



Bearing Arrangements for the Food Industry

Deep groove ball bearings, radial insert ball bearings, stainless steel housing units, plastic housing units

Technical Product Information

We pioneer motion

SCHAEFFLER

Foreword

Schaeffler products have proved themselves over many years even under critical and challenging application conditions.

In the food and beverage industry, special environmental influences as well as legal or religious requirements call for the use of special high-quality solutions. We now offer an extended range of corrosion-resistant products for the food industry, to satisfy these high demands on corrosion protection, reliability, and service life, as well as the specific lubricant requirements:

- deep groove ball bearings and radial insert ball bearings
- housing units made from stainless steel and plastic

1 Certifications: kosher, halal, NSF H1



00194FB5

Specific lubricants are used in the products that meet the special requirements and approval regulations such as NSF H1. These lubricants are non-toxic and neutral in taste and odor. They are suitable for applications where contact between food and lubricant cannot always be ruled out.

The grease contains only allergen-free ingredients in accordance with Regulation (EC) 1169/2011 and is therefore free of cereals containing gluten, nuts, and milk, for example. In addition, the grease does not contain any components comprising animal or genetically modified organisms.

All other bearing components are, of course, also designed to meet the standards of the food industry. The designations of products for the food industry are distinguished from the standard range by the suffix FD.

2 Areas of application



001E248F

Image top right, source: Krones AG

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1 Deep groove ball bearings

Deep groove ball bearings in FD design are optimized for use in the food industry. They correspond in their structure to single row standard deep groove ball bearings but are specially adapted in relation to:

- suitable materials for the food industry
- significantly higher corrosion and media resistance

Design variants

Deep groove ball bearings in FD design for the food industry are available in the following variant:

- single row, contact seals on both sides

If a longer operating life is also necessary, ceramic rolling elements can replace the steel rolling elements in deep groove ball bearings.

1.1 Bearing design

Single row deep groove ball bearings are the most frequently used type of rolling bearing. They are produced in numerous sizes and designs and are particularly economical. Due to their low frictional torque, they are also suitable for high speeds.

Due to the raceway geometry, the use of balls as rolling elements, and the design without a filling slot, deep groove ball bearings can support axial loads in both directions as well as radial loads.

The angular adjustment facility of single row deep groove ball bearings is limited, so the bearing positions must be well aligned.

Operation even under difficult conditions is ensured by seals that are matched to the application and the use of food-grade greases.

Special characteristics

- bearing rings, cages, and balls made from stainless steel
- highly effective contact seal
- lubrication with food-grade grease

Single row deep groove ball bearings

3 Contact seals on both sides, FD design



0016CA33

Bearing series:

- S60..-FD
- S62..-FD
- S63..-FD

1.2 Corrosion-resistant materials

The bearing rings, cages, and rolling elements are made from stainless steel. The materials used in design FD are resistant to moisture, contaminated water, salt spray mist, and weak alkaline or weak acidic cleaning agents. Upon request, deep groove ball bearings for the food industry are also available as hybrid bearings with ceramic rolling elements made of silicon nitride Si₃N₄.

1 Steels used

Bearing components	Material			
	Designation			Material number
	ISO 683-17	GB/T 1220-2007	AISI	EN 10088-3
Bearing rings	–	95Cr18	–	–
Rolling elements	–	95Cr18	–	–
Cage	X5CrNi18-10	–	304	1.4301

We reserve the right to make technical changes, including material changes, as part of the ongoing development.

Media resistance

In the food industry in particular, the resistance of the material in relation to various cleaning agents is of increasing importance.

2 Resistance to media

Medium		Concentration	X5CrNi18-10 AISI 304		95Cr18	
			+20 °C	+80 °C	+20 °C	+80 °C
			+68 °F	+176 °F	+68 °F	+176 °F
Hydrochloric acid	HCl	0.1	++	++	– ¹⁾	– ¹⁾
		1	+	–	– ¹⁾	– ¹⁾
		18	–	–	– ¹⁾	– ¹⁾
Hydrofluoric acid	HF	1	–	–	– ¹⁾	– ¹⁾
		5	– ¹⁾	–	– ¹⁾	– ¹⁾
Sulfuric acid	H ₂ SO ₄	1	++	–	– ¹⁾	– ¹⁾
		10	+	–	– ¹⁾	– ¹⁾
		96	++	+	– ¹⁾	– ¹⁾
Sulfurous acid	H ₂ SO ₃	1	++	++	–	–
Nitric acid	HNO ₃	5	++	++	o	+
		25	++	++	++	++
		65	++	++	++	++
Phosphoric acid	H ₃ PO ₄	1	++	++	++	++
		10	++	++	+	+
		85	++	++	++	++
Formic acid	HCOOH	5	++	++	–	–
		25	++	++	–	–
Acetic acid	CH ₃ COOH	5	++	++	+	–
		25	++	++	+	–
Citric acid		5	++	++	+	+
		25	++	++	+	o
Chloroacetic acid		5	++	++	+	–
Sodium chloride	NaCl	10	++	++	2)	2)
Seawater		4	++	++	++ ¹⁾	2)
Distilled water		–	++	++	++ ¹⁾	++ ¹⁾
Ammonium hydroxide	NH ₄ OH	1	++	++	++ ¹⁾	++ ¹⁾
		10	++	++	++ ¹⁾	++ ¹⁾
Potassium hydroxide solution	KOH	0.1	++	++	++ ¹⁾	++ ¹⁾
		1	++	++	++ ¹⁾	++ ¹⁾
		10	++	++	++ ¹⁾	++ ¹⁾
Sodium hypochlorite solution		1	++ ¹⁾	++	+	o
Hydrogen peroxide	H ₂ O ₂	5	++	++	2)	2)

- ++ resistant
- + moderately resistant
- o barely resistant
- not resistant

¹⁾ Not tested. Estimate generated from remaining test series.

²⁾ Not tested. No estimate possible.

1.3 Load carrying capacity

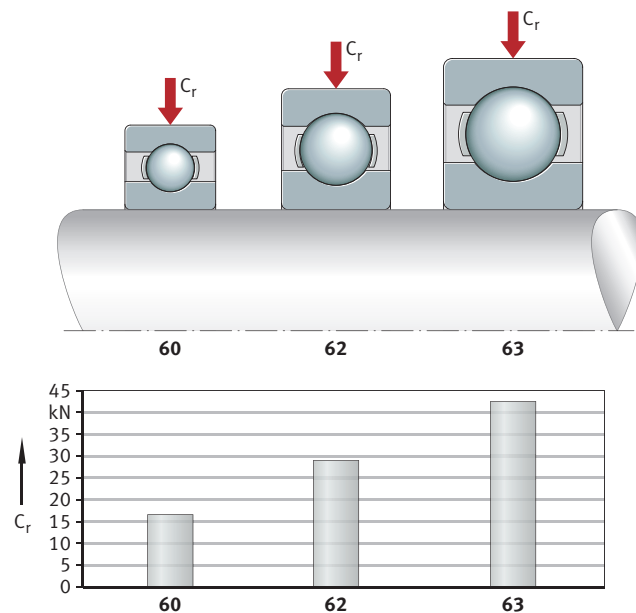
1

Radial load carrying capacity

The balls are in contact with the raceways at 1 point only. Under purely radial load, the contact points between the rolling elements and raceways lie at the center of the raceway. As a result, the connection between the contact points passes through the radial plane, i.e., the optimum load direction is a purely radial load.

The load carrying capacity is dependent on the bearing series and the size of the ball set in the deep groove ball bearings. As a result, the deep groove ball bearing series 60 with a smaller bearing cross-section has a lower load carrying capacity than the standard series 62 with the same dimensions relative to the bore diameter d and a larger ball set. The heavy bearing series 63 with the largest ball set is suitable for even higher loads when used for the same bore diameter.

□4 Single row deep groove ball bearings, comparison of cross-section and load carrying capacity for bearings with $d = 40$ mm



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Axial load carrying capacity

Due to the deep raceway grooves in the bearing rings and the narrow osculation between the raceway grooves and the balls, the bearings can support axial loads in both directions. The axial load carrying capacity is dependent, for example, on the bearing size, the internal construction, and the operating clearance. If the axial load is too high, however, this can increase the running noise and considerably reduce the operating life of the bearings.

If there is any uncertainty regarding the axial load carrying capacity of the bearings, please consult Schaeffler.

1.4 Compensation of angular misalignments

The products are only suitable for compensating static angular misalignments to a very limited extent. As a result, the bearing positions must be well aligned. Misalignments shorten the operating life, as they place an additional strain on the bearing. In order to minimize this strain, only small adjustment angles are permissible, depending on the load.

3 Permissible adjustment angles

Series	Adjustment angle for low loads		Adjustment angle for high loads	
	from	to	from	to
60	2	6	5	10
62	5	10	8	16
63	5	10	8	16

1.5 Lubrication

Food-grade grease application

The high-quality grease used for lubrication is approved for food applications to category NSF H1. The grease is particularly suitable for use in the food industry and meets the quality requirements of FDA 21 CFR 178.3570 in full. Furthermore, the grease is halal and kosher-certified.

A lubricant of class NSF H1 is suitable for applications in which incidental contact between food and lubricant may occur and is unavoidable by technical measures. Such lubricants must be non-toxic and neutral in taste and odor.

The grease contains only allergen-free ingredients in accordance with Regulation (EC) 1169/2011 and is therefore free of cereals containing gluten, nuts, and milk, for example. In addition, the grease does not contain any components comprising animal or genetically modified organisms.

The halal and kosher certification of the lubricant used confirms that the strict halal and kosher criteria are also met in relation to the processing and ingredients of the bearings. These dietary laws of the Muslim and Jewish population not only apply to the actual food and beverages, but also to the machines and environment during manufacture.

5 Certifications

①



②



512687 - DE - 5102

③



Nonfood Compounds
H1

1 kosher	2 halal
3 National Sanitation Foundation (NSF)	

001A75F1

Lubrication of bearings

The bearings are greased using an aluminum complex soap grease with food applications approval to NSF H1, which is characterized by very good water and chemical resistance. The grease filling is measured so that it is sufficient for the entire life of the bearing. As a result, these bearings are generally maintenance-free.

Do not wash greased bearings out prior to mounting. If mounting is carried out using thermal tools, the bearings should be heated to a maximum temperature of +80 °C (+176 °F), taking account of the grease filling and seal material. If higher heating temperatures are required, it must be ensured that the permissible upper temperature limits for greases and seals are observed.

Schaeffler recommends the use of induction heating devices for heating purposes, see MH 1, Mounting Handbook.

1.6 Sealing

As standard, bearings for the food industry are sealed on both sides with contact seals made of NBR. These seals are elastomer lip seals with a sheet steel reinforcement and have the suffix 2RSR.

4 Seal type

Seal RSR



single piece, sheet steel washer with vulcanized and radially preloaded seal lip made of NBR

! In the case of direct exposure to spray water, prior consultation with Application Engineering is required. For any queries regarding resistance to specific media, please consult Application Engineering.

1.7 Speeds

The product tables give the limiting speed n_G .

! The limiting speed n_G is the kinematically permissible speed of the bearing. Even under favorable mounting and operating conditions, this value should only be exceeded following prior consultation with Schaeffler.

If the application renders it necessary to exceed the specified speed limits, please contact Schaeffler Application Engineering.

1.8 Temperature range

Deep groove ball bearings with seals can be used at operating temperatures of -30 °C to +100 °C (-22 °F to +210 °F), restricted by the grease.

1.9 Internal clearance

Deep groove ball bearings of basic design are manufactured as standard with the radial internal clearance CN (Normal). CN is not stated in the designation.

Certain sizes are also available by agreement with the smaller internal clearance C2 and with the larger internal clearance C3 and C4.

The values for radial internal clearance correspond to DIN 620-4:2004 (ISO 5753-1:2009). The values are valid for bearings which are free from load and measurement forces, i.e., without elastic deformation.

5 Radial internal clearance

d		C2 (Group 2)		CN (Group N)		C3 (Group 3)		C4 (Group 4)	
mm		μm		μm		μm		μm	
>	≤	min.	max.	min.	max.	min.	max.	min.	max.
1.5	6	0	7	2	13	8	23	–	–
6	10	0	7	2	13	8	23	14	29
10	18	0	9	3	18	11	25	18	33
18	24	0	10	5	20	13	28	20	36
24	30	1	11	5	20	13	28	23	41
30	40	1	11	6	20	15	33	28	46
40	50	1	11	6	23	18	36	30	51

d mm Nominal bore diameter

1.10 Dimensions, tolerances

The main dimensions of the single row deep groove ball bearings correspond to DIN 625-1:2011. The nominal dimensions of the single row deep groove ball bearings are listed in the product table ►20 | 1.17.2.

Chamfer dimensions

The limiting dimensions for chamfer dimensions correspond to DIN 620-6:2004. For an overview and limiting values, please refer to Catalog HR 1, Rolling Bearings. The nominal dimensions for chamfer dimensions are listed in the product table ►20 | 1.17.2.

Tolerances

The tolerances for the dimensional and running accuracy of deep groove ball bearings correspond to tolerance class Normal in accordance with ISO 492.

1.11 Structure of the ordering designation

6

Designation structure: deep groove ball bearings for the food industry

S

62

10

2RSR

FD

C2

Suffix

S Stainless steel

HC Hybrid bearings with ceramic balls made from Si₃N₄, available on request

Dimension series

... e.g., 62 → width series 6, diameter series 2

Bearing bore code

00...03 00 → d = 10 mm, 01 → d = 12 mm, 02 → d = 15 mm, 03 → d = 17 mm

04...10 e.g., 10 → bore diameter d = 10 · 5 mm = 50 mm

Seal type

2RSR Radial contact NBR lip seal on both sides

Special version

FD Suitable for applications in the food industry

Radial internal clearance

- Standard: Group N (no specification)

C2 Group 2 (< Group N), available on request

C3 Group 3 (> Group N), available on request

C4 Group 4 (> Group 3), available on request

001DFC86

1.12 Dimensioning

Equivalent dynamic bearing load

The basic rating life equation $L = (C_r/P)^P$ used in the dimensioning of bearings under dynamic load assumes a load of constant magnitude and direction. In radial bearings, this is a purely radial load F_r . If such a load is present, the bearing load F_r is used in the rating life equation for P ($P = F_r$).

If a load of constant magnitude and direction is not present, a constant radial force must first be determined for the rating life calculation that, in relation to the rating life, represents an equivalent load. This force is known as the equivalent dynamic bearing load P .

The calculation of P is dependent on the load ratio F_a/F_r and the calculation factor e :

f1

Equivalent dynamic load

$$\frac{F_a}{F_r} \leq e \Rightarrow P = F_r$$

f2

Equivalent dynamic load

$$\frac{F_a}{F_r} > e \Rightarrow P = X \cdot F_r + Y \cdot F_a$$

e	-	Calculation factor: Limiting value for F_a/F_r
F_a	N	Axial load
F_r	N	Radial load
P	N	Equivalent dynamic bearing load
X	-	Dynamic radial load factor
Y	-	Dynamic axial load factor

The specified values are valid for normal operating clearance. If the operating clearance varies significantly, Schaeffler recommends using Bearinx to calculate the rating life. If the calculation values lie between the stated values (such as 0.4), then read off the table values for 0.3 and 0.5 and determine the intermediate values using linear interpolation.

For normal operating clearance, observe the fit recommendations in Catalog HR 1, Rolling Bearings.

6 Factors e, X, and Y

$\frac{f_0 \cdot F_a}{C_{0r}}$	Factor (for normal operating clearance)		
	e	X	Y
0.3	0.22	0.56	2
0.5	0.24	0.56	1.8
0.9	0.28	0.56	1.58
1.6	0.32	0.56	1.4
3	0.36	0.56	1.2
6	0.43	0.56	1

C_{0r}	N	Basic static load rating, radial
e	–	Calculation factor: Limiting value for F_a/F_r
f_0	–	Calculation factor
F_a	N	Axial load
X	–	Dynamic radial load factor
Y	–	Dynamic axial load factor

Equivalent static bearing load

The calculation of P_0 for deep groove ball bearings under static load is dependent on the load ratio F_{0a}/F_{0r} and the factor 0.8:

f13 Equivalent static load

$$\frac{F_{0a}}{F_{0r}} \leq 0.8 \Rightarrow P_0 = F_{0r}$$

f14 Equivalent static load

$$\frac{F_{0a}}{F_{0r}} > 0.8 \Rightarrow P_0 = 0.6 \cdot F_{0r} + 0.5 \cdot F_{0a}$$

F_{0a}	N	Largest axial load present (maximum load)
F_{0r}	N	Largest radial load present (maximum load)
P_0	N	Equivalent static bearing load

Static load safety factor

In addition to the basic rating life L (L_{10h}), it is also always necessary to check the static load safety factor S_0 :

f15 Static load safety factor

$$S_0 = \frac{C_0}{P_0}$$

C_0	N	Basic static load rating
P_0	N	Equivalent static bearing load
S_0	–	Static load safety factor

1.13 Minimum load

In order that no slippage occurs between the contact partners, the bearings must be constantly subjected to a sufficiently high load. Based on experience, a minimum load of the order of $P > C_{0r}/100$ is required for this purpose. In most cases, however, the radial load is already higher than the requisite minimum load due to the weight of the supported parts and the external forces.

If the minimum radial load is lower than specified above, please consult Schaeffler.

1.14 Design of bearing arrangements

In order to allow full utilization of the load carrying capacity of the bearings and thus also achieve the requisite rating life, the bearing rings must be rigidly and uniformly supported by means of contact surfaces over their entire circumference and over the entire width of the raceway. The seating and contact surfaces should not be interrupted by grooves, holes or other recesses. The accuracy of mating parts must meet specific requirements.

Radial location of bearings, fit recommendations

In addition to supporting the rings adequately, the bearings must also be securely located in a radial direction, to prevent creep of the bearing rings on the mating parts under load. This is generally achieved by means of tight fits between the bearing rings and the mating parts. If the rings are not secured adequately or correctly, this can cause severe damage to the bearings and adjacent machine parts. Influencing factors, such as the conditions of rotation, magnitude of the load, internal clearance, temperature conditions, design of the mating parts, and the mounting and dismounting options must be taken into consideration in the selection of fits.



If shock type loads occur, tight fits in the form of transition fits or interference fits are required to prevent the rings from coming loose at any point.

Axial location of bearings, location methods

A tight fit alone is not normally sufficient to also locate the bearing rings securely on the shaft and in the housing bore in an axial direction. This must usually be achieved by means of an additional axial location or retention method. The axial location of the bearing rings must be matched to the type of bearing arrangement. Shaft and housing shoulders, housing covers, nuts, spacer rings, and retaining rings etc., are fundamentally suitable.

Dimensional accuracy, geometrical accuracy, and running accuracy of cylindrical bearing seats

The accuracy of the cylindrical bearing seat on the shaft and in the housing should correspond to the accuracy of the bearing used. For bearings with the tolerance class Normal, the shaft seat should correspond to a minimum of standard tolerance grade IT6 and the housing seat to a minimum of IT7. Guide values for the geometrical and positional tolerances of bearing seating surfaces and corresponding numerical values for IT grades can be found in the table.

7 Guide values for the geometrical and positional tolerances of bearing seating surfaces

Bearing tolerance class		Bearing seating surface	Load case	Fundamental tolerance grades to ISO 286-1 (IT grades)			
ISO 492	DIN 620			Diameter tolerance	t ₁	t ₂	t ₃
Normal	PN (P0)	Shaft	Circumferential load	IT6 (IT5)	IT4/2	IT4/2	IT4
			Point load		IT5/2	IT5/2	IT4
		Housing	Circumferential load	IT7 (IT6)	IT5/2	IT5/2	IT5
			Point load		IT6/2	IT6/2	IT5

t ₁	μm	Roundness tolerance to ISO 286-1
t ₂	μm	Parallelism tolerance to ISO 286-1
t ₃	μm	Total axial run-out tolerance of abutment shoulder to ISO 286-1

8 Values for fundamental tolerance grades (IT grades) to ISO 286-1:2010

Nominal dimension		Fundamental tolerances, values				
mm		μm				
>	≤	IT grade				
		IT3	IT4	IT5	IT6	IT7
–	3	2	3	4	6	10
3	6	2.5	4	5	8	12
6	10	2.5	4	6	9	15
10	18	3	5	8	11	18
18	30	4	6	9	13	21
30	50	4	7	11	16	25
50	80	5	8	13	19	30
80	120	6	10	15	22	35

Roughness of cylindrical bearing seating surfaces

The roughness of the bearing seats must be matched to the tolerance class of the bearings. The mean roughness value Ra must not be too high, in order to maintain the interference loss within limits. The shafts must be ground, while the bores must be precision turned. Guide values as a function of the IT grade of bearing seating surfaces can be found in the table.

9 Roughness values for cylindrical bearing seating surfaces – guide values

Nominal bearing seat diameter		Recommended mean roughness value for ground bearing seats			
d, D		R _{max}			
mm		μm			
>	≤	Diameter tolerance (IT grade)			
		IT4	IT5	IT6	IT7
–	80	0.2	0.4	0.8	1.6
80	500	0.4	0.8	1.6	1.6

Mounting dimensions for the contact surfaces of bearing rings

The mounting dimensions of the shaft shoulders, housing shoulders, and spacer rings etc., must ensure that the contact surfaces for the bearing rings are of sufficient height. However, they must also reliably prevent rotating parts of the bearing from grazing stationary parts. Proven mounting dimensions for the radii and diameters of the abutment shoulders are indicated in the product tables. These dimensions are limiting dimensions (maximum or minimum dimensions). These limiting dimensions must be observed.

1.15 Mounting and dismounting

Deep groove ball bearings are not separable. In the mounting of non-separable bearings, the mounting forces must always be applied to the bearing ring with a tight fit.



The mounting and dismounting options for deep groove ball bearings by thermal, hydraulic, or mechanical methods, must also be taken into consideration in the design of the bearing position.

Mounting Handbook

Rolling bearings are well-proven precision machine elements for the design of economical and reliable bearing arrangements, which offer high operational security. In order that these products can function correctly and achieve the envisaged operating life without detrimental effect, they must be handled with care.



The Schaeffler Mounting Handbook MH 1 gives comprehensive information about the correct storage, mounting, dismounting, and maintenance of rotary rolling bearings. The Mounting Handbook also provides information which should be observed by the designer in relation to the mounting, dismounting, and maintenance of bearings, in the original design of the bearing position.

1.16 Further information

The information on the design of the bearing arrangement, lubrication, mounting and dismounting, and on the operation of the bearings provided in the Technical Principles of Catalog HR 1, Rolling Bearings, must be observed as further information.

HR 1 | Rolling Bearings |
<https://www.schaeffler.de/std/1D3D>

MH 1 | Mounting Handbook |
<https://www.schaeffler.de/std/1D53>

TPI 64 | Corrosion-resistant products |
<https://www.schaeffler.de/std/1F37>

1.17 Product tables

1.17.1 Explanations of the product tables

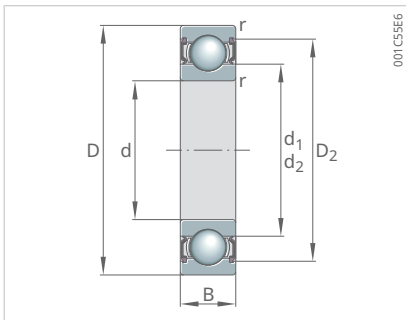
B	mm	Width
C _{0r}	N	Basic static load rating, radial
C _r	N	Basic dynamic load rating, radial
C _{ur}	N	Fatigue limit load, radial
d	mm	Bearing bore diameter
D	mm	Bearing outside diameter
d ₁	mm	Inner ring rib diameter
d ₂	mm	Inner ring caliber diameter
D ₂	mm	Outer ring caliber diameter
d _a	mm	Abutment diameter of shaft shoulder
D _a	mm	Abutment diameter of housing shoulder
f ₀	–	Calculation factor
m	kg	Mass
n _G	min ⁻¹	Limiting speed
r	mm	Chamfer dimension
r _a	mm	Undercut radius

1.17.2 Deep groove ball bearing, single row

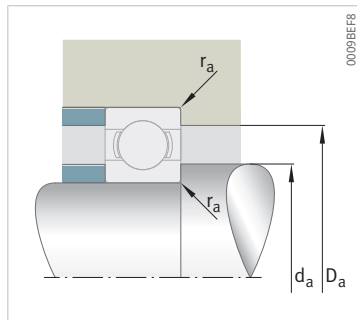
FD design

Contact seals on both sides

Designation	d	D	B	d ₁ ≈	d ₂ ≈	D ₂ ≈	r min.
–	mm	mm	mm	mm	mm	mm	mm
S6000-2RSR-FD	10	26	8	14.5	13.5	22.7	0.3
S6200-2RSR-FD	10	30	9	17.4	–	25	0.6
S6300-2RSR-FD	10	35	11	19.4	–	29.5	0.6
S6001-2RSR-FD	12	28	8	17.2	15.8	25	0.3
S6201-2RSR-FD	12	32	10	18.1	–	27.6	0.6
S6301-2RSR-FD	12	37	12	19.3	–	31.6	1
S6002-2RSR-FD	15	32	9	20.4	19.4	28.5	0.3
S6202-2RSR-FD	15	35	11	21.6	–	30.85	0.6
S6302-2RSR-FD	15	42	13	24.3	–	36.6	1
S6003-2RSR-FD	17	35	10	22.9	–	31	0.3
S6203-2RSR-FD	17	40	12	24.6	–	34.85	0.6
S6303-2RSR-FD	17	47	14	27.15	–	39.8	1
S6004-2RSR-FD	20	42	12	26.9	–	37	0.6
S6204-2RSR-FD	20	47	14	29.3	–	41.15	1
S6304-2RSR-FD	20	52	15	29.5	–	43.8	1.1
S6005-2RSR-FD	25	47	12	31.9	–	42	0.6
S6205-2RSR-FD	25	52	15	33.8	–	46.45	1
S6305-2RSR-FD	25	62	17	36	–	52.45	1.1
S6006-2RSR-FD	30	55	13	38.4	–	49.15	1
S6206-2RSR-FD	30	62	16	40.2	–	54.2	1
S6306-2RSR-FD	30	72	19	44.8	–	60.65	1.1
S6007-2RSR-FD	35	62	14	43.3	–	55.15	1
S6207-2RSR-FD	35	72	17	46.5	–	62.45	1.1
S6307-2RSR-FD	35	80	21	50.4	–	69.8	1.5
S6008-2RSR-FD	40	68	15	48.8	–	60.55	1
S6208-2RSR-FD	40	80	18	53.2	–	70.4	1.1
S6009-2RSR-FD	45	75	16	54.45	–	68	1
S6209-2RSR-FD	45	85	19	58.8	–	74.65	1.1
S6010-2RSR-FD	50	80	16	59.2	–	72.35	1
S6210-2RSR-FD	50	90	20	62.4	–	80.1	1.1



With seal 2RSR
(schematic)



Mounting dimensions

C_r	C_{0r}	C_{ur}	n_g	f_0	m	d_a	D_a	r_a
N	N	N	min^{-1}	—	kg	mm	mm	mm
4850	1970	122	18400	12.4	0.018	12	24	0.3
5400	2390	148	15400	13.2	0.032	14.2	25.8	0.6
8100	3450	215	13800	12.2	0.055	14.2	30.8	0.6
5400	2390	148	15500	13.2	0.022	14	26	0.3
7200	3050	189	14800	12.3	0.036	16.2	27.8	0.6
10300	4200	260	13900	11.1	0.065	17.6	31.4	1
5900	2850	176	13100	14	0.03	17	30	0.3
8100	3750	231	12400	13.2	0.045	19.2	30.8	0.6
12100	5400	335	11000	12.2	0.081	20.6	36.4	1
6400	3250	202	11700	14.3	0.039	19	33	0.3
10200	4800	295	10900	13.2	0.065	21.2	35.8	0.6
14400	6600	410	9800	12.4	0.114	22.6	41.4	1
10000	5000	310	9900	13.8	0.071	23.2	38.8	0.6
13600	6700	415	9100	13.3	0.109	25.6	41.4	1
16900	7900	490	9100	12.4	0.144	27	45	1.1
10700	5900	365	8400	14.6	0.077	28.2	43.8	0.6
14900	7900	485	7900	13.9	0.13	30.6	46.4	1
23800	11500	710	7400	12.4	0.245	32	55	1.1
14000	8300	510	7000	14.8	0.1	34.6	50.4	1
20700	11300	700	6700	13.8	0.211	35.6	56.4	1
28500	15200	940	6000	13.2	0.32	37	65	1.1
17000	10300	640	6200	14.9	0.155	39.6	57.4	1
27500	15300	950	5800	13.8	0.303	42	65	1.1
35500	19300	1190	5300	13.2	0.483	44	71	1.5
17800	11500	710	5500	15.2	0.188	44.6	63.4	1
31500	18100	1120	5000	14	0.384	47	73	1.1
21100	14000	870	4900	15.3	0.244	49.6	70.4	1
33500	20700	1280	4550	14.4	0.383	52	78	1.1
22100	15400	960	4500	15.5	0.27	54.6	75.4	1
37500	23200	1440	4300	14.4	0.457	57	83	1.1

2 Radial insert ball bearings

Radial insert ball bearings in FD design are designed for use in the food and beverage industry. They have a significantly higher resistance to corrosion and media than conventional radial insert ball bearings and are therefore extremely suitable for a wide range of applications in the food industry, where they are exposed to various media, moisture, salt spray mist, contaminated water, or cleaning agents.

Design variants

Radial insert ball bearings in FD design for the food industry are available with various location methods in the following variants:

- radial insert ball bearings with grub screws in the inner ring
- radial insert ball bearings with eccentric locking collar
- radial insert ball bearings with locking collar (concentric)

2.1 Bearing design

The bearings in FD design (stainless steel version, food-grade grease) correspond in their design to single row deep groove ball bearings of series 62. They are ready to fit, particularly easy to fit, and allow robust, economical bearing arrangements with a long operating life. Set screws in the extended inner ring, an eccentric locking collar, or a concentric locking collar are used to locate the radial insert ball bearings on the shaft.

Operation even under difficult conditions is ensured by seals that are matched to the application and the use of food-grade greases.

Special characteristics

- bearing rings, cages, and balls made from stainless steel
- locking collars, set screws, and flinger shields made from stainless steel
- highly effective contact seals with steel reinforcement ➤ 30 | 2.6
 - with additional flinger shield: series GYE
 - without flinger shield: series GE
 - each with 4 seal lips and flinger shield: series Y, YE, OC, OCE
- lubrication with food-grade grease
- with relubrication facility or maintenance-free
- with anti-rotation ball to prevent the outer ring from turning in the housing bore: series Y, YE, OC, OCE

The series provides an overview of the characteristics of radial insert ball bearings ➤ 25 | 10.

2.1.1 Radial insert ball bearings with grub screws in the inner ring

Two stainless steel grub screws offset by 120° are used to locate the inner ring (Y type) on the shaft. This location method is suitable for bearing arrangements with a constant direction of rotation, and under low speed and load, for an alternating direction of rotation.

The grub screws are self-retaining and have a fine pitch thread with cup point for secure location of the bearings, in due accordance with the stated tightening torques.

7 With grub screws in inner ring in FD design



0019C0C8

Bearing series:

- GYE...-KRR-B-FA107-VA-FD (metric)
- YE...-DC-B-VA-FD (metric)
- Y...-DC-B-VA-FD (imperial)

2.1.2 Radial insert ball bearings with eccentric locking collar

The bearings are located on the shaft by means of an eccentric stainless steel locking collar. They are thus particularly suitable for bearing arrangements with a constant direction of rotation or, under low load and speed, for an alternating direction of rotation.

The locking collar is preferably tightened in the direction of rotation and must be secured by means of a grub screw. This location method prevents damage to the shaft and can be easily loosened again.

8 With eccentric locking collar in FD design



0019C0D8

Bearing series:

- GE...-KRR-B-FA107-VA-FD (metric)

2.1.3 Radial insert ball bearings with locking collar

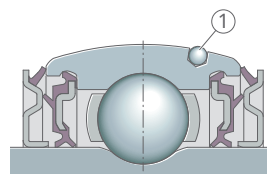
A concentric stainless steel locking collar secures the bearing inner ring to the shaft; grub screws prevent the locking collar from rotating. These radial insert ball bearings are suitable for shafts up to tolerance class h9^⑥.

Radial insert ball bearings with locking collar are particularly suitable for bearing arrangements with a constant or alternating direction and medium to high speeds. The concentric design ensures constant rotational balance during operation, with reduced vibrations and noise.

In these radial insert ball bearings with an integral locking system, the laterally slotted inner ring acts as an adapter sleeve. A concentric stainless steel locking collar clamps the bearing inner ring onto the shaft concentrically, by means of force locking, without damaging the shaft. Two stainless steel grub screws offset by 120° prevent the locking collar from rotating on the bearing ring. This location method allows speeds comparable to those of deep groove ball bearings. These bearings also offer quieter running than standard radial insert ball bearings.

An anti-rotation ball in the outer ring prevents the outer ring from turning in the housing bore.

⑨ Anti-rotation ball in the outer ring



001D56F6

1 Anti-rotation ball

The bearings are highly suitable for reversing operation. The force locking connection prevents the occurrence of fretting corrosion between the shaft and the bearing inner ring.

The fixing is easy to fit and remove.

⑩ With locking collar in FD design



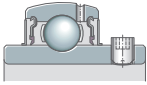
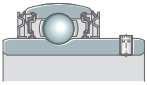
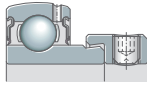
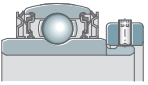
001B9BAB

Bearing series:

- OCE..-DC-B-VA-FD (metric)
- OC..-DC-B-VA-FD (imperial)

2.1.4 Comparison of series

10 Comparison of series, features of radial insert ball bearings

Feature		Radial insert ball bearing			
		with set screws		with eccentric locking collar	with locking collar
					
		GYE...-KRR-B-FA107-VA-FD	YE...-DC-B-VA-FD Y...-DC-B-VA-FD	GE...-KRR-B-FA107-VA-FD	OCE...-DC-B-VA-FD OC...-DC-B-VA-FD
Shaft diameter	mm	20 ... 40	20 ... 40	20 ... 40	20 ... 35
	inch	–	1/2 ... 1 1/2	–	1/2 ... 1 7/16
Location method		Set screws	Set screws	Eccentric locking collar	Locking collar
Seal type		RSR	DC	RSR	DC
Sealing material		NBR	FKM, NBR	NBR	FKM, NBR
Compensation of misalignment		✓	✓	✓	✓
Internal clearance, group		3	3	3	3
Bearing components		Stainless steel	Stainless steel	Stainless steel	Stainless steel
Grease approved for food applications NSF H1		✓	✓	✓	✓
Relubrication facility		✓	–	✓	–
Maintenance-free		–	✓	–	✓
Recommended application temperature	°C	–30 ... +100	–20 ... +100	–30 ... +100	–20 ... +100
	°F	–22 ... +210	–4 ... +210	–22 ... +210	–4 ... +210
Comments		Stainless steel design with flinger shield	Stainless steel design with flinger shield	Stainless steel design	Stainless steel design with flinger shield

2.2 Corrosion-resistant materials

The bearing rings, cages, and rolling elements are made from stainless steel. The seal and flinger shield reinforcement as well as the fasteners such as locking collars, eccentric locking collars, and set screws are also made from stainless steel.

The materials used in design FD are resistant to moisture, contaminated water, salt spray mist, and weak alkaline or weak acidic cleaning agents.

11 Steels used

Bearing components	Material			
	Designation			Material number
	ISO 683-17	ISO 3574	AISI	EN 10088-3
Bearing rings	X105CrMo17	–	440C	1.4125
Rolling elements				
Cage	X5CrNi18-10	–	304	1.4301
Set screws				
Eccentric locking collar				
Locking collar				
Anti-rotation ball				
Flinger shields				
Seal reinforcement of RSR seal				
Seal reinforcement of DC cartridge seal ¹⁾	–	CR1	1008	DC01, 1.0330

¹⁾ Under IP69K conditions, the reinforcement does not come into contact with food, since the outer part of the seal is completely encased in NBR.

We reserve the right to make technical changes, including material changes, as part of the ongoing development.

Media resistance

In the food industry in particular, the resistance of the material in relation to various cleaning agents is of increasing importance.

12 Resistance to media

Medium		Concentration	X5CrNi18-10 AISI 304		X105CrMo17 AISI 440C	
			+20 °C	+80 °C	+20 °C	+80 °C
			+68 °F	+176 °F	+68 °F	+176 °F
Hydrochloric acid	HCl	0.1	++	++	–	–
		1	+	–	–	–
		18	–	–	–	–
Hydrofluoric acid	HF	1	–	–	–	–
		5	– ²⁾	–	– ²⁾	–
Sulfuric acid	H ₂ SO ₄	1	++	–	–	–
		10	+	–	–	–
		96	++	+	–	–
Sulfurous acid	H ₂ SO ₃	1	++	++	–	–
Nitric acid	HNO ₃	5	++	++	–	–
		25	++	++	++	+
		65	++	++	++	+
Phosphoric acid	H ₃ PO ₄	1	++	++	++	++
		10	++	++	+	++
		85	++	++	++	–
Formic acid	HCOOH	5	++	++	–	–
		25	++	++	–	–
Acetic acid	CH ₃ COOH	5	++	++	++	–
		25	++	++	++	–
Citric acid		5	++	++	++	++
		25	++	++	–	–
Chloroacetic acid		5	++	++	+	–
Sodium chloride	NaCl	10	++	++	o	o
Seawater		4	++	++	o	o
Distilled water		–	++	++	++	++
Ammonium hydroxide	NH ₄ OH	1	++	++	++	++
		10	++	++	++	++
Potassium hydroxide solution	KOH	0.1	++	++	++	++
		1	++	++	++	++
		10	++	++	++	++
Sodium hypochlorite solution		1	++ ²⁾	++	³⁾	o
Hydrogen peroxide	H ₂ O ₂	5	++	++	++	++

++ resistant
 + moderately resistant
 o barely resistant
 – not resistant

²⁾ Not tested. Estimate generated from remaining test series.

³⁾ Not tested. No estimate possible.

FDA-compliant materials

The following FDA-compliant materials are used:

13 FDA-compliant materials, series GYE and GE

Bearing components	Material, designation	FDA directive
Seals	NBR	FDA 21 CFR 177.2600
Grease	Mobilgrease FM 222	FDA 21 CFR 178.3570

14 FDA-compliant materials, series Y, YE, OC, OCE

Bearing components	Material, designation	FDA directive
Seals	NBR, AISI 1008	FDA 21 CFR 177.2600
Flinger shields	FKM, AISI 304	FDA 21 CFR 177.2600, FDA GRAS status
Grease	Fuchs CASSIDA GREASE GTS 2	FDA 21 CFR 178.3570, equivalent to NSF H1 certification

The classification of components as FDA-compliant is based on information provided by material manufacturers.

2.3 Load carrying capacity

Radial load carrying capacity

The balls are in contact with the raceways at 1 point only. Under purely radial load, the contact points between the rolling elements and raceways lie at the center of the raceway. As a result, the connection between the contact points passes through the radial plane, i.e., the optimum load direction is a purely radial load.

Axial load carrying capacity

Due to the deep raceway grooves in the bearing rings and the narrow osculation between the raceway grooves and the balls, the bearings can support axial loads in both directions. The axial load carrying capacity is dependent, for example, on the bearing size, the internal construction, and the operating clearance. If the axial load is too high, however, this can increase the running noise and considerably reduce the operating life of the bearings.

If there is any uncertainty regarding the axial load carrying capacity of the bearings, please consult Schaeffler.

2.4 Compensation of angular misalignments

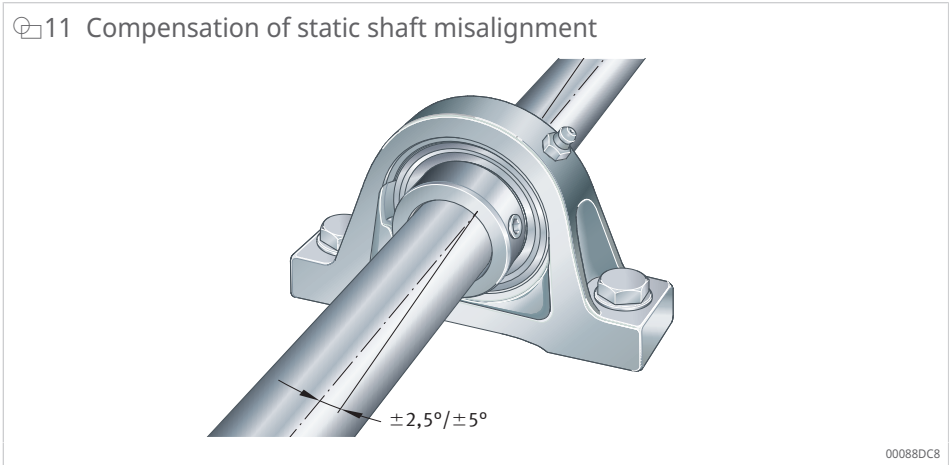
Bearings with a spherical outside surface of the outer ring, fitted in housings with a concave bore, can compensate for static misalignment of the shaft.

For units with a lubrication groove in the housing and lubrication hole in the radial insert ball bearing, the following applies:

- Up to $\pm 2.5^\circ$, the units can be relubricated.
- Between $\pm 2.5^\circ$ and $\pm 5^\circ$, the facility for relubrication is dependent on the specific unit. Please contact us in this case.
- Over $\pm 5^\circ$, relubrication is no longer possible.



The units are not suitable for supporting swiveling or tumbling motion.



2.5 Lubrication

Food-grade grease application

The high-quality grease used for lubrication is approved for food applications to category NSF H1. The grease is particularly suitable for use in the food industry and meets the quality requirements of FDA 21 CFR 178.3570 in full. Furthermore, the grease is halal and kosher-certified.

A lubricant of class NSF H1 is suitable for applications in which incidental contact between food and lubricant may occur and is unavoidable by technical measures. Such lubricants must be non-toxic and neutral in taste and odor.

The grease contains only allergen-free ingredients in accordance with Regulation (EC) 1169/2011 and is therefore free of cereals containing gluten, nuts, and milk, for example. In addition, the grease does not contain any components comprising animal or genetically modified organisms.

The halal and kosher certification of the lubricant used confirms that the strict halal and kosher criteria are also met in relation to the processing and ingredients of the bearings. These dietary laws of the Muslim and Jewish population not only apply to the actual food and beverages, but also to the machines and environment during manufacture.

12 Certifications

①

②

③

001A75F1

1	kosher	2	halal
3	National Sanitation Foundation (NSF)		

Lubrication of bearings, series Y, YE, OC, OCE

The radial insert ball bearings are lubricated for life with Fuchs CASSIDA GREASE GTS 2, a fully synthetic calcium-sulfonate complex soap grease with food-grade approval according to NSF H1.

The lubricant Fuchs CASSIDA GREASE GTS 2 is particularly long-lasting and is characterized by excellent high-pressure properties, wear protection properties, and very good mechanical stability under the influence of heat and water. With its enhanced water resistance, the grease provides effective protection against corrosion. The lubricant is highly resistant to oxidation, prevents the formation of oxidation residues at high temperatures, and remains stable in consistency, which reduces the risk of leakage.

Lubrication of bearings, series GYE, GE

Initial greasing is carried out with Mobilgrease FM 222, an aluminum-complex soap grease with food-grade approval according to NSF H1.

In many cases, the initial grease application is sufficient for the entire operating life of the bearings. The bearings are relubricated via lubrication holes in the outside surface of the outer rings. Schaeffler recommends that rolling bearing grease Arcanol FOOD2 be used for relubrication.

Arcanol FOOD2

Arcanol FOOD2 is a rolling bearing grease designed for rolling bearing arrangements in the food industry. It is registered to NSF H1 (reg. no. 150727), is halal-certified and kosher-certified, offers excellent water resistance and corrosion protection, and is highly resistant to cleaning chemicals.

Typical areas of application are:

- applications with food contact
- H1 to USDA
- bearings with NSF H1 requirement (food contact)

The criteria for application are:

- versatile application
- good relubrication

2.6 Sealing

As standard, bearings for the food industry are delivered with seals made from NBR.

Seal RSR

Radial insert ball bearings of series GYE and GE for the food industry are sealed in a radial direction on both sides with contact seals made from NBR. These seals are of the RSR type and are elastomer lip seals with stainless steel reinforcement. This variant has the suffix KRR.

In the case of variant GYE, the seals are additionally fitted with flinger shields made from stainless steel, which protect the seals against mechanical damage.

Cartridge seal DC

The radial insert ball bearings of series Y, YE, OC, and OCE are sealed on both sides with cartridge seals. Each cartridge seal contains an elastomer seal and a flinger shield, with a total of 4 contact seal lips. The variant with cartridge seals has the suffix DC.

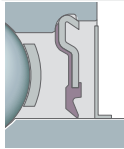
Each seal has a steel reinforcement as well as 1 vulcanized, axially preloaded seal lip and 2 vulcanized, radially preloaded seal lips made from NBR.

The seals are additionally fitted with stainless steel flinger shields containing 1 additional vulcanized, axially preloaded seal lip made from FKM. The flinger shields effectively protect the seals against mechanical damage and high-pressure water jets.

Overview of seal types

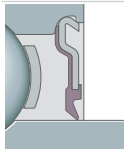
15 Seal type

Seal RSR with flinger shield in stainless steel design:



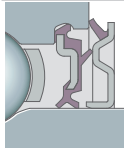
- single-piece, sheet steel washer made from stainless steel with vulcanized, radially preloaded seal lip made from NBR
- additional flinger shield made from stainless steel
- used in radial insert ball bearings with set screws in the inner ring, series GYE

Seal RSR in stainless steel design:



- single-piece, sheet steel washer made from stainless steel with vulcanized, radially preloaded seal lip made from NBR
- used in radial insert ball bearings with eccentric locking collar, series GE

Seal DC, cartridge seal with flinger shield, stainless steel design:



- single-piece, sheet steel washer with 3 vulcanized seal lips made from NBR
- additional flinger shield made from stainless steel with vulcanized, axially preloaded seal lip made from FKM
- used in radial insert ball bearings of series Y, YE, OC, OCE

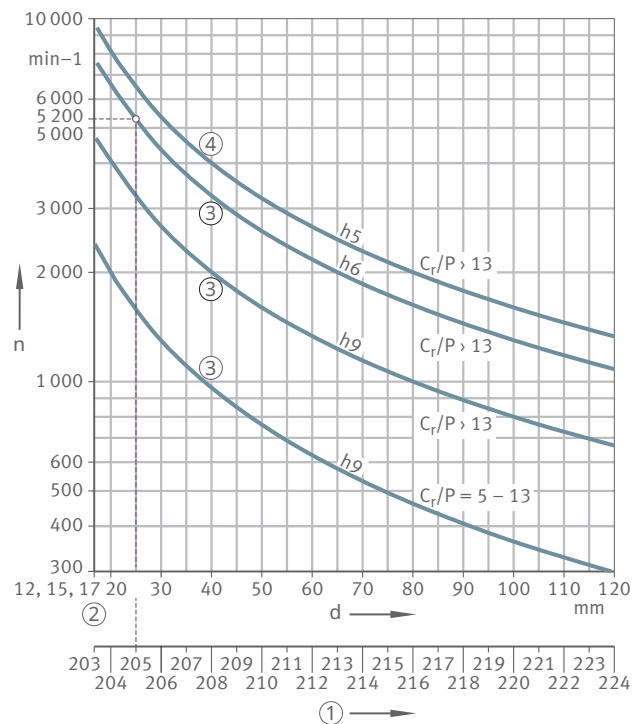
! In the case of direct exposure to spray water, prior consultation with Application Engineering is required. For any queries regarding resistance to specific media, please consult Application Engineering.

2.7 Speeds

The speed limits are dependent on the load, the clearance between the bearing bore and shaft, and the friction of the seals in the case of bearings with contact seals.

Guide values for the permissible speeds can be derived from the diagram.

13 Determining the permissible speeds for radial insert ball bearings



001A7631

1	Ball set	2	With $d = 12\text{mm}$, 15mm , and 17mm , identical ball set 203
3	For radial insert ball bearings with DC or RSR seals (version KRR)	4	For radial insert ball bearings with RSR seals (version KRR)
n	Permissible speed	d	Bore diameter
C_r/P	Load ratio	h_5, h_6, h_9	Shaft tolerance. The envelope condition ⑥ applies here.

In the case of load ratios $C_r/P > 13$, the speeds can be increased. For $C_r/P < 5$, Schaeffler recommends location by means of a fit with a shaft roughness of $R_a 0.3$, as specified in Catalog HR 1, Rolling Bearings. For both types of applications, please contact Schaeffler. In order to ensure slippage-free operation, the minimum radial load must be observed.

Example of permissible speed calculation

16 Given

Shaft tolerance	h_6 ⑥
Radial insert ball bearing	GE25-KRR-B-FA107-VA-FD
Ball set	205
Sealing	RSR
Basic dynamic load rating, radial	C_r 13400 N
Load	P 1000 N

17 Required

Load ratio	C_r/P	13400 N/1000 N = 13.4 > 13
Permissible speed	n	5200 min ⁻¹ according to the determination of the permissible speeds for radial insert ball bearings

2

2.8 Temperature range

The operating temperature of the bearings is limited by the:

- lubricant
- seals

18 Permissible temperature ranges, radial insert ball bearings in FD design

Operating temperature		with seal RSR (material NBR)	with cartridge seal DC (materials NBR, FKM)
	°C	-30 ... +100	-20 ... +100
	°F	-22 ... +210	-4 ... +210

2.9 Internal clearance

Radial insert ball bearings for the food industry are manufactured as standard with radial internal clearance C3 (Group 3). C3 is not stated in the designation.

The internal clearance is larger than in the case of standard deep groove ball bearings. As a result, support of misalignments and shaft deflections is improved.

The values for radial internal clearance correspond to DIN 620-4:2004 (ISO 5753-1:2009). The values are valid for bearings which are free from load and measurement forces, i.e., without elastic deformation.

19 Radial internal clearance

d		CN (Group N)		C3 (Group 3)		C4 (Group 4)		C5 (Group 5)	
mm		µm		µm		µm		µm	
>	≤	min.	max.	min.	max.	min.	max.	min.	max.
1.5	6	2	13	8	23	–	–	–	–
6	10	2	13	8	23	14	29	20	37
10	18	3	18	11	25	18	33	25	45
18	24	5	20	13	28	20	36	28	48
24	30	5	20	13	28	23	41	30	53
30	40	6	20	15	33	28	46	40	64

d mm Nominal bore diameter

2.10 Dimensions, tolerances

Dimensions

The main dimensions of radial insert ball bearings correspond to ISO 9628 and DIN 626-1:1999. Nominal dimensions of the radial insert ball bearings are listed in the product tables.

Tolerances

The tolerances for the dimensional and running accuracy of radial insert ball bearings correspond to tolerance class Normal in accordance with ISO 492.

The diameter tolerances of radial insert ball bearings deviate from the values in the above-mentioned standard. The inner ring bore has a plus tolerance to facilitate mounting of the bearing.

In the case of sealed bearings, the largest value and smallest value of the outside diameter can deviate from the mean value by up to 0.03 mm.

20 Tolerances of radial insert ball bearings, FD design

Inner ring				Outer ring			
d		t _{ΔDmp}		D		t _{ΔDmp}	
mm		μm		mm		μm	
>	≤	U	L	>	≤	U	L
18	24	+25	0	50	80	0	-13
24	30	+25	0	80	120	0	-13
30	40	+25	0	120	150	0	-13

d

D

L

t_{ΔDmp}

t_{ΔDmp}

U

mm

mm

μm

μm

μm

μm

Bore diameter

Outside diameter

Lower limit deviation

Deviation of the mean value of the outside diameter from the nominal dimension in accordance with ISO 492

Deviation of the mean value of the bore diameter from the nominal dimension in accordance with ISO 492

Upper limit deviation

2.11 Structure of the ordering designation

14 Designation structure: radial insert ball bearings for the food industry

	GY	E	20	KRR	B	FA107	VA	FD
Radial insert ball bearing series								
GY, Y	With set screws in inner ring							
G	With eccentric locking collar							
OC	With locking collar							
Bearing bore dimensions								
E	Metric							
-	Imperial (no specification)							
Bore diameter d								
...	Metric: d in mm							
...	Imperial: 1st digit for full inch, 2nd and 3rd digits for $\frac{1}{16}$ inch, e.g., 107 → d = 1 inch + 7 · $\frac{1}{16}$ inch = 1 $\frac{7}{16}$ inch							
Seal type								
KRR	For GE: NBR lip seal on both sides, type RSR For GYE: as for GE, additional flinger shield							
DC	Cartridge seal: 3-lip NBR seal on both sides, flinger shield with 1-lip FKM seal							
Outer ring shape								
B	Spherical outer ring							
Lubrication holes								
FA107	Bearing with lubrication holes on the locating side							
-	Bearings without lubrication holes (no specification)							
Materials								
VA	Components made from stainless steel							
Special version								
FD	Suitable for applications in the food industry							

001E2786

2.12 Dimensioning

Equivalent dynamic bearing load

The basic rating life equation $L = (C_r/P)^P$ used in the dimensioning of bearings under dynamic load assumes a load of constant magnitude and direction. In radial bearings, this is a purely radial load F_r . If such a load is present, the bearing load F_r is used in the rating life equation for P ($P = F_r$).

If a load of constant magnitude and direction is not present, a constant radial force must first be determined for the rating life calculation that, in relation to the rating life, represents an equivalent load. This force is known as the equivalent dynamic bearing load P .

The calculation of P is dependent on the load ratio F_a/F_r and the calculation factor e :

6 Equivalent dynamic load

$$\frac{F_a}{F_r} \leq e \Rightarrow P = F_r$$

17 Equivalent dynamic load

$$\frac{F_a}{F_r} > e \Rightarrow P = X \cdot F_r + Y \cdot F_a$$

e	–	Calculation factor: Limiting value for F_a/F_r
F_a	N	Axial load
F_r	N	Radial load
P	N	Equivalent dynamic bearing load
X	–	Dynamic radial load factor
Y	–	Dynamic axial load factor

The specified values are valid for normal operating clearance. If the operating clearance varies significantly, Schaeffler recommends using Bearinx to calculate the rating life. If the calculation values lie between the stated values (such as 0.4), then read off the table values for 0.3 and 0.5 and determine the intermediate values using linear interpolation.

For normal operating clearance, observe the fit recommendations in Catalog HR 1, Rolling Bearings.

21 Factors e, X, and Y

$\frac{f_0 \cdot F_a}{C_{0r}}$	Factor (for normal operating clearance)		
	e	X	Y
0.3	0.22	0.56	2
0.5	0.24	0.56	1.8
0.9	0.28	0.56	1.58
1.6	0.32	0.56	1.4
3	0.36	0.56	1.2
6	0.43	0.56	1

C_{0r}	N	Basic static load rating, radial
e	–	Calculation factor: Limiting value for F_a/F_r
f_0	–	Calculation factor
F_a	N	Axial load
X	–	Dynamic radial load factor
Y	–	Dynamic axial load factor

Equivalent static bearing load

As radial insert ball bearings have the same internal construction as single row deep groove ball bearings, their equivalent static bearing load is calculated in the same manner as for deep groove ball bearings.

The calculation of P_0 for deep groove ball bearings under static load is dependent on the load ratio F_{0a}/F_{0r} and the factor 0.8:

18 Equivalent static load

$$\frac{F_{0a}}{F_{0r}} \leq 0.8 \Rightarrow P_0 = F_{0r}$$

f19 Equivalent static load

$$\frac{F_{0a}}{F_{0r}} > 0.8 \Rightarrow P_0 = 0.6 \cdot F_{0r} + 0.5 \cdot F_{0a}$$

F_{0a}	N	Largest axial load present (maximum load)
F_{0r}	N	Largest radial load present (maximum load)
P_0	N	Equivalent static bearing load

Static load safety factor

In addition to the basic rating life L (L_{10h}), it is also always necessary to check the static load safety factor S_0 :

f10 Static load safety factor

$$S_0 = \frac{C_0}{P_0}$$

C_0	N	Basic static load rating
P_0	N	Equivalent static bearing load
S_0	–	Static load safety factor

2.13 Minimum load

In order that no slippage occurs between the contact partners, the bearings must be constantly subjected to a sufficiently high load. Based on experience, a minimum load of the order of $P > C_{0r}/100$ is required for this purpose. In most cases, however, the radial load is already higher than the requisite minimum load due to the weight of the supported parts and the external forces.

If the minimum radial load is lower than specified above, please consult Schaeffler.

2.14 Design of bearing arrangements

Shaft tolerances for radial insert ball bearings

The permissible shaft tolerance is dependent on the speed and load. Shafts of the tolerance classes h6[Ⓔ] to h9[Ⓔ] can be used ►32|2.7.

Conventional drawn shafts will suffice for most applications.

Roughness of cylindrical bearing seating surfaces

The roughness of the bearing seats must be matched to the tolerance class of the bearings. The mean roughness value R_a must not be too high, in order to maintain the interference loss within limits. The shafts must be ground, while the bores must be precision turned. Guide values as a function of the IT grade of bearing seating surfaces can be found in the table.

22 Roughness values for cylindrical bearing seating surfaces – guide values

Nominal bearing seat diameter		Recommended mean roughness value for ground bearing seats			
d, D		Ramax			
mm		µm			
>	≤	Diameter tolerance (IT grade)			
		IT4	IT5	IT6	IT7
–	80	0.2	0.4	0.8	1.6
80	500	0.4	0.8	1.6	1.6

Housing units for radial insert ball bearings

For radial insert ball bearings for the food industry, Schaeffler offers the appropriate pillow block housings, flanged housings, and take-up housings made from stainless steel or plastic. The housings, like the radial insert ball bearings themselves, are corrosion-resistant and suitable for food applications.

The housing units comprise radial insert ball bearings with a spherical outer ring and housings with a spherical bore to form ready-to-fit units. The user is thus spared the need for costly production of the mounting environment required for these bearings. The areas of application correspond to those of the radial insert ball bearings.

2.15 Mounting and dismounting

Correct mounting has a decisive influence on the achievable bearing life. Careful attention must therefore be paid to the following guidelines.



The Schaeffler Mounting Handbook MH 1 gives comprehensive information about the correct storage, mounting, dismounting, and maintenance of rotary rolling bearings. The Mounting Handbook also provides information which should be observed by the designer in relation to the mounting, dismounting, and maintenance of bearings, in the original design of the bearing position.

MH 1 | Mounting Handbook |
<https://www.schaeffler.de/std/1D53>

Detailed guidelines on the mounting and dismounting of radial insert ball bearings

SG 1 | Radial Insert Ball bearings and Housing Units |
<https://www.schaeffler.de/std/1B64>

MON 108 | Mounting of Radial Insert Ball Bearings with Spherical Outer Ring in Bearing Housings |
<https://www.schaeffler.de/std/1FA1>

Tightening torques for grub screws

The tightening torques for set screws from Schaeffler are dependent on the material of the screws. The tightening torques for the stainless steel set screws are valid only for original set screws.

 23 Tightening torques for metric stainless steel set screws

Width across flats	Thread	Tightening torque
W	G	M_A
mm	–	Nm
2.5	M5	2.4
3	M6×0.75	3.9
4	M8×1	8.3

2.16 Further information

The information on the design of the bearing arrangement, lubrication, mounting and dismounting, and on the operation of the bearings provided in the Technical Principles of Catalog HR 1, Rolling Bearings, must be observed as further information.

HR 1 | Rolling Bearings |

<https://www.schaeffler.de/std/1D3D>

SG 1 | Radial Insert Ball bearings and Housing Units |

<https://www.schaeffler.de/std/1B64>

MH 1 | Mounting Handbook |

<https://www.schaeffler.de/std/1D53>

TPI 64 | Corrosion-resistant products |

<https://www.schaeffler.de/std/1F37>

2.17 Product tables

2.17.1 Explanations of the product tables

A	mm	Distance to grub screw
B	mm	Width
B ₁	mm	Width across locking collar
C	mm	Outer ring width
C _{0r}	N	Basic static load rating, radial
C ₂	mm	Width across seals
C _a	mm	Distance to lubrication hole
C _r	N	Basic dynamic load rating, radial
C _{ur}	N	Fatigue limit load, radial
d	inch or mm	Bearing bore diameter
d ₁	mm	Inner ring rib diameter
d ₃	mm	Outside diameter of locking collar
D _{sp}	mm	Bearing outside diameter
f ₀	–	Calculation factor
m	kg	Mass
S	mm	Distance to raceway center
W	mm	Width across flats

2.17.2 Radial insert ball bearings with grub screws in the inner ring

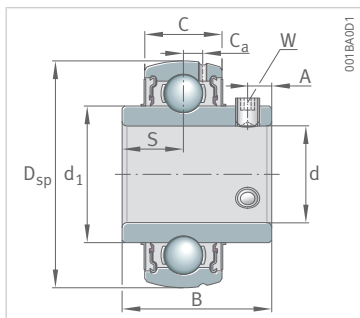
2

FD design

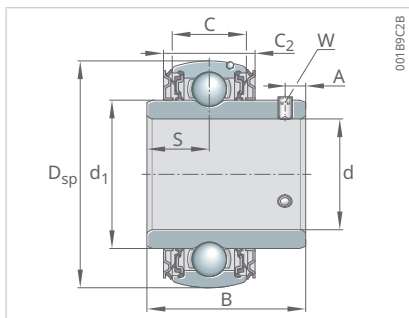
Spherical outer ring

With extended inner ring

Designation	d		D _{sp}	B	C	C ₂	S
-	mm	inch	mm	mm	mm	mm	mm
Y008-DC-B-VA-FD	12.7	$\frac{1}{2}$	47	31	16	20	12.7
Y010-DC-B-VA-FD	15.875	$\frac{5}{8}$	47	31	16	20	12.7
Y012-DC-B-VA-FD	19.05	$\frac{3}{4}$	47	31	16	20	12.7
GYE20-KRR-B-FA107-VA-FD	20	–	47	31	16	–	12.7
YE20-DC-B-VA-FD	20	–	47	31	16	20	12.7
Y014-DC-B-VA-FD	22.225	$\frac{7}{8}$	52	34.1	17	21	14.3
Y015-DC-B-VA-FD	23.812	$\frac{15}{16}$	52	34.1	17	21	14.3
GYE25-KRR-B-FA107-VA-FD	25	–	52	34.1	17	–	14.3
YE25-DC-B-VA-FD	25	–	52	34.1	17	21	14.3
Y100-DC-B-VA-FD	25.4	1	52	34.1	17	21	14.3
Y102-DC-B-VA-FD	28.575	$1\frac{1}{8}$	62	38.1	19	23	15.9
Y103-DC-B-VA-FD	30.162	$1\frac{3}{16}$	62	38.1	19	23	15.9
GYE30-KRR-B-FA107-VA-FD	30	–	62	38.1	19	–	15.9
YE30-DC-B-VA-FD	30	–	62	38.1	19	23	15.9
Y104-DC-B-VA-FD	31.75	$1\frac{1}{4}$	62	38.1	19	23	15.9
Y104-207-DC-B-VA-FD	31.75	$1\frac{1}{4}$	72	42.9	20	24	17.5
Y105-DC-B-VA-FD	33.338	$1\frac{5}{16}$	72	42.9	20	24	17.5
Y106-DC-B-VA-FD	34.925	$1\frac{3}{8}$	72	42.9	20	24	17.5
GYE35-KRR-B-FA107-VA-FD	35	–	72	42.9	20	–	17.5
YE35-DC-B-VA-FD	35	–	72	42.9	20	24	17.5
Y107-DC-B-VA-FD	36.512	$1\frac{7}{16}$	72	42.9	20	24	17.5
Y108-DC-B-VA-FD	38.1	$1\frac{1}{2}$	80	49.2	21	25	19
GYE40-KRR-B-FA107-VA-FD	40	–	80	49.2	21	–	19
YE40-DC-B-VA-FD	40	–	80	49.2	21	25	19



GYE...-KRR-B-FA107-VA-FD



Y...-DC-B-VA-FD, YE...-DC-B-VA-FD

d ₁	C _a	A	W	C _r	C _{0r}	C _{ur}	f ₀	m ≈
mm	mm	mm	mm	N	N	N	–	kg
29.06	–	5	2.5	11100	5400	500	13.2	0.18
29.06	–	5	2.5	11100	5400	500	13.2	0.18
29.06	–	5	2.5	11100	5400	500	13.2	0.18
28.3	4	5	2.5	12800	6600	280	13.1	0.16
29.06	–	5	2.5	11100	5400	500	13.2	0.18
34	–	5.5	3	12200	6500	550	13.9	0.2
34	–	5.5	3	12200	6500	550	13.9	0.2
34	4.15	5	2.5	13400	7500	335	13.8	0.21
34	–	5.5	3	12200	6500	550	13.9	0.2
34	–	5.5	3	12200	6500	550	13.9	0.2
40.4	–	6	3	16700	9110	760	13.9	0.31
40.4	–	6	3	16700	9110	760	13.9	0.31
40.3	5	6	3	18700	10700	475	13.8	0.3
40.4	–	6	3	16700	9110	760	13.9	0.31
40.4	–	6	3	16700	9110	760	13.9	0.31
47.45	–	6.5	4	21900	12500	1000	13.9	0.47
47.45	–	6.5	4	21900	12500	1000	13.9	0.47
47.45	–	6.5	4	21900	12500	1000	13.9	0.47
46.9	5.7	6.5	3	24600	14600	655	13.8	0.46
47.45	–	6.5	4	21900	12500	1000	13.9	0.47
47.45	–	6.5	4	21900	12500	1000	13.9	0.47
52.7	–	8	4	24900	14500	1130	14	0.65
52.4	5.9	8	4	31500	18900	800	14	0.61
52.7	–	8	4	24900	14500	1130	14	0.65

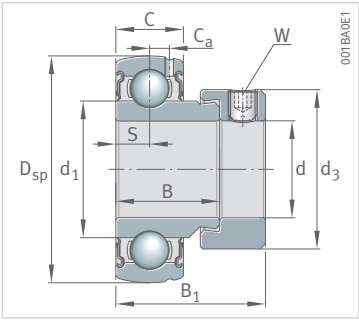
2.17.3 Radial insert ball bearings with eccentric locking collar

2

FD design

Spherical outer ring

Designation	d	D _{sp}	B ₁	B	C	S	d ₁
–	mm	mm	mm	mm	mm	mm	mm
GE20-KRR-B-FA107-VA-FD	20	47	21.5	14	31	7	28.3
GE25-KRR-B-FA107-VA-FD	25	52	21.5	15	31	7.5	34
GE30-KRR-B-FA107-VA-FD	30	62	23.8	16	35.7	8	40.3
GE35-KRR-B-FA107-VA-FD	35	72	25.4	17	38.9	8.5	46.9
GE40-KRR-B-FA107-VA-FD	40	80	30.2	18	43.7	9	52.4



GE..-KRR-B-FA107-VA-FD

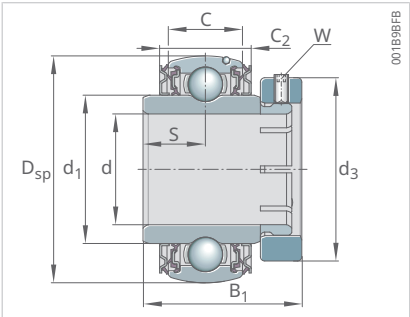
C _a	d ₃ max.	W	C _r	C _{0r}	C _{ur}	f ₀	m ≈
mm	mm	mm	N	N	N	-	kg
4.1	33.3	3	12840	6650	280	13.1	0.17
4.15	38.1	3	14020	7880	335	13.8	0.2
5	44.5	3	19460	11310	475	13.8	0.3
5.35	55.6	3	25670	15300	655	13.8	0.5
5.5	60.3	4	29520	18140	800	14	0.63

2.17.4 Radial insert ball bearings with locking collar

FD design

Spherical outer ring

Designation	d		D _{sp}	B ₁	C	C ₂	S
–	mm	inch	mm	mm	mm	mm	mm
OC008-DC-B-VA-FD	12.7	$\frac{1}{2}$	47	33.3	16	20	12.7
OC010-DC-B-VA-FD	15.875	$\frac{5}{8}$	47	33.3	16	20	12.7
OC012-DC-B-VA-FD	19.05	$\frac{3}{4}$	47	33.3	16	20	12.7
OCE20-DC-B-VA-FD	20	–	47	33.3	16	20	12.7
OC014-DC-B-VA-FD	22.225	$\frac{7}{8}$	52	36.5	17	21	14.3
OC015-DC-B-VA-FD	23.812	$\frac{15}{16}$	52	36.5	17	21	14.3
OCE25-DC-B-VA-FD	25	–	52	36.5	17	21	14.3
OC100-DC-B-VA-FD	25.4	1	52	36.5	17	21	14.3
OC102-DC-B-VA-FD	28.575	$1 \frac{1}{8}$	62	39.7	19	23	15.9
OCE30-DC-B-VA-FD	30	–	62	39.7	19	23	15.9
OC103-DC-B-VA-FD	30.162	$1 \frac{3}{16}$	62	39.7	19	23	15.9
OC104-DC-B-VA-FD	31.75	$1 \frac{1}{4}$	62	39.7	19	23	15.9
OC104-207-DC-B-VA-FD	31.75	$1 \frac{1}{4}$	72	44.5	20	24	17.5
OC105-DC-B-VA-FD	33.338	$1 \frac{5}{16}$	72	44.5	20	24	17.5
OC106-DC-B-VA-FD	34.925	$1 \frac{3}{8}$	72	44.5	20	24	17.5
OC107-DC-B-VA-FD	36.512	$1 \frac{7}{16}$	72	44.5	20	24	17.5
OCE35-DC-B-VA-FD	35	–	72	44.5	20	24	17.5
OC108-DC-B-VA-FD	38.1	$1 \frac{1}{2}$	80	50.8	21	25	19
OCE40-DC-B-VA-FD	40	–	80	50.8	21	25	19



OC...-DC-B-VA-FD, OCE...-DC-B-VA-FD

d ₁	d ₃ max.	W	C _r	C _{0r}	C _{ur}	f ₀	m ≈
mm	mm	mm	N	N	N	–	kg
29.06	37	3	11100	5400	500	13.2	0.21
29.06	37	3	11100	5400	500	13.2	0.21
29.06	37	3	11100	5400	500	13.2	0.21
29.06	37	3	11100	5400	500	13.2	0.21
34	42	3	12200	6500	550	13.9	0.24
34	42	3	12200	6500	550	13.9	0.24
34	42	3	12200	6500	550	13.9	0.24
34	42	3	12200	6500	550	13.9	0.24
40.4	48	3	16700	9110	760	13.9	0.35
40.4	48	3	16700	9110	760	13.9	0.35
40.4	48	3	16700	9110	760	13.9	0.35
40.4	48	3	16700	9110	760	13.9	0.35
47.45	57	4	21900	12500	1000	13.9	0.51
47.45	57	4	21900	12500	1000	13.9	0.51
47.45	57	4	21900	12500	1000	13.9	0.51
47.45	57	4	21900	12500	1000	13.9	0.51
47.45	57	4	21900	12500	1000	13.9	0.51
52.7	63	4	24900	14500	1130	14	0.69
52.7	63	4	24900	14500	1130	14	0.69

3 Stainless steel housing units

Housing units with stainless steel housings made from X5CrNiMo17-12-2 are specifically designed for the food industry as pillow block housing units, flanged housing units, and take-up housing units in FD design. The stainless steels used are highly resistant to moisture, UV radiation, bacterial and fungal attacks, as well as to many chemical agents. The housing units are designed for frequent high-pressure washing cycles.

The stainless steel housing units are highly suited to applications in the food industry in which they are exposed to various media, moisture, salt spray mist, contaminated water, or cleaning agents.

Design variants

Stainless steel housing units in FD design for the food industry are available in the following variants:

- **pillow block units:** stainless steel housing with stainless steel radial insert ball bearing
 - standard housing or stand-off housing
 - location by means of set screws or locking collar
- **flanged housing units:** stainless steel housing with stainless steel radial insert ball bearing
 - standard housing or stand-off housing
 - location by means of set screws or locking collar
- **take-up housing units:** stainless steel housing with stainless steel radial insert ball bearing
 - standard housing
 - location by means of set screws or locking collar

The housing units are lubricated with food-grade grease.

3.1 Housing design

The units are ready-to-fit and comprise stainless steel housings in which corrosion-resistant Schaeffler radial insert ball bearings for the food industry are fitted. The housing units are certified to degree of protection IP69K and thus protected against water ingress during high-pressure or steam-jet cleaning, as well as against high-pressure water jets.

The possible combinations can be found in the table of combination options ►52 | 25.

Housing design

Standard housings have a complete housing base and therefore offer no hidden spaces for bacteria to grow.

Stand-off housings have a reduced connection surface between the screw mounting surface and the housing unit, preventing bacterial settlement. They allow for CIP (Cleaning in Place) and are particularly suitable for high-pressure cleaning. With a distance of $\frac{1}{2}$ inch between the screw mounting surface and the housing unit, the housing units comply with food standards HACCP and HARPC.

Location method

Set screws locate housing units with integral radial insert ball bearing Y..-DC-B-VA-FD on the shaft.

A **locking collar** secures housing units with integral radial insert ball bearing OC..-DC-B-VA-FD on the shaft.

! In order to ensure function and reliability under all operating conditions, the bearings and housings are matched to each other with a defined swivel moment after mounting.

The swivel moment can be requested from Schaeffler.

Special characteristics

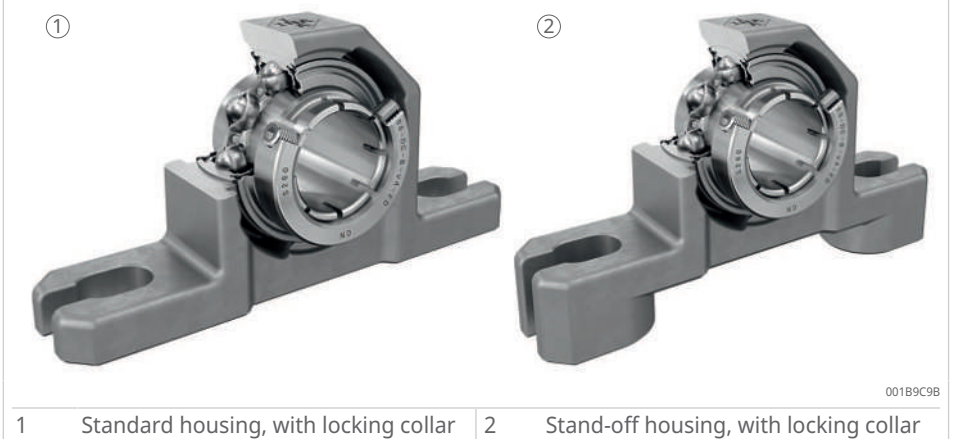
- components made from 100 % stainless steel, recyclable
- available as standard housings or stand-off housings
- IP69K certified
- smooth surface, easy to clean with high-pressure water or steam jets
- greased for life with food-grade lubricant
- maintenance-free design

3.1.1 Pillow block housing units

Pillow block housing units are available with a long base or short base. The stainless steel housings are not split and are screw mounted to the adjacent construction by means of slots or threaded holes.

Pillow block housing units with long base

15 Pillow block housing units with long base, FD design



Series with standard housing:

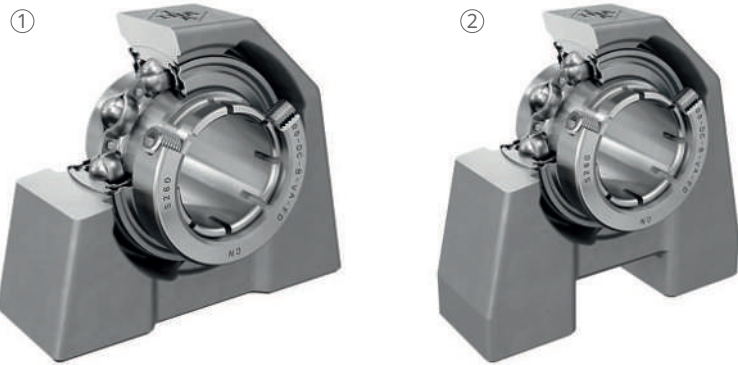
- with grub screws: RASEY..-VA-FD
- with locking collar: RASEOC..-VA-FD

Series with stand-off housing:

- with grub screws: RASEHY..-VA-FD
- with locking collar: RASEHOC..-VA-FD

Pillow block housing units with short base

16 Pillow block housing units with short base, FD design



001B9CC9

1	Standard housing, with locking collar	2	Stand-off housing, with locking collar
---	---------------------------------------	---	--

Series with standard housing:

- with grub screws: RSHEY..-VA-FD
- with locking collar: RSHEOC..-VA-FD

Series with stand-off housing:

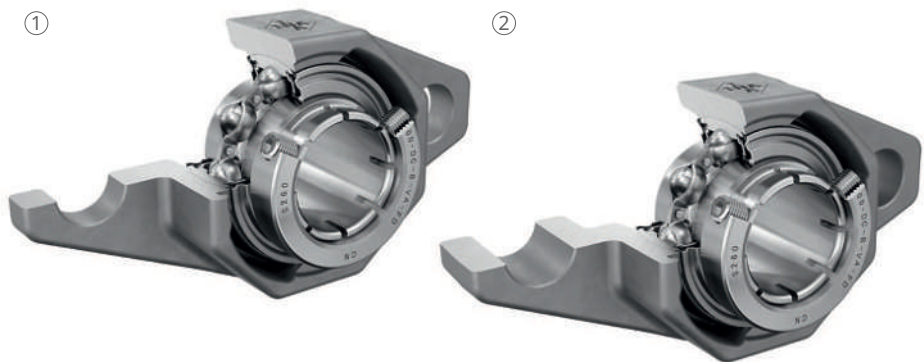
- with grub screws: RSHEHY..-VA-FD
- with locking collar: RSHEHOC..-VA-FD

3.1.2 Flanged housing units

Flanged housing units are available as two-bolt, three-bolt, and four-bolt flanged housing units.

Two-bolt flanged housing units

17 Two-bolt flanged housing units, narrow version, FD design



001B9CFE

1	Standard housing, with locking collar	2	Stand-off housing, with locking collar
---	---------------------------------------	---	--

Series with standard housing:

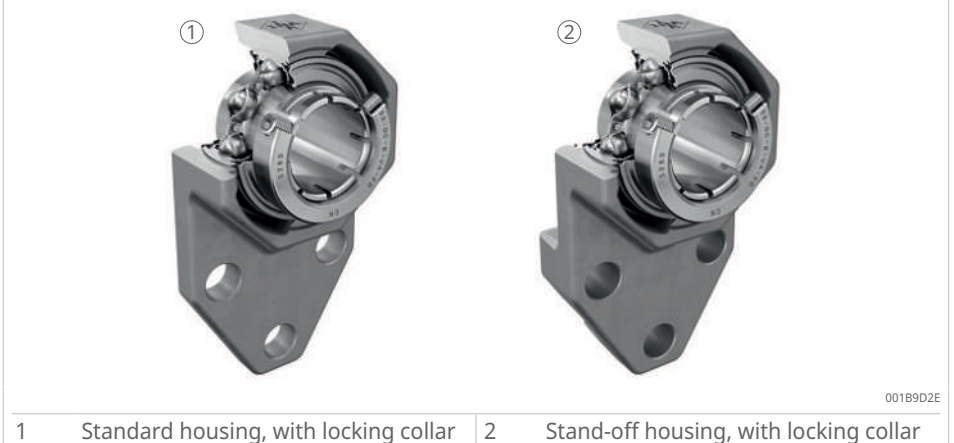
- with grub screws: RCJTY..-VA-FD
- with locking collar: RCJTOC..-VA-FD

Series with stand-off housing:

- with grub screws: RCJTHY..-VA-FD
- with locking collar: RCJTHOC..-VA-FD

Three-bolt flanged housing units

18 Three-bolt flanged housing units, FD design



Series with standard housing:

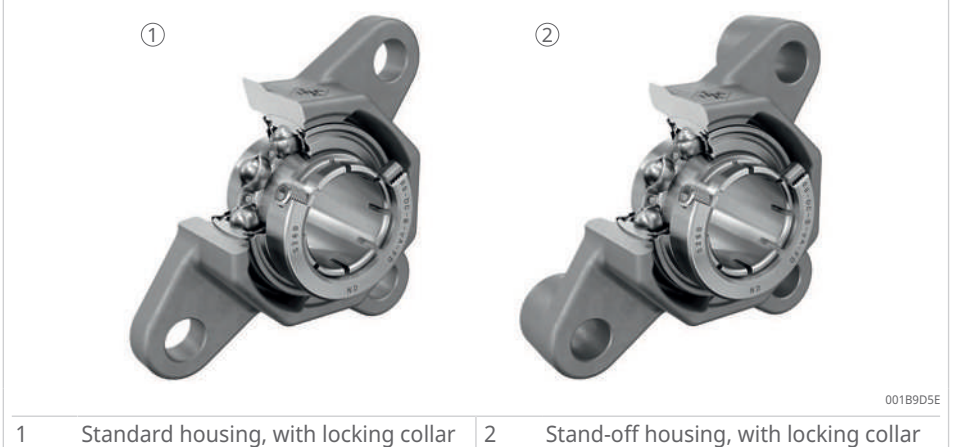
- with grub screws: RFBY..-VA-FD
- with locking collar: RFOC..-VA-FD

Series with stand-off housing:

- with grub screws: RFBHY..-VA-FD
- with locking collar: RFBHOC..-VA-FD

Four-bolt flanged housing units

19 Four-bolt flanged housing units, FD design



Series with standard housing:

- with grub screws: RCJY..-VA-FD
- with locking collar: RCJOC..-VA-FD

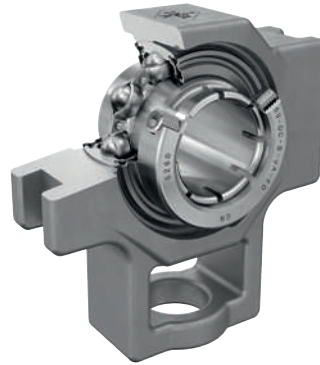
Series with stand-off housing:

- with grub screws: RCJHY..-VA-FD
- with locking collar: RCJHOC..-VA-FD

3.1.3 Take-up housing units

Take-up housing units are not split and are clamped to the adjacent construction through 1 fixing hole. Take-up housing units have facilities for sliding motion. They are used where shafts must undergo substantial radial displacement travel.

20 Take-up housing units, FD design



001B9BCB

Series with standard housing:

- with grub screws: RTUEY..-VA-FD
- with locking collar: RTUEOC..-VA-FD

3.1.4 Accessories

3.1.4.1 Bearing end caps

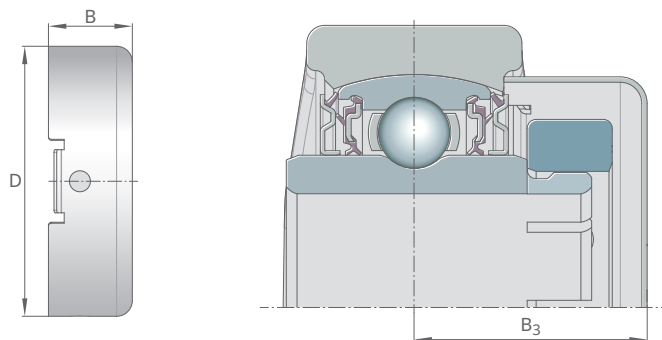
For stainless steel housing units, closed bearing end caps made from stainless steel are available as safety covers; see product tables.

The IP69K-certified housing units do not require any additional sealing. The bearing end caps are designed as safety covers and are not sealed. They have 2 drain holes to release moisture and heat. The bearing end caps must be removed for cleaning.

The bearing end caps are very easy to fit and remove. They are inserted into the front of the housing and rotated until they snap into place.

Bearing end caps are not included in the scope of delivery of the stainless steel housing units.

21 Closed bearing end caps



001B9EAE

24 Bearing end caps for stainless steel housing units

Designation	D	B	B ₃
Closed end cap	mm	mm	mm
KASK04-VA-G-NAT	46.5	15	24
KASK05-VA-G-NAT	51.5	16	26
KASK06-VA-G-NAT	61.5	17	27.5
KASK07-VA-G-NAT	71.5	19	30.5
KASK08-VA-G-NAT	79.5	23	36

3

3.1.5 Lubricant approved for food applications

The lubricant used is approved for food applications to category NSF H1 and meets the quality requirements of FDA 21 CFR 178.3570 in full. Furthermore, the lubricant is certified to halal and kosher standards. The grease also contains only allergen-free ingredients and no components comprising animal or genetically modified organisms.

22 Certifications

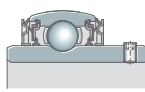
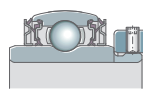


001A75F1

1	kosher	2	halal
3	National Sanitation Foundation (NSF)		

3.1.6 Possible combinations of radial insert ball bearings and stainless steel housings

25 Possible combinations of radial insert ball bearings and stainless steel housings

Stainless steel housing				Radial insert ball bearing	
				with grub screws	with locking collar
					
				YE...-DC-B-VA-FD Y...-DC-B-VA-FD d = 20 mm ... 40 mm	OCE...-DC-B-VA-FD OC...-DC-B-VA-FD d = 20 mm ... 40 mm
Design				Designation	d = 1/2 inch ... 1 1/2 inch
Pillow block housing	with long base	Standard	GEH.ASE...-VA-NAT	RASEY...-VA-FD ➤60 3.17.2	RASEOC...-VA-FD ➤62 3.17.3
		Stand-off	GEH.ASEH...-VA-NAT	RASEHY...-VA-FD ➤60 3.17.2	RASEHOC...-VA-FD ➤62 3.17.3
	with short base	Standard	GEH.SHE...-VA-NAT	RSHEY...-VA-FD ➤64 3.17.4	RSHEOC...-VA-FD ➤66 3.17.5
		Stand-off	GEH.SHEH...-VA-NAT	RSHEHY...-VA-FD ➤64 3.17.4	RSHEHOC...-VA-FD ➤66 3.17.5
Flanged housing	Two-bolt, narrow	Standard	GEH.CJT...-VA-NAT	RCJTY...-VA-FD ➤68 3.17.6	RCJTOC...-VA-FD ➤70 3.17.7
		Stand-off	GEH.CJTH...-VA-NAT	RCJTHY...-VA-FD ➤68 3.17.6	RCJTHOC...-VA-FD ➤70 3.17.7
	Three-bolt	Standard	GEH.FB...-VA-NAT	RFBY...-VA-FD ➤72 3.17.8	RFBOC...-VA-FD ➤74 3.17.9
		Stand-off	GEH.FBH...-VA-NAT	RFBHY...-VA-FD ➤72 3.17.8	RFBHOC...-VA-FD ➤74 3.17.9
	Four-bolt	Standard	GEH.CJ...-VA-NAT	RCJY...-VA-FD ➤76 3.17.10	RCJOC...-VA-FD ➤78 3.17.11
		Stand-off	GEH.CJH...-VA-NAT	RCJHY...-VA-FD ➤76 3.17.10	RCJHOC...-VA-FD ➤78 3.17.11
Take-up housing		Standard	GEH.TUE...-VA-NAT	RTUEY...-VA-FD ➤80 3.17.12	RTUEOC...-VA-FD ➤82 3.17.13

3.2 Materials, corrosion protection, food grade

All further information on the materials used, corrosion resistance, and food-grade greasing can be found in the section Radial insert ball bearings ➤22 | 2.

26 Steels used

Bearing components	Material		
	Short name		Material number
	ISO 683-17:2023	AISI	
Housing	X5CrNiMo17-12-2	316	1.4401
Bearing end cap	X5CrNi18-10	304	1.4301

We reserve the right to make technical changes, including material changes, as part of the ongoing development.

Media resistance

In the food industry in particular, the resistance of the material in relation to various cleaning agents is of increasing importance.

27 Resistance to media

Medium		Concentration	X5CrNiMo17-12-2 AISI 316	
			+20 °C +68 °F	+80 °C +176 °F
Hydrochloric acid	HCl	0.1	++	++
		1	+	o
		18	–	–
Hydrofluoric acid	HF	1	–	–
		5	–	–
Sulfuric acid	H ₂ SO ₄	1	++	–
		10	+	–
		96	++	–
Sulfurous acid	H ₂ SO ₃	1	++	++
Nitric acid	HNO ₃	5	++	++
		25	++	++
		65	++	++
Phosphoric acid	H ₃ PO ₄	1	++	++
		10	++	++
		85	++	++
Formic acid	HCOOH	5	++	++
		25	++	++
Acetic acid	CH ₃ COOH	5	++	++
		25	++	++
Citric acid		5	++	++
		25	++	++
Chloroacetic acid		5	++	++
Sodium chloride	NaCl	10	++	++
Seawater		4	++	++
Distilled water		–	++	++
Ammonium hydroxide	NH ₄ OH	1	++	++
		10	++	++
Potassium hydroxide solution	KOH	0.1	++	++
		1	++	++
		10	++	++
Sodium hypochlorite solution		1	++	++
Hydrogen peroxide	H ₂ O ₂	5	++	++

- ++ resistant
- + moderately resistant
- o barely resistant
- not resistant

FDA-compliant materials

The following FDA-compliant materials are used:

28 FDA-compliant materials

Bearing components	Material, designation	FDA directive
Seals	NBR, AISI 1008	FDA 21 CFR 177.2600
Flinger shields	FKM, AISI 304	FDA 21 CFR 177.2600, FDA GRAS status
Grease	Fuchs CASSIDA GREASE GTS 2	FDA 21 CFR 178.3570, equivalent to NSF H1 certification
Housing	AISI 316	FDA GRAS status (chromium content $\geq 16\%$)
Bearing end cap	AISI 304	FDA GRAS status (chromium content $\geq 16\%$)

The classification of components as FDA-compliant is based on information provided by material manufacturers.

3.3 Load carrying capacity

The load carrying capacity of radial insert ball bearings can be found in the section Radial insert ball bearings ►28|2.3.

Due to their versatile characteristics, Schaeffler housing units are suitable for use in almost all industrial sectors.



If bearing arrangements are planned for equipment in which a malfunction could be hazardous to persons or an unplanned stoppage of the machine causes major disruption, it is essential that you consult Schaeffler before proceeding with the design.

Radial load carrying capacity of housings

Stainless steel housings can support the same radial static loads as the radial insert ball bearings fitted.

The static load carrying capacity C_{0r} of the radial insert ball bearings is stated in the product tables.



Where shock loads are present, appropriate safety factors must be applied. Please consult Schaeffler in this case.

Axial load carrying capacity of housings

The axial operating load of the unit must not exceed the axial load carrying capacity of the housing.

The axial load carrying capacity of stainless steel housings is $C_{0a\ G} = 0.5 \cdot C_{0r}$.

3.4 Compensation of angular misalignments

Bearings with a spherical outside surface of the outer ring, fitted in housings with a concave bore, can compensate for static misalignment of the shaft.

Detailed information on the compensation of static misalignments can be found in the section Radial insert ball bearings ►28|2.4.

3.5 Speeds

The speed limits are dependent on the load, the clearance between the bearing bore and shaft, and the friction of the seals in the case of bearings with contact seals.

Detailed information on the speed limits can be found in the section Radial insert ball bearings ►32 | 2.7.

3.6 Lubrication

All further information on the lubrication of housing units can be found in the section Radial of insert ball bearings ►29 | 2.5.

3.7 Sealing

All further information on the sealing of housing units can be found in the section Radial insert ball bearings ►30 | 2.6.

3.8 Temperature range

Stainless steel housing units are suitable for operating temperatures from -20 °C to +100 °C (-4 °F to +210 °F).

3.9 Internal clearance

Information on the internal clearance of integral radial insert ball bearings can be found in the section Radial insert ball bearings ►33 | 2.9.

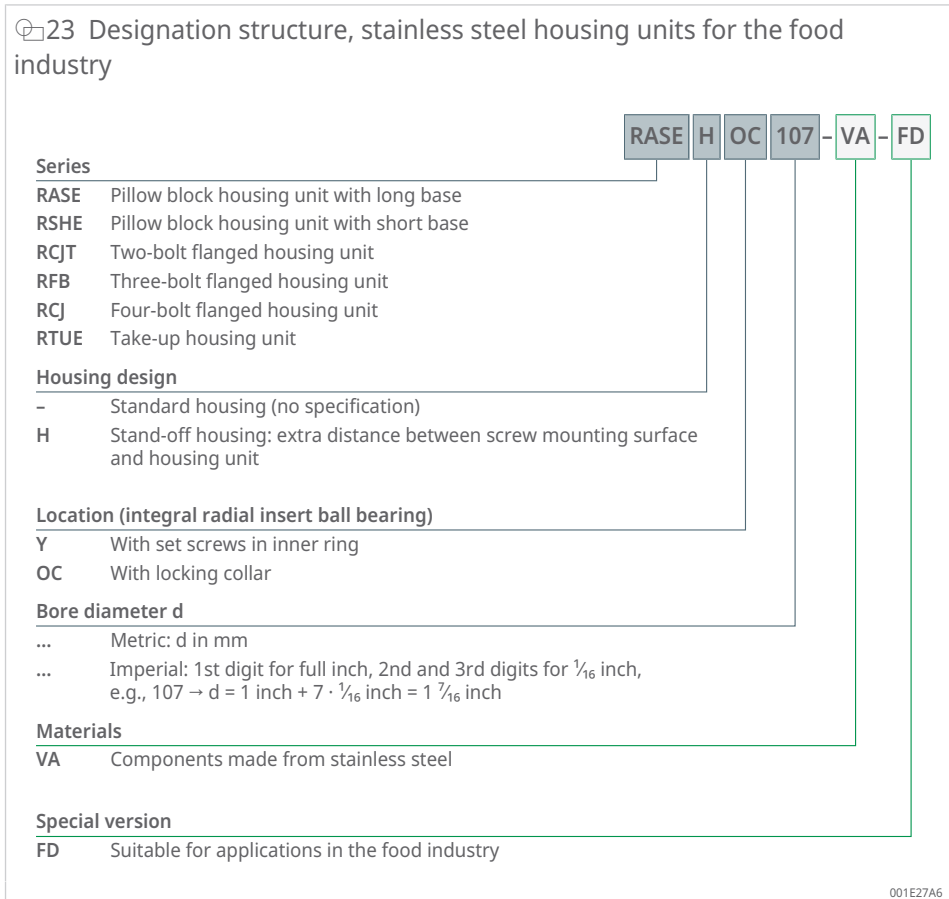
3.10 Dimensions, tolerances

Information on the dimensions and tolerances of integral radial insert ball bearings can be found in the section Radial insert ball bearings ►33 | 2.10.

Housing tolerances

The dimensional, geometrical, and positional tolerances of stainless steel housings correspond to ISO 8062-3.

3.11 Structure of the ordering designation



3.12 Dimensioning

Detailed information on the dimensioning of integral radial insert ball bearings can be found in the section Radial insert ball bearings ►35|2.12.

3.13 Minimum load

Detailed information on the minimum loading of integral radial insert ball bearings can be found in the section Radial insert ball bearings ►37|2.13.

3.14 Design of the adjacent construction

Shaft design

The permissible shaft tolerance is dependent on the speed, load, and the radial insert ball bearing fitted. Shafts of the tolerance classes h6[Ⓔ] to h9[Ⓔ] can be used. Conventional drawn shafts will suffice for most applications.

The roughness of the bearing seats on the shaft must be matched to the tolerance class of the integral radial insert ball bearing. The mean roughness value Ra must not be too high, in order to maintain the interference loss within limits. The shafts must be ground. Guide values as a function of the IT grade of bearing seating surfaces can be found in the table.

 29 Roughness values for cylindrical bearing seating surfaces – guide values

Nominal bearing seat diameter		Recommended mean roughness value for ground bearing seats			
d, D		R _{max}			
mm		μm			
>	≤	Diameter tolerance (IT grade)			
		IT4	IT5	IT6	IT7
–	80	0.2	0.4	0.8	1.6
80	500	0.4	0.8	1.6	1.6

Screw mounting surfaces

The housings are screw mounted on the adjacent construction. Less stringent tolerances are sufficient for the screw mounting surfaces.

Recommendations for the screw mounting surfaces are as follows:

- roughness of the screw mounting surface max. Ra 12.5 (Rz_{max} 63)
- geometrical and positional tolerance 0.04/100 concave, spherical not permissible

Fixing screws

Stainless steel screws of property class 80 or higher are suitable for fastening the housing to the screw mounting surface. The maximum tightening torques applicable to this screw property class must not be exceeded, even if screws of a higher property class are used.

Schaeffler recommends adhering to the following criteria for fastening:

- Design the screw connection in accordance with VDI 2230 using a coefficient of friction $\mu = 0.12$ (90 %).
- Screws and other accessories used for fastening should be made from stainless steel
- Use hexagon head screws with a coarse pitch full thread in accordance with DIN EN ISO 4017 as fastening screws. Combine the screws with at least 1 washer in accordance with DIN EN ISO 7089 or DIN EN ISO 7090.

Screws and accessories for location are not included in the delivery.

3.15 Mounting and dismounting

Correct mounting has a decisive influence on the achievable bearing life. Careful attention must therefore be paid to the following guidelines.



The Schaeffler Mounting Handbook MH 1 gives comprehensive information about the correct storage, mounting, dismounting, and maintenance of rotary rolling bearings. The Mounting Handbook also provides information which should be observed by the designer in relation to the mounting, dismounting, and maintenance of bearings, in the original design of the bearing position.

MH 1 | Mounting Handbook |

<https://www.schaeffler.de/std/1D53>

Detailed guidelines on the mounting and dismounting of housing units and radial insert ball bearings

SG 1 | Radial Insert Ball bearings and Housing Units |

<https://www.schaeffler.de/std/1B64>

MON 108 | Mounting of Radial Insert Ball Bearings with Spherical Outer Ring in Bearing Housings |

<https://www.schaeffler.de/std/1FA1>

Locating radial insert ball bearings on the shaft

Further information on locating radial insert ball bearings on the shaft can be found in the section Radial insert ball bearings ►38|2.15.

Location of the housing

Stainless steel screws of property class 80 or higher are suitable for fastening the housing to the screw mounting surface. The maximum tightening torques applicable to this screw property class must not be exceeded, even if screws of a higher property class are used.

Hexagonal socket head screws with a coarse pitch full thread in accordance with DIN EN ISO 4017 should be used as fixing screws. The screws should be combined as a minimum with 1 washer in accordance with DIN EN ISO 7089 or DIN EN ISO 7090.



The maximum tightening torques apply to stainless steel screws utilizing 90 % of the yield strength of screw material grade 8.8 and with a friction coefficient $\mu = 0.12$. Schaeffler recommends tightening the fixing screws to approximately 70 % of the normative values.

30 Tightening torques for stainless steel fixing screws

Nominal screw diameter		Tightening torque recommended
	inch	Nm
M10	$\frac{3}{8}$	19
M12	$\frac{7}{16}$	33
M14	$\frac{1}{2}$	45

3.16 Further information

The information on the design of the bearing arrangement, lubrication, mounting and dismounting, and on the operation of the bearings provided in the Technical Principles of Catalog HR 1, Rolling Bearings, must be observed as further information.

HR 1 | Rolling Bearings |

<https://www.schaeffler.de/std/1D3D>

SG 1 | Radial Insert Ball bearings and Housing Units |

<https://www.schaeffler.de/std/1B64>

MH 1 | Mounting Handbook |

<https://www.schaeffler.de/std/1D53>

MON 108 | Mounting of Radial Insert Ball Bearings with Spherical Outer Ring in Bearing Housings |

<https://www.schaeffler.de/std/1FA1>

TPI 64 | Corrosion-resistant products |

<https://www.schaeffler.de/std/1F37>

3.17 Product tables

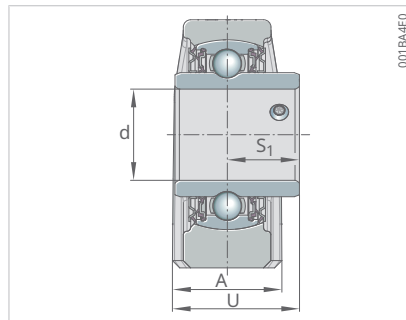
3.17.1 Explanations of the product tables

A	mm	Base width
A	mm	Housing height
A	mm	Housing width on locating side
A ₁	mm	Flange thickness
A ₁	mm	Guide slot width
A ₂	mm	Distance to raceway center
A ₂	mm	Housing width
B	mm	Width
B ₁	mm	Width across locking collar
C _{0r}	N	Basic static load rating, radial
C _r	N	Basic dynamic load rating, radial
C _{ur}	N	Fatigue limit load, radial
d	inch or mm	Bearing bore diameter
H	mm	Distance to shaft axis
H	mm	Flange height
H	mm	Height
H ₁	mm	Base height
H ₁	mm	Distance from fixing holes to shaft axis
H ₁	mm	Distance between guide slots
H ₂	mm	Height
H ₃	mm	Thread length
J	mm	Distance between fixing holes
J ₁	mm	Distance between fixing holes
K	–	Fixing hole thread
L	mm	Length
L	mm	Width
L ₁	mm	Distance to shaft axis
L ₂	mm	Crosspiece length
L ₃	mm	Guide slot length
m	kg	Mass
N	mm	Slot width
N	mm	Fixing hole
N ₁	mm	Slot length
N ₁	mm	Recess width
N ₂	mm	Recess height
S	mm	Distance to raceway center
S ₁	mm	Distance from raceway center to locking collar
T	mm	Housing height on locating side
U	mm	Total unit width
U	mm	Total unit height
Y	mm	Distance of housing to screw mounting surface

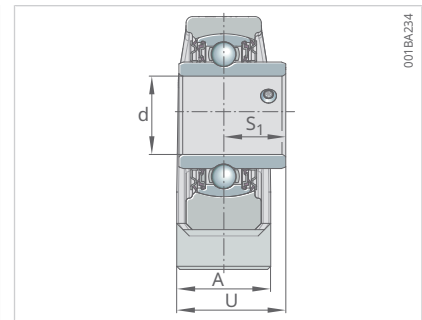
3.17.2 Pillow block housing units, with long base, with grub screws

FD design

Stainless steel housings, standard or stand-off design

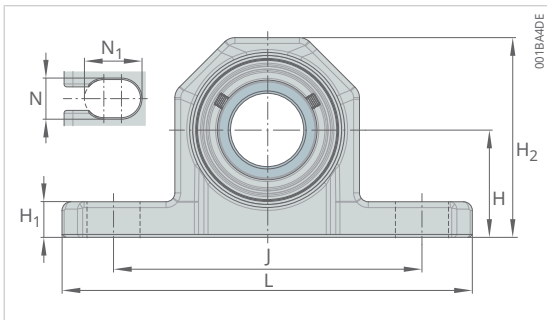


RASEY...-VA-FD

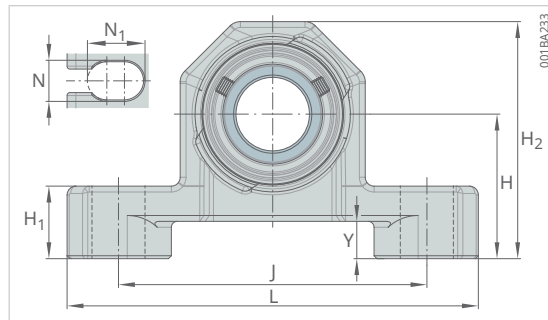


RASEHY...-VA-FD

Unit	d		Housing	Radial insert ball bearing	L	U	A
-	mm	inch	-	-	mm	mm	mm
RASEY008-VA-FD	12.7	1/2	GEH.ASE04-VA-NAT	Y008-DC-B-VA-FD	127	33.3	30
RASEHY008-VA-FD	12.7	1/2	GEH.ASEH04-VA-NAT	Y008-DC-B-VA-FD	127	33.3	30
RASEY010-VA-FD	15.875	5/8	GEH.ASE04-VA-NAT	Y010-DC-B-VA-FD	127	33.3	30
RASEHY010-VA-FD	15.875	5/8	GEH.ASEH04-VA-NAT	Y010-DC-B-VA-FD	127	33.3	30
RASEY012-VA-FD	19.05	3/4	GEH.ASE04-VA-NAT	Y012-DC-B-VA-FD	127	33.3	30
RASEHY012-VA-FD	19.05	3/4	GEH.ASEH04-VA-NAT	Y012-DC-B-VA-FD	127	33.3	30
RASEY20-VA-FD	20	-	GEH.ASE04-VA-NAT	YE20-DC-B-VA-FD	127	33.3	30
RASEHY20-VA-FD	20	-	GEH.ASEH04-VA-NAT	YE20-DC-B-VA-FD	127	33.3	30
RASEY014-VA-FD	22.225	7/8	GEH.ASE05-VA-NAT	Y014-DC-B-VA-FD	140	34.8	30
RASEHY014-VA-FD	22.225	7/8	GEH.ASEH05-VA-NAT	Y014-DC-B-VA-FD	140	34.8	30
RASEY015-VA-FD	23.812	15/16	GEH.ASE05-VA-NAT	Y015-DC-B-VA-FD	140	34.8	30
RASEHY015-VA-FD	23.812	15/16	GEH.ASEH05-VA-NAT	Y015-DC-B-VA-FD	140	34.8	30
RASEY25-VA-FD	25	-	GEH.ASE05-VA-NAT	YE25-DC-B-VA-FD	140	34.8	30
RASEHY25-VA-FD	25	-	GEH.ASEH05-VA-NAT	YE25-DC-B-VA-FD	140	34.8	30
RASEY100-VA-FD	25.4	1	GEH.ASE05-VA-NAT	Y100-DC-B-VA-FD	140	34.8	30
RASEHY100-VA-FD	25.4	1	GEH.ASEH05-VA-NAT	Y100-DC-B-VA-FD	140	34.8	30
RASEY102-VA-FD	28.575	1 1/8	GEH.ASE06-VA-NAT	Y102-DC-B-VA-FD	165	40.2	36
RASEHY102-VA-FD	28.575	1 1/8	GEH.ASEH06-VA-NAT	Y102-DC-B-VA-FD	165	40.2	36
RASEY30-VA-FD	30	-	GEH.ASE06-VA-NAT	YE30-DC-B-VA-FD	165	40.2	36
RASEHY30-VA-FD	30	-	GEH.ASEH06-VA-NAT	YE30-DC-B-VA-FD	165	40.2	36
RASEY103-VA-FD	30.162	1 3/16	GEH.ASE06-VA-NAT	Y103-DC-B-VA-FD	165	40.2	36
RASEHY103-VA-FD	30.162	1 3/16	GEH.ASEH06-VA-NAT	Y103-DC-B-VA-FD	165	40.2	36
RASEY104-VA-FD	31.75	1 1/4	GEH.ASE06-VA-NAT	Y104-DC-B-VA-FD	165	40.2	36
RASEHY104-VA-FD	31.75	1 1/4	GEH.ASEH06-VA-NAT	Y104-DC-B-VA-FD	165	40.2	36
RASEY104-207-VA-FD	31.75	1 1/4	GEH.ASE07-VA-NAT	Y104-207-DC-B-VA-FD	167	44.4	38
RASEHY104-207-VA-FD	31.75	1 1/4	GEH.ASEH07-VA-NAT	Y104-207-DC-B-VA-FD	167	44.4	38
RASEY105-VA-FD	33.338	1 5/16	GEH.ASE07-VA-NAT	Y105-DC-B-VA-FD	167	44.4	38
RASEHY105-VA-FD	33.338	1 5/16	GEH.ASEH07-VA-NAT	Y105-DC-B-VA-FD	167	44.4	38
RASEY106-VA-FD	34.925	1 3/8	GEH.ASE07-VA-NAT	Y106-DC-B-VA-FD	167	44.4	38
RASEHY106-VA-FD	34.925	1 3/8	GEH.ASEH07-VA-NAT	Y106-DC-B-VA-FD	167	44.4	38
RASEY35-VA-FD	35	-	GEH.ASE07-VA-NAT	YE35-DC-B-VA-FD	167	44.4	38
RASEHY35-VA-FD	35	-	GEH.ASEH07-VA-NAT	YE35-DC-B-VA-FD	167	44.4	38
RASEY107-VA-FD	36.512	1 7/16	GEH.ASE07-VA-NAT	Y107-DC-B-VA-FD	167	44.4	38
RASEHY107-VA-FD	36.512	1 7/16	GEH.ASEH07-VA-NAT	Y107-DC-B-VA-FD	167	44.4	38
RASEY108-VA-FD	38.1	1 1/2	GEH.ASE08-VA-NAT	Y108-DC-B-VA-FD	184	50.2	40
RASEY40-VA-FD	40	-	GEH.ASE08-VA-NAT	YE40-DC-B-VA-FD	184	50.2	40



RASEY..-VA-FD



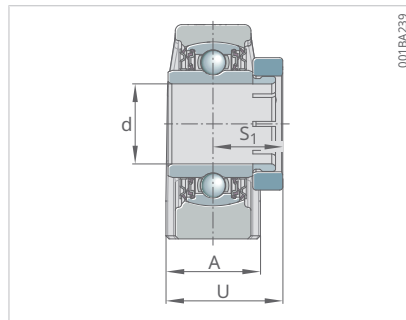
RASEHY..-VA-FD

H ₂	H	Y	H ₁	S ₁	J	N	N ₁	C _r	C _{0r}	C _{ur}	m ≈	Bearing end cap
mm	mm	mm	mm	mm	mm	mm	mm	N	N	N	kg	–
61.8	33.3	–	11	18.3	95	13	18	11100	5400	500	0.64	KASK04-VA-G-NAT
74.5	46	12.7	23.7	18.3	95	13	18	11100	5400	500	0.67	KASK04-VA-G-NAT
61.8	33.3	–	11	18.3	95	13	18	11100	5400	500	0.64	KASK04-VA-G-NAT
74.5	46	12.7	23.7	18.3	95	13	18	11100	5400	500	0.67	KASK04-VA-G-NAT
61.8	33.3	–	11	18.3	95	13	18	11100	5400	500	0.64	KASK04-VA-G-NAT
74.5	46	12.7	23.7	18.3	95	13	18	11100	5400	500	0.67	KASK04-VA-G-NAT
61.8	33.3	–	11	18.3	95	13	18	11100	5400	500	0.64	KASK04-VA-G-NAT
74.5	46	12.7	23.7	18.3	95	13	18	11100	5400	500	0.67	KASK04-VA-G-NAT
68	36.5	–	12	19.8	105	13	19	12200	6500	550	0.73	KASK05-VA-G-NAT
80.7	49.2	12.7	24.7	19.8	105	13	19	12200	6500	550	0.77	KASK05-VA-G-NAT
68	36.5	–	12	19.8	105	13	19	12200	6500	550	0.73	KASK05-VA-G-NAT
80.7	49.2	12.7	24.7	19.8	105	13	19	12200	6500	550	0.77	KASK05-VA-G-NAT
68	36.5	–	12	19.8	105	13	19	12200	6500	550	0.73	KASK05-VA-G-NAT
80.7	49.2	12.7	24.7	19.8	105	13	19	12200	6500	550	0.77	KASK05-VA-G-NAT
68	36.5	–	12	19.8	105	13	19	12200	6500	550	0.73	KASK05-VA-G-NAT
80.7	49.2	12.7	24.7	19.8	105	13	19	12200	6500	550	0.77	KASK05-VA-G-NAT
80.9	42.9	–	13	22.2	121	17	21	16700	9110	760	1.27	KASK06-VA-G-NAT
93.6	55.6	12.7	25.7	22.2	121	17	21	16700	9110	760	1.33	KASK06-VA-G-NAT
80.9	42.9	–	13	22.2	121	17	21	16700	9110	760	1.27	KASK06-VA-G-NAT
93.6	55.6	12.7	25.7	22.2	121	17	21	16700	9110	760	1.33	KASK06-VA-G-NAT
80.9	42.9	–	13	22.2	121	17	21	16700	9110	760	1.27	KASK06-VA-G-NAT
93.6	55.6	12.7	25.7	22.2	121	17	21	16700	9110	760	1.33	KASK06-VA-G-NAT
80.9	42.9	–	13	22.2	121	17	21	16700	9110	760	1.27	KASK06-VA-G-NAT
93.6	55.6	12.7	25.7	22.2	121	17	21	16700	9110	760	1.33	KASK06-VA-G-NAT
90.6	47.6	–	14	25.4	127	17	21	21900	12500	1000	1.45	KASK07-VA-G-NAT
103.3	60.3	12.7	26.7	25.4	127	17	21	21900	12500	1000	1.59	KASK07-VA-G-NAT
90.6	47.6	–	14	25.4	127	17	21	21900	12500	1000	1.45	KASK07-VA-G-NAT
103.3	60.3	12.7	26.7	25.4	127	17	21	21900	12500	1000	1.59	KASK07-VA-G-NAT
90.6	47.6	–	14	25.4	127	17	21	21900	12500	1000	1.45	KASK07-VA-G-NAT
103.3	60.3	12.7	26.7	25.4	127	17	21	21900	12500	1000	1.59	KASK07-VA-G-NAT
90.6	47.6	–	14	25.4	127	17	21	21900	12500	1000	1.45	KASK07-VA-G-NAT
103.3	60.3	12.7	26.7	25.4	127	17	21	21900	12500	1000	1.59	KASK07-VA-G-NAT
90.6	47.6	–	14	25.4	127	17	21	21900	12500	1000	1.45	KASK07-VA-G-NAT
103.3	60.3	12.7	26.7	25.4	127	17	21	21900	12500	1000	1.59	KASK07-VA-G-NAT
96.2	49.2	–	14	31.2	137	17	21	24900	14500	1130	1.78	KASK08-VA-G-NAT
96.2	49.2	–	14	31.2	137	17	21	24900	14500	1130	1.78	KASK08-VA-G-NAT

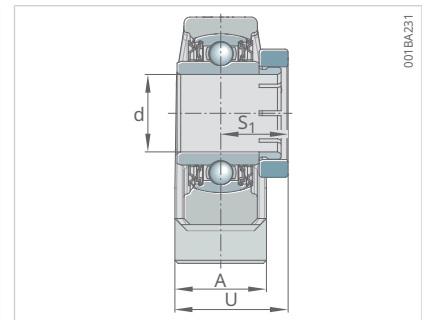
3.17.3 Pillow block housing units, with long base, with locking collar

FD design

Stainless steel housings, standard or stand-off design

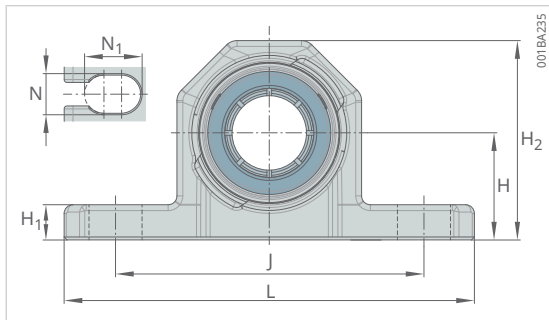


RASEOC...-VA-FD

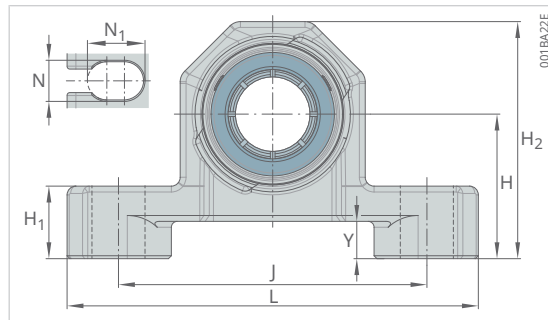


RASEHOC...-VA-FD

Unit	d		Housing	Radial insert ball bearing	L	U	A
-	mm	inch	-	-	mm	mm	mm
RASEOC008-VA-FD	12.7	1/2	GEH.ASE04-VA-NAT	OC008-DC-B-VA-FD	127	34.8	30
RASEHOC008-VA-FD	12.7	1/2	GEH.ASEH04-VA-NAT	OC008-DC-B-VA-FD	127	34.8	30
RASEOC010-VA-FD	15.875	5/8	GEH.ASE04-VA-NAT	OC010-DC-B-VA-FD	127	34.8	30
RASEHOC010-VA-FD	15.875	5/8	GEH.ASEH04-VA-NAT	OC010-DC-B-VA-FD	127	34.8	30
RASEOC012-VA-FD	19.05	3/4	GEH.ASE04-VA-NAT	OC012-DC-B-VA-FD	127	34.8	30
RASEHOC012-VA-FD	19.05	3/4	GEH.ASEH04-VA-NAT	OC012-DC-B-VA-FD	127	34.8	30
RASEOC20-VA-FD	20	-	GEH.ASE04-VA-NAT	OCE20-DC-B-VA-FD	127	34.8	30
RASEHOC20-VA-FD	20	-	GEH.ASE04H-VA-NAT	OCE20-DC-B-VA-FD	127	34.8	30
RASEOC014-VA-FD	22.225	7/8	GEH.ASE05-VA-NAT	OC014-DC-B-VA-FD	140	37.2	30
RASEHOC014-VA-FD	22.225	7/8	GEH.ASE05H-VA-NAT	OC014-DC-B-VA-FD	140	37.2	30
RASEOC015-VA-FD	23.812	15/16	GEH.ASE05-VA-NAT	OC015-DC-B-VA-FD	140	37.2	30
RASEHOC015-VA-FD	23.812	15/16	GEH.ASE05H-VA-NAT	OC015-DC-B-VA-FD	140	37.2	30
RASEOC25-VA-FD	25	-	GEH.ASE05-VA-NAT	OCE25-DC-B-VA-FD	140	37.2	30
RASEHOC25-VA-FD	25	-	GEH.ASE05H-VA-NAT	OCE25-DC-B-VA-FD	140	37.2	30
RASEOC100-VA-FD	25.4	1	GEH.ASE05-VA-NAT	OC100-DC-B-VA-FD	140	37.2	30
RASEHOC100-VA-FD	25.4	1	GEH.ASE05H-VA-NAT	OC100-DC-B-VA-FD	140	37.2	30
RASEOC102-VA-FD	28.575	1 1/8	GEH.ASE06-VA-NAT	OC102-DC-B-VA-FD	165	41.8	36
RASEHOC102-VA-FD	28.575	1 1/8	GEH.ASE06H-VA-NAT	OC102-DC-B-VA-FD	165	41.8	36
RASEOC30-VA-FD	30	-	GEH.ASE06-VA-NAT	OCE30-DC-B-VA-FD	165	41.8	36
RASEHOC30-VA-FD	30	-	GEH.ASE06H-VA-NAT	OCE30-DC-B-VA-FD	165	41.8	36
RASEOC103-VA-FD	30.162	1 3/16	GEH.ASE06-VA-NAT	OC103-DC-B-VA-FD	165	41.8	36
RASEHOC103-VA-FD	30.162	1 3/16	GEH.ASE06H-VA-NAT	OC103-DC-B-VA-FD	165	41.8	36
RASEOC104-VA-FD	31.75	1 1/4	GEH.ASE06-VA-NAT	OC104-DC-B-VA-FD	165	41.8	36
RASEHOC104-VA-FD	31.75	1 1/4	GEH.ASE06H-VA-NAT	OC104-DC-B-VA-FD	165	41.8	36
RASEOC104-207-VA-FD	31.75	1 1/4	GEH.ASE07-VA-NAT	OC104-207-DC-B-VA-FD	167	46	38
RASEHOC104-207-VA-FD	31.75	1 1/4	GEH.ASE07H-VA-NAT	OC104-207-DC-B-VA-FD	167	46	38
RASEOC105-VA-FD	33.338	1 5/16	GEH.ASE07-VA-NAT	OC105-DC-B-VA-FD	167	46	38
RASEHOC105-VA-FD	33.338	1 5/16	GEH.ASE07H-VA-NAT	OC105-DC-B-VA-FD	167	46	38
RASEOC106-VA-FD	34.925	1 3/8	GEH.ASE07-VA-NAT	OC106-DC-B-VA-FD	167	46	38
RASEHOC106-VA-FD	34.925	1 3/8	GEH.ASE07H-VA-NAT	OC106-DC-B-VA-FD	167	46	38
RASEOC35-VA-FD	35	-	GEH.ASE07-VA-NAT	OCE35-DC-B-VA-FD	167	46	38
RASEHOC35-VA-FD	35	-	GEH.ASE07H-VA-NAT	OCE35-DC-B-VA-FD	167	46	38
RASEOC107-VA-FD	36.512	1 7/16	GEH.ASE07-VA-NAT	OC107-DC-B-VA-FD	167	46	38
RASEHOC107-VA-FD	36.512	1 7/16	GEH.ASE07H-VA-NAT	OC107-DC-B-VA-FD	167	46	38
RASEOC108-VA-FD	38.1	1 1/2	GEH.ASE08-VA-NAT	OC108-DC-B-VA-FD	184	51.8	40
RASEOC40-VA-FD	40	-	GEH.ASE08-VA-NAT	OCE40-DC-B-VA-FD	184	51.8	40



RASEOC...-VA-FD



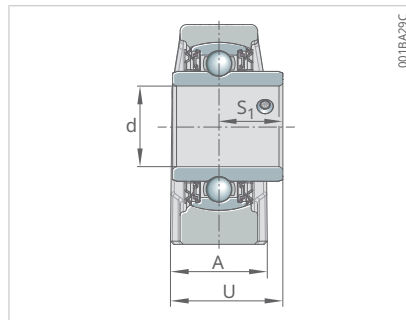
RASEHOC...-VA-FD

H ₂	H	Y	H ₁	S ₁	J	N	N ₁	C _r	C _{0r}	C _{ur}	m ≈	Bearing end cap
mm	mm	mm	mm	mm	mm	mm	mm	N	N	N	kg	–
61.8	33.3	–	11	20.6	95	13	18	11100	5400	500	0.55	KASK04-VA-G-NAT
74.5	46	12.7	23.7	20.6	95	13	18	11100	5400	500	0.7	KASK04-VA-G-NAT
61.8	33.3	–	11	20.6	95	13	18	11100	5400	500	0.55	KASK04-VA-G-NAT
74.5	46	12.7	23.7	20.6	95	13	18	11100	5400	500	0.7	KASK04-VA-G-NAT
61.8	33.3	–	11	20.6	95	13	18	11100	5400	500	0.55	KASK04-VA-G-NAT
74.5	46	12.7	23.7	20.6	95	13	18	11100	5400	500	0.7	KASK04-VA-G-NAT
61.8	33.3	–	11	20.6	95	13	18	11100	5400	500	0.67	KASK04-VA-G-NAT
74.5	46	12.7	23.7	20.6	95	13	18	11100	5400	500	0.7	KASK04-VA-G-NAT
68	36.5	–	12	22.2	105	13	19	12200	6500	550	–	KASK05-VA-G-NAT
80.7	49.2	12.7	24.7	22.2	105	13	19	12200	6500	550	0.82	KASK05-VA-G-NAT
68	36.5	–	12	22.2	105	13	19	12200	6500	550	0.79	KASK05-VA-G-NAT
80.7	49.2	12.7	24.7	22.2	105	13	19	12200	6500	550	0.82	KASK05-VA-G-NAT
68	36.5	–	12	22.2	105	13	19	12200	6500	550	0.78	KASK05-VA-G-NAT
80.7	49.2	12.7	24.7	22.2	105	13	19	12200	6500	550	0.82	KASK05-VA-G-NAT
68	36.5	–	12	22.2	105	13	19	12200	6500	550	0.79	KASK05-VA-G-NAT
80.7	49.2	12.7	24.7	22.2	105	13	19	12200	6500	550	0.82	KASK05-VA-G-NAT
80.9	42.9	–	13	23.8	121	17	21	16700	9110	760	1.3	KASK06-VA-G-NAT
93.6	55.6	12.7	25.7	23.8	121	17	21	16700	9110	760	1.39	KASK06-VA-G-NAT
80.9	42.9	–	13	23.8	121	17	21	16700	9110	760	1.3	KASK06-VA-G-NAT
93.6	55.6	12.7	25.7	23.8	121	17	21	16700	9110	760	1.39	KASK06-VA-G-NAT
80.9	42.9	–	13	23.8	121	17	21	16700	9110	760	1.3	KASK06-VA-G-NAT
93.6	55.6	12.7	25.7	23.8	121	17	21	16700	9110	760	1.39	KASK06-VA-G-NAT
80.9	42.9	–	13	23.8	121	17	21	16700	9110	760	1.3	KASK06-VA-G-NAT
93.6	55.6	12.7	25.7	23.8	121	17	21	16700	9110	760	1.39	KASK06-VA-G-NAT
90.6	47.6	–	14	28.5	127	17	21	21900	12500	1000	1.52	KASK07-VA-G-NAT
103.3	60.3	12.7	26.7	27	127	17	21	21900	12500	1000	1.59	KASK07-VA-G-NAT
90.6	47.6	–	14	28.5	127	17	21	21900	12500	1000	1.52	KASK07-VA-G-NAT
103.3	60.3	12.7	26.7	27	127	17	21	21900	12500	1000	1.59	KASK07-VA-G-NAT
90.6	47.6	–	14	28.5	127	17	21	21900	12500	1000	1.52	KASK07-VA-G-NAT
103.3	60.3	12.7	26.7	27	127	17	21	21900	12500	1000	1.59	KASK07-VA-G-NAT
90.6	47.6	–	14	28.5	127	17	21	21900	12500	1000	1.52	KASK07-VA-G-NAT
103.3	60.3	12.7	26.7	27	127	17	21	21900	12500	1000	1.59	KASK07-VA-G-NAT
90.6	47.6	–	14	28.5	127	17	21	21900	12500	1000	1.52	KASK07-VA-G-NAT
103.3	60.3	12.7	26.7	27	127	17	21	21900	12500	1000	1.59	KASK07-VA-G-NAT
96.2	49.2	–	14	31.8	137	17	21	24900	14500	1130	1.86	KASK08-VA-G-NAT
96.2	49.2	–	14	31.8	137	17	21	24900	14500	1130	1.86	KASK08-VA-G-NAT

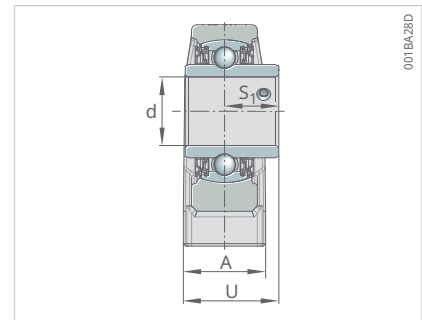
3.17.4 Pillow block housing units, with short base, with grub screws

FD design

Stainless steel housings, standard or stand-off design

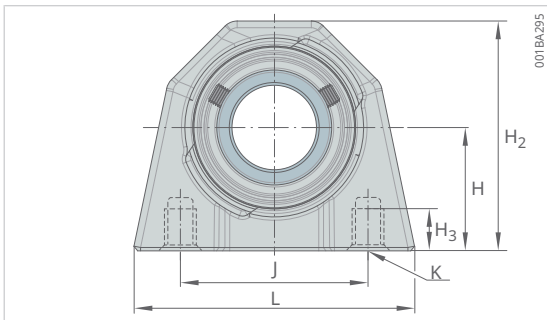


RSHEY...-VA-FD

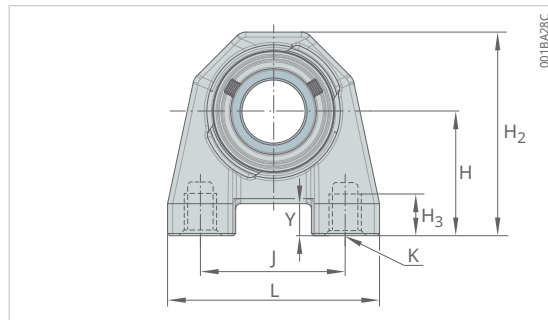


RSHEHY...-VA-FD

Unit	d		Housing	Radial insert ball bearing	L	U	A
-	mm	inch	-	-	mm	mm	mm
RSHEY008-VA-FD	12.7	1/2	GEH.SHE04-VA-NAT	Y008-DC-B-VA-FD	76	33.3	30
RSHEY010-VA-FD	15.875	5/8	GEH.SHE04-VA-NAT	Y010-DC-B-VA-FD	76	33.3	30
RSHEY012-VA-FD	19.05	3/4	GEH.SHE04-VA-NAT	Y012-DC-B-VA-FD	76	33.3	30
RSHEY20-VA-FD	20	-	GEH.SHE04-VA-NAT	YE20-DC-B-VA-FD	76	33.3	30
RSHEY014-VA-FD	22.225	7/8	GEH.SHE05-VA-NAT	Y014-DC-B-VA-FD	83	34.8	30
RSHEHY014-VA-FD	22.225	7/8	GEH.SHEH05-VA-NAT	Y014-DC-B-VA-FD	84	34.8	30
RSHEY015-VA-FD	23.812	15/16	GEH.SHE05-VA-NAT	Y015-DC-B-VA-FD	83	34.8	30
RSHEHY015-VA-FD	23.812	15/16	GEH.SHEH05-VA-NAT	Y015-DC-B-VA-FD	84	34.8	30
RSHEY25-VA-FD	25	-	GEH.SHE05-VA-NAT	YE25-DC-B-VA-FD	83	34.8	30
RSHEHY25-VA-FD	25	-	GEH.SHEH05-VA-NAT	YE25-DC-B-VA-FD	84	34.8	30
RSHEY100-VA-FD	25.4	1	GEH.SHE05-VA-NAT	Y100-DC-B-VA-FD	83	34.8	30
RSHEHY100-VA-FD	25.4	1	GEH.SHEH05-VA-NAT	Y100-DC-B-VA-FD	84	34.8	30
RSHEY102-VA-FD	28.575	1 1/8	GEH.SHE06-VA-NAT	Y102-DC-B-VA-FD	98	40.2	36
RSHEHY102-VA-FD	28.575	1 1/8	GEH.SHEH06-VA-NAT	Y102-DC-B-VA-FD	96	40.2	36
RSHEY30-VA-FD	30	-	GEH.SHE06-VA-NAT	YE30-DC-B-VA-FD	98	40.2	36
RSHEHY30-VA-FD	30	-	GEH.SHEH06-VA-NAT	YE30-DC-B-VA-FD	96	40.2	36
RSHEY103-VA-FD	30.162	1 3/16	GEH.SHE06-VA-NAT	Y103-DC-B-VA-FD	98	40.2	36
RSHEHY103-VA-FD	30.162	1 3/16	GEH.SHEH06-VA-NAT	Y103-DC-B-VA-FD	96	40.2	36
RSHEY104-VA-FD	31.75	1 1/4	GEH.SHE06-VA-NAT	Y104-DC-B-VA-FD	98	40.2	36
RSHEHY104-VA-FD	31.75	1 1/4	GEH.SHEH06-VA-NAT	Y104-DC-B-VA-FD	96	40.2	36
RSHEY104-207-VA-FD	31.75	1 1/4	GEH.SHE07-VA-NAT	Y104-207-DC-B-VA-FD	110	44.4	38
RSHEHY104-207-VA-FD	31.75	1 1/4	GEH.SHEH07-VA-NAT	Y104-207-DC-B-VA-FD	110	44.4	38
RSHEY105-VA-FD	33.338	1 5/16	GEH.SHE07-VA-NAT	Y105-DC-B-VA-FD	110	44.4	38
RSHEHY105-VA-FD	33.338	1 5/16	GEH.SHEH07-VA-NAT	Y105-DC-B-VA-FD	110	44.4	38
RSHEY106-VA-FD	34.925	1 3/8	GEH.SHE07-VA-NAT	Y106-DC-B-VA-FD	110	44.4	38
RSHEHY106-VA-FD	34.925	1 3/8	GEH.SHEH07-VA-NAT	Y106-DC-B-VA-FD	110	44.4	38
RSHEY35-VA-FD	35	-	GEH.SHE07-VA-NAT	Y35-DC-B-VA-FD	110	44.4	38
RSHEHY35-VA-FD	35	-	GEH.SHEH07-VA-NAT	YE35-DC-B-VA-FD	110	44.4	38
RSHEY107-VA-FD	36.512	1 7/16	GEH.SHE07-VA-NAT	Y107-DC-B-VA-FD	110	44.4	38
RSHEHY107-VA-FD	36.512	1 7/16	GEH.SHEH07-VA-NAT	Y107-DC-B-VA-FD	110	44.4	38



RSHEY...-VA-FD



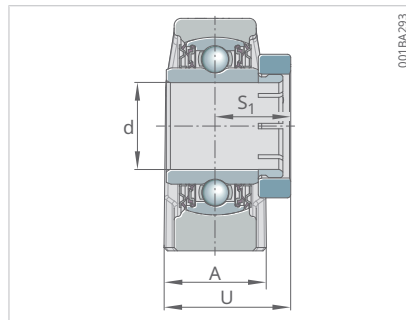
RSHEY...-VA-FD

H ₂	H	Y	S ₁	J	K	H ₃	C _r	C _{0r}	C _{ur}	m ≈	Bearing end cap
mm	mm	mm	mm	mm	–	mm	N	N	N	kg	–
58.7	33.3	–	18.3	50.8	³ / ₈ -16UNC	13	11100	5400	500	0.45	KASK04-VA-G-NAT
58.7	33.3	–	18.3	50.8	³ / ₈ -16UNC	13	11100	5400	500	0.45	KASK04-VA-G-NAT
58.7	33.3	–	18.3	50.8	³ / ₈ -16UNC	13	11100	5400	500	0.45	KASK04-VA-G-NAT
58.7	33.3	–	18.3	50.8	³ / ₈ -16UNC	13	11100	5400	500	0.45	KASK04-VA-G-NAT
68	36.5	–	19.8	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.6	KASK05-VA-G-NAT
80.7	49.2	12.7	19.8	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.78	KASK05-VA-G-NAT
68	36.5	–	19.8	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.6	KASK05-VA-G-NAT
80.7	49.2	12.7	19.8	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.78	KASK05-VA-G-NAT
68	36.5	–	19.8	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.6	KASK05-VA-G-NAT
80.7	49.2	12.7	19.8	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.78	KASK05-VA-G-NAT
68	36.5	–	19.8	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.6	KASK05-VA-G-NAT
80.7	49.2	12.7	19.8	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.78	KASK05-VA-G-NAT
80.9	42.9	–	22.2	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	0.87	KASK06-VA-G-NAT
93.6	55.6	12.7	22.2	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	1.08	KASK06-VA-G-NAT
80.9	42.9	–	22.2	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	0.87	KASK06-VA-G-NAT
93.6	55.6	12.7	22.2	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	1.08	KASK06-VA-G-NAT
80.9	42.9	–	22.2	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	0.87	KASK06-VA-G-NAT
93.6	55.6	12.7	22.2	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	1.08	KASK06-VA-G-NAT
80.9	42.9	–	22.2	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	0.87	KASK06-VA-G-NAT
93.6	55.6	12.7	22.2	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	1.08	KASK06-VA-G-NAT
90.6	47.6	–	25.4	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.32	KASK07-VA-G-NAT
103.3	60.3	12.7	25.4	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.63	KASK07-VA-G-NAT
90.6	47.6	–	25.4	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.32	KASK07-VA-G-NAT
103.3	60.3	12.7	25.4	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.63	KASK07-VA-G-NAT
90.6	47.6	–	25.4	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.32	KASK07-VA-G-NAT
103.3	60.3	12.7	25.4	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.63	KASK07-VA-G-NAT
90.6	47.6	–	25.4	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.32	KASK07-VA-G-NAT
103.3	60.3	12.7	25.4	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.63	KASK07-VA-G-NAT
90.6	47.6	–	25.4	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.32	KASK07-VA-G-NAT
103.3	60.3	12.7	25.4	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.63	KASK07-VA-G-NAT

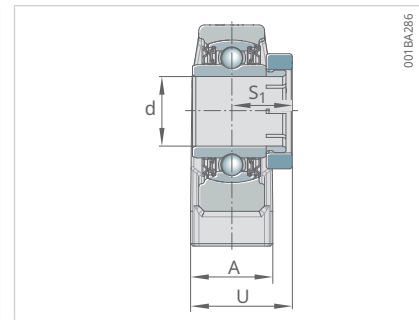
3.17.5 Pillow block housing units, with short base, with locking collar

FD design

Stainless steel housings, standard or stand-off design

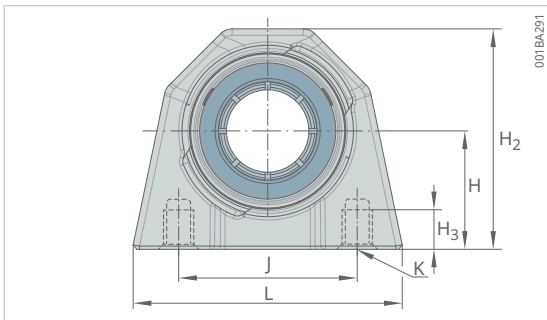


RSHEOC...-VA-FD

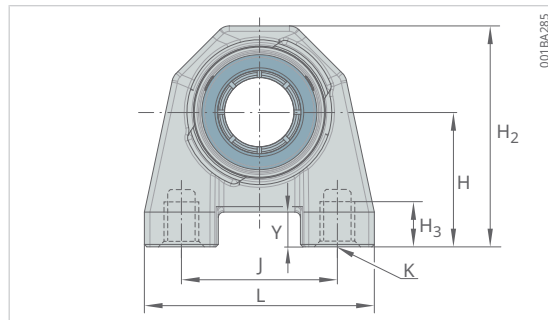


RSHEHOC...-VA-FD

Unit	d		Housing	Radial insert ball bearing	L	U	A
-	mm	inch	-	-	mm	mm	mm
RSHEOC008-VA-FD	12.7	1/2	GEH.SHE04-VA-NAT	OC008-DC-B-VA-FD	76	34.8	30
RSHEOC010-VA-FD	15.875	5/8	GEH.SHE04-VA-NAT	OC010-DC-B-VA-FD	76	34.8	30
RSHEOC012-VA-FD	19.05	3/4	GEH.SHE04-VA-NAT	OC012-DC-B-VA-FD	76	34.8	30
RSHEOC20-VA-FD	20	-	GEH.SHE04-VA-NAT	OCE20-DC-B-VA-FD	76	34.8	30
RSHEOC014-VA-FD	22.225	7/8	GEH.SHE05-VA-NAT	OC014-DC-B-VA-FD	83	37.2	30
RSHEHOC014-VA-FD	22.225	7/8	GEH.SHEH05-VA-NAT	OC014-DC-B-VA-FD	84	37.2	30
RSHEOC015-VA-FD	23.812	15/16	GEH.SHE05-VA-NAT	OC015-DC-B-VA-FD	83	37.2	30
RSHEHOC015-VA-FD	23.812	15/16	GEH.SHEH05-VA-NAT	OC015-DC-B-VA-FD	84	37.2	30
RSHEOC25-VA-FD	25	-	GEH.SHE05-VA-NAT	OCE25-DC-B-VA-FD	83	37.2	30
RSHEHOC25-VA-FD	25	-	GEH.SHEH05-VA-NAT	OCE25-DC-B-VA-FD	84	37.2	30
RSHEOC100-VA-FD	25.4	1	GEH.SHE05-VA-NAT	OC100-DC-B-VA-FD	83	37.2	30
RSHEHOC100-VA-FD	25.4	1	GEH.SHEH05-VA-NAT	OC100-DC-B-VA-FD	84	37.2	30
RSHEOC102-VA-FD	28.575	1 1/8	GEH.SHE06-VA-NAT	OC102-DC-B-VA-FD	98	41.8	36
RSHEHOC102-VA-FD	28.575	1 1/8	GEH.SHEH06-VA-NAT	OC102-DC-B-VA-FD	96	41.8	36
RSHEOC30-VA-FD	30	-	GEH.SHE06-VA-NAT	OCE30-DC-B-VA-FD	98	41.8	36
RSHEHOC30-VA-FD	30	-	GEH.SHEH06-VA-NAT	OCE30-DC-B-VA-FD	96	41.8	36
RSHEOC103-VA-FD	30.162	1 3/16	GEH.SHE06-VA-NAT	OC103-DC-B-VA-FD	98	41.8	36
RSHEHOC103-VA-FD	30.162	1 3/16	GEH.SHEH06-VA-NAT	OC103-DC-B-VA-FD	96	41.8	36
RSHEOC104-VA-FD	31.75	1 1/4	GEH.SHE06-VA-NAT	OC104-DC-B-VA-FD	98	41.8	36
RSHEHOC104-VA-FD	31.75	1 1/4	GEH.SHEH06-VA-NAT	OC104-DC-B-VA-FD	96	41.8	36
RSHEOC104-207-VA-FD	31.75	1 1/4	GEH.SHE07-VA-NAT	OC104-207-DC-B-VA-FD	110	46	38
RSHEHOC104-207-VA-FD	31.75	1 1/4	GEH.SHEH07-VA-NAT	OC104-207-DC-B-VA-FD	110	46	38
RSHEOC105-VA-FD	33.338	1 5/16	GEH.SHE07-VA-NAT	OC105-DC-B-VA-FD	110	46	38
RSHEHOC105-VA-FD	33.338	1 5/16	GEH.SHEH07-VA-NAT	OC105-DC-B-VA-FD	110	46	38
RSHEOC106-VA-FD	34.925	1 3/8	GEH.SHE07-VA-NAT	OC106-DC-B-VA-FD	110	46	38
RSHEHOC106-VA-FD	34.925	1 3/8	GEH.SHEH07-VA-NAT	OC106-DC-B-VA-FD	110	46	38
RSHEOC35-VA-FD	35	-	GEH.SHE07-VA-NAT	OCE35-DC-B-VA-FD	110	46	38
RSHEHOC35-VA-FD	35	-	GEH.SHEH07-VA-NAT	OCE35-DC-B-VA-FD	110	46	38
RSHEOC107-VA-FD	36.512	1 7/16	GEH.SHE07-VA-NAT	OC107-DC-B-VA-FD	110	46	38
RSHEHOC107-VA-FD	36.512	1 7/16	GEH.SHEH07-VA-NAT	OC107-DC-B-VA-FD	110	46	38



RSHEOC...-VA-FD



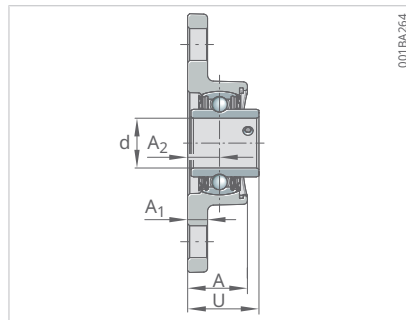
RSHEOC...-VA-FD

H ₂	H	Y	S ₁	J	K	H ₃	C _r	C _{0r}	C _{ur}	m ≈	Bearing end cap
mm	mm	mm	mm	mm	–	mm	N	N	N	kg	–
58.7	33.3	–	20.6	50.8	³ / ₈ -16UNC	13	11100	5400	500	0.48	KASK04-VA-G-NAT
58.7	33.3	–	20.6	50.8	³ / ₈ -16UNC	13	11100	5400	500	0.48	KASK04-VA-G-NAT
58.7	33.3	–	20.6	50.8	³ / ₈ -16UNC	13	11100	5400	500	0.48	KASK04-VA-G-NAT
58.7	33.3	–	20.6	50.8	³ / ₈ -16UNC	13	11100	5400	500	0.48	KASK04-VA-G-NAT
68	36.5	–	22.2	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.65	KASK05-VA-G-NAT
80.7	49.2	12.7	22.2	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.81	KASK05-VA-G-NAT
68	36.5	–	22.2	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.65	KASK05-VA-G-NAT
80.7	49.2	12.7	22.2	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.81	KASK05-VA-G-NAT
68	36.5	–	22.2	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.65	KASK05-VA-G-NAT
80.7	49.2	12.7	22.2	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.81	KASK05-VA-G-NAT
68	36.5	–	22.2	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.65	KASK05-VA-G-NAT
80.7	49.2	12.7	22.2	50.8	³ / ₈ -16UNC	13	12200	6500	550	0.81	KASK05-VA-G-NAT
80.9	42.9	–	23.8	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	0.93	KASK06-VA-G-NAT
93.6	55.6	12.7	23.8	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	1.13	KASK06-VA-G-NAT
80.9	42.9	–	23.8	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	0.93	KASK06-VA-G-NAT
93.6	55.6	12.7	23.8	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	1.13	KASK06-VA-G-NAT
80.9	42.9	–	23.8	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	0.93	KASK06-VA-G-NAT
93.6	55.6	12.7	23.8	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	1.13	KASK06-VA-G-NAT
80.9	42.9	–	23.8	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	0.93	KASK06-VA-G-NAT
93.6	55.6	12.7	23.8	76.2	⁷ / ₁₆ -14UNC	18	16700	9110	760	1.13	KASK06-VA-G-NAT
90.6	47.6	–	27	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.4	KASK07-VA-G-NAT
103.3	60.3	12.7	27	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.69	KASK07-VA-G-NAT
90.6	47.6	–	27	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.4	KASK07-VA-G-NAT
103.3	60.3	12.7	27	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.69	KASK07-VA-G-NAT
90.6	47.6	–	27	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.4	KASK07-VA-G-NAT
103.3	60.3	12.7	27	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.69	KASK07-VA-G-NAT
90.6	47.6	–	27	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.4	KASK07-VA-G-NAT
103.3	60.3	12.7	27	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.69	KASK07-VA-G-NAT
90.6	47.6	–	27	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.4	KASK07-VA-G-NAT
103.3	60.3	12.7	27	82.6	¹ / ₂ -13UNC	20	21900	12500	1000	1.69	KASK07-VA-G-NAT

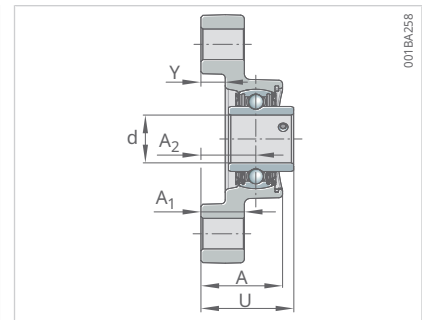
3.17.6 Two-bolt flanged housing units, narrow version, with grub screws

FD design

Stainless steel housings, standard or stand-off design

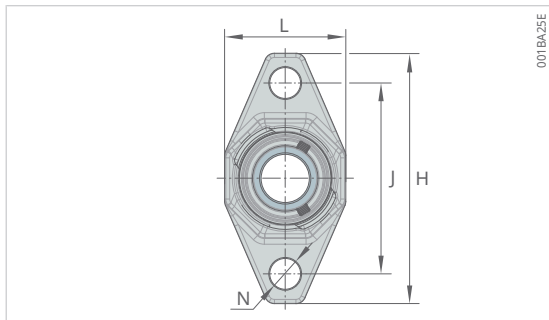


RCJTY...-VA-FD

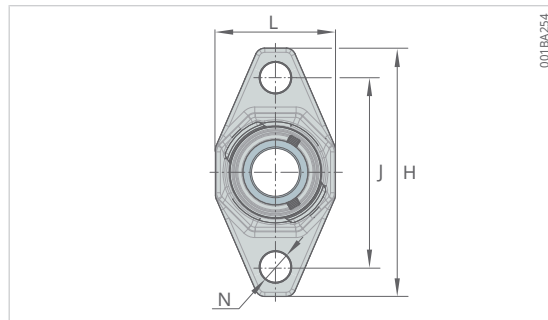


RCJTHY...-VA-FD

Unit	d		Housing	Radial insert ball bearing	L	H	U
-	mm	inch	-	-	mm	mm	mm
RCJTY008-VA-FD	12.7	1/2	GEH.CJT04-VA-NAT	Y008-DC-B-VA-FD	58	113	34.1
RCJTHY008-VA-FD	12.7	1/2	GEH.CJTH04-VA-NAT	Y008-DC-B-VA-FD	58	113	46.8
RCJTY010-VA-FD	15.875	5/8	GEH.CJT04-VA-NAT	Y010-DC-B-VA-FD	58	113	34.1
RCJTHY010-VA-FD	15.875	5/8	GEH.CJTH04-VA-NAT	Y010-DC-B-VA-FD	58	113	46.8
RCJTY012-VA-FD	19.05	3/4	GEH.CJT04-VA-NAT	Y012-DC-B-VA-FD	58	113	34.1
RCJTHY012-VA-FD	19.05	3/4	GEH.CJTH04-VA-NAT	Y012-DC-B-VA-FD	58	113	46.8
RCJTY20-VA-FD	20	-	GEH.CJT04-VA-NAT	YE20-DC-B-VA-FD	58	113	34.1
RCJTHY20-VA-FD	20	-	GEH.CJTH04-VA-NAT	YE20-DC-B-VA-FD	58	113	46.8
RCJTY014-VA-FD	22.225	7/8	GEH.CJT05-VA-NAT	Y014-DC-B-VA-FD	63	130	35.8
RCJTHY014-VA-FD	22.225	7/8	GEH.CJTH05-VA-NAT	Y014-DC-B-VA-FD	63	130	48.5
RCJTY015-VA-FD	23.812	15/16	GEH.CJT05-VA-NAT	Y015-DC-B-VA-FD	63	130	35.8
RCJTHY015-VA-FD	23.812	15/16	GEH.CJTH05-VA-NAT	Y015-DC-B-VA-FD	63	130	48.5
RCJTY25-VA-FD	25	-	GEH.CJT05-VA-NAT	YE25-DC-B-VA-FD	63	130	35.8
RCJTHY25-VA-FD	25	-	GEH.CJTH05-VA-NAT	YE25-DC-B-VA-FD	63	130	48.5
RCJTY100-VA-FD	25.4	1	GEH.CJT05-VA-NAT	Y100-DC-B-VA-FD	63	130	35.8
RCJTHY100-VA-FD	25.4	1	GEH.CJTH05-VA-NAT	Y100-DC-B-VA-FD	63	130	48.5
RCJTY102-VA-FD	28.575	1 1/8	GEH.CJT06-VA-NAT	Y102-DC-B-VA-FD	76	148	40.2
RCJTHY102-VA-FD	28.575	1 1/8	GEH.CJTH06-VA-NAT	Y102-DC-B-VA-FD	76	148	52.9
RCJTY30-VA-FD	30	-	GEH.CJT06-VA-NAT	YE30-DC-B-VA-FD	76	148	40.2
RCJTHY30-VA-FD	30	-	GEH.CJTH06-VA-NAT	YE30-DC-B-VA-FD	76	148	52.9
RCJTY103-VA-FD	30.162	1 3/16	GEH.CJT06-VA-NAT	Y103-DC-B-VA-FD	76	148	40.2
RCJTHY103-VA-FD	30.162	1 3/16	GEH.CJTH06-VA-NAT	Y103-DC-B-VA-FD	76	148	52.9
RCJTY104-VA-FD	31.75	1 1/4	GEH.CJT06-VA-NAT	Y104-DC-B-VA-FD	76	148	40.2
RCJTHY104-VA-FD	31.75	1 1/4	GEH.CJTH06-VA-NAT	Y104-DC-B-VA-FD	76	148	52.9
RCJTY104-207-VA-FD	31.75	1 1/4	GEH.CJT07-VA-NAT	Y104-207-DC-B-VA-FD	86	161	44.4
RCJTHY104-207-VA-FD	31.75	1 1/4	GEH.CJTH07-VA-NAT	Y104-207-DC-B-VA-FD	86	161	57.1
RCJTY105-VA-FD	33.338	1 5/16	GEH.CJT07-VA-NAT	Y105-DC-B-VA-FD	86	161	44.4
RCJTHY105-VA-FD	33.338	1 5/16	GEH.CJTH07-VA-NAT	Y105-DC-B-VA-FD	86	161	57.1
RCJTY106-VA-FD	34.925	1 3/8	GEH.CJT07-VA-NAT	Y106-DC-B-VA-FD	86	161	44.4
RCJTHY106-VA-FD	34.925	1 3/8	GEH.CJTH07-VA-NAT	Y106-DC-B-VA-FD	86	161	57.1
RCJTY35-VA-FD	35	-	GEH.CJT07-VA-NAT	YE35-DC-B-VA-FD	86	161	44.4
RCJTHY35-VA-FD	35	-	GEH.CJTH07-VA-NAT	YE35-DC-B-VA-FD	86	161	57.1
RCJTY107-VA-FD	36.512	1 7/16	GEH.CJT07-VA-NAT	Y107-DC-B-VA-FD	86	161	44.4
RCJTHY107-VA-FD	36.512	1 7/16	GEH.CJTH07-VA-NAT	Y107-DC-B-VA-FD	86	161	57.1



RCJTY...-VA-FD



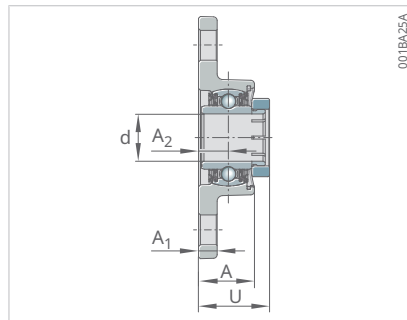
RCJTHY...-VA-FD

A	Y	A ₁	A ₂	J	N	C _r	C _{0r}	C _{ur}	m ≈	Bearing end cap
mm	mm	mm	mm	mm	mm	N	N	N	kg	-
28	-	10	15	90	12	11100	5400	500	0.57	KASK04-VA-G-NAT
40.7	12.7	22.7	27.7	90	12	11100	5400	500	0.79	KASK04-VA-G-NAT
28	-	10	15	90	12	11100	5400	500	0.57	KASK04-VA-G-NAT
40.7	12.7	22.7	27.7	90	12	11100	5400	500	0.79	KASK04-VA-G-NAT
28	-	10	15	90	12	11100	5400	500	0.57	KASK04-VA-G-NAT
40.7	12.7	22.7	27.7	90	12	11100	5400	500	0.79	KASK04-VA-G-NAT
28	-	10	15	90	12	11100	5400	500	0.57	KASK04-VA-G-NAT
40.7	12.7	22.7	27.7	90	12	11100	5400	500	0.79	KASK04-VA-G-NAT
30	-	10	16	99	16	12200	6500	550	0.71	KASK05-VA-G-NAT
42.7	12.7	22.7	28.7	99	16	12200	6500	550	0.98	KASK05-VA-G-NAT
30	-	10	16	99	16	12200	6500	550	0.71	KASK05-VA-G-NAT
42.7	12.7	22.7	28.7	99	16	12200	6500	550	0.98	KASK05-VA-G-NAT
30	-	10	16	99	16	12200	6500	550	0.71	KASK05-VA-G-NAT
42.7	12.7	22.7	28.7	99	16	12200	6500	550	0.98	KASK05-VA-G-NAT
30	-	10	16	99	16	12200	6500	550	0.71	KASK05-VA-G-NAT
42.7	12.7	22.7	28.7	99	16	12200	6500	550	0.98	KASK05-VA-G-NAT
32.5	-	10	18	117	16	16700	9110	760	1.06	KASK06-VA-G-NAT
45.2	12.7	22.7	30.7	117	16	16700	9110	760	1.18	KASK06-VA-G-NAT
32.5	-	10	18	117	16	16700	9110	760	1.06	KASK06-VA-G-NAT
45.2	12.7	22.7	30.7	117	16	16700	9110	760	1.18	KASK06-VA-G-NAT
32.5	-	10	18	117	16	16700	9110	760	1.06	KASK06-VA-G-NAT
45.2	12.7	22.7	30.7	117	16	16700	9110	760	1.18	KASK06-VA-G-NAT
32.5	-	10	18	117	16	16700	9110	760	1.06	KASK06-VA-G-NAT
45.2	12.7	22.7	30.7	117	16	16700	9110	760	1.18	KASK06-VA-G-NAT
34	-	11	19	130	16	21900	12500	1000	1.33	KASK07-VA-G-NAT
46.7	12.7	23.7	31.7	130	16	21900	12500	1000	1.47	KASK07-VA-G-NAT
34	-	11	19	130	16	21900	12500	1000	1.33	KASK07-VA-G-NAT
46.7	12.7	23.7	31.7	130	16	21900	12500	1000	1.47	KASK07-VA-G-NAT
34	-	11	19	130	16	21900	12500	1000	1.33	KASK07-VA-G-NAT
46.7	12.7	23.7	31.7	130	16	21900	12500	1000	1.47	KASK07-VA-G-NAT
34	-	11	19	130	16	21900	12500	1000	1.33	KASK07-VA-G-NAT
46.7	12.7	23.7	31.7	130	16	21900	12500	1000	1.47	KASK07-VA-G-NAT
34	-	11	19	130	16	21900	12500	1000	1.33	KASK07-VA-G-NAT
46.7	12.7	23.7	31.7	130	16	21900	12500	1000	1.47	KASK07-VA-G-NAT

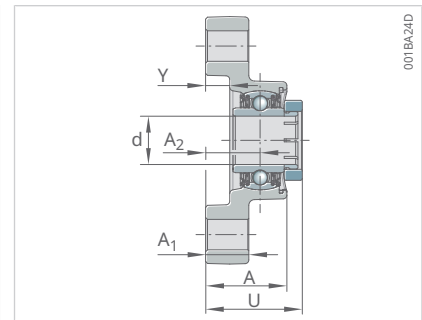
3.17.7 Two-bolt flanged housing units, narrow version, with locking collar

FD design

Stainless steel housings, standard or stand-off design

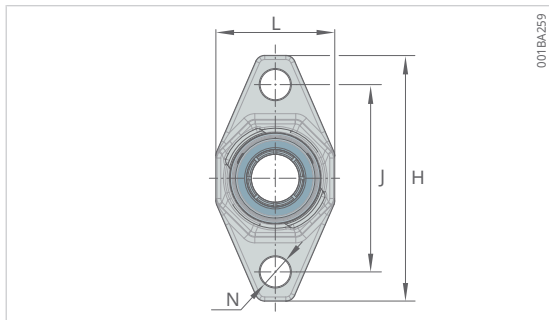


RCJTOC...-VA-FD

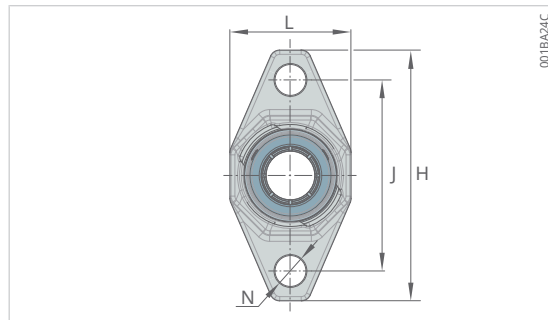


RCJTHOC...-VA-FD

Unit	d		Housing	Radial insert ball bearing	L	H	U
-	mm	inch	-	-	mm	mm	mm
RCJTOC008-VA-FD	12.7	1/2	GEH.CJT04-VA-NAT	OC008-DC-B-VA-FD	58	113	35.6
RCJTHOC008-VA-FD	12.7	1/2	GEH.CJTH04-VA-NAT	OC008-DC-B-VA-FD	58	113	48.3
RCJTOC010-VA-FD	15.875	5/8	GEH.CJT04-VA-NAT	OC010-DC-B-VA-FD	58	113	35.6
RCJTHOC010-VA-FD	15.875	5/8	GEH.CJTH04-VA-NAT	OC010-DC-B-VA-FD	58	113	48.3
RCJTOC012-VA-FD	19.05	3/4	GEH.CJT04-VA-NAT	OC012-DC-B-VA-FD	58	113	35.6
RCJTHOC012-VA-FD	19.05	3/4	GEH.CJTH04-VA-NAT	OC012-DC-B-VA-FD	58	113	48.3
RCJTOC20-VA-FD	20	-	GEH.CJT04-VA-NAT	OCE20-DC-B-VA-FD	58	113	35.6
RCJTHOC20-VA-FD	20	-	GEH.CJTH04-VA-NAT	OCE20-DC-B-VA-FD	58	113	48.3
RCJTOC014-VA-FD	22.225	7/8	GEH.CJT05-VA-NAT	OC014-DC-B-VA-FD	63	130	38.2
RCJTHOC014-VA-FD	22.225	7/8	GEH.CJTH05-VA-NAT	OC014-DC-B-VA-FD	63	130	50.9
RCJTOC015-VA-FD	23.812	15/16	GEH.CJT05-VA-NAT	OC015-DC-B-VA-FD	63	130	38.2
RCJTHOC015-VA-FD	23.812	15/16	GEH.CJTH05-VA-NAT	OC015-DC-B-VA-FD	63	130	50.9
RCJTOC25-VA-FD	25	-	GEH.CJT05-VA-NAT	OCE25-DC-B-VA-FD	63	130	38.2
RCJTHOC25-VA-FD	25	-	GEH.CJTH05-VA-NAT	OCE25-DC-B-VA-FD	63	130	50.9
RCJTOC100-VA-FD	25.4	1	GEH.CJT05-VA-NAT	OC100-DC-B-VA-FD	63	130	38.2
RCJTHOC100-VA-FD	25.4	1	GEH.CJTH05-VA-NAT	OC100-DC-B-VA-FD	63	130	50.9
RCJTOC102-VA-FD	28.575	1 1/8	GEH.CJT06-VA-NAT	OC102-DC-B-VA-FD	76	148	41.8
RCJTHOC102-VA-FD	28.575	1 1/8	GEH.CJTH06-VA-NAT	OC102-DC-B-VA-FD	76	148	54.5
RCJTOC30-VA-FD	30	-	GEH.CJT06-VA-NAT	OCE30-DC-B-VA-FD	76	148	41.8
RCJTHOC30-VA-FD	30	-	GEH.CJTH06-VA-NAT	OCE30-DC-B-VA-FD	76	148	54.5
RCJTOC103-VA-FD	30.162	1 3/16	GEH.CJT06-VA-NAT	OC103-DC-B-VA-FD	76	148	41.8
RCJTHOC103-VA-FD	30.162	1 3/16	GEH.CJTH06-VA-NAT	OC103-DC-B-VA-FD	76	148	54.5
RCJTOC104-VA-FD	31.75	1 1/4	GEH.CJT06-VA-NAT	OC104-DC-B-VA-FD	76	148	41.8
RCJTHOC104-VA-FD	31.75	1 1/4	GEH.CJTH06-VA-NAT	OC104-DC-B-VA-FD	76	148	54.5
RCJTOC104-207-VA-FD	31.75	1 1/4	GEH.CJT07-VA-NAT	OC104-207-DC-B-VA-FD	86	161	46
RCJTHOC104-207-VA-FD	31.75	1 1/4	GEH.CJTH07-VA-NAT	OC104-207-DC-B-VA-FD	86	161	58.7
RCJTOC105-VA-FD	33.338	1 5/16	GEH.CJT07-VA-NAT	OC105-DC-B-VA-FD	86	161	46
RCJTHOC105-VA-FD	33.338	1 5/16	GEH.CJTH07-VA-NAT	OC105-DC-B-VA-FD	86	161	58.7
RCJTOC106-VA-FD	34.925	1 3/8	GEH.CJT07-VA-NAT	OC106-DC-B-VA-FD	86	161	46
RCJTHOC106-VA-FD	34.925	1 3/8	GEH.CJTH07-VA-NAT	OC106-DC-B-VA-FD	86	161	58.7
RCJTOC35-VA-FD	35	-	GEH.CJT07-VA-NAT	OCE35-DC-B-VA-FD	86	161	46
RCJTHOC35-VA-FD	35	-	GEH.CJTH07-VA-NAT	OCE35-DC-B-VA-FD	86	161	58.7
RCJTOC107-VA-FD	36.512	1 7/16	GEH.CJT07-VA-NAT	OC107-DC-B-VA-FD	86	161	46
RCJTHOC107-VA-FD	36.512	1 7/16	GEH.CJTH07-VA-NAT	OC107-DC-B-VA-FD	86	161	58.7



RCJTOC...-VA-FD



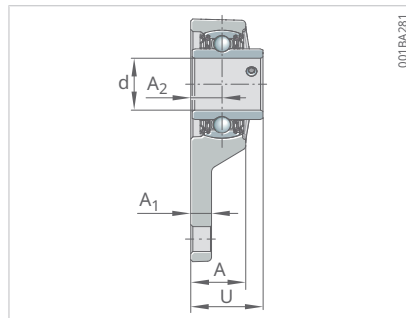
RCJTHOC...-VA-FD

A	Y	A ₁	A ₂	J	N	C _r	C _{0r}	C _{ur}	m ≈	Bearing end cap
mm	mm	mm	mm	mm	mm	N	N	N	kg	-
28	-	10	15	90	12	11100	5400	500	0.6	KASK04-VA-G-NAT
40.7	12.7	22.7	27.7	90	12	11100	5400	500	0.82	KASK04-VA-G-NAT
28	-	10	15	90	12	11100	5400	500	0.6	KASK04-VA-G-NAT
40.7	12.7	22.7	27.7	90	12	11100	5400	500	0.82	KASK04-VA-G-NAT
28	-	10	15	90	12	11100	5400	500	0.6	KASK04-VA-G-NAT
40.7	12.7	22.7	27.7	90	12	11100	5400	500	0.82	KASK04-VA-G-NAT
28	-	10	15	90	12	11100	5400	500	0.6	KASK04-VA-G-NAT
40.7	12.7	22.7	27.7	90	12	11100	5400	500	0.82	KASK04-VA-G-NAT
30	-	10	16	99	16	12200	6500	550	0.76	KASK05-VA-G-NAT
42.7	12.7	22.7	28.7	99	16	12200	6500	550	0.89	KASK05-VA-G-NAT
30	-	10	16	99	16	12200	6500	550	0.76	KASK05-VA-G-NAT
42.7	12.7	22.7	28.7	99	16	12200	6500	550	0.89	KASK05-VA-G-NAT
30	-	10	16	99	16	12200	6500	550	0.76	KASK05-VA-G-NAT
42.7	12.7	22.7	28.7	99	16	12200	6500	550	0.89	KASK05-VA-G-NAT
30	-	10	16	99	16	12200	6500	550	0.76	KASK05-VA-G-NAT
42.7	12.7	22.7	28.7	99	16	12200	6500	550	0.89	KASK05-VA-G-NAT
32.5	-	10	18	117	16	16700	9110	760	1.12	KASK06-VA-G-NAT
45.2	12.7	22.7	30.7	117	16	16700	9110	760	1.25	KASK06-VA-G-NAT
32.5	-	10	18	117	16	16700	9110	760	1.12	KASK06-VA-G-NAT
45.2	12.7	22.7	30.7	117	16	16700	9110	760	1.25	KASK06-VA-G-NAT
32.5	-	10	18	117	16	16700	9110	760	1.12	KASK06-VA-G-NAT
45.2	12.7	22.7	30.7	117	16	16700	9110	760	1.25	KASK06-VA-G-NAT
32.5	-	10	18	117	16	16700	9110	760	1.12	KASK06-VA-G-NAT
45.2	12.7	22.7	30.7	117	16	16700	9110	760	1.25	KASK06-VA-G-NAT
34	-	11	19	130	16	21900	12500	1000	1.41	KASK07-VA-G-NAT
46.7	12.7	23.7	31.7	130	16	21900	12500	1000	1.55	KASK07-VA-G-NAT
34	-	11	19	130	16	21900	12500	1000	1.41	KASK07-VA-G-NAT
46.7	12.7	23.7	31.7	130	16	21900	12500	1000	1.55	KASK07-VA-G-NAT
34	-	11	19	130	16	21900	12500	1000	1.41	KASK07-VA-G-NAT
46.7	12.7	23.7	31.7	130	16	21900	12500	1000	1.55	KASK07-VA-G-NAT
34	-	11	19	130	16	21900	12500	1000	1.41	KASK07-VA-G-NAT
46.7	12.7	23.7	31.7	130	16	21900	12500	1000	1.55	KASK07-VA-G-NAT
34	-	11	19	130	16	21900	12500	1000	1.41	KASK07-VA-G-NAT
46.7	12.7	23.7	31.7	130	16	21900	12500	1000	1.55	KASK07-VA-G-NAT

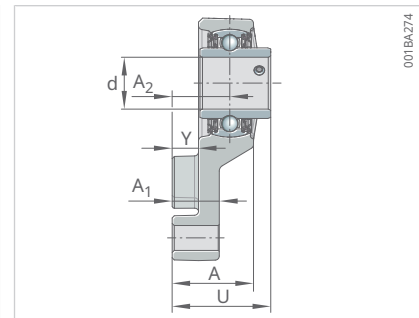
3.17.8 Three-bolt flanged housing units, with grub screws

FD design

Stainless steel housings, standard or stand-off design

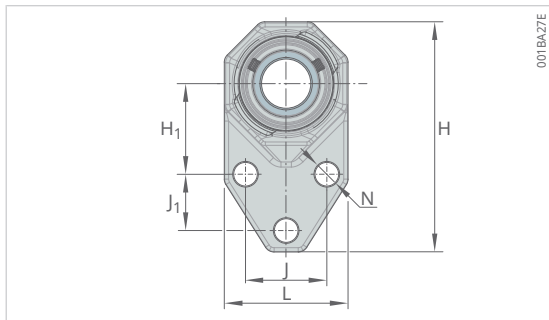


RFBY...-VA-FD

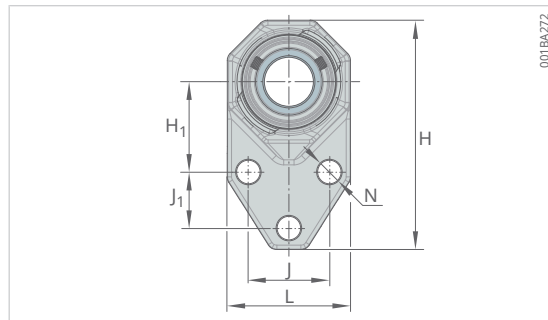


RFBHY...-VA-FD

Unit	d		Housing	Radial insert ball bearing	L	H	U	A
	mm	inch			mm	mm	mm	mm
RFBY008-VA-FD	12.7	1/2	GEH.FB04-VA-NAT	Y008-DC-B-VA-FD	58	105	32.6	26.5
RFBHY008-VA-FD	12.7	1/2	GEH.FBH04-VA-NAT	Y008-DC-B-VA-FD	58	105	45.3	39.2
RFBY010-VA-FD	15.875	5/8	GEH.FB04-VA-NAT	Y010-DC-B-VA-FD	58	105	32.6	26.5
RFBHY010-VA-FD	15.875	5/8	GEH.FBH04-VA-NAT	Y010-DC-B-VA-FD	58	105	45.3	39.2
RFBY012-VA-FD	19.05	3/4	GEH.FB04-VA-NAT	Y012-DC-B-VA-FD	58	105	32.6	26.5
RFBHY012-VA-FD	19.05	3/4	GEH.FBH04-VA-NAT	Y012-DC-B-VA-FD	58	105	45.3	39.2
RFBY20-VA-FD	20	–	GEH.FB04-VA-NAT	YE20-DC-B-VA-FD	58	105	32.6	26.5
RFBHY20-VA-FD	20	–	GEH.FBH04-VA-NAT	YE20-DC-B-VA-FD	58	105	45.3	39.2
RFBY014-VA-FD	22.225	7/8	GEH.FB05-VA-NAT	Y014-DC-B-VA-FD	63	117	34.8	29
RFBHY014-VA-FD	22.225	7/8	GEH.FBH05-VA-NAT	Y014-DC-B-VA-FD	63	117	47.5	41.7
RFBY015-VA-FD	23.812	15/16	GEH.FB05-VA-NAT	Y015-DC-B-VA-FD	63	117	34.8	29
RFBHY015-VA-FD	23.812	15/16	GEH.FBH05-VA-NAT	Y015-DC-B-VA-FD	63	117	47.5	41.7
RFBY25-VA-FD	25	–	GEH.FB05-VA-NAT	YE25-DC-B-VA-FD	63	117	34.8	29
RFBHY25-VA-FD	25	–	GEH.FBH05-VA-NAT	YE25-DC-B-VA-FD	63	117	47.5	41.7
RFBY100-VA-FD	25.4	1	GEH.FB05-VA-NAT	Y100-DC-B-VA-FD	63	117	34.8	29
RFBHY100-VA-FD	25.4	1	GEH.FBH05-VA-NAT	Y100-DC-B-VA-FD	63	117	47.5	41.7
RFBY102-VA-FD	28.575	1 1/8	GEH.FB06-VA-NAT	Y102-DC-B-VA-FD	76	133.3	39.2	31.5
RFBHY102-VA-FD	28.575	1 1/8	GEH.FBH06-VA-NAT	Y102-DC-B-VA-FD	76	133.3	51.9	44.2
RFBY30-VA-FD	30	–	GEH.FB06-VA-NAT	YE30-DC-B-VA-FD	76	133.3	39.2	31.5
RFBHY30-VA-FD	30	–	GEH.FBH06-VA-NAT	YE30-DC-B-VA-FD	76	133.3	51.9	44.2
RFBY103-VA-FD	30.162	1 3/16	GEH.FB06-VA-NAT	Y103-DC-B-VA-FD	76	133.3	39.2	31.5
RFBHY103-VA-FD	30.162	1 3/16	GEH.FBH06-VA-NAT	Y103-DC-B-VA-FD	76	133.3	51.9	44.2
RFBY104-VA-FD	31.75	1 1/4	GEH.FB06-VA-NAT	Y104-DC-B-VA-FD	76	133.3	39.2	31.5
RFBHY104-VA-FD	31.75	1 1/4	GEH.FBH06-VA-NAT	Y104-DC-B-VA-FD	76	133.3	51.9	44.2
RFBY104-207-VA-FD	31.75	1 1/4	GEH.FB07-VA-NAT	Y104-207-DC-B-VA-FD	86	151	44.4	34
RFBHY104-207-VA-FD	31.75	1 1/4	GEH.FBH07-VA-NAT	Y104-207-DC-B-VA-FD	86	151	57.1	46.7
RFBY105-VA-FD	33.338	1 5/16	GEH.FB07-VA-NAT	Y105-DC-B-VA-FD	86	151	44.4	34
RFBHY105-VA-FD	33.338	1 5/16	GEH.FBH07-VA-NAT	Y105-DC-B-VA-FD	86	151	57.1	46.7
RFBY106-VA-FD	34.925	1 3/8	GEH.FB07-VA-NAT	Y106-DC-B-VA-FD	86	151	44.4	34
RFBHY106-VA-FD	34.925	1 3/8	GEH.FBH07-VA-NAT	Y106-DC-B-VA-FD	86	151	57.1	46.7
RFBY35-VA-FD	35	–	GEH.FB07-VA-NAT	YE35-DC-B-VA-FD	86	151	44.4	34
RFBHY35-VA-FD	35	–	GEH.FBH07-VA-NAT	YE35-DC-B-VA-FD	86	151	57.1	46.7
RFBY107-VA-FD	36.512	1 7/16	GEH.FB07-VA-NAT	Y107-DC-B-VA-FD	86	151	44.4	34
RFBHY107-VA-FD	36.512	1 7/16	GEH.FBH07-VA-NAT	Y107-DC-B-VA-FD	86	151	57.1	46.7



RFBY...-VA-FD



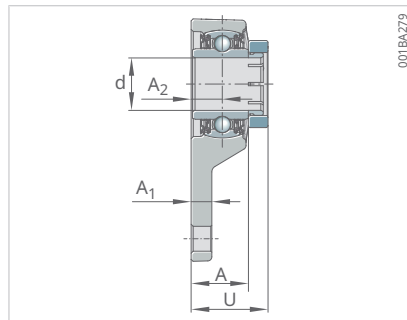
RFBHY...-VA-FD

Y	A ₁	A ₂	H ₁	J	J ₁	N	C _r	C _{0r}	C _{ur}	m ≈	Bearing end cap
mm	mm	mm	mm	mm	mm	mm	N	N	N	kg	-
-	8	13.5	42.9	38.1	22.2	12	11100	5400	500	0.43	KASK04-VA-G-NAT
12.7	20.7	26.2	42.9	38.1	22.2	12	11100	5400	500	0.52	KASK04-VA-G-NAT
-	8	13.5	42.9	38.1	22.2	12	11100	5400	500	0.43	KASK04-VA-G-NAT
12.7	20.7	26.2	42.9	38.1	22.2	12	11100	5400	500	0.52	KASK04-VA-G-NAT
-	8	13.5	42.9	38.1	22.2	12	11100	5400	500	0.43	KASK04-VA-G-NAT
12.7	20.7	26.2	42.9	38.1	22.2	12	11100	5400	500	0.52	KASK04-VA-G-NAT
-	8	13.5	42.9	38.1	22.2	12	11100	5400	500	0.43	KASK04-VA-G-NAT
12.7	20.7	26.2	42.9	38.1	22.2	12	11100	5400	500	0.52	KASK04-VA-G-NAT
-	10	15	46	41.3	28.6	12	12200	6500	550	0.5	KASK05-VA-G-NAT
12.7	22.7	27.7	46	41.3	28.6	12	12200	6500	550	0.61	KASK05-VA-G-NAT
-	10	15	46	41.3	28.6	12	12200	6500	550	0.5	KASK05-VA-G-NAT
12.7	22.7	27.7	46	41.3	28.6	12	12200	6500	550	0.61	KASK05-VA-G-NAT
-	10	15	46	41.3	28.6	12	12200	6500	550	0.5	KASK05-VA-G-NAT
12.7	22.7	27.7	46	41.3	28.6	12	12200	6500	550	0.61	KASK05-VA-G-NAT
-	10	15	46	41.3	28.6	12	12200	6500	550	0.5	KASK05-VA-G-NAT
12.7	22.7	27.7	46	41.3	28.6	12	12200	6500	550	0.61	KASK05-VA-G-NAT
-	10	17	52.4	47.6	31.8	12	16700	9110	760	0.9	KASK06-VA-G-NAT
12.7	22.7	29.7	52.4	47.6	31.8	12	16700	9110	760	1.04	KASK06-VA-G-NAT
-	10	17	52.4	47.6	31.8	12	16700	9110	760	0.9	KASK06-VA-G-NAT
12.7	22.7	29.7	52.4	47.6	31.8	12	16700	9110	760	1.04	KASK06-VA-G-NAT
-	10	17	52.4	47.6	31.8	12	16700	9110	760	0.9	KASK06-VA-G-NAT
12.7	22.7	29.7	52.4	47.6	31.8	12	16700	9110	760	1.04	KASK06-VA-G-NAT
-	10	17	52.4	47.6	31.8	12	16700	9110	760	0.9	KASK06-VA-G-NAT
12.7	22.7	29.7	52.4	47.6	31.8	12	16700	9110	760	1.04	KASK06-VA-G-NAT
-	12.7	19	60.3	50.8	31.8	15	21900	12500	1000	1.34	KASK07-VA-G-NAT
12.7	25.4	31.7	60.3	50.8	31.8	15	21900	12500	1000	1.56	KASK07-VA-G-NAT
-	12.7	19	60.3	50.8	31.8	15	21900	12500	1000	1.34	KASK07-VA-G-NAT
12.7	25.4	31.7	60.3	50.8	31.8	15	21900	12500	1000	1.56	KASK07-VA-G-NAT
-	12.7	19	60.3	50.8	31.8	15	21900	12500	1000	1.34	KASK07-VA-G-NAT
12.7	25.4	31.7	60.3	50.8	31.8	15	21900	12500	1000	1.56	KASK07-VA-G-NAT
-	12.7	19	60.3	50.8	31.8	15	21900	12500	1000	1.34	KASK07-VA-G-NAT
12.7	25.4	31.7	60.3	50.8	31.8	15	21900	12500	1000	1.56	KASK07-VA-G-NAT
-	12.7	19	60.3	50.8	31.8	15	21900	12500	1000	1.34	KASK07-VA-G-NAT
12.7	25.4	31.7	60.3	50.8	31.8	15	21900	12500	1000	1.56	KASK07-VA-G-NAT

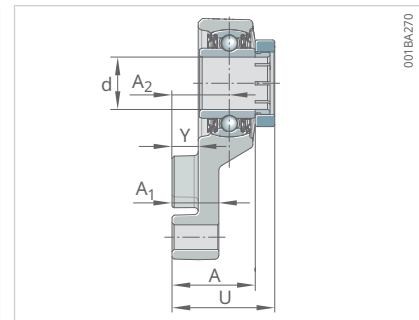
3.17.9 Three-bolt flanged housing units, with locking collar

FD design

Stainless steel housings, standard or stand-off design

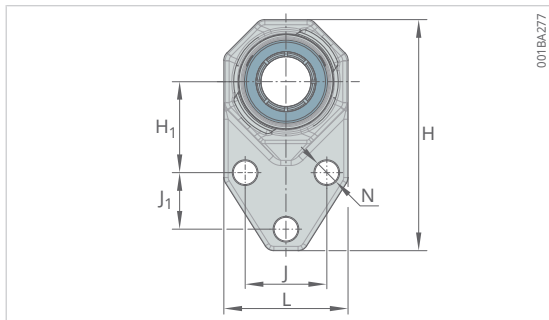


RBOC...-VA-FD

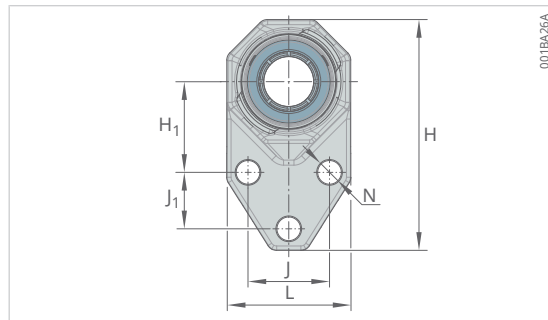


RFBHOC...-VA-FD

Unit	d		Housing	Radial insert ball bearing	L	H	U	A
-	mm	inch	-	-	mm	mm	mm	mm
RBOC008-VA-FD	12.7	1/2	GEH.FB04-VA-NAT	OC008-DC-B-VA-FD	58	105	34.1	26.5
RFBHOC008-VA-FD	12.7	1/2	GEH.FBH04-VA-NAT	OC008-DC-B-VA-FD	58	105	46.8	39.2
RBOC010-VA-FD	15.875	5/8	GEH.FB04-VA-NAT	OC010-DC-B-VA-FD	58	105	34.1	26.5
RFBHOC010-VA-FD	15.875	5/8	GEH.FBH04-VA-NAT	OC010-DC-B-VA-FD	58	105	46.8	39.2
RBOC012-VA-FD	19.05	3/4	GEH.FB04-VA-NAT	OC012-DC-B-VA-FD	58	105	34.1	26.5
RFBHOC012-VA-FD	19.05	3/4	GEH.FBH04-VA-NAT	OC012-DC-B-VA-FD	58	105	46.8	39.2
RBOC20-VA-FD	20	-	GEH.FB04-VA-NAT	OCE20-DC-B-VA-FD	58	105	34.1	26.5
RFBHOC20-VA-FD	20	-	GEH.FBH04-VA-NAT	OCE20-DC-B-VA-FD	58	105	46.8	39.2
RBOC014-VA-FD	22.225	7/8	GEH.FB05-VA-NAT	OC014-DC-B-VA-FD	63	117	37.2	29
RFBHOC014-VA-FD	22.225	7/8	GEH.FBH05-VA-NAT	OC014-DC-B-VA-FD	63	117	49.9	41.7
RBOC015-VA-FD	23.812	15/16	GEH.FB05-VA-NAT	OC015-DC-B-VA-FD	63	117	37.2	29
RFBHOC015-VA-FD	23.812	15/16	GEH.FBH05-VA-NAT	OC015-DC-B-VA-FD	63	117	49.9	41.7
RBOC25-VA-FD	25	-	GEH.FB05-VA-NAT	OCE25-DC-B-VA-FD	63	117	37.2	29
RFBHOC25-VA-FD	25	-	GEH.FBH05-VA-NAT	OCE25-DC-B-VA-FD	63	117	49.9	41.7
RBOC100-VA-FD	25.4	1	GEH.FB05-VA-NAT	OC100-DC-B-VA-FD	63	117	37.2	29
RFBHOC100-VA-FD	25.4	1	GEH.FBH05-VA-NAT	OC100-DC-B-VA-FD	63	117	49.9	41.7
RBOC102-VA-FD	28.575	1 1/8	GEH.FB06-VA-NAT	OC102-DC-B-VA-FD	76	133	40.8	31.5
RFBHOC102-VA-FD	28.575	1 1/8	GEH.FBH06-VA-NAT	OC102-DC-B-VA-FD	76	133	53.5	44.2
RBOC30-VA-FD	30	-	GEH.FB06-VA-NAT	OCE30-DC-B-VA-FD	76	133	40.8	31.5
RFBHOC30-VA-FD	30	-	GEH.FBH06-VA-NAT	OCE30-DC-B-VA-FD	76	133	53.5	44.2
RBOC103-VA-FD	30.162	1 3/16	GEH.FB06-VA-NAT	OC103-DC-B-VA-FD	76	133	40.8	31.5
RFBHOC103-VA-FD	30.162	1 3/16	GEH.FBH06-VA-NAT	OC103-DC-B-VA-FD	76	133	53.5	44.2
RBOC104-VA-FD	31.75	1 1/4	GEH.FB06-VA-NAT	OC104-DC-B-VA-FD	76	133	40.8	31.5
RFBHOC104-VA-FD	31.75	1 1/4	GEH.FBH06-VA-NAT	OC104-DC-B-VA-FD	76	133	53.5	44.2
RBOC104-207-VA-FD	31.75	1 1/4	GEH.FB07-VA-NAT	OC104-207-DC-B-VA-FD	86	151	46	34
RFBHOC104-207-VA-FD	31.75	1 1/4	GEH.FBH07-VA-NAT	OC104-207-DC-B-VA-FD	86	151	58.7	46.7
RBOC105-VA-FD	33.338	1 5/16	GEH.FB07-VA-NAT	OC105-DC-B-VA-FD	86	151	46	34
RFBHOC105-VA-FD	33.338	1 5/16	GEH.FBH07-VA-NAT	OC105-DC-B-VA-FD	86	151	58.7	46.7
RBOC106-VA-FD	34.925	1 3/8	GEH.FB07-VA-NAT	OC106-DC-B-VA-FD	86	151	46	34
RFBHOC106-VA-FD	34.925	1 3/8	GEH.FBH07-VA-NAT	OC106-DC-B-VA-FD	86	151	58.7	46.7
RBOC35-VA-FD	35	-	GEH.FB07-VA-NAT	OCE35-DC-B-VA-FD	86	151	46	34
RFBHOC35-VA-FD	35	-	GEH.FBH07-VA-NAT	OCE35-DC-B-VA-FD	86	151	58.7	46.7
RBOC107-VA-FD	36.512	1 7/16	GEH.FB07-VA-NAT	OC107-DC-B-VA-FD	86	151	46	34
RFBHOC107-VA-FD	36.512	1 7/16	GEH.FBH07-VA-NAT	OC107-DC-B-VA-FD	86	151	58.7	46.7



RFB0C...-VA-FD



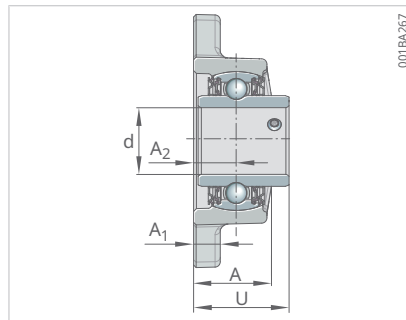
RFBHOC...-VA-FD

Y	A ₁	A ₂	H ₁	J	J ₁	N	C _r	C _{0r}	C _{ur}	m ≈	Bearing end cap
mm	mm	mm	mm	mm	mm	mm	N	N	N	kg	-
-	8	13.5	42.9	38.1	22.2	12	11100	5400	500	0.46	KASK04-VA-G-NAT
12.7	20.7	26.2	42.9	38.1	22.2	12	11100	5400	500	0.55	KASK04-VA-G-NAT
-	8	13.5	42.9	38.1	22.2	12	11100	5400	500	0.46	KASK04-VA-G-NAT
12.7	20.7	26.2	42.9	38.1	22.2	12	11100	5400	500	0.55	KASK04-VA-G-NAT
-	8	13.5	42.9	38.1	22.2	12	11100	5400	500	0.46	KASK04-VA-G-NAT
12.7	20.7	26.2	42.9	38.1	22.2	12	11100	5400	500	0.55	KASK04-VA-G-NAT
-	8	13.5	42.9	38.1	22.2	12	11100	5400	500	0.46	KASK04-VA-G-NAT
12.7	20.7	26.2	42.9	38.1	22.2	12	11100	5400	500	0.55	KASK04-VA-G-NAT
-	10	15	46	41.3	28.6	12	12200	6500	550	0.55	KASK05-VA-G-NAT
12.7	22.7	27.7	46	41.3	28.6	12	12200	6500	550	0.66	KASK05-VA-G-NAT
-	10	15	46	41.3	28.6	12	12200	6500	550	0.55	KASK05-VA-G-NAT
12.7	22.7	27.7	46	41.3	28.6	12	12200	6500	550	0.66	KASK05-VA-G-NAT
-	10	15	46	41.3	28.6	12	12200	6500	550	0.55	KASK05-VA-G-NAT
12.7	22.7	27.7	46	41.3	28.6	12	12200	6500	550	0.66	KASK05-VA-G-NAT
-	10	15	46	41.3	28.6	12	12200	6500	550	0.55	KASK05-VA-G-NAT
12.7	22.7	27.7	46	41.3	28.6	12	12200	6500	550	0.66	KASK05-VA-G-NAT
-	10	17	52.4	47.6	31.8	12	16700	9110	760	0.96	KASK06-VA-G-NAT
12.7	22.7	29.7	52.4	47.6	31.8	12	16700	9110	760	1.1	KASK06-VA-G-NAT
-	10	17	52.4	47.6	31.8	12	16700	9110	760	0.96	KASK06-VA-G-NAT
12.7	22.7	29.7	52.4	47.6	31.8	12	16700	9110	760	1.1	KASK06-VA-G-NAT
-	10	17	52.4	47.6	31.8	12	16700	9110	760	0.96	KASK06-VA-G-NAT
12.7	22.7	29.7	52.4	47.6	31.8	12	16700	9110	760	1.1	KASK06-VA-G-NAT
-	10	17	52.4	47.6	31.8	12	16700	9110	760	0.96	KASK06-VA-G-NAT
12.7	22.7	29.7	52.4	47.6	31.8	12	16700	9110	760	1.1	KASK06-VA-G-NAT
-	12.7	19	60.3	50.8	31.8	15	21900	12500	1000	1.41	KASK07-VA-G-NAT
12.7	25.4	31.7	60.3	50.8	31.8	15	21900	12500	1000	1.62	KASK07-VA-G-NAT
-	12.7	19	60.3	50.8	31.8	15	21900	12500	1000	1.41	KASK07-VA-G-NAT
12.7	25.4	31.7	60.3	50.8	31.8	15	21900	12500	1000	1.62	KASK07-VA-G-NAT
-	12.7	19	60.3	50.8	31.8	15	21900	12500	1000	1.41	KASK07-VA-G-NAT
12.7	25.4	31.7	60.3	50.8	31.8	15	21900	12500	1000	1.62	KASK07-VA-G-NAT
-	12.7	19	60.3	50.8	31.8	15	21900	12500	1000	1.41	KASK07-VA-G-NAT
12.7	25.4	31.7	60.3	50.8	31.8	15	21900	12500	1000	1.62	KASK07-VA-G-NAT
-	12.7	19	60.3	50.8	31.8	15	21900	12500	1000	1.41	KASK07-VA-G-NAT
12.7	25.4	31.7	60.3	50.8	31.8	15	21900	12500	1000	1.62	KASK07-VA-G-NAT

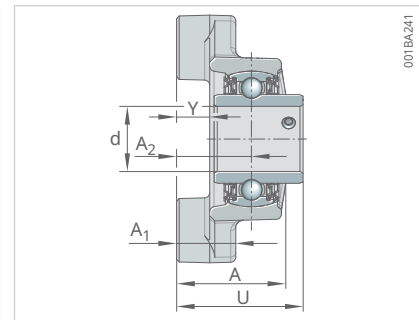
3.17.10 Four-bolt flanged housing units, with grub screws

FD design

Stainless steel housings, standard or stand-off design

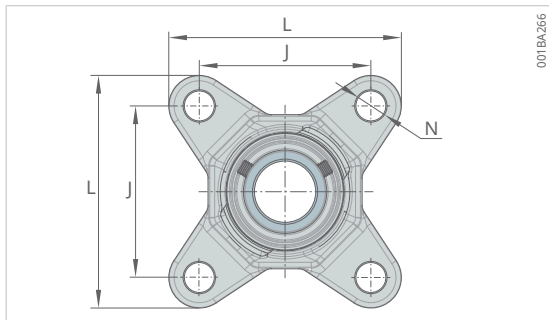


RCJY..-TV-VA-FD

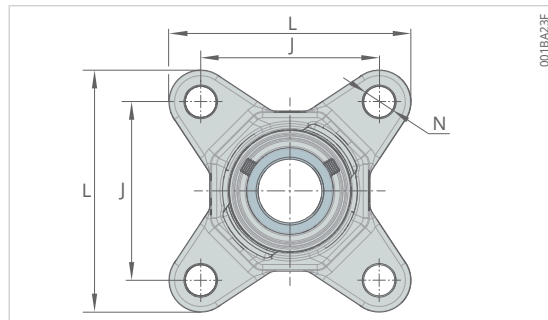


RCJHY..-VA-FD

Unit	d		Housing	Radial insert ball bearing	L	U	A
-	mm	inch	-	-	mm	mm	mm
RCJY008-VA-FD	12.7	1/2	GEH.CJ04-VA-NAT	Y008-DC-B-VA-FD	86	34.1	28
RCJHY008-VA-FD	12.7	1/2	GEH.CJH04-VA-NAT	Y008-DC-B-VA-FD	86	46.8	40.7
RCJY010-VA-FD	15.875	5/8	GEH.CJ04-VA-NAT	Y010-DC-B-VA-FD	86	34.1	28
RCJHY010-VA-FD	15.875	5/8	GEH.CJH04-VA-NAT	Y010-DC-B-VA-FD	86	46.8	40.7
RCJY012-VA-FD	19.05	3/4	GEH.CJ04-VA-NAT	Y012-DC-B-VA-FD	86	34.1	28
RCJHY012-VA-FD	19.05	3/4	GEH.CJH04-VA-NAT	Y012-DC-B-VA-FD	86	46.8	40.7
RCJY20-VA-FD	20	-	GEH.CJ04-VA-NAT	YE20-DC-B-VA-FD	86	34.1	28
RCJHY20-VA-FD	20	-	GEH.CJH04-VA-NAT	YE20-DC-B-VA-FD	86	46.8	40.7
RCJY014-VA-FD	22.225	7/8	GEH.CJ05-VA-NAT	Y014-DC-B-VA-FD	95	35.8	30
RCJHY014-VA-FD	22.225	7/8	GEH.CJH05-VA-NAT	Y014-DC-B-VA-FD	95	48.5	42.7
RCJY015-VA-FD	23.812	15/16	GEH.CJ05-VA-NAT	Y015-DC-B-VA-FD	95	35.8	30
RCJHY015-VA-FD	23.812	15/16	GEH.CJH05-VA-NAT	Y015-DC-B-VA-FD	95	48.5	42.7
RCJY25-VA-FD	25	-	GEH.CJ05-VA-NAT	YE25-DC-B-VA-FD	95	35.8	30
RCJHY25-VA-FD	25	-	GEH.CJH05-VA-NAT	YE25-DC-B-VA-FD	95	48.5	42.7
RCJY100-VA-FD	25.4	1	GEH.CJ05-VA-NAT	Y100-DC-B-VA-FD	95	35.8	30
RCJHY100-VA-FD	25.4	1	GEH.CJH05-VA-NAT	Y100-DC-B-VA-FD	95	48.5	42.7
RCJY102-VA-FD	28.575	1 1/8	GEH.CJ06-VA-NAT	Y102-DC-B-VA-FD	108	40.2	32.5
RCJHY102-VA-FD	28.575	1 1/8	GEH.CJH06-VA-NAT	Y102-DC-B-VA-FD	108	52.9	45.2
RCJY30-VA-FD	30	-	GEH.CJ06-VA-NAT	YE30-DC-B-VA-FD	108	40.2	32.5
RCJHY30-VA-FD	30	-	GEH.CJH06-VA-NAT	YE30-DC-B-VA-FD	108	52.9	45.2
RCJY103-VA-FD	30.162	1 3/16	GEH.CJ06-VA-NAT	Y103-DC-B-VA-FD	108	40.2	32.5
RCJHY103-VA-FD	30.162	1 3/16	GEH.CJH06-VA-NAT	Y103-DC-B-VA-FD	108	52.9	45.2
RCJY104-VA-FD	31.75	1 1/4	GEH.CJ06-VA-NAT	Y104-DC-B-VA-FD	108	40.2	32.5
RCJHY104-VA-FD	31.75	1 1/4	GEH.CJH06-VA-NAT	Y104-DC-B-VA-FD	108	52.9	45.2
RCJY104-207-VA-FD	31.75	1 1/4	GEH.CJ07-VA-NAT	Y104-207-DC-B-VA-FD	117	44.4	34
RCJHY104-207-VA-FD	31.75	1 1/4	GEH.CJH07-VA-NAT	Y104-207-DC-B-VA-FD	117	57.1	46.7
RCJY105-VA-FD	33.338	1 5/16	GEH.CJ07-VA-NAT	Y105-DC-B-VA-FD	117	44.4	34
RCJHY105-VA-FD	33.338	1 5/16	GEH.CJH07-VA-NAT	Y105-DC-B-VA-FD	117	57.1	46.7
RCJY106-VA-FD	34.925	1 3/8	GEH.CJ07-VA-NAT	Y106-DC-B-VA-FD	117	44.4	34
RCJHY106-VA-FD	34.925	1 3/8	GEH.CJH07-VA-NAT	Y106-DC-B-VA-FD	117	57.1	46.7
RCJY35-VA-FD	35	-	GEH.CJ07-VA-NAT	YE35-DC-B-VA-FD	117	44.4	34
RCJHY35-VA-FD	35	-	GEH.CJH07-VA-NAT	YE35-DC-B-VA-FD	117	57.1	46.7
RCJY107-VA-FD	36.512	1 7/16	GEH.CJ07-VA-NAT	Y107-DC-B-VA-FD	117	44.4	34
RCJHY107-VA-FD	36.512	1 7/16	GEH.CJH07-VA-NAT	Y107-DC-B-VA-FD	117	57.1	46.7
RCJY108-VA-FD	38.1	1 1/2	GEH.CJ08-VA-NAT	Y108-DC-B-VA-FD	130	51.2	37.5
RCJHY108-VA-FD	38.1	1 1/2	GEH.CJH08-VA-NAT	Y108-DC-B-VA-FD	130	63.9	50.2
RCJY40-VA-FD	40	-	GEH.CJ08-VA-NAT	YE40-DC-B-VA-FD	130	51.2	37.5
RCJHY40-VA-FD	40	-	GEH.CJH08-VA-NAT	YE40-DC-B-VA-FD	130	63.9	50.2



RCJY...-TV-VA-FD



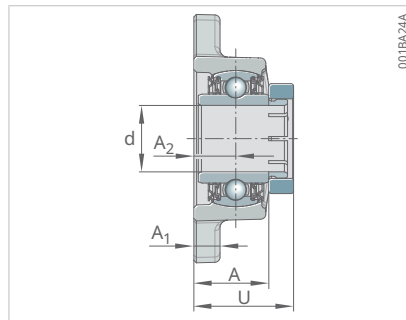
RCJHY...-VA-FD

Y	A ₁	A ₂	J	N	C _r	C _{0r}	C _{ur}	m ≈	Bearing end cap
mm	mm	mm	mm	mm	N	N	N	kg	-
-	10	15	64	12	11100	5400	500	0.57	KASK04-VA-G-NAT
12.7	22.7	27.7	64	12	11100	5400	500	0.7	KASK04-VA-G-NAT
-	10	15	64	12	11100	5400	500	0.57	KASK04-VA-G-NAT
12.7	22.7	27.7	64	12	11100	5400	500	0.7	KASK04-VA-G-NAT
-	10	15	64	12	11100	5400	500	0.57	KASK04-VA-G-NAT
12.7	22.7	27.7	64	12	11100	5400	500	0.7	KASK04-VA-G-NAT
-	10	15	64	12	11100	5400	500	0.57	KASK04-VA-G-NAT
12.7	22.7	27.7	64	12	11100	5400	500	0.7	KASK04-VA-G-NAT
-	10	16	70	12	12200	6500	550	0.69	KASK05-VA-G-NAT
12.7	22.7	28.7	70	12	12200	6500	550	0.94	KASK05-VA-G-NAT
-	10	16	70	12	12200	6500	550	0.69	KASK05-VA-G-NAT
12.7	22.7	28.7	70	12	12200	6500	550	0.94	KASK05-VA-G-NAT
-	10	16	70	12	12200	6500	550	0.69	KASK05-VA-G-NAT
12.7	22.7	28.7	70	12	12200	6500	550	0.94	KASK05-VA-G-NAT
-	10	16	70	12	12200	6500	550	0.69	KASK05-VA-G-NAT
12.7	22.7	28.7	70	12	12200	6500	550	0.94	KASK05-VA-G-NAT
-	10	18	83	12	16700	9110	760	1	KASK06-VA-G-NAT
12.7	22.7	30.7	83	12	16700	9110	760	1.29	KASK06-VA-G-NAT
-	10	18	83	12	16700	9110	760	1	KASK06-VA-G-NAT
12.7	22.7	30.7	83	12	16700	9110	760	1.29	KASK06-VA-G-NAT
-	10	18	83	12	16700	9110	760	1	KASK06-VA-G-NAT
12.7	22.7	30.7	83	12	16700	9110	760	1.29	KASK06-VA-G-NAT
-	10	18	83	12	16700	9110	760	1	KASK06-VA-G-NAT
12.7	22.7	30.7	83	12	16700	9110	760	1.29	KASK06-VA-G-NAT
-	11	19	92	14	21900	12500	1000	1.26	KASK07-VA-G-NAT
12.7	23.7	31.7	92	14	21900	12500	1000	1.61	KASK07-VA-G-NAT
-	11	19	92	14	21900	12500	1000	1.26	KASK07-VA-G-NAT
12.7	23.7	31.7	92	14	21900	12500	1000	1.61	KASK07-VA-G-NAT
-	11	19	92	14	21900	12500	1000	1.26	KASK07-VA-G-NAT
12.7	23.7	31.7	92	14	21900	12500	1000	1.61	KASK07-VA-G-NAT
-	11	19	92	14	21900	12500	1000	1.26	KASK07-VA-G-NAT
12.7	23.7	31.7	92	14	21900	12500	1000	1.61	KASK07-VA-G-NAT
-	11	19	92	14	21900	12500	1000	1.26	KASK07-VA-G-NAT
12.7	23.7	31.7	92	14	21900	12500	1000	1.61	KASK07-VA-G-NAT
-	12	21	102	16	24900	14500	1130	1.71	KASK08-VA-G-NAT
12.7	24.7	33.7	102	16	24900	14500	1130	2.19	KASK08-VA-G-NAT
-	12	21	102	16	24900	14500	1130	1.71	KASK08-VA-G-NAT
12.7	24.7	33.7	102	16	24900	14500	1130	2.19	KASK08-VA-G-NAT

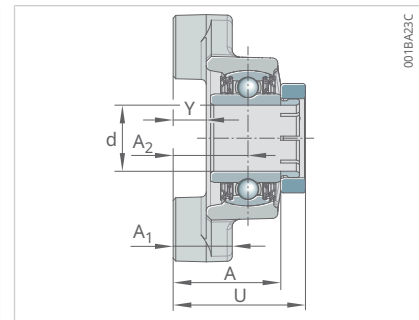
3.17.11 Four-bolt flanged housing units, with locking collar

FD design

Stainless steel housings, standard or stand-off design

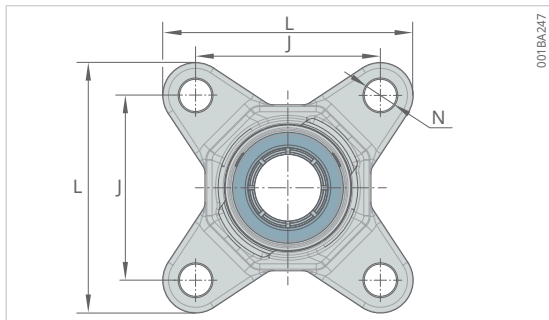


RCJOC...-VA-FD

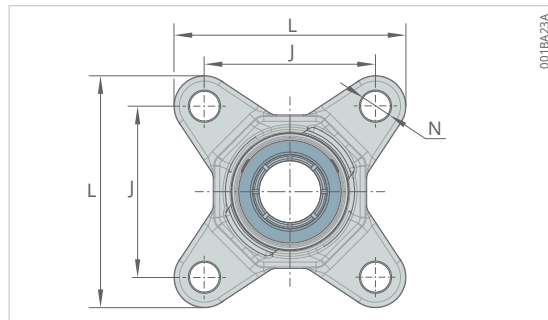


RCJHOC...-VA-FD

Unit	d		Housing	Radial insert ball bearing	L	U	A
-	mm	inch	-	-	mm	mm	mm
RCJOC008-VA-FD	12.7	1/2	GEH.CJ04-VA-NAT	OC008-DC-B-VA-FD	86	35.6	28
RCJHOC008-VA-FD	12.7	1/2	GEH.CJH04-VA-NAT	OC008-DC-B-VA-FD	86	48.3	40.7
RCJOC010-VA-FD	15.875	5/8	GEH.CJ04-VA-NAT	OC010-DC-B-VA-FD	86	35.6	28
RCJHOC010-VA-FD	15.875	5/8	GEH.CJH04-VA-NAT	OC010-DC-B-VA-FD	86	48.3	40.7
RCJOC012-VA-FD	19.05	3/4	GEH.CJ04-VA-NAT	OC012-DC-B-VA-FD	86	35.6	28
RCJHOC012-VA-FD	19.05	3/4	GEH.CJH04-VA-NAT	OC012-DC-B-VA-FD	86	48.3	40.7
RCJOC20-VA-FD	20	-	GEH.CJ04-VA-NAT	OCE20-DC-B-VA-FD	86	35.6	28
RCJHOC20-VA-FD	20	-	GEH.CJH04-VA-NAT	OCE20-DC-B-VA-FD	86	48.3	40.7
RCJOC014-VA-FD	22.225	7/8	GEH.CJ05-VA-NAT	OC014-DC-B-VA-FD	95	38.2	30
RCJHOC014-VA-FD	22.225	7/8	GEH.CJH05-VA-NAT	OC014-DC-B-VA-FD	95	50.9	42.7
RCJOC015-VA-FD	23.812	15/16	GEH.CJ05-VA-NAT	OC015-DC-B-VA-FD	95	38.2	30
RCJHOC015-VA-FD	23.812	15/16	GEH.CJH05-VA-NAT	OC015-DC-B-VA-FD	95	50.9	42.7
RCJOC25-VA-FD	25	-	GEH.CJ05-VA-NAT	OCE25-DC-B-VA-FD	95	38.2	30
RCJHOC25-VA-FD	25	-	GEH.CJH05-VA-NAT	OCE25-DC-B-VA-FD	95	50.9	42.7
RCJOC100-VA-FD	25.4	1	GEH.CJ05-VA-NAT	OC100-DC-B-VA-FD	95	38.2	30
RCJHOC100-VA-FD	25.4	1	GEH.CJH05-VA-NAT	OC100-DC-B-VA-FD	95	50.9	42.7
RCJOC102-VA-FD	28.575	1 1/8	GEH.CJ06-VA-NAT	OC102-DC-B-VA-FD	108	41.8	32.5
RCJHOC102-VA-FD	28.575	1 1/8	GEH.CJH06-VA-NAT	OC102-DC-B-VA-FD	108	54.5	45.2
RCJOC30-VA-FD	30	-	GEH.CJ06-VA-NAT	OCE30-DC-B-VA-FD	108	41.8	32.5
RCJHOC30-VA-FD	30	-	GEH.CJH06-VA-NAT	OCE30-DC-B-VA-FD	108	54.5	45.2
RCJOC103-VA-FD	30.162	1 3/16	GEH.CJ06-VA-NAT	OC103-DC-B-VA-FD	108	41.8	32.5
RCJHOC103-VA-FD	30.162	1 3/16	GEH.CJH06-VA-NAT	OC103-DC-B-VA-FD	108	54.5	45.2
RCJOC104-VA-FD	31.75	1 1/4	GEH.CJ06-VA-NAT	OC104-DC-B-VA-FD	108	41.8	32.5
RCJHOC104-VA-FD	31.75	1 1/4	GEH.CJH06-VA-NAT	OC104-DC-B-VA-FD	108	54.5	45.2
RCJOC104-207-VA-FD	31.75	1 1/4	GEH.CJ07-VA-NAT	OC104-207-DC-B-VA-FD	117	46	34
RCJHOC104-207-VA-FD	31.75	1 1/4	GEH.CJH07-VA-NAT	OC104-207-DC-B-VA-FD	117	58.7	46.7
RCJOC105-VA-FD	33.338	1 5/16	GEH.CJ07-VA-NAT	OC105-DC-B-VA-FD	117	46	34
RCJHOC105-VA-FD	33.338	1 5/16	GEH.CJH07-VA-NAT	OC105-DC-B-VA-FD	117	58.7	46.7
RCJOC106-VA-FD	34.925	1 3/8	GEH.CJ07-VA-NAT	OC106-DC-B-VA-FD	117	46	34
RCJHOC106-VA-FD	34.925	1 3/8	GEH.CJH07-VA-NAT	OC106-DC-B-VA-FD	117	58.7	46.7
RCJOC35-VA-FD	35	-	GEH.CJ07-VA-NAT	OCE35-DC-B-VA-FD	117	46	34
RCJHOC35-VA-FD	35	-	GEH.CJH07-VA-NAT	OCE35-DC-B-VA-FD	117	58.7	46.7
RCJOC107-VA-FD	36.512	1 7/16	GEH.CJ07-VA-NAT	OC107-DC-B-VA-FD	117	46	34
RCJHOC107-VA-FD	36.512	1 7/16	GEH.CJH07-VA-NAT	OC107-DC-B-VA-FD	117	58.7	46.7
RCJOC108-VA-FD	38.1	1 1/2	GEH.CJ08-VA-NAT	OC108-DC-B-VA-FD	130	52.8	37.5
RCJHOC108-VA-FD	38.1	1 1/2	GEH.CJH08-VA-NAT	OC108-DC-B-VA-FD	130	65.5	50.2
RCJOC40-VA-FD	40	-	GEH.CJ08-VA-NAT	OCE40-DC-B-VA-FD	130	52.8	37.5
RCJHOC40-VA-FD	40	-	GEH.CJH08-VA-NAT	OCE40-DC-B-VA-FD	130	65.5	50.2



RCJOC...-VA-FD



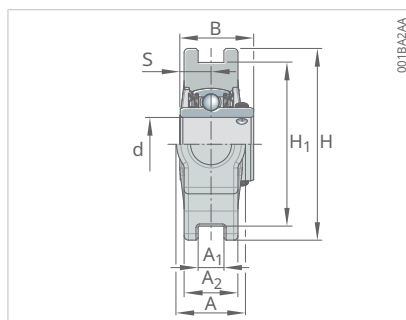
RCJHOC...-VA-FD

Y	A ₁	A ₂	J	N	C _r	C _{0r}	C _{ur}	m ≈	Bearing end cap
mm	mm	mm	mm	mm	N	N	N	kg	-
-	10	15	64	12	11100	5400	500	0.57	KASK04-VA-G-NAT
12.7	22.7	27.7	64	12	11100	5400	500	0.73	KASK04-VA-G-NAT
-	10	15	64	12	11100	5400	500	0.57	KASK04-VA-G-NAT
12.7	22.7	27.7	64	12	11100	5400	500	0.73	KASK04-VA-G-NAT
-	10	15	64	12	11100	5400	500	0.57	KASK04-VA-G-NAT
12.7	22.7	27.7	64	12	11100	5400	500	0.73	KASK04-VA-G-NAT
-	10	15	64	12	11100	5400	500	0.57	KASK04-VA-G-NAT
12.7	22.7	27.7	64	12	11100	5400	500	0.73	KASK04-VA-G-NAT
-	10	16	70	12	12200	6500	550	0.72	KASK05-VA-G-NAT
12.7	22.7	28.7	70	12	12200	6500	550	0.85	KASK05-VA-G-NAT
-	10	16	70	12	12200	6500	550	0.72	KASK05-VA-G-NAT
12.7	22.7	28.7	70	12	12200	6500	550	0.85	KASK05-VA-G-NAT
-	10	16	70	12	12200	6500	550	0.72	KASK05-VA-G-NAT
12.7	22.7	28.7	70	12	12200	6500	550	0.85	KASK05-VA-G-NAT
-	10	16	70	12	12200	6500	550	0.72	KASK05-VA-G-NAT
12.7	22.7	28.7	70	12	12200	6500	550	0.85	KASK05-VA-G-NAT
-	10	18	83	12	16700	9110	760	1.05	KASK06-VA-G-NAT
12.7	22.7	30.7	83	12	16700	9110	760	1.35	KASK06-VA-G-NAT
-	10	18	83	12	16700	9110	760	1.05	KASK06-VA-G-NAT
12.7	22.7	30.7	83	12	16700	9110	760	1.35	KASK06-VA-G-NAT
-	10	18	83	12	16700	9110	760	1.05	KASK06-VA-G-NAT
12.7	22.7	30.7	83	12	16700	9110	760	1.35	KASK06-VA-G-NAT
-	10	18	83	12	16700	9110	760	1.05	KASK06-VA-G-NAT
12.7	22.7	30.7	83	12	16700	9110	760	1.35	KASK06-VA-G-NAT
-	11	19	92	14	21900	12500	1000	1.33	KASK07-VA-G-NAT
12.7	23.7	31.7	92	14	21900	12500	1000	1.68	KASK07-VA-G-NAT
-	11	19	92	14	21900	12500	1000	1.33	KASK07-VA-G-NAT
12.7	23.7	31.7	92	14	21900	12500	1000	1.68	KASK07-VA-G-NAT
-	11	19	92	14	21900	12500	1000	1.33	KASK07-VA-G-NAT
12.7	23.7	31.7	92	14	21900	12500	1000	1.68	KASK07-VA-G-NAT
-	11	19	92	14	21900	12500	1000	1.33	KASK07-VA-G-NAT
12.7	23.7	31.7	92	14	21900	12500	1000	1.68	KASK07-VA-G-NAT
-	11	19	92	14	21900	12500	1000	1.33	KASK07-VA-G-NAT
12.7	23.7	31.7	92	14	21900	12500	1000	1.68	KASK07-VA-G-NAT
-	12	21	102	16	24900	14500	1130	1.79	KASK08-VA-G-NAT
12.7	24.7	33.7	102	16	24900	14500	1130	2.27	KASK08-VA-G-NAT
-	12	21	102	16	24900	14500	1130	1.79	KASK08-VA-G-NAT
12.7	24.7	33.7	102	16	24900	14500	1130	2.27	KASK08-VA-G-NAT

3.17.12 Take-up housing units,
with grub screws

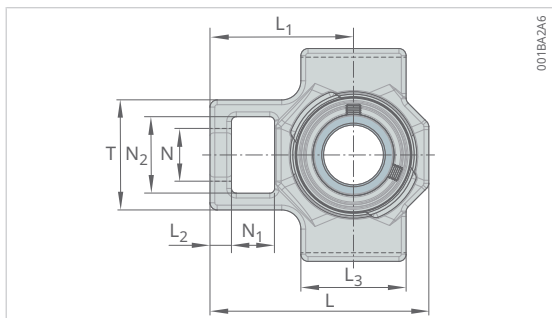
FD design

Stainless steel housing



RTUEY...-VA-FD

Unit	d		Housing	Radial insert ball bearing	L	H	B	A	A ₁
-	mm	inch	-	-	mm	mm	mm	mm	mm
RTUEY014-VA-FD	22.225	$\frac{7}{8}$	GEH.TUE05-VA-NAT	Y014-DC-B-VA-FD	91.5	89	34.1	32	12
RTUEY015-VA-FD	23.812	$\frac{15}{16}$	GEH.TUE05-VA-NAT	Y015-DC-B-VA-FD	91.5	89	34.1	32	12
RTUEY25-VA-FD	25	-	GEH.TUE05-VA-NAT	YE25-DC-B-VA-FD	91.5	89	34.1	32	12
RTUEY100-VA-FD	25.4	1	GEH.TUE05-VA-NAT	Y100-DC-B-VA-FD	91.5	89	34.1	32	12
RTUEY102-VA-FD	28.575	$1\frac{1}{8}$	GEH.TUE06-VA-NAT	Y102-DC-B-VA-FD	105	102	38.1	37	12
RTUEY30-VA-FD	30	-	GEH.TUE06-VA-NAT	YE30-DC-B-VA-FD	105	102	38.1	37	12
RTUEY103-VA-FD	30.162	$1\frac{3}{16}$	GEH.TUE06-VA-NAT	Y103-DC-B-VA-FD	105	102	38.1	37	12
RTUEY104-VA-FD	31.75	$1\frac{1}{4}$	GEH.TUE06-VA-NAT	Y104-DC-B-VA-FD	105	102	38.1	37	12
RTUEY104-207-VA-FD	31.75	$1\frac{1}{4}$	GEH.TUE07-VA-NAT	Y104-207-DC-B-VA-FD	118	102	42.9	37	12
RTUEY105-VA-FD	33.338	$1\frac{5}{16}$	GEH.TUE07-VA-NAT	Y105-DC-B-VA-FD	118	102	42.9	37	12
RTUEY106-VA-FD	34.925	$1\frac{3}{8}$	GEH.TUE07-VA-NAT	Y106-DC-B-VA-FD	118	102	42.9	37	12
RTUEY35-VA-FD	35	-	GEH.TUE07-VA-NAT	YE35-DC-B-VA-FD	118	102	42.9	37	12
RTUEY107-VA-FD	36.512	$1\frac{7}{16}$	GEH.TUE07-VA-NAT	Y107-DC-B-VA-FD	118	102	42.9	37	12



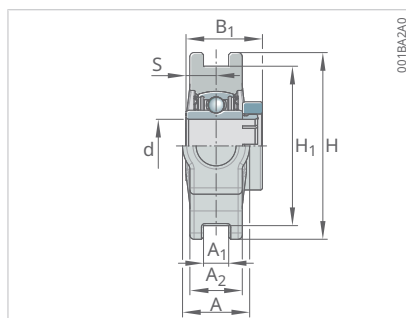
RTUEY..-VA-FD

A ₂	S	H ₁	T	L ₁	L ₂	L ₃	N	N ₁	N ₂	C _r	C _{0r}	C _{ur}	m ≈	Bearing end cap
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	N	N	N	kg	-
25	14.3	76	46	60	9	44	19	18	32	12200	6500	550	0.87	KASK05-VA-G-NAT
25	14.3	76	46	60	9	44	19	18	32	12200	6500	550	0.87	KASK05-VA-G-NAT
25	14.3	76	46	60	9	44	19	18	32	12200	6500	550	0.87	KASK05-VA-G-NAT
25	14.3	76	46	60	9	44	19	18	32	12200	6500	550	0.87	KASK05-VA-G-NAT
27	15.9	89	52	67	9	50	22	18	37	16700	9110	760	1.19	KASK06-VA-G-NAT
27	15.9	89	52	67	9	50	22	18	37	16700	9110	760	1.19	KASK06-VA-G-NAT
27	15.9	89	52	67	9	50	22	18	37	16700	9110	760	1.19	KASK06-VA-G-NAT
27	15.9	89	52	67	9	50	22	18	37	16700	9110	760	1.19	KASK06-VA-G-NAT
31	17.5	89	56	75	11	56	22	18	37	21900	12500	1000	1.63	KASK07-VA-G-NAT
31	17.5	89	56	75	11	56	22	18	37	21900	12500	1000	1.63	KASK07-VA-G-NAT
31	17.5	89	56	75	11	56	22	18	37	21900	12500	1000	1.63	KASK07-VA-G-NAT
31	17.5	89	56	75	11	56	22	18	37	21900	12500	1000	1.63	KASK07-VA-G-NAT
31	17.5	89	56	75	11	56	22	18	37	21900	12500	1000	1.63	KASK07-VA-G-NAT

3.17.13 Take-up housing units,
with locking collar

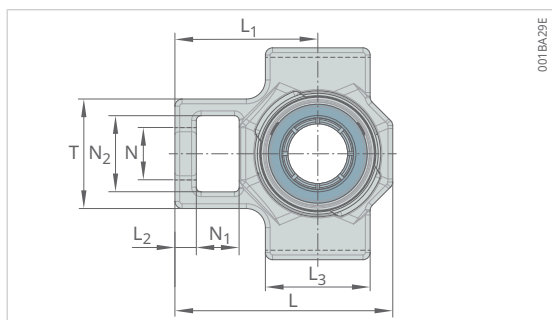
FD design

Stainless steel housing



RTUEOC...-VA-FD

Unit	d		Housing	Radial insert ball bearing	L	H	B ₁	A	A ₁
-	mm	inch	-	-	mm	mm	mm	mm	mm
RTUEOC014-VA-FD	22.225	7/8	GEH.TUE05-VA-NAT	OC014-DC-B-VA-FD	91.5	89	36.4	32	12
RTUEOC015-VA-FD	23.812	15/16	GEH.TUE05-VA-NAT	OC015-DC-B-VA-FD	91.5	89	36.4	32	12
RTUEOC25-VA-FD	25	-	GEH.TUE05-VA-NAT	OCE25-DC-B-VA-FD	91.5	89	36.4	32	12
RTUEOC100-VA-FD	25.4	1	GEH.TUE05-VA-NAT	OC100-DC-B-VA-FD	91.5	89	36.4	32	12
RTUEOC102-VA-FD	28.575	1 1/8	GEH.TUE06-VA-NAT	OC102-DC-B-VA-FD	105	102	40.4	37	12
RTUEOC30-VA-FD	30	-	GEH.TUE06-VA-NAT	OCE30-DC-B-VA-FD	105	102	40.4	37	12
RTUEOC103-VA-FD	30.162	1 3/16	GEH.TUE06-VA-NAT	OC103-DC-B-VA-FD	105	102	40.4	37	12
RTUEOC104-VA-FD	31.75	1 1/4	GEH.TUE06-VA-NAT	OC104-DC-B-VA-FD	105	102	40.4	37	12
RTUEOC104-207-VA-FD	31.75	1 1/4	GEH.TUE07-VA-NAT	OC104-207-DC-B-VA-FD	118	102	44.5	37	12
RTUEOC105-VA-FD	33.338	1 5/16	GEH.TUE07-VA-NAT	OC105-DC-B-VA-FD	118	102	44.5	37	12
RTUEOC106-VA-FD	34.925	1 3/8	GEH.TUE07-VA-NAT	OC106-DC-B-VA-FD	118	102	44.5	37	12
RTUEOC35-VA-FD	35	-	GEH.TUE07-VA-NAT	OCE35-DC-B-VA-FD	118	102	44.5	37	12
RTUEOC107-VA-FD	36.512	1 7/16	GEH.TUE07-VA-NAT	OC107-DC-B-VA-FD	118	102	44.5	37	12



RTUEOC...-VA-FD

A ₂	S	H ₁	T	L ₁	L ₂	L ₃	N	N ₁	N ₂	C _r	C _{0r}	C _{ur}	m ≈	Bearing end cap
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	N	N	N	kg	-
25	14.3	76	46	60	9	44	19	18	32	12200	6500	550	0.92	KASK05-VA-G-NAT
25	14.3	76	46	60	9	44	19	18	32	12200	6500	550	0.92	KASK05-VA-G-NAT
25	14.3	76	46	60	9	44	19	18	32	12200	6500	550	0.92	KASK05-VA-G-NAT
25	14.3	76	46	60	9	44	19	18	32	12200	6500	550	0.92	KASK05-VA-G-NAT
27	15.9	89	52	67	9	50	22	18	37	16700	9110	760	1.25	KASK06-VA-G-NAT
27	15.9	89	52	67	9	50	22	18	37	16700	9110	760	1.25	KASK06-VA-G-NAT
27	15.9	89	52	67	9	50	22	18	37	16700	9110	760	1.25	KASK06-VA-G-NAT
27	15.9	89	52	67	9	50	22	18	37	16700	9110	760	1.25	KASK06-VA-G-NAT
31	17.5	89	56	75	11	56	22	18	37	21900	12500	1000	1.7	KASK07-VA-G-NAT
31	17.5	89	56	75	11	56	22	18	37	21900	12500	1000	1.7	KASK07-VA-G-NAT
31	17.5	89	56	75	11	56	22	18	37	21900	12500	1000	1.7	KASK07-VA-G-NAT
31	17.5	89	56	75	11	56	22	18	37	21900	12500	1000	1.7	KASK07-VA-G-NAT
31	17.5	89	56	75	11	56	22	18	37	21900	12500	1000	1.7	KASK07-VA-G-NAT

4 Plastic housing units

Housing units with white, FDA-approved plastic housings made from PBT are available as pillow block housing units and flanged housing units.

The glass fiber reinforced plastic PBT is highly resistant to humidity, UV radiation, bacterial and fungal attacks as well as many chemical agents.

The white plastic housing units are highly suitable for applications in the food industry, where they are exposed to various media, moisture, salt spray mist, contaminated water or cleaning agents.

Design variants

- **Pillow block housing units** with white plastic housings, with radial insert ball bearings made from stainless steel. Location by means of set screws or eccentric locking collar.
- **Flanged housing units** with white plastic housings, with radial insert ball bearings made from stainless steel. Location by means of set screws or eccentric locking collar.

The housing units are lubricated with food-grade grease.

4.1 Housing design

The units are ready-to-fit and comprise white plastic housings in which corrosion-resistant Schaeffler radial insert ball bearings for the food industry are fitted. The possible combinations can be found in the table of combination options ►89 | 33.

Grub screws locate housing units with integral radial insert ball bearing GYE..-KRR-B-FA107-VA-FD on the shaft. Eccentric locking collars locate housing units with integral radial insert ball bearing GE..-KRR-B-FA107-VA-FD on the shaft.



In order to ensure function and reliability under all operating conditions, the bearings and housings are matched to each other with a defined swivel moment after mounting.

The swivel moment can be requested from Schaeffler.

4.1.1 Pillow block housing units

Pillow block housing units are available with a long base or short base. They have a complete housing base and therefore offer no hidden spaces for bacterial growth. The housings are made from glass fiber reinforced, white plastic PBT, are not split, and are screw mounted to the adjacent construction by means of slots or threaded holes. Inserts made from corrosion-resistant steel are integrated into the housing base, to prevent damage when tightening the screws.

For relubrication of radial insert ball bearings, the housing bore has a lubrication groove and the housing has a lubrication hole suitable for conventional lubrication nipples. The lubrication nipple is supplied already fitted, a bearing end cap is supplied loose at the time of delivery.

Pillow block housing units with long base

24 Pillow block housing units with long base, FD design



00089A6D

Series:

- with grub screws: RASEY..-TV-VA-FD
- with eccentric locking collar: RASE..-TV-VA-FD

Pillow block housing units with short base

25 Pillow block housing units with short base, FD design



00089A7D

Series:

- with grub screws: RSHEY..-TV-VA-FD
- with eccentric locking collar: RSHE..-TV-VA-FD

4.1.2 Flanged housing units

Flanged housing units are available as two-bolt flanged housing units and four-bolt flanged housing units. For location, the housings have through holes reinforced with stainless steel inserts.

The housing material, the design of lubrication arrangements, and the delivered condition correspond to those of pillow block housing units.

Two-bolt flanged housing units

26 Two-bolt flanged housing units, narrow version, FD design



00089A71

Series:

- with grub screws: RCJTY...TV-VA-FD
- with eccentric locking collar: RCJT...TV-VA-FD

27 Two-bolt flanged housing units, wide version, FD design



00089A69

Series:

- with eccentric locking collar: GLCTE...TV-VA-FD

Four-bolt flanged housing units

28 Four-bolt flanged housing units, FD design



00089A75

Series:

- with grub screws: RCJY...TV-VA-FD
- with eccentric locking collar: RCJ...TV-VA-FD

4.1.3 Accessories

4.1.3.1 Bearing end caps

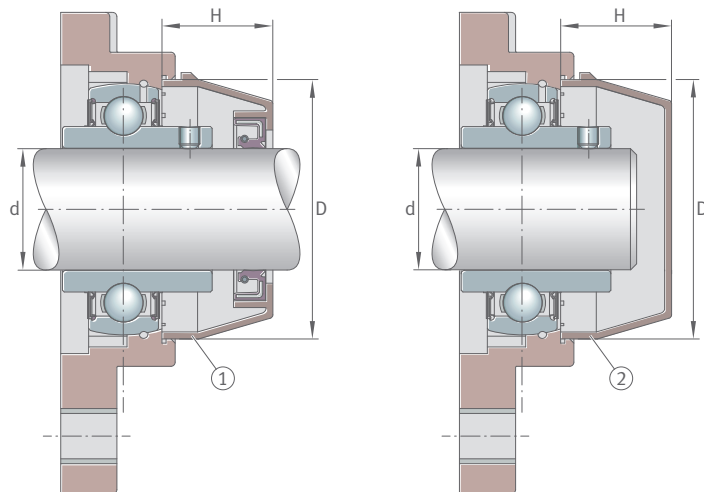
Each housing unit is supplied with a closed white end cap KASK..-S-G-WHT.

Open white end caps KASK..-S-R-NBR-WHT with integrated radial shaft seal are available on request. The open end caps are suitable only for housing units containing GYE radial insert bearings with set screws, not for GE radial insert ball bearings with eccentric locking collars.

The bearing end caps are made from Capilene SR 50 plastic.

In application testing, the bearing end caps proved resistant to water jets applied at a high water pressure (90 bar). During testing, housings sealed with end caps withstood water jets at a temperature of +80 °C (+176 °F) from various angles (0°, 30°, 60°, 90°). They remained in position on the housings and were not damaged.

29 Open or closed end caps



001A7611

1 Open end cap with integral rotary shaft seal

2 Closed end cap

31 Bearing end caps for plastic housing units

Designation		d	D	H
Closed end cap	Open end cap	mm	mm	mm
KASK04-S-G-WHT	KASK04-S-R-NBR-WHT	20	50	23
KASK05-S-G-WHT	KASK05-S-R-NBR-WHT	25	55	25
KASK06-S-G-WHT	KASK06-S-R-NBR-WHT	30	64	30
KASK07-S-G-WHT	KASK07-S-R-NBR-WHT	35	74.6	32
KASK08-S-G-WHT	KASK08-S-R-NBR-WHT	40	84	37

4.1.3.2 Back Seal component

For flanged housing units RCJ..-TV-VA-FD and RCJT..-TV-VA-FD, a Back Seal component RWDR..-R-NBR is available, which seals the rear of the housing.

The Back Seal component is made from NBR and has a spring washer made from corrosion-resistant steel, material no. 1.4301. This additional sealing against the environment gives the plastic housing units effective, additional protection against contamination, which extends the operating life of the bearings.

30 Flanged housing units with Back Seal component

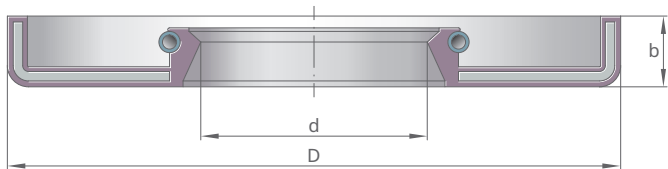


001A7651

1 Flanged housing unit RCJ..-TV-VA-FD with Back Seal component

2 Flanged housing unit RCJT..-TV-VA-FD with Back Seal component

31 Dimensions of the Back Seal component



001B690D

32 Designations and dimensions of Back Seal components

Designation	d	b	D
	mm	mm	mm
RWDR04-R-NBR	20	6	52
RWDR05-R-NBR	25	6	62
RWDR06-R-NBR	30	6	72
RWDR07-R-NBR	35	6	82
RWDR08-R-NBR	40	6	88

4.1.4 Lubricant approved for food applications

The lubricant used is approved for food applications to category NSF H1 and meets the quality requirements of FDA 21 CFR 178.3570 in full. Furthermore, the lubricant is certified to halal and kosher standards. The grease also contains only allergen-free ingredients and no components comprising animal or genetically modified organisms.

32 Certifications



001A75F1

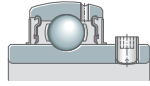
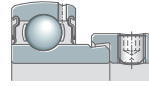
1 kosher

2 halal

3 National Sanitation Foundation (NSF)

4.1.5 Possible combinations of radial insert ball bearings and plastic housings

33 Possible combinations of radial insert ball bearings and plastic housings

Plastic housing			Radial insert ball bearing	
			with grub screws	with eccentric locking collar
				
			GYE...KRR-B-FA107-VA-FD	GE...KRR-B-FA107-VA-FD
			d = 20 mm ... 40 mm	d = 20 mm ... 40 mm
Pillow block housing	with long base		GEH.ASE...-TV-WHT RASEY...-TV-VA-FD ►96 4.17.2	RASE...-TV-VA-FD ►98 4.17.3
	with short base		GEH.SHE...-TV-WHT RSHEY...-TV-VA-FD ►100 4.17.4	RSHE...-TV-VA-FD ►102 4.17.5
Flanged housing	Two-bolt, narrow		GEH.CJT...-TV-WHT RCJTY...-TV-VA-FD ►104 4.17.6	RCJT...-TV-VA-FD ►106 4.17.7
	Two-bolt, wide		– ¹⁾	GLCTE...-TV-VA-FD ►108 4.17.8
	Four-bolt		GEH.CJ...-TV-WHT RCJY...-TV-VA-FD ►110 4.17.9	RCJ...-TV-VA-FD ►112 4.17.10

¹⁾ Combinations not possible or not advisable

4.2 Materials, corrosion protection, food grade

All further information on the materials used, corrosion resistance, and food-grade greasing can be found in the section Radial insert ball bearings ►22 | 2.

We reserve the right to make technical changes, including material changes, as part of the ongoing development.

FDA-compliant materials

The following FDA-compliant materials are used:

34 FDA-compliant materials

Bearing components	Material, designation	FDA directive
Seals	NBR	FDA 21 CFR 177.2600
Grease	Mobilgrease FM 222	FDA 21 CFR 178.3570
Housing	PBT-GF20	FDA 21 CFR 175-178 FDA 21 CFR 177.1660
End cap	Capilene SR 50	FDA 21 CFR 177.1520(a)(3)(i), (c)3.1a FDA 21 CFR 177.1520(b)

The classification of components as FDA-compliant is based on information provided by material manufacturers.

4.3 Load carrying capacity

The load carrying capacity of radial insert ball bearings can be found in the section Radial insert ball bearings ►28|2.3.

Due to their versatile characteristics, Schaeffler housing units are suitable for use in almost all industrial sectors.



If bearing arrangements are planned for equipment in which a malfunction could be hazardous to persons or an unplanned stoppage of the machine causes major disruption, it is essential that you consult Schaeffler before proceeding with the design.

Radial load carrying capacity of housings

Plastic housings are suitable for moderate loads. The radial static load carrying capacity $C_{0r\ G}$ of plastic housings and the static load carrying capacity C_{0r} of the radial insert ball bearings is stated in the relevant product tables.

Axial load carrying capacity of housings

The axial operating load of the unit must not exceed the axial load carrying capacity of the housing.

The axial load carrying capacity of plastic housings is $C_{0a\ G} = 0.25 \cdot C_{0r\ G}$.

4.4 Compensation of angular misalignments

Bearings with a spherical outside surface of the outer ring, fitted in housings with a concave bore, can compensate for static misalignment of the shaft.

Detailed information on the compensation of static misalignments can be found in the section Radial insert ball bearings ►28|2.4.

4.5 Lubrication

All further information on the lubrication of housing units can be found in the section Radial of insert ball bearings ►29|2.5.

4.6 Sealing

All further information on the sealing of housing units can be found in the section Radial insert ball bearings ►30|2.6.

4.7 Speeds

The speed limits are dependent on the load, the clearance between the bearing bore and shaft, and the friction of the seals in the case of bearings with contact seals.

Detailed information on the speed limits can be found in the section Radial insert ball bearings ►32|2.7.

4.8 Temperature range

Housing units with or without a Back Seal component are suitable for operating temperatures from -30 °C to $+100\text{ °C}$ (-22 °F to $+210\text{ °F}$).

If bearing end caps are used, the maximum temperature is reduced to $+80\text{ °C}$ ($+176\text{ °F}$).

4.9 Internal clearance

Information on the internal clearance of integral radial insert ball bearings can be found in the section Radial insert ball bearings ►33 | 2.9.

4.10 Dimensions, tolerances

Information on the dimensions and tolerances of integral radial insert ball bearings can be found in the section Radial insert ball bearings ►33 | 2.10.

Housing tolerances

The dimensional tolerances, geometrical tolerances, and positional tolerances of plastic housings correspond to DIN 16742.

4.11 Structure of the ordering designation

33 Designation structure: plastic housing units for the food industry

Series		RASE	Y	20	-	TV	-	VA	-	FD
RASE	Pillow block housing unit with long base									
RSHE	Pillow block housing unit with short base									
RCJT	Two-bolt flanged housing unit, narrow									
GLCTE	Two-bolt flanged housing unit, wide									
RCJ	Four-bolt flanged housing unit									
Location (integral radial insert ball bearing)										
Y	With set screws in inner ring									
-	With eccentric locking collar (no specification)									
Bore diameter d										
...	Metric: d in mm									
Housing material										
TV	Plastic housing									
Materials										
VA	Components made from stainless steel									
Special version										
FD	Suitable for applications in the food industry									

001E27C6

4.12 Dimensioning

Detailed information on the dimensioning of integral radial insert ball bearings can be found in the section Radial insert ball bearings ►35 | 2.12.

4.13 Minimum load

Detailed information on the minimum loading of integral radial insert ball bearings can be found in the section Radial insert ball bearings ►37 | 2.13.

4.14 Design of the adjacent construction

Shaft design

The permissible shaft tolerance is dependent on the speed, load, and the radial insert ball bearing fitted. Shafts of the tolerance classes h6[Ⓔ] to h9[Ⓔ] can be used. Conventional drawn shafts will suffice for most applications.

The roughness of the bearing seats on the shaft must be matched to the tolerance class of the integral radial insert ball bearing. The mean roughness value R_a must not be too high, in order to maintain the interference loss within limits. The shafts must be ground. Guide values as a function of the IT grade of bearing seating surfaces can be found in the table.

35 Roughness values for cylindrical bearing seating surfaces – guide values

Nominal bearing seat diameter		Recommended mean roughness value for ground bearing seats			
d, D		R _{max}			
mm		μm			
>	≤	Diameter tolerance (IT grade)			
		IT4	IT5	IT6	IT7
–	80	0.2	0.4	0.8	1.6
80	500	0.4	0.8	1.6	1.6

Screw mounting surfaces

The housings are screw mounted on the adjacent construction. Less stringent tolerances are sufficient for the screw mounting surfaces.

Recommendations for the screw mounting surfaces are as follows:

- roughness of the screw mounting surface max. R_a 12.5 (R_{zmax} 63)
- geometrical and positional tolerance 0.04/100 concave, spherical not permissible

Fixing screws

Stainless steel screws of property class 80 or higher are suitable for fastening the housing to the screw mounting surface. The maximum tightening torques applicable to this screw property class must not be exceeded, even if screws of a higher property class are used.

Schaeffler recommends adhering to the following criteria for fastening:

- Design the screw connection in accordance with VDI 2230 using a coefficient of friction $\mu = 0.12$ (90 %).
- Screws and other accessories used for fastening should be made from stainless steel
- Use hexagon head screws with a coarse pitch full thread in accordance with DIN EN ISO 4017 as fastening screws. Combine the screws with at least 1 washer in accordance with DIN EN ISO 7089 or DIN EN ISO 7090.

Screws and accessories for location are not included in the delivery.

4.15 Mounting and dismounting

Correct mounting has a decisive influence on the achievable bearing life. Careful attention must therefore be paid to the following guidelines.



The Schaeffler Mounting Handbook MH 1 gives comprehensive information about the correct storage, mounting, dismounting, and maintenance of rotary rolling bearings. The Mounting Handbook also provides information which should be observed by the designer in relation to the mounting, dismounting, and maintenance of bearings, in the original design of the bearing position.

MH 1 | Mounting Handbook |
<https://www.schaeffler.de/std/1D53>

Detailed guidelines on the mounting and dismounting of housing units and radial insert ball bearings

SG 1 | Radial Insert Ball bearings and Housing Units |
<https://www.schaeffler.de/std/1B64>

MON 108 | Mounting of Radial Insert Ball Bearings with Spherical Outer Ring in Bearing Housings |
<https://www.schaeffler.de/std/1FA1>

Locating radial insert ball bearings on the shaft

Further information on locating radial insert ball bearings on the shaft can be found in the section Radial insert ball bearings ►38 | 2.15.

Location of the housing

Stainless steel screws of property class 80 or higher are suitable for fastening the housing to the screw mounting surface. The maximum tightening torques applicable to this screw property class must not be exceeded, even if screws of a higher property class are used.

Hexagonal socket head screws with a coarse pitch full thread in accordance with DIN EN ISO 4017 should be used as fixing screws. The screws should be combined as a minimum with 1 washer in accordance with DIN EN ISO 7089 or DIN EN ISO 7090.



The maximum tightening torques apply to stainless steel screws when utilizing 90 % of the yield strength of screw material grade 8.8 and with a friction coefficient $\mu = 0.12$.

36 Tightening torques for stainless steel fastening screws

Housing	Nominal screw size	Tightening torque
		max., recommended
		Nm
GEH.GLCTE04-TV-WHT	M8	15
GEH.GLCTE05-TV-WHT		15
GEH.SHE04-TV-WHT		18
GEH.ASE04-TV-WHT	M10	18
GEH.ASE05-TV-WHT		25
GEH.CJ04-TV-WHT		18
GEH.CJ05-TV-WHT		25
GEH.CJ06-TV-WHT		30
GEH.CJT04-TV-WHT		18
GEH.CJT05-TV-WHT		25
GEH.CJT06-TV-WHT		30
GEH.GLCTE06-TV-WHT		20
GEH.GLCTE07-TV-WHT		25
GEH.SHE05-TV-WHT		25
GEH.SHE06-TV-WHT		30
GEH.SHE07-TV-WHT		35
GEH.ASE06-TV-WHT	M12	30
GEH.ASE07-TV-WHT		35
GEH.ASE08-TV-WHT		45
GEH.CJ07-TV-WHT		35
GEH.CJ08-TV-WHT		40
GEH.CJT07-TV-WHT		35
GEH.CJT08-TV-WHT		40
GEH.GLCTE08-TV-WHT		30
GEH.SHE08-TV-WHT		45

4.16 Further information

The information on the design of the bearing arrangement, lubrication, mounting and dismounting, and on the operation of the bearings provided in the Technical Principles of Catalog HR 1, Rolling Bearings, must be observed as further information.

HR 1 | Rolling Bearings |

<https://www.schaeffler.de/std/1D3D>

SG 1 | Radial Insert Ball bearings and Housing Units |

<https://www.schaeffler.de/std/1B64>

MH 1 | Mounting Handbook |

<https://www.schaeffler.de/std/1D53>

MON 108 | Mounting of Radial Insert Ball Bearings with Spherical Outer Ring in Bearing Housings |

<https://www.schaeffler.de/std/1FA1>

TPI 64 | Corrosion-resistant products |

<https://www.schaeffler.de/std/1F37>

4.17 Product tables

4.17.1 Explanations of the product tables

A	mm	Base width
A	mm	Housing height
A ₁	mm	Flange thickness
A ₂	mm	Distance to raceway center
B	mm	Width
B ₁	mm	Width across locking collar
B ₃	mm	Distance from housing center to end of cap
C _{0r}	N	Basic static load rating, radial
C _{0r G}	N	Basic static load rating, radial, housing
C _r	N	Basic dynamic load rating, radial
C _{ur}	N	Fatigue limit load, radial
d	mm	Bearing bore diameter
d ₃	mm	Outside diameter of locking collar
f ₀	-	Calculation factor
H	mm	Distance to shaft axis
H	mm	Flange height
H ₁	mm	Base height
H ₂	mm	Height
J	mm	Distance between fixing holes
K	-	Fixing hole thread
L	mm	Length
L	mm	Width
m	kg	Mass
N	mm	Slot width
N	mm	Fixing hole
N ₁	mm	Slot length
Q	-	Threaded connector for lubrication
S ₁	mm	Distance from raceway center to locking collar
U	mm	Total unit height
V	mm	Housing shoulder diameter
W	mm	Width across flats

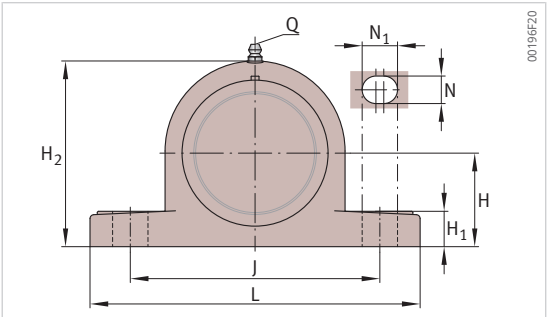
4.17.2 Pillow block housing units, with long base, with grub screws

FD design

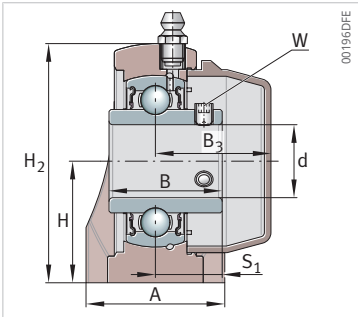
White plastic housing

4

Unit	d	Housing	Radial insert ball bearing	L	A	H ₂	H	H ₁	J
-	mm	-	-	mm	mm	mm	mm	mm	mm
RASEY20-TV-VA-FD	20	GEH.ASE04-TV-WHT	GYE20-KRR-B-FA107-VA-FD	127	38	65.5	33.3	14	95
RASEY25-TV-VA-FD	25	GEH.ASE05-TV-WHT	GYE25-KRR-B-FA107-VA-FD	140	38	71	36.5	14	105
RASEY30-TV-VA-FD	30	GEH.ASE06-TV-WHT	GYE30-KRR-B-FA107-VA-FD	162	46	83	42.9	17.8	119
RASEY35-TV-VA-FD	35	GEH.ASE07-TV-WHT	GYE35-KRR-B-FA107-VA-FD	167	48	94	47.6	18	127
RASEY40-TV-VA-FD	40	GEH.ASE08-TV-WHT	GYE40-KRR-B-FA107-VA-FD	184	54	98	49.2	19.5	137



RASEY..-TV-VA-FD, RASE..-TV-VA-FD



RASEY..-TV-VA-FD

N	N ₁	B	B ₃	S ₁	Q	W	C _r	C _{0r}	C _{ur}	C _{0r G}	f ₀	m ≈
mm	mm	mm	mm	mm	–	mm	N	N	N	N	–	kg
11	14	31	31.65	18.3	1/4"-28 UNF	2.5	10900	5300	280	7700	13.1	0.3
11	14	34.1	34.05	19.8	1/4"-28 UNF	2.5	11900	6300	335	10000	13.8	0.37
14	18	38.1	39.95	22.2	1/4"-28 UNF	3	18700	10700	475	10600	13.8	0.69
14	18	42.9	44.85	25.4	1/4"-28 UNF	3	22000	12300	655	10800	13.8	0.76
14	18	49.2	51.5	30.2	1/4"-28 UNF	4	24900	14300	800	11100	14	0.97

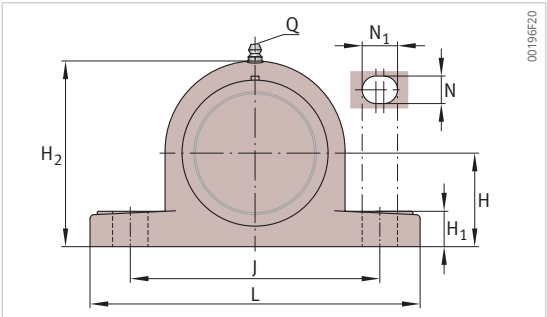
4.17.3 Pillow block housing units, with long base, with eccentric locking collar

FD design

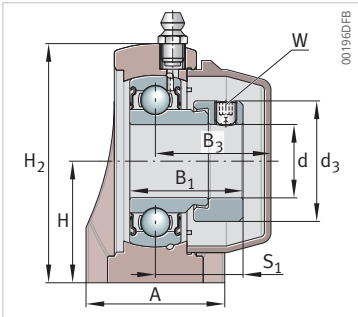
White plastic housing

4

Unit	d	Housing	Radial insert ball bearing	L	A	H ₂	H	H ₁	J
–	mm	–	–	mm	mm	mm	mm	mm	mm
RASE20-TV-VA-FD	20	GEH.ASE04-TV-WHT	GE20-KRR-B-FA107-VA-FD	127	38	65.5	33.3	14.2	95
RASE25-TV-VA-FD	25	GEH.ASE05-TV-WHT	GE25-KRR-B-FA107-VA-FD	140	38	71	36.5	14.5	105
RASE30-TV-VA-FD	30	GEH.ASE06-TV-WHT	GE30-KRR-B-FA107-VA-FD	162	46	83	42.9	17.8	119
RASE35-TV-VA-FD	35	GEH.ASE07-TV-WHT	GE35-KRR-B-FA107-VA-FD	167	48	94	47.6	18	127
RASE40-TV-VA-FD	40	GEH.ASE08-TV-WHT	GE40-KRR-B-FA107-VA-FD	184	54	98	49.2	19.5	137



RASEY..-TV-VA-FD, RASE..-TV-VA-FD



RASE..-TV-VA-FD

N	N ₁	B ₁	B ₃	d ₃ max.	S ₁	Q	W	C _r	C _{0r}	C _{ur}	C _{0r G}	f ₀	m ≈
mm	mm	mm	mm	mm	mm	–	mm	N	N	N	N	–	kg
11	14	31	31.65	33.3	24.1	1/4"-28 UNF	3	12840	6650	280	7700	13.1	0.3
11	14	31	34.05	38.1	23.5	1/4"-28 UNF	3	14020	7880	335	10000	13.8	0.35
14	18	35.7	39.95	44.5	27.7	1/4"-28 UNF	3	19460	11310	475	10600	13.8	0.55
14	18	38.9	44.85	55.6	30.4	1/4"-28 UNF	3	25670	15300	655	10800	13.8	0.8
14	18	43.7	51.5	60.3	34.7	1/4"-28 UNF	4	29520	18140	800	11100	14	0.99

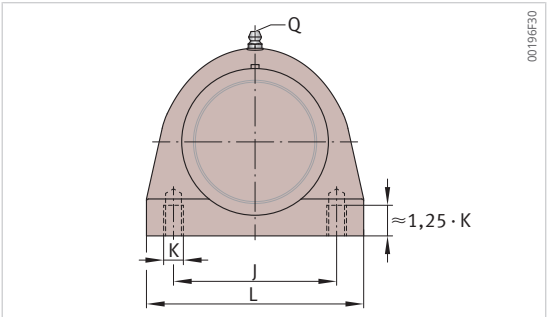
4.17.4 Pillow block housing units, with short base, with grub screws

FD design

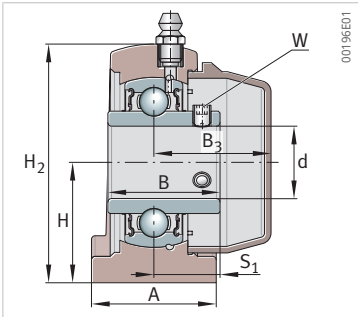
White plastic housing

4

Unit	d	Housing	Radial insert ball bearing	L	A	H ₂	H	J	K
-	mm	-	-	mm	mm	mm	mm	mm	-
RSHEY20-TV-VA-FD	20	GEH.SHE04-TV-WHT	GYE20-KRR-B-FA107-VA-FD	72.8	34.5	66	33.3	50.8	M8
RSHEY25-TV-VA-FD	25	GEH.SHE05-TV-WHT	GYE25-KRR-B-FA107-VA-FD	76.2	39.5	73.5	36.5	50.8	M10
RSHEY30-TV-VA-FD	30	GEH.SHE06-TV-WHT	GYE30-KRR-B-FA107-VA-FD	101	42.5	84	42.9	76.2	M10
RSHEY35-TV-VA-FD	35	GEH.SHE07-TV-WHT	GYE35-KRR-B-FA107-VA-FD	110	47.5	95	47.6	82.6	M10
RSHEY40-TV-VA-FD	40	GEH.SHE08-TV-WHT	GYE40-KRR-B-FA107-VA-FD	120	48	100.5	49.2	88.9	M12



RSHEY...-TV-VA-FD, RSHE...-TV-VA-FD



RSHEY...-TV-VA-FD

B	B ₃	S ₁	Q	W	C _r	C _{0r}	C _{ur}	C _{0r G}	f ₀	m ≈
mm	mm	mm	-	mm	N	N	N	N	-	kg
31	32.35	18.3	¹ / ₄ "-28 UNF	2.5	10900	5300	280	6900	13.1	0.27
34.1	35.05	19.8	¹ / ₄ "-28 UNF	2.5	11900	6300	335	7000	13.8	0.37
38.1	41.25	22.2	¹ / ₄ "-28 UNF	3	16700	9000	475	6500	13.8	0.52
42.9	45.05	25.4	¹ / ₄ "-28 UNF	3	22000	12300	655	8000	13.8	0.74
49.2	51.4	30.2	¹ / ₄ "-28 UNF	4	24900	14300	800	9100	14	0.91

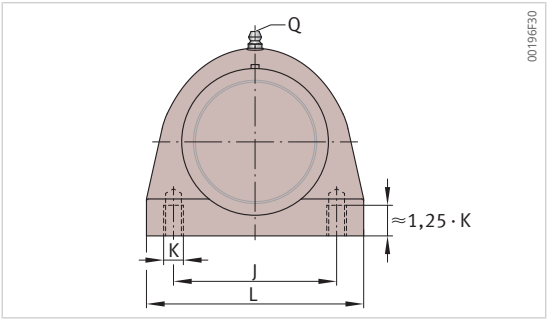
4.17.5 Pillow block housing units, with short base, with eccentric locking collar

FD design

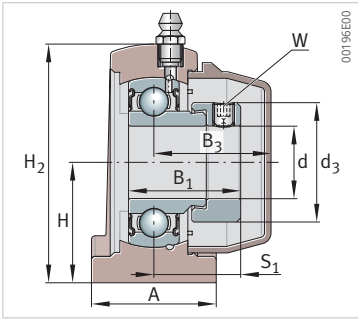
White plastic housing

4

Unit	d	Housing	Radial insert ball bearing	L	A	H ₂	H	J	K
–	mm	–	–	mm	mm	mm	mm	mm	–
RSHE20-TV-VA-FD	20	GEH.SHE04-TV-WHT	GE20-KRR-B-FA107-VA-FD	72.8	34.5	66	33.3	50.8	M8
RSHE25-TV-VA-FD	25	GEH.SHE05-TV-WHT	GE25-KRR-B-FA107-VA-FD	76.2	39.5	73.5	36.5	50.8	M10
RSHE30-TV-VA-FD	30	GEH.SHE06-TV-WHT	GE30-KRR-B-FA107-VA-FD	101	42.5	84	42.9	76.2	M10
RSHE35-TV-VA-FD	35	GEH.SHE07-TV-WHT	GE35-KRR-B-FA107-VA-FD	110	47.5	95	47.6	82.6	M10
RSHE40-TV-VA-FD	40	GEH.SHE08-TV-WHT	GE40-KRR-B-FA107-VA-FD	120	48	100.5	49.2	88.9	M12



RSHEY..-TV-VA-FD, RSHE..-TV-VA-FD



RSHE..-TV-VA-FD

B ₁	B ₃	d ₃ max.	S ₁	Q	W	C _r	C _{0r}	C _{ur}	C _{0r G}	f ₀	m ≈
mm	mm	mm	mm	–	mm	N	N	N	N	–	kg
31	32.35	33.3	24	1/4"-28 UNF	3	12840	6650	280	6900	13.1	0.28
31	35.05	38.1	23.5	1/4"-28 UNF	3	14020	7880	335	7000	13.8	0.35
35.7	41.25	44.5	27.7	1/4"-28 UNF	3	19460	11310	475	6500	13.8	0.52
38.9	45.05	55.6	30.4	1/4"-28 UNF	3	25670	15300	655	8000	13.8	0.79
43.7	51.4	60.3	34.7	1/4"-28 UNF	4	29520	18140	800	9100	14	0.93

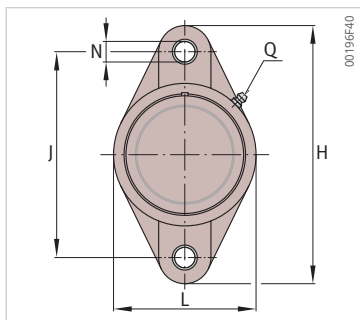
4.17.6 Two-bolt flanged housing units, narrow version, with grub screws

FD design

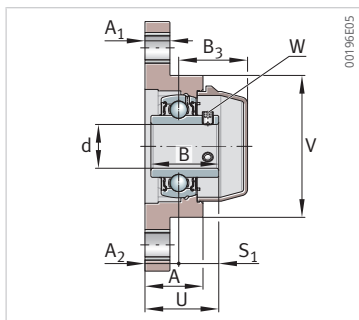
White plastic housing

4

Unit	d	Housing	Radial insert ball bearing	L	H	A	A ₁	A ₂	J
–	mm	–	–	mm	mm	mm	mm	mm	mm
RCJTY20-TV-VA-FD	20	GEH.CJT04-TV-WHT	GYE20-KRR-B-FA107-VA-FD	64.8	114	26.5	11.4	15.4	90
RCJTY25-TV-VA-FD	25	GEH.CJT05-TV-WHT	GYE25-KRR-B-FA107-VA-FD	70	130	29.1	13.5	17	99
RCJTY30-TV-VA-FD	30	GEH.CJT06-TV-WHT	GYE30-KRR-B-FA107-VA-FD	80	148	30.5	13.3	19	117
RCJTY35-TV-VA-FD	35	GEH.CJT07-TV-WHT	GYE35-KRR-B-FA107-VA-FD	90	163	32.8	16.1	18	130
RCJTY40-TV-VA-FD	40	GEH.CJT08-TV-WHT	GYE40-KRR-B-FA107-VA-FD	100	175	37.5	20	21.5	144



RCJTY..-TV-VA-FD, RCJT..-TV-VA-FD



RCJTY..-TV-VA-FD

N	B	B ₃	S ₁	U	V	Q	W	C _r	C _{0r}	C _{ur}	C _{0r G}	f ₀	m ≈
mm	mm	mm	mm	mm	mm	-	mm	N	N	N	N	-	kg
11	31	31.4	18.3	33.7	64.8	1/4"-28 UNF	2.5	10900	5300	280	8500	13.1	0.25
11	34.1	34.1	19.8	37.1	70	1/4"-28 UNF	2.5	11900	6300	335	11100	13.8	0.33
11	38.1	38.5	22.2	41.2	80	1/4"-28 UNF	3	16700	9000	475	14200	13.8	0.45
13	42.9	43.6	25.4	43.4	90	1/4"-28 UNF	3	22000	12300	655	14900	13.8	0.65
14	49.2	49.5	30.2	51.7	100	1/4"-28 UNF	4	24900	14300	800	14900	14	0.86

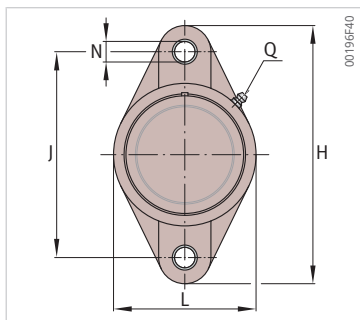
4.17.7 Two-bolt flanged housing units, narrow version, with eccentric locking collar

FD design

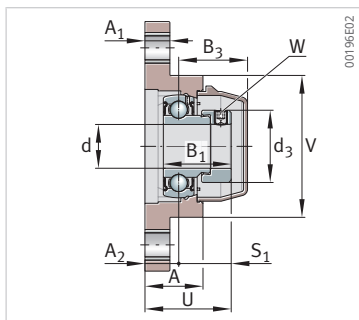
White plastic housing

4

Unit	d	Housing	Radial insert ball bearing	L	H	A	A ₁	A ₂	J
–	mm	–	–	mm	mm	mm	mm	mm	mm
RCJT20-TV-VA-FD	20	GEH.CJT04-TV-WHT	GE20-KRR-B-FA107-VA-FD	64.8	114	26.5	11.4	15.4	90
RCJT25-TV-VA-FD	25	GEH.CJT05-TV-WHT	GE25-KRR-B-FA107-VA-FD	70	130	29.1	13.5	17	99
RCJT30-TV-VA-FD	30	GEH.CJT06-TV-WHT	GE30-KRR-B-FA107-VA-FD	80	148	30.5	13.3	19	117
RCJT35-TV-VA-FD	35	GEH.CJT07-TV-WHT	GE35-KRR-B-FA107-VA-FD	90	163	32.8	16.1	18	130
RCJT40-TV-VA-FD	40	GEH.CJT08-TV-WHT	GE40-KRR-B-FA107-VA-FD	100	175	37.5	20	21.5	144



RCJTY..-TV-VA-FD, RCJT..-TV-VA-FD



RCJT..-TV-VA-FD

N	B ₁	B ₃	d ₃ max.	S ₁	U	V	Q	W	C _r	C _{0r}	C _{ur}	C _{0r G}	f ₀	m ≈
mm	mm	mm	mm	mm	mm	mm	-	mm	N	N	N	N	-	kg
11	31	31.4	33.3	24	39.4	64.8	1/4"-28 UNF	3	12840	6650	280	8500	13.1	0.26
11	31	34.1	38.1	23.5	40.5	70	1/4"-28 UNF	3	14020	7880	335	11100	13.8	0.32
11	35.7	38.5	44.5	27.7	46.7	80	1/4"-28 UNF	3	19460	11310	475	14200	13.8	0.45
13	38.9	43.6	55.6	30.4	48.4	90	1/4"-28 UNF	3	25670	15300	655	14900	13.8	0.69
14	43.7	49.5	60.3	34.7	56.2	100	1/4"-28 UNF	4	29520	18140	800	14900	14	0.88

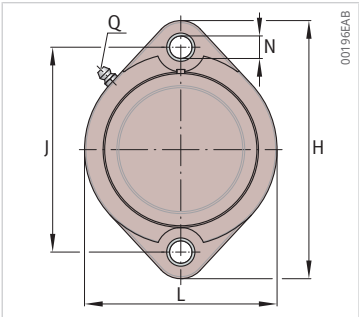
4.17.8 Two-bolt flanged housing units, wide version, with eccentric locking collar

FD design

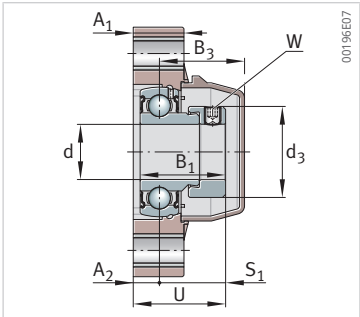
White plastic housing

4

Unit	d	Housing	Radial insert ball bearing	L	H	A ₁	A ₂	J	N
-	mm	-	-	mm	mm	mm	mm	mm	mm
GLCTE20-TV-VA-FD	20	GEH.GLCTE04-TV-WHT	GE20-KRR-B-FA107-VA-FD	66.5	90.5	18.4	9.5	71.4	9.2
GLCTE25-TV-VA-FD	25	GEH.GLCTE05-TV-WHT	GE25-KRR-B-FA107-VA-FD	91	97	18.4	9.9	76.2	9.2
GLCTE30-TV-VA-FD	30	GEH.GLCTE06-TV-WHT	GE30-KRR-B-FA107-VA-FD	84	112	20.5	11.4	90.5	11
GLCTE35-TV-VA-FD	35	GEH.GLCTE07-TV-WHT	GE35-KRR-B-FA107-VA-FD	94	126	22.5	12.4	100	11
GLCTE40-TV-VA-FD	40	GEH.GLCTE08-TV-WHT	GE40-KRR-B-FA107-VA-FD	100	150	24	13.5	119	14



GLCTE..-TV-VA-FD



GLCTE..-TV-VA-FD

B ₁	B ₃	d ₃ max.	S ₁	U	Q	W	C _r	C _{0r}	C _{ur}	C _{0r G}	f ₀	m ≈
mm	mm	mm	mm	mm	–	mm	N	N	N	N	–	kg
31.1	30.8	33.3	24	33.6	1/4"-28 UNF	3	12840	6650	280	9600	13.1	0.25
31	33.5	38.1	23.5	33.4	1/4"-28 UNF	3	14020	7880	335	9400	13.8	0.29
35.7	38.6	44.5	27.7	39.1	1/4"-28 UNF	3	19460	11310	475	12000	13.8	0.4
38.9	41.1	55.6	30.4	42.8	1/4"-28 UNF	3	25670	15300	655	12600	13.8	0.66
43.7	47.5	60.3	34.7	48.2	1/4"-28 UNF	4	29520	18140	800	12800	14	0.82

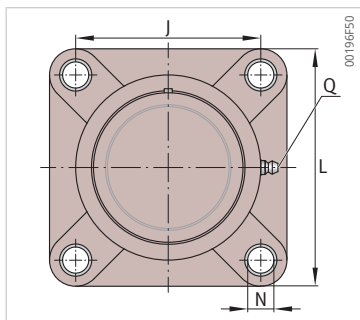
4.17.9 Four-bolt flanged housing units, with grub screws

FD design

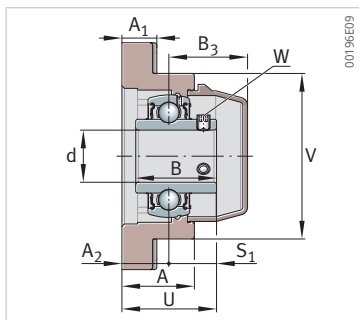
White plastic housing

4

Unit	d	Housing	Radial insert ball bearing	L	A	A ₁	A ₂	J
–	mm	–	–	mm	mm	mm	mm	mm
RCJY20-TV-VA-FD	20	GEH.CJ04-TV-WHT	GYE20-KRR-B-FA107-VA-FD	87	27.8	13.4	18	63.5
RCJY25-TV-VA-FD	25	GEH.CJ05-TV-WHT	GYE25-KRR-B-FA107-VA-FD	94.5	27.9	14.3	17	70
RCJY30-TV-VA-FD	30	GEH.CJ06-TV-WHT	GYE30-KRR-B-FA107-VA-FD	107	31.5	14.3	19.2	83
RCJY35-TV-VA-FD	35	GEH.CJ07-TV-WHT	GYE35-KRR-B-FA107-VA-FD	117	34.8	15.5	21.5	92
RCJY40-TV-VA-FD	40	GEH.CJ08-TV-WHT	GYE40-KRR-B-FA107-VA-FD	130	37.5	17	23	102



RCJY...-TV-VA-FD, RCJ...-TV-VA-FD



RCJY...-TV-VA-FD

N	B	B ₃	S ₁	U	V	Q	W	C _r	C _{0r}	C _{ur}	C _{0r G}	f ₀	m ≈
mm	mm	mm	mm	mm	mm	-	mm	N	N	N	N	-	kg
11	31	30.2	18.3	36.3	63.5	1/4"-28 UNF	2.5	10900	5300	280	10200	13.1	0.31
11	34.1	33.1	19.8	36.8	70	1/4"-28 UNF	2.5	13400	7500	335	12100	13.8	0.39
11	38.1	39.5	22.2	41.4	80	1/4"-28 UNF	3	16700	9000	475	17700	13.8	0.52
13	42.9	42.1	25.4	46.9	90	1/4"-28 UNF	3	22000	12300	655	18500	13.8	0.73
14	49.2	48	30.2	53.2	99	1/4"-28 UNF	4	24900	14300	800	19200	14	0.97

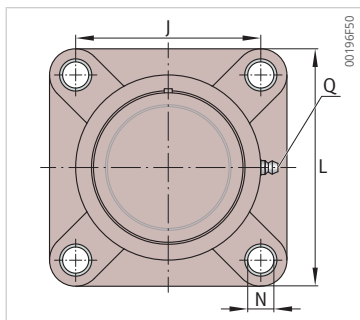
4.17.10 Four-bolt flanged housing units, with eccentric locking collar

FD design

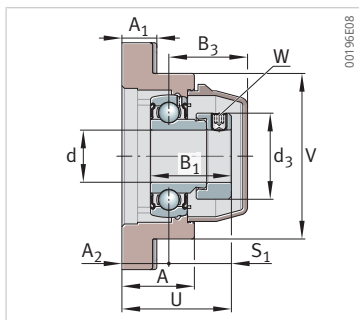
White plastic housing

4

Unit	d	Housing	Radial insert ball bearing	L	A	A ₁	A ₂	J
-	mm	-	-	mm	mm	mm	mm	mm
RCJ20-TV-VA-FD	20	GEH.CJ04-TV-WHT	GE20-KRR-B-FA107-VA-FD	87	27.8	13.4	18	63.5
RCJ25-TV-VA-FD	25	GEH.CJ05-TV-WHT	GE25-KRR-B-FA107-VA-FD	94.5	27.9	14.3	17	70
RCJ30-TV-VA-FD	30	GEH.CJ06-TV-WHT	GE30-KRR-B-FA107-VA-FD	107	31.5	14.3	19.2	83
RCJ35-TV-VA-FD	35	GEH.CJ07-TV-WHT	GE35-KRR-B-FA107-VA-FD	117	34.8	15.5	21.5	92
RCJ40-TV-VA-FD	40	GEH.CJ08-TV-WHT	GE40-KRR-B-FA107-VA-FD	130	37.5	17	23	102



RCJY...TV-VA-FD, RCJ...TV-VA-FD



RCJ...TV-VA-FD

N	B ₁	B ₃	d ₃ max.	S ₁	U	V	Q	W	C _r	C _{0r}	C _{ur}	C _{0rG}	f ₀	m ≈
mm	mm	mm	mm	mm	mm	mm	-	mm	N	N	N	N	-	kg
11	31	30.2	33.3	24	42	63.5	1/4"-28 UNF	3	12840	6650	280	10200	13.1	0.31
11	31	33.1	38.1	23.5	40.5	70	1/4"-28 UNF	3	14020	7880	335	12100	13.8	0.38
11	35.7	39.5	44.5	27.7	46.9	80	1/4"-28 UNF	3	19460	11310	475	17700	13.8	0.52
13	38.9	42.1	55.6	30.4	51.9	90	1/4"-28 UNF	3	25670	15300	655	18500	13.8	0.77
14	43.7	48	60.3	34.7	57.7	99	1/4"-28 UNF	4	28500	17200	800	19200	14	0.99

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