM.

Table A-19 is an application selection guide for ball-bearing housed units.

TABLE A-19. BALL-BEARING HOUSED-UNIT SELECTION GUIDE FOR APPLICATIONS

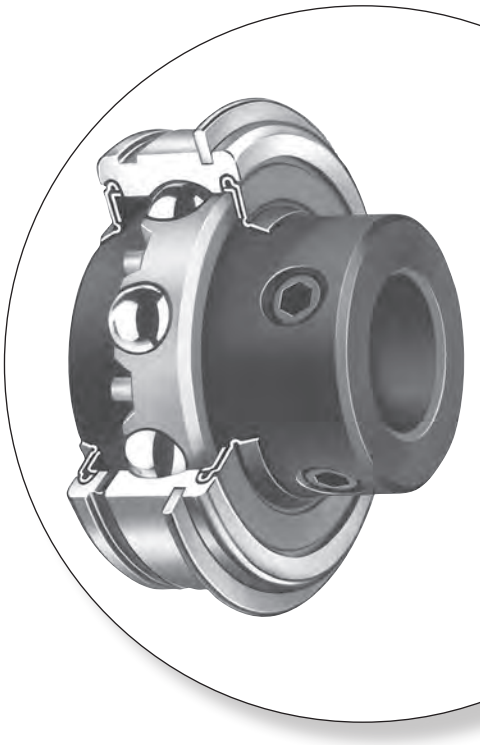
Load	Bearing Types																			
	Wide Inner Ring Ball Bearing with Tri-ply Seals Self-Locking Collar		Wide-Inner-Ring Ball Bearing With Contact Seals Self-Locking Collar				Extended Inner Ring Bearing with Contact Seals Self-Locking Collar				Wide-Inner-Ring Ball Bearing with Contact Seals Set Screw Lock			Narrow Width Bearing with Contact Seals Set Screw Lock			Wide-Inner-Ring Ball Bearing with Labyrinth or Special Seals Self-Locking Collar		
	Housing Type		Housing Type				Housing Type				Housing Type			Housing Type			Housing Type		
	Pillow Block	Flange Unit	Pillow Block	Flange Unit	Take-Up Unit	Cartridge	Pillow Block	Flange Unit	Take-Up Unit	Cartridge	Pillow Block	Flange Unit	Take-Up Unit	Pillow Block	Flange Unit	Take-Up Unit	Pillow Block	Flange Unit	Take-Up Unit
Light Duty				RR, RRT[1] RRTR[1] GRR			PB[1] PBS[1] RBG(U) RPB[1]	LFST[1] VFMST[1] RBGF RA, RAT[1] RATR[1] GRA	MSTU[1]	RCSM[1] RCR[1] LCR[1] RABR[1]									
Normal Duty	TAK TAS	TCJ TCJT	RAK RAS RAKH RAKHL[2] DRNR	RCJ RCJT GFRTD(R) RFTD(R)[1] GRFD(R) RFD(R)[1]	RTU TU	RC	VAK VAS VTB	VCJ VCJT FLCT[1] GVFTD(R) VFTD(R)[1] GVFD(R) VFD(R)[1]	VTU VNTU		YAS YAK RASC	YCJ YCJT RCJC RCJTC RFC YCJTM YCJM	YTU	SAS SAK STB	SCJ SCJT	STU	LAK LAS LSA SAL[3] LAKHL	LCJ LCJT	LTU
Heavy Duty			RAO RSAO	RCJO													LAO LSAO SAOL[3]	LCJO	

[1]Non-relubricatable.
[2]Float unit, grease lubrication.
[3]Fixed and floating. Oil lubrication, SAL and SAOL units, with adjustable seal packages also can be considered for adverse environments.
NOTE: All bearings or units are double sealed and prelubricated with grease except where noted.

WIDE-INNER-RING BALL BEARINGS

Wide-inner-ring ball bearings consist of a single-row ball bearing and an extended inner ring. They carry radial, axial and combination loads. The extended inner ring slips onto the shaft and secures with a locking mechanism.

- **Sizes:** Standard series: 15 mm – 75 mm shaft (1/2 – 2 15/16 in.). Medium and heavy-duty series are available in larger sizes.
- **Industries and applications:** Agriculture, food processing, fans, blowers, and conveyors.
- **Features:** Available with a variety of shaft locking systems: eccentric locking collars, set screws and concentric locking collars.
- **Benefits:** Designed for ease of mounting and maximum shaft support.



Nomenclature A-26
Introduction A-27

INDUSTRIAL SERIES
KR, KRR, KRRB Non-Relubricatable Types A-32
G-KRR, G-KRRB Relubricatable Types A-34
KL, KLB, KLL, KLLB Special Series, Non-Relubricatable Types A-36
G-KLL, G-KLLB Special Series, Relubricatable Types A-37
KLLG Special Series with Wireloc® A-38
Tri-Ply Industrial Series, Non-Relubricatable and Relubricatable Types A-39
GC-KRRB Industrial-Series Concentric Collar, Relubricatable Type A-40
SM Industrial Series A and B Types/MUA-B Inserts A-41
SM-S Industrial Series A-43
GY-KRRB Set Screw Industrial Series A-44
ER Industrial Series, Relubricatable Types A-46

STANDARD SERIES
RA-RR, RA-RRB Non-Relubricatable Types A-48
GRA-RR, GRA-RRB Relubricatable Types A-50
RA-DD, Non-Relubricatable Types A-52
YA-RR, YA-RRB Non-Relubricatable Types A-53
GYA-RR, GYA-RRB Relubricatable Types A-54

LIGHT SERIES
RAL-NPPB Non-Relubricatable Types A-55

MEDIUM SERIES
GYM-KRRB Inserts Set Screw Lock A-56

HEAVY SERIES
GN-KRRB Relubricatable Types A-57
GN-KLLB Special Duty A-59
SMN A and B Types/MUOA-B Inserts A-60
SMN-S Series A-62

NOMENCLATURE

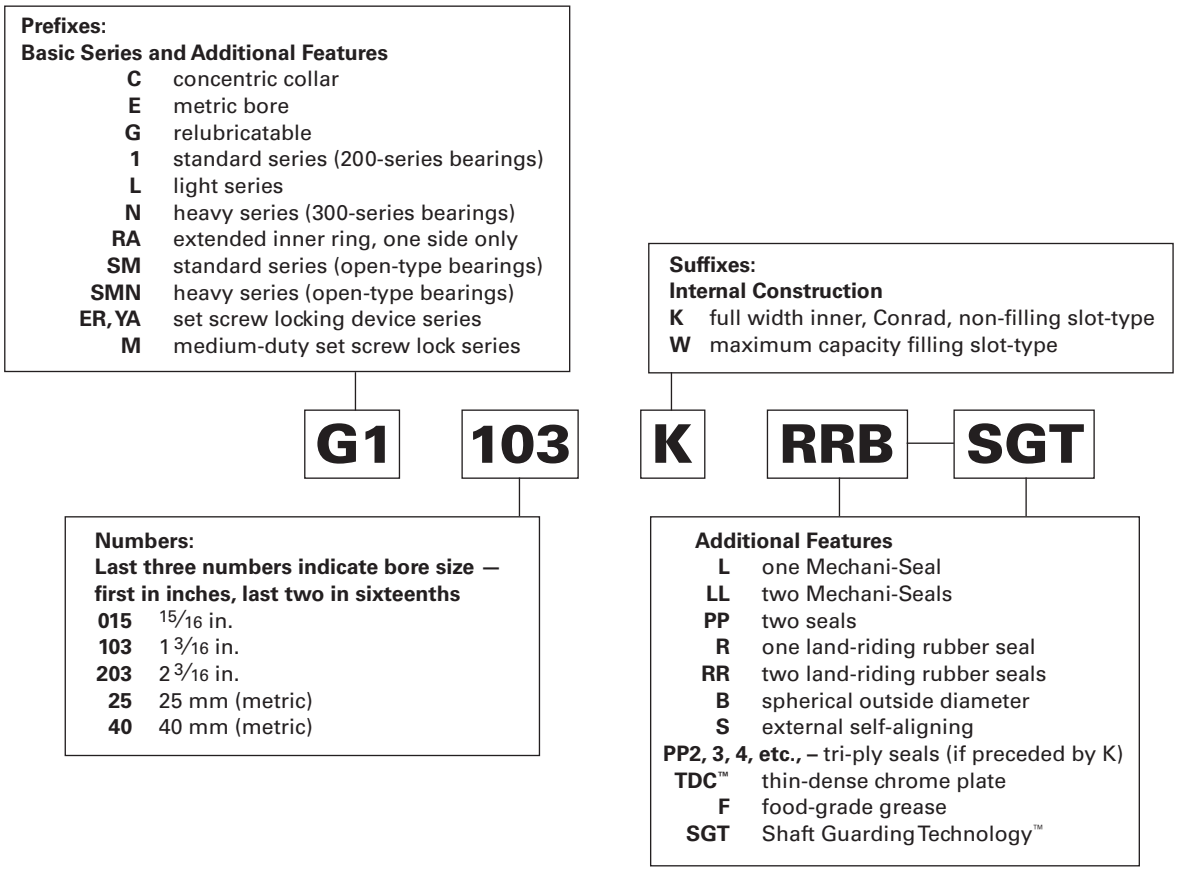


Fig. A-8. Wide-inner-ring ball bearing nomenclature.

⚠ WARNING

Failure to observe the following warnings could create a risk of death or serious injury.

Proper maintenance and handling practices are critical. Always follow installation instructions and maintain proper lubrication.

Tensile stresses can be very high in tightly fitted bearing components. Attempting to remove such components by cutting the cone (inner race) may result in a sudden shattering of the component causing fragments of metal to be forcefully expelled. Always use properly guarded presses or bearing pullers to remove bearings from shafts, and always use suitable personal protective equipment, including safety glasses.

⚠ CAUTION

Failure to follow this caution could create a risk of injury.

SHAFT GUARDING TECHNOLOGY™
Do not remove band from bore groove. Removal may cause it to release suddenly.

NOTE

The products catalogued are application specific. Any use in applications other than those intended could lead to equipment failure or to reduced equipment life.

Use of improper bearing fits may cause damage to equipment.

Do not use damaged bearings. The use of a damaged bearing can result in equipment damage.

INTRODUCTION

WIDE-INNER-RING BALL BEARING DESIGN FOR BALL BEARINGS THAT ARE EASILY MOUNTED ON STRAIGHT SHAFTS AND POSITIONED WITHOUT SHOULDERS, LOCKNUTS OR ADAPTERS

The internal bearing construction is basically the same as the deep race, single-row radial type with the ability to carry radial, thrust and combined loads, while providing low-friction qualities. The inner ring is generally extended on both sides of the race to provide additional shaft support, and is locked to the shaft by specially designed set screws, an eccentric self-locking collar or a concentric collar. The wide-inner-ring ball bearings also are available with cylindrical or spherical outside diameters (O.D.). The cylindrical or straight O.D. type is used for mounting in straight-bored housings. The spherical O.D. type must be mounted in a corresponding spherical seat and is used to compensate for shaft or housing misalignments.

WIDE-INNER-RING BALL BEARINGS WITH ECCENTRIC LOCKING COLLARS

The following series are available with the eccentric cam (self-locking) collar. See installation instructions in table A-20 on page A-29.

RR SERIES

These bearings feature the flareout, contact-type R-seal which encloses a synthetic rubber-impregnated washer between two metal caps (fig. A-9). Most sizes incorporate the shroud-seal design. R-seal wide-inner-ring ball bearings are available in the following non-relubricatable variations: KR (one seal, cylindrical O.D.), KRR (two seals, cylindrical O.D.) and KRRB (two seals, spherical O.D.). Relubricatable versions are: G-KRR, G-KRRB and GN-KRRB (heavy-duty).



Fig. A-9. RR series.

LL SERIES

These bearings are dimensionally interchangeable with the RR series, but have non-contact labyrinth seals and steel cages for low torque, high speed and higher temperature service (up to 177° C [350° F]).

RA-RR SERIES

The RA-RR series features an extended inner ring and self-locking collar for simple and effective shaft retention in a standard-series bearing (fig. A-10). The positive contact, land-riding R-seal provides improved protection against the heavy contamination encountered in many applications. All sizes have a heat-stabilized, moisture-conditioned 6/6 nylon retainer, which has proven effective under conditions of misalignment. RA-RR extended inner- ring bearings are available as RA-RR (two-seals, straight O.D.) and RA-RRB (two seals, spherical O.D.). Relubricatable versions are GRA-RR and GRA-RRB.



Fig. A-10. RA-RR series.

TRI-PLY SEAL SERIES



Fig. A-11. Tri-ply seal series.

Tri-ply seal bearings are designed for environments where severe conditions and moisture are present (fig. A-11). The one-piece tri-ply seals incorporate a highly effective seal design molded to an exterior shroud cap. The shroud cap protects the seal lips from fiber wrap and abrasion while enhancing the overall sealing effectiveness of the unit. All units incorporate the self-locking collar and have a nylon retainer. Tri-ply seal bearings are available in both a non-relubricatable (KPPB) and relubricatable version (G-KPPB).

EXTERNAL SELF-ALIGNING SERIES

The construction of this series permits the inner assembly, which contains an open-type ball bearing with spherical O.D. to align in the seat of the mating outer ring (fig. A-12). The seat of this outer ring is matched with the spherical O.D. of the ball bearing outer ring providing unrestricted self-alignment and allowing the inner assembly to become square and true with the shaft. Self-aligning units are available in both standard SM-S or heavy SMN-S series.



Fig. A-12. External self-aligning series.

RA-DD-SERIES BEARINGS

The RA-DD-series bearings are extended inner-ring types with cam locking collars (fig. A-13). They incorporate two close-fitting, non-contact grease shields to effectively retain lubricant and provide protection against harmful contaminants. The non-contact metallic shields provide improved high-speed and low-torque performance required for high-speed applications such as printing presses and tissue manufacturing. The 6/6 molded nylon retainer has proven effective under conditions of misalignment. These bearings are dimensionally interchangeable and have the same load capacities as the RA-RR series. Available in 15.88 mm – 38.10 mm (⅝ in. – 1 ½ in.) shaft sizes.



Fig. A-13. RA-DD series.

WIDE-INNER-RING BALL BEARINGS WITH CONCENTRIC COLLARS

GC SERIES



Fig. A-14. GC series.

The GC series wide-inner-ring ball bearings are relubricatable with spherical outside diameters, nylon retainers and shroud seals (fig. A-14). The metal shroud maintains tight seal contact against the inner ring and shields the rubber seals from damage due to dirt or fiber wrap. The concentric collar is locked to the shaft by two set screws, located 120 degrees apart, mated with threaded holes in the collar and drilled holes in the bearing inner ring.

YM MEDIUM-DUTY SERIES



Fig. A-15. YM series.

The Timken medium-duty series offers reliable performance and extended life for applications that carry heavier loads (fig. A-15). This series has been designed with a combination of premium features – superfinished raceways and a nylon-patch set screw locking device, designed for demanding conditions. These bearing inserts will operate with reduced levels of noise, vibration and friction and are the choice antifriction component for saw and paper mill applications, fan and blower assemblies, food and grain handling, and conveyor systems.

CAM (SELF-LOCKING) COLLAR INSTALLATION INSTRUCTIONS

The self-locking collar eliminates the need for locknuts, washers, shoulders, sleeves and adapters. With various seal and inner width variations for many agricultural and industrial applications, self-locking collars are the easiest housed units to install.

The locking collar has a counterbored recess made purposely eccentric to the collar bore. When assembled on the shaft, this eccentric recess engages or mates with an eccentric cam end of a bearing's inner ring. The collar is engaged on the inner cam of the bearing.

This assembly grips the shaft tightly with a positive binding action that increases with use. No adjustments of any kind are necessary. The collar set screw provides supplementary locking.

TABLE A-20. CAM COLLAR INSTALLATION



1. Observe cam design of the wide inner ring and self-locking collar.



2. Mate the cam of the collar with the cam of the wide inner ring.



3. Press the locking collar against the wide inner ring and turn in the direction of shaft rotation until tightly engaged.



4. With drift pin in collar hole, tap lightly in direction of shaft rotation to lock.

   For stationary shafts and outer ring rotation, turn the collar in opposite direction of rotation.



5. Tighten set screw in collar.

WIDE-INNER-RING BALL BEARINGS WITH SET SCREW LOCKING DEVICE

The following series are available with the set screw locking device with special set screws that are resistant to loosening during operation.

Y SERIES

Full-width, inner-ring Y-series bearings increase shaft support in heating, ventilation and air conditioning (HVAC) systems, conveyors and other industrial applications (fig. A-16). They feature superfinished raceways, grade-10 balls and anti-backout nylon-patch set screws. Flexible 6/6 nylon retainers and land-riding shroud seals ensure excellent performance. They are factory-prelubricated. Relubricatable set screw mounting feature is ideal for reversing applications. To protect the shaft with Shaft Guarding Technology™ (page A-31), add suffix SGT to the part number when ordering.



Fig. A-16. Y series.

YA SERIES

The YA-series relubricatable and non-relubricatable bearings are an extended inner-ring type with specially designed set screws (fig. A-17). Positive-contact, land-riding R-seals provide protection against harmful contaminants and retain lubricant.

Set screw series bearings are available in both non-relubricatable version YA and relubricatable version GYA-RRB. Both types have nylon retainers.



Fig. A-17. YA series.

ER SERIES

This series offers industry-standard mounting dimensions and standard nomenclature for a large variety of sizes of relubricatable, extended inner-ring bearings for through-bored housings (fig. A-18). All bearings in this series have nylon retainers and are equipped with snap rings, eliminating the need for machining housing shoulders. ER bearings are designed with a unique set screw locking device that locks the bearing to the shaft and is resistant to loosening during operation. Positive-contact, land-riding R-seals provide protection against harmful contaminants and retain lubricant. All ER bearings are black-oxide-coated for corrosion resistance. Ideal for low-starting and running-torque applications. To protect the shaft with Shaft Guarding Technology (page A-31), add suffix SGT to the part number when ordering.



Fig. A-18. ER series.

SHAFT GUARDING TECHNOLOGY™ FOR SET SCREW LOCKING DEVICES

Housed units with Timken Shaft Guarding Technology use a stainless-steel, hardened band to transfer gripping pressure on the shaft. Unlike traditional set screws, which can dig into the shaft, there are no nicks, raised metal or permanent shaft damage when using Shaft Guarding Technology. The stainless band won't corrode on the shaft.

Timken Shaft Guarding Technology is designed to exceed gripping application requirements, maintain dimensional integrity and reduce fretting corrosion. This is a preferred solution when shaft replacement is costly.

Housed units with Shaft Guarding Technology™:

- Are faster and easier to install and remove.
- Reduce the number of shaft replacements.
- Decrease overall system costs.

Tight grip offers protection.

- Two set screws and a nylon patch at a 90-degree separation provide strong holding capability with minimal distortion.
- Groove running beneath the set screws in the inner ring bore keeps the band in place.
- Hardened stainless-steel band helps protect the shaft from damage.
- Longer inner ring along the shaft (ABMA compliant) improves shaft support and reduces bearing misalignment.
- Timken thin-dense chrome (TDC™) optional.
- Seal options include three-piece R-seal for normal-to-high contamination environments and L-seal for higher speeds and temperatures.
- Choice of housing configurations.

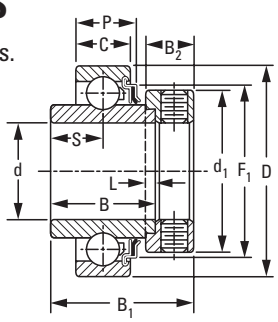
Industries and applications:

- Rubber and plastic.
- Agriculture (combines and implements).
- Forest products (paper, tissue, newsprint, fine paper).
- Industrial machinery.
  - Fans and blowers.
  - Canning and bottling.
  - Conveyors.
  - Food processing.
  - Printing presses.
  - Packaging.
  - Textiles.

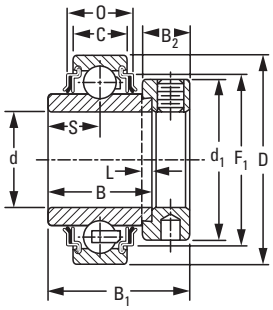
INDUSTRIAL SERIES

KR, KRR, KRRB NON-RELUBRICATABLE TYPES

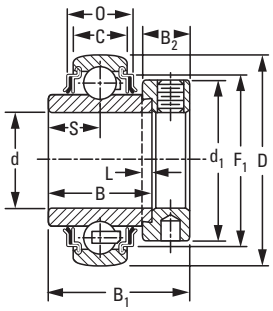
- Designed for extremely dirty or wet conditions.
- Feature R-seals with flared lips that firmly contact the ground O.D. of the inner ring.
- R-seals provide a positive seal against dirt and other contaminants, while effectively retaining the lubricant.
- Equipped with shroud-seals, providing extra effectiveness and protection.
- Extra-wide design provides additional shaft support and extra-large grease capacity.



KR One Seal Cylindrical O.D.



KRR Two Seals Cylindrical O.D.



KRRB Two Seals Spherical O.D.

Suggested shaft tolerances:

½ in. – 1 15⁄16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15⁄16 in., nominal to -0.025 mm, -0.0010 in.

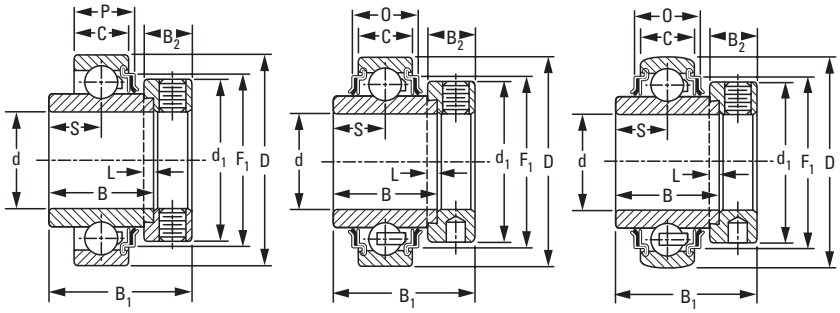
To order, specify bearing number followed by "+ COL".

Example: 1103KRRB + COL.

Bearing No. Cylindrical O.D.	Bearing No. Spherical O.D.		Collar No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S	L	d_1	B_2	B_1	F_1	O	P	Brg. and Collar Wt.		Static Load Rating C_o	Extended Dynamic Load Rating C_E
					in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg**	lbs.	**N** lbs.	**N** lbs.
–	1008KRR	(KRRB)	S1008K	203	½	**40** 1.5748	**27.78** 1 3⁄32	**12** 0.472	**13.90** 35⁄64	**4.0** 5⁄32	**28.6** 1⅛	**13.5** 17⁄32	**37.3** 1 15⁄32	**34.01** 1.339	**16.56** 0.652	**14.27** 0.562	**0.154**	0.34	**4700** 1060	**10700** 2400
1010KR	1010KRR	(KRRB)	S1010K		5⁄8												**0.145**	0.32		
–	1011KRR	(KRRB)	S1011K		11⁄16												**0.122**	0.27		
–	E17KRR	(KRRB)	SE17K		**17**												**0.122**	0.27		
1012KR	1012KRR	(KRRB)	S1012K	204	¾	**47** 1.8504	**34.13** 1 11⁄32	**14** 0.551	**17.10** 43⁄64	**4.0** 5⁄32	**33.3** 1 5⁄16	**13.5** 17⁄32	**43.7** 1 23⁄32	**38.91** 1.532	**16.56** 0.652	**15.29** 0.602	**0.204**	0.45	**6200** 1400	**14300** 3200
–	E20KRR	(KRRB)	SE20K		**20**												**0.204**	0.45		
–	1013KRR	(KRRB)	S1013K	205	13⁄16	**52** 2.0472	**34.92** 1 3⁄8	**15** 0.591	**17.50** 11⁄16	**4.0** 5⁄32	**38.1** 1 ½	**13.5** 17⁄32	**44.1** 1 47⁄64	**45.19** 1.779	**16.66** 0.656	**15.82** 0.623	**0.286**	0.63	**7700** 1730	**15800** 3550
–	1014KRR	(KRRB)	S1014K		7⁄8												**0.272**	0.60		
1015KR	1015KRR	(KRRB)	S1015K		15⁄16												**0.254**	0.56		
1100KR	1100KRR	(KRRB)	S1100K		1												**0.231**	0.51		
–	E25KRR	(KRRB)	SE25K		**25**												**0.231**	0.51		
–	1101	(KRRB)	S1101K	206	1 1⁄16	**62** 2.4409	**36.51** 1 7⁄16	**16** 0.630[1]	**18.30** 23⁄32	**4.0** 5⁄32	**44.4** 1 ¾	**15.9** 5⁄8	**48.4** 1 29⁄32	**52.53** 2.068	**19.56** 0.770	**17.78** 0.700	**0.413**	0.91	**11100** 2500	**21200** 4900
1102KR	1102KRR	(KRRB)	S1102K		1 ⅛												**0.404**	0.89		
1103KR	1103KRR	(KRRB)	S1103K		1 3⁄16												**0.376**	0.83		
–	1103KRR3	(KRRB3)	S1103K3		1 ¼												**0.349**	0.77		
–	E30KRR	(KRRB)	SE30K		**30**												**0.376**	0.83		
1104KR	1104KRR	(KRRB)	S1104K	207	1 ¼	**72** 2.8346	**37.70** 1 31⁄64	**17** 0.669[2]	**18.85** 0.742	**4.0** 5⁄32	**54.0** 2 ⅛	**17.1** 43⁄64	**51.2** 2 1⁄64	**60.55** 2.384	**19.69** 0.775	**18.34** 0.722	**0.653**	1.44	**15100** 3400	**28500** 6400
–	1105KRR	(KRRB)	S1105K		1 5⁄16												**0.603**	1.33		
–	1106KRR	(KRRB)	S1106K		1 ⅜												**0.572**	1.26		
1107KR	1107KRR	(KRRB)	S1107K		1 7⁄16												**0.544**	1.20		
–	E35KRR	(KRRB)	SE35K		**35**												**0.572**	1.26		

[1]Spherical O.D. outer-ring width is 18 mm (0.709 in.).
[2]Spherical O.D. outer-ring width is 19 mm (0.748 in.).
[3]Spherical O.D. outer-ring width is 21 mm (0.827 in.).
[4]Available with spherical O.D. To order, add suffix B. Example 1115KRRB.
[5]Spherical O.D. outer-ring width is 22 mm (0.866 in.).
NOTE: Bore tolerances: ½ in. – 2 3⁄16 in. nominal to +0.013 mm, +0.0005;
2 ¼ in. – 2 15⁄16 in. nominal to +0.015 mm, +0.0006 in.

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KR One Seal Cylindrical O.D. | **KRR Two Seals Cylindrical O.D.** | **KRRB Two Seals Spherical O.D.**

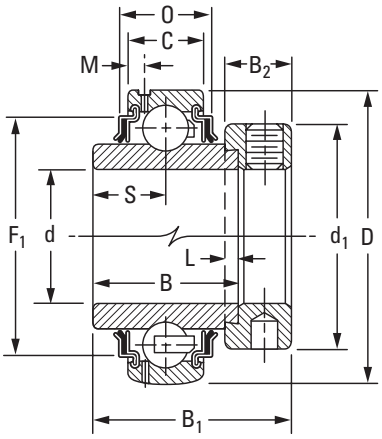
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Bearing No.			Collar No.	Basic Outer-Ring Size	Shaft Dia.	O.D.	Ring Widths											Brg. and Collar Wt.		Static Load Rating	Extended Dynamic Load Rating
Cylindrical O.D.		Spherical O.D.					Inner	Outer	S	L	d_1	B_2	B_1	F_1	O	P				
					d	D	B	C												C_o	C_E
					in.	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg		N	N
					mm	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.		lbs.	lbs.	lbs.
1108KR	1108KRR	(KRRB)	S1108KT		1 1/2												**0.789**	1.74		
–	1109KRR	(KRRB)	S1109KT	208	1 9/16	**80**	**42.86**	**18**	**21.40**	**4.8**	**60.3**	**18.3**	**56.4**	**67.79**	**20.45**	**19.28**	**0.739**	1.63	**19600**	**36000**
–	E40KRR	(KRRB)	SE40K		**40**	3.1496	1 11/16	0.709[3]	27/32	3/16	2 3/8	23/32	2 7/32	2.669	0.805	0.757	**0.739**	1.63	4400	8150
–	1110KRR	(KRRB)	S1110K		1 5/8												**0.898**	1.98		
1111KR	1111KRR	(KRRB)	S1111K	209	1 11/16	**85**	**42.86**	**19**	**21.40**	**4.8**	**63.5**	**18.3**	**56.4**	**73.86**	**24.18**	**21.59**	**0.848**	1.87	**20000**	**36000**
1112KR	1112KRR	(KRRB)	S1112K		1 3/4	3.3465	1 11/16	0.748	27/32	3/16	2 1/2	23/32	2 7/32	2.908	0.952	0.850	**0.825**	1.82	4500	8150
–	E45KRR	(KRRB)	SE45K		**45**												**0.825**	1.82		
–	1114KRR	(KRRB)	S1114K		1 7/8												**1.057**	2.33		
1115KR[4]	1115KRR	(KRRB)	S1115K	210	1 15/16	**90**	**49.21**	**20**	**24.60**	**4.8**	**69.9**	**18.3**	**62.7**	**77.7**	**24.51**	**22.25**	**1.000**	2.18	**22709**	**39000**
–	E50KRR	(KRRB)	SE50K		**50**	3.5433	1 15/16	0.787[5]	31/32	3/16	2 3/4	23/32	2 15/32	3.059	0.965	0.876	**1.000**	2.18	5100	8800
1200KR	1200KRR	(KRRB)	S1200K		2												**1.520**	3.35		
–	1202KRR	(KRRB)	S1202K	211	2 1/8	**100**	**55.56**	**21**	**27.80**	**4.8**	**76.2**	**20.6**	**71.4**	**87.17**	**27.41**	**24.21**	**1.356**	2.99	**28500**	**48000**
1203KR	1203KRR	(KRRB)	S1203K		2 3/16	3.9370	2 3/16	0.827	1 3/32	3/16	3	13/16	2 13/16	3.432	1.079	0.953	**1.306**	2.88	6400	10800
–	E55KRR	(KRRB)	SE55K		**55**												**1.306**	2.88		
–	1204KRR	(KRRB)	S1204K		2 1/4												**1.715**	3.78		
1207KR	1207KRR	(KRRB)	S1207K	212	2 7/16	**110**	**61.91**	**22**	**31.00**	**6.4**	**84.1**	**22.2**	**77.8**	**94.89**	**30.02**	**26.01**	**1.565**	3.45	**35600**	**58500**
–	E60KRR	(KRRB)	SE60K		**60**	4.3307	2 7/16	0.866	1 7/32	1/4	3 5/16	7/8	3 1/16	3.736	1.182	1.024	**1.615**	3.56	8000	13200
–	1215KRR	(KRRB)	S1215K	215	2 15/16	**130**	**74.61**	**25**	**37.30**	**6.4**	**101.6**	**23.8**	**91.2**	**113.13**	**34.03**	–	**2.640**	5.82	**43600**	**69500**
	E75KRR	(KRRB)	SE75K		**75**	5.1181	2 15/16	0.984	1 15/32	1/4	4	15/16	3 5/8	4.454	1.340		**2.640**	5.82	9800	15600

[1]Spherical O.D. outer-ring width is 18 mm (0.709 in.).
[2]Spherical O.D. outer-ring width is 19 mm (0.748 in.).
[3]Spherical O.D. outer-ring width is 21 mm (0.827 in.).
[4]Available with spherical O.D. To order, add suffix B. Example 1115KRRB.
[5]Spherical O.D. outer-ring width is 22 mm (0.866 in.).
NOTE: Bore tolerances: 1/2 in. – 2 3/16 in. nominal to +0.013 mm, +0.0005;
2 1/4 in. – 2 15/16 in. nominal to +0.015 mm, +0.0006 in.

G-KRR, G-KRRB RELUBRICATABLE TYPES

- The G-KRR-series wide-inner-ring ball bearings are the same as the RR series and have a provision for relubrication.
- These bearings are designed for extremely dirty or wet conditions.
- The bearing includes R-seals with flared lips that firmly contact the ground O.D. of the inner ring. The inner ring provides a positive seal against dust, dirt and other contaminants, and effectively retains the lubricant.
- G-KRR-series bearings are equipped with shroud-seals, providing extra effectiveness and protection.
- The extra-wide design provides additional shaft support and extra-large grease capacity.



Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

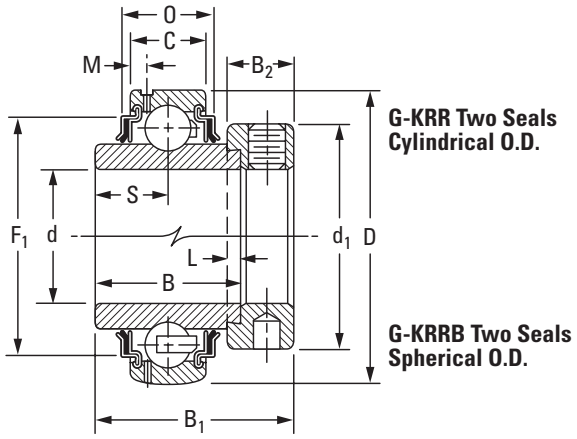
To order, specify bearing number followed by "+ COL".

Example: G1010KRRB + COL.

Bearing No.		Collar No.	Basic Outer-Ring Size	Shaft Dia.	O.D.	Ring Widths										Brg. and Collar Wt.		Static Load Rating	Extended Dynamic Load Rating
Cylindrical O.D.	Spherical O.D.			d	D	Inner B	Outer C	S	L	d_1	B_2	M	B_1	F_1	O			C_o	C_E
				in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg**	lbs.	**N** lbs.	**N** lbs.
–	G1008KRRB	S1008K		1/2												**0.154**	0.34		
–	G1009KRRB	S1009K		9/16												**0.141**	0.31		
G1010KRR	G1010KRRB	S1010K	203	5/8	**40** 1.5748	**27.78** 1 3/32	**12** 0.472	**13.90** 35/64	**4.0** 5/32	**28.6** 1 1/8	**13.5** 17/32	**2.72** 0.107	**37.3** 1 15/32	**34.01** 1.339	**16.56** 0.652	**0.141**	0.31	**4700** 1060	**10700** 2400
G1011KRR	G1011KRRB	S1011K		11/16												**0.118**	0.26		
GE17KRR	GE17KRRB	SE17K		**17**												**0.118**	0.26		
G1012KRR	G1012KRRB	S1012K	204	3/4	**47**	**34.13**	**14**	**17.10**	**4.0**	**33.3**	**13.5**	**3.43**	**43.7**	**38.91**	**17.30**	**0.204**	0.45	**6200**	**14300**
GE20KRR	GE20KRRB	SE20K		**20**	1.8504	1 11/32	0.551	43/64	5/32	1 5/16	17/32	0.135	1 23/32	1.532	0.681	**0.204**	0.45	1400	3200
–	G1013KRRB	S1013K		13/16												**0.286**	0.63		
G1014KRR	G1014KRRB	S1014K		7/8												**0.263**	0.58		
G1015KRR	G1015KRRB	S1015K	205	15/16	**52** 2.0472	**34.92** 1 3/8	**15** 0.591	**17.50** 11/16	**4.0** 5/32	**38.1** 1 1/2	**13.5** 17/32	**3.86** 0.152	**44.4** 1 3/4	**45.19** 1.779	**16.66** 0.656	**0.240**	0.53	**7700** 1730	**15800** 3550
G1100KRR	G1100KRRB	S1100K		**1**												**0.227**	0.50		
GE25KRR	GE25KRRB	SE25K		**25**												**0.227**	0.50		
G1101KRR	G1101KRRB	S1101K		1 1/16												**0.417**	0.92		
G1102KRR	G1102KRRB	S1102K		1 1/8												**0.404**	0.89		
G1103KRR	G1103KRRB	S1103K	206	1 3/16	**62** 2.4409	**36.51** 1 7/16	**18** 0.709	**18.30** 23/32	**4.0** 5/32	**44.1** 1 47/64	**15.9** 5/8	**3.96** 0.156	**48.4** 1 29/32	**52.53** 2.068	**21.56** 0.849	**0.376**	0.83	**11100** 2500	**21800** 4900
–	G1103KRRB3	S1103K3		1 1/4												**0.349**	0.77		
GE30KRR	GE30KRRB	SE30K		**30**												**0.376**	0.83		
G1104KRR	G1104KRRB	S1104K		1 1/4												**0.653**	1.44		
–	G1105KRRB	S1105K		1 5/16												**0.617**	1.36		
G1106KRR	G1106KRRB	S1106K	207	1 3/8	**72** 2.8346	**37.70** 1 31/64	**19** 0.748	**18.85** 0.742	**4.0** 5/32	**54.0** 2 1/8	**17.1** 43/64	**3.68** 0.145	**51.2** 2 1/64	**60.55** 2.384	**21.74** 0.856	**0.585**	1.29	**15100** 3400	**28500** 6400
G1107KRR	G1107KRRB	S1107K		1 7/16												**0.562**	1.24		
GE35KRR	GE35KRRB	SE35K		**35**												**0.585**	1.29		
G1108KRR	G1108KRRB	S1108KT		1 1/2												**0.812**	1.79		
–	G1109KRRB	S1109KT	208	1 9/16	**80** 3.1496	**42.86** 1 11/16	**21** 0.827	**21.40** 27/32	**4.8** 3/16	**60.3** 2 3/8	**18.3** 23/32	**4.06** 0.160	**56.4** 2 7/32	**67.79** 2.669	**23.44** 0.923	**0.771**	1.70	**19600** 4400	**36000** 8150
GE40KRR	GE40KRRB	SE40K		**40**												**0.771**	1.70		

(1)Spherical O.D. outer-ring width is 22 mm, 0.866 in. 2 1/4 in. – 2 15/16 in., nominal to 0.015 mm, +0.0006 in.
(2)Spherical O.D. outer-ring width is 24 mm (0.945 in.).
NOTE: Bore tolerances: 1/2 in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.

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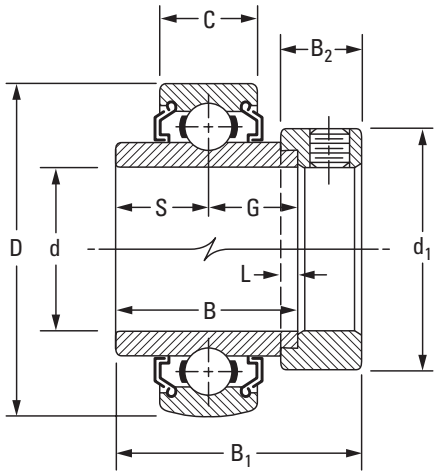
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Bearing No.		Collar No.	Basic Outer-Ring Size	Shaft Dia.	O.D.	Ring Widths										Brg. and Collar Wt.		Static Load Rating	Extended Dynamic Load Rating
Cylindrical O.D.	Spherical O.D.					Inner	Outer	S	L	d_1	B_2	M	B_1	F_1	O				
				d	D	B	C											C_o	C_E
				in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg**	lbs.	**N** lbs.	**N** lbs.
G1110KRR	G1110KRRB	S1110K	209	1 5/8	85 3.3465	42.86 1 11/16	22 0.866	21.40 27/32	4.8 3/16	63.5 2 1/2	18.3 23/32	4.55 0.179	56.4 2 7/32	73.86 2.908	27.18 1.07	0.925	2.04	20500 4600	36300 8160
G1111KRR	G1111KRRB	S1111K		1 11/16												0.880	1.94		
G1112KRR	G1112KRRB	S1112K		1 3/4												0.835	1.84		
GE45KRR	GE45KRRB	SE45K		**45**												0.835	1.84		
–	G1113KRR	S1113K	210	1 13/16	90 3.5433	49.21 1 15/16	23 0.903[1]	24.60 31/32	4.8 3/16	69.9 2 3/4	18.3 23/32	4.70 0.185	62.7 2 15/32	77.70 3.059	27.51 1.083	1.116	2.46	22700 5100	39200 8800
–	G1114KRRB	S1114K		1 7/8												1.034	2.28		
G1115KRR	G1115KRRB	S1115K		1 15/16												1.016	2.24		
GE50KRR	GE50KRRB	SE50K		**50**												1.016	2.24		
G1200KRR	G1200KRRB	S1200K	211	2	100 3.9370	55.56 2 3/16	25 0.983[2]	27.80 1 3/32	4.8 3/16	76.2 3	20.6 13/16	5.00 0.197	71.4 2 13/16	87.17 3.432	29.01 1.142	1.583	3.49	28500 6400	48000 10800
–	G1201KRRB	S1201K		2 1/16												1.470	3.24		
–	G1202KRRB	S1202K		2 1/8												1.406	3.10		
G1203KRR	G1203KRRB	S1203K		2 3/16												1.365	3.01		
GE55KRR	GE55KRRB	SE55K		**55**												1.365	3.01		
–	G1204KRRB	S1204K	212	2 1/4	110 4.3307	61.91 2 7/16	27 1.063	31.00 1 7/32	6.4 1/4	84.1 3 5/16	22.2 7/8	5.13 0.202	77.8 3 1/16	94.89 3.736	35.03 1.379	2.041	4.50	35600 8000	58800 13200
–	G1205KRRB	S1205K		2 5/16												1.923	4.24		
–	G1206KRRB	S1206K		2 3/8												1.846	4.07		
G1207KRR	G1207KRRB	S1207K		2 7/16												1.778	3.92		
GE60KRR	GE60KRRB	SE60K		**60**												1.846	4.07		
–	G1210KRRB	S1210K	214	2 5/8	125 4.9213	68.26 2 11/16	28 1.102	34.10 1 11/32	6.4 1/4	96.8 3 13/16	23.8 15/16	5.08 0.200	79.4 3 1/8	109.17 4.298	35.94 1.415	2.681	5.91	43000 9650	69500 15600
–	G1211KRRB	S1211K		2 11/16												2.585	5.70		
–	GE70KRRB	SE70K		**70**												2.585	5.70		
–	G1212KRRB	S1212K	215	2 3/4	130 5.1181	74.61 2 15/16	29 1.142	37.30 1 15/32	6.4 1/4	101.6 4	23.8 15/16	5.56 0.219	92.1 3 5/8	113.13 4.454	38.03 1.497	3.084	6.80	43600 9800	69500 15600
–	G1213KRRB	S1213K		2 13/16												2.976	6.56		
–	G1214KRRB	S1214K		2 7/8												2.867	6.32		
–	G1215KRRB	S1215K		2 15/16												2.753	6.07		
–	GE75KRRB	SE75K		**75**												2.753	6.07		

[1]Spherical O.D. outer-ring width is 22 mm, 0.866 in. 2 1/4 in. – 2 15/16 in., nominal to 0.015 mm, +0.0006 in.
[2]Spherical O.D. outer-ring width is 24 mm (0.945 in.).
NOTE: Bore tolerances: 1/2 in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.

KL, KLB, KLL, KLLB SPECIAL SERIES, NON-RELUBRICATABLE TYPES

- These wide-inner-ring ball bearings have either one or two Mechani-Seals.
- Types KLB and KLLB have spherical outside diameters permitting self-alignment when mounted in a housing with a corresponding spherical seat.
- All four types are prelubricated at the factory and require no further lubrication.
- These bearings are suitable for higher-speed and/or higher-temperature applications.
- Because they incorporate non-contact seals, these bearings have very low rotational torque.



Suggested shaft tolerances:

½ in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify bearing number followed by "+ COL".

Example: 1100KLL + COL.

Bearing No. Cylindrical O.D.		Bearing No. Spherical O.D.	Collar No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S(G)	L	d_1	B_2	B_1	Brg. and Collar Wt. kg	Brg. and Collar Wt. lbs.	Static Load Rating C_o N lbs.	Extended Dynamic Load Rating C_E N lbs.
					in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.				
1008KL		1008KLL	(KLLB)	S1008K		½								0.168	0.37		
–		1009KLL	–	S1009K	203	9/16	40	27.78	12	13.89	3.97	28.58	13.49	37.31	0.163	0.36	4700	10700
1010KL		1010KLL	(KLLB)	S1010K		5/8	1.5748	1 3/32	0.4724	35/64	5/32	1 1/8	17/32	1 15/32	0.141	0.31	1060	2400
1011KL		1011KLL	(KLLB)	S1011K		11/16									0.122	0.27		
1012KL		1012KLL	(KLLB)	S1012K	204	3/4	47 1.8504	34.13 1 11/32	14 0.5512	17.06 43/64	3.97 5/32	33.34 1 5/16	13.50 17/32	43.70 1 23/32	0.209	0.46	6200 1400	14300 3200
–		–	–	S1013K		13/16									0.286	0.63		
1014KL		1014KLL	(KLLB)	S1014K	205	7/8	52	34.92	15	17.46	3.97	38.10	13.49	44.45	0.277	0.61	7700	15800
1015KL		1015KLL	(KLLB)	S1015K		15/16	2.0472	1 3/8	0.5906	11/16	5/32	1 1/2	17/32	1 47/64	0.254	0.56	1730	3550
1100KL	(KLB)	1100KLL	(KLLB)	S1100K		1									0.250	0.55		
1101KL		–	–	S1101K		1 1/16									0.417	0.92		
1102KL		1102KLL	(KLLB)	S1102K	206	1 1/8	62	36.51	16	18.26	3.97	44.10	15.88	48.42	0.413	0.91	11100	21800
1103KL	(KLB)	1103KLL	(KLLB)	S1103K		1 3/16	2.4409	1 7/16	0.6299[1]	23/32	5/32	1 3/4	5/8	1 29/32	0.372	0.82	2500	4900
1103KL3		1103KLL3	(KLLB3)	S1103K3		1 1/4									0.358	0.79		
1104KL		1104KLL	(KLLB)	S1104K		1 1/4									0.649	1.43		
–		1105KLL	(KLLB)	S1105K	207	1 5/16	72	37.70	17	18.85	3.97	54.00	17.46	51.20	0.617	1.36	15100	28500
1106KL		1106KLL	(KLLB)	S1106K		1 3/8	2.8346	1 31/64	0.6693[2]	0.742	5/32	2 1/8	43/64	2 1/64	0.581	1.28	3400	6400
1107KL	(KLB)	1107KLL	(KLLB)	S1107K		1 7/16									0.544	1.20		
1108KL	(KLB)	1108KLL	(KLLB)	S1108K	208	1 1/2	80	42.86	18	21.43	4.76	60.32	18.26	56.36	0.821	1.81	17600	36200
–		1109KLL	(KLLB)	S1109K		1 9/16	3.1496	1 11/16	0.7087[3]	27/32	3/16	2 3/8	23/32	2 7/32	0.767	1.69	4000	8130
1110KL		1110KLL	(KLLB)	S1110K		1 5/8									0.934	2.06		
1111KL		1111KLL	(KLLB)	S1111K	209	1 11/16	85	42.86	19	21.43	4.76	60.35	18.26	56.36	0.890	1.96	20000	36300
1112KL	(KLB)	1112KLL	(KLLB)	S1112K		1 3/4	3.3465	1 11/16	0.7480	27/32	3/16	2 1/2	23/32	2 7/32	0.844	1.86	4500	8160
1114KL		1114KLL	(KLLB)	S1114K	210	1 7/8	90	49.21	20	24.61	4.76	69.90	18.26	62.71	1.075	2.37	22700	39000
1115KL	(KLB)	1115KLL	(KLLB)	S1115K		1 15/16	3.5433	1 15/16	0.7874	31/32	3/16	2 3/4	23/32	2 15/32	1.021	2.25	5100	8800
1200KL	(KLB)	1200KLL	(KLLB)	S1200K		2									1.540	3.40		
–		1202KLL	(KLLB)	S1202K	211	2 1/8	100	55.56	21	27.98	4.76	76.20	20.64	71.44	1.406	3.10	28500 6400	48000 10800
1203KL		1203KLL	(KLLB)	S1203K		2 3/16	3.9370	2 3/16	0.8268	1 3/32	3/16	3	13/16	2 13/16	1.347	2.97		
1207KL		–	–	S1207K	212	2 7/16	110 4.3307	61.91 2 7/16	22 0.8661	30.96 1 7/32	6.35 1/4	84.14 3 5/16	22.22 7/8	77.79 3 1/16	1.660	3.66	35600 8000	58500 13200
–		1215KLL	(KLLB)	S1215K	215	2 15/16	130 5.1181	74.61 2 15/16	25 0.9843	37.31 1 15/32	6.35 1/4	101.6 4	23.81 15/16	91.08 3 5/8	2.268	5.00	43600 9800	69500 15600

[1]Spherical O.D. outer-ring width is 18 mm (0.7087 in.).
[2]Spherical O.D. outer-ring width is 19 mm (0.7480 in.).
[3]Spherical O.D. outer-ring width is 21 mm (0.8268 in.).
NOTE: Bore tolerance: ½ in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.
2 7/16 in. – 2 15/16 in., nominal to +0.015 mm, +0.0006 in.

G-KLL, G-KLLB SPECIAL SERIES, RELUBRICATABLE TYPES

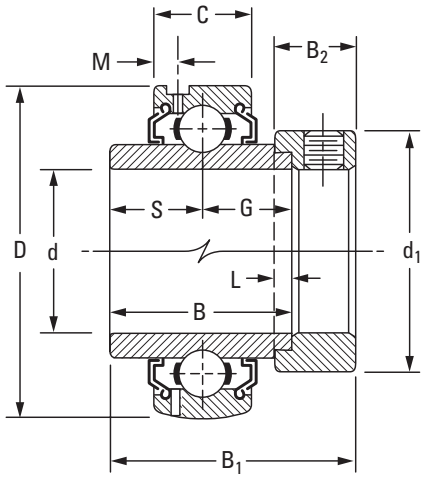
- These wide-inner-ring ball bearings have two Mechani-Seals and a provision for relubrication.
- Type G-KLL has a cylindrical outside diameter.
- Type G-KLLB has a spherical outside diameter.
- Both are generally suitable for higher-speed and/or higher-temperature applications.
- Because they incorporate non-contact seals, these bearings have very low rotational torque.
- Consult your Timken engineer for suggestions.

Suggested shaft tolerances:

½ in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify bearing number followed by "+ COL".

Example: G1015KLL + COL.



Bearing No. Cylindrical O.D.	Bearing No. Spherical O.D.	Collar No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S(G)	L	d_1	B_2	M	B_1	Brg. and Collar Wt.		Static Load Rating C_o	Extended Dynamic Load Rating C_E
				in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	kg	lbs.	N lbs.	N lbs.
–	G1008KLLB	S1008K	203	1/2	40 1.5748	27.78 1 3/32	12 0.4724	13.90 35/64	4.0 5/32	28.6 1 1/8	13.50 17/32	2.720 0.107	37.30 1 15/32	0.150	0.33	4700 1060	10700 2400
–	G1009KLLB	S1009K		9/16										0.136	0.30		
G1010KLL	G1010KLLB	S1010K		5/8										0.141	0.31		
G1011KLL	G1011KLLB	S1011K		11/16										0.118	0.26		
G1012KLL	G1012KLLB	S1012K	204	3/4	47 1.8504	34.13 1 11/32	14 0.5512	17.10 43/64	4.0 5/32	33.3 1 5/16	13.50 17/32	3.430 0.135	43.70 1 23/32	0.200	0.44	6200 1400	14300 3200
–	G1013KLLB	S1013K	205	13/16	52 2.0472	34.92 1 3/8	15 0.5906	17.50 11/16	4.0 5/32	38.1 1 1/2	13.50 17/32	3.860 0.152	44.45 1 3/4	0.286	0.63	7700 1730	15800 3550
G1014KLL	G1014KLLB	S1014K		7/8										0.263	0.58		
G1015KLL	G1015KLLB	S1015K		15/16										0.245	0.54		
G1100KLL	G1100KLLB	S1100K		1										0.222	0.49		
G1101KLL	–	S1101K	206	1 1/16	62 2.4409	36.51 1 7/16	18 0.7087	18.30 23/32	4.0 5/32	44.4 1 3/4	15.90 5/8	3.960 0.156	48.40 1 29/32	0.422	0.93	11100 2500	21800 4900
G1102KLL	G1102KLLB	S1102K		1 1/8										0.413	0.91		
G1103KLL	G1103KLLB	S1103K		1 3/16										0.395	0.87		
–	G1103KLLB3	S1103K3		1 1/4										0.340	0.75		
G1104KLL	G1104KLLB	S1104K	207	1 1/4	72 2.8346	37.70 1 31/64	19 0.7480	18.85 0.742	4.0 5/32	54.0 2 1/8	17.46 11/16	3.430 0.135	51.20 2 1/64	0.649	1.43	15100 3400	28500 6400
–	G1105KLLB	S1105K		1 5/16										0.622	1.37		
G1106KLL	G1106KLLB	S1106K		1 3/8										0.590	1.30		
G1107KLL	G1107KLLB	S1107K		1 7/16										0.549	1.21		
G1108KLL	G1108KLLB	S1108KT	208	1 1/2	80 3.1496	42.86 1 11/16	21 0.8268	21.40 27/32	4.8 3/16	60.3 2 3/8	18.30 23/32	4.060 0.160	56.40 2 7/32	0.826	1.82	17600 4000	36200 8130
G1109KLL	G1109KLLB	S1109KT		1 9/16										0.785	1.73		
G1110KLL	G1110KLLB	S1110K	209	1 5/8	85 3.3465	42.86 1 11/16	22 0.8661	21.40 27/32	4.8 3/16	63.5 2 1/2	18.30 23/32	4.550 0.179	56.40 2 7/32	0.949	2.09	20000 4500	36300 8160
G1111KLL	G1111KLLB	S1111K		1 11/16										0.899	1.98		
G1112KLL	G1112KLLB	S1112K		1 3/4										0.853	1.88		
–	G1113KLLB	S1113K	210	1 13/16	90 3.5433	49.21 1 15/16	23 0.9055	24.60 31/32	4.8 3/16	69.9 2 3/4	18.30 23/32	4.700 0.185	62.70 2 15/32	1.148	2.53	22700 5100	39000 8800
G1114KLL	G1114KLLB	S1114K		1 7/8										1.090	2.40		
G1115KLL	G1115KLLB	S1115K		1 15/16										1.031	2.27		
G1200KLL	G1200KLLB	S1200K	211	2	100 3.9370	55.56 2 3/16	24 0.9450	27.80 1 3/32	4.8 3/16	76.2 3	20.60 13/16	5.000 0.197	71.40 2 13/16	1.593	3.51	28500 6400	48000 10800
–	G1201KLLB	S1201K		2 1/16										1.512	3.33		
–	G1202KLLB	S1202K		2 1/8										1.416	3.12		
G1203KLL	G1203KLLB	S1203K		2 3/16										1.285	2.83		
G1204KLL	G1204KLLB	S1204K	212	2 1/4	110 4.3307	61.91 2 7/16	27 1.0630	31.00 1 7/32	6.4 1/4	84.1 3 5/16	22.20 7/8	5.130 0.202	77.80 3 1/16	2.030	4.47	35600 8000	58500 13200
–	G1205KLLB	S1205K		2 5/16										1.938	4.27		
–	G1206KLLB	S1206K		2 3/8										1.852	4.08		
–	G1207KLLB	S1207K		2 7/16										1.789	3.94		
–	G1215KLLB	S1215K	215	2 15/16	130 5.1181	74.61 2 15/16	25 0.9843	37.30 1 15/32	6.4 1/4	101.6 4	23.80 15/16	5.560 0.219	91.20 3 5/8	2.837	6.25	43600 9800	69500 15600

NOTE: Bore tolerance: ½ in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.
2 1/4 in. – 2 15/16 in., nominal to +0.015 mm, +0.0006 in.

KLLG SPECIAL SERIES WITH WIRELOC®

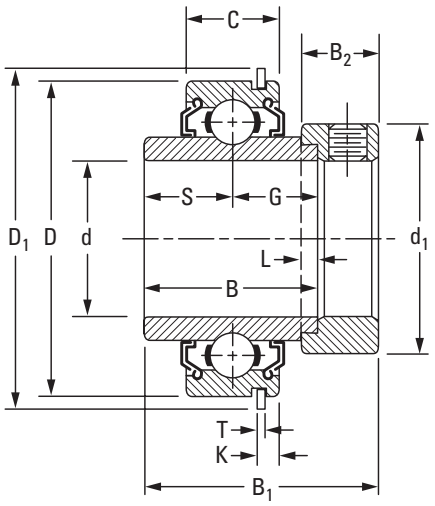
- KLLG wide-inner-ring ball bearings are the same as the KLL type, except for a snap ring, or Wireloc®, in the outer ring.
- The Wireloc mounting provides a convenient method of positively locating a bearing axially.

Suggested shaft tolerances:

½ in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 7/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify bearing number followed by "+ COL".

Example: 1008KLLG + COL.



Bearing No.	Collar No.	Basic Outer-Ring Size	Shaft Dia.	O.D.	Ring Widths								Snap Ring Dimensions			Brg. and Collar Wt.		Static Load Rating	Extended Dynamic Load Rating
					Inner	Outer	S(G)	L	d_1	B_2	B_1		D_1	T	K				
			d	D	B	C												C_o	C_E
			in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.		mm in.	mm in.	mm in.	kg	lbs.	N lbs.	N lbs.
1008KLLG	S1008K	203	½	40 1.5748	27.78 1 3/32	12 0.4724	13.90 35/64	4.0 5/32	28.6 1 1/8	13.5 17/32	37.3 1 15/32		44.45 1 3/4	1.07 0.042	3.05 0.120	0.173 0.154 0.141 0.132	0.38 0.34 0.31 0.29	4700 1060	10700 2400
1009KLLG	S1009K		9/16																
1010KLLG	S1010K		5/8																
1011KLLG	S1011K		11/16																
1012KLLG	S1012K	204	¾	47 1.8504	34.13 1 11/32	14 0.5512	17.10 43/64	4.0 5/32	33.3 1 5/16	13.5 17/32	43.7 1 23/32		52.39 2 1/16	1.07 0.042	3.45 0.136	0.204	0.45	6200 1400	14300 3200
1013KLLG	S1013K	205	13/16	52 2.0472	34.92 1 3/8	15 0.5906	17.50 11/16	4.0 5/32	38.1 1 1/2	13.5 17/32	44.1 1 47/64		57.55 2 17/64	1.07 0.042	3.45 0.136	0.272 0.263 0.245 0.227	0.60 0.58 0.54 0.50	7700 1730	15800 3550
1014KLLG	S1014K		7/8																
1015KLLG	S1015K		15/16																
1100KLLG	S1100K		1																
1101KLLG	S1101K	206	1 1/16	62 2.4409	36.51 1 7/16	16 0.6299	18.30 23/32	4.0 5/32	44.4 1 3/4	15.9 5/8	48.4 1 29/32		67.47 2 21/32	1.65 0.065	4.83 0.190	0.427 0.386 0.386	0.94 0.85 0.85	11100 2500	21800 4900
1102KLLG	S1102K		1 1/8																
1103KLLG	S1103K		1 3/16																
1104KLLG	S1104K	207	1 1/4	72 2.8346	37.70 1 31/64	17 0.6693	18.85 0.742	4.0 5/32	54.0 2 1/8	17.1 43/64	51.2 2 1/64		78.18 3 5/64	1.65 0.065	4.83 0.190	0.645 0.604 0.577 0.540	1.42 1.33 1.27 1.19	15100 3400	28500 6400
1105KLLG	S1105K		1 5/16																
1106KLLG	S1106K		1 3/8																
1107KLLG	S1107K		1 7/16																
1108KLLG	S1108KT	208	1 1/2	80 3.1496	42.86 1 11/16	18 0.7087	21.40 27/32	4.8 3/16	60.3 2 3/8	18.3 23/32	56.4 2 7/32		86.52 3 13/32	1.65 0.065	4.83 0.190	0.826 0.785	1.82 1.73	17600 4000	36200 8130
1109KLLG	S1109KT		1 9/16																
1110KLLG	S1110K	209	1 5/8	85 3.3465	42.86 1 11/16	19 0.7480	21.40 27/32	4.8 3/16	63.5 2 1/2	18.3 23/32	56.4 2 7/32		91.28 3 19/32	1.65 0.065	4.83 0.190	0.922 0.881 0.844	2.03 1.94 1.86	20000 4500	36300 8160
1111KLLG	S1111K		1 11/16																
1112KLLG	S1112K		1 3/4																
1113KLLG	S1113K	210	1 13/16	90 3.5433	49.21 1 15/16	20 0.7874	24.60 31/32	4.8 3/16	69.9 2 3/4	18.3 23/32	62.7 2 15/32		96.44 3 51/64	2.41 0.095	5.59 0.220	1.035 1.003 0.971	2.28 2.21 2.14	22700 5100	39000 8800
1114KLLG	S1114K		1 7/8																
1115KLLG	S1115K		1 15/16																
1200KLLG	S1200K	211	2	100 3.9370	55.56 2 3/16	21 0.8268	27.80 1 3/32	4.8 3/16	76.2 3	20.6 13/16	71.4 2 13/16		106.36 4 3/16	2.41 0.095	5.59 0.220	1.475 1.444 1.380 1.353	3.25 3.18 3.08 2.98	28500 6400	48000 10800
1201KLLG	S1201K		2 1/16																
1202KLLG	S1202K		2 1/8																
1203KLLG	S1203K		2 3/16																
1204KLLG	S1204K	212	2 1/4	110 4.3307	61.91 2 7/16	22 0.8661	30.96 1 7/32	6.4 1/4	84.1 3 5/16	22.2 7/8	77.8 3 1/16		116.28 4 37/64	2.41 0.095	5.59 0.220	1.793 1.743 1.711 1.684	3.95 3.84 3.77 3.71	35600 8000	58500 13200
1205KLLG	S1205K		2 5/16																
1206KLLG	S1206K		2 3/8																
1207KLLG	S1207K		2 7/16																

NOTE: Bore tolerance: ½ in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.
2 1/4 in. – 2 7/16 in., nominal to +0.015 mm, +0.0006 in.

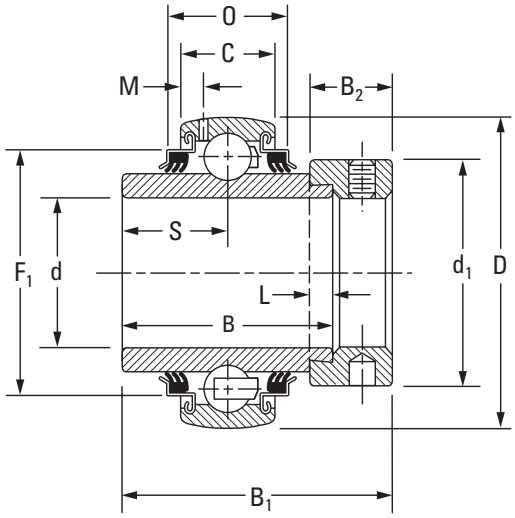
TRI-PLY SEAL INDUSTRIAL SERIES, NON-RELUBRICATABLE AND RELUBRICATABLE TYPES

- Tri-ply seal bearings are dimensionally interchangeable with KRRB bearings and can be used with standard housings.
- One-piece tri-ply seals incorporate a highly effective seal design molded to an exterior shroud cap. The shroud cap protects the seal lip from fiber wrap and abrasion.
- Supplied with a self-locking collar, the bearings are most effective in environments with severe contamination and moisture.
- Relubricatable tri-ply seal bearings are dimensionally interchangeable with G-KRRB bearings.
- This design can be used with standard housings.

Suggested shaft tolerances:

- Heavy loads – nominal to -0.025 mm, -0.001 in.;
- Light loads – nominal to -0.050 mm, -0.002 in.

To order, specify bearing number followed by "+ COL".
Example: G1115KPPB3 + COL.

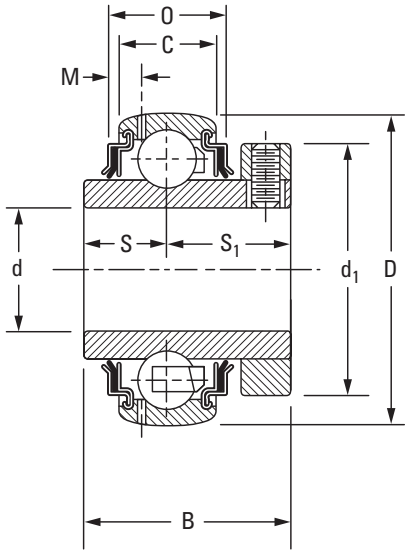


Bearing No. Spherical O.D. Relubricatable Type	Bearing No. Spherical O.D. Non-Relubricatable Type	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	L	d_1	B_2	S	B_1	M[1]	F_1	O	Brg. and Collar Wt.	Static Load Rating C_o	Extended Dynamic Load Rating C_E
			in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg** lbs.	**N** lbs.	**N** lbs.
G1013KPPB3	1013KPPB3	205	13/16	52 2.0472	34.92 1 3/8	15 0.591	3.9 5/32	38.1 1 1/2	13.5 17/32	17.50 11/16	44.4 1 3/4	3.61 0.142	45.19 1.779	16.66 0.656	**0.286** 0.63	7700 1730	15800 3550
G1014KPPB3	1014KPPB3		7/8												**0.272** 0.60		
G1015KPPB3	1015KPPB3		15/16												**0.254** 0.56		
G1100KPPB3	1100KPPB3		1												**0.231** 0.51		
GE25KPPB3	E25KPPB3		**25**												**0.231** 0.51		
G1101KPPB3	1101KPPB3	206	1 1/16	62 2.4409	36.51 1 7/16	18 0.709	3.9 5/32	44.4 1 3/4	15.9 5/8	18.30 23/32	48.4 1 29/32	4.19 0.156	52.53 2.068	21.56 0.849	**0.413** 0.91	11100 2500	21800 4900
G1102KPPB3	1102KPPB3		1 1/8												**0.404** 0.89		
G1103KPPB3	1103KPPB3		1 3/16												**0.376** 0.83		
G1103KPPB4	1103KPPB4		1 1/4												**0.349** 0.77		
GE30KPPB3	E30KPPB3		**30**												**0.376** 0.83		
G1104KPPB2	1104KPPB2	207	1 1/4	72 2.8346	37.70 1 31/64	19 0.748	3.9 5/32	54.0 2 1/8	17.1 43/64	18.85 0.742	51.2 2 1/64	3.68 0.145	60.35 2.376	25.40 1.000	**0.653** 1.44	15100 3400	28500 6400
G1105KPPB2	1105KPPB2		1 5/16												**0.603** 1.33		
G1106KPPB2	1106KPPB2		1 3/8												**0.572** 1.26		
G1107KPPB2	1107KPPB2		1 7/16												**0.544** 1.20		
GE35KPPB2	E35KPPB2		**35**												**0.572** 1.26		
G1108KPPB3	1108KPPB3	208	1 1/2	80 3.1496	42.86 1 11/16	21 0.827	4.8 3/16	60.3 2 3/8	18.3 23/32	21.40 27/32	56.4 2 7/32	5.66 0.223	67.79 2.669	23.44 0.923	**0.789** 1.74	19800 4460	20500 4600
G1109KPPB3	1109KPPB3		1 9/16												**0.739** 1.63		
GE40KPPB3	E40KPPB3		**40**												**0.739** 1.63		
G1110KPPB4	1110KPPB4	209	1 5/8	85 3.3465	42.86 1 11/16	22 0.866	4.8 3/16	63.5 2 1/2	18.3 23/32	21.40 27/32	56.4 2 7/32	4.55 0.179	72.44 2.852	27.48 1.082	**0.898** 1.98	20500 4600	36300 8160
G1111KPPB4	1111KPPB4		1 11/16												**0.848** 1.87		
G1112KPPB4	1112KPPB4		1 3/4												**0.826** 1.82		
GE45KPPB4	E45KPPB4		**45**												**0.826** 1.82		
G1113KPPB3	1113KPPB3	210	1 13/16	90 3.5433	49.21 1 15/16	23 0.906	4.8 3/16	69.9 2 3/4	18.3 23/32	24.60 31/32	62.7 2 15/32	4.70 0.185	77.70 3.059	27.51 1.083	**1.116** 2.46	22700 5100	39200 8800
G1114KPPB3	1114KPPB3		1 7/8												**1.034** 2.28		
G1115KPPB3	1115KPPB3		1 15/16												**1.016** 2.24		
GE50KPPB3	E50KPPB3		**50**												**1.016** 2.24		
G1200KPPB4	1200KPPB4	211	2	100 3.9370	55.56 2 3/16	24 0.945	4.8 3/16	76.2 3	20.6 13/16	27.80 1 3/32	71.4 2 13/16	5.41 0.213	87.17 3.432	29.01 1.142	**1.583** 3.49	28500 6400	48100 10800
G1201KPPB4	1201KPPB4		2 1/16												**1.470** 3.24		
G1202KPPB4	1202KPPB4		2 1/8												**1.406** 3.10		
G1203KPPB4	1203KPPB4		2 3/16												**1.365** 3.01		
GE55KPPB4	E55KPPB4		**55**												**1.365** 3.01		

[1]Applies to relubricatable type only.
NOTE: Suggested max speed – 500 RPM.
NOTE: Bore tolerance: 13/16 in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.

GC-KRRB INDUSTRIAL-SERIES CONCENTRIC COLLAR, RELUBRICATABLE TYPES

- These bearing are relubricatable with spherical outside diameters and shroud seals.
- The metal shroud maintains tight seal contact against the inner ring and shields the rubber seals from damage because of dirt or fiber wrap.
- The concentric collar is locked to the shaft by two set screws located 120 degrees apart, mated with threaded holes in the collar and drilled holes in the bearing inner ring.
- The extra-wide design provides additional shaft support and extra-large grease capacity.



Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify bearing number.

Example: GC1103KRRB + COL.

Bearing No. Spherical O.D.	Collar No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S	S_1	d_1	M	O	Set Screw Size	Brg. and Collar Wt.	Static Load Rating C_o	Extended Dynamic Load Rating C_E
			in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg** lbs.	**N** lbs.	**N** lbs.
GC1008KRRB			1/2										**0.154** 0.34		
GC1010KRRB	C203	203	5/8	**40**	**26.59**	**12**	**11.1**	**15.5**	**34.1**	**2.72**	**14.71**	**M5x0.8**	**0.145** 0.32	**4700**	**10600**
GC1011KRRB			11/16	1.5748	1 3/64	0.4720	7/16	39/64	11/32	0.107	0.579	10-32	**0.122** 0.27	1060	2360
GCE17KRRB			**17**										**0.122** 0.27		
GC1012KRRB	C204	204	3/4	**47**	**30.96**	**14**	**12.3**	**18.7**	**38.1**	**3.43**	**20.68**	**M5x0.8**	**0.204** 0.45	**6200**	**14300**
GCE20KRRB			**20**	1.8504	1 7/32	0.5510	31/64	47/64	1 1/2	0.135	0.814	10-32	**0.204** 0.45	1400	3200
GC1014KRRB			7/8										**0.272** 0.60		
GC1015KRRB	C205	205	15/16	**52**	**34.13**	**15**	**13.9**	**20.2**	**44.4**	**3.61**	**19.74**	**M6x1**	**0.254** 0.56	**7700**	**15800**
GC1100KRRB			1	2.0472	1 11/32	0.5905	35/64	51/64	1 3/4	0.142	0.777	1/4-28	**0.231** 0.51	1730	3550
GCE25KRRB			**25**										**0.231** 0.51		
GC1102KRRB			1 1/8										**0.404** 0.89		
GC1103KRRB	C206	206	1 3/16	**62**	**37.31**	**18**	**14.7**	**22.6**	**52.4**	**4.19**	**24.51**	**M6x1**	**0.376** 0.83	**11100**	**21800**
GC1103KRRB3			1 1/4	2.4409	1 15/32	0.7090	37/64	57/64	2 1/16	0.156	0.965	1/4-28	**0.349** 0.77	2500	4900
GCE30KRRB			**30**										**0.376** 0.83		
GC1104KRRB			1 1/4										**0.653** 1.44		
GC1106KRRB	C207	207	1 3/8	**72**	**41.28**	**19**	**15.9**	**25.4**	**59.5**	**3.68**	**25.86**	**M6x1**	**0.572** 1.26	**15100**	**28500**
GC1107KRRB			1 7/16	2.8346	1 5/8	0.7481	5/8	1	2 11/32	0.145	1.018	1/4-28	**0.544** 1.20	3400	6400
GCE35KRRB			**35**										**0.572** 1.26		
GC1108KRRB	C208	208	1 1/2	**80**	**44.05**	**21**	**16.7**	**27.4**	**68.3**	**5.66**	**28.42**	**M8x1.25**	**0.789** 1.74	**19800**	**20500**
GCE40KRRB			**40**	3.1496	1 47/64	0.8270	21/32	1 5/64	2 11/16	0.223	1.119	5/16-24	**0.739** 1.63	4460	4600
GC1110KRRB	C209-2		1 5/8										**0.898** 1.98		
GC1111KRRB		209	1 11/16	**85**	**46.83**	**22**	**17.5**	**29.4**	**73.0**	**4.55**	**32.21**	**M8x1.25**	**0.848** 1.87	**36200**	**36300**
GC1112KRRB	C209		1 3/4	3.3465	1 27/32	0.8660	1 11/16	1 5/32	2 7/8	0.179	1.268	5/16-24	**0.826** 1.82	8130	8160
GCE45KRRB			**45**										**0.826** 1.82		
GC1115KRRB	C210	210	1 15/16	**90**	**48.42**	**23**	**18.3**	**30.2**	**79.4**	**4.70**	**32.23**	**M8x1.25**	**0.990** 2.18	**22700**	**39200**
GCE50KRRB			**50**	3.5433	1 29/32	0.9060	23/32	1 3/16	3 1/8	0.185	1.269	5/16-24	**0.990** 2.18	5100	8800
GC1200KRRB			2										**1.520** 3.35		
GC1203KRRB	C211	211	2 3/16	**100**	**53.97**	**24**	**20.6**	**33.3**	**88.9**	**5.41**	**33.73**	**M10x1.5**	**1.306** 2.88	**28500**	**48000**
GCE55KRRB			**55**	3.9370	2 1/8	0.9450	13/16	1 5/16	3 1/2	0.213	1.328	3/8-24	**1.306** 2.88	6400	10800
GC1207KRRB	C212	212	2 7/16	**110**	**60.32**	**27**	**23.0**	**37.3**	**95.3**	**5.13**	**35.03**	**M10x1.5**	**1.565** 3.45	**35600**	**58800**
GCE60KRRB			**60**	4.3307	2 3/8	1.0630	29/32	1 15/32	3 3/4	0.202	1.379	3/8-24		8000	13200
GC1215KRRB	C215	215	2 15/16	**130**	**70.64**	**29**	**27.0**	**43.7**	**114.3**	**5.59**	**38.25**	**M10x1.5**	**2.640** 5.82	**43600**	**69500**
GCE75KRRB			**75**	5.1181	2 25/32	1.1420	1 1/16	1 23/32	4 1/2	0.219	1.506	3/8-20		9800	15600

NOTE: Bore tolerances: 1 3/16 in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.
2 1/4 in. – 3 3/16 in., nominal to +0.015 mm, +0.0006 in.

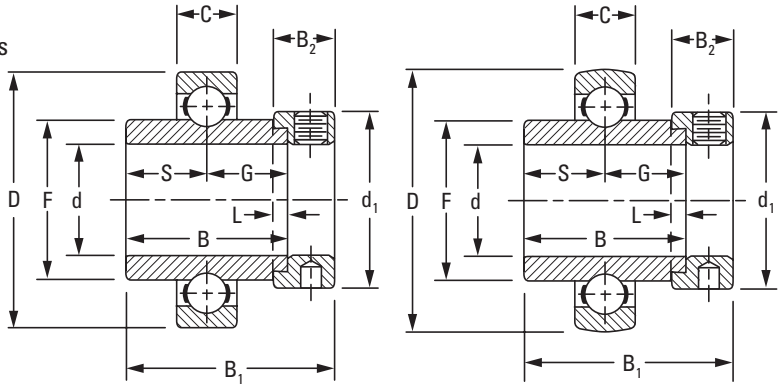
SM INDUSTRIAL SERIES A AND B TYPES/MUA-B INSERTS[1]

- Standard SM series A and B have the same ring tolerances and corner radii as equivalent 200-series single-row radial ball bearings.
- Type A has cylindrical outside diameters; type B has spherical outside diameters. The letter B appears on the outer ring only.
- The bearings are not prelubricated.

Suggested shaft tolerances:

½ in. – 1 15⁄16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 3 15⁄16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify bearing number followed by "+ COL".
Example: SM1207KB + COL.



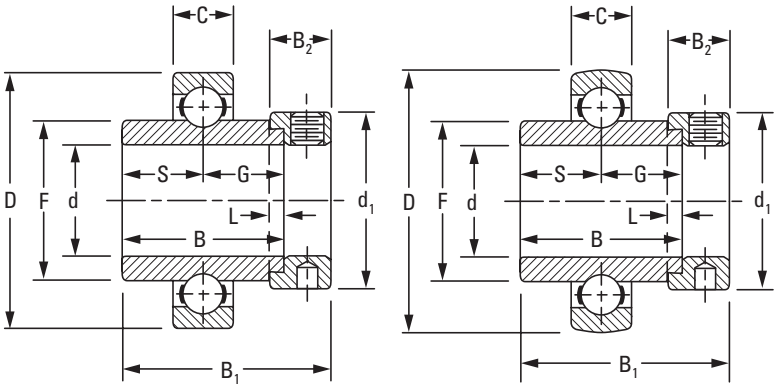
Type A Type B

Bearing No. A Type[2]	Bearing No. B Type	Collar No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S(G)	F	L	d_1	B_1	B_2	Brg. and Collar Wt. kg	Brg. and Collar Wt. lbs.	Static Load Rating C_o N lbs.	Extended Dynamic Load Rating C_E N lbs.
				in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.				
SM1008K	SM1008KB	S1008K	203	½	40 1.5748	27.78 1 3⁄32	12 0.4724	13.90 35⁄64	22.86 0.900	4.0 5⁄32	28.60 1 1⁄8	13.50 17⁄32	37.30 1 15⁄32	0.145	0.32	4700 1600	10600 2360
SM1009K	SM1009KB	S1009K		9⁄16										0.131	0.29		
SM1010K	SM1010KB	S1010K		5⁄8										0.136	0.30		
SM1011K	SM1011KB	S1011K		11⁄16										0.113	0.25		
SM1012K	SM1012KB	S1012K	204	¾	47 1.8504	34.13 1 11⁄32	14 0.5512	17.10 43⁄64	27.56 1.085	4.0 5⁄32	33.30 1 5⁄16	13.50 17⁄32	48.66 1 23⁄32	0.195	0.43	6200 1400	14300 3200
SM1013K	SM1013KB	S1013K	205	13⁄16	52 2.0472	34.93 1 3⁄8	15 0.5906	17.50 11⁄16	33.83 1.332	4.0 5⁄32	38.10 1 1⁄2	13.50 17⁄32	44.45 1 3⁄4	0.276	0.61	6950 1730	15600 3450
SM1014K	SM1014KB	S1014K		7⁄8										0.254	0.56		
SM1015K	SM1015KB	S1015K		15⁄16										0.236	0.52		
SM1100K	SM1100KB	S1100K		1										0.217	0.48		
SM1101K	SM1101KB	S1101K	206	1 1⁄16	62 2.4409	36.51 1 7⁄16	16 0.6299[3]	18.30 23⁄32	40.31 1.587	4.0 5⁄32	44.40 1 3⁄4	15.90 5⁄8	48.40 1 29⁄32	0.399	0.88	11100 2500	21600 4800
SM1102K	SM1102KB	S1102K		1 1⁄8										0.367	0.81		
SM1103K	SM1103KB	S1103K		1 3⁄16										0.331	0.73		
SM1104K	SM1104KB	S1104K	207	1 1⁄4	72 2.8346	37.70 1 31⁄64	17 0.6693[4]	18.85 0.742	46.13 1.816	4.0 5⁄32	54.00 2 1⁄8	17.46 11⁄16	51.20 2 1⁄64	0.621	1.37	15100 3400	28500 6400
SM1105K	SM1105KB	S1105K		1 5⁄16										0.589	1.30		
SM1106K	SM1106KB	S1106K		1 3⁄8										0.562	1.24		
SM1107K	SM1107KB	S1107K		1 7⁄16										0.539	1.19		
SM1108KT	SM1108KB	S1108KT	208	1 1⁄2	80 3.1496	42.86 1 11⁄16	18 0.7087[5]	21.40 27⁄32	52.27 2.058	4.8 3⁄16	60.30 2 3⁄8	18.30 23⁄32	56.40 2 7⁄32	0.761	1.68	19600 4400	36000 8150
SM1109KT	–	S1109KT		1 9⁄16										0.716	1.58		
SM1110K	SM1110KB	S1110K	209	1 5⁄8	85 3.3465	42.86 1 11⁄16	19 0.7480	21.40 27⁄32	57.92 2.280	4.8 3⁄16	63.50 2 1⁄2	18.30 23⁄32	56.40 2 7⁄32	0.875	1.93	20000 4500	36000 8150
SM1111K	SM1111KB	S1111K		1 11⁄16										0.857	1.89		
SM1112K	SM1112KB	S1112K		1 3⁄4										0.803	1.77		

[1]See page A-159.
[2]Order as MUA assembly suggested.
[3]Spherical O.D. outer-ring width is 18 mm (0.7087 in.).
[4]Spherical O.D. outer-ring width is 19 mm (0.7480 in.).
[5]Spherical O.D. outer-ring width is 21 mm (0.8268 in.).
[6]For applications where thrust load exceeds 60 percent of radial load, consult your Timken engineer.
NOTE: Bore tolerance: ½ in. – 2 3⁄16 in., nominal to +0.013 mm, +0.0005 in.
2 ¼ in. – 3 3⁄16 in., nominal to +0.015 mm, +0.0006 in.
3 ¼ in. – 3 15⁄16 in., nominal to +0.018 mm, +0.0007 in.

Continued on next page.

SM INDUSTRIAL SERIES A AND B TYPES/MUA-B INSERTS[1] – *continued*



Type A **Type B**

Continued from previous page.

Bearing No. A Type[2]	Bearing No. B Type	Collar No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S(G)	F	L	d_1	B_1	B_2	Brg. and Collar Wt.		Static Load Rating C_o	Extended Dynamic Load Rating C_E
				in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg**	lbs.	**N** lbs.	**N** lbs.
SM1113K	SM1113KB	S1113K	210	1 13/16	**90** 3.5433	**49.21** 1 15/16	**20** 0.7874	**24.60** 31/32	**62.84** 2.474	**4.8** 3/16	**69.90** 2 3/4	**18.30** 23/32	**62.70** 2 15/32	**1.075**	2.37	**22700** 5100	**39000** 8800
SM1114K	SM1114KB	S1114K		1 7/8										**1.012**	2.23		
SM1115K	SM1115KB	S1115K		1 15/16										**0.962**	2.12		
SM1200K	SM1200KB	S1200K	211	2	**100** 3.9370	**55.56** 2 9/16	**21** 0.8268	**27.80** 1 3/32	**69.77** 2.747	**4.8** 3/16	**76.20** 3	**20.60** 13/16	**71.40** 2 13/16	**1.51**	3.33	**28500** 6400	**48000** 10800
SM1201K	SM1201KB	S1201K		2 1/16										**1.397**	3.08		
SM1202K	SM1202KB	S1202K		2 1/8										**1.438**	3.17		
SM1203K	SM1203KB	S1203K		2 3/16										**1.256**	2.77		
SM1204K	SM1204KB	S1204K	212	2 1/4	**110** 4.3307	**61.91** 2 7/16	**22** 0.8661	**30.96** 1 7/32	**76.48** 3.011	**6.4** 1/4	**84.14** 3 5/16	**22.33** 7/8	**77.80** 3 1/16	**1.860**	4.10	**35600** 8000	**58500** 13200
SM1205K	SM1205KB	S1205K		2 5/16										**1.787**	3.94		
SM1206K	SM1206KB	S1206K		2 3/8										**1.692**	3.73		
SM1207K	SM1207KB	S1207K		2 7/16										**1.374**	3.03		
SM1208K	SM1208KB	S1208K	213	2 1/2	**120** 4.7244	**68.26** 2 11/16	**23** 0.9055	**34.13** 1 11/32	**84.58** 3.330	**6.4** 1/4	**96.84** 3 13/16	**23.81** 15/16	**85.73** 3 3/8	**2.472**	5.45	**39200** 8800	**63000** 14300
SM1211KT	SM1211KTB	S1211KT	214	2 11/16	**125** 4.9213	**68.26** 2 11/16	**24** 0.9449	**34.13** 1 11/32	**86.92** 3.422	**6.4** 1/4	**96.84** 3 13/16	**23.81** 15/16	**85.73** 3 3/8	**2.418**	5.33	**43000** 9650	**69500** 15600
SM1213K	SM1213KB	S1213K	215	2 13/16	**130** 5.1181	**74.61** 2 15/16	**25** 0.9843	**37.30** 1 15/32	**91.92** 3.619	**6.4** 1/4	**101.60** 4	**23.81** 15/16	**92.08** 3 5/8	**2.858**	6.30	**43600** 9800	**68000** 15300
SM1215K	SM1215KB	S1215K		2 15/16										**2.803**	6.18		
SM1303K	SM1303KB	S1303K	216	3 3/16	**140** 5.5118	**80.96** 3 3/16	**26** 1.0236	**40.48** 1 19/32	**98.40** 3.874	**6.4** 1/4	**111.13** 4 3/8	**25.40** 1	**100.01** 3 15/16	**3.452**	7.61	**53400** 12000	**80000** 18000
SM1307K	SM1307KB	S1307K	217	3 7/16	**150** 5.9055	**87.31** 3 7/16	**28** 1.1024	**43.66** 1 23/32	**104.83** 4.127	**6.4** 1/4	**112.71** 4 7/16	**25.40** 1	**106.36** 4 3/16	**3.901**	8.60	**61000** 13700	**93000** 20800
SM1311W-BR	SM1311WB-BR[6]	S1311K	219	3 11/16	**170** 6.6929	**93.66** 3 11/16	**32** 1.2598	**46.83** 1 27/32	**118.34** 4.659	**6.4** 1/4	**127.00** 5	**26.99** 11/16	**114.30** 4 1/2	**6.078**	13.40	**113600** 25500	**150000** 34000
SM1315W-BR	SM1315WB-BR[6]	S1315	220	3 15/16	**180** 7.0866	**100.01** 3 15/16	**34** 1.3386	**50.00** 1 31/32	**123.85** 4.876	**6.4** 1/4	**139.70** 5 1/2	**31.75** 1 1/4	**125.41** 4 15/16	**7.335**	16.17	**126900** 28500	**170000** 38000

[1]See page A-159.
[2]Order as MUA assembly suggested.
[3]Spherical O.D. outer-ring width is 18 mm (0.7087 in.).
[4]Spherical O.D. outer-ring width is 19 mm (0.7480 in.).
[5]Spherical O.D. outer-ring width is 21 mm (0.8268 in.).
[6]For applications where thrust load exceeds 60 percent of radial load, consult your Timken engineer.
NOTE: Bore tolerance: 1/2 in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.
2 1/4 in. – 3 3/16 in., nominal to +0.015 mm, +0.0006 in.
3 1/4 in. – 3 15/16 in., nominal to +0.018 mm, +0.0007 in.

SM-S INDUSTRIAL SERIES

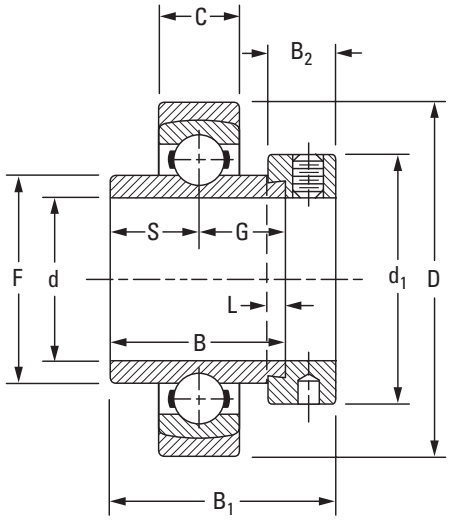
- Standard SM-S series permits the inner assembly to swivel in the outer aligning ring.
- The unrestricted self-alignment is achieved by allowing the inner ring to become square and true with the shaft and assembly.
- The external S-ring is uniquely ground and closely matched to its respective outer-bearing ring. The S-ring of one bearing will not fit the outer ring of another bearing.
- The bearings are not prelubricated.

Suggested shaft tolerances:

1 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 3 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify bearing number followed by "+ COL".

Example: SM1100KS + COL.



Bearing No.	Collar No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S(G)	F	L	d_1	B_2	B_1	Brg. and Collar Wt.		Static Load Rating C_o	Extended Dynamic Load Rating C_E
			in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg**	lbs.	**N** lbs.	**N** lbs.
SM1100KS	S1100K	205	1	**57** 2.2441	**34.93** 1 3/8	**15** 0.5910	**17.46** 11/16	**33.83** 1.332	**4.0** 5/32	**38.10** 1 1/2	**13.50** 17/32	**44.10** 1 47/64	**0.263**	0.58	**7700** 1730	**15600** 3450
SM1103KS	S1103K	206	1 3/16	**68** 2.6772	**36.51** 1 7/16	**16** 0.6300	**18.30** 23/32	**39.12** 1.540	**4.0** 5/32	**44.40** 1 3/4	**15.90** 5/8	**48.40** 1 29/32	**0.418**	0.92	**11100** 2500	**21600** 4800
SM1104KS	S1104K	207	1 1/4	**79** 3.1102	**37.70** 1 31/64	**17** 0.6690	**18.85** 0.742	**46.13** 1.816	**4.0** 5/32	**54.40** 2 1/8	**17.46** 11/16	**51.20** 2 1/64	**0.726**	1.60	**11500** 3400	**28500** 6400
SM1107KS	S1107K		1 7/16										**0.658**	1.45		
SM1108KS	S1108KT	208	1 1/2	**88** 3.4646	**42.86** 1 11/16	**18** 0.7090	**21.40** 27/32	**52.27** 2.058	**4.8** 3/16	**60.30** 2 3/8	**18.30** 23/32	**56.40** 2 7/32	**0.903**	1.99	**19600** 4400	**36000** 8150
SM1115KS	S1115K	210	1 15/16	**100** 3.9370	**49.21** 1 15/16	**20** 0.7874	**24.60** 31/32	**62.84** 2.474	**4.8** 3/16	**69.90** 2 3/4	**18.30** 23/32	**62.70** 2 15/32	**1.185**	2.61	**22700** 5100	**39000** 8800
SM1203KS	S1203K	211	2 3/16	**110** 4.3307	**55.56** 2 3/16	**21** 0.8268	**27.80** 1 3/32	**69.77** 2.747	**4.8** 3/16	**76.20** 3	**20.60** 13/16	**71.40** 2 13/16	**1.748**	3.85	**28500** 6400	**48000** 10800
SM1207KS	S1207K	212	2 7/16	**120** 4.7244	**61.91** 2 7/16	**22** 0.8661	**30.96** 1 7/32	**76.48** 3.011	**6.4** 1/4	**84.14** 3 5/16	**22.20** 7/8	**77.80** 3 1/16	**1.907**	4.20	**35600** 8000	**58500** 13200
SM1211KS	S1211KT	214	2 11/16	**140** 5.5118	**68.26** 2 11/16	**24** 0.9449	**34.13** 1 11/32	**86.92** 3.422	**6.4** 1/4	**96.84** 3 13/16	**23.81** 15/16	**79.40** 3 3/8	**2.974**	6.55	**43000** 9650	**69500** 15600
SM1215KS	S1215K	215	2 15/16	**145** 5.7087	**74.61** 2 15/16	**25** 0.9843	**37.30** 1 15/32	**91.92** 3.619	**6.4** 1/4	**101.60** 4	**23.81** 15/16	**92.08** 3 5/8	**3.541**	7.80	**43600** 9800	**68000** 15300
SM1303KS	S1303K	216	3 3/16	**155** 6.1024	**80.96** 3 3/16	**26** 1.0236	**40.48** 1 19/32	**98.40** 3.874	**6.4** 1/4	**111.13** 4 3/8	**25.40** 1	**100.01** 3 15/16	**4.150**	9.14	**53400** 12000	**80000** 18000
SM1307KS	S1307K	217	3 7/16	**165** 6.4961	**87.31** 3 7/16	**28** 1.1024	**43.66** 1 23/32	**104.83** 4.127	**6.4** 1/4	**112.71** 4 7/16	**25.40** 1	**106.36** 4 3/16	**4.690**	10.33	**61000** 13700	**93000** 20800
SM1315WS[1]	S1315K	220	3 15/16	**200** 7.8740	**100.01** 3 15/16	**34** 1.3386	**50.00** 1 31/32	**123.85** 4.876	**6.4** 1/4	**139.70** 5 1/2	**31.75** 1 1/4	**125.41** 4 15/16	**8.939**	19.69	**126900** 28500	**170000** 38000

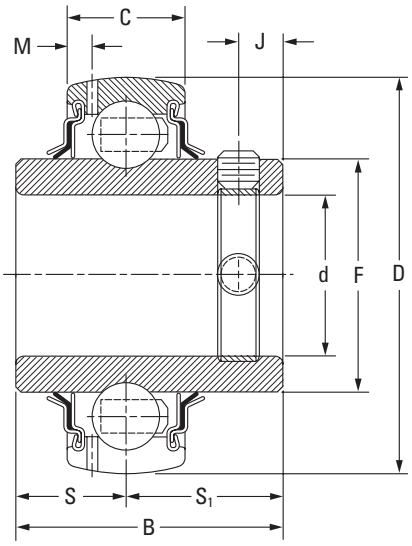
[1]For applications where thrust load exceeds 60 percent of radial load, consult your Timken engineer.
NOTE: Bore tolerance: 1 in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.
2 1/4 in. – 3 3/16 in., nominal to +0.015 mm, +0.0006 in.
3 1/4 in. – 3 15/16 in., nominal to +0.018 mm, +0.0007 in.

GY-KRRB SET SCREW INDUSTRIAL SERIES

- Incorporates Shaft Guarding Technology, which reduces replacement time, provides shaft protection and prolongs the life of the shaft.
- The Y-series set screw bearing has increased shaft support for HVAC and other industrial applications.
- The Y series features superfinished raceways, grade-10 balls and anti-back-out nylon-patch set screws; they are factory-prelubricated and relubricatable.
- The set screw mounting feature is ideal for reversing load applications.

Suggested shaft tolerances:

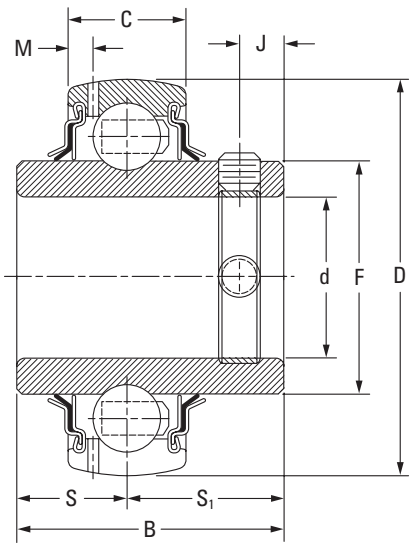
1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.



Bearing No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S	S_1	F	M	J	Set Screw Size	Static Load Rating C_o	Extended Dynamic Load Rating C_E
		in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.
GY1008KRRB	203	1/2	**40** 1.5748	**27.38** 1.0780	**12** 0.0472	**11.50** 0.453	**15.88** 0.6250	**22.86** 0.900	**2.72** 0.107	**4.55** 0.179	**M5X.8** 10 – 32	**4400** 1000	**10600** 2360
GY1009KRRB		9/16											
GY1010KRRB		5/8											
GY1011KRRB		11/16											
GYE15KRRB		**15**											
GYE17KRRB		**17**											
GY1012KRRB SGT	204	3/4	**47** 1.8504	**31.80** 1.2480	**14** 0.5500	**12.70** 0.500	**19.10** 0.7480	**27.56** 1.085	**3.43** 0.135	**5.87** 0.231	**M5X.8** 10 – 32	**6200** 1400	**14300** 3200
GYE20KRRB SGT		**20**											
GY1013KRRB	205	13/16	**52** 2.0472	**34.85** 1.3717	**15** 0.5910	**14.27** 0.562	**20.56** 0.8097	**33.83** 1.332	**3.86** 0.152	**6.80** 0.267	**M6X1** 1/4 – 28	**7700** 1730	**15800** 3550
GY1014KRRB SGT		7/8											
GY1015KRRB SGT		15/16											
GY1100KRRB SGT		1											
GYE25KRRB SGT		**25**											
GY1101KRRB	206	1 1/16	**62** 2.4409	**39.10** 1.5400	**18** 0.7090	**15.88** 0.625	**23.24** 0.9150	**40.31** 1.587	**3.96** 0.156	**8.63** 0.340	**M6X1** 1/4 – 28	**11000** 2500	**21600** 4800
GY1102KRRB SGT		1 1/8											
GY1103KRRB SGT		1 3/16											
GY1103KRRB3		1 1/4											
GYE30KRRB SGT		**30**											
GY1104KRRB SGT	207	1 1/4	**72** 2.8346	**45.41** 1.7880	**19** 0.7480	**17.48** 0.688	**27.94** 1.1000	**46.18** 1.816	**3.68** 0.145	**10.36** 0.408	**M8X1.25** 5/16 – 24	**15100** 3400	**28500** 6400
GY1105KRRB		1 5/16											
GY1106KRRB SGT		1 3/8											
GY1107KRRB SGT		1 7/16											
GYE35KRRB SGT		**35**											
GY1108KRRB SGT	208	1 1/2	**80** 3.1496	**49.22** 1.9380	**21** 0.8270	**19.05** 0.750	**30.17** 1.1880	**52.27** 2.058	**4.06** 0.160	**8.00** 0.315	**M8X1.25** 5/16 – 24	**19600** 4400	**36000** 8150
GY1109KRRB		1 9/16											
GYE40KRRB SGT		**40**											

NOTE: Bore tolerances: 1/2 in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.
2 1/4 in. – 3 15/16 in., nominal to +0.015 mm, +0.0006 in.

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Bearing No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S	S_1	F	M	J	Set Screw Size	Static Load Rating C_o	Extended Dynamic Load Rating C_E
		in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.
GY1110KRRB SGT	209	1 5/8	**85** 3.3465	**50.37** 1.9830	**22** 0.8661	**19.05** 0.750	**31.32** 1.2330	**57.92** 2.280	**4.55** 0.179	**9.14** 0.360	**M8X1.25** 5/16 – 24	**20000** 4500	**36000** 8150
GY1111KRRB SGT		1 11/16											
GY1112KRRB SGT		1 3/4											
GYE45KRRB SGT		**45**											
GY1113KRRB	210	1 13/16	**90** 3.5433	**51.59** 2.0310	**22** 0.8661	**19.05** 0.750	**32.54** 1.2810	**62.84** 2.474	**4.70** 0.185	**10.00** 0.394	**M10X1.5** 3/8 – 24	**22700** 5100	**39000** 8800
GY1114KRRB		1 7/8											
GY1115KRRB SGT		1 15/16											
GY1115KRRB3		2											
GYE50KRRB SGT		**50**											
GY1200KRRB SGT	211	2	**100** 3.9370	**55.55** 2.1870	**24** 0.9450	**22.22** 0.875	**33.32** 1.3120	**69.77** 2.747	**5.00** 0.197	**10.00** 0.394	**M10X1.5** 3/8 – 24	**28500** 6400	**48000** 10800
GY1201KRRB		2 1/16											
GY1202KRRB		2 1/8											
GY1203KRRB SGT		2 3/16											
GYE55KRRB SGT		**55**											
GY1204KRRB SGT	212	2 1/4	**110** 4.3307	**65.07** 2.5620	**27** 1.0630	**25.40** 1.000	**39.67** 1.5620	**76.48** 3.011	**5.13** 0.202	**10.00** 0.394	**M10X1.5** 3/8 – 24	**35600** 8000	**58500** 13200
GY1205KRRB		2 5/16											
GY1206KRRB		2 3/8											
GY1207KRRB SGT		2 7/16											
GYE60KRRB SGT		**60**											
GY1210KRRB	214	2 5/8	**125** 4.9213	**69.85** 2.7500	**28** 1.1020	**26.97** 1.062	**42.84** 1.6870	**86.92** 3.422	**5.08** 0.200	**12.00** 0.472	**M12X1.75** 7/16 – 20	**37500** 8500	**69500** 15600
GY1211KRRB		2 11/16											
GYE70KRRB		**70**											
GY1212KRRB	215	2 3/4	**130** 5.1181	**77.80** 3.0630	**29** 1.1420	**33.32** 1.312	**44.45** 1.7500	**91.92** 3.619	**5.56** 0.219	**12** 0.472	**M12X1.75** 7/16 – 20	**43600** 9800	**69500** 15600
GY1214KRRB		2 7/8											
GY1215KRRB		2 15/16											
GYE75KRRB		**75**											

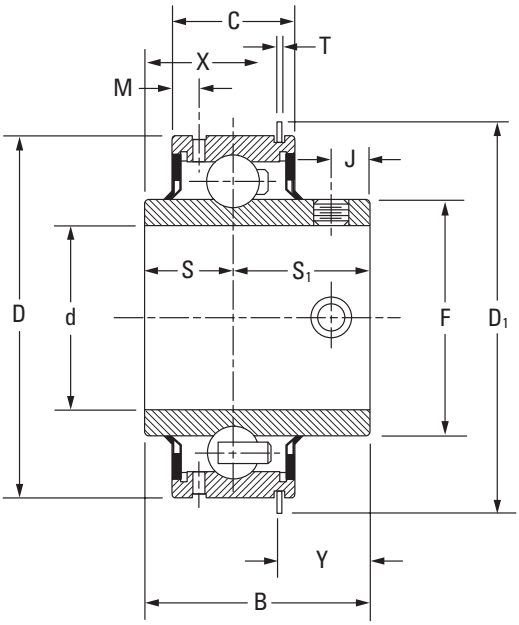
NOTE: Bore tolerances: 1/2 in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.
2 1/4 in. – 3 15/16 in., nominal to +0.015 mm, +0.0006 in.

ER INDUSTRIAL SERIES, RELUBRICATABLE TYPES

- Incorporates (optional) Shaft Guarding Technology, which reduces replacement time, provides shaft protection and prolongs shaft life.
- This bearing is designed for use in applications where low-starting torque and low-running torque are necessary.
- The ER-DD series is for applications where extremely low torque is required.
- Test results indicate an average of 95 percent reduction in start-up torque when using ER-DD instead of the standard ER bearing. Running torque is reduced up to 85–90 percent.

Suggested shaft tolerances:

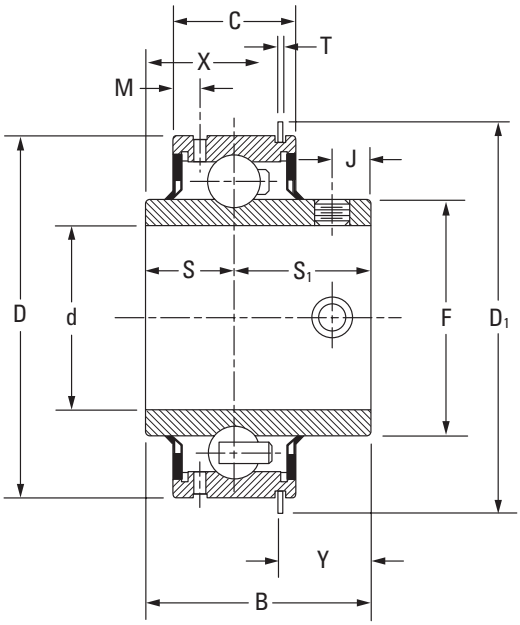
1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 3 7/16 in., nominal to -0.025 mm, -0.0010 in.



Bearing No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S	S1	F	J	D1	Y	T	M	X	Set Screw Size	Brg. Wt.		Static Load Rating Co	Extended Dynamic Load Rating CE
		in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	kg	lbs.	N lbs.	N lbs.
ER08[1]	204	1/2	47 1.850	30.963 1 7/32	15.817 5/8	12.700 1/2	18.263 64/89	27.546 1 5/64	5.131 13/64	52.400 2 6/95	16.612 1/16	1.067 3/64	3.861 5/32	14.351 9/16	M5X.8 10 - 32	0.190	0.42	6571.2 1480	14163.6 3190
ER10[1]		5/8														0.167	0.37		
ER12[1][2]		3/4														0.141	0.31		
ER14[1][2]	205	7/8	52 2.047	34.841 1 3/8	18.992 3/4	14.275 50/89	20.566 13/16	33.820 1 21/64	6.774 17/64	57.531 2 17/64	17.341 11/16	1.067 3/64	3.404 9/64	17.501 11/16	M6X1 1/4 -28	0.218	0.480	7814.4 1760	15495.6 3490
ER15[2]		15/16														0.195	0.43		
ER16[1][2]		1														0.181	0.40		
ER18[2]	206	1 1/8	62 2.441	39.116 1 35/64	22.167 7/8	15.875 5/8	23.241 59/64	40.297 1 37/64	8.636 11/32	67.285 2 41/64	18.948 3/4	1.651 1/16	5.563 7/32	20.168 51/64	M6X1 1/4 -28	0.340	0.75	11233.2 2530	21534 4850
ER19[2]		1 3/16														0.313	0.69		
ER20[1][2]	207	1 1/4	72 2.834	45.415 1 25/32	23.754 15/16	17.475 11/16	27.940 1 7/64	46.825 1 27/32	10.363 13/32	78.105 3 5/64	22.301 7/8	1.651 1/16	5.563 7/32	23.114 29/32	M8X1.25 5/16 -24	0.567	1.25	15273.6 3440	28416 6400
ER22[1][2]		1 3/8														0.499	1.10		
ER23[1][2]		1 7/16														0.476	1.05		
ER24[1][2]	208	1 1/2	80 3.149	49.225 1 15/16	27.722 1 3/32	19.050 3/4	30.175 1 3/16	52.261 2 3/64	8.001 5/16	86.106 3 25/64	21.158 53/64	1.651 1/16	6.350 1/4	28.067 1 7/64	M8X1.25 5/16 - 24	0.671	1.48	19802.4 4460	36097.2 8130
ER27[2]	209	1 11/16	85 3.346	50.368 1 63/64	27.724 1 3/32	19.050 3/4	31.318 1 15/64	57.899 2 15/64	9.144 23/64	91.110 3 37/64	22.250 7/8	1.651 1/16	6.325 1/4	28.118 1 7/64	M8X1.25 5/16 - 24	0.735	1.62	20424 4600	36230.4 8160
ER28[1][2]		1 3/4														0.690	1.52		
ER30	210	1 7/8	90 3.543	51.587 2 1/32	28.517 1 1/8	19.050 3/4	32.537 1 9/32	62.827 2 15/32	10.008 25/64	96.088 3 25/32	24.282 31/32	2.413 3/32	7.061 9/32	27.305 1 5/64	M10X1.5 3/8 - 24	0.853	1.88	23132.4 5210	38805.6 8740
ER31[2]		1 15/16														0.834	1.84		

[1]DD low-drag/low-torque version is available.
[2]Available with Shaft Guarding Technology modification.
NOTE: Bore tolerances: 1.1874 in. – 2.1874 in. nominal to +0.013 mm, +0.0005 in.
2.2500 in. – 3.1874 in. nominal to +0.015 mm, +0.0006 in.

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Bearing No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S	S_1	F	J	D_1	Y	T	M	X	Set Screw Size	Brg. Wt.		Static Load Rating C_o	Extended Dynamic Load Rating C_E
		in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg**	lbs.	**N** lbs.	**N** lbs.
ER32[1][2] ER35[2]	211	2 3/16	**100** 3.9370	**55.56** 2 3/16	**30.16** 1 3/16	**22.22** 7/8	**33.34** 1 5/16	**69.85** 2 3/4	**9.92** 25/64	**106.4** 4 3/16	**24.28** 61/64	**2.4** 3/32	**7.14** 9/32	**31.27** 1 15/64	**M10X1.5** 3/8 - 24	**1.300** **1.084**	2.87 2.39	**29170.8** 6570	**47952** 10800
ER39[1][2]	212	2 7/16	**110** 4.331	**65.09** 2 9/16	**31.75** 1 1/4	**25.4** 1	**39.69** 1 9/16	**76.60** 3 1/64	**9.92** 25/64	**116.3** 4 37/64	**28.24** 1.11	**2.4** 3/32	**6.75** 1 7/64	**36.83** 1 29/64	**M10X1.5** 3/8 - 24	**1.450**	3.20	**35875.2** 8080	**58164** 13100
ER47	215	2 15/16	**130** 5.1180	**77.79** 3 1/16	**38.1** 1 1/2	**33.33** 1 5/16	**44.45** 1 3/4	**91.68** 3 39/64	**11.91** 15/32	**139.7** 5 1/2	**33.02** 1.30	**2.8** 7/64	**6.35** 1/4	**44.78** 1 49/64	**M12X1.75** 7/16 -20	**2.210**	4.88	**44844** 10100	**68820** 15500
ER51	216	3 3/16	**140** 5.5110	**77.79** 3 1/16	**42.86** 1 11/16	**28.58** 1 1/8	**49.21** 1 15/16	**98.43** 3 7/8	**13.49** 17/32	**149.6** 5 57/64	**35.32** 1.39	**2.8** 7/64	**11.11** 7/16	**42.47** 1 43/64	**M12X1.75** 7/16 -20	**3.450**	7.61	**54168** 12200	**79476** 17900
ER55	217	3 7/16	**150** 5.905	**85.72** 3 3/8	**49.21** 1 15/16	**34.16** 1 11/32	**51.57** 2 1/32	**104.84** 4 1/8	**11.91** 7/16	**159.5** 6 1/4	**34.53** 1.36	**2.8** 7/64	**11.02** 7/16	**51.21** 2 1/64	**M12X1.75** 7/16 -20	–	–	**61716** 13900	**92796** 20900

[1]DD low-drag/low-torque version is available.
[2]Available with Shaft Guarding Technology modification.
NOTE: Bore tolerances: 1.1874 in. – 2.1874 in. nominal to +0.013 mm, +0.0005 in.
2.2500 in. – 3.1874 in. nominal to +0.015 mm, +0.0006 in.

STANDARD SERIES

RA-RR, RA-RRB NON-RELUBRICATABLE TYPES

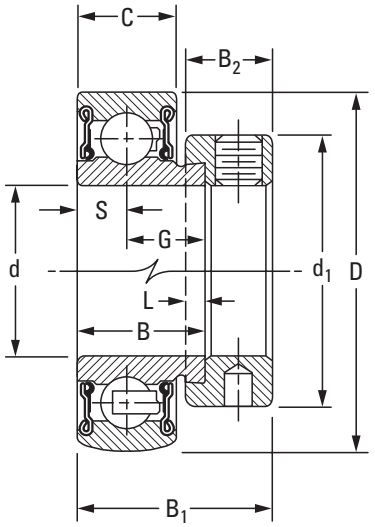
- These bearings are an extended inner-ring type with a self-locking collar.
- Due to the positive contact, the land-riding R-seal provides improved protection against harmful contaminants and retains lubricant under severe operating conditions.
- RA-RR series are factory-prelubricated and have cylindrical outside diameters.
- RA-RRB series have spherical outside diameters for use in housings with corresponding spherical inside surfaces to provide unrestricted initial alignment.

Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify bearing number followed by "+ COL".

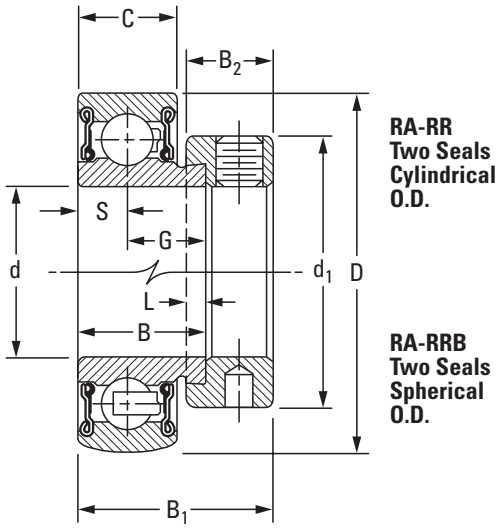
Example: RA100RRB + COL.



Bearing No. Cylindrical O.D.	Bearing No. Spherical O.D.	Collar No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S	G	L	d_1	B_2	B_1	Brg. and Collar Wt.	Static Load Rating C_o	Extended Dynamic Load Rating C_E
				in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg** lbs.	**N** lbs.	**N** lbs.
RA008RR	RA008RRB	S1008K	203	1/2	**40** 1.5748	**19.05** 0.750	**13** 0.512[1]	**6.50** 0.256	**12.55** 0.494	**4.0** 5/32	**28.60** 1 1/8	**13.5** 17/32	**28.6** 1 1/8	**0.154** 0.34		
RA009RR	RA009RRB	S1009K		9/16										**0.145** 0.32	**4700** 1060	**10600** 2360
RA010RR	RA010RRB	S1010K		5/8										**0.127** 0.28		
RAE17RR	RAE17RRB	SE17K		**17**										**0.127** 0.28		
RA012RR	RA012RRB	S1012K	204	3/4	**47** 1.8504	**21.44** 0.844	**15** 0.591[2]	**7.49** 0.295	**13.92** 0.548	**4.0** 5/32	**33.30** 1 5/16	**13.5** 17/32	**31.0** 1 7/32	**0.132** 0.29	**6200** 1400	**14300** 3200
RAE20RR	RAE20RRB	SE20K		**20**										**0.132** 0.29		
RA013RR	RA013RRB	S1013K	205	13/16	**52** 2.0472	**21.44** 0.844	**15** 0.591	**7.49** 0.295	**13.92** 0.548	**4.0** 5/32	**38.10** 1 1/2	**13.5** 17/32	**31.0** 1 7/32	**0.231** 0.51	**7700** 1730	**15800** 3550
RA014RR	RA014RRB	S1014K		7/8										**0.213** 0.47		
RA015RR	RA015RRB	S1015K		15/16										**0.200** 0.44		
RA100RR	RA100RRB	S1100K		1										**0.186** 0.41		
RAE25RR	RAE25RRB	SE25K		**25**										**0.186** 0.41		
RA101RR	RA101RRB	S1101K	206	1 1/16	**62** 2.4409	**23.82** 0.938	**18** 0.709	**8.99** 0.354	**14.81** 0.583	**4.0** 5/32	**44.10** 1 47/64	**15.9** 5/8	**35.7** 1 13/32	**0.349** 0.77	**11100** 2500	**21800** 4900
RA102RR	RA102RRB	S1102K		1 1/8										**0.327** 0.72		
RA103RR	RA103RRB	S1103K		1 3/16										**0.318** 0.70		
RA103RR2	RA103RRB2	S1103K3		1 1/4										**0.295** 0.65		
RAE30RR	RAE30RRB	SE30K		**30**										**0.318** 0.70		
RA104RR	RA104RRB	S1104K	207	1 1/4	**72** 2.8346	**25.40** 1.000	**19** 0.748	**9.50** 0.374	**15.90** 0.626	**4.0** 5/32	**54.40** 2 1/8	**17.1** 43/64	**38.9** 1 17/32	**0.562** 1.24	**15100** 3400	**28500** 6400
RA105RR	RA105RRB	S1105K		1 5/16										**0.540** 1.19		
RA106RR	RA106RRB	S1106K		1 3/8										**0.513** 1.13		
RA107RR	RA107RRB	S1107K		1 7/16										**0.476** 1.05		
RAE35RR	RAE35RRB	SE35K		**35**										**0.513** 1.13		

[1]Spherical O.D. outer-ring width is 12 mm (0.472 in.).
[2]Spherical O.D. outer-ring width is 14 mm (0.551 in.).
[3]Spherical O.D. outer-ring width is 21 mm (0.827 in.).
NOTE: Bore tolerance is nominal to +0.013 mm, +0.0005 in.

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Bearing No.		Collar No.	Basic Outer-Ring Size	Shaft Dia.	O.D.	Ring Widths								Brg. and Collar Wt.		Static Load Rating	Extended Dynamic Load Rating
Cylindrical O.D.	Spherical O.D.			d	D	Inner B	Outer C	S	G	L	d_1	B_2	B_1			C_o	C_E
				in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg**	lbs.	**N** lbs.	**N** lbs.
RA108RR	RA108RRB	S1108K	208	1 1/2	**80** 3.1496	**30.18** 1.188	**22** 0.866[3]	**11.00** 0.433	**19.18** 0.755	**4.8** 3/16	**60.30** 2 3/8	**18.3** 23/32	**43.7** 1 23/32	**0.694**	1.53	**19600** 4400	**36000** 8150
RA109RR	RA109RRB	S1109K		1 9/16										**0.649**	1.43		
RAE40RR	RAE40RRB	SE40K		**40**										**0.649**	1.43		
RA110RR	RA110RRB	S1110K	209	1 5/8	**85** 3.3465	**30.18** 1.188	**22** 0.866	**11.00** 0.433	**19.18** 0.755	**4.8** 3/16	**63.50** 2 1/2	**18.3** 23/32	**43.7** 1 23/32	**0.780**	1.72	**20000** 4500	**36000** 8150
RA111RR	RA111RRB	S1111K		1 11/16										**0.735**	1.62		
RA112RR	RA112RRB	S1112K		1 3/4										**0.680**	1.50		
RAE45RR	RAE45RRB	SE45K		**45**										**0.680**	1.50		
RA113RR	RA113RRB	S1113K	210	1 13/16	**90** 3.5433	**30.18** 1.188	**22** 0.866	**11.00** 0.433	**19.18** 0.755	**4.8** 3/16	**69.90** 2 3/4	**18.3** 23/32	**43.7** 1 23/32	**0.880**	1.94	**22700** 5100	**39200** 8800
RA114RR	RA114RRB	S1114K		1 7/8										**0.830**	1.83		
RA115RR	RA115RRB	S1115K		1 15/16										**0.771**	1.79		
RA115RR2	RA115RRB2	S1115K2		2										**0.717**	1.58		
RAE50RR	RAE50RRB	SE50K		**50**										**0.771**	1.79		
RA200RR	RA200RRB	S1200K	211	2	**100** 3.9370	**32.54** 1.281	**24** 0.945	**11.99** 0.472	**20.55** 0.809	**4.8** 3/16	**76.20** 3	**20.6** 13/16	**48.4** 1 29/32	**0.962**	2.12	**28500** 6400	**48000** 10800
RA201RR	RA201RRB	S1201K		2 1/16										**0.898**	1.98		
RA202RR	RA202RRB	S1202K		2 1/8										**0.857**	1.89		
RA203RR	RA203RRB	S1203K		2 3/16										**0.807**	1.78		
RAE55RR	RAE55RRB	SE55K		**55**										**0.807**	1.78		

[1]Spherical O.D. outer-ring width is 12 mm (0.472 in.).
[2]Spherical O.D. outer-ring width is 14 mm (0.551 in.).
[3]Spherical O.D. outer-ring width is 21 mm (0.827 in.).
NOTE: Bore tolerance is nominal to +0.013 mm, +0.0005 in.

GRA-RR, GRA-RRB RELUBRICATABLE TYPES

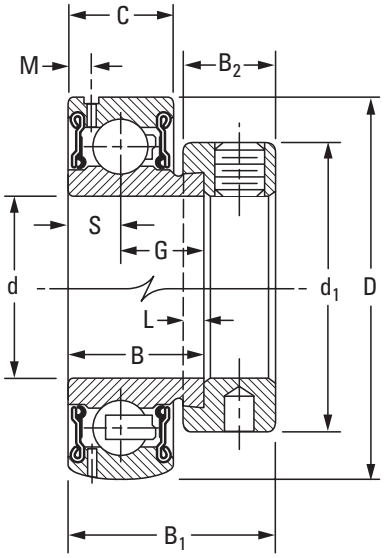
- GRA-RR-series bearings are the same as the RA-RR series and have a provision for relubrication.
- GRA-RR series have cylindrical outside diameters.
- GRA-RRB have spherical outside diameters

Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.13 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify bearing number followed by "+ COL".

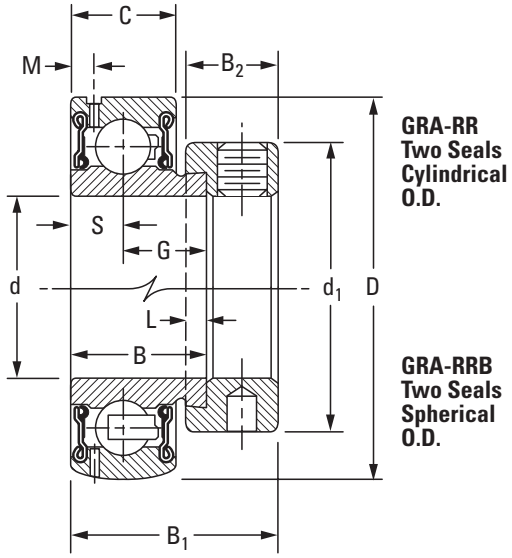
Example: GRA100RRB + COL.



Bearing No.		Collar No.	Basic Outer-Ring Size	Shaft Dia.	O.D.	Ring Widths									Brg. and Collar Wt.		Static Load Rating	Extended Dynamic Load Rating
Cylindrical O.D.	Spherical O.D.					Inner	Outer											
				d	D	B	C	S	G	L	d_1	B_2	M	B_1			C_o	C_E
				in.	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg		N	N
				mm	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.		lbs.	lbs.	lbs.
GRA008RR	GRA008RRB	S1008K		1/2											0.154	0.34		
–	GRA009RRB	S1009K	203	9/16	40	19.05	13	6.50	12.55	4.0	28.6	13.5	2.72	28.6	0.145	0.32	4700	10600
GRA010RR	GRA010RRB	S1010K		5/8	1.5748	0.750	0.512[1]	0.256	0.494	5/32	1 1/8	17/32	0.107	1 1/8	0.127	0.28	1060	2360
GRAE17RR	GRAE17RRB	SE17K		17											0.127	0.28		
GRA012RR	GRA012RRB	S1012K	204	3/4	47	21.44	15	7.49	13.92	4.0	33.3	13.5	3.05	31.0	0.132	0.29	6200	14300
GRAE20RR	GRAE20RRB	SE20K		20	1.8504	0.844	0.591[2]	0.295	0.548	5/32	1 5/16	17/32	0.120	1 7/32	0.132	0.29	1400	3200
–	GRA013RRB	S1013K		13/16											0.231	0.51		
GRA014RR	GRA014RRB	S1014K		7/8											0.213	0.47		
–	GRA015RRB	S1015K	205	15/16	52	21.44	15	7.49	13.92	4.0	38.1	13.5	3.61	31.0	0.200	0.44	7700	15800
GRA100RR	GRA100RRB	S1100K		1	2.0472	0.844	0.591	0.295	0.548	5/32	1 1/2	17/32	0.142	1 7/32	0.186	0.41	1730	3550
GRAE25RR	GRAE25RRB	SE25K		25											0.186	0.41		
GRA101RR	GRA101RRB	S1101K		1 1/16											0.349	0.77		
GRA102RR	GRA102RRB	S1102K		1 1/8											0.327	0.72		
GRA103RR	GRA103RRB	S1103K	206	1 3/16	62	23.83	18	8.99	14.81	4.0	44.1	15.9	4.17	35.7	0.318	0.70	11100	21800
GRA103RR2	GRA103RRB2	S1103K3		1 1/4	2.4409	0.938	0.709	0.354	0.583	5/32	1 47/64	5/8	0.164	1 13/32	0.295	0.65	2500	4900
GRAE30RR	GRAE30RRB	SE30K		30											0.318	0.70		
GRA104RR	GRA104RRB	S1104K		1 1/4											0.562	1.24		
–	GRA105RRB	S1105K		1 5/16											0.540	1.19		
–	GRA106RRB	S1106K	207	1 3/8	72	25.40	19	9.50	15.90	4.0	54.0	17.1	3.68	38.9	0.513	1.13	15100	28500
–	GRA107RRB	S1107K		1 7/16	2.8346	1.000	0.748	0.374	0.626	5/32	2 1/8	43/64	0.145	1 17/32	0.476	1.05	3400	6400
GRAE35RR	GRAE35RRB	SE35K		35											0.513	1.13		

[1]Spherical O.D. outer-ring width is 12 mm (0.472 in.).
[2]Spherical O.D. outer-ring width is 14 mm (0.551 in.).
[3]Spherical O.D. outer-ring width is 21 mm (0.827 in.).
NOTE: Bore tolerance is nominal to +0.013 mm, +0.0005 in.

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Bearing No.		Collar No.	Basic Outer-Ring Size	Shaft Dia.	O.D.	Ring Widths									Brg. and Collar Wt.		Static Load Rating	Extended Dynamic Load Rating
Cylindrical O.D.	Spherical O.D.					Inner	Outer											
				d	D	B	C	S	G	L	d_1	B_2	M	B_1			C_o	C_E
				in.	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg		N	N
				mm	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.		lbs.	lbs.	lbs.
GRA108RR	GRA108RRB	S1108K		1 1/2											0.694	1.53		
–	GRA109RRB	S1109K	208	1 9/16	80	30.18	22	11.00	19.18	4.8	60.3	18.3	4.17	43.7	0.649	1.43	19600	36000
GRAE40RR	GRAE40RRB	SE40K		40	3.1496	1.188	0.866[3]	0.433	0.755	3/16	2 3/8	23/32	0.164	1 23/32	0.649	1.43	4400	8150
–	GRA110RRB	S1110K		1 5/8											0.780	1.72		
–	GRA111RRB	S1111K	209	1 11/16	85	30.18	22	11.00	19.18	4.8	63.5	18.3	4.55	43.7	0.735	1.62	20500	36300
–	GRA112RRB	S1112K		1 3/4	3.3465	1.188	0.866	0.433	0.755	3/16	2 1/2	23/32	0.179	1 23/32	0.680	1.50	4600	8160
–	GRAE45RRB	SE45K		45											0.680	1.50		
–	GRA113RRB	S1113K		1 13/16											0.880	1.94		
–	GRA114RRB	S1114K		1 7/8											0.830	1.83		
–	GRA115RRB	S1115K	210	1 15/16	90	30.18	22	11.00	19.18	4.8	69.9	18.3	4.44	43.7	0.771	1.79	22700	39200
–	GRA115RRB2	S1115K2		2	3.5433	1.188	0.866	0.433	0.755	3/16	2 3/4	23/32	0.175	1 23/32	0.717	1.58	5100	8800
–	GRAE50RRB	SE50K		50											0.771	1.79		
–	GRA200RRB	S1200K		2											0.962	2.12		
–	GRA201RRB	S1201K		2 1/16											0.898	1.98		
–	GRA202RRB	S1202K	211	2 1/8	100	32.54	24	11.99	20.55	4.8	76.2	20.6	4.90	48.4	0.857	1.89	28500	48000
–	GRA203RRB	S1203K		2 3/16	3.9370	1.281	0.945	0.472	0.809	3/16	3	13/16	0.193	1 29/32	0.807	1.78	6400	10800
–	GRAE55RRB	SE55K		55											0.807	1.78		

[1]Spherical O.D. outer-ring width is 12 mm (0.472 in.).
[2]Spherical O.D. outer-ring width is 14 mm (0.551 in.).
[3]Spherical O.D. outer-ring width is 21 mm (0.827 in.).
NOTE: Bore tolerance is nominal to +0.013 mm, +0.0005 in.

RA-DD NON-RELUBRICATABLE TYPES

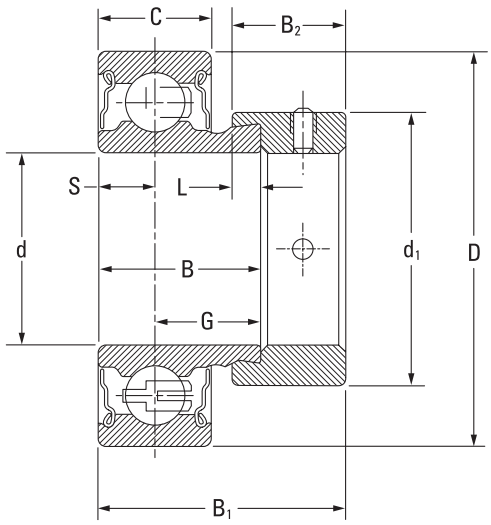
- These bearings are an extended inner-ring type with a self-locking collar.
- The two non-contact grease shields retain lubricant, provide protection against harmful contaminants and offer improved high-speed, low-torque performance.
- RA-DD series are factory-prelubricated and have cylindrical outside diameters.

Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify bearing number followed by "+ COL".

Example: RA100DD + COL.



Bearing No.	Collar No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S	G	L	d_1	B_2	B_1	Static Load Rating C_o	Extended Dynamic Load Rating C_E
			in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.
RA008DD	S1008K	203	1/2	**40.00** 1.575	**19.05** 0.750	**13.00** 0.512	**6.50** 0.256	**12.55** 0.494	**3.97** 5/32	**28.58** 1 1/8	**13.49** 17/32	**28.58** 1 1/8	**4400** 1000	**10600** 2360
RA009DD	S1009K		9/16											
RA010DD[1]	S1010K		5/8											
RAE17DD	SE17K		**17**											
RA012DD	S1012K	204	3/4	**47.00** 1.850	**21.44** 0.844	**15.01** 0.591	**7.49** 0.295	**13.92** 0.548	**3.97** 5/32	**33.34** 1 5/16	**13.49** 17/32	**30.96** 1 7/32	**6200** 1400	**14300** 3200
RAE20DD	SE20K		**20**											
RA013DD	S1013K	205	13/16	**52.00** 2.047	**21.44** 0.844	**15.01** 0.591	**7.49** 0.295	**13.92** 0.548	**3.97** 5/32	**38.10** 1 1/2	**13.49** 17/32	**30.96** 1 7/32	**6950** 1560	**15600** 3450
RA014DD[1]	S1014K		7/8											
RA015DD	S1015K		15/16											
RA100DD	S1100K		1											
RAE25DD	SE25K		**25**											
RA101DD	S1101K	206	1 1/16	**62.00** 2.441	**23.83** 0.938	**18.01** 0.709	**8.99** 0.354	**14.81** 0.583	**3.97** 5/32	**44.45** 1 3/4	**15.88** 5/8	**35.72** 1 13/32	**10000** 2280	**21600** 4800
RA102DD	S1102K		1 1/8											
RA103DD[1]	S1103K		1 3/16											
RA103DD2	S1103K3		1 1/4S											
RAE30DD	SE30K		**30**											
RA104DD	S1104K	207	1 1/4	**72.00** 2.835	**25.40** 1.000	**19.00** 0.748	**9.50** 0.374	**15.90** 0.626	**3.97** 5/32	**53.98** 2 1/8	**17.07** 43/64	**38.89** 1 17/32	**13700** 3050	**28500** 6400
RA105DD	S1105K		1 5/16											
RA106DD	S1106K		1 3/8											
RA107DD[1]	S1107K		1 7/16											
RAE35DD	SE35K		**35**											
RA108DD[1]	S1108K	208	1 1/2	**80.00** 3.150	**30.18** 1.188	**22.00** 0.866	**11.00** 0.433	**19.18** 0.755	**4.76** 3/16	**60.33** 2 3/8	**18.26** 23/32	**43.66** 1 23/32	**17600** 4000	**36000** 8150
RA109DD	S1109K		1 9/16											
RAE40DD	SE40K		**40**											

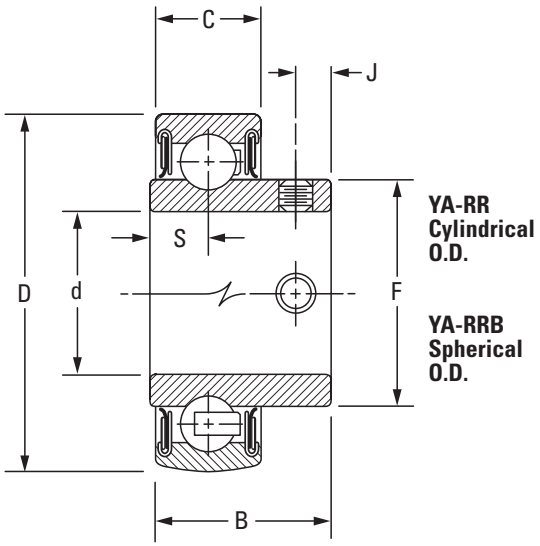
[1]Popular sizes.
NOTE: Bore tolerance is nominal to +0.013 mm, +0.0005 in.

YA-RR, YA-RRB NON-RELUBRICATABLE TYPES

- These bearings are an extended inner-ring type and have specially designed set screws with unique thread form.
- The thread form in both series locks the bearing to the shaft so they are resistant to loosening during operation.
- A positive contact, land-riding R-seal provides improved protection against harmful contaminants in both series and retains lubricant under severe operating conditions.
- A 6/6 molded nylon retainer has proved effective under conditions of misalignment.
- YA-RR series has cylindrical outside diameters.
- YA-RRB series has spherical outside diameters for use in housings with corresponding spherical inside surfaces. This provides unrestricted initial self-alignment.

Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.



Bearing No.		Basic Outer-Ring Size	Shaft Dia.	O.D.	Ring Widths					Set Screw Size	Brg. Wt.	Static Load Rating	Extended Dynamic Load Rating
Cylindrical O.D.	Spherical O.D.				Inner	Outer	S	F	J				
			d	D	B	C						C_o	C_E
			in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg** lbs.	**N** lbs.	**N** lbs.
YA008RR	YA008RRB	203	1/2	**40**	**23.8**	**13**	**7.95**	**24.6**	**4.75**	**M5X.8**	**0.09**	**4700**	**10600**
YA010RR	YA010RRB		5/8	1.5748	0.938	0.5120[1]	0.313	31/32	0.187	10 – 32	0.19	1060	2360
YAE17RR	YAE17RRB		**17**										
YA012RR	YA012RRB	204	3/4	**47**	**27.0**	**15**	**8.86**	**29.0**	**6.02**	**M6X1**	**0.14**	**6200**	**14300**
YAE20RR	YAE20RRB		**20**	1.8504	1.063	0.5910[2]	0.349	1 9/64	0.237	1/4 – 28	0.30	1400	3200
YA014RR	YA014RRB	205	7/8	**52**	**28.2**	**15**	**8.84**	**33.7**	**6.35**	**M6X1**	**0.17**	**7700**	**15800**
YA015RR	YA015RRB		15/16	2.0472	1.109	0.5910	0.348	1 21/64	0.250	1/4 – 28	0.38	1730	3550
YA100RR	YA100RRB		1										
YAE25RR	YAE25RRB		**25**										
YA102RR	YA102RRB	206	1 1/8	**62**	**32.5**	**18**	**9.65**	**40.1**	**7.87**	**M8X1.25**	**0.26**	**11100**	**21800**
YA103RR	YA103RRB		1 3/16	2.4409	1.281	0.7090	0.380	1 37/64	0.310	5/16 – 24[3]	0.58	2500	4900
YA103RR2	YA103RRB2		1 1/4										
YAE30RR	YAE30RRB		**30**										
YA104RR	YA104RRB	207	1 1/4	**72**	**36.5**	**19**	**10.85**	**46.8**	**7.87**	**M8X1.25**	**0.42**	**15100**	**28500**
YA106RR	YA106RRB		1 3/8	2.8346	1.444	0.7480	0.427	1 27/32	0.310	5/16 – 24	0.93	3400	6400
YA107RR	YA107RRB		1 7/16										
YAE35RR	YAE35RRB		**35**										
YA108RR	YA108RRB	208	1 1/2	**80**	**39.3**	**22**	**11.63**	**52.4**	**7.87**	**M8X1.25**	**0.56**	**17600**	**36000**
YAE40RR	YAE40RRB		**40**	3.1496	1.538	0.8661[4]	0.458	2 1/16	0.310	5/16 – 24	1.24	4000	8150
YA110RR	YA110RRB	209	1 5/8	**85**	**42.0**	**22**	**13.46**	**57.9**	**7.87**	**M8X1.25**	**0.54**	**20500**	**36300**
YA111RR	YA111RRB		1 11/16	3.3465	1.655	0.8861	0.530	2 9/32	0.310	5/16 – 24	1.18	4500	8160
YA112RR	YA112RRB		1 3/4										
YAE45RR	YAE45RRB		**45**										
YA115RR	YA115RRB	210	1 15/16	**90**	**44.3**	**22**	**13.46**	**62.7**	**9.02**	**M10X1.5**	**0.57**	**22700**	**39200**
YA115RR2	YA115RRB2		2	3.5433	1.746	0.8661	0.530	2 15/32	0.355	3/8 – 24	1.25	5100	8800
YAE50RR	YAE50RRB		**50**										
YA200RR	YA200RRB	211	2	**100**	**46.6**	**24**	**14.60**	**69.8**	**9.02**	**M10X1.5**	**0.58**	**28500**	**48000**
YA203RR	YA203RRB		2 3/16	3.9370	1.833	0.9449	0.575	2 3/4	0.355	3/8 – 24	1.27	6400	10800
YAE55RR	YAE55RRB		**55**										

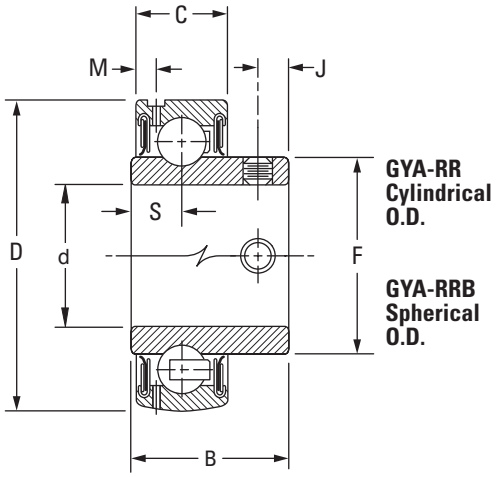
[1]Spherical O.D. outer-ring width is 12 mm (0.4724 in.).
[2]Spherical O.D. outer-ring width is 14 mm (0.5512 in.).
[3]YA103RR2 and YA103RRB2 use 1/4 – 28 in. set screw.
[4]Spherical O.D. outer-ring width is 21 mm (0.8268 in.).
NOTE: Bore tolerance is nominal to +0.013 mm, +0.0005 in.

GYA-RR, GYA-RRB RELUBRICATABLE TYPES

- GYA-RR-series bearings are dimensionally interchangeable with the YA-RR series.
- Both series have cylindrical outside diameters and can be used in standard cylindrical housings.
- GYA-RRB series have spherical outside diameters, providing unrestricted initial alignment. This series is used in housings with corresponding spherical inside surfaces.

Suggested shaft tolerances:

1/2 in.- 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.



Bearing No.		Basic Outer-Ring Size	Shaft Dia.	O.D.	Ring Widths						Set Screw Size	Brg. Wt.	Static Load Rating	Extended Dynamic Load Rating
Cylindrical O.D.	Spherical O.D.				Inner	Outer								
			d	D	B	C	S	F	M	J			C_o	C_E
			in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg** lbs.	**N** lbs.	**N** lbs.
GYA008RR	GYA008RRB	203	1/2	**40**	**23.8**	**12**	**7.95**	**24.6**	**2.72**	**4.75**	**M5X.8**	**0.09**	**4700**	**10600**
GYA010RR	GYA010RRB		5/8	1.5748	0.938	0.4720	0.313	31/32	0.107	0.187	10 – 32	0.19	1060	2360
GYAE17RR	GYAE17RRB		**17**											
GYA012RR	GYA012RRB	204	3/4	**47**	**27.0**	**14**	**8.86**	**29.0**	**3.05**	**6.02**	**M6X1**	**0.14**	**6200**	**14300**
GYAE20RR	GYAE20RRB		**20**	1.8504	1.063	0.5510	0.349	1 9/64	0.120	0.237	1/4 – 28	0.30	1400	3200
GYA014RR	GYA014RRB	205	7/8	**52**	**28.2**	**15**	**8.84**	**33.7**	**3.61**	**6.35**	**M6X1**	**0.17**	**7700**	**15800**
GYA015RR	GYA015RRB		15/16	2.0472	1.109	0.5910	0.348	1 21/64	0.142	0.250	1/4 – 28	0.38	1730	3550
GYA100RR	GYA100RRB		1											
GYAE25RR	GYAE25RRB		**25**											
GYA102RR	GYA102RRB	206	1 1/8	**62**	**32.5**	**18**	**9.65**	**40.1**	**4.17**	**7.87**	**M8X1.25**	**0.26**	**11100**	**21800**
GYA103RR	GYA103RRB		1 3/16	2.4409	1.281	0.7090	0.380	1 37/64	0.164	0.310	5/16 – 24[1]	0.58	2500	4900
GYA103RR2	GYA103RRB2		1 1/4											
GYAE30RR	GYAE30RRB		**30**											
GYA104RR	GYA104RRB	207	1 1/4	**72**	**36.5**	**19**	**10.85**	**46.8**	**3.68**	**7.87**	**M8X1.25**	**0.42**	**15100**	**28500**
GYA106RR	GYA106RRB		1 3/8	2.8346	1.444	0.7480	0.427	1 27/32	0.145	0.310	5/16 – 24	0.93	3400	6400
GYA107RR	GYA107RRB		1 7/16											
GYAE35RR	GYAE35RRB		**35**											
GYA108RR	GYA108RRB	208	1 1/2	**80**	**39.3**	**22**	**11.63**	**52.4**	**4.17**	**7.87**	**M8X1.25**	**0.56**	**17600**	**36000**
GYAE40RR	GYAE40RRB		**40**	3.1496	1.538	0.8661	0.458	2 1/16	0.164	0.310	5/16 – 24	1.24	4000	8150
GYA110RR	GYA110RRB	209	1 5/8	**85**	**42**	**22**	**13.46**	**57.9**	**4.54**	**7.87**	**M8X1.25**	**0.54**	**20000**	**36000**
GYA111RR	GYA111RRB		1 11/16	3.3465	1.655	0.8661	0.530	2 9/32	0.179	0.310	5/16 – 24	1.18	4500	8150
GYA112RR	GYA112RRB		1 3/4											
GYAE45RR	GYAE45RRB		**45**											
GYA115RR	GYA115RRB	210	1 15/16	**90**	**44.3**	**22**	**13.46**	**62.7**	**4.44**	**9.02**	**M10X1.5**	**0.57**	**22700**	**39200**
GYA115RR2	GYA115RRB2		2	3.5433	1.746	0.8661	0.530	2 15/32	0.175	0.355	3/8 – 24	1.25	5100	8800
GYAE50RR	GYAE50RRB		**50**											
GYA200RR	GYA200RRB	211	2	**100**	**46.6**	**24**	**14.60**	**69.8**	**4.90**	**9.02**	**M10X1.5**	**0.58**	**28500**	**48000**
GYA203RR	GYA203RRB		2 3/16	3.9370	1.833	0.9449	0.575	2 3/4	0.193	0.355	3/8 – 24	1.27	6400	10800
GYAE55RR	GYAE55RRB		**55**											

[1]GYA103RR2 and GYA103RRB2 use 1/4 – 28 in. set screw.
NOTE: Bore tolerance is nominal to +0.013 mm, +0.0005 in.

LIGHT SERIES

RAL-NPPB NON-RELUBRICATABLE TYPES

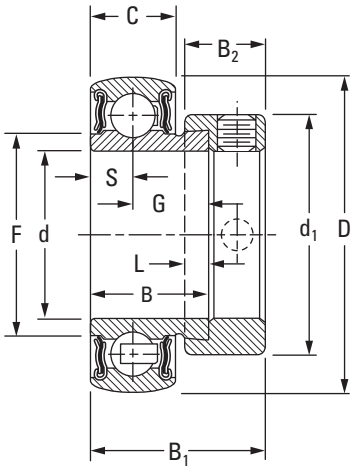
- RAL series are high-quality, compact, low-cost bearings and are intended for use in lightly loaded applications.
- RAL series are on extended inner-ring type with self-locking collars.
- Prelubricated RAL series incorporate the positive contact, land-riding R-seal. The seal has proved effective in the retention of lubricants and exclusion of foreign matter under extreme service conditions.
- RAL-NPPD-series bearings have spherical outside diameters providing unrestricted initial alignment.
- This bearing is used in housings with corresponding spherical inside surfaces.

Suggested shaft tolerances:

½ in. – 1 ¼ in., nominal to -0.013 mm, -0.0005 in.

To order, specify bearing number followed by "+ COL".

Example: RAL100NPPB + COL.



Bearing No.	Collar No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S	G	F	L	d_1	B_2	B_1	Brg. and Collar Wt.		Static Load Rating C_o	Extended Dynamic Load Rating C_E
			in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg**	lbs.	**N** lbs.	**N** lbs.
RAL008NPPB[1]	LS008K	202	½	**35** 1.3780	**15.88** ⅝	**11** 0.433	**5.502** 0.2116	**10.373** 0.4084	**20.07** 0.790	**4.0** 5/32	**25.4** 1	**11.1** 7/16	**23.8** 15/16	–	–	**3000** 680	**7500** 1700
RAL009NPPB	LS009K		9/16											–	–		
RAL010NPPB[1]	LS010K		⅝											**0.06**	0.13		
RAL012NPPB[1]	LS012K	9104	¾	**42** 1.6535	**16.67** 21/32	**12** 0.472	**6.000** 0.2362	**10.663** 0.4198	**25.15** 0.990	**3.2** 1/8	**29.8** 1 11/64	**11.1** 7/16	**24.6** 31/32	**0.09**	0.20	**4400** 1000	**10400** 2320
RAL013NPPB	LS013K	9105	13/16	**47** 1.8504	**17.46** 11/16	**12** 0.472	**6.000** 0.2362	**11.476** 0.4518	**29.67** 1.168	**4.0** 5/32	**36.1** 1 27/64	**11.9** 15/32	**25.4** 1	–	–	**4900** 1120	**11000** 2500
RAL014NPPB	LS014K		⅞											**0.11**	0.24		
RAL015NPPB	LS015K		15/16											–	–		
RAL100NPPB[1]	LS100K		1											**0.10**	0.22		
RAL101NPPB	LS101K	9106	1 1/16	**55** 2.1654	**18.27** 23/32	**13** 0.512	**6.500** 0.2559	**11.755** 0.4628	**36.32** 1.430	**4.0** 5/32	**42.5** 1 43/64	**11.9** 15/32	**26.2** 1 1/32	–	–	**6950** 1560	**14600** 3350
RAL102NPPB	LS102K		1 ⅛											**0.13**	0.29		
RAL103NPPB	LS103K		1 3/16											**0.13**	0.29		
RAL103NPPB2[1]	LS103K2		1 ¼											**0.13**	0.29		

[1]Also available with cylindrical O.D. Delete suffix B.
NOTE: Bore tolerance is nominal to +0.013 mm, +0.0005 in.

MEDIUM SERIES

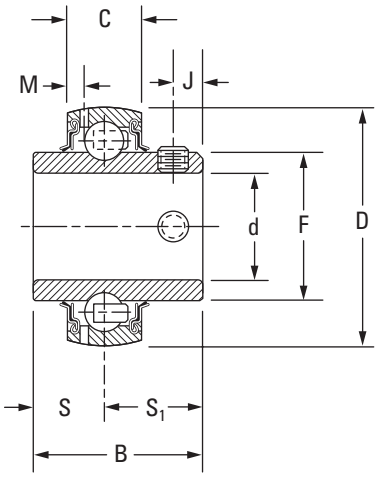
GYM-KRRB INSERTS SET SCREW LOCK

- This series is designed to offer extended bearing life despite demanding industrial environments.
- The insert features a full-width inner ring, providing extra support along the shaft.
- The extra support feature, coupled with a flexible nylon retainer, allows the inserts to operate for extended periods with undersized shafts or in misalignment conditions.
- The inserts are equipped with a three-piece seal, protecting against corrosion, contamination and fiber wrap.
- The inserts also include nylon-patch set screws, resisting set screw back-out and providing superior holding power in applications with severe vibration.

Suggested shaft tolerances:

1 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;

2 in. – 3 in., nominal to -0.025 mm, -0.0010 in.



Bearing No. Spherical O.D.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S	S_1	F	M	J	Set Screw Size	Brg. Wt.	Static Load Rating C_o	Extended Dynamic Load Rating C_E
		in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg** lbs.	**N** lbs.	**N** lbs.
GYM1100KRRB	206	1	**62** 2.4409	**38.10** 1.500	**18** 0.709	**15.88** 0.625	**22.22** 0.875	**40.31** 1.587	**3.96** 0.156	**7.62** 0.300	**M6 x 1** 1/4 – 28	**0.427** 0.94	**11100** 2500	**21800** 4900
GYM1103KRRB	207	1 3/16	**72** 2.8346	**42.87** 1.688	**19** 0.748	**17.48** 0.688	**25.40** 1.000	**46.18** 1.816	**3.68** 0.145	**7.82** 0.308	**M8 x 1.25** 5/16 – 24	**0.704** 1.55	**15100** 3400	**28500** 6400
GYM1107KRRB	208	1 7/16	**80** 3.1496	**49.22** 1.938	**21** 0.827	**19.05** 0.750	**30.17** 1.188	**52.27** 2.058	**4.06** 0.160	**8.00** 0.315	**M8 x 1.25** 5/16 – 24	**0.817** 1.80	**19600** 4400	**36300** 8150
GYM1108KRRB	209	1 1/2	**85** 3.3465	**49.22** 1.938	**22** 0.866	**19.05** 0.750	**30.17** 1.188	**52.27** 2.280	**4.55** 0.179	**8.00** 0.315	**M8 x 1.25** 5/16 – 24	**0.885** 1.95	**20000** 4500	**36300** 8150
GYM1111KRRB	210	1 11/16	**90** 3.5433	**51.59** 2.031	**22** 0.866	**19.05** 0.750	**32.54** 1.281	**62.84** 2.474	**4.70** 0.185	**10.00** 0.394	**M10 x 1.5** 3/8 – 24	**1.271** 2.80	**22700** 5100	**39200** 8800
GYM1112KRRB		1 3/4										**1.203** 2.65		
GYM1115KRRB	211	1 15/16	**100** 3.9370	**55.55** 2.187	**24** 0.945	**22.22** 0.875	**33.32** 1.312	**69.77** 2.747	**5.00** 0.197	**10.00** 0.394	**M10 x 1.5** 3/8 – 24	**1.634** 3.60	**28500** 6400	**48100** 10800
GY1200KRRB		2										**1.498** 3.30		
GYM1203KRRB	212	2 3/16	**110** 4.3307	**65.07** 2.562	**27** 1.063	**25.40** 1.000	**39.67** 1.562	**76.48** 3.011	**5.13** 0.202	**10.00** 0.394	**M10 x 1.5** 3/8 – 24	**2.225** 4.90	**35600** 8000	**58800** 13200
GY1204KRRB		2 1/4										**1.952** 4.30		
GYM1207KRRB	214	2 7/16	**125** 4.9213	**69.85** 2.750	**28** 1.102	**26.97** 1.062	**42.84** 1.687	**76.48** 3.422	**5.08** 0.200	**12.00** 0.472	**M12 x 1.75** 7/16 – 20	**2.996** 6.60	**43000** 9650	**69500** 15600
GYM1208KRRB		2 1/2										**2.860** 6.30		
GYM1211KRRB	215	2 11/16	**130** 5.1181	**77.80** 3.063	**29** 1.142	**33.32** 1.312	**44.45** 1.750	**91.92** 3.619	**5.56** 0.219	**12.00** 0.472	**M12 x 1.75** 7/16 – 20	**3.042** 6.70	**43600** 9800	**69500** 15600
GYM1215KRRB GYM1300KRRB	216	2 15/16 3	**140** 5.5118	**77.80** 3.063	**29** 1.142	**33.32** 1.312	**44.45** 1.750	**91.92** 3.619	**5.56** 0.219	**12.00** 0.472	**M12 x 1.75** 7/16 – 20	**3.087** 6.80	**53400** 12000	**80200** 18000

NOTE: Bore tolerance: 1/2 in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.
2 1/4 in. – 3 in., nominal to +0.015 mm, +0.0006 in.

HEAVY SERIES

GN-KRRB RELUBRICATABLE TYPES

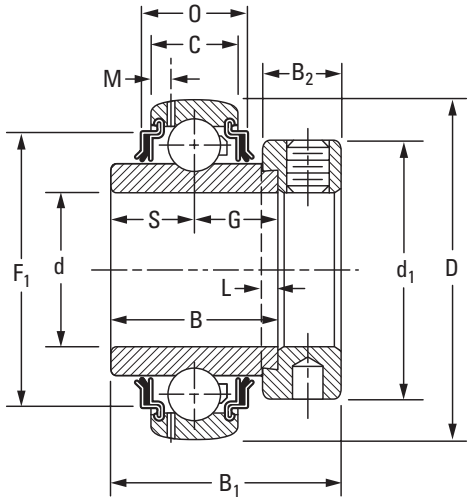
- The heavy series R-seal bearings are similar to the standard series and designed to withstand continuous, heavy or shock loads.
- This series has heavier-section 300-series bearings. They include a considerably thicker sealing member in the contact-type diaphragm seal.
- The design of the series ensures complete retention of the lubricant and positive exclusion of all contaminants.

Suggested shaft tolerances:

1 3/16 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 3 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify bearing number followed by "+ COL".

Example: GN303KRRB + COL.

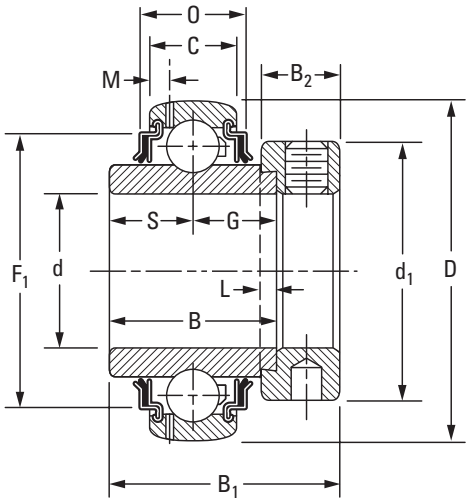


Bearing No.	Collar No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S	G	L	d_1	B_2	M	B_1	F_1	O	Brg. and Collar Wt.		Static Load Rating C_o	Extended Dynamic Load Rating C_E
			in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	kg	lbs.	N lbs.	N lbs.
GN103KRRB	SN103K	306	1 3/16	**72** 2.8346	**36.51** 1 7/16	**20** 0.787	**17.5** 11/16	**19.1** 3/4	**4.0** 5/32	**49.2** 1 15/16	**17.5** 11/16	**3.61** 0.142	**50.0** 1 31/32	**60.17** 2.369	**23.50** 0.925	**0.553**	1.22	**15600** 3550	**33500** 7500
GN104KRRB	SN104K	307	1 1/4	**80** 3.1496	**38.10** 1 1/2	**22** 0.866	**18.3** 23/32	**19.8** 25/32	**4.0** 5/32	**55.6** 2 3/16	**17.5** 11/16	**3.96** 0.156	**51.6** 2 1/32	**67.01** 2.638	**27.00** 1.063	**0.762**	1.68	**20000** 4500	**40500** 9150
GN105KRRB	SN105K		1 5/16													**0.744**	1.64		
GN106KRRB	SN106K		1 3/8													**0.726**	1.60		
GN107KRRB	SN107K		1 7/16													**0.708**	1.56		
GN108KRRB[1]	SN108K	308	1 1/2	**90** 3.5433	**41.28** 1 5/8	**25** 0.984	**19.8** 25/32	**21.4** 27/32	**4.8** 3/16	**63.5** 2 1/2	**20.6** 13/16	**4.62** 0.182	**57.2** 2 1/4	**75.06** 2.955	**26.67** 1.05	**1.152**	2.54	**24500** 5500	**49000** 11000
GN110KRRB	SN110K	309	1 5/8	**100** 3.9370	**42.86** 1 11/16	**27** 1.063	**19.8** 25/32	**23.0** 29/32	**4.8** 3/16	**69.9** 2 3/4	**20.6** 13/16	**5.00** 0.197	**58.7** 2 5/16	**82.58** 3.251	**28.52** 1.123	**1.656**	3.65	**30000** 6700	**58500** 13200
GN111KRRB	SN111K		1 11/16													**1.456**	3.21		
GN112KRRB[1]	SN112K		1 3/4													**1.388**	2.95		
GN114KRRB	SN114K	310	1 7/8	**110** 4.3307	**49.21** 1 15/16	**29** 1.142	**24.6** 31/32	**24.6** 31/32	**4.8** 3/16	**75.8** 2 63/64	**22.2** 7/8	**5.36** 0.211	**66.7** 2 5/8	**82.87** 3.654	**30.86** 1.215	**1.973**	4.35	**35500** 8000	**68000** 15300
GN115KRRB[1]	SN115K		1 15/16													**1.905**	4.20		
GN200KRRB	SN200K	311	2	**120** 4.7244	**55.56** 2 3/16	**31** 1.220	**27.8** 1 3/32	**27.8** 1 3/32	**4.8** 3/16	**82.6** 3 1/4	**22.2** 7/8	**5.49** 0.216	**73.0** 2 7/8	**101.78** 4.007	**37.47** 1.475	**2.132**	4.70	**41500** 9300	**80000** 18000
GN203KRRB	SN203K		2 3/16													**2.368**	5.22		

[1]Also available with cylindrical O.D. Delete suffix B. Example: GN108KRR.
NOTE: Bore tolerances: 1 3/16 in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.;
2 1/4 in. – 3 3/16 in., nominal to +0.015 mm, +0.0006 in.

Continued on next page.

GN-KRRB RELUBRICATABLE TYPES – *continued*



Continued from previous page.

Bearing No.	Collar No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S	G	L	d_1	B_2	M	B_1	F_1	O	Brg. and Collar Wt.		Static Load Rating C_o	Extended Dynamic Load Rating C_E
			in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg**	lbs.	**N** lbs.	**N** lbs.
GN207KRRB	SN207K	312	2 7/16	**130** 5.1181	**61.91** 2 7/16	**33** 1.299	**31.0** 1 7/32	**31.0** 1 7/32	**6.4** 1/4	**88.9** 3 1/2	**23.8** 15/16	**5.84** 0.230	**79.4** 3 1/8	**108.52** 4.312	**38.99** 1.535	**2.839**	6.26	**48000** 10800	**90000** 20400
GN211KRRB	SO211K	314	2 11/16	**150** 5.9055	**68.26** 2 11/16	**37** 1.457	**34.1** 1 11/32	**34.1** 1 11/32	**6.4** 1/4	**101.6** 4	**27.0** 1 1/16	**6.73** 0.265	**88.9** 3 1/2	**126.31** 4.973	**44.96** 1.770	**4.509**	9.94	**63000** 14300	**116000** 26000
GN215KRRB	SN215K	315	2 15/16	**160** 6.2992	**74.61** 2 15/16	**39** 1.535	**37.3** 1 15/32	**37.3** 1 15/32	**6.4** 1/4	**112.7** 4 7/16	**31.8** 1 1/4	**6.48** 0.255	**100.0** 3 15/16	**133.02** 5.273	**51.13** 2.013	**5.634**	12.42	**71000** 16000	**125000** 28500
GN303KRRB	SN303K	316	3 3/16	**170** 6.6929	**80.96** 3 3/16	**41** 1.614	**40.5** 1 19/32	**40.5** 1 19/32	**6.4** 1/4	**119.1** 4 11/16	**31.8** 1 1/4	**7.26** 0.286	**106.4** 4 3/16	**142.82** 5.623	**51.05** 2.010	**7.126**	15.71	**80000** 18000	**137000** 30500
GN307KRRB	SN307K	318	3 7/16	**190** 7.4803	**87.31** 3 7/16	**45** 1.772	**42.1** 1 21/32	**42.1** 1 21/32	**7.9** 5/16	**133.4** 5 1/4	**36.5** 1 7/16	**8.18** 0.322	**115.9** 4 9/16	**161.37** 6.353	**52.63** 2.072	**9.190**	20.26	**98000** 22400	**156000** 33500
GN315KRRB	SN315K	320	3 15/16	**215** 8.4646	**100.01** 3 15/16	**49** 1.929	**50.0** 1 31/32	**50.0** 1 31/32	**7.9** 5/16	**146.1** 5 3/4	**36.5** 1 7/16	**7.82** 0.308	**129.6** 5 1/16	**182.85** 7.199	**59.36** 2.337	**12.233**	26.97	**132000** 22900	**193000** 43000

[1]Also available with cylindrical O.D. Delete suffix B. Example: GN108KRR.
NOTE: Bore tolerances: 1 3/16 in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.;
2 1/4 in. – 3 3/16 in., nominal to +0.015 mm, +0.0006 in.

GN-KLLB SPECIAL DUTY

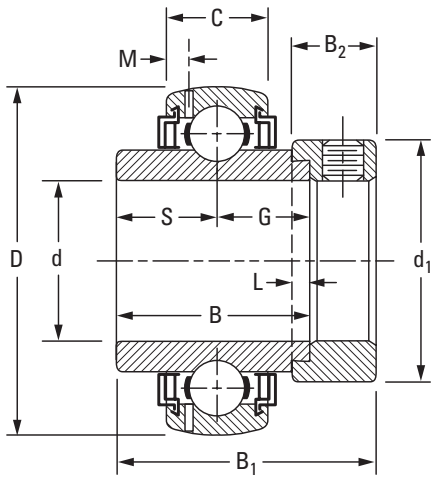
- The GN-KLLB-series ball bearings are heavy and are similar in design to the standard LL (Mechani-Seal) wide-inner-ring ball bearings.
- The GN-KLLB series have heavier-section 300-series bearings.
- Unlike standard series, the seal in this heavy series is a three-piece construction and includes two fixed inner members and an external rotation slinger.

Suggested shaft tolerances:

1/8 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify bearing number followed by "+ COL".

Example: GN104KLLB + COL.



Bearing No.	Collar No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C N-KLL	Ring Widths Outer C GN-KLLB	S	G	L	d_1	B_2	M	B_1	Brg. and Collar Wt.		Static Load Rating C_o	Extended Dynamic Load Rating C_E
			in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	kg	lbs.	N lbs.	N lbs.
GN102KLLB	SN102K	306	1 1/8	**72**	**36.51**	**19**	**20**	**17.46**	**19.05**	**3.9**	**49.21**	**17.46**	**3.61**	**1.97**	**0.554**	1.22	**15800**	**33500**
GN103KLLB	SN103K		1 3/16	2.8346	1 7/16	0.7480	0.7874	11/16	3/4	5/32	1 15/16	11/16	0.142	1 31/32	**0.604**	1.33	3550	7500
GN104KLLB	SN104K	307	1 1/4	**80**	**38.10**	**21**	**22**	**18.30**	**19.84**	**3.9**	**55.60**	**17.46**	**3.96**	**51.59**	**0.649**	1.43	**21200**	**40500**
GN106KLLB	SN106K		1 3/8	3.1496	1 1/2	0.8268	0.8661	23/32	25/32	5/32	2 3/16	11/16	0.156	2 1/32	**0.699**	1.54	4750	9150
GN107KLLB	SN107K		1 7/16												**0.731**	1.61		
GN108KLLB	SN108K	308	1 1/2	**90**	**41.28**	**23**	**25**	**19.84**	**21.43**	**4.8**	**63.50**	**20.64**	**4.62**	**57.15**	**1.153**	2.54	**26100**	**49000**
				3.5433	1 5/8	0.9055	0.9843	25/32	27/32	3/16	2 1/2	13/16	0.182	2 1/4			5850	11000
GN111KLLB	SN111K	309	1 11/16	**100**	**42.86**	**25**	**27**	**19.84**	**23.02**	**4.8**	**69.85**	**20.64**	**4.80**	**58.74**	**1.457**	3.21	**31600**	**58500**
GN112KLLB	SN112K		1 3/4	3.9370	1 11/16	0.9843	1.0630	25/32	29/32	3/16	2 3/4	13/16	0.189	2 5/16	**1.657**	3.65	7100	13200
GN115KLLB	SN115K	310	1 15/16	**110**	**50.00**	**27**	**29**	**24.60**	**24.60**	**4.8**	**76.20**	**22.23**	**5.16**	**66.68**	**1.907**	4.20	**37900**	**68000**
				4.3307	1 31/32	1.0630	1.1417	31/32	31/32	3/16	3	7/8	0.203	2 5/8			8500	15300
GN203KLLB	SN203K	311	2 3/16	**120**	**55.56**	**29**	**31**	**27.80**	**29.37**	**4.8**	**82.55**	**22.23**	**5.49**	**73.02**	**2.370**	5.22	**43600**	**80000**
				4.7244	2 3/16	1.1417	1.2205	1 3/32	1 5/32	3/16	3 1/4	7/8	0.216	2 7/8			9800	18000
GN207KLLB	SN207K	312	2 7/16	**130**	**61.91**	**31**	**33**	**30.96**	**30.96**	**6.4**	**88.90**	**23.80**	**5.84**	**79.38**	**2.841**	6.26	**51700**	**90000**
				5.1181	2 7/16	1.2205	1.2992	1 7/32	1 7/32	1/4	3 1/2	15/16	0.230	3 1/8			11600	20400
GN211KLLB	SN211K	314	2 11/16	**150**	**68.26**	**35**	**37**	**34.13**	**34.13**	**6.4**	**101.60**	**26.99**	**6.73**	**88.90**	**4.512**	9.94	**66800**	**116000**
				5.9055	2 11/16	1.3780	1.4567	1 11/32	1 11/32	1/4	4	1 1/16	0.265	3 1/2			15000	26000
GN215KLLB	SN215K	315	2 15/16	**160**	**74.61**	–	**39**	**37.30**	**37.30**	**6.4**	**112.71**	**31.75**	**6.48**	**100.01**	**5.638**	12.42	**75700**	**125000**
				6.2992	2 15/16		1.5354	1 15/32	1 15/32	1/4	4 7/16	1 1/4	0.255	3 15/16			17000	28500

NOTE: Bore tolerance: 1/2 in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.
2 7/16 in. – 2 15/16 in., nominal to +0.015 mm, +0.0006 in.

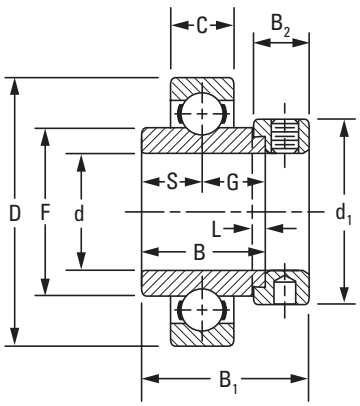
SMN A AND B TYPES/MUOA-B INSERTS[1]

- SMN series types A and B have the same ring tolerances and corner radii as equivalent 300-series single-row radial ball bearings.
- Type A has cylindrical outside diameters; type B has spherical outside diameters. The letter B appears on the outer ring only.
- The bearings are not prelubricated.

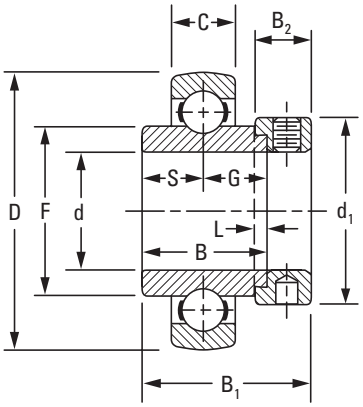
Suggested shaft tolerances:

5/8 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 3/16 in. – 3 15/16 in., nominal to -0.025 mm, -0.0010 in.
For larger sizes, contact your Timken engineer.

To order, specify bearing number followed by "+ COL".
Example: SMN102K + COL.



Type A

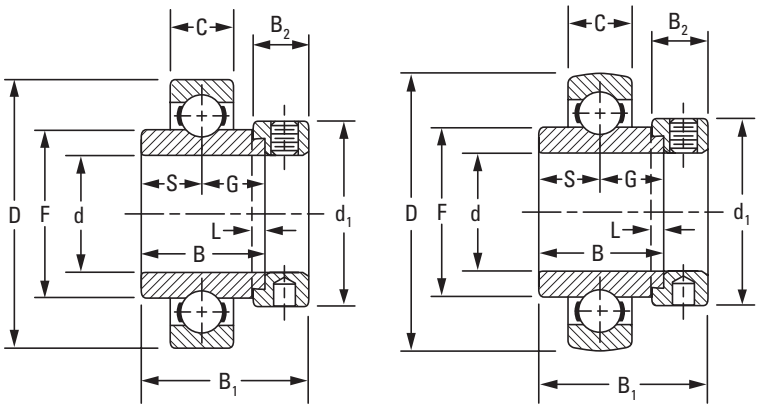


Type B

Bearing No. A Type[2]	Bearing No. B Type	Collar No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S	G	F	L	d_1	B_2	B_1	Brg. and Collar Wt. kg	Brg. and Collar Wt. lbs.	Static Load Rating C_o	Extended Dynamic Load Rating C_E
				in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.			N lbs.	N lbs.
SMN010K	SMN010KB	SN010K	303	5/8	**47**	**34.13**	**14**	**17.07**	**17.07**	**25.93**	**4.00**	**34.93**	**15.88**	**46.05**	**0.240**	0.53	**6550**	**15000**
SMN011K	SMN011KB	SN011K		11/16	1.8504	1 11/32	0.5512	43/64	43/64	1.021	5/32	1 3/8	5/8	1 13/16	**0.218**	0.48	1460	3350
SMN012K	SMN012KB	SN012K	304	3/4	**52** 2.0472	**34.93** 1 3/8	**15** 0.5906	**15.90** 5/8	**19.05** 3/4	**29.24** 1.151	**4.00** 5/32	**36.51** 1 7/16	**15.88** 5/8	**46.83** 1 27/32	**0.227**	0.50	**7800** 1760	**17600** 4000
SMN013K	SMN013KB	SN013K	305	13/16	**62** 2.4409	**34.93** 1 3/8	**17** 0.6693	**16.67** 21/32	**18.26** 23/32	**36.50** 1.437	**4.00** 5/32	**42.86** 1 11/16	**15.88** 5/8	**46.83** 1 27/32	**0.445**	0.98	**12200** 2750	**26000** 5850
SMN014K	SMN014KB	SN014K		7/8											**0.431**	0.95		
SMN015K	SMN015KB	SN015K		15/16											**0.413**	0.91		
SMN100K	SMN100KB	SN100K		1											**0.404**	0.86		
SMN101K	SMN101KB	SN101K	306	1 1/16	**72** 2.8346	**36.51** 1 7/16	**19** 0.7480	**17.46** 11/16	**19.05** 3/4	**43.23** 1.702	**4.00** 5/32	**49.21** 1 15/16	**17.46** 11/16	**50.00** 1 31/32	**0.608**	1.34	**15600** 3550	**33500** 7500
SMN102K	SMN102KB	SN102K		1 1/8											**0.585**	1.29		
SMN103K	SMN103KB	SN103K		1 3/16											**0.567**	1.25		
SMN104K	SMN104KB	SN104K	307	1 1/4	**80** 3.1496	**38.10** 1 1/2	**21** 0.8268	**18.26** 23/32	**19.84** 25/32	**48.95** 1.927	**4.00** 5/32	**55.60** 2 3/16	**17.46** 11/16	**51.59** 2 1/32	**0.803**	1.77	**21200** 4750	**40500** 9150
SMN105K	SMN105KB	SN105K		1 15/16											**0.757**	1.67		
SMN106K	SMN106KB	SN106K		1 3/8											**0.726**	1.60		
SMN107K	SMN107KB	SN107K		1 7/16											**0.721**	1.56		
SMN108K	SMN108KB	SN108K	308	1 1/2	**90** 3.5433	**41.28** 1 5/8	**23** 0.9055	**19.84** 25/32	**21.43** 27/32	**55.50** 2.185	**4.80** 3/16	**63.50** 2 1/2	**20.64** 13/16	**57.15** 2 1/4	**1.089**	2.40	**26100** 5850	**49000** 11000
SMN109K	SMN109KB	SN109K		1 9/16											**1.025**	2.26		
SMN110K	SMN110KB	SN110K	309	1 5/8	**100** 3.9370	**42.86** 1 11/16	**25** 0.9843	**19.84** 25/32	**23.02** 29/32	**62.05** 2.443	**4.80** 3/16	**69.90** 2 3/4	**20.64** 13/16	**58.74** 2 5/16	**1.433**	3.16	**31600** 7100	**58500** 13200
SMN111K	SMN111KB	SN111K		1 11/16											**1.361**	3.00		
SMN112K	SMN112KB	SN112K		1 3/4											**1.361**	3.00		
SMN113K	SMN113KB	SN113K	310	1 13/16	**110** 4.3307	**49.21** 1 15/16	**27** 1.0630	**24.61** 31/32	**24.61** 31/32	**68.78** 2.708	**4.80** 3/16	**76.20** 3	**22.20** 7/8	**66.68** 2 5/8	**1.896**	4.18	**37900** 8500	**68000** 15300
SMN114K	SMN114KB	SN114K		1 7/8											**1.805**	3.98		
SMN115K	SMN115KB	SN115K		1 15/16											**1.737**	3.83		

[1]See page A-159.
[2]Order as MUOA assembly suggested.
[3]For applications where thrust load exceeds 60 percent of radial load, consult your Timken engineer.
NOTE: Bore tolerance: 5/8 in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.
3 1/4 in. – 4 3/16 in., nominal to +0.018 mm, +0.0007 in.
4 7/16 in. – 4 15/16 in., nominal to +0.020 mm, +0.0008 in.

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Bearing No.		Collar No.	Basic Outer-Ring Size	Shaft Dia.	O.D.	Ring Widths									Brg. and Collar Wt.		Static Load Rating	Extended Dynamic Load Rating
A Type[2]	B Type					Inner	Outer	S	G	F	L	d_1	B_2	B_1				
				d	D	B	C								kg	lbs.	C_o	C_E
				in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.			N lbs.	N lbs.
SMN200K	SMN200KB	SN200K	311	2	**120** 4.7244	**55.56** 2 3/16	**29** 1.1417	**27.78** 1 3/32	**27.78** 1 3/32	**75.01** 2.953	**4.80** 3/16	**82.55** 3 1/4	**22.20** 7/8	**73.03** 2 7/8	**2.413**	5.32		
SMN201K	SMN201KB	SN201K		2 1/16											**2.395**	5.28	**43600** 9800	**80000** 18000
SMN202K	SMN202KB	SN202K		2 1/8											**2.331**	5.14		
SMN203K	SMN203KB	SN203K		2 3/16											**2.209**	4.87		
SMN204K	SMN204KB	SN204K	312W	2 1/4	**130** 5.1181	**61.91** 2 7/16	**31** 1.2205	**31.00** 1 7/32	**31.00** 1 7/32	**81.53** 3.210	**6.40** 1/4	**88.90** 3 1/2	**23.81** 15/16	**79.38** 3 1/8	**3.084**	6.80		
SMN205K	SMN205KB	SN205K		2 5/16											**3.012**	6.64	**51480** 11700	**89800** 20400
SMN206K	SMN206KB	SN206K		2 3/8											**2.908**	6.41		
SMN207K	SMN207KB	SN207K		2 7/16											**2.812**	6.20		
SMN211K	SMN211KB	SO211K	314	2 11/16	**150** 5.9055	**2.69** 2 11/16	**35** 1.3780	**34.13** 1 11/32	**34.13** 1 11/32	**94.78** 3.731	**6.40** 1/4	**101.60** 4	**26.99** 1 1/16	**92.08** 3 5/8	**4.205**	9.27	**66800** 15000	**116000** 26000
SMN215K	SMN215KB	SN215K	315	2 15/16	**160** 6.2992	**74.61** 2 15/16	**37** 1.4567	**37.31** 1 15/32	**37.31** 1 15/32	**100.38** 3.952	**6.40** 1/4	**112.71** 4 7/16	**31.75** 1 1/4	**100.01** 3 15/16	**5.856**	12.91	**75700** 17000	**125000** 28500
SMN303K	SMN303KB	SN303K	316	3 3/16	**170** 6.6929	**80.96** 3 3/16	**39** 1.5354	**40.48** 1 19/32	**40.48** 1 19/32	**106.91** 4.209	**6.40** 1/4	**119.06** 4 11/16	**31.75** 1 1/4	**106.36** 4 3/16	**6.704**	14.78	**86000** 19300	**137000** 30500
SMN307K	SMN307KB	SN307K	318	3 7/16	**190** 7.4803	**87.31** 3 7/16	**43** 1.6929	**43.66** 1 23/32	**43.66** 123/32	**120.12** 4.729	**7.94** 5/16	**133.35** 5 1/4	**36.51** 1 7/16	**115.89** 4 9/16	**9.984**	22.01	**106900** 24000	**156000** 35500
SM0311W-BR[3]	SM0311WB-BR[3]	SO311K	319	3 11/16	**200** 7.8740	**93.66** 3 11/16	**45** 1.7717	**38.89** 1 17/32	**54.77** 2 5/32	**126.67** 4.987	**7.94** 5/16	**139.70** 5 1/2	**36.51** 1 7/16	**122.24** 4 13/16	**11.090**	24.45	**173700** 39000	**224000** 50000
SMN315K	SMN315KB	SN315K	320	3 15/16	**215** 8.4646	**100.01** 3 15/16	**47** 1.8504	**50.00** 1 31/32	**50.00** 131/32	**134.77** 5.306	**7.94** 5/16	**146.05** 5 3/4	**36.51** 1 7/16	**128.59** 5 1/16	**13.068**	28.81	**140300** 31500	**193000** 43000
SMN403W-BR[3]	SMN403WB-BR	SN403K	321	4 3/16	**225** 8.8583	**104.78** 4 1/8	**49** 1.9291	**48.42** 1 29/32	**56.36** 2 7/32	**141.22** 5.560	**7.94** 5/16	**157.16** 6 3/16	**42.86** 1 11/16	**139.70** 5 1/2	**15.508**	34.19	**202700** 45500	**250000** 56000
SMN407W-BR[3]	SMN407WB-BR[3]	SN407K	322	4 7/16	**240** 9.4488	**106.36** 4 3/16	**50** 1.9685	**49.21** 1 15/16	**57.15** 2 1/4	**142.75** 5.920	**7.94** 5/16	**165.10** 6 1/2	**42.86** 1 11/16	**141.29** 5 9/16	**19.051**	42.00	**245000** 55000	**285100** 64000
SMN415W-BR[3]	SMN415WB-BR[3]	SN415K	326	4 15/16	**280** 11.0236	**106.36** 4 3/16	**59** 2.3228	**53.98** 2 1/8	**61.91** 2 7/16	**176.56** 6.951	**7.94** 5/16	**206.38** 8 1/8	**42.86** 1 11/16	**150.81** 5 15/16	**29.660**	65.39	**327400** 73500	**347400** 78000

[1]See page A-159.
[2]Order as MUOA assembly suggested.
[3]For applications where thrust load exceeds 60 percent of radial load, consult your Timken engineer.
NOTE: Bore tolerance: 5/8 in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.
3 1/4 in. – 4 3/16 in., nominal to +0.018 mm, +0.0007 in.
4 7/16 in. – 4 15/16 in., nominal to +0.020 mm, +0.0008 in.

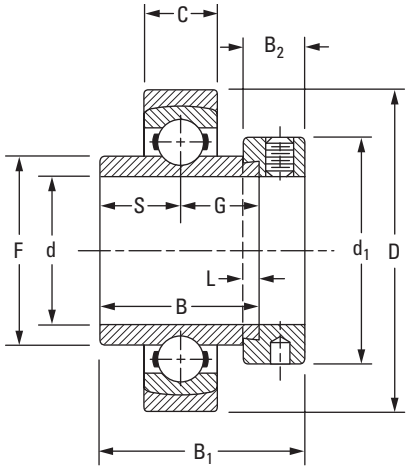
SMN-S SERIES

- The SMN-S heavy-series construction permits its inner assembly to swivel in the outer aligning ring.
- Unrestricted self-alignment is achieved, allowing the inner ring to become square and true with the shaft and assembly.
- The external S-ring is uniquely ground and closely matched to its respective outer-bearing ring so that the S-ring of one bearing will not fit the outer ring of another bearing.
- This bearing has the basic 300-series load capacities.
- The bearings are not prelubricated.

Suggested shaft tolerances:

1 3/16 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 3 15/16 in., nominal to -0.025 mm, -0.0010 in.
Greater than 3 15/16 in., consult your Timken engineer.

To order, specify bearing number followed by "+ COL".
Example: SMN103KS + COL.



Bearing No.	Collar No.	Basic Outer-Ring Size	Shaft Dia. d	O.D. D	Ring Widths Inner B	Ring Widths Outer C	S	G	F	L	d_1	B_2	B_1	Brg. and Collar Wt.	Static Load Rating C_o	Extended Dynamic Load Rating C_E
			in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	kg lbs.	N lbs.	N lbs.
SMN103KS	SN103K	306	1 3/16	80 3.1496	36.51 1 7/16	19 0.7480	17.50 11/16	19.10 3/4	43.23 1.702	4.0 5/32	49.20 1 15/16	17.50 11/16	50.00 1 31/32	0.654 1.44	15600 3550	33500 7550
SMN107KS	SN107K	307	1 7/16	88 3.4646	38.10 1 1/2	21 0.8268	18.30 23/32	19.80 25/32	48.95 1.927	4.0 5/32	55.60 2 3/16	17.50 11/16	51.60 2 1/32	0.849 1.87	21200 4750	40500 9150
SMN108KS	SN108KT	308	1 1/2	100 3.9370	41.28 1 5/8	23 0.9055	19.80 25/32	21.40 27/32	55.50 2.185	4.8 3/16	63.50 2 1/2	20.60 13/16	57.20 2 1/4	1.344 2.96	26100 5850	49000 11000
SMN111KS	SN111K	309	1 11/16	110 4.3307	42.86 1 11/16	25 0.9843	19.80 25/32	23.00 29/32	62.05 2.443	4.8 3/16	69.90 2 3/4	20.60 13/16	58.70 2 5/16	1.693 3.73	31600 7100	58500 13200
SMN115KS	SN115K	310	1 15/16	120 4.7244	49.21 1 15/16	27 1.0630	24.60 31/32	24.60 31/32	68.78 2.708	4.8 3/16	76.20 3	22.20 7/8	66.70 2 5/8	2.147 4.73	37900 8500	68000 15300
SMN203KS	SN203K	311	2 3/16	130 5.1181	55.56 2 3/16	29 1.1417	27.80 1 3/32	27.80 1 3/32	75.01 2.953	4.8 3/16	82.60 3 1/4	22.20 7/8	73.00 2 7/8	2.769 6.10	43600 9800	80000 18000
SMN207KS	SN207K	312	2 7/16	145 5.7087	61.91 2 7/16	31 1.2205	31.00 1 7/32	31.00 1 7/32	81.53 3.210	6.4 1/4	88.90 3 1/2	23.80 15/16	79.40 3 1/8	3.405 7.50	51700 11600	90000 20400
SMN211KS	SO211K	314	2 11/16	165 6.4961	68.26 2 11/16	35 1.3780	34.10 1 11/32	34.10 1 11/32	94.70 3.731	6.4 1/4	101.60 4	27.00 1 1/16	92.10 3 5/8	5.185 11.42	66800 15000	116000 26000
SMN215KS	SN215K	315	2 15/16	175 6.8898	74.61 2 15/16	37 1.4567	37.30 1 15/32	37.30 1 15/32	100.38 3.952	6.4 1/4	112.70 4 7/16	31.80 1 1/4	100.00 3 15/16	6.456 14.22	75700 17000	125000 28500
SMN303KS	SN303K	316	3 3/16	190 7.4803	80.96 3 3/16	39 1.5354	40.50 1 19/32	40.50 1 19/32	106.91 4.209	6.4 1/4	119.10 4 11/16	31.80 1 1/4	106.40 4 3/16	8.040 17.71	86000 19300	137000 30500
SMN307KS	SN307K	318	3 7/16	210 8.2677	87.31 3 7/16	43 1.6929	43.70 1 23/32	43.70 1 23/32	120.12 4.729	7.9 5/16	133.40 5 1/4	36.50 1 7/16	115.90 4 9/16	1.790 25.97	106900 24000	156000 35500
SMO311WS-BR	SO311K	319	3 11/16	220 8.6608	93.66 3 11/16	45 1.7680	38.89 1 17/32	54.77 2 5/32	126.53 4.982	7.94 5/16	139.70 5 1/2	36.51 1 7/16	122.24 4 13/16	16.300 33.00	166000 37500	224000 50000
SMN315KS	SN315K	320	3 15/16	235 9.2520	100.01 3 15/16	47 1.8504	50.00 1 31/32	50.00 1 31/32	134.77 5.306	7.9 5/16	146.00 5 3/4	36.50 1 7/16	128.60 5 1/16	15.822 34.85	140300 31500	193000 43000
SMN407WS-BR[1]	SN407K	322	4 7/16	265 10.4331	106.36 4 3/16	50 1.9685	49.20 1 15/16	57.20 2 1/4	150.37 5.920	7.9 5/16	168.30 6 1/2	42.90 1 11/16	141.30 5 9/16	21.465 47.28	245000 55000	280000 63000
SMN415WS-BR[1]	SN415K	326	4 15/16	300 11.8110	115.89 4 9/16	59 2.3228	54.00 2 1/8	61.90 2 7/16	176.56 6.951	7.9 5/16	206.40 8 1/8	42.90 1 11/16	150.80 5 15/16	33.773 74.39	327400 73500	345000 78000

[1]For applications where thrust load exceeds 60 percent of radial load, consult your Timken engineer.
NOTE: Bore tolerance: 15/16 in. – 2 3/16 in., nominal to +0.013 mm, +0.0005 in.
2 1/4 in. – 3 3/16 in., nominal to +0.015 mm, +0.0006 in.
3 1/4 in. – 4 3/16 in., nominal to +0.018 mm, +0.0007 in.
4 7/16 in. – 4 15/16 in., nominal to +0.020 mm, +0.0008 in.

BALL BEARING HOUSED UNITS

Timken® housed units are available in a wide variety of types and sizes to accommodate a complete range of operating conditions.

- **Sizes:** 12.7 mm – 125.4 mm (1/2 in. – 4 15/16 in.). Size range is dependent upon duty series.
- **Industries and applications:** Agriculture, food processing, conveyors, fans and blowers.
- **Features:** Most popular design features cast-iron housing. Other material options include malleable iron, polymer, pressed-steel or rubber.
- **Benefits:** Combines bearing, housing, seal and locking system into one device for easy installation. Operates even when the shaft is not perfectly aligned with the mounting surface.



Nomenclature A-65
Introduction A-66

CAST-IRON HOUSED UNITS
RAK, TAK, LAK Industrial Series A-69
YAK Industrial-Series Set Screw Units A-71
VAK Standard Series A-72
SAK Standard Series A-73
RAS, TAS, LAS Industrial Series A-74
RASC Industrial-Series Concentric Collar A-76
YAS Industrial-Series Set Screw Units A-77
VAS Standard Series A-78
SAS Standard Series A-79
RAKH Industrial Series A-80
RAKHL Expansion Series A-81
YASM Medium-Duty Series Set Screw Lock A-82
STB Series A-83
VTB Series A-84
RAO, LAO Heavy Series A-85
RSA, LSA Industrial Series A-86
RSAO, LSAO Heavy Series A-88
SAL Industrial Series, Fixed and Floating Types A-89
SAOL Heavy Series, Fixed and Floating Types A-90
DRNR Industrial Series A-92

CAST-IRON FLANGED UNITS
RCJ, TCJ, LCJ Industrial Series A-93
RCJC Industrial-Series Concentric Collar A-95
YCJ Industrial Set Screw Series A-96
VCJ Standard Series A-98
SCJ Standard Series A-99
RCJO, LCJO Heavy Series A-100
YCJM Medium-Duty Series Set Screw Lock A-101
YCJTM Medium-Duty Series Set Screw Lock A-102
RCJT, TCJT, LCJT Industrial Series A-103
RCJTC Industrial-Series Concentric Collar A-104
VCJT Standard Series A-105
YCJT Industrial Set Screw Series A-106
SCJT Standard Series A-107
FLCT Standard Series A-108
RFC Industrial Piloted-Series Concentric Collar A-109
RC Series A-110

MALLEABLE-IRON FLANGED UNITS
GVFD, GVFDR Relubricatable Series –
VFD, VFDR Non-Relubricatable Series A-111
GRFD, GRFDR Relubricatable Series –
RFD, RFDR Non-Relubricatable Series A-112

MALLEABLE-IRON FLANGED UNITS – *continued*
GVFTD, GVFTDR Relubricatable Series –
VFTD, VFTDR Non-Relubricatable Series A-113
GRFTD, GRFTDR Relubricatable Series –
RFTD, RFTDR Non-Relubricatable Series A-114

PRESSED-STEEL HOUSED UNITS
PBS Series A-115
PB Series – RPB Series A-116

PRESSED-STEEL FLANGED UNITS
VFMST Series A-118
LFST Series A-119

PRESSED-STEEL FLANGETTE UNITS
RR Flangette Unit A-120
RA Flangette Unit A-122
RAT, RRT Two-Bolt Flangette Units A-124
RATR, RRTR Triangle Flangette Units A-126
GRA, GRR Relubricatable Flangette Units A-128

RUBBER CARTRIDGES
RCSM, RCR, CR Series A-130
RABR HVAC Special Series A-131

TAKE-UP UNITS
NLTU Series Side-Mounted, Pressed-Steel A-132
TU Series Top-Mounted, Cast-Iron A-133
RTU Industrial Series A-134
YTU Industrial Series A-135
VTU Standard Series A-136
TTU Industrial Series A-137

TIMKEN® SURVIVOR® PS SERIES A-138
KAK/S Series A-139
KJC Series A-140
KCJT and KTB Series A-141

TIMKEN® SURVIVOR® PT SERIES A-142
YAK/S Series A-143
YJC Series A-144
YJCT Series A-145
YTB and YFB Series A-146
RAK/S Series A-147
RCJ Series A-148
RCJT and RTB Series A-149

TIMKEN® SURVIVOR® NT SERIES A-150
YJC and YJCT Series A-151
RAK/S Series A-152
RCJ Series A-153
RCJT Series A-154
RTU Series A-155

MISCELLANEOUS HOUSED UNITS
Idler Pulley Units A-156
Roller Chain Idler Sprockets A-158

REPLACEMENT BEARINGS
Housed Unit Replacement Chart A-159

MACHINE UNITS A-161

TIMKEN® BALL BEARING HOUSED UNIT SAFETY END CAPS MAKE WORKPLACE PROTECTION A SNAP A-162

NOMENCLATURE

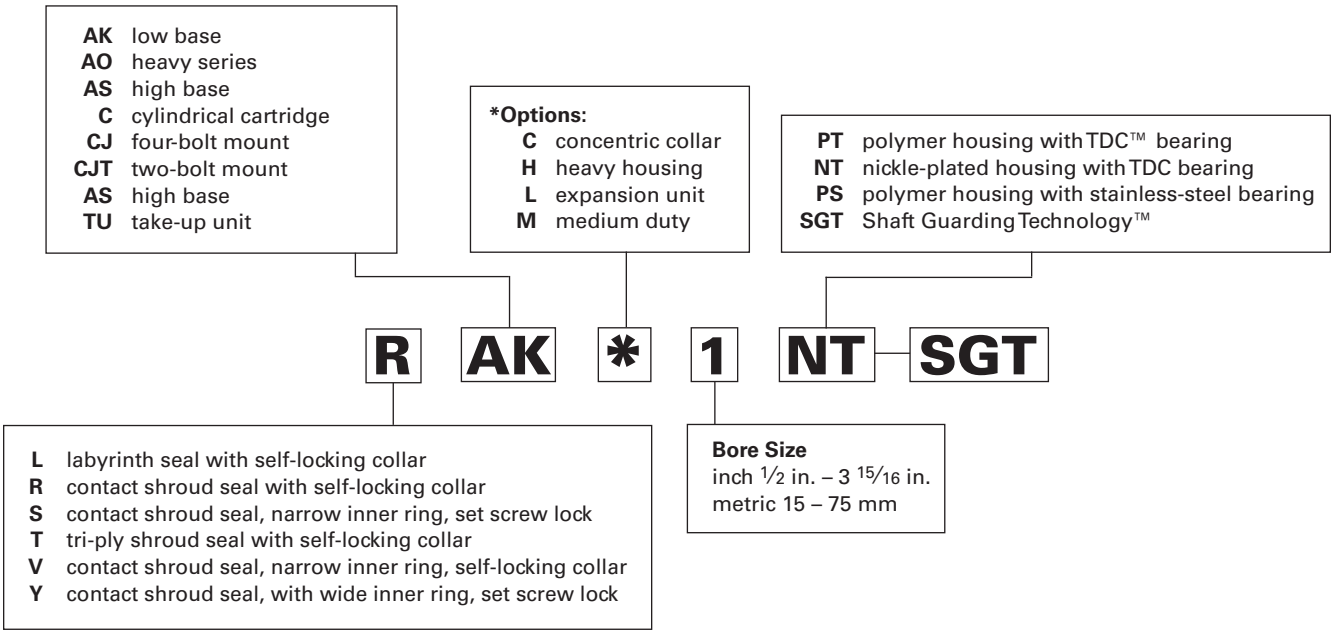


Fig. A-19. Wide-inner-ring ball bearing housed unit nomenclature.

INTRODUCTION

Ball bearing housed units are available in a wide variety of types and sizes to accommodate a complete range of operating conditions.

These units generally have cast-iron housings and mount on straight shafts with a slip fit. The self-locking collar and the set screw inner-bearing designs make mounting easier. Many of the set screw units include Shaft Guarding Technology™ (see page A-31). Bolt holes in housings take standard bolts to attach units to machinery frames. Several series are available with the concentric locking collar. Most units have a self-aligning feature.

Units incorporating prelubricated wide-inner-ring ball bearings may be furnished without grease fittings.

Several basic types of housed units are available:

- Pillow blocks also known as housed units.
- Flanged cartridges.
- Flangette units.
- Cylindrical cartridges.
- Take-up units.

The choice is determined by application and mounting requirements. Within the basic type selected, variations are available for specific load factors, shaft sizes, mounting surface dimensions, base-to-shaft centerline heights and lubrication requirements.

PILLOW BLOCKS

Pillow blocks, the most commonly used type of mounted units, provide shaft support where the mounting surface is parallel to the shaft axis (fig. A-20). The bolt holes are usually slotted for easy adjustment during mounting.

Pillow blocks come in a variety of configurations.

- Narrow series (V and S) are lightweight, yet structurally designed to support bearing load.
- Premium width series (R and Y) are three times stronger for rougher environments. They're available in two styles that fit typical applications.
- Pressed steel and rubber pillow blocks are available for light-duty applications.



Fig. A-20. Pillow block.

FLANGED CARTRIDGES

Flanged cartridges are used where a shaft passes through the machine frame at a right angle (fig. A-21). A four-bolt mounting is the most common; however, where the mounting area is restricted, three- and two-bolt versions are available. A piloted flanged cartridge provides additional mounting accuracy and support.



Fig. A-21. Flanged cartridge.

Flanged cartridges are supplied in both standard and heavy-duty series. Iron- and rubber-flanged cartridges also are available.

A complete line of flangette units or pressed-steel flanged cartridges provides an economical solution for light-duty applications. Two-, three- and four-bolt mountings are available along with a relubricatable version.

CYLINDRICAL CARTRIDGES

Cylindrical cartridges, like flanged cartridges, provide shaft support where the shaft axis is perpendicular to and passing through a machined housing that is generally very thick (fig. A-22). The outside diameter of the cylindrical cartridges permits mounting with a press fit into a straight, through-bored housing.

Cylindrical cartridges have a machined spherical bearing seat to provide initial shaft alignment in standard-duty applications. Synthetic, conductive rubber cylindrical cartridges are available for applications where low-cost, light-duty, low-noise operation is essential.



Fig. A-22. Cylindrical cartridge.



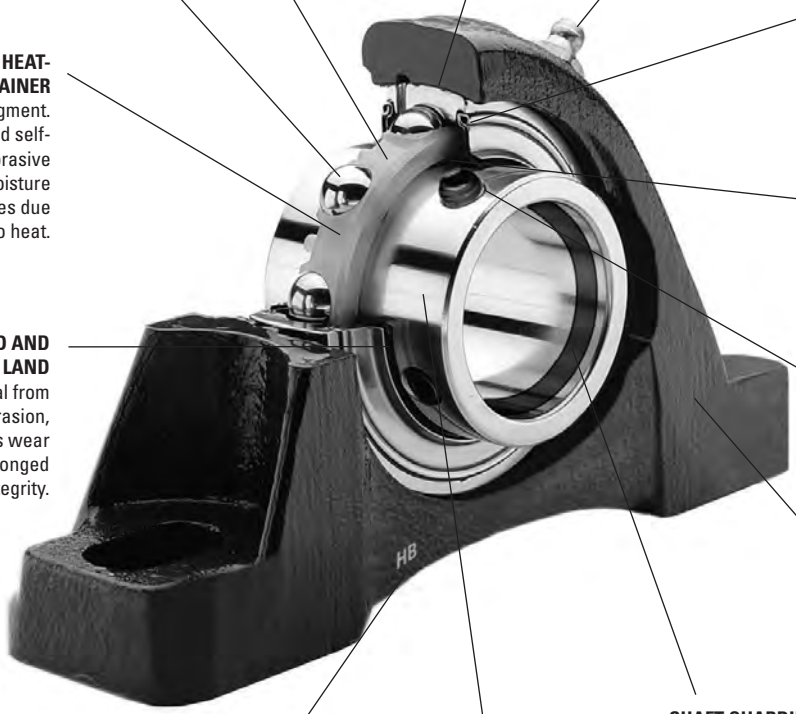
Fig. 23. Take-up unit.

TAKE-UP UNITS

Take-up units are used where shaft adjustment and belt-tightening devices are required, such as conveyor applications (fig. A-23). Frames for take-up units provide for either side or top mounting.

Take-up units are available in cast-iron for standard-duty applications and pressed steel for economical, light-duty applications.

FEATURES AND BENEFITS OF TIMKEN® BALL BEARING HOUSED UNITS



DOUBLE-FILTERED POLYUREA GREASE
Improves lubrication cleanliness for excellent performance at higher speeds.

HOUSING TOLERANCES
Provides better grease purge throughout the bearing due to reduced risk of grease purge between the bearing and housing.

GRADE-10 BALLS
Quieter and smoother-running bearings due to higher-specification steel and improved roundness.

GREASE FITTING OFFSET
Minimizes risk of accidental and side impact, and maintains accessibility for single-point lubricators.

SEAL CURL
Secures mechanical attachment of seal, resisting "pop-out" during relubrication and inhibiting spinning of the seal.

6/6 NYLON HEAT-STABILIZED RETAINER
Tolerates some misaligment. Non-corrosive and self-lubricating. Resistant to abrasive wear, most solvents, moisture trapping and size changes due to heat.

SEAL MATERIAL
Buna-N-Rubber using cotton fiber, embedded to wick oil, enhances lubrication and improves sealing integrity.

HARDENED AND GROUND SEAL LAND
Protects seal from inner-ring abrasion, resulting in less wear and prolonged seal integrity.

NYLON-PATCH SET SCREW
Increases bearing life by reducing the potential of the set screw backing out due to vibration.

POWDER-COAT FINISH
Reduces chipping, scratching and subsequent exposure of metals, preventing corrosion.

SHAFT GUARDING TECHNOLOGY™
Helps protect shaft and prolong life with stainless-steel band.

SUPERFINISHED RACEWAYS
Reduces friction with even surfaces, leading to cooler, quieter running and longer life.

BASE-TO-CENTER LINE HEIGHT INDICATOR
Provides a line height indicator to help you select the right base (low or high) when replacing the housed unit.

NOTE

Failure to follow the mounting/dismounting instructions of your equipment supplier can cause damage to the shaft, leading to premature failure of the equipment.

www.timken.com/warning/WIR

TIMKEN SELF-LOCKING COLLAR INSTALLATION

Most Timken housed units come equipped with the self-locking collar to facilitate the mounting of wide-inner-ring ball bearings. This self-locking collar eliminates the need for locknuts, washers, shoulders, sleeves and adapters.

The locking collar has a counterbored recess made purposely eccentric to the bore. The collar recess and the end of the bearing inner ring with which it engages are both machined so that they act as mating cams when on the shaft.

When the collar is engaged to the inner ring, it grips the shaft tightly with a positive binding action that increases with use. No adjustments of any kind are necessary.

CONCENTRIC COLLAR

For simplified installation of Timken housed units equipped with concentric-collar bearings, the collar is normally assembled to the wide inner ring for shipment. Slip the complete unit on the shaft following steps 1 and 2 (table A-22) described for the self-locking collar procedure, and tighten both set screws.

TIMKEN SET SCREW LOCKING BEARING

Steps 1 and 2 (table A-22) can be repeated from the self-locking collar installation above. To lock the set screw bearing, simply tighten each inner ring set screw to the suggested torque listed by shaft size. See table A-21.

TABLE A-21. SET SCREW LOCKING GUIDE.

Shaft Size		SUGGESTED
in.	**mm**	Torque in. - lbs.
1/2 – 11/16	**17**	35
3/4 – 1	**20 – 25**	80
1 1/16 – 1 3/4	**30 – 45**	155
1 13/16 – 2 3/16	**50 – 55**	275

It may be necessary to rotate the shaft to provide an easy access of the set screw wrench to the set screws. To disassemble, loosen the set screws.

TABLE A-22. SELF-LOCKING COLLAR INSTALLATION



1. Slip the shaft through the pillow block or other Timken® housed unit incorporating the wide-inner-ring ball bearing. Be certain the bearing is aligned in position along the shaft to eliminate any possibility of cramping loads.



2. Fasten the unit securely to the base using the proper bolt size.



3. Place the self-locking collar on the shaft with its cam adjacent to the cam on the end of the bearing's inner ring. The eccentric recessed cam will slide over and engage the corresponding cam on the bearing inner ring. Turn the collar in the direction of shaft rotation.



4. Using a lightweight hammer and a drift pin inserted in the drift-pin hole, tap lightly in the direction of shaft rotation to positively engage the collar. The wide inner ring is now locked to the shaft.



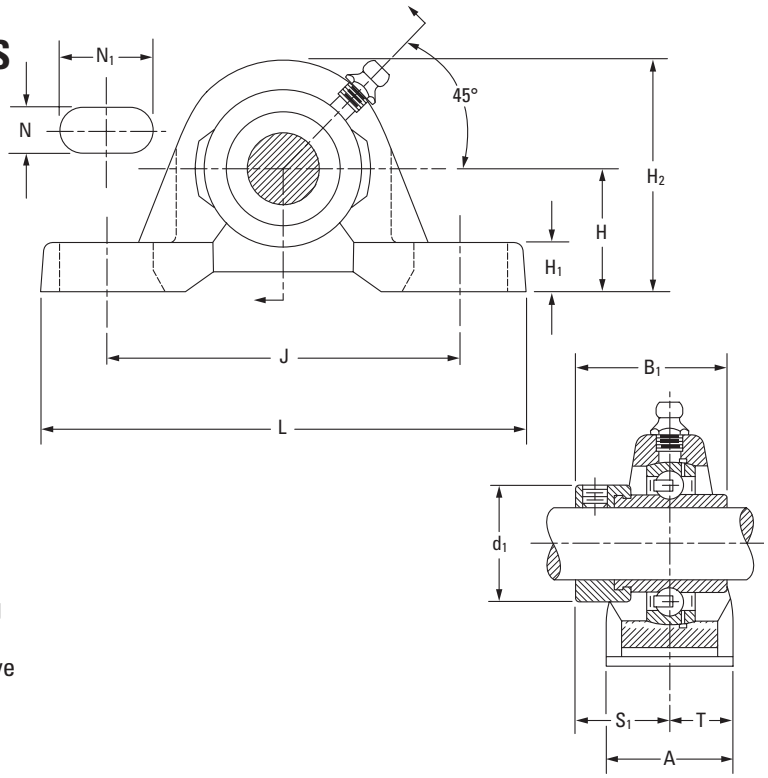
5. As a final step, fully tighten the set screw. It exerts a wedging action to hold the collar always in the engaged position, even under shock load. This design will operate effectively after the cams are tightly locked and in most cases, with no set screws at all.

CAST-IRON HOUSED UNITS

RAK, TAK, LAK INDUSTRIAL SERIES

RAK, TAK and LAK pillow blocks are suggested for industrial applications where normal loads are encountered.

- Heavier than our standard block with solid, flat feet for increased strength.
- Compact, one-piece housing can be mounted in any position.
- Pillow blocks self-align at mounting with the spherical outside diameter of the bearing fitting into the corresponding spherical housing seat.
- Prelubricated and ready for immediate installation.
- Grease fitting for relubrication.
- Self-locking collars supplied with all units.
- RAK pillow block is equipped with G-KRRB (R-seal) wide-inner-ring ball bearings, the TAK with G-KPPB (tri-ply seal) wide-inner-ring ball bearings and the LAK with the G-KLLB (Mechani-seal) wide-inner-ring ball bearings.
- Contact a Timken engineer to discuss highly corrosive applications (food processing, chemical exposure) where Timken thin-dense chrome-coated bearings can be utilized.



Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RAK 1 7/16 in.

BEARING DATA

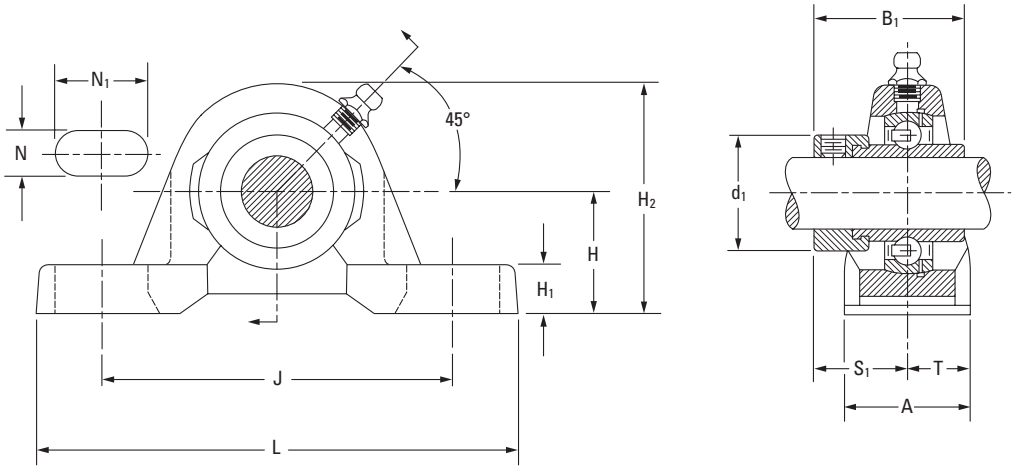
Unit	Bearing No.	Dimensions and Load Ratings
RAK	G-KRRB	Page A-34
TAK	G-KPPB	Page A-39
LAK	G-KLLB	Page A-37

Unit	Shaft Dia.	H	H_2	B_1	J	L	A	H_1	N	N_1	d_1	S_1	T	Bolt Size	Bearing No.[1]		Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	RAK	(TAK/LAK)		New (Old)	**kg** lbs.
RAK, LAK	1/2														G1008KRRB	(KLLB)	S1008K		
RAK, LAK	5/8	**26.99**	**53.20**	**37.3**	**92.1**	**123.8**	**30.2**	**8.7**	**11.1**	**22.2**	**28.6**	**23.4**	**15.1**	**10**	G1010KRRB	(KLLB)	S1010K	T-40238	**0.454**
RAK	11/16	1 1/16	2 3/32	1 15/32	3 5/8	4 7/8	1 3/16	11/32	7/16	7/8	1 1/8	59/64	19/32	3/8	G1011KRRB		S1011K	(T-30595)	1.00
RAK	**17**														GE17KRRB		SE17K		
RAK, LAK	3/4	**31.75**	**64.30**	**43.7**	**96.0**	**127.0**	**33.3**	**13.5**	**11.1**	**20.2**	**33.3**	**26.6**	**16.7**	**10**	G1012KRRB	(KLLB)	S1012K	M96830	**0.730**
RAK	**20**	1 1/4	2 17/32	1 23/32	3 25/32	5	1 5/16	17/32	7/16	51/64	1 5/16	1 3/64	21/32	3/8	GE20KRRB		SE20K		1.61
RAK, TAK	7/8														G1014KRRB	(KPPB3)	S1014K		
RAK, TAK, LAK	15/16	**33.34**	**69.80**	**44.4**	**104.8**	**139.7**	**37.3**	**11.9**	**11.1**	**20.6**	**38.1**	**27.0**	**18.7**	**10**	G1015KRRB	(KPPB3/KLLB)	S1015K	M96833	**0.950**
RAK, TAK, LAK	1	1 5/16	2 3/4	1 3/4	4 1/8	5 1/2	1 15/32	15/32	7/16	13/16	1 1/2	1 1/16	47/64	3/8	G1100KRRB	(KPPB3/KLLB)	S1100K		2.10
RAK, TAK	**25**														GE25KRRB	(KPPB3)	SE25K		
RAK, TAK	1 1/16														G1101KRRB	(KPPB3)	S1101K		
RAK, TAK, LAK	1 1/8	**36.68**	**81.70**	**48.4**	**117.5**	**157.2**	**42.9**	**13.5**	**14.3**	**23.8**	**44.1**	**30.1**	**21.4**	**12**	G1102KRRB	(KPPB3/KLLB)	S1102K	M96836	**1.420**
RAK, TAK, LAK	1 3/16	1 9/16	3 7/32	1 29/32	4 5/8	6 3/16	1 11/16	17/32	9/16	15/16	1 47/64	1 3/16	27/32	1/2	G1103KRRB	(KPPB3/KLLB)	S1103K		3.14
RAK, TAK	**30**														GE30KRRB	(KPPB3)	SE30K		
RAK, TAK, LAK	1 1/4														G1104KRRB	(KPPB2/KLLB)	S1104K		
RAK, TAK	1 5/16	**46.04**	**93.70**	**51.2**	**130.2**	**166.7**	**46.8**	**16.7**	**14.3**	**24.6**	**53.4**	**32.5**	**23.4**	**12**	G1105KRRB	(KPPB2)	S1105K		
RAK, TAK	1 3/8	1 13/16	3 11/16	2 1/64	5 1/8	6 9/16	1 27/32	21/32	9/16	31/32	2 1/8	1 9/32	59/64	1/2	G1106KRRB	(KPPB2)	S1106K	M96839	**1.890**
RAK, TAK, LAK	1 7/16														G1107KRRB	(KPPB2/KLLB)	S1107K		4.18
RAK, TAK	**35**														GE35KRRB	(KPPB2)	SE35K		

[1]Bearing number for RAK is G-KRRB. TAK uses G-KPPB. LAK uses G-KLLB.
NOTE: All units have 1/8 pipe-thread grease fitting except 1/2 – 11/16 and 3/4 units, which have 1/4-28 fitting.

Continued on next page.

RAK, TAK, LAK INDUSTRIAL SERIES – *continued*



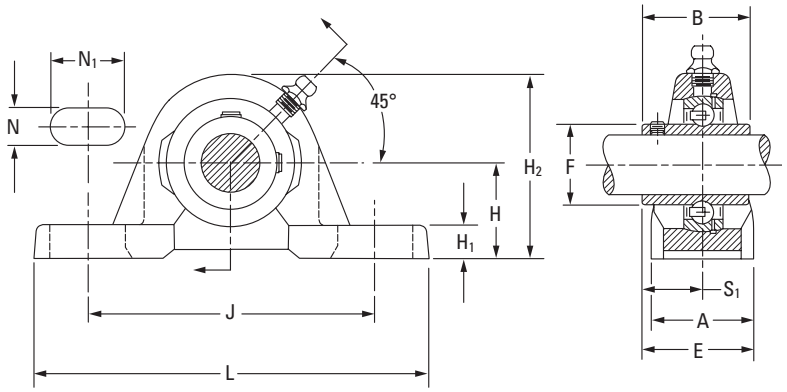
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Unit	Shaft Dia.	H	H_2	B_1	J	L	A	H_1	N	N_1	d_1	S_1	T	Bolt Size	Bearing No.[1]		Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	RAK	(TAK/LAK)		New (Old)	**kg** lbs.
RAK, TAK, LAK	1 1/2														G1108KRRB	(KPPB3/KLLB)	S1108KT		
RAK, TAK	1 9/16	**49.21**	**101.60**	**56.4**	**136.5**	**179.4**	**51.6**	**19.1**	**14.3**	**26.2**	**60.3**	**34.9**	**25.8**	**12**	G1109KRRB	(KPPB3)	S1109KT	M96842	**2.490**
RAK, TAK	**40**	1 15/16	4	2 7/32	5 3/8	7 1/16	2 1/32	3/4	9/16	1 1/32	2 3/8	1 3/8	1 1/64	1/2	GE40KRRB	(KPPB3)	SE40K		5.50
RAK, TAK	1 5/8														G1110KRRB	(KPPB4)	S1110K		
RAK, TAK, LAK	1 11/16	**52.39**	**104.80**	**56.4**	**98.4**	**191.3**	**52.4**	**17.5**	**14.3**	**28.6**	**63.5**	**34.9**	**26.2**	**12**	G1111KRRB	(KPPB4/KLLB)	S1111K	M96844	**3.200**
RAK, TAK, LAK	1 3/4	2 1/16	4 1/8	2 7/32	5 7/8	7 17/32	2 1/16	11/16	9/16	1 1/8	2 1/2	1 3/8	1 1/32	1/2	G1112KRRB	(KPPB4/KLLB)	S1112K		7.06
RAK, TAK	**45**														GE45KRRB	(KPPB4)	SE45K		
RAK, TAK	1 7/8														G1114KRRB	(KPPB3)	S1114K		
RAK, TAK, LAK	1 15/16	**55.56**	**112.70**	**62.7** 2	**158.0**	**200.0**	**57.9**	**17.7**	**18.3**	**25.4**	**69.9**	**38.1**	**29.0**	**16**	G1115KRRB	(KPPB3/KLLB)	S1115K	M96847	**4.010**
RAK, TAK	**50**	2 3/16	4 7/16	15/32	6 7/32	7 7/8	2 9/32	11/16	23/32	1	2 3/4	1 1/2	1 9/64	5/8	GE50KRRB	(KPPB3)	SE50K		8.86
RAK, TAK	2														G1200KRRB	(KPPB4)	S1200K		
RAK, TAK	2 1/8	**61.91**	**126.20**	**71.4**	**176.2**	**222.3**	**60.3**	**19.0**	**18.3**	**29.4**	**76.2**	**43.7**	**30.2**	**16**	G1202KRRB	(KPPB4)	S1202K	T-40246	**3.901**
RAK, TAK, LAK	2 3/16	2 7/16	4 31/32	2 13/16	6 15/16	8 3/4	2 3/8	3/4	23/32	1 5/32	3	1 23/32	1 3/16	5/8	G1203KRRB	(KPPB4/KLLB)	S1203K	(M96850)	8.60
RAK, TAK	**55**														GE55KRRB	(KPPB4)	SE55K		
RAK	2 1/4														G1204KRRB		S1204K		
RAK	2 3/8	**68.26**	**137.30**	**77.8**	**188.1**	**239.7**	**60.3**	**22.2**	**18.3**	**29.4**	**84.1**	**46.8**	**30.2**	**16**	G1206KRRB		S1206K	T-40247	**5.511**
RAK, LAK	2 7/16	2 11/16	5 13/32	3 1/16	7 13/32	9 7/16	2 3/8	7/8	23/32	1 5/32	3 5/16	1 27/32	1 3/16	5/8	G1207KRRB	(KLLB)	S1207K	(M99647)	12.15
RAK	**60**														GE60KRRB		SE60K		
RAK	2 11/16	**76.20**	**154.00**	**85.7**	**203.2**	**266.7**	**73.0**	**33.3**	**20.6**	**34.9**	**96.8**	**45.2**	**36.5**	**20**	G1211KRRB		S1211KT	T-22503	**7.920**
RAK	**70**	3	6 1/16	3 3/8	8	10 1/2	2 7/8	1 5/16	13/16	1 3/8	3 13/16	1 25/32	1 7/16	3/4	GE70KRRB		SE70K		17.46
RAK	2 15/16	**84.14**	**163.50**	**92.1**	**241.3**	**304.8**	**82.6**	**38.1**	**22.2**	**31.8**	**101.6**	**54.8**	**41.3**	**20**	G1215KRRB		S1215K	T-20134	**9.026**
RAK	**75**	3 5/16	6 7/16	3 5/8	9 1/2	12	3 1/4	1 1/2	7/8	1 1/4	4	2 5/32	1 5/8	3/4	GE75KRRB		SE75K		19.90

[1]Bearing number for RAK is G-KRRB. TAK uses G-KPPB. LAK uses G-KLLB.
NOTE: All units have 1/8 pipe-thread grease fitting except 1/2 – 11/16 and 3/4 units, which have 1/4-28 fitting.

YAK INDUSTRIAL-SERIES SET SCREW UNITS

- Incorporates Shaft Guarding Technology, which reduces replacement time, provides shaft protection and prolongs the life of the shaft.
- Heavier than our standard block with solid, flat feet for increased strength.
- Timken series low-base set screw pillow blocks feature the GY-KRRB bearing.
- Well-suited for industrial applications with normal loads due to its full-width inner-ring set screw.
- Contact a Timken engineer to discuss highly corrosive applications (food processing, chemical exposure) where Timken thin-dense chrome-coated bearings can be utilized.



Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: YAK 1 7/16 in.

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
YAK	GY-KRRB	Page A-44

Unit	Shaft Dia.	H	H_2	B	J	L	A	H_1	N	N_1	F	S_1	E	Bolt Size	Bearing No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			**kg** lbs.
YAK YAK YAK	1/2 5/8 **17**	**26.99** 1 1/16	**53.2** 2 3/32	**27.4** 1 5/64	**92.1** 3 5/8	**123.8** 4 7/8	**30.2** 1 3/16	**8.7** 11/32	**11.1** 7/16	**22.2** 7/8	**22.9** 0.900	**15.9** 5/8	**31.0** 1 7/32	**10** 3/8	GY1008KRRB GY1010KRRB GYE17KRRB	T40238	**0.4536** 1.0000
YAK YAK	3/4 SGT **20 SGT**	**31.75** 1 1/4	**64.3** 2 17/32	**31.8** 1 1/4	**96.4** 3 51/64	**127.0** 5	**33.3** 1 5/16	**13.5** 17/32	**11.1** 7/16	**20.2** 51/64	**27.6** 1.085	**19.1** 3/4	**35.7** 1 13/32	**10** 3/8	GY1012KRRB SGT GYE20KRRB SGT	M96830	**0.6775** 1.4937
YAK YAK YAK YAK	7/8 SGT 15/16 SGT 1 SGT **25 SGT**	**33.34** 1 5/16	**70.0** 2 3/4	**34.9** 1 3/8	**104.8** 4 1/8	**139.7** 5 1/2	**37.3** 1 15/32	**11.9** 15/32	**11.1** 7/16	**20.6** 13/16	**33.8** 1.332	**20.6** 13/16	**39.3** 1 35/64	**10** 3/8	GY1014KRRB SGT GY1015KRRB SGT GY1100KRRB SGT GYE25KRRB SGT	M96833	**0.8924** 1.9673
YAK YAK YAK YAK	1 1/8 SGT 1 3/16 SGT 1 1/4S **30 SGT**	**39.69** 1 9/16	**81.8** 3 7/32	**39.3** 1 35/64	**117.5** 4 5/8	**157.2** 6 3/16	**42.9** 1 11/16	**13.5** 17/32	**14.3** 9/16	**23.8** 15/16	**40.3** 1.587	**23.4** 59/64	**44.8** 1 49/64	**12** 1/2	GY1102KRRB SGT GY1103KRRB SGT GY1103KRRB3 SGT GYE30KRRB SGT	M96836	**1.3541** 2.9853
YAK YAK YAK YAK	1 1/4 SGT 1 3/8 SGT 1 7/16 SGT **35 SGT**	**46.04** 1 13/16	**93.7** 3 11/16	**45.2** 1 25/32	**130.2** 5 1/8	**166.7** 6 9/16	**46.8** 1 27/32	**16.7** 21/32	**14.3** 9/16	**24.6** 31/32	**46.8** 1.844	**28.2** 1 7/64	**51.6** 2 1/32	**12** 1/2	GY1104KRRB SGT GY1106KRRB SGT GY1107KRRB SGT GYE35KRRB SGT	M96839	**1.8434** 4.0639
YAK YAK	1 1/2 SGT **40 SGT**	**49.21** 1 15/16	**101.6** 4	**49.2** 1 15/16	**136.5** 5 3/8	**179.4** 7 1/16	**51.6** 2 1/32	**19.1** 3/4	**14.3** 9/16	**26.2** 1 1/32	**52.3** 2.058	**30.2** 1 3/16	**56.0** 2 13/34	**12** 1/2	GY1108KRRB SGT GYE40KRRB SGT	M96842	**2.4763** 5.4592
YAK YAK YAK YAK	1 5/8 SGT 1 11/16 SGT 1 3/4 SGT **45 SGT**	**52.39** 2 1/16	**104.8** 4 1/8	**50.4** 1 63/64	**149.2** 5 7/8	**191.3** 7 17/32	**52.4** 2 1/16	**17.5** 11/16	**14.3** 9/16	**28.6** 1 1/8	**57.9** 2.280	**31.4** 1 15/64	**57.5** 2 17/64	**12** 1/2	GY1110KRRB SGT GY1111KRRB SGT GY1112KRRB SGT GYE45KRRB SGT	M96844	**2.6311** 5.8005
YAK YAK YAK	1 15/16 SGT 2 S **50 SGT**	**55.56** 2 3/16	**112.7** 4 7/16	**51.6** 2 1/32	**158.0** 6 7/32	**200.2** 7 7/8	**57.9** 2 9/32	**17.5** 11/16	**18.3** 23/32	**25.4** 1	**62.8** 2.474	**32.5** 1 9/32	**61.5** 2 27/64	**16** 5/8	GY1115KRRB SGT GY1115KRRB2 SGT GYE50KRRB SGT	M96847	**3.2579** 7.1824
YAK YAK YAK	2 SGT 2 3/16 SGT **55 SGT**	**61.91** 2 7/16	**126.2** 4 31/32	**55.6** 2 3/16	**176.2** 6 15/16	**222.3** 8 3/4	**60.3** 2 3/8	**19.1** 3/4	**18.3** 23/32	**29.4** 1 5/32	**69.8** 2.747	**33.3** 1 5/16	**61.9** 2 7/16	**16** 5/8	GY1200KRRB SGT GY1203KRRB SGT GYE55KRRB SGT	M96850	**3.9009** 8.6000
YAK YAK YAK	2 1/4 SGT 2 7/16 SGT **60 SGT**	**68.26** 2 11/16	**137.3** 5 13/32	**65.1** 2 9/16	**188.1** 7 13/32	**239.7** 9 7/16	**60.3** 2 3/8	**22.2** 7/8	**18.3** 23/32	**29.4** 1 5/32	**76.5** 3.011	**39.7** 1 9/16	**69.9** 2 3/4	**16** 5/8	GY1204KRRB SGT GY1207KRRB SGT GYE60KRRB SGT	M99647	**4.7718** 10.5200
YAK YAK	2 11/16 **70**	**76.20** 3	**154.0** 6 1/16	**69.9** 2 3/4	**203.2** 8	**266.7** 10 1/2	**73.0** 2 7/8	**33.3** 1 5/16	**20.6** 13/16	**34.9** 1 3/8	**86.9** 3.422	**42.9** 1 11/16	**79.4** 3 1/8	**20** 3/4	GY1211KRRB GYE70KRRB	T22503	**7.1259** 15.7100
YAK YAK	2 15/16 **75**	**84.14** 3 5/16	**163.5** 6 7/16	**77.8** 3 1/16	**241.3** 9 1/2	**304.8** 12	**82.6** 3 1/4	**38.1** 1 1/2	**22.2** 7/8	**31.8** 1 1/4	**91.9** 3.619	**44.5** 1 3/4	**85.7** 3 3/8	**20** 3/4	GY1215KRRB GY75KRRB	T20134	**8.5185** 18.7800

NOTE: Shaft diameter with an S = smaller housing.

VAK STANDARD SERIES

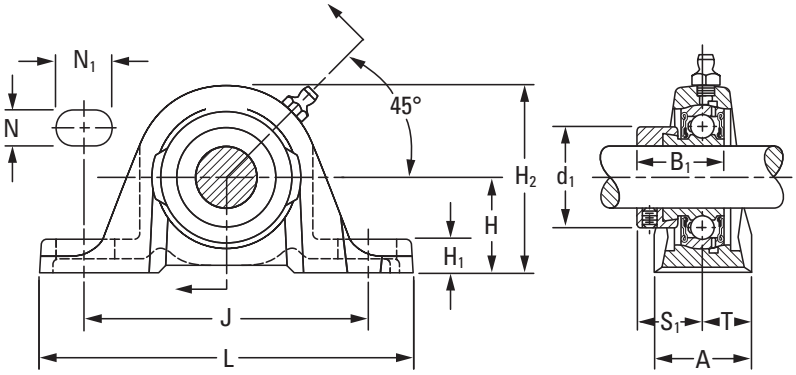
- The streamlined and rugged VAK pillow block unit combines an engineered housing and an RA-RR extended inner ring bearing.
- RA-RR bearing employs a positive-contact, land-riding seal and a Timken self-locking collar. Collar ensures positive shaft retention.
- The pillow block can be mounted to operate in any position.
- Bearing housed units are factory-prelubricated, but a grease fitting is provided to allow for relubrication if required.

Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: VAK 1 7/16 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
VAK	GRA-RRB	Page A-50

Unit	Shaft Dia.	H	H_2	B_1	J	L	A	H_1	N	N_1	d_1	S_1	T	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			New (Old)	**kg** lbs.
VAK	1/2														GRA008RRB	S1008K		
VAK	5/8	**26.99** 1 1/16	**53.2** 2 3/32	**28.6** 1 1/8	**92.1** 3 5/8	**123.8** 4 7/8	**30.2** 1 3/16	**8.7** 11/32	**11.1** 7/16	**22.2** 7/8	**28.6** 1 1/8	**22.2** 7/8	**15.1** 19/32	**10** 3/8	GRA010RRB	S1010K	T-40238 (T-30595)	**0.454** 1.00
VAK	**17**														GRAE17RRB	SE17K		
VAK	3/4	**31.75**	**62.7**	**31.0**	**96.0**	**127.0**	**31.8**	**11.9**	**11.1**	**19.8**	**33.3**	**23.4**	**15.9**	**10**	GRA012RRB	S1012K	T-40239	**0.563**
VAK	**20**	1 1/4	2 15/32	1 7/32	3 25/32	5	1 1/4	15/32	7/16	25/32	1 5/16	59/64	5/8	3/8	GRAE20RRB	SE20K	(T-30555)	1.24
VAK	7/8														GRA014RRB	S1014K		
VAK	15/16	**33.34**	**68.3**	**31.0**	**104.8**	**139.7**	**35.7**	**11.9**	**11.1**	**20.6**	**38.1**	**23.4**	**17.9**	**10**	GRA015RRB	S1015K	T-30365	**0.758**
VAK	1	1 5/16	2 11/16	1 7/32	4 1/8	5 1/2	1 13/32	15/32	7/16	13/16	1 1/2	59/64	45/64	3/8	GRA100RRB	S1100K		1.67
VAK	**25**														GRAE25RRB	SE25K		
VAK	1 1/8														GRA102RRB	S1102K		
VAK	1 3/16	**39.69**	**80.2**	**35.7**	**117.5**	**157.2**	**39.7**	**13.5**	**14.3**	**23.8**	**44.1**	**27.0**	**19.9**	**12**	GRA103RRB	S1103K	T-40241	**1.235**
VAK	1 1/4 S	1 9/16	3 5/32	1 13/32	4 5/8	6 3/16	1 9/16	17/32	9/16	15/16	1 47/64	1 1/16	25/32	1/2	GRA103RRB2	S1103K3	(T-30300)	2.72
VAK	**30**														GRAE30RRB	SE30K		
VAK	1 1/4														GRA104RRB	S1104K		
VAK	1 3/8	**46.04**	**92.1**	**38.9**	**130.2**	**166.7**	**45.2**	**16.7**	**14.3**	**24.6**	**54.0**	**29.4**	**22.7**	**12**	GRA106RRB	S1106K	T-40242	**1.594**
VAK	1 7/16	1 13/16	3 5/8	1 17/32	5 1/8	6 9/16	1 25/32	21/32	9/16	31/32	2 1/8	1 5/32	57/64	1/2	GRA107RRB	S1107K	(T-30410)	3.51
VAK	**35**														GRAE35RRB	SE35K		
VAK	1 1/2														GRA108RRB	S1108KT		
VAK	1 9/16	**49.21**	**100.0**	**43.7**	**136.5**	**179.4**	**47.6**	**19.0**	**14.3**	**26.2**	**60.3**	**32.5**	**23.8**	**12**	GRA109RRB	S1109KT	T-40243	**2.034**
VAK	**40**	1 15/16	3 15/16	1 23/32	5 3/8	7 1/16	1 7/8	3/4	9/16	1 1/32	2 3/8	1 9/32	15/16	1/2	GRAE40RRB	SE40K	(T-30484)	4.48
VAK	1 5/8														GRA110RRB	S1110K		
VAK	1 11/16	**52.39**	**104.8**	**43.7**	**149.2**	**191.3**	**50.8**	**17.5**	**14.3**	**28.6**	**63.5**	**32.5**	**25.4**	**12**	GRA111RRB	S1111K	T-40244	**2.261**
VAK	1 3/4	2 1/16	4 1/8	1 23/32	5 7/8	7 17/32	2	11/16	9/16	1 1/8	2 1/2	1 9/32	1	1/2	GRA112RRB	S1112K	(T-30682)	4.98
VAK	**45**														GRAE45RRB	SE45K		
VAK	1 7/8														GRA114RRB	S1114K		
VAK	1 15/16	**55.56**	**112.7**	**43.7**	**158.0**	**200.0**	**55.6**	**17.5**	**17.5**	**23.8**	**69.8**	**32.5**	**27.8**	**16**	GRA115RRB	S1115K	T-40245	**2.774**
VAK	2 S	2 3/16	4 7/16	1 23/32	6 7/32	7 7/8	2 3/16	11/16	11/16	15/16	2 3/4	1 9/32	1 3/32	5/8	GRA115RRB2	S1115K2	(T-30706)	6.11
VAK	**50**														GRAE50RRB	SE50K		
VAK	2														GRA200RRB	S1200K		
VAK	2 3/16	**61.91**	**124.6**	**48.4**	**176.2**	**222.3**	**58.7**	**19.0**	**18.3**	**29.4**	**76.2**	**36.5**	**29.4**	**16**	GRA203RRB	S1203K	T-40246	**3.328**
VAK	**55**	2 7/16	4 29/32	1 29/32	6 15/16	8 3/4	2 5/16	3/4	23/32	1 5/32	3	1 7/16	1 5/32	5/8	GRAE55RRB	SE55K	(T-30738)	7.33

NOTE: All units have 1/8 pipe-thread grease fitting except 1/2 – 1 1/16 and 3/4 units, which have 1/4-28 fitting.
NOTE: Shaft diameter with an S = smaller housing.

SAK STANDARD SERIES

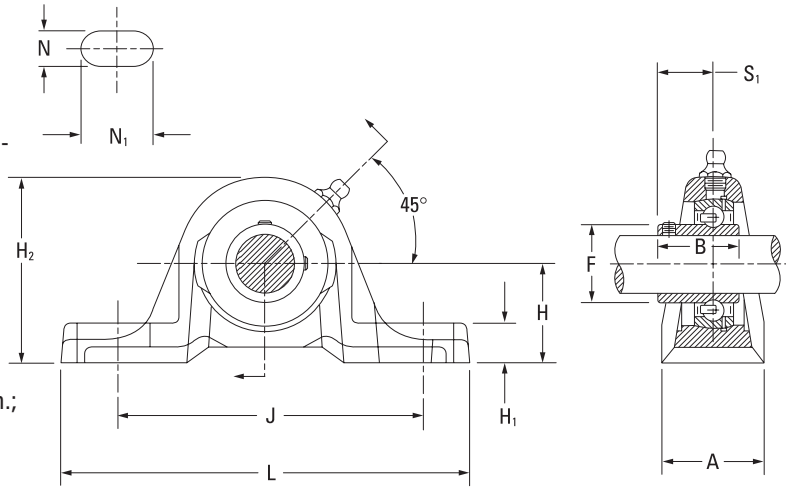
- The streamlined, rugged, one-piece pillow block combines an RAK housing and GYA-RRB set screw bearing.
- GYA-RRB bearing employs a positive-contact, land-riding seal and specially designed set screws.
- This pillow block can be mounted to operate in any position.
- Bearing housed units are factory-prelubricated, but a grease fitting is provided to allow for relubrication if required.

Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: SAK 1 in.



BEARING DATA

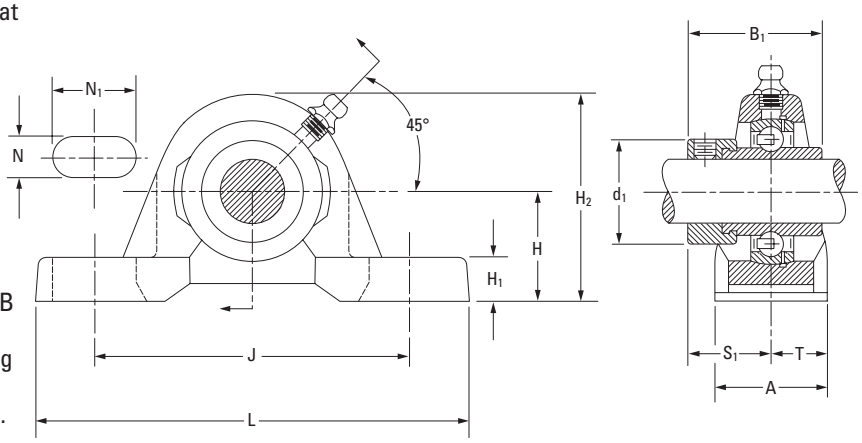
Unit	Bearing No.	Dimensions and Load Ratings
SAK	GYA-RRB	Page A-54

Unit	Shaft Dia.	Basic Bearing No.	H	H_2	S_1	J	L	A	H_1	N	N_1	F	B	Bolt Size	Bearing No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			New (Old)	**kg** lbs.
SAK	1/2	203	**26.99** 1 1/16	**53.2** 2 3/32	**15.9** 5/8	**92.1** 3 5/8	**123.8** 4 7/8	**30.2** 1 3/16	**8.7** 11/32	**11.1** 7/16	**22.2** 7/8	**24.6** 31/32	**23.8** 15/16	10 3/8	GYA008RRB GYA010RRB	T40238 (T30595)	**0.42** 0.92
SAK	**17**														GYAE17RRB		
SAK	3/4	204	**31.75** 1 1/4	**62.7** 2 15/32	**18.3** 23/32	**96.0** 3 25/32	**127** 5	**31.8** 1 1/4	**11.9** 15/32	**11.1** 7/16	**19.8** 25/32	**29.0** 1 9/64	**31.8** 1 1/16	10 3/8	GYA012RRB GYAE20RRB	T40239 (T30555)	**0.57** 1.25
SAK	**20**																
SAK	7/8	205	**33.34** 1 5/16	**68** 2 11/16	**19.4** 49/64	**104.8** 4 1/8	**139.7** 5 1/2	**35.7** 1 13/32	**11.9** 15/32	**11.1** 7/16	**20.6** 13/16	**33.7** 1 21/64	**34.9** 1 7/64	10 3/8	GYA014RRB GYA015RRB GYA100RRB	T30365	**0.76** 1.67
SAK	15/16																
SAK	1																
SAK	**25**														GYAE25RRB		
SAK	1 1/8	206	**39.69** 1 9/16	**80.2** 3 5/32	**23.0** 29/32	**117.5** 4 5/8	**157.2** 6 3/16	**39.7** 1 9/16	**13.5** 17/32	**14.3** 9/16	**23.8** 15/16	**40.1** 1 37/64	**32.5** 1 9/32	12 1/2	GYA102RRB GYA103RRB GYA103RRB2	T40241 (T30300)	**1.14** 2.52
SAK	1 3/16																
SAK	1 1/4 S																
SAK	**30**														GYAE30RRB		
SAK	1 1/4	207	**46.04** 1 13/16	**92.1** 3 5/8	**25.8** 1 1/64	**130.2** 5 1/8	**166.7** 6 9/16	**45.2** 1 25/32	**16.7** 21/32	**14.3** 9/16	**24.6** 31/32	**46.8** 1 70/83	**36.5** 1 7/16	12 1/2	GYA104RRB GYA106RRB GYA107RRB	T40242 (T30410)	**1.52** 3.35
SAK	1 3/8																
SAK	1 7/16																
SAK	**35**														GYAE35RRB		
SAK	1 1/2	208	**49.21** 1 15/16	**100.0** 3 15/16	**27.8** 1 3/32	**136.5** 5 3/8	**179.4** 7 1/16	**47.6** 1 7/8	**19.1** 3/4	**14.3** 9/16	**26.2** 1 1/32	**52.4** 2 1/16	**39.3** 1 35/64	12 1/2	GYA108RRB GYAE40RRB	T40243 (T30484)	**1.85** 4.08
SAK	**40**																
SAK	1 5/8	209	**52.39** 2 1/16	**104.8** 4 1/8	**28.6** 1 1/8	**149.2** 5 7/8	**191.3** 7 17/32	**50.8** 2	**17.5** 11/16	**14.3** 9/16	**28.6** 1 1/8	**57.9** 2 9/32	**42.1** 1 21/32	12 1/2	GYA110RRB GYA111RRB GYA112RRB	T40244 (T30682)	**2.06** 4.55
SAK	1 11/16																
SAK	1 3/4																
SAK	**45**														GYAE45RRB		
SAK	1 15/16	210	**55.56** 2 3/16	**112.7** 4 7/16	**31.0** 1 7/32	**158.0** 6 7/32	**200.2** 7 7/8	**55.6** 2 3/16	**17.5** 11/16	**17.5** 11/16	**23.8** 15/16	**62.7** 2 15/32	**44.5** 1 3/4	16 5/8	GYA115RRB GYA115RRB2	T40245 (T30706)	**2.54** 5.60
SAK	2S																
SAK	**50**														GYAE50RRB		
SAK	2	211	**61.91** 2 7/16	**124.6** 4 29/32	**31.8** 1 1/4	**176.2** 6 15/16	**222.3** 8 3/4	**58.7** 2 5/16	**19.1** 3/4	**18.3** 23/32	**29.4** 1 5/32	**69.9** 2 3/4	**46.4** 1 53/64	16 5/8	GYA200RRB GYA203RRB	T40246 (T30738)	**3.02** 6.66
SAK	2 3/16																
SAK	**55**														GYAE55RRB		

NOTE: All units have a 1/8 pipe-thread grease fitting except 1/2 – 1 1/16 and 3/4 units which have 1/4-28 fitting.

RAS, TAS, LAS INDUSTRIAL SERIES

- Heavier than our standard block with solid, flat feet for increased strength.
- Timken RAS, TAS and LAS pillow blocks are similar in design and equal in load-carrying capacity to the RAK, TAK and LAK types.
- RAS, TAS and LAS types have a slightly higher base-to-center height dimension than the RAK, TAK and LAK types, making them interchangeable with other competitive designs.
- The RAS pillow block is equipped with G-KRRB (R-seal) wide-inner-ring ball bearings, the TAS with G-KPPB (tri-ply seal) wide-inner-ring ball bearings, and the LAS with the G-KLLB (Mechani-seal) wide-inner-ring ball bearings.
- Contact your Timken engineer to discuss highly corrosive applications (food processing, chemical exposure) where Timken thin-dense chrome-coated bearings can be utilized.



Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;

2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RAS 1 3/16 in.

BEARING DATA

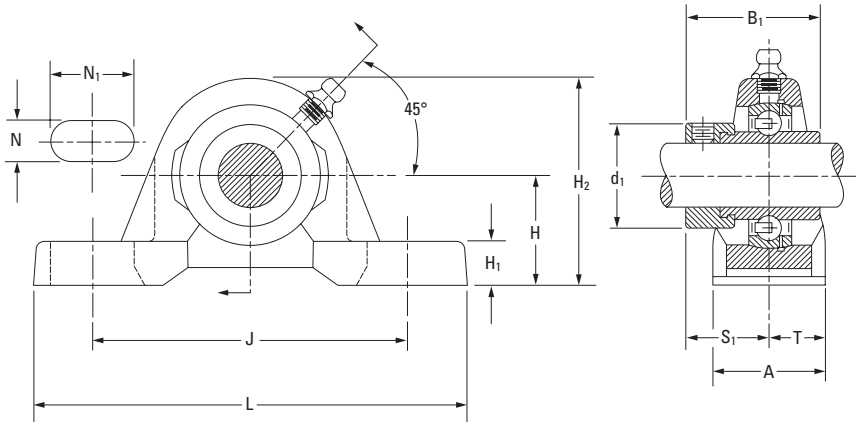
Unit	Bearing No.	Dimensions and Load Ratings
RAS	G-KRRB	Page A-34
TAS	G-KPPB	Page A-39
LAS	G-KLLB	Page A-37

Unit	Shaft Dia.	H	H_2	B_1	J	L	A	H_1	N	N_1	d_1	S_1	T	Bolt Size	Bearing No.[1]		Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	RAS	(TAS)		New (Old)	**kg** lbs.
RAS	1/2														G1008KRRB		S1008K		
RAS	5/8	**30.16**	**56.4**	**37.3**	**92.1**	**123.8**	**30.2**	**11.9**	**11.1**	**22.2**	**28.6**	**23.4**	**15.1**	**10**	G1010KRRB		S1010K	T-40238	**0.454**
RAS	11/16	1 3/16	2 7/32	1 15/32	3 5/8	4 7/8	1 3/16	15/32	7/16	7/8	1 1/8	59/64	19/32	3/8	G1011KRRB		S1011K	(T-30595)	1.00
RAS	**17**														GE17KRRB		SE17K		
RAS	3/4	**33.34**	**65.9**	**43.7**	**96.4**	**127.0**	**33.3**	**15.1**	**11.1**	**20.2**	**33.3**	**26.6**	**16.7**	**10**	G1012KRRB		S1012K	M96830	**0.730**
RAS	**20**	1 5/16	2 19/32	1 23/32	3 51/64	5	1 5/16	19/32	7/16	51/64	1 5/16	1 3/64	21/32	3/8	GE20KRRB		SE20K		
RAS,TAS	7/8														G1014KRRB	(KPPB3)	S1014K		
RAS,TAS	15/16	**36.51**	**73.0**	**44.4**	**104.8**	**139.7**	**37.3**	**15.1**	**11.1**	**20.6**	**38.1**	**27.0**	**18.7**	**10**	G1015KRRB	(KPPB3)	S1015K	M96833	**1.610**
RAS,TAS,LAS	1	1 7/16	2 7/8	1 3/4	4 1/8	5 1/2	1 15/32	19/32	7/16	13/16	1 1/2	1 1/16	47/64	3/8	G1100KRRB	(KPPB3)	S1100K		0.95
RAS,TAS	**25**														GE25KRRB	(KPPB3)	SE25K		2.10
RAS,TAS	1 1/16														G1101KRRB	(KPPB3)	S1101K		
RAS,TAS	1 1/8	**42.86**	**84.9**	**48.4**	**117.5**	**157.2**	**42.9**	**16.7**	**14.3**	**23.8**	**44.1**	**30.1**	**21.4**	**12**	G1102KRRB	(KPPB3)	S1102K	M96836	**1.420**
RAS,TAS,LAS	1 3/16	1 11/16	3 11/32	1 29/32	4 5/8	6 3/16	1 11/16	21/32	9/16	15/16	1 47/64	1 3/16	27/32	1/2	G1103KRRB	(KPPB3)	S1103K		3.14
RAS,TAS	**30**														GE30KRRB	(KPPB3)	SE30K		
RAS,TAS	1 1/4														G1104KRRB	(KPPB2)	S1104K		
RAS,TAS	1 5/16														G1105KRRB	(KPPB2)	S1105K		
RAS,TAS	1 3/8	**47.63**	**95.3**	**51.2**	**130.2**	**166.7**	**46.8**	**18.3**	**14.3**	**24.6**	**54.0**	**32.5**	**23.4**	**12**	G1106KRRB	(KPPB2)	S1106K	M96839	**1.890**
RAS,TAS,LAS	1 7/16	1 7/8	3 3/4	2 1/64	5 1/8	6 9/16	1 27/32	23/32	9/16	31/32	2 1/8	1 9/32	59/64	1/2	G1107KRRB	(KPPB2)	S1107K		4.18
RAS,TAS	**35**														GE35KRRB	(KPPB2)	SE35K		
RAS,TAS	1 1/2														G1108KRRB	(KPPB3)	S1108KT		
RAS,TAS	1 9/16	**49.21**	**101.6**	**56.4**	**136.5**	**179.4**	**51.6**	**19.1**	**14.3**	**26.2**	**60.3** 2	**34.9**	**25.8**	**12**	G1109KRRB	(KPPB3)	S1109KT	M96842	**2.490**
RAS,TAS	**40**	1 15/16	4	2 7/32	5 3/8	7 1/16	2 1/32	3/4	9/16	1 1/32	3/8	1 3/8	1 1/64	1/2	GE40KRRB	(KPPB3)	SE40K		5.50

[1]Bearing number for RAS is G-KRRB. TAS uses G-KPPB. LAS uses G-KLLB.

NOTE: All units have 1/8 pipe-thread grease fitting except 1/2 – 1 1/16 and 3/4 units, which have 1/4-28 fitting.

Continued on next page.



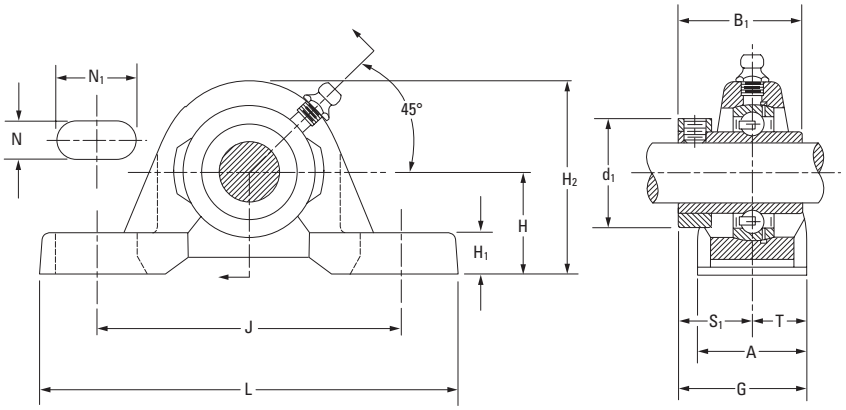
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Unit	Shaft Dia.	H	H_2	B_1	J	L	A	H_1	N	N_1	d_1	S_1	T	Bolt Size	Bearing No.[1]		Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	RAS	(TAS)		New (Old)	**kg** lbs.
RAS,TAS	1 5/8																		
RAS,TAS	1 11/16	**53.98**	**106.4**	**56.4**	**149.2**	**191.3**	**52.4**	**19.1**	**14.3**	**28.6**	**63.5**	**34.9**	**26.2**	**12**	G1111KRRB	(KPPB4)	S1111K	M96844	**3.200**
RAS,TAS	1 3/4	2 1/8	4 3/16	2 7/32	5 7/8	7 17/32	2 1/16	3/4	9/16	1 1/8	2 1/2	1 3/8	1 1/32	1/2	G1112KRRB	(KPPB4)	S1112K		7.06
RAS,TAS	**45**														GE45KRRB	(KPPB4)	SE45K		
RAS,TAS	1 7/8														G1114KRRB	(KPPB3)	S1114K		
RAS,TAS,LAS	1 15/16	**57.15**	**114.3**	**62.7**	**158.0**	**200.0**	**57.9**	**19.1**	**18.3**	**25.4**	**69.9**	**38.1**	**29.0**	**16**	G1115KRRB	(KPPB3)	S1115K	M96847	**4.010**
RAS,TAS	**50**	2 1/4	4 1/2	2 15/32	6 7/32	7 7/8	2 9/32	3/4	23/32	1	2 3/4	1 1/2	1 9/64	5/8	GE50KRRB	(KPPB3)	SE50K		8.86
RAS,TAS	2														G1200KRRB	(KPPB4)	S1200K		
RAS,TAS	2 1/8	**63.50**	**127.8**	**71.4**	**176.2**	**222.3**	**60.3**	**20.6**	**18.3**	**29.4**	**76.2**	**43.7**	**30.2**	**16**	G1202KRRB	(KPPB4)	S1202K	M96850	**3.901**
RAS,TAS	2 3/16	2 1/2	5 1/32	2 13/16	6 15/16	8 3/4	2 3/8	13/16	23/32	1 5/32	3	1 23/32	1 3/16	5/8	G1203KRRB	(KPPB4)	S1203K		8.60
RAS,TAS	**55**														GE55KRRB	(KPPB4)	SE55K		
RAS	2 1/4														G1204KRRB		S1204K		
RAS	2 3/8	**69.85**	**138.9**	**77.8**	**188.1**	**239.7**	**60.3**	**23.8**	**18.3**	**29.4**	**84.1**	**46.8**	**30.2**	**16**	G1206KRRB		S1206K	M99647	**5.511**
RAS,LAS	2 7/16	2 3/4	5 15/32	3 1/16	7 13/32	9 7/16	2 3/8	15/16	23/32	1 5/32	3 5/16	1 27/32	1 3/16	5/8	G1207KRRB		S1207K		12.15
RAS	**60**														GE60KRRB		SE60K		
RAS	2 15/16	**82.55**	**164.3**	**92.1**	**215.9**	**269.9**	**69.9**	**25.4**	**22.2**	**31.8**	**101.6**	**54.8**	**34.9**	**20**	G1215KRRB		S1215K	T-23423	**9.026**
RAS	**75**	3 1/4	6 15/32	3 5/8	8 1/2	10 5/8	2 3/4	1	7/8	1 1/4	4	2 5/32	1 3/8	3/4	GE75KRRB		SE75K		19.90

[1]Bearing number for RAS is G-KRRB. TAS uses G-KPPB. LAS uses G-KLLB.
NOTE: All units have 1/8 pipe-thread grease fitting except 1/2 – 1 1/16 and 3/4 units, which have 1/4-28 fitting.

RASC INDUSTRIAL-SERIES CONCENTRIC COLLAR

- Heavier than our standard block with solid, flat feet for increased strength.
- All RASC pillow blocks are equipped with GC-KRRB (R-seal) wide-inner-ring ball bearings with concentric collars.
- Pillow blocks self-align at mounting with the spherical outside diameter of the bearing fitting into a corresponding spherical housing seat.
- Units are prelubricated and ready for immediate installation.
- Grease fitting provides for relubrication if required.
- Concentric collars are supplied with all units.



Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;

2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RASC 1 in.

BEARING DATA

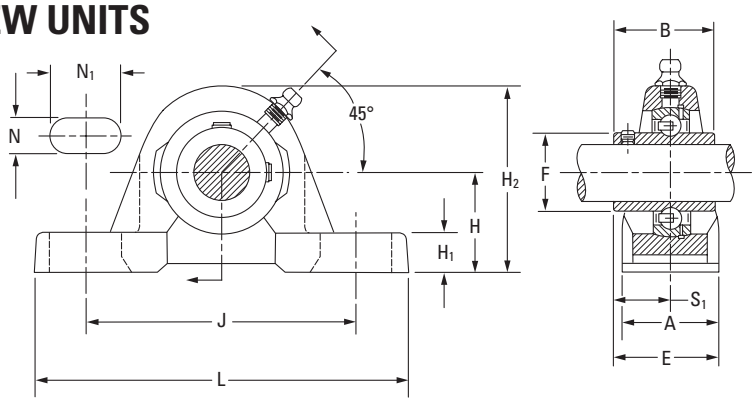
Unit	Bearing No.	Dimensions and Load Ratings
RASC	GC-KRRB	Page A-40

Unit	Shaft Dia.	H	H_2	B_1	J	L	A	H_1	N	N_1	d_1	S_1	T	G	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.			New (Old)	kg lbs.
RASC	5/8	**30.16** 1 3/16	**56.4** 2 7/32	**26.6** 1 3/64	**92.1** 3 5/8	**123.8** 4 7/8	**30.2** 1 3/16	**11.9** 15/32	**11.1** 7/16	**22.2** 7/8	**34.1** 1 11/32	**15.5** 39/64	**15.08** 19/32	**30.53** 1 13/64	**10** 3/8	GC1010KRRB	C203	T-40238 (T-30595)	**0.454** 1.00
RASC	3/4	**33.34** 1 5/16	**65.9** 2 19/32	**31.0** 1 7/32	**96.0** 3 25/32	**127.0** 5	**33.3** 1 5/16	**15.1** 19/32	**11.1** 7/16	**19.8** 25/32	**38.1** 1 1/2	**18.7** 47/64	**16.70** 21/32	**35.32** 1 25/64	**10** 3/8	GC1012KRRB	C204	M96830	**0.635** 1.40
RASC	1	**36.51** 1 7/16	**73.0** 2 7/8	**34.1** 1 11/32	**104.8** 4 1/8	**139.7** 5 1/2	**37.3** 1 15/32	**15.1** 19/32	**11.1** 7/16	**20.2** 13/16	**44.4** 1 3/4	**20.2** 51/64	**18.70** 47/64	**38.89** 1 17/32	**10** 3/8	GC1100KRRB	C205	M96833	**0.803** 1.77
RASC RASC RASC	1 1/8 1 3/16 1 1/4 S	**42.86** 1 11/16	**84.9** 3 11/32	**37.3** 1 15/32	**117.5** 4 5/8	**157.2** 6 3/16	**42.9** 1 11/16	**16.7** 21/32	**14.3** 9/16	**23.8** 15/16	**52.4** 2 1/16	**22.6** 57/64	**21.40** 27/32	**44.05** 1 47/64	**12** 1/2	GC1102KRRB GC1103KRRB GC1103KRRB3	C206	M96836	**1.297** 2.86
RASC RASC RASC	1 1/4 1 3/8 1 7/16	**47.62** 1 7/8	**95.3** 3 3/4	**41.3** 1 5/8	**130.2** 5 1/8	**166.7** 6 9/16	**46.8** 1 27/32	**18.3** 23/32	**14.3** 9/16	**24.6** 31/32	**59.5** 2 11/32	**25.4** 1	**23.40** 59/64	**48.81** 1 59/64	**12** 1/2	GC1104KRRB GC1106KRRB GC1107KRRB	C207	M96839	**1.674** 3.69
RASC	1 1/2	**49.21** 1 15/16	**101.6** 4	**44.1** 1 47/64	**136.5** 5 3/8	**179.4** 7 1/16	**51.6** 2 1/32	**19.1** 3/4	**14.3** 9/16	**26.2** 1 1/32	**68.3** 2 11/16	**27.4** 1 5/64	**25.80** 1 1/64	**53.16** 2 15/16	**12** 1/2	GC1108KRRB	C208	M96842	**2.150** 4.74
RASC RASC	1 11/16 1 3/4	**53.98** 2 1/8	**106.4** 4 3/16	**46.8** 1 27/32	**149.2** 5 7/8	**191.3** 7 17/32	**52.4** 2 1/16	**19.1** 3/4	**14.3** 9/16	**23.0** 29/32	**73.0** 2 7/8	**29.4** 1 5/32	**26.20** 1 1/32	**55.55** 2 3/16	**12** 1/2	GC1111KRRB GC1112KRRB	C209	M96844	**2.409** 5.31
RASC	1 15/16	**57.15** 2 1/4	**114.3** 4 1/2	**48.4** 1 29/32	**158.0** 6 7/32	**200.0** 7 7/8	**57.9** 2 9/32	**19.1** 3/4	**17.5** 11/16	**23.8** 15/16	**79.4** 3 1/8	**30.2** 1 3/16	**29.00** 1 9/64	**59.13** 2 21/64	**16** 5/8	GC1115KRRB	C210	M96847	**3.003** 6.62
RASC RASC	2 2 3/16	**63.50** 2 1/2	**127.8** 5 1/32	**54.0** 2 1/8	**176.2** 6 15/16	**222.3** 8 3/4	**60.3** 2 3/8	**20.6** 13/16	**18.3** 23/32	**29.4** 1 5/32	**88.9** 3 1/2	**33.3** 1 5/16	**30.20** 1 3/16	**62.70** 2 15/32	**16** 5/8	GC1200KRRB GC1203KRRG	C211	M96850	**3.901** 8.60
RASC	2 7/16	**69.85** 2 3/4	**138.9** 5 15/32	**60.3** 2 3/8	**188.1** 7 13/32	**239.7** 9 7/16	**60.3** 2 3/8	**23.8** 15/16	**18.3** 23/32	**29.4** 1 5/32	**95.2** 3 3/4	**37.3** 1 15/32	**30.20** 1 3/16	**67.46** 2 21/32	**16** 5/8	GC1207KRRB	C212	M99647	**5.511** 12.15
RASC	2 15/16	**82.55** 3 1/4	**164.3** 6 15/32	**70.6** 2 25/32	**215.9** 8 1/2	**269.9** 10 5/8	**69.9** 2 3/4	**25.4** 1	**22.2** 7/8	**31.8** 1 1/4	**114.3** 4 1/2	**43.7** 1 23/32	**34.90** 1 3/8	**78.60** 3 3/32	**20** 3/4	GC1215KRRB	C215	T 23423	**9.060** 19.91

NOTE: All units have 1/8 pipe-thread grease fitting except RASC 1/2 – 1 1/16 and 3/4 units, which have 1/4-28 fitting.

YAS INDUSTRIAL-SERIES SET SCREW UNITS

- Incorporates Shaft Guarding Technology, which reduces replacement time, provides shaft protection and prolongs the life of the shaft.
- Heavier than our standard block with solid, flat feet for increased strength.
- Timken YAS-series high-base, set screw pillow blocks feature the GY-KRRB bearing.
- This full-width inner ring set screw is well-suited for industrial applications involving wet or dirty environments.
- Housing is designed for two-bolt mounting in any position.
- Contact your Timken engineer to discuss highly corrosive applications (food processing, chemical exposure) where Timken thin-dense chrome-coated bearings can be utilized.



Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: YAS 1 7/16 in.

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
YAS	GY-KRRB	Page A-44

Unit	Shaft Dia.	H	H_2	B	L	J	A	H_1	N	N_1	F	S_1	E	Bolt Size	Bearing No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			**kg** lbs.
YAS	1/2	**30.16**	**56.4**	**27.4**	**123.8**	**92.1**	**30.2**	**11.9**	**11.1**	**22.2**	**22.9**	**15.9**	**31.0**	**10**	GY1008KRRB	T40238	**0.4536**
YAS	5/8	1 3/16	2 7/32	1 5/64	4 7/8	3 5/8	1 3/16	15/32	7/16	7/8	0.900	5/8	1 7/32	3/8	GY1010KRRB		1.0000
YAS	**17**														GYE17KRRB		
YAS	3/4 SGT	**33.34**	**65.9**	**31.8**	**127.0**	**96.4**	**33.3**	**15.1**	**11.1**	**20.2**	**27.6**	**19.1**	**35.7**	**10**	GY1012KRRB SGT	M96830	**0.7027**
YAS	**20 SGT**	1 5/16	2 19/32	1 1/4	5	3 51/64	1 5/16	19/32	7/16	51/64	1.085	3/4	1 13/32	3/8	GYE20KRRB SGT		1.5491
YAS	7/8 SGT														GY1014KRRB SGT		
YAS	15/16 SGT	**36.51**	**73.0**	**34.9**	**139.7**	**104.8**	**37.3**	**15.1**	**11.1**	**20.6**	**33.8**	**20.6**	**39.3**	**10**	GY1015KRRB SGT	M96833	**0.9535**
YAS	1 SGT	1 7/16	2 7/8	1 3/8	5 1/2	4 1/8	1 15/32	19/32	7/16	13/16	1.332	13/16	1 35/64	3/8	GY1100KRRB SGT		2.1022
YAS	**25 SGT**														GYE25KRRB SGT		
YAS	1 1/8 SGT														GY1102KRRB SGT		
YAS	1 3/16 SGT	**42.86**	**84.9**	**39.3**	**157.2**	**117.5**	**42.9**	**16.7**	**14.3**	**23.8**	**40.3**	**23.4**	**44.8**	**12**	GY1103KRRB SGT	M96836	**1.4275**
YAS	1 1/4 S	1 11/16	3 11/32	1 35/64	6 3/16	4 5/8	1 11/16	21/32	9/16	15/16	1.587	59/64	1 49/64	1/2	GY1103KRRB3 SGT		3.1472
YAS	**30 SGT**														GYE30KRRB SGT		
YAS	1 1/4 SGT														GY1104KRRB SGT		
YAS	1 3/8 SGT	**47.63**	**95.3**	**45.2**	**166.7**	**130.2**	**46.8**	**18.3**	**14.3**	**24.6**	**46.8**	**28.2**	**51.6**	**12**	GY1106KRRB SGT	M96839	**1.8981**
YAS	1 7/16 SGT	1 7/8	3 3/4	1 25/32	6 9/16	5 1/8	1 27/32	23/32	9/16	31/32	1.844	1 7/64	2 1/32	1/2	GY1107KRRB SGT		4.1847
YAS	**35 SGT**														GYE35KRRB SGT		
YAS	1 1/2 SGT	**49.21**	**101.6**	**49.2**	**179.4**	**136.5**	**51.6**	**19.1**	**14.3**	**26.2**	**52.3**	**30.2**	**56.0**	**12**	GY1108KRRB SGT	M96842	**2.4763**
YAS	**40 SGT**	1 15/16	4	1 15/16	7 1/16	5 3/8	2 1/32	3/4	9/16	1 1/32	2.058	1 3/16	2 13/34	1/2	GYE40KRRB SGT		5.4592
YAS	1 5/8 SGT														GY1110KRRB SGT		
YAS	1 11/16 SGT	**53.98**	**106.4**	**50.4**	**191.3**	**149.2**	**52.4**	**19.1**	**14.3**	**28.6**	**57.9**	**31.4**	**57.5**	**12**	GY1111KRRB SGT	M96844	**2.681**
YAS	1 3/4 SGT	2 1/8	4 3/16	1 63/64	7 17/32	5 7/8	2 1/16	3/4	9/16	1 1/8	2.280	1 15/64	2 17/64	1/2	GY1112KRRB SGT		5.9107
YAS	**45 SGT**														GYE45KRRB SGT		
YAS	1 15/16 SGT	**57.15**	**114.3**	**51.6**	**200.2**	**158.0**	**57.9**	**19.1**	**18.3**	**25.4**	**62.8**	**32.5**	**61.5**	**16**	GY1115KRRB SGT	M96847	**3.3136**
YAS	2S	2 1/4	4 1/2	2 1/32	7 7/8	6 7/32	2 9/32	3/4	23/32	1	2.474	1 9/32	2 27/64	5/8	GY1115KRRB2		7.3053
YAS	**50 SGT**														GYE50KRRB SGT		
YAS	2 SGT	**63.50**	**127.8**	**55.6**	**222.3**	**176.2**	**60.3**	**20.6**	**18.3**	**29.4**	**69.8**	**33.3**	**61.9**	**16**	GY1200KRRB SGT	M96850	**3.9009**
YAS	2 3/16 SGT	2 1/2	5 1/32	2 3/16	8 3/4	6 15/16	2 3/8	13/16	23/32	1 5/32	2.747	1 5/16	2 7/16	5/8	GY1203KRRB SGT		8.6000
YAS	**55 SGT**														GYE55KRRB SGT		
YAS	2 1/4 SGT	**69.85**	**138.9**	**65.1**	**239.7**	**188.1**	**60.3**	**23.8**	**18.3**	**29.4**	**76.5**	**39.7**	**69.9**	**16**	GY1204KRRB SGT	M99647	**4.7718**
YAS	2 7/16 SGT	2 3/4	5 15/32	2 9/16	9 7/16	7 13/32	2 3/8	15/16	23/32	1 5/32	3.011	1 9/16	2 3/4	5/8	GY1207KRRB SGT		10.5200
YAS	**60 SGT**														GYE60KRRB SGT		
YAS	2 15/16	**82.55**	**164.3**	**69.9**	**269.9**	**215.9**	**69.4**	**25.4**	**14.3**	**34.9**	**91.9**	**30.2**	**79.4**	**20**	GY1215KRRB	T23423	**7.9197**
YAS	**75**	3 1/4	6 15/32	2 3/4	10 5/8	8 1/2	2 3/4	1	7/8	1 3/8	3.618	1 3/4	3 1/8	3/4	GYE75KRRB		17.4600
YAS	2 15/16 H	**88.40**	**177.8**	**77.8**	**330.2**	**241.3**	**88.9**	**31.8**	**23.8**	**31.8**	**91.9**	**30.2**	**88.9**	20	GY1215KRRB	T22305	**8.4187**
		3 1/2	7	3 1/16	13	9 1/2	3 1/2	1 1/4	15/16	1 1/4	3.619	1 3/4	3 1/2	3/4			18.5600

NOTE: Shaft diameter with an S = Smaller housing; Shaft diameter with an H = heavier housing.

VAS STANDARD SERIES

- Timken VAS pillow blocks are similar in design and features, and equal in load-carrying capacity, to the VAK series.
- The slightly different base-to-center height dimension makes them interchangeable with certain other competitive designs.
- The units are prelubricated and ready for immediate installation.
- A grease fitting is provided for relubrication if required.

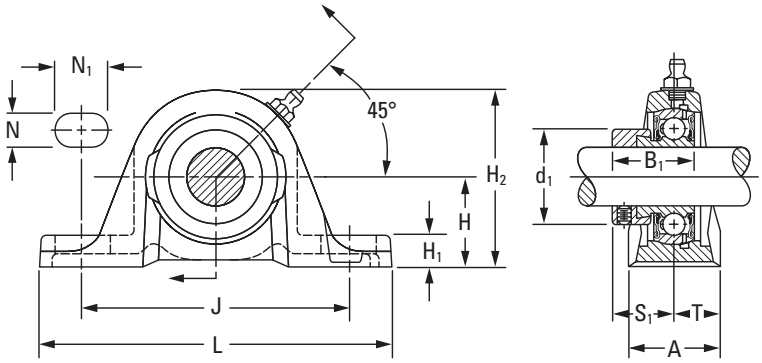
Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;

2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: VAS 1 3/16 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
VAS	GRA-RRB	Page A-50

Unit	Shaft Dia.	H	H_2	B_1	J	L	A	H_1	N	N_1	d_1	S_1	T	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			New (Old)	**kg** lbs.
VAS	1/2														GRA008RRB	S1008K		
VAS	5/8	**30.16**	**56.4**	**28.6**	**92.1**	**123.8**	**30.2**	**11.9**	**11.1**	**22.2**	**28.6**	**22.2**	**15.1**	**10**	GRA010RRB	S1010K	T-40238	**0.454**
VAS	**17**	1 3/16	2 7/32	1 1/8	3 5/8	4 7/8	1 3/16	15/32	7/16	7/8	1 1/8	7/8	19/32	3/8	GRAE17RRB	SE17K	(T-30595)	1.00
VAS	3/4														GRA012RRB	S1012K		
VAS	**20**	**33.34**	**64.3**	**31.0**	**96.0**	**127.0**	**31.8**	**13.5**	**11.1**	**19.8**	**33.3**	**23.4**	**15.9**	**10**	GRAE20RRB	SE20K	T-40239	**0.563**
VAS		1 5/16	2 17/32	1 7/32	3 25/32	5	1 1/4	17/32	7/16	25/32	1 5/16	59/64	5/8	3/8			(T-30555)	1.24
VAS	7/8														GRA014RRB	S1014K		
VAS	15/16	**36.51**	**71.4**	**31.0**	**104.8**	**139.7**	**35.7**	**15.1**	**11.1**	**20.6**	**38.1**	**23.4**	**17.9**	**10**	GRA015RRB	S1015K	T-30365	**0.758**
VAS	1	1 7/16	2 13/16	1 7/32	4 1/8	5 1/2	1 13/32	19/32	7/16	13/16	1 1/2	59/64	45/64	3/8	GRA100RRB	S1100K		1.67
VAS	**25**														GRAE25RRB	SE25K		
VAS	1 1/8														GRA102RRB	S1102K		
VAS	1 3/16	**42.86**	**83.3**	**35.7**	**117.5**	**157.2**	**39.7**	**16.7**	**14.3**	**23.8**	**44.1**	**27.0**	**19.9**	**12**	GRA103RRB	S1103K	T-40241	**1.235**
VAS	1 1/4 S	1 11/16	3 9/32	1 13/32	4 5/8	6 3/16	1 9/16	21/32	9/16	15/16	1 47/64	1 1/16	25/32	1/2	GRA103RRB2	S1103K3	(T-30300)	2.72
VAS	**30**														GRAE30RRB	SE30K		
VAS	1 1/4														GRA104RRB	S1104K		
VAS	1 3/8	**47.62**	**93.7**	**38.9**	**130.2**	**166.7**	**45.2**	**18.3**	**14.3**	**24.6**	**54.0**	**29.4**	**22.7**	**12**	GRA106RRB	S1106K	T-40242	**1.594**
VAS	1 7/16	1 7/8	3 11/16	1 17/32	5 1/8	6 9/16	1 25/32	23/32	9/16	31/32	2 1/8	1 5/32	57/64	1/2	GRA107RRB	S1107K	(T-30410)	3.51
VAS	**35**														GRAE35RRB	SE35K		
VAS	1 1/2	**49.21**	**100.0**	**43.7**	**136.5**	**179.4**	**47.6**	**19.0**	**14.3**	**26.2**	**60.3**	**32.5**	**23.8**	**12**	GRA108RRB	S1108KT	T-40243	**2.034**
VAS	**40**	1 15/16	3 15/16	1 23/32	5 3/8	7 1/16	1 7/8	3/4	9/16	1 1/32	2 3/8	1 9/32	15/16	1/2	GRAE40RRB	SE40K	(T-30484)	4.48
VAS	1 5/8														GRA110RRB	S1110K		
VAS	1 11/16	**53.98**	**106.4**	**43.7**	**149.2**	**191.3**	**50.8**	**19.0**	**14.3**	**28.6**	**63.5** 2	**32.5**	**25.4**	**12**	GRA111RRB	S1111K	T-40244	**2.261**
VAS	1 3/4	2 1/8	4 3/16	1 23/32	5 7/8	7 17/32	2	3/4	9/16	1 1/8	1/2	1 9/32	1	1/2	GRA112RRB	S1112K	(T-30682)	4.98
VAS	**45**														GRAE45RRB	SE45K		
VAS	1 7/8														GRA114RRB	S1114K		
VAS	1 15/16	**57.15**	**114.3**	**43.7**	**158.0**	**200.0**	**55.6**	**19.0**	**18.3**	**29.4**	**69.8**	**32.5**	**27.8**	**16**	GRA115RRB	S1115K	T-40245	**2.774**
VAS	2 S	2 1/4	4 1/2	1 23/32	6 7/32	7 7/8	2 3/16	3/4	23/32	1 5/32	2 3/4	1 9/32	1 3/32	5/8	GRA115RRB2	S1115K2	(T-30706)	6.11
VAS	**50**														GRAE50RRB	SE50K		
VAS	2														GRA200RRB	S1200K		
VAS	2 3/16	**63.50**	**126.2**	**48.4**	**176.2**	**222.3**	**58.7**	**20.6**	**18.3**	**29.4**	**76.2**	**36.5**	**29.4**	**16**	GRA203RRB	S1203K	T-40246	**3.328**
VAS	**55**	2 1/2	4 31/32	1 29/32	6 15/16	8 3/4	2 5/16	13/16	23/32	1 5/32	3	1 7/16	1 5/32	5/8	GRAE55RRB	SE55K	(T-30738)	7.33

NOTE: All units have 1/8 pipe-thread grease fitting except 1/2 – 1 1/16 and 3/4 units, which have 1/4-28 fitting.

SAS STANDARD SERIES

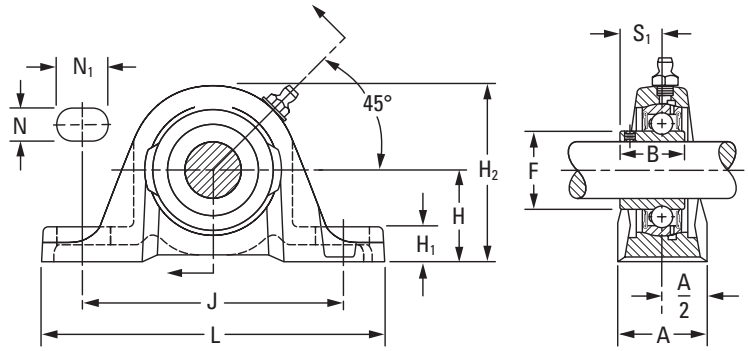
- The SAS is a streamlined and rugged one-piece pillow block unit that combines the Timken engineered housing and a GYA-RRB set screw bearing.
- GYA-RRB bearing employs a positive-contact, land-riding seal and specially designed set screws.
- SAS pillow block can be mounted in any position.
- Bearing housed units are factory-prelubricated, but a grease fitting is provided to allow for relubrication if required.

Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: SAS 1 in.



BEARING DATA

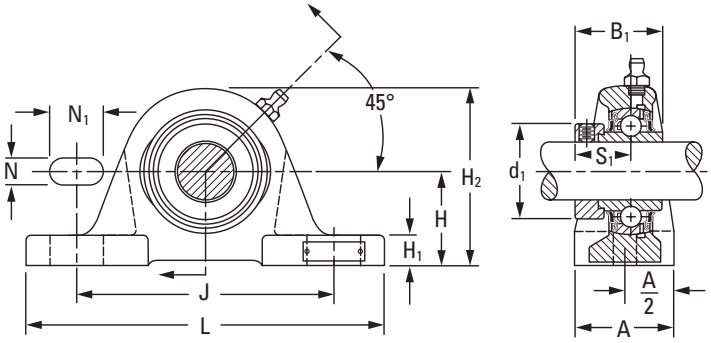
Unit	Bearing No.	Dimensions and Load Ratings
SAS	GYA-RRB	Page A-54

Unit	Shaft Dia.	H	H_2	S_1	J	L	A	H_1	N	N_1	F	B	Bolt Size	Bearing No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.		New (Old)	**kg** lbs.
SAS	1/2	**30.16**	**56.4**	**15.9**	**92.1**	**123.8**	**30.2**	**11.9**	**11.1**	**22.2**	**24.6**	**23.8**	**10**	GYA008RRB	T-40238	**0.42**
SAS	5/8	1 3/16	2 7/32	5/8	3 5/8	4 7/8	1 3/16	15/32	7/16	7/8	31/32	15/16	3/8	GYA010RRB	(T-30595)	0.92
SAS	**17**													GYAE17RRB		
SAS	3/4	**33.34**	**64.3**	**18.3**	**96.0**	**127.0**	**31.8**	**13.5**	**11.1**	**19.8**	**29.0**	**27.0**	**10**	GYA012RRB	T-40239	**0.57**
SAS	**20**	1 5/16	2 17/32	23/32	3 25/32	5	1 1/4	17/32	7/16	25/32	1 9/64	1 1/16	3/8	GYAE20RRB	(T-30555)	1.25
SAS	7/8													GYA014RRB		
SAS	15/16	**36.51**	**71.4**	**19.4**	**104.8**	**139.7**	**35.7**	**15.1**	**11.1**	**20.6**	**33.7**	**28.2**	**10**	GYA015RRB	T-30365	**0.75**
SAS	1	1 7/16	2 13/16	49/64	4 1/8	5 1/2	1 13/32	19/32	7/16	13/16	1 21/64	1 7/64	3/8	GYA100RRB		1.67
SAS	**25**													GYAE25RRB		
SAS	1 1/8													GYA102RRB		
SAS	1 3/16	**42.86**	**83.3**	**23.0**	**117.5**	**157.2**	**39.7**	**16.7**	**14.3**	**23.8**	**40.1**	**32.5**	**12**	GYA103RRB	T-40241	**1.14**
SAS	1 1/4 S	1 11/16	3 9/32	29/32	4 5/8	6 3/16	1 9/16	21/32	9/16	15/16	1 37/64	1 9/32	1/2	GYA103RRB2	(T-30300)	2.52
SAS	**30**													GYAE30RRB		
SAS	1 1/4													GYA104RRB		
SAS	1 3/8	**47.62**	**93.6**	**25.8**	**130.2**	**166.7**	**45.2**	**18.3**	**14.3**	**24.6**	**46.8**	**36.5**	**12**	GYA106RRB	T-40242	**1.52**
SAS	1 7/16	1 7/8	3 11/16	1 1/64	5 1/8	6 9/16	1 25/32	23/32	9/16	31/32	1 27/32	1 7/16	1/2	GYA107RRB	(T-30410)	3.35
SAS	**35**													GYAE35RRB		
SAS	1 1/2	**49.21**	**100.0**	**27.8**	**136.5**	**179.4**	**47.6**	**19.0**	**14.3**	**26.2**	**52.4**	**39.3**	**12**	GYA108RRB	T-40243	**1.85**
SAS	**40**	1 15/16	3 15/16	1 3/32	5 3/8	7 1/16	1 7/8	3/4	9/16	1 1/32	2 1/16	1 35/64	1/2	GYAE40RRB	(T-30484)	4.08
SAS	1 1/2 H	**53.90** 2 1/8	**100.0** 3 15/16	**27.8** 1 3/32	**136.5** 5 3/8	**179.4** 7 1/16	**47.6** 1 7/8	**19.0** 3/4	**14.3** 9/16	**26.2** 1 1/32	**52.4** 2 1/16	**39.3** 1 35/64	**12** 1/2	GYA108RRB	T-39528	**1.85** 4.08
SAS	1 5/8													GYA110RRB		
SAS	1 11/16	**53.90**	**106.3**	**28.6**	**149.2**	**191.3**	**51.0**	**19.0**	**14.3**	**28.6**	**57.9**	**42.1**	**12**	GYA111RRB	T-40244	**2.06**
SAS	1 3/4	2 1/8	4 3/16	1 1/8	5 7/8	7 17/32	2	3/4	9/16	1 1/8	2 9/32	1 21/32	1/2	GYA112RRB	(T-30682)	4.55
SAS	**45**													GYAE45RRB		
SAS	1 15/16													GYA115RRB		
SAS	2 S	**57.20**	**114.3**	**30.9**	**158.0**	**200.0**	**55.6**	**19.0**	**17.5**	**23.8**	**62.7**	**44.4**	**16**	GYA115RRB2	T-40245	**2.54**
SAS	**50**	2 1/4	4 1/2	1 7/32	6 7/32	7 7/8	2 3/16	3/4	11/16	15/16	2 15/32	1 3/4	5/8	GYAE50RRB	(T-30706)	5.60
SAS	2													GYA200RRB		
SAS	2 3/16	**63.50**	**126.2**	**31.7**	**176.2**	**222.3**	**58.7**	**20.6**	**18.3**	**29.4**	**69.8**	**46.4**	**16**	GYA203RRB	T-40246	**3.02**
SAS	**55**	2 1/2	4 31/32	1 1/4	6 15/16	8 3/4	2 5/16	13/16	23/32	1 5/32	2 3/4	1 53/64	5/8	GYAE55RRB	(T-30738)	6.66

NOTE: All units have 1/8 pipe-thread grease fitting except 1/2 – 1 1/16 and 3/4 units, which have 1/4-28 fitting.
NOTE: Shaft diameter with an S = smaller housing; Shaft diameter with an H = heavier housing.

RAKH INDUSTRIAL SERIES

- Timken pillow blocks are similar in design to other standard series, but have slightly different dimensions to allow interchangeability with competitive designs.
- These pillow blocks may be used independently or in connection with the RAKHL expansion unit shown at right. Used in this capacity, the RAKH pillow blocks provide fixed shaft location while the RAKHL expansion units allow for axial movement. Maximum operating temperature for the RAKH units is 121° C (250° F).
- The units are supplied with self-locking collars.
- Contact your Timken engineer to discuss highly corrosive applications (food processing, chemical exposure) where Timken thin-dense chrome-coated bearings can be utilized.



Suggested shaft tolerances:

13/16 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;

2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RAKH 1 7/16 in.

BEARING DATA

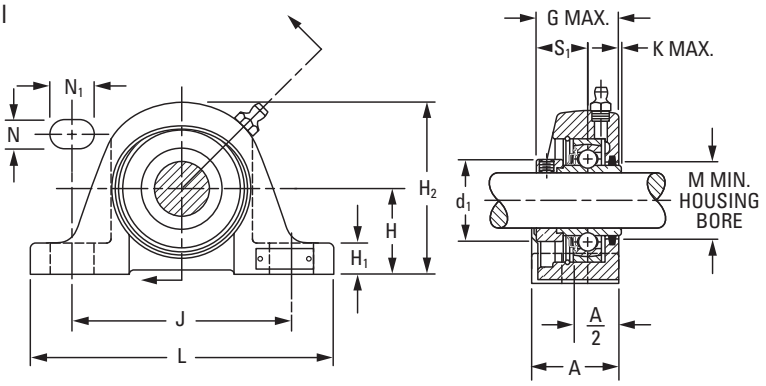
Unit	Bearing No.	Dimensions and Load Ratings
RAKH	G-KRRB	Page A-34

Unit[1]	Shaft Dia.	H	H_2	B_1	J	L	A	H_1	N	N_1	d_1	S_1	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			New	**kg** lbs.
RAKH	1	**44.45** 1 3/4	**82.6** 3 1/4	**44.4** 1 3/4	**119.1** 4 11/16	**158.8** 6 1/4	**50.8** 2	**15.9** 5/8	**14.3** 9/16	**25.4** 1	**38.1** 1 1/2	**27.0** 1 1/16	**12** 1/2	G1100KRRB	S1100K	T-22295	**1.689** 3.720
RAKH	1 3/16	**47.63** 1 7/8	**90.5** 3 9/16	**48.4** 1 29/32	**127.0** 5	**174.6** 6 7/8	**57.2** 2 1/4	**17.5** 11/16	**14.3** 9/16	**25.4** 1	**44.1** 1 47/64	**30.2** 1 3/16	**12** 1/2	G1103KRRB	S1103K	T-22216	**2.184** 4.810
RAKH RAKH	1 1/4 1 7/16	**53.98** 2 1/8	**101.6** 4	**51.2** 2 1/64	**144.5** 5 11/16	**203.2** 8	**57.2** 2 1/4	**19.0** 3/4	**14.3** 9/16	**30.2** 1 3/16	**54.0** 2 1/8	**32.5** 1 9/32	**12** 1/2	G1104KRRB G1107KRRB	S1104K S1107K	T-22212	**2.915** 6.420
RAKH	1 1/2	**58.74** 2 5/16	**111.1** 4 3/8	**56.4** 2 7/32	**155.6** 6 1/8	**222.2** 8 3/4	**66.7** 2 5/8	**20.6** 13/16	**17.5** 11/16	**31.8** 1 1/4	**60.3** 2 3/8	**34.9** 1 3/8	**16** 5/8	G1108KRRB	S1108KT	T-22291	**4.004** 8.820
RAKH RAKH	1 11/16 1 3/4	**58.74** 2 5/16	**114.3** 4 1/2	**56.4** 2 7/32	**155.6** 6 1/8	**222.2** 8 3/4	**66.7** 2 5/8	**20.6** 13/16	**17.5** 11/16	**33.3** 1 5/16	**63.5** 2 1/2	**34.9** 1 3/8	**16** 5/8	G1111KRRB G1112KRRB	S1111K S1112K	T-22293	**4.032** 8.880
RAKH	1 15/16	**63.50** 2 1/2	**122.2** 4 13/16	**62.7** 2 15/32	**171.4** 6 3/4	**241.3** 9 1/2	**73.0** 2 7/8	**22.2** 7/8	**17.5** 11/16	**36.5** 1 7/16	**69.8** 2 3/4	**38.1** 1 1/2	**16** 5/8	G1115KRRB	S1115K	T-22214	**5.098** 11.230
RAKH RAKH	2 3/16 **55**	**69.85** 2 3/4	**136.5** 5 3/8	**71.4** 2 13/16	**184.2** 7 1/4	**260.4** 10 1/4	**79.4** 3 1/8	**27.0** 1 1/16	**20.6** 13/16	**36.5** 1 7/16	**76.2** 3	**43.7** 1 23/32	**16** 5/8	G1203KRRB GE55KRRB	S1203K SE55K	T-22297	**6.728** 14.820
RAKH	2 7/16	**76.20** 3	**150.8** 5 15/16	**77.8** 3 1/16	**203.2** 8	**285.8** 11 1/4	**82.6** 3 1/4	**27.0** 1 1/16	**20.6** 13/16	**41.3** 1 5/8	**84.1** 3 5/16	**46.8** 1 27/32	**16** 5/8	G1207KRRB	S1207K	T-22299	**8.2170** 18.115
RAKH	2 11/16	**88.90** 3 1/2	**171.4** 6 3/4	**85.7** 3 3/8	**228.6** 9	**330.2** 13	**88.9** 3 1/2	**28.6** 1 1/8	**23.8** 15/16	**50.8** 2	**96.8** 3 13/16	**45.2** 1 25/32	**20** 3/4	G1211KRRB	S1211K	T-22303	**11.495** 25.320
RAKH	2 15/16	**88.90** 3 1/2	**177.8** 7	**92.1** 3 5/8	**228.6** 9	**330.2** 13	**88.9** 3 1/2	**31.8** 1 1/4	**23.8** 15/16	**50.8** 2	**101.6** 4	**54.8** 2 5/32	**20** 3/4	G1215KRRB	S1215K	T-22305	**11.795** 25.980

[1]When used with the expansion unit, specify both units, shaft diameter and suffix.

RAKHL EXPANSION SERIES

- The RAKH expansion series is designed to allow axial shaft expansion caused by elevated temperatures or other conditions that lead to shaft movement.
- The RAKH expansion-series bearings are designed for use with the RAKH pillow blocks.
- RAKH units provide axial shaft location and the RAKHL allows shaft floatation.
- Due to limitations of the lubricant and seal material, the maximum operating temperature for the RAKHL units is 121° C (250° F).
- Units are supplied with self-locking collars.
- Steel S-ring ensures axial expansion.



Suggested shaft tolerances:

13/16 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;

2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RAKHL 2 7/16 in.

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RAKHL	KRS	Page A-43

Unit	Shaft Dia.	Total Float	H	H_2	G	J	L	A	H_1	N	N_1	K	d_1	S_1	M	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in.	**mm** in.	**mm** in	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			New	**kg** lbs.
RAKHL	1 3/16	**3.2** 1/8	**47.63** 1 7/8	**96.8** 3 13/16	**49.2** 1 15/16	**127.0** 5	**174.6** 6 7/8	**50.8** 2	**17.5** 11/16	**14.3** 9/16	**25.4** 1	**2.4** 3/32	**44.5** 1 3/4	**30.2** 1 3/16	**41.70** 1 41/64	**12** 1/2	1103KRS	S1103K	A11414	**2.182** 4.81
RAKHL RAKHL	1 3/8 1 7/16	**4.8** 3/16	**53.98** 2 1/8	**106.4** 4 3/16	**55.2** 2 11/64	**144.5** 5 11/16	**201.6** 7 15/16	**51.6** 2 1/32	**19.0** 3/4	**14.3** 9/16	**30.2** 1 3/16	**3.2** 1/8	**54.0** 2 1/8	**32.5** 1 9/32	**48.02** 1 57/64	**12** 1/2	1106KRS 1107KRS	S1106K S1107K	A11199	**2.912** 6.42
RAKHL	1 15/16	**6.4** 1/4	**63.50** 2 1/2	**129.4** 5 3/32	**65.1** 2 9/16	**171.4** 6 3/4	**241.3** 9 1/2	**63.5** 2 1/2	**22.2** 7/8	**17.5** 11/16	**36.5** 1 7/16	**4.0** 5/32	**69.8** 2 3/4	**38.1** 1 1/2	**63.90** 2 33/64	**16** 5/8	1115KRS	S1115K	A11357	**5.094** 11.23
RAKHL	2 3/16	**6.4** 1/4	**69.85** 2 3/4	**142.9** 5 5/8	**73.4** 2 57/64	**184.2** 7 1/4	**260.4** 10 1/4	**76.2** 3	**27.0** 1 1/16	**20.6** 13/16	**36.5** 1 7/16	**4.4** 11/64	**76.2** 3	**43.7** 1 23/32	**71.00** 2 51/64	**16** 5/8	1203KRS	S1203K	A11358	**6.722** 14.82
RAKHL[1]	2 7/16	**6.4** 1/4	**76.20** 3	**158.8** 6 1/4	**78.6** 3 3/32	**203.2** 8	**285.8** 11 1/4	**82.6** 3 1/4	**27.0** 1 1/16	**20.6** 13/16	**41.3** 1 5/8	**4.8** 3/16	**84.1** 3 5/16	**46.8** 1 27/32	**78.20** 3 5/64	**16** 5/8	1207KRS	S1207K	–	**8.210** 18.10
RAKHL	2 15/16	**6.4** 1/4	**88.90** 3 1/2	**181.0** 7 1/4	**113.5** 3 15/32	**228.6** 9	**330.2** 13	**88.9** 3 1/2	**31.8** 1 1/4	**23.8** 15/16	**50.8** 2	**8.7** 11/32	**101.6** 4	**54.8** 2 5/32	**118.70** 3 43/64	**20** 3/4	1215KRS	S1215K	T-28261	**11.785** 25.98

[1]Special order.

YASM MEDIUM-DUTY SERIES SET SCREW LOCK

- Timken YASM medium-duty pillow blocks feature the GYM-KRRB bearing inserts.
- Timken YASM medium-duty pillow blocks are ideal for conveyer, fan and blower, sawmill, and feed and grain handling applications.
- The cast-iron housings are durable, powder-coated and maintain an excellent finish, while resisting corrosion, chemicals and weather exposure.
- These pillow blocks incorporate premium features designed to extend bearing life.

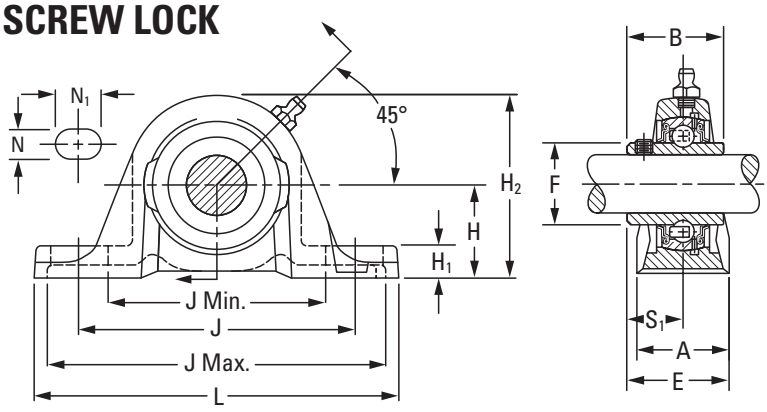
Suggested shaft tolerances:

1 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;

2 in. – 3 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: YASM 1 7/16 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
YASM	GYM-KRRB	Page A-56

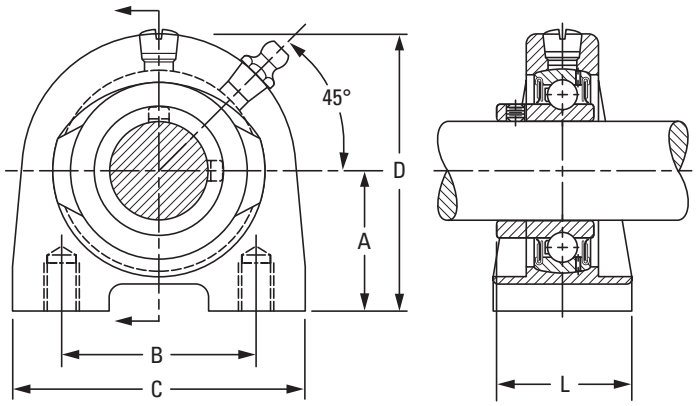
Unit	Shaft Dia.	H	H_2	B	L	J	J min.	J max.	A	H_1	F	N	N_1	S_1	E	Bolt Size	Bearing No.
	in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	
YASM	1	42.86 1 11/16	83.30 3 9/32	38.10 1 1/2	157.2 6 3/16	117.5 4 5/8	93.70 3 11/16	141.30 5 9/16	39.70 1 9/16	16.70 21/32	40.31 1.587	14.22 9/16	23.88 15/16	22.20 7/8	42.070 1 21/32	12 1/2	GYM1100KRRB
YASM	1 3/16	47.62 1 7/8	93.60 3 11/16	42.90 1 11/16	166.7 6 9/16	130.2 5 1/8	105.60 4 5/32	154.80 6 3/32	45.20 1 25/32	18.30 23/32	48.84 1.844	14.22 9/16	24.64 31/32	25.40 1	48.020 1 57/64	12 1/2	GYM1103KRRB
YASM	1 7/16	53.98 2 1/8	104.80 4 1/8	49.20 1 15/16	179.4 7 1/16	136.5 5 3/8	110.30 4 11/32	162.70 6 13/16	47.60 1 7/8	23.00 29/32	52.27 2.058	14.22 9/16	26.16 1 1/32	30.20 1 3/16	53.980 2 1/8	12 1/2	GYM1107KRRB
YASM	1 1/2	53.98 2 1/8	106.30 4 3/16	49.20 1 15/16	191.3 7 17/32	149.2 5 7/8	120.70 4 3/4	177.80 7	50.80 2	19.10 3/4	57.92 2.280	14.22 9/16	28.45 1 1/8	30.20 1 3/16	55.560 2 3/16	12 1/2	GYM1108KRRB
YASM	1 11/16	57.15 2 1/4	114.30 4 1/2	51.60 2 1/32	200.0 7 7/8	157.9 6 7/32	134.10 5 9/32	183.40 7 5/32	55.60 2 3/16	19.10 3/4	62.84 2.474	17.53 11/16	23.88 15/16	32.50 1 9/32	60.330 2 3/8	16 5/8	GYM1111KRRB
YASM	1 3/4																GYM1112KRRB
YASM	1 15/16	63.50 2 1/2	126.20 4 31/32	55.60 2 3/16	222.3 8 3/4	176.2 6 15/16	146.90 5 25/32	205.60 8 3/32	54.80 2 5/32	20.60 13/16	69.77 2.747	18.26 23/32	29.46 1 5/32	33.30 1 5/16	61.910 2 7/16	16 5/8	GYM1115KRRB
YASM	2																GYM1200KRRB
YASM	2 3/16	69.85 2 3/4	138.90 5 15/32	65.10 2 9/16	239.7 9 7/16	188.1 7 13/32	158.80 6 1/4	217.50 8 9/16	60.30 2 3/8	23.80 15/16	76.48 3.011	18.26 23/32	29.46 1 5/32	39.10 1 9/16	69.850 2 3/4	16 5/8	GYM1203KRRB
YASM	2 1/4																GYM1204KRRB
YASM	2 7/16	76.20 3	153.99 6 1/16	77.78 3 1/16	266.7 10 1/2	203.2 8	168.28 6 5/8	238.13 9 3/8	73.02 2 7/8	33.34 1 5/16	86.92 3.422	20.57 13/16	35.05 1 3/8	42.86 1 11/16	79.375 3 1/8	20 3/4	GYM1207KRRB
YASM	2 1/2																GYM1208KRRB
YASM	2 11/16	88.90 3 1/2	177.80 7	93.66 3 11/16	330.2 13	228.6 9	177.80 7	279.40 11	88.90 3 1/2	31.75 1 1/4	91.90 3.618	23.88 15/16	50.08 2	44.45 1 3/4	93.660 3 11/16	20 3/4	GYM1211KRRB
YASM	2 15/16	88.90 3 1/2	177.80 7	93.66 3 11/16	330.2 13	228.6 9	177.80 7	279.40 11	88.90 3 1/2	31.75 1 1/4	91.90 3.618	23.88 15/16	50.08 2	44.45 1 3/4	93.660 3 11/16	20 3/4	GYM1215KRRB
YASM	3																GYM1300KRRB

STB SERIES

- STB two-bolt housed units come assembled and ready for mounting.
- These housed units are ideal for applications where space is limited, bolt screws are accessed from the bottom of the unit, loads are not severe and reversing moments do not occur.
- The units are assembled with GYA-RRB bearings with positive-contact, land-riding seals and set screw locking.
- The units are factory-prelubricated, but a grease fitting is provided for relubrication if required.

To order, specify UNIT and SHAFT DIAMETER.

Example: STB 1 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
STB	GYA-RRB	Page A-54

Unit	Shaft Dia.	A	B	C	D	F	H	N	L	Bearing No.	Housing No.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.		
STB	3/4	**32.3** 1 5/16	**50.80** 2	**73.03** 2 7/8	**71.12** 2 13/32	**18.30** 23/32	**36.50** 1 7/16	**3/8-16**	**36.50** 1 7/16	GYA012RRB	T-90001
STB	**20**									GYAE20RRB	
STB	7/8									GYA014RRB	T-39343
STB	15/16	**36.5** 1 7/16	**50.80** 2	**76.20** 3	**71.44** 2 13/16	**18.30** 23/32	**36.50** 1 7/16	**3/8-16**	**37.70** 1 31/64	GYA015RRB	
STB	1									GYA100RRB	
STB	**25**									GYAE25RRB	
STB	1 1/8									GYA102RRB	T-90003
STB	1 3/16	**42.9** 1 11/16	**76.20** 3	**101.60** 4	**82.60** 3 1/4	**19.05** 3/4	**38.10** 1 1/2	**7/16-14**	**42.07** 1 21/32	GYA103RRB	
STB	1 1/4 S									GYA103RRB2	
STB	**30**									GYAE30RRB	
STB	1 1/4									GYA104RRB	T-40256
STB	1 3/8	**47.6** 1 7/8	**82.60** 3 1/4	**107.95** 4 1/4	**93.66** 3 11/16	**22.23** 7/8	**44.45** 1 3/4	**1/2-13**	**48.02** 1 57/64	GYA106RRB	
STB	1 7/16									GYA107RRB3	
STB	**35**									GYAE35RRB	
STB	1 1/2	**49.2** 1 15/16	**88.90** 3 1/2	**117.48** 4 5/8	**100.01** 3 15/16	**23.81** 15/16	**47.63** 1 7/8	**1/2-13**	**51.20** 2 1/64	GYA108RRB	T-90005
STB	**40**									GYAE40RRB	
STB	1 5/8									GYA110RRB	T-90008
STB	1 11/16	**54.0** 2 1/8	**95.25** 3 3/4	**127.00** 5	**107.95** 4 1/4	**25.40** 1	**50.80** 2	**1/2-13**	**53.98** 2 1/8	GYA111RRB	
STB	1 3/4									GYA112RRB	
STB	**45**									GYAE45RRB	
STB	1 15/16	**57.2** 2 1/4	**101.60** 4	**139.70** 5 1/2	**114.30** 4 1/2	**25.40** 1	**50.80** 2	**5/8-11**	**56.36** 2 7/32	GYA115RRB	T-90010
STB	2									GYA200RRB	
STB	**50**									GYAE50RRB	

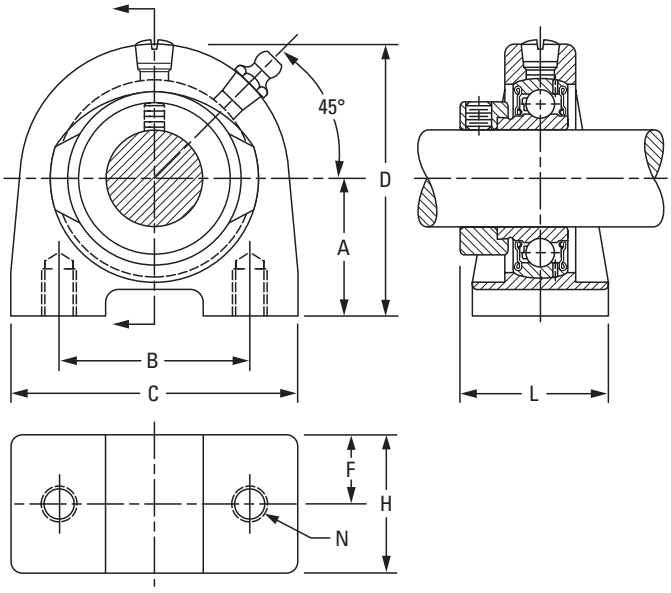
NOTE: Shaft diameter with an S = smaller housing.

VTB SERIES

- VTB two-bolt housed units are nearly identical to the STB unit, except they are assembled with the GRA-RRB bearings and positive-contact R-seals and locking collar.

To order, specify UNIT and SHAFT DIAMETER.

Example: VTB 1 in.



BEARING DATA

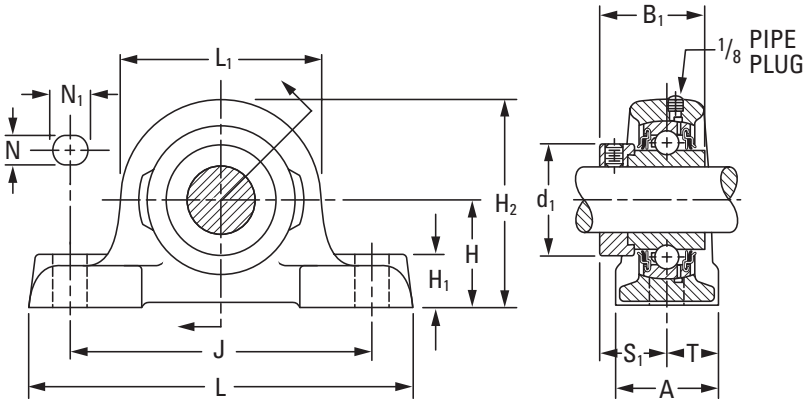
Unit	Bearing No.	Dimensions and Load Ratings
VTB	GRA-RRB	Page A-50

Unit	Shaft Dia.	A	B	C	D	F	H	N	L	Bearing No.	Collar No.	Housing No.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			
VTB	3/4	**32.3**	**50.80**	**73.03**	**71.12**	**18.30**	**36.50**	**3/8-16**	**41.67**	GRA012RRB	S1012K	T-90001
VTB	**20**	1 5/16	2	2 7/8	2 13/32	23/32	1 7/16		1 41/64	GRAE20RRB	SE20K	
VTB	7/8									GRA014RRB	S1014K	
VTB	15/16	**36.5**	**50.80**	**76.20**	**71.44**	**18.30**	**36.50**	**3/8-16**	**41.67**	GRA015RRB	S1015K	T-39343
VTB	1	1 7/16	2	3	2 13/16	23/32	1 7/16		1 41/64	GRA100RRB	S1100K C2	
VTB	**25**									GRAE25RRB	SE25K	
VTB	1 1/8									GRA102RRB	S1102K	
VTB	1 3/16	**42.9**	**76.20**	**101.60**	**82.60**	**19.05**	**38.10**	**7/16-14**	**45.64**	GRA103RRB	S1103K	T-90003
VTB	1 1/4 S	1 11/16	3	4	3 1/4	3/4	1 1/2		1 51/64	GRA103RRB2	S1103K3	
VTB	**30**									GRAE30RRB	SE30K	
VTB	1 1/4									GRA104RRB	S1104K C1	
VTB	13/8	**47.6**	**82.60**	**107.95**	**93.66**	**22.23**	**44.45**	**1/2-13**	**51.60**	GRA106RRB	S1106K C1	T-40256
VTB	1 7/16	1 7/8	3 1/4	4 1/4	3 11/16	7/8	1 3/4		2 1/32	GRA107RRB3	S1107K C1	
VTB	**35**									GRAE35RRB	SE35K	
VTB	1 1/2	**49.2**	**88.90**	**117.48**	**100.01**	**23.81**	**47.63**	**1/2-13**	**56.36**	GRA108RRB	S1108KT	T-90005
VTB	**40**	1 15/16	3 1/2	4 5/8	3 15/16	15/16	1 7/8		2 7/32	GRAE40RRB	SE40K	
VTB	1 5/8									GRA110RRB	S1110K	
VTB	1 11/16	**54.0**	**95.25**	**127.00**	**107.95**	**25.40**	**50.80**	**1/2-13**	**57.94**	GRA111RRB	S1111K	T-90008
VTB	1 3/4	2 1/8	3 3/4	5	4 1/4	1	2		2 9/32	GRA112RRB	S1112K	
VTB	**45**									GRAE45RRB	SE45K	
VTB	1 15/16									GRA115RRB	S1115K	
VTB	2 S	**57.2**	**101.60**	**139.70**	**114.30**	**25.40**	**50.80**	**5/8-11**	**57.94**	GRA200RRB	S1115K2	T-90010
VTB	**50**	2 1/4	4	5 1/2	4 1/2	1	2		2 9/32	GRAE50RRB	SE50K	

NOTE: Shaft diameter with an S = smaller housing.

RAO, LAO HEAVY SERIES

- This is a compact, economic, heavy-duty ball bearing housed unit.
- This series incorporates the tested and proven features of the Timken standard RAK-series pillow block.
- RAO-series bearings are equipped to handle heavy capacity.
- LAO-series bearings are equipped with heavy-series GN-KLLB wide-inner-ring ball bearings.
- The units are supplied with a self-locking collar that eliminates shaft shoulders, machining adapters and sleeves, and locknuts that provide easy mounting.



Suggested shaft tolerances:

1 3/16 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RAO 1 7/16 in.

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RAO	GN-KRRB	Page A-57
LAO	GN-KLLB	Page A-59

Unit[1]	Shaft Dia.	H	H_2	B_1	L_1	J	L	A	H_1	N	N_1	d_1	S_1	T	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in.	mm in	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.			New	kg lbs.
RAO	1 3/16	**47.63** 1 7/8	**93.7** 3 11/16	**50.0** 1 31/32	**90.5** 3 9/16	**136.5** 5 3/8	**173.0** 6 13/16	**49.2** 1 15/16	**22.2** 7/8	**15.9** 5/8	**19.0** 3/4	**49.2** 1 15/16	**32.5** 1 9/32	**24.6** 31/32	**12** 1/2	GN103KRRB	SN103K	T-18798	**1.898** 4.18
RAO	1 7/16	**53.98** 2 1/8	**104.0** 4 3/32	**51.6** 2 1/32	**101.6** 4	**152.4** 6	**192.1** 7 9/16	**54.0** 2 1/8	**23.8** 15/16	**15.9** 5/8	**19.0** 3/4	**55.6** 2 3/16	**33.3** 1 5/16	**27.0** 1 1/16	**12** 1/2	GN107KRRB	SN107K	T-18626	**2.406** 5.30
RAO	1 1/2	**60.33** 2 3/8	**117.5** 4 5/8	**57.2** 2 1/4	**114.3** 4 1/2	**171.4** 6 3/4	**215.9** 8 1/2	**60.3** 2 3/8	**27.0** 1 1/16	**19.0** 3/4	**25.4** 1	**63.5** 2 1/2	**37.3** 1 15/32	**30.2** 1 3/16	**16** 5/8	GN108KRRB	SN108K	T-18800	**3.755** 8.27
RAO	1 11/16	**66.68** 2 5/8	**130.2** 5 1/8	**58.7** 2 5/16	**127.0** 5	**190.5** 7 1/2	**239.7** 9 7/16	**66.7** 2 5/8	**30.2** 1 3/16	**19.0** 3/4	**25.4** 1	**69.8** 2 3/4	**38.9** 1 17/32	**33.3** 1 5/16	**16** 5/8	GN111KRRB	SN111K	T-18802	**5.030** 11.08
RAO	1 15/16	**71.44** 2 13/16	**141.3** 5 9/16	**66.7** 2 5/8	**138.1** 5 7/16	**209.6** 8 1/4	**265.1** 10 7/16	**73.0** 2 7/8	**33.3** 1 5/16	**19.0** 3/4	**25.4** 1	**76.2** 3	**42.1** 1 21/32	**36.5** 1 7/16	**16** 5/8	GN115KRRB	SN115K	T-18804	**6.265** 13.80
RAO	2 3/16	**77.79** 3 1/16	**153.2** 6 1/32	**73.0** 2 7/8	**150.8** 5 15/16	**228.6** 9	**287.3** 11 5/16	**79.4** 3 1/8	**36.5** 1 7/16	**22.2** 7/8	**28.6** 1 1/8	**82.6** 3 1/4	**45.2** 1 25/32	**39.7** 1 9/16	**20** 3/4	GN203KRRB	SN203K	T-18806	**7.940** 17.49
RAO	2 7/16	**84.14** 3 5/16	**165.9** 6 17/32	**79.4** 3 1/8	**163.5** 6 7/16	**247.6** 9 3/4	**312.7** 12 5/16	**84.1** 3 5/16	**38.1** 1 1/2	**22.2** 7/8	**28.6** 1 1/8	**88.9** 3 1/2	**48.4** 1 29/32	**42.1** 1 21/32	**20** 3/4	GN207KRRB	SN207K	T-18808	**9.761** 21.50
RAO	2 11/16	**96.84** 3 13/16	**192.1** 7 9/16	**88.9** 3 1/2	**188.9** 7 7/16	**285.8** 11 1/4	**360.4** 14 3/16	**96.0** 3 13/16	**44.4** 1 3/4	**25.4** 1	**33.3** 1 5/16	**101.6** 4	**54.8** 2 5/32	**48.4** 1 29/32	**22** 7/8	GN211KRRB	SO211K	T-18810	**15.322** 33.75
RAO	2 15/16	**104.78** 4 1/8	**204.8** 8 1/16	**100.0** 3 15/16	**201.6** 7 15/16	**304.8** 12	**384.2** 15 1/8	**103.2** 4 1/16	**47.6** 1 7/8	**25.4** 1	**33.3** 1 5/16	**112.7** 4 7/16	**62.7** 2 15/32	**51.6** 2 1/32	**22** 7/8	GN215KRRB	SN215K	T-18601	**18.205** 40.10

[1]LAO assembled with GN-KLLB bearing.

RSA, LSA INDUSTRIAL SERIES

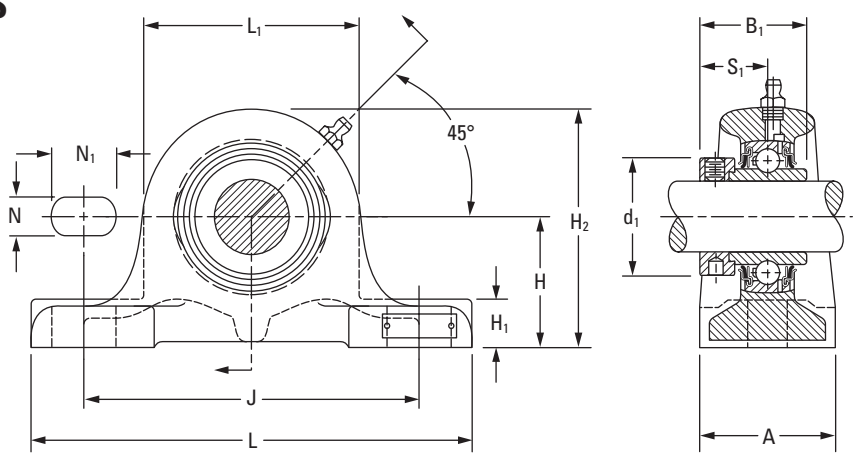
- RSA series is equipped with G-KRRB wide inner ring ball bearings.
- LSA series is equipped with G-KLLB wide inner ring bearings.
- Pillow blocks are prelubricated and ready for immediate use.
- A grease fitting is provided for relubrication if required.
- All units are supplied with a self-locking collar.

Suggested shaft tolerances:

½ in. – 1 15⁄16 in.,
nominal to -0.013 mm, -0.0005 in.;
2 in. – 3 15⁄16 in.,
nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RSA 1 7⁄16 in.

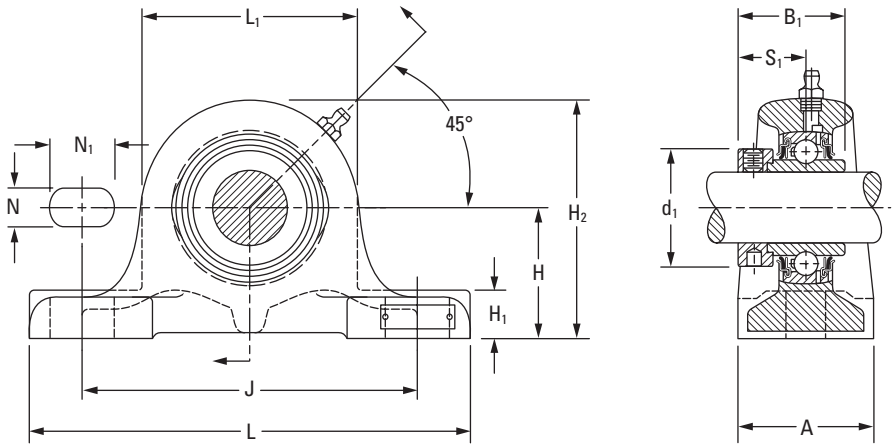


BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RSA	G-KRRB	Page A-34
LSA	G-KLLB	Page A-37

Unit	Shaft Dia.	H	H_2	B_1	L_1	J	L	A	H_1	N	N_1	d_1	S_1	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			New	**kg** lbs.
RSA	1⁄2														G1008KRRB	S1008K		
RSA	5⁄8	**31.75**	**58.7**	**37.3**	**54.0**	**96.8**	**122.2**	**31.8**	**12.7**	**11.1**	**14.3**	**30.2**	**23.4**	**10**	G1010KRRB	S1010K	T-22784	**0.681**
RSA	11⁄16	1 1⁄4	2 5⁄16	1 15⁄32	2 1⁄8	3 13⁄16	4 13⁄16	1 1⁄4	1⁄2	7⁄16	9⁄16	1 3⁄16	59⁄64	3⁄8	G1011KRRB	S1011K		1.50
RSA	**17**														GE17KRRB	SE17K		
RSA	3⁄4	**44.45**	**76.2**	**43.7**	**63.5**	**127.0**	**165.1**	**50.8**	**14.3**	**14.3**	**19.0**	**33.3**	**26.6**	**12**	G1012KRRB	S1012K	T-22741	**1.226**
RSA	**20**	1 3⁄4	3	1 23⁄32	2 1⁄2	5	6 1⁄2	2	9⁄16	9⁄16	3⁄4	1 5⁄16	1 3⁄64	1⁄2	GE20KRRB	SE20K		2.70
RSA	7⁄8														G1014KRRB	S1014K		
RSA	15⁄16	**50.80**	**85.7**	**44.4**	**69.8**	**139.7**	**177.8**	**54.0**	**15.9**	**14.3**	**19.0**	**38.1**	**27.0**	**12**	G1015KRRB	S1015K	T-22716	**1.521**
RSA	1	2	3 3⁄8	1 3⁄4	2 3⁄4	5 1⁄2	7	2 1⁄8	5⁄8	9⁄16	3⁄4	1 1⁄2	1 1⁄16	1⁄2	G1100KRRB	S1100K		3.35
RSA	**25**														GE25KRRB	SE25K		
RSA	1 1⁄16														G1101KRRB	S1101K		
RSA	1 1⁄8	**50.80**	**91.3**	**48.4**	**81.0**	**139.7**	**177.8**	**54.0**	**17.5**	**15.9**	**20.6**	**44.1**	**30.2**	**12**	G1102KRRB	S1102K	T-22725	**1.789**
RSA, LSA	1 3⁄16	2	3 19⁄32	1 29⁄32	3 3⁄16	5 1⁄2	7	2 1⁄8	11⁄16	5⁄8	13⁄16	1 47⁄64	1 3⁄16	1⁄2	G1103KRRB	S1103K		3.94
RSA	**30**														GE30KRRB	SE30K		
RSA, LSA	1 1⁄4														G1104KRRB	S1104K		
RSA	1 5⁄16														G1105KRRB	S1105K		
RSA	1 3⁄8	**60.33**	**111.1**	**51.2**	**101.6**	**158.8**	**209.6**	**66.7**	**22.2**	**19.0**	**31.8**	**54.0**	**32.5**	**16**	G1106KRRB	S1106K	T-22382	**3.260**
RSA, LSA	1 7⁄16	2 3⁄8	4 3⁄8	2 1⁄64	4	6 1⁄4	8 1⁄4	2 5⁄8	7⁄8	3⁄4	1 1⁄4	2 1⁄8	1 9⁄32	5⁄8	G1107KRRB	S1107K		7.18
RSA	**35**														GE35KRRB	SE35K		
RSA	1 1⁄2														G1108KRRB	S1108KT		
RSA	1 9⁄16	**60.33**	**111.1**	**56.4**	**101.6**	**168.3**	**209.6**	**60.3**	**19.0**	**19.0**	**22.2**	**60.3**	**34.9**	**16**	G1109KRRB	S1109KT	T-22752	**2.928**
RSA	**40**	2 3⁄8	4 3⁄8	2 7⁄32	4	6 5⁄8	8 1⁄4	2 3⁄8	3⁄4	3⁄4	7⁄8	2 3⁄8	1 3⁄8	5⁄8	GE40KRRB	SE40K		6.45

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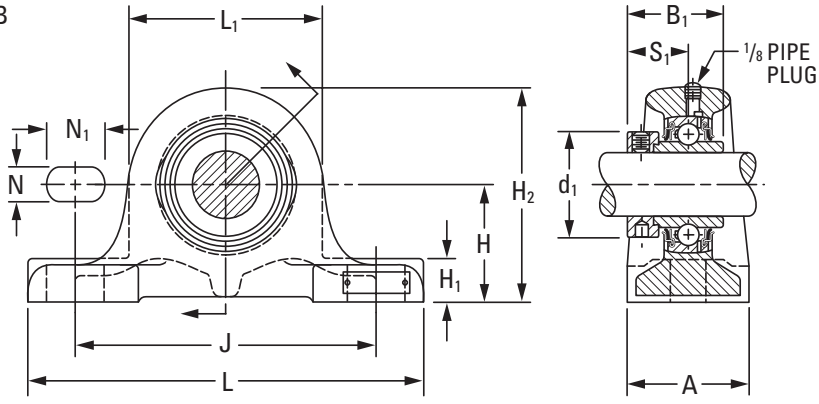


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Unit	Shaft Dia.	H	H_2	B_1	L_1	J	L	A	H_1	N	N_1	d_1	S_1	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			New	**kg** lbs.
RSA	1 5/8														G1110KRRB	S1110K		
RSA, LSA	1 11/16	**60.33**	**114.3**	**56.4**	**108.0**	**168.3**	**209.6**	**60.3**	**20.6**	**19.0**	**23.8**	**63.5**	**34.9**	**16**	G1111KRRB	S1111K	T-22701	**3.064**
RSA	1 3/4	2 3/8	4 1/2	2 7/32	4 1/4	6 5/8	8 1/4	2 3/8	13/16	3/4	15/16	2 1/2	1 3/8	5/8	G1112KRRB	S1112K		6.75
RSA	**45**														GE45KRRB	SE45K		
RSA	1 7/8														G1114KRRB	S1114K		
RSA, LSA	1 15/16	**69.85**	**130.2**	**62.7**	**120.6**	**209.6**	**269.9**	**69.8**	**26.2**	**19.0**	**34.9**	**69.8**	**38.1**	**16**	G1115KRRB	S1115K	T-22384	**4.885**
RSA	**50**	2 3/4	5 1/8	2 15/32	4 3/4	8 1/4	10 5/8	2 3/4	1 1/32	3/4	1 3/8	2 3/4	1 1/2	5/8	GE50KRRB	SE50K		10.76
RSA	2														G1200KRRB	S1200K		
RSA	2 1/8	**79.38**	**142.1**	**71.4**	**125.4**	**228.6**	**288.9**	**79.4**	**25.4**	**19.0**	**33.3**	**76.2**	**43.7**	**16**	G1202KRRB	S1202K	T-22696	**6.022**
RSA, LSA	2 3/16	3 1/8	5 19/32	2 13/16	4 15/16	9	11 3/8	3 1/8	1	3/4	1 5/16	3	1 23/32	5/8	G1203KRRB	S1203K		13.22
RSA	**55**														GE55KRRB	SE55K		
RSA	2 1/4														G1204KRRB	S1204K		
RSA	2 3/8	**79.38**	**149.2**	**77.8**	**139.7**	**228.6**	**288.9**	**79.4**	**28.6**	**22.2**	**28.6**	**84.1**	**46.8**	**20**	G1206KRRB	S1206K	T-22743	**6.901**
RSA, LSA	2 7/16	3 1/8	5 7/8	3 1/16	5 1/2	9	11 3/8	3 1/8	1 1/8	7/8	1 1/8	3 5/16	1 27/32	3/4	G1207KRRB	S1207K		15.20
RSA	**60**														GE60KRRB	SE60K		
RSA	2 11/16	**95.25**	**173.0**	**82.6**	**155.6**	**260.4**	**320.7**	**88.9**	**33.3**	**22.2**	**34.9**	**96.8**	**45.2**	**20**	G1211KRRB	S1211KT	T-22748	**9.997**
RSA	**70**	3 3/4	6 13/16	3 1/4	6 1/8	10 1/4	12 5/8	3 1/2	1 5/16	7/8	1 3/8	3 13/16	1 25/32	3/4	GE70KRRB	SE70K		22.02
RSA	2 15/16	**95.25**	**177.8**	**92.1**	**196.1**	**206.4**	**320.7**	**88.9**	**38.1**	**22.2**	**31.8**	**101.6**	**54.8**	**20**	G1215KRRB	S1215K	T-22386	**10.683**
RSA	**75**	3 3/4	7	3 5/8	7 23/32	10 1/4	12 5/8	3 1/2	1 1/2	7/8	1 1/4	4	2 5/32	3/4	GE75KRRB	SE75K		23.53

RSAO, LSAO HEAVY SERIES

- RSAO pillow blocks are equipped with GN-KRRB wide-inner-ring ball bearings.
- LSAO pillow blocks are equipped with GN-KLLB wide-inner-ring ball bearings.
- All units are suited for installations where the load is heavy in proportion to the shaft diameter or where considerable shock loads exist.
- All units are for use in wet or extremely dirty conditions.
- These units are prelubricated and ready for immediate use. A grease fitting is also provided for relubrication if required.
- All units are supplied with a self-locking collar.



Suggested shaft tolerances:

1 1/16 in., nominal to -0.013 mm, -0.0005 in.;

2 in. – 3 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RSAO 1 7/16 in.

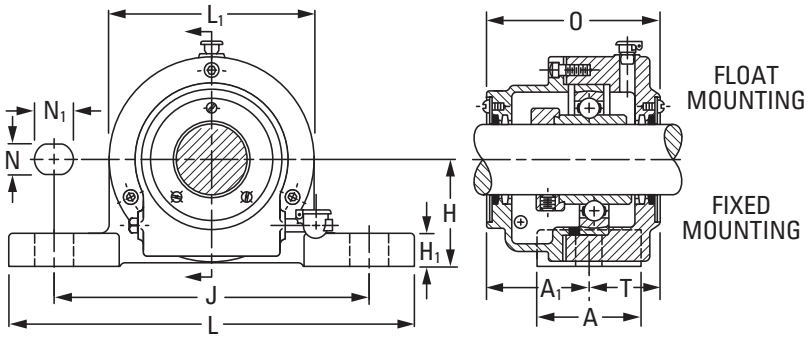
BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RSAO	GN-KRRB	Page A-57
LSAO	GN-KLLB	Page A-59

Unit	Shaft Dia.	H	H_2	B_1	L_1	J	L	A	H_1	N	N_1	d_1	S_1	Bolt Size	Bearing No.		Collar No.	Housing No.	Unit Wt.
	in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	RSAO	LSAO		New	kg lbs.
RSAO, LSAO	1 3/16	**60.33** 2 3/8	**108.0** 4 1/4	**50.0** 1 31/32	**95.2** 3 3/4	**168.3** 6 5/8	**209.6** 8 1/4	**60.3** 2 3/8	**22.2** 7/8	**15.9** 5/8	**25.4** 1	**48.7** 1.918	**32.5** 1.280	**12** 1/2	GN103KRRB	(KLLB)	SN103K	T-22678	**2.937** 6.47
RSAO, LSAO	1 7/16	**69.85** 2 3/4	**122.2** 4 13/16	**51.6** 2 1/32	**104.8** 4 1/8	**209.6** 8 1/4	**269.9** 10 5/8	**69.8** 2 3/4	**23.8** 15/16	**19.0** 3/4	**28.6** 1 1/8	**55.1** 2.168	**33.3** 1 5/16	**16** 5/8	GN107KRRB	(KLLB)	SN107K	T-22496	**4.154** 9.15
RSAO, LSAO	1 1/2	**79.38** 3 1/8	**136.6** 5 3/8	**57.2** 2 1/4	**114.3** 4 1/2	**228.6** 9	**288.9** 11 3/8	**79.4** 3 1/8	**27.0** 1 1/16	**19.0** 3/4	**28.6** 1 1/8	**63.0** 2.480	**37.3** 1 15/32	**16** 5/8	GN108KRRB	(KLLB)	SN108K	T-22672	**5.857** 12.90
RSAO, LSAO	1 11/16	**79.38**	**142.9**	**58.7**	**127.0**	**228.6**	**288.9**	**79.4**	**30.2**	**19.0**	**28.6**	**69.3**	**38.9**	**16**	GN111KRRB	(KLLB)	SN111K	T-22498	**6.560**
RSAO	1 3/4	3 1/8	5 5/8	2 5/16	5	9	11 3/8	3 1/8	1 3/16	3/4	1 1/8	2.730	1 17/32	5/8	GN112KRRB	–	SN112K	–	14.45
RSAO, LSAO	1 15/16	**79.38** 3 1/8	**148.4** 5 27/32	**66.7** 2 5/8	**138.1** 5 7/16	**228.6** 9	**288.9** 11 3/8	**79.4** 3 1/8	**33.3** 1 5/16	**19.0** 3/4	**28.6** 1 1/8	**75.7** 2.980	**42.1** 1 21/32	**16** 5/8	GN115KRRB	(KLLB)	SN115K	T-22502	**7.246** 15.96
RSAO	2	**95.25**	**170.7**	**73.0**	**150.8**	**260.4**	**320.7**	**88.9**	**36.5**	**22.2**	**34.9**	**82.0**	**45.2**	**20**	GN200KRRB	–	SN200K	T-22500	**10.192**
RSAO, LSAO	2 3/16	3 3/4	6 23/32	2 7/8	5 15/16	10 1/4	12 5/8	3 1/2	1 7/16	7/8	1 3/8	3.230	1 25/32	3/4	GN203KRRB	(KLLB)	SN203K	–	22.45
RSAO, LSAO	2 7/16	**104.78** 4 1/8	**186.5** 7 11/32	**79.4** 3 1/8	**163.5** 6 7/16	**285.8** 11 1/4	**349.2** 13 3/4	**101.6** 4	**38.1** 1 1/2	**22.2** 7/8	**34.9** 1 3/8	**88.4** 3.480	**48.4** 1 29/32	**20** 3/4	GN207KRRB	(KLLB)	SN207K	T-22494	**16.144** 35.56
RSAO, LSAO	2 11/16	**115.89** 4 9/16	**210.3** 8 9/32	**88.9** 3 1/2	**188.9** 7 7/16	**304.8** 12	**390.5** 15 3/8	**111.1** 4 3/8	**44.4** 1 3/4	**25.4** 1	**34.9** 1 3/8	**101.1** 3.980	**54.8** 2 5/32	**22** 7/8	GN211KRRB	(KLLB)	SO211K	T-22492	**19.295** 42.50
RSAO, LSAO	2 15/16	**115.89** 4 9/16	**217.5** 8 9/16	**100.0** 3 15/16	**203.2** 8	**314.3** 12 3/8	**390.5** 15 3/8	**111.1** 4 3/8	**47.6** 1 7/8	**25.4** 1	**34.9** 1 3/8	**112.2** 4.418	**62.7** 2 15/32	**22** 7/8	GN215KRRB	(KLLB)	SN215K	T-22490	**20.090** 44.25
RSAO	3 3/16	**115.89** 4 9/16	**223.0** 8 25/32	**106.4** 4 3/16	**214.3** 8 7/16	**314.3** 12 3/8	**390.5** 15 3/8	**111.1** 4 3/8	**49.2** 1 15/16	**25.4** 1	**44.4** 1 3/4	**119.1** 4.688	**65.9** 2 19/32	**22** 7/8	GN303KRRB	–	SN303K	T-22444	**22.814** 50.25
RSAO	3 7/16	**130.18** 5 1/8	**250.8** 9 7/8	**115.9** 4 9/16	**241.3** 9 1/2	**339.7** 13 3/8	**409.6** 16 1/8	**120.6** 4 3/4	**57.2** 2 1/4	**28.6** 1 1/8	**54.0** 2 1/8	**133.4** 5.250	**73.8** 2 29/32	**24** 1	GN307KRRB	–	SN307K	T-22446	**30.986** 68.25
RSAO	3 15/16	**144.46** 5 11/16	**281.0** 11 1/16	**128.6** 5 1/16	**273.0** 10 3/4	**374.6** 14 3/4	**439.7** 17 5/16	**130.2** 5 1/8	**65.1** 2 9/16	**28.6** 1 1/8	**44.4** 1 3/4	**146.0** 5.750	**78.6** 3 3/32	**24** 1	GN315KRRB	–	SN315K	T-22448	**40.633** 89.50

SAL INDUSTRIAL SERIES, FIXED AND FLOATING TYPES

- These types are designed for applications where normal to high temperatures are encountered and applications where one or more floating bearing units are required.
- The floating unit allows the bearing to move axially as the shaft expands from rising temperatures. The fixed unit maintains shaft location.
- The bearings have a loose internal fit.
- The SAL unit is equipped with a self-aligning SM wide-inner-ring bearing and a self-locking collar.
- The external aligning ring is fitted to the spherical surface of the outer ring.
- These types are equipped with oil-tight seals. They're normally fitted for oil lubrication, but they can be equipped for grease lubrication when specified.
- Before installation, lubricate with high-grade automotive oil, turbine oil or ball-bearing grease.
- The units are assembled with a spacer ring (fixed type). By removing the spacer ring, the assembly becomes a floating unit.



Suggested shaft tolerances:

1 3/16 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 3 7/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER and whether fixed or floating.

Example: SAL 1 7/16 in. (one fixed, one floating).

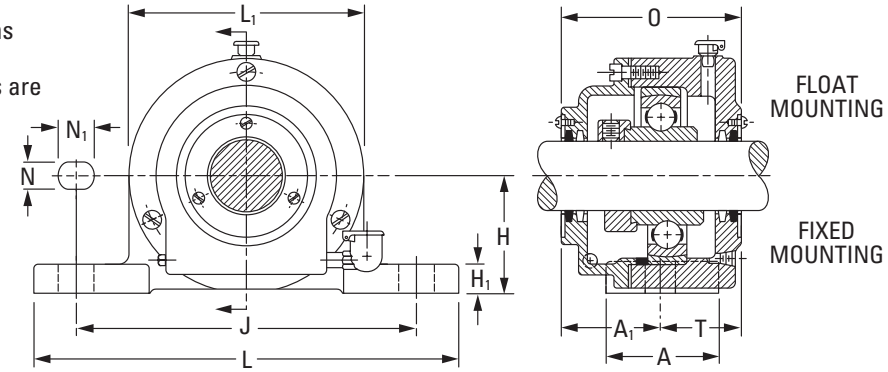
BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
SAL	SM-KS	Page A-43

Unit	Shaft Dia.	Total Float	H	O	L_1	A	J	L	N	N_1	H_1	A_1	T	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in.	**mm** in.	**mm** in	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			New	**kg** lbs.
SAL	1 3/16	**6.4** 1/4	**50.80** 2	**97.6** 3 27/32	**96.8** 3 13/16	**54.0** 2 1/8	**139.7** 5 1/2	**177.8** 7	**15.9** 5/8	**19.0** 3/4	**17.5** 11/16	**56.4** 2 7/32	**41.3** 1 5/8	**12** 1/2	SM1103KS	S1103K	T-12127	**3.768** 8.30
SAL	1 1/4	**6.4** 1/4	**60.33** 2 3/8	**104.8** 4 1/8	**108.0** 4 1/4	**60.3** 2 3/8	**158.8** 6 1/4	**210.0** 8 1/4	**19.0** 3/4	**25.4** 1	**19.0** 3/4	**62.7** 2 15/32	**42.1** 1 21/32	**16** 5/8	SM1104KS	S1104K	T-13108	**5.239** 11.54
SAL	1 7/16	**6.4** 1/4	**60.33** 2 3/8	**104.8** 4 1/8	**108.0** 4 1/4	**60.3** 2 3/8	**158.8** 6 1/4	**210.0** 8 1/4	**19.0** 3/4	**25.4** 1	**19.0** 3/4	**62.7** 2 15/32	**42.1** 1 21/32	**16** 5/8	SM1107KS	S1107K	T-13108	**5.239** 11.54
SAL	1 1/2	**7.9** 5/16	**60.33** 2 3/8	**108.0** 4 1/4	**120.6** 4 3/4	**60.3** 2 3/8	**168.3** 6 5/8	**210.0** 8 1/4	**19.0** 3/4	**25.4** 1	**19.0** 3/4	**63.5** 2 1/2	**44.4** 1 3/4	**16** 5/8	SM1108KTS	S1108KT	T-12121	**6.143** 13.53
SAL	1 11/16	**7.9** 5/16	**60.33** 2 3/8	**110.3** 4 11/32	**120.6** 4 3/4	**60.3** 2 3/8	**168.3** 6 5/8	**210.0** 8 1/4	**19.0** 3/4	**25.4** 1	**19.0** 3/4	**65.9** 2 19/32	**44.4** 1 3/4	**16** 5/8	SM1111KS	S1111K	T-12121	**5.866** 12.92
SAL	1 15/16	**7.9** 5/16	**69.85** 2 3/4	**116.7** 4 19/32	**133.4** 5 1/4	**69.8** 2 3/4	**210.0** 8 1/4	**269.9** 10 5/8	**19.0** 3/4	**25.4** 1	**22.2** 7/8	**69.1** 2 23/32	**47.6** 1 7/8	**16** 5/8	SM1115KS	S1115K	T-12313	**8.113** 17.87
SAL	2 3/16	**7.9** 5/16	**79.38** 3 1/8	**137.3** 5 13/32	**146.0** 5 3/4	**79.4** 3 1/8	**228.6** 9	**288.9** 11 3/8	**19.0** 3/4	**25.4** 1	**22.2** 7/8	**79.4** 3 1/8	**57.9** 2 9/32	**16** 5/8	SM1203KS	S1203K	A-5845	**10.978** 24.18
SAL	2 7/16	**9.5** 3/8	**79.38** 3 1/8	**150.0** 5 29/32	**158.8** 6 1/4	**79.4** 3 1/8	**228.6** 9	**288.9** 11 3/8	**19.0** 3/4	**25.4** 1	**22.2** 7/8	**88.9** 3 1/2	**61.1** 2 13/32	**16** 5/8	SM1207KS	S1207K	A-5083	**12.894** 28.40
SAL	2 11/16	**7.1** 9/32	**95.25** 3 3/4	**156.4** 6 5/32	**171.4** 6 3/4	**88.9** 3 1/2	**259.7** 10 1/4	**320.7** 12 5/8	**22.2** 7/8	**28.6** 1 1/8	**27.0** 1 1/16	**92.1** 3 5/8	**64.3** 2 17/32	**20** 3/4	SM1211KTS	S1211K	T-18940	**15.889** 35.02
SAL	2 15/16	**9.9** 25/64	**95.25** 3 3/4	**173.8** 6 27/32	**190.5** 7 1/2	**88.9** 3 1/2	**259.7** 10 1/4	**320.7** 12 5/8	**22.2** 7/8	**28.6** 1 1/8	**27.0** 1 1/16	**100.8** 3 31/32	**73.0** 2 7/8	**20** 3/4	SM1215KS	S1215K	A-5088	**20.203** 44.50
SAL	3 7/16	**9.5** 3/8	**115.89** 4 9/16	**186.5** 7 11/32	**212.7** 8 3/8	**111.1** 4 3/8	**314.3** 12 3/8	**390.6** 15 3/8	**25.4** 1	**31.8** 1 1/4	**31.8** 1 1/4	**107.2** 4 7/32	**79.4** 3 1/8	**22** 7/8	SM1307KS	S1307K	A-5206	**33.482** 73.75

SAOL HEAVY SERIES, FIXED AND FLOATING TYPES

- These types are designed for applications with higher- than-usual temperatures or where one or more floating bearing units are required.
- The floating unit allows the bearing to move axially as the shaft expands from rising temperatures. The fixed unit maintains shaft location.
- The bearings have a loose internal fit.
- The SAOL unit is equipped with a self-aligning SMN wide-inner-ring ball bearing and a self-locking collar.
- The external aligning ring is fitted to the spherical surface of the outer ring.
- These types are equipped with oil-type seals. They're normally fitted for oil lubrication, but they can be equipped for grease lubrication when specified.
- Before installation, lubricate with high-grade automotive oil, turbine oil or ball-bearing grease.
- The units are assembled with a spacer ring (fixed type). By removing the spacer ring, the assembly becomes a floating unit.



Suggested shaft tolerances:

1 3/16 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 3 15/16 in., nominal to -0.025 mm, -0.0010 in.
Larger sizes, consult your Timken engineer.

To order, specify UNIT and SHAFT DIAMETER and whether fixed or floating.

Example: SAOL 1 7/16 in. (one fixed, one floating).

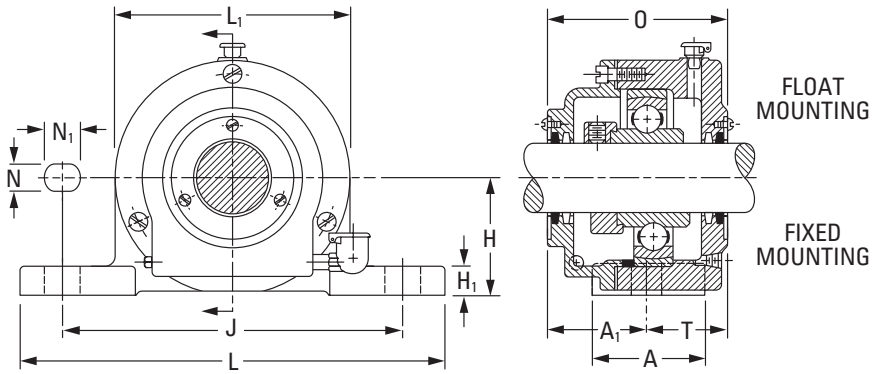
BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
SAOL	SMN-KS	Page A-62

Unit	Shaft Dia.	Total Float	H	O	L_1	A	J	L	N	N_1	H_1	A_1	T	J_1[1]	Bolt		Bearing No.	Collar No.	Housing No.	Unit Wt.
															No.	Size				
	in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.		**mm** in.			New	**kg** lbs.
SAOL	1 3/16	**7.9** 5/16	**60.33** 2 3/8	**103.2** 4 1/16	**111.1** 4 3/8	**60.3** 2 3/8	**168.3** 6 5/8	**210.0** 8 1/4	**15.9** 5/8	**22.2** 7/8	**17.5** 11/16	**60.3** 2 3/8	**42.9** 1 11/16	–	2	**12** 1/2	SMN103KS	SN103K	T-12389	**5.521** 12.16
SAOL	1 7/16	**9.1** 23/64	**69.80** 2 3/4	**111.1** 4 3/8	**120.6** 4 3/4	**69.8** 2 3/4	**209.6** 8 1/4	**269.9** 10 5/8	**19.0** 3/4	**25.4** 1	**20.6** 13/16	**69.1** 2 23/32	**42.1** 1 21/32	–	2	**16** 5/8	SMN107KS	SN107K	A-4779	**7.037** 15.50
SAOL	1 1/2	**9.5** 3/8	**79.40** 3 1/8	**123.8** 4 7/8	**146.0** 5 3/4	**79.4** 3 1/8	**228.6** 9	**288.9** 11 3/8	**19.0** 3/4	**25.4** 1	**20.6** 13/16	**74.6** 2 15/16	**49.2** 1 15/16	–	2	**16** 5/8	SMN108KS	SN108K	A-4778A	**11.350** 25.00
SAOL	1 11/16	**9.5** 3/8	**79.40** 3 1/8	**123.8** 4 7/8	**146.0** 5 3/4	**79.4** 3 1/8	**228.6** 9	**288.9** 11 3/8	**19.0** 3/4	**25.4** 1	**20.6** 13/16	**74.6** 2 15/16	**49.2** 1 15/16	–	2	**16** 5/8	SMN111KS	SN111K	A-4778	**11.150** 24.56
SAOL	1 15/16	**9.5** 3/8	**79.40** 3 1/8	**122.2** 4 13/16	**158.8** 6 1/4	**79.4** 3 1/8	**228.6** 9	**288.9** 11 3/8	**19.0** 3/4	**25.4** 1	**20.6** 13/16	**73.8** 2 29/32	**48.4** 1 29/32	–	2	**16** 5/8	SMN115KS	SN115K	A-3818	**12.462** 27.45
SAOL	2 3/16	**9.1** 23/64	**95.25** 3 3/4	**139.7** 5 1/2	**171.4** 6 3/4	**88.9** 3 1/2	**259.7** 10 1/4	**320.7** 12 5/8	**22.2** 7/8	**31.8** 1 1/4	**27.0** 1 1/16	**82.6** 3 1/4	**57.2** 2 1/4	–	2	**20** 3/4	SMN203KS	SN203K	A-4755	**15.409** 33.94
SAOL	2 7/16	**8.7** 11/32	**104.80** 4 1/8	**150.0** 5 29/32	**190.5** 7 1/2	**101.6** 4	**285.8** 11 1/4	**349.2** 13 3/4	**22.2** 7/8	**31.8** 1 1/4	**27.0** 1 1/16	**91.3** 3 19/32	**58.7** 2 5/16	–	2	**20** 3/4	SMN207KS	SN207K	A-3819	**18.841** 41.50
SAOL	2 11/16	**9.5** 3/8	**115.89** 4 9/16	**174.6** 6 7/8	**215.9** 8 1/2	**111.1** 4 3/8	**304.8** 12	**390.6** 15 3/8	**25.4** 1	**31.8** 1 1/4	**31.8** 1 1/4	**109.5** 4 5/16	**65.1** 2 9/16	–	2	**22** 7/8	SMN211KS	SO211K	A-4709	**26.332** 58.00
SAOL	2 15/16	**12.7** 1/2	**115.89** 4 9/16	**177.8** 7	**225.4** 8 7/8	**111.1** 4 3/8	**314.3** 12 3/8	**390.6** 15 3/8	**25.4** 1	**31.8** 1 1/4	**31.8** 1 1/4	**104.8** 4 1/8	**73.0** 2 7/8	–	2	**22** 7/8	SMN215KS	SN215K	A-4798	**33.823** 74.50

[1]When four bolts are used, dimension J_1 is the distance between centers, and A_1 and T are measured from the center of the base.

Continued on next page.



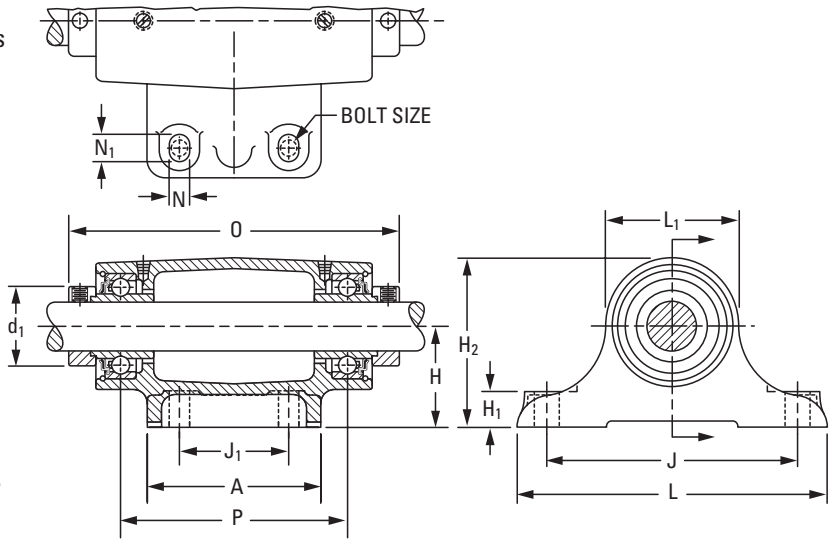
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Unit	Shaft Dia.	Total Float	H	O	L_1	A	J	L	N	N_1	H_1	A_1	T	J_1[1]	Bolt		Bearing No.	Collar No.	Housing No.	Unit Wt.
															No.	Size				
	in.	**mm** in.	**mm** in	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.		**mm** in.			New	**kg** lbs.
SAOL	3 3/16	**13.1** 33/64	**115.89** 4 9/16	**184.2** 7 1/4	**241.3** 9 1/2	**111.1** 4 3/8	**314.3** 12 3/8	**390.6** 15 3/8	**25.4** 1	**31.8** 1 1/4	**31.8** 1 1/4	**108.0** 4 1/4	**76.2** 3	**57.2** 2 1/4	4	**22** 7/8	SMN303KS	SN303K	A-4780	**35.298** 77.75
SAOL	3 7/16	**13.5** 17/32	**130.2** 5 1/8	**190.5** 7 1/2	**260.4** 10 1/4	**120.6** 4 3/4	**339.7** 13 3/8	**409.6** 16 1/8	**25.4** 1	**31.8** 1 1/4	**31.8** 1 1/4	**111.1** 4 3/8	**79.4** 3 1/8	**76.2** 3	4	**22** 7/8	SMN307KS	SN307K	A-4155	**48.805** 107.5
SAOL	3 11/16	**12.7** 1/2	**144.5** 5 11/16	**213.5** 8 13/32	**279.4** 11	**125.4** 4 15/16	**374.6** 14 3/4	**439.7** 17 5/16	**28.6** 1 1/8	**38.1** 1 1/2	**31.8** 1 1/4	**133.4** 5 1/4	**80.2** 3 5/32	–	2	**24** 1	SMO311WS	SO311K	A-4156	**54.48** 120.0
SAOL	3 15/16	**17.5** 11/16	**152.4** 6	**219.9** 8 21/32	**298.4** 11 3/4	**133.4** 5 1/4	**393.1** 15 1/2	**469.9** 18 1/2	**28.6** 1 1/8	**38.1** 1 1/2	**34.9** 1 3/8	**127.0** 5	**92.9** 3 21/32	**82.6** 3 1/4	4	**24** 1	SMN315KS	SN315K	A-4795	**70.824** 156.0
SAOL	4 3/16	**15.9** 5/8	**165.1** 6 1/2	**225.4** 8 7/8	**317.5** 12 1/2	**158.8** 6 1/4	**449.3** 17 11/16	**539.8** 21 1/4	**28.6** 1 1/8	**38.1** 1 1/2	**38.1** 1 1/2	**134.1** 5 9/32	**91.3** 3 19/32	**101.6** 4	4	**24** 1	SMN403WS	SN403K	T-14342	**88.076** 194.0
SAOL	4 7/16	**14.3** 9/16	**177.8** 7	**228.6** 9	**327.0** 12 7/8	**171.4** 6 3/4	**449.3** 17 11/16	**539.8** 21 1/4	**31.8** 1 1/4	**44.4** 1 3/4	**44.4** 1 3/4	**134.9** 5 5/16	**93.6** 3 11/16	**108.0** 4 1/4	4	**27** 1 1/8	SMN407WS	SN407K	T-11469	**95.34** 210.0
SAOL	4 15/16	**31.4** 1 15/64	**209.6** 8 1/4	**261.9** 10 5/16	**381.0** 15	**184.2** 7 1/4	**514.4** 20 1/4	**630.2** 24 13/16	**31.8** 1 1/4	**44.4** 1 3/4	**50.8** 2	**152.4** 6	**109.5** 4 5/16	**120.6** 4 3/4	4	**27** 1 1/8	SMN415WS	SN415K	T-11783	**160.262** 353.0

[1]When four bolts are used, dimension J_1 is the distance between centers, and A_1 and T are measured from the center of the base.

DRNR INDUSTRIAL SERIES

- This rigid double pillow block is designed to provide a sturdy two-bearing mounting for fans and blowers, bench grinders, buffers, vertical shafts and similar heavy-duty applications.
- The compact, one-piece housing is equipped with two wide-inner-ring ball bearings with integral R-seals and a self-locking collar.
- Individual grease chambers are provided for both bearings.
- The close clearance baffles allow excess grease to work into the center chamber of the housing.
- The grease fittings that take the place of standard pipe plugs provide the means of relubrication.
- This pillow block can be mounted in any position, with ample radial and thrust capacity.



Suggested shaft tolerances:

15/16 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;

2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: DRNR 1 7/16 in.

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
DRNR	KR	Page A-32

Unit	Shaft Dia.	H	H_2	O	L_1	J	L	A	H_1	N	N_1	J_1	d_1	P	Bolt (4 req'd)	Bearing No. (2 req'd)	Collar No.	Housing No.	Unit Wt.
	in.	**mm** in	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			New	**kg** lbs.
DRNR	15/16	**63.5** 2 1/2	**99.2** 3 29/32	**200.0** 7 7/8	**71.4** 2 13/16	**158.8** 6 1/4	**196.8** 7 3/4	**108.0** 4 1/4	**19.0** 3/4	**12.7** 1/2	**15.9** 5/8	**69.8** 2 3/4	**38.1** 1 1/2	**146.0** 5 3/4	**10** 3/8	1015KR	S1015K	T-19189	**4.812** 10.60
DRNR	1 3/16	**63.5** 2 1/2	**105.6** 4 5/32	**203.2** 8	**84.1** 3 5/16	**158.8** 6 1/4	**196.8** 7 3/4	**108.0** 4 1/4	**22.2** 7/8	**12.7** 1/2	**15.9** 5/8	**69.8** 2 3/4	**44.1** 1 47/64	**142.9** 5 5/8	**10** 3/8	1103KR	S1103K	T-19191	**5.167** 11.38
DRNR	1 7/16	**76.2** 3	**123.8** 4 7/8	**276.2** 10 7/8	**95.2** 3 3/4	**203.2** 8	**254.0** 10	**139.7** 5 1/2	**25.4** 1	**15.9** 5/8	**22.2** 7/8	**88.9** 3 1/2	**54.0** 2 1/8	**211.5** 8 21/64	**12** 1/2	1107KR	S1107K	T-19193	**9.625** 21.20
DRNR	1 11/16	**76.2** 3	**133.4** 5 1/4	**279.4** 11	**114.3** 4 1/2	**203.2** 8	**254.0** 10	**139.7** 5 1/2	**25.4** 1	**15.9** 5/8	**22.2** 7/8	**88.9** 3 1/2	**63.5** 2 1/2	**209.6** 8 1/4	**12** 1/2	1111KR	S1111K	T-19197	**11.690** 25.75
DRNR	1 15/16	**88.9** 3 1/2	**150.8** 5 5/16	**352.4** 13 7/8	**123.8** 4 7/8	**241.3** 9 1/2	**304.8** 12	**177.8** 7	**28.5** 1 1/8	**17.5** 11/16	**28.5** 1 1/8	**114.3** 4 1/2	**69.8** 2 3/4	**276.2** 10 7/8	**16** 5/8	1115KR	S1115K	T-19195	**18.841** 41.50
DRNR	2 3/16	**88.9** 3 1/2	**158.8** 6 1/4	**355.6** 14	**133.4** 5 1/4	**241.3** 9 1/2	**304.8** 12	**177.8** 7	**31.8** 1 1/4	**17.5** 11/16	**28.5** 1 1/8	**114.3** 4 1/2	**76.2** 3	**268.3** 10 9/16	**16** 5/8	1203KR	S1203K	A-9598	**23.608** 52.00

CAST-IRON FLANGED UNITS

RCJ, TCJ, LCJ INDUSTRIAL SERIES

- Timken cartridges are used in applications where a minimum amount of machining is to be done.
- Each unit comes assembled and ready for mounting, with bolts through the flange.
- These are wide-inner-ring ball bearings, self-aligning B-types, which compensate for shaft misalignment.
- The RCJ flange cartridge is equipped with G-KRRB (R-seal) wide-inner-ring ball bearings. The TCJ is equipped with G-KPPB (tri-ply seal) wide-inner-ring ball bearings. The LCJ is equipped with the G-KLLB (Mechani-seal) wide-inner-ring ball bearings.
- The TCJ flange cartridges are identical to RCJ units, except they use the tri-ply seal bearing. Tri-ply units offer the best protection in dirty environments.
- The units are factory-prelubricated, but a grease fitting is provided for relubrication if required. The units are supplied with self-locking collars.
- Contact a Timken engineer to discuss highly corrosive applications (food processing, chemical exposure) where Timken thin-dense chrome-coated bearings can be used.
- Safety end caps are available for selected sizes.

Suggested shaft tolerances:

1 13/16 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

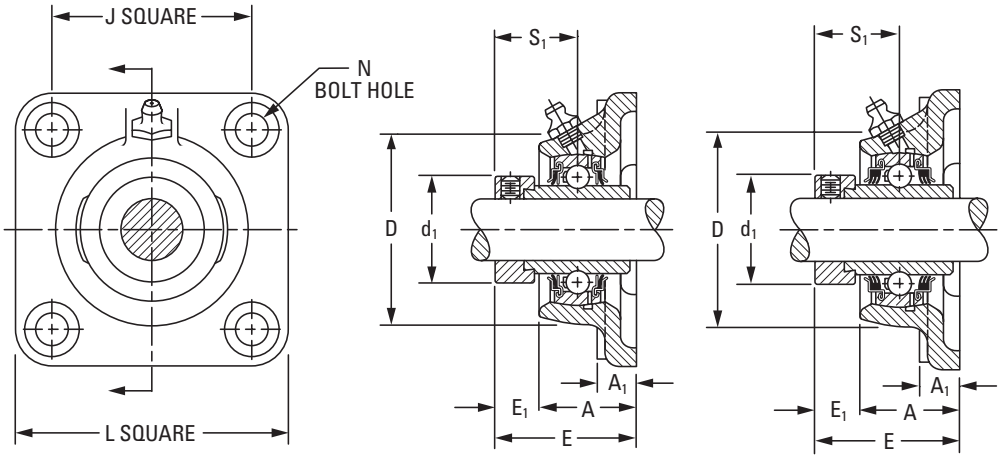
For larger sizes, consult your Timken engineer.

To order, specify UNIT and SHAFT DIAMETER.

Example: RCJ 1 3/16 in.

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RCJ	G-KRRB	Page A-34
TCJ	G-KPPB	Page A-39
LCJ	G-KLLB	Page A-37



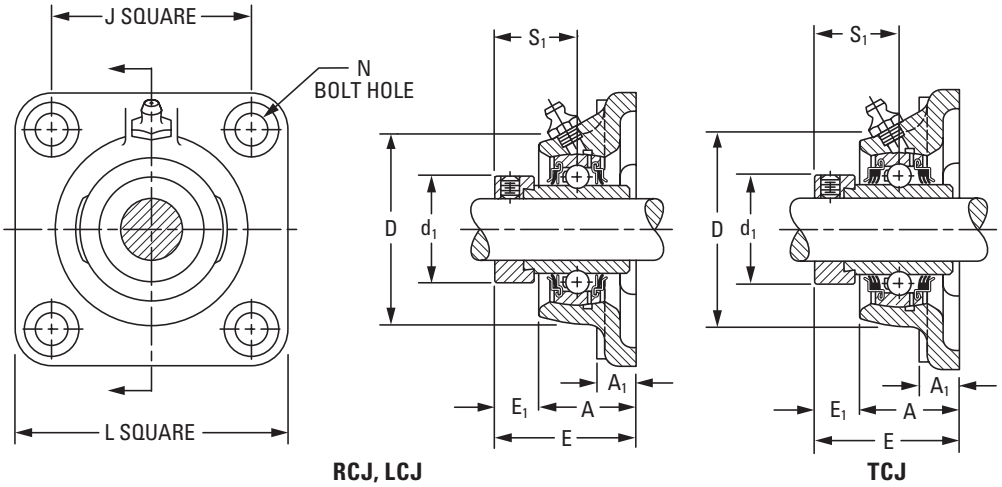
RCJ, LCJ **TCJ**

Unit[1]	Shaft Dia.	L	J	A_1	A	E	N	E_1	S_1	D	d_1	Bolt Size	Bearing No.[2]		Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	RCJ	(TCJ)		New (Old)	**kg** lbs.
RCJ	1/2												G1008KRRB		S1008K		
RCJ	5/8	**76.2**	**54.0**	**9.5**	**23.6**	**40.6**	**10.7**	**13.9**	**23.4**	**52.4**	**28.1**	**10**	G1010KRRB		S1010K	T-40278	**0.526**
RCJ	11/16	3	2 1/8	13/32	0.929	1.599	27/64	35/64	59/64	2 1/16	1.105	3/8	G1011KRRB	–	S1011K	(T-16659)	1.16
RCJ	**17**												GE17KRRB		SE17K		
RCJ	3/4	**85.7**	**63.5**	**11.1**	**27.8**	**46.4**	**10.7**	**16.3**	**26.6**	**60.3**	**32.8**	**10**	G1012KRRB		S1012K	T-40267	**0.726**
RCJ	**20**	3 3/8	2 1/2	7/16	1.094	1.828	27/64	41/64	1 3/64	2 3/8	1.292	3/8	GE20KRRB	–	SE20K	(T-16661)	1.60
RCJ, TCJ	7/8												G1014KRRB	(KPPB3)	S1014K		
RCJ, TCJ	15/16	**95.2**	**69.8**	**12.7**	**27.9**	**46.6**	**11.5**	**15.9**	**27.0**	**65.1**	**37.6**	**10**	G1015KRRB	(KPPB3)	S1015K	T-40262	**0.939**
RCJ, TCJ	1	3 3/4	2 3/4	1/2	1.100	1.834	29/64	5/8	1 1/16	2 9/16	1.480	3/8	G1100KRRB	(KPPB3)	S1100K	(T-16663)	2.07
RCJ, TCJ	**25**												GE25KRRB	(KPPB3)	SE25K		
RCJ, TCJ	1 1/16												G1101KRRB	(KPPB3)	S1101K		
RCJ, TCJ	1 1/8	**107.9**	**82.6**	**13.5**	**29.9**	**50.5**	**11.5**	**17.5**	**30.2**	**76.2**	**43.9**	**10**	G1102KRRB	(KPPB3)	S1102K	T-40266	**1.302**
RCJ, TCJ	1 3/16	4 1/4	3 1/4	17/32	1.178	1.990	29/64	11/16	1 3/16	3	1.730	3/8	G1103KRRB	(KPPB3)	S1103K	(T-16664)	2.87
RCJ, TCJ	**30**												GE30KRRB	(KPPB3)	SE30K		

[1]Type LCJ uses G-KLLB.
[2]Bearing number for RCJ is G-KRRB. TCJ uses G-KPPB.

Continued on next page.

RCJ, TCJ, LCJ INDUSTRIAL SERIES – *continued*



Continued from previous page.

Unit[1]	Shaft Dia.	L	J	A_1	A	E	N	E_1	S_1	D	d_1	Bolt Size	Bearing No.[2]		Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	RCJ	(TCJ)		New (Old)	**kg** lbs.
RCJ, TCJ	1 1/4												G1104KRRB	(KPPB2)	S1104K		
RCJ, TCJ	1 5/16												G1105KRRB	(KPPB2)	S1105K		
RCJ, TCJ	1 3/8	**117.5**	**92.1**	**13.5**	**31.8**	**53.5**	**13.1**	**19.0**	**32.5**	**88.9**	**53.6**	**12**	G1106KRRB	(KPPB2)	S1106K	T-40253	**1.787**
RCJ, TCJ	1 7/16	4 5/8	3 5/8	17/32	1.254	2.106	33/64	3/4	1 9/32	3 1/2	2.112	1/2	G1107KRRB	(KPPB2)	S1107K	(T-16617)	3.94
RCJ, TCJ	**35**												GE35KRRB	(KPPB2)	SE35K		
RCJ, TCJ	1 1/2												G1108KRRB	(KPPB3)	S1108KT		
RCJ, TCJ	1 9/16	**130.2**	**101.6**	**14.3**	**38.1**	**59.3**	**13.1**	**20.6**	**34.9**	**98.4**	**58.2**	**12**	G1109KRRB	(KPPB3)	S1109KT	T-40263	**2.291**
RCJ, TCJ	**40**	5 1/8	4	9/16	1.500	2.334	33/64	13/16	1 3/8	3 7/8	2.292	1/2	GE40KRRB	(KPPB3)	SE40K	(T-16666)	5.05
RCJ, TCJ	1 5/8												G1110KRRB	(KPPB4)	S1110K		
RCJ, TCJ	1 11/16	**136.5**	**104.8**	**14.3**	**38.9**	**59.3**	**13.1**	**19.8**	**34.9**	**104.8**	**63.0**	**12**	G1111KRRB	(KPPB4)	S1111K	T-40264	**2.585**
RCJ, TCJ	1 3/4	5 3/8	4 1/8	9/16	1.531	2.334	33/64	25/32	1 3/8	4 1/8	2.480	1/2	G1112KRRB	(KPPB4)	S1112K	(T-16667)	5.70
RCJ, TCJ	**45**												GE45KRRB	(KPPB4)	SE45K		
RCJ, TCJ	1 7/8												G1114KRRB	(KPPB3)	S1114K		
RCJ, TCJ	1 15/16	**142.9**	**111.1**	**14.3**	**42.9**	**66.4**	**17.1**	**23.0**	**38.1**	**112.7**	**69.3**	**16**	G1115KRRB	(KPPB3)	S1115K	T-40265	**3.016**
RCJ, TCJ	**50**	5 5/8	4 3/8	9/16	1.688	2.615	43/64	29/32	1 1/2	4 7/16	2.730	5/8	GE50KRRB	(KPPB3)	SE50K	(T-16668)	6.65
RCJ, TCJ	2												G1200KRRB	(KPPB4)	S1200K		
RCJ, TCJ	2 1/8	**161.9**	**130.2**	**16.7**	**46.8**	**75.1**	**17.1**	**27.8**	**43.7**	**120.6**	**75.7**	**16**	G1202KRRB	(KPPB4)	S1202K	T-40268	**3.842**
RCJ, TCJ	2 3/16	6 3/8	5 1/8	21/32	1.844	2.958	43/64	1 3/32	1 23/32	4 3/4	2.980	5/8	G1203KRRB	(KPPB4)	S1203K	(T-16683)	8.47
RCJ, TCJ	**55**												GE55KRRB	(KPPB4)	SE55K		
RCJ	2 1/4												G1204KRRB		S1204K		
RCJ	2 3/8	**174.6**	**142.9**	**17.5**	**49.2**	**81.6**	**17.1**	**31.8**	**46.8**	**136.5**	**83.6**	**16**	G1206KRRB	–	S1206K	T-40269	**5.048**
RCJ	2 7/16	6 7/8	5 5/8	11/16	1.937	3.214	43/64	1 1/4	1 27/32	5 3/8	3.292	5/8	G1207KRRB		S1207K	(T-17648)	11.13
RCJ	**60**												GE60KRRB		SE60K		
RCJ	2 11/16	**187.3**	**149.2**	**19.1**	**63.5**	**90.3**	**16.3**	**25.4**	**45.2**	**152.4**	**96.3**	**16**	G1211KRRB	–	S1211K	T-22530	**6.885**
RCJ	**70**	7 3/8	5 7/8	3/4	2.500	3.557	41/64	1	1 25/32	6	3.792	5/8	GE70KRRB		SE70K	(T-22270)	15.18
RCJ	2 15/16	**196.8**	**152.4**	**22.2**	**66.7**	**96.7**	**19.8**	**26.2**	**54.8**	**161.9**	**101.1**	**16**	G1215KRRB	–	S1215K	T-21620	**8.210**
RCJ	**75**	7 3/4	6	7/8	2.625	3.807	25/32	1 1/32	2 5/32	6 3/8	3.980	5/8	GE75KRRB		SE75K	(T-21620)	18.100

[1]Type LCJ uses G-KLLB.
[2]Bearing number for RCJ is G-KRRB. TCJ uses G-KPPB.

RCJC INDUSTRIAL-SERIES CONCENTRIC COLLAR

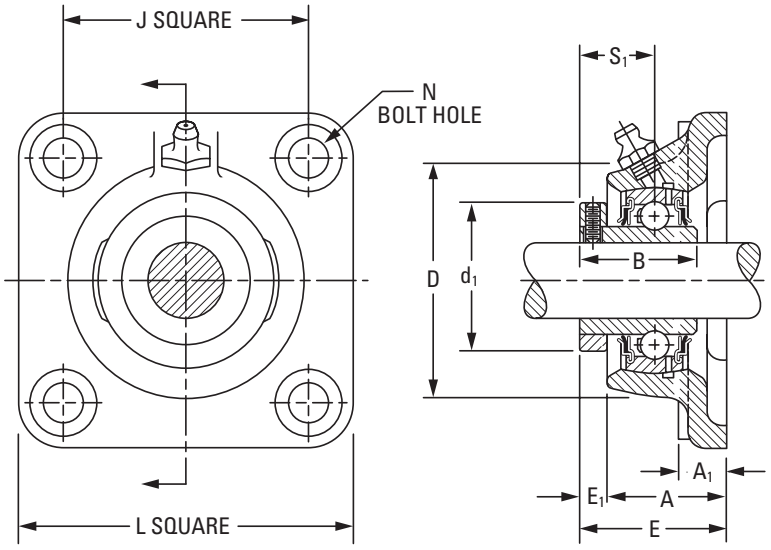
- These units have the same basic design as the RCJ series, except a concentric collar is used as the shaft-locking device instead of a self-locking cam collar.
- All RCJC units are equipped with GC-KRRB wide inner ring, concentric-collar bearings.
- The spherical outside diameter of the bearings is mounted in corresponding machined housing seats to provide the initial self-alignment.
- The bolt-hole spacing dimensions are interchangeable with the RCJ series and most competitive units.
- The units are factory-prelubricated, but a grease fitting is provided for relubrication if required.
- Concentric collars are supplied with all units.
- Safety end caps are available for selected sizes.

Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RCJC 1 3/16 in.



BEARING DATA

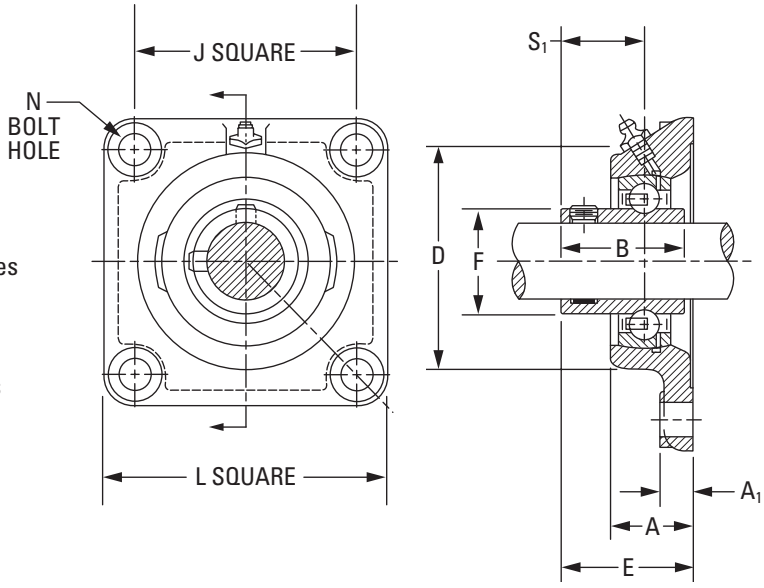
Unit	Bearing No.	Dimensions and Load Ratings
RCJC	GC-KRRB	Page A-40

Unit	Shaft Dia.	L	J	A_1	A	E	N	E_1	B	D	d_1	S_1	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in.	mm in	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.					kg lbs.
RCJC	5/8	76.2 3	53.98 2 1/8	11.1 7/16	22.2 7/8	30.2 1 3/16	9.9 25/64	7.9 5/16	26.6 1 3/64	52.4 2 1/16	34.1 1 11/32	15.5 39/64	10 3/8	GC1010KRRB	C203	T-27113	0.486 1.07
RCJC	3/4	85.7 3 3/8	63.5 2 1/2	11.1 7/16	25.8 1 1/64	32.5 1 9/32	9.9 25/64	6.7 17/64	31.0 1 7/32	60.3 2 3/8	38.1 1 1/2	18.7 47/64	10 3/8	GC1012KRRB	C204	T-26605	0.645 1.42
RCJC	1	95.2 3 3/4	69.85 2 3/4	11.1 7/16	28.6 1 1/8	36.1 1 27/64	11.5 29/64	7.5 19/64	34.1 1 11/32	65.1 2 9/16	44.4 1 3/4	20.2 51/64	10 3/8	GC1100KRRB	C205	T-26614	0.781 1.72
RCJC RCJC RCJC	1 1/8 1 3/16 1 1/4 S	107.9 4 1/4	82.55 3 1/4	12.7 1/2	30.2 1 3/16	39.3 1 35/64	11.5 29/64	9.1 23/64	37.3 1 15/32	76.2 3	52.4 2 1/16	22.6 57/64	10 3/8	GC1102KRRB GC1103KRRB GC1103KRRB3	C206	T-26630	1.135 2.50
RCJC RCJC RCJC	1 1/4 1 3/8 1 7/16	117.5 4 5/8	92.08 3 5/8	14.3 9/16	34.1 1 11/32	44.4 1 3/4	13.1 33/64	10.3 13/32	41.3 1 5/8	88.9 3 1/2	59.5 2 11/32	25.4 1	12 1/2	GC1104KRRB GC1106KRRB GC1107KRRB	C207	T-26665	1.707 3.76
RCJC	1 1/2	130.2 5 1/8	101.60 4	17.5 11/16	40.5 1 19/32	51.2 2 1/64	13.1 33/64	10.7 27/64	44.1 1 47/64	98.4 3 7/8	68.3 2 11/16	27.4 1 5/64	12 1/2	GC1108KRRB	C208	T-16666A	2.238 4.93
RCJC RCJC	1 11/16 1 3/4	136.5 5 3/8	104.78 4 1/8	17.5 11/16	41.3 1 5/8	53.2 2 3/32	13.1 33/64	11.9 15/32	46.8 1 27/32	104.8 4 1/8	73.0 2 7/8	29.4 1 5/32	12 1/2	GC1111KRRB GC1112KRRB	C209	T-16667A	2.538 5.59
RCJC	1 15/16	142.9 5 5/8	111.12 4 3/8	15.9 5/8	42.1 1 21/32	54.8 2 5/32	17.1 43/64	12.7 1/2	48.4 1 29/32	112.7 4 7/16	79.4 3 1/8	30.2 1 3/16	16 5/8	GC1115KRRB	C210	T-26700	2.797 6.16
RCJC RCJC	2 2 3/16	161.9 6 3/8	130.18 5 1/8	19.0 3/4	44.4 1 3/4	58.7 2 5/16	17.1 43/64	14.3 9/16	54.0 2 1/8	120.6 4 3/4	88.9 3 1/2	33.33 1 5/16	16 5/8	GC1200KRRB GC1203KRRB	C211	T-26712	4.036 8.89
RCJC	2 7/16	174.6 6 7/8	142.88 5 5/8	19.0 3/4	47.6 1 7/8	65.9 2 19/32	16.3 41/64	18.3 23/32	60.3 2 3/8	136.5 5 3/8	95.2 3 3/4	37.3 1 15/32	16 5/8	GC1207KRRB	C212	T-26726	4.926 10.85
RCJC	2 15/16	196.8 7 3/4	152.40 6	22.2 7/8	54.0 2 1/8	75.4 2 31/32	19.8 25/32	21.4 27/32	70.6 2 25/32	161.9 6 3/8	114.3 4 1/2	43.7 1 23/32	16 5/8	GC1215KRRB	C215	T-27128	7.473 16.46

NOTE: Shaft diameter with an S = smaller housing.

YCJ INDUSTRIAL SET SCREW SERIES

- Incorporates Shaft Guarding Technology, which reduces replacement time, provides shaft protection and prolongs the life of the shaft.
- The same basic design as the RCJ series, except specially designed set screws are used as the locking device instead of an eccentric collar.
- All units are equipped with GY-KRRB wide-inner-ring set screw bearings.
- Spherical outside diameter of the bearings mounted in the corresponding machined housing seats provides the initial self-alignment.
- Bolt-hole spacing dimensions are interchangeable with the RCJ series and most competitive units.
- Units are factory-prelubricated, but a grease fitting is provided for relubrication if required.
- Safety end caps are available for selected sizes.



Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: YCJ 1 7/16 in.

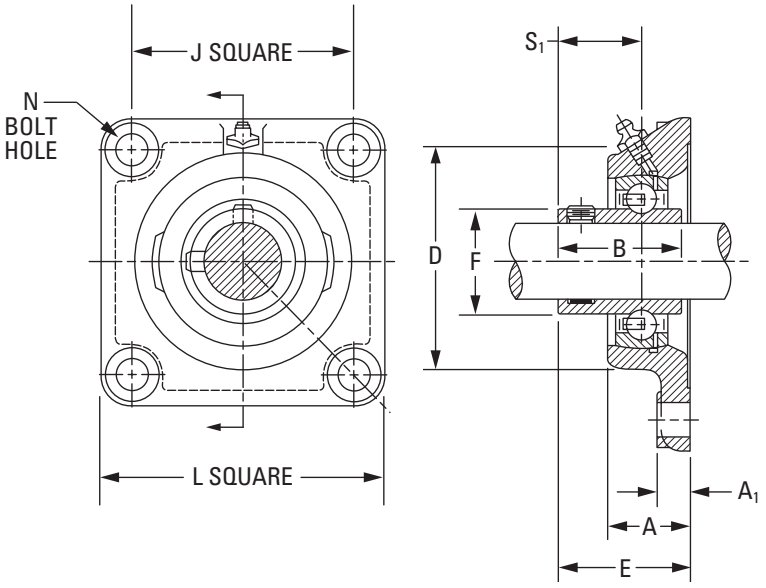
BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
YCJ	GY-KRRB	Page A-44

Unit	Shaft Dia.	L	J	A_1	A	E	N	B	D	F	S_1	Bolt Size	Bearing No.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	
YCJ	1/2												GY1008KRRB
YCJ	5/8	**76.2** 3	**54.0** 2 1/8	**10.3** 13/32	**23.6** 0.929	**32.50** 1.296	**10.72** 27/64	**27.40** 1 5/64	**52.4** 2 1/16	**23.90** 0.941	**15.9** 5/8	**10** 3/8	GY1010KRRB
YCJ	**17**												GYE17KRRB
YCJ SGT	3/4												GY1012KRRB SGT
YCJ SGT	**20**	**85.7** 3 3/8	**63.5** 2 1/2	**11.1** 7/16	**27.8** 1.094	**38.40** 1.513	**10.72** 27/64	**31.80** 1 1/4	**60.3** 2 3/8	**27.56** 1.085	**19.1** 3/4	**10** 3/8	GYE20KRRB SGT
YCJ SGT	7/8												GY1014KRRB SGT
YCJ SGT	15/16	**95.2** 3 3/4	**69.8** 2 49/64	**12.7** 1/2	**27.9** 1.100	**40.00** 1.575	**11.51** 29/64	**34.90** 1 3/8	**65.1** 2 9/16	**33.88** 1.331	**20.6** 13/16	**10** 3/8	GY1015KRRB SGT
YCJ SGT	1												GY1100KRRB SGT
YCJ SGT	**25**												GYE25KRRB SGT
YCJ SGT	1 1/8												GY1102KRRB SGT
YCJ SGT	1 3/16	**107.9** 4 1/4	**82.6** 3 1/4	**13.5** 17/32	**29.9** 1.178	**43.46** 1.711	**11.51** 29/64	**39.29** 1 35/64	**76.2** 3	**40.31** 1.587	**23.4** 59/64	**10** 3/8	GY1103KRRB SGT
YCJ	1 1/4 S												GY1103KRRB3
YCJ SGT	**30**												GYE30KRRB SGT
YCJ SGT	1 1/4												GY1104KRRB SGT
YCJ SGT	1 3/8	**117.5** 4 5/8	**92.1** 3 5/8	**13.5** 17/32	**31.8** 1.254	**48.95** 1.927	**13.10** 33/64	**45.20** 1 25/32	**88.9** 3 1/2	**46.81** 1.843	**28.2** 1 7/16	**12** 1/2	GY1106KRRB SGT
YCJ SGT	1 7/16												GY1107KRRB SGT
YCJ SGT	**35**												GYE35KRRB SGT
YCJ SGT	1 1/2	**130.2** 5 1/8	**101.6** 4	**14.3** 9/16	**38.1** 1.500	**54.40** 2.141	**13.10** 33/64	**49.20** 1 15/16	**98.4** 3 7/8	**52.27** 2.057	**30.2** 1 3/16	**12** 1/2	GY1108KRRB SGT
YCJ SGT	**40**												GYE40KRRB SGT

NOTE: Shaft diameter with an S = smaller housing.

Continued on next page.



Continued from previous page.

Unit	Shaft Dia.	L	J	A_1	A	E	N	B	D	F	S_1	Bolt Size	Bearing No.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	
YCJ SGT	1 5/8												GY1110KRRB SGT
YCJ SGT	1 11/16	**136.5**	**104.8**	**14.3**	**38.9**	**55.52**	**13.10**	**50.40**	**104.8**	**57.92**	**31.4**	**12**	GY1111KRRB SGT
YCJ SGT	1 3/4	5 3/8	4 1/8	9/16	1.531	2.186	33/64	1 63/64	4 1/8	2.279	1 15/16	1/2	GY1112KRRB SGT
YCJ SGT	**45**												GYE45KRRB SGT
YCJ SGT	1 15/16												GY1115KRRB SGT
YCJ	2 S	**142.9**	**111.1**	**14.3**	**42.9**	**60.70**	**17.07**	**51.60**	**112.7**	**62.84**	**32.5**	**16**	GY1115KRRB3
YCJ SGT	**50**	5 5/8	4 3/8	9/16	1.688	2.390	43/64	2 1/32	4 7/16	2.473	1 9/32	5/8	GYE50KRRB SGT
YCJ SGT	2												GY1200KRRB SGT
YCJ SGT	2 3/16	**161.9**	**130.2**	**16.7**	**46.8**	**64.70**	**17.07**	**55.60**	**120.7**	**69.77**	**33.3**	**16**	GY1203KRRB SGT
YCJ SGT	**55**	6 3/8	5 1/8	21/32	1.844	2.546	43/64	2 3/16	4 3/4	2.747	1 5/16	5/8	GYE55KRRB SGT
YCJ SGT	2 7/16	**174.6**	**142.9**	**17.5**	**49.2**	**74.20**	**17.07**	**65.10**	**136.5**	**76.48**	**39.1**	**16**	GY1207KRRB SGT
YCJ SGT	**60**	6 7/8	5 5/8	11/16	1.937	2.921	43/64	2 9/16	5 3/8	3.011	1 9/16	5/8	GYE60KRRB SGT
YCJ	2 11/16	**187.3**	**149.2**	**19.0**	**63.5**	**81.40**	**16.27**	**69.90**	**152.4**	**86.92**	**42.9**	**16**	GY1211KRRB
YCJ	**70**	7 3/8	5 7/8	3/4	2.500	3.204	41/64	2 3/4	6	3.422	1 11/16	5/8	GYE70KRRB
YCJ	2 15/16	**196.8**	**152.4**	**23.8**	**66.7**	**86.20**	**19.84**	**77.80**	**161.9**	**91.92**	**44.4**	**20**	GY1215KRRB
YCJ	**75**	7 3/4	6	15/16	2.625	3.392	25/32	3 1/16	6 3/8	3.619	1 3/4	3/4	GYE75KRRB

NOTE: Shaft diameter with an S = smaller housing.

VCJ STANDARD SERIES

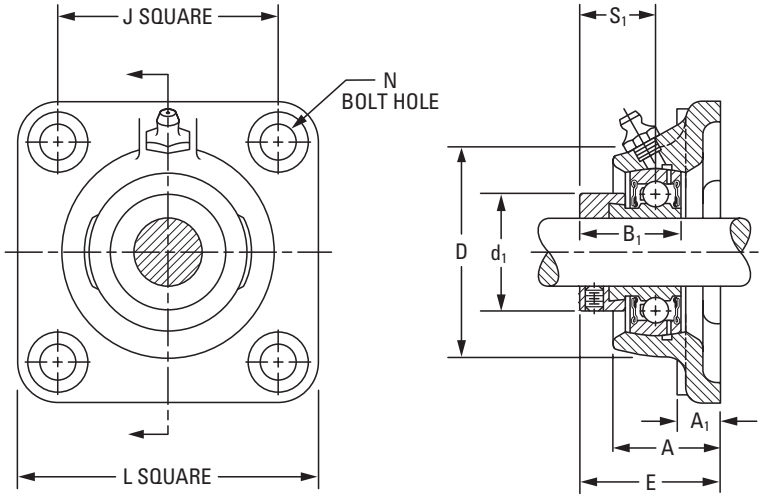
- The flange cartridges come assembled and ready for mounting by using four bolts through the flange.
- The VCJ-series flange cartridges require minimal machining.
- The units are assembled with GRA-RRB bearings with positive-contact, land-riding seals and self-locking collars.
- The units are factory-prelubricated, but a grease fitting is provided for relubrication if required.
- Safety end caps are available for selected sizes.

Suggested shaft tolerances:

½ in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: VCJ 1 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
VCJ	GRA-RRB	Page A-50

Unit	Shaft Dia.	L	J	A_1	A	E	N	B_1	D	d_1	S_1	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			New (Old)	**kg** lbs.
VCJ	1/2												GRA008RRB	S1008K		
VCJ	5/8	**76.2** 3	**53.98** 2 1/8	**10.3** 13/32	**23.6** 0.929	**39.3** 1.548	**10.7** 27/64	**28.6** 1 1/8	**52.4** 2 1/16	**28.1** 1.105	**22.2** 7/8	**10** 3/8	GRA010RRB	S1010K	T-40278 (T-16659)	**0.527** 1.16
VCJ	**17**												GRAE17RRB	SE17K		
VCJ	3/4	**85.7**	**63.50**	**11.1**	**27.8**	**43.3**	**10.7**	**31.0**	**60.3**	**32.8**	**23.4**	**10**	GRA012RRB	S1012K	T-40267	**0.654**
VCJ	**20**	3 3/8	2 1/2	7/16	1.094	1.706	27/64	1 7/32	2 3/8	1.292	59/64	3/8	GRAE20RRB	SE20K	(T-16661A)	1.44
VCJ	7/8												GRA014RRB	S1014K		
VCJ	15/16	**95.2**	**69.85**	**12.7**	**27.9**	**43.1**	**11.5**	**31.0**	**65.1**	**37.6**	**23.4**	**10**	GRA015RRB	S1015K	T-40262	**0.894**
VCJ	1	3 3/4	2 3/4	1/2	1.100	1.696	29/64	1 7/32	2 9/16	1.480	59/64	3/8	GRA100RRB	S1100K	(T-16663A)	1.97
VCJ	**25**												GRAE25RRB	SE25K		
VCJ	1 1/8												GRA102RRB	S1102K		
VCJ	1 3/16	**107.9**	**82.55**	**13.5**	**29.9**	**47.1**	**11.5**	**35.7**	**76.2**	**43.9**	**27.0**	**10**	GRA103RRB	S1103K	T-40266	**1.239**
VCJ	1 1/4 S	4 1/4	3 1/4	17/32	1.178	1.856	29/64	1 13/32	3	1.730	1 1/16	3/8	GRA103RRB2	S1103K3	(T-16664A)	2.73
VCJ	**30**												GRAE30RRB	SE30K		
VCJ	1 1/4												GRA104RRB	S1104K		
VCJ	1 3/8	**117.5**	**92.08**	**13.5**	**31.8**	**50.5**	**13.1**	**38.9**	**88.9**	**53.6**	**29.4**	**12**	GRA106RRB	S1106K	T-40253	**1.707**
VCJ	1 7/16	4 5/8	3 5/8	17/32	1.254	1.989	33/64	1 17/32	3 1/2	2.112	1 5/32	1/2	GRA107RRB	S1107	(T-16617A)	3.76
VCJ	**35**												GRAE35RRB	SE35K		
VCJ	1 1/2	**130.2**	**101.60**	**14.3**	**38.1**	**58.3**	**13.1**	**43.7**	**98.4**	**58.2**	**32.5**	**12**	GRA108RRB	S1108KT	T-40263	**2.175**
VCJ	**40**	5 1/8	4	9/16	1.500	2.297	33/64	1 23/32	3 7/8	2.292	1 9/32	1/2	GRAE40RRB	SE40K	(T-16666A)	4.79
VCJ	1 5/8												GRA110RRB	S1110K		
VCJ	1 11/16	**136.5**	**104.78**	**14.3**	**38.9**	**57.0**	**13.1**	**43.7**	**104.8**	**63.0**	**32.5**	**12**	GRA111RRB	S1111K	T-40264	**2.438**
VCJ	1 3/4	5 3/8	4 1/8	9/16	1.531	2.244	33/64	1 23/32	4 1/8	2.480	1 9/32	1/2	GRA112RRB	S1112K	(T-16667A)	5.37
VCJ	**45**												GRAE45RRB	SE45K		
VCJ	1 7/8												GRA114RRB	S1114K		
VCJ	1 15/16	**142.9**	**111.12**	**14.3**	**42.9**	**61.0**	**17.1**	**43.7**	**112.7**	**69.3**	**32.5**	**16**	GRA115RRB	S1115K	T-40265	**2.788**
VCJ	2 S	5 5/8	4 3/8	9/16	1.688	2.400	43/64	1 23/32	4 7/16	2.730	1 9/32	5/8	GRA115RRB2	S1115K2	(T-16668A)	6.14
VCJ	**50**												GRAE50RRB	SE50K		
VCJ	2												GRA200RRB	S1200K		
VCJ	2 3/16	**161.9**	**130.18**	**16.7**	**46.8**	**67.9**	**17.1**	**48.4**	**120.6**	**75.7**	**36.5**	**16**	GRA203RRB	S1203K	T-40236	**3.269**
VCJ	**55**	6 3/8	5 1/8	21/32	1.844	2.672	43/64	1 29/32	4 3/4	2.980	1 7/16	5/8	GRAE55RRB	SE55K	(T-16683A)	7.20

NOTE: Shaft diameter with an S = smaller housing.

SCJ STANDARD SERIES

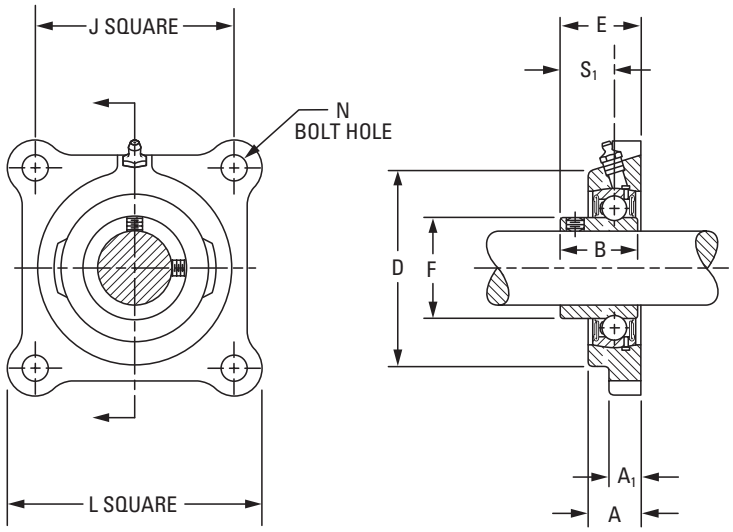
- The flange cartridges come assembled and ready for mounting by using four bolts through the flange.
- The units are ideal for applications where minimum shaft length is required.
- The units are assembled with GYA-RRB bearings with positive-contact, land-riding seals and set screw locking.
- The units are factory-prelubricated, but a grease fitting is provided for relubrication if required.
- Safety end caps are available for selected sizes.

Suggested shaft tolerances:

½ in. – 1 15⁄16 in.,
nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3⁄16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: SCJ 1 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
SCJ	GYA-RRB	Page A-54

Unit	Shaft Dia.	L	J	A_1	A	E	N	B	D	F	S_1	Bolt Size	Bearing No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			**kg** lbs.
SCJ	½												GYA008RRB		
SCJ	5⁄8	**76.2** 3	**53.98** 2 1⁄8	**11.1** 7⁄16	**17.9** 45⁄64	**25.4** 1	**10.7** 27⁄64	**23.8** 15⁄16	**52.4** 2 1⁄16	**24.6** 31⁄32	**15.9** 5⁄8	**10** 3⁄8	GYA010RRB	T-40124	**0.47** 1.03
SCJ	**17**												GYAE17RRB		
SCJ	¾	**85.7** 3 3⁄8	**63.50** 2 1⁄2	**11.1** 7⁄16	**19.0** ¾	**28.6** 1 1⁄8	**10.7** 27⁄64	**27.0** 1 1⁄16	**60.3** 2 3⁄8	**29.0** 1 9⁄64	**18.3** 23⁄32	**10** 3⁄8	GYA012RRB	T-40126	**0.52** 1.14
SCJ	**20**												GYAE20RRB		
SCJ	7⁄8												GYA014RRB		
SCJ	15⁄16	**95.2** 3 3⁄4	**69.85** 2 3⁄4	**13.5** 17⁄32	**19.8** 25⁄32	**29.8** 1 11⁄64	**11.5** 29⁄64	**28.2** 1 7⁄64	**65.1** 2 9⁄16	**33.7** 1 21⁄64	**19.4** 49⁄64	**10** 3⁄8	GYA015RRB	T-40128	**0.68** 1.50
SCJ	1												GYA100RRB		
SCJ	**25**												GYAE25RRB		
SCJ	1 1⁄8												GYA102RRB		
SCJ	1 3⁄16	**107.9** 4 1⁄4	**82.55** 3 1⁄4	**14.3** 9⁄16	**21.4** 27⁄32	**34.1** 1 11⁄32	**11.5** 29⁄64	**32.5** 1 9⁄32	**76.2** 3	**40.1** 1 37⁄64	**23.0** 29⁄32	**10** 3⁄8	GYA103RRB	T-40130	**1.19** 2.62
SCJ	1 1⁄4 S												GYA103RRB2		
SCJ	**30**												GYAE30RRB		
SCJ	1 1⁄4												GYA104RRB		
SCJ	1 3⁄8	**117.5** 4 5⁄8	**92.08** 3 5⁄8	**15.1** 19⁄32	**24.6** 31⁄32	**38.1** 1 1⁄2	**13.1** 33⁄64	**36.5** 1 7⁄16	**88.9** 3 1⁄2	**46.8** 1 27⁄32	**25.8** 1 1⁄64	**12** 1⁄2	GYA106RRB	T-40132	**1.35** 2.98
SCJ	1 7⁄16												GYA107RRB		
SCJ	**35**												GYAE35RRB		
SCJ	1 1⁄2	**130.2** 5 1⁄8	**101.60** 4	**15.9** 5⁄8	**26.2** 1 1⁄32	**40.9** 1 39⁄64	**13.1** 33⁄64	**39.3** 1 35⁄64	**98.4** 3 7⁄8	**52.4** 2 1⁄16	**27.8** 1 3⁄32	**12** 1⁄2	GYA108RRB	T-40134	**2.10** 4.63
SCJ	**40**												GYAE40RRB		
SCJ	1 5⁄8												GYA110RRB		
SCJ	1 11⁄16	**136.5** 5 3⁄8	**104.78** 4 1⁄8	**15.9** 5⁄8	**28.6** 1 1⁄8	**43.6** 1 23⁄32	**13.1** 33⁄64	**42.1** 1 21⁄32	**104.8** 4 1⁄8	**57.9** 2 9⁄32	**28.6** 1 1⁄8	**12** 1⁄2	GYA111RRB	T-40164	**2.24** 4.94
SCJ	1 3⁄4												GYA112RRB		
SCJ	**45**												GYAE45RRB		
SCJ	1 15⁄16												GYA115RRB		
SCJ	2 S	**142.9** 5 5⁄8	**111.12** 4 3⁄8	**16.7** 21⁄32	**28.6** 1 1⁄8	**46.0** 1 13⁄16	**17.1** 43⁄64	**44.4** 1 3⁄4	**112.7** 4 7⁄16	**62.6** 2 15⁄32	**30.9** 1 7⁄32	**16** 5⁄8	GYA115RRB2	T-40166	**2.55** 5.63
SCJ	**50**												GYAE50RRB		
SCJ	2												GYA200RRB		
SCJ	2 3⁄16	**161.9** 6 3⁄8	**130.18** 5 1⁄8	**18.2** 23⁄32	**30.9** 1 7⁄32	**48.0** 1 57⁄64	**17.1** 43⁄64	**46.4** 1 53⁄64	**120.6** 4 3⁄4	**69.8** 2 3⁄4	**31.7** 1 1⁄4	**16** 5⁄8	GYA203RRB	T-40168	**2.96** 6.53
SCJ	**55**												GYAE55RRB		

NOTE: Shaft diameter with an S = smaller housing.

RCJO, LCJO HEAVY SERIES

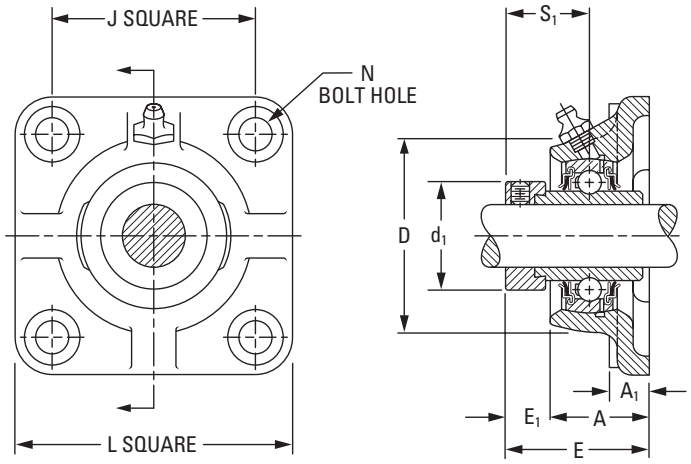
- The flange cartridges are similar in design to the standard series.
- The units are ideal for applications where minimum machining is to be done.
- The units come assembled and ready for mounting by using four bolts through the flange.
- The RCJO units are assembled with GN-KRRB (R-seal) wide-inner-ring bearings. LCJO units are equipped with GN-KLLB (L-seal) wide-inner-ring ball bearings.
- The units are factory-prelubricated, but a grease fitting is provided for relubrication if required.
- The units are supplied with self-locking collars and are dimensionally interchangeable.

Suggested shaft tolerances:

1 3/16 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 3 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RCJO 1 7/16 in., LCJO 1 11/16 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RCJO	GN-KRRB	Page A-57
LCJO	GN-KLLB	Page A-59

Unit	Shaft Dia.	L	J	A_1	A	E	N	E_1	S_1	D	d_1	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	RCJO LCJO			**kg** lbs.
RCJO, LCJO	1 3/16	**120.6** 4 3/4	**92.1** 3 5/8	**14.3** 9/16	**38.1** 1.500	**53.7** 2.115	**14.3** 9/16	**15.1** 19/32	**32.5** 1 9/32	**96.8** 3 13/16	**48.7** 1.918	**12** 1/2	GN103KRRB (KLLB)	SN103K	T-19165	**1.816** 4.00
RCJO, LCJO	1 7/16	**130.2** 5 1/8	**101.6** 4	**15.9** 5/8	**40.5** 1.594	**55.3** 2.177	**14.3** 9/16	**14.3** 9/16	**33.3** 1 5/16	**104.8** 4 1/8	**55.1** 2.168	**12** 1/2	GN107KRRB (KLLB)	SN107	T-19167	**2.497** 5.50
RCJO, LCJO	1 1/2	**136.5** 5 3/8	**104.8** 4 1/8	**15.9** 5/8	**44.4** 1.750	**60.8** 2.396	**15.9** 5/8	**15.9** 5/8	**37.3** 1 15/32	**114.3** 4 1/2	**63.0** 2.480	**14** 9/16	GN108KRRB (KLLB)	SN108K	T-19169	**3.133** 6.90
RCJO, LCJO	1 11/16	**142.9** 5 5/8	**111.1** 4 3/8	**17.5** 11/16	**46.8** 1.844	**62.4** 2.458	**15.9** 5/8	**15.1** 19/32	**38.9** 1 17/32	**123.8** 4 7/8	**69.3** 2.730	**14** 9/16	GN111KRRB (KLLB)	SN111K	T-19171	**3.573** 7.87
RCJO	1 15/16	**165.1** 6 1/2	**130.2** 5 1/8	**17.5** 11/16	**53.2** 2.094	**70.4** 2.771	**17.5** 11/16	**16.7** 21/32	**42.1** 1 21/32	**141.3** 5 9/16	**75.7** 2.980	**16** 5/8	GN115KRRB	SN115K	T-19173	**5.185** 11.42
RCJO	2 3/16	**177.8** 7	**142.9** 5 5/8	**17.5** 11/16	**58.7** 2.312	**76.7** 3.021	**17.5** 11/16	**17.5** 11/16	**45.2** 1 25/32	**154.0** 6 1/16	**82.0** 3.230	**16** 5/8	GN203KRRB	SN203K	T-19175	**6.424** 14.15
RCJO	2 7/16	**190.5** 7 1/2	**149.2** 5 7/8	**19.0** 3/4	**65.1** 2.562	**84.7** 3.333	**20.6** 13/16	**19.0** 3/4	**48.4** 1 29/32	**160.3** 6 5/16	**88.4** 3.480	**20** 3/4	GN207KRRB	SN207K	T-19177	**7.409** 16.32
RCJO	2 11/16	**225.4** 8 7/8	**177.8** 7	**22.2** 7/8	**72.2** 2.844	**89.4** 3.521	**23.8** 15/16	**21.4** 27/32	**54.8** 2 5/32	**185.7** 7 5/16	**101.1** 3.980	**22** 7/8	GN211KRRB	SO211K	T-19179	**9.534** 21.00
RCJO	2 15/16	**231.8** 9 1/8	**184.2** 7 1/4	**22.2** 7/8	**77.8** 3.062	**105.3** 4.146	**23.8** 15/16	**27.0** 1 1/16	**62.7** 2 15/32	**198.4** 7 13/16	**112.2** 4.418	**22** 7/8	GN215KRRB	SN215K	T-19181	**14.128** 31.12
RCJO	3 7/16	**279.4** 11	**215.9** 8 1/2	**28.6** 1 1/8	**84.1** 3.312	**121.2** 4.770	**27.0** 1 1/16	**36.5** 1 7/16	**73.8** 2 29/32	**228.6** 9	**132.3** 5.210	**24** 1	GN307KRRB	SN307K	T-24475	**21.474** 47.30
RCJO	3 15/16	**317.5** 12 1/2	**241.3** 9 1/2	**31.8** 1 1/4	**96.8** 3.812	**133.6** 5.260	**30.2** 1 3/16	**36.5** 1 7/16	**78.6** 3 3/32	**266.7** 10 1/2	**145.5** 5.730	**27** 1 1/8	GN315KRRB	SN315K	T-24477	**30.645** 67.50

YCJM MEDIUM-DUTY SERIES SET SCREW LOCK

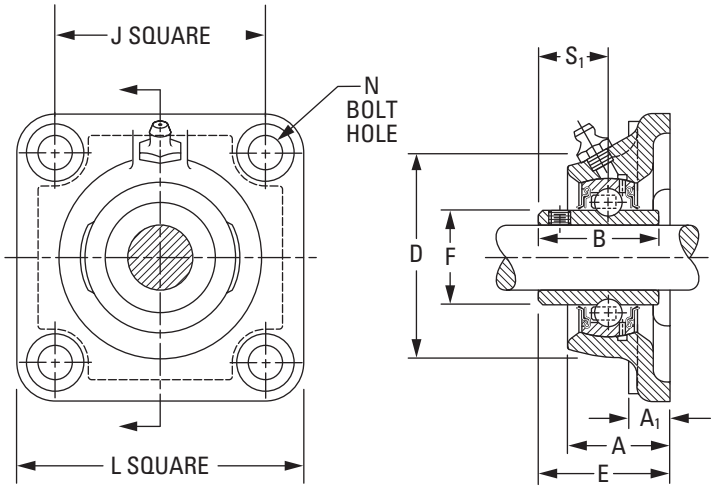
- This series includes four-bolt flanged cartridges featuring GYM-KRRB bearing inserts.
- This series is ideal for conveyor, fan and blower, sawmill, and feed and grain-handling applications.
- The durable cast-iron housings are powder-coated and maintain an excellent finish while resisting corrosion, chemicals and weather exposure.
- The industrial-duty flanged cartridges incorporate premium features designed to extend bearing life.

Suggested shaft tolerances:

1 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 3 15/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: YCJM 1 7/16 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
YCJM	GYM-KRRB	Page A-56

Unit	Shaft Dia.	L	J	A_1	A	E	N	B	D	F	S_1	Bolt Size	Bearing No.
	in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	
YCJM	1	**107.9** 4 1/4	**82.6** 3 1/4	**13.5** 17/32	**29.9** 1.178	**42.4** 1.671	**11.51** 29/64	**38.10** 1 1/2	**76.2** 3	**40.31** 1.587	**22.2** 7/8	**10** 3/8	GYM1100KRRB
YCJM	1 3/16	**117.5** 4 5/8	**92.1** 3 5/8	**13.5** 17/32	**31.8** 1.254	**46.4** 1.827	**13.10** 33/64	**42.90** 1 11/16	**88.9** 3 1/2	**46.81** 1.843	**25.4** 1	**12** 1/2	GYM1103KRRB
YCJM	1 7/16	**130.2** 5 1/8	**101.6** 4	**14.8** 9/16	**38.1** 1.500	**54.4** 2.141	**13.10** 33/64	**49.20** 1 15/16	**98.4** 3 7/8	**52.27** 2.058	**30.2** 1 3/16	**12** 1/2	GYM1107KRRB
YCJM	1 1/2	**136.5** 5 3/8	**104.8** 4 1/8	**14.3** 9/16	**38.9** 1.531	**54.4** 2.141	**13.10** 33/64	**49.20** 1 15/16	**104.8** 4 1/8	**57.92** 2.280	**30.2** 1 3/16	**12** 1/2	GYM1108KRRB
YCJM YCJM	1 11/16 1 3/4	**142.9** 5 5/8	**111.1** 4 3/8	**14.3** 9/16	**42.9** 1.688	**60.7** 2.390	**17.07** 43/64	**51.60** 2 1/32	**112.7** 4 7/16	**62.84** 2.474	**32.5** 1 9/32	**16** 5/8	GYM1111KRRB GYM1112KRRB
YCJM YCJM	1 15/16 2	**161.9** 6 3/8	**130.2** 5 1/8	**16.7** 21/32	**46.8** 1.844	**64.7** 2.546	**17.07** 43/64	**55.60** 2 3/16	**120.7** 4 3/4	**69.77** 2.747	**33.3** 1 15/16	**16** 5/8	GYM1115KRRB GY1200KRRB
YCJM YCJM	2 3/16 2 1/4	**174.6** 6 7/8	**142.9** 5 5/8	**17.5** 11/16	**49.2** 1.937	**74.3** 2.926	**17.07** 43/64	**65.10** 2 9/16	**136.5** 5 3/8	**76.48** 3.011	**39.1** 1 9/16	**16** 5/8	GYM1203KRRB GY1204KRRB
YCJM YCJM	2 7/16 2 1/2	**187.3** 7 3/8	**149.2** 5 7/8	**19.0** 3/4	**63.5** 2.500	**81.5** 3.208	**17.07** 43/64	**69.90** 2 3/4	**152.4** 6	**86.92** 3.422	**42.9** 1 11/16	**16** 5/8	GYM1207KRRB GYM1208KRRB
YCJM	2 11/16	**196.8** 7 3/4	**152.4** 6	**22.2** 7/8	**66.7** 2.625	**86.2** 3.396	**19.84** 25/32	**77.80** 3 1/16	**161.9** 6 3/8	**91.92** 3.619	**44.4** 1 3/4	**20** 3/4	GYM1211KRRB
YCJM YCJM	2 15/16 3	**196.8** 7 3/4	**152.4** 6	**22.2** 7/8	**66.7** 2.625	**90.8** 3.576	**19.84** 25/32	**77.80** 3 1/16	**179.4** 7 1/16	**98.37** 3.873	**44.4** 1 15/16	**20** 3/4	GYM1215KRRB GYM1300KRRB
YCJM	3 7/16	**214.3** 8 7/16	**171.4** 6 3/4	**25.4** 1	**70.5** 2.776	**101.1** 3.981	**19.84** 25/32	**95.94** 3 25/32	**196.8** 7 3/4	**111.68** 4.397	**56.4** 2 7/32	**20** 3/4	GYM1307KRRB
YCJM	3 15/16	**268.3** 10 9/16	**211.1** 8 5/16	**31.8** 1 1/4	**95.4** 3.755	**127.3** 5.014	**26.19** 1 1/32	**117.35** 4 5/8	**235.0** 9 1/4	**131.30** 5.171	**68.3** 2 11/16	**24** 1	GYM1315KRRB

YCJTM MEDIUM-DUTY SERIES SET SCREW LOCK

- The medium-duty, two-bolt flanged cartridges feature GYM-KRRB bearing inserts.
- This series is ideal for conveyor, fan and blower, sawmill, and feed and grain-handling applications.
- The durable cast-iron housings are powder-coated and maintain an excellent finish while resisting corrosion, chemicals and weather exposure.
- The industrial-duty flanged cartridge units incorporate premium features designed to extend bearing life. They can replace competitive designs.

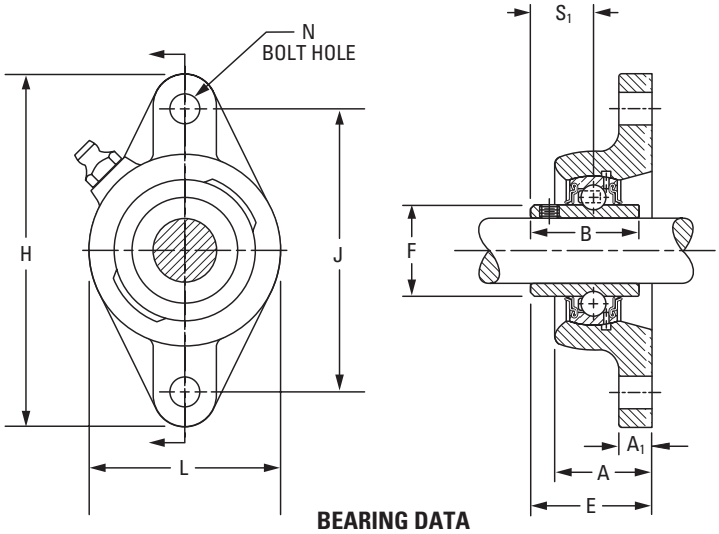
Suggested shaft tolerances:

1 – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;

2 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: YCJTM 1 7/16 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
YCJTM	GYM-KRRB	Page A-56

Unit	Shaft Dia.	H	J	L	A	E	N	B	A_1	F	S_1	Bolt Size	Bearing No.
	in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	
YCJTM	1	**141.3** 5 9/16	**116.7** 4 19/32	**79.5** 3 1/8	**29.9** 1.178	**42.4** 1.671	**11.51** 29/64	**38.1** 1 1/2	**13.5** 17/32	**40.31** 1.587	**22.2** 7/8	**10** 3/8	GYM1100KRRB
YCJTM	1 3/16	**155.6** 6 1/8	**130.2** 5 1/8	**92.1** 3 5/8	**31.8** 1.254	**46.4** 1.827	**13.10** 33/64	**42.9** 1 11/16	**11.9** 15/32	**46.79** 1.843	**25.4** 1	**12** 1/2	GYM1103KRRB
YCJTM	1 7/16	**171.5** 6 3/4	**143.7** 5 21/32	**104.8** 4 1/8	**38.1** 1.500	**54.4** 2.141	**13.10** 33/64	**49.2** 1 15/16	**12.7** 1/2	**52.27** 2.058	**30.2** 1 3/16	**12** 1/2	GYM1107KRRB
YCJTM	1 1/2	**179.4** 7 1/16	**148.4** 5 27/32	**111.1** 4 3/8	**38.9** 1.531	**54.4** 2.141	**13.10** 33/64	**49.2** 1 15/16	**12.7** 1/2	**57.92** 2.280	**30.2** 1 3/16	**12** 1/2	GYM1108KRRB
YCJTM	1 11/16	**188.9** 7 7/16	**157.2** 6 3/16	**115.9** 4 9/16	**42.9** 1.688	**60.7** 2.390	**17.07** 43/64	**51.6** 2 1/32	**12.7** 1/2	**62.81** 2.473	**32.5** 1 9/32	**16** 5/8	GYM1111KRRB
YCJTM	1 3/4												GYM1112KRRB
YCJTM	1 15/16	**215.9** 8 1/2	**184.2** 7 1/4	**127.0** 5	**46.8** 1.844	**64.7** 2.546	**17.07** 43/64	**55.6** 2 3/16	**16.7** 21/32	**69.77** 2.747	**33.3** 1 15/16	**16** 5/8	GYM1115KRRB
YCJTM	2												GY1200KRRB

RCJT, TCJT, LCJT INDUSTRIAL SERIES

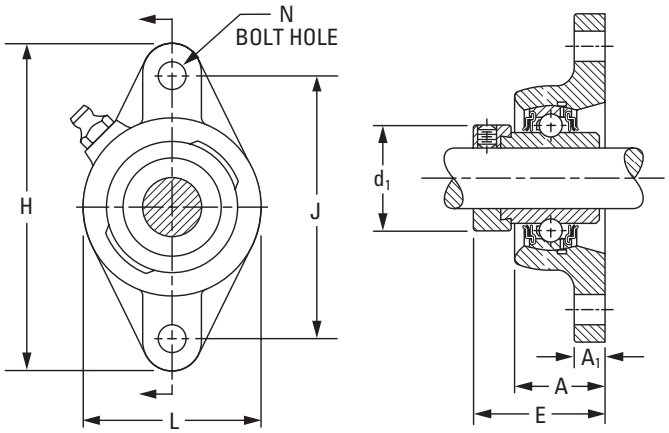
- The cartridges are the same basic design as RCJ, TCJ, and LCJ types, except they have two bolt holes instead of four.
- This series is primarily designed for applications where the mounting area is restricted.
- The RCJT cartridge is equipped with G-KRRB (R-seal) wide-inner-ring ball bearings. The TCJT is equipped with G-KPPB (tri-ply seal) wide-inner-ring ball bearings. The LCJT is equipped with the G-KLLB (Mechani-seal) wide-inner-ring ball bearings.
- The units are factory-prelubricated, but a grease fitting is provided for relubrication.
- Safety end caps are available for selected sizes.

Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RCJT 1 3/16 in., TCJT 1 3/16 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RCJT	G-KRRB	Page A-34
TCJT	G-KPPB	Page A-39
LCJT	G-KLLB	Page A-37

Unit	Shaft Dia.	H	J	L	A	N	E	A_1	d_1	Bolt Size	Bearing No.			Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	RCJT	TCJT	LCJT		New (Old)	**kg** lbs.
RCJT	1/2										G1008KRRB			S1008K		
RCJT	5/8	**98.4**	**76.2**	**54.0**	**23.6**	**10.7**	**40.6**	**10.3**	**28.1**	**10**	G1010KRRB	–	–	S1010K	T-40219	**0.590**
RCJT	11/16	3 7/8	3	2 1/8	0.929	27/64	1.599	13/32	1.105	3/8	G1011KRRB			S1011K		1.30
RCJT	**17**										GE17KRRB			SE17K		
RCJT	3/4	**111.9**	**89.7**	**60.5**	**27.8**	**10.7**	**46.4**	**11.1**	**32.8**	**10**	G1012KRRB	–	–	S1012K	T-40220	**0.590**
RCJT	**20**	4 13/32	3 17/32	2 3/8	1.094	27/64	1.828	7/16	1.292	3/8	GE20KRRB			SE20K		1.30
RCJT, TCJT, LCJT	13/16										G1013KRRB	G1013KPPB3	G1013KLLB	S1013K		
RCJT, TCJT, LCJT	7/8	**123.8**	**99.2**	**69.8**	**27.9**	**11.5**	**46.7**	**11.1**	**23.9**	**10**	G1014KRRB	G1014KPPB3	G1014KLLB	S1014K	T-40221	**0.785**
RCJT, TCJT, LCJT	15/16	4 7/8	3 29/32	2 3/4	1.100	29/64	1.839	7/16	1.480	3/8	G1015KRRB	G1015KPPB3	G1015KLLB	S1015K	(T-21412P)	1.73
RCJT, TCJT, LCJT	1										G1100KRRB	G1100KPPB3	G1100KLLB	S1100K		
RCJT, TCJT, LCJT	**25**										GE25KRRB	GE25KPPB3	GE25KLLB	SE25K		
RCJT, TCJT, LCJT	1 1/16										G1101KRRB	G1101KPPB3	G1101KLLB	S1101K		
RCJT, TCJT, LCJT	1 1/8	**141.3**	**116.7**	**79.4**	**29.9**	**11.5**	**50.5**	**11.9**	**43.7**	**10**	G1102KRRB	G1102KPPB3	G1102KLLB	S1102K	T-40222	**1.090**
RCJT, TCJT, LCJT	1 3/16	5 9/16	4 19/32	3 1/8	1.178	29/64	1.990	15/32	1.730	3/8	G1103KRRB	G1103KPPB3	G1103KLLB	S1103K	(T-21548P)	2.40
RCJT, TCJT, LCJT	1 1/4 S										G1103KRRB3	G1103KPPB4	G1103KLLB3	S1103K3		
RCJT, TCJT, LCJT	**30**										GE30KRRB	GE30KPPB3	GE30KLLB	SE30K		
RCJT, TCJT, LCJT	1 1/4										G1104KRRB	G1104KPPB2	G1104KLLB	S1104K[1]		
RCJT, TCJT, LCJT	1 5/16	**155.6**	**130.2**	**92.1**	**31.8**	**13.1**	**53.5**	**11.9**	**53.6**	**12**	G1105KRRB	G1105KPPB2	G1105KLLB	S1105K[1]	T-40223	**1.444**
RCJT, TCJT, LCJT	1 3/8	6 1/8	5 1/8	3 5/8	1.254	33/64	2.106	15/32	2.112	1/2	G1106KRRB	G1106KPPB2	G1106KLLB	S1106K[1]	(T-21414)	3.18
RCJT, TCJT, LCJT	1 7/16										G1107KRRB	G1107KPPB2	G1107KLLB	S1107K[1]		
RCJT, TCJT, LCJT	**35**										GE35KRRB	GE35KPPB2	GE35KLLB	SE35K		
RCJT, TCJT, LCJT	1 1/2										G1108KRRB	G1108KPPB3	G1108KLLB	S1108KT		
RCJT, TCJT, LCJT	1 9/16	**171.4**	**143.6**	**104.7**	**38.1**	**13.1**	**59.3**	**12.7**	**58.2**	**12**	G1109KRRB	G1109KPPB3	G1109KLLB	S1109KT	T-40224	**2.193**
RCJT, TCJT, LCJT	**40**	6 3/4	5 21/32	4 1/8	1.500	33/64	2.334	1/2	2.292	1/2	GE40KRRB	GE40KPPB3	GE40KLLB	SE40K	(T-22529)	4.83
RCJT, TCJT, LCJT	1 5/8										G1110KRRB	G1110KPPB4	G1110KLLB	S1110K		
RCJT, TCJT, LCJT	1 11/16	**179.4**	**148.0**	**111.1**	**38.9**	**13.1**	**59.3**	**12.7**	**63.0**	**12**	G1111KRRB	G1111KPPB4	G1111KLLB	S1111K	T-40225	**2.379**
RCJT, TCJT, LCJT	1 3/4	7 1/16	5 27/32	4 3/8	1.531	33/64	2.334	1/2	2.480	1/2	G1112KRRB	G1112KPPB4	G1112KLLB	S1112K	(T-21416)	5.24
RCJT, TCJT, LCJT	**45**										GE45KRRB	GE45KPPB4	GE45KLLB	SE45K		
RCJT, TCJT, LCJT	1 7/8	**188.9**	**157.2**	**115.9**	**42.9**	**17.1**	**66.4**	**12.7**	**69.3**	**16**	G1114KRRB	G1114KPPB3	G1114KLLB	S1114K	T-40226	**2.724**
RCJT, TCJT, LCJT	1 15/16	7 7/16	6 3/16	4 9/16	1.688	43/64	2.615	1/2	2.730	5/8	G1115KRRB	G1115KPPB3	G1115KLLB	S1115K	(T-21418)	6.00
RCJT, TCJT, LCJT	**50**										GE50KRRB	GE50KPPB3	GE50KLLB	SE50K		
RCJT, TCJT, LCJT	2										G1200KRRB	G1200KPPB4	G1200KLLB	S1200K		
RCJT, TCJT, LCJT	2 1/8	**215.9**	**184.1**	**127.0**	**46.8**	**17.1**	**75.1**	**16.7**	**75.7**	**16**	G1202KRRB	G1202KPPB4	G1202KLLB	S1202K	T-40227	**3.668**
RCJT, TCJT, LCJT	2 3/16	8 1/2	7 1/4	5	1.844	43/64	2.958	21/32	2.980	5/8	G1203KRRB	G1203KPPB4	G1203KLLB	S1203K	(T-23788)	8.08
RCJT, TCJT, LCJT	**55**										GE55KRRB	GE55KPPB4	GE55KLLB	SE55K		

[1]Add C1 suffix to collar numbers for G-KPPB2 bearings (TCJT).
NOTE: Shaft diameter with an S = smaller housing.

RCJTC INDUSTRIAL-SERIES CONCENTRIC COLLAR

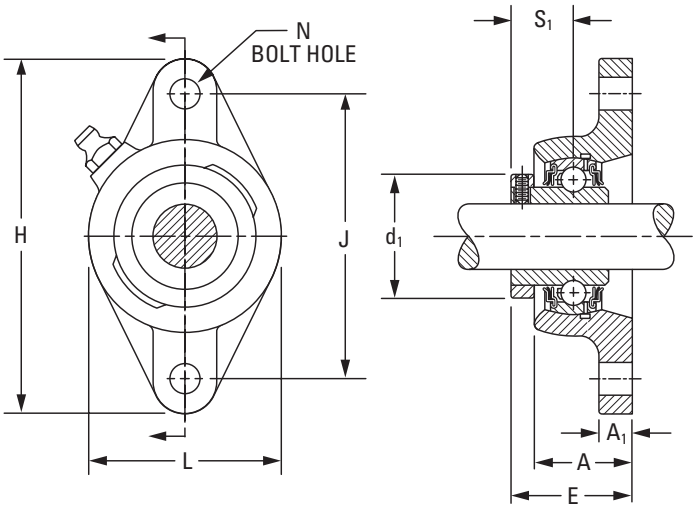
- This series has the same basic design as RCJT, except it uses the concentric collar rather than the self-locking eccentric collar as the shaft-locking device.
- All units are equipped with GC-KRRB wide inner ring concentric collars.
- The spherical outside diameter mounted in the corresponding machined housing seats provides the initial self-alignment.
- The bolt-hole spacing dimensions are interchangeable with the RCJT series and most competitive units.
- The units are factory-prelubricated. A grease fitting is provided for relubrication.
- Safety end caps are available for selected sizes.

Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;

To order, specify UNIT and SHAFT DIAMETER.

Example: RCJTC 1 3/16 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RCJTC	GC-KRRB	Page A-40

Unit	Shaft Dia.	H	J	L	A	E	N	A_1	d_1	S_1	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			New (Old)	**kg** lbs.
RCJTC	5/8	**98.4** 3 7/8	**76.20** 3	**60.3** 2 3/8	**23.6** 0.929	**32.7** 1.287	**9.9** 25/64	**8.3** 21/64	**33.8** 1.329	**15.5** 39/64	**10** 3/8	GC1010KRRB	C203	T-40270 (T-27181)	**0.368** 0.81
RCJTC	3/4	**111.9** 4 13/32	**89.70** 3 17/32	**60.3** 2 3/8	**27.8** 1.094	**38.2** 1.502	**9.9** 25/64	**11.1** 7/16	**37.7** 1.485	**18.7** 47/64	**10** 3/8	GC1012KRRB	C204	T-40271 (T-27183)	**0.545** 1.20
RCJTC	1	**123.8** 4 7/8	**98.81** 3 57/64	**69.8** 2 3/4	**27.9** 1.100	**39.8** 1.569	**11.9** 15/32	**13.5** 17/32	**44.1** 1.735	**20.2** 51/64	**10** 3/8	GC1100KRRB	C205	T-40272 (T-27200)	**0.717** 1.58
RCJTC RCJTC RCJTC	1 1/8 1 3/16 1 1/4 S	**141.3** 5 9/16	**116.70** 4 19/32	**81.0** 3 3/16	**29.9** 1.178	**43.0** 1.693	**11.5** 29/64	**13.5** 17/32	**52.3** 2.058	**22.6** 57/64	**10** 3/8	GC1102KRRB GC1103KRRB GC1103KRRB3	C206	T-401273 (T-27197)	**1.035** 2.28
RCJTC RCJTC RCJTC	1 1/4 1 3/8 1 7/16	**155.6** 6 1/8	**130.20** 5 1/8	**92.1** 3 5/8	**31.8** 1.254	**46.6** 1.834	**13.1** 33/64	**14.3** 9/16	**58.2** 2.292	**25.4** 1	**12** 1/2	GC1104KRRB GC1106KRRB GC1107KRRB	C207	T-40252	**1.498** 3.30
RCJTC	1 11/16	**179.4** 7 1/16	**148.40** 5 27/32	**111.1** 4 3/8	**38.9** 1.531	**53.7** 2.116	**13.1** 33/64	**14.3** 9/16	**72.9** 2.871	**29.4** 1 5/32	**12** 1/2	GC1111KRRB	C209	T-40275	**2.097** 4.62
RCJTC	1 15/16	**188.9** 7 7/16	**157.20** 6 3/16	**115.9** 4 9/16	**42.9** 1.688	**58.5** 2.303	**17.1** 43/64	**14.3** 9/16	**79.3** 3.121	**30.2** 1 3/16	**16** 5/8	GC1115KRRB	C210	T-40276	**2.497** 5.50

NOTE: Shaft diameter with an S = smaller housing.

VCJT STANDARD SERIES

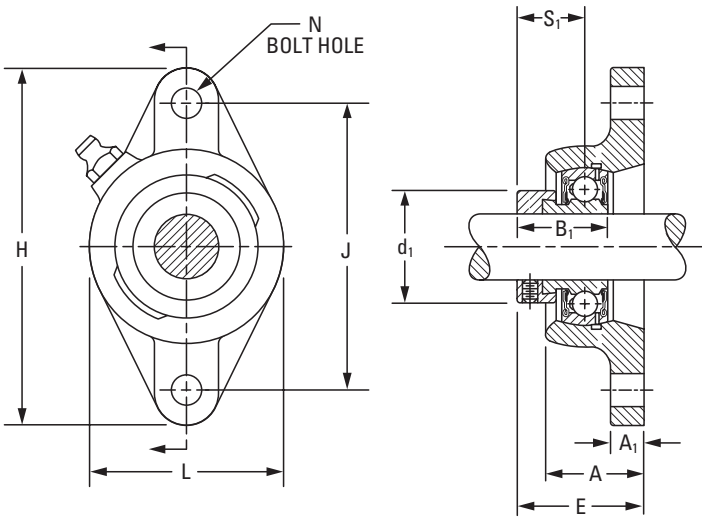
- This series has the same design and features as the VCJ type, but has two bolt holes instead of four. This allows mounting in restricted areas.
- This series is assembled with GRA-RRB bearings with positive-contact, land-riding seals and self-locking collars.
- The units are factory-prelubricated. A grease fitting is provided for relubrication.
- Safety end caps are available for selected sizes.

Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: VCJT 1 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
VCJT	GRA-RRB	Page A-50

Unit	Shaft Dia.	H	J	L	A	E	N	B_1	A_1	d_1	S_1	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			New (Old)	**kg** lbs.
VCJT	1/2												GRA008RRB	S1008K		
VCJT	5/8	**98.4** 3 7/8	**76.2** 3	**53.9** 2 1/8	**23.6** 0.929	**39.3** 1.548	**10.7** 27/64	**28.6** 1 1/8	**10.3** 13/32	**28.1** 1.105	**22.2** 7/8	**10** 3/8	GRA010RRB	S1010K	T-40219 (T-22244P)	**0.590** 1.30
VCJT	**17**												GRAE17RRB	SE17K		
VCJT	3/4	**111.9** 4 13/32	**89.7** 3 17/32	**60.3** 2 3/8	**27.8** 1.094	**43.3** 1.706	**9.9** 25/64	**31.0** 1 7/32	**11.1** 7/16	**32.8** 1.292	**23.4** 59/64	**10** 3/8	GRA012RRB	S1012K	T-40220 (T-21409P)	**0.518** 1.44
VCJT	**20**												GRAE20RRB	SE20K		
VCJT	7/8												GRA014RRB	S1014K		
VCJT	15/16	**123.8** 4 7/8	**99.2** 3 29/32	**69.8** 2 3/4	**27.9** 1.100	**43.2** 1.701	**11.5** 29/64	**31.0** 1 7/32	**11.1** 7/16	**23.9** 1.480	**23.4** 59/64	**10** 3/8	GRA015RRB	S1015K	T-40221 (T-21412P)	**0.740** 1.63
VCJT	1												GRA100RRB	S1100K		
VCJT	**25**												GRAE25RRB	SE25K		
VCJT	1 1/8												GRA102RRB	S1102K		
VCJT	1 3/16	**141.3** 5 9/16	**116.7** 4 19/32	**79.4** 3 1/8	**29.9** 1.178	**47.1** 1.856	**11.5** 29/64	**35.7** 1 13/32	**11.9** 15/32	**43.7** 1.730	**27.0** 1 1/16	**10** 3/8	GRA103RRB	S1103K	T-40222 (T-21548P)	**1.026** 2.26
VCJT	1 1/4 S												GRA103RRB2	S1103K3		
VCJT	**30**												GRAE30RRB	SE30K		
VCJT	1 1/4												GRA104RRB	S1104K		
VCJT	1 3/8	**155.6** 6 1/8	**130.2** 5 1/8	**92.1** 3 5/8	**31.8** 1.254	**50.5** 1.989	**13.1** 33/64	**38.9** 1 17/32	**11.9** 15/32	**53.6** 2.112	**29.4** 1 5/32	**12** 1/2	GRA106RRB	S1106K	T-40223 (T-21414)	**1.362** 3.00
VCJT	1 7/16												GRA107RRB	S1107K		
VCJT	**35**												GRAE35RRB	SE35K		
VCJT	1 1/2	**171.4** 6 3/4	**143.6** 5 21/32	**104.7** 4 1/8	**38.1** 1.500	**56.9** 2.243	**13.1** 33/64	**43.7** 1 23/32	**12.7** 1/2	**58.2** 2.292	**32.5** 1 9/32	**12** 1/2	GRA108RRB	S1108KT	T-40224 (T-22529)	**2.075** 4.57
VCJT	**40**												GRAE40RRB	SE40K		
VCJT	1 5/8												GRA110RRB	S1110K		
VCJT	1 11/16	**179.4** 7 1/16	**148.0** 5 27/32	**111.1** 4 3/8	**38.9** 1.531	**57.0** 2.244	**13.1** 33/64	**43.7** 1 23/32	**12.7** 1/2	**63.0** 2.480	**32.5** 1 9/32	**12** 1/2	GRA111RRB	S1111K	T-40225 (T-21416)	**2.229** 4.91
VCJT	1 3/4												GRA112RRB	S1112K		
VCJT	**45**												GRAE45RRB	SE45K		
VCJT	1 7/8												GRA114RRB	S1114K		
VCJT	1 15/16	**188.9** 7 7/16	**157.2** 6 3/16	**115.8** 4 9/16	**42.9** 1.688	**61.0** 2.400	**17.1** 43/64	**43.7** 1 23/32	**12.7** 1/2	**69.3** 2.730	**32.5** 1 9/32	**16** 5/8	GRA115RRB	S1115K	T-40226 (T-21418)	**2.492** 5.49
VCJT	2 S												GRA115RRB2	S1115K2		
VCJT	**50**												GRAE50RRB	SE50K		
VCJT	2												GRA200RRB	S1200K		
VCJT	2 3/16	**215.9** 8 1/2	**184.1** 7 1/4	**127.0** 5	**46.8** 1.844	**67.9** 2.672	**17.1** 43/64	**48.4** 1 29/32	**16.7** 21/32	**75.7** 2.980	**36.5** 2 7/16	**16** 5/8	GRA203RRB	S1203K	T-40227 (T-23788)	**3.092** 6.81
VCJT	**55**												GRAE55RRB	SE55K		

NOTE: Shaft diameter with an S = smaller housing.

YCJT INDUSTRIAL SET SCREW SERIES

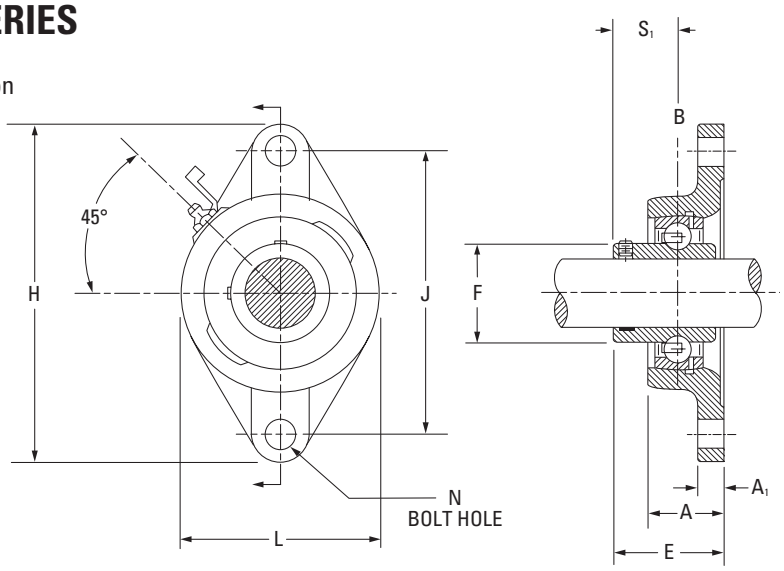
- Incorporates Shaft Guarding Technology, which reduces replacement time, provides shaft protection and prolongs the life of the shaft.
- This series has the same design as the YCJ series, but is mounted with two bolts instead of four.
- All units are equipped with GY-KRRB wide inner ring, set screw bearings.
- The spherical outside diameter mounted in the corresponding machined housings seats provides the initial self-alignment.
- The units are factory-prelubricated. A grease fitting is provided for relubrication.
- Safety end caps are available for selected sizes.

Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: YCJT 1 7/16 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
YCJT	GY-KRRB	Page A-44

Unit	Shaft Dia.	H	J	L	A	E	B	A_1	F	N	S_1	Bolt Size	Bearing No.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	
YCJT	1/2												GY1008KRRB
YCJT	5/8	**98.4** 3 7/8	**76.2** 3	**54.00** 2 1/8	**23.6** 0.929	**32.90** 1.296	**27.40** 1 5/64	**11.1** 7/16	**23.9** 0.941	**10.0** 27/64	**15.9** 5/8	**10** 3/8	GY1010KRRB
YCJT	**17**												GYE17KRRB
YCJT SGT	3/4	**111.9** 4 13/32	**89.7** 3 17/32	**60.30** 2 3/8	**27.8** 1.094	**38.40** 1.513	**31.80** 1 1/4	**11.1** 7/16	**27.6** 1.085	**10.0** 27/64	**19.1** 3/4	**10** 3/8	GY1012KRRB SGT
YCJT SGT	**20**												GYE20KRRB SGT
YCJT SGT	7/8												GY1014KRRB SGT
YCJT SGT	15/16	**123.8** 4 7/8	**99.2** 3 29/32	**69.90** 2 3/4	**27.9** 1.100	**40.00** 1.575	**34.90** 1 3/8	**12.7** 1/2	**33.8** 1.331	**11.5** 29/64	**20.6** 13/16	**12** 1/2	GY1015KRRB SGT
YCJT SGT	1												GY1100KRRB SGT
YCJT SGT	**25**												GYE25KRRB SGT
YCJT SGT	1 1/8												GY1102KRRB SGT
YCJT SGT	1 3/16	**141.3** 5 9/16	**116.7** 4 19/32	**79.45** 3 1/8	**29.9** 1.178	**43.46** 1.711	**39.29** 1 35/64	**13.5** 17/32	**40.3** 1.587	**11.5** 29/64	**23.4** 59/64	**12** 1/2	GY1103KRRB SGT
YCJT	1 1/4 S												GY1103KRRB3
YCJT SGT	**30**												GYE30KRRB SGT
YCJT SGT	1 1/4												GY1104KRRB SGT
YCJT SGT	1 3/8	**155.6** 6 1/8	**130.2** 5 1/8	**92.10** 3 5/8	**31.8** 1.254	**48.95** 1.927	**45.20** 1 25/32	**13.5** 17/32	**46.8** 1.843	**13.0** 33/64	**27.9** 1 1/10	**12** 1/2	GY1106KRRB SGT
YCJT SGT	1 7/16												GY1107KRRB SGT
YCJT SGT	**35**												GYE35KRRB SGT
YCJT SGT	1 1/2	**171.5** 6 3/4	**143.7** 5 21/32	**104.80** 4 1/8	**38.1** 1.500	**54.40** 2.141	**49.20** 1 15/16	**14.3** 9/16	**52.2** 2.057	**13.0** 33/64	**30.2** 1 3/16	**12** 1/2	GY1108KRRB SGT
YCJT SGT	**40**												GYE40KRRB SGT
YCJT SGT	1 5/8												GY1110KRRB SGT
YCJT SGT	1 11/16	**179.4** 7 1/16	**148.4** 5 27/32	**111.10** 4 3/8	**38.9** 1.531	**55.52** 2.186	**50.40** 1 63/64	**14.3** 9/16	**57.9** 2.279	**13.0** 33/64	**31.4** 1 15/64	**12** 1/2	GY1111KRRB SGT
YCJT SGT	1 3/4												GY1112KRRB SGT
YCJT SGT	**45**												GYE45KRRB SGT
YCJT SGT	1 15/16	**188.9** 7 7/16	**157.2** 6 3/16	**115.90** 4 9/16	**42.9** 1.688	**60.70** 2.390	**51.60** 2 1/32	**14.3** 9/16	**62.8** 2.473	**17.0** 43/64	**32.5** 1 9/32	**12** 1/2	GY1115KRRB SGT
YCJT	2 S												GY1115KRRB3
YCJT SGT	**50**												GYE50KRRB SGT
YCJT SGT	2	**215.9** 8 1/2	**184.2** 7 1/4	**127.00** 5	**46.8** 1.844	**64.70** 2.547	**55.60** 2 3/16	**16.7** 21/32	**69.7** 2.745	**17.0** 43/64	**33.3** 1 5/16	**16** 5/8	GY1200KRRB SGT
YCJT SGT	2 3/16												GY1203KRRB SGT
YCJT SGT	**55**												GYE55KRRB SGT

NOTE: Shaft diameter with an S = smaller housing.

SCJT STANDARD SERIES

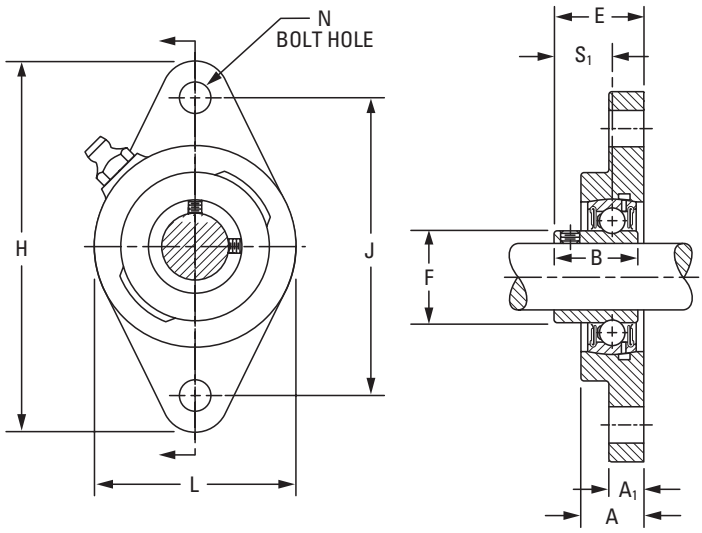
- This series has the same construction and design as SCJ type, but is mounted with two bolts instead of four.
- This series is assembled with GYA-RRB bearings with positive-contact, land-riding seals and set screw locking.
- The units are factory-prelubricated. A grease fitting is provided for relubrication.

Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: SCJT 1 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
SCJT	GYA-RRB	Page A-54

Unit	Shaft Dia.	H	J	L	A	E	N	B	A_1	F	S_1	Bolt Size	Bearing No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			**kg** lbs.
SCJT	1/2												GYA008RRB		
SCJT	5/8	**98.4**	**76.20**	**60.3**	**17.9**	**25.4**	**9.9**	**23.8**	**11.1**	**24.6**	**15.9**	**10**	GYA010RRB	T-40136	**0.34**
SCJT	**17**	3 7/8	3	2 3/8	45/64	1	25/64	15/16	7/16	31/32	5/8	3/8	GYAE17RRB		0.75
SCJT	3/4	**111.9**	**89.69**	**65.1**	**19.0**	**28.6**	**9.9**	**27.0**	**11.1**	**29.0**	**18.3**	**10**	GYA012RRB	T-40138	**0.43**
SCJT	**20**	4 13/32	3 17/32	2 9/16	3/4	1 1/8	25/64	1 1/16	7/16	1 9/64	23/32	3/8	GYAE20RRB		0.94
SCJT	7/8												GYA014RRB		
SCJT	15/16	**123.8**	**98.82**	**69.9**	**19.8**	**29.8**	**11.9**	**28.2**	**11.1**	**33.7**	**19.4**	**10**	GYA015RRB	T-40140	**0.48**
SCJT	1	4 7/8	3 57/64	2 3/4	25/32	1 11/64	15/32	1 7/64	7/16	1 21/64	49/64	3/8	GYA100RRB		1.07
SCJT	**25**												GYAE25RRB		
SCJT	1 1/8												GYA102RRB		
SCJT	1 3/16	**141.3**	**116.68**	**79.4**	**21.4**	**34.1**	**11.5**	**32.5**	**13.5**	**40.1**	**23.0**	**10**	GYA103RRB	T-40142	**0.72**
SCJT	1 1/4 S	5 9/16	4 19/32	3 1/8	27/32	1 11/32	29/64	1 9/32	17/32	1 37/64	29/32	3/8	GYA103RRB3		1.58
SCJT	**30**												GYAE30RRB		
SCJT	1 1/4												GYA104RRB		
SCJT	1 3/8	**155.6**	**130.18**	**92.1**	**24.6**	**38.1**	**13.1**	**36.5**	**14.3**	**46.8**	**25.8**	**12**	GYA106RRB	T-40144	**1.08**
SCJT	1 7/16	6 1/8	5 1/8	3 5/8	31/32	1 1/2	33/64	1 7/16	9/16	1 27/32	1 1/64	1/2	GYA107RRB		2.37
SCJT	**35**												GYAE35RRB		
SCJT	1 1/2	**171.5**	**143.67**	**104.8**	**26.2**	**40.9**	**13.1**	**39.3**	**14.3**	**52.4**	**27.8**	**12**	GYA108RRB	T-40146	**1.97**
SCJT	**40**	6 3/4	5 21/32	4 1/8	1 1/32	1 39/64	33/64	1 35/64	9/16	2 1/16	1 3/32	1/2	GYAE40RRB		4.34
SCJT	1 5/8												GYA110RRB		
SCJT	1 11/16	**179.4**	**148.00**	**111.1**	**28.6**	**43.6**	**13.1**	**42.1**	**15.8**	**57.9**	**28.6**	**12**	GYA111RRB	T-40170	**2.03**
SCJT	1 3/4	7 1/16	5 27/32	4 3/8	1 1/8	1 23/32	33/64	1 21/32	5/8	2 5/32	1 7/8	1/2	GYA112RRB		4.48
SCJT	**45**												GYAE45RRB		
SCJT	1 15/16												GYA115RRB		
SCJT	2 S	**189.9**	**157.16**	**115.8**	**28.6**	**46.0**	**17.1**	**44.4**	**16.6**	**62.7**	**30.9**	**16**	GYA115RRB2	T-40172	**2.26**
SCJT	**50**	7 7/16	6 3/16	4 9/16	1 1/8	1 13/16	43/64	1 3/4	21/32	2 15/32	1 7/32	5/8	GYAE50RRB		4.98
SCJT	2												GYA200RRB		
SCJT	2 3/16	**215.9**	**184.15**	**127.0**	**30.9**	**48.0**	**17.1**	**46.4**	**18.2**	**69.8**	**31.7**	**16**	GYA203RRB	T-40174	**2.79**
SCJT	**55**	8 1/2	7 1/4	5	1 7/32	1 57/64	43/64	1 53/64	23/32	2 3/4	1 1/4	5/8	GYAE55RRB		6.14

NOTE: Shaft diameter with an S = smaller housing.

FLCT STANDARD SERIES

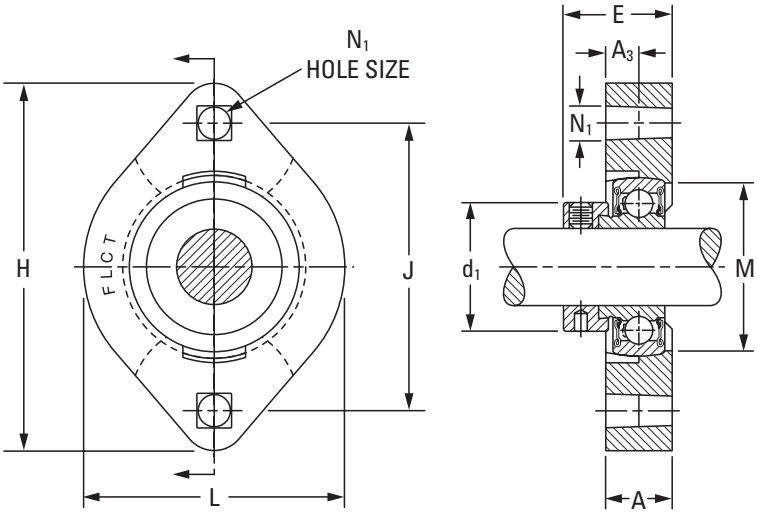
- These versatile power-transmission units are designed to provide sturdy shaft support in minimum space at minimum cost.
- The space-saving, two-bolt unit mounts flush against the frame.
- The bolt-hole spacing and size is the same as the pressed-steel flangette unit.
- The series is equipped with RA-RRB extended inner ring ball bearings with positive-contact, land-riding seals.
- The series is permanently prelubricated.

Suggested shaft tolerances:

½ in. – 1 7⁄16 in., nominal to -0.013 mm, -0.0005 in.;

To order, specify UNIT and SHAFT DIAMETER.

Example: FLCT 1 3⁄16 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
FLCT	RA-RRB	Page A-48

Unit	Shaft Dia.	H	J	L	E	A	A_3	N_1 Sq.	d_1	M	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**kg** lbs.
FLCT	½											RA008RRB	S1008K		
FLCT	5⁄8	**81.0** 3 3⁄16	**63.5** 2 ½	**58.7** 2 5⁄16	**30.2** 1 3⁄16	**14.7** 37⁄64	**7.1** 9⁄32	**7.1** 9⁄32	**28.6** 1 1⁄8	**38.1** 1 ½	**6** ¼	RA010RRB	S1010K	T-34124	**0.322** 0.71
FLCT	**17**											RAE17RRB	SE17K		
FLCT	¾	**90.5** 3 9⁄16	**71.4** 2 13⁄16	**66.7** 2 5⁄8	**32.9** 1 19⁄64	**17.1** 43⁄64	**8.7** 11⁄32	**8.7** 11⁄32	**33.3** 1 5⁄16	**45.2** 1 25⁄32	**8** 5⁄16	RA012RRB	S1012K	T-34122	**0.445** 0.98
FLCT	**20**											RAE20RRB	SE20K		
FLCT	7⁄8											RA014RRB	S1014K		
FLCT	15⁄16	**95.2** 3 ¾	**76.2** 3	**71.0** 2 51⁄64	**34.5** 1 23⁄64	**17.5** 11⁄16	**8.7** 11⁄32	**8.7** 11⁄32	**38.1** 1 ½	**50.4** 1 63⁄64	**8** 5⁄16	RA015RRB	S1015K	T-33753	**0.499** 1.10
FLCT	1											RA100RRB	S1100K		
FLCT	**25**											RAE25RRB	SE25K		
FLCT	1 1⁄8											RA102RRB	S1102K		
FLCT	1 3⁄16	**112.7** 4 7⁄16	**90.5** 3 9⁄16	**84.1** 3 5⁄16	**38.5** 1 33⁄64	**20.6** 13⁄16	**10.3** 13⁄32	**10.3** 13⁄32	**44.4** 1 ¾	**59.5** 2 11⁄32	**10** ⅜	RA103RRB	S1103K	T-34120	**0.835** 1.84
FLCT	1 ¼ S											RA103RRB2	S1103K3		
FLCT	**30**											RAE30RRB	SE30K		
FLCT	1 ¼											RA104RRB	S1104K		
FLCT	1 3⁄8	**125.4** 4 15⁄16	**100.0** 3 15⁄16	**93.7** 3 11⁄16	**41.1** 1 21⁄32	**22.2** ⅞	**11.1** 7⁄16	**10.3** 13⁄32	**54.0** 2 1⁄8	**69.5** 2 47⁄64	**10** ⅜	RA106RRB	S1106K	T-34118	**1.075** 2.37
FLCT	1 7⁄16											RA107RRB	S1107K		
FLCT	**35**											RAE35RRB	SE35K		

NOTE: Shaft diameter with an S = smaller housing.

RFC INDUSTRIAL PILOTED-SERIES CONCENTRIC COLLAR

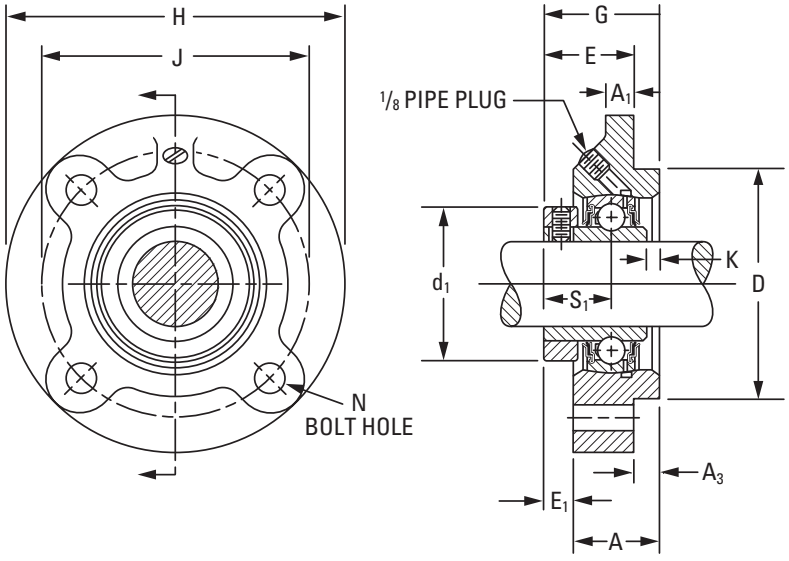
- The piloted flange cartridges ensure accurate mounting fits and provide better support for heavy loads.
- The cast-iron units are suited for applications such as material handling, industrial conveyor equipment, and farm and construction equipment.
- This series is assembled with R-seal (GC-KRRB) bearings with a concentric-locking collar.
- The units are factory-prelubricated. A grease fitting is provided for relubrication if required.

Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RFC 1 7/16 in.



BEARING DATA

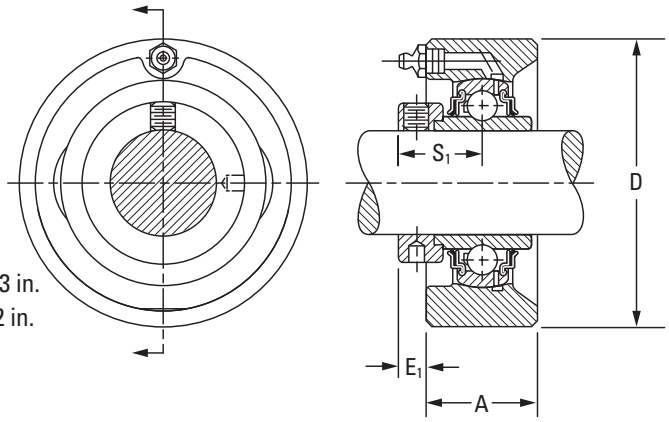
Unit	Bearing No.	Dimensions and Load Ratings
RFC	GC-KRRB	Page A-40

Unit	Shaft Dia.	D	J	H	S_1	K	N	G	A	E_1	A_3	E	A_1	d_1	Bolt Size	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**kg** lbs.
RFC	1	**76.20** 3.000	**92.1** 3 5/8	**111.1** 4 3/8	**20.2** 51/64	**3.6** 9/64	**10.3** 13/32	**37.7** 1 31/64	**28.2** 1 7/64	**9.5** 3/8	**6.4** 1/4	**31.4** 1 15/64	**9.5** 3/8	**44.4** 1 3/4	**10** 3/8	GC1100KRRB	C205	T-27031	**1.152** 2.54
RFC	1 1/8	**85.72** 3.375	**104.8** 4 1/8	**127.0** 5	**22.6** 57/64	**3.6** 9/64	**11.9** 15/32	**40.9** 1 39/64	**30.6** 1 13/64	**10.3** 13/32	**10.7** 27/64	**30.2** 1 3/16	**9.5** 3/8	**52.4** 2 1/16	**10** 3/8	GC1102KRRB	C206	T-27021	**1.742** 3.84
RFC	1 3/16															GC1103KRRB			
RFC	1 1/4 S															GC1103KRRB3			
RFC	1 1/4	**92.08** 3.625	**111.1** 4 3/8	**133.4** 5 1/4	**25.4** 1	**3.2** 1/8	**11.9** 15/32	**44.4** 1 3/4	**34.1** 1 11/32	**10.3** 13/32	**11.9** 15/32	**32.5** 1 9/32	**12.7** 1/2	**59.5** 2 11/32	**10** 3/8	GC1104KRRB	C207	T-26730	**1.864** 4.11
RFC	1 3/8															GC1106KRRB			
RFC	1 7/16															GC1107KRRB			
RFC	1 1/2	**92.08** 3.625	**111.1** 4 3/8	**133.4** 5 1/4	**27.4** 1 5/64	**4.8** 3/16	**11.9** 15/32	**48.8** 1 59/64	**38.1** 1 1/2	**10.7** 27/64	**11.9** 15/32	**36.9** 1 29/64	**12.7** 1/2	**68.3** 2 11/16	**10** 3/8	GC1108KRRB	C208	T-26587	**2.141** 4.72
RFC	1 11/16	**107.95** 4.250	**130.2** 5 1/8	**155.6** 6 1/8	**29.4** 1 5/32	–	**13.5** 17/32	**46.8** 1 27/32	**34.1** 1 11/32	**12.7** 1/2	**11.9** 15/32	**34.9** 1 3/8	**11.5** 29/64	**73.0** 2 7/8	**12** 1/2	GC1111KRRB	C209	T-27276	**2.817** 6.21
RFC	1 3/4															GC1112KRRB			
RFC	1 15/16	**114.30** 4.500	**136.5** 5 3/8	**161.9** 6 3/8	**30.2** 1 3/16	**6.4** 1/4	**13.5** 17/32	**54.8** 2 5/32	**42.9** 1 11/16	**11.9** 15/32	**15.9** 5/8	**38.9** 1 17/32	**12.7** 1/2	**79.4** 3 1/8	**12** 1/2	GC1115KRRB	C210	T-26743	**3.211** 7.08
RFC	2	**127.00** 5.000	**152.4** 6	**181.0** 7 1/8	**33.3** 1 5/16	**7.1** 9/32	**15.1** 19/32	**61.1** 2 13/32	**44.4** 1 3/4	**16.7** 21/32	**22.2** 7/8	**38.9** 1 17/32	**12.7** 1/2	**88.9** 3 1/2	**12** 1/2	GC1200KRRB	C211	T-28287	**4.082** 9.00
RFC	2 3/16															GC1203KRRB			

NOTE: Shaft diameter with an S = smaller housing.

RC SERIES

- The RC series is convenient for mounting in straight-bore housings.
- The bearing features a self-locking collar and spherical outside diameter fitted to a corresponding spherical seat in the cartridge that provides self-alignment.
- The unit is equipped with a G-KRRB (R-seal) bearing.



Suggested housing bore:

Shaft Rotating: nominal +.025 mm to +.076 mm, +.001 in. to +.003 in.

Shaft Stationary: nominal +.00 mm to -.050 mm, +.000 in. to -.002 in.

Avoid excessive tightening of anchor bolts.

Suggested shaft tolerances:

½ in. – 1 15⁄16 in., nominal to -0.013 mm, -0.0005 in.;

2 in. – 2 7⁄16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RC 1 3⁄16 in.

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RC	G-KRRB	Page A-34

Unit[1]	Shaft Dia.	D	A	E_1	S_1	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**kg** lbs.
RC	½					G1008KRRB	S1008K		
RC	5⁄8	**68.27**	**30.2**	**8.3**	**23.4**	G1010KRRB	S1010K	T-16793	**0.549**
RC	11⁄16	2 11⁄16	1 3⁄16	21⁄64	59⁄64	G1011KRRB	S1011K		1.21
RC	**17**					GE17KRRB	SE17K		
RC	¾	**74.61**	**36.5**	**8.3**	**26.6**	G1012KRRB	S1012K	T-16795	**0.804**
RC	**20**	2 15⁄16	1 7⁄16	21⁄64	1 3⁄64	GE20KRRB	SE20K		1.77
RC	7⁄8					G1014KRRB	S1014K		
RC	15⁄16	**79.38**	**38.1**	**7.9**	**27.0**	G1015KRRB	S1015K	T-16797	**0.876**
RC	1	3 1⁄8	1 ½	5⁄16	1 1⁄16	G1100KRRB	S1100K		1.93
RC	**25**					GE25KRRB	SE25K		
RC	1 1⁄16					G1101KRRB	S1101K		
RC	1 1⁄8	**88.90**	**38.1**	**11.1**	**30.2**	G1102KRRB	S1102K	T-16798	**1.171**
RC	1 3⁄16	3 ½	1 ½	7⁄16	1 3⁄16	G1103KRRB	S1103K		2.58
RC	**30**					GE30KRRB	SE30K		
RC	1 ¼					G1104KRRB	S1104K		
RC	1 5⁄16					G1105KRRB	S1105K		
RC	1 3⁄8	**98.43**	**39.7**	**12.7**	**32.5**	G1106KRRB	S1106K	T-16686	**1.448**
RC	1 7⁄16	3 7⁄8	1 9⁄16	½	1 9⁄32	G1107KRRB	S1107K		3.19
RC	**35**					GE35KRRB	SE35K		
RC	1 ½					G1108KRRB	S1108KT		
RC	1 9⁄16	**106.36**	**44.4**	**12.7**	**34.9**	G1109KRRB	S1109KT	T-16800	**1.870**
RC	**40**	4 3⁄16	1 ¾	½	1 3⁄8	GE40KRRB	SE40K		4.12
RC	1 5⁄8					G1110KRRB	S1110K		
RC	1 11⁄16	**111.13**	**44.4**	**12.7**	**34.9**	G1111KRRB	S1111K	T-16687	**1.970**
RC	1 ¾	4 3⁄8	1 ¾	½	1 3⁄8	G1112KRRB	S1112K		4.34
RC	**45**					GE45KRRB	SE45K		
RC	1 7⁄8	**115.89**	**52.4**	**11.9**	**38.1**	G1114KRRB	S1114K	T-16802	**2.452**
RC	1 15⁄16	4 9⁄16	2 1⁄16	15⁄32	1 ½	G1115KRRB	S1115K		5.40
RC	**50**					GE50KRRB	SE50K		
RC	2					G1200KRRB	S1200K		
RC	2 1⁄8	**125.41**	**58.7**	**14.3**	**43.7**	G1202KRRB	S1202K	T-16804	**3.164**
RC	2 3⁄16	4 15⁄16	2 5⁄16	9⁄16	1 23⁄32	G1203KRRB	S1203K		6.97
RC	**55**					GE55KRRB	SE55K		
RC	2 7⁄16	**149.23**	**65.1**	**14.3**	**46.8**	G1207KRRB	S1207K	T-17927	**5.130**
RC	**60**	5 7⁄8	2 9⁄16	9⁄16	1 27⁄32	GE60KRRB	SE60K		11.30

[1]All units have 1⁄4-28 grease fittings.

MALLEABLE-IRON FLANGED UNITS

GVFD, GVFDR RELUBRICATABLE SERIES – VFD, VFDR NON-RELUBRICATABLE SERIES

- The malleable-iron flange cartridges provide self-alignment and rigid support for medium-duty applications.
- The mounting bolt holes are interchangeable with pressed-steel flangette units of corresponding size.

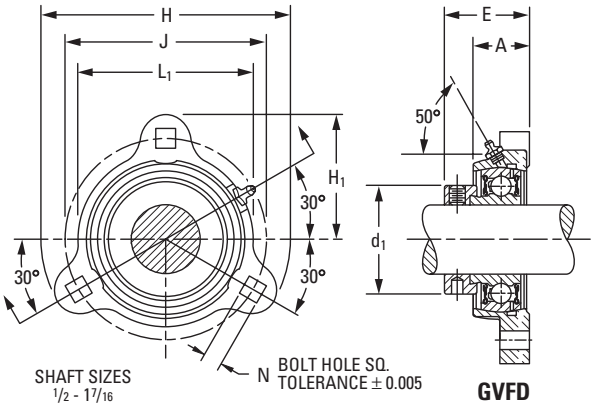
Suggested shaft tolerances: nominal to -0.013 mm, -0.0005 in.

To order, specify UNIT and SHAFT DIAMETER.
For the non-relubricatable series, omit the G prefix on the unit and bearing number.

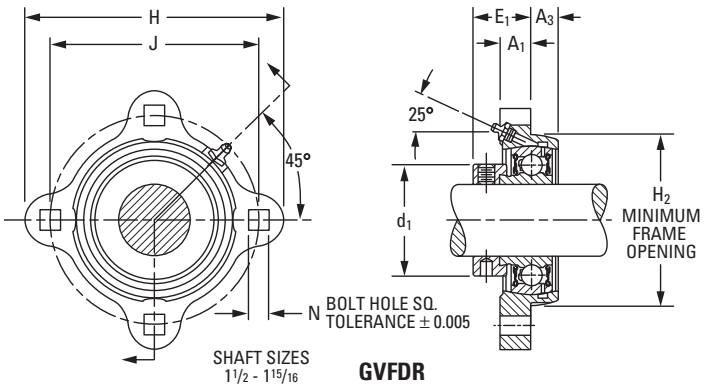
Example: VFD 1 3/16 in. or VFDR 1 3/16 in.; GVFD 1 3/16 in. or GVFDR 1 3/16 in.

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
VFD, VFDR	RA-RRB	Page A-48
GVFD, GVFDR	GRA-RRB	Page A-50



GVFD



GVFDR

Unit		Shaft Dia.	H_1	L_1	H	J	N	H_2	E	A	E_1	A_3	A_1	d_1	Bearing No.	Collar No.	Unit Wt.
Face Mounted	Reverse Mounted	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			**kg** lbs.
RELUBRICATABLE SERIES[1]																	
GVFD[2]	GVFDR[2]	1/2	**40.5** 1 19/32	**53.2** 2 3/32	**81.0** 3 3/16	**63.5** 2 1/2	**7.1** 9/32	**47.6** 1 7/8	**31.8** 1 1/4	**17.5** 11/16	**22.2** 7/8	**7.9** 5/16	**9.5** 3/8	**28.6** 1 1/8	GRA008RRB	S1008K	**2.63**
GVFD[2]	GVFDR[2]	5/8													GRA010RRB	S1010K	0.58
GVFD[2]	GVFDR[2]	**17**													GRAE17RRB	SE17K	
GVFD[2]	GVFDR	3/4	**45.2** 1 25/32	**60.3** 2 3/8	**90.5** 3 9/16	**71.4** 2 13/16	**8.7** 11/32	**54.8** 2 5/32	**34.1** 1 11/32	**19.8** 25/32	**23.4** 59/64	**9.1** 23/64	**10.7** 27/64	**33.3** 1 5/16	GRA012RRB	S1012K	**0.336**
GVFD[2]	GVFDR	**20**													GRAE20RRB	SE20K	0.74
GVFD	GVFDR	7/8	**47.6** 1 7/8	**66.7** 2 5/8	**95.2** 3 3/4	**76.2** 3	**8.7** 11/32	**60.3** 2 3/8	**34.1** 1 11/32	**19.8** 25/32	**23.4** 59/64	**9.1** 23/64	**10.7** 27/64	**38.1** 1 1/2	GRA014RRB	S1014K	**0.386**
GVFD	GVFDR	15/16													GRA015RRB	S1015K	0.85
GVFD	GVFDR	1													GRA100RRB	S1100K	
GVFD	GVFDR	**25**													GRAE25RRB	SE25K	
GVFD	GVFDR	1 1/8	**56.4** 2 7/32	**78.6** 3 3/32	**112.7** 4 7/16	**90.5** 3 9/16	**10.3** 13/32	**71.4** 2 13/16	**38.9** 1 17/32	**22.2** 7/8	**26.6** 1 3/64	**10.7** 27/64	**11.9** 15/32	**44.5** 1 3/4	GRA102RRB	S1102K	**0.608**
GVFD	GVFDR	1 3/16													GRA103RRB	S1103K	1.34
GVFD	GVFDR	1 1/4 S													GRA103RRB2	S1103K3	
GVFD	GVFDR	**30**													GRAE30RRB	SE30K	
GVFD	GVFDR	1 1/4	**61.1** 2 13/32	**88.9** 3 1/2	**122.2** 4 13/16	**100.0** 3 15/16	**10.3** 13/32	**81.8** 3 7/32	**42.1** 1 21/32	**23.8** 15/16	**29.4** 1 5/32	**11.1** 7/16	**12.7** 1/2	**54.0** 2 1/8	GRA104RRB	S1104K	**0.821**
GVFD	GVFDR	1 3/8													GRA106RRB	S1106K	1.81
GVFD	GVFDR	1 7/16													GRA107RRB	S1107	
GVFD	GVFDR	**35**													GRAE35RRB	SE35K	
GVFD	GVFDR	1 1/2	**73.8** 2 29/32	**98.4** 3 7/8	**147.6** 5 13/16	**119.1** 4 11/16	**13.5** 17/32	**89.7** 3 17/32	**48.4** 1 29/32	**28.6** 1 1/8	**32.5** 1 9/32	**12.7** 1/2	**15.9** 5/8	**60.3** 2 3/8	GRA108RRB	S1108KT	**1.334**
GVFD	GVFDR	**40**													GRAE40RRB	SE40K	2.94
GVFD	GVFDR	1 5/8	**74.6** 2 15/16	**107.2** 4 7/32	**149.2** 5 7/8	**120.6** 4 3/4	**13.5** 17/32	**96.0** 3 25/32	**48.4** 1 29/32	**28.6** 1 1/8	**32.5** 1 9/32	**12.7** 1/2	**15.9** 5/8	**63.5** 2 1/2	GRA110RRB	S1110K	**1.361**
GVFD	GVFDR	1 11/16													GRA111RRB	S1111K	3.00
GVFD	GVFDR	1 3/4													GRA112RRB	S1112K	
GVFD	GVFDR	**45**													GRAE45RRB	SE45K	
GVFD	GVFDR	1 7/8	**77.8** 3 1/16	**113.5** 4 15/32	**155.6** 6 1/8	**127.0** 5	**13.5** 17/32	**100.8** 3 31/32	**48.4** 1 29/32	**28.6** 1 1/8	**32.5** 1 9/32	**12.7** 1/2	**15.9** 5/8	**69.8** 2 3/4	GRA114RRB	S1114K	**1.451**
GVFD	GVFDR	1 15/16													GRA115RRB	S1115K	3.20
GVFD	GVFDR	**50**													GRAE50RRB	SE50K	

[1]All units have a 1/4-28 grease fitting, except as noted.
[2]10-32 grease fitting.
NOTE: Shaft diameter with an S = smaller housing.

GRFD, GRFDR RELUBRICATABLE SERIES – RFD, RFDR NON-RELUBRICATABLE SERIES

- The malleable-iron flange cartridges provide self-alignment and rigid support for medium-duty applications.

Suggested shaft tolerances: nominal to -0.013 mm, -0.0005 in.

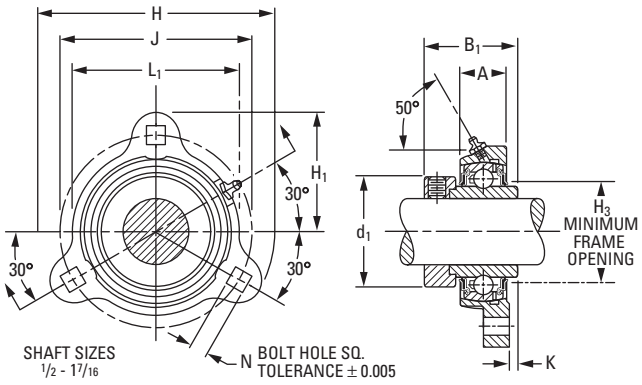
To order, specify UNIT and SHAFT DIAMETER.

For the non-relubricatable series, omit G prefix on unit and bearing number.

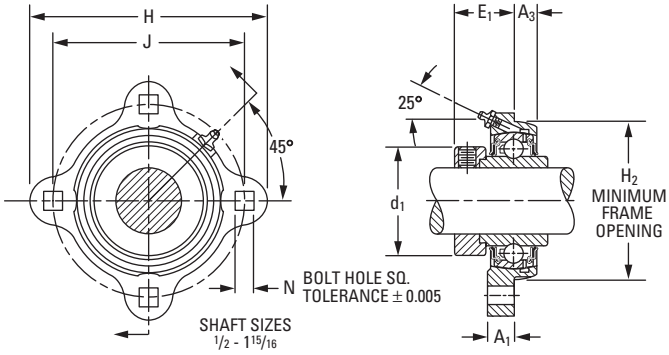
Example: GRFD 1 3/16 in. or GRFDR 1 3/16 in.; RFD 1 3/16 in. or RFDR 1 3/16 in.

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RFD, RFDR	-KRRB	Page A-32
GRFD, GRFDR	G-KRRB	Page A-34



GRFD



GRFDR

Unit		Shaft Dia.	H_1	L_1	H	J	N	H_2	B_1	A	E_1	A_3	A_1	d_1	H_3	K	Bearing No.	Collar No.	Unit Wt.
Face Mounted	Reverse Mounted	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			**kg** lbs.
RELUBRICATABLE SERIES[1]																			
GRFD[2]	GRFDR[2]	1/2															G1008KRRB	S1008K	
GRFD[2]	GRFDR[2]	5/8	**40.5**	**53.2**	**81.0**	**63.5**	**7.1**	**47.6**	**37.3**	**17.5**	**23.4**	**7.9**	**9.5**	**28.6**	**29.4**	**4.4**	G1010KRRB	S1010K	**0.259**
GRFD[2]	GRFDR[2]	11/16	1 19/32	2 3/32	3 3/16	2 1/2	9/32	1 7/8	1 15/32	11/16	59/64	5/16	3/8	1 1/8	1 5/32	11/64	G1011KRRB	S1011K	0.57
GRFD[2]	GRFDR[2]	**17**															GE17KRRB	SE17K	
GRFD[2]	GRFDR	3/4	**45.2**	**60.3**	**90.5**	**71.4**	**8.7**	**54.8**	**43.7**	**19.8**	**26.6**	**9.1**	**10.7**	**33.3**	**34.1**	**6.4**	G1012KRRB	S1012K	**0.395**
GRFD[2]	GRFDR	**20**	1 25/32	2 3/8	3 9/16	2 13/16	11/32	2 5/32	1 23/32	25/32	1 3/64	23/64	27/64	1 5/16	1 11/32	1/4	GE20KRRB	SE20K	0.87
GRFD	GRFDR	7/8															G1014KRRB	S1014K	
GRFD	GRFDR	15/16	**47.6**	**66.7**	**95.2**	**76.2**	**8.7**	**60.3**	**44.4**	**19.8**	**27.0**	**9.1**	**10.7**	**38.1**	**38.9**	**6.7**	G1015KRRB	S1015K	**0.463**
GRFD	GRFDR	1	1 7/8	2 5/8	3 3/4	3	11/32	2 3/8	1 3/4	25/32	1 1/16	23/64	27/64	1 1/2	1 17/32	17/64	G1100KRRB	S1100K	1.02
GRFD	GRFDR	**25**															GE25KRRB	SE25K	
GRFD	GRFDR	1 1/16															G1101KRRB	S1101K	
GRFD	GRFDR	1 1/8															G1102KRRB	S1102K	
GRFD	GRFDR	1 3/16	**56.4**	**78.6**	**112.7**	**90.5**	**10.3**	**71.4**	**48.4**	**22.2**	**30.2**	**10.7**	**11.9**	**44.5**	**46.0**	**6.4**	G1103KRRB	S1103K	**6.260**
GRFD	GRFDR	1 1/4 S	2 7/32	3 3/32	4 7/16	3 9/16	13/32	2 13/16	1 29/32	7/8	1 3/16	27/64	15/32	1 3/4	1 13/16	1/4	G1103KRRB3	S1103K3	1.38
GRFD	GRFDR	**30**															GE30KRRB	SE30K	
GRFD	GRFDR	1 1/4															G1104KRRB	S1104K	
GRFD	GRFDR	1 5/16															G1105KRRB	S1105K	
GRFD	GRFDR	1 3/8	**61.1**	**88.9**	**122.2**	**100.0**	**10.3**	**81.8**	**51.2**	**23.8**	**32.5**	**11.1**	**12.7**	**54.0** 2	**53.2**	**6.4**	G1106KRRB	S1106K	**0.857**
GRFD	GRFDR	1 7/16	2 13/32	3 1/2	4 13/16	3 15/16	13/32	3 7/32	2 1/64	15/16	1 9/32	7/16	1/2	1/8	2 3/32	1/4	G1107KRRB	S1107K	1.89
GRFD	GRFDR	**35**															GE35KRRB	SE35K	
GRFD	GRFDR	1 1/2															G1108KRRB	S1108KT	
GRFD	GRFDR	1 9/16	**73.8**	**98.4**	**147.6**	**119.1**	**13.5**	**89.7**	**56.4**	**28.6**	**34.9**	**12.7**	**15.9**	**60.3**	**59.5**	**5.6**	G1109KRRB	S1109KT	**1.138**
GRFD	GRFDR	**40**	2 29/32	3 7/8	5 13/16	4 11/16	17/32	3 17/32	2 7/32	1 1/8	1 3/8	1/2	5/8	2 3/8	2 11/32	7/32	GE40KRRB	SE40K	2.50
GRFD	GRFDR	1 5/8															G1110KRRB	S1110K	
GRFD	GRFDR	1 11/16	**74.6**	**107.2**	**149.2**	**120.6**	**13.5**	**96.0**	**56.4**	**28.6**	**34.9**	**12.7**	**15.9**	**63.5**	**65.1**	**5.6**	G1111KRRB	S1111K	**1.488**
GRFD	GRFDR	1 3/4	2 15/16	4 7/32	5 7/8	4 3/4	17/32	3 25/32	2 7/32	1 1/8	1 3/8	1/2	5/8	2 1/2	2 9/16	7/32	G1112KRRB	S1112K	3.28
GRFD	GRFDR	**45**															GE45KRRB	SE45K	
GRFD	GRFDR	1 7/8															G1114KRRB	S1114K	
GRFD	GRFDR	1 15/16	**77.8**	**113.5**	**155.6**	**127.0**	**13.5**	**100.8**	**62.7**	**28.6**	**38.1**	**12.7**	**15.9**	**69.8** 2	**69.8**	**8.7**	G1115KRRB	S1115K	**1.692**
GRFD	GRFDR	**50**	3 1/16	4 15/32	6 1/8	5	17/32	3 31/32	2 15/32	1 1/8	1 1/2	1/2	5/8	3/4	2 3/4	11/32	GE50KRRB	SE50K	3.73

[1]All units have a 1/4-28 grease fitting, except as noted.
[2]10-32 grease fitting.
NOTE: Shaft diameter with an S = smaller housing.

GVFTD, GVFTDR RELUBRICATABLE SERIES – VFTD, VFTDR NON-RELUBRICATABLE SERIES

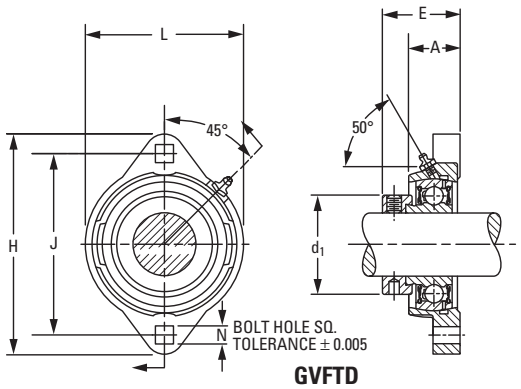
- The malleable-iron flange cartridges provide self-alignment and rigid support for medium-duty applications.

Suggested shaft tolerances: nominal to -0.013 mm, -0.0005 in.

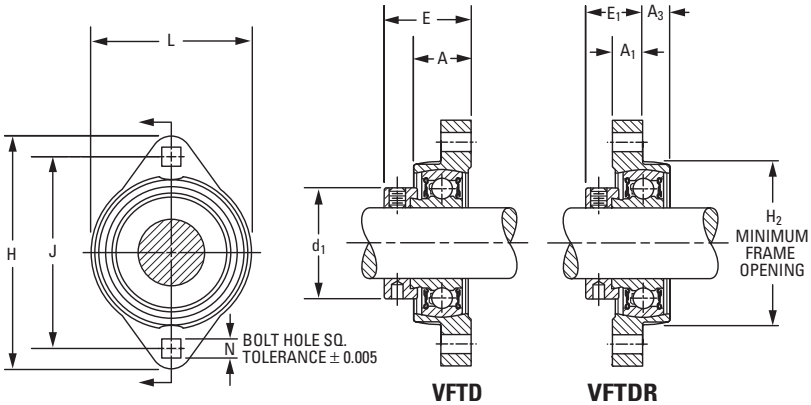
To order, specify UNIT and SHAFT DIAMETER.

For the non-relubricatable series, omit G prefix on unit and bearing number.

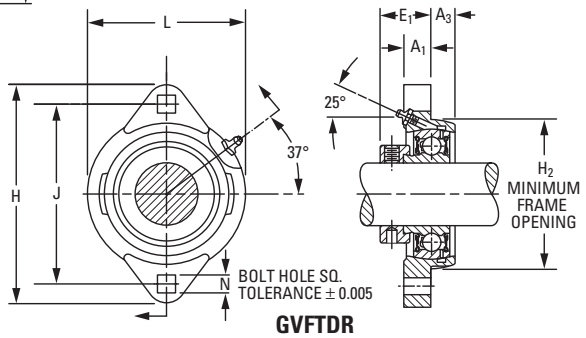
Example: VFTD 1 3⁄16 in. or VFTDR 1 3⁄16 in.; GVFTD 1 3⁄16 in. or GVFTDR 1 3⁄16 in.



GVFTD



VFTD VFTDR



GVFTDR

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
VFTD, VFTDR	RA-RRB	Page A-48
GVFTD, GVFTDR	GRA-RRB	Page A-50

Unit		Shaft Dia.	H	J	L	N	H_2	E	A	E_1	A_3	A_1	d_1	Bearing No.	Collar No.	Unit Wt.
Face Mounted	Reverse Mounted	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			**kg** lbs.
RELUBRICATABLE SERIES[1]																
GVFTD	GVFTDR	1⁄2												GRA008RRB	S1008K	
GVFTD	GVFTDR	5⁄8	**81.0** 3 3⁄16	**63.5** 2 1⁄2	**53.2** 2 3⁄32	**7.1** 9⁄32	**47.6** 1 7⁄8	**31.8** 1 1⁄4	**17.5** 11⁄16	**22.2** 7⁄8	**7.9** 5⁄16	**9.5** 3⁄8	**28.6** 1 1⁄8	GRA010RRB	S1010K	**0.245** 0.54
GVFTD	GVFTDR	**17**												GRAE17RRB	SE17K	
GVFTD	GVFTDR	3⁄4	**90.5** 3 9⁄16	**71.4** 2 13⁄16	**60.3** 2 3⁄8	**8.7** 11⁄32	**54.8** 2 5⁄32	**34.1** 1 11⁄32	**19.8** 25⁄32	**23.4** 59⁄64	**9.1** 23⁄64	**10.7** 27⁄64	**33.3** 1 5⁄16	GRA012RRB	S1012K	**0.331** 0.73
GVFTD	GVFTDR	**20**												GRAE20RRB	SE20K	
GVFTD	GVFTDR	7⁄8												GRA014RRB	S1014K	
GVFTD	GVFTDR	15⁄16	**95.2** 3 3⁄4	**76.2** 3	**66.7** 2 5⁄8	**8.7** 11⁄32	**60.3** 2 3⁄8	**34.1** 1 11⁄32	**19.8** 25⁄32	**23.4** 59⁄64	**9.1** 23⁄64	**10.7** 27⁄64	**38.1** 1 1⁄2	GRA015RRB	S1015K	**0.363** 0.80
GVFTD	GVFTDR	1												GRA100RRB	S1100K	
GVFTD	GVFTDR	**25**												GRAE25RRB	SE25K	
GVFTD	GVFTDR	1 1⁄8												GRA102RRB	S1102K	
GVFTD	GVFTDR	1 3⁄16	**112.7** 4 7⁄16	**90.5** 3 9⁄16	**78.6** 3 3⁄32	**10.3** 13⁄32	**71.4** 2 13⁄16	**38.9** 1 17⁄32	**22.2** 7⁄8	**26.6** 1 3⁄64	**10.7** 27⁄64	**11.9** 15⁄32	**44.5** 1 3⁄4	GRA103RRB	S1103K	**0.608** 1.34
GVFTD	GVFTDR	1 1⁄4 S												GRA103RRB2	S1103K3	
GVFTD	GVFTDR	**30**												GRAE30RRB	SE30K	
GVFTD	GVFTDR	1 1⁄4												GRA104RRB	S1104K	
GVFTD	GVFTDR	1 3⁄8	**122.2** 4 13⁄16	**100.0** 3 15⁄16	**88.9** 3 1⁄2	**10.3** 13⁄32	**81.8** 3 7⁄32	**42.1** 1 21⁄32	**23.8** 15⁄16	**29.4** 1 5⁄32	**11.1** 7⁄16	**12.7** 1⁄2	**54.0** 2 1⁄8	GRA106RRB	S1106K	**0.862** 1.90
GVFTD	GVFTDR	1 7⁄16												GRA107RRB	S1107K	
GVFTD	GVFTDR	**35**												GRAE35RRB	SE35K	

[1]All units have a 1⁄4-28 grease fitting.
NOTE: Shaft diameter with an S = smaller housing.

GRFTD, GRFTDR RELUBRICATABLE SERIES – RFTD, RFTDR NON-RELUBRICATABLE SERIES

- The malleable-iron flange cartridges provide self-alignment and rigid support for medium-duty applications.

Suggested shaft tolerances: nominal to -0.013 mm, -0.0005 in.

BEARING DATA

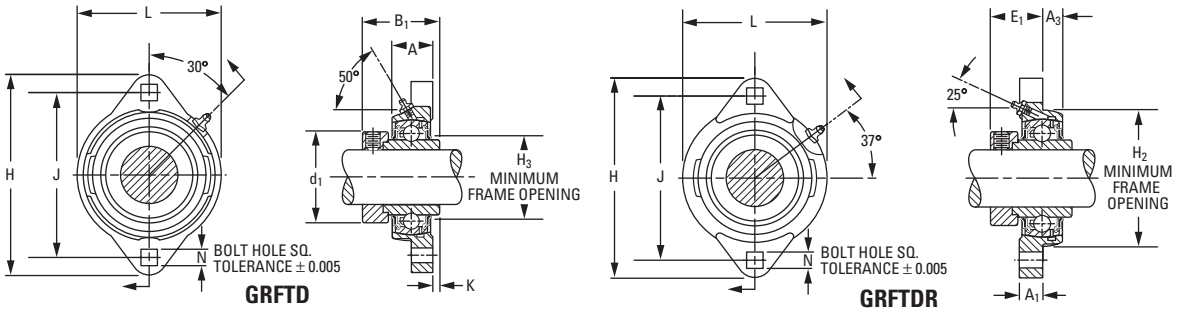
Unit	Bearing No.	Dimensions and Load Ratings
RFTD, RFTDR	-KRRB	Page A-32
GRFTD, GRFTDR	G-KRRB	Page A-34

To order, specify UNIT and SHAFT DIAMETER.

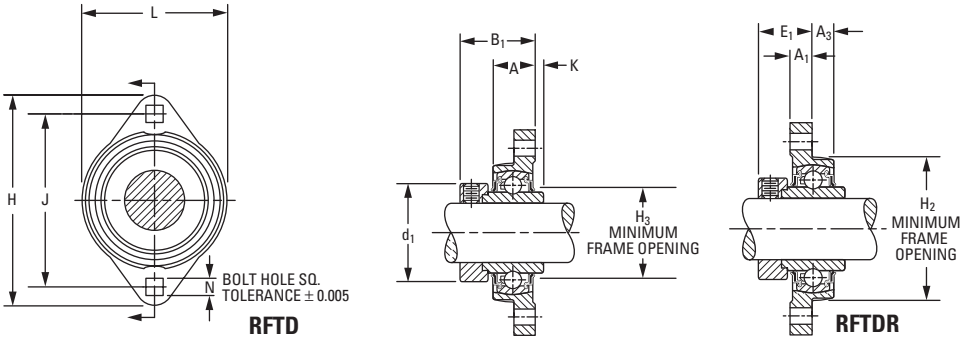
For the non-relubricatable series, omit G prefix on unit and bearing number.

Example: RFTD 1 3/16 in. or RFTDR 1 3/16 in.; GRFTD 1 3/16 in. or GRFTDR 1 3/16 in.

Relubricatable series



Non-relubricatable series



Unit		Shaft Dia.	H	J	L	N	H_2	B_1	A	E_1	A_3	A_1	d_1	H_3	K	Bearing No.	Collar No.	Unit Wt.
Face Mounted	Reverse Mounted	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			**kg** lbs.
RELUBRICATABLE SERIES[1]																		
GRFTD	GRFTDR	1/2														G1008KRRB	S1008K	
GRFTD	GRFTDR	5/8	**81.0**	**63.5**	**53.2**	**7.1**	**47.6**	**37.3**	**15.9**	**23.4**	**7.9**	**9.5**	**28.6**	**29.4**	**4.4**	G1010KRRB	S1010K	**0.254**
GRFTD	GRFTDR	11/16	3 3/16	2 1/2	2 3/32	9/32	1 7/8	1 15/32	5/8	59/64	5/16	3/8	1 1/8	1 5/32	11/64	G1011KRRB	S1011K	0.56
GRFTD	GRFTDR	**17**														GE17KRRB	SE17K	
GRFTD	GRFTDR	3/4	**90.5**	**71.4**	**60.3**	**8.7**	**54.8**	**43.7**	**19.8**	**26.6**	**9.1**	**10.7**	**33.3**	**34.1**	**6.4**	G1012KRRB	S1012K	**0.386**
GRFTD	GRFTDR	**20**	3 9/16	2 13/16	2 3/8	11/32	2 5/32	1 23/32	25/32	1 3/64	23/64	27/64	1 5/16	1 11/32	1/4	GE20KRRB	SE20K	0.85
GRFTD	GRFTDR	7/8														G1014KRRB	S1014K	
GRFTD	GRFTDR	15/16	**95.2**	**76.2**	**66.7**	**8.7**	**60.3**	**44.4**	**19.8**	**27.0**	**9.1**	**10.7**	**38.1**	**38.9**	**6.7**	G1015KRRB	S1015K	**0.386**
GRFTD	GRFTDR	1	3 3/4	3	2 5/8	11/32	2 3/8	1 3/4	25/32	1 1/16	23/64	27/64	1 1/2	1 17/32	17/64	G1100KRRB	S1100K	0.85
GRFTD	GRFTDR	**25**														GE25KRRB	SE25K	
GRFTD	GRFTDR	1 1/16														G1101KRRB	S1101K	
GRFTD	GRFTDR	1 1/8														G1102KRRB	S1102K	
GRFTD	GRFTDR	1 3/16	**112.7**	**90.5**	**78.6**	**10.3**	**71.4**	**48.4**	**22.2**	**30.2**	**10.7**	**11.9**	**44.5**	**46.0**	**6.4**	G1103KRRB	S1103K	**0.712**
GRFTD	GRFTDR	1 1/4 S	4 7/16	3 9/16	3 3/32	13/32	2 13/16	1 29/32	7/8	1 3/16	27/64	15/32	1 3/4	1 13/16	1/4	G1103KRRB3	S1103K3	1.57
GRFTD	GRFTDR	**30**														GE30KRRB	SE30K	
GRFTD	GRFTDR	1 1/4														G1104KRRB	S1104K	
GRFTD	GRFTDR	1 5/16														G1105KRRB	S1105K	
GRFTD	GRFTDR	1 3/8	**122.2**	**100.0**	**88.9**	**10.3**	**81.8**	**51.2**	**23.8**	**32.5**	**11.1**	**12.7**	**54.0**	**53.2**	**6.4**	G1106KRRB	S1106K	**0.962**
GRFTD	GRFTDR	1 7/16	4 13/16	3 15/16	3 1/2	13/32	3 7/32	2 1/64	15/16	1 9/32	7/16	1/2	2 1/8	2 3/32	1/4	G1107KRRB	S1107K	2.12
GRFTD	GRFTDR	**35**														GE35KRRB	SE35K	

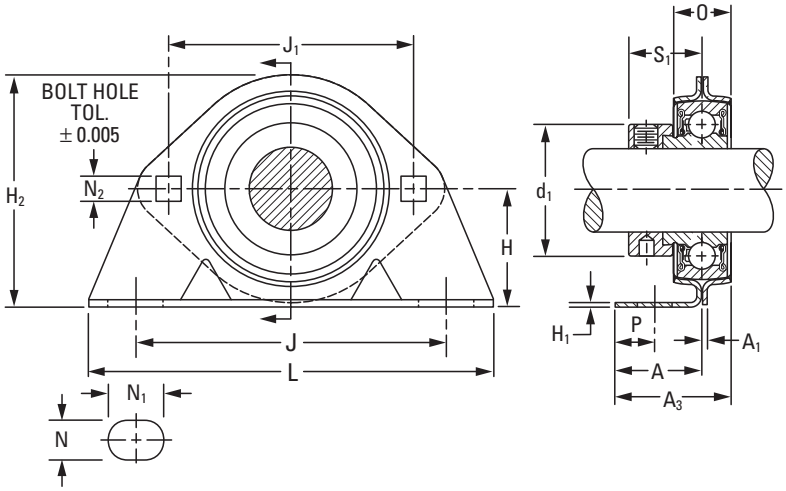
[1]All units have a 1/4-28 grease fitting.

NOTE: Shaft diameter with an S = smaller housing.

PRESSED-STEEL HOUSED UNITS

PBS SERIES

- The PBS series has an economical transmission unit for light-duty, moderate-speed requirements.
- The housing includes two heavy-gage, zinc-plated steel stampings. One is a standard stamping used in the MST two-bolt flangette unit.
- The RA-RRB (extended inner-ring) bearings are regularly furnished with this bearing. RR wide inner rings also can be used.
- The Timken self-locking collar completes the assembly.
- This series is made with a precision bearing seat and dimensions are held to close tolerances. This provides an accurate bearing-to-housing fit and ensures proper alignment of parts.
- The RA-RRB bearing used in the PBS pillow block has positive-contact land-riding seals. It includes a shroud cap design and is permanently prelubricated.
- The base-to-center height and bolt spacing are interchangeable with many other pillow blocks on the market.



Suggested shaft tolerances: nominal to -0.013 mm, -0.0005 in.

To order, specify UNIT and SHAFT DIAMETER.
Example: PBS 1 7/16 in.

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
PBS	RA-RRB	Page A-48

Unit	Shaft Dia.	H	J	N_1	L	H_2	J_1	d_1	S_1	O	A	H_1	A_1	A_3	N_2	P	N	Bearing No.	Flangette No.	Stamping Radial Load Rating[1]	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			**N** lbs.	**kg** lbs.
PBS	1/2																	RA008RRB			
PBS	5/8	**30.2**	**92.1**	**15.9**	**123.8**	**59.5**	**63.5**	**28.6**	**22.2**	**14.3**	**25.4**	**2.64**	**1.90**	**32.5**	**7.1**	**10.3**	**10.3**	RA010RRB	40	**2650**	**0.340**
PBS	**17**	1 3/16	3 5/8	5/8	4 7/8	2 11/32	2 1/2	1 1/8	7/8	9/16	1	0.104	0.075	1 9/32	9/32	13/32	13/32	RAE17RRB	MST-(ZP)	600	0.75
PBS	3/4	**33.3**	**96.8**	**15.9**	**127.0**	**68.3**	**71.4**	**33.3**	**23.4**	**15.9**	**25.4**	**3.02**	**2.11**	**33.3**	**8.7**	**10.3**	**10.3**	RA012RRB	47	**3100**	**0.440**
PBS	**20**	1 5/16	3 13/16	5/8	5	2 11/16	2 13/16	1 5/16	59/64	5/8	1	0.119	0.083	1 5/16	11/32	13/32	13/32	RAE20RRB	MST-(ZP)	700	0.97
PBS	7/8																	RA014RRB			
PBS	15/16	**36.5**	**95.2**	**20.6**	**133.4**	**72.2**	**76.2**	**38.1**	**23.4**	**17.5**	**25.4**	**3.40**	**2.11**	**34.1**	**8.7**	**11.1**	**11.1**	RA015RRB	52	**3550**	**0.544**
PBS	1	1 7/16	3 3/4	13/16	5 1/4	2 27/32	3	1 1/2	59/64	11/16	1	0.134	0.083	1 11/32	11/32	7/16	7/16	RA100RRB	MST-(ZP)	800	1.20
PBS	**25**																	RAE25RRB			
PBS	1 1/8																	RA102RRB			
PBS	1 3/16	**42.9**	**119.1**	**22.2**	**158.8**	**84.9**	**90.5**	**44.4**	**26.6**	**17.5**	**30.2**	**3.40**	**2.64**	**37.3**	**10.3**	**14.3**	**14.3**	RA103RRB	62	**3550**	**0.744**
PBS	1 1/4 S	1 11/16	4 11/16	7/8	6 1/4	3 11/32	3 9/16	1 3/4	1 3/64	11/16	1 3/16	0.134	0.104	1 15/32	13/32	9/16	9/16	RA103RRB2	MST-(ZP)	800	1.64
PBS	**30**																	RAE30RRB			
PBS	1 1/4																	RA104RRB			
PBS	1 3/8	**47.6**	**127.0**	**22.2**	**165.1**	**94.5**	**100.0**	**54.0**	**29.4**	**22.2**	**34.9**	**3.78**	**2.64**	**46.0**	**10.3**	**14.3**	**14.3**	RA106RRB	72	**4000**	**1.089**
PBS	1 7/16	1 7/8	5	7/8	6 1/2	3 23/32	3 15/16	2 1/8	1 5/32	7/8	1 3/8	0.149	0.104	1 13/16	13/32	9/16	9/16	RA107RRB	MST-(ZP)	900	2.40
PBS	**35**																	RAE35RRB			

[1]Stamping thrust rating is 1/5 of stamping radial load rating.
NOTE: Shaft diameter with an S = smaller housing.

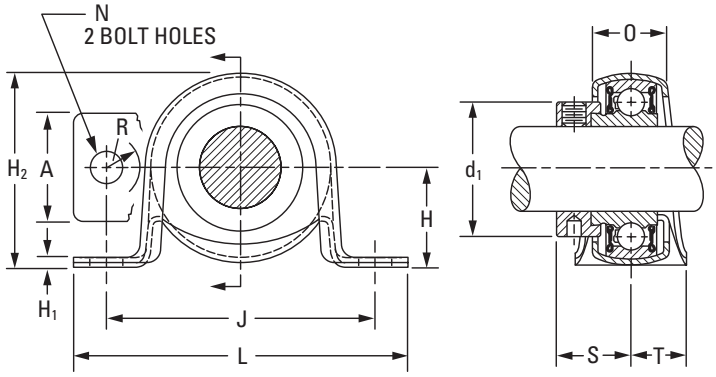
PB SERIES – RPB SERIES

- The PB series provides the advantages of ball bearings at an economical price.
- They are used for light-duty applications.
- The PB series consists of a two-piece separable zinc-plated steel housing with a spherical bearing seat. This allows the spherically ground bearing to have initial self-alignment in all directions.
- The ball bearing is an RA-RRB extended inner-ring-type with positive-contact, land-riding seals and a self-locking collar.
- The series incorporates an improved shroud-cap design and comes permanently prelubricated.
- RPB has the same construction as the PB-type, but with a thick, electrically conductive rubber inner liner.
- The bearings in the RPB unit are designated as RA-RRB FS450 and have a special ball and race finish for quiet operation.
- The RABR unit consists of the bearing with the rubber interliner.

Suggested shaft tolerances: nominal to -0.013 mm, -0.0005 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: PB 1 3/16 in. or RPB 1 3/16 in.



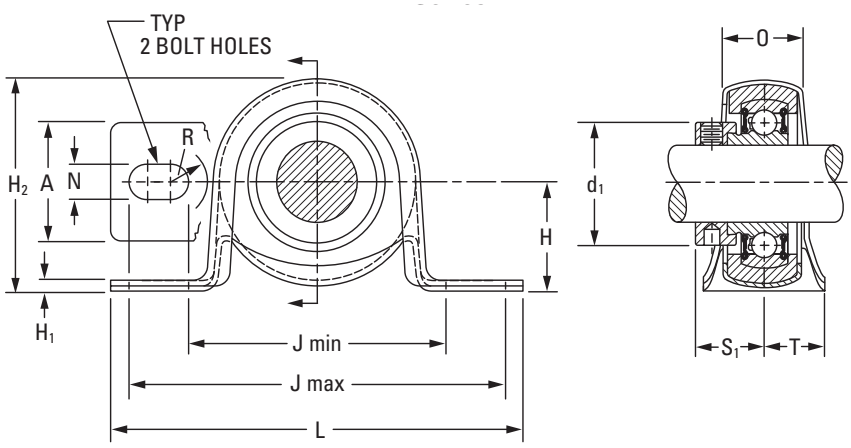
PB Series

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
PB	RA-RRB	Page A-48
RPB	RA-RRB	Page A-48

Unit	Shaft Dia.	H	H_2	J max.	J min.	L	A	H_1	N	R	d_1	O	S_1	T	Bearing No.	Collar No.	Stamping Radial Load Rating[1]	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			**N** lbs.	**kg** lbs.
PB	1/2	**22.2**	**44.4**	**81.0**	**55.6**	**92.1**	**25.4**	**2.54**	**8.7**	**8.7**	**28.6**	**18.24**	**22.07**	**12.7**	RA008RRB	S1008K		
PB	5/8	7/8	1 3/4	3 3/16	2 3/16	3 5/8	1	0.100	11/32	11/32	1 1/8	0.718	0.869	1/2	RA010RRB	S1010K	**1340** 300	**0.200** 0.44
PB	**17**														RAE17RRB	SE17K		
PB	3/4	**25.4**	**52.4**	**88.9**	**63.5**	**104.8**	**25.4**	**2.54**	**10.3**	**10.3**	**33.3**	**21.82**	**23.44**	**15.9**	RA012RRB	S1012K	**1560**	**0.259**
PB	**20**	1	2 1/16	3 1/2	2 1/2	4 1/8	1	0.100	13/32	13/32	1 5/16	0.859	0.923	5/8	RAE20RRB	SE20K	350	0.57
PB	7/8														RA014RRB	S1014K		
PB	15/16	**28.6**	**56.4**	**100.0**	**71.4**	**114.0**	**28.6**	**5.28**	**10.3**	**10.3**	**38.1**	**25.40**	**23.44**	**14.3**	RA015RRB	S1015K	**1760**	**0.295**
PB	1	1 1/8	2 7/32	3 15/16	2 13/16	4 1/2	1 1/8	0.208	13/32	13/32	1 1/2	1.000	0.923	9/16	RA100RRB	S1100K	400	0.65
PB	**25**														RAE25RRB	SE25K		
PB	1 1/8														RA102RRB	S1102K		
PB	1 3/16	**33.3**	**66.7**	**104.8**	**76.2**	**123.8**	**31.8**	**3.68**	**10.3**	**10.3**	**44.5**	**25.40**	**26.72**	**19.0**	RA103RRB	S1103K	**2650**	**0.476**
PB	1 1/4 S	1 5/16	2 5/8	4 1/8	3	4 7/8	1 1/4	0.145	13/32	13/32	1 3/4	1.000	1.052	3/4	RA103RRB2	S1103K3	600	1.05
PB	**30**														RAE30RRB	SE30K		

[1]Housing thrust rating is 1/3 of housing radial load rating. Maximum suggested speed is 2400 RPM.
NOTE: Shaft diameter with an S = smaller housing.
NOTE: Load ratings are upright mounted capacities with load direction toward base.
NOTE: These units should not be mounted vertically or upside down.



RPB Series

Unit	Shaft Dia.	H	H2	J max.	J min.	L	A	H1	N	R	d1	O	S1	T	Bearing No.(1)	Collar No.	Stamping Radial Load Rating(2)	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			**N** lbs.	**kg** lbs.
RPB	1/2														RA008RRB	S1008K		
RPB	5/8	**25.40** 1	**52.4** 2 1/16	**88.9** 3 1/2	**63.5** 2 1/2	**104.8** 4 1/8	**25.4** 1	**2.54** 0.100	**10.3** 13/32	**10.3** 13/32	**28.6** 1 1/8	**21.59** 0.85	**22.07** 0.869	**15.9** 5/8	RA010RRB	S1010K	**880** 200	**0.200** 0.44
RPB	**17**														RAE17RRB	SE17K		
RPB	3/4	**28.58** 1 1/8	**56.4** 2 7/32	**100.0** 3 5/16	**71.4** 2 13/16	**114.0** 4 1/2	**28.6** 1 1/8	**5.28** 0.208	**10.3** 13/32	**10.3** 13/32	**33.3** 1 5/16	**25.40** 1.00	**23.44** 0.923	**14.3** 9/16	RA012RRB	S1012K	**1120** 250	**0.259** 0.57
RPB	**20**														RAE20RRB	SE20K		
RPB	7/8														RA014RRB	S1014K		
RPB	15/16	**33.34** 1 5/16	**66.7** 2 5/8	**104.8** 4 1/8	**76.2** 3	**123.8** 4 7/8	**31.8** 1 1/4	**3.68** 0.145	**10.3** 13/32	**10.3** 13/32	**38.1** 1 1/2	**25.40** 1.00	**23.44** 0.923	**19.0** 3/4	RA015RRB	S1015K	**1340** 300	**0.295** 0.65
RPB	1														RA100RRB	S1100K		
RPB	**25**														RAE25RRB	SE25K		
LRPB	1 3/16	**33.34** 1 5/16	**66.7** 2 5/8	**104.8** 4 1/8	**76.2** 3	**123.8** 4 7/8	**31.8** 1 1/4	**3.68** 0.145	**10.3** 13/32	**10.3** 13/32	**44.4** 1 3/4	**25.40** 1.00	**28.30** 1.114	**19.0** 3/4	RAL103NPPB	LS103K	**1340** 300	**0.476** 1.05

(1)Bearing suffix number FS450.
(2)Housing thrust rating is 1/3 of housing radial load rating. Maximum suggested speed is 2400 RPM.

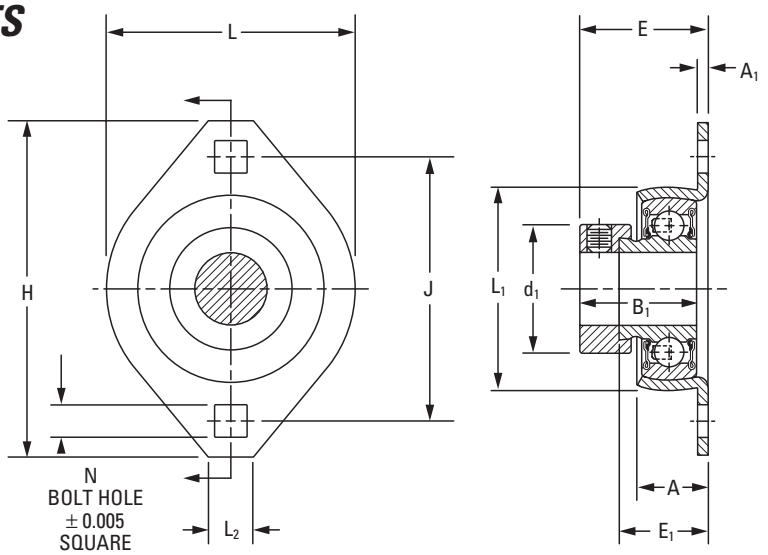
PRESSED-STEEL FLANGED UNITS

VFMST SERIES

- The zinc-plated, pressed-metal flange unit is assembled with an RA-RR prelubricated extended inner-ring-type bearing.
- The unit is ideal for light-duty applications.
- The unit features flush-mounting.
- The unit has additional contamination protection.
- The VFMST series is self-aligning.

Suggested shaft tolerances:

nominal to -0.013 mm, -0.0005 in.



BEARING DATA

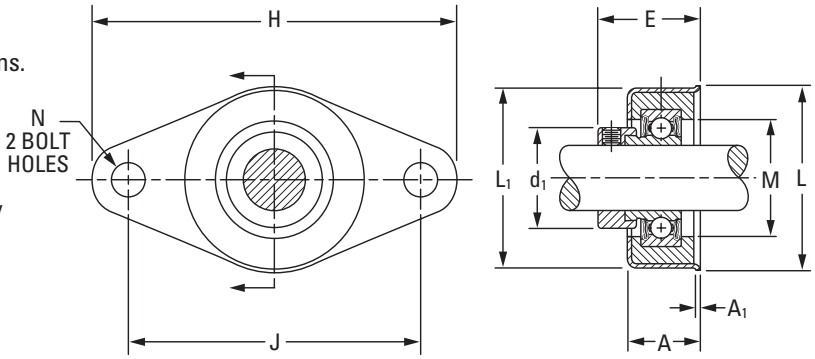
Unit	Bearing No.	Dimensions and Load Ratings
VFMST	RA-RRB	Page A-48

Unit	Shaft Dia.	H	J	L	E	A	N	L_1	E_1	L_2	B_1	d_1	A_1	Bearing No.	Collar No.	Stamping	
																Size	Radial Load Rating[1]
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**N** lbs.
VFMST	3/4	**90.5**	**71.4**	**66.7**	**33.3**	**16.7**	**8.7**	**50.8**	**23.0**	**12.7**	**31.0**	**33.3**	**2.64**	RA012RRB	S1012K	47FMST	**2240**
VFMST	**20**	3 9/16	2 13/16	2 5/8	1 5/16	21/32	11/32	2	29/32	1/2	1 7/32	1 5/16	0.104	RAE20RRB	SE20K		500
VFMST	7/8													RA014RRB	S1014K		
VFMST	15/16	**95.2**	**76.2**	**71.0**	**33.3**	**18.3**	**8.7**	**55.6**	**23.8**	**12.7**	**31.0**	**38.1**	**2.64**	RA015RRB	S1015K	52FMST	**2650**
VFMST	1	3 3/4	3	2 51/64	1 5/16	23/32	11/32	2 3/16	15/16	1/2	1 7/32	1 1/2	0.104	RA100RRB	S1100K		600
VFMST	**25**													RAE25RRB	SE25K		
VFMST	1 1/8													RA102RRB	S1102K		
VFMST	1 3/16	**112.7**	**90.5**	**84.1**	**38.9**	**23.0**	**10.3**	**66.7**	**27.8**	**15.9**	**35.7**	**44.4**	**3.40**	RA103RRB	S1103K	62FMST	**3550**
VFMST	1 1/4 S	4 7/16	3 9/16	3 5/16	1 17/32	29/32	13/32	2 5/8	1 3/32	5/8	1 13/32	1 3/4	0.134	RA103RRB2	S1103K3		800
VFMST	**30**													RAE30RRB	SE30K		

[1]Housing thrust rating is 1/3 of housing radial load rating.
NOTE: Shaft diameter with an S = smaller housing.

LFST SERIES

- This unit is zinc-plated, pressed-steel and flush-mounted.
- This unit simplifies bearing flange-unit installations.
- The conductive rubber interliner reduces noise and vibration. This allows for alignment while the pressed-steel flange assures rigid bearing support.
- The bolt-hole spacing permits interchangeability with competitive mountings.
- The unit offers compact, economical, corrosion-resistant housing and balanced design.
- The unit features Timken RAL light-series ball bearings. The RAL provides precision in an extended inner-ring bearing with superior shroud seal protection and self-locking collar.
- The bearings are prelubricated.



Suggested shaft tolerances:

nominal to -0.013 mm, -0.0005 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: LFST 1 in.

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
LFST	RAL-NPP	Page A-55

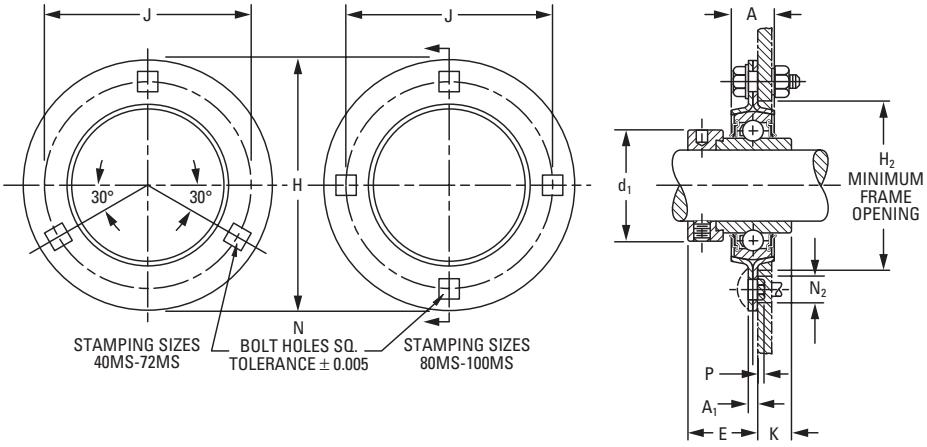
Unit	Shaft Dia.	H	J	L	L_1	E	N	A	A_1	d_1	M	Bearing No.	Collar No.	Housing Radial Load Rating[1]
	in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			**N** lbs.
LFST	1/2	**114.3** 4 1/2	**92.1** 3 5/8	**57.2** 2 1/4	**55.6** 2 3/16	**31** 1 7/32	**9.5** 3/8	**23** 29/32	**1.52** 0.06	**25.4** 1	**29.4** 1 5/32	RAL008NPP	LS008K	**880** 200
LFST	5/8											RAL010NPP	LS010K	
LFST	3/4	**114.3** 4 1/2	**92.1** 3 5/8	**57.2** 2 1/4	**55.6** 2 3/16	**31** 1 7/32	**9.5** 3/8	**23** 29/32	**1.52** 0.06	**29.8** 1 11/64	**34.9** 1 3/8	RAL012NPP	LS012K	**1120** 250
LFST	15/16	**114.3** 4 1/2	**92.1** 3 5/8	**57.2** 2 1/4	**55.6** 2 3/16	**31** 1 7/32	**9.5** 3/8	**23** 29/32	**1.52** 0.06	**36.1** 1 27/64	**39.7** 1 9/16	RAL015NPP	LS015K	**1340** 300
LFST	1											RAL100NPP	LS100K	

[1]Housing thrust rating is 1/3 of housing radial load rating. Maximum suggested speed is 2400 RPM.

PRESSED-STEEL FLANGETTE UNITS

RR FLANGETTE UNIT

- The unit consists of two interchangeable, pressed-steel, zinc-plated flanges housing a standard bearing with a self-locking collar.
- The spherical inside surfaces of each pair of flanges mate with the spherical outside surface of the bearing's outer ring. This provides initial self-alignment.
- The flangette is equipped with the KRRB (R-seal) wide-inner-ring ball bearing.
- All units are non-relubricatable.



Suggested shaft tolerances:

½ in. – 1 15⁄16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 15⁄16 in., nominal to -0.025 mm, -0.0010 in.

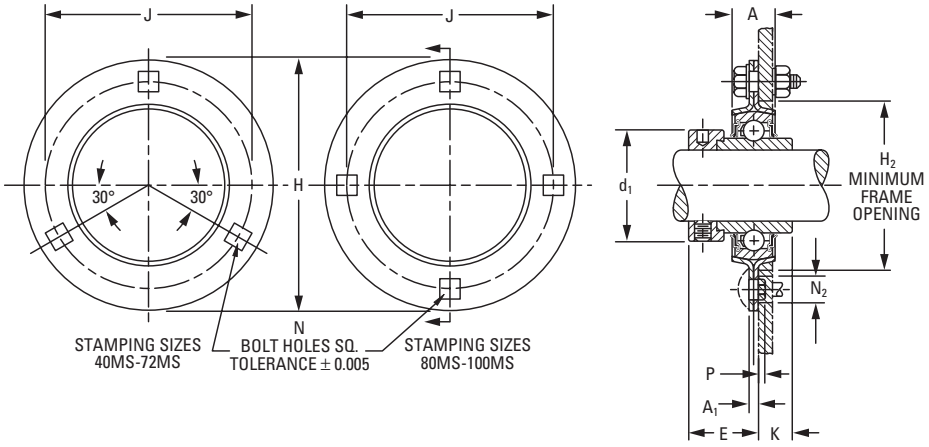
BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RR	KRRB	Page A-32

Unit	Shaft Dia.	H	A	J	N	H_2	A_1	E	K	d_1	Bolt Size	Short Shank P	Long Shank P	Flange Hole Diam. to Clear Sq. Shank N_2	Bearing No.	Collar No.	Stamping[1] Size	Stamping[1] Radial Load Rating[2]	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**N** lbs.	**kg** lbs.
RR	½														1008KRRB	S1008K			
RR	⅝	**81.0**	**14.2**	**63.5**	**7.1**	**49.2**	**3.80**	**25.4**	**11.9**	**28.6**	**6.4**	**0.15**	**2.54**	**10.3**	1010KRRB	S1010K	40MS	**2650**	**0.295**
RR	**17**	3 3⁄16	9⁄16	2 ½	9⁄32	1 15⁄16	0.150	1	15⁄32	1 1⁄8	¼	0.006	0.100	13⁄32	E17KRRB	SE17K		600	0.65
RR	¾	**90.5**	**15.8**	**71.4**	**8.7**	**55.6**	**4.22**	**28.6**	**15.1**	**33.3**	**7.9**	**0.53**	**2.92**	**12.7**	1012KRRB	S1012K	47MS	**3100**	**0.404**
RR	**20**	3 9⁄16	5⁄8	2 13⁄16	11⁄32	2 3⁄16	0.166	1 1⁄8	19⁄32	1 5⁄16	5⁄16	0.021	0.115	½	E20KRRB	SE20K		700	0.89
RR	7⁄8														1014KRRB	S1014K			
RR	15⁄16	**95.2**	**17.4**	**76.2**	**8.7**	**60.3**	**4.22**	**28.6**	**15.1**	**38.1**	**7.9**	**0.53**	**2.92**	**12.7**	1015KRRB	S1015K	52MS	**3550**	**0.490**
RR	1	3 ¾	11⁄16	3	11⁄32	2 3⁄8	0.166	1 1⁄8	19⁄32	1 ½	5⁄16	0.021	0.115	½	1100KRRB	S1100K		800	1.08
RR	**25**														E25KRRB	SE25K			
RR	1 1⁄8														1102KRRB	S1102K			
RR	1 3⁄16	**112.7**	**17.4**	**90.5**	**10.3**	**71.4**	**5.28**	**32.5**	**15.9**	**44.5**	**9.5**	**0.28**	**2.64**	**15.1**	1103KRRB	S1103K	62MS	**4900**	**0.753**
RR	1 ¼ S	4 7⁄16	11⁄16	3 9⁄16	13⁄32	2 13⁄16	0.208	1 9⁄32	5⁄8	1 ¾	3⁄8	0.011	0.104	19⁄32	1103KRRB3	S1103K3		1100	1.66
RR	**30**														E30KRRB	SE30K			
RR	1 ¼														1104KRRB	S1104K			
RR	1 5⁄16														1105KRRB	S1105K			
RR	1 3⁄8	**122.2**	**19.0**	**100.0**	**10.3**	**81.0**	**5.28**	**34.9**	**15.9**	**54.0**	**9.5**	**0.28**	**2.64**	**15.1**	1106KRRB	S1106K	72MS	**6220**	**0.962**
RR	1 7⁄16	4 13⁄16	¾	3 15⁄16	13⁄32	3 3⁄16	0.208	1 3⁄8	⅝	2 1⁄8	3⁄8	0.011	0.104	19⁄32	1107KRRB	S1107K		1400	2.12
RR	**35**														E35KRRB	SE35K			

[1]Stampings must be ordered in pairs to assemble bearing.
[2]Thrust ratings for stamping are 50 percent of radial ratings.
NOTE: Shaft diameter with an S = smaller housing.

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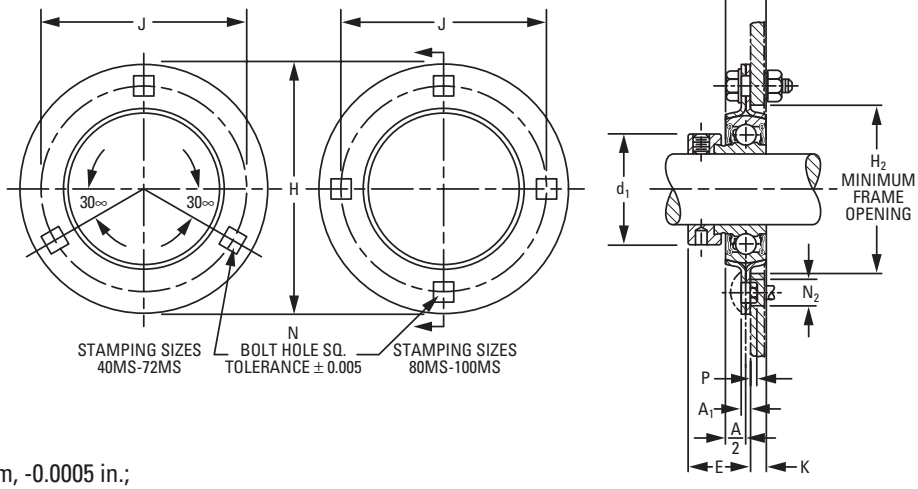
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Unit	Shaft Dia.	H	A	J	N	H_2	A_1	E	K	d_1	Bolt Size	Short Shank P	Long Shank P	Flange Hole Diam. to Clear Sq. Shank N_2	Bearing No.	Collar No.	Stamping[1] Size	Stamping[1] Radial Load Rating[2]	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**N** lbs.	**kg** lbs.
RR	1 1/2														1108KRRB	S1108KT			
RR	1 9/16	**147.6**	**20.6**	**119.1**	**13.5**	**90.5**	**6.80**	**38.1**	**18.3**	**60.3**	**12.7**	**0.33**	**2.72**	**19.4**	1109KRRB	S1109KT	80MS	**7500**	**1.143**
RR	**40**	5 13/16	13/16	4 11/16	17/32	3 9/16	0.268	1 1/2	23/32	2 3/8	1/2	0.013	0.107	49/64	E40KRRB	SE40K		1700	2.52
RR	1 5/8														1110KRRB	S1110K			
RR	1 11/16	**149.2**	**22.2**	**120.6**	**13.5**	**96.8** 3	**6.80**	**38.1**	**18.3**	**63.5**	**12.7**	**0.33**	**2.72**	**19.4**	1111KRRB	S1111K	85MS	**7500**	**1.651**
RR	**45**	5 7/8	7/8	4 3/4	17/32	13/16	0.268	1 1/2	23/32	2 1/2	1/2	0.013	0.107	49/64	E45KRRB	SE45K		1700	3.64
RR	1 7/8														1114KRRB	S1114K			
RR	1 15/16	**155.6**	**22.2**	**127.0**	**13.5**	**101.6**	**7.56**	**42.1**	**20.6**	**69.8**	**12.7**	**0**	**1.96**	**19.4**	1115KRRB	S1115K	90MS	**8500**	**1.878**
RR	**50**	6 1/8	7/8	5	17/32	4	0.298	1 21/32	13/16	2 3/4	1/2	0	0.077	49/64	E50KRRB	SE50K		1900	4.14
RR	2														1200KRRB	S1200K			
RR	2 1/8	**166.7**	**23.8**	**138.1**	**13.5**	**112.7**	**7.56**	**47.6**	**23.8**	**76.2**	**12.7**	**0**	**1.96**	**19.4**	1202KRRB	S1202K	100MS	**10200**	**2.268**
RR	2 3/16	6 9/16	15/16	5 7/16	17/32	4 7/16	0.298	1 7/8	15/16	3	1/2	0	0.077	49/64	1203KRRB	S1203K		2300	5.00
RR	**55**														E55KRRB	SE55K			

[1]Thrust ratings for stamping are 50 percent of radial ratings.
[2]Stampings must be ordered in pairs to assemble bearing.
NOTE: Shaft diameter with an S = smaller housing.

RA FLANGETTE UNIT

- The RA flangette unit is similar to Timken RR flangette unit.
- The unit consists of two interchangeable, pressed-steel, zinc-plated flanges that house a standard ball bearing.
- The unit incorporates an extended inner-ring bearing with a self-locking collar and spherical seat in the cartridge, providing initial self-alignment.
- The unit is equipped with an RA-RRB extended inner ring ball bearing.
- The units are non-relubricatable.



Suggested shaft tolerances:

½ in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RA 1 in. flangette.

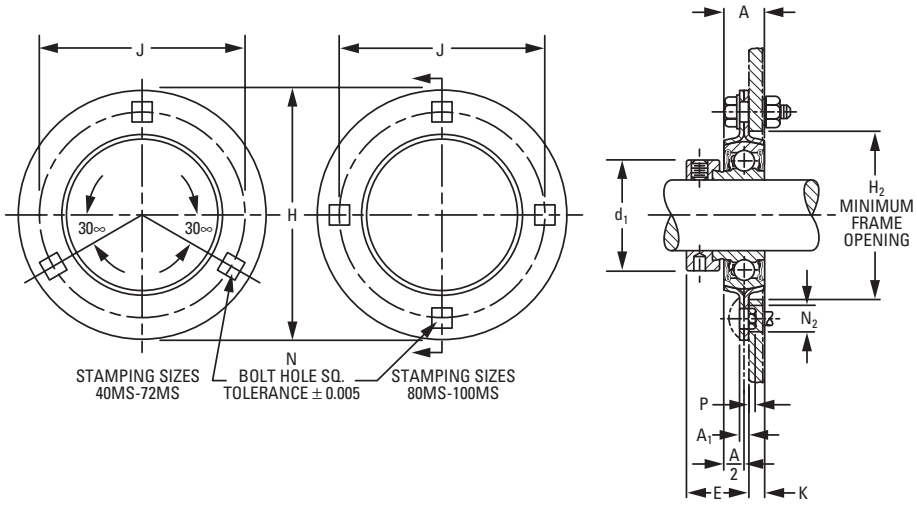
BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RA	RA-RRB	Page A-48

Unit	Shaft Dia.	H	A	J	N	H_2	A_1	E	K	d_1	Bolt Size	Short Shank P	Long Shank P	Flange Hole Diam. to Clear Sq. Shank N_2	Bearing No.	Collar No.	Stamping[1] Size	Stamping[1] Radial Load Rating[2]	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**N** lbs.	**kg** lbs.
RA	½														RA008RRB	S1008K			
RA	9/16	**81.0**	**14.2**	**63.5**	**7.1**	**49.2**	**3.81**	**23.8**	**5.6**	**28.6**	**6.4**	**0.15**	**2.54**	**10.3**	RA009RRB	S1009K	40MS	**2650**	**0.277**
	5/8	3 3/16	9/16	2 1/2	9/32	1 15/16	0.150	15/16	7/32	1 1/8	1/4	0.006	0.100	13/32	RA010RRB	S1010K		600	0.61
RA	**17**														RAE17RRB	SE17K			
RA	¾	**90.5**	**15.8**	**71.4**	**8.7**	**55.6**	**4.22**	**25.0**	**6.4**	**33.3**	**7.9**	**0.53**	**2.92**	**12.7**	RA012RRB	S1012K	47MS	**3100**	**0.363**
RA	**20**	3 9/16	5/8	2 13/16	11/32	2 3/16	0.166	63/64	1/4	1 5/16	5/16	0.021	0.115	1/2	RAE20RRB	SE20K		700	0.80
	13/16														RA013RRB	S1013K			
RA	7/8														RA014RRB	S1014K			
RA	15/16	**95.2**	**17.4**	**76.2**	**8.7**	**60.3**	**4.22**	**25.0**	**7.1**	**38.1**	**7.9**	**0.53**	**2.92**	**12.7**	RA015RRB	S1015K	52MS	**3550**	**0.408**
RA	1	3 3/4	11/16	3	11/32	2 3/8	0.166	63/64	9/32	1 1/2	5/16	0.021	0.115	1/2	RA100RRB	S1100K		800	0.90
RA	**25**														RAE25RRB	SE25K			
	1 1/16														RA101RRB	S11013K			
RA	1 1/8														RA102RRB	S1102K			
RA	1 3/16	**112.7**	**17.4**	**90.5**	**10.3**	**71.4**	**5.28**	**29.0**	**6.7**	**44.5**	**9.5**	**0.28**	**2.64**	**15.1**	RA103RRB	S1103K	62MS	**4900**	**0.667**
RA	1 1/4 S	4 7/16	11/16	3 9/16	13/32	2 13/16	0.208	1 9/64	17/64	1 3/4	3/8	0.011	0.104	19/32	RA103RRB3	S1103K3		1100	1.47
RA	**30**														RAE30RRB	SE30K			
RA	1 1/4														RA104RRB	S1104K			
RA	1 5/16														RA105RRB	S1105K			
RA	1 3/8	**122.2**	**19.0**	**100.0**	**10.3**	**81.0**	**5.28**	**31.8**	**7.5**	**54**	**9.5**	**0.28**	**2.64**	**15.1**	RA106RRB	S1106K	72MS	**6220**	**0.889**
RA	1 7/16	4 13/16	3/4	3 15/16	13/32	3 3/16	0.208	1 1/4	19/64	2 1/8	3/8	0.011	0.104	19/32	RA107RRB	S1107K		1400	1.96
RA	**35**														RAE35RRB	SE35K			

[1]Stampings must be ordered in pairs to assemble bearing.
[2]Thrust ratings for stamping are 50 percent of radial ratings.
NOTE: Shaft diameter with an S = smaller housing.

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Unit	Shaft Dia.	H	A	J	N	H_2	A_1	E	K	d_1	Bolt Size	Short Shank P	Long Shank P	Flange Hole Diam. to Clear Sq. Shank N_2	Bearing No.	Collar No.	Stamping[1] Size	Stamping[1] Radial Load Rating[2]	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**N** lbs.	**kg** lbs.
RA	1 1/2														RA108RRB	S1108KT			
RA	1 9/16	**147.6**	**20.6**	**119.1**	**13.5**	**90.5**	**6.80**	**36.1**	**7.5**	**60.3**	**12.7**	**0.33**	**2.72**	**19.4**	RA109RRB	S1109KT	80MS	**7500**	**1.447**
RA	**40**	5 13/16	13/16	4 11/16	17/32	3 9/16	0.268	1 27/64	19/64	2 3/8	1/2	0.013	0.107	49/64	RAE40RRB	SE40K		1700	3.19
RA	1 5/8														RA110RRB	S1110K			
RA	1 11/16	**149.2**	**22.2**	**120.6**	**13.5**	**96.8**	**6.80**	**36.1**	**7.5**	**63.5**	**12.7**	**0.33**	**2.72**	**19.4**	RA111RRB	S1111K	85MS	**7500**	**1.479**
	1 3/4	5 7/8	7/8	4 3/4	17/32	3 13/16	0.268	1 27/64	19/64	2 1/2	1/2	0.013	0.107	49/64	RA112RRB	S1112K		1700	3.26
RA	**45**														RAE45RRB	SE45K			
	1 13/16														RA113RRB	S1113K			
RA	1 7/8	**155.6**	**22.2**	**127.0**	**13.5**	**101.6**	**7.56**	**36.5**	**7.1**	**69.8**	**12.7**	**0**	**1.96**	**19.4**	RA114RRB	S1114K	90MS	**8500**	**1.669**
RA	1 15/16	6 1/8	7/8	5	17/32	4	0.300	1 7/16	9/32	2 3/4	1/2	0	0.077	49/64	RA115RRB	S1115K		1900	3.68
RA	**50**														RAE50RRB	SE50K			
RA	2														RA200RRB	S1200K			
	2 1/16														RA201RRB	S1201K			
RA	2 1/8	**166.7**	**23.8**	**138.1**	**13.5**	**112.7**	**7.56**	**40.5**	**8.3**	**76.2**	**12.7**	**0**	**1.96**	**19.4**	RA202RRB	S1202K	100MS	**10200**	**2.000**
RA	2 3/16	6 9/16	15/16	5 7/16	17/32	4 7/16	0.300	1 19/32	29/64	3	1/2	0	0.077	49/64	RA203RRB	S1203K		2300	4.41
RA	**55**														RAE55RRB	SE55K			

[1]Stampings must be ordered in pairs to assemble bearing.
[2]Thrust ratings for stamping are 50 percent of radial ratings.
NOTE: Shaft diameter with an S = smaller housing.

RAT, RRT TWO-BOLT FLANGETTE UNITS

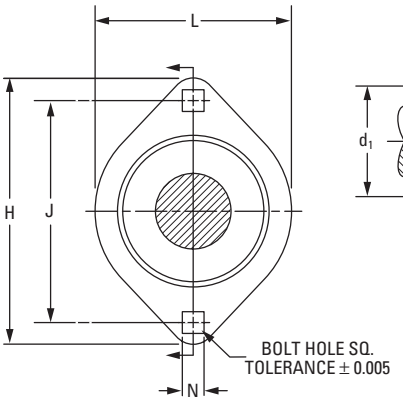
- These units are designed for installations where the standard three-bolt flangettes cannot be used due to space limitations.
- Like standard three-bolt flangettes, they are available with RA-RRB extended inner ring ball bearings and the KRRB wide-inner-ring ball bearings (RRT) with self-locking collars.
- All units are non-relubricatable.

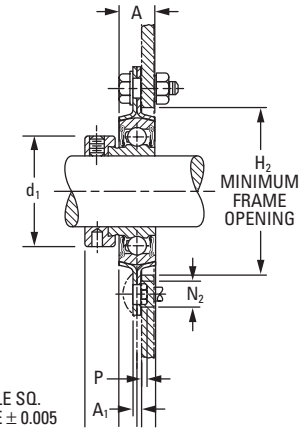
Suggested shaft tolerances:

½ in. – 1 7⁄16 in.,
nominal to -0.013 mm, -0.0005 in.;

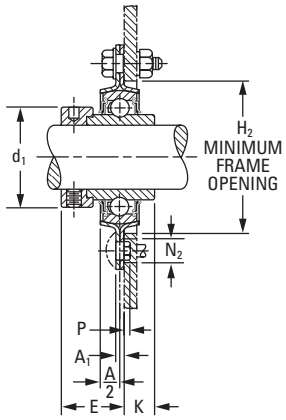
To order, specify UNIT and SHAFT DIAMETER.

Example: RAT 1 in. flangette or RRT 1 in. flangette.





RAT Series



RRT Series

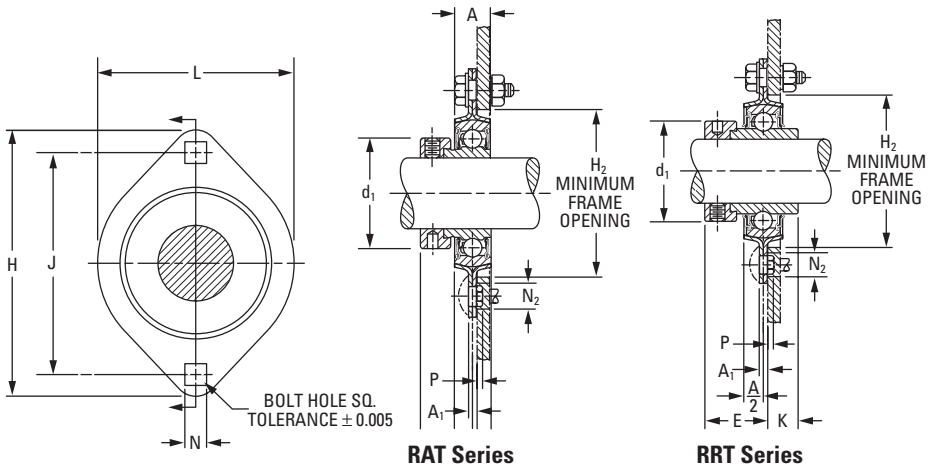
BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RAT	RA-RRB	Page A-48
RRT	-KRRB	Page A-32

Unit	Shaft Dia.	L	H	A	J	N	H_2	A_1	E	K	d_1	Bolt Size	Short Shank P	Long Shank P	Flange Hole Diam. to Clear Sq. Shank N_2	Bearing No.	Collar No.	Stamping[1] Size	Stamping[1] Radial Load Rating[2]	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**N** lbs.	**kg** lbs.
RAT	1⁄2															RA008RRB	S1008K			
RAT	5⁄8	**58.7** 2 5⁄16	**81.0** 3 3⁄16	**14.2** 9⁄16	**63.5** 2 1⁄2	**7.1** 9⁄32	**49.2** 1 15⁄16	**3.81** 0.150	**23.8** 15⁄16	**5.6** 7⁄32	**28.6** 1 1⁄8	**6.4** 1⁄4	**0.15** 0.006	**2.54** 0.100	**10.3** 13⁄32	RA010RRB	S1010K	40MST	**2650** 600	**0.213** 0.47
RAT	**17**															RAE17RRB	SE17K			
RAT	3⁄4															RA012RRB	S1012K			
RAT	**20**	**66.7** 2 5⁄8	**90.5** 3 9⁄16	**15.8** 5⁄8	**71.4** 2 13⁄16	**8.7** 11⁄32	**55.6** 2 3⁄16	**4.22** 0.166	**25.0** 63⁄64	**6.4** 1⁄4	**33.3** 1 5⁄16	**7.9** 5⁄16	**0.53** 0.021	**2.92** 0.115	**12.7** 1⁄2	RAE20RRB	SE20K	47MST	**3100** 700	**0.299** 0.66
RAT	7⁄8															RA014RRB	S1014K			
RAT	15⁄16															RA015RRB	S1015K			
RAT	1	**71.0** 2 51⁄64	**95.2** 3 3⁄4	**17.4** 11⁄16	**76.2** 3	**8.7** 11⁄32	**60.3** 2 3⁄8	**4.22** 0.166	**25.0** 63⁄64	**7.1** 9⁄32	**38.1** 1 1⁄2	**7.9** 5⁄16	**0.53** 0.021	**2.92** 0.115	**12.7** 1⁄2	RA100RRB	S1100K	52MST	**3550** 800	**0.331** 0.73
RAT	**25**															RAE25RRB	SE25K			
RAT	1 1⁄16															RA101RRB	S1103K			
RAT	1 1⁄8															RA102RRB	S1102K			
RAT	1 3⁄16	**84.1** 3 5⁄16	**112.7** 4 7⁄16	**17.4** 11⁄16	**90.5** 3 9⁄16	**10.3** 13⁄32	**71.4** 2 13⁄16	**5.28** 0.208	**29.0** 1 9⁄64	**6.7** 17⁄64	**44.5** 1 3⁄4	**9.5** 3⁄8	**0.28** 0.011	**2.64** 0.104	**15.1** 19⁄32	RA103RRB	S1103K	62MST	**4900** 1100	**0.531** 1.17
RAT	1 1⁄4 S															RA103RRB2	S1103K3			
RAT	**30**															RAE30RRB	SE30K			
RAT	1 1⁄4															RA104RRB	S1104K			
RAT	1 5⁄16															RA105RRB	S1105K			
RAT	1 3⁄8	**93.7** 3 11⁄16	**125.4** 4 15⁄16	**22.2** 7⁄8	**100.0** 3 15⁄16	**10.3** 13⁄32	**81.0** 3 3⁄16	**5.28** 0.208	**32.1** 1 17⁄64	**6.7** 17⁄64	**54.0** 2 1⁄8	**9.5** 3⁄8	**0.28** 0.011	**2.64** 0.104	**15.1** 19⁄32	RA106RRB	S1106K	72MST	**6220** 1400	**0.476** 1.05
RAT	1 7⁄16															RA107RRB	S1107K			
RAT	**35**															RAE35RRB	SE35K			

[1]Stampings must be ordered in pairs to assemble bearing.
[2]Thrust ratings for stamping are 50 percent of radial ratings.
NOTE: Shaft diameter with an S = smaller housing.

Continued on next page.



Continued from previous page.

Unit	Shaft Dia.	L	H	A	J	N	H_2	A_1	E	K	d_1	Bolt Size	Short Shank P	Long Shank P	Flange Hole Diam. to Clear Sq. Shank N_2	Bearing No.	Collar No.	Stamping[1] Size	Stamping[1] Radial Load Rating[2]	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**N** lbs.	**kg** lbs.
RRT	1/2															1008KRBB	S1008K			
RRT	5/8	**58.7** 2 5/16	**81.0** 3 3/16	**14.2** 9/16	**63.5** 2 1/2	**7.1** 9/32	**49.2** 1 15/16	**3.81** 0.150	**23.8** 15/16	**5.6** 7/32	**28.6** 1 1/8	**6.4** 1/4	**0.15** 0.006	**2.54** 0.100	**10.3** 13/32	1010KRRB	S1010K	40MST	**2650** 600	**0.213** 0.47
RRT	**17**															E17KRRB	SE17K			
RRT	3/4	**66.7** 2 5/8	**90.5** 3 9/16	**15.8** 5/8	**71.4** 2 13/16	**8.7** 11/32	**55.6** 2 3/16	**4.22** 0.166	**25.0** 63/64	**6.4** 1/4	**33.3** 1 5/16	**7.9** 5/16	**0.53** 0.021	**2.92** 0.115	**12.7** 1/2	**1012KRRB**	**S1012K**	47MST	**3100** 700	**0.299** 0.66
RRT	**20**															E20KRRB	SE20K			
RRT	7/8															1014KRRB	S1014K			
RRT	15/16	**71.0** 2 51/64	**95.2** 3 3/4	**17.4** 11/16	**76.2** 3	**8.7** 11/32	**60.3** 2 3/8	**4.22** 0.166	**25.0** 63/64	**7.1** 9/32	**38.1** 1 1/2	**7.9** 5/16	**0.53** 0.021	**2.92** 0.115	**12.7** 1/2	**1015KRRB**	**S1015K**	52MST	**3550** 800	**0.331** 0.73
RRT	1															1100KRRB	S1100K			
RRT	**25**															E25KRRB	SE25K			
RRT	1 1/16															1101KRRB	S1103K			
RRT	1 1/8															**1102KRRB**	**S1102K**			
RRT	1 3/16	**84.1** 3 5/16	**112.7** 4 7/16	**17.4** 11/16	**90.5** 3 9/16	**10.3** 13/32	**71.4** 2 13/16	**5.28** 0.208	**29.0** 1 9/64	**6.7** 17/64	**44.5** 1 3/4	**9.5** 3/8	**0.28** 0.011	**2.64** 0.104	**15.1** 19/32	1103KRRB	S1103K	62MST	**4900** 1100	**0.531** 1.17
RRT	1 1/4 S															1103KRRB3	S1103K3			
RRT	**30**															E30KRRB	SE30K			
RRT	1 1/4															1104KRRB	S1104K			
RRT	1 5/16															**1105KRRB**	**S1105K**			
RRT	1 3/8	**93.7** 3 11/16	**125.4** 4 15/16	**22.2** 7/8	**100.0** 3 15/16	**10.3** 13/32	**81.0** 3 3/16	**5.28** 0.208	**32.1** 1 17/64	**6.7** 17/64	**54.0** 2 1/8	**9.5** 3/8	**0.28** 0.011	**2.64** 0.104	**15.1** 19/32	1106KRRB	S1106K	72MST	**6220** 1400	**0.476** 1.05
RRT	1 7/16															1107KRRB	S1107K			
RRT	**35**															E35KRRB	SE35K			

[1]Stampings must be ordered in pairs to assemble bearing.
[2]Thrust ratings for stamping are 50 percent of radial ratings.
NOTE: Shaft diameter with an S = smaller housing.

RATR, RRTR TRIANGLE FLANGETTE UNITS

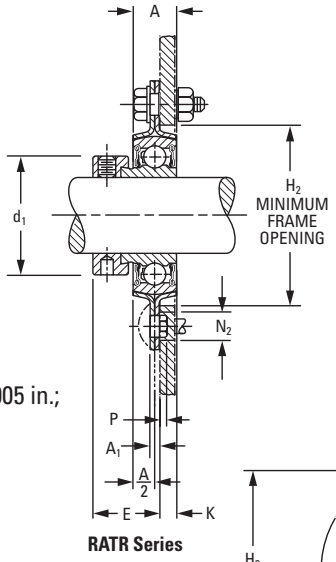
- These units are similar to standard 47MS, 52MS, 62MS and 72MS, except the stamping is triangular instead of round.
- These units are used where space is limited or where it is necessary to cut off one or more sides of the standard flangette stamping.
- The RA-RRB and KRRB may be used with this stamping, as with other types of flangettes.
- All units are non-relubricatable.

Suggested shaft tolerances:

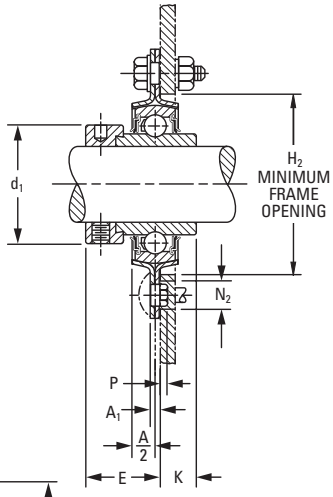
½ in. – 1 7⁄16 in., nominal to -0.013 mm, -0.0005 in.;

To order, specify UNIT and SHAFT DIAMETER.

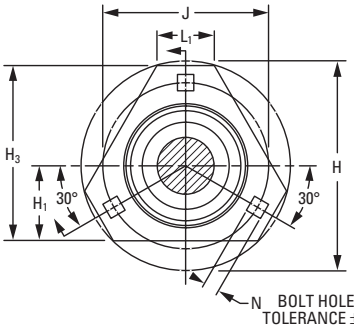
Example: RATR 1 in. flangette or
RRTR 1 in. flangette.



RATR Series



RRTR Series



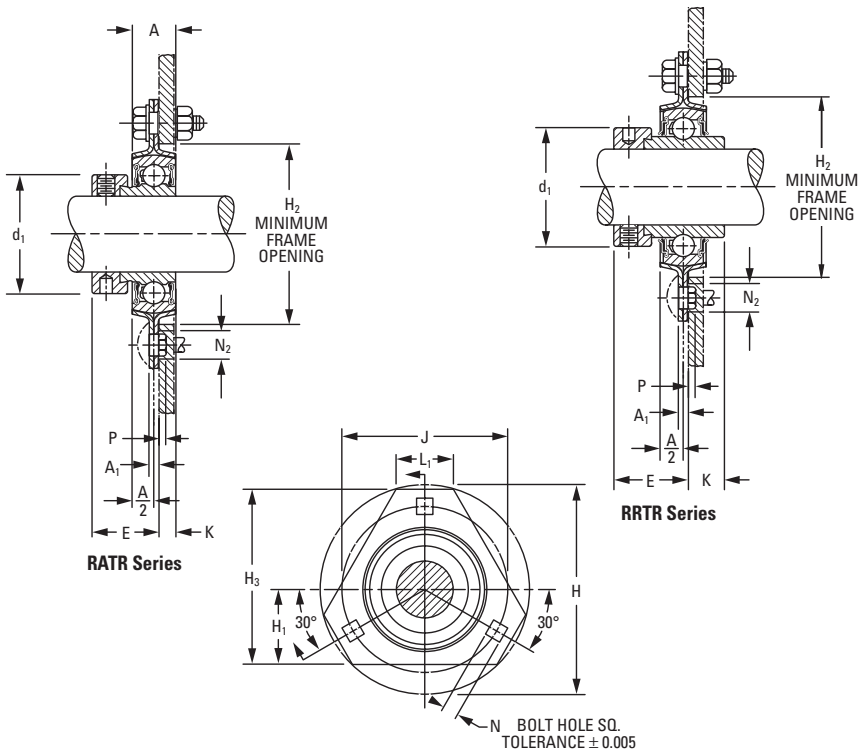
BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RATR	RA-RRB	Page A-48
RRTR	-KRRB	Page A-32

Unit	Shaft Dia.	H_3	H	A	J	N	H_2	A_1	E	K	d_1	H_1	L_1	Bolt Size	Short Shank P	Long Shank P	Flange Hole Diam. to Clear Sq. Shank N_2	Bearing No.	Collar No.	Stamping[1] Size	Stamping[1] Radial Load Rating[2]	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**N** lbs.	**kg** lbs.
RATR	¾	**76.2**	**90.5**	**15.8**	**71.4**	**8.7**	**55.6**	**4.22**	**25.0**	**6.4**	**33.3**	**33.3**	**27.0**	**7.9**	**0.15**	**2.54**	**12.7**	RA012RRB	S1012K	47MSTR	**3100**	**0.313**
RATR	**20**	3	3 9⁄16	5⁄8	2 13⁄16	11⁄32	2 3⁄16	0.166	63⁄64	1⁄4	1 5⁄16	1 5⁄16	1 1⁄16	5⁄16	0.006	0.100	1⁄2	RAE20RRB	SE20K		700	0.69
RATR	7⁄8																	RA014RRB	S1014K			
RATR	15⁄16	**79.4**	**95.2**	**17.4**	**76.2**	**8.7**	**60.3**	**4.22**	**25.0**	**7.1**	**38.1**	**34.9**	**27.8**	**7.9**	**0.53**	**2.92**	**12.7**	RA015RRB	S1015K		**3550**	**0.354**
RATR	1	3 1⁄8	3 3⁄4	11⁄16	3	11⁄32	2 3⁄8	0.166	63⁄64	9⁄32	1 1⁄2	1 3⁄8	1 3⁄32	5⁄16	0.021	0.115	1⁄2	RA100RRB	S1100K	52MSTR	800	0.78
RATR	**25**																	RAE25RRB	SE25K			
RATR	1 1⁄16																	RA101RRB	S1103K			
RATR	1 1⁄8																	RA102RRB	S1102K			
RATR	1 3⁄16	**93.7**	**112.7**	**17.4**	**90.5**	**10.3**	**71.4**	**5.28**	**29.0**	**6.7**	**44.5**	**38.1**	**25.4**	**9.5**	**0.28**	**2.64**	**15.1**	RA103RRB	S1103K	62MSTR	**4900**	**0.526**
RATR	1 1⁄4 S	3 11⁄16	4 7⁄16	11⁄16	3 9⁄16	13⁄32	2 13⁄16	0.208	1 9⁄64	17⁄64	1 3⁄4	1 1⁄2	1	3⁄8	0.011	0.104	19⁄32	RA103RRB2	S1103K3		1100	1.16
RATR	**30**																	RAE30RRB	SE30K			
RATR	1 1⁄4																	RA104RRB	S1104K			
RATR	1 5⁄16																	RA105RRB	S1105K			
RATR	1 3⁄8	**105.6**	**127.0**	**19.0**	**100.0**	**10.3**	**81.0**	**5.28**	**32.1**	**6.7**	**54.0**	**44.4**	**32.1**	**9.5**	**0.028**	**2.64**	**15.1**	RA106RRB	S1106K	72MSTR	**6300**	**0.703**
RATR	1 7⁄16	4 5⁄32	5	3⁄4	3 15⁄16	13⁄32	3 3⁄16	0.208	1 17⁄64	17⁄64	2 1⁄8	1 3⁄4	1 17⁄64	3⁄8	0.011	0.104	19⁄32	RA107RRB	S1107K		1400	1.55
RATR	**35**																	RAE35RRB	SE35K			

[1]Stampings must be ordered in pairs to assemble bearing.
[2]Thrust ratings for stamping are 50 percent of radial ratings.
NOTE: Shaft diameter with an S = smaller housing.

Continued on next page.



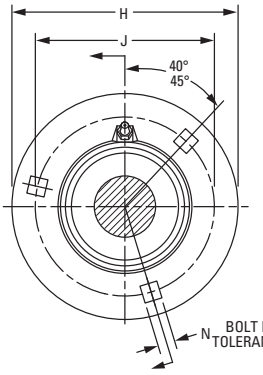
Continued from previous page.

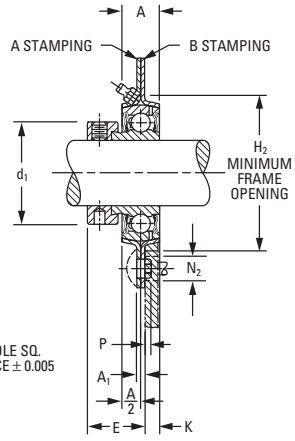
Unit	Shaft Dia.	H_3	H	A	J	N	H_2	A_1	E	K	d_1	H_1	L_1	Bolt Size	Short Shank P	Long Shank P	Flange Hole Diam. to Clear Sq. Shank N_2	Bearing No.	Collar No.	Stamping[1] Size	Stamping[1] Radial Load Rating[2]	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**N** lbs.	**kg** lbs.
RRTR	3/4	**76.2**	**90.5**	**15.8**	**71.4**	**8.7**	**55.6**	**4.22**	**28.6**	**15.1**	**33.3**	**33.3**	**2.07**	**7.9**	**0.15**	**2.54**	**12.7**	1012KRRB	S1012K	47MSTR	**3100**	**0.313**
RRTR	**20**	3	3 9/16	5/8	2 13/16	11/32	2 3/16	0.166	1 1/8	19/32	1 5/16	1 5/16	1 1/16	5/16	0.006	0.100	1/2	E20KRRB	SE20K		700	0.69
RRTR	7/8																	1014KRRB	S1014K			
RRTR	15/16	**79.4**	**95.2**	**17.4**	**76.2**	**8.7**	**60.3**	**4.22**	**28.6**	**15.1**	**38.1**	**34.9**	**27.8**	**7.9**	**0.53**	**2.92**	**12.7**	1015KRRB	S1015K	52MSTR	**3550**	**0.354**
RRTR	1	3 1/8	3 3/4	11/16	3	11/32	2 3/8	0.166	1 1/8	19/32	1 1/2	1 3/8	1 3/32	5/16	0.021	0.115	1/2	1100KRRB	S1100K		800	0.78
RRTR	**25**																	E25KRRB	SE25K			
RRTR	1 1/16																	1101KRRB	S1103K			
RRTR	1 1/8																	1102KRRB	S1102K			
RRTR	1 3/16	**93.7**	**112.7**	**17.4**	**90.5**	**10.3**	**71.4**	**5.28**	**32.5**	**15.9**	**44.5**	**38.1**	**25.4**	**9.5**	**0.28**	**2.64**	**15.1**	1103KRRB	S1103K	62MSTR	**4900**	**0.526**
RRTR	1 1/4 S	3 11/16	4 7/16	11/16	3 9/16	13/32	2 13/16	0.208	1 9/32	5/8	1 3/4	1 1/2	1	3/8	0.011	0.104	19/32	1103KRRB3	S1103K3		1100	1.16
RRTR	**30**																	E30KRRB	SE30K			
RRTR	1 1/4																	1104KRRB	S1104K			
RRTR	1 5/16																	1105KRRB	S1105K			
RRTR	1 3/8	**105.6**	**127.0**	**19.0**	**100.0**	**10.3**	**81.0**	**5.28**	**34.9**	**16.3**	**54.0**	**44.4**	**32.1**	**9.5**	**.028**	**2.64**	**15.1**	1106KRRB	S1106K	72MSTR	**6300**	**0.703**
RRTR	1 7/16	4 5/32	5	3/4	3 15/16	13/32	3 3/16	0.208	1 3/8	41/64	2 1/8	1 3/4	1 17/64	3/8	0.011	0.104	19/32	1107KRRB	S1107K		1400	1.55
RRTR	**35**																	E35KRRB	SE35K			

[1]Stampings must be ordered in pairs to assemble bearing.
[2]Thrust ratings for stamping are 50 percent of radial ratings.
NOTE: Shaft diameter with an S = smaller housing.

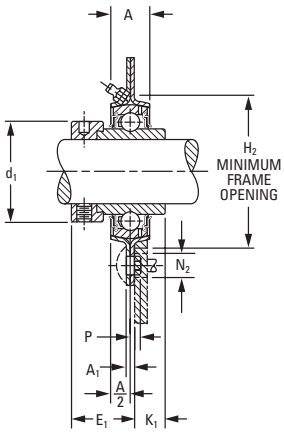
GRA, GRR RELUBRICATABLE FLANGETTE UNITS

- These units are supplements to the standard non-relubricatable type.
- These units are zinc-plated and designed for relubrication in applications where excessive moisture and severe contamination are present.
- The relubricatable flangettes are dimensionally interchangeable with the non-relubricated types. Load ratings also are the same.
- The relubricatable units incorporate G-KRRB bearings and GRA-RRB inner-ring bearings with positive-contact, land-riding seals and self-locking collars.
- The two stampings are needed to make a complete relubricatable flangette. Stamping A contains the boss for the grease fitting and a grease groove to allow grease to enter holes in the outer ring of the bearing. Stamping B contains a similar groove for the same purpose. With the grease groove in both stampings, the bearing can be reversed in the housing and still be relubricated.





GRA Series



GRR Series

Suggested shaft tolerances:

1/2 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: GRA 1 in. flangette.

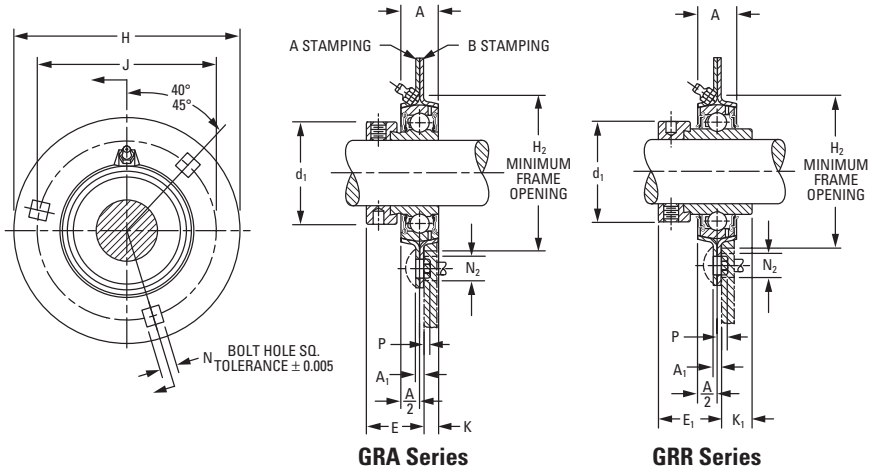
BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
GRA	GRA-RRB	Page A-50
GRR	G-KRRB	Page A-34

Unit	Shaft Dia.	H	A	J	N	H_2	A_1	E	E_1	K	K_1	d_1	Short Shank P	Long Shank P	Flange Hole Diam. to Clear Sq. Shank N_2	Bearing No. (GRA)	Bearing No. (GRR)	Collar No.	Stamping Radial Load Rating[1]
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**N** lbs.
G52MSA & G52MSB	13/16	**95.2** 3 3/4	**17.40** 11/16	**76.2** 3	**8.7** 11/32	**60.3** 2 3/8	**4.22** 0.166	**25.4** 1	**29.0** 1 9/64	**6.7** 17/64	**13.5** 17/32	**38.1** 1 1/2	**0.53** 0.021	**2.92** 0.115	**12.7** 1/2	GRA013RRB	G1013KRRB	S1013K	**7700** 1730
	7/8															GRA014RRB	G1014KRRB	S1014K	
	15/16															GRA015RRB	G1015KRRB	S1015K	
	1															GRA100RRB	G1100KRRB	S1100K	
	25															GRAE25RRB	GE25KRRB	SE25K	
G62MSA & G62MSB	1 1/16	**112.7** 4 7/16	**19.05** 3/4	**90.5** 3 9/16	**10.3** 13/32	**71.4** 2 13/16	**5.28** 0.208	**29.4** 1 5/32	**32.9** 1 19/64	**6.7** 17/64	**15.5** 39/64	**44.1** 1 47/64	**0.28** 0.011	**2.64** 0.104	**15.1** 19/32	GRA101RRB	G1101KRRB	S1103K	**11100** 2500
	1 1/8															GRA102RRB	G1102KRRB	S1102K	
	1 3/16															GRA103RRB	G1103KRRB	S1103K	
	1 1/4 S															GRA103RRB2	G1103KRRB3	S1103K3	
	30															GRAE30RRB	GE30KRRB	SE30K	
G72MSA & G72MSB	1 1/4	**122.2** 4 13/16	**22.20** 7/8	**100.0** 3 15/16	**10.3** 13/32	**81.0** 3 3/16	**6.80** 0.268	**32.9** 1 19/64	**35.7** 1 13/32	**7.9** 5/16	**15.5** 39/64	**54.0** 2 1/8	**0.28** 0.011	**2.64** 0.104	**15.1** 19/32	GRA104RRB	G1104KRRB	S1104K	**15100** 3400
	1 5/16															GRA105RRB	G1105KRRB	S1105K	
	1 3/8															GRA106RRB	G1106KRRB	S1106K	
	1 7/16															GRA107RRB	G1107KRRB	S1107K	
	35															GRAE35RRB	GE35KRRB	SE35K	

[1]Thrust ratings for stampings are 50 percent of radial ratings.
[2]Four bolt holes.
NOTE: Shaft diameter with an S = smaller housing.

Continued on next page.



GRA Series **GRR Series**

Continued from previous page.

Unit	Shaft Dia.	H	A	J	N	H_2	A_1	E	E_1	K	K_1	d_1	Short Shank P	Long Shank P	Flange Hole Diam. to Clear Sq. Shank N_2	Bearing No. (GRA)	Bearing No. (GRR)	Collar No.	Stamping Radial Load Rating[1]
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**N** lbs.
G80MSA[2] & G80MSB[2]	1 1/2 1 9/16 **40**	**147.6** 5 13/16	**31.80** 1 1/4	**119.1** 4 11/16	**13.5** 17/32	**90.4** 3 9/16	**7.56** 0.298	**36.5** 1 7/16	**38.9** 1 17/32	**12.3** 31/64	**17.9** 45/64	**60.3** 2 3/8	**0.33** 0.013	**2.72** 0.107	**19.4** 49/64	GRA108RRB GRA109RRB GRAE40RRB	G1108KRRB G1109KRRB GE40KRRB	S1108KT S1109KT SE40K	**19600** 4400
G85MSA[2] & G85MSB[2]	1 5/8 1 11/16 1 3/4 **45**	**149.2** 5 7/8	**31.8** 1 1/4	**120.6** 4 3/4	**13.5** 17/32	**96.8** 3 13/16	**7.56** 0.298	**36.5** 1 7/16	**38.9** 1 17/32	**11.9** 15/32	**17.9** 45/64	**63.5** 2 1/2	**0.33** 0.013	**2.72** 0.107	**19.4** 49/64	GRA110RRB GRA111RRB GRA112RRB GRAE45RRB	G1110KRRB G1111KRRB G1112KRRB GE45KRRB	S1110K S1111K S1112K SE45K	**20500** 4600
G90MSA[2] & G90MSB[2]	1 13/16 1 7/8 1 15/16 **50**	**155.6** 6 1/8	**25.4** 1	**127.0** 5	**13.5** 17/32	**101.6** 4	**8.34** 0.328	**36.9** 1 29/64	**42.5** 1 43/64	**8.3** 21/64	**20.6** 13/16	**69.8** 2 3/4	–	**1.96** 0.077	**19.4** 49/64	GRA113RRB GRA114RRB GRA115RRB GRAE50RRB	G1113KRRB G1114KRRB G1115KRRB GE50KRRB	S1113K S1114K S1115K SE50K	**22700** 5100
G100MSA & G100MSB	2 2 1/16 2 1/8 2 3/16 **55**	**166.7** 6 9/16	**31.8** 1 1/4	**138.1** 5 7/16	**13.5** 17/32	**112.7** 4 7/16	**8.34** 0.328	**40.5** 1 19/32	**47.6** 1 7/8	**11.9** 15/32	**23.8** 15/16	**76.2** 3	–	**1.96** 0.077	**19.4** 49/64	GRA200RRB GRA201RRB GRA202RRB GRA203RRB GRAE55RRB	G1200KRRB G1201KRRB G1202KRRB G1203KRRB GE55KRRB	S1200K S1201K S1202K S1203K SE55K	**28500** 6400

[1]Thrust ratings for stampings are 50 percent of radial ratings.
[2]Four bolt holes.
NOTE: Shaft diameter with an S = smaller housing.

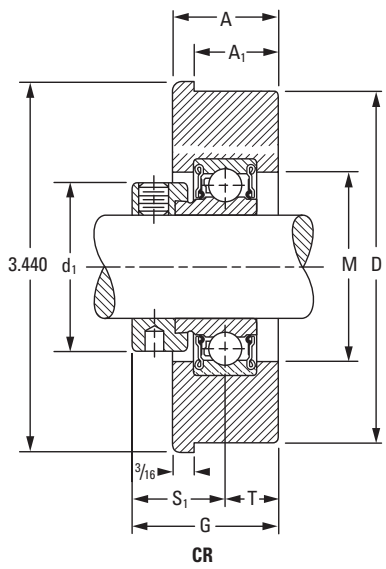
RUBBER CARTRIDGES

RCSM, RCR, CR SERIES

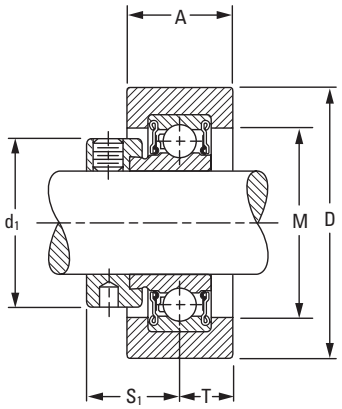
- RCSM and RCR are quiet, synthetic, conductive-rubber cylindrical cartridges designed for domestic heating, air-conditioning, ventilating equipment and other applications that require noise-free operation.
- All units are available with the RA-RRB extended inner-ring bearings with positive-contact, land-riding seals and a self-locking collar.
- An initial supply of grease is provided in the one-piece, non-relubricatable cartridges.
- The Timken-patented CR unit was designed to accommodate the wide tolerances of hot or cold rolled #10-gage (0.134 in.), 3 ½ in. O.D., electric-resistance welded mechanical tubing, similar to what is found in post office conveyor systems.

To order, specify UNIT and SHAFT DIAMETER.

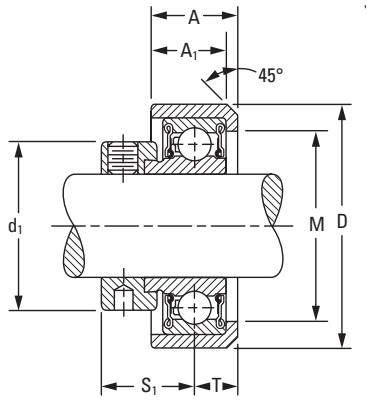
Example: RCSM ¾ in. or RCR ¾ in. or CR ¾ in.



CR



RCSM



RCR

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RCSM, RCR, CR	RA-RR	Page A-48

Unit	Shaft Dia.	D	A	A_1	G	M	d_1	S_1	T	Bearing No.[1]	Collar No.	Housing Radial Load Rating[2]	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			**N** lbs.	**kg** lbs.
RCSM SERIES – Suggested Housing Diameter = Nominal D ± 0.013 mm ± 0.005 in.													
RCSM	½									RA008RR	S1008K		
RCSM	⅝	**64.30**	**25.4**	–	–	**34.9**	**28.6**	**22.2**	**12.7**	RA010RR	S1010K	**880**	**0.395**
RCSM	**17**	2 17/32	1			1 3/8	1 1/8	7/8	½	RAE17RR	SE17K	200	0.87
RCSM	¾												
RCSM	**20**	**64.30** 2 17/32	**25.4** 1	–	–	**39.7** 1 9/16	**33.3** 1 5/16	**23.4** 59/64	**12.7** ½	RA012RR –	S1012K SE20K	**1120** 250	**0.472** 1.04
RCSM	15/16									RA015RR	S1015K		
RCSM	1	**64.30**	**25.4**	–	–	**45.2**	**38.1**	**23.4**	**12.7**	RA100RR	S1100K	**1340**	**0.527**
RCSM	**25**	2 17/32	1			1 25/32	1 ½	59/64	½	RAE25RR	SE25K	300	1.16
LRCSM	1 3/16	**64.30** 2 17/32	**25.4** 1	–	–	**47.6** 1 7/8	**42.1** 1 21/32	**19.8** 25/32	**12.7** ½	RAL103NPP	LS103K	**1340** 300	**0.627** 1.38
RCSM SERIES – Suggested Housing Diameter = Nominal D -0.13 mm to -0.038 mm, -0.005 in. to -0.0015 in.													
LRCR	¾	**46.00** 1 13/16	**18.3** 23/32	**15.9** ⅝	–	**34.9** 1 3/8	**30.2** 1 3/16	**18.7** 47/64	**9.9** 25/64	RAL012NPP	LS012K	**880** 200	**0.272** 0.60
RCR	1	**57.20**	**19.8**	**17.5**	–	**44.4**	**38.1**	**23.4**	**9.9**	RA100RR	S1100K	**1340**	**0.409**
RCR	**25**	2 ¼	25/32	11/16		1 ¾	1 ½	59/64	25/64	RAE25RR	SE25K	300	0.90
RCSM SERIES – Suggested Housing Diameter 82.73 mm to 81.76 mm, 3.257 in. to 3.219 in.													
CR	¾	**83.57**	**25.4**	**22.2**	**36.1**	**39.7**	**33.3**	**23.4**	**12.7**	RA012RR	S1012K	**670**	**0.318**
CR	**20**	3.29	1	7/8	1 27/64	1 9/16	1 5/16	59/64	½	RAE20RR	SE20K	150	0.70
CR	1	**83.57**	**25.4**	**22.2**	**36.1**	**45.2**	**38.1**	**23.4**	**12.7**	RA100RR	S1100K	**880**	**0.340**
CR	**25**	3.29	1	7/8	1 27/64	1 25/32	1 ½	59/64	½	RAE25RR	SE25K	200	0.75
LCR	1	**83.57**	**25.4**	**20.6**	**33.3**	**39.7**	**36.1**	**19.8**	**14.3**	RAL100NPP	S1100K	**880**	**0.309**
LCR	**25**	3.29	1	13/16	1 5/16	1 9/16	1 27/64	25/32	9/16	RALE25NPP	SE25K	200	0.68

[1]Suffix for RA bearing is FS450 (RCSM and RCR series).
[2]Steady loads only. Thrust load is ⅓ radial load rating. Maximum suggested speed is 2400 RPM.

RABR HVAC SPECIAL SERIES

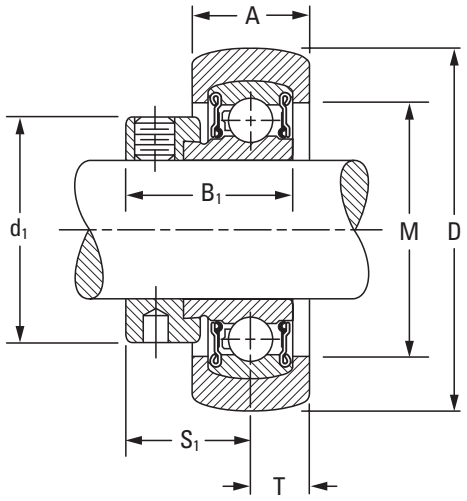
- This unit features a conductive rubber interliner to dissipate static charges.
- The quiet RA-RRB extended inner-ring bearings are prelubricated and have positive-contact, land-riding seals with self-locking collars.
- RABR units can be mounted in tri-arm brackets or pressed-steel stampings.
- Maximum suggested speed is 2400 RPM.

Suggested housing diameter =

Nominal (D) -0.130 mm – 0.380 mm; -0.005 in. – 0.015 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RABR 1 in.



BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RABR	RA-RRB	Page A-48

Unit	Shaft Dia.	D	B_1	A	M	d_1	S_1	T	Bearing No.[1]	Collar No.	Housing Radial Load Rating[2]
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.			**N** lbs.
RABR	1/2								RA008RRB	S1008K	
RABR	5/8	**47.37** 1.865	**28.6** 1 1/8	**17.5** 11/16	**34.9** 1 3/8	**28.6** 1 1/8	**22.2** 7/8	**8.7** 11/32	RA010RRB	S1010K	**880** 200
RABR	**17**								RAE17RRB	SE17K	
RABR	3/4	**52.37** 2.062	**31.0** 1 7/32	**17.5** 11/16	**41.3** 1 5/8	**33.3** 1 5/16	**23.4** 59/64	**8.7** 11/32	RA012RRB	S1012K	**1120** 250
RABR	**20**								RAE20RRB	SE20K	
RABR	15/16								RA015RRB	S1015K	
RABR	1	**62.38** 2.456	**31.0** 1 7/32	**20.6** 13/16	**46.8** 1 27/32	**38.1** 1 1/2	**23.4** 59/64	**10.3** 13/32	RA100RRB	S1100K	**1340** 300
RABR	**25**								RAE25RRB	SE25K	
RABR	1 3/16	**62.38** 2.456	**35.7** 1 13/32	**20.6** 13/16	**46.8** 1 27/32	**44.4** 1 3/4	**28.6** 1 1/8	**10.3** 13/32	RAL103PP	LS103K	**1340** 300
RABR	**30**								RAE30PP3	SE30K	

[1]For replacement of bearings, specify suffix FS450.
[2]Thrust load is 1/3 radial load rating.
NOTE: Maximum suggested speed is 2400 RPM.

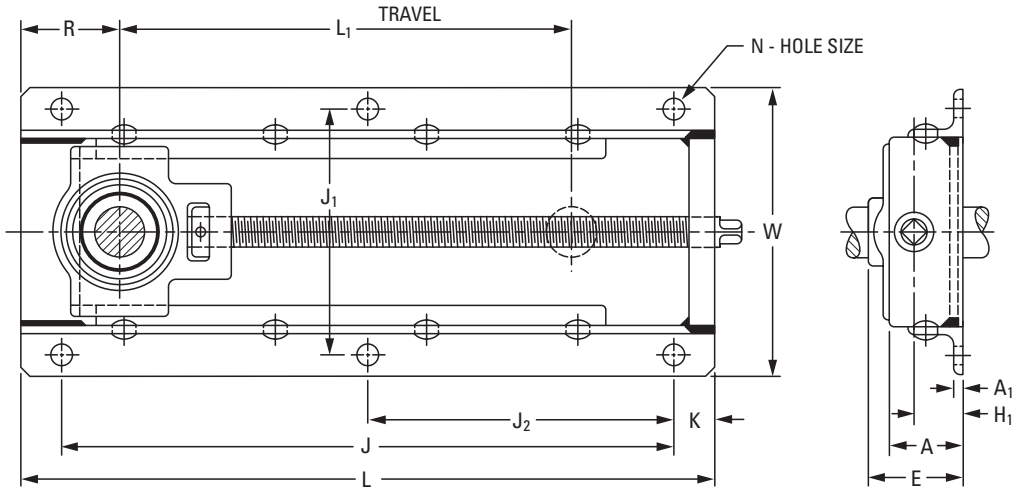
TAKE-UP UNITS

NLTU SERIES
SIDE-MOUNTED, PRESSED-STEEL

- The take-up frame incorporates RTU take-up units as shown on the following pages.
- The frame is designed for side mounting and made of welded steel.

To order a complete assembly, specify NLTU FRAME and RTU TAKE-UP UNIT.

Example: NLTU5 frame and RTU 1 11/16 in. If frame only is required, order by frame number. Example: NLTU3.

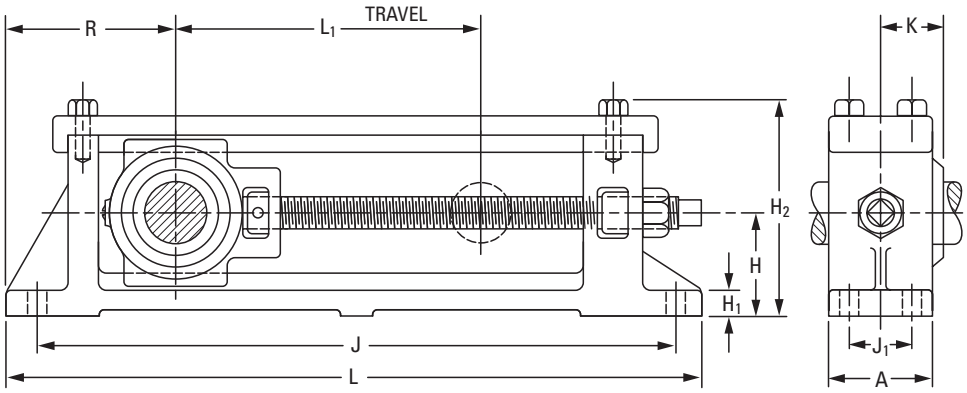


NLTU Frame No.	Shaft Dia.	L_1	R	J	L	A_1	H_1	E	J_1	W	A	J_2	K	N	Bolts 6 req'd.	Unit Wt.
	in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	in.	**kg** lbs.
1	5/16, 3/4, 13/16, 7/8, 15/16, 1	**231.8** 9 1/8	**62.70** 2 15/32	**327.0** 12 7/8	**377.8** 14 7/8	**4.8** 3/16	**27.0** 1 1/16	**54.0** 2 1/8	**141.3** 5 9/16	**166.7** 6 9/16	**44.4** 1 3/4	**163.5** 6 7/16	**25.4** 1	**12.7** 1/2	7/16	**3.691** 8.13
3	1 1/16, 1 1/8, 1 3/16, 1 1/4, 1 5/16, 1 3/8, 1 7/16	**290.5** 11 7/16	**64.23** 2 17/32	**392.1** 15 7/16	**432.2** 17 7/16	**4.8** 3/16	**31.8** 1 1/4	**61.9** 2 7/16	**154.0** 6 1/16	**179.4** 7 1/16	**50.8** 2	**196.1** 7 23/32	**25.4** 1	**12.7** 1/2	7/16	**5.003** 11.02
		290.5 11 7/16	**61.90** 2 7/16	**392.1** 15 7/16	**432.2** 17 7/16	**4.8** 3/16	**31.8** 1 1/4	**64.3** 2 17/32	**154** 6 1/16	**179.4** 7 1/16	**50.8** 2	**196.1** 7 23/32	**25.4** 1	**12.7** 1/2	7/16	
5	1 1/2, 1 9/16, 1 5/8, 1 11/16, 1 3/4, 1 13/16, 1 7/8, 1 15/16	**298.4** 11 3/4	**92.90** 3 21/32	**444.5** 17 1/2	**501.6** 19 3/4	**4.8** 3/16	**36.5** 1 7/16	**71.4** 2 13/16	**185.7** 7 5/16	**223.8** 8 13/16	**57.2** 2 1/4	**222.5** 8 3/4	**28.6** 1 1/8	**14.3** 9/16	1/2	**8.217** 18.10
7	2, 2 1/16, 2 1/8, 2 3/16, 2 1/4, 2 5/16, 2 3/8, 2 7/16	**362.0** 14 1/4	**92.90** 3 21/32	**546.1** 21 1/2	**603.2** 23 3/4	**4.8** 3/16	**38.1** 1 1/2	**81.8** 3 7/32	**219.1** 8 5/8	**265.1** 10 7/16	**63.5** 2 1/2	**273.0** 10 3/4	**28.6** 1 1/8	**15.9** 5/8	9/16	**12.312** 27.12
		362.0 14 1/4	**92.90** 3 21/32	**546.1** 21 1/2	**603.2** 23 3/4	**4.8** 3/16	**38.1** 1 1/2	**84.9** 3 11/32	**219.1** 8 5/8	**265.1** 10 7/16	**63.5** 2 1/2	**273.0** 10 3/4	**28.6** 1 1/8	**15.9** 5/8	9/16	

TU SERIES
TOP-MOUNTED, CAST-IRON

- The take-up frame incorporates RTU take-up units as shown on the following pages.
- The frame is designed for top mounting and is made of cast-iron.

To order a complete assembly, specify TU FRAME and RTU or TU TAKE-UP UNIT.
Example: TU5 frame and RTU 1 11/16 in.

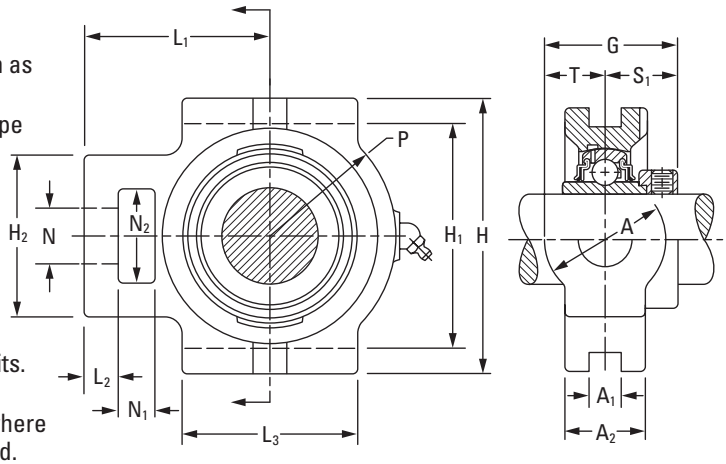


TU Frame No.	Shaft Dia.	L_1	R	J	L	H_1	H	H_2	J_1	A	K	Bolts 4 req'd.	Unit Wt.
	in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	in.	**kg** lbs.
1	3/4, 13/16, 7/8, 15/16, 1	**203.2** 8	**114.3** 4 1/2	**419.2** 16 1/2	**469.9** 18 1/2	**14.3** 9/16	**63.5** 2 1/2	**131.0** 5 5/32	**34.9** 1 3/8	**54.0** 2 1/8	–	3/8	**7.491** 16.50
3	1 1/16, 1 1/8, 1 3/16, 1 1/4, 1 5/16, 1 3/8, 1 7/16	**254.0** 10	**127.0** 5	**492.1** 19 3/8	**542.9** 21 3/8	**15.9** 5/8	**71.4** 2 13/16	**149.2** 5 7/8	**38.1** 1 1/2	**65.1** 2 9/16	–	7/16	**11.464** 25.25
5	1 1/2, 1 9/16, 1 5/8, 1 11/16, 1 3/4, 1 13/16, 1 7/8, 1 15/16	**254.0** 10	**139.7** 5 1/2	**530.2** 20 7/8	**581.0** 22 7/8	**19.0** 3/4	**82.6** 3 1/4	**171.4** 6 3/4	**50.8** 2	**88.9** 3 1/2	–	1/2	**20.203** 44.50
7	2, 2 1/16, 2 1/8, 2 3/16, 2 1/4, 2 5/16, 2 3/8, 2 7/16	**304.8** 12	**168.3** 6 5/8	**644.5** 25 3/8	**708.0** 27 7/8	**22.2** 7/8	**101.6** 4	**211.9** 8 11/32	**63.5** 2 1/2	**101.6** 4	–	5/8	**36.320** 80.00
9	2 11/16, 2 15/16 [1]	**304.8** 12	**193.7** 7 5/8	**695.3** 27 3/8	**771.5** 30 3/8	**25.4** 1	**117.5** 4 5/8	**243.7** 9 19/32	**82.6** 3 1/4	**120.6** 4 3/4	**65.1** 2 9/16	5/8	**52.778** 116.25

[1]Dimension K is 69.1 mm (2 23/32 in.) for 2 15/16 in. shaft diameters.

RTU INDUSTRIAL SERIES

- These ball bearing take-up units are used where shaft adjustment and belt-tightening devices are required, such as in conveyor applications.
- Both types of take-up units incorporate self-aligning, B-type wide-inner-ring ball bearings with self-locking collars.
- These units use a G-KRRB, R-seal type wide inner ring ball bearing.
- These units provide compact, efficient supports for adjustable shafts and conveyer take-up pulleys.
- The units are factory-prelubricated. A grease fitting is provided for relubrication if required.
- See the preceding page for take-up frames to fit these units.
- Contact your Timken engineer to discuss highly corrosive applications (e.g., food processing, chemical exposure) where Timken thin-dense chrome-coated bearings can be utilized.



Suggested shaft tolerances:

3/4 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 7/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: RTU 3/4 in. or RTU 2 11/16 in.

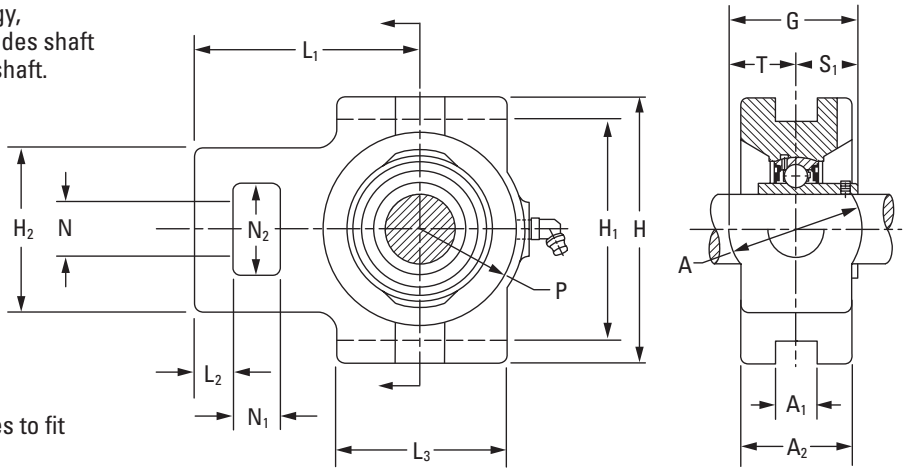
BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
RTU	G-KRRB	Page A-34

Unit	Shaft Dia.	G	T	S_1	A_2	A_1	A	L_1	H_2	N	N_2	L_2	N_1	P	L_3	H_1	H	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**kg** lbs.
RTU	3/4	**47.6**	**20.6**	**27.0**	**34.1**	**13.5**	**41.3**	**67.5**	**57.2**	**19.0**	**31.8**	**12.7**	**15.9**	**49.2**	**57.2**	**76.2**	**92.1**	G1012KRRB	S1012K	T-18832	**1.444**
RTU	**20**	1 7/8	13/16	1 1/16	1 11/32	17/32	1 5/8	2 21/32	2 1/4	3/4	1 1/4	1/2	5/8	1 15/16	2 1/4	3	3 5/8	GE20KRRB	SE20K		3.18
RTU	7/8																	G1014KRRB	S1014K		
RTU	15/16	**42.9**	**22.2**	**27.0**	**37.3**	**13.5**	**44.4**	**67.5**	**57.2**	**19.0**	**31.8**	**12.7**	**15.9**	**34.9**	**57.2**	**76.2**	**92.1**	G1015KRRB	S1015K	T-18696	**1.498**
RTU	1	1 15/16	7/8	1 1/16	1 15/32	17/32	1 3/4	2 21/32	2 1/4	3/4	1 1/4	1/2	5/8	1 3/8	2 1/4	3	3 5/8	G1100KRRB	S1100K		3.30
RTU	**25**																	GE25KRRB	SE25K		
RTU	1 1/16																	G1101KRRB	S1101K		
RTU	1 1/8	**55.6**	**25.4**	**30.2**	**38.1**	**13.5**	**50.8**	**72.2**	**61.9**	**22.2**	**36.5**	**12.7**	**15.9**	**41.3**	**63.5**	**88.9**	**104.8**	G1102KRRB	S1102K	T-18694	**1.920**
RTU	1 3/16	2 3/16	1	1 3/16	1 1/2	17/32	2	2 27/32	2 7/16	7/8	1 7/16	1/2	5/8	1 5/8	2 1/2	3 1/2	4 1/8	G1103KRRB	S1103K		4.23
RTU	**30**																	GE30KRRB	SE30K		
RTU	1 1/4																	G1104KRRB	S1104K		
RTU	1 5/16																	G1105KRRB	S1105K		
RTU	1 3/8	**54.8**	**22.2**	**32.5**	**36.5**	**13.5**	**44.5**	**74.6**	**63.5**	**22.2**	**36.5**	**12.7**	**15.9**	**49.2**	**69.8**	**88.9**	**104.8**	G1106KRRB	S1106K	T-18692	**2.025**
RTU	1 7/16	2 5/32	7/8	1 9/32	1 7/16	17/32	1 3/4	2 15/16	2 1/2	7/8	1 7/16	1/2	5/8	1 15/16	2 3/4	3 1/2	4 1/8	G1107KRRB	S1107K		4.46
RTU	**35**																	GE35KRRB	SE35K		
RTU	1 1/2																	G1108KRRB	S1108KT		
RTU	1 9/16	**67.5**	**32.5**	**34.9**	**44.4**	**17.5**	**65.1**	**88.1**	**82.6**	**28.6**	**49.2**	**15.9**	**19.0**	**53.3**	**82.6**	**100.8**	**120.6**	G1109KRRB	S1109K	T-18834	**3.314**
RTU	**40**	2 21/32	1 9/32	1 3/8	1 3/4	11/16	2 9/16	3 15/32	3 1/4	1 1/8	1 15/16	5/8	3/4	2 3/32	3 1/4	3 31/32	4 3/4	GE40KRRB	SE40K		7.30
RTU	1 5/8																	G1110KRRB	S1110K		
RTU	1 11/16	**67.5**	**32.5**	**34.9**	**44.4**	**17.5**	**65.1**	**88.1**	**82.6**	**28.6**	**49.2**	**15.9**	**19.0**	**53.3**	**82.6**	**100.8**	**120.6**	G1111KRRB	S1111K	T-18762	**3.164**
RTU	1 3/4	2 21/32	1 9/32	1 3/8	1 3/4	11/16	2 9/16	3 15/32	3 1/4	1 1/8	1 15/16	5/8	3/4	2 3/32	3 1/4	3 31/32	4 3/4	G1112KRRB	S1112K		6.97
RTU	**45**																	GE45KRRB	SE45K		
RTU	1 7/8																	G1114KRRB	S1114K		
RTU	1 15/16	**70.6**	**32.5**	**38.1**	**49.2**	**17.5**	**65.1**	**91.3**	**82.6**	**28.6**	**49.2**	**15.9**	**19.0**	**59.5**	**85.7**	**100.8**	**120.6**	G1115KRRB	S1115K	T-18690	**3.587**
RTU	**50**	2 25/32	1 9/32	1 1/2	1 15/16	11/16	2 9/16	3 19/32	3 1/4	1 1/8	1 15/16	5/8	3/4	2 11/32	3 3/8	3 31/32	4 3/4	GE50KRRB	SE50K		7.90
RTU	2																	G1200KRRB	S1201K		
RTU	2 1/8	**77.0**	**34.9**	**43.7**	**55.6**	**27.0**	**69.8**	**119.9**	**101.6**	**34.9**	**63.5**	**19.0**	**31.8**	**69.1**	**101.6**	**129.4**	**149.2**	G1202KRRB	S1202K	T-18828	**6.333**
RTU	2 3/16	3 1/32	1 3/8	1 23/32	2 3/16	1 1/16	2 3/4	4 23/32	4	1 3/8	2 1/2	3/4	1 1/4	2 23/32	4	5 3/32	5 7/8	G1203KRRB	S1203K		13.95
RTU	**55**																	GE55KRRB	SE55K		
RTU	2 1/4																	G1204KRRB	S1204K		
RTU	2 3/8	**81.8**	**34.9**	**46.8**	**52.4**	**27.0**	**69.8**	**119.9**	**101.6**	**34.9**	**63.5**	**19.0**	**31.8**	**69.1**	**101.6**	**129.4**	**149.2**	G1206KRRB	S1206K	T-18830	**5.993**
RTU	2 7/16	3 7/32	1 3/8	1 27/32	2 1/16	1 1/16	2 3/4	4 23/32	4	1 3/8	2 1/2	3/4	1 1/4	2 23/32	4	5 3/32	5 7/8	G1207KRRB	S1207K		13.20
RTU	**60**																	GE60KRRB	SE60K		

YTU INDUSTRIAL SERIES

- Incorporates Shaft Guarding Technology, which reduces replacement time, provides shaft protection and prolongs the life of the shaft.
- Used where shaft adjustment and belt-tightening devices are required, such as conveyer applications.
- Incorporates self-aligning, B-type extra wide-inner-ring ball bearings with set screw lock.
- Provides compact, efficient supports for adjustable shafts and conveyor take-up pulleys.
- Factory-prelubricated. A grease fitting is provided for relubrication if required.
- See preceding pages for take-up frames to fit these units.
- Safety end caps are available for selected sizes.
- Contact your Timken engineer to discuss highly corrosive applications (e.g., food processing, chemical exposure) where Timken thin-dense chrome-coated bearings can be utilized.



Suggested shaft tolerances:

½ in. – 1 15⁄16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 7⁄16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: YTU ¾ in.

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
YTU	GY-KRRB	Page A-44

Unit	Shaft Dia.	G	T	S_1	A_2	A_1	A	L_1	H_2	N	N_2	L_2	N_1	P	L_3	H_1	H	Bearing No.	Housing No.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.		
YTU SGT	¾	**39.7**	**20.6**	**19.00**	**34.1**	**13.5**	**41.3**	**67.5**	**57.2**	**19.0**	**31.8**	**12.7**	**15.9**	**33.3**	**57.2**	**76.2**	**92.1**	GY1012KRRB SGT	T-18832
YTU SGT	**20**	1 9⁄16	13⁄16	0.748	1 11⁄32	17⁄32	1 5⁄8	2 21⁄32	2 1⁄4	¾	1 1⁄4	½	5⁄8	1 5⁄16	2 1⁄4	3	3 5⁄8	GYE20KRRB SGT	
YTU SGT	7⁄8																	GY1014KRRB SGT	T-18696
YTU SGT	15⁄16	**42.9**	**22.2**	**20.60**	**37.3**	**13.5**	**44.4**	**67.5**	**57.2**	**19.0**	**31.8**	**12.7**	**15.9**	**34.9**	**57.2**	**76.2**	**92.1**	GY1015KRRB SGT	
YTU SGT	1	1 11⁄16	7⁄8	0.81	1 15⁄32	17⁄32	1 3⁄4	2 21⁄32	2 1⁄4	¾	1 1⁄4	½	5⁄8	1 3⁄8	2 1⁄4	3	3 5⁄8	GY1100KRRB SGT	
YTU SGT	**25**																	GYE25KRRB SGT	
YTU SGT	1 1⁄8																	GY1102KRRB SGT	T-18694
YTU SGT	1 3⁄16	**48.8**	**25.4**	**23.24**	**38.1**	**13.5**	**50.8**	**72.2**	**61.9**	**22.2**	**36.5**	**12.7**	**15.9**	**41.3**	**63.5**	**88.9**	**104.8**	GY1103KRRB SGT	
YTU SGT	**30**	1 59⁄64	1	0.915	1 1⁄2	17⁄32	2	2 27⁄32	2 7⁄16	7⁄8	1 7⁄16	½	5⁄8	1 5⁄8	2 1⁄2	3 1⁄2	4 1⁄8	GYE30KRRB SGT	
YTU SGT	1 1⁄4																	GY1104KRRB SGT	T-18692
YTU SGT	1 3⁄8	**50.4**	**22.2**	**27.90**	**36.5**	**13.5**	**44.5**	**74.6**	**63.5**	**22.2**	**36.5**	**12.7**	**15.9**	**49.2**	**69.8**	**88.9**	**104.8**	GY1106KRRB SGT	
YTU SGT	1 7⁄16	1 63⁄64	7⁄8	1.1	1 7⁄16	17⁄32	1 3⁄4	2 15⁄16	2 1⁄2	7⁄8	1 7⁄16	½	5⁄8	1 15⁄16	2 3⁄4	3 1⁄2	4 1⁄8	GY1107KRRB SGT	
YTU SGT	**35**																	GYE35KRRB SGT	
YTU SGT	1 1⁄2	**62.7**	**32.5**	**30.20**	**44.4**	**17.5**	**65.1**	**88.1**	**82.6**	**28.6**	**49.2**	**15.9**	**19.0**	**53.3**	**82.6**	**100.8**	**120.6**	GY1108KRRB SGT	T-18834
YTU SGT	**40**	2 15⁄32	1 9⁄32	1.188	1 3⁄4	11⁄16	2 9⁄16	3 15⁄32	3 1⁄4	1 1⁄8	1 15⁄16	5⁄8	3⁄4	2 3⁄32	3 1⁄4	3 31⁄32	4 3⁄4	GYE40KRRB SGT	
YTU SGT	1 5⁄8																	GY1110KRRB SGT	T-18762
YTU SGT	1 11⁄16	**64.0**	**32.5**	**31.30**	**44.4**	**17.5**	**65.1**	**88.1**	**82.6**	**28.6**	**49.2**	**15.9**	**19.0**	**53.3**	**82.6**	**100.8**	**120.6**	GY1111KRRB SGT	
YTU SGT	1 3⁄4	2 33⁄64	1 9⁄32	1.233	1 3⁄4	11⁄16	2 9⁄16	3 15⁄32	3 1⁄4	1 1⁄8	1 15⁄16	5⁄8	3⁄4	2 3⁄32	3 1⁄4	3 31⁄32	4 3⁄4	GY1112KRRB SGT	
YTU SGT	**45**																	GYE45KRRB SGT	
YTU SGT	1 15⁄16	**65.0**	**32.5**	**32.50**	**49.2**	**17.5**	**65.1**	**91.3**	**82.6**	**28.6**	**49.2**	**15.9**	**19.0**	**59.5**	**85.7**	**100.8**	**120.6**	GY1115KRRB SGT	T-18690
YTU SGT	**50**	2 9⁄16	1 9⁄32	1.281	1 15⁄16	11⁄16	2 9⁄16	3 19⁄32	3 1⁄4	1 1⁄8	1 15⁄16	5⁄8	3⁄4	2 11⁄32	3 3⁄8	3 31⁄32	4 3⁄4	GYE50KRRB SGT	
YTU SGT	2	**68.3**	**34.9**	**33.30**	**55.6**	**27.0**	**69.8**	**119.9**	**101.6**	**34.9**	**63.5**	**19.0**	**31.8**	**69.1**	**101.6**	**129.4**	**149.2**	GY1200KRRB SGT	T-18828
YTU SGT	2 3⁄16	2 11⁄16	1 3⁄8	1.312	2 3⁄16	1 1⁄16	2 3⁄4	4 23⁄32	4	1 3⁄8	2 1⁄2	¾	1 1⁄4	2 23⁄32	4	5 3⁄32	5 7⁄8	GY1203KRRB SGT	
YTU SGT	**55**																	GYE55KRRB SGT	
YTU SGT	2 1⁄4	**74.6**	**34.9**	**39.70**	**52.4**	**27.0**	**69.8**	**119.9**	**101.6**	**34.9**	**63.5**	**19.0**	**31.8** 1	**69.1**	**101.6**	**129.4**	**149.2**	GY1204KRRB SGT	T-18830
YTU SGT	2 7⁄16	2 15⁄16	1 3⁄8	1.562	2 1⁄16	1 1⁄16	2 3⁄4	4 23⁄32	4	1 3⁄8	2 1⁄2	¾	1⁄4	2 23⁄32	4	5 3⁄32	5 7⁄8	GY1207KRRB SGT	
YTU SGT	**60**																	GYE60KRRB SGT	

VTU STANDARD SERIES

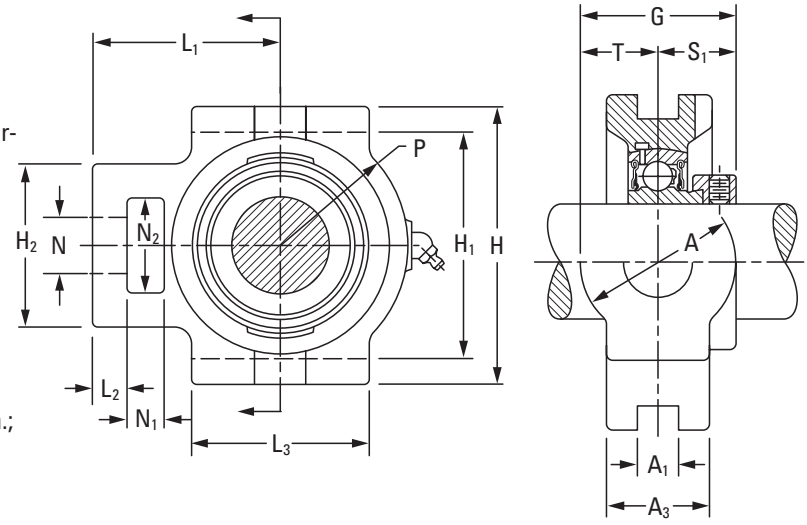
- These units are used where shaft adjustment and belt-tightening devices are required (e.g., conveyor belt applications).
- This unit provides self-aligning, B-type wide-inner-ring ball bearings with self-locking collars.
- Provides compact, efficient supports for adjustable shafts and conveyor take-up pulleys.
- The units are factory-prelubricated. A grease fitting is provided for relubrication if required.
- See the preceding pages for take-up frames to fit these units.

Suggested shaft tolerances:

3/4 in. – 1 15/16 in., nominal to -0.013 mm, -0.0005 in.;
2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: VTU 3/4 in. or VTU 2 11/16 in.



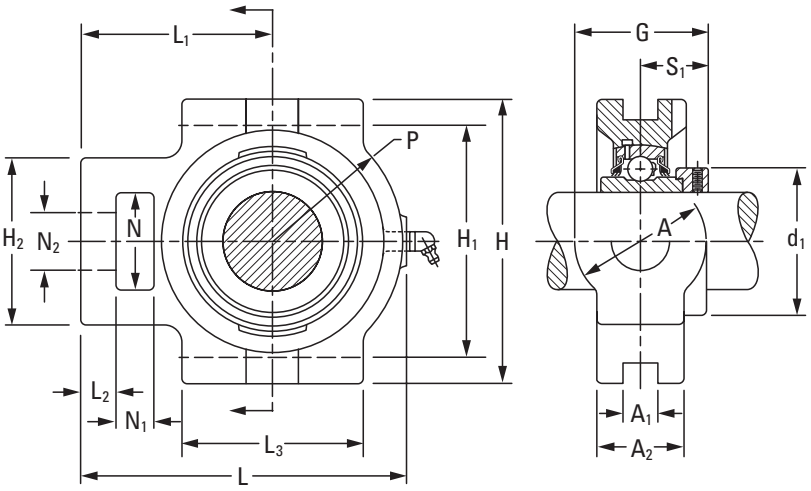
BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
VTU	GRA-RRB	Page A-50

Unit	Shaft Dia.	G	T	S_1	A_3	A_1	A	L_1	H_2	N	N_2	L_2	N_1	P	L_3	H_1	H	Bearing No.	Collar No.	Housing No.	Unit Wt.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.				**kg** lbs.
VTU	3/4	**44.1**	**20.6**	**23.4**	**34.1**	**13.5**	**41.3**	**67.5**	**57.2**	**19.0**	**31.8**	**12.7**	**15.9**	**33.3**	**57.2**	**76.2**	**92.1**	GRA012RRB	S1012K	T-18832	**1.372**
VTU	**20**	1 47/64	13/16	59/64	1 11/32	17/32	1 5/8	2 21/32	2 1/4	3/4	1 1/4	1/2	5/8	1 5/16	1/4	3	3 5/8	GRAE20RRB	SE20K		3.02
VTU	7/8																	GRA014RRB	S1014K		
VTU	15/16	**45.2**	**22.2**	**23.0**	**37.3**	**13.5**	**44.4**	**67.5**	**57.2**	**19.0**	**31.8**	**12.7**	**15.9**	**34.9**	**57.2**	**76.2**	**92.1**	GRA015RRB	S1015K	T-18696	**1.458**
VTU	1	1 25/32	7/8	29/32	1 15/32	17/32	1 3/4	2 21/32	2 1/4	3/4	1 1/4	1/2	5/8	3/8	2 1/4	3	3 5/8	GRA100RRB	S1100K		3.21
VTU	**25**																	GRAE25RRB	SE25K		
VTU	1 1/8																	GRA102RRB	S1102K		
VTU	1 3/16	**52.0**	**25.4**	**27.0**	**38.1**	**13.5**	**50.8**	**72.2**	**61.9**	**22.2**	**36.5**	**12.7**	**15.9**	**41.3**	**63.5**	**88.9**	**104.8**	GRA103RRB	S1103K3	T-18694	**1.862**
VTU	**30**	2 1/16	1	1 1/16	1 1/2	17/32	2	2 27/32	2 7/16	7/8	1 7/16	1/2	5/8	1 5/8	2 1/2	3 1/2	4 1/8	GRAE30RRB	SE30K		4.10
VTU	1 1/4																	GRA104RRB	S1104K		
VTU	1 3/8	**51.6**	**22.2**	**29.4**	**36.5**	**13.5**	**44.5**	**74.6**	**63.5**	**22.2**	**36.5**	**12.7**	**15.9**	**49.2**	**69.8**	**88.9**	**104.8**	GRA106RRB	S1106K	T-18692	**1.953**
VTU	1 7/16	2 1/32	7/8	1 5/32	1 7/16	17/32	1 3/4	2 15/16	2 1/2	7/8	1 7/16	1/2	5/8	1 15/16	3/4	3 1/2	4 1/8	GRA107RRB	S1107K		4.30
VTU	**35**																	GRAE35RRB	SE35K		
VTU	1 1/2	**65.0**	**32.5**	**32.5**	**44.4**	**17.5**	**65.1**	**88.1**	**82.6**	**28.6**	**49.2**	**15.9**	**19.0**	**53.3**	**82.6**	**100.8**	**120.6**	GRA108RRB	S1108KT	T-18834	**3.192**
VTU	**40**	2 9/16	1 9/32	1 9/32	1 3/4	11/16	2 9/16	3 15/32	3 1/4	1 1/8	1 15/16	5/8	3/4	2 3/32	3 1/4	3 31/32	4 3/4	GRAE40RRB	SE40K		7.03
VTU	1 5/8																	GRA110RRB	S1110K		
VTU	1 11/16	**65.0**	**32.5**	**32.5**	**44.4**	**17.5**	**65.1**	**88.1**	**82.6**	**28.6**	**49.2**	**15.9**	**19.0**	**53.3**	**82.6**	**100.8**	**120.6**	GRA111RRB	S1111K	T-18762	**3.009**
VTU	1 3/4	2 9/16	1 9/32	1 9/32	1 3/4	11/16	2 9/16	3 15/32	3 1/4	1 1/8	1 15/16	5/8	3/4	2 3/32	3 1/4	3 31/32	4 3/4	GRA112RRB	S1112K		6.63
VTU	**45**																	GRAE45RRB	SE45K		
VTU	1 7/8																	GRA114RRB	S1114K		
VTU	1 15/16	**65.0**	**32.5**	**32.5**	**49.2**	**17.5**	**65.1**	**91.3**	**82.6**	**28.6**	**49.2**	**15.9**	**19.0**	**59.5**	**85.7**	**100.8**	**120.6**	GRA115RRB	S1115K	T-18690	**3.342**
VTU	**50**	2 9/16	1 9/32	1 9/32	1 15/16	11/16	2 9/16	3 19/32	3 1/4	1 1/8	1 15/16	5/8	3/4	2 11/32	3 3/8	3 31/32	4 3/4	GRAE50RRB	SE50K		7.36
VTU	2																	GRA200RRB	S1200K		
VTU	2 3/16	**71.4**	**34.9**	**36.5**	**55.6**	**27.0**	**69.8**	**119.9**	**101.6**	**34.9**	**63.5**	**19.0**	**31.8**	**69.1**	**101.6**	**129.4**	**149.2**	GRA203RRB	S1203K	T-18828	**5.784**
VTU	**55**	2 13/16	1 3/8	1 7/16	2 3/16	1 1/16	2 3/4	4 23/32	4	1 3/8	1/2	3/4	1 1/4	2 23/32	4	5 3/32	5 7/8	GRAE55RRB	SE55K		12.73

TTU INDUSTRIAL SERIES

- These units are used where shaft adjustment and belt-tightening devices are required (e.g., in conveyor belt applications).
- The unit incorporates self-aligning, B-type, extra wide-inner-ring ball bearings with self-locking collars.
- The unit uses a G-KPPB (tri-ply) type wide inner ring ball bearing.
- The unit provides compact, efficient supports for adjustable shafts and conveyor take-up pulleys.
- The units are factory-prelubricated. A grease fitting is provided for relubrication if required.
- Contact your Timken engineer to discuss highly corrosive applications (e.g., food processing, chemical exposure) where Timken thin-dense chrome-coated bearings can be utilized.



Suggested shaft tolerances:

2 in. – 2 3/16 in., nominal to -0.025 mm, -0.0010 in.

To order, specify UNIT and SHAFT DIAMETER.

Example: TTU 3/4 in.

BEARING DATA

Unit	Bearing No.	Dimensions and Load Ratings
TTU	G-KPPB	Page A-39

Unit	Shaft Dia.	G	L	S_1	d_1	A_2	A_1	A	L_1	H_2	N	N_2	L_2	N_1	P	L_3	H_1	H	Bearing No.	Housing No.
	in. **mm**	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.		
TTU	1 1/4 1 5/16 1 3/8 1 7/16	**54.38** 2.141	**125.41** 4 15/16	**32.31** 1.272	**53.98** 2.125	**36.51** 1 7/16	**13.49** 17/32	**44.45** 1 3/4	**74.61** 2 15/16	**63.50** 2 1/2	**36.51** 1 7/16	**22.23** 0.875	**12.70** 1/2	**15.88** 5/8	**49.21** 1 15/16	**69.85** 2 3/4	**88.90** 3 1/2	**104.78** 4 1/8	G1104KPPB2 G1105KPPB2 G1106KPPB2 G1107KPPB2	T18692
TTU	1 15/16	**70.64** 2.781	**152.80** 6 1/64	**38.07** 1.499	**69.34** 2.73	**49.21** 1 15/16	**17.46** 11/16	**65.09** 2 9/16	**91.28** 3 19/32	**82.55** 3 1/4	**49.21** 1 15/16	**28.58** 1.125	**15.88** 5/8	**19.05** 3/4	**59.53** 2 11/32	**85.73** 3 3/8	**100.81** 3 31/32	**120.65** 4 3/4	G1115KPPB3	T18690
TTU	2 2 1/16 2 1/8 2 3/16 **55**	**79** 3.109	**190.5** 7 1/2	**43.6** 1.716	**75.7** 2.980	**55.6** 2 3/16	**27** 1 1/16	**69.8** 2 3/4	**119.9** 4 23/32	**101.6** 4	**63.5** 2 1/2	**34.7** 1.365	**19** 3/4	**31.8** 1 1/4	**69.1** 2 23/32	**101.6** 4	**129.4** 5 3/32	**149.2** 5 7/8	G1200KPPB4 G1201KPPB4 G1202KPPB4 G1203KPPB4 GE55KPPB4	T-18828

TIMKEN® SURVIVOR® PS SERIES

Timken® Survivor® PS series housed units have polymer housings and a 300-series stainless-steel insert to provide the highest possible corrosion resistance in the industry (fig. A-24). The engineered polymer housing unit is FDA/USDA compliant. It is specifically designed for light loads and low speeds with stainless-steel set screws.

The durable corrosion-proof polymer housing features stainless-steel crush bushings in mounting holes with stainless-steel grease fittings with a nylon cap (table A-23). It resists a broad range of acids and alkalis, as well as steam and continuous temperature up to 121° C (250° F) and brief exposure up to 160° C (320° F). Additionally, the polymer strength exceeds the static capacity of the bearing, and the housing retains proper bearing fit and resists shock loads. The flush base has no voids where bacteria could collect. Optional end covers further protect the insert bearing from direct contact with wash-down solutions and cover rotating components.

Survivor PS series units are available as:

- High-base and low-base pillow blocks.
- Two-bolt and four-bolt flanged cartridges for popular shaft sizes.



Fig. A-24. PS series.

TABLE A-23.

PS SERIES	
Component	Material
Balls	Stainless steel
Ball retainer	Nylon
Set screws	Stainless steel
Crush bushing	Stainless steel
Grease	FDA approved
Housing	**Polymer**
Grease fitting	Stainless steel
Grease-fitting cover	Nylon
Rings	**Stainless steel**
Seals	Synthetic rubber

ORDERING INFORMATION

To order complete Survivor polymer assemblies, simply replace the (current cast-iron housed-unit designations) prefix with K and add the PS suffix.

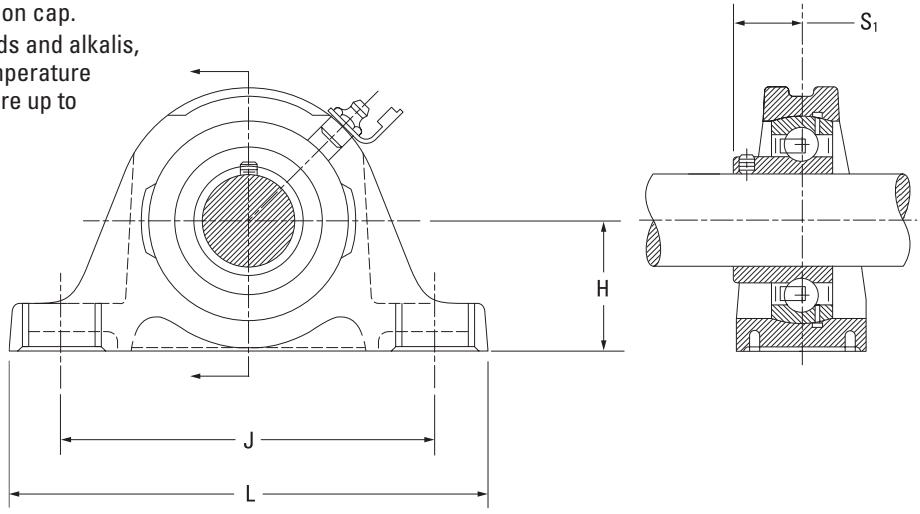
Example: **KCJT 1 PS or KAK ¾ PS**

PS Survivor inserts can be ordered using the part numbers shown in the following tables.

Example: **KCJT1PS100RRB or KAK3/4PS012RRB**

PS
KAK/S SERIES

- The 300-series stainless-steel insert provides the highest resistance to corrosion in the industry.
- This unit is used for the ready-to-eat portion of the process. Loads are lighter and corrosion protection is the primary concern.
- Specifically designed for light loads and low speeds, and has stainless-steel set screws.
- The durable, corrosion-proof polymer housing has stainless-steel crush bushings in the mounting holes and a stainless-steel grease fitting with nylon cap.
- Polymer resists a broad range of acids and alkalis, as well as steam and continuous temperature up to 121° C (250° F) and brief exposure up to 160° C (320° F).
- The polymer strength exceeds static capacity of bearing; housing retains proper bearing fit and resists shock loads.
- The flush base contains no voids where bacteria can collect.
- The optional end covers further protect insert bearing from direct contact with washdown solutions and cover rotating components.

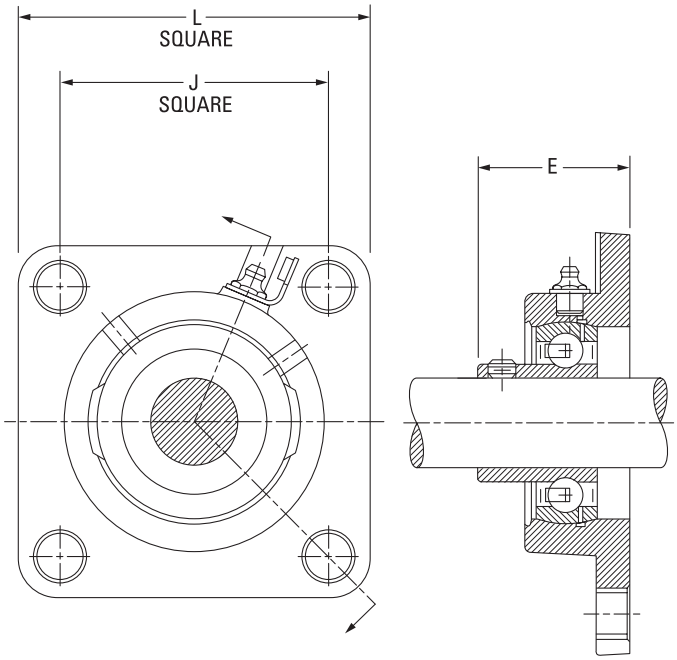


Unit[1]	Shaft Dia.	Type	KAK H	KAS H	J	L	S_1	Static Load Rating	Limiting Speed	Bearing No.
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	RPM	
KAK/S	3/4 **20**	PS	**31.75** 1 1/4	**33.34** 1 15/16	**96.04** 3 25/32	**127.00** 5	**18.26** 23/32	**900** 200	500	GKY012RRB GKYE20RRB
KAK/S	1 **25**	PS	**33.34** 1 5/16	**36.51** 1 7/16	**104.78** 4 1/8	**139.70** 5 1/2	**20.64** 13/16	**1100** 240	425	GKY100RRB GKYE25RRB
KAK/S	1 3/16 1 1/4 S **30**	PS	**39.69** 1 9/16	**42.86** 1 11/16	**117.48** 4 5/8	**157.16** 6 3/16	**22.23** 7/8	**1600** 350	375	GKY103RRB GKY103RRB2 GKYE30RRB
KAK/S	1 1/4 1 7/16 **35**	PS	**46.04** 1 13/16	**47.63** 1 7/8	**130.18** 5 1/8	**166.69** 6 9/16	**27.38** 1 5/64	**2100** 475	300	GKY104RRB GKY107RRB GKYE35RRB

[1]Option of low-base KAK or high-base KAS.

KCJ SERIES

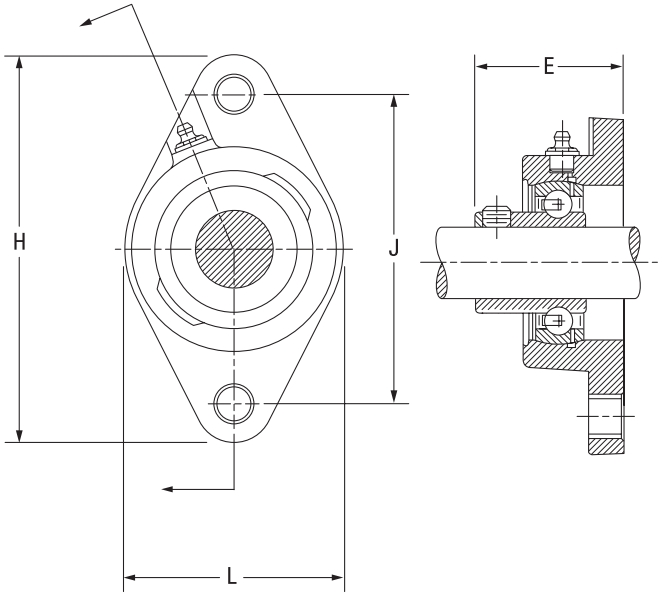
- The 300-series stainless-steel insert provides the highest resistance to corrosion in the industry.
- This unit is used for the ready-to-eat portion of the process. Loads are lighter and corrosion protection is the primary concern.
- Specifically designed for light loads and low speeds, and has stainless-steel set screws.
- The durable, corrosion-proof polymer housing has stainless-steel crush bushings in the mounting holes and a stainless-steel grease fitting with nylon cap.
- Polymer resists a broad range of acids and alkalis, as well as steam and continuous temperature up to 121° C (250° F) and brief exposure up to 160° C (320° F).
- The polymer strength exceeds static capacity of bearing; housing retains proper bearing fit and resists shock loads.
- The flush base contains no voids where bacteria can collect.
- The optional end covers further protect insert bearing from direct contact with washdown solutions and cover rotating components.



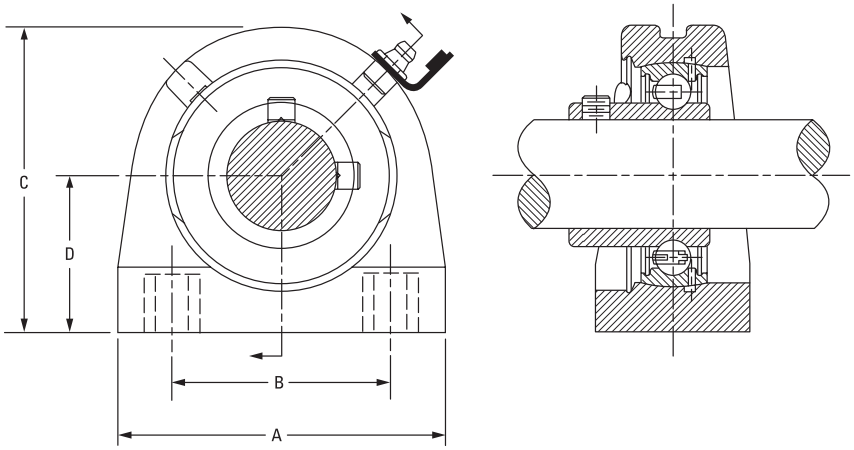
Unit	Shaft Dia.	Type	L	J	E	Static Load Rating	Limiting Speed	Bearing No.
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**N** lbs.	RPM	
KCJ	3/4 **20**	PS	**85.33** 3 23/64	**63.50** 2 1/2	**37.31** 1 15/32	**900** 200	500	GKY012RRB GKYE20RRB
KCJ	1 **25**	PS	**94.85** 3 47/64	**69.85** 2 3/4	**39.69** 1 9/16	**1100** 240	425	GKY100RRB GKYE25RRB
KCJ	1 3/16 1 1/4 S **30**	PS	**107.95** 4 1/4	**82.55** 3 1/4	**41.28** 1 5/8	**1600** 350	375	GKY103RRB GKY103RRB2 GKYE30RRB
KCJ	1 1/4 1 7/16 **35**	PS	**117.48** 4 5/8	**92.08** 3 5/8	**46.04** 1 13/16	**2100** 475	300	GKY104RRB GKY107RRB GKYE35RRB

KCJT AND KTB SERIES

- The 300-series stainless-steel insert provides the highest resistance to corrosion in the industry.
- This unit is used for the ready-to-eat portion of the process. Loads are lighter and corrosion protection is the primary concern.
- Specifically designed for light loads and low speeds, and has stainless-steel set screws.
- The durable, corrosion-proof polymer housing has stainless-steel crush bushings in the mounting holes and a stainless-steel grease fitting with nylon cap.
- Polymer resists a broad range of acids and alkalis, as well as steam and continuous temperature up to 121° C (250° F) and brief exposure up to 160° C (320° F).
- The polymer strength exceeds static capacity of bearing; housing retains proper bearing fit and resists shock loads.
- The flush base contains no voids where bacteria can collect.
- The optional end covers further protect insert bearing from direct contact with washdown solutions and cover rotating components.



Unit	Shaft Dia.	Type	H	J	L	E	Static Load Rating	Limiting Speed	Bearing No.
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	RPM	
KCJT	3/4 **20**	PS	**111.92** 4 13/32	**89.69** 3 17/32	**60.33** 2 3/8	**37.31** 1 15/32	**900** 200	500	GKY012RRB GKYE20RRB
KCJT	1 **25**	PS	**124.22** 4 57/64	**98.82** 3 57/64	**65.48** 2 37/64	**39.69** 1 9/16	**1100** 240	425	GKY100RRB GKYE25RRB
KCJT	1 3/16 1 1/4 S **30**	PS	**140.89** 5 35/64	**116.68** 4 19/32	**76.20** 3	**41.28** 1 5/8	**1600** 350	375	GKY103RRB GKY103RRB2 GKYE30RRB
KCJT	1 1/4 1 7/16 **35**	PS	**155.58** 6 1/8	**130.18** 5 1/8	**92.08** 3 5/8	**49.21** 1 15/16	**2100** 475	300	GKY104RRB GKY107RRB GKYE35RRB



Unit	Shaft Dia.	Type	A	B	C	D	Static Load Rating	Limiting Speed	Bearing No.
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	RPM	
KTB	1	PS	**76.20** 3	**50.80** 2	**71.44** 2 13/16	**36.51** 1 7/16	**1100** 240	425	GKY100RRB

TIMKEN® SURVIVOR® PT SERIES

Timken® Survivor® PT series housed units are designed to meet stringent food-handling requirements while standing up to highly corrosive environments (fig. A-25). All materials used in Survivor assemblies, including grease, are approved for USDA- and FDA-compliant industries (table A-24).

The Survivor series also provides extraordinary corrosion resistance for materials handling operations, dairy and refrigeration applications, as well as heating, ventilation and air conditioning (HVAC), chemical, maritime and other highly corrosive environments.

Patented Survivor PT polymer housed units withstand a wide range of chemicals. These units are dimensionally stable under load and able to operate in continuous temperatures up to 120° C (250° F) and brief exposures up to 177° C (350° F).

Our bearing inserts are coated in proprietary Timken thin-dense chrome that will not crack or peel. Inserts are available with a self-locking collar or a set screw locking device. Also available is Timken Shaft Guarding Technology (page A-31), which uses a stainless-steel, hardened band to transfer gripping pressure on the shaft. Unlike traditional set screws, which can dig into the shaft, there are no nicks, raised metal or permanent shaft damage. The stainless band won't corrode on the shaft. Housed units with Shaft Guarding Technology also reduce change-out time.

Survivor PT series units are available as:

- High-base and low-base pillow blocks.
- Two-bolt and four-bolt flanged cartridges for popular shaft sizes of ½ in. through 2 15⁄16 in. (and selected metric diameters).
- Take-up unit in the Survivor PT series in limited shaft sizes (RTU-NT). The bearing inserts are available with self-locking collars.

Timken also produces a take-up unit in the Survivor NT series in limited shaft sizes (RTU-NT). The bearing inserts are available with self-locking collars.

Survivor PT assemblies are dimensionally interchangeable with the current line of Timken cast-iron housed units.

The polymer housing and TDC coating resist premature failure under corrosive conditions. These properties extend the life of the housed unit and bearing. Longer periods between replacements save costs and reduce downtime.



Fig. A-25. Popular styles.

TABLE A-24.

PT SERIES	
Component	Material
Balls	Stainless steel
Ball retainer	Nylon
Collar	Stainless steel
Crush bushing	Stainless steel
Grease	FDA approved
Housing	**Polymer**
Grease fitting	Stainless steel
Grease fitting cover	Nylon
Rings	**TDC plated**
Seals	Synthetic rubber
Seal caps	Stainless steel
Set screw	Stainless steel

ORDERING INFORMATION

To order complete Survivor polymer assemblies, simply add the PT suffix to the current cast-iron housed-unit designations.

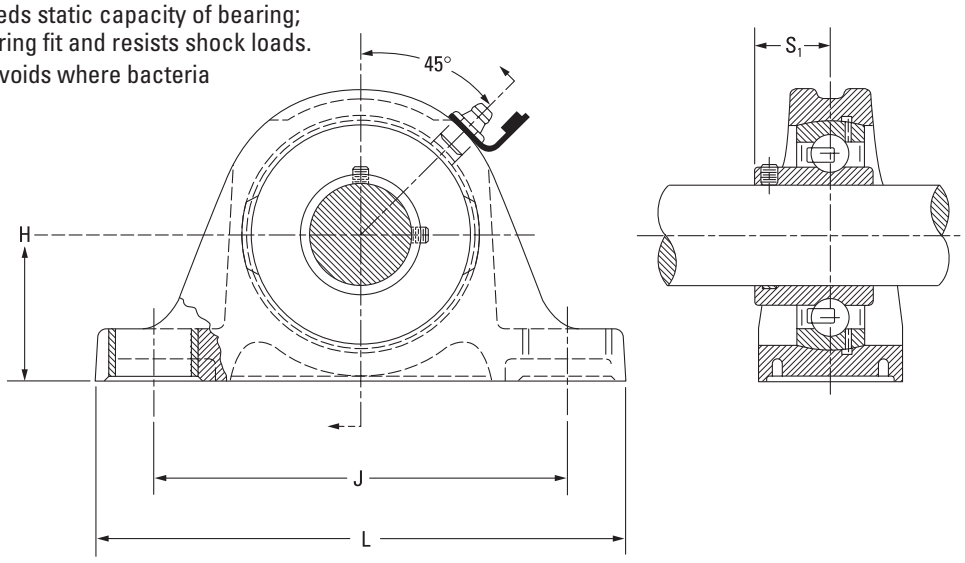
Example: **YCJT 1 PT SGT or RAK ¾ PT SGT**

Survivor inserts can be ordered using Timken's standard part number for wide-inner-ring ball bearings with a TDCF suffix.

Example: **GY1100KRRB TDCF SGT or G1100KRRB + COL TDCF SGT**

PT
YAK/S SERIES

- This unit is used for the main portion of the process where loads are lighter and corrosion protection is important.
- Durable corrosion-proof polymer housing with stainless-steel crush bushings in mounting holes and a stainless-steel grease fitting with a nylon cap.
- Polymer resists a broad range of acids and alkalis, as well as steam and continuous temperature up to 121° C (250° F), and brief exposure up to 160° C (320° F).
- The polymer strength exceeds static capacity of bearing; housing retains proper bearing fit and resists shock loads.
- The flush base contains no voids where bacteria can collect.
- Corrosion-resistant insert bearing with stainless-steel balls and a nylon retainer. The PT series also features industrial-duty contact seals with stainless-steel shroud caps.
- This unit has stainless-steel set screws with Shaft Guarding Technology.
- This unit is factory lubricated with FDA/USDA-approved grease (class H1 lubricant) for incidental food contact.

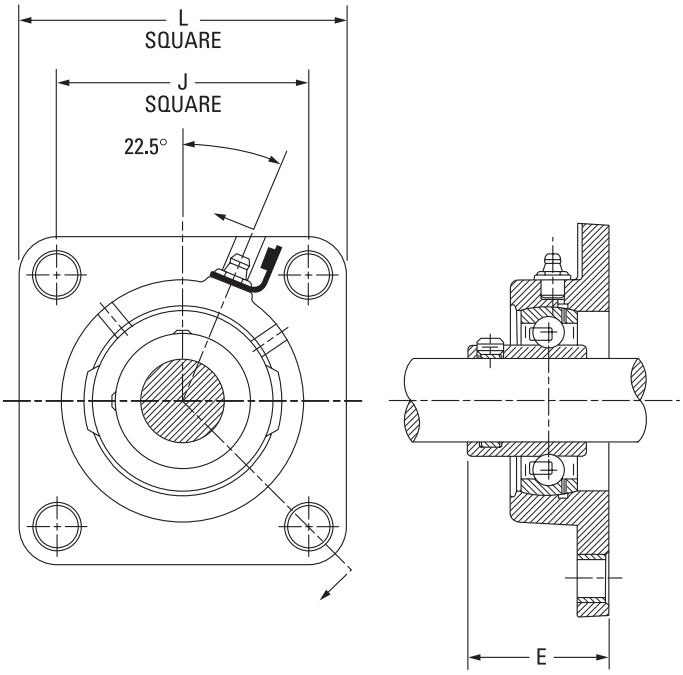


Unit[1]	Shaft Dia.	Type	YAK H	YAS H	J	L	S_1	Static Load Rating	Dynamic Load Rating	Speed Rating	Bearing No.	
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.	RPM		
YAK/S	3/4 **20**	PT SGT	**31.75** 1 1/4	**33.34** 1 5/16	**96.04** 3 25/32	**127.00** 5	**19.05** 3/4	**6500** 1460	**14500** 3250	9200 8800	GY1012KRRB GYE20KRRB	TDCF SGT TDCF SGT
YAK/S	1 **25**	PT SGT	**33.34** 1 5/16	**36.51** 1 7/16	**104.78** 4 1/8	**139.70** 5 1/2	**20.64** 13/16	**7700** 1730	**15800** 3550	6900 7000	GY1100KRRB GYE25KRRB	TDCF SGT TDCF SGT
YAK/S	1 1/4S **30**	PT PT SGT	**39.69** 1 9/16	**42.86** 1 11/16	**117.48** 4 5/8	**157.16** 6 3/16	**23.4** 59/64	**11100** 2500	**21800** 4900	5500 5800	GY1103KRRB3 GYE30KRRB	TDCF TDCF SGT
YAK/S	1 3/8 1 7/16 **35**	PT SGT	**46.04** 1 13/16	**47.63** 1 7/8	**130.18** 5 1/8	**166.69** 6 9/16	**28.18** 1 7/64	**15100** 3400	**28500** 6400	5000 4800 5000	GY1106KRRB GY1107KRRB GYE35KRRB	TDCF SGT TDCF SGT TDCF SGT
YAK/S	1 1/2 **40**	PT SGT	**49.21** 1 15/16	**49.21** 1 15/16	**136.53** 5 3/8	**179.39** 7 1/16	**30.16** 1 3/16	**19600** 4400	**36300** 8150	4600 4400	GY1108KRRB GYE40KRRB	TDCF SGT TDCF SGT

[1]Option of low-base RAK or high-base RAS.

YCJ SERIES

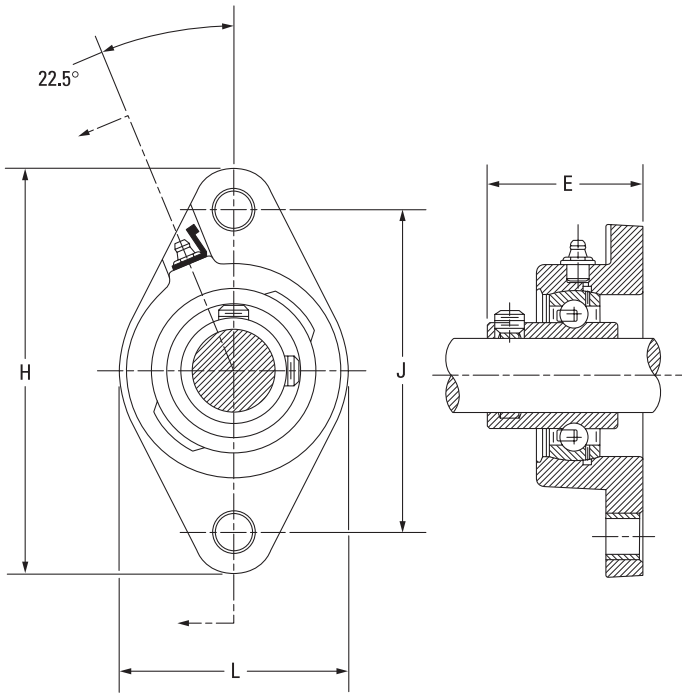
- This unit is used for the main portion of the process where loads are lighter and corrosion protection is important.
- Durable corrosion-proof polymer housing with stainless-steel crush bushings in mounting holes and a stainless-steel grease fitting with a nylon cap.
- Polymer resists a broad range of acids and alkalis, as well as steam and continuous temperature up to 121° C (250° F), and brief exposure up to 160° C (320° F).
- The polymer strength exceeds static capacity of bearing; housing retains proper bearing fit and resists shock loads.
- The flush base contains no voids where bacteria can collect.
- Corrosion-resistant insert bearing with stainless-steel balls and a nylon retainer. The PT series also features industrial-duty contact seals with stainless-steel shroud caps.
- This unit has stainless-steel set screws with Shaft Guarding Technology.
- This unit is factory lubricated with FDA/USDA-approved grease (class H1 lubricant) for incidental food contact.



Unit	Shaft Dia.	Type	L	J	E	Static Load Rating	Dynamic Load Rating	Speed Rating	Bearing No.	
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.	RPM		
YCJ	3/4 **20**	PT SGT	**85.73** 3 3/8	**63.50** 2 1/2	**38.10** 1 1/2	**6500** 1460	**14500** 3250	9200 8800	GY1012KRRB GYE20KRRB	TDCF SGT TDCF SGT
YCJ	1 **25**	PT SGT	**95.25** 3 3/4	**69.85** 2 49/64	**39.69** 1 9/16	**7700** 1730	**15800** 3550	6900 7000	GY1100KRRB GYE25KRRB	TDCF SGT TDCF SGT
YCJ	1 3/16 1 1/4S **30**	PT SGT PT PT SGT	**107.95** 4 1/4	**82.55** 3 1/4	**42.07** 1 21/32	**11100** 2500	**21800** 4900	5800 5500 5800	GY1103KRRB GY1103KRRB3 GYE30KRRB	TDCF SGT TDCF TDCF SGT
YCJ	1 1/4 1 3/8 1 7/16 **35**	PT SGT	**117.48** 4 5/8	**92.08** 3 5/8	**48.42** 1 29/32	**15100** 3400	**28500** 6400	5500 5000 4800 5000	GY1104KRRB GY1106KRRB GY1107KRRB GYE35KRRB	TDCF SGT TDCF SGT TDCF SGT TDCF SGT
YCJ	1 1/2 **40**	PT SGT	**130.18** 5 1/8	**101.60** 4	**53.98** 2 1/8	**19600** 4400	**36300** 8150	4600 4400	GY1108KRRB GYE40KRRB	TDCF SGT TDCF SGT

YCJT SERIES

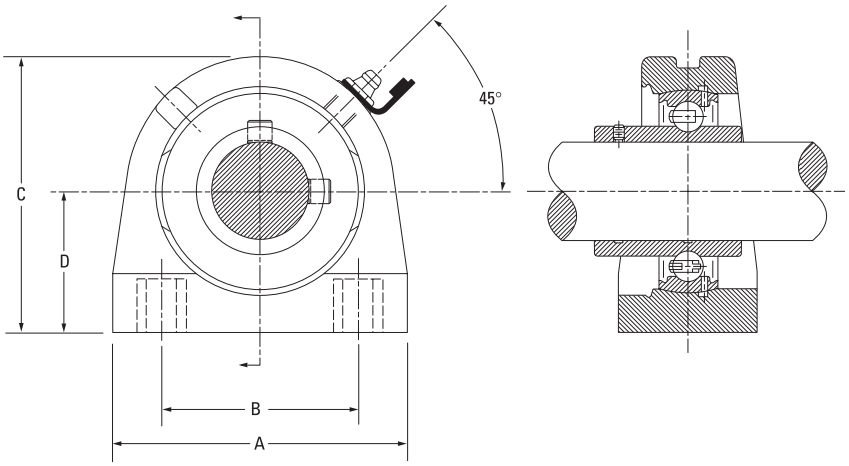
- This unit is used for the main portion of the process where loads are lighter and corrosion protection is important.
- Durable corrosion-proof polymer housing with stainless-steel crush bushings in mounting holes and a stainless-steel grease fitting with a nylon cap.
- Polymer resists a broad range of acids and alkalis, as well as steam and continuous temperature up to 121° C (250° F), and brief exposure up to 160° C (320° F).
- The polymer strength exceeds static capacity of bearing; housing retains proper bearing fit and resists shock loads.
- The flush base contains no voids where bacteria can collect.
- Corrosion-resistant insert bearing with stainless-steel balls and a nylon retainer. The PT series also features industrial-duty contact seals with stainless-steel shroud caps.
- This unit has stainless-steel set screws with Shaft Guarding Technology.
- This unit is factory lubricated with FDA/USDA-approved grease (class H1 lubricant) for incidental food contact.



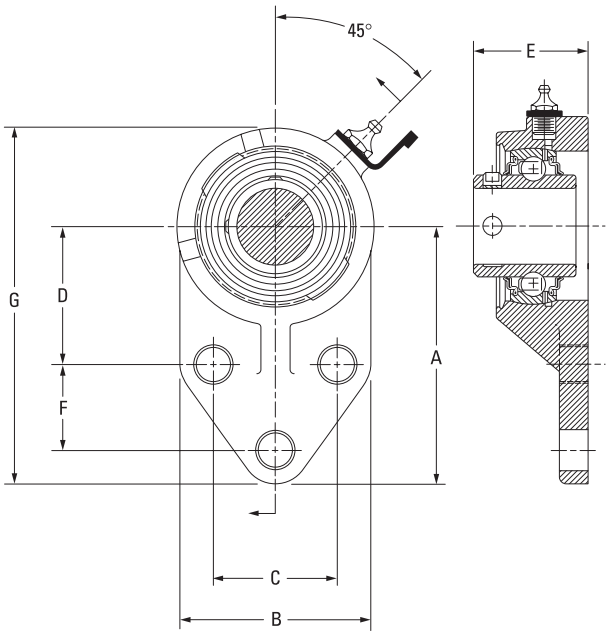
Unit	Shaft Dia.	Type	H	J	L	E	Static Load Rating	Dynamic Load Rating	Speed Rating	Bearing No.	
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.	RPM		
YCJT	3/4 **20**	PT SGT	**111.92** 4 13/32	**89.69** 3 17/32	**60.33** 2 3/8	**38.10** 1 1/2	**6500** 1460	**14500** 3250	9200 8800	GY1012KRRB GYE20KRRB	TDCF SGT TDCF SGT
YCJT	1 **25**	PT SGT	**123.83** 4 7/8	**99.22** 3 29/32	**69.85** 2 3/4	**39.69** 1 9/16	**7700** 1730	**15800** 3550	6900 7000	GY1100KRRB GYE25KRRB	TDCF SGT TDCF SGT
YCJT	1 3/16 1 1/4S **30**	PT SGT PT PT SGT	**141.29** 5 9/16	**116.68** 4 19/32	**79.38** 3 1/8	**42.07** 1 21/32	**11100** 2500	**21800** 4900	5800 5500 5800	GY1103KRRB GY1103KRRB3 GYE30KRRB	TDCF SGT TDCF TDCF SGT
YCJT	1 1/4 1 3/8 1 7/16 **35**	PT SGT	**155.58** 6 1/8	**130.18** 5 1/8	**92.08** 3 5/8	**48.42** 1 29/32	**15100** 3400	**28500** 6400	5500 5000 4800 5000	GY1104KRRB GY1106KRRB GY1107KRRB GYE35KRRB	TDCF SGT TDCF SGT TDCF SGT TDCF SGT
YCJT	1 1/2 **40**	PT SGT	**171.45** 6 3/4	**143.67** 5 21/32	**104.78** 4 1/8	**53.98** 2 1/8	**19600** 4400	**36300** 8150	4600 4400	GY1108KRRB GYE40KRRB	TDCF SGT TDCF SGT

YTB AND YFB SERIES

- This unit is used for the main portion of the process where loads are lighter and corrosion protection is important.
- Durable corrosion-proof polymer housing with stainless-steel crush bushings in mounting holes and a stainless-steel grease fitting with a nylon cap.
- Polymer resists a broad range of acids and alkalis, as well as steam and continuous temperature up to 121° C (250° F), and brief exposure up to 160° C (320° F).
- The polymer strength exceeds static capacity of bearing; housing retains proper bearing fit and resists shock loads.
- The flush base contains no voids where bacteria can collect.
- Corrosion-resistant insert bearing with stainless-steel balls and a nylon retainer. The PT series also features industrial-duty contact seals with stainless-steel shroud caps.
- This unit has stainless-steel set screws with Shaft Guarding Technology.
- This unit is factory lubricated with FDA/USDA-approved grease (class H1 lubricant) for incidental food contact.



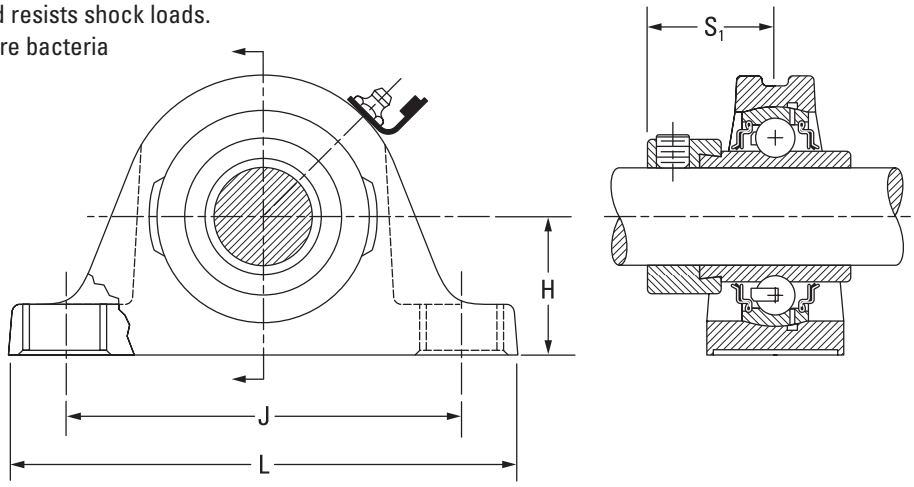
Unit	Shaft Dia.	Type	A	B	C	D	Static Load Rating	Dynamic Load Rating	Speed Rating	Bearing No.	
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.	RPM		
YTB	1	PT SGT	**76.20** 3	**50.80** 2	**71.44** 2 13/16	**36.51** 1 7/16	**7700** 1730	**15800** 3550	6900	GY1100KRRB	TDCF SGT
	25								7000	GYE25KRRB	TDCF SGT



Unit	Shaft Dia.	Type	A	B	C	D	E	F	G	Static Load Rating	Dynamic Load Rating	Speed Rating	Bearing No.	
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.	RPM		
YFB	1	PT SGT	**85.73** 3 3/8	**63.50** 2 1/2	**41.28** 1 5/8	**46.04** 1 13/16	**38.10** 1 1/2	**28.58** 1 1/8	**118.66** 4 43/64	**6900** 1560	**15300** 3450	6900 7000	GY1100KRRB GYE25KRRB	TDCF SGT TDCF SGT
	25													

RAK/S SERIES

- This unit is used for the main portion of the process where loads are lighter and corrosion protection is important.
- Durable corrosion-proof polymer housing with stainless-steel crush bushings in mounting holes and a stainless-steel grease fitting with a nylon cap.
- Polymer resists a broad range of acids and alkalis, as well as steam and continuous temperature up to 121° C (250° F), and brief exposure up to 160° C (320° F).
- The polymer strength exceeds static capacity of bearing; housing retains proper bearing fit and resists shock loads.
- The flush base contains no voids where bacteria can collect.
- Corrosion-resistant insert bearing with stainless-steel balls and a nylon retainer. The PT series also features industrial-duty contact seals with stainless-steel shroud caps.
- This unit has a stainless-steel lock collar.
- This unit is factory lubricated with FDA/USDA-approved grease (class H1 lubricant) for incidental food contact.

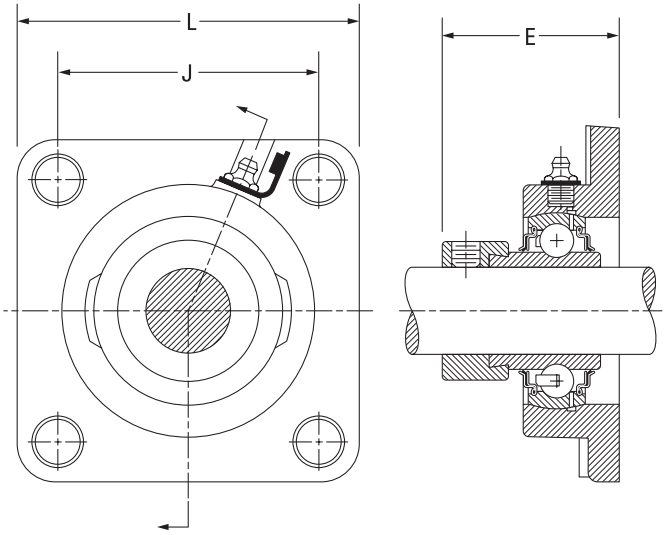


Unit[1]	Shaft Dia.	Type	RAK H	RAS H	J	L	S_1	Static Load Rating	Dynamic Load Rating	Speed Rating	Bearing No.	Collar No.
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.	RPM		
RAK/S	3/4	PT	**31.75** 1 1/4	**33.34** 1 5/16	**96.04** 3 25/32	**127.00** 5	**26.59** 1 3/64	**6500** 1460	**14500** 3250	9200	G1012KRRB TDCF	S1012K SS
RAK/S	1 **25**	PT	**33.34** 1 5/16	**36.51** 1 7/16	**104.78** 4 1/8	**139.70** 5 1/2	**26.99** 1 1/16	**7700** 1730	**15800** 3550	6900 7000	G1100KRRB TDCF GE25KRRB TDCF	S1100K SS SE25K SS
RAK/S	1 3/16 1 1/4S **30**	PT	**39.69** 1 9/16	**42.86** 1 11/16	**117.48** 4 5/8	**157.16** 6 3/16	**30.16** 1 3/16	**11100** 2500	**21800** 4900	5800 5500 5800	G1103KRRB TDCF G1103KRRB3 TDCF GE30KRRB TDCF	S1103K SS S1103K3 SS SE30K SS
RAK/S	1 1/4 1 3/8 1 7/16	PT	**46.04** 1 13/16	**47.63** 1 7/8	**130.18** 5 1/8	**166.69** 6 9/16	**32.54** 1 9/32	**15100** 3400	**28500** 6400	5500 5000 4800	G1104KRRB TDCF G1106KRRB TDCF G1107KRRB TDCF	S1104K SS S1106K SS S1107K SS
RAK/S	1 1/2 **40**	PT	**49.21** 1 15/16	**49.21** 1 15/16	**136.53** 5 3/8	**179.39** 7 1/16	**34.93** 1 3/8	**19600** 4400	**36300** 8150	4600 4400	G1108KRRB TDCF GE40KRRB TDCF	S1108KT SS SE40K SS

[1]Option of low-base RAK or high-base RAS.

RCJ SERIES

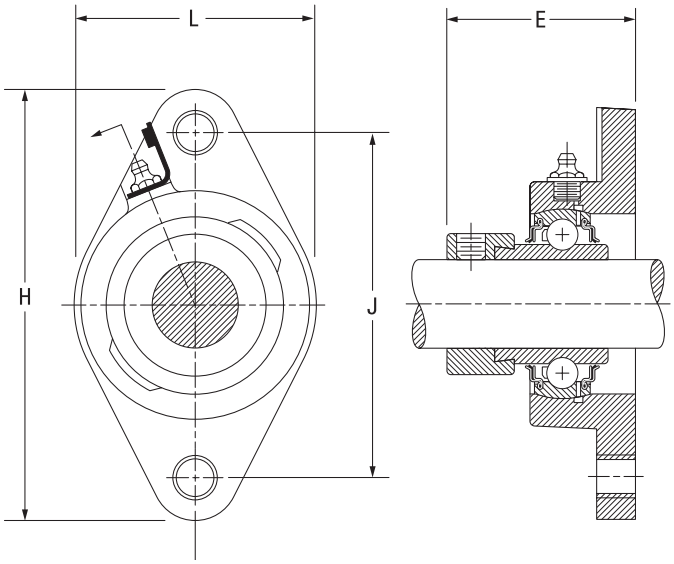
- This unit is used for the main portion of the process where loads are lighter and corrosion protection is important.
- Durable corrosion-proof polymer housing with stainless-steel crush bushings in mounting holes and a stainless-steel grease fitting with a nylon cap.
- Polymer resists a broad range of acids and alkalis, as well as steam and continuous temperature up to 121° C (250° F), and brief exposure up to 160° C (320° F).
- The polymer strength exceeds static capacity of bearing; housing retains proper bearing fit and resists shock loads.
- The flush base contains no voids where bacteria can collect.
- Corrosion-resistant insert bearing with stainless-steel balls and a nylon retainer. The PT series also features industrial-duty contact seals with stainless-steel shroud caps.
- This unit has a stainless-steel lock collar.
- This unit is factory lubricated with FDA/USDA-approved grease (class H1 lubricant) for incidental food contact.



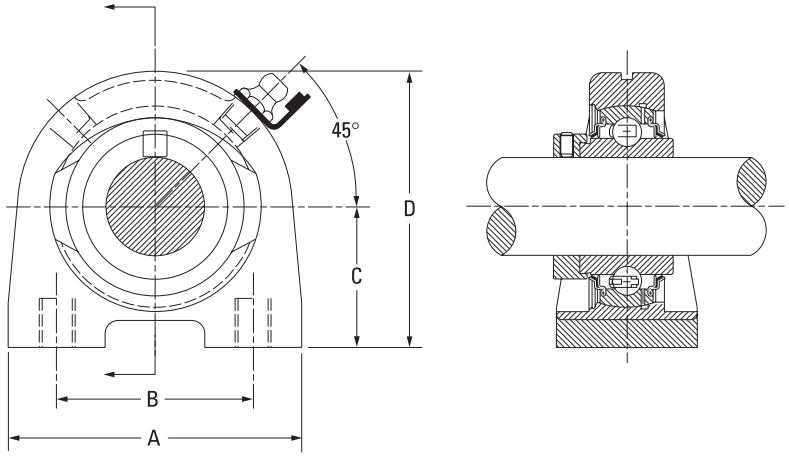
Unit	Shaft Dia.	Type	L	J	E	Static Load Rating	Dynamic Load Rating	Speed Rating	Bearing No.	Collar No.
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.	RPM		
RCJ	¾	PT	**85.73** 3 3/8	**63.50** 2 1/2	**43.26** 1 45/64	**6500** 1460	**14500** 3250	9200	G1012KRRB TDCF	S1012K SS
RCJ	1 **25**	PT	**95.25** 3 3/4	**69.85** 2 3/4	**46.04** 1 13/16	**7700** 1730	**15800** 3550	6900 7000	G1100KRRB TDCF GE25KRRB TDCF	S1100K SS SE25K SS
RCJ	1 3/16 1 1/4S **30**	PT	**107.95** 4 1/4	**82.55** 3 1/4	**49.21** 1 15/16	**11100** 2500	**21800** 4900	5800 5500 5800	G1103KRRB TDCF G1103KRRB3 TDCF GE30KRRB TDCF	S1103K SS S1103K3 SS SE30K SS
RCJ	1 1/4 1 3/8 1 7/16	PT	**117.48** 4 5/8	**92.08** 3 5/8	**52.78** 2 5/64	**15100** 3400	**28500** 6400	5500 5000 4800	G1104KRRB TDCF G1106KRRB TDCF G1107KRRB TDCF	S1104K SS S1106K SS S1107K SS
RCJ	1 1/2 **40**	PT	**130.18** 5 1/8	**101.60** 4	**58.74** 2 5/16	**19600** 4400	**36300** 8150	4600 4400	G1108KRRB TDCF GE40KRRB TDCF	S1108KT SS SE40K SS

RCJT AND RTB SERIES

- This unit is used for the main portion of the process where loads are lighter and corrosion protection is important.
- Durable corrosion-proof polymer housing with stainless steel crush bushings in mounting holes and a stainless-steel grease fitting with a nylon cap.
- Polymer resists a broad range of acids and alkalis, as well as steam and continuous temperature up to 121° C (250° F), and brief exposure up to 160° C (320° F).
- The polymer strength exceeds static capacity of bearing; housing retains proper bearing fit and resists shock loads.
- The flush base contains no voids where bacteria can collect.
- Corrosion-resistant insert bearing with stainless-steel balls and a nylon retainer. The PT series also features industrial-duty contact seals with stainless-steel shroud caps.
- This unit has a stainless-steel lock collar.
- This unit is factory lubricated with FDA/USDA-approved grease (class H1 lubricant) for incidental food contact.



Unit	Shaft Dia.	Type	H	J	L	E	Static Load Rating	Dynamic Load Rating	Speed Rating	Bearing No.	Collar No.
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.	RPM		
RCJT	3/4	PT	**111.92** 4 13/32	**89.69** 3 17/32	**60.5** 2 3/8	**45.24** 1 25/32	**6500** 1460	**14500** 3250	9200	G1012KRRB TDCF	S1012K SS
RCJT	1 **25**	PT	**123.83** 4 7/8	**99.22** 3 29/32	**69.85** 2 3/4	**46.04** 1 13/16	**7700** 1730	**15800** 3550	6900 7000	G1100KRRB TDCF GE25KRRB TDCF	S1100K SS SE25K SS
RCJT	1 3/16 1 1/4S **30**	PT	**141.29** 5 9/16	**116.68** 4 19/32	**79.38** 3 1/8	**49.21** 1 15/16	**11100** 2500	**21800** 4900	5800 5500 5800	G1103KRRB TDCF G1103KRRB3 TDCF GE30KRRB TDCF	S1103K SS S1103K3 SS SE30K SS
RCJT	1 1/4 1 3/8 1 7/16	PT	**155.58** 6 1/8	**130.18** 5 1/8	**92.08** 3 5/8	**52.78** 2 5/64	**15100** 3400	**28500** 6400	5000 4800 5500	G1104KRRB TDCF G1106KRRB TDCF G1107KRRB TDCF	S1104K SS S1106K SS S1107K SS
RCJT	1 1/2 **40**	PT	**171.45** 6 3/4	**143.67** 5 21/32	**104.78** 4 1/8	**58.74** 2 5/16	**19600** 4400	**36300** 8150	4600 4400	G1108KRRB TDCF GE40KRRB TDCF	S1108KT SS SE40K SS



Unit	Shaft Dia.	Type	A	B	C	D	Static Load Rating	Dynamic Load Rating	Limiting Speed	Bearing No.	Collar No.
	in.		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.	RPM		
RTB	1	PT	**76.20** 3	**50.80** 2	**36.51** 1 7/16	**71.44** 2 13/16	**7700** 1730	**15300** 3450	6900	G1100KRRB TDCF	S1100K SS

TIMKEN® SURVIVOR® NT SERIES

Timken® Survivor® NT series housed units offer superior corrosion resistance and durability for food and beverage industries, materials-handling operations, dairy and refrigeration applications, as well as HVAC, chemical, maritime and other highly corrosive environments (fig. A-26). All materials used in the Survivor assemblies, including the grease, are approved for USDA- and FDA-compliant industries (table A-25). The solid base is designed so food particles easily wash out.

Bearing inserts are coated in proprietary Timken thin-dense chrome that will not crack or peel. Combined with stainless-steel locking collars, these offer superior corrosion protection. The robust block option features an electroless nickel-plated housing.

Survivor NT series units are available as:

- High-base and low-base pillow blocks.
- Two-bolt and four-bolt flanged cartridges for popular shaft sizes of ½ in. through 2 15⁄16 in. (and select metric diameters).
- Take-up unit in the Survivor NT series in limited shaft sizes (RTU-NT). The bearing inserts are available with self-locking collars.

The Survivor NT series is dimensionally interchangeable with the current line of Timken cast-iron housed units.

Our bearing inserts are coated in proprietary Timken thin-dense chrome that will not crack or peel. Inserts are available with a self-locking collar or a set screw locking device. Also available is Timken Shaft Guarding Technology (page A-31), which uses a stainless-steel hardened band to transfer gripping pressure on the shaft. Unlike traditional set screws, which can dig into the shaft, there are no nicks, raised metal or permanent shaft damage. The stainless band won't corrode on the shaft. Housed units with Shaft Guarding Technology also reduce change-out time.



Fig. A-26. Popular styles.

TABLE A-25.

NT SERIES	
Component	Material
Balls	Stainless steel
Ball retainer	Nylon
Collar	Stainless steel
Rings	TDC plated
Grease	FDA approved
Housing finish	**Nickel plating**
Grease fitting	Stainless steel
Grease-fitting cover	Nylon
Seals	Synthetic rubber
Seal caps	Stainless steel
Set screw[1]	Stainless steel

[1]Standard Survivor® NT units are only available in the R-series self-locking collar types. Set screw lock series (Y) units are available for minimum quantity orders.

ORDERING INFORMATION

To order complete Survivor nickel-plated assemblies, simply add the NT suffix to the cast-iron housed-unit designations.

Example: **RCJT 1 NT or RAK ¾ NT**

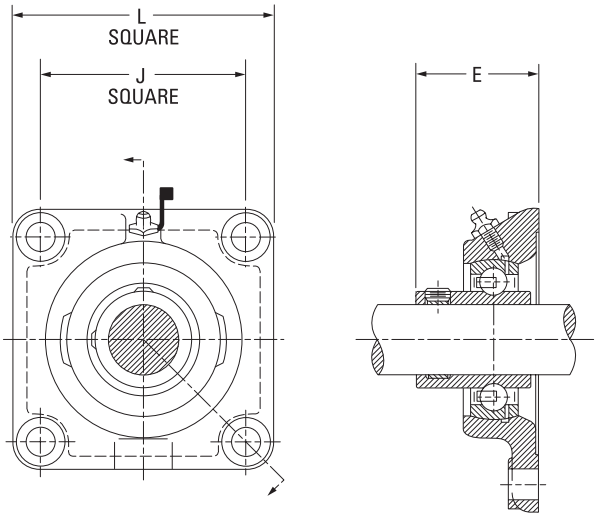
Survivor inserts can be ordered using Timken's standard part number for wide-inner-ring ball bearings with a TDCF suffix.

Example: **G1100KRRB + COL TDCF**

NT

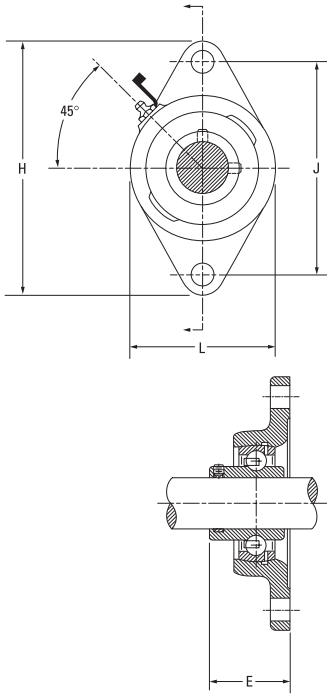
YCJ AND YCJT SERIES

- This unit has the largest variety of configurations and shaft sizes and is used for the heaviest loads at the beginning of processing.
- Corrosion-resistant housing that is electroless nickel-plated and has a stainless-steel grease fitting. The protective cap withstands corrosion and prevents contamination.
- The corrosion-resistant insert bearing has stainless-steel balls with a nylon retainer. It also has industrial-duty contact seals with stainless-steel shroud caps.
- This unit has stainless-steel set screws with Shaft Guarding Technology.
- The unit is factory lubricated with FDA/USDA-approved grease (class H1 lubricant) for incidental food contact.



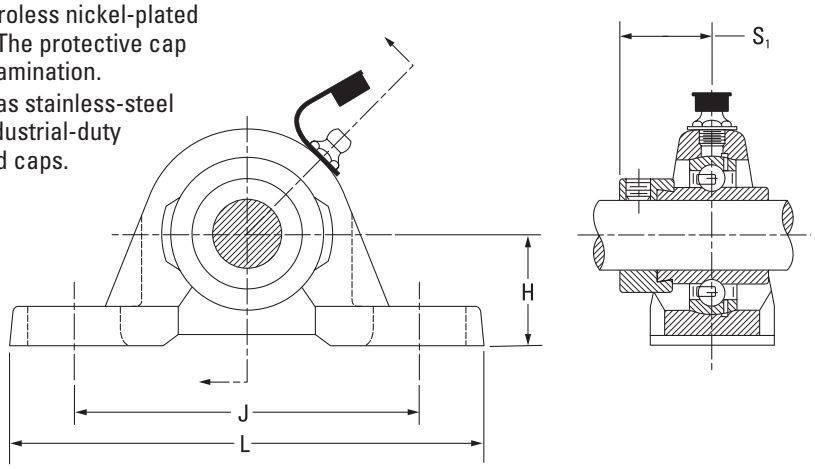
Unit	Shaft Dia.	Type	L	J	E	Static Load Rating	Dynamic Load Rating	Speed Rating	Bearing No.	
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.	RPM		
YCJ	1 **25**	NT SGT	**95.25** 3 3/4	**70.25** 2 49/64	**40.08** 1 37/64	**7700** 1730	**15800** 3550	6900 7000	GY1100KRRB GYE25KRRB	TDCF SGT TDCF SGT
YCJ	1 1/4S **30**	NT SGT	**107.95** 4 1/4	**82.55** 3 1/4	**42.46** 1 43/64	**11100** 2500	**21800** 4900	5500 5800	GY1103KRRB3 GYE30KRRB	TDCF TDCF SGT
YCJ	1 1/4 1 3/8 1 7/16 **35**	NT SGT	**117.48** 4 5/8	**92.08** 3 5/8	**49.21** 1 15/16	**15100** 3400	**28500** 6400	5500 5000 4800 4800	GY1104KRRB GY1106KRRB GY1107KRRB GYE35KRRB	TDCF SGT TDCF SGT TDCF SGT TDCF SGT
YCJ	1 15/16	NT SGT	**142.88** 5 5/8	**111.13** 4 3/8	**60.72** 2 25/64	**22700** 5100	**39100** 8800	3600	GY1115KRRB	TDCF SGT
YCJ	2	NT SGT	**161.93** 6 3/8	**130.18** 5 1/8	**64.69** 2 35/64	**28500** 6400	**48000** 10800	3400	GY1200KRRB	TDCF SGT
YCJ	2 7/16	NT SGT	**174.63** 6 7/8	**142.88** 5 5/8	**74.22** 2 59/64	**35600** 8000	**58700** 13200	2800	GY1207KRRB	TDCF SGT

Unit	Shaft Dia.	Type	H	J	L	E	Static Load Rating	Dynamic Load Rating	Speed Rating	Bearing No.	
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.	RPM		
YCJT	3/4	NT SGT	**111.92** 4 13/32	**89.69** 3 17/32	**60.33** 2 3/8	**38.50** 1 33/64	**6500** 1460	**14500** 3250	9200	G1012KRRB	TDCF SGT
YCJT	1 **25**	NT SGT	**123.83** 4 7/8	**99.22** 3 29/32	**69.85** 2 3/4	**40.08** 1 37/64	**7700** 1730	**15800** 3550	6900 7000	G1100KRRB GE25KRRB	TDCF SGT TDCF SGT
YCJT	1 3/16 1 1/4S **30**	NT SGT NT NT SGT	**141.29** 5 9/16	**116.68** 4 19/32	**79.38** 3 1/8	**43.66** 1 23/32	**11100** 2500	**21800** 4900	5800 5500 5800	G1103KRRB G1103KRRB3 GE30KRRB	TDCF SGT TDCF TDCF SGT
YCJT	1 1/4 1 3/8 1 7/16 **35**	NT SGT	**155.58** 6 1/8	**130.18** 5 1/8	**92.08** 3 5/8	**49.21** 1 15/16	**15100** 3400	**28500** 6400	5500 5000 4800 4800	G1104KRRB G1106KRRB G1107KRRB GE35KRRB	TDCF SGT TDCF SGT TDCF SGT TDCF SGT
YCJT	1 1/2 **40**	NT SGT	**171.45** 6 3/4	**143.67** 5 21/32	**104.78** 4 1/8	**54.37** 2 9/64	**19600** 4400	**36300** 8150	4600 4400	G1108KRRB GE40KRRB	TDCF SGT TDCF SGT
YCJT	1 11/16 1 3/4	NT SGT	**179.39** 7 1/16	**148.03** 5 53/64	**111.13** 4 3/8	**55.56** 2 3/16	**20000** 4500	**36300** 8150	4100 3900	G1111KRRB G1112KRRB	TDCF SGT TDCF SGT
YCJT	1 15/16	NT SGT	**188.91** 7 7/16	**157.16** 6 3/16	**115.89** 4 9/16	**60.72** 2 25/64	**22700** 5100	**39100** 8800	3600	G1115KRRB	TDCF SGT
YCJT	2 3/16	NT SGT	**215.90** 8 1/2	**184.15** 7 1/4	**127.00** 5	**64.69** 2 35/64	**28500** 6400	**48000** 10800	3100	G1203KRRB	TDCF SGT



RAK/S SERIES

- This unit has the largest variety of configurations and shaft sizes and is used for the heaviest loads at the beginning of processing.
- Corrosion-resistant housing that is electroless nickel-plated and has a stainless-steel grease fitting. The protective cap withstands corrosion and prevents contamination.
- The corrosion-resistant insert bearing has stainless-steel balls with a nylon retainer. It also has industrial-duty contact seals with stainless-steel shroud caps.
- This unit has a stainless-steel lock collar.
- The unit is factory lubricated with FDA/USDA-approved grease (class H1 lubricant) for incidental food contact.

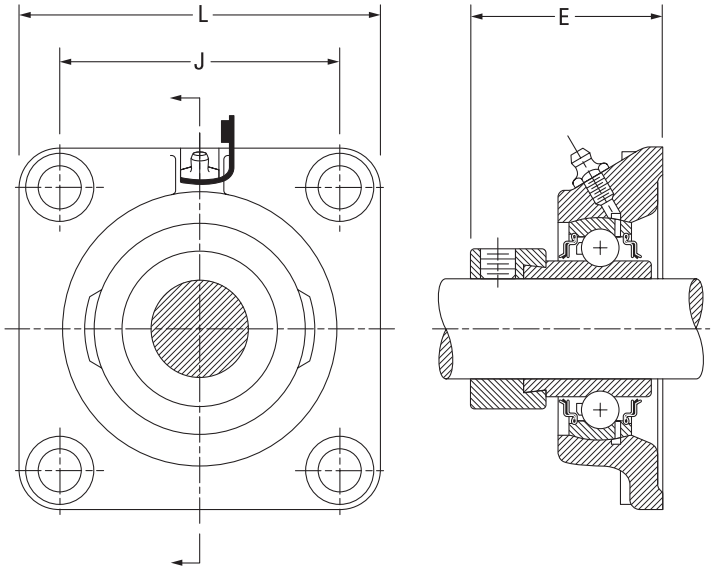


Unit[1]	Shaft Dia.	Type	RAK H	RAS H	J	L	S_1	Static Load Rating	Dynamic Load Rating	Speed Rating	Bearing No.		Collar No.
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.	RPM			
RAK/S	1/2 5/8	NT	**26.99** 1 1/16	**30.16** 1 3/16	**92.08** 3 5/8	**123.83** 4 7/8	**23.42** 59/64	**4700** 1060	**10700** 2400	13800 11000	G1008KRRB G1010KRRB	TDCF TDCF	S1008K SS S1010K SS
RAK/S	3/4	NT	**31.75** 1 1/4	**33.34** 1 5/16	**96.04** 3 25/32	**127.00** 5	**26.59** 1 3/64	**6500** 1460	**14500** 3250	9200	G1012KRRB	TDCF	S1012K SS
RAK/S	1 **25**	NT	**33.34** 1 5/16	**36.51** 1 7/16	**104.78** 4 1/8	**139.70** 5 1/2	**26.99** 1 1/16	**7700** 1730	**15800** 3550	6900 7000	G1100KRRB GE25KRRB	TDCF TDCF	S1100K SS SE25K SS
RAK/S	1 3/16 1 1/4S **30**	NT	**39.69** 1 9/16	**42.86** 1 11/16	**117.48** 4 5/8	**157.16** 6 3/16	**30.16** 1 3/16	**11100** 2500	**21800** 4900	5800 5500 5800	G1103KRRB G1103KRRB3 GE30KRRB	TDCF TDCF TDCF	S1103K SS S1103K3 SS SE30K SS
RAK/S	1 1/4 1 3/8 1 7/16	NT	**46.04** 1 13/16	**47.63** 1 7/8	**130.18** 5 1/8	**166.69** 6 9/16	**32.54** 1 9/32	**15100** 3400	**28500** 6400	5500 5000 4800	G1104KRRB G1106KRRB G1107KRRB	TDCF TDCF TDCF	S1104K SS S1106K SS S1107K SS
RAK/S	1 1/2 **40**	NT	**49.21** 1 15/16	**49.21** 1 15/16	**136.53** 5 3/8	**179.39** 7 1/16	**34.93** 1 3/8	**19600** 4400	**36300** 8150	4600 4400	G1108KRRB GE40KRRB	TDCF TDCF	S1108KT SS SE40K SS
RAK/S	1 11/16 1 3/4	NT	**52.39** 2 1/16	**53.98** 2 1/8	**149.23** 5 7/8	**191.29** 7 17/32	**34.93** 1 3/8	**20000** 4500	**36300** 8150	4100 3900	G1111KRRB G1112KRRB	TDCF TDCF	S1111K SS S1112K SS
RAK/S	1 15/16	NT	**55.56** 2 3/16	**57.15** 2 1/4	**157.96** 6 7/32	**200.03** 7 7/8	**38.10** 1 1/2	**22700** 5100	**39100** 8800	3600	G1115KRRB	TDCF	S1115K SS
RAK/S	2 2 3/16	NT	**61.91** 2 7/16	**63.50** 2 1/2	**176.21** 6 15/16	**222.25** 8 3/4	**43.66** 1 23/32	**28500** 6400	**48000** 10800	3400 3100	G1200KRRB G1203KRRB	TDCF TDCF	S1200K SS S1203K SS
RAK/S	2 7/16	NT	**68.26** 2 11/16	**69.85** 2 3/4	**188.12** 7 13/32	**239.71** 9 7/16	**46.83** 1 27/32	**35600** 8000	**58700** 13200	2800	G1207KRRB	TDCF	S1207K SS
RAK/S	2 11/16	NT	**76.20** 3	–	**203.20** 8	**266.70** 10 1/2	**51.59** 2 1/32	**42900** 9650	**69400** 15600	2600	G1211KRRB	TDCF	S1211K SS
RAK/S	2 15/16	NT	**84.14** 3 5/16	**82.55** 3 1/4	**241.30** 9 1/2	**304.80** 12	**54.77** 2 5/32	**43600** 9800	**69400** 15600	2300	G1215KRRB	TDCF	S1215K SS

[1]Option of low-base RAK or high-base RAS.

RCJ SERIES

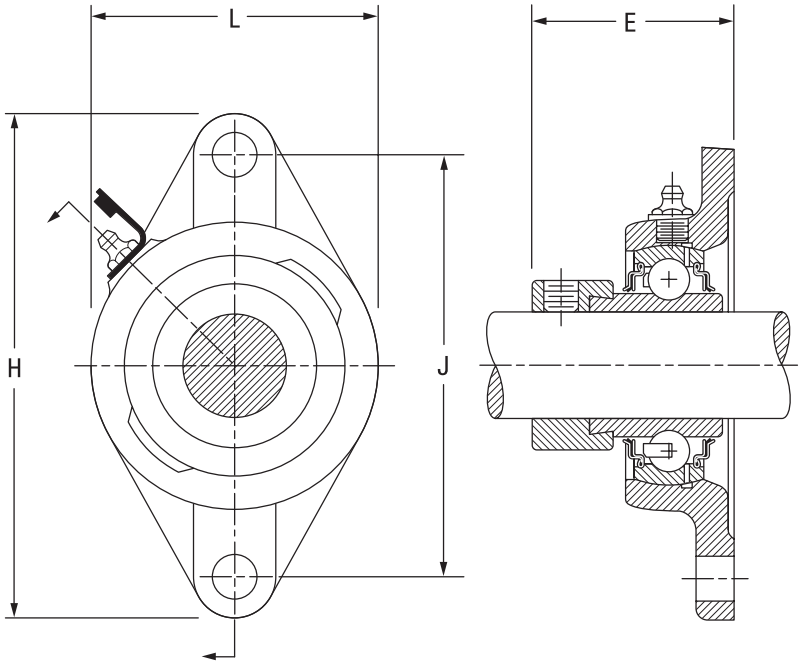
- This unit has the largest variety of configurations and shaft sizes and is used for the heaviest loads at the beginning of processing.
- Corrosion-resistant housing that is electroless nickel-plated and has a stainless-steel grease fitting. The protective cap withstands corrosion and prevents contamination.
- The corrosion-resistant insert bearing has stainless-steel balls with a nylon retainer. It also has industrial-duty contact seals with stainless-steel shroud caps.
- This unit has a stainless-steel lock collar.
- The unit is factory lubricated with FDA/USDA-approved grease (class H1 lubricant) for incidental food contact.



Unit	Shaft Dia.	Type	L	J	E	Static Load Rating	Dynamic Load Rating	Speed Rating	Bearing No.	Collar No.
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.	RPM		
RCJ	1/2 5/8	NT	**76.20** 3	**53.98** 2 1/8	**40.10** 1 19/32	**4700** 1060	**10700** 2400	13800 11000	G1008KRRB TDCF G1010KRRB TDCF	S1008K SS S1010K SS
RCJ	3/4	NT	**85.73** 3 3/8	**63.50** 2 1/2	**46.43** 1 53/64	**6500** 1460	**14500** 3250	9200	G1012KRRB TDCF	S1012K SS
RCJ	1 **25**	NT	**95.25** 3 3/4	**69.85** 2 3/4	**46.80** 1 27/32	**7700** 1730	**15800** 3550	6900 7000	G1100KRRB TDCF GE25KRRB TDCF	S1100K SS SE25K SS
RCJ	1 3/16 1 1/4S **30**	NT	**107.95** 4 1/4	**82.55** 3 1/4	**50.80** 2	**11100** 2500	**21800** 4900	5800 5500 5800	G1103KRRB TDCF G1103KRRB3 TDCF GE30KRRB TDCF	S1103K SS S1103K3 SS SE30K SS
RCJ	1 1/4 1 3/8 1 7/16	NT	**117.48** 4 5/8	**92.08** 3 5/8	**53.58** 2 7/64	**15100** 3400	**28500** 6400	5500 5000 4800	G1104KRRB TDCF G1106KRRB TDCF G1107KRRB TDCF	S1104K SS S1106K SS S1107K SS
RCJ	1 1/2 **40**	NT	**130.18** 5 1/8	**101.60** 4	**59.13** 2 21/64	**19600** 4400	**36300** 8150	4600 4400	G1108KRRB TDCF GE40KRRB TDCF	S1108KT SS SE40K SS
RCJ	1 11/16 1 3/4	NT	**136.53** 5 3/8	**104.78** 4 1/8	**59.13** 2 21/64	**20000** 4500	**36300** 8150	4100 3900	G1111KRRB TDCF G1112KRRB TDCF	S1111K SS S1112K SS
RCJ	1 15/16	NT	**142.88** 5 5/8	**111.13** 4 3/8	**66.68** 2 5/8	**22700** 5100	**39100** 8800	3600	G1115KRRB TDCF	S1115K SS
RCJ	2 2 3/16	NT	**161.93** 6 3/8	**130.18** 5 1/8	**75.41** 2 31/32	**28500** 6400	**48000** 10800	3400 3100	G1200KRRB TDCF G1203KRRB TDCF	S1200K SS S1203K SS
RCJ	2 7/16	NT	**174.63** 6 7/8	**142.88** 5 5/8	**81.76** 3 7/32	**35600** 8000	**58700** 13200	2800	G1207KRRB TDCF	S1207K SS
RCJ	2 11/16	NT	**187.33** 7 3/8	**149.23** 5 7/8	**90.49** 3 9/16	**42900** 9650	**69400** 15600	2600	G1211KRRB TDCF	S1211K SS
RCJ	2 15/16	NT	**196.85** 7 3/4	**152.40** 6	**96.84** 3 13/16	**43600** 9800	**69400** 15600	2300	G1215KRRB TDCF	S1215K SS

RCJT SERIES

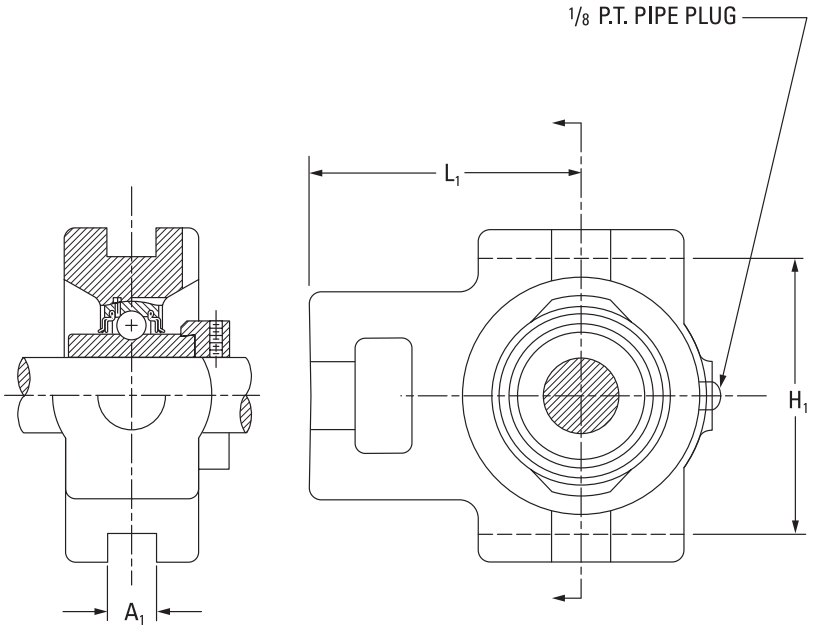
- This unit has the largest variety of configurations and shaft sizes and is used for the heaviest loads at the beginning of processing.
- Corrosion-resistant housing that is electroless nickel-plated and has a stainless-steel grease fitting. The protective cap withstands corrosion and prevents contamination.
- The corrosion-resistant insert bearing has stainless-steel balls with a nylon retainer. It also has industrial-duty contact seals with stainless-steel shroud caps.
- This unit has a stainless-steel lock collar.
- The unit is factory lubricated with FDA/USDA-approved grease (class H1 lubricant) for incidental food contact.



Unit	Shaft Dia.	Type	H	J	L	E	Static Load Rating	Dynamic Load Rating	Speed Rating	Bearing No.		Collar No.
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.	RPM			
RCJT	1/2	NT	**98.43** 3 7/8	**76.20** 3	**54.0** 2 1/8	**40.61** 1 39/64	**4700** 1060	**10700** 2400	13800 11000	G1008KRRB G1010KRRB	TDCF TDCF	S1008K SS S1010K SS
RCJT	3/4	NT	**111.92** 4 13/32	**89.69** 3 17/32	**60.5** 2 3/8	**46.43** 1 53/64	**6500** 1460	**14500** 3250	9200	G1012KRRB	TDCF	S1012K SS
RCJT	1 **25**	NT	**123.83** 4 7/8	**99.22** 3 29/32	**69.85** 2 3/4	**46.83** 1 27/32	**7700** 1730	**15800** 3550	6900 7000	G1100KRRB GE25KRRB	TDCF TDCF	S1100K SS SE25K SS
RCJT	1 3/16 1 1/4S **30**	NT	**141.29** 5 9/16	**116.68** 4 19/32	**79.38** 3 1/8	**50.80** 2	**11100** 2500	**21800** 4900	5800 5500 5800	G1103KRRB G1103KRRB3 GE30KRRB	TDCF TDCF TDCF	S1103K SS S1103K3 SS SE30K SS
RCJT	1 1/4 1 3/8 1 7/16	NT	**155.58** 6 1/8	**130.18** 5 1/8	**92.08** 3 5/8	**53.58** 2 7/64	**15100** 3400	**28500** 6400	5500 5000 4800	G1104KRRB G1106KRRB G1107KRRB	TDCF TDCF TDCF	S1104K SS S1106K SS S1107K SS
RCJT	1 1/2 **40**	NT	**171.45** 6 3/4	**143.67** 5 21/32	**104.78** 4 1/8	**59.13** 2 21/64	**19600** 4400	**36300** 8150	4600 4400	G1108KRRB GE40KRRB	TDCF TDCF	S1108KT SS SE40K SS
RCJT	1 11/16 1 3/4	NT	**179.39** 7 1/16	**148.03** 5 27/32	**111.13** 4 3/8	**59.13** 2 21/64	**20000** 4500	**36300** 8150	4100 3900	G1111KRRB G1112KRRB	TDCF TDCF	S1111K SS S1112K SS
RCJT	1 15/16	NT	**188.91** 7 7/16	**157.16** 6 3/16	**115.89** 4 9/16	**66.68** 2 5/8	**22700** 5100	**39100** 8800	3600	G1115KRRB	TDCF	S1115K SS
RCJT	2 2 3/16	NT	**215.90** 8 1/2	**184.15** 7 1/4	**127.00** 5	**75.41** 2 31/32	**28500** 6400	**48000** 10800	3400 3100	G1200KRRB G1203KRRB	TDCF TDCF	S1200K SS S1203K SS

RTU SERIES

- This unit has the largest variety of configurations and shaft sizes and is used for the heaviest loads at the beginning of processing.
- Corrosion-resistant housing that is electroless nickel-plated and has a stainless-steel grease fitting. The protective cap withstands corrosion and prevents contamination.
- The corrosion-resistant insert bearing has stainless-steel balls with a nylon retainer. It also has industrial-duty contact seals with stainless-steel shroud caps.
- This unit has a stainless-steel lock collar.
- The unit is factory lubricated with FDA/USDA-approved grease (class H1 lubricant) for incidental food contact.

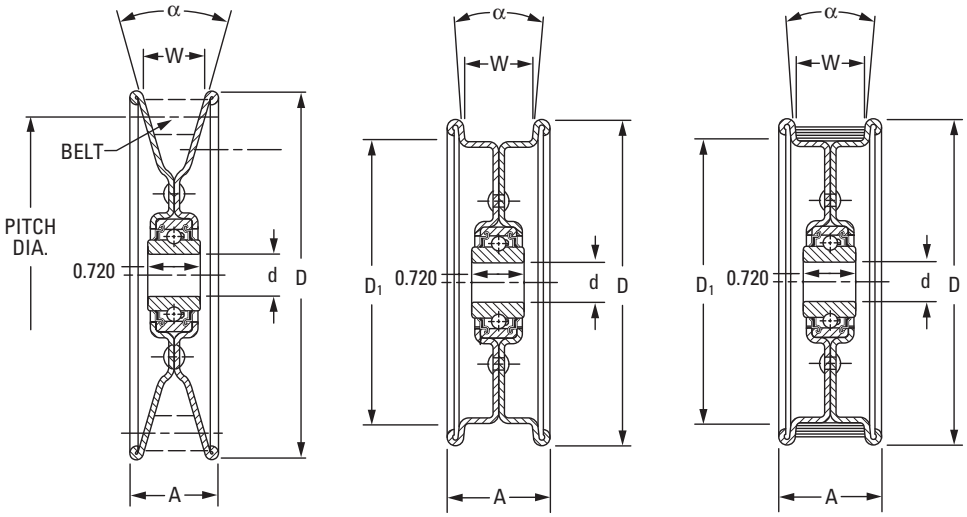


Unit	Shaft Dia.	Type	A_1	H_1	L_1	Static Load Rating	Dynamic Load Rating	Speed Rating	Bearing No.	Collar No.
	in. **mm**		**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**N** lbs.	RPM		
RTU	1 **25**	NT	**13.49** 17/32	**76.20** 3	**67.47** 2 21/32	**7700** 1730	**15300** 3450	6900 7000	G1100KRRB TDCF GE25KRRB TDCF	S1100K SS SE25K SS
RTU	1 3/16 **30**	NT	**13.49** 17/32	**88.90** 3 1/2	**72.23** 2 27/32	**11100** 2500	**21800** 4900	5800 5800	G1103KRRB TDCF GE30KRRB TDCF	S1103K SS SE30K SS
RTU	1 1/4 1 7/16	NT	**13.49** 17/32	**88.90** 3 1/2	**74.61** 2 15/16	**15100** 3400	**28500** 6400	5500 4800	G1104KRRB TDCF G1107KRRB TDCF	S1104K SS S1107K SS
RTU	1 1/2 **40**	NT	**17.46** 11/16	**100.81** 3 31/32	**88.11** 3 15/32	**19600** 4400	**36300** 8150	4600 4400	G1108KRRB TDCF GE40KRRB TDCF	S1108KT SS SE40K SS
RTU	1 11/16 1 3/4	NT	**17.46** 11/16	**100.81** 3 31/32	**88.11** 3 15/32	**20000** 4500	**36300** 8150	4100 3900	G1111KRRB TDCF G1112KRRB TDCF	S1111K SS S1112K SS
RTU	1 15/16	NT	**17.46** 11/16	**100.81** 3 31/32	**91.28** 3 19/32	**22700** 5100	**39100** 8800	3600	G1115KRRB TDCF	S1115K SS
RTU	2 2 3/16	NT	**26.99** 1 1/16	**129.38** 5 3/32	**119.86** 4 23/32	**28500** 6400	**48000** 10800	3400 3100	G1200KRRB TDCF G1203KRRB TDCF	S1200K SS S1203K SS
RTU	2 7/16	NT	**26.99** 1 1/16	**129.38** 5 3/32	**119.86** 4 23/32	**35600** 8000	**58700** 13200	2800	G1207KRRB TDCF	S1207K SS

MISCELLANEOUS HOUSED UNITS
IDLER PULLEY UNITS

- A pressed-steel pulley and a Timken® precision ball bearing with rubber seals are combined to make a self-contained unit.
- Two pulley designs are available. One for V-belts and another for the backs of V-belts. Both are made for A, B, C and D section belts.
- A chain idler, identical in construction to the flat idler, is available, with the addition of an assembled rubber tire (part number A-10927). The rubber tire cushions the chain, preventing undue wear on the pulley surface or chain.
- Idler pulley units feature a Timken® single-row radial ball bearing with an inner ring extended on both sides. This provides clearance for abutting parts and greater support on the shaft.
- Contact-type rubber seals help ensure positive retention for lubricant and full protection against dirt, dust and foreign matter.
- All units are non-relubricatable. Special features include smoothly rolled-over edges, eliminating belt chafing and scuffing. The weep holes on the rivet circle allow water drainage when the pulley is mounted in a horizontal position.

To order, specify PULLEY NUMBER.
Example: 008-10853 Idler Pulley.

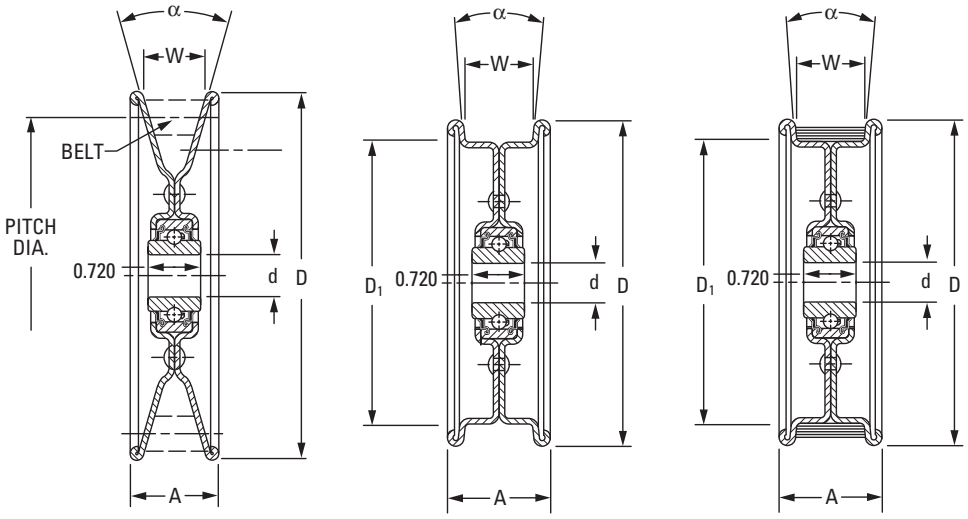


V - IDLER **FLAT - IDLER** **CHAIN - IDLER**

Pulley No.	α Included Angle Degrees	Bearing No.	Bore d	D	A	D_1	W	Wt.
			mm in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg** lbs.
V IDLERS								
006-11520A[1]	32	WS3NPP3	**10.010/9.780** 0.3940/0.3850	**76.2** 3	**19.0** ¾	–	**12.45** 0.049	0.145 0.32
10874[2]	34	203NPP	**17.000/16.993** 0.6693/0.6690	**101.6** 4	**22.2** ⅞	–	**12.70** 0.500	0.417 0.92
010-10874	34	203KRR2	**16.130/16.260** 0.6350/0.6400	**101.6** 4	**22.2** 7.8	–	**12.70** 0.500	0.435 0.96
008-10482	32	203KRR5	**13.080/12.950** 0.5150/0.5100	**128.6** 5 1/16	**31.8** 1 ¼	–	**22.15** 0.872	**0.572** 1.26
010-10482	32	203KRR2	**16.130/16.260** 0.6350/0.6400	**128.6** 5 1/16	**31.8** 1 ¼	–	**22.15** 0.872	**0.558** 1.23
008-10853	32	203KRR5	**13.080/12.950** 0.5150/0.5100	**185.7** 7 5/16	**31.8** 1 ¼	–	**22.15** 0.872	**1.134** 2.50
010-10853	32	203KRR2	**16.13/16.260** 0.6350/0.6400	**185.7** 7 5/16	**31.8** 1 ¼	–	**22.15** 0.872	**1.120** 2.47

[1]Inner ring width 13.891 mm – 13.764 mm; (0.5469 in. – 0.5419 in.)
[2]12 mm (0.4724 in.) inner ring width 11.999 mm – 11.872 mm (0.4724 in. – 0.4674 in.).

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Pulley No.	α Included Angle Degrees	Bearing No.	Bore d	D	A	D_1	W	Wt.
			mm in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**kg** lbs.
FLAT IDLERS								
006-11581A[1]	10	WS3NPP3	**10.01/9.78** 0.394/0.385	**92.1** 3 5/8	**30.6** 1 7/32	**76.2** 3	**22.2** 7/8	**0.259** 0.57
008-10601	10	203KRR5	**13.08/12.95** 0.515/0.510	**117.5** 4 5/8	**36.5** 1 7/16	**101.6** 4	**25.4** 1	**0.503** 1.11
010-10601	10	203KRR2	**16.13/16.26** 0.635/0.640	**117.5** 4 5/8	**36.5** 1 7/16	**101.6** 4	**25.4** 1	**0.490** 1.08
FLAT IDLERS								
008-10483	10	203KRR5	**13.08/12.95** 0.515/0.510	**158.8** 6 1/4	**36.5** 1 7/16	**139.7** 5 1/2	**25.4** 1	**0.803** 1.77
010-10483	10	203KRR2	**16.13/16.26** 0.635/0.640	**158.8** 6 1/4	**36.5** 1 7/16	**139.7** 5 1/2	**25.4** 1	**0.789** 1.74
008-10650	50	203KRR5	**13.08/12.95** 0.515/0.510	**158.8** 6 1/4	**36.5** 1 7/16	**139.7** 5 1/2	**25.4** 1	**0.785** 1.73
010-10650	50	203KRR2	**16.13/16.26** 0.635/0.640	**158.8** 6 1/4	**41.3** 1 7/16	**139.7** 5 1/2	**25.4** 1	**0.771** 1.70
008-11515	10	203KRR5	**13.08/12.95** 0.515/0.510	**222.2** 8 3/4	**35.7** 1 13/32	**203.2** 8	**25.4** 1	**1.238** 2.73
010-11515	10	203KRR2	**16.13/16.26** 0.635/0.640	**222.2** 8 3/4	**35.7** 1 13/32	**203.2** 8	**25.4** 1	**1.225** 2.70
008-10731	10	203KRR5	**13.08/12.95** 0.515/0.510	**222.2** 8 3/4	**48.4** 1 29/32	**203.2** 8	**38.1** 1 1/2	**1.488** 3.38
010-10731	10	203KRR2	**16.13/16.26** 0.635/0.640	**222.2** 8 3/4	**48.4** 1 29/32	**203.2** 8	**38.1** 1 1/2	**1.474** 3.25
CHAIN IDLERS								
008-10927	10	203KRR5	**13.08/12.95** 0.515/0.510	**117.5** 4 5/8	**36.5** 1 7/16	**111.1** 4 3/8	**25.4** 1	**0.576** 1.27
010-10927	10	203KRR2	**16.13/16.26** 0.635/0.640	**117.5** 4 5/8	**36.5** 1 7/16	**111.1** 4 3/8	**25.4** 1	**0.562** 1.24

[1]Inner ring width 13.891 mm – 13.764 mm; (0.5469 in. – 0.5419 in.)
[2]12 mm (0.4724 in.) inner ring width 11.999 mm – 11.872 mm (0.4724 in. – 0.4674 in.).

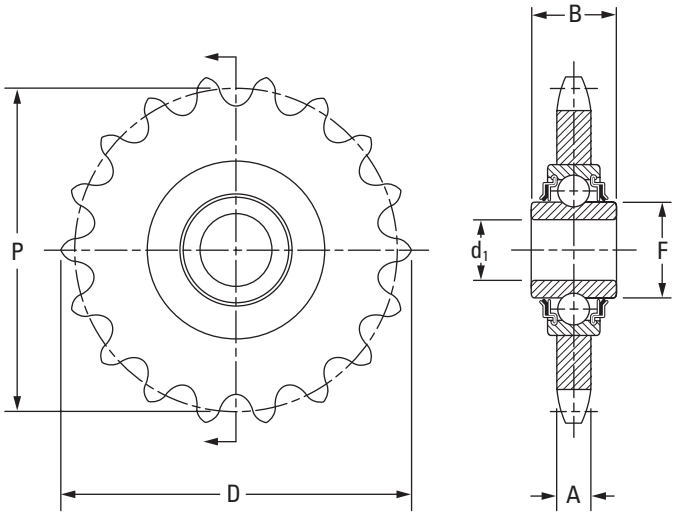
ROLLER CHAIN IDLER SPROCKETS

- The sintered-steel sprockets are hardened and perform well at an economical cost.
- The roller chain idler sprocket replaces the hardened-plate steel sprockets on most applications.
- All units are non-relubricatable.

To order, specify SPROCKET NUMBER.

Example: 010-5017S Idler Sprocket.

Order all bearings with E8728 specification.



Sprocket No.	Bearing No.	Bore d_1	A.S.A. Chain No.	No. of Teeth	Pitch	P	D	A	F	B	Bearing Radial Load Rating @500 RPM	Wt.
		mm in.			**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**mm** in.	**N** lbs.	**kg** lbs.
008-4018-S	203KRR5	**13.08/12.95** 0.5150/0.5000	40	18	**12.7** ½	**73.13** 2.879	**79.88** 3.145	**7.21** 0.284	**24.43** 0.962	**18.29** 0.72	**3550** 800	**0.200** 0.44
008-5017-S	203KRR5	**13.08/12.95** 0.5150/0.5000	50	17	**15.9** ⅝	**86.36** 3.400	**94.72** 3.729	**8.71** 0.343	**24.43** 0.962	**18.29** 0.72	**3550** 800	**0.299** 0.66
008-6015-S	203KRR5	**13.08/12.95** 0.5150/0.5000	60	15	**19.0** ¾	**91.62** 3.607	**101.32** 3.989	**11.66** 0.459	**24.43** 0.962	**18.29** 0.72	**3550** 800	**0.417** 0.92
010-4018-S	203KRR2	**16.26/16.13** 0.6400/0.6350	40	18	**12.7** ½	**73.13** 2.879	**79.88** 3.145	**7.21** 0.284	**24.43** 0.962	**18.29** 0.72	**3550** 800	**0.200** 0.44
010-5017-S	203KRR2	**16.26/16.13** 0.6400/0.6350	50	17	**15.9** ⅝	**86.36** 3.400	**94.72** 3.729	**8.71** 0.343	**24.43** 0.962	**18.29** 0.72	**3550** 800	**0.299** 0.66
010-6015-S	203KRR2	**16.26/16.13** 0.6400/0.6350	60	15	**19.0** ¾	**91.62** 3.607	**101.32** 3.989	**11.66** 0.459	**24.43** 0.962	**18.29** 0.72	**3550** 800	**0.417** 0.92
011H-5017-S	204KRR2	**17.65/17.52** HEX 0.6950/0.6900	50	17	**15.9** ⅝	**86.36** 3.400	**94.72** 3.729	**8.71** 0.343	**28.73** 1.131	**18.29** 0.72	**3550** 800	**0.299** 0.66
011H-6015-S	204RR2	**17.65/17.52** HEX 0.6950/0.6900	60	15	**19.0** ¾	**91.62** 3.607	**101.32** 3.989	**11.66** 0.459	**24.43** 0.962	**18.29** 0.72	**3550** 800	**0.417** 0.92
012-8012-S	204RR6	**19.18/19.05** 0.7500/0.7505	80	12	**25.4** 1	**98.15** 3.864	**110.41** 4.347	**14.60** 0.575	**26.62** 1.048	**15.49** 0.61	**4800** 1080	**0.676** 1.49

REPLACEMENT BEARINGS

TABLE A-26. HOUSED UNIT REPLACEMENT BEARINGS

Housed Units	Replacement Bearing Assembly	Features	Part No.
C	MUB replaced by 1000KRB & Col.	Standard series (SM) wide inner ring (B-type), collar, caps and wire	Example: 2 11/16 in. (uses MUB 2 11/16 in.)
DRNR	1000KR & Col. (Two)	Single R-seal (A-type), complete bearing number marked on seal	Example: DRNR 1 3/16 in. (uses two 1103KR & Col.)
FLCT	RA000RRB & Col.	Non-relubricatable; B-spherical outer ring; RR-double R-seal	Bearing identification marked on seal.
GRFD, GRFDR, GRFTD, GRFTDR	G1000KRRB & Col.	G-relubricatable; B-spherical outer ring; RR-double R-seal	Complete bearing number marked on seal. Example: GRFD 1 3/16 in. (uses G1103KRRB & Col.)
GRKD, GRSD	G1000KRRB & Col.	G-relubricatable; B-spherical outer ring; RR-double R-seal	Complete bearing number marked on seal. Example: GRKD 1 3/16 in. (uses G1103KRRB & Col.)
GVFD, GVFDR, GVFTD, GVFTDR	GRA000RRB & Col.	G-relubricatable; B-spherical outer ring; RR-double R-seal	Bearing identification marked on seal.
GVKD, GVSD	GRA000RRB & Col.	G-relubricatable; B-spherical outer ring; RR-double R-seal	Bearing identification marked on seal.
LAK, LAS	G1000KLLB & Col.	G-relubricatable; B-spherical outer ring; LL-double Mechani-seal	Complete bearing number marked on seal. Example: LAK 1 3/16 in. (uses G1103KLLB & Col.)
LAKHL	1000KLS & Col.	L-single Mechani-seal; S-external self-aligning	Complete bearing number marked on seal. Example: LAKHL 1 3/16 in. (uses 1103KLS & Col.)
LAO, LSAO	GN000KLLB & Col.	G-relubricatable; B-spherical outer ring; LL-double Mechani-seal	Complete bearing number marked on seal. Example: LAO 1 3/16 in. (uses GN103KLLB & Col.)
LCJ, LCJT	G1000KLLB & Col.	G-relubricatable; B-spherical outer ring; LL-double Mechani-seal	Complete bearing number marked on seal. Example: LCJ 1 3/16 in. (uses G1103KLLB & Col.)
LCJO	GN000KLLB	G-relubricatable; N-Heavy series; B-spherical outer ring; LL-double Mechani-seal	Complete bearing number marked on seal. Example: LCJO 1 3/16 in. (uses GN103KLLB & Col.)
PB, PBS, VKD, VSD	RA000RRB & Col.	Non-relubricatable; B-spherical outer ring; RR-double R-seal	Bearing identification marked on seal.
RA Flangette, RAT Flangette	RA000RRB & Col.	Non-relubricatable; B-spherical outer ring; RR-double R-seal	Bearing identification marked on seal.
RA Relubricatable Flangette	GRA000RRB & Col.	G-relubricatable; B-spherical outer ring; RR-double R-seal	To order, specify bearings and markings. Example: 1-GRA103RRB & Col., 1-G62MSA marking, 1-G62MSB marking
RAK, RAS, RAKH, RSA	G1000KRRB & Col.	G-relubricatable; B-spherical outer ring; RR-double R-seal	Complete bearing number marked on seal. Example: RAK 1 3/16 in. (uses G1103KRRB & Col.)
RAKHL	1000KRS & Col	R-Single R-seal; S-external self-aligning	Complete bearing number marked on seal. Example: RAKHL 1 3/16 in. (uses 1103KRS & Col.)
RAKN, RASN	1000KRRB & Col.	Non-relubricatable; B-spherical outer ring; RR-double R-seal	Complete bearing number marked on seal. Example: RAKN 1 3/16 in. (uses 1103KRRB & Col.)
RAO, RSAO	GN000KRRB & Col.	G-relubricatable; B-spherical outer ring; RR-double R-seal	Complete bearing number marked on seal. Example: RSAO 3 3/16 in. (uses GN303KRRB & Col.)
RASC	GC1000KRRB & Col.	G-relubricatable; C-concentric collar; B-spherical outer ring; RR-double R-seal	Complete bearing number marked on seal. Example: RASC 1 3/16 in. (uses GC1103KRRB & Col.)
RCJ, RCJT, RC	G1000KRRB & Col.	G-relubricatable; B-spherical outer ring; RR-double R-seal	Complete bearing number marked on seal. Example: RCJ 1 3/16 in. (uses G1103KRRB & Col.)
RCJN, RR Flangette, RRT Flangette	1000KRRB & Col.	Non-relubricatable; B-spherical outer ring; RR-double R-seal	Complete bearing number marked on seal. Example: RCJN 1 3/16 in. (uses 1103KRRB & Col.)
RFC, RCJC, RCJTC	GC1000KRRB & Col.	G-relubricatable; C-concentric collar; B-spherical outer ring; RR-double R-seal	Complete bearing number marked on seal. Example: 1 3/16 in. (uses GC1103KRRB & Col.)
RFD, RFDR, RFTD, RFTDR	1000KRRB & Col.	Non-relubricatable; B-spherical outer ring; RR-double R-seal	Complete bearing number marked on seal. Example: RFD: 1 3/16 in. (uses 1103KRRB & Col.)

Continued on next page.

Continued from previous page.

Housed Units	Replacement Bearing Assembly	Features	Part No.
RKD, RSD	1000KRRB & Col.	Non-relubricatable; B-spherical outer ring; RR-double R-seal	Complete bearing number marked on seal. Example: RKD 1 3/16 in. (uses 1103KRRB & Col.)
RPB	RABR (shaft size)	Non-relubricatable; B-spherical outer ring; RR-double R-seal	RA000RRB FS-450 Bearing and Col. mounted in rubber interliner. Example: RPB 1 3/16 in. (uses an RABR 1 3/16 in.)
RR Relubricatable Flangette	G1000KRRB & Col.	G-relubricatable; B-spherical outer ring; RR-double R-seal	To order, specify bearing and markings. Example: 1-G1100KRRB & Col., 1-G52MSA marking, 1-G52MSB marking
SA	MUB replaced by 1000KRB & Col.	Standard series (SM) wide-inner-ring ball bearing (B-type), collar, caps and wire	Example: SA 1 3/16 in. (uses MUB 1 3/16 in.)
SAD	MUBD replaced by 1000KRB & Col.	Standard series (SM) wide-inner-ring ball bearing (B-type), dust seal, collar, caps and wire	Example: SA 1 3/16 in. (uses MUB 1 3/16 in.)
SADD	MUBD replaced by N000KRB & Col.	Rear dust seal, otherwise same as SAD	
SAL	SM1000KS & Col.	S-external self-aligning ring	Example: SAL 1 3/16 in. (uses SM1103KS & Col.)
SAO	MUOB replaced by 100KRB & Col.	Heavy series (SMN) wide-inner-ring ball bearing (B-type), collar, caps and wire	Example: SAO 1 3/16 in. (uses MUOB 1 3/16 in.)
SAOD	MUOBD (shaft size}	Heavy series (SMN) wide-inner-ring ball bearing (B-type), dust seal, collar, caps and wire	Example: SAOD 1 3/16 in. (uses MUOBD 1 3/16 in.)
SAODD	MUOBD (shaft size}	Rear dust seal, otherwise same as SAOD	
SAOL	SMN000KS & Col.	S-external self-aligning ring heavy series	Example: SAOL 1 3/16 in. (uses SMN103KS & Col.)
SAS, SAK	GYA000RRB	G-relubricatable; B-spherical outer ring; RR-double R-seal	Bearing identification marked on seal.
SCJ, SCJT	GYA00RRB	G-relubricatable; B-spherical outer ring; RR-double R-seal	Bearing identification marked on seal.
TAK, TAS	G1000KPPB & Col.	G-relubricatable; B-spherical outer ring; PP-Double tri-ply seal	Complete bearing number marked on seal. Example: TAK 1 3/16 in. (uses G1103KPPB3 & Col.)
TCJ, TCJT	G1000KPPB & Col.	G-relubricatable; B-spherical outer ring; PP-Double tri-ply seal	Complete bearing number marked on seal. Example: TCJ 1 3/16 in. (uses G1103KPPB3 & Col.)
VAK, VAS	GRA000RRB & Col.	G-relubricatable; B-spherical outer ring; RR-double R-seal	Bearing identification marked on seal.
VCJ, VCJT	GRA000RRB & Col.	G-relubricatable; B-spherical outer ring; RR-double R-seal	Bearing identification marked on seal.
VFD, VFDR, VFTD, VFTDR	RA000RRB & Col.	Non-relubricatable; B-spherical outer ring; RR-double R-seal	Bearing identification marked on seal.
YAS, YAK, YASM, YCJ, YCJT, YTU	GY-KRRB	G-relubricatable; B-spherical outer ring; RR-double R-seal, Y-series wide inner ring	Bearing identification marked on seal.
OTHER TYPES			
LTU Take-Up	G1000KLLB & Col.	G-relubricatable; B-spherical outer ring; LL-double Mechani-seal	Complete bearing number marked on seal. Example: LTU 1 3/16 in. (uses G1103KLLB & Col.)
RHC, RHCM Hanger	GC1000KRRB & Col.	G-relubricatable; C-concentric collar; B-spherical outer ring; RR-double R-seal	Complete bearing number marked on seal. Example: RCH 1 1/2 in. (uses GC1108KRRB & Col.)
RTU Take-Up	G1000KRRB & Col.	G-relubricatable; B-spherical outer ring; RR-double R-seal	Complete bearing number marked on seal. Example: RTU 1 3/16 in. (uses G1103KRRB & Col.)
STU Take-Up	GYA-RRB	G-relubricatable; B-spherical outer ring; RR-double R-seal	Complete bearing number marked on seal. Example: STU 1 3/16 in. (uses GYA103RRB)
TU Take-Up	MUB replaced by 1000KRB & Col.	Standard series (SM) wide-inner-ring ball bearing (B-type), collar, caps and wire	Example: TU 2 11/16 in. (uses MUB 2 11/16 & Col.)
YTU Take-Up	GY-KRRB	G-relubricatable; B-spherical outer ring; RR-double R-seal; Y-series wide inner ring with set screw lock	Complete bearing number marked on seal. Example: YTU 1 3/16 in. (uses GY1103KRRB)

MACHINE UNITS

A complete machine unit consists of either a standard (SM) or heavy (SMN) series wide-inner-ring ball bearing, an inner and outer sealing cap, a retaining wire and self-locking collar, or an integrally sealed bearing and collar. These units are available as bearing replacements for Timken power transmission units such as the SA, SAO, DSA and DSAO pillow blocks, and C and Co cylindrical cartridges or special housings.

These are available in two types, A and B, as described below.

A-TYPE

Fig. A-27 shows a machine unit with an A-type bearing carrying the designation MUA (standard series) and MUOA (heavy series). It consists of a wide inner ring, open type or one-piece R-seal bearing, collar, caps and wire. The "caps" are two steel members which comprise a non-integral frictionless labyrinth seal. The inner member is pressed on the inner ring and rotates with it. The outer member is pressed in the housing against the face of the outer ring and is held in place by the round retaining wire.

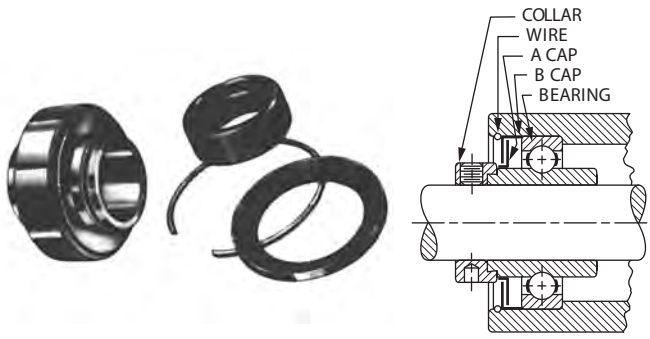


Fig. A-27. MUA, MUOA.

B-TYPE

Fig. A-28 is the same as fig. A-27, except that the bearing is B-type and the seal on the collar side is either a labyrinth seal (as shown) or a one-piece R-seal. In the latter case no wire is supplied. The designation of the machine unit is MUB (standard series) or MUOB (heavy series). The B-type bearing is mounted in the spherical housing seat by means of two slots milled diametrically opposite each other in the housing. The bearing can be inserted at right angles and swiveled into position. No additional shoulders or snap rings are required to locate this type.

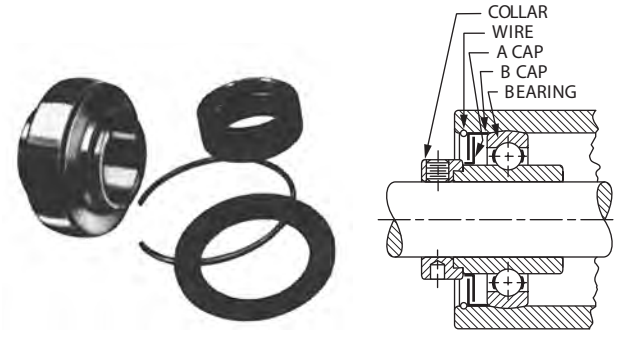


Fig. A-28. MUB, MUOB.

TIMKEN® BALL BEARING HOUSED UNIT SAFETY END CAPS MAKE WORKPLACE PROTECTION A SNAP

Easy-to-install Timken® safety end caps protect exposed rotating shafts, reducing hazards around many types of equipment.

The Timken safety product line consists of a mounting ring and snap-on cover, both molded in durable, bright-yellow polymer. The end cap snaps into the adhesive-backed ring that adheres to the outboard face of most flanged bearing housings. The secure 360-degree fit makes for a rugged unit that also provides basic protection and washdown.

Factory retrofits are a snap with everything provided in a handy kit. The cost-effective end covers are simple-to-install on Timken and most other flanged units. Current sizes range from 20 mm to 50 mm (3/4 in. to 1 15/16 in.) shaft sizes for two or four-bolt flanged cast-iron, malleable iron and other selected housing styles and sizes.



Fig. A-29. Safety end caps protect against rotating stub shafts.

KIT CONTENTS

Timken safety end caps come in a convenient kit that contains everything required for a safe and durable mounting:

- Polymer end cap.
- Adhesive-backed polymer mounting ring.
- Scuffing pad.
- Cleaning cloth.

INSTALLATION

Steps in the simple mounting procedure include:

1. Use the scuffing pad on housing's mating surface where the mounting ring will be placed.
2. Clean off the mounting area.
3. Attach the adhesive-backed mounting ring.
4. Hold the mounting ring in place with pressure for 60 seconds.
5. Allow the adhesive to set for a minimum of one hour.
6. Snap the end cap into place.

ORDERING INFORMATION

TABLE A-27. ORDERING INFORMATION

Kit[1]	Shaft Sizes
204 ECY Kit	**20 mm,** 3/4
205 ECY Kit	**25 mm,** 7/8, 15/16, 1
206 ECY Kit	**30 mm,** 1 1/16, 1 1/8,1 3/16, 1 1/4 S
207 ECY Kit	**35 mm,** 1 1/4, 1 5/16, 1 3/8, 1 7/16,
208 ECY Kit	**40 mm,** 1 1/2
209 ECY Kit	**45 mm,** 1 5/8, 1 11/16, 1 3/4
210 ECY Kit	**50 mm,** 1 15/16, 2 S

[1]Kits are designed to fit the following housed units –
Four-bolt: YCJ, RCJ, RCJC, TCJ, LCJ, SCJ, VCJ
Two-bolt: YCJT, RCJT, RCJTC, TCJT, LCJT, SCJT, VCJT

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