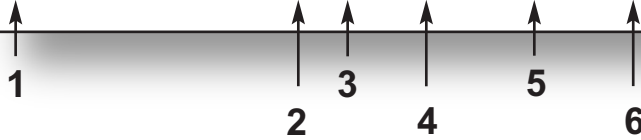




Spherical Roller Bearings

ECB 22240 CCK JA / C3 W33



| 1. Prefixes | | 4. Cage Designation/Seals | | W22 | |
|--------------------|--|---------------------------|---|----------------------|--|
| ECB | Air melt carburized steel, inner ring only | 2CS | Nitrile rubber seals on both sides, bearing filled with medium temp. extreme pressure grease | W26 | Six lubrication holes in inner ring |
| BS2 | Double row spherical roller bearing with special dimensions for seals | 2CS2* | Fluoroelastomer rubber seals on both sides, filled with hi-temp grease* | W31 | Bearing inspected to special quality requirements |
| 2. Internal Design | | 2CS5 | Hydrogenated Acrylonitrile (HNBR) seals on both sides filled with 70-100% of Polyurea based hi-temperature grease | W33 | Groove and 3 oil holes in outer ring |
| CA | One-piece machined brass cage of the double-pronged type, retaining flanges on the inner ring and guide ring centred on the inner ring. | F | Machined steel cage, ring guided | W33X | Lubrication groove and six holes in outer ring |
| CAC | Same as CA but improved raceway geometry | J | Pressed steel cage | W4 | Hi point of eccentricity marked on inner ring or sleeve |
| CAFA | Same as CA but with a machined steel cage. | JA | Hardened steel cage, ring guided | W502 | Combination of W22 and W33 |
| CC | Two, window-type steel cages, flangeless inner ring and guide ring centred on the inner ring | MA | Machined brass cage outer ring guided | W509 | W26 + W31 + W33 |
| E | d < 65mm, Two window-type steel cages, flangeless inner ring and guide centred on the inner ring. When d > 65 mm as above but guide ring centred on the cages | M2 | Machined brass roller guided cage no guide ring (Vibrating screens) | W513 | W26 + W33 |
| ECA | One-piece machined brass cage of the double-pronged type, retaining flanges on the inner ring, guide ring centred on the inner ring and reinforced roller complement | Y | Pressed brass cage, ring guided | HA1 | Case hardened outer and inner rings |
| ECAC | As ECA but with improved raceway geometry | 5. Clearance/Tolerance | | HA3 | Case hardened inner rings (As ECB prefix) |
| ECAF | As ECA but with a machined steel cage | C1 | Clearance < C2 | VA405 | Vibrating screen specification |
| C2 | Clearance < Normal | CN | Normal (no symbol) | VA406 | As VA405 with PTFE coated bore |
| C3 | Clearance > Normal | C4 | Clearance > C3 | VE552(E) | Three equally spaced threaded holes in face of outer ring for hoisting tackle, (E) indicates appropriate lifting eyes supplied |
| C08 | Reduce runout on both inner and outer rings to ISO P5 (RBEC 5) | C08 | Reduce runout on both inner and outer rings to ISO P5 (RBEC 5) | VE553(E) | As VE552 but on both side faces. |
| VQ 424 | Closer tolerances than C08 | VQ 424 | Closer tolerances than C08 | VA751 / VA759 | Both printing press/coater specifications |
| 3. Bore types | | 6. Features | | VT143 | Extreme pressure grease |
| - | Cylindrical bore no symbol | W | No relubrication feature on E style bearings | W64 | Solid oil filling |
| K | 1:12 tapered bore | | | W77 | Plugged W33 holes |
| K30 | 1:30 tapered bore | | | | |

* See warning page 163

Spherical roller bearings

Technical Features

Boundary Dimensions in accordance with ISO 15:1998

Tolerances SKF spherical roller bearings are manufactured as standard to normal tolerances. SKF Explorer bearings up to 315 mm bore diameter are produced to higher precision than the ISO normal tolerances. The width tolerance is considerably tighter*. The running accuracy is to tolerance class P5 as standard.
For larger bearings P5 tolerances are also available with the suffix C08 or closer tolerances are available with suffix VQ424.
Vibratory bearings are manufactured to; bore P5 and O/D P6.

Heat Stabilization 392 °F (200 °C)

Misalignment

| | |
|---------------------|---------------------|
| series 21300 - 1° | series 22200 - 1.5° |
| series 22300 - 2° | series 23000 - 1.5° |
| series 23100 - 1.5° | series 23200 - 2.5° |
| series 23900 - 1.5° | series 24000 - 2° |
| series 24100 - 2.5° | |

Cage Material

| | |
|----------|--|
| Standard | Steel |
| Optional | Machined brass (CA) larger bearings only |

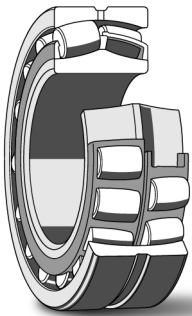
Axial Load - max Sleeve mounted For adapter mounts $F_{ap} = 3 \times B \times d$
Where B = bearing width (mm) and d = bearing bore (mm)
Fap = axial load in Newtons
For cylindrical mounts - contact SKF engineering

Seals

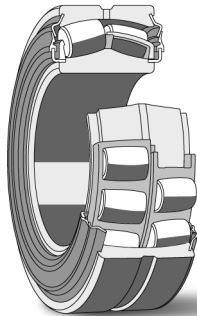
- 2CS - 2 Nitrile seals with medium temperature grease
- 2CS2 - 2 Fluoroelastomer rubber seals with high temperature bearings grease
- 2CS5 - 2 Hydrogenated acrylonitrile butadiene rubber seals with hi-temp grease

width may differ from standard bearings

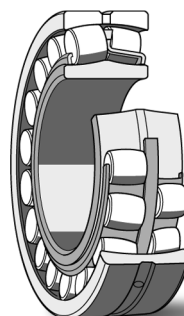
* See width tolerances on page 704 of the SKF 6000 catalogue



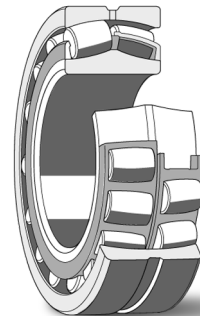
Standard
Spherical Roller Bearing
(data tables on page 166)



Sealed
Spherical Roller Bearing
(data tables on page 174)



VA405 Design
Shaker Screen
Spherical Roller Bearing
(data tables on page 176)



Printing Press
Spherical Roller Bearing
(data tables on page 179)

Warning:

SKF sealed roller bearings that are fitted with fluoro rubber (elastomer) seals (2CS2) can cause serious bodily injury if used improperly. The seals are suitable for operation up to 392°F (200°C). A fluoroelastomer base will resist ignition under any conditions outside special furnace condition, but if exposure to heat (due to fire or any other conditions) is extreme, e.g. over 572°F (300°C) for more than a brief time, degradation will occur. Fluoro rubber emits dangerous fumes at temperatures of 572°F (300°C) and above. This may occur if the seals are subjected to extreme heat during dismounting, for example. Once it

has been overheated, fluoro rubber will remain dangerous to handle even when it has cooled down. This degraded product is a major health and safety danger due to the evolution of hydrofluoric acid (HF). It is necessary to handle overheated fluoro rubber seals carefully; always observe safety instructions and wear goggles and protective gloves. Under no circumstances should material (hot or cold) be allowed to contact skin. If hands or eyes have come into contact with the material or fumes, they should be washed or rinsed in plenty of water. A doctor should always be consulted especially if the fumes have been inhaled.

Decontamination can be carried out using limewater (calcium hydroxide solution); use of P.V.C. gloves is essential. After neutralization, the degraded seal can be disposed of in a similar manner to an un-degraded one.

The user is responsible for the correct handling of the seals during bearing life, and for the proper disposal of used seals. Seals of fluoro rubber and bearings incorporating them are not dangerous to handle provided they have never been overheated.

Mounting Information

Please go to www.skf.com/mount

| Radial internal clearance of spherical roller bearings with cylindrical bore | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------|---------|---------|---------------------------|-----|--------|--------|-----|-----|--------|--------|-----|------|--------|--------|------|------|--------|--------|------|------|--------|--------|
| Bore diameter d | | | | Radial internal clearance | | | | | | | | | | | | | | | | | | | |
| | | | | C2 | | Normal | | | | C3 | | | | C4 | | | | C5 | | | | | |
| over | incl. | over | incl. | min | max | min | max | min | max | min | max | min | max | min | max | min | max | | | | | | |
| mm | in | mm | in | µm | in | µm | in | µm | in | µm | in | µm | in | µm | in | µm | in | | | | | | |
| 18 | 24 | 0.7087 | 0.9449 | 10 | 20 | 0.0004 | 0.0008 | 20 | 35 | 0.0008 | 0.0014 | 35 | 45 | 0.0014 | 0.0018 | 45 | 60 | 0.0018 | 0.0024 | 60 | 75 | 0.0024 | 0.0030 |
| 24 | 30 | 0.9449 | 1.1811 | 15 | 25 | 0.0006 | 0.0010 | 25 | 40 | 0.0010 | 0.0016 | 40 | 55 | 0.0016 | 0.0022 | 55 | 75 | 0.0022 | 0.0030 | 75 | 95 | 0.0030 | 0.0037 |
| 30 | 40 | 1.1811 | 1.5748 | 15 | 30 | 0.0006 | 0.0012 | 30 | 45 | 0.0012 | 0.0018 | 45 | 60 | 0.0018 | 0.0024 | 60 | 80 | 0.0024 | 0.0031 | 80 | 100 | 0.0031 | 0.0039 |
| 40 | 50 | 1.5748 | 1.9685 | 20 | 35 | 0.0008 | 0.0014 | 35 | 55 | 0.0014 | 0.0022 | 55 | 75 | 0.0022 | 0.0030 | 75 | 100 | 0.0030 | 0.0039 | 100 | 125 | 0.0039 | 0.0049 |
| 50 | 65 | 1.9685 | 2.5591 | 20 | 40 | 0.0008 | 0.0016 | 40 | 65 | 0.0016 | 0.0026 | 65 | 90 | 0.0026 | 0.0035 | 90 | 120 | 0.0035 | 0.0047 | 120 | 150 | 0.0047 | 0.0059 |
| 65 | 80 | 2.5591 | 3.1496 | 30 | 50 | 0.0012 | 0.0020 | 50 | 80 | 0.0020 | 0.0031 | 80 | 110 | 0.0031 | 0.0043 | 110 | 145 | 0.0043 | 0.0057 | 145 | 180 | 0.0057 | 0.0071 |
| 80 | 100 | 3.1496 | 3.9370 | 35 | 60 | 0.0014 | 0.0024 | 60 | 100 | 0.0024 | 0.0039 | 100 | 135 | 0.0039 | 0.0053 | 135 | 180 | 0.0053 | 0.0071 | 180 | 225 | 0.0071 | 0.0089 |
| 100 | 120 | 3.9370 | 4.7244 | 40 | 75 | 0.0016 | 0.0030 | 75 | 120 | 0.0030 | 0.0047 | 120 | 160 | 0.0047 | 0.0063 | 160 | 210 | 0.0063 | 0.0083 | 210 | 260 | 0.0083 | 0.0102 |
| 120 | 140 | 4.7244 | 5.5118 | 50 | 95 | 0.0020 | 0.0037 | 95 | 145 | 0.0037 | 0.0057 | 145 | 190 | 0.0057 | 0.0075 | 190 | 240 | 0.0075 | 0.0094 | 240 | 300 | 0.0094 | 0.0118 |
| 140 | 160 | 5.5118 | 6.2992 | 60 | 110 | 0.0024 | 0.0043 | 110 | 170 | 0.0043 | 0.0067 | 170 | 220 | 0.0067 | 0.0087 | 220 | 280 | 0.0087 | 0.0110 | 280 | 350 | 0.0110 | 0.0138 |
| 160 | 180 | 6.2992 | 7.0866 | 65 | 120 | 0.0026 | 0.0047 | 120 | 180 | 0.0047 | 0.0071 | 180 | 240 | 0.0071 | 0.0094 | 240 | 310 | 0.0094 | 0.0122 | 310 | 390 | 0.0122 | 0.0154 |
| 180 | 200 | 7.0866 | 7.8740 | 70 | 130 | 0.0028 | 0.0051 | 130 | 200 | 0.0051 | 0.0079 | 200 | 260 | 0.0079 | 0.0102 | 260 | 340 | 0.0102 | 0.0134 | 340 | 430 | 0.0134 | 0.0169 |
| 200 | 225 | 7.8740 | 8.8583 | 80 | 140 | 0.0031 | 0.0055 | 140 | 220 | 0.0055 | 0.0087 | 220 | 290 | 0.0087 | 0.0114 | 290 | 380 | 0.0114 | 0.0150 | 380 | 470 | 0.0150 | 0.0185 |
| 225 | 250 | 8.8583 | 9.8425 | 90 | 150 | 0.0035 | 0.0059 | 150 | 240 | 0.0059 | 0.0094 | 240 | 320 | 0.0094 | 0.0126 | 320 | 420 | 0.0126 | 0.0165 | 420 | 520 | 0.0165 | 0.0205 |
| 250 | 280 | 9.8425 | 11.0236 | 100 | 170 | 0.0039 | 0.0067 | 170 | 260 | 0.0067 | 0.0102 | 260 | 350 | 0.0102 | 0.0138 | 350 | 460 | 0.0138 | 0.0181 | 460 | 570 | 0.0181 | 0.0224 |
| 280 | 315 | 11.0236 | 12.4016 | 110 | 190 | 0.0043 | 0.0075 | 190 | 280 | 0.0075 | 0.0110 | 280 | 370 | 0.0110 | 0.0146 | 370 | 500 | 0.0146 | 0.0197 | 500 | 630 | 0.0197 | 0.0248 |
| 315 | 355 | 12.4016 | 13.9764 | 120 | 200 | 0.0047 | 0.0079 | 200 | 310 | 0.0079 | 0.0122 | 310 | 410 | 0.0122 | 0.0161 | 410 | 550 | 0.0161 | 0.0217 | 550 | 690 | 0.0217 | 0.0272 |
| 355 | 400 | 13.9764 | 15.7480 | 130 | 220 | 0.0051 | 0.0087 | 220 | 340 | 0.0087 | 0.0134 | 340 | 450 | 0.0134 | 0.0177 | 450 | 600 | 0.0177 | 0.0236 | 600 | 750 | 0.0236 | 0.0295 |
| 400 | 450 | 15.7480 | 17.7165 | 140 | 240 | 0.0055 | 0.0094 | 240 | 370 | 0.0094 | 0.0146 | 370 | 500 | 0.0146 | 0.0197 | 500 | 660 | 0.0197 | 0.0260 | 660 | 820 | 0.0260 | 0.0323 |
| 450 | 500 | 17.7165 | 19.6850 | 140 | 260 | 0.0055 | 0.0102 | 260 | 410 | 0.0102 | 0.0161 | 410 | 550 | 0.0161 | 0.0217 | 550 | 720 | 0.0217 | 0.0283 | 720 | 900 | 0.0283 | 0.0354 |
| 500 | 560 | 19.6850 | 22.0472 | 150 | 280 | 0.0059 | 0.0110 | 280 | 440 | 0.0110 | 0.0173 | 440 | 600 | 0.0173 | 0.0236 | 600 | 780 | 0.0236 | 0.0307 | 780 | 1000 | 0.0307 | 0.0394 |
| 560 | 630 | 22.0472 | 24.8031 | 170 | 310 | 0.0067 | 0.0122 | 310 | 480 | 0.0122 | 0.0189 | 480 | 650 | 0.0189 | 0.0256 | 650 | 850 | 0.0256 | 0.0335 | 850 | 1100 | 0.0335 | 0.0433 |
| 630 | 710 | 24.8031 | 27.9528 | 190 | 350 | 0.0075 | 0.0138 | 350 | 530 | 0.0138 | 0.0209 | 530 | 700 | 0.0209 | 0.0276 | 700 | 920 | 0.0276 | 0.0362 | 920 | 1190 | 0.0362 | 0.0469 |
| 710 | 800 | 27.9528 | 31.4961 | 210 | 390 | 0.0083 | 0.0154 | 390 | 580 | 0.0154 | 0.0228 | 580 | 770 | 0.0228 | 0.0303 | 770 | 1010 | 0.0303 | 0.0398 | 1010 | 1300 | 0.0398 | 0.0512 |
| 800 | 900 | 31.4961 | 35.4331 | 230 | 430 | 0.0091 | 0.0169 | 430 | 650 | 0.0169 | 0.0256 | 650 | 860 | 0.0256 | 0.0339 | 860 | 1120 | 0.0339 | 0.0441 | 1120 | 1440 | 0.0441 | 0.0567 |
| 900 | 1000 | 35.4331 | 39.3701 | 260 | 480 | 0.0102 | 0.0189 | 480 | 710 | 0.0189 | 0.0280 | 710 | 930 | 0.0280 | 0.0366 | 930 | 1220 | 0.0366 | 0.0480 | 1220 | 1570 | 0.0480 | 0.0618 |
| 1000 | 1120 | 39.3701 | 44.0945 | 290 | 530 | 0.0114 | 0.0209 | 530 | 780 | 0.0209 | 0.0307 | 780 | 1020 | 0.0307 | 0.0402 | 1020 | 1330 | 0.0402 | 0.0524 | 1330 | 1720 | 0.0524 | 0.0677 |
| 1120 | 1250 | 44.0945 | 49.2126 | 320 | 580 | 0.0126 | 0.0228 | 580 | 860 | 0.0228 | 0.0339 | 860 | 1120 | 0.0339 | 0.0441 | 1120 | 1460 | 0.0441 | 0.0575 | 1460 | 1870 | 0.0575 | 0.0736 |

Spherical roller bearings

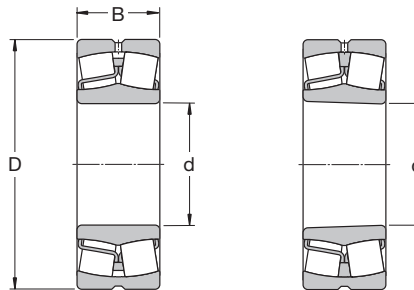
| Radial internal clearance of spherical roller bearings with tapered bore | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------|---------|---------|---------------------------|-----|--------|--------|--------|------|--------|--------|------|------|--------|--------|------|------|--------|--------|------|------|--------|--------|
| Bore diameter d | | | | Radial internal clearance | | | | | | | | | | | | | | | | | | | |
| | | | | C2 | | | | Normal | | | | C3 | | | | C4 | | | | C5 | | | |
| over | incl. | over | incl. | min | max | min | max | min | max | min | max | min | max | min | max | min | max | min | max | | | | |
| mm | in | mm | in | μm | in | μm | in | μm | in | μm | in | μm | in | μm | in | μm | in | μm | in | | | | |
| 24 | 30 | 0.9449 | 1.1811 | 20 | 30 | 0.0008 | 0.0012 | 30 | 40 | 0.0012 | 0.0016 | 40 | 55 | 0.0016 | 0.0022 | 55 | 75 | 0.0022 | 0.0030 | - | - | | |
| 30 | 40 | 1.1811 | 1.5748 | 25 | 35 | 0.0010 | 0.0014 | 35 | 50 | 0.0014 | 0.0020 | 50 | 65 | 0.0020 | 0.0026 | 65 | 85 | 0.0026 | 0.0033 | 85 | 105 | 0.0033 | 0.0041 |
| 40 | 50 | 1.5748 | 1.9685 | 30 | 45 | 0.0012 | 0.0018 | 45 | 60 | 0.0018 | 0.0024 | 60 | 80 | 0.0024 | 0.0031 | 80 | 100 | 0.0031 | 0.0039 | 100 | 130 | 0.0039 | 0.0051 |
| 50 | 65 | 1.9685 | 2.5591 | 40 | 55 | 0.0016 | 0.0022 | 55 | 75 | 0.0022 | 0.0030 | 75 | 95 | 0.0030 | 0.0037 | 95 | 120 | 0.0037 | 0.0047 | 120 | 160 | 0.0047 | 0.0063 |
| 65 | 80 | 2.5591 | 3.1496 | 50 | 70 | 0.0020 | 0.0028 | 70 | 95 | 0.0028 | 0.0037 | 95 | 120 | 0.0037 | 0.0047 | 120 | 150 | 0.0047 | 0.0059 | 150 | 200 | 0.0059 | 0.0079 |
| 80 | 100 | 3.1496 | 3.9370 | 55 | 80 | 0.0022 | 0.0031 | 80 | 110 | 0.0031 | 0.0043 | 110 | 140 | 0.0043 | 0.0055 | 140 | 180 | 0.0055 | 0.0071 | 180 | 230 | 0.0071 | 0.0091 |
| 100 | 120 | 3.9370 | 4.7244 | 65 | 100 | 0.0026 | 0.0039 | 100 | 135 | 0.0039 | 0.0053 | 135 | 170 | 0.0053 | 0.0067 | 170 | 220 | 0.0067 | 0.0087 | 220 | 280 | 0.0087 | 0.0110 |
| 120 | 140 | 4.7244 | 5.5118 | 80 | 120 | 0.0031 | 0.0047 | 120 | 160 | 0.0047 | 0.0063 | 160 | 200 | 0.0063 | 0.0079 | 200 | 260 | 0.0079 | 0.0102 | 260 | 330 | 0.0102 | 0.0130 |
| 140 | 160 | 5.5118 | 6.2992 | 90 | 130 | 0.0035 | 0.0051 | 130 | 180 | 0.0051 | 0.0071 | 180 | 230 | 0.0071 | 0.0091 | 230 | 300 | 0.0091 | 0.0118 | 300 | 380 | 0.0118 | 0.0150 |
| 160 | 180 | 6.2992 | 7.0866 | 100 | 140 | 0.0039 | 0.0055 | 140 | 200 | 0.0055 | 0.0079 | 200 | 260 | 0.0079 | 0.0102 | 260 | 340 | 0.0102 | 0.0134 | 340 | 430 | 0.0134 | 0.0169 |
| 180 | 200 | 7.0866 | 7.8740 | 110 | 160 | 0.0043 | 0.0063 | 160 | 220 | 0.0063 | 0.0087 | 220 | 290 | 0.0087 | 0.0114 | 290 | 370 | 0.0114 | 0.0146 | 370 | 470 | 0.0146 | 0.0185 |
| 200 | 225 | 7.8740 | 8.8583 | 120 | 180 | 0.0047 | 0.0071 | 180 | 250 | 0.0071 | 0.0098 | 250 | 320 | 0.0098 | 0.0126 | 320 | 410 | 0.0126 | 0.0161 | 410 | 520 | 0.0161 | 0.0205 |
| 225 | 250 | 8.8583 | 9.8425 | 140 | 200 | 0.0055 | 0.0079 | 200 | 270 | 0.0079 | 0.0106 | 270 | 350 | 0.0106 | 0.0138 | 350 | 450 | 0.0138 | 0.0177 | 450 | 570 | 0.0177 | 0.0224 |
| 250 | 280 | 9.8425 | 11.0236 | 150 | 220 | 0.0059 | 0.0087 | 220 | 300 | 0.0087 | 0.0118 | 300 | 390 | 0.0118 | 0.0154 | 390 | 490 | 0.0154 | 0.0193 | 490 | 620 | 0.0193 | 0.0244 |
| 280 | 315 | 11.0236 | 12.4016 | 170 | 240 | 0.0067 | 0.0094 | 240 | 330 | 0.0094 | 0.0130 | 330 | 430 | 0.0130 | 0.0169 | 430 | 540 | 0.0169 | 0.0213 | 540 | 680 | 0.0213 | 0.0268 |
| 315 | 355 | 12.4016 | 13.9764 | 190 | 270 | 0.0075 | 0.0106 | 270 | 360 | 0.0106 | 0.0142 | 360 | 470 | 0.0142 | 0.0185 | 470 | 590 | 0.0185 | 0.0232 | 590 | 740 | 0.0232 | 0.0291 |
| 355 | 400 | 13.9764 | 15.7480 | 210 | 300 | 0.0083 | 0.0118 | 300 | 400 | 0.0118 | 0.0157 | 400 | 520 | 0.0157 | 0.0205 | 520 | 650 | 0.0205 | 0.0256 | 650 | 820 | 0.0256 | 0.0323 |
| 400 | 450 | 15.7480 | 17.7165 | 230 | 330 | 0.0091 | 0.0130 | 330 | 440 | 0.0130 | 0.0173 | 440 | 570 | 0.0173 | 0.0224 | 570 | 720 | 0.0224 | 0.0283 | 720 | 910 | 0.0283 | 0.0358 |
| 450 | 500 | 17.7165 | 19.6850 | 260 | 370 | 0.0102 | 0.0146 | 370 | 490 | 0.0146 | 0.0193 | 490 | 630 | 0.0193 | 0.0248 | 630 | 790 | 0.0248 | 0.0311 | 790 | 1000 | 0.0311 | 0.0394 |
| 500 | 560 | 19.6850 | 22.0472 | 290 | 410 | 0.0114 | 0.0161 | 410 | 540 | 0.0161 | 0.0213 | 540 | 680 | 0.0213 | 0.0268 | 680 | 870 | 0.0268 | 0.0343 | 870 | 1100 | 0.0343 | 0.0433 |
| 560 | 630 | 22.0472 | 24.8031 | 320 | 460 | 0.0126 | 0.0181 | 460 | 600 | 0.0181 | 0.0236 | 600 | 760 | 0.0236 | 0.0299 | 760 | 980 | 0.0299 | 0.0386 | 980 | 1230 | 0.0386 | 0.0484 |
| 630 | 710 | 24.8031 | 27.9528 | 350 | 510 | 0.0138 | 0.0201 | 510 | 670 | 0.0201 | 0.0264 | 670 | 850 | 0.0264 | 0.0335 | 850 | 1090 | 0.0335 | 0.0429 | 1090 | 1360 | 0.0429 | 0.0535 |
| 710 | 800 | 27.9528 | 31.4961 | 390 | 570 | 0.0154 | 0.0224 | 570 | 750 | 0.0224 | 0.0295 | 750 | 960 | 0.0295 | 0.0378 | 960 | 1220 | 0.0378 | 0.0480 | 1220 | 1500 | 0.0480 | 0.0591 |
| 800 | 900 | 31.4961 | 35.4331 | 440 | 640 | 0.0173 | 0.0252 | 640 | 840 | 0.0252 | 0.0331 | 840 | 1070 | 0.0331 | 0.0421 | 1070 | 1370 | 0.0421 | 0.0539 | 1370 | 1690 | 0.0539 | 0.0665 |
| 900 | 1000 | 35.4331 | 39.3701 | 490 | 710 | 0.0193 | 0.0280 | 710 | 930 | 0.0280 | 0.0366 | 930 | 1190 | 0.0366 | 0.0469 | 1190 | 1520 | 0.0469 | 0.0598 | 1520 | 1860 | 0.0598 | 0.0732 |
| 1000 | 1120 | 39.3701 | 44.0945 | 530 | 770 | 0.0209 | 0.0303 | 770 | 1030 | 0.0303 | 0.0406 | 1030 | 1300 | 0.0406 | 0.0512 | 1300 | 1670 | 0.0512 | 0.0657 | 1670 | 2050 | 0.0657 | 0.0807 |
| 1120 | 1250 | 44.0945 | 49.2126 | 570 | 830 | 0.0224 | 0.0327 | 830 | 1120 | 0.0327 | 0.0441 | 1120 | 1420 | 0.0441 | 0.0559 | 1420 | 1830 | 0.0559 | 0.0720 | 1830 | 2250 | 0.0720 | 0.0886 |



Spherical roller bearings

d 20 - 90 mm

d 0.787 - 3.543 in



| Principal dimensions | | | | | | Basic load ratings | | Fatigue load limit P _U | Speed ratings | | Mass kg | Designations | |
|----------------------|-----|------|-------|-------|-------|--------------------|--------------------------|--------------------------------------|-------------------------|-------------------|------------|----------------------------------|-------------------|
| d | D | B | d | D | B | dynamic C | static C ₀ | | Refer- ence speed | Limiting speed | | Bearing with cylindrical bore | tapered bore |
| mm | | | in | | | kN | | kN | r/min | | – | | |
| 20 | 52 | 18 | 0.787 | 2.047 | 0.709 | 49 | 44 | 4.75 | 13 000 | 17 000 | 0.28 | * 22205/20 E | – |
| 25 | 52 | 18 | 0.984 | 2.047 | 0.709 | 49 | 44 | 4.75 | 13 000 | 17 000 | 0.26 | * 22205 E | * 22205 EK |
| | 62 | 17 | | 2.441 | 0.669 | 41.4 | 41.5 | 4.55 | 8 500 | 12 000 | 0.28 | 21305 CC | – |
| 30 | 62 | 20 | 1.181 | 2.441 | 0.787 | 64 | 60 | 6.4 | 10 000 | 14 000 | 0.29 | * 22206 E | * 22206 EK |
| | 72 | 19 | | 2.835 | 0.748 | 55.2 | 61 | 6.8 | 7 500 | 10 000 | 0.41 | 21306 CC | 21306 CCK |
| 35 | 72 | 23 | 1.378 | 2.835 | 0.906 | 86.5 | 85 | 9.3 | 9 000 | 12 000 | 0.45 | * 22207 E | * 22207 EK |
| | 80 | 21 | | 3.150 | 0.827 | 65.6 | 72 | 8.15 | 6 700 | 9 500 | 0.55 | 21307 CC | 21307 CCK |
| 40 | 80 | 23 | 1.575 | 3.150 | 0.906 | 96.5 | 90 | 9.8 | 8 000 | 11 000 | 0.53 | * 22208 E | * 22208 EK |
| | 90 | 23 | | 3.543 | 0.906 | 104 | 108 | 11.8 | 7 000 | 9 500 | 0.75 | * 21308 E | * 21308 EK |
| | 90 | 33 | | 3.543 | 1.299 | 150 | 140 | 15 | 6 000 | 8 000 | 1.05 | * 22308 E | * 22308 EK |
| 45 | 85 | 23 | 1.772 | 3.346 | 0.906 | 102 | 98 | 10.8 | 7 500 | 10 000 | 0.58 | * 22209 E | * 22209 EK |
| | 100 | 25 | | 3.937 | 0.984 | 125 | 127 | 13.7 | 6 300 | 8 500 | 0.99 | * 21309 E | * 21309 EK |
| | 100 | 36 | | 3.937 | 1.417 | 183 | 183 | 19.6 | 5 300 | 7 000 | 1.4 | * 22309 E | * 22309 EK |
| 50 | 90 | 23 | 1.969 | 3.543 | 0.906 | 104 | 108 | 11.8 | 7 000 | 9 500 | 0.63 | * 22210 E | * 22210 EK |
| | 110 | 27 | | 4.331 | 1.063 | 156 | 166 | 18.6 | 5 600 | 7 500 | 1.35 | * 21310 E | * 21310 EK |
| | 110 | 40 | | 4.331 | 1.575 | 220 | 224 | 24 | 4 800 | 6 300 | 1.9 | * 22310 E | * 22310 EK |
| 55 | 100 | 25 | 2.165 | 3.937 | 0.984 | 125 | 127 | 13.7 | 6 300 | 8 500 | 0.84 | * 22211 E | * 22211 EK |
| | 120 | 29 | | 4.724 | 1.142 | 156 | 166 | 18.6 | 5 600 | 7 500 | 1.7 | * 21311 E | * 21311 EK |
| | 120 | 43 | | 4.724 | 1.693 | 270 | 280 | 30 | 4 300 | 5 600 | 2.45 | * 22311 E | * 22311 EK |
| 60 | 110 | 28 | 2.362 | 4.331 | 1.102 | 156 | 166 | 18.6 | 5 600 | 7 500 | 1.15 | * 22212 E | * 22212 EK |
| | 130 | 31 | | 5.118 | 1.220 | 212 | 240 | 26.5 | 4 800 | 6 300 | 2.1 | * 21312 E | * 21312 EK |
| | 130 | 46 | | 5.118 | 1.811 | 310 | 335 | 36.5 | 4 000 | 5 300 | 3.1 | * 22312 E | * 22312 EK |
| 65 | 100 | 35 | 2.559 | 3.394 | 1.378 | 132 | 173 | 20.4 | 4 300 | 6 300 | 0.95 | * 24013 CC/W33 | * 24013 CCK30/W33 |
| | 120 | 31 | | 4.724 | 1.220 | 193 | 216 | 24 | 5 000 | 7 000 | 1.55 | * 22213 E | * 22213 EK |
| | 140 | 33 | | 5.512 | 1.299 | 236 | 270 | 29 | 4 300 | 6 000 | 2.55 | * 21313 E | * 21313 EK |
| | 140 | 48 | | 5.512 | 1.890 | 340 | 360 | 38 | 3 800 | 5 000 | 3.75 | * 22313 E | * 22313 EK |
| 70 | 125 | 31 | 2.756 | 4.921 | 1.220 | 208 | 228 | 25.5 | 5 000 | 6 700 | 1.55 | * 22214 E | * 22214 EK |
| | 150 | 35 | | 5.906 | 1.378 | 285 | 325 | 34.5 | 4 000 | 5 600 | 3.1 | * 21314 E | * 21314 EK |
| | 150 | 51 | | 5.906 | 2.008 | 400 | 430 | 45 | 3 400 | 4 500 | 4.55 | * 22314 E | * 22314 EK |
| 75 | 115 | 40 | 2.953 | 4.528 | 1.575 | 173 | 232 | 28.5 | 3 800 | 5 300 | 1.55 | * 24015 CC/W33 | * 24015 CCK30/W33 |
| | 130 | 31 | | 5.118 | 1.220 | 212 | 240 | 26.5 | 4 800 | 6 300 | 1.7 | * 22215 E | * 22215 EK |
| | 160 | 37 | | 6.299 | 1.457 | 285 | 325 | 34.5 | 4 000 | 5 600 | 3.75 | * 21315 E | * 21315 EK |
| | 160 | 55 | | 6.299 | 2.165 | 440 | 475 | 48 | 3 200 | 4 300 | 5.55 | * 22315 E | * 22315 EK |
| 80 | 140 | 33 | 3.150 | 5.512 | 1.299 | 236 | 270 | 29 | 4 300 | 6 000 | 2.1 | * 22216 E | * 22216 EK |
| | 170 | 39 | | 6.693 | 1.535 | 325 | 375 | 39 | 3 800 | 5 300 | 4.45 | * 21316 E | * 21316 EK |
| | 170 | 58 | | 6.693 | 2.283 | 490 | 540 | 54 | 3 000 | 4 000 | 6.6 | * 22316 E | * 22316 EK |
| 85 | 150 | 36 | 3.346 | 5.906 | 1.417 | 285 | 325 | 34.5 | 4 000 | 5 600 | 2.65 | * 22217 E | * 22217 EK |
| | 180 | 41 | | 7.087 | 1.614 | 325 | 375 | 39 | 3 800 | 5 300 | 5.2 | * 21317 E | * 21317 EK |
| | 180 | 60 | | 7.087 | 2.362 | 550 | 620 | 61 | 2 800 | 3 800 | 7.65 | * 22317 E | * 22317 EK |
| 90 | 160 | 40 | 3.543 | 6.299 | 1.575 | 325 | 375 | 39 | 3 800 | 5 300 | 3.4 | * 22218 E | * 22218 EK |
| | 160 | 52.4 | | 6.299 | 2.063 | 355 | 440 | 48 | 2 800 | 3 800 | 4.65 | * 23218 CC/W33 | * 23218 CCK/W33 |
| | 190 | 43 | | 7.480 | 1.693 | 380 | 450 | 46.5 | 3 600 | 4 800 | 6.1 | * 21318 E | * 21318 EK |
| | 190 | 64 | | 7.480 | 2.520 | 610 | 695 | 67 | 2 600 | 3 600 | 9.05 | * 22318 E | * 22318 EK |

* SKF Explorer bearing

Spherical roller bearings

d 95 - 140 mm

d 3.740 - 5.512 in

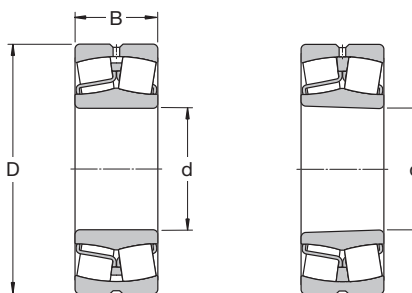
| Principal dimensions | | | | | | Basic load ratings | | Fatigue load limit P _U | Speed ratings | | Mass | Designations | |
|----------------------|-----|------|-------|--------|-------|--------------------|--------------------------|--------------------------------------|-------------------------|-------------------|----------------|----------------------------------|-------------------|
| d | D | B | d | D | B | dynamic C | static C ₀ | | Refer- ence speed | Limiting speed | | Bearing with cylindrical bore | tapered bore |
| mm | | | in | | | kN | | kN | r/min | kg | — | | |
| 95 | 170 | 43 | 3.740 | 6.693 | 1.693 | 380 | 450 | 46.5 | 3 600 | 4 800 | 4.15 | * 22219 E | * 22219 EK |
| | 200 | 45 | | 7.874 | 1.772 | 425 | 490 | 49 | 3 400 | 4 500 | 7.05 | * 21319 E | * 21319 EK |
| | 200 | 67 | | 7.874 | 2.638 | 670 | 765 | 73.5 | 2 600 | 3 400 | 10.5 | * 22319 E | * 22319 EK |
| 100 | 150 | 50 | 3.937 | 5.906 | 1.969 | 285 | 415 | 45.5 | 2 800 | 4 000 | 3.15 | * 24020 CC/W33 | * 24020 CCK30/W33 |
| | 165 | 52 | | 6.496 | 2.047 | 365 | 490 | 53 | 3 000 | 4 000 | 4.55 | * 23120 CC/W33 | * 23120 CCK/W33 |
| | 165 | 65 | | 6.496 | 2.559 | 455 | 640 | 68 | 2 400 | 3 200 | 5.65 | * 24120 CC/W33 | * 24120 CCK30/W33 |
| | 180 | 46 | | 7.087 | 1.811 | 425 | 490 | 49 | 3 400 | 4 500 | 4.9 | * 22220 E | * 22220 EK |
| | 180 | 60.3 | | 7.087 | 2.374 | 475 | 600 | 63 | 2 400 | 3 400 | 6.85 | * 23220 CC/W33 | * 23220 CCK/W33 |
| | 215 | 47 | | 8.465 | 1.850 | 425 | 490 | 49 | 3 400 | 4 500 | 8.6 | * 21320 E | * 21320 EK |
| | 215 | 73 | | 8.465 | 2.874 | 815 | 950 | 88 | 2 400 | 3 000 | 13.5 | * 22320 E | * 22320 EK |
| 110 | 170 | 45 | 4.331 | 6.693 | 1.772 | 310 | 440 | 46.5 | 3 400 | 4 300 | 3.8 | * 23022 CC/W33 | * 23022 CCK/W33 |
| | 170 | 60 | | 6.693 | 2.362 | 415 | 620 | 67 | 2 400 | 3 600 | 5 | * 24022 CC/W33 | * 24022 CCK30/W33 |
| | 180 | 56 | | 7.087 | 2.205 | 430 | 585 | 61 | 2 800 | 3 600 | 5.75 | * 23122 CC/W33 | * 23122 CCK/W33 |
| | 180 | 69 | 7.087 | 2.717 | 520 | 750 | 78 | 2 200 | 3 000 | 7.1 | * 24122 CC/W33 | * 24122 CCK30/W33 | |
| | 200 | 53 | | 7.874 | 2.087 | 560 | 640 | 63 | 3 000 | 4 000 | 7 | * 22222 E | * 22222 EK |
| | 200 | 69.8 | | 7.874 | 2.748 | 600 | 765 | 76.5 | 2 200 | 3 200 | 9.85 | * 23222 CC/W33 | * 23222 CCK/W33 |
| | 240 | 80 | | 9.449 | 3.150 | 950 | 1120 | 100 | 2 000 | 2 800 | 18.4 | * 22322 E | * 22322 EK |
| 120 | 180 | 46 | 4.724 | 7.087 | 1.811 | 355 | 510 | 53 | 3 200 | 4 000 | 4.2 | * 23024 CC/W33 | * 23024 CCK/W33 |
| | 180 | 60 | | 7.087 | 2.362 | 430 | 670 | 68 | 2 400 | 3 400 | 5.45 | * 24024 CC/W33 | * 24024 CCK30/W33 |
| | 200 | 62 | | 7.874 | 2.441 | 510 | 695 | 71 | 2 600 | 3 400 | 8 | * 23124 CC/W33 | * 23124 CCK/W33 |
| | 200 | 80 | 7.874 | 3.150 | 655 | 950 | 95 | 1 900 | 2 600 | 10.3 | * 24124 CC/W33 | * 24124 CCK30/W33 | |
| | 215 | 58 | | 8.465 | 2.283 | 630 | 765 | 73.5 | 2 800 | 3 800 | 8.7 | * 22224 E | * 22224 EK |
| | 215 | 76 | | 8.465 | 2.992 | 695 | 930 | 93 | 2 000 | 2 800 | 12 | * 23224 CC/W33 | * 23224 CCK/W33 |
| | 260 | 86 | | 10.236 | 3.386 | 965 | 1120 | 100 | 2 000 | 2 600 | 23 | * 22324 CC/W33 | * 22324 CCK/W33 |
| 130 | 200 | 52 | 5.118 | 7.874 | 2.047 | 430 | 610 | 62 | 2 800 | 3 600 | 6 | * 23026 CC/W33 | * 23026 CCK/W33 |
| | 200 | 69 | | 7.874 | 2.717 | 540 | 815 | 81.5 | 2 000 | 3 000 | 8.05 | * 24026 CC/W33 | * 24026 CCK30/W33 |
| | 210 | 64 | | 8.268 | 2.520 | 560 | 780 | 78 | 2 400 | 3 200 | 8.8 | * 23126 CC/W33 | * 23126 CCK/W33 |
| | 210 | 80 | 8.268 | 3.150 | 680 | 1000 | 100 | 1 800 | 2 400 | 11 | * 24126 CC/W33 | * 24126 CCK30/W33 | |
| | 230 | 64 | | 9.055 | 2.520 | 735 | 930 | 88 | 2 600 | 3 600 | 11 | * 22226 E | * 22226 EK |
| | 230 | 80 | | 9.055 | 3.150 | 780 | 1060 | 104 | 1 900 | 2 600 | 14.5 | * 23226 CC/W33 | * 23226 CCK/W33 |
| | 280 | 93 | | 11.024 | 3.661 | 1 120 | 1 320 | 114 | 1 800 | 2 400 | 29 | * 22326 CC/W33 | * 22326 CCK/W33 |
| 140 | 210 | 53 | 5.512 | 8.268 | 2.087 | 465 | 680 | 68 | 2 600 | 3 400 | 6.55 | * 23028 CC/W33 | * 23028 CCK/W33 |
| | 210 | 69 | | 8.268 | 2.717 | 570 | 900 | 88 | 2 000 | 2 800 | 8.55 | * 24028 CC/W33 | * 24028 CCK30/W33 |
| | 225 | 68 | | 8.858 | 2.677 | 630 | 900 | 88 | 2 200 | 2 800 | 10.5 | * 23128 CC/W33 | * 23128 CCK/W33 |
| | 225 | 85 | 8.858 | 3.346 | 765 | 1 160 | 112 | 1 700 | 2 400 | 13.5 | * 24128 CC/W33 | * 24128 CCK30/W33 | |
| | 250 | 68 | | 9.843 | 2.677 | 710 | 900 | 86.5 | 2 400 | 3 200 | 14 | * 22228 CC/W33 | * 22228 CCK/W33 |
| | 250 | 88 | | 9.843 | 3.465 | 915 | 1 250 | 120 | 1 700 | 2 400 | 19 | * 23228 CC/W33 | * 23228 CCK/W33 |
| | 300 | 102 | | 11.811 | 4.016 | 1 290 | 1 560 | 132 | 1 700 | 2 200 | 36.5 | * 22328 CC/W33 | * 22328 CCK/W33 |

* SKF Explorer bearing

Spherical roller bearings

d 150 - 200 mm

d 5.906 - 7.874 in



| Principal dimensions | | | | | | Basic load ratings | | Fatigue load limit P _U | Speed ratings | | Mass kg | Designations | | |
|----------------------|-----|-----|--------|--------|--------|--------------------|--------------------------|--------------------------------------|-------------------------|-------------------|---------------|----------------------------------|------------------|------------------|
| d | D | B | d | D | B | dynamic C | static C ₀ | | Refer- ence speed | Limiting speed | | Bearing with cylindrical bore | tapered bore | |
| mm | | | in | | | kN | | kN | r/min | | — | | | |
| 150 | 225 | 56 | 5.906 | 8.858 | 2.205 | 510 | 750 | 73.5 | 2 400 | 3 200 | 7.95 | *23030 CC/W33 | *23030 CCK/W33 | |
| | 225 | 75 | | 8.858 | 2.953 | 655 | 1 040 | 100 | 1 800 | 2 600 | 10.5 | *24030 CC/W33 | *24030 CCK30/W33 | |
| | 250 | 80 | | 9.843 | 3.150 | 830 | 1 200 | 114 | 2 000 | 2 600 | 16 | *23130 CC/W33 | *23130 CCK/W33 | |
| | 250 | 100 | | 9.843 | 3.937 | 1 020 | 1 530 | 146 | 1 500 | 2 200 | 20 | *24130 CC/W33 | *24130 CCK30/W33 | |
| | 270 | 73 | | 10.630 | 2.874 | 850 | 1 080 | 102 | 2 200 | 3 000 | 18 | *22230 CC/W33 | *22230 CCK/W33 | |
| | 270 | 96 | | 10.630 | 3.780 | 1 080 | 1 460 | 137 | 1 600 | 2 200 | 24.5 | *23230 CC/W33 | *23230 CCK/W33 | |
| | 320 | 108 | | 12.598 | 4.252 | 1 460 | 1 760 | 146 | 1 600 | 2 000 | 43.5 | *22330 CC/W33 | *22330 CCK/W33 | |
| | 160 | 240 | 60 | 6.299 | 9.449 | 2.362 | 585 | 880 | 83 | 2 400 | 3 000 | 9.7 | *23032 CC/W33 | *23032 CCK/W33 |
| | | 240 | 80 | | 9.449 | 3.150 | 750 | 1 200 | 114 | 1 700 | 2 400 | 13 | *24032 CC/W33 | *24032 CCK30/W33 |
| | | 270 | 86 | | 10.630 | 3.386 | 980 | 1 370 | 129 | 1 900 | 2 400 | 20.5 | *23132 CC/W33 | *23132 CCK/W33 |
| 270 | | 109 | 10.630 | | 4.291 | 1 180 | 1 760 | 163 | 1 400 | 1 900 | 25 | *24132 CC/W33 | *24132 CCK30/W33 | |
| 290 | | 80 | | 11.417 | 3.150 | 1 000 | 1 290 | 118 | 2 000 | 2 800 | 22.5 | *22232 CC/W33 | *22232 CCK/W33 | |
| 290 | | 104 | | 11.417 | 4.094 | 1 220 | 1 660 | 153 | 1 500 | 2 200 | 31 | *23232 CC/W33 | *23232 CCK/W33 | |
| 340 | | 114 | | 13.386 | 4.488 | 1 600 | 1 960 | 160 | 1 500 | 1 900 | 52 | *22332 CC/W33 | *22332 CCK/W33 | |
| 170 | 260 | 67 | 6.693 | 10.236 | 2.638 | 710 | 1 060 | 100 | 2 200 | 2 800 | 13 | *23034 CC/W33 | *23034 CCK/W33 | |
| | 260 | 90 | | 10.236 | 3.543 | 930 | 1 460 | 137 | 1 600 | 2 400 | 17.5 | *24034 CC/W33 | *24034 CCK30/W33 | |
| | 280 | 88 | | 11.024 | 3.465 | 1 040 | 1 500 | 137 | 1 800 | 2 400 | 22 | *23134 CC/W33 | *23134 CCK/W33 | |
| | 280 | 109 | | 11.024 | 4.291 | 1 220 | 1 860 | 170 | 1 300 | 1 900 | 27.5 | *24134 CC/W33 | *24134 CCK30/W33 | |
| | 310 | 86 | | 12.205 | 3.386 | 1 120 | 1 460 | 132 | 1 900 | 2 600 | 28.5 | *22234 CC/W33 | *22234 CCK/W33 | |
| | 310 | 110 | | 12.205 | 4.331 | 1 400 | 1 930 | 173 | 1 400 | 2 000 | 37.5 | *23234 CC/W33 | *23234 CCK/W33 | |
| | 360 | 120 | | 14.173 | 4.724 | 1 760 | 2 160 | 176 | 1 400 | 1 800 | 61 | *22334 CC/W33 | *22334 CCK/W33 | |
| 180 | 250 | 52 | 7.087 | 9.843 | 2.047 | 431 | 830 | 76.5 | 2 200 | 2 800 | 7.9 | 23936 CC/W33 | 23936 CCK/W33 | |
| | 280 | 74 | | 11.024 | 2.913 | 830 | 1 250 | 114 | 2 000 | 2 600 | 17 | *23036 CC/W33 | *23036 CCK/W33 | |
| | 280 | 100 | | 11.024 | 3.937 | 1 080 | 1 730 | 156 | 1 500 | 2 200 | 23 | *24036 CC/W33 | *24036 CCK30/W33 | |
| | 300 | 96 | | 11.811 | 3.780 | 1 200 | 1 760 | 160 | 1 700 | 2 200 | 28 | *23136 CC/W33 | *23136 CCK/W33 | |
| | 300 | 118 | 11.811 | 4.646 | 1 400 | 2 160 | 196 | 1 300 | 1 700 | 34.5 | *24136 CC/W33 | *24136 CCK30/W33 | | |
| | 320 | 86 | | 12.598 | 3.386 | 1 180 | 1 560 | 140 | 1 800 | 2 600 | 29.5 | *22236 CC/W33 | *22236 CCK/W33 | |
| | 320 | 112 | | 12.598 | 4.409 | 1 500 | 2 120 | 186 | 1 300 | 1 900 | 39.5 | *23236 CC/W33 | *23236 CCK/W33 | |
| | 380 | 126 | | 14.961 | 4.961 | 2 000 | 2 450 | 193 | 1 300 | 1 700 | 71.5 | *22336 CC/W33 | *22336 CCK/W33 | |
| 190 | 260 | 52 | 7.480 | 10.236 | 2.047 | 414 | 800 | 76.5 | 2 200 | 2 600 | 8.3 | 23938 CC/W33 | 23938 CCK/W33 | |
| | 290 | 75 | | 11.417 | 2.953 | 865 | 1 340 | 122 | 1 900 | 2 400 | 18 | *23038 CC/W33 | *23038 CCK/W33 | |
| | 290 | 100 | | 11.417 | 3.937 | 1 120 | 1 800 | 163 | 1 400 | 2 000 | 24.5 | *24038 CC/W33 | *24038 CCK30/W33 | |
| | 320 | 104 | | 12.598 | 4.094 | 1 370 | 2 080 | 183 | 1 500 | 2 000 | 35 | *23138 CC/W33 | *23138 CCK/W33 | |
| | 320 | 128 | 12.598 | 5.039 | 1 600 | 2 500 | 212 | 1 200 | 1 600 | 43 | *24138 CC/W33 | *24138 CCK30/W33 | | |
| | 340 | 92 | | 13.386 | 3.622 | 1 270 | 1 700 | 150 | 1 700 | 2 400 | 36.5 | *22238 CC/W33 | *22238 CCK/W33 | |
| | 340 | 120 | | 13.386 | 4.724 | 1 660 | 2 400 | 208 | 1 300 | 1 800 | 48 | *23238 CC/W33 | *23238 CCK/W33 | |
| | 400 | 132 | | 15.748 | 5.197 | 2 120 | 2 650 | 208 | 1 200 | 1 600 | 82.5 | *22338 CC/W33 | *22338 CCK/W33 | |
| 200 | 280 | 60 | 7.874 | 11.024 | 2.362 | 546 | 1 040 | 93 | 2 000 | 2 400 | 11.5 | 23940 CC/W33 | 23940 CCK/W33 | |
| | 310 | 82 | | 12.205 | 3.228 | 1 000 | 1 530 | 137 | 1 800 | 2 200 | 23.3 | *23040 CC/W33 | *23040 CCK/W33 | |
| | 310 | 109 | | 12.205 | 4.291 | 1 290 | 2 120 | 186 | 1 300 | 1 900 | 31 | *24040 CC/W33 | *24040 CCK30/W33 | |
| | 340 | 112 | | 13.386 | 4.409 | 1 600 | 2 360 | 204 | 1 500 | 1 900 | 43 | *23140 CC/W33 | *23140 CCK/W33 | |
| | 340 | 140 | 13.386 | 5.512 | 1 800 | 2 800 | 232 | 1 100 | 1 500 | 53.5 | *24140 CC/W33 | *24140 CCK30/W33 | | |
| | 360 | 98 | | 14.173 | 3.858 | 1 460 | 1 930 | 166 | 1 600 | 2 200 | 43.5 | *22240 CC/W33 | *22240 CCK/W33 | |
| | 360 | 128 | | 14.173 | 5.039 | 1 860 | 2 700 | 228 | 1 200 | 1 700 | 58 | *23240 CC/W33 | *23240 CCK/W33 | |
| | 420 | 138 | | 16.535 | 5.433 | 2 320 | 2 900 | 224 | 1 200 | 1 500 | 95 | *22340 CC/W33 | *22340 CCK/W33 | |

* SKF Explorer bearing

Spherical roller bearings

d 220 - 300 mm

d 8.661 - 11.811 in

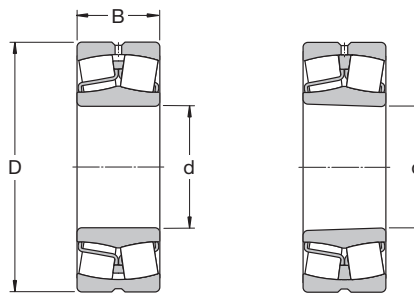
| Principal dimensions | | | | | | Basic load ratings | | Fatigue load limit P _U | Speed ratings | | Mass | Designations | | | |
|----------------------|------------|-----|--------------|---------------|---------------|--------------------|--------------------------|--------------------------------------|-------------------------|-------------------|-------|----------------------------------|--------------------------|-----------------------|------------------------|
| d | D | B | d | D | B | dynamic C | static C ₀ | | Refer- ence speed | Limiting speed | | Bearing with cylindrical bore | tapered bore | | |
| mm | | | in | | | kN | | kN | r/min | | kg | — | | | |
| 220 | 300 | 60 | 8.661 | 11.811 | 2.362 | 546 | 1 080 | 93 | 1 900 | 2 200 | 12.5 | 23944 CC/W33 | 23944 CCK/W33 | | |
| | 340 | 90 | | 13.386 | 3.543 | 1 220 | 1 860 | 163 | 1 600 | 2 000 | 30.5 | * 23044 CC/W33 | * 23044 CCK/W33 | | |
| | 340 | 118 | | 13.386 | 4.646 | 1 560 | 2 600 | 212 | 1 200 | 1 700 | 40 | * 24044 CC/W33 | * 24044 CCK30/W33 | | |
| | 370 | 120 | | 14.567 | 4.724 | 1 800 | 2 750 | 232 | 1 300 | 1 700 | 53.5 | * 23144 CC/W33 | * 23144 CCK/W33 | | |
| | 370 | 150 | | 14.567 | 5.906 | 2 120 | 3 350 | 285 | 1 000 | 1 400 | 67 | * 24144 CC/W33 | * 24144 CCK30/W33 | | |
| | 400 | 108 | | 15.748 | 4.252 | 1 760 | 2 360 | 196 | 1 500 | 2 000 | 60.5 | * 22244 CC/W33 | * 22244 CCK/W33 | | |
| | 400 | 144 | | 15.748 | 5.669 | 2 360 | 3 450 | 285 | 1 100 | 1 500 | 81.5 | * 23244 CC/W33 | * 23244 CCK/W33 | | |
| | 460 | 145 | | 18.110 | 5.709 | 2 700 | 3 450 | 260 | 1 000 | 1 400 | 120 | * 22344 CC/W33 | * 22344 CCK/W33 | | |
| | 240 | 320 | | 60 | 9.449 | 12.598 | 2.362 | 564 | 1 160 | 98 | 1 700 | 2 000 | 13.5 | 23948 CC/W33 | 23948 CCK/W33 |
| | | 360 | | 92 | | 14.173 | 3.622 | 1 290 | 2 080 | 176 | 1 500 | 1 900 | 33.5 | * 23048 CC/W33 | * 23048 CCK/W33 |
| 360 | | 118 | 14.173 | 4.646 | | 1 600 | 2 700 | 228 | 1 100 | 1 600 | 43 | * 24048 CC/W33 | * 24048 CCK30/W33 | | |
| 400 | | 128 | 15.748 | 5.039 | | 2 080 | 3 200 | 255 | 1 200 | 1 600 | 66.5 | * 23148 CC/W33 | * 23148 CCK/W33 | | |
| 400 | | 160 | 15.748 | 6.299 | | 2 400 | 3 900 | 320 | 900 | 1 300 | 83 | * 24148 CC/W33 | * 24148 CCK30/W33 | | |
| 440 | | 120 | 17.323 | 4.724 | | 2 200 | 3 000 | 245 | 1 300 | 1 800 | 83 | * 22248 CC/W33 | * 22248 CCK/W33 | | |
| 440 | | 160 | 17.323 | 6.299 | | 2 900 | 4 300 | 345 | 950 | 1 300 | 110 | * 23248 CC/W33 | * 23248 CCK/W33 | | |
| 500 | | 155 | 19.685 | 6.102 | | 3 100 | 4 000 | 290 | 950 | 1 300 | 155 | * 22348 CC/W33 | * 22348 CCK/W33 | | |
| 260 | | 360 | 75 | 10.236 | | 14.173 | 2.953 | 880 | 1 800 | 156 | 1 500 | 1 900 | 23.5 | 23952 CC/W33 | 23952 CCK/W33 |
| | | 400 | 104 | | | 15.748 | 4.094 | 1 600 | 2 550 | 212 | 1 300 | 1 700 | 48.5 | * 23052 CC/W33 | * 23052 CCK/W33 |
| | 400 | 140 | 15.748 | | 5.512 | 2 040 | 3 450 | 285 | 1 000 | 1 400 | 65.5 | * 24052 CC/W33 | * 24052 CCK30/W33 | | |
| | 440 | 144 | 17.323 | | 5.669 | 2 550 | 3 900 | 290 | 1 100 | 1 400 | 90.5 | * 23152 CC/W33 | * 23152 CCK/W33 | | |
| | 440 | 180 | 17.323 | | 7.087 | 3 000 | 4 800 | 380 | 850 | 1 200 | 110 | * 24152 CC/W33 | * 24152 CCK30/W33 | | |
| | 480 | 130 | 18.898 | | 5.118 | 2 650 | 3 550 | 285 | 1 200 | 1 600 | 110 | * 22252 CC/W33 | * 22252 CCK/W33 | | |
| | 480 | 174 | 18.898 | | 6.850 | 3 250 | 4 750 | 360 | 850 | 1 200 | 140 | * 23252 CC/W33 | * 23252 CCK/W33 | | |
| | 540 | 165 | 21.260 | | 6.496 | 3 550 | 4 550 | 325 | 850 | 1 100 | 190 | * 22352 CC/W33 | * 22352 CCK/W33 | | |
| | 280 | 380 | 75 | | 11.024 | 14.961 | 2.953 | 845 | 1 760 | 143 | 1 400 | 1 700 | 25 | 23956 CC/W33 | 23956 CCK/W33 |
| | | 420 | 106 | | | 16.535 | 4.173 | 1 730 | 2 850 | 224 | 1 300 | 1 600 | 52.5 | * 23056 CC/W33 | * 23056 CCK/W33 |
| 420 | | 140 | 16.535 | 5.512 | | 2 160 | 3 800 | 285 | 950 | 1 400 | 69.5 | * 24056 CC/W33 | * 24056 CCK30/W33 | | |
| 460 | | 146 | 18.110 | 5.748 | | 2 650 | 4 250 | 335 | 1 000 | 1 300 | 97 | * 23156 CC/W33 | * 23156 CCK/W33 | | |
| 460 | | 180 | 18.110 | 7.087 | | 3 100 | 5 100 | 415 | 800 | 1 100 | 120 | * 24156 CC/W33 | * 24156 CCK30/W33 | | |
| 500 | | 130 | 19.685 | 5.118 | | 2 700 | 3 750 | 300 | 1 100 | 1 500 | 115 | * 22256 CC/W33 | * 22256 CCK/W33 | | |
| 500 | | 176 | 19.685 | 6.929 | | 3 250 | 4 900 | 365 | 800 | 1 100 | 150 | * 23256 CC/W33 | * 23256 CCK/W33 | | |
| 580 | | 175 | 22.835 | 6.890 | | 4 000 | 5 200 | 365 | 800 | 1 100 | 235 | * 22356 CC/W33 | * 22356 CCK/W33 | | |
| 300 | | 380 | 60 | 11.811 | | 14.961 | 2.362 | 656 | 1 600 | 137 | 1 400 | 1 700 | 16.5 | 23860 CAMA | 23860 CAKMA |
| | | 420 | 90 | | | 16.535 | 3.543 | 1 200 | 2 500 | 200 | 1 300 | 1 600 | 39.5 | 23960 CC/W33 | 23960 CCK/W33 |
| | 460 | 118 | 18.110 | | 4.646 | 2 120 | 3 450 | 265 | 1 200 | 1 500 | 71.5 | * 23060 CC/W33 | * 23060 CCK/W33 | | |
| | 460 | 160 | 18.110 | | 6.299 | 2 700 | 4 750 | 355 | 850 | 1 200 | 97 | * 24060 CC/W33 | * 24060 CCK30/W33 | | |
| | 500 | 160 | 19.685 | | 6.299 | 3 200 | 5 100 | 380 | 950 | 1 200 | 125 | * 23160 CC/W33 | * 23160 CCK/W33 | | |
| | 500 | 200 | 19.685 | | 7.874 | 3 750 | 6 300 | 465 | 700 | 1 000 | 160 | * 24160 CC/W33 | * 24160 CCK30/W33 | | |
| | 540 | 140 | 21.260 | | 5.512 | 3 150 | 4 250 | 325 | 1 000 | 1 400 | 145 | * 22260 CC/W33 | * 22260 CCK/W33 | | |
| | 540 | 192 | 21.260 | | 7.559 | 3 900 | 5 850 | 425 | 750 | 1 000 | 190 | * 23260 CC/W33 | * 23260 CCK/W33 | | |

* SKF Explorer bearing

Spherical roller bearings

d 320 - 420 mm

d 12.598 - 16.535 in



| Principal dimensions | | | | | | Basic load ratings | | Fatigue load limit P _u | Speed ratings | | Mass | Designations | | |
|----------------------|-----|-----|--------|--------|--------|--------------------|--------------------------|--------------------------------------|-------------------------|-------------------|-------|----------------------------------|---------------------|-------------------|
| d | D | B | d | D | B | dynamic C | static C ₀ | | Refer- ence speed | Limiting speed | | Bearing with cylindrical bore | tapered bore | |
| mm | | | in | | | kN | | kN | r/min | kg | — | | | |
| 320 | 440 | 90 | 12.598 | 17.323 | 3.543 | 1 430 | 2 700 | 212 | 1 400 | 1 500 | 42 | * 23964 CC/W33 | * 23964 CCK/W33 | |
| | 480 | 121 | | 18.898 | 4.764 | 2 240 | 3 800 | 285 | 1 100 | 1 400 | 78 | * 23064 CC/W33 | * 23064 CCK/W33 | |
| | 480 | 160 | | 18.898 | 6.299 | 2 850 | 5 100 | 400 | 800 | 1 200 | 100 | * 24064 CC/W33 | * 24064 CCK30/W33 | |
| | 540 | 176 | | 21.260 | 6.929 | 3 750 | 6 000 | 440 | 850 | 1 100 | 165 | * 23164 CC/W33 | * 23164 CCK/W33 | |
| | 540 | 218 | | 21.260 | 8.583 | 4 250 | 7 100 | 510 | 670 | 900 | 210 | * 24164 CC/W33 | * 24164 CCK30/W33 | |
| | 580 | 150 | | 22.835 | 5.906 | 3 600 | 4 900 | 375 | 950 | 1 300 | 175 | * 22264 CC/W33 | * 22264 CCK/W33 | |
| | 580 | 208 | | 22.835 | 8.189 | 4 400 | 6 700 | 480 | 700 | 950 | 240 | * 23264 CC/W33 | * 23264 CCK/W33 | |
| | 340 | 460 | 90 | 13.386 | 18.110 | 3.543 | 1 460 | 2 800 | 216 | 1 300 | 1 400 | 45.5 | * 23968 CC/W33 | * 23968 CCK/W33 |
| | | 520 | 133 | | 20.472 | 5.236 | 2 700 | 4 550 | 335 | 1 000 | 1 300 | 105 | * 23068 CC/W33 | * 23068 CCK/W33 |
| | | 520 | 180 | | 20.472 | 7.087 | 3 450 | 6 200 | 475 | 750 | 1 100 | 140 | * 24068 CC/W33 | * 24068 CCK30/W33 |
| 580 | | 190 | | 22.835 | 7.480 | 4 250 | 6 800 | 480 | 800 | 1 000 | 210 | * 23168 CC/W33 | * 23168 CCK/W33 | |
| 580 | | 243 | | 22.835 | 9.567 | 5 300 | 8 650 | 630 | 600 | 850 | 280 | * 24168 ECCJ/W33 | * 24168 ECCK30J/W33 | |
| 620 | | 224 | | 24.409 | 8.819 | 5 100 | 7 800 | 550 | 560 | 800 | 295 | * 23268 CA/W33 | * 23268 CAK/W33 | |
| 360 | 480 | 90 | 14.173 | 18.898 | 3.543 | 1 400 | 2 750 | 220 | 1 200 | 1 300 | 43 | * 23972 CC/W33 | * 23972 CCK/W33 | |
| | 540 | 134 | | 21.260 | 5.276 | 2 750 | 4 800 | 345 | 950 | 1 200 | 110 | * 23072 CC/W33 | * 23072 CCK/W33 | |
| | 540 | 180 | | 21.260 | 7.087 | 3 550 | 6 550 | 490 | 700 | 1 000 | 145 | * 24072 CC/W33 | * 24072 CCK30/W33 | |
| | 600 | 192 | | 23.622 | 7.559 | 4 300 | 6 950 | 490 | 750 | 1 000 | 220 | * 23172 CC/W33 | * 23172 CCK/W33 | |
| | 600 | 243 | | 23.622 | 9.567 | 5 600 | 9 300 | 670 | 560 | 800 | 270 | * 24172 ECCJ/W33 | * 24172 ECCK30J/W33 | |
| | 650 | 170 | | 25.591 | 6.693 | 4 300 | 6 200 | 440 | 630 | 850 | 255 | * 22272 CA/W33 | * 22272 CAK/W33 | |
| | 650 | 232 | | 25.591 | 9.134 | 5 400 | 8 300 | 570 | 530 | 750 | 335 | * 23272 CA/W33 | * 23272 CAK/W33 | |
| | 380 | 520 | 106 | 14.961 | 20.472 | 4.173 | 1 960 | 3 800 | 285 | 1 100 | 1 200 | 69 | * 23976 CC/W33 | * 23976 CCK/W33 |
| 560 | | 135 | 22.047 | | 5.315 | 2 900 | 5 000 | 360 | 900 | 1 200 | 115 | * 23076 CC/W33 | * 23076 CCK/W33 | |
| 560 | | 180 | 22.047 | | 7.087 | 3 600 | 6 800 | 480 | 670 | 950 | 150 | * 24076 CC/W33 | * 24076 CCK30/W33 | |
| 620 | | 194 | | 24.409 | 7.638 | 4 400 | 7 100 | 500 | 560 | 1 000 | 230 | * 23176 CA/W33 | * 23176 CAK/W33 | |
| 620 | | 243 | | 24.409 | 9.567 | 5 700 | 9 800 | 710 | 480 | 850 | 300 | * 24176 ECA/W33 | * 24176 ECAK30/W33 | |
| 680 | | 240 | | 26.772 | 9.449 | 5 850 | 9 150 | 620 | 500 | 750 | 375 | * 23276 CA/W33 | * 23276 CAK/W33 | |
| 400 | | 540 | 106 | 15.748 | 21.260 | 4.173 | 2 000 | 3 900 | 290 | 1 100 | 1 200 | 71 | * 23980 CC/W33 | * 23980 CCK/W33 |
| | 600 | 148 | 23.622 | | 5.827 | 3 250 | 5 700 | 400 | 850 | 1 100 | 150 | * 23080 CC/W33 | * 23080 CCK/W33 | |
| | 600 | 200 | 23.622 | | 7.874 | 4 300 | 8 000 | 560 | 630 | 900 | 205 | * 24080 ECCJ/W33 | * 24080 ECCK30J/W33 | |
| | 650 | 200 | | 25.591 | 7.874 | 4 650 | 7 650 | 530 | 530 | 950 | 265 | * 23180 CA/W33 | * 23180 CAK/W33 | |
| | 650 | 250 | | 25.591 | 9.843 | 6 200 | 10 600 | 735 | 430 | 800 | 340 | * 24180 ECA/W33 | * 24180 ECAK30/W33 | |
| | 720 | 256 | | 28.346 | 10.079 | 6 550 | 10 400 | 680 | 480 | 670 | 450 | * 23280 CA/W33 | * 23280 CAK/W33 | |
| | 820 | 243 | | 32.283 | 9.567 | 7 500 | 10 400 | 670 | 430 | 750 | 650 | * 22380 CA/W33 | * 22380 CAK/W33 | |
| | 420 | 560 | 106 | 16.535 | 22.047 | 4.173 | 2 040 | 4 150 | 300 | 1 000 | 1 100 | 74.5 | * 23984 CC/W33 | * 23984 CCK/W33 |
| 620 | | 150 | 24.409 | | 5.906 | 3 400 | 6 000 | 415 | 600 | 1 100 | 155 | * 23084 CA/W33 | * 23084 CAK/W33 | |
| 620 | | 200 | 24.409 | | 7.874 | 4 400 | 8 300 | 585 | 530 | 900 | 210 | * 24084 ECA/W33 | * 24084 ECAK30/W33 | |
| 700 | | 224 | | 27.559 | 8.819 | 5 600 | 9 300 | 620 | 480 | 900 | 350 | * 23184 CJ/W33 | * 23184 CKJ/W33 | |
| 700 | | 280 | | 27.559 | 11.024 | 7 350 | 12 600 | 850 | 400 | 700 | 445 | * 24184 ECA/W33 | * 24184 ECAK30/W33 | |
| 760 | | 272 | | 29.921 | 10.709 | 7 350 | 11 600 | 765 | 450 | 630 | 535 | * 23284 CA/W33 | * 23284 CAK/W33 | |

* SKF Explorer bearing

Spherical roller bearings

d 440 - 560 mm

d 17.323 - 22.047 in

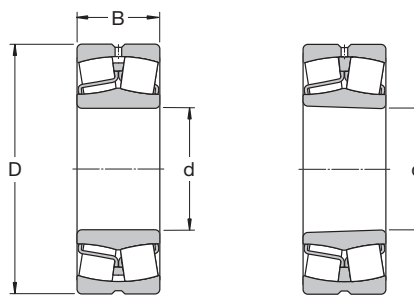
| Principal dimensions | | | | | | Basic load ratings | | Fatigue load limit P _U | Speed ratings | | Mass | Designations | |
|----------------------|------------|-----|---------------|---------------|--------|--------------------|--------------------------|--------------------------------------|-------------------------|-------------------|-------|----------------------------------|----------------------|
| d | D | B | d | D | B | dynamic C | static C ₀ | | Refer- ence speed | Limiting speed | | Bearing with cylindrical bore | tapered bore |
| mm | | | in | | | kN | | kN | r/min | | kg | — | |
| 440 | 600 | 118 | 17.323 | 23.622 | 4.646 | 2 450 | 4 900 | 345 | 950 | 1 000 | 99.5 | * 23988 CA/W33 | * 23988 CCK/W33 |
| | 650 | 157 | | 25.591 | 6.181 | 3 650 | 6 550 | 450 | 560 | 1 000 | 180 | * 23088 CA/W33 | * 23088 CAK/W33 |
| | 650 | 212 | | 25.591 | 8.346 | 4 800 | 9 150 | 630 | 500 | 850 | 245 | * 24088 ECA/W33 | * 24088 ECAK30/W33 |
| | 720 | 226 | | 28.346 | 8.898 | 6 000 | 10 000 | 670 | 450 | 850 | 360 | * 23188 CA/W33 | * 23188 CAK/W33 |
| | 720 | 280 | | 28.346 | 11.024 | 7 500 | 13 200 | 900 | 400 | 700 | 460 | * 24188 ECA/W33 | * 24188 ECAK30/W33 |
| | 790 | 280 | | 31.102 | 11.024 | 7 800 | 12 500 | 800 | 430 | 600 | 590 | * 23288 CA/W33 | * 23288 CAK/W33 |
| | 460 | 580 | 118 | 18.110 | 22.835 | 4.646 | 1 790 | 4 900 | 345 | 560 | 1 100 | 75.5 | 24892 CAMA/W20 |
| 620 | | 118 | 24.409 | | 4.646 | 2 500 | 5 000 | 355 | 600 | 1 000 | 105 | * 23992 CA/W33 | * 23992 CAK/W33 |
| 680 | | 163 | 26.772 | | 6.417 | 3 900 | 6 950 | 465 | 560 | 950 | 205 | * 23092 CA/W33 | * 23092 CAK/W33 |
| 680 | | 218 | | 26.772 | 8.583 | 5 200 | 10 000 | 670 | 480 | 800 | 275 | * 24092 ECA/W33 | * 24092 ECAK30/W33 |
| 760 | | 240 | | 29.921 | 9.449 | 6 400 | 10 800 | 680 | 430 | 800 | 440 | * 23192 CA/W33 | * 23192 CAK/W33 |
| 760 | | 300 | | 29.921 | 11.811 | 8 300 | 14 600 | 1 000 | 360 | 670 | 560 | * 24192 ECA/W33 | * 24192 ECAK30/W33 |
| 830 | | 296 | | 32.677 | 11.654 | 8 500 | 13 700 | 880 | 400 | 560 | 695 | * 23292 CA/W33 | * 23292 CAK/W33 |
| 480 | 600 | 90 | 18.898 | 23.622 | 3.543 | 1 440 | 3 750 | 280 | 530 | 1 100 | 61 | 23896 CAMA/W20 | 23896 CAKMA/W20 |
| | 650 | 128 | | 25.591 | 5.039 | 2 900 | 5 700 | 405 | 560 | 1 000 | 125 | * 23996 CA/W33 | * 23996 CAK/W33 |
| | 700 | 165 | | 27.559 | 6.496 | 3 900 | 6 800 | 450 | 530 | 950 | 215 | * 23096 CA/W33 | * 23096 CAK/W33 |
| | 700 | 218 | | 27.559 | 8.583 | 5 300 | 10 400 | 695 | 450 | 750 | 285 | * 24096 ECA/W33 | * 24096 ECAK30/W33 |
| | 790 | 248 | | 31.102 | 9.764 | 6 950 | 12 000 | 780 | 400 | 750 | 485 | * 23196 CA/W33 | * 23196 CAK/W33 |
| | 790 | 308 | | 31.102 | 12.126 | 9 000 | 15 600 | 1 040 | 340 | 630 | 605 | * 24196 ECA/W33 | * 24196 ECAK30/W33 |
| | 870 | 310 | | 34.252 | 12.205 | 9 300 | 15 000 | 950 | 380 | 530 | 800 | * 23296 CA/W33 | * 23296 CAK/W33 |
| 500 | 620 | 90 | 19.685 | 24.409 | 3.543 | 1 480 | 4 000 | 290 | 530 | 1 000 | 62 | 238/500 CAMA/W20 | 238/500 CAKMA/W20 |
| | 670 | 128 | | 26.378 | 5.039 | 2 900 | 6 000 | 415 | 530 | 950 | 130 | * 239/500 CA/W33 | * 239/500 CAK/W33 |
| | 720 | 167 | | 28.346 | 6.575 | 4 150 | 7 800 | 510 | 500 | 900 | 225 | * 230/500 CA/W33 | * 230/500 CAK/W33 |
| | 720 | 218 | | 28.346 | 8.583 | 5 500 | 11 000 | 735 | 430 | 700 | 295 | * 240/500 ECA/W33 | * 240/500 ECAK30/W33 |
| | 830 | 264 | | 32.677 | 10.394 | 7 650 | 12 900 | 830 | 380 | 700 | 580 | * 231/500 CA/W33 | * 231/500 CAK/W33 |
| | 830 | 325 | | 32.677 | 12.795 | 9 800 | 17 000 | 1 120 | 320 | 600 | 700 | * 241/500 ECA/W33 | * 241/500 ECAK30/W33 |
| | 920 | 336 | | 36.220 | 13.228 | 10 600 | 17 300 | 1 060 | 360 | 500 | 985 | * 232/500 CA/W33 | * 232/500 CAK/W33 |
| 530 | 650 | 118 | 20.866 | 25.591 | 4.646 | 1 840 | 5 300 | 380 | 480 | 950 | 86 | 248/530 CAMA/W20 | 248/530 CAK30MA/W20 |
| | 710 | 136 | | 27.953 | 5.354 | 3 200 | 6 700 | 480 | 500 | 900 | 155 | * 239/530 CA/W33 | * 239/530 CAK/W33 |
| | 780 | 185 | | 30.709 | 7.283 | 5 100 | 9 300 | 630 | 450 | 800 | 310 | * 230/530 CA/W33 | * 230/530 CAK/W33 |
| | 780 | 250 | | 30.709 | 9.843 | 6 700 | 13 200 | 830 | 400 | 670 | 410 | * 240/530 ECA/W33 | * 240/530 ECAK30/W33 |
| | 870 | 272 | | 34.252 | 10.709 | 8 150 | 14 000 | 915 | 360 | 670 | 645 | * 231/530 CA/W33 | * 231/530 CAK/W33 |
| | 870 | 335 | | 34.252 | 13.189 | 10 600 | 19 000 | 1 220 | 300 | 560 | 830 | * 241/530 ECA/W33 | * 241/530 ECAK30/W33 |
| | 980 | 355 | | 38.583 | 13.976 | 11 100 | 20 400 | 1 220 | 300 | 480 | 1 200 | 232/530 CA/W33 | 232/530 CAK/W33 |
| 560 | 750 | 140 | 22.047 | 29.528 | 5.512 | 3 450 | 7 200 | 510 | 450 | 850 | 175 | * 239/560 CA/W33 | * 239/560 CAK/W33 |
| | 820 | 195 | | 32.283 | 7.677 | 5 600 | 10 200 | 680 | 430 | 750 | 355 | * 230/560 CA/W33 | * 230/560 CAK/W33 |
| | 820 | 258 | | 32.283 | 10.157 | 7 350 | 14 600 | 960 | 380 | 630 | 465 | * 240/560 ECA/W33 | * 240/560 ECAK30/W33 |
| | 920 | 280 | | 36.220 | 11.024 | 9 150 | 16 000 | 980 | 340 | 630 | 740 | * 231/560 CA/W33 | * 231/560 CAK/W33 |
| | 920 | 355 | | 36.220 | 13.976 | 12 000 | 21 600 | 1 340 | 280 | 500 | 985 | * 241/560 ECJ/W33 | * 241/560 ECK30J/W33 |
| | 1030 | 365 | | 40.551 | 14.370 | 11 500 | 22 000 | 1 400 | 280 | 430 | 1 350 | 232/560 CA/W33 | 232/560 CAK/W33 |

* SKF Explorer bearing

Spherical roller bearings

d 600 - 800 mm

d 23.622 - 31.496 in



| Principal dimensions | | | | | | Basic load ratings | | Fatigue load limit P _u | Speed ratings | | Mass kg | Designations | | |
|----------------------|------|------|--------|--------|--------|--------------------|--------------------------|--------------------------------------|-------------------------|-------------------|------------|----------------------------------|----------------------|----------------------|
| d | D | B | d | D | B | dynamic C | static C ₀ | | Refer- ence speed | Limiting speed | | Bearing with cylindrical bore | tapered bore | |
| mm | | | in | | | kN | | kN | r/min | | – | | | |
| 600 | 800 | 150 | 23.622 | 31.496 | 5.906 | 3 900 | 8 300 | 585 | 430 | 750 | 220 | * 239/600 CA/W33 | * 239/600 CAK/W33 | |
| | 870 | 200 | | 34.252 | 7.874 | 6 000 | 11 400 | 750 | 400 | 700 | 405 | * 230/600 CA/W33 | * 230/600 CAK/W33 | |
| | 870 | 272 | | 34.252 | 10.709 | 8 150 | 17 000 | 1 100 | 340 | 560 | 520 | * 240/600 ECA/W33 | * 240/600 ECAK30/W33 | |
| | 980 | 300 | | 38.583 | 11.811 | 10 200 | 18 000 | 1 100 | 320 | 560 | 895 | * 231/600 CA/W33 | * 231/600 CAK/W33 | |
| | 980 | 375 | | 38.583 | 14.764 | 11 500 | 23 600 | 1 460 | 240 | 480 | 1 200 | 241/600 ECA/W33 | 241/600 ECAK30/W33 | |
| | 1090 | 388 | | 42.913 | 15.276 | 13 100 | 25 500 | 1 560 | 260 | 400 | 1 600 | 232/600 CA/W33 | 232/600 CAK/W33 | |
| | 630 | 780 | 112 | 24.803 | 30.709 | 4.409 | 2 190 | 6 100 | 415 | 400 | 750 | 120 | 238/630 CAMA/W20 | 238/630 CAKMA/W20 |
| | | 850 | 165 | | 33.465 | 6.496 | 4 650 | 9 800 | 640 | 400 | 700 | 280 | * 239/630 CA/W33 | * 239/630 CAK/W33 |
| | | 920 | 212 | | 36.220 | 8.346 | 6 700 | 12 500 | 800 | 380 | 670 | 485 | * 230/630 CA/W33 | * 230/630 CAK/W33 |
| | | 920 | 290 | | 36.220 | 11.417 | 8 800 | 18 000 | 1 140 | 320 | 530 | 645 | * 240/630 ECJ/W33 | * 240/630 ECK30J/W33 |
| 1030 | | 315 | | 40.551 | 12.402 | 10 500 | 20 800 | 1 220 | 260 | 530 | 1 050 | 231/630 CA/W33 | 231/630 CAK/W33 | |
| 1030 | | 400 | | 40.551 | 15.748 | 12 700 | 27 000 | 1 630 | 220 | 450 | 1 400 | 241/630 ECA/W33 | 241/630 ECAK30/W33 | |
| 670 | | 820 | 112 | 26.378 | 32.283 | 4.409 | 2 250 | 6 400 | 440 | 360 | 700 | 130 | 238/670 CAMA/W20 | 238/670 CAKMA/W20 |
| | 820 | 150 | 32.283 | | 5.906 | 3 110 | 9 500 | 655 | 360 | 700 | 172 | 248/670 CAMA/W20 | – | |
| | 900 | 170 | | 35.433 | 6.693 | 5 000 | 10 800 | 695 | 360 | 670 | 315 | * 239/670 CA/W33 | * 239/670 CAK/W33 | |
| | 980 | 230 | | 38.583 | 9.055 | 7 650 | 14 600 | 915 | 340 | 600 | 600 | * 230/670 CA/W33 | * 230/670 CAK/W33 | |
| | 980 | 308 | | 38.583 | 12.126 | 10 000 | 20 400 | 1 320 | 300 | 500 | 790 | * 240/670 ECA/W33 | * 240/670 ECAK30/W33 | |
| | 1090 | 336 | | 42.913 | 13.228 | 10 900 | 22 400 | 1 370 | 240 | 500 | 1 250 | 231/670 CA/W33 | 231/670 CAK/W33 | |
| | 1090 | 412 | | 42.913 | 16.220 | 13 800 | 29 000 | 1 760 | 200 | 400 | 1 600 | 241/670 ECA/W33 | 241/670 ECAK30/W33 | |
| | 1220 | 438 | | 48.031 | 17.244 | 15 400 | 30 500 | 1 700 | 220 | 360 | 2 270 | 232/670 CA/W33 | 232/670 CAK/W33 | |
| | 710 | 870 | 118 | 27.953 | 34.252 | 4.646 | 2 580 | 7 500 | 500 | 340 | 670 | 153 | 238/710 CAMA/W20 | – |
| | | 950 | 180 | | 37.402 | 7.087 | 5 600 | 12 000 | 765 | 340 | 600 | 365 | * 239/710 CA/W33 | * 239/710 CAK/W33 |
| 950 | | 243 | | 37.402 | 9.567 | 6 800 | 15 600 | 930 | 300 | 500 | 495 | * 249/710 CA/W33 | * 249/710 CAK30/W33 | |
| 1030 | | 236 | | 40.551 | 9.291 | 8 300 | 16 300 | 1 000 | 320 | 560 | 670 | * 230/710 CA/W33 | * 230/710 CAK/W33 | |
| 1030 | | 315 | | 40.551 | 12.402 | 9 370 | 22 800 | 1 370 | 260 | 450 | 895 | 240/710 ECA/W33 | 240/710 ECAK30/W33 | |
| 1150 | | 345 | | 45.276 | 13.583 | 12 200 | 26 000 | 1 530 | 240 | 450 | 1 450 | 231/710 CA/W33 | 231/710 CAK/W33 | |
| 1150 | | 438 | | 45.276 | 17.244 | 15 200 | 32 500 | 1 900 | 190 | 380 | 1 900 | 241/710 ECA/W33 | 241/710 ECAK30/W33 | |
| 1280 | | 450 | | 50.394 | 17.717 | 17 600 | 34 500 | 2 000 | 200 | 320 | 2 610 | 232/710 CA/W33 | 232/710 CAK/W33 | |
| 750 | 920 | 128 | 29.528 | 36.220 | 5.039 | 2 930 | 8 500 | 550 | 320 | 600 | 135 | 238/750 CAMA/W20 | 238/750 CAKMA/W20 | |
| | 1000 | 185 | | 39.370 | 7.283 | 6 000 | 13 200 | 815 | 320 | 560 | 420 | * 239/750 CA/W33 | * 239/750 CAK/W33 | |
| | 1000 | 250 | | 39.370 | 9.843 | 7 650 | 18 000 | 1 100 | 280 | 480 | 560 | * 249/750 CA/W33 | * 249/750 CAK30/W33 | |
| | 1090 | 250 | | 42.913 | 9.843 | 9 650 | 18 600 | 1 100 | 300 | 530 | 795 | * 230/750 CA/W33 | * 230/750 CAK/W33 | |
| | 1090 | 335 | | 42.913 | 13.189 | 10 100 | 25 000 | 1 460 | 240 | 430 | 1 065 | 240/750 ECA/W33 | 240/750 ECAK30/W33 | |
| | 1220 | 365 | | 48.031 | 14.370 | 13 800 | 29 000 | 1 660 | 220 | 430 | 1 700 | 231/750 CA/W33 | 231/750 CAK/W33 | |
| | 1220 | 475 | | 48.031 | 18.701 | 17 300 | 37 500 | 2 160 | 180 | 360 | 2 100 | 241/750 ECA/W33 | 241/750 ECAK30/W33 | |
| | 1360 | 475 | | 53.543 | 18.701 | 18 700 | 36 500 | 2 120 | 190 | 300 | 3 050 | 232/750 CAF/W33 | 232/750 CAFK/W33 | |
| | 800 | 980 | 180 | 31.496 | 38.583 | 7.087 | 4 140 | 12 900 | 830 | 300 | 560 | 300 | 248/800 CAMA/W20 | 248/800 CAK30MA/W20 |
| | | 1060 | 195 | | 41.732 | 7.677 | 6 400 | 14 300 | 880 | 300 | 530 | 470 | * 239/800 CA/W33 | * 239/800 CAK/W33 |
| 1060 | | 258 | 41.732 | | 10.157 | 8 000 | 19 300 | 1 060 | 260 | 430 | 640 | * 249/800 CA/W33 | * 249/800 CAK30/W33 | |
| 1150 | | 258 | | 45.276 | 10.157 | 10 000 | 20 000 | 1 160 | 280 | 480 | 895 | * 230/800 CA/W33 | * 230/800 CAK/W33 | |
| 1150 | | 345 | | 45.276 | 13.583 | 11 100 | 28 500 | 1 730 | 220 | 400 | 1 200 | 240/800 ECA/W33 | 240/800 ECAK30/W33 | |
| 1280 | | 375 | | 50.394 | 14.764 | 14 800 | 31 500 | 1 800 | 200 | 400 | 1 920 | 231/800 CA/W33 | 231/800 CAK/W33 | |
| 1280 | | 475 | | 50.394 | 18.701 | 18 400 | 40 500 | 2 320 | 170 | 320 | 2 300 | 241/800 ECA/W33 | 241/800 ECAK30/W33 | |

* SKF Explorer bearing

Spherical roller bearings

d 850 - 1800 mm

d 33.465 - 70.866 in

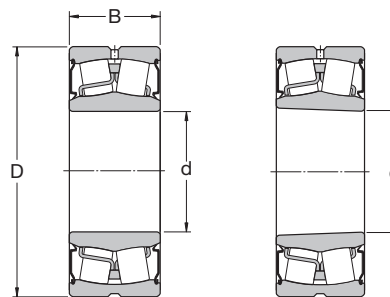
| Principal dimensions | | | | | | Basic load ratings | | Fatigue load limit P _U | Speed ratings | | Mass | Designations | | |
|----------------------|-------------|------|---------------|---------------|---------------|--------------------|--------------------------|--------------------------------------|-------------------------|-------------------|-------|----------------------------------|-----------------------------|----------------------------|
| d | D | B | d | D | B | dynamic C | static C ₀ | | Refer- ence speed | Limiting speed | | Bearing with cylindrical bore | tapered bore | |
| mm | | | in | | | kN | | kN | r/min | | kg | — | | |
| 850 | 1030 | 136 | 33.465 | 40.551 | 5.354 | 3 340 | 10 000 | 640 | 260 | 530 | 240 | 238/850 CAMA/W20 | 238/850 CAKMA/W20 | |
| | 1120 | 200 | | 44.094 | 7.874 | 5 980 | 15 600 | 930 | 260 | 480 | 560 | 239/850 CA/W33 | 239/850 CAK/W33 | |
| | 1120 | 272 | | 44.094 | 10.709 | 8 170 | 22 800 | 1 370 | 220 | 400 | 740 | 249/850 CA/W33 | 249/850 CAK30/W33 | |
| | 1220 | 272 | | 48.031 | 10.709 | 9 370 | 21 600 | 1 270 | 240 | 450 | 1 050 | 230/850 CA/W33 | 230/850 CAK/W33 | |
| | 1220 | 365 | | 48.031 | 14.370 | 12 700 | 31 500 | 1 900 | 200 | 360 | 1 410 | 240/850 ECA/W33 | 240/850 ECAK30/W33 | |
| | 1360 | 400 | | 53.543 | 15.748 | 16 100 | 34 500 | 2 000 | 180 | 360 | 2 200 | 231/850 CA/W33 | 231/850 CAK/W33 | |
| | 1360 | 500 | | 53.543 | 19.685 | 20 200 | 45 000 | 2 550 | 150 | 300 | 2 710 | 241/850 ECAF/W33 | 241/850 ECAK30F/W33 | |
| | 900 | 1090 | 190 | 35.433 | 42.913 | 7.480 | 4 660 | 15 300 | 950 | 240 | 480 | 370 | 248/900 CAMA/W20 | 248/900 CAK30MA/W20 |
| | | 1180 | 206 | | 46.457 | 8.110 | 6 440 | 17 000 | 1 020 | 240 | 450 | 605 | 239/900 CA/W33 | 239/900 CAK/W33 |
| | | 1280 | 280 | | 50.394 | 11.024 | 10 100 | 23 200 | 1 340 | 220 | 400 | 1 200 | 230/900 CA/W33 | 230/900 CAK/W33 |
| 1280 | | 375 | 50.394 | | 14.764 | 13 600 | 34 500 | 2 040 | 190 | 340 | 1 570 | 240/900 ECA/W33 | 240/900 ECAK30/W33 | |
| 1420 | | 515 | 55.905 | | 20.276 | 21 400 | 49 000 | 2 700 | 140 | 280 | 3 350 | 241/900 ECAF/W33 | 241/900 ECAK30F/W33 | |
| 950 | | 1250 | 224 | | 37.402 | 49.213 | 8.819 | 7 250 | 19 600 | 1 120 | 220 | 430 | 755 | 239/950 CA/W33 |
| | 1250 | 300 | 49.213 | 11.811 | | 9 200 | 26 000 | 1 500 | 180 | 340 | 1 015 | 249/950 CA/W33 | 249/950 CAK30/W33 | |
| | 1360 | 300 | 53.543 | 11.811 | | 12 000 | 28 500 | 1 600 | 200 | 380 | 1 450 | 230/950 CA/W33 | 230/950 CAK/W33 | |
| | 1360 | 412 | 53.543 | 16.220 | | 14 800 | 39 000 | 2 320 | 170 | 300 | 1 990 | 240/950 CAF/W33 | 240/950 CAK30F/W33 | |
| | 1500 | 545 | 59.055 | 21.457 | | 23 900 | 55 000 | 3 000 | 130 | 260 | 3 535 | 241/950 ECAF/W33 | 241/950 ECAK30F/W33 | |
| | 1000 | 1220 | 165 | 39.370 | | 48.031 | 6.496 | 4 660 | 14 300 | 865 | 220 | 400 | 410 | 238/1000 CAMA/W20 |
| 1320 | | 315 | 51.968 | | 12.402 | 10 400 | 29 000 | 1 500 | 170 | 320 | 1 200 | 249/1000 CA/W33 | 249/1000 CAK30/W33 | |
| 1420 | | 308 | 55.905 | | 12.126 | 12 700 | 30 500 | 1 700 | 180 | 360 | 1 600 | 230/1000 CAF/W33 | 230/1000 CAKF/W33 | |
| 1420 | | 412 | 55.905 | | 16.220 | 15 400 | 40 500 | 2 240 | 160 | 280 | 2 140 | 240/1000 CAF/W33 | 240/1000 CAK30F/W33 | |
| 1580 | | 462 | 62.205 | | 18.189 | 21 400 | 48 000 | 2 550 | 140 | 280 | 3 500 | 231/1000 CAF/W33 | 231/1000 CAKF/W33 | |
| 1580 | | 580 | 62.205 | | 22.835 | 26 700 | 62 000 | 3 350 | 120 | 240 | 4 300 | 241/1000 ECAF/W33 | 241/1000 ECAK30F/W33 | |
| 1060 | 1280 | 165 | 41.732 | 50.394 | 6.496 | 4 770 | 15 000 | 800 | 200 | 380 | 435 | 238/1060 CAMA/W20 | 238/1060 CAKMA/W20 | |
| | 1280 | 218 | | 50.394 | 8.583 | 6 100 | 20 000 | 1 200 | 200 | 380 | 570 | 248/1060 CAMA/W20 | 248/1060 CAK30MA/W20 | |
| | 1400 | 250 | | 55.118 | 9.843 | 9 550 | 26 000 | 1 460 | 180 | 360 | 1 100 | 239/1060 CAF/W33 | 239/1060 CAKF/W33 | |
| | 1400 | 335 | | 55.118 | 13.189 | 11 500 | 32 500 | 1 860 | 160 | 280 | 1 400 | 249/1060 CAF/W33 | 249/1060 CAK30F/W33 | |
| | 1500 | 325 | | 59.055 | 12.795 | 13 800 | 34 000 | 1 830 | 170 | 320 | 2 250 | 230/1060 CAF/W33 | 230/1060 CAKF/W33 | |
| | 1500 | 438 | | 59.055 | 17.244 | 17 300 | 45 500 | 2 500 | 150 | 260 | 2 515 | 240/1060 CAF/W33 | 240/1060 CAK30F/W33 | |
| | 1120 | 1360 | | 243 | 44.094 | 53.543 | 9.567 | 7 250 | 24 000 | 1 400 | 180 | 340 | 735 | 248/1120 CAF/W20 |
| 1460 | | 335 | 57.480 | 13.189 | | 11 700 | 34 500 | 1 830 | 140 | 260 | 1 500 | 249/1120 CAF/W33 | 249/1120 CAK30F/W33 | |
| 1580 | | 462 | 62.205 | 18.189 | | 18 700 | 50 000 | 2 850 | 130 | 240 | 2 925 | 240/1120 CAF/W33 | 240/1120 CAK30F/W33 | |
| 1180 | 1420 | 180 | 46.457 | 55.905 | 7.087 | 5 870 | 18 600 | 1 080 | 170 | 320 | 575 | 238/1180 CAF/W20 | 238/1180 CAKFA/W20 | |
| | 1420 | 243 | | 55.905 | 9.567 | 7 710 | 27 000 | 1 560 | 170 | 320 | 770 | 248/1180 CAF/W20 | 248/1180 CAK30FA/W20 | |
| | 1540 | 272 | | 60.630 | 10.709 | 11 100 | 31 000 | 1 660 | 150 | 300 | 1 400 | 239/1180 CAF/W33 | 239/1180 CAKF/W33 | |
| | 1540 | 355 | | 60.630 | 13.976 | 13 600 | 40 500 | 2 160 | 130 | 240 | 1 800 | 249/1180 CAF/W33 | 249/1180 CAK30F/W33 | |
| 1250 | 1750 | 375 | 49.213 | 68.898 | 14.764 | 17 900 | 45 000 | 2 400 | 130 | 240 | 2 840 | 230/1250 CAF/W33 | 230/1250 CAKF/W33 | |
| 1320 | 1600 | 280 | 51.968 | 62.992 | 11.024 | 9 780 | 33 500 | 1 860 | 140 | 260 | 1 160 | 248/1320 CAF/W20 | 248/1320 CAK30FA/W20 | |
| | 1720 | 400 | | 67.716 | 15.748 | 16 100 | 49 000 | 2 550 | 110 | 200 | 2 500 | 249/1320 CAF/W33 | 249/1320 CAK30F/W33 | |
| 1500 | 1820 | 315 | 59.055 | 71.653 | 12.402 | 12 700 | 45 000 | 2 400 | 110 | 200 | 1 710 | 248/1500 CAF/W20 | 248/1500 CAK30FA/W20 | |
| 1800 | 2180 | 375 | 70.866 | 85.827 | 14.764 | 17 600 | 63 000 | 3 050 | 75 | 130 | 2 900 | 248/1800 CAF/W20 | 248/1800 CAK30FA/W20 | |

* SKF Explorer bearing

Sealed spherical roller bearings

d 30 - 140 mm

d 1.181 - 5.512 in



| Principal dimensions | | | | | | Basic load ratings | | Fatigue load limit | Limiting speed | Mass | Designations | |
|----------------------|-----|------|-------|-------|-------|--------------------|-----------------------|--------------------|----------------|------|-------------------------------|-----------------|
| d | D | B | d | D | B | dynamic C | static C ₀ | P _u | r/min | kg | Bearing with cylindrical bore | tapered bore |
| mm | | | in | | | kN | | kN | | | – | |
| 30 | 62 | 25 | 1.181 | 2.441 | 0.984 | 64 | 60 | 6.4 | 2 800 | 0.34 | * BS2-2206-2CS | – |
| 35 | 72 | 28 | 1.378 | 2.835 | 1.102 | 86.5 | 85 | 9.3 | 2 400 | 0.52 | * BS2-2207-2CS | – |
| 40 | 80 | 28 | 1.575 | 3.150 | 1.102 | 96.5 | 90 | 9.8 | 2 200 | 0.57 | * BS2-2208-2CS | * BS2-2208-2CSK |
| 45 | 85 | 28 | 1.772 | 3.346 | 1.102 | 102 | 98 | 10.8 | 2 000 | 0.66 | * BS2-2209-2CS | * BS2-2209-2CSK |
| 50 | 90 | 28 | 1.969 | 3.543 | 1.102 | 104 | 108 | 11.8 | 1 900 | 0.70 | * BS2-2210-2CS | * BS2-2210-2CSK |
| 55 | 100 | 31 | 2.165 | 3.937 | 1.220 | 125 | 127 | 13.7 | 1 700 | 1.00 | * BS2-2211-2CS | * BS2-2211-2CSK |
| 60 | 110 | 34 | 2.362 | 4.331 | 1.339 | 156 | 166 | 18.6 | 1 600 | 1.30 | * BS2-2212-2CS | * BS2-2212-2CSK |
| 65 | 100 | 35 | 2.559 | 3.937 | 1.378 | 132 | 173 | 20.4 | 1 000 | 0.95 | * 24013-2CS5/VT143 | – |
| | 120 | 38 | | 4.724 | 1.496 | 193 | 216 | 24 | 1 500 | 1.60 | * BS2-2213-2CS | * BS2-2213-2CSK |
| 70 | 125 | 38 | 2.756 | 4.921 | 1.496 | 208 | 228 | 25.5 | 1 400 | 1.80 | * BS2-2214-2CS | * BS2-2214-2CSK |
| 75 | 115 | 40 | 2.953 | 4.528 | 1.575 | 173 | 232 | 28.5 | 950 | 1.55 | * 24015-2CS2/VT143 | – |
| | 130 | 38 | | 5.118 | 1.496 | 212 | 240 | 26.5 | 1 300 | 2.10 | * BS2-2215-2CS | * BS2-2215-2CSK |
| 80 | 140 | 40 | 3.150 | 5.512 | 1.575 | 236 | 270 | 29 | 1 200 | 2.40 | * BS2-2216-2CS | * BS2-2216-2CSK |
| 85 | 150 | 44 | 3.346 | 5.906 | 1.732 | 285 | 325 | 34.5 | 1 100 | 3.00 | * BS2-2217-2CS | * BS2-2217-2CSK |
| 90 | 160 | 48 | 3.543 | 6.299 | 1.890 | 325 | 375 | 39 | 1 000 | 3.70 | * BS2-2218-2CS | * BS2-2218-2CSK |
| 100 | 150 | 50 | 3.937 | 5.906 | 1.969 | 285 | 415 | 45.5 | 800 | 3.15 | * 24020-2CS2/VT143 | – |
| | 165 | 52 | | 6.496 | 2.047 | 365 | 490 | 53 | 850 | 4.55 | * 23120-2CS2/VT143 | – |
| | 180 | 55 | | 7.087 | 2.165 | 425 | 490 | 49 | 900 | 5.50 | * BS2-2220-2CS | – |
| | 180 | 60.3 | | 7.087 | 2.374 | 475 | 600 | 63 | 700 | 6.85 | * 23220-2CS | – |
| 110 | 170 | 45 | 4.331 | 6.693 | 1.772 | 310 | 440 | 46.5 | 900 | 3.80 | * 23022-2CS | – |
| | 180 | 56 | | 7.087 | 2.205 | 430 | 585 | 61 | 800 | 5.75 | * 23122-2CS2/VT143 | – |
| | 180 | 69 | | 7.087 | 2.717 | 520 | 750 | 78 | 630 | 7.10 | * 24122-2CS2/VT143 | – |
| | 200 | 63 | | 7.874 | 2.480 | 560 | 640 | 63 | 800 | 7.60 | * BS2-2222-2CS5/VT143 | – |
| 120 | 180 | 46 | 4.724 | 7.087 | 1.811 | 355 | 510 | 52 | 850 | 4.20 | * 23024-2CS2/VT143 | – |
| | 180 | 60 | | 7.087 | 2.362 | 430 | 670 | 68 | 670 | 5.45 | * 24024-2CS2/VT143 | – |
| | 200 | 80 | | 7.874 | 3.150 | 655 | 950 | 95 | 560 | 10.5 | * 24124-2CS2/VT143 | – |
| | 215 | 69 | | 8.465 | 2.717 | 630 | 765 | 73.5 | 750 | 9.75 | * BS2-2224-2CS | – |
| 130 | 200 | 52 | 5.118 | 7.874 | 2.047 | 430 | 610 | 62 | 800 | 6.00 | * 23026-2CS2/VT143 | – |
| | 200 | 69 | | 7.874 | 2.717 | 540 | 815 | 81.5 | 600 | 8.05 | * 24026-2CS2/VT143 | – |
| | 210 | 80 | | 8.268 | 3.150 | 680 | 1 000 | 100 | 530 | 11.0 | * 24126-2CS2/VT143 | – |
| 140 | 210 | 69 | 5.512 | 8.268 | 2.717 | 570 | 900 | 88 | 560 | 8.55 | * 24028-2CS2/VT143 | – |
| | 225 | 85 | | 8.858 | 3.346 | 765 | 1 160 | 112 | 450 | 13.5 | * 24128-2CS2/VT143 | – |

* SKF Explorer bearing

Sealed spherical roller bearings

d 150 - 220 mm

d 5.906 - 8.661 in

| Principal dimensions | | | | | | Basic load ratings | | Fatigue load limit | Limiting speed | Mass | Designations |
|----------------------|-----|-----|--------------|--------|-------|--------------------|--------------------------|--------------------|----------------|------|-------------------------------|
| d | D | B | d | D | B | dynamic C | static C ₀ | P _u | | | Bearing with cylindrical bore |
| mm | | | in | | | kN | | kN | r/min | kg | — |
| 150 | 225 | 75 | 5.906 | 8.858 | 2.953 | 655 | 1 040 | 100 | 530 | 10.5 | * 24030-2CS2/VT143 |
| | 250 | 100 | | 9.843 | 3.937 | 1 020 | 1 530 | 146 | 400 | 20.0 | * 24130-2CS2/VT143 |
| 160 | 240 | 80 | 6.299 | 9.449 | 3.150 | 750 | 1 200 | 114 | 450 | 13.0 | * 24032-2CS2/VT143 |
| | 270 | 86 | | 10.630 | 3.386 | 980 | 1 370 | 129 | 530 | 20.5 | * 23132-2CS2/VT143 |
| 170 | 260 | 90 | 6.693 | 10.236 | 3.543 | 930 | 1 460 | 137 | 400 | 17.5 | * 24034-2CS2/VT143 |
| | 280 | 109 | | 11.024 | 4.291 | 1 220 | 1 860 | 170 | 360 | 27.5 | * 24134-2CS2/VT143 |
| 180 | 280 | 100 | 7.087 | 11.024 | 3.937 | 1 080 | 1 730 | 156 | 380 | 23.0 | * 24036-2CS2/VT143 |
| 190 | 320 | 128 | 7.480 | 12.598 | 5.039 | 1 600 | 2 500 | 212 | 340 | 43.0 | * 24138-2CS2/VT143 |
| 200 | 340 | 140 | 7.874 | 13.386 | 5.512 | 1 800 | 2 800 | 232 | 320 | 53.5 | * 24140-2CS |
| | 360 | 128 | | 14.173 | 5.039 | 1 860 | 2 700 | 228 | 430 | 58.0 | * 23240-2CS2/VT143 |
| 220 | 300 | 60 | 8.661 | 11.811 | 2.362 | 546 | 1 080 | 93 | 600 | 12.5 | 23944-2CS |

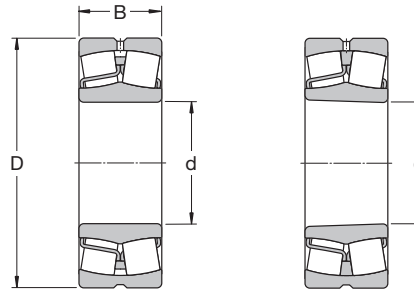


* SKF Explorer bearing

Spherical roller bearings for vibratory applications

d 40 - 170 mm

d 1.575 - 6.693 in



| Principal dimensions | | | | | | Basic load ratings | | Fatigue load limit | Speed ratings | | Mass | Designations | |
|----------------------|-----|-----|-------|--------|-------|--------------------|-----------------------|--------------------|------------------|----------------|------|-------------------------------|-----------------------|
| d | D | B | d | D | B | dynamic C | static C ₀ | P _u | Refer-ence speed | Limiting speed | | Bearing with cylindrical bore | tapered bore |
| mm | | | in | | | kN | | kN | r/min | | kg | – | |
| 40 | 90 | 33 | 1.575 | 3.543 | 1.299 | 150 | 140 | 15 | 6 000 | 8 000 | 1.1 | *22308 E/VA405 | – |
| 45 | 100 | 36 | 1.772 | 3.937 | 1.417 | 183 | 183 | 19.6 | 5 300 | 7 000 | 1.4 | *22309 E/VA405 | – |
| 50 | 110 | 40 | 1.969 | 4.331 | 1.575 | 220 | 224 | 24 | 4 800 | 6 300 | 1.9 | *22310 E/VA405 | – |
| 55 | 120 | 43 | 2.165 | 4.724 | 1.693 | 270 | 280 | 30 | 4 300 | 5 600 | 2.45 | *22311 E/VA405 | *22311 EK/VA405 |
| 60 | 130 | 46 | 2.362 | 5.118 | 1.811 | 310 | 335 | 36.5 | 4 000 | 5 300 | 3.1 | *22312 E/VA405 | *22312 EK/VA405 |
| 65 | 140 | 48 | 2.559 | 5.512 | 1.890 | 340 | 360 | 38 | 3 800 | 5 000 | 3.75 | *22313 E/VA405 | *22313 EK/VA405 |
| 70 | 150 | 51 | 2.756 | 5.906 | 2.008 | 400 | 430 | 45 | 3 400 | 4 500 | 4.55 | *22314 E/VA405 | *22314 EK/VA405 |
| 75 | 160 | 55 | 2.953 | 6.299 | 2.165 | 440 | 475 | 48 | 3 200 | 4 300 | 5.55 | *22315 EJA/VA405 | *22315 EKJA/VA405 |
| 80 | 170 | 58 | 3.150 | 6.693 | 2.283 | 490 | 540 | 54 | 3 000 | 4 000 | 6.6 | *22316 EJA/VA405 | *22316 EKJA/VA405 |
| 85 | 180 | 60 | 3.346 | 7.087 | 2.362 | 550 | 620 | 61 | 2 800 | 3 800 | 7.65 | *22317 EJA/VA405 | *22317 EKJA/VA405 |
| | 180 | 60 | | 7.087 | 2.362 | 550 | 620 | 61 | 2 800 | 3 800 | 7.65 | *22317 EJA/VA406 | – |
| 90 | 190 | 64 | 3.543 | 7.480 | 2.520 | 610 | 695 | 67 | 2 600 | 3 600 | 9.05 | *22318 EJA/VA405 | *22318 EKJA/VA405 |
| 95 | 200 | 67 | 3.740 | 7.874 | 2.638 | 670 | 765 | 73.5 | 2 600 | 3 400 | 10.5 | *22319 EJA/VA405 | *22319 EKJA/VA405 |
| 100 | 215 | 73 | 3.937 | 8.465 | 2.874 | 815 | 950 | 88 | 2 400 | 3 000 | 13.5 | *22320 EJA/VA405 | *22320 EKJA/VA405 |
| | 215 | 73 | | 8.465 | 2.874 | 815 | 950 | 88 | 2 400 | 3 000 | 13.5 | *22320 EJA/VA406 | – |
| 110 | 240 | 80 | 4.331 | 9.449 | 3.150 | 950 | 1 120 | 100 | 2 000 | 2 800 | 18.4 | *22322 EJA/VA405 | *22322 EKJA/VA405 |
| | 240 | 80 | | 9.449 | 3.150 | 950 | 1 120 | 100 | 2 000 | 2 800 | 18.4 | *22322 EJA/VA406 | – |
| 120 | 260 | 86 | 4.724 | 10.236 | 3.386 | 965 | 1 120 | 100 | 2 000 | 2 600 | 23 | *22324 CCJA/W33VA405 | *22324 CCKJA/W33VA405 |
| | 260 | 86 | | 10.236 | 3.386 | 965 | 1 120 | 100 | 2 000 | 2 600 | 23 | *22324 CCJA/W33VA406 | – |
| 130 | 280 | 93 | 5.118 | 11.024 | 3.661 | 1 120 | 1 320 | 114 | 1 800 | 2 400 | 29 | *22326 CCJA/W33VA405 | *22326 CCKJA/W33VA405 |
| | 280 | 93 | | 11.024 | 3.661 | 1 120 | 1 320 | 114 | 1 800 | 2 400 | 29 | *22326 CCJA/W33VA406 | – |
| 140 | 300 | 102 | 5.512 | 11.811 | 4.016 | 1 290 | 1 560 | 132 | 1 700 | 2 200 | 36.5 | *22328 CCJA/W33VA405 | *22328 CCKJA/W33VA405 |
| | 300 | 102 | | 11.811 | 4.016 | 1 290 | 1 560 | 132 | 1 700 | 2 200 | 36.5 | *22328 CCJA/W33VA406 | – |
| 150 | 320 | 108 | 5.906 | 12.598 | 4.252 | 1 460 | 1 760 | 146 | 1 600 | 2 000 | 43.5 | *22330 CCJA/W33VA405 | *22330 CCKJA/W33VA405 |
| | 320 | 108 | | 12.598 | 4.252 | 1 460 | 1 760 | 146 | 1 600 | 2 000 | 43.5 | *22330 CCJA/W33VA406 | – |
| 160 | 340 | 114 | 6.299 | 13.386 | 4.488 | 1 600 | 1 960 | 160 | 1 500 | 1 900 | 52 | *22332 CCJA/W33VA405 | *22332 CCKJA/W33VA405 |
| | 340 | 114 | | 13.386 | 4.488 | 1 600 | 1 960 | 160 | 1 500 | 1 900 | 52 | *22332 CCJA/W33VA406 | – |
| 170 | 360 | 120 | 6.693 | 14.173 | 4.724 | 1 760 | 2 160 | 176 | 1 400 | 1 800 | 61 | *22334 CCJA/W33VA405 | *22334 CCKJA/W33VA405 |
| | 360 | 120 | | 14.173 | 4.724 | 1 760 | 2 160 | 176 | 1 400 | 1 800 | 61 | *22334 CCJA/W33VA406 | – |

* SKF Explorer bearing

Spherical roller bearings for vibratory applications

d 180 - 240 mm
d 7.087 - 9.449 in

| Principal dimensions | | | | | | Basic load ratings | | Fatigue load limit | Speed ratings | | Mass | Designations | |
|----------------------|-----|-----|--------------|--------|-------|--------------------|--------------------------|--------------------|-------------------------|-------------------|------|-------------------------------------|-----------------------|
| d | D | B | d | D | B | dynamic C | static C ₀ | P _u | Refer- ence speed | Limiting speed | | Bearing with cylindrical bore | tapered bore |
| mm | | | in | | | kN | | kN | r/min | | kg | – | |
| 180 | 380 | 126 | 7.087 | 14.961 | 4.961 | 2 000 | 2 450 | 193 | 1 300 | 1 700 | 71.5 | *22336 CCJA/W33VA405 | *22336 CCKJA/W33VA405 |
| | 380 | 126 | | 14.961 | 4.961 | 2 000 | 2 450 | 193 | 1 300 | 1 700 | 71.5 | *22336 CCJA/W33VA406 | – |
| 190 | 400 | 132 | 7.480 | 15.748 | 5.197 | 2 120 | 2 650 | 208 | 1 200 | 1 600 | 82.5 | *22338 CCJA/W33VA405 | *22338 CCKJA/W33VA405 |
| | 400 | 132 | | 15.748 | 5.197 | 2 120 | 2 650 | 208 | 1 200 | 1 600 | 82.5 | *22338 CCJA/W33VA406 | – |
| 200 | 420 | 138 | 7.874 | 16.535 | 5.433 | 2 320 | 2 900 | 224 | 1 200 | 1 500 | 95 | *22340 CCJA/W33VA405 | *22340 CCKJA/W33VA405 |
| | 420 | 138 | | 16.535 | 5.433 | 2 320 | 2 900 | 224 | 1 200 | 1 500 | 95 | *22340 CCJA/W33VA406 | – |
| 220 | 460 | 145 | 8.661 | 18.110 | 5.709 | 2 700 | 3 450 | 260 | 1 000 | 1 400 | 120 | *22344 CCJA/W33VA405 | *22344 CCKJA/W33VA405 |
| 240 | 500 | 155 | 9.449 | 19.685 | 6.102 | 3 100 | 4 000 | 290 | 950 | 1 300 | 155 | *22348 CCJA/W33VA405 | *22348 CCKJA/W33VA405 |



* SKF Explorer bearing

Spherical roller bearings

Shaker Screen

Series: 452308 M2/W502 — 452340 M2/W502

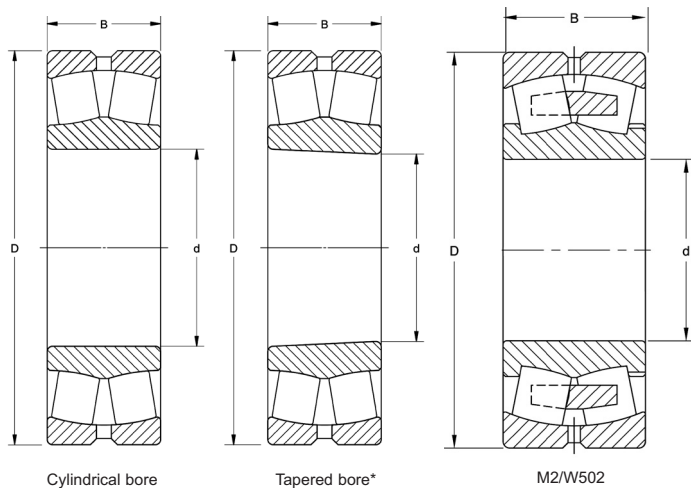
Size: 40 mm — 200 mm

1.5748 in — 7.8740 in

Series: 453315 M2/W502 — 453332 M2/W502

Size: 75 mm — 160 mm

2.9528 in — 6.2992 in



| Designation | Principal Dimensions | | | | | | Basic Load Ratings | | | | Speed Rating | | Mass | | Calculation Factors | | |
|----------------|----------------------|--------|------------------|---------|-------|--------|--------------------|----------------|--------|---------|--------------|-------|-------|--------|---------------------|----------------|----------------|
| | Bore | | Outside Diameter | | Width | | Dynamic | | Static | | Lubrication | | kg | lb | e | Y ₁ | Y ₂ |
| | d | D | D | D | B | B | C | C ₀ | Grease | Oil | r/min | r/min | | | | | |
| mm | in | mm | in | mm | in | kN | lbf | kN | lbf | r/min | r/min | kg | lb | - | - | - | |
| 452308 M2/W502 | 40 | 1.5748 | 90 | 3.5433 | 33 | 1.2992 | 107 | 24 000 | 112 | 25 200 | 4 500 | 5 600 | 1.00 | 2.20 | 0.37 | 1.8 | 2.7 |
| 452309 M2/W502 | 45 | 1.7717 | 100 | 3.9370 | 36 | 1.4173 | 133 | 29 900 | 150 | 33 700 | 3 800 | 4 800 | 1.35 | 3.00 | 0.37 | 1.8 | 2.7 |
| 452310 M2/W502 | 50 | 1.9685 | 110 | 4.3307 | 40 | 1.5748 | 168 | 37 800 | 186 | 41 800 | 3 400 | 4 300 | 1.85 | 4.10 | 0.37 | 1.8 | 2.7 |
| 452311 M2/W502 | 55 | 2.1654 | 120 | 4.7244 | 43 | 1.6929 | 199 | 44 700 | 232 | 52 100 | 3 200 | 4 000 | 2.35 | 5.20 | 0.35 | 1.9 | 2.9 |
| 452312 M2/W502 | 60 | 2.3622 | 130 | 5.1181 | 46 | 1.8110 | 235 | 52 800 | 280 | 62 900 | 2 800 | 3 000 | 2.95 | 6.50 | 0.35 | 1.9 | 2.9 |
| 452313 M2/W502 | 65 | 2.5591 | 140 | 5.5118 | 48 | 1.8898 | 258 | 58 000 | 305 | 68 500 | 2 600 | 3 400 | 3.55 | 7.85 | 0.35 | 1.9 | 2.9 |
| 452314 M2/W502 | 70 | 2.7559 | 150 | 5.9055 | 51 | 2.0079 | 299 | 67 200 | 360 | 80 900 | 2 400 | 3 200 | 4.30 | 9.50 | 0.35 | 1.9 | 2.9 |
| 452315 M2/W502 | 75 | 2.9528 | 160 | 6.2992 | 55 | 2.1645 | 328 | 73 700 | 405 | 91 000 | 2 200 | 3 000 | 5.20 | 11.5 | 0.35 | 1.9 | 2.9 |
| 452316 M2/W502 | 80 | 3.1496 | 170 | 6.6929 | 58 | 2.2835 | 374 | 84 000 | 465 | 105 000 | 2 000 | 2 800 | 6.10 | 13.50 | 0.35 | 1.9 | 2.9 |
| 452317 M2/W502 | 85 | 3.3465 | 180 | 7.0866 | 60 | 2.3622 | 408 | 91 700 | 490 | 110 000 | 1 900 | 2 600 | 7.25 | 16.00 | 0.33 | 2.0 | 3.0 |
| 452318 M2/W502 | 90 | 3.5433 | 190 | 7.4803 | 64 | 2.5197 | 460 | 103 000 | 570 | 128 000 | 1 800 | 2 400 | 8.60 | 19.00 | 0.35 | 1.9 | 2.9 |
| 452319 M2/W502 | 95 | 3.7402 | 200 | 7.8740 | 67 | 2.6378 | 518 | 116 000 | 670 | 151 000 | 1 800 | 2 400 | 10.00 | 22.00 | 0.35 | 1.9 | 2.9 |
| 452320 M2/W502 | 100 | 3.9370 | 215 | 8.4646 | 73 | 2.8740 | 610 | 137 000 | 800 | 180 000 | 1 700 | 2 200 | 13.00 | 28.50 | 0.35 | 1.9 | 2.9 |
| 452322 M2/W502 | 110 | 4.3307 | 240 | 9.4488 | 80 | 3.1496 | 725 | 163 000 | 965 | 217 000 | 1 600 | 2 000 | 18.00 | 40.00 | 0.35 | 1.9 | 2.9 |
| 452324 M2/W502 | 120 | 4.7244 | 260 | 10.2362 | 86 | 3.3858 | 845 | 190 000 | 1 140 | 256 000 | 1 400 | 1 800 | 22.00 | 48.50 | 0.35 | 1.9 | 2.9 |
| 452326 M2/W502 | 130 | 5.1181 | 280 | 11.0236 | 93 | 3.6614 | 978 | 220 000 | 1 320 | 297 000 | 1 300 | 1 700 | 28.50 | 63.00 | 0.35 | 1.9 | 2.9 |
| 452328 M2/W502 | 140 | 5.5118 | 300 | 11.8110 | 102 | 4.0157 | 1 130 | 254 000 | 1 560 | 351 000 | 1 100 | 1 500 | 34.50 | 76.00 | 0.35 | 1.9 | 2.9 |
| 452330 M2/W502 | 150 | 5.9055 | 320 | 12.5984 | 108 | 4.2520 | 1 290 | 290 000 | 1 800 | 404 000 | 1 000 | 1 400 | 41.50 | 91.50 | 0.35 | 1.9 | 2.9 |
| 452332 M2/W502 | 160 | 6.2292 | 340 | 13.3858 | 114 | 4.4882 | 1 400 | 315 000 | 1 960 | 440 000 | 950 | 1 300 | 50.00 | 110.00 | 0.35 | 1.9 | 2.9 |
| 452336 M2/W502 | 180 | 7.0866 | 380 | 14.9606 | 126 | 4.9606 | 1 640 | 369 000 | 2 400 | 540 000 | 900 | 1 200 | 68.00 | 150.00 | 0.35 | 1.9 | 2.9 |
| 452338 M2/W502 | 190 | 7.4803 | 400 | 15.7480 | 132 | 5.1968 | 1 870 | 421 000 | 1 560 | 351 000 | 850 | 1 100 | 79.50 | 175.00 | 0.35 | 1.9 | 2.9 |
| 452340 M2/W502 | 200 | 7.8740 | 420 | 16.5354 | 138 | 5.4331 | 2 020 | 454 000 | 2 900 | 652 000 | 850 | 1 100 | 93.00 | 205.00 | 0.33 | 2.0 | 3.0 |

* tapered (K) bore available on limited sizes.

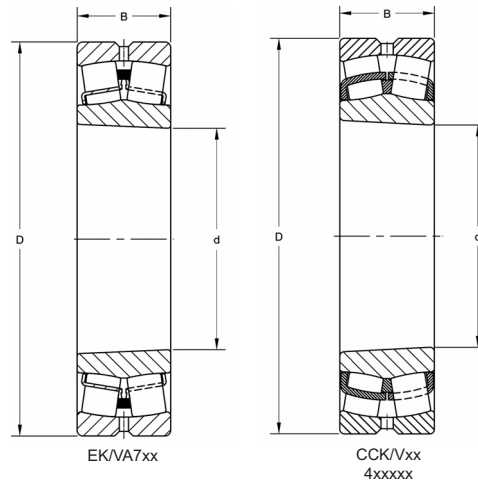
Spherical roller bearings

Printing Press

Series: 22209 CCK/VA759 — 23226 VAD

Size: 45.000 mm — 130.000 mm

1.7717 in — 5.1181 in



Please contact SKF Application Engineering for tapered journal (X drawings) details.

| Designation | | Principal Dimensions | | | | | | Basic Load Ratings | | | | Mass | | Calculation Factors | | |
|-------------------|------------------------------|----------------------|--------|------------------|---------|-------|--------|--------------------|---------|-----------|---------|-------|-------|---------------------|----------------|----------------|
| Current | Basic/ Replaced Design | Bore | | Outside Diameter | | Width | | Dynamic | | Static | | kg | lb | e | Y ₁ | Y ₂ |
| | | d | in | D | in | B | in | C | N | N | lbf | | | | | |
| 22209 CCK/VA759 | 22209 CCK/W33 | 45.000 | 1.7717 | 85 | 3.3465 | 23.0 | 0.9055 | 138 000 | 31 000 | 160 000 | 31 100 | 1.35 | 3.00 | 0.26 | 2.6 | 3.9 |
| 22211 EK/VA751 | 22211 VAE | 55.000 | 2.1654 | 100 | 3.9370 | 25.0 | 0.9843 | 99 500 | 22 400 | 118 000 | 26 500 | 0.82 | 1.80 | 0.24 | 2.8 | 4.2 |
| 22212 EK/VA751 | 22212 VAD | 60.000 | 2.3622 | 110 | 4.3307 | 28.0 | 1.1024 | 122 000 | 27 000 | 146 000 | 32 800 | 1.10 | 2.45 | 0.24 | 2.8 | 4.2 |
| 22212 EK/VA7582† | 22212 EK/VA751 | 60.000 | 2.3622 | 110 | 4.3307 | 28.0 | 1.1024 | 122 000 | 27 000 | 146 000 | 32 800 | 1.10 | 2.45 | 0.24 | 2.8 | 4.2 |
| 22220 VAE | 22220 CCK/W33 | 100.000 | 3.9370 | 180 | 7.0866 | 46.0 | 1.8110 | 311 000 | 70 000 | 415 000 | 93 300 | 4.85 | 10.50 | 0.24 | 2.8 | 4.2 |
| 22220 VAM† | 22220 VAE | 100.000 | 3.9370 | 180 | 7.0866 | 46.0 | 1.8110 | 311 000 | 70 000 | 415 000 | 93 300 | 4.85 | 10.50 | 0.24 | 2.8 | 4.2 |
| 22230 VAB | 22230 CCK/W33 | 150.000 | 5.9055 | 270 | 10.6299 | 73.0 | 2.8740 | 736 000 | 166 000 | 1 080 000 | 243 000 | 18.00 | 39.50 | 0.26 | 2.6 | 3.9 |
| 22309 EK/VA751 | 450918 | 45.000 | 1.7717 | 100 | 3.9370 | 36.0 | 1.4173 | 138 000 | 31 000 | 160 000 | 31 100 | 1.35 | 3.00 | 0.37 | 1.8 | 2.7 |
| 22310 EK/VA751 | 467964 | 50.000 | 1.9685 | 110 | 4.3307 | 40.0 | 1.5748 | 176 000 | 39 600 | 200 000 | 45 000 | 1.85 | 4.10 | 0.37 | 1.8 | 2.7 |
| 22311 EK/VA751 | 22311 VAE | 55.000 | 2.1654 | 120 | 4.7244 | 43.0 | 1.6929 | 199 000 | 44 800 | 232 000 | 52 200 | 2.35 | 5.20 | 0.35 | 1.9 | 2.9 |
| 22312 EK/VA751 | 467000 | 60.000 | 2.3622 | 130 | 5.1181 | 46.0 | 1.8110 | 235 000 | 52 900 | 280 000 | 63 000 | 2.95 | 6.50 | 0.35 | 1.9 | 2.9 |
| 22312 EK/VA7582† | 22312 EK/VA7583†† | 60.000 | 2.3622 | 130 | 5.1181 | 46.0 | 1.8110 | 235 000 | 52 900 | 280 000 | 63 000 | 2.95 | 6.50 | 0.35 | 1.9 | 2.9 |
| 22312 EK/VA7583†† | 22312 EK/VA751 | 60.000 | 2.3622 | 130 | 5.1181 | 46.0 | 1.8110 | 235 000 | 52 900 | 280 000 | 63 000 | 2.95 | 6.50 | 0.35 | 1.9 | 2.9 |
| 22313 VAC | 22313 CCK/W33 | 65.000 | 2.5591 | 140 | 5.5118 | 48.0 | 1.8898 | 253 000 | 56 900 | 300 000 | 67 400 | 3.55 | 7.85 | 0.35 | 1.9 | 2.9 |
| 22315 CCK/VA755 | 22315 CCK/W33 | 75.000 | 2.9528 | 160 | 6.2992 | 55.0 | 2.1654 | 345 000 | 77 600 | 430 000 | 96 700 | 5.25 | 11.50 | 0.35 | 1.9 | 2.9 |
| 22315 VAE†† | 466915 | 75.000 | 2.9528 | 160 | 6.2992 | 55.0 | 2.1654 | 345 000 | 77 600 | 430 000 | 96 700 | 5.25 | 11.50 | 0.35 | 1.9 | 2.9 |
| 22315 VAH† | 22315 VAE†† | 75.000 | 2.9528 | 160 | 6.2992 | 55.0 | 2.1654 | 345 000 | 77 600 | 430 000 | 96 700 | 5.25 | 11.50 | 0.35 | 1.9 | 2.9 |
| 22319 VAC | 22319 CCK/W33 | 95.000 | 3.7402 | 200 | 7.8740 | 67.0 | 2.6378 | 518 000 | 117 000 | 670 000 | 151 000 | 10.00 | 22.00 | 0.35 | 1.9 | 2.9 |
| 23122 VAF | 23122 CCK/W33 | 110.000 | 4.3307 | 180 | 7.0866 | 56.0 | 2.2047 | 374 000 | 84 000 | 585 000 | 132 000 | 5.45 | 12.00 | 0.30 | 2.3 | 3.4 |
| 23124 VAA | 23124 CCK/W33 | 120.000 | 4.7244 | 200 | 7.7840 | 62.0 | 2.4409 | 437 000 | 98 300 | 695 000 | 156 000 | 7.80 | 17.00 | 0.28 | 2.4 | 3.6 |
| 23130 VAA** | 23130 CCK/W33 | 151.333 | 5.9579 | 250 | 9.8425 | 80.0 | 3.1496 | 725 000 | 163 000 | 1 200 000 | 270 000 | 16.00 | 35.50 | 0.30 | 2.3 | 3.4 |
| 23220 VAA | 23220 CCK/W33 | 100.000 | 3.9370 | 180 | 7.0866 | 60.3 | 2.3470 | 414 000 | 93 200 | 600 000 | 135 000 | 6.70 | 15.00 | 0.33 | 2.0 | 3.0 |
| ECB 23220 VAA | EVB 23220 VAA | 100.000 | 3.9370 | 180 | 7.0866 | 60.3 | 2.3470 | 414 000 | 93 200 | 600 000 | 135 000 | 6.70 | 15.00 | 0.33 | 2.0 | 3.0 |
| 23222 CCK/VA756 | 23222 CCK/W33 | 110.000 | 4.3307 | 200 | 7.8740 | 69.8 | 2.7480 | 518 000 | 117 000 | 765 000 | 172 000 | 9.70 | 21.50 | 0.33 | 2.0 | 3.0 |
| 23226 VAD | 23226 CCK/W33 | 130.000 | 5.1181 | 230 | 9.0551 | 80.0 | 3.1496 | 690 000 | 155 000 | 1 060 000 | 238 000 | 14.00 | 31.00 | 0.33 | 2.0 | 3.0 |

* special bore size

** controlled inner ring width

† coater roll bearing w/ .000050 runout max

†† coater roll bearing w/ .000075 runout max.

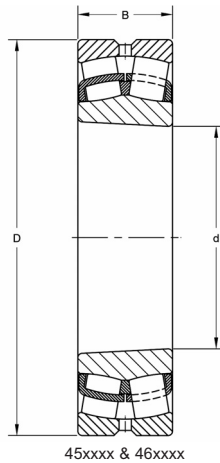
Spherical roller bearings

Printing Press

Series: 453538 — 468772

Size: 50.000 mm — 130.000 mm

1.9685 in — 5.1181 in



Please contact SKF Application Engineering for tapered journal (X drawings) details.

| Designation | | Principal Dimensions | | | | | | Basic Load Ratings | | | | Mass | | Calculation Factors | | |
|-------------|------------------------------|----------------------|---------|------------------|---------|-------|--------|--------------------|---------|----------------|---------|-------|--------|---------------------|----------------|----------------|
| Current | Basic/ Replaced Design | Bore | | Outside Diameter | | Width | | Dynamic | | Static | | kg | lb | e | Y ₁ | Y ₂ |
| | | d | | D | | B | | C | | C ₀ | | | | | | |
| | | mm | in | mm | in | mm | in | N | lbf | N | lbf | | | - | - | - |
| 453538 | 22210 CCK/W33 | 50.000 | 1.9685 | 90 | 3.5433 | 23.0 | .9055 | 84 500 | 19 000 | 100 000 | 22 500 | 0.60 | 1.30 | 0.24 | 2.8 | 4.2 |
| 454548 | 23126 CCK/W33 | 130.000 | 5.1181 | 210 | 8.2677 | 64.0 | 2.5197 | 489 000 | 110 000 | 780 000 | 175 000 | 8.55 | 19.00 | 0.28 | 2.4 | 3.6 |
| 458681 | 22217 CCK/W33 | 85.000 | 3.3465 | 150 | 5.9055 | 36.0 | 1.4173 | 210 000 | 47 200 | 270 000 | 60 700 | 2.55 | 5.60 | 0.22 | 3.0 | 4.6 |
| 465123 | 22216 CCK/W33 | 80.000 | 3.1496 | 140 | 5.5118 | 33.0 | 1.2992 | 176 000 | 39 600 | 228 000 | 51 300 | 2.05 | 4.50 | 0.22 | 3.0 | 4.6 |
| 466144 | 23122 CCK/W33 | 110.000 | 4.3307 | 180 | 7.0866 | 56.0 | 2.2047 | 374 000 | 84 000 | 585 000 | 132 000 | 5.45 | 12.00 | 0.30 | 2.3 | 3.4 |
| 466144 A** | 23122 CCK/W33 | 110.000 | 4.3307 | 180 | 7.0866 | 56.0 | 2.2047 | 374 000 | 84 000 | 585 000 | 132 000 | 5.45 | 12.00 | 0.30 | 2.3 | 3.4 |
| 466619 | 22240 CCK/W33* | 199.882 | 7.8694 | 360 | 14.1732 | 98.0 | 3.8583 | 1 270 000 | 286 000 | 1 930 000 | 434 000 | 43.50 | 96.00 | 0.26 | 2.6 | 3.9 |
| 466619 A** | 22240 CCK/W33* | 199.882 | 7.8694 | 360 | 14.1732 | 98.0 | 3.8583 | 1 270 000 | 286 000 | 1 930 000 | 434 000 | 43.50 | 96.00 | 0.26 | 2.6 | 3.9 |
| 466645 | I 112605 CAC/W33 | 129.888 | 5.1137 | 225 | 8.8583 | 76.0 | 2.9921 | 633 000 | 142 000 | 1 010 000 | 227 000 | 13.00 | 28.50 | 0.31 | 2.2 | 3.3 |
| 466713 | 23230 CCK/W33 | 150.000 | 5.9055 | 270 | 10.6299 | 96.0 | 3.7795 | 937 000 | 211 000 | 1 460 000 | 328 000 | 24.00 | 53.00 | 0.35 | 1.9 | 2.9 |
| 466713 A** | 23230 CCK/W33 | 150.000 | 5.9055 | 270 | 10.6299 | 96.0 | 3.7795 | 937 000 | 211 300 | 1 460 000 | 328 000 | 24.00 | 53.00 | 0.35 | 1.9 | 2.9 |
| 466815 | 23224 CCK/W33 | 120.000 | 4.7244 | 215 | 8.4646 | 76.0 | 2.9921 | 610 000 | 137 000 | 930 000 | 209 000 | 12.00 | 26.50 | 0.35 | 1.9 | 2.9 |
| 466816 | 23226 CCK/W33 | 130.000 | 5.1181 | 230 | 9.0551 | 80.0 | 3.1496 | 690 000 | 155 000 | 1 060 000 | 238 000 | 14.00 | 31.00 | 0.33 | 2.0 | 3.0 |
| 466817 | 23228 CCK/W33 | 140.000 | 5.5118 | 250 | 9.8425 | 88.0 | 3.4646 | 799 000 | 180 000 | 1 250 000 | 281 000 | 18.50 | 41.00 | 0.33 | 2.0 | 3.0 |
| 466817 A** | 23228 CCK/W33 | 140.000 | 5.5118 | 250 | 9.8425 | 88.0 | 3.4646 | 799 000 | 180 000 | 1 250 000 | 281 000 | 18.50 | 41.00 | 0.33 | 2.0 | 3.0 |
| 466915 | 22315 CCK/W33 | 75.000 | 2.9528 | 160 | 6.2992 | 55.0 | 2.1654 | 345 000 | 77 600 | 430 000 | 96 700 | 5.25 | 11.50 | 0.35 | 1.9 | 2.9 |
| 467304 | 22314 CCK/W33 | 70.000 | 2.7559 | 150 | 5.9055 | 51.0 | 2.0079 | 311 000 | 70 000 | 380 000 | 85 400 | 4.30 | 9.50 | 0.35 | 1.9 | 2.9 |
| 467311 | 22316 CCK/W33 | 80.000 | 3.1496 | 170 | 6.6929 | 58.0 | 2.2835 | 374 000 | 84 200 | 455 000 | 102 000 | 6.20 | 13.50 | 0.35 | 1.9 | 2.9 |
| 467311 A** | 22316 CCK/W33 | 80.000 | 3.1496 | 170 | 6.6929 | 58.0 | 2.2835 | 374 000 | 84 200 | 455 000 | 102 000 | 6.20 | 13.50 | 0.35 | 1.9 | 2.9 |
| 467315 | 22317 CCK/W33 | 85.000 | 3.3465 | 180 | 7.0866 | 60.0 | 2.3622 | 420 000 | 94 500 | 520 000 | 117 000 | 7.25 | 16.00 | 0.33 | 2.0 | 3.0 |
| 467315 A** | 22317 CCK/W33 | 85.000 | 3.3465 | 180 | 7.0866 | 60.0 | 2.3622 | 420 000 | 94 500 | 520 000 | 117 000 | 7.25 | 16.00 | 0.33 | 2.0 | 3.0 |
| 467350 | 23148 CCK/W33 | 240.000 | 9.4488 | 400 | 15.7480 | 128.0 | 5.0394 | 1 790 000 | 403 000 | 3 200 000 | 719 000 | 65.50 | 145.00 | 0.30 | 2.3 | 3.4 |
| 467350 A** | 23148 CCK/W33 | 240.000 | 9.4488 | 400 | 15.7480 | 128.0 | 5.0394 | 1 790 000 | 403 000 | 3 200 000 | 719 000 | 65.50 | 145.00 | 0.30 | 2.3 | 3.4 |
| 467418 | 22218 CCK/W33 | 90.000 | 3.5433 | 160 | 6.2992 | 40.0 | 1.5748 | 253 000 | 56 900 | 340 000 | 76 400 | 3.25 | 7.15 | 0.23 | 2.9 | 4.4 |
| 468043 | 23222 CCK/W33 | 110.000 | 4.3307 | 200 | 7.8740 | 69.8 | 2.7480 | 518 000 | 117 000 | 765 000 | 172 000 | 9.70 | 21.50 | 0.33 | 2.0 | 3.0 |
| 468043 A** | 23222 CCK/W33 | 110.000 | 4.3307 | 200 | 7.8740 | 69.8 | 2.7480 | 518 000 | 117 000 | 765 000 | 172 000 | 9.70 | 21.50 | 0.33 | 2.0 | 3.0 |
| 468324 | 23132 CCK/W33 | 160.000 | 6.2992 | 270 | 10.6299 | 86.0 | 3.3858 | 845 000 | 190 000 | 1 370 000 | 308 000 | 20.50 | 45.00 | 0.30 | 2.3 | 3.4 |
| 468603 | 22222 CCK/W33 | 110.000 | 4.3307 | 200 | 7.8740 | 53.0 | 2.0866 | 408 000 | 91 800 | 560 000 | 126 000 | 7.00 | 15.50 | 0.25 | 2.7 | 4.0 |
| 468699 | 23156 CAK/W33 | 280.000 | 11.0236 | 460 | 18.1102 | 146.0 | 5.7480 | 2 300 000 | 518 000 | 4 250 000 | 955 000 | 97.00 | 215.00 | 0.30 | 2.3 | 3.4 |
| 468772 | 22226 CCK/W33 | 130.000 | 5.1181 | 230 | 9.0551 | 64.0 | 2.5197 | 546 000 | 123 000 | 800 000 | 180 000 | 11.00 | 24.50 | 0.26 | 2.6 | 3.9 |

* special bore size

** controlled inner ring width

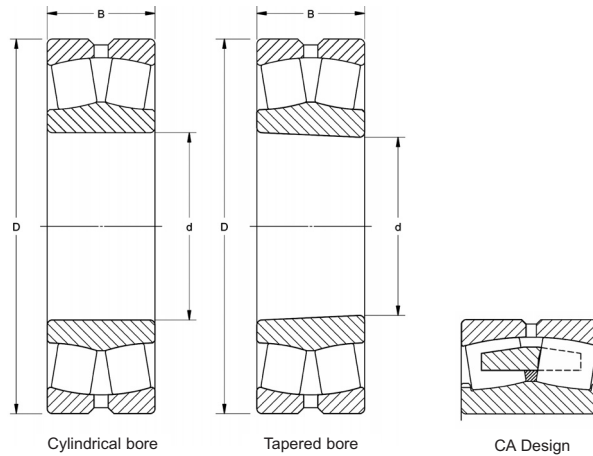
Spherical roller bearings

Special Bearings

Series: I-26310 CAM2/W33 — ECBI-112630 CAC/W33

Size: 200 mm — 350 mm

7.8740 in — 13.7795 in



| Designation | Principal Dimensions | | | | | | Basic Load Ratings | | | | Speed Rating | | Mass | | Calculation Factors | | |
|--------------------------|----------------------|---------|------------------|---------|-------|--------|--------------------|----------------|----------------|----------------|--------------|-------|--------|--------|---------------------|----------------|----------------|
| | Bore | | Outside Diameter | | Width | | Dynamic | | Static | | Lubrication | | kg | lb | e | Y ₁ | Y ₂ |
| | d | D | D | D | B | B | C | C ₀ | C ₀ | C ₀ | Grease | Oil | | | | | |
| mm | in | mm | in | mm | in | N | lbf | N | lbf | r/min | r/min | | | - | - | - | |
| I-26310 CAM2/W33* | 200 | 7.8740 | 380 | 14.9606 | 126 | 4.9606 | 1 730 000 | 390 000 | 2 700 000 | 610 000 | 750 | 950 | 68.00 | 150.00 | 0.33 | 2.0 | 3.0 |
| I-26311 CAM2/W33* | 220 | 8.6614 | 420 | 16.5354 | 138 | 5.4331 | 2 070 000 | 465 000 | 3 200 000 | 720 000 | 670 | 850 | 90.50 | 200.00 | 0.33 | 2.0 | 3.0 |
| I-28809 CAM2/W33* | 190 | 7.4803 | 280 | 11.0236 | 67 | 2.6378 | 644 000 | 145 000 | 1 140 000 | 256 000 | 1 700 | 2 200 | 15.00 | 33.00 | 0.21 | 3.2 | 4.8 |
| I-28814 CAM2/W33* | 240 | 9.4488 | 350 | 13.7795 | 83 | 3.2677 | 978 000 | 220 000 | 1 830 000 | 411 000 | 850 | 1 100 | 27.50 | 60.50 | 0.21 | 3.2 | 4.8 |
| I-28821 CACM2/W33* | 310 | 12.2047 | 455 | 17.9134 | 109 | 4.2913 | 1 680 000 | 378 000 | 3 250 000 | 730 000 | 630 | 800 | 66.00 | 145.00 | 0.21 | 3.2 | 4.8 |
| I-37611 CAM2/W33** | 220 | 8.6614 | 420 | 16.5354 | 138 | 5.4331 | 2 070 000 | 465 000 | 3 200 000 | 720 000 | 670 | 850 | 90.50 | 200.00 | 0.33 | 2.0 | 3.0 |
| I-37617 CA/W33** | 340 | 13.3858 | 640 | 25.1969 | 190 | 7.4803 | 4 080 000 | 920 000 | 6 550 000 | 1 500 000 | 480 | 600 | 150.00 | 640.00 | 0.30 | 2.3 | 3.4 |
| I-112618 CA/W33** | 250 | 9.8425 | 410 | 16.1417 | 128 | 5.0394 | 1 760 000 | 400 000 | 3 100 000 | 700 000 | 630 | 800 | 68.00 | 150.00 | 0.30 | 2.3 | 3.4 |
| ECBI-112630 CAC/W33**350 | 350 | 13.7795 | 590 | 23.2283 | 192 | 7.5591 | 3 740 000 | 840 500 | 6 800 000 | 1 530 000 | 430 | 530 | 220.00 | 485.00 | 0.30 | 2.3 | 3.4 |

* cylindrical bore
** tapered bore

