



Deep groove ball bearings

6200-2Z J/C3 HC5 GJN

1

2

3

4

5

1. Seals, shields & snap rings:

RSH	Contact seal of synthetic rubber (NBR) on one side for bearings up to 52 mm O.D.
RS1	Contact seal of synthetic rubber (NBR) on one side for bearings above 52 mm O.D.
RS2	Contact seal of synthetic rubber (FRM) on one side for high temperature capability
RSL	Low friction seal of synthetic rubber (NBR) on one side for bearings up to 52 mm O.D.
RZ	Low friction seal of synthetic rubber (NBR) on one side for bearings above 52 mm O.D.
Z	Shield on one side
2RSH	Contact seal of synthetic rubber (NBR) on both sides for bearings up to 52 mm O.D.
2RS2	Contact seal of synthetic rubber (FPM) on both sides for high temperature capability
2RSL	Low friction seal of synthetic rubber (NBR) on both sides for bearings up to 52 mm O.D.
2RZ	Low friction seal of synthetic rubber (NBR) on both sides for bearings above 52 mm O.D.
2Z	Shields on both sides
NR	Snap ring groove and snap ring on outer ring
N	Snap ring groove
ZNBR	Snap ring on opposite side of shield
JEM	C3 clearance, Pressed steel cage, electric motor quietness specification, GJN grease for "bearings with closures.

2. Cage designs:

J	Pressed steel cage, ball guided (not marked on bearings)
M/MA	Machined brass cage, rolling element guided
TC	Phenolic cage, inner ring guided
Y	Pressed brass cage, ball guided
TN9	Cage of glass fiber reinforced polyamide 6.6, ball guided

3. Clearance/tolerance:

C1	Clearance < C2
C2	Clearance < Normal
(C0)*	Normal clearance
C3	Clearance > Normal
C4	Clearance > C3
C08	ABEC5 running accuracy inner and outer
C78	Combination of C70 and C08
C70	Reduced I.R. and O.R. diameter
C782	C78 and C2 clearance
C783	C78 and C3 clearance

* Not marked on bearing or package.

Note: C3 clearance, J-steel cages and quiet running characteristics available in JEM bearings. See page 35.

4. Suffix:

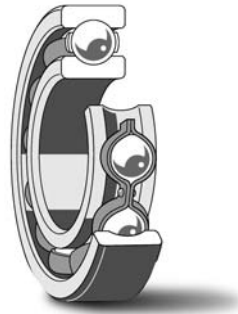
HC5	Ceramic ball set
VA201, VA208, VA228	Special specifications for high temperature applications

5. Lubrication:

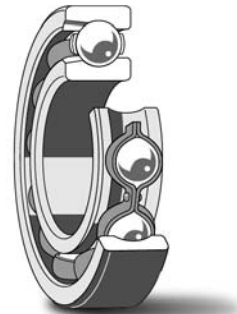
GJN	High temperature, long life NLGI 2 grease with urea thickener and mineral oil (HT51 no longer available, replaced by GJN)
WT	Wide temperature range, long life NLGI 2-3 grease with urea thickener and ester oil
LHT23	Long life, quiet running NLGI 2 grease with lithium thickener and ester oil
MT47	Medium temperature, quiet running NLGI 2 grease with lithium thickener and mineral oil
MT33	Medium temperature, quiet running NLGI 3 grease with lithium thickener and mineral oil
LHT30	Dow Corning Molykote™ 44 Medium
LHT64	Shell Aeroshell #7, MIL-G-23827
W64	Solid Oil
LT10	Low temperature NLGI 2 grease with lithium thickener and diester oil

Introduction

Technical Features		
Boundary dimensions	In accordance with ISO 15	
Tolerances	Normal, ABEC 1 P6 (SKF Explorer)	
Running accuracy	Up to 52 mm O.D. – P5, ABEC 5 52 mm to 110 mm O.D. – P6, ABEC 3 >110 mm O.D. – Normal, ABEC 1	
Heat stabilization	250° F (120° C)	
Misalignment	2-10 minutes of arc	
Cage material	Standard	Steel
	Optional	Machined brass (M)
Axial load – max	0.5 x C0 for 6200, 6300 and 6400 series 0.25 x C0 for 61800, 61900 and 6000 series	
Seals	2RS1 – Synthetic rubber (NBR) seals 2RS2 – Synthetic rubber (FRM) seals	
Shields	2Z – Stamped steel	



Single row deep groove ball bearing (data tables on page 40) and ABEC 5 (data tables on page 54)



Single row deep groove ball bearing Max type (data tables on page 55)

Introduction

Deep groove ball bearings are used in a particularly wide variety of applications. They are relatively simple in design, non-separable, capable of operating at high and even very high speeds, and require little attention or maintenance in service provided the customer selects the appropriate bearing specifications for his application. These characteristics coupled with a price advantage make deep groove ball bearings the most popular of all rolling bearings.

SKF produces deep groove ball bearings in a large number of designs and sizes. The most numerous are the single row bearings without filling slots (Conrad assembly). The bearings with filling slots described in the section starting on page 55 are used in special applications and consequently only a limited range is produced.

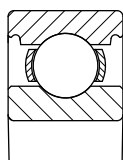
Basic design

Deep groove ball bearings, single row

SKF single row deep groove ball bearings have deep, uninterrupted raceways and a high degree of conformity between balls and raceways. This enables them to carry axial loads in both directions in addition to radial loads even at high speeds. Single row deep groove ball bearings are suitable for a wide variety of applications and are therefore produced in a large number of sizes and designs.

Single row deep groove ball bearings of the basic design, i.e. open at both sides, (**Figure 1**) are produced by SKF in several series and in a very wide range of diameters. Those bearings of the basic design which are also produced as shielded or sealed bearings may, for manufacturing reasons, have recessed outer ring shoulders to take the shields or seals.

Figure 1



Deep groove ball bearing
single row

ABEC 5 single row bearings

SKF produces single row deep groove ball bearings in a higher precision class (ABEC 5). These products are most frequently used in high-speed applications or where precision is critical as in cutting tools, electric motors, handheld tools, and spindles. ABEC 5 bearings are produced in the 6200 and 6300 series and are available in an open version only. They can be supplied with either a brass (Y) or phenolic (TC) cage.

Deep groove ball bearings with filling slots (Max type)

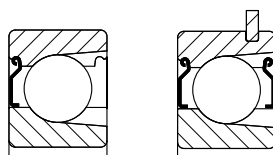
Single row deep groove ball bearings with filling slots incorporate a greater number of balls than the corresponding size without filling slot, and have a filling slot in both outer and inner rings. The radial load carrying capacity is higher than that of bearings without filling slot, but their axial load carrying capacity is small. They are also unable to operate at the high speeds normally associated with deep groove ball bearings.

SKF deep groove ball bearings with filling slots are available in various designs to meet market demands. The most common are described below (**Figure 2**) and are listed in the tables on page 55.

SKF Explorer class bearings

High performance SKF Explorer deep groove ball bearings are **printed in blue** in the product tables. The higher performance of SKF Explorer deep groove ball bearings also includes quieter running. SKF Explorer bearings retain the designation of the earlier standard bearings. However, each bearing and its box are marked with the name "SKF Explorer". Additional details on SKF Explorer performance class bearings can be found on page 25.

Figure 2



Deep groove ball bearing
with filling slots (Max type)

Product highlights

Fast, quiet, robust bearings

If the application is demanding and quiet running, smoothness, strength and low heat generation are mandatory—SKF deep groove ball bearings fit the bill.

Quiet running

High precision balls and specially designed raceway grinding equipment are used by SKF to produce some of the quietest running bearings available.

Quality performance in demanding applications

Capable of meeting the severest demands in terms of operating speed, operating temperature, vibration, high running accuracy, low friction, and the ability to function in a contaminated environment with available seals and shields.

Optimized internal geometry

The internal geometry has been optimized for longer life, quieter running, improved seal attachment, low friction and increased ability to accommodate slight misalignments without reducing bearing life.

Large product assortment

Available in a wide range (2.5 to 800 mm inside bore diameter), the basic SKF design is available with a choice of shields, seals and snap rings. In addition, SKF produces max-type deep groove ball bearings with a filling slot.

JEM bearings

In the USA, SKF offers bearings with C3 internal clearance, steel cages and quiet running characteristics packaged as JEM bearings.

JEM packaging

The box will be marked "JEM" while the bearing is marked C3 and/or GJN pending if the bearing is open or capped.

GJN grease provided as standard in JEM bearings

SKF provides GJN, a high temperature urea based grease, as the standard for all JEM deep groove ball bearings. GJN is accepted by major OEM electric motor manufacturers in the U.S. and offers a wide range of operating temperature and is quiet running.

Introduction

Variations

Bearings with shields

Bearings with shields, designation suffix Z or 2Z, are produced in one of two designs, depending on the bearing series and size (Figure 3). The shields are made of sheet steel and normally have a cylindrical extension in the shield bore to form a long sealing gap with the inner ring shoulder.

Shielded bearings are primarily intended for applications where the inner ring rotates. If the outer ring rotates, there is a risk that the grease will leak from the bearing at high speeds.

Bearings with low friction seals

SKF deep groove ball bearings with low-friction seals, designation suffixes RSL, 2RSL or RZ, 2RZ are manufactured in two designs depending on bearing series and size (Figure 4).

- Bearings in the 60, 62 and 63 series up to 52 mm outside diameter are equipped with RSL seals to design (a).
- Other bearings have RZ seals (b).

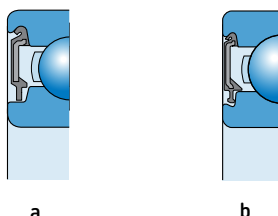
The seals form an extremely narrow gap with the cylindrical surface of the inner ring shoulder or recess profile and are practically non-contracting. Because of this, bearings fitted with low-friction seals can be operated at the same high speeds as bearings with Z shields, but with improved seal performance.

The low-friction seals are made of oil and wear-resistant acrylonitrile butadiene rubber (NBR) with a sheet steel reinforcement. The permissible operating temperature range for these seals is -40° to $+212^{\circ}$ F (-40° to $+100^{\circ}$ C) and up to $+250^{\circ}$ F ($+120^{\circ}$ C) for brief periods.

Figure 3



Figure 4



Bearings with contact seals

Bearings with contact seals, designation suffixes RSH, 2RSH or RS1, 2RS1 are manufactured in three designs depending on bearing series and size (Figure 5).

- Bearings in the 60, 62 and 63 series up to 52 mm outside diameter are equipped with RSH seals to design (a).
- Other bearings have RS1 seals, which seal against the cylindrical surface of the inner ring shoulder (b) indicated by dimension d1 in the product table or against a recess in the inner ring side face (c) indicated by dimension d2 in the product table.
- The seals are inserted in recesses in the outer ring and provide good sealing at this position without deforming the outer ring. Standard seals are made of acrylonitrile butadiene rubber (NBR) with a sheet steel reinforcement. The permissible operating temperature range for these seals is -40° to 212° F (-40° to $+100^{\circ}$ C) and up to $+250^{\circ}$ F ($+120^{\circ}$ C) for brief periods.
- When sealed bearings are operated under extreme conditions, e.g. very high speeds or high temperatures, grease leakage may occur at the inner ring. For bearing arrangements where this would be detrimental, special design steps must be undertaken, please consult SKF Applications Engineering.

Bearings with snap ring groove

Deep groove ball bearings with a snap ring groove can simplify arrangement design as the bearings can be axially located in the housing by a snap (or retaining) ring (Figure 6). This saves space. Appropriate snap rings are shown in the product table with designation and dimensions and may be supplied separately or already mounted on the bearing.

Figure 5

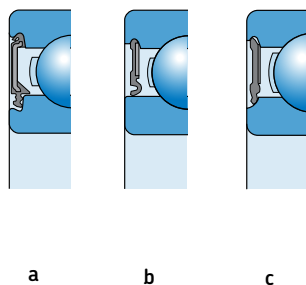
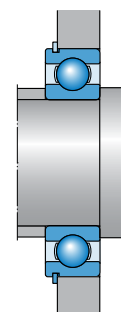


Figure 6



Warning!

Safety precautions for fluoro rubber

Fluoro rubber is very stable and harmless in normal operating conditions up to $+392^{\circ}$ F ($+200^{\circ}$ C). However, if exposed to extreme temperatures above $+572^{\circ}$ F ($+300^{\circ}$ C), e.g. fire or the flame of a cutting torch, fluoro rubber seals give off hazardous fumes. These fumes can be harmful if inhaled, as well as to the eyes. In addition, once the seals have been heated to such temperatures, they are dangerous to handle even after they have cooled and should not touch the skin. If it is necessary to handle bearings with seals that have been subjected to high temperatures, such as when dismantling the bearing, the following safety precautions should be observed:

- Always wear protective goggles, gloves and appropriate breathing apparatus,
- Place the remains of the seals in an airtight plastic container marked with a symbol for "material will etch",
- Follow the safety precautions in the appropriate material safety data sheet (MSDS).

If there is unintentional contact with the seals, wash hands with soap and plenty of water and flush eyes with plenty of water and consult a doctor immediately. If the fumes have been inhaled, consult a doctor immediately.

The user is responsible for the correct use of the product during its service life and its proper disposal. SKF takes no responsibility for the improper handling of fluoro rubber seals or for any injury resulting from their use.

Lubrication

Bearings with shields or seals at both sides are supplied as standard filled with a grease which has good rust inhibiting properties and which is suitable for operating temperatures between -22° and +230° F (-30° to +110° C). The bearings are lubricated for life and are maintenance free. **They should on no account be heated to temperatures above 250° F (120° C), nor should they be washed.** By special order, bearings with shields or seals can be supplied with other greases, e.g. for a temperature range of -40° to +300° F (-40° to +150° C).

The quantity of grease supplied is appropriate to the size of the bearing and normally fills between 25 and 35% of the free space in the bearing. Open bearings

are supplied with a rust preservative that is compatible with most standard greases and should not be removed prior to mounting or lubricating.

Masses

The masses given in the tables are for the basic design of the bearing. The mass of bearings with shield(s), seal(s) or snap ring groove differs only slightly from that of the basic bearing.

Internal clearance

Radial internal clearance (Table 1)

SKF single row deep groove ball bearings are produced with Normal radial internal clearance (CN or CO

not marked on bearing) as standard. Radial clearance selection is based on factors such as high speed, operating temperature, shaft fits and axial movement limitations. The availability of bearings with clearances other than Normal should be checked before ordering. The suffix JEM indicates an internal clearance greater than Normal (C3). Many of the bearings, particularly the smaller sizes, are also available with radial internal clearance, which is greater than (C3) or less than (C2) Normal.

The values of the clearance limits for single row deep groove ball bearings are shown in Table 1 and the values of the clearance limits for max type ball bearings are shown in Table 3 on page 38. Both conform to ISO 5753-1991 (ABMA standard 20-1996) for the size range covered by this standard. The values apply to unmounted bearings under zero measuring load.

Table 1

Radial internal clearance of deep groove ball bearings																					
Bore diameter d		Radial internal clearance																			
over	incl.	C2				Normal				C3				C4				C5			
mm	µm	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max
		µm	in	µm	in	µm	in	µm	in	µm	in	µm	in	µm	in	µm	in	µm	in	µm	in
2.5	6	0	7	0.0000	0.2756	2	13	0.0787	0.5118	8	23	0.3150	0.9055	-	-	-	-	-	-	-	-
6	10	0	7	0.0000	0.2756	2	13	0.0787	0.5118	8	23	0.3150	0.9055	14	29	0.5512	1.1417	20	37	0.7874	1.4567
10	18	0	9	0.0000	0.3543	3	18	0.1181	0.7087	11	25	0.4331	0.9843	18	33	0.7087	1.2992	25	45	0.9843	1.7717
18	24	0	10	0.0000	0.3937	5	20	0.1969	0.7874	13	28	0.5118	1.1024	20	36	0.7874	1.4173	28	48	1.1024	1.8898
24	30	1	11	0.0394	0.4331	5	20	0.1969	0.7874	13	28	0.5118	1.1024	23	41	0.9055	1.6142	30	53	1.1811	2.0866
30	40	1	11	0.0394	0.4331	6	20	0.2362	0.7874	15	33	0.5906	1.2992	28	46	1.1024	1.8110	40	64	1.5748	2.5197
40	50	1	11	0.0394	0.4331	6	23	0.2362	0.9055	18	36	0.7087	1.4173	30	51	1.1811	2.0079	45	73	1.7717	2.8740
50	65	1	15	0.0394	0.5906	8	28	0.3150	1.1024	23	43	0.9055	1.6929	38	61	1.4961	2.4016	55	90	2.1654	3.5433
65	80	1	15	0.0394	0.5906	10	30	0.3937	1.1811	25	51	0.9843	2.0079	46	71	1.8110	2.7953	65	105	2.5591	4.1339
80	100	1	18	0.0394	0.7087	12	36	0.4724	1.4173	30	58	1.1811	2.2835	53	84	2.0866	3.3071	75	120	2.9528	4.7244
100	120	2	20	0.0787	0.7874	15	41	0.5906	1.6142	36	66	1.4173	2.5984	61	97	2.4016	3.8189	90	140	3.5433	5.5118
120	140	2	23	0.0787	0.9055	18	48	0.7087	1.8898	41	81	1.6142	3.1890	71	114	2.7953	4.4882	105	160	4.1339	6.2992
140	160	2	23	0.0787	0.9055	18	53	0.7087	2.0866	46	91	1.8110	3.5827	81	130	3.1890	5.1181	120	180	4.7244	7.0866
160	180	2	25	0.0787	0.9843	20	61	0.7874	2.4016	53	102	2.0866	4.0157	91	147	3.5827	5.7874	135	200	5.3150	7.8740
180	200	2	30	0.0787	1.1811	25	71	0.9843	2.7953	63	117	2.4803	4.6063	107	163	4.2126	6.4173	150	230	5.9055	9.0551
200	225	2	35	0.0787	1.3780	25	85	0.9843	3.3465	75	140	2.9528	5.5118	125	195	4.9213	7.6772	175	265	6.8898	10.4331
225	250	2	40	0.0787	1.5748	30	95	1.1811	3.7402	85	160	3.3465	6.2992	145	225	5.7087	8.8583	205	300	8.0709	11.8110
250	280	2	45	0.0787	1.7717	35	105	1.3780	4.1339	90	170	3.5433	6.6929	155	245	6.1024	9.6457	225	340	8.8583	13.3858
280	315	2	55	0.0787	2.1654	40	115	1.5748	4.5276	100	190	3.9370	7.4803	175	270	6.8898	10.6299	245	370	9.6457	14.5669
315	355	3	60	0.1181	2.3622	45	125	1.7717	4.9213	110	210	4.3307	8.2677	195	300	7.6772	11.8110	275	410	10.8268	16.1417
355	400	3	70	0.1181	2.7559	55	145	2.1654	5.7087	130	240	5.1181	9.4488	225	340	8.8583	13.3858	315	460	12.4016	18.1102
400	450	3	80	0.1181	3.1496	60	170	2.3622	6.6929	150	270	5.9055	10.6299	250	380	9.8425	14.9606	350	520	13.7795	20.4724
450	500	3	90	0.1181	3.5433	70	190	2.7559	7.4803	170	300	6.6929	11.8110	280	420	11.0236	16.5354	390	570	15.3543	22.4409
500	560	10	100	0.3937	3.9370	80	210	3.1496	8.2677	190	330	7.4803	12.9921	310	470	12.2047	18.5039	440	630	17.3228	24.8031
560	630	10	110	0.3937	4.3307	90	230	3.5433	9.0551	210	360	8.2677	14.1732	340	520	13.3858	20.4724	490	700	19.2913	27.5591
630	710	20	130	0.7874	5.1181	110	260	4.3307	10.2362	240	400	9.4488	15.7480	380	570	14.9606	22.4409	540	780	21.2598	30.7087
710	800	20	140	0.7874	5.5118	120	290	4.7244	11.4173	270	450	10.6299	17.7165	430	630	16.9291	24.8031	600	860	23.6220	33.8583
800	900	20	160	0.7874	6.2992	140	320	5.5118	12.5984	300	500	11.8110	19.6850	480	700	18.8976	27.5591	670	960	26.3780	37.7953
900	1 000	20	170	0.7874	6.6929	150	350	5.9055	13.7795	330	550	12.9921	21.6535	530	770	20.8661	30.3150	740	1040	29.1339	40.9449
1 000	1 120	20	180	0.7874	7.0866	160	380	6.2992	14.9606	360	600	14.1732	23.6220	580	850	22.8346	33.4646	820	1150	32.2835	45.2756
1 120	1 250	20	190	0.7874	7.4803	170	410	6.6929	16.1417	390	650	15.3543	25.5906	630	920	24.8031	36.2205	890	1260	35.0394	49.6063
1 250	1 400	30	200	1.1811	7.8740	190	440	7.4803	17.3228	420	700	16.5354	27.5591	680	1000	26.7717	39.3701	-	-	-	-
1 400	1 600	30	210	1.1811	8.2677	210	470	8.2677	18.5039	450	750	17.7165	29.5276	730	1060	28.7402	41.7323	-	-	-	-

Introduction

Loads

Equivalent dynamic bearing load for single bearings, Conrad type

$$P = F_r \text{ when } F_a / F_r \leq e$$

$$P = XF_r + YF_a \text{ when } F_a / F_r > e$$

where

P = equivalent dynamic bearing load

F_r = radial load acting on the bearing

F_a = axial load acting on the bearing

X, Y and e = factors from **Table 2**

The X and Y factors required for the calculation of the equivalent bearing load of deep groove ball bearings are dependent on the ratio of the axial load F_a to the basic static load rating C_0 . They are also influenced by the magnitude of the radial internal clearance; increased clearance enables heavier axial loads to be carried.

If the bearings are mounted with the usual fits (tolerance j5 to n6 depending on shaft diameter, and J7 for the housing) the values of e, X and Y given in **Table 2** can be used to calculate the equivalent load. If a clearance greater than Normal is chosen because a reduction in clearance will be obtained in operation, for example, as a result of strong heating of the inner ring, then the values of the factors under Normal clearance should be used.

Equivalent dynamic bearing load for single row deep groove ball bearings with filling slots

$$P = F_r + F_a$$

provided $F_a / F_r \leq 0.6$

Bearings with filling slots are unsuitable for axial loads F_a greater than $0.6 F_r$ and deep groove ball bearings without filling slot should be used instead.

Minimum load

In order to provide satisfactory operation of all ball and roller bearings they must always be subjected to a given minimum load.

This is also true of deep groove ball bearings, particularly if they run at high speeds where the inertia forces of the balls and cage, and the friction in the lubricant can have a detrimental influence on the rolling conditions in the bearing and may cause damaging sliding movements to occur between the balls and the raceways.

The requisite minimum radial load to be applied in such cases can be determined by using the Interactive Engineering Catalog on the SKF website www.skf.com or by contacting SKF Applications Engineering.

However, the weight of the components supported by the bearing, together with the external forces, often exceeds the requisite minimum load. If this is not the case, an additional radial load must be applied to the bearing; for example, by increasing belt tension, by applying a preload to the inner or outer rings, or by using springs.

Frequency vibration data

Frequency vibration data is available on the SKF website www.skf.com under Knowledge Centre/Engineering tools and CAD, or by contacting SKF Applications Engineering.

Special solutions using deep groove ball bearings

- Bearings with inch boundary dimensions
- High temperature (kiln truck) bearings for extreme temperatures
- Stainless steel bearings for water/moist environments
- INSOCOAT for electrically insulating a bearing from stray current
- Bearings with ceramic balls for extreme speed or electrical insulation
- Double row deep groove (4200 series) for increased load

Details on these special solution products are available in other SKF publications, which can be supplied upon request.

Table 2

Calculation factors for single row deep groove ball bearings

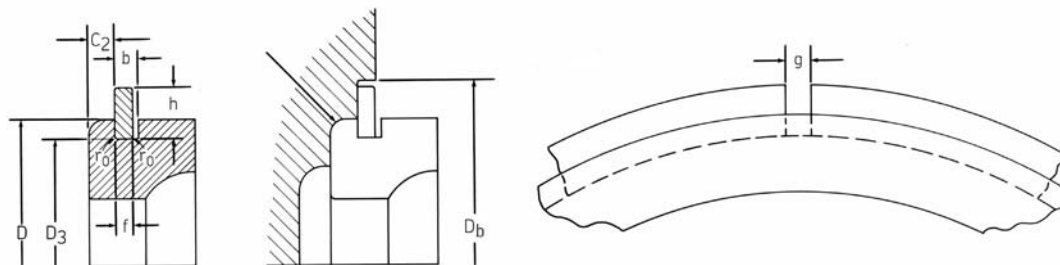
Single bearings and bearing pairs in tandem

F_a/C_0	Normal clearance			C3 clearance			C4 clearance		
	e	X	Y	e	X	Y	e	X	Y
0.025	0.22	0.56	2.0	0.31	0.46	1.75	0.4	0.44	1.42
0.04	0.24	0.56	1.8	0.33	0.46	1.62	0.42	0.44	1.36
0.07	0.27	0.56	1.6	0.36	0.46	1.46	0.44	0.44	1.27
0.13	0.31	0.56	1.4	0.41	0.46	1.30	0.48	0.44	1.16
0.25	0.37	0.56	1.2	0.46	0.46	1.14	0.53	0.44	1.05
0.5	0.44	0.56	1.0	0.54	0.46	1.00	0.56	0.44	1.00

Table 3

Radial internal clearance of deep groove ball bearings with filling slots

Bore diameter d	incl.	Radial internal clearance											
		C2				Normal				C3			
		min	max	min	max	min	max	min	max	min	max		
mm		μm	in	μm	in	μm	in	μm	in	μm	in	μm	in
18	24	0	10	0.0000	0.0004	5	20	0.0002	0.0008	13	28	0.0005	0.0011
24	30	1	11	0.0000	0.0004	5	20	0.0002	0.0008	13	28	0.0005	0.0011
30	40	1	11	0.0000	0.0004	6	20	0.0002	0.0008	15	33	0.0006	0.0013
40	50	1	11	0.0000	0.0004	6	23	0.0002	0.0009	18	36	0.0007	0.0014
50	65	1	15	0.0000	0.0006	8	28	0.0003	0.0011	23	43	0.0009	0.0017
65	80	1	15	0.0000	0.0006	10	30	0.0004	0.0012	25	51	0.0010	0.0020
80	100	1	18	0.0000	0.0007	12	36	0.0005	0.0014	30	58	0.0012	0.0023



Snap ring and snap ring groove dimensions

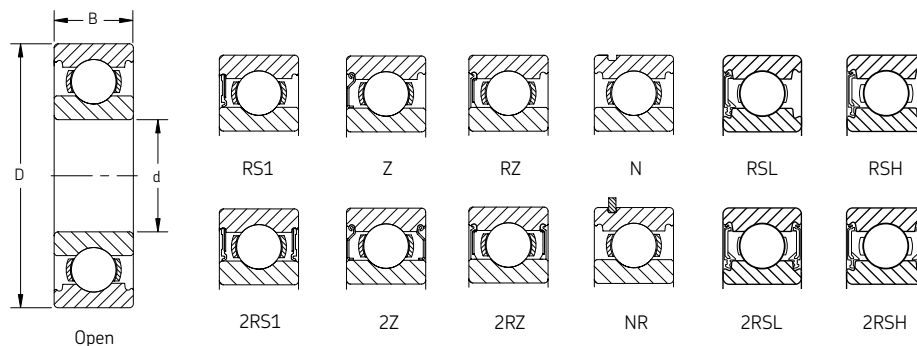
Table 4

Snap ring and groove dimensions - ball bearings

Outer ring O.D.	Groove dia. max. D ₃		Groove location max. C ₂		Groove width min. b		Fillet radius max. r ₀		Ring thickness max. f		Ring section height max. h		Ring gap g		End cover D _b		
	D																
mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
40	1.5748	38.10	1.500	2.06	0.081	1.35	0.053	0.4	0.016	1.12	0.044	3.25	0.128	3	0.12	45	1.8
47	1.8504	44.60	1.756	2.46	0.097	1.35	0.053	0.4	0.016	1.12	0.044	4.04	0.159	4	0.15	53	2.1
52	2.0472	49.73	1.958	2.46	0.097	1.35	0.053	0.4	0.016	1.12	0.044	4.04	0.159	4	0.15	58	2.3
62	2.4409	59.61	2.347	3.28	0.129	1.90	0.075	0.6	0.024	1.70	0.067	4.04	0.159	4	0.15	68	2.7
72	2.8346	68.81	2.709	3.28	0.129	1.90	0.075	0.6	0.024	1.70	0.067	4.85	0.191	5	0.19	80	3.1
80	3.1496	76.81	3.024	3.28	0.129	1.90	0.075	0.6	0.024	1.70	0.067	4.85	0.191	5	0.19	88	3.5
85	3.3464	81.81	3.221	3.28	0.129	1.90	0.075	0.6	0.024	1.70	0.067	4.85	0.191	5	0.19	93	3.7
90	3.5400	86.79	3.417	3.28	0.129	2.70	0.106	0.6	0.024	2.46	0.097	4.85	0.191	5	0.19	98	3.9
100	3.9370	96.80	3.811	3.28	0.129	2.70	0.106	0.6	0.024	2.46	0.097	4.85	0.191	5	0.19	108	4.3
110	4.3307	106.81	4.205	3.28	0.129	2.70	0.106	0.6	0.024	2.46	0.097	4.85	0.191	5	0.19	118	4.6
120	4.7244	115.21	4.536	4.06	0.160	3.10	0.122	0.6	0.024	2.82	0.111	7.21	0.284	7	0.28	131	5.2
125	4.9210	120.22	4.733	4.06	0.160	3.10	0.122	0.6	0.024	2.82	0.111	7.21	0.284	7	0.28	136	5.4
130	5.1181	125.22	4.930	4.06	0.160	3.10	0.122	0.6	0.024	2.82	0.111	7.21	0.284	7	0.28	141	5.6
140	5.5118	135.23	5.324	4.90	0.193	3.10	0.122	0.6	0.024	2.82	0.111	7.21	0.284	7	0.28	151	5.9
150	5.9055	145.24	5.718	4.90	0.193	3.10	0.122	0.6	0.024	2.82	0.111	7.21	0.284	7	0.28	161	6.3
160	6.2992	155.22	6.111	4.90	0.193	3.10	0.122	0.6	0.024	2.82	0.111	7.21	0.284	7	0.28	171	6.7
170	6.6929	163.65	6.443	5.69	0.224	3.50	0.138	0.6	0.024	3.10	0.122	9.60	0.378	10	0.39	184	7.2
180	7.0866	173.66	6.837	5.69	0.224	3.50	0.138	0.6	0.024	3.10	0.122	9.60	0.378	10	0.39	194	7.6
190	7.4803	183.64	7.230	5.69	0.224	3.50	0.138	0.6	0.024	3.10	0.122	9.60	0.378	10	0.39	204	8.0
200	7.8740	193.65	7.624	5.69	0.224	3.50	0.138	0.6	0.024	3.10	0.122	9.60	0.378	10	0.39	214	8.4

Note: Does not include 6000 series bearings

Single row
 Conrad
 Open, sealed, shielded and snap ring
 Standard and **SKF Explorer**
 Series: 604 – 6026
 Size: 4 mm – 140 mm
 0.1575 in – 5.1118 in



Designation	Principal dimensions						Basic load ratings				Speed rating ¹			Mass	
	Bore		Outside diameter		Width		Dynamic		Static		Refer- ence speed	Limiting speed	Sealed Limiting speed	kg	lb
	d		D		B		C		C ₀						
mm	in	mm	in	mm	in	N	lbf	N	lbf	r/min	r/min	r/min			
604	4	0.1575	12	0.4724	4	0.1575	806	180	280	60	120000	75000	–	0.00	0.01
607	7	0.2756	19	0.7480	6	0.2362	2340	530	950	210	85000	53000	24000	0.01	0.02
608	8	0.3150	22	0.8661	7	0.2756	3450	780	1370	310	75000	48000	22000	0.01	0.03
609	9	0.3543	24	0.9449	7	0.2756	3900	880	1660	370	70000	43000	19000	0.01	0.03
6000	10	0.3937	26	1.0236	8	0.3150	4750	1070	1960	440	67000	40000	19000	0.02	0.04
6001	12	0.4724	28	1.1024	8	0.3150	5400	1210	2360	530	60000	38000	17000	0.02	0.05
6002	15	0.5906	32	1.2598	9	0.3543	5850	1310	2850	640	50000	32000	14000	0.03	0.07
6003	17	0.6693	35	1.3780	10	0.3937	6370	1430	3250	730	45000	28000	13000	0.04	0.08
6004	20	0.7874	42	1.6535	12	0.4724	9950	2240	5000	1120	38000	24000	11000	0.07	0.15
6005	25	0.9843	47	1.8504	12	0.4724	11900	2670	6550	1470	32000	20000	9500	0.08	0.17
6006	30	1.1811	55	2.1654	13	0.5118	13800	3100	8300	1870	28000	17000	8000	0.12	0.26
6007	35	1.3780	62	2.4409	14	0.5512	16800	3780	10200	2290	24000	15000	7000	0.15	0.34
6008	40	1.5748	68	2.6772	15	0.5906	17800	4000	11000	2470	22000	14000	6300	0.19	0.42
6009	45	1.7717	75	2.9528	16	0.6299	22100	4970	14600	3280	20000	12000	5600	0.24	0.54
6010	50	1.9685	80	3.1496	16	0.6299	22900	5150	16000	3600	18000	11000	5000	0.26	0.58
6011	55	2.1654	90	3.5433	18	0.7087	29600	6650	21200	4760	16000	10000	4500	0.38	0.85
6012	60	2.3622	95	3.7402	18	0.7087	30700	6900	23200	5210	15000	9500	4300	0.41	0.91
6013	65	2.5591	100	3.9370	18	0.7087	31900	7170	25000	5620	14000	9000	4000	0.44	0.96
6014	70	2.7559	110	4.3307	20	0.7874	39700	8920	31000	6970	13000	8000	3600	0.61	1.35
6015	75	2.9528	115	4.5276	20	0.7874	41600	9350	33500	7530	12000	7500	3400	0.65	1.43
6016	80	3.1496	125	4.9213	22	0.8661	49400	11100	40000	8990	11000	7000	3200	0.86	1.89
6017	85	3.3465	130	5.1181	22	0.8661	52000	11690	43000	9660	11000	6700	3000	0.90	1.99
6018	90	3.5433	140	5.5118	24	0.9449	60500	13600	50000	11240	10000	6300	2800	1.16	2.56
6019	95	3.7402	145	5.7087	24	0.9449	63700	14310	54000	12130	9500	6000	2800	1.21	2.67
6020	100	3.9370	150	5.9055	24	0.9449	63700	14310	54000	12130	9500	5600	2600	1.26	2.78
6021	105	4.1339	160	6.2992	26	1.0236	76100	17100	65500	14720	8500	5300	2400	1.60	3.53
6022	110	4.3307	170	6.6929	28	1.1024	85200	19150	73500	16520	8000	5000	2400	1.97	4.34
6024	120	4.7244	180	7.0866	28	1.1024	88400	19870	80000	17980	7500	4800	2200	2.10	4.64
6026	130	5.1181	200	7.8740	33	1.2992	112000	25170	100000	22470	7000	4300	2000	3.28	7.23

¹ For shielded limiting speed ratings, contact SKF Applications Engineering.

Consult SKF USA Inc. prior to design change or order placement.

Single row

Conrad

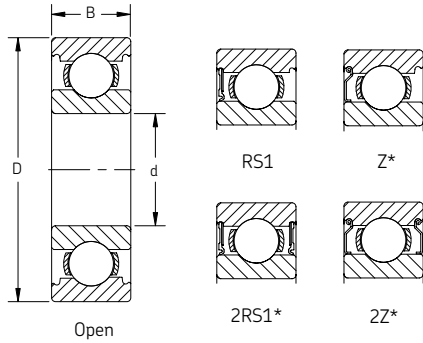
Open, sealed, shielded and snap ring

Standard

Series: 6028 – 60/800 N1MAS

Size: 150 mm – 800 mm

5.9055 in – 31.4961 in

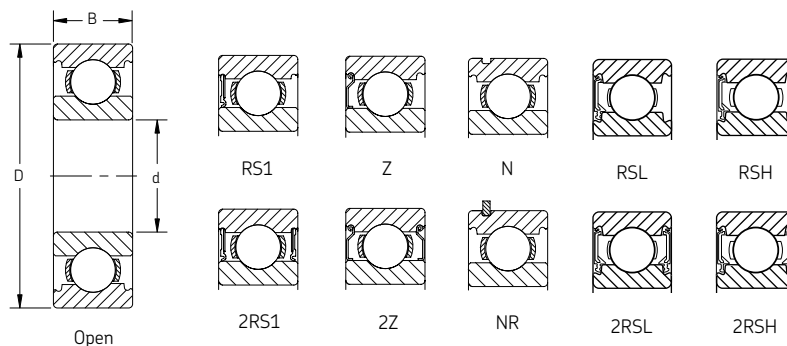


Designation	Principal dimensions						Basic load ratings				Speed rating ¹			Mass			
	Bore		Outside diameter		Width		Dynamic		Static		Refer- ence speed	Sealed		kg		lb	
	d		D		B		C		C ₀			Limiting speed	Limiting speed				
mm	in	mm	in	mm	in	N	lbf	N	lbf	r/min	r/min	r/min					
6028	140	5.5118	210	8.2677	33	1.2992	111000	24940	108000	24270	6700	4000	1800	3.45	7.61		
6030	150	5.9055	225	8.8583	35	1.3780	125000	28090	125000	28090	6000	3800	1700	4.29	9.46		
6032	160	6.2992	240	9.4488	38	1.4961	143000	32130	143000	32130	5600	3600	1600	5.21	11.48		
6034 M	170	6.6929	260	10.2362	42	1.6535	168000	37750	173000	38880	5300	4300	–	8.14	17.95		
6036 M	180	7.0866	280	11.0236	46	1.8110	190000	42700	200000	44940	4800	4000	–	10.31	22.73		
6038 M	190	7.4803	290	11.4173	46	1.8110	195000	43820	216000	48540	4800	3800	–	10.81	23.84		
6040 M	200	7.8740	310	12.2047	51	2.0079	216000	48540	245000	55060	4300	3600	–	13.96	30.78		
6044 M	220	8.6614	340	13.3858	56	2.2047	247000	55510	290000	65170	4000	3200	–	18.32	40.40		
6048 M	240	9.4488	360	14.1732	56	2.2047	255000	57300	315000	70790	3600	3000	–	19.60	43.22		
6052 M	260	10.2362	400	15.7480	65	2.5591	291000	65390	375000	84270	3200	2800	–	29.04	64.04		
6056 M	280	11.0236	420	16.5354	65	2.5591	302000	67870	405000	91010	3000	2600	–	30.78	67.87		
6060 M	300	11.8110	460	18.1102	74	2.9134	358000	80450	500000	112360	2800	2400	–	44.00	97.02		
6064 M	320	12.5984	480	18.8976	74	2.9134	371000	83370	540000	121350	2600	2200	–	46.00	101.43		
6068 M	340	13.3858	520	20.4724	82	3.2283	423000	95060	640000	143820	2400	2200	–	62.00	136.71		
6072 M	360	14.1732	540	21.2598	82	3.2283	442000	99330	695000	156180	2400	1900	–	64.50	142.22		
6076 M	380	14.9606	560	22.0472	82	3.2283	436000	97980	695000	156180	2200	1800	–	70.40	155.23		
6080 M	400	15.7480	600	23.6220	90	3.5433	520000	116850	865000	194380	2000	1700	–	87.50	192.94		
6084 M	420	16.5354	620	24.4094	90	3.5433	507000	113930	880000	197750	2000	1600	–	91.50	201.76		
6088 M	440	17.3228	650	25.5906	94	3.7008	553000	124270	965000	216850	1900	1500	–	105.00	231.53		
6092 MB	460	18.1102	680	26.7717	100	3.9370	582000	130790	1060000	238200	1800	1500	–	120.00	264.60		
6096 M	480	18.8976	700	27.5591	100	3.9370	618000	138880	1140000	256180	1700	1400	–	125.00	275.63		
60/500 N1MAS	500	19.6850	720	28.3465	100	3.9370	605000	135960	1140000	256180	1600	1300	–	135.00	297.68		
60/530 N1MAS	530	20.8661	780	30.7087	112	4.4094	650000	146070	1270000	285390	1500	1200	–	185.00	407.93		
60/560 N1MAS	560	22.0472	820	32.2835	115	4.5276	663000	148990	1370000	307870	1400	1200	–	210.00	463.05		
60/ 600 MA	600	23.6220	870	34.2520	118	4.6457	728000	163600	1500000	337080	1300	1100	–	230.00	507.15		
60/630 N1MBS	630	24.8031	920	36.2205	128	5.0394	819000	184040	1760000	395510	1200	1000	–	285.00	628.43		
60/670 N1MAS	670	26.3780	980	38.5827	136	5.3543	904000	203150	2039999	458430	1100	900	–	345.00	760.73		
60/710 N1MAS	710	27.9528	1030	40.5512	140	5.5118	956000	214830	2199999	494380	1000	850	–	394.00	868.77		
60/750 MA	750	29.5276	1090	42.9134	150	5.9055	995000	223600	2360000	530340	950	800	–	485.00	1069.43		
60/800 N1MAS	800	31.4961	1150	45.2756	155	6.1024	1010000	226970	2550000	573030	900	750	–	523.00	1153.22		

* Feature may not be available in all sizes.

¹ For shielded limiting speed ratings, contact SKF Applications Engineering.

Single row
 Conrad
 Open, sealed, shielded and snap ring
 Standard and **SKF Explorer**
 Series: 623 – 6222
 Size: 3 mm – 110 mm
 0.1181 in – 4.3307 in

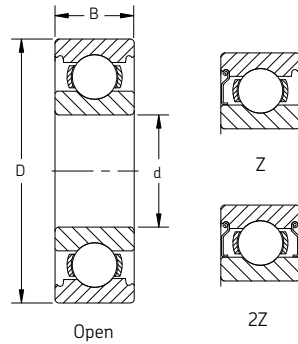


Designation	Principal dimensions						Basic load ratings				Speed rating ¹			Mass	
	Bore d		Outside diameter D		Width B		Dynamic C		Static C ₀		Refer- ence speed	Limiting speed	Sealed Limiting speed	kg	lb
	mm	in	mm	in	mm	in	N	lbf	N	lbf	r/min	r/min	r/min		
623	3	0.1181	10	0.3937	4	0.1575	540	120	180	40	130000	80000	40000	0.00	0.00
624	4	0.1575	13	0.5118	5	0.1969	936	210	290	70	110000	67000	–	0.00	0.01
625	5	0.1969	16	0.6299	5	0.1969	1140	260	380	90	95000	60000	–	0.01	0.01
626	6	0.2362	19	0.7480	6	0.2362	2340	530	950	210	80000	50000	24000	0.01	0.02
627	7	0.2756	22	0.8661	7	0.2756	3450	780	1370	310	70000	45000	22000	0.01	0.03
628	8	0.3150	24	0.9449	8	0.3150	3900	880	1660	370	63000	40000	19000	0.02	0.04
629	9	0.3543	26	1.0236	8	0.3150	4750	1070	1960	440	60000	38000	19000	0.02	0.04
6200	10	0.3937	30	1.1811	9	0.3543	5400	1210	2360	530	56000	36000	17000	0.03	0.07
6201	12	0.4724	32	1.2598	10	0.3937	7280	1640	3100	700	50000	32000	15000	0.04	0.08
6202	15	0.5906	35	1.3780	11	0.4331	8060	1810	3750	840	43000	28000	13000	0.04	0.10
6203	17	0.6693	40	1.5748	12	0.4724	9950	2240	4750	1070	38000	24000	12000	0.06	0.14
6204	20	0.7874	47	1.8504	14	0.5512	13500	3030	6550	1470	32000	20000	10000	0.11	0.23
6205	25	0.9843	52	2.0472	15	0.5906	14800	3330	7800	1750	28000	18000	8500	0.13	0.28
6206	30	1.1811	62	2.4409	16	0.6299	20300	4560	11200	2520	24000	15000	7500	0.20	0.44
6207	35	1.3780	72	2.8346	17	0.6693	27000	6070	15300	3440	20000	13000	6300	0.29	0.64
6208	40	1.5748	80	3.1496	18	0.7087	32500	7300	19000	4270	18000	11000	5600	0.37	0.80
6209	45	1.7717	85	3.3465	19	0.7480	35100	7890	21600	4850	17000	11000	5000	0.42	0.92
6210	50	1.9685	90	3.5433	20	0.7874	37100	8340	23200	5210	15000	10000	4800	0.46	1.01
6211	55	2.1654	100	3.9370	21	0.8268	46200	10380	29000	6520	14000	9000	4300	0.61	1.35
6212	60	2.3622	110	4.3307	22	0.8661	55300	12430	36000	8090	13000	8000	4000	0.78	1.72
6213	65	2.5591	120	4.7244	23	0.9055	58500	13150	40500	9100	12000	7500	3600	1.02	2.25
6214	70	2.7559	125	4.9213	24	0.9449	63700	14310	45000	10110	11000	7000	3400	1.09	2.40
6215	75	2.9528	130	5.1181	25	0.9843	68900	15480	49000	11010	10000	6700	3200	1.19	2.62
6216	80	3.1496	140	5.5118	26	1.0236	72800	16360	55000	12360	9500	6000	3000	1.47	3.23
6217	85	3.3465	150	5.9055	28	1.1024	87100	19570	64000	14380	9000	5600	2800	1.80	3.98
6218	90	3.5433	160	6.2992	30	1.1811	101000	22700	73500	16520	8500	5300	2600	2.22	4.89
6219	95	3.7402	170	6.6929	32	1.2598	114000	25620	81500	18310	8000	5000	2400	2.63	5.79
6220	100	3.9370	180	7.0866	34	1.3386	127000	28540	93000	20900	7500	4800	2400	3.18	7.01
6221	105	4.1339	190	7.4803	36	1.4173	140000	31460	104000	23370	7000	4500	2200	3.79	8.36
6222	110	4.3307	200	7.8740	38	1.4961	151000	33930	118000	26520	6700	4300	2000	4.45	9.80

¹ For shielded limiting speed ratings, contact SKF Applications Engineering.

Consult SKF USA Inc. prior to design change or order placement.

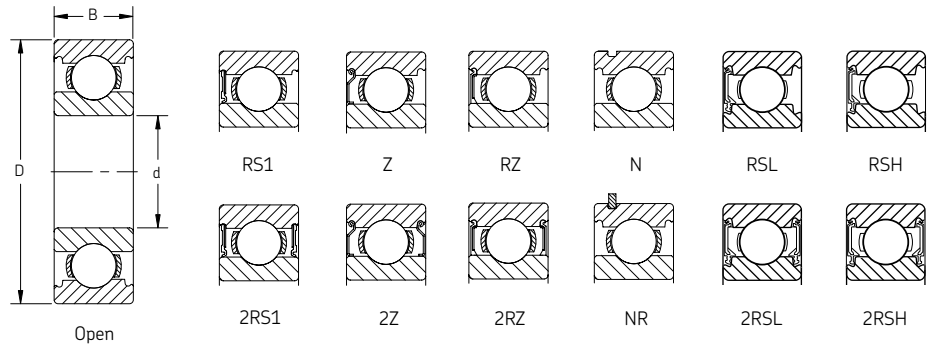
Single row
 Conrad
 Open and shielded
 Standard
 Series: 6224 – 6260 M
 Size: 120 mm – 300 mm
 4.7244 in – 11.8110 in



Designation	Principal dimensions						Basic load ratings				Speed rating		Mass	
	Bore d		Outside diameter D		Width B		Dynamic C		Static C ₀		Reference speed	Limiting speed	kg	lb
	mm	in	mm	in	mm	in	N	lbf	N	lbf	r/min	r/min		
6224	120	4.7244	215	8.4646	40	1.5748	146000	32810	118000	26520	6300	4000	5.27	11.62
6226	130	5.1181	230	9.0551	40	1.5748	156000	35060	132000	29660	5600	3600	5.86	12.92
6228	140	5.5118	250	9.8425	42	1.6535	165000	37080	150000	33710	5300	3400	7.77	17.14
6230	150	5.9055	270	10.6299	45	1.7717	174000	39100	166000	37300	5000	3200	10.14	22.35
6232	160	6.2992	290	11.4173	48	1.8898	186000	41800	186000	41800	4500	3000	12.90	28.44
6234 M	170	6.6929	310	12.2047	52	2.0472	212000	47640	224000	50340	4300	3800	17.50	38.58
6236 M	180	7.0866	320	12.5984	52	2.0472	229000	51460	240000	53930	4000	3800	17.83	39.31
6238 M	190	7.4803	340	13.3858	55	2.1654	255000	57300	280000	62920	3800	3400	21.66	47.75
6240 M	200	7.8740	360	14.1732	58	2.2835	270000	60670	310000	69660	3600	3200	26.18	57.73
6244 M	220	8.6614	400	15.7480	65	2.5591	296000	66520	365000	82020	3200	3000	36.56	80.61
6248 M	240	9.4488	440	17.3228	72	2.8346	358000	80450	465000	104490	3000	2600	51.00	112.46
6252 M	260	10.2362	480	18.8976	80	3.1496	390000	87640	530000	119100	2600	2400	65.50	144.43
6256 M	280	11.0236	500	19.6850	80	3.1496	423000	95060	600000	134830	2600	2200	72.00	158.76
6260 M	300	11.8110	540	21.2598	85	3.3465	462000	103820	670000	150560	2400	2000	88.50	195.14

Consult SKF USA Inc. prior to design change or order placement.

Single row
 Conrad
 Open, sealed, shielded and snap ring
 Standard and SKF Explorer
 Series: 634 – 6324 M
 Size: 4 mm – 120 mm
 0.1575 in – 4.7244 in

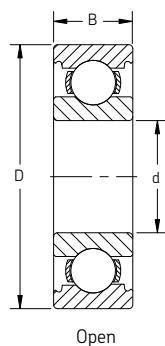


Designation	Principal dimensions						Basic load ratings				Speed rating ¹			Mass	
	Bore d		Outside diameter D		Width B		Dynamic C		Static C ₀		Refer- ence speed	Sealed Limiting speed	Sealed Limiting speed	kg	lb
	mm	in	mm	in	mm	in	N	lbf	N	lbf	r/min	r/min	r/min		
634	4	0.1575	16	0.6299	5	0.1969	1110	250	380	90	95000	60000	28000	0.01	0.01
635	5	0.1969	19	0.7480	6	0.2362	2340	530	950	210	80000	50000	24000	0.01	0.02
6300	10	0.3937	35	1.3780	11	0.4331	8520	1910	3400	760	50000	32000	15000	0.05	0.12
6301	12	0.4724	37	1.4567	12	0.4724	10100	2270	4150	930	45000	28000	14000	0.06	0.13
6302	15	0.5906	42	1.6535	13	0.5118	11900	2670	5400	1210	38000	24000	12000	0.08	0.18
6303	17	0.6693	47	1.8504	14	0.5512	14300	3210	6550	1470	34000	22000	11000	0.11	0.25
6304	20	0.7874	52	2.0472	15	0.5906	16800	3780	7800	1750	30000	19000	9500	0.14	0.32
6305	25	0.9843	62	2.4409	17	0.6693	23400	5260	11600	2610	24000	16000	7500	0.23	0.50
6306	30	1.1811	72	2.8346	19	0.7480	29600	6650	16000	3600	20000	13000	6300	0.35	0.77
6307	35	1.3780	80	3.1496	21	0.8268	35100	7890	19000	4270	19000	12000	6000	0.46	1.01
6308	40	1.5748	90	3.5433	23	0.9055	42300	9510	24000	5390	17000	11000	5000	0.63	1.38
6309	45	1.7717	100	3.9370	25	0.9843	55300	12430	31500	7080	15000	9500	4500	0.84	1.84
6310	50	1.9685	110	4.3307	27	1.0630	65000	14610	38000	8540	13000	8500	4300	1.08	2.38
6311	55	2.1654	120	4.7244	29	1.1417	74100	16650	45000	10110	12000	8000	3800	1.37	3.03
6312	60	2.3622	130	5.1181	31	1.2205	85200	19150	52000	11690	11000	7000	3400	1.72	3.80
6313	65	2.5591	140	5.5118	33	1.2992	97500	21910	60000	13480	10000	6700	3200	2.11	4.64
6314	70	2.7559	150	5.9055	35	1.3780	111000	24940	68000	15280	9500	6300	3000	2.55	5.62
6315	75	2.9528	160	6.2992	37	1.4567	119000	26740	76500	17190	9000	5600	2800	3.06	6.74
6316	80	3.1496	170	6.6929	39	1.5354	130000	29210	86500	19440	8500	5300	2600	3.63	8.00
6317	85	3.3465	180	7.0866	41	1.6142	140000	31460	96500	21690	8000	5000	2400	4.25	9.38
6318	90	3.5433	190	7.4803	43	1.6929	151000	33930	108000	24270	7500	4800	2400	4.97	10.96
6319	95	3.7402	200	7.8740	45	1.7717	159000	35730	118000	26520	7000	4500	2200	5.75	12.67
6320	100	3.9370	215	8.4646	47	1.8504	174000	39100	140000	31460	6700	4300	2000	7.08	15.60
6321	105	4.1339	225	8.8583	49	1.9291	182000	40900	153000	34380	6300	4000	–	8.18	18.03
6322	110	4.3307	240	9.4488	50	1.9685	203000	45620	180000	40450	6000	3800	1800	9.66	21.31
6324	120	4.7244	260	10.2362	55	2.1654	208000	46740	186000	41800	5600	3400	1700	12.66	27.92

¹ For shielded limiting speed ratings, contact SKF Applications Engineering.

Consult SKF USA Inc. prior to design change or order placement.

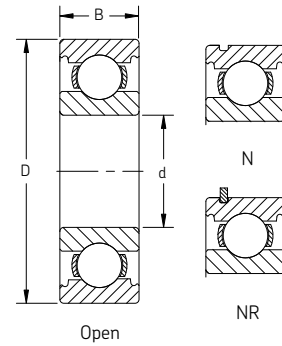
Single row
 Conrad
 Open
 Series: 6326 M – 6348 M
 Standard
 Size: 130 mm – 240 mm
 5.1181 in – 9.4488 in



Designation	Principal dimensions						Basic load ratings				Speed rating		Mass	
	Bore d		Outside diameter D		Width B		Dynamic C		Static C ₀		Reference speed	Limiting speed	kg	lb
	mm	in	mm	in	mm	in	N	lbf	N	lbf	r/min	r/min		
6326 M	130	5.1181	280	11.0236	58	2.2835	229000	51460	216000	48540	5000	4500	17.26	38.05
6328 M	140	5.5118	300	11.8110	62	2.4409	251000	56400	245000	55060	4800	4300	21.07	46.46
6330 M	150	5.9055	320	12.5984	65	2.5591	276000	62020	285000	64040	4300	4000	25.50	56.23
6332 M	160	6.2992	340	13.3858	68	2.6772	276000	62020	285000	64040	4000	3800	29.85	65.82
6334 M	170	6.6929	360	14.1732	72	2.8346	312000	70110	340000	76400	3800	3400	34.93	77.03
6336 M	180	7.0866	380	14.9606	75	2.9528	351000	78880	405000	91010	3600	3200	40.90	90.19
6338 M	190	7.4803	400	15.7480	78	3.0709	371000	83370	430000	96630	3400	3000	47.44	104.60
6344 M	220	8.6614	460	18.1102	88	3.4646	410000	92130	520000	116850	3000	2600	73.00	160.97
6348 M	240	9.4488	500	19.6850	95	3.7402	442000	99330	585000	131460	2600	2400	96.80	213.44

Consult SKF USA Inc. prior to design change or order placement.

Single row
 Conrad
 Open and snap ring
 Standard
 Series: 6403 – 6418
 Size: 17 mm – 90 mm
 0.6693 in – 3.5433 in



Designation	Principal dimensions						Basic load ratings				Speed rating		Mass	
	Bore		Outside diameter		Width		Dynamic		Static		Reference speed	Limiting speed		
	d	D	B	C	C ₀	r/min	r/min	kg	lb					
	mm	in	mm	in	mm	in	N	lbf	N	lbf				
6403	17	0.6693	62	2.4409	17	0.6693	22900	5150	10800	2430	28000	18000	0.27	0.60
6404	20	0.7874	72	2.8346	19	0.7480	30700	6900	15000	3370	24000	15000	0.41	0.90
6405	25	0.9843	80	3.1496	21	0.8268	35800	8040	19300	4340	20000	13000	0.54	1.20
6406	30	1.1811	90	3.5433	23	0.9055	43600	9800	23600	5300	18000	11000	0.75	1.65
6407	35	1.3780	100	3.9370	25	0.9843	55300	12430	31000	6970	16000	10000	0.97	2.14
6408	40	1.5748	110	4.3307	27	1.0630	63700	14310	36500	8200	14000	9000	1.26	2.78
6409	45	1.7717	120	4.7244	29	1.1417	76100	17100	45000	10110	13000	8500	1.57	3.47
6410	50	1.9685	130	5.1181	31	1.2205	87100	19570	52000	11690	12000	7500	1.94	4.27
6411	55	2.1654	140	5.5118	33	1.2992	99500	22360	62000	13930	11000	7000	2.35	5.19
6412	60	2.3622	150	5.9055	35	1.3780	108000	24270	69500	15620	10000	6300	2.83	6.24
6413	65	2.5591	160	6.2992	37	1.4567	119000	26740	78000	17530	9500	6000	3.37	7.43
6414	70	2.7559	180	7.0866	42	1.6535	143000	32130	104000	23370	8500	5300	4.93	10.87
6415	75	2.9528	190	7.4803	45	1.7717	153000	34380	114000	25620	8000	5000	5.81	12.80
6416	80	3.1496	200	7.8740	48	1.8898	163000	36630	125000	28090	7500	4800	6.86	15.12
6417	85	3.3465	210	8.2677	52	2.0472	174000	39100	137000	30790	7000	4500	8.05	17.75
6418	90	3.5433	225	8.8583	54	2.1260	186000	41800	150000	33710	6700	4300	9.78	21.56

Single row

Conrad

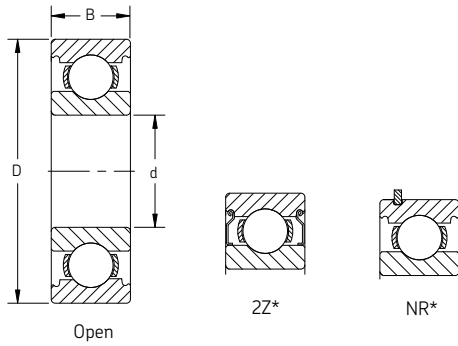
Open, shielded and snap ring

Standard and SKF Explorer

Series: 16002 – 16044

Size: 15 mm – 220 mm

0.5906 in – 8.6614 in



Designation	Principal dimensions						Basic load ratings				Speed rating ¹		Mass	
	Bore		Outside diameter		Width		Dynamic		Static		Reference	Limiting		
	d	D	B	C	C ₀	speed	speed	kg	lb					
	mm	in	mm	in	mm	in	N	lbf	N	lbf	r/min	r/min	kg	lb
16002	15	0.5906	32	1.2598	8	0.3150	5850	1310	2850	640	50000	32000	0.03	0.06
16003	17	0.6693	35	1.3780	8	0.3150	6370	1430	3250	730	45000	28000	0.03	0.07
16005	25	0.9843	47	1.8504	8	0.3150	8060	1810	4750	1070	32000	20000	0.06	0.12
16006	30	1.1811	55	2.1654	9	0.3543	11900	2670	7350	1650	28000	17000	0.09	0.20
16007	35	1.3780	62	2.4409	9	0.3543	13000	2920	8150	1830	24000	15000	0.11	0.25
16008	40	1.5748	68	2.6772	9	0.3543	13800	3100	10200	2290	22000	14000	0.13	0.29
16009	45	1.7717	75	2.9528	10	0.3937	16500	3710	10800	2430	20000	12000	0.17	0.37
16010	50	1.9685	80	3.1496	10	0.3937	16800	3780	11400	2560	18000	11000	0.18	0.40
16011	55	2.1654	90	3.5433	11	0.4331	20300	4560	14000	3150	16000	10000	0.26	0.58
16012	60	2.3622	95	3.7402	11	0.4331	20800	4670	15000	3370	15000	9500	0.29	0.63
16013	65	2.5591	100	3.9370	11	0.4331	22500	5060	19600	4400	14000	9000	0.30	0.66
16014	70	2.7559	110	4.3307	13	0.5118	29100	6540	25000	5620	13000	8000	0.44	0.97
16015	75	2.9528	115	4.5276	13	0.5118	30200	6790	27000	6070	12000	7500	0.46	1.02
16016	80	3.1496	125	4.9213	14	0.5512	35100	7890	31500	7080	11000	7000	0.61	1.34
16017	85	3.3465	130	5.1181	14	0.5512	35800	8040	33500	7530	11000	6700	0.64	1.41
16018	90	3.5433	140	5.5118	16	0.6299	43600	9800	39000	8760	10000	6300	0.85	1.88
16019	95	3.7402	145	5.7087	16	0.6299	44900	10090	41500	9330	9500	6000	0.89	1.97
16020	100	3.9370	150	5.9055	16	0.6299	46200	10380	44000	9890	9500	5600	0.94	2.06
16021	105	4.1339	160	6.2992	18	0.7087	54000	12130	51000	11460	8500	5300	1.19	2.63
16022	110	4.3307	170	6.6929	19	0.7480	60500	13600	57000	12810	8000	5000	1.47	3.23
16024	120	4.7244	180	7.0866	19	0.7480	63700	14310	64000	14380	7500	4800	1.57	3.45
16026	130	5.1181	200	7.8740	22	0.8661	83200	18700	81500	18310	7000	4300	2.39	5.26
16028	140	5.5118	210	8.2677	22	0.8661	80600	18110	86500	19440	6700	4000	2.53	5.57
16030	150	5.9055	225	8.8583	24	0.9449	92300	20740	98000	22020	6000	3800	3.14	6.93
16032	160	6.2992	240	9.4488	25	0.9843	99500	22360	108000	24270	5600	3600	3.66	8.08
16034	170	6.6929	260	10.2362	28	1.1024	119000	26740	129000	28990	5300	3200	5.02	11.06
16036	180	7.0866	280	11.0236	31	1.2205	138000	31010	146000	32810	4800	3000	6.51	14.35
16038	190	7.4803	290	11.4173	31	1.2205	148000	33260	166000	37300	4800	3000	6.89	15.20
16040	200	7.8740	310	12.2047	34	1.3386	168000	37750	190000	42700	4300	2800	8.78	19.37
16044	220	8.6614	340	13.3858	37	1.4567	174000	39100	204000	45840	4000	2400	11.49	25.33

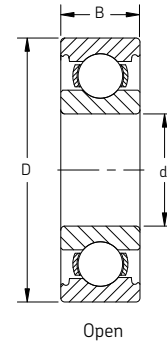
* Feature may not be available in all sizes.

¹ For shielded limiting speed ratings, contact SKF Applications Engineering.

Consult SKF USA Inc. prior to design change or order placement.

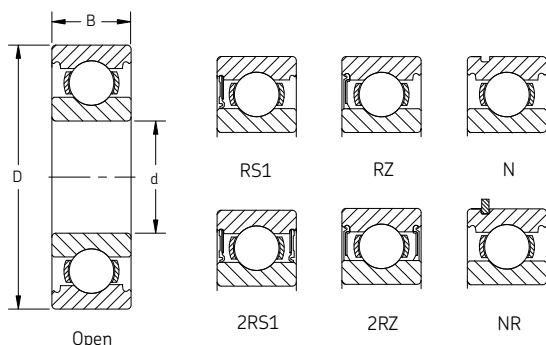
Single row
 Conrad
 Open and sealed
 Standard
 Series: 16048 – 16076
 Size: 240 mm – 380 mm
 9.4488 in – 14.9606 in

Series: 16100 – 16101
 Size: 10 mm – 12 mm
 0.3937 in – 0.4724 in



Designation	Principal dimensions						Basic load ratings				Speed rating			Mass	
	Bore d		Outside diameter D		Width B		Dynamic C		Static C ₀		Refer- ence speed	Limiting speed	Sealed		
	mm	in	mm	in	mm	in	N	lbf	N	lbf			Limiting speed		
16048	240	9.4488	360	14.1732	37	1.4567	203000	45620	255000	57300	3600	2200	–	12.30	27.12
16052	260	10.2362	400	15.7480	44	1.7323	238000	53480	310000	69660	3200	2000	–	18.00	39.69
16056	280	11.0236	420	16.5354	44	1.7323	242000	54380	335000	75280	3000	1900	–	19.00	41.90
16060 MA	300	11.8110	460	18.1102	50	1.9685	286000	64270	405000	91010	2800	1800	–	32.00	70.56
16064 MA	320	12.5984	480	18.8976	50	1.9685	281000	63150	405000	91010	2600	2200	–	34.00	74.97
16068 MA	340	13.3858	520	20.4724	57	2.2441	345000	77530	520000	116850	2400	2000	–	45.00	99.23
16072 MA	360	14.1732	540	21.2598	57	2.2441	351000	78880	550000	123600	1800	1400	–	49.00	108.05
16076 MA	380	14.9606	560	22.0472	57	2.2441	377000	84720	620000	139330	2200	1400	–	51.00	112.46
16100	10	0.3937	28	1.1024	8	0.3150	5070	1140	2360	530	60000	38000	–	0.02	0.05
16101	12	0.4724	30	1.1811	8	0.3150	5070	1140	2360	530	60000	38000	16000	0.03	0.06

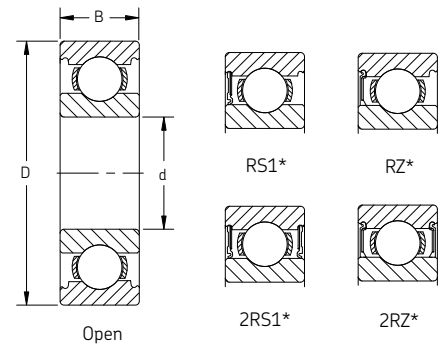
Single row
 Conrad
 Open, sealed and snap ring
 Standard
 Series: 61800 – 61830
 Size: 10 mm – 150 mm
 0.3937 in – 5.9055 in



Designation	Principal dimensions						Basic load ratings				Speed rating			Mass	
	Bore		Outside diameter		Width		Dynamic		Static		Refer- ence speed	Limiting speed	Sealed Limiting speed	kg	lb
	d		D		B		C		C ₀						
mm	in	mm	in	mm	in	N	lbf	N	lbf	r/min	r/min	r/min			
61800	10	0.3937	19	0.7480	5	0.1969	1720	390	830	190	80000	48000	22000	0.01	0.01
61801	12	0.4724	21	0.8268	5	0.1969	1740	390	915	210	70000	43000	20000	0.01	0.01
61802	15	0.5906	24	0.9449	5	0.1969	1900	430	1100	250	60000	38000	17000	0.01	0.01
61803	17	0.6693	26	1.0236	5	0.1969	2030	460	1270	290	56000	34000	16000	0.01	0.02
61804	20	0.7874	32	1.2598	7	0.2756	4030	910	2320	520	45000	28000	13000	0.02	0.04
61805	25	0.9843	37	1.4567	7	0.2756	4360	980	2600	580	38000	24000	11000	0.02	0.05
61806	30	1.1811	42	1.6535	7	0.2756	4490	1010	2900	650	32000	20000	9500	0.03	0.06
61807	35	1.3780	47	1.8504	7	0.2756	4360	980	3350	750	30000	18000	8500	0.03	0.06
61808	40	1.5748	52	2.0472	7	0.2756	4490	1010	3750	840	26000	16000	7500	0.03	0.07
61809	45	1.7717	58	2.2835	7	0.2756	6630	1490	6100	1370	22000	14000	6700	0.04	0.09
61810	50	1.9685	65	2.5591	7	0.2756	6760	1520	6800	1530	20000	13000	6000	0.05	0.11
61811	55	2.1654	72	2.8346	9	0.3543	9040	2030	8800	1980	19000	12000	5300	0.08	0.18
61812	60	2.3622	78	3.0709	10	0.3937	11900	2670	11400	2560	17000	11000	4800	0.11	0.24
61813	65	2.5591	85	3.3465	10	0.3937	12400	2790	12700	2850	16000	10000	4500	0.13	0.29
61814	70	2.7559	90	3.5433	10	0.3937	12400	2790	13200	2970	15000	9000	4300	0.14	0.31
61815	75	2.9528	95	3.7402	10	0.3937	12500	2810	10800	2430	14000	8500	4000	0.15	0.32
61816	80	3.1496	100	3.9370	10	0.3937	12700	2850	11200	2520	13000	8000	3600	0.15	0.34
61817	85	3.3465	110	4.3307	13	0.5118	19500	4380	16600	3730	12000	7500	3400	0.26	0.58
61818	90	3.5433	115	4.5276	13	0.5118	19500	4380	17000	3820	11000	7000	3200	0.28	0.61
61819	95	3.7402	120	4.7244	13	0.5118	19900	4470	17600	3960	11000	6700	3000	0.29	0.64
61820	100	3.9370	125	4.9213	13	0.5118	17800	4000	18300	4110	10000	6300	3000	0.30	0.67
61821	105	4.1339	130	5.1181	13	0.5118	20800	4670	19600	4400	10000	6300	2800	0.31	0.68
61822	110	4.3307	140	5.5118	16	0.6299	28100	6310	26000	5840	9500	5600	2600	0.47	1.04
61824	120	4.7244	150	5.9055	16	0.6299	29100	6540	28000	6290	8500	5300	2400	0.51	1.13
61826	130	5.1181	165	6.4961	18	0.7087	37700	8470	43000	9660	8000	4800	2200	0.75	1.65
61828	140	5.5118	175	6.8898	18	0.7087	39000	8760	46500	10450	7500	4500	2000	0.82	1.82
61830	150	5.9055	190	7.4803	20	0.7874	48800	10970	61000	13710	6700	4300	–	1.19	2.62

* 61808-2RZ NR and 61812 NR are made to order products.

Single row
 Conrad
 Open and sealed
 Standard
 Series: 61832 – 618/800 MA
 Size: 160 mm – 800 mm
 6.2992 in – 31.4961 in



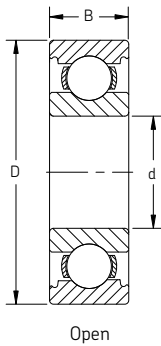
Designation	Principal dimensions						Basic load ratings				Speed rating			Mass	
	Bore d		Outside diameter D		Width B		Dynamic C		Static C ₀		Refer- ence speed	Limiting speed	Sealed Limiting speed	kg	lb
	mm	in	mm	in	mm	in	N	lbf	N	lbf					
61832	160	6.2992	200	7.8740	20	0.7874	49400	11100	64000	14380	6300	4000	–	1.25	2.76
61834	170	6.6929	215	8.4646	22	0.8661	61800	13890	78000	17530	6000	3600	–	1.63	3.60
61836	180	7.0866	225	8.8583	22	0.8661	62400	14020	81500	18310	5600	3400	–	1.73	3.82
61838	190	7.4803	240	9.4488	24	0.9449	76100	17100	98000	22020	5300	3200	–	2.24	4.93
61840	200	7.8740	250	9.8425	24	0.9449	76100	17100	102000	22920	5000	3200	–	2.34	5.16
61844	220	8.6614	270	10.6299	24	0.9449	78000	17530	110000	24720	4500	2800	–	2.54	5.60
61848	240	9.4488	300	11.8110	28	1.1024	108000	24270	150000	33710	4000	2600	–	3.88	8.55
61852	260	10.2362	320	12.5984	28	1.1024	111000	24940	163000	36630	3800	2400	–	4.17	9.19
61856 MA	280	11.0236	350	13.7795	33	1.2992	138000	31010	200000	44940	3400	2800	–	7.25	15.98
61860 MA	300	11.8110	380	14.9606	38	1.4961	172000	38650	245000	55060	3200	2600	–	10.35	22.83
61864 MA	320	12.5984	400	15.7480	38	1.4961	172000	38650	255000	57300	3000	2400	–	10.95	24.16
61868 MA	340	13.3858	420	16.5354	38	1.4961	178000	40000	275000	61800	2800	2400	–	11.57	25.51
61872 MA	360	14.1732	440	17.3228	38	1.4961	182000	40900	285000	64040	2600	2200	–	12.00	26.46
61876 MA	380	14.9606	480	18.8976	46	1.8110	242000	54380	390000	87640	2400	2000	–	20.00	44.10
61880 MA	400	15.7480	500	19.6850	46	1.8110	247000	55510	405000	91010	2400	1900	–	20.50	45.20
61884 MA	420	16.5354	520	20.4724	46	1.8110	251000	56400	425000	95510	2200	1800	–	21.50	47.41
61888 MA	440	17.3228	540	21.2598	46	1.8110	255000	57300	440000	98880	2200	1800	–	22.50	49.61
61892 MA	460	18.1102	580	22.8346	56	2.2047	319000	71690	570000	128090	2000	1600	–	35.00	77.18
61896 MA	480	18.8976	600	23.6220	56	2.2047	325000	73030	600000	134830	1900	1600	–	36.50	80.48
618/500 MA	500	19.6850	620	24.4094	56	2.2047	332000	74610	620000	139330	1800	1500	–	40.50	89.30
618/530 MA	530	20.8661	650	25.5906	56	2.2047	332000	74610	655000	147190	1700	1400	–	39.50	87.10
618/560 MA	560	22.0472	680	26.7717	56	2.2047	345000	77530	695000	156180	1600	1300	–	42.00	92.61
618/600 MA	600	23.6220	730	28.7402	60	2.3622	364000	81800	765000	171910	1500	1200	–	52.00	114.66
618/630 MA	630	24.8031	780	30.7087	69	2.7165	442000	99330	965000	216850	1400	1100	–	73.00	160.97
618/710 MA	710	27.9528	870	34.2520	74	2.9134	475000	106740	1100000	247190	1200	1000	–	93.50	206.17
618/750 MA	750	29.5276	920	36.2205	78	3.0709	527000	118430	1250000	280900	1100	900	–	110.00	242.55
618/800 MA	800	31.4961	980	38.5827	82	3.2283	559000	125620	1370000	307870	1000	850	–	130.00	286.65

* Feature may not be available in all sizes.

Consult SKF USA Inc. prior to design change or order placement.

Single row
Conrad
Open
Standard

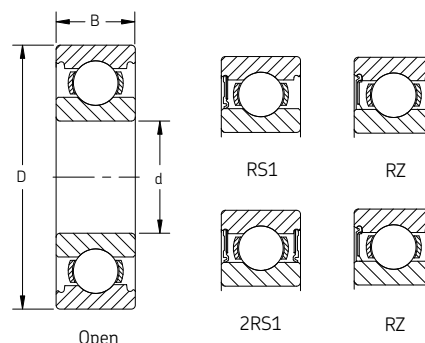
Series: 618/850 MA – 618/1500 MA
Size: 850 mm – 1 500 TN
33.4646 in – 59.0551 in



Designation	Principal dimensions						Basic load ratings				Speed rating ¹		Mass	
	Bore d		Outside diameter D		Width B		Dynamic C		Static C ₀		Reference speed	Limiting speed	kg	lb
	mm	in	mm	in	mm	in	N	lbf	N	lbf	r/min	r/min		
618/850 MA	850	33.4646	1030	40.5512	82	3.2283	559000	125620	1430000	321350	950	750	140.00	308.70
618/900 MA	900	35.4331	1090	42.9134	85	3.3465	618000	138880	1599999	359550	850	700	167.00	368.24
618/950 MA	950	37.4016	1150	45.2756	90	3.5433	637000	143150	1729999	388760	800	670	196.50	433.28
618/1000 MA	1000	39.3701	1220	48.0315	100	3.9370	637000	143150	1800000	404490	750	600	245.00	540.23
618/1060 MA	1060	41.7323	1280	50.3937	100	3.9370	728000	163600	2119999	476400	670	560	260.00	573.30
618/1120 MA	1120	44.0945	1360	53.5433	106	4.1732	741000	166520	2200000	494380	630	530	315.00	694.58
618/1180 MB	1180	46.4567	1420	55.9055	106	4.1732	761000	171010	2359999	530340	560	480	337.00	743.09
618/1320 MA	1320	51.9685	1600	62.9921	122	4.8031	956000	214830	3149999	707860	480	400	500.00	1102.50
618/1500 TN	1500	59.0551	1820	71.6535	140	5.5118	1170000	262920	4149999	932580	380	240	638.00	1406.79

Consult SKF USA Inc. prior to design change or order placement.

Single row
 Conrad
 Open and sealed
 Standard
 Series: 61900 – 61936 MA
 Size: 10 mm – 180 mm
 0.3937 in – 7.0866 in

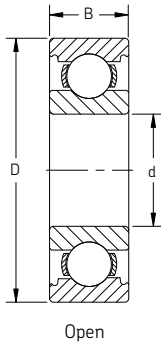


Designation	Principal dimensions						Basic load ratings				Speed rating			Mass	
	Bore d		Outside diameter D		Width B		Dynamic C		Static C ₀		Refer- ence speed	Limiting speed	Sealed Limiting speed	kg	lb
	mm	in	mm	in	mm	in	N	lbf	N	lbf	r/min	r/min	r/min		
61900	10	0.3937	22	0.8661	6	0.2362	2700	610	1270	290	70000	45000	20000	0.01	0.02
61901	12	0.4724	24	0.9449	6	0.2362	2910	650	1460	330	67000	40000	19000	0.01	0.02
61902	15	0.5906	28	1.1024	7	0.2756	4360	980	2240	500	56000	34000	16000	0.02	0.04
61903	17	0.6693	30	1.1811	7	0.2756	4620	1040	2550	570	50000	32000	14000	0.02	0.04
61904	20	0.7874	37	1.4567	9	0.3543	6370	1430	3650	820	43000	26000	12000	0.04	0.08
61905	25	0.9843	42	1.6535	9	0.3543	7020	1580	4300	970	36000	22000	10000	0.05	0.10
61906	30	1.1811	47	1.8504	9	0.3543	7280	1640	4550	1020	30000	19000	8500	0.05	0.11
61907	35	1.3780	55	2.1654	10	0.3937	10800	2430	7800	1750	26000	16000	7500	0.08	0.18
61908	40	1.5748	62	2.4409	12	0.4724	13800	3100	10000	2250	24000	14000	6700	0.12	0.26
61909	45	1.7717	68	2.6772	12	0.4724	14000	3150	10800	2430	20000	13000	6000	0.14	0.31
61910	50	1.9685	72	2.8346	12	0.4724	14600	3280	11800	2650	19000	12000	5600	0.14	0.31
61911	55	2.1654	80	3.1496	13	0.5118	16500	3710	14000	3150	17000	11000	5000	0.19	0.42
61912	60	2.3622	85	3.3465	13	0.5118	16500	3710	12000	2700	16000	10000	4500	0.20	0.43
61913	65	2.5591	90	3.5433	13	0.5118	17400	3910	16000	3600	15000	9500	4300	0.22	0.49
61914	70	2.7559	100	3.9370	16	0.6299	23800	5350	18300	4110	14000	8500	4000	0.34	0.74
61915	75	2.9528	105	4.1339	16	0.6299	24200	5440	19300	4340	13000	8000	3600	0.36	0.79
61916	80	3.1496	110	4.3307	16	0.6299	25100	5640	20400	4580	12000	7500	3400	0.38	0.85
61917	85	3.3465	120	4.7244	18	0.7087	31900	7170	30000	6740	11000	7000	–	0.55	1.22
61918	90	3.5433	125	4.9213	18	0.7087	33200	7460	31500	7080	11000	6700	–	0.59	1.30
61919	95	3.7402	130	5.1181	18	0.7087	33800	7600	33500	7530	10000	6300	3000	0.61	1.35
61920	100	3.9370	140	5.5118	20	0.7874	42300	9510	41500	9330	9500	6000	–	0.83	1.83
61921	105	4.1339	145	5.7087	20	0.7874	44200	9930	44000	9890	9500	5600	–	0.87	1.92
61922	110	4.3307	150	5.9055	20	0.7874	43600	9800	45000	10110	9000	5600	–	0.90	1.99
61924	120	4.7244	165	6.4961	22	0.8661	55300	12430	57000	12810	8000	5000	–	1.20	2.65
61926	130	5.1181	180	7.0866	24	0.9449	65000	14610	67000	15060	7500	4500	–	1.60	3.53
61928	140	5.5118	190	7.4803	24	0.9449	66300	14900	72000	16180	7000	4300	–	1.70	3.75
61930 MA	150	5.9055	210	8.2677	28	1.1024	88400	19870	93000	20900	6300	5300	–	3.03	6.69
61932 MA	160	6.2992	220	8.6614	28	1.1024	92300	20740	98000	22020	6000	5000	–	3.20	7.06
61934 MA	170	6.6929	230	9.0551	28	1.1024	93600	21030	106000	23820	5600	4800	–	3.37	7.43
61936 MA	180	7.0866	250	9.8425	33	1.2992	119000	26740	134000	30110	5300	4300	–	4.99	11.00

Consult SKF USA Inc. prior to design change or order placement.

Single row
Conrad
Open

Standard
Series: 61938 MA – 619/850
Size: 190 mm – 850 mm
7.4803 in – 33.4646 in

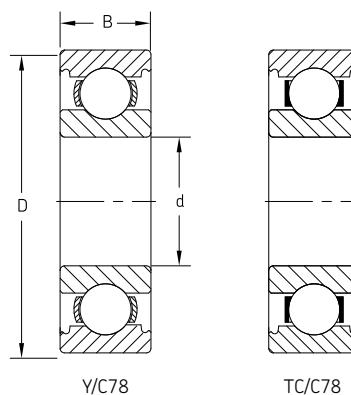


Designation	Principal dimensions						Basic load ratings				Speed rating		Mass	
	Bore		Outside diameter		Width		Dynamic		Static		Reference	Limiting		
	d	D	D	B	C	C ₀	speed	speed	kg	lb				
	mm	in	mm	in	mm	in	N	lbf	N	lbf	r/min	r/min	kg	lb
61938 MA	190	7.4803	260	10.2362	33	1.2992	117000	26290	134000	30110	5000	4300	5.21	11.50
61940 MA	200	7.8740	280	11.0236	38	1.4961	148000	33260	166000	37300	4800	3800	7.32	16.15
61944 MA	220	8.6614	300	11.8110	38	1.4961	151000	33930	180000	40450	4300	3600	7.93	17.49
61948 MA	240	9.4488	320	12.5984	38	1.4961	159000	35730	200000	44940	4000	3200	8.54	18.84
61952 MA	260	10.2362	360	14.1732	46	1.8110	212000	47640	270000	60670	3600	3000	14.42	31.80
61956 MA	280	11.0236	380	14.9606	46	1.8110	216000	48540	285000	64040	3200	2800	15.34	33.83
61960 MA	300	11.8110	420	16.5354	56	2.2047	270000	60670	375000	84270	3000	2400	24.35	53.69
61964 MA	320	12.5984	440	17.3228	56	2.2047	276000	62020	400000	89890	2800	2400	25.50	56.23
61968 MA	340	13.3858	460	18.1102	56	2.2047	281000	63150	425000	95510	2600	2200	26.50	58.43
61972 MA	360	14.1732	480	18.8976	56	2.2047	291000	65390	450000	101120	2600	2200	28.00	61.74
61976 MA	380	14.9606	520	20.4724	65	2.5591	338000	75960	540000	121350	2400	1900	40.00	88.20
61980 MA	400	15.7480	540	21.2598	65	2.5591	345000	77530	570000	128090	2200	1800	41.50	91.51
61984 MA	420	16.5354	560	22.0472	65	2.5591	351000	78880	600000	134830	2200	1800	43.00	94.82
61988 MA	440	17.3228	600	23.6220	74	2.9134	410000	92130	720000	161800	2000	1600	60.50	133.40
61992 MA	460	18.1102	620	24.4094	74	2.9134	423000	95060	750000	168540	1900	1600	62.50	137.81
61996 MA	480	18.8976	650	25.5906	78	3.0709	449000	100900	815000	183150	1800	1500	74.00	163.17
619/500 MA	500	19.6850	670	26.3780	78	3.0709	462000	103820	865000	194380	1700	1400	81.50	179.71
619/530 MA	530	20.8661	710	27.9528	82	3.2283	488000	109660	930000	208990	1600	1300	90.50	199.55
619/560 MA	560	22.0472	750	29.5276	85	3.3465	494000	111010	980000	220220	1500	1200	105.00	231.53
619/600 MA	600	23.6220	800	31.4961	90	3.5433	585000	131460	1220000	274160	1400	1100	125.00	275.63
619/670 MA	670	26.3780	900	35.4331	103	4.0551	676000	151910	1500000	337080	1200	1000	192.00	423.36
619/710 MA	710	27.9528	950	37.4016	106	4.1732	663000	148990	1500000	337080	1100	900	220.00	485.10
619/750 MA	750	29.5276	1000	39.3701	112	4.4094	761000	171010	1799999	404490	1000	850	255.00	562.28
619/800 MA	800	31.4961	1060	41.7323	115	4.5276	832000	186970	2039999	458430	950	800	275.00	606.38
619/850 MA	850	33.4646	1120	44.0945	118	4.6457	852000	191460	2119999	476400	850	750	320.00	705.60

Consult SKF USA Inc. prior to design change or order placement.

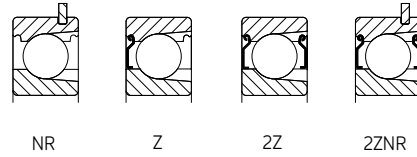
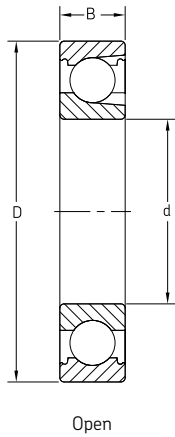
Single row
 ABEC 5
 Open
 Standard
 Series: 6205/C78 – 6218/C78
 Size: 25 mm – 90 mm
 0.9843 in – 3.5433 in

Series: 6303/C78 – 6317/C78
 Size: 17 mm – 85 mm
 0.6693 in – 3.3465 in



Designation	Principal dimensions						Basic load ratings				Speed rating		Mass	
	Bore		Outside diameter		Width		Dynamic		Static		Reference	Limiting		
	d		D		B		C	C ₀			speed	speed	kg	lb
	mm	in	mm	in	mm	in	N	lbf	N	lbf	r/min	r/min		
6205/C78	25	0.9843	52	2.0472	15	0.5906	14 800	3 330	7 800	1 750	28 000	18 000	0.13	0.29
6206/C78	30	1.1811	62	2.4409	16	0.6299	20 300	4 560	11 200	2 520	24 000	15 000	0.20	0.44
6207/C78	35	1.3780	72	2.8346	17	0.6693	27 000	6 070	15 300	3 440	20 000	13 000	0.28	0.62
6208/C78	40	1.5748	80	3.1496	18	0.7087	32 500	7 310	19 000	4 270	18 000	11 000	0.36	0.79
6209/C78	45	1.7717	85	3.3465	19	0.748	35 100	7 890	21 600	4 860	17 000	11 000	0.41	0.90
6210/C78	50	1.9685	90	3.5433	20	0.7874	37 100	8 340	23 200	5 220	15 000	10 000	0.46	1.01
6211/C78	55	2.1654	100	3.9370	21	0.8268	46 200	10 390	29 000	6 520	14 000	9 000	0.60	1.32
6212/C78	60	2.3622	110	4.3307	22	0.8661	55 300	12 430	36 000	8 090	13 000	8 000	0.78	1.72
6213/C78	65	2.5591	120	4.7244	23	0.9055	58 500	13 150	40 500	9 100	12 000	7 500	0.99	2.18
6214/C78	70	2.7559	125	4.9213	24	0.9449	63 700	14 320	45 000	10 120	11 000	7 000	1.07	2.40
6215/C78	75	2.9528	130	5.1181	25	0.9843	68 900	15 490	49 000	11 020	10 000	6 700	1.20	2.60
6216/C78	80	3.1496	140	5.5118	26	1.0236	72 800	16 370	55 000	12 360	9 500	6 000	1.42	3.10
6217/C78	85	3.3465	150	5.9055	28	1.1024	87 100	19 580	64 000	14 390	9 000	5 600	1.80	4.00
6218/C78	90	3.5433	160	6.2992	30	1.1811	101 000	22 700	73 500	16 520	8 500	5 300	2.15	4.70
6303/C78	17	0.6693	47	1.8504	14	0.5512	14 300	3 210	6 550	1 470	34 000	22 000	0.12	0.26
6304/C78	20	0.7874	52	2.0472	15	0.5906	16 800	3 780	7 800	1 750	30 000	19 000	0.14	0.31
6305/C78	25	0.9843	62	2.4409	17	0.6693	23 400	5 260	11 600	2 610	24 000	16 000	0.23	0.50
6306/C78	30	1.1811	72	2.8346	19	0.748	29 600	6 650	16 000	3 600	20 000	13 000	0.34	0.70
6307/C78	35	1.3780	80	3.1496	21	0.8268	35 100	7 890	19 000	4 270	19 000	12 000	0.46	1.00
6308/C78	40	1.5748	90	3.5433	23	0.9055	42 300	9 510	24 000	5 400	17 000	11 000	0.63	1.40
6309/C78	45	1.7717	100	3.9370	25	0.9843	55 300	12 430	31 500	7 080	15 000	9 500	0.84	1.90
6310/C78	50	1.9685	110	4.3307	27	1.063	65 000	14 610	38 000	8 540	13 000	8 500	1.10	2.40
6311/C78	55	2.1654	120	4.7244	29	1.1417	74 100	16 660	45 000	10 120	12 000	8 000	1.39	3.10
6312/C78	60	2.3622	130	5.1181	31	1.2205	85 200	19 150	52 000	11 690	11 000	7 000	1.75	3.90
6313/C78	65	2.5591	140	5.5118	33	1.2992	97 500	21 920	60 000	13 490	10 000	6 700	2.10	4.60
6314/C78	70	2.7559	150	5.9055	35	1.378	111 000	24 950	68 000	15 290	9 500	6 300	2.55	5.60
6315/C78	75	2.9528	160	6.2992	37	1.4567	119 000	26 750	76 500	17 200	9 000	5 600	3.05	6.70
6316/C78	80	3.1496	170	6.6929	39	1.5354	130 000	29 220	86 500	19 450	8 500	5 300	3.59	7.90
6317/C78	85	3.3465	180	7.0866	41	1.6142	140 000	31 470	96 500	21 690	8 000	5 000	4.30	9.50

Consult SKF USA Inc. prior to design change or order placement.



Single row
 Max type
 Open, shielded, snap ring
 Standard
 Series: 206 – 220
 Size: 30 mm – 100 mm
 1.1811 in – 3.9370 in

Series: 305 – 318
 Size: 25 mm – 90 mm
 0.9843 in – 3.5433 in

Designation	Principal dimensions						Basic load ratings				Speed rating ¹		Mass	
	Bore		Outside diameter		Width		Dynamic		Static		Reference	Limiting		
	d	D	B	C	speed	speed	kg	lb						
	mm	in	mm	in	mm	in	N	lbf	N	lbf	r/min	r/min	kg	lb
206	30	1.1811	62	2.4409	16	0.6299	21 000	4 800	14 510	3 300	20 000	12 000	0.21	0.46
207	35	1.3780	72	2.8346	17	0.6693	27 760	6 300	19 740	4 500	17 000	11 000	0.31	0.68
208	40	1.5748	80	3.1496	18	0.7087	33 370	7 600	24 200	5 500	15 000	9 500	0.39	0.86
209	45	1.7717	85	3.3465	19	0.7480	35 100	7 900	26 070	5 900	14 000	9 000	0.44	0.97
210	50	1.9685	90	3.5433	20	0.7874	38 920	8 800	29 760	6 700	13 000	8 000	0.50	1.10
211	55	2.1654	100	3.9370	21	0.8268	48 110	10 900	37 670	8 500	12 000	7 500	0.66	1.50
212	60	2.3622	110	4.3307	22	0.8661	55 540	12 500	43 400	9 800	11 000	6 700	0.85	1.90
213	65	2.5591	120	4.7244	23	0.9055	60 500	13 700	58 500	13 200	10 000	6 000	1.05	2.30
214	70	2.7559	125	4.9213	24	0.9449	66 000	14 900	65 500	14 800	9 500	6 000	1.15	2.50
215	75	2.9528	130	5.1181	25	0.9843	72 100	16 300	72 000	16 200	9 000	5 600	1.25	2.80
216	80	3.1496	140	5.5118	26	1.0236	88 000	19 800	85 000	19 200	8 500	5 300	1.55	3.40
217	85	3.3465	150	5.9055	28	1.1024	96 800	21 800	100 000	22 500	7 500	4 800	1.95	4.30
218	90	3.5433	160	6.2992	30	1.1811	112 000	25 200	114 000	25 700	7 000	4 500	2.35	5.20
219	95	3.7402	170	6.6929	32	1.2598	121 000	27 300	122 000	27 500	6 700	4 300	2.70	6.00
220	100	3.9370	180	7.0866	34	1.3386	134 000	30 200	140 000	31 500	6 300	4 000	3.45	7.60
305	25	0.9843	62	2.4409	17	0.6693	22 900	5 200	15 600	3 600	20 000	13 000	0.24	0.50
306	30	1.1811	72	2.8346	19	0.7480	29 490	6 700	20 480	4 700	18 000	11 000	0.37	0.80
307	35	1.3780	80	3.1496	21	0.8268	34 860	7 900	24 640	5 600	16 000	10 000	0.48	1.10
308	40	1.5748	90	3.5433	23	0.9055	45 200	10 200	33 570	7 600	14 000	9 000	0.64	1.40
309	45	1.7717	100	3.9370	25	0.9843	55 260	12 500	41 260	9 300	13 000	8 000	0.88	1.90
310	50	1.9685	110	4.3307	27	1.0630	64 730	14 600	49 100	11 100	11 000	7 000	1.15	2.50
311	55	2.1654	120	4.7244	29	1.1417	79 200	17 800	67 000	15 100	10 000	6 700	1.50	3.30
312	60	2.3622	130	5.1181	31	1.2205	91 300	20 500	78 000	17 600	9 500	6 000	1.85	4.10
313	65	2.5591	140	5.5118	33	1.2992	102 000	22 900	90 000	20 300	9 000	5 600	2.30	5.10
314	70	2.7559	150	5.9055	35	1.3780	114 000	25 600	102 000	23 000	8 000	5 000	2.75	6.10
315	75	2.9528	160	6.2992	37	1.4567	125 000	28 100	116 000	26 100	7 500	4 800	3.25	7.20
316	80	3.1496	170	6.6929	39	1.5354	138 000	31 000	129 000	29 000	7 000	4 500	3.95	8.70
317	85	3.3465	180	7.0866	41	1.6142	147 000	33 100	146 000	32 900	6 700	4 300	4.60	10.10
318	90	3.5433	190	7.4803	43	1.6929	157 000	35 300	160 000	36 000	6 300	4 000	5.40	11.90

¹ For shielded limiting speed ratings, contact SKF Applications Engineering.