

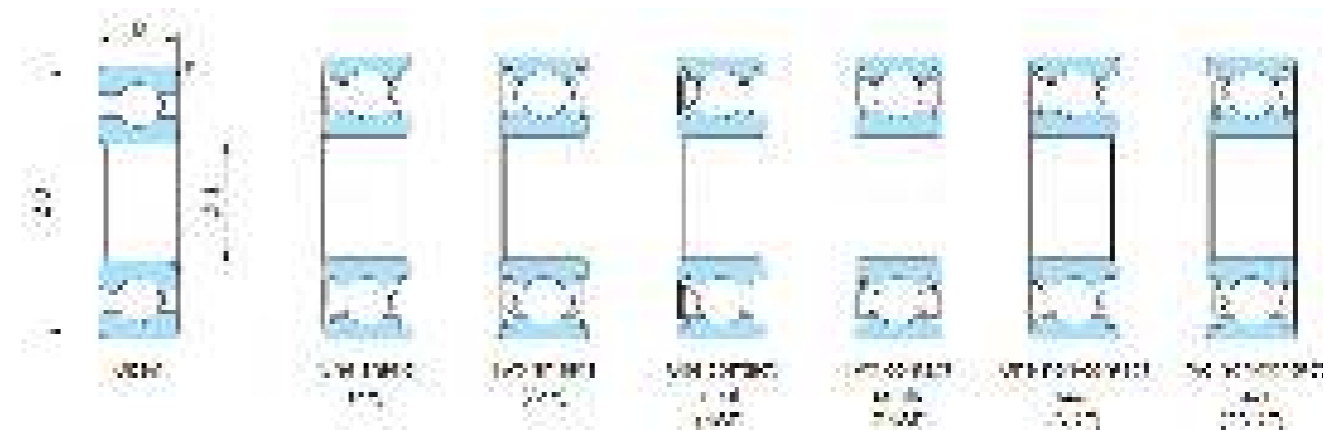
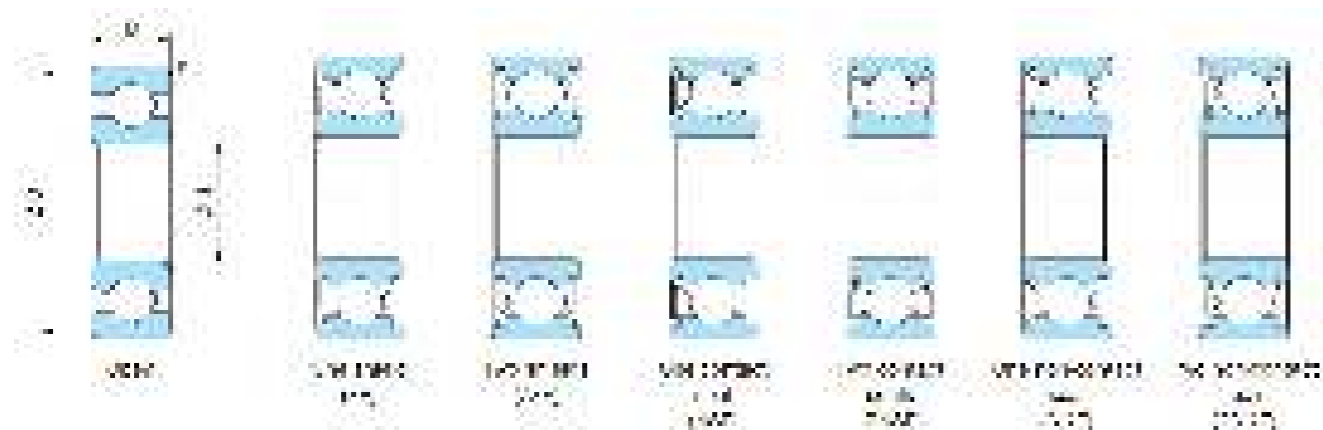
Nachi Premium Bearings





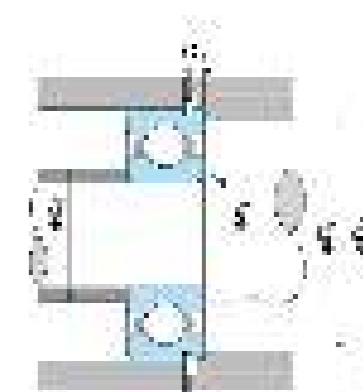
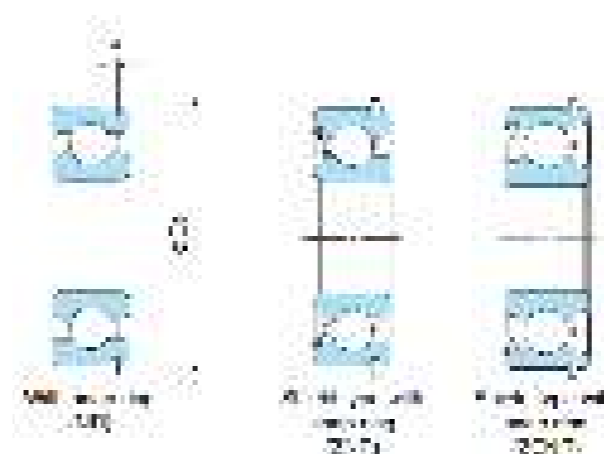
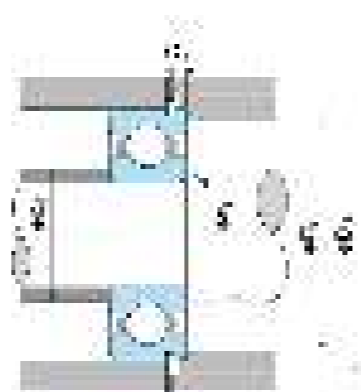
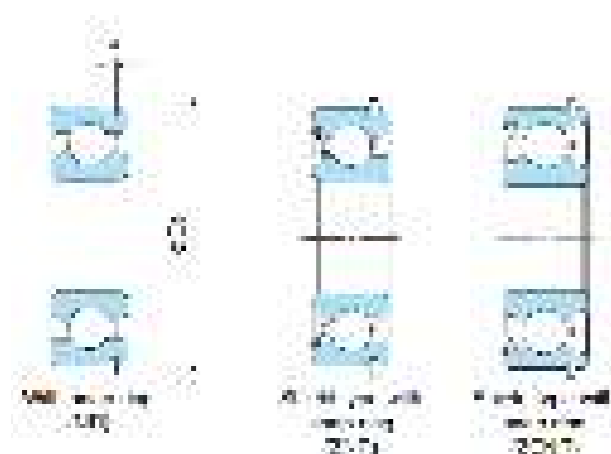
NACHI BEARINGS

| | | | |
|--|---------------|---|---------------|
| Deep Groove Ball Bearings | 5.1.4 | Double Row Self Aligning Ball Bearings | 5.1.72 |
| 6000 Series | 5.1.4 | 1200 Series | 5.1.72 |
| 6000 Series w/ Snap Ring | 5.1.6 | 1300 Series | 5.1.72 |
| 6200 Series | 5.1.8 | 2200 Series | 5.1.72 |
| 6200 Series w/ Snap Ring | 5.1.10 | 1200 Tapered Bore Series | 5.1.74 |
| 6300 Series | 5.1.12 | 1300 Tapered Bore Series | 5.1.74 |
| 6300 Series w/ Snap Ring | 5.1.14 | 2200 Tapered Bore Series | 5.1.74 |
| 62/22 & 63/32 Series and Specials | 5.1.14 | | |
| 6800 (61800) Series | 5.1.16 | Automotive Bearings | 5.1.76 |
| 6900 (61900) Series | 5.1.18 | | |
| 16000 Series | 5.1.20 | | |
| Tapered Roller Bearings | 5.1.22 | | |
| 30200 Series | 5.1.22 | | |
| 30300 Series | 5.1.24 | | |
| 32000 Series | 5.1.26 | | |
| 32200 Series | 5.1.28 | | |
| 32300 Series | 5.1.30 | | |
| Inch Series | 5.1.32 | | |
| Spherical Roller Bearings | 5.1.34 | | |
| 21300 Series | 5.1.34 | | |
| 22200 Series | 5.1.36 | | |
| 22300 Series | 5.1.38 | | |
| 23000 Series | 5.1.40 | | |
| 23100 Series | 5.1.42 | | |
| 23200 Series | 5.1.44 | | |
| 24000 Series | 5.1.46 | | |
| 24100 Series | 5.1.46 | | |
| Spherical Roller Thrust Bearings | 5.1.48 | | |
| Cylindrical Roller Bearings | 5.1.50 | | |
| 200 Series | 5.1.50 | | |
| 300 Series | 5.1.52 | | |
| Double Row Cylindrical Roller Bearings | 5.1.54 | | |
| Thrust Ball Bearings | 5.1.56 | | |
| 51100 Series | 5.1.56 | | |
| 51200 Series | 5.1.58 | | |
| 51300 Series | 5.1.60 | | |
| Inch Series "0" | 5.1.62 | | |
| Angular Contact Ball Bearings | 5.1.64 | | |
| 5200 - 5300 Series | 5.1.64 | | |
| 7000 Series Angular Contact Precision | 5.1.66 | | |
| 7200-7300 Series Angular Contact | 5.1.68 | | |
| Ball Screw Precision Angular Contact Bearings | 5.1.70 | | |
| TAB Series | 5.1.70 | | |



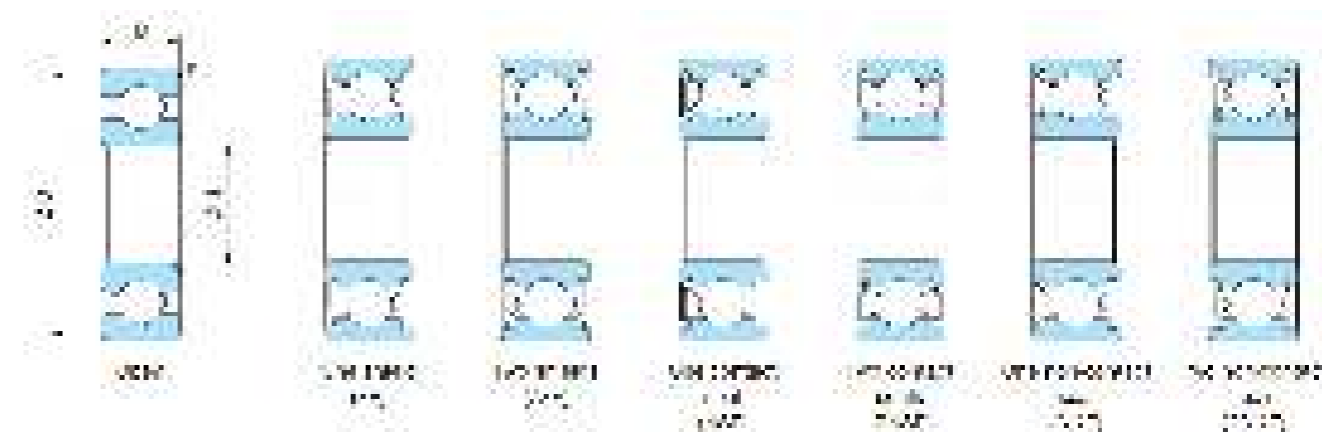
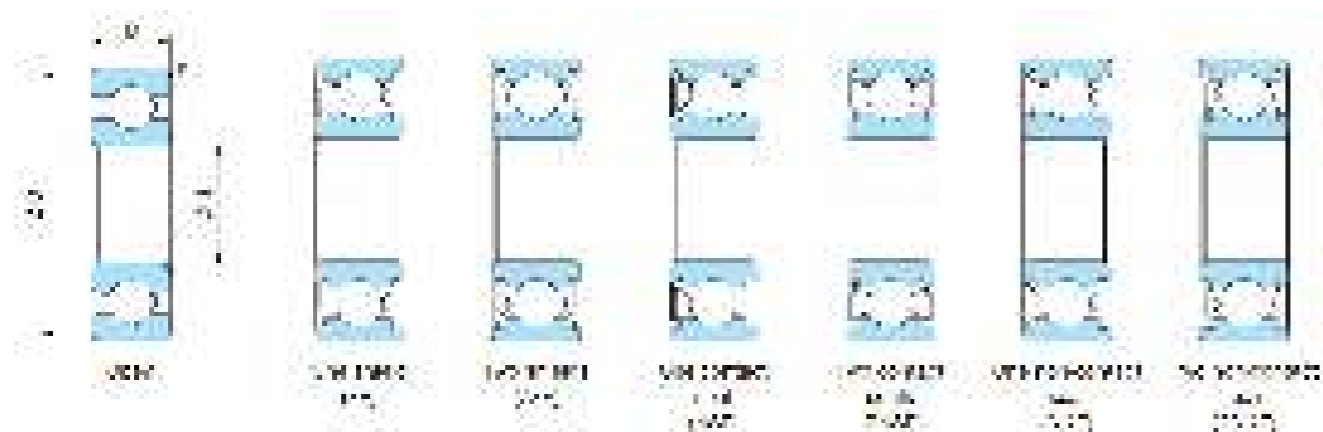
| Boundary dimensions (mm) | | | | Bearing No | | | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Factor fo | Limiting speed (min ⁻¹) | | | Abutment and fillet dimensions (mm) | | | Mass (kg) | Bearing No |
|--------------------------|-----|----|---------|------------|-------------|-------------------|------------------------|----------------------------------|----------------------------------|-----------|-------------------------------------|-----------|-----------------|-------------------------------------|----------|----------|-----------|------------|
| d | D | B | r (min) | Open type | Shield Type | Contact seal type | Non-contact seal type* | | | | Grease lubrication | | Oil lubrication | da (min) | Da (max) | ra (max) | | |
| | | | | | | | | | | | Open type, ZE, ZZE, NKE, 2NKE | NSE, 2NSE | Open type, ZE | | | | | |
| 10 | 26 | 8 | 0.3 | 6000 | 6000ZZE | 6000-2NSE | 6000-2NKE | 4550 | 1970 | 12.4 | 30000 | 22000 | 36000 | 12 | 24 | 0.3 | 0.019 | 6000 |
| 12 | 28 | 8 | 0.3 | 6001 | 6001ZZE | 6001-2NSE | 6001-2NKE | 5100 | 2390 | 13.2 | 28000 | 18000 | 32000 | 14 | 26 | 0.3 | 0.023 | 6001 |
| 15 | 32 | 9 | 0.3 | 6002 | 6002ZZE | 6002-2NSE | 6002-2NKE | 5600 | 2840 | 13.9 | 24000 | 15000 | 28000 | 17 | 30 | 0.3 | 0.032 | 6002 |
| 17 | 35 | 10 | 0.3 | 6003 | 6003ZZE | 6003-2NSE | 6003-2NKE | 6000 | 3250 | 14.3 | 22000 | 14000 | 26000 | 19 | 33 | 0.3 | 0.039 | 6003 |
| 20 | 42 | 12 | 0.6 | 6004 | 6004ZZE | 6004-2NSE | 6004-2NKE | 9400 | 5000 | 13.9 | 18000 | 11000 | 21000 | 24 | 38 | 0.6 | 0.07 | 6004 |
| 25 | 47 | 12 | 0.6 | 6005 | 6005ZZE | 6005-2NSE | 6005-2NKE | 10100 | 5850 | 14.5 | 15000 | 9500 | 18000 | 29 | 43 | 0.6 | 0.079 | 6005 |
| 30 | 55 | 13 | 1 | 6006 | 6006ZZE | 6006-2NSE | 6006-2NKE | 13200 | 8300 | 14.8 | 13000 | 8000 | 15000 | 35 | 50 | 1 | 0.117 | 6006 |
| 35 | 62 | 14 | 1 | 6007 | 6007ZZE | 6007-2NSE | 6007-2NKE | 16000 | 10300 | 14.8 | 12000 | 6800 | 14000 | 40 | 57 | 1 | 0.156 | 6007 |
| 40 | 68 | 15 | 1 | 6008 | 6008ZZE | 6008-2NSE | 6008-2NKE | 16800 | 11500 | 15.3 | 10000 | 6100 | 12000 | 45 | 63 | 1 | 0.194 | 6008 |
| 45 | 75 | 16 | 1 | 6009 | 6009ZZE | 6009-2NSE | 6009-2NKE | 20900 | 15200 | 15.3 | 9200 | 5400 | 11000 | 50 | 70 | 1 | 0.246 | 6009 |
| 50 | 80 | 16 | 1 | 6010 | 6010ZZE | 6010-2NSE | 6010-2NKE | 21800 | 16600 | 15.6 | 8500 | 5000 | 10000 | 55 | 75 | 1 | 0.264 | 6010 |
| 55 | 90 | 18 | 1.1 | 6011 | 6011ZZE | 6011-2NSE | 6011-2NKE | 28300 | 21300 | 15.4 | 7700 | 4500 | 9000 | 61 | 84 | 1 | 0.384 | 6011 |
| 60 | 95 | 18 | 1.1 | 6012 | 6012ZZE | 6012-2NSE | 6012-2NKE | 29400 | 23200 | 15.5 | 7100 | 4100 | 8500 | 66 | 89 | 1 | 0.418 | 6012 |
| 65 | 100 | 18 | 1.1 | 6013 | 6013ZZE | 6013-2NSE | 6013-2NKE | 30500 | 25200 | 15.7 | 6700 | 4000 | 8000 | 71 | 94 | 1 | 0.438 | 6013 |
| 70 | 110 | 20 | 1.1 | 6014 | 6014ZZE | 6014-2NSE | 6014-2NKE | 38000 | 31000 | 15.6 | 6100 | 3600 | 7100 | 76 | 104 | 1 | 0.607 | 6014 |
| 75 | 115 | 20 | 1.1 | 6015 | 6015ZZE | 6015-2NSE | 6015-2NKE | 39500 | 33500 | 15.7 | 5700 | 3400 | 6700 | 81 | 109 | 1 | 0.645 | 6015 |
| 80 | 125 | 22 | 1.1 | 6016 | 6016ZZ | 6016-2NSL | - | 47500 | 39500 | 15.6 | 5300 | - | 6300 | 86 | 119 | 1 | 0.855 | 6016 |
| 85 | 130 | 22 | 1.1 | 6017 | 6017ZZ | 6017-2NSL | - | 49500 | 43000 | 15.7 | 5000 | - | 6000 | 91 | 124 | 1.1 | 0.895 | 6017 |
| 90 | 140 | 24 | 1.5 | 6018 | 6018ZZ | 6018-2NSL | - | 58000 | 49500 | 15.6 | 4800 | - | 5600 | 97 | 133 | 1.5 | 1.17 | 6018 |
| 95 | 145 | 24 | 1.5 | 6019 | 6019ZZ | 6019-2NSL | - | 60500 | 54000 | 15.8 | 4500 | - | 5300 | 102 | 138 | 1.5 | 1.22 | 6019 |
| 100 | 150 | 24 | 1.5 | 6020 | 6020ZZ | 6020-2NSL | - | 60000 | 54000 | 15.9 | 4300 | - | 5300 | 107 | 143 | 1.5 | 1.26 | 6020 |
| 105 | 160 | 26 | 2 | 6021 | 6021ZZ | 6021-2NS | - | 72500 | 65500 | 15.8 | 4000 | - | 4800 | 113 | 152 | 2 | 1.6 | 6021 |
| 110 | 170 | 28 | 2 | 6022 | 6022ZZ | 6022-2NS | - | 84500 | 73000 | 15.5 | 3800 | - | 4500 | 118 | 162 | 2 | 1.97 | 6022 |
| 120 | 180 | 28 | 2 | 6024 | 6024ZZ | 6024-2NS | - | 88000 | 79500 | 15.7 | 3600 | - | 4300 | 128 | 172 | 2 | 2.67 | 6024 |
| 130 | 200 | 33 | 2 | 6026 | 6026ZZ | 6026-2NS | - | 106000 | 101000 | 15.7 | 3200 | - | 3800 | 138 | 192 | 2 | 3.92 | 6026 |
| 140 | 210 | 33 | 2 | 6028 | 6028ZZ | - | - | 110000 | 109000 | 15.9 | 3000 | - | 3600 | 148 | 202 | 2 | 4.15 | 6028 |
| 150 | 225 | 35 | 2.1 | 6030 | 6030ZZ | - | - | 126000 | 126000 | 15.9 | 2800 | - | 3200 | 159 | 216 | 2 | 4.48 | 6030 |

* Not a stocked range although available on request.



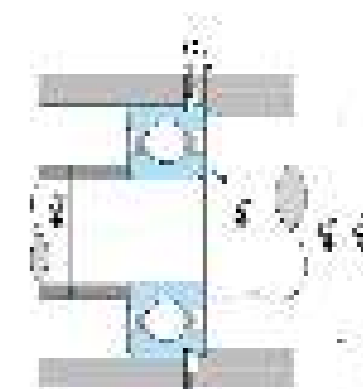
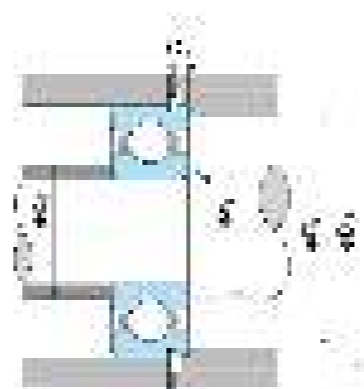
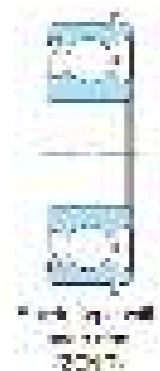
| Boundary dimensions (mm) | | | | | Dimensions of snap ring groove and snap ring (mm) | | | | Bearing No. | | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Factor fo | Limiting speed (min-1) | | Abutment and fillet dimensions (mm) | | Bearing No. |
|--------------------------|-----|----|---------|----------|---|---------|---------|---------|-------------------|------------|-------------|----------------------------------|----------------------------------|-----------|------------------------|-----------------|-------------------------------------|----------|-------------|
| d | D | B | r (min) | r1 (min) | D1 (max) | a (max) | b (min) | f (max) | Contact seal type | Open type* | Shield type | | | | Grease lubrication | Oil lubrication | da (min) | Da (max) | |
| 15 | 32 | 9 | 0.3 | 0.3 | 30.15 | 2.06 | 1.35 | 1.12 | 6002-2NSENR | 6002NR | 6002ZENR | 5600 | 2840 | 13.9 | 24000 | 28000 | 17 | 30 | 6002 |
| 17 | 35 | 10 | 0.3 | 0.3 | 33.17 | 2.06 | 1.35 | 1.12 | 6003-2NSENR | 6003NR | 6003ZENR | 6000 | 3250 | 14.3 | 22000 | 26000 | 19 | 33 | 6003 |
| 20 | 42 | 12 | 0.6 | 0.5 | 39.75 | 2.06 | 1.35 | 1.12 | 6004-2NSENR | 6004NR | 6004ZENR | 9400 | 5000 | 13.9 | 18000 | 21000 | 24 | 38 | 6004 |
| 25 | 47 | 12 | 0.6 | 0.5 | 44.6 | 2.06 | 1.35 | 1.12 | 6005-2NSENR | 6005NR | 6005ZENR | 10100 | 5850 | 14.5 | 15000 | 18000 | 29 | 43 | 6005 |
| 30 | 55 | 13 | 1 | 0.5 | 52.6 | 2.08 | 1.35 | 1.12 | 6006-2NSENR | 6006NR | 6006ZENR | 13200 | 8300 | 14.8 | 13000 | 15000 | 35 | 50 | 6006 |
| 35 | 62 | 14 | 1 | 0.5 | 59.61 | 2.08 | 1.9 | 1.7 | 6007-2NSENR | 6007NR | 6007ZENR | 16000 | 10300 | 14.8 | 12000 | 14000 | 40 | 57 | 6007 |
| 40 | 68 | 15 | 1 | 0.5 | 64.82 | 2.49 | 1.9 | 1.7 | 6008-2NSENR | 6008NR | 6008ZENR | 16800 | 11500 | 15.3 | 10000 | 12000 | 45 | 63 | 6008 |
| 45 | 75 | 16 | 1 | 0.5 | 71.83 | 2.49 | 1.9 | 1.7 | 6009-2NSENR | 6009NR | 6009ZENR | 20900 | 15200 | 15.3 | 9200 | 11000 | 50 | 70 | 6009 |
| 50 | 80 | 16 | 1 | 0.5 | 76.81 | 2.49 | 1.9 | 1.7 | 6010-2NSENR | 6010NR | 6010ZENR | 21800 | 16600 | 15.6 | 8500 | 10000 | 55 | 75 | 6010 |
| 65 | 100 | 18 | 1.1 | 0.5 | 96.8 | 2.87 | 2.7 | 2.46 | - | 6013NR | 6013ZENR | 30500 | 25200 | 15.7 | 6700 | 8000 | 71 | 94 | 6013 |
| 70 | 110 | 20 | 1.1 | 0.5 | 106.81 | 2.87 | 2.7 | 2.46 | - | 6014NR | 6014ZENR | 38000 | 31000 | 15.6 | 6100 | 7100 | 76 | 104 | 6014 |
| 75 | 115 | 20 | 1.1 | 0.5 | 111.81 | 2.87 | 2.7 | 2.46 | - | 6015NR | 6015ZENR | 39500 | 33500 | 15.7 | 5700 | 6700 | 81 | 109 | 6015 |
| 80 | 125 | 22 | 1.1 | 0.5 | 120.22 | 2.87 | 3.1 | 2.82 | - | 6016NR | 6016ZENR | 47500 | 39500 | 15.6 | 5300 | 6300 | 86 | 119 | 6016 |

* Not a stocked range although available on request.



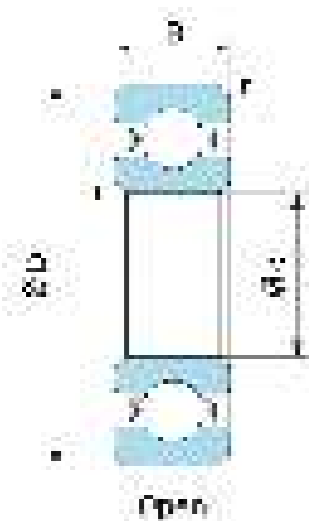
| Boundary dimensions (mm) | | | | Bearing No | | | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Factor fo | Limiting speed (min-1) | | | Abutment and fillet dimensions (mm) | | | Mass (kg) | Bearing No |
|--------------------------|-----|----|---------|------------|-------------|-------------------|------------------------|----------------------------------|----------------------------------|-----------|-------------------------------|-----------|-----------------|-------------------------------------|----------|----------|-----------|------------|
| d | D | B | r (min) | Open type | Shield type | Contact seal type | Non-contact seal type* | | | | Grease lubrication | | Oil lubrication | da (min) | Da (max) | ra (max) | | |
| | | | | | | | | | | | Open type, ZE, ZZE, NKE, 2NKE | NSE, 2NSE | Open type, ZE | | | | | |
| 10 | 30 | 9 | 0.6 | 6200 | 6200ZZE | 6200-2NSE | 6200-2NKE | 5100 | 2390 | 13.2 | 25000 | 18000 | 30000 | 15 | 25 | 0.6 | 0.032 | 6200 |
| 12 | 32 | 10 | 0.6 | 6201 | 6201ZZE | 6201-2NSE | 6201-2NKE | 6800 | 3050 | 12.3 | 22000 | 17000 | 28000 | 17 | 27 | 0.6 | 0.037 | 6201 |
| 15 | 35 | 11 | 0.6 | 6202 | 6202ZZE | 6202-2NSE | 6202-2NKE | 7650 | 3700 | 13.1 | 20000 | 15000 | 24000 | 20 | 30 | 0.6 | 0.045 | 6202 |
| 17 | 40 | 12 | 0.6 | 6203 | 6203ZZE | 6203-2NSE | 6203-2NKE | 9550 | 4800 | 13.1 | 18000 | 12000 | 21000 | 22 | 35 | 0.6 | 0.6 | 6203 |
| 20 | 47 | 14 | 1 | 6204 | 6204ZZE | 6204-2NSE | 6204-2NKE | 12800 | 6600 | 13.1 | 16000 | 11000 | 18000 | 26 | 41 | 1 | 0.106 | 6204 |
| 25 | 52 | 15 | 1 | 6205 | 6205ZZE | 6205-2NSE | 6205-2NKE | 14000 | 7900 | 13.9 | 13000 | 9000 | 16000 | 31 | 46 | 1 | 0.128 | 6205 |
| 30 | 62 | 16 | 1 | 6206 | 6206ZZE | 6206-2NSE | 6206-2NKE | 19500 | 11300 | 13.9 | 11000 | 7500 | 13000 | 36 | 56 | 1 | 0.199 | 6206 |
| 35 | 72 | 17 | 1.1 | 6207 | 6207ZZE | 6207-2NSE | 6207-2NKE | 25700 | 15300 | 13.8 | 9800 | 6300 | 11000 | 42 | 65 | 1 | 0.288 | 6207 |
| 40 | 80 | 18 | 1.1 | 6208 | 6208ZZE | 6208-2NSE | 6208-2NKE | 29100 | 17900 | 14 | 8700 | 5600 | 10000 | 47 | 73 | 1 | 0.366 | 6208 |
| 45 | 85 | 19 | 1.1 | 6209 | 6209ZZE | 6209-2NSE | 6209-2NKE | 32500 | 20500 | 14.1 | 7800 | 5300 | 9300 | 52 | 78 | 1 | 0.407 | 6209 |
| 50 | 90 | 20 | 1.1 | 6210 | 6210ZZE | 6210-2NSE | 6210-2NKE | 35000 | 23200 | 14.4 | 7100 | 4800 | 8600 | 57 | 83 | 1 | 0.463 | 6210 |
| 55 | 100 | 21 | 1.5 | 6211 | 6211ZZE | 6211-2NSE | 6211-2NKE | 43500 | 29300 | 14.4 | 6400 | 4300 | 7700 | 64 | 91 | 1.5 | 0.607 | 6211 |
| 60 | 110 | 22 | 1.5 | 6212 | 6212ZZE | 6212-2NSE | 6212-2NKE | 52500 | 36000 | 14.3 | 6000 | 3800 | 7100 | 69 | 101 | 1.5 | 0.783 | 6212 |
| 65 | 120 | 23 | 1.5 | 6213 | 6213ZZE | 6213-2NSE | 6213-2NKE | 57000 | 40000 | 14.4 | 5500 | 3600 | 6500 | 74 | 111 | 1.5 | 0.99 | 6213 |
| 70 | 125 | 24 | 1.5 | 6214 | 6214ZZE | 6214-2NSE | 6214-2NKE | 62000 | 44000 | 14.4 | 5100 | 3400 | 6300 | 79 | 116 | 1.5 | 1.07 | 6214 |
| 75 | 130 | 25 | 1.5 | 6215 | 6215ZZE | 6215-2NSE | 6215-2NKE | 66000 | 49500 | 14.7 | 4800 | 3200 | 5600 | 84 | 121 | 1.5 | 1.18 | 6215 |
| 80 | 140 | 26 | 2 | 6216 | 6216ZZ | 6216-2NSL | 6216NK | 72500 | 53000 | 14.6 | 4500 | 3000 | 5300 | 90 | 130 | 2 | 1.4 | 6216 |
| 85 | 150 | 28 | 2 | 6217 | 6217ZZ | 6217-2NSL | 6217NK | 84000 | 62000 | 14.5 | 4300 | 2800 | 5000 | 95 | 140 | 2 | 1.79 | 6217 |
| 90 | 160 | 30 | 2 | 6218 | 6218ZZ | 6218-2NSL | 6218NK | 96000 | 71500 | 14.5 | 4000 | 2600 | 4800 | 100 | 150 | 2 | 2.15 | 6218 |
| 95 | 170 | 32 | 2.1 | 6219 | 6219ZZ | 6219-2NSL | 6219NK | 109000 | 81500 | 14.4 | 3800 | 2600 | 4500 | 107 | 158 | 2 | 2.62 | 6219 |
| 100 | 180 | 34 | 2.1 | 6220 | 6220ZZ | 6220-2NSL | 6220NK | 122000 | 93000 | 14.4 | 3600 | 2400 | 4300 | 112 | 168 | 2 | 3.14 | 6220 |
| 105 | 190 | 36 | 2.1 | 6221 | 6221ZZ | 6221-2NS | - | 133000 | 104000 | 14.3 | 3400 | - | 4000 | 117 | 178 | 2 | 3.76 | 6221 |
| 110 | 200 | 38 | 2.1 | 6222 | 6222ZZ | 6222-2NS | - | 144000 | 117000 | 14.3 | 3200 | - | 3800 | 122 | 188 | 2 | 4.36 | 6222 |
| 120 | 215 | 40 | 2.1 | 6224 | 6224ZZ | - | - | 145000 | 118000 | 14.4 | 2900 | - | 3400 | 132 | 203 | 2 | 5.15 | 6224 |

* Not a stocked range although available on request.



| Boundary dimensions (mm) | | | | | Dimensions of snap ring groove and snap ring (mm) | | | | Bearing No. | | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Factor fo | Limiting speed (min-1) | | Abutment and fillet dimensions (mm) | | Bearing No. | Mass (kg) |
|--------------------------|-----|----|---------|----------|---|---------|---------|---------|-------------------|------------|-------------|----------------------------------|----------------------------------|-----------|------------------------|-----------------|-------------------------------------|----------|-------------|-----------|
| d | D | B | r (min) | r1 (min) | D1 (max) | a (max) | b (min) | f (max) | Contact seal type | Open type* | Shield type | | | | Grease lubrication | Oil lubrication | da (min) | Da (max) | | |
| 12 | 32 | 10 | 0.6 | 0.5 | 30.15 | 2.06 | 1.35 | 1.12 | 6201-2NSEN | 6201NR | 6201ZENR | 6800 | 3050 | 12.3 | 22000 | 28000 | 17 | 27 | 6201 | 0.037 |
| 15 | 35 | 11 | 0.6 | 0.5 | 39.75 | 2.06 | 1.35 | 1.12 | 6202-2NSEN | 6202NR | 6202ZENR | 7650 | 3700 | 13.1 | 20000 | 24000 | 21 | 30 | 6202 | 0.045 |
| 17 | 40 | 12 | 0.6 | 0.5 | 44.6 | 2.46 | 1.35 | 1.12 | 6203-2NSEN | 6203NR | 6203ZENR | 9550 | 4800 | 13.1 | 18000 | 21000 | 22 | 35 | 6203 | 0.065 |
| 20 | 47 | 14 | 1 | 0.5 | 44.6 | 2.46 | 1.35 | 1.12 | 6204-2NSEN | 6204NR | 6204ZENR | 12800 | 6600 | 13.1 | 16000 | 18000 | 26 | 41 | 6204 | 0.106 |
| 25 | 52 | 15 | 1 | 0.5 | 49.73 | 2.46 | 1.35 | 1.12 | 6205-2NSEN | 6205NR | 6205ZENR | 14000 | 7900 | 13.9 | 13000 | 16000 | 31 | 46 | 6205 | 0.128 |
| 30 | 62 | 16 | 1 | 0.5 | 59.61 | 3.28 | 1.9 | 1.7 | 6206-2NSEN | 6206NR | 6206ZENR | 19500 | 11300 | 13.9 | 11000 | 13000 | 36 | 56 | 6206 | 0.199 |
| 35 | 72 | 17 | 1.1 | 0.5 | 68.81 | 3.28 | 1.9 | 1.6 | 6207-2NSEN | 6207NR | 6207ZENR | 25700 | 15300 | 13.8 | 9800 | 11000 | 42 | 65 | 6207 | 0.288 |
| 40 | 80 | 18 | 1.1 | 0.5 | 76.81 | 3.28 | 1.9 | 1.7 | 6208-2NSEN | 6208NR | 6208ZENR | 29100 | 17900 | 14 | 8700 | 10000 | 47 | 73 | 6208 | 0.366 |
| 45 | 85 | 19 | 1.1 | 0.5 | 81.81 | 3.28 | 1.9 | 1.7 | 6209-2NSEN | 6209NR | 6209ZENR | 32500 | 20500 | 14.1 | 7800 | 9300 | 52 | 78 | 6209 | 0.407 |
| 50 | 90 | 20 | 1.1 | 0.5 | 86.79 | 3.28 | 2.7 | 2.46 | 6210-2NSEN | 6210NR | 6210ZENR | 35000 | 23200 | 14.4 | 7100 | 8600 | 57 | 83 | 6210 | 0.463 |
| 55 | 100 | 21 | 1.5 | 0.5 | 96.8 | 3.28 | 2.7 | 2.46 | 6211-2NSEN | 6211NR | 6211ZENR | 43500 | 29300 | 14.4 | 6400 | 7700 | 64 | 91 | 6211 | 0.607 |
| 60 | 110 | 22 | 1.5 | 0.5 | 106.81 | 3.28 | 2.7 | 2.46 | 6212-2NSEN | 6212NR | 6212ZENR | 52500 | 36000 | 14.3 | 6000 | 7100 | 69 | 101 | 6212 | 0.783 |
| 65 | 120 | 23 | 1.5 | 0.5 | 115.21 | 4.06 | 3.1 | 2.82 | - | 6213NR | 6213ZENR | 57000 | 40000 | 14.4 | 5500 | 6500 | 74 | 111 | 6213 | 0.99 |
| 80 | 140 | 26 | 2 | 0.5 | 135.23 | 4.9 | 3.1 | 2.82 | - | 6216NR | 6216ZENR | 72500 | 53000 | 14.6 | 4500 | 5300 | 90 | 130 | 6216 | 1.4 |

* Not a stocked range although available on request.



Open



Two shields
(ZZ)



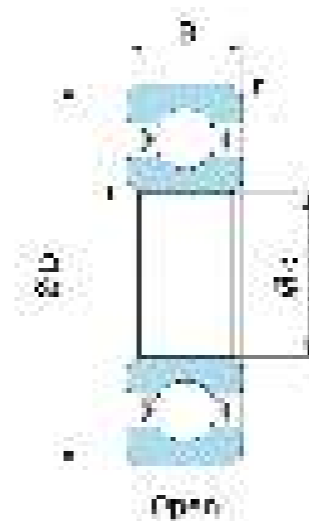
One contact
shield
(2RS)



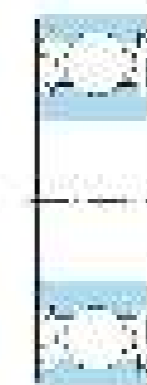
Two contact
shields
(2RSH)



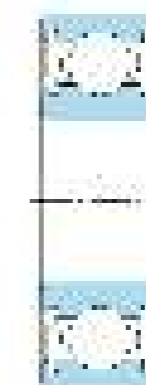
One non-contact
shield
(2RN)



Open



Two shields
(ZZ)



One contact
shield
(2RS)



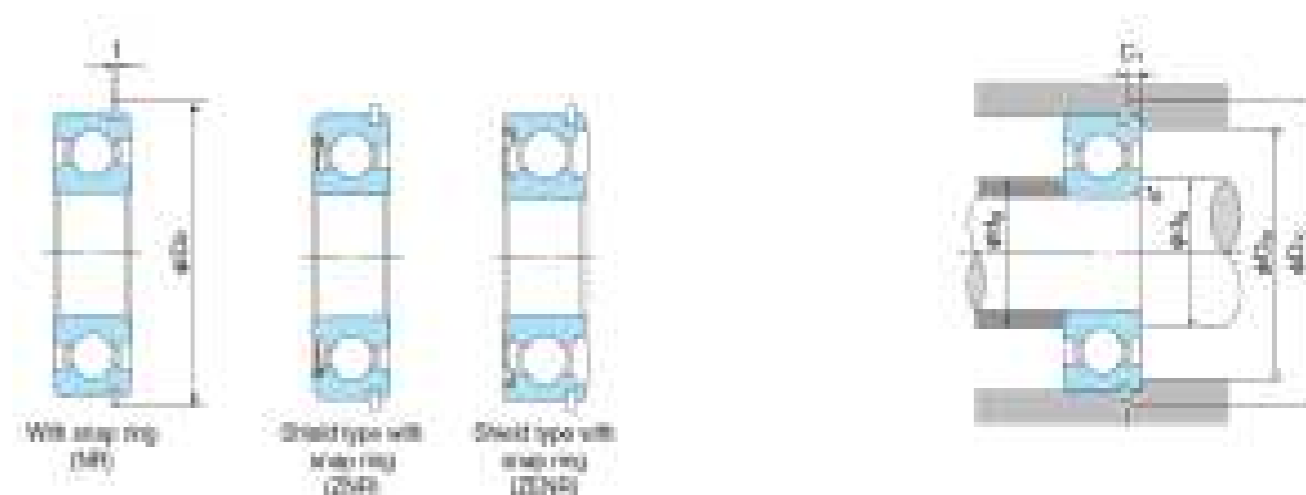
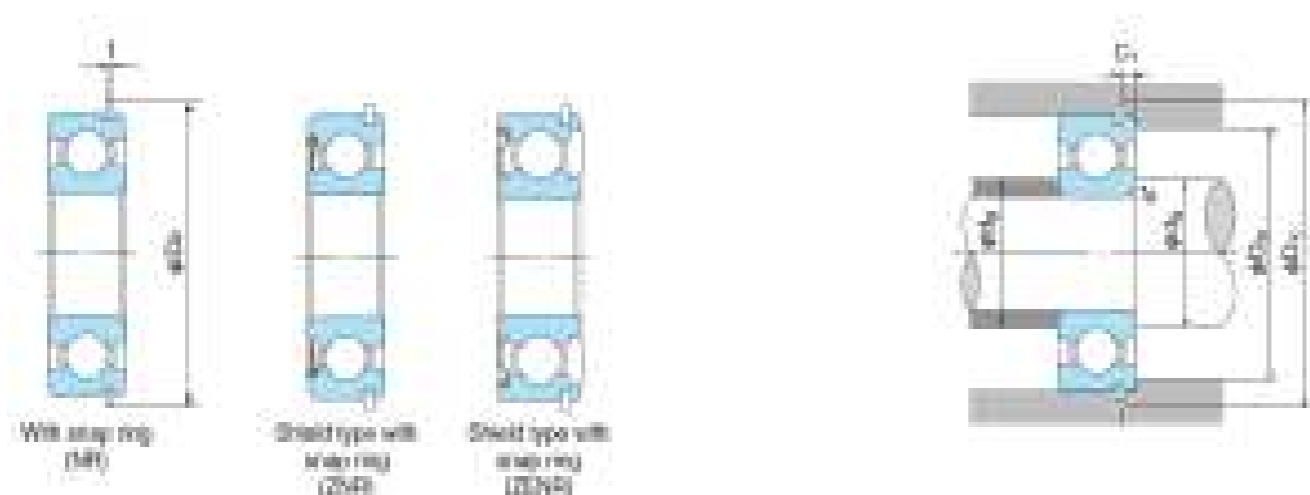
Two contact
shields
(2RSH)



One non-contact
shield
(2RN)

| Boundary dimensions (mm) | | | | Bearing No | | | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Factor fo | Limiting speed (min-1) | | | Abutment and fillet dimensions (mm) | | | Mass (kg) | Bearing No |
|--------------------------|-----|----|---------|------------|-------------|-------------------|------------------------|----------------------------------|----------------------------------|-----------|-------------------------------|-----------|-----------------|-------------------------------------|----------|----------|-----------|------------|
| d | D | B | r (min) | Open type | Shield type | Contact seal type | Non-contact seal type* | | | | Grease lubrication | | Oil lubrication | da (min) | Da (max) | ra (max) | | |
| | | | | | | | | | | | Open type, ZE, ZZE, NKE, 2NKE | NSE, 2NSE | Open type, ZE | | | | | |
| 10 | 35 | 11 | 0.6 | 6300 | 6300ZZE | 6300-2NSE | - | 8100 | 3450 | 11.3 | 23000 | 17000 | 27000 | 15 | 30 | 0.6 | 0.053 | 6300 |
| 12 | 37 | 12 | 1 | 6301 | 6301ZZE | 6301-2NSE | - | 9750 | 4250 | 11.2 | 20000 | 16000 | 24000 | 18 | 31 | 1.0 | 0.060 | 6301 |
| 15 | 42 | 13 | 1 | 6302 | 6302ZZE | 6302-2NSE | - | 11400 | 5400 | 12.3 | 17000 | 13000 | 21000 | 21 | 36 | 1.0 | 0.082 | 6302 |
| 17 | 47 | 14 | 1 | 6303 | 6303ZZE | 6303-2NSE | - | 13600 | 6550 | 12.3 | 16000 | 11000 | 19000 | 23 | 41 | 1.0 | 0.115 | 6303 |
| 20 | 52 | 15 | 1.1 | 6304 | 6304ZZE | 6304-2NSE | 6304-2NKE | 15900 | 7900 | 12.4 | 14000 | 10000 | 17000 | 27 | 45 | 1.1 | 0.144 | 6304 |
| 25 | 62 | 17 | 1.1 | 6305 | 6305ZZE | 6305-2NSE | 6305-2NKE | 23600 | 12100 | 12.2 | 12000 | 8100 | 14000 | 32 | 55 | 1 | 0.232 | 6305 |
| 30 | 72 | 19 | 1.1 | 6306 | 6306ZZE | 6306-2NSE | 6306-2NKE | 26700 | 15000 | 13.2 | 10000 | 6700 | 12000 | 37 | 65 | 1 | 0.346 | 6306 |
| 35 | 80 | 21 | 1.5 | 6307 | 6307ZZE | 6307-2NSE | 6307-2NKE | 33500 | 19200 | 13.2 | 8800 | 6000 | 10000 | 44 | 71 | 1.5 | 0.457 | 6307 |
| 40 | 90 | 23 | 1.5 | 6308 | 6308ZZE | 6308-2NSE | 6308-2NKE | 40500 | 24100 | 13.2 | 7800 | 5300 | 9200 | 49 | 81 | 1.5 | 0.633 | 6308 |
| 45 | 100 | 25 | 1.5 | 6309 | 6309ZZE | 6309-2NSE | 6309-2NKE | 53000 | 32000 | 13.1 | 7000 | 4800 | 8200 | 54 | 91 | 1.5 | 0.833 | 6309 |
| 50 | 110 | 27 | 2 | 6310 | 6310ZZE | 6310-2NSE | 6310-2NKE | 62000 | 38000 | 13.1 | 6400 | 4300 | 7500 | 60 | 100 | 2 | 1.07 | 6310 |
| 55 | 120 | 29 | 2 | 6311 | 6311ZZE | 6311-2NSE | 6311-2NKE | 71500 | 44500 | 13.1 | 5800 | 4000 | 6800 | 65 | 110 | 2 | 1.37 | 6311 |
| 60 | 130 | 31 | 2.1 | 6312 | 6312ZZE | 6312-2NSE | 6312-2NKE | 82000 | 52000 | 13.2 | 5400 | 3600 | 6300 | 72 | 118 | 2 | 1.7 | 6312 |
| 65 | 140 | 33 | 2.1 | 6313 | 6313ZZE | 6313-2NSE | 6313-2NKE | 92500 | 59500 | 13.2 | 4900 | 3400 | 6000 | 77 | 128 | 2 | 2.08 | 6313 |
| 70 | 150 | 35 | 2.1 | 6314 | 6314ZZE | 6314-2NSE | 6314-2NKE | 104000 | 68000 | 13.2 | 4600 | 3200 | 5400 | 82 | 138 | 2 | 2.52 | 6314 |
| 75 | 160 | 37 | 2.1 | 6315 | 6315ZZE | 6315-2NSE | 6315-2NKE | 113000 | 77000 | 13.2 | 4300 | 2900 | 5000 | 87 | 148 | 2 | 3.02 | 6315 |
| 80 | 170 | 39 | 2.1 | 6316 | 6316ZZ | 6316-2NSL | 6316NK | 123000 | 86500 | 13.2 | 4000 | 2800 | 4800 | 92 | 158 | 2 | 3.59 | 6316 |
| 85 | 180 | 41 | 3 | 6317 | 6317ZZ | 6317-2NS | 6317NK | 133000 | 96500 | 13.3 | 3800 | 2600 | 4500 | 99 | 166 | 2.5 | 4.23 | 6317 |
| 90 | 190 | 43 | 3 | 6318 | 6318ZZ | 6318-2NS | 6318NK | 143000 | 107000 | 13.3 | 3600 | 2400 | 4300 | 104 | 176 | 2.5 | 4.91 | 6318 |
| 95 | 200 | 45 | 3 | 6319 | 6319ZZ | 6319-2NS | 6319NK | 153000 | 118000 | 13.3 | 3300 | 2400 | 3900 | 109 | 186 | 2.5 | 5.67 | 6319 |
| 100 | 180 | 34 | 2.1 | 6320 | 6320ZZ | 6320-2NS | 6320NK | 173000 | 141000 | 13.2 | 3200 | 2200 | 3700 | 114 | 201 | 2.5 | 7 | 6320 |
| 110 | 240 | 50 | 3 | 6322 | 6322ZZ | - | - | 205000 | 179000 | 13.1 | 2900 | - | 3400 | 124 | 226 | 2.5 | 9.54 | 6322 |

* Not a stocked range although available on request.



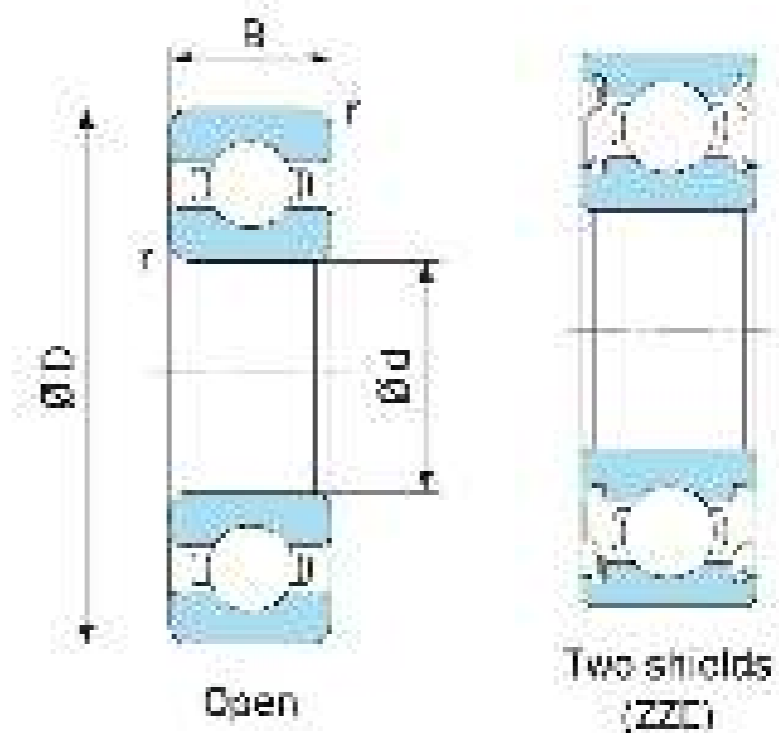
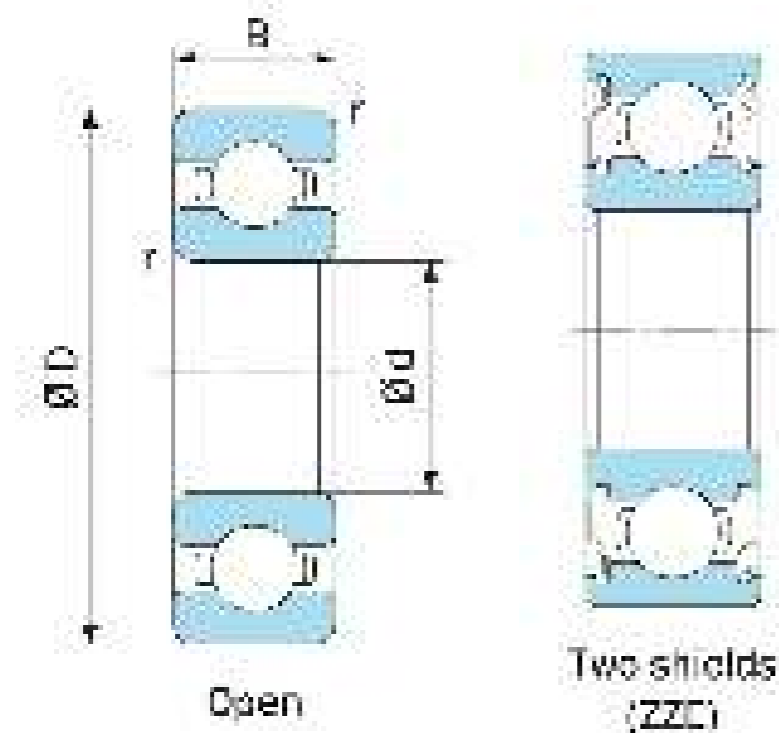
| Boundary dimensions (mm) | | | | | Dimensions of snap ring groove and snap ring (mm) | | | | | Bearing No. | | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Factor fo | Limiting speed (min ⁻¹) | | Abutment and fillet dimensions (mm) | | Mass (kg) | Bearing No |
|--------------------------|-----|----|---------|----------|---|---------|---------|----------|---------|-------------------|------------|-------------|----------------------------------|----------------------------------|-----------|-------------------------------------|-----------------|-------------------------------------|----------|-----------|------------|
| d | D | B | r (min) | r1 (min) | D1 (max) | a (max) | b (min) | D2 (max) | f (max) | Contact seal type | Open type* | Shield type | | | | Grease lubrication | Oil lubrication | da (min) | Da (max) | | |
| 15 | 42 | 13 | 1 | 0.5 | 39.75 | 2.06 | 1.35 | 46.3 | 1.12 | 6302-2NSENR | 6302NR | 6302ZENR | 11400 | 5400 | 12.3 | 17000 | 21000 | 21 | 36 | 0.082 | 6302 |
| 17 | 47 | 14 | 1 | 0.5 | 44.6 | 2.46 | 1.35 | 52.7 | 1.12 | 6303-2NSENR | 6303NR | 6303ZENR | 13600 | 6550 | 12.3 | 16000 | 19000 | 23 | 41 | 0.115 | 6303 |
| 20 | 52 | 15 | 1.1 | 0.5 | 49.73 | 2.46 | 1.35 | 57.9 | 1.12 | 6304-2NSENR | 6304NR | 6304ZENR | 15900 | 7900 | 12.4 | 14000 | 17000 | 27 | 45 | 0.144 | 6304 |
| 25 | 62 | 17 | 1.1 | 0.5 | 59.61 | 3.28 | 1.9 | 67.7 | 1.7 | 6305-2NSENR | 6305NR | 6305ZENR | 23600 | 12100 | 12.2 | 12000 | 14000 | 32 | 55 | 0.232 | 6305 |
| 30 | 72 | 19 | 1.1 | 0.5 | 68.81 | 3.28 | 1.9 | 78.6 | 1.7 | 6306-2NSENR | 6306NR | 6306ZENR | 26700 | 15000 | 13.2 | 10000 | 12000 | 37 | 65 | 0.346 | 6306 |
| 35 | 80 | 21 | 1.5 | 0.5 | 76.81 | 3.28 | 1.9 | 86.6 | 1.6 | 6307-2NSENR | 6307NR | 6307ZENR | 33500 | 19100 | 13.2 | 8800 | 10000 | 44 | 71 | 0.457 | 6307 |
| 40 | 90 | 23 | 1.5 | 0.5 | 86.79 | 3.28 | 2.7 | 96.5 | 2.46 | 6308-2NSENR | 6308NR | 6308ZENR | 40500 | 24100 | 13.2 | 7800 | 9200 | 49 | 81 | 0.633 | 6308 |
| 45 | 100 | 25 | 1.5 | 0.5 | 96.8 | 3.28 | 2.7 | 106.5 | 2.46 | 6309-2NSENR | 6309NR | 6309ZENR | 53000 | 32000 | 13.1 | 7000 | 8200 | 54 | 91 | 0.833 | 6309 |
| 50 | 110 | 27 | 2 | 0.5 | 106.81 | 3.28 | 2.7 | 116.6 | 2.46 | 6310-2NSENR | 6310NR | 6310ZENR | 62000 | 38100 | 13.1 | 6400 | 7500 | 60 | 100 | 1.07 | 6310 |
| 55 | 120 | 29 | 2 | 0.5 | 115.21 | 4.06 | 3.1 | 129.7 | 2.82 | 6311-2NSENR | 6311NR | 6311ZENR | 71500 | 44500 | 13.1 | 5800 | 6800 | 65 | 110 | 1.37 | 6311 |
| 60 | 130 | 31 | 2.1 | 0.5 | 125.22 | 4.06 | 3.1 | 139.7 | 2.82 | 6312-2NSENR | 6312NR | 6312ZENR | 82000 | 52000 | 13.2 | 5400 | 6300 | 72 | 118 | 1.7 | 6312 |
| 65 | 140 | 33 | 2.1 | 0.5 | 135.23 | 4.9 | 3.1 | 149.7 | 2.82 | 6313-2NSENR | 6313NR | 6313ZENR | 92500 | 59500 | 13.2 | 4900 | 6000 | 77 | 128 | 2.08 | 6313 |

Deep Groove Ball Bearings 62/22 & 63/32 Series and Specials

Deep Groove Ball Bearings 62/22 & 63/32 Series and Specials

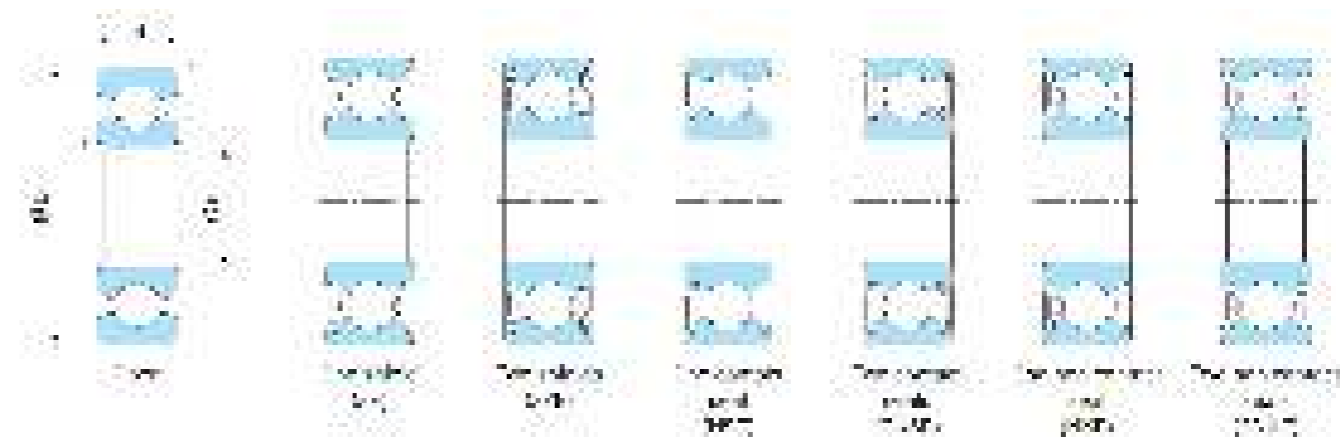
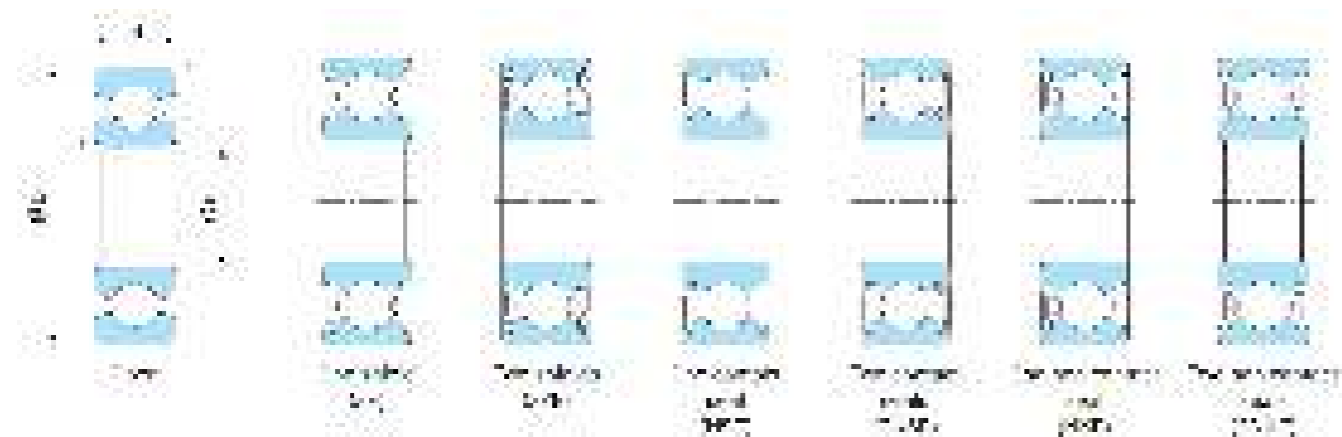
| Boundary dimensions (mm) | | | | Bearing No | | | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Factor fo | Limiting speed (min ⁻¹) | | | Abutment and fillet dimensions (mm) | | Mass (kg) | Bearing No |
|--------------------------|----|----|---------|------------|-------------|-------------------|------------------------|----------------------------------|----------------------------------|-----------|-------------------------------------|-----------------|----------|-------------------------------------|----|-----------|------------|
| d | D | B | r (min) | Open type | Shield type | Contact seal type | Non-contact seal type* | | | | Grease lubrication | Oil lubrication | da (min) | Da (max) | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 22 | 56 | 16 | 1.1 | 63/22 | 63/22ZZE | 63/22-2NSE | 63/22-2NKE | 18400 | 9250 | 12.4 | 13000 | 9500 | 16000 | 29 | 49 | 0.176 | 63/22 |
| 28 | 58 | 16 | 1 | 62/28 | 62/28ZZE | 62/28-2NSE | 62/28-2NSE | 17900 | 9750 | 13.1 | 12000 | 8200 | 14000 | 34 | 52 | 0.175 | 62/28 |
| 28 | 68 | 18 | 1.1 | 63/28 | 63/28ZZE | 63/28-2NSE | 63/28-2NSE | 26800 | 14000 | 12.4 | 11000 | 7500 | 13000 | 35 | 61 | 0.287 | 63/28 |
| 32 | 65 | 17 | 1 | 62/32 | 62/32ZZE | 62/32-2NSE | 62/32-2NKE | 22400 | 13100 | 13.6 | 11000 | 7100 | 12000 | 38 | 59 | 0.23 | 62/32 |
| 32 | 75 | 20 | 1.1 | 63/32 | 63/32ZZE | 63/32-2NSE | 63/32-2NKE | 30000 | 16200 | 12.7 | 9500 | 6500 | 11000 | 39 | 68 | 0.382 | 63/32 |

* Not a stocked range although available on request.



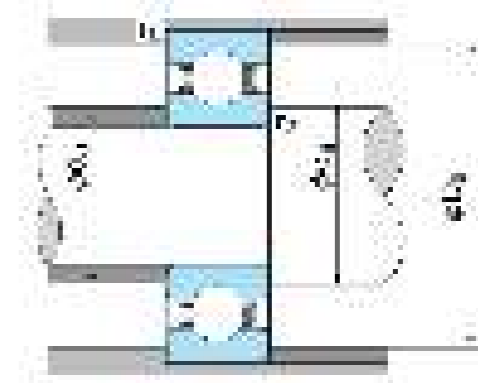
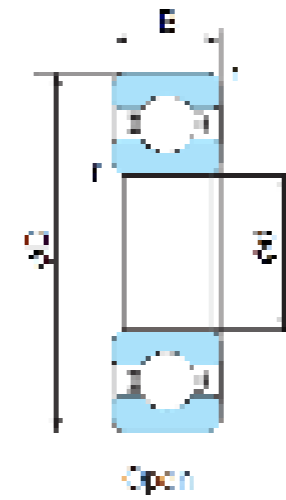
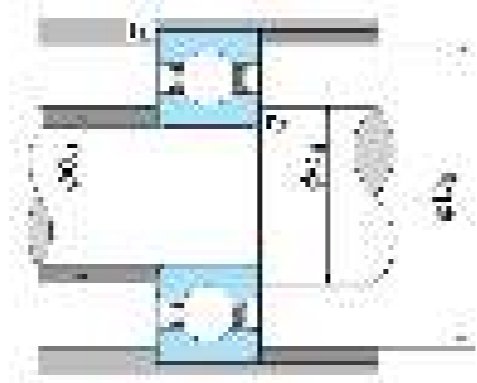
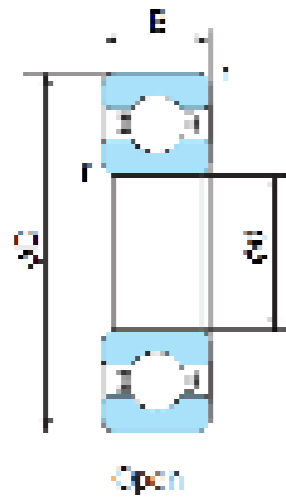
| Boundary dimensions (mm) | | | | Bearing No | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Factor fo | Limiting speed (min ⁻¹) | | | Abutment and fillet dimensions (mm) | | | Mass (kg) | Bearing No |
|--------------------------|-----|----|---------|------------|-------------|----------------------------------|----------------------------------|-----------|-------------------------------------|-----------|-----------------|-------------------------------------|----------|----------|-----------|------------|
| d | D | B | r (min) | Open type* | Shield type | | | | Grease lubrication | | Oil lubrication | da (min) | Da (max) | ra (max) | | |
| | | | | | | | | | Open type, ZE, ZZE, NKE, 2NKE | NSE, 2NSE | Open type, ZE | | | | | |
| 10 | 19 | 5 | 0.3 | 6800 | 6800ZZE | 2120 | 985 | 14.2 | 37000 | 24000 | 44000 | 12 | 17 | 0.3 | 0.005 | 6800 |
| 12 | 21 | 5 | 0.3 | 6801 | 6801ZZE | 1920 | 1040 | 15.3 | 32000 | 20000 | 39000 | 14 | 19 | 0.3 | 0.006 | 6801 |
| 15 | 24 | 5 | 0.3 | 6802 | 6802ZZE | 2080 | 1260 | 15.8 | 28000 | 17000 | 34000 | 17 | 22 | 0.3 | 0.007 | 6802 |
| 17 | 26 | 5 | 0.3 | 6803 | 6803ZZE | 2630 | 1570 | 16.1 | 26000 | 15000 | 30000 | 19 | 24 | 0.3 | 0.008 | 6803 |
| 20 | 32 | 7 | 0.3 | 6804 | 6804ZZE | 4000 | 2640 | 15.5 | 22000 | 13000 | 26000 | 22 | 30 | 0.3 | 0.019 | 6804 |
| 25 | 37 | 7 | 0.3 | 6805 | 6805ZZE | 4300 | 2940 | 16 | 18000 | 10000 | 22000 | 27 | 35 | 0.3 | 0.022 | 6805 |
| 30 | 42 | 7 | 0.3 | 6806 | 6806ZZE | 5350 | 3800 | 16.4 | 15000 | 9000 | 18000 | 32 | 40 | 0.3 | 0.026 | 6806 |
| 35 | 47 | 7 | 0.3 | 6807 | 6807ZZE | 4750 | 3800 | 16.4 | 14000 | 7600 | 16000 | 37 | 45 | 0.3 | 0.029 | 6807 |
| 40 | 52 | 7 | 0.3 | 6808 | 6808ZZE | 5950 | 4900 | 16.2 | 12000 | 6700 | 14000 | 42 | 50 | 0.3 | 0.033 | 6808 |
| 45 | 58 | 7 | 0.3 | 6809 | 6809ZZE | 5350 | 4900 | 16.1 | 11000 | 6000 | 13000 | 47 | 56 | 0.3 | 0.04 | 6809 |
| 50 | 65 | 7 | 0.3 | 6810 | 6810ZZE | 6400 | 5800 | 16.1 | 10000 | 5300 | 12000 | 52 | 63 | 0.3 | 0.052 | 6810 |
| 55 | 72 | 9 | 0.3 | 6811 | 6811ZZ | 8800 | 8100 | 16.2 | 8700 | - | 10000 | 57 | 70 | 0.3 | 0.083 | 6811 |
| 60 | 78 | 10 | 0.3 | 6812 | 6812ZZ | 11500 | 10600 | 16.3 | 8000 | - | 9500 | 62 | 76 | 0.3 | 0.106 | 6812 |
| 65 | 85 | 10 | 0.6 | 6813 | 6813ZZ | 11900 | 11500 | 16.2 | 7500 | - | 8700 | 69 | 81 | 0.6 | 0.125 | 6813 |
| 70 | 90 | 10 | 0.6 | 6814 | 6814ZZ | 12100 | 11900 | 16.1 | 7000 | - | 8100 | 74 | 86 | 0.6 | 0.135 | 6814 |
| 75 | 95 | 10 | 0.6 | 6815 | 6815ZZ | 12500 | 12800 | 16 | 6500 | - | 7600 | 79 | 91 | 0.6 | 0.145 | 6815 |
| 80 | 100 | 10 | 0.6 | 6816 | 6816ZZ | 12700 | 13300 | 15.9 | 6000 | - | 7100 | 84 | 96 | 0.6 | 0.155 | 6816 |
| 85 | 110 | 13 | 1 | 6817 | 6817ZZ | 18700 | 19000 | 16.2 | 5700 | - | 6700 | 90 | 105 | 1 | 0.265 | 6817 |
| 90 | 115 | 13 | 1 | 6818 | 6818ZZ | 19000 | 19700 | 16.1 | 5400 | - | 6300 | 95 | 110 | 1 | 0.28 | 6818 |
| 150 | 190 | 20 | 1.1 | 6830 | - | 47500 | 54500 | 16.1 | 3200 | - | 3800 | 156 | 184 | 1 | 1.2 | 6830 |

* Not a stocked range although available on request.

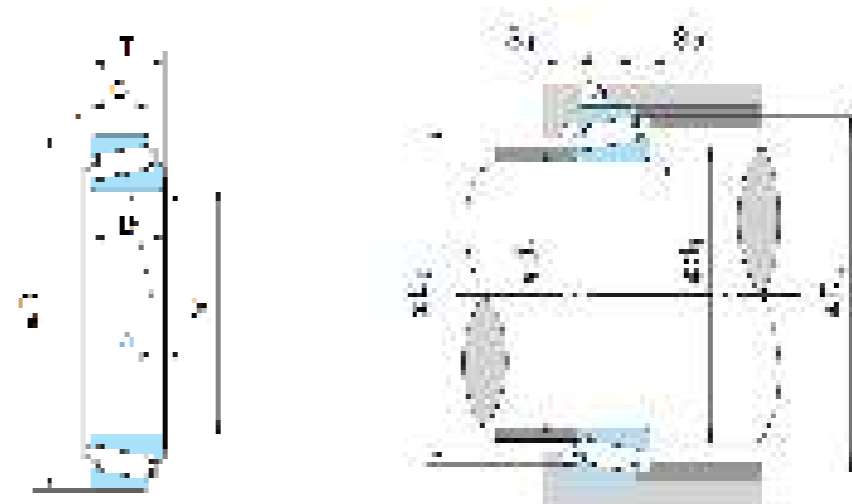
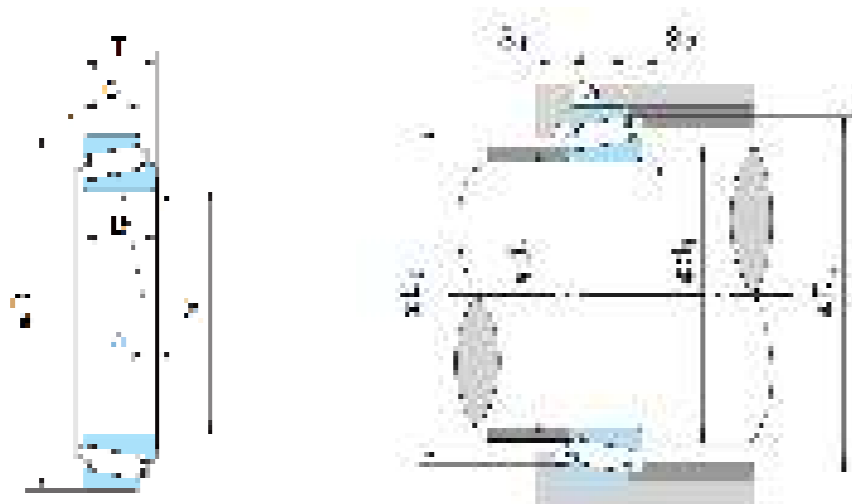


| Boundary dimensions (mm) | | | | Bearing No | | | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Factor fo | Limiting speed (min-1) | | | Abutment and fillet dimensions (mm) | | | Mass (kg) | Bearing No |
|--------------------------|-----|----|---------|------------|-------------|-------------------|------------------------|----------------------------------|----------------------------------|-----------|-------------------------------|-----------|-----------------|-------------------------------------|----------|----------|-----------|------------|
| d | D | B | r (min) | Open type* | Shield type | Contact seal type | Non-contact seal type* | | | | Grease lubrication | | Oil lubrication | da (min) | Da (max) | ra (max) | | |
| | | | | | | | | | | | Open type, ZE, ZZE, NKE, 2NKE | NSE, 2NSE | Open type, ZE | | | | | |
| 10 | 22 | 6 | 0.3 | 6900 | 6900ZZE | 6900-2NSE | 6900-2NKE | 2490 | 1130 | 14 | 33000 | 22000 | 38000 | 12 | 20 | 0.3 | 0.009 | 6900 |
| 12 | 24 | 6 | 0.3 | 6901 | 6901ZZE | 6901-2NSE | 6901-2NKE | 2700 | 1320 | 14.5 | 30000 | 20000 | 36000 | 14 | 22 | 0.3 | 0.011 | 6901 |
| 15 | 28 | 7 | 0.3 | 6902 | 6902ZZE | 6902-2NSE | 6902-2NKE | 4300 | 2250 | 14.3 | 26000 | 17000 | 31000 | 17 | 26 | 0.3 | 0.016 | 6902 |
| 17 | 30 | 7 | 0.3 | 6903 | 6903ZZE | 6903-2NSE | 6903-2NKE | 4600 | 2550 | 14.7 | 24000 | 15000 | 29000 | 19 | 28 | 0.3 | 0.018 | 6903 |
| 20 | 37 | 9 | 0.3 | 6904 | 6904ZZE | 6904-2NSE | 6904-2NKE | 6350 | 3700 | 14.8 | 19000 | 12000 | 23000 | 22 | 35 | 0.3 | 0.036 | 6904 |
| 25 | 42 | 9 | 0.3 | 6905 | 6905ZZE | 6905-2NSE | 6905-2NKE | 7000 | 4500 | 15.3 | 16000 | 10000 | 20000 | 27 | 40 | 0.3 | 0.042 | 6905 |
| 30 | 47 | 9 | 0.3 | 6906 | 6906ZZE | 6906-2NSE | 6906-2NKE | 7250 | 5000 | 15.8 | 14000 | 8500 | 17000 | 32 | 45 | 0.3 | 0.045 | 6906 |
| 35 | 55 | 10 | 0.6 | 6907 | 6907ZZE | 6907-2NSE | 6907-2NKE | 10400 | 7150 | 15.6 | 12000 | 7500 | 15000 | 39 | 51 | 0.6 | 0.073 | 6907 |
| 40 | 62 | 12 | 0.6 | 6908 | 6908ZZE | 6908-2NSE | 6908-2NKE | 13700 | 9950 | 15.8 | 11000 | 6300 | 13000 | 44 | 58 | 0.6 | 0.108 | 6908 |
| 45 | 68 | 12 | 0.6 | 6909 | 6909ZZE | 6909-2NSE | 6909-2NKE | 14100 | 10900 | 16.1 | 10000 | 5600 | 12000 | 49 | 64 | 0.6 | 0.122 | 6909 |
| 50 | 72 | 12 | 0.6 | 6910 | 6910ZZE | 6910-2NSE | 6910-2NKE | 14500 | 11700 | 16.1 | 9500 | 5300 | 11000 | 54 | 68 | 0.6 | 0.125 | 6910 |
| 65 | 90 | 13 | 1 | 6913 | 6913ZZ | - | - | 17400 | 16000 | 16.5 | 7100 | - | 8500 | 70 | 85 | 1 | 0.2 | 6913 |
| 70 | 100 | 16 | 1 | 6914 | 6914ZZ | - | - | 23700 | 21100 | 16.3 | 6500 | - | 7700 | 75 | 95 | 1 | 0.327 | 6914 |
| 80 | 110 | 16 | 1 | 6916 | 6916ZZ | - | - | 27600 | 25300 | 16.4 | 5700 | - | 6700 | 85 | 105 | 1 | 0.363 | 6916 |

* Not a stocked range although available on request.



| Boundary dimensions (mm) | | | | Bearing No | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Factor fo | Limiting speed (min-1) | | Abutment and fillet dimensions (mm) | | | Mass (kg) |
|--------------------------|-----|----|---------|------------|----------------------------------|----------------------------------|-----------|------------------------|--------------------|-------------------------------------|----------|----------|-----------|
| d | D | B | r (min) | | | | | Open type | Grease lubrication | Oil lubrication | da (min) | Da (max) | |
| 17 | 35 | 8 | 0.3 | 16003 | 6000 | 3250 | 14.3 | 22000 | 26000 | 22 | 30 | 0.3 | 0.032 |
| 20 | 42 | 8 | 0.3 | 16004 | 7900 | 4500 | 14.5 | 18000 | 21000 | 25 | 37 | 0.3 | 0.05 |
| 25 | 47 | 8 | 0.3 | 16005 | 6950 | 4600 | 15.6 | 15000 | 18000 | 30 | 42 | 0.3 | 0.06 |
| 30 | 55 | 9 | 0.3 | 16006 | 9950 | 6550 | 15.4 | 13000 | 15000 | 35 | 50 | 0.3 | 0.085 |
| 35 | 62 | 9 | 0.3 | 16007 | 11700 | 8150 | 15.6 | 12000 | 14000 | 40 | 57 | 0.6 | 0.11 |
| 40 | 68 | 9 | 0.3 | 16008 | 11100 | 8550 | 16.1 | 10000 | 12000 | 45 | 63 | 0.3 | 0.125 |
| 45 | 75 | 10 | 0.6 | 16009 | 12900 | 10500 | 16.2 | 9200 | 11000 | 52 | 68 | 0.6 | 0.17 |
| 50 | 80 | 10 | 0.6 | 16010 | 16100 | 13100 | 16.1 | 8500 | 10000 | 57 | 73 | 0.6 | 0.18 |
| 55 | 90 | 11 | 0.6 | 16011 | 15200 | 13500 | 16.5 | 7700 | 9000 | 62 | 83 | 0.6 | 0.26 |
| 60 | 95 | 11 | 0.6 | 16012 | 16200 | 14300 | 16.5 | 7100 | 8500 | 67 | 88 | 0.6 | 0.28 |
| 65 | 100 | 11 | 0.6 | 16013 | 20500 | 18600 | 16.4 | 6700 | 8000 | 72 | 93 | 0.6 | 0.3 |
| 70 | 110 | 13 | 0.6 | 16014 | 26800 | 23600 | 16.2 | 6100 | 7100 | 77 | 103 | 0.6 | 0.433 |
| 75 | 115 | 13 | 0.6 | 16015 | 27600 | 25300 | 16.4 | 5700 | 6700 | 82 | 108 | 0.6 | 0.457 |
| 80 | 125 | 14 | 0.6 | 16016 | 32000 | 29600 | 16.4 | 5300 | 6300 | 87 | 118 | 0.6 | 0.597 |
| 85 | 130 | 14 | 0.6 | 16017 | 31500 | 29800 | 16.4 | 5000 | 6000 | 92 | 123 | 0.6 | 0.626 |

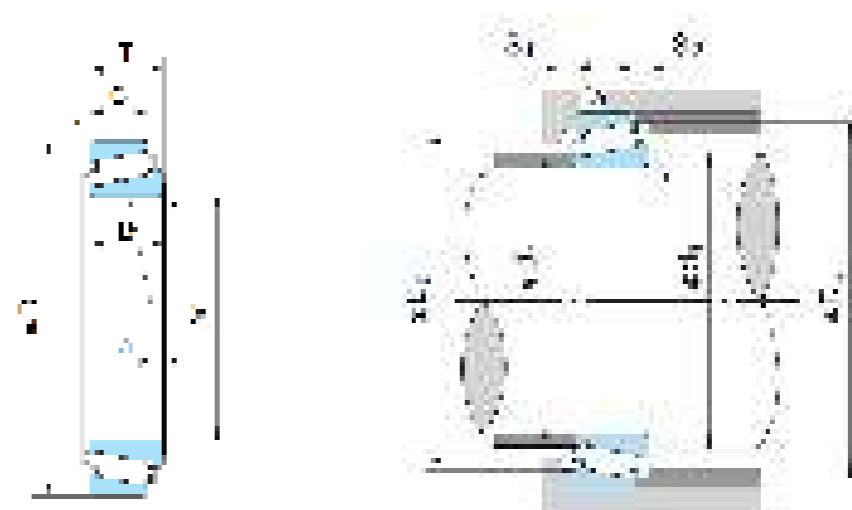
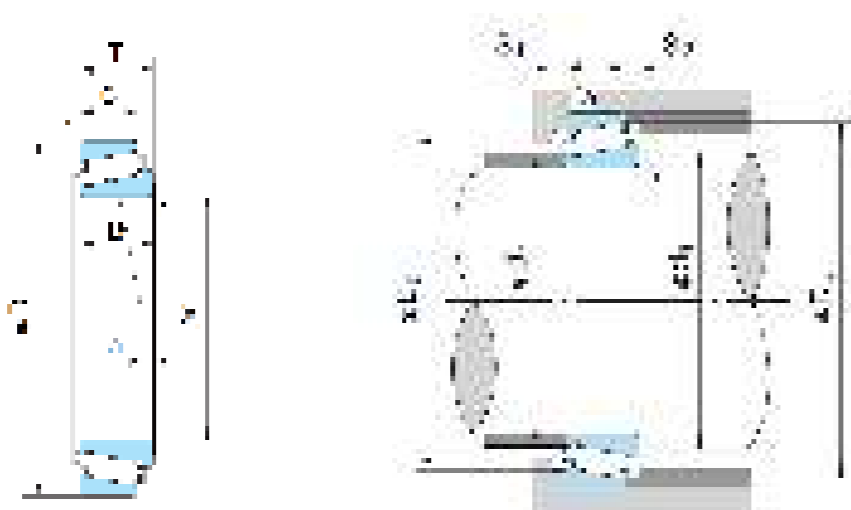


| Boundary dimensions (mm) | | | | | | | Bearing No | (Ref.) ISO355 Dimension series | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | Abutment and fillet dimensions (mm) | | | | | | | | Load center (mm) a (1) | Constant e | Axial load factor | | Mass(kg) Reference | Bearing No | | |
|--------------------------|-----|-------|----|----|---------|-----|------------|--------------------------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|-------------------------------------|----------|----------|----------|----------|----------|----------|-----|------------------------|------------|-------------------|------|--------------------|------------|-------|---------|
| d | D | T | B | C | Cone | Cup | | | | | Grease lubrication | Oil lubrication | da (min) | db (max) | Da (min) | Db (min) | S1 (min) | S2 (min) | Cone | Cup | | | Y1 | Y0 | | | | |
| | | | | | r (min) | | | | | | | | | | | | | | ra (max) | | | | | | | | | |
| 15 | 35 | 11.75 | 11 | 10 | 0.6 | 0.6 | E30202J | | 15800 | 14500 | 12000 | 16000 | | | 19.5 | 20 | 29 | 33 | 2 | 1.7 | 0.6 | 0.6 | 3.4 | 0.32 | 1.88 | 1.04 | 0.054 | E30202J |
| 17 | 40 | 13.25 | 12 | 11 | 1 | 1 | E30203J | 2DB | 20800 | 20700 | 10000 | 14000 | | | 22.5 | 23 | 33 | 37 | 2 | 2 | 1 | 1 | 3.2 | 0.35 | 1.74 | 0.96 | 0.081 | E30203J |
| 20 | 47 | 15.25 | 14 | 12 | 1 | 1 | E30204J | 2DB | 27000 | 27200 | 8700 | 12000 | | | 25.5 | 27 | 39 | 44 | 2 | 3 | 1 | 1 | 3.5 | 0.35 | 1.74 | 0.95 | 0.127 | E30204J |
| 25 | 52 | 16.25 | 15 | 13 | 1 | 1 | E30205J | 3CC | 31500 | 33700 | 7500 | 10000 | | | 30.5 | 31 | 44 | 48 | 2 | 3 | 1 | 1 | 3.3 | 0.37 | 1.60 | 0.88 | 0.156 | E30205J |
| 30 | 62 | 17.25 | 16 | 14 | 1 | 1 | E30206J | 3DB | 41500 | 44800 | 6500 | 8700 | | | 35.5 | 37 | 53 | 57 | 2 | 3 | 1 | 1 | 3.1 | 0.37 | 1.60 | 0.88 | 0.236 | E30206J |
| 35 | 72 | 18.25 | 17 | 15 | 1.5 | 1.5 | E30207J | 3DB | 55100 | 60900 | 5600 | 7400 | | | 43.5 | 44 | 62 | 67 | 3 | 3 | 1.5 | 1.5 | 2.9 | 0.37 | 1.60 | 0.88 | 0.344 | E30207J |
| 40 | 80 | 19.75 | 18 | 16 | 1.5 | 1.5 | E30208J | 3DB | 62900 | 69200 | 5000 | 6700 | | | 48.5 | 49 | 69 | 75 | 3 | 3.5 | 1.5 | 1.5 | 2.7 | 0.37 | 1.60 | 0.88 | 0.434 | E30208J |
| 45 | 85 | 20.75 | 19 | 16 | 1.5 | 1.5 | E30209J | 3DB | 67200 | 77400 | 4600 | 6100 | | | 53.5 | 54 | 74 | 80 | 3 | 4.5 | 1.5 | 1.5 | 1.8 | 0.40 | 1.48 | 0.81 | 0.502 | E30209J |
| 50 | 90 | 21.75 | 20 | 17 | 1.5 | 1.5 | E30210J | 3DB | 76500 | 91700 | 4300 | 5700 | | | 58.5 | 58 | 79 | 85 | 3 | 4.5 | 1.5 | 1.5 | 1.65 | 0.42 | 1.43 | 0.79 | 0.566 | E30210J |
| 55 | 100 | 22.75 | 21 | 18 | 2 | 1.5 | E30211J | 3DB | 94600 | 113000 | 3900 | 5200 | | | 65 | 64 | 88 | 94 | 4 | 4.5 | 2 | 1.5 | 2 | 0.40 | 1.48 | 0.81 | 0.732 | E30211J |
| 60 | 110 | 23.75 | 22 | 19 | 2 | 1.5 | E30212J | 3EB | 106000 | 127000 | 3500 | 4700 | | | 70 | 70 | 96 | 103 | 4 | 4.5 | 2 | 1.5 | 1.8 | 0.40 | 1.48 | 0.81 | 0.945 | E30212J |
| 65 | 120 | 24.75 | 23 | 20 | 2 | 1.5 | E30213J | 3EB | 128000 | 156000 | 3200 | 4300 | | | 75 | 77 | 106 | 113 | 4 | 4.5 | 2 | 1.5 | 0.6 | 0.40 | 1.48 | 0.81 | 1.18 | E30213J |
| 70 | 125 | 26.25 | 24 | 21 | 2 | 1.5 | E30214J | 3EB | 138000 | 173000 | 3100 | 4100 | | | 80 | 81 | 110 | 118 | 4 | 5 | 2 | 1.5 | 0.3 | 0.42 | 1.43 | 0.79 | 1.32 | E30214J |
| 75 | 130 | 27.25 | 25 | 25 | 2 | 1.5 | E30215J | 4DB | 142000 | 181000 | 2900 | 3900 | | | 85 | 86 | 115 | 124 | 4 | 5 | 2 | 1.5 | -0.3 | 0.44 | 1.38 | 0.76 | 1.42 | E30215J |
| 80 | 140 | 28.25 | 26 | 22 | 2.5 | 2 | E30216J | 3EB | 161000 | 202000 | 2700 | 3600 | | | 92 | 91 | 124 | 132 | 4 | 6 | 2 | 2 | -0.3 | 0.42 | 1.43 | 0.79 | 1.72 | E30216J |
| 85 | 150 | 30.5 | 28 | 24 | 2.5 | 2 | E30217J | 3EB | 182000 | 231000 | 2500 | 3400 | | | 97 | 97 | 132 | 141 | 5 | 6.5 | 2 | 2 | 0.1 | 0.42 | 1.43 | 0.79 | 2.17 | E30217J |
| 90 | 160 | 32.5 | 30 | 26 | 2.5 | 2 | E30218J | 3FB | 204000 | 261000 | 2400 | 3200 | | | 102 | 103 | 140 | 150 | 5 | 6.5 | 2 | 2 | -0.1 | 0.42 | 1.43 | 0.79 | 2.65 | E30218J |
| 95 | 170 | 34.5 | 32 | 27 | 3 | 2.5 | E30219J | 3FB | 231000 | 299000 | 2200 | 3000 | | | 109 | 110 | 149 | 159 | 5 | 7.5 | 2.5 | 2 | -0.4 | 0.42 | 1.43 | 0.79 | 3.20 | E30219J |
| 100 | 180 | 37 | 34 | 29 | 3 | 2.5 | E30220J | 3FB | 258000 | 338000 | 2100 | 2800 | | | 114 | 116 | 157 | 168 | 5 | 8 | 2.5 | 2 | 0.2 | 0.42 | 1.43 | 0.79 | 3.83 | E30220J |
| 105 | 190 | 39 | 36 | 30 | 3 | 2.5 | E30221J | | 288000 | 380000 | 2000 | 2600 | | | 119 | 122 | 165 | 178 | 6 | 9 | 2.5 | 2 | 0.0 | 0.42 | 1.43 | 0.79 | 4.49 | E30221L |
| 110 | 200 | 41 | 38 | 32 | 3 | 2.5 | E30222J | 3FB | 324000 | 343000 | 1900 | 2500 | | | 124 | 129 | 174 | 188 | 6 | 9 | 2.5 | 2 | 0.2 | 0.42 | 1.43 | 0.79 | 5.33 | E30222J |
| 120 | 215 | 43.5 | 40 | 34 | 3 | 2.5 | E30224J | 4FE | 347000 | 473000 | 1700 | 2300 | | | 134 | 140 | 187 | 203 | 6 | 9.5 | 2.5 | 2 | -0.7 | 0.44 | 1.38 | 0.76 | 6.36 | E30224J |
| 130 | 230 | 43.75 | 40 | 34 | 4 | 3 | E30226J | 4FB | 377000 | 511000 | 1600 | 2100 | | | 148 | 152 | 203 | 218 | 7 | 9.5 | 3 | 2.5 | -2.7 | 0.44 | 1.38 | 0.76 | 7.24 | E30226J |
| 140 | 250 | 45.75 | 42 | 36 | 4 | 3 | E30228J | | 405000 | 538000 | 1500 | 1900 | | | 158 | 163 | 219 | 237 | 9 | 9.5 | 3 | 2.5 | -3.4 | 0.43 | 1.39 | 0.77 | 8.9 | E30228J |
| 150 | 270 | 49 | 45 | 38 | 4 | 3 | E30230J | | 466000 | 625000 | 1300 | 1800 | | | 168 | 175 | 234 | 255 | 9 | 11 | 3 | 2.5 | -2.7 | 0.43 | 1.39 | 0.77 | 10.9 | E30230J |

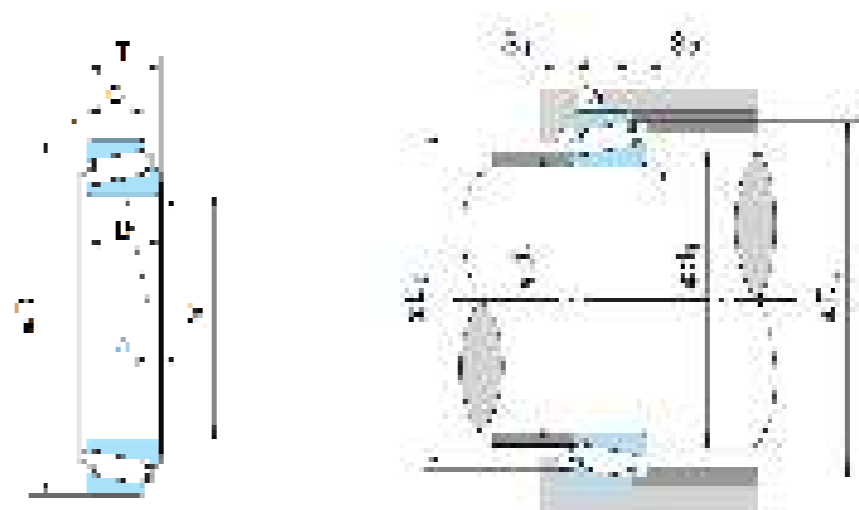
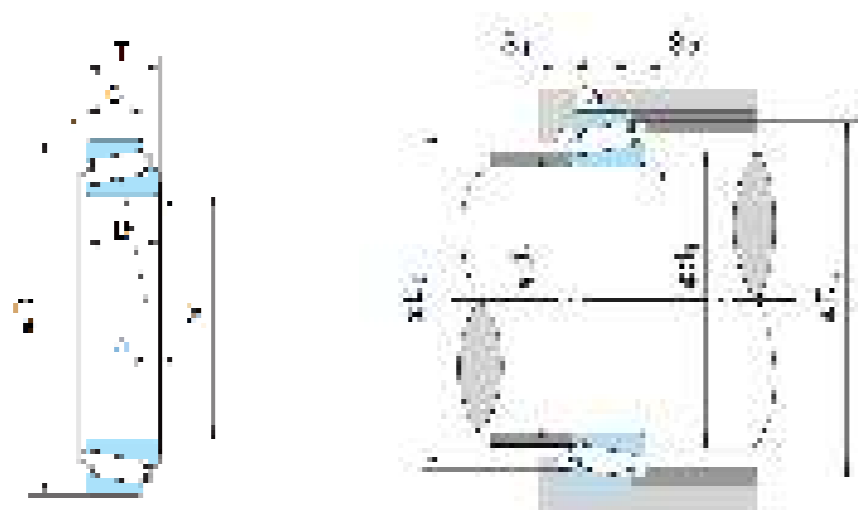


| Boundary dimensions (mm) | | | | | | | Bearing No | (Ref.) ISO355 Dimension series | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min-1) | | Abutment and fillet dimensions (mm) | | | | | | | | Load center (mm) a (1) | Constant e | Axial load factor | | Mass(kg) Reference | Bearing No |
|--------------------------|-----|----|----|------|---------|-----|------------|---|---|---|------------------------|--------------------|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|---------------------------------|------------|----------------------|------|-----------------------|------------|
| d | D | T | B | C | Cone | Cup | | | | | Grease lubrication | Oil lubrication | da | db | Da | Db | S1 | S2 | Cone | Cup | | | Y1 | Y0 | | |
| | | | | | r (min) | | | | | | | | (min) | (max) | (min) | (min) | (min) | (min) | (min) | (min) | | | | | | |
| 20 | 42 | 15 | 15 | 12 | 0.6 | 0.6 | E32004J | 3CC | 27300 | 31500 | 9300 | 13000 | 24.5 | 25 | 35 | 39 | 3 | 3 | 0.6 | 0.6 | 4.5 | 0.37 | 1.6 | 0.88 | 0.102 | E32004J |
| 25 | 47 | 15 | 15 | 11.5 | 0.6 | 0.6 | E32005J | 4CC | 30200 | 37700 | 8300 | 11000 | 29.5 | 30 | 40 | 44 | 3 | 3.5 | 0.6 | 0.6 | 3.2 | 0.43 | 1.39 | 0.77 | 0.118 | E32005J |
| 26 | 47 | 15 | 15 | 11.5 | 0.6 | 0.6 | E32005JS | 4CC | 30200 | 37700 | 8300 | 11000 | 29.5 | 30 | 40 | 44 | 3 | 3.5 | 0.6 | 0.6 | 3.2 | 0.43 | 1.39 | 0.77 | 0.118 | E32005JS |
| 30 | 55 | 17 | 17 | 13 | 1 | 1 | E32006J | 4CC | 38200 | 48000 | 7000 | 9400 | 35.5 | 35 | 47 | 52 | 3 | 4 | 1 | 1 | 3.4 | 0.43 | 1.39 | 0.77 | 0.177 | E32006J |
| 35 | 62 | 18 | 18 | 14 | 1 | 1 | E32007J | 4CC | 45500 | 59400 | 6200 | 8200 | 40.5 | 40 | 54 | 59 | 4 | 4 | 1 | 1 | 2.9 | 0.45 | 1.32 | 0.73 | 0.231 | E32007J |
| 40 | 68 | 19 | 19 | 14.5 | 1 | 1 | E32008J | 3CD | 53500 | 71400 | 5600 | 7400 | 45.5 | 46 | 60 | 65 | 4 | 4.5 | 1 | 1 | 3.9 | 0.38 | 1.58 | 0.87 | 0.282 | E32008J |
| 45 | 75 | 20 | 20 | 15.5 | 1 | 1 | E32009J | 3CC | 62800 | 86500 | 5000 | 6600 | 50.5 | 51 | 67 | 72 | 4 | 4.5 | 1 | 1 | 3.5 | 0.39 | 1.53 | 0.84 | 0.354 | E32009J |
| 50 | 80 | 20 | 20 | 15.5 | 1 | 1 | E32010J | 3CC | 65700 | 94500 | 4600 | 6100 | 55.5 | 56 | 72 | 77 | 4 | 4.5 | 1 | 1 | 2.3 | 0.42 | 1.42 | 0.78 | 0.389 | E32010J |
| 50 | 80 | 20 | 20 | 15.5 | - | - | E32010JA1* | 3CC | 65700 | 94500 | 4600 | 6100 | - | - | - | - | - | - | - | - | 2.3 | 0.42 | 1.42 | 0.78 | 0.389 | E32010JA1 |
| 55 | 90 | 23 | 23 | 17.5 | 1.5 | 1.5 | E32011J | 3CC | 84600 | 121000 | 4100 | 5500 | 63.5 | 63 | 81 | 86 | 4 | 5.5 | 1.5 | 1.5 | 3.2 | 0.41 | 1.48 | 0.81 | 0.569 | E32011J |
| 60 | 95 | 23 | 23 | 17.5 | 1.5 | 1.5 | E32012J | 4CC | 86100 | 127000 | 3900 | 5200 | 68.5 | 67 | 85 | 91 | 4 | 5.5 | 1.5 | 1.5 | 2 | 0.43 | 1.39 | 0.77 | 0.621 | E32012J |
| 65 | 100 | 23 | 23 | 17.5 | 1.5 | 1.5 | E32013J | 4CC | 90000 | 137000 | 3600 | 4800 | 73.5 | 72 | 90 | 97 | 4 | 5.5 | 1.5 | 1.5 | 0.5 | 0.46 | 1.31 | 0.72 | 0.664 | E32013J |
| 70 | 110 | 25 | 25 | 19 | 1.5 | 1.5 | E32014J | 4CC | 108000 | 163000 | 3300 | 4400 | 78.5 | 78 | 98 | 105 | 5 | 6 | 1.5 | 1.5 | 1.4 | 0.43 | 1.38 | 0.76 | 0.884 | E32014J |
| 75 | 115 | 25 | 25 | 19 | 1.5 | 1.5 | E32015J | 4CC | 110000 | 169000 | 3100 | 4200 | 83.5 | 83 | 103 | 110 | 5 | 6 | 1.5 | 1.5 | -0.1 | 0.46 | 1.31 | 0.72 | 0.93 | E32015J |
| 80 | 125 | 29 | 29 | 22 | 1.5 | 1.5 | E32016J | 3CC | 147000 | 225000 | 2900 | 3900 | 88.5 | 89 | 112 | 120 | 6 | 7 | 1.5 | 1.5 | 2.3 | 0.42 | 1.42 | 0.78 | 1.32 | E32016J |
| 85 | 130 | 29 | 29 | 22 | 1.5 | 1.5 | E32017J | 4CC | 150000 | 234000 | 2800 | 3700 | 93.5 | 94 | 117 | 125 | 6 | 7 | 1.5 | 1.5 | 1 | 0.44 | 1.36 | 0.75 | 1.38 | E32017J |
| 90 | 140 | 32 | 32 | 24 | 2 | 1.5 | E32018J | 3CC | 178000 | 276000 | 2600 | 3500 | 100 | 100 | 125 | 134 | 6 | 8 | 2 | 1.5 | 2.2 | 0.42 | 1.42 | 0.78 | 1.8 | E32018J |
| 95 | 145 | 32 | 32 | 24 | 2 | 1.5 | E32019J | 4CC | 182000 | 287000 | 2500 | 3300 | 105 | 105 | 130 | 140 | 6 | 8 | 2 | 1.5 | 0.8 | 0.44 | 1.36 | 0.75 | 1.88 | E32019J |
| 100 | 150 | 32 | 32 | 24 | 2 | 1.5 | E32020J | 4CC | 185000 | 298000 | 2400 | 3200 | 110 | 109 | 134 | 144 | 6 | 8 | 2 | 1.5 | -0.6 | 0.46 | 1.31 | 0.72 | 1.95 | E32020J |
| 105 | 160 | 35 | 35 | 26 | 2.5 | 2 | E32021J | 4DC | 215000 | 344000 | 2200 | 3000 | 117 | 116 | 143 | 154 | 6 | 9 | 2 | 2 | 0.5 | 0.44 | 1.35 | 0.74 | 2.45 | E32021J |
| 110 | 170 | 38 | 38 | 29 | 2.5 | 2 | E32022J | 4DC | 248000 | 395000 | 2100 | 2800 | 122 | 122 | 152 | 163 | 7 | 9 | 2 | 2 | 1.9 | 0.43 | 1.39 | 0.77 | 3.12 | E32022J |
| 120 | 180 | 38 | 38 | 29 | 2.5 | 2 | E32024J | 4DC | 258000 | 427000 | 2000 | 2600 | 132 | 131 | 161 | 173 | 7 | 9 | 2 | 2 | -0.8 | 0.46 | 1.31 | 0.72 | 3.34 | E32024J |
| 130 | 200 | 45 | 45 | 34 | 2.5 | 2 | E32026J | 4EC | 340000 | 563000 | 1800 | 2300 | 142 | 144 | 178 | 192 | 8 | 11 | 2 | 2 | 2.1 | 0.43 | 1.38 | 0.76 | 5.04 | E32026J |
| 140 | 210 | 45 | 45 | 34 | 2.5 | 2 | E32028J | 4DC | 346000 | 585000 | 1700 | 2200 | 152 | 153 | 187 | 202 | 8 | 11 | 2 | 2 | -0.6 | 0.46 | 1.31 | 0.72 | 5.28 | E32028J |
| 150 | 225 | 48 | 48 | 36 | 2.5 | 2 | E32030J | 4EC | 391000 | 668000 | 1500 | 2000 | 164 | 164 | 200 | 216 | 8 | 12 | 2.5 | 2 | -0.8 | 0.46 | 1.31 | 0.72 | 6.41 | E32030J |
| 160 | 240 | 51 | 51 | 38 | 3 | 2.5 | E32032J | 4EC | 440000 | 758000 | 1400 | 1900 | 174 | 175 | 213 | 231 | 8 | 13 | 2.5 | 2 | -1.1 | 0.46 | 1.31 | 0.72 | 7.75 | E32032J |
| 170 | 260 | 57 | 57 | 43 | 3 | 2.5 | E32034J | 4EC | 526000 | 905000 | 1300 | 1700 | 184 | 187 | 230 | 249 | 10 | 14 | 2.5 | 2 | 1.2 | 0.44 | 1.35 | 0.74 | 10.5 | E32034J |
| 180 | 280 | 64 | 64 | 48 | 3 | 2.5 | E32036J | 4EC | 644000 | 1100000 | 1200 | 1600 | 194 | 199 | 247 | 268 | 10 | 16 | 2.5 | 2 | 4.5 | 0.42 | 1.42 | 0.78 | 14.1 | E32036J |
| 190 | 290 | 64 | 64 | 48 | 3 | 2.5 | E32038J | 4FD | 654000 | 1170000 | 1100 | 1500 | 204 | 209 | 257 | 279 | 10 | 16 | 2.5 | 2 | 1.1 | 0.44 | 1.36 | 0.75 | 14.7 | E32038J |

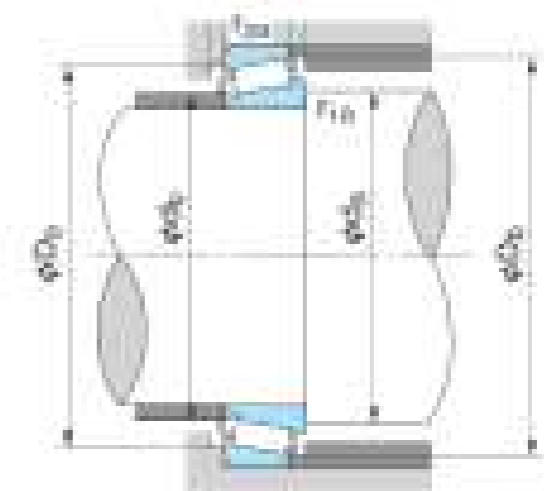
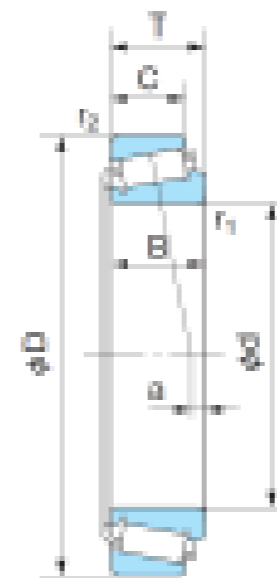
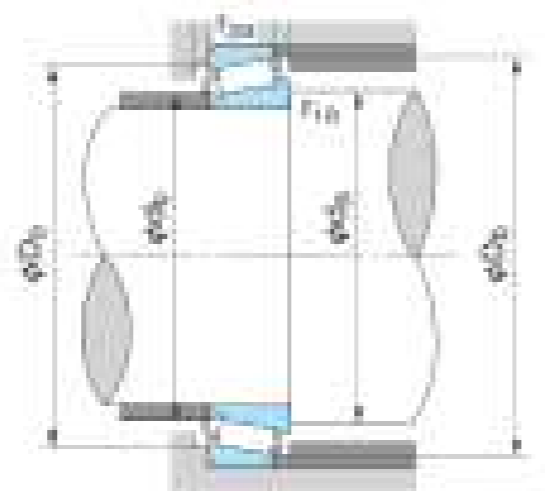
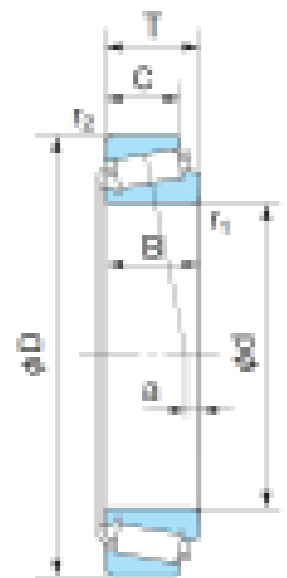
* Tapered Roller (Automotive).



| Boundary dimensions (mm) | | | | | | | Bearing No. | (Ref.) ISO355 Dimension series | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | Abutment and fillet dimensions (mm) | | | | | | | Load center (mm) a (1) | Constant e | Axial load factor | | Mass(kg) Reference | Bearing No. | |
|--------------------------|-----|-------|----|----|-----------------|----------------|-------------|--------------------------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|-------------------------------------|----------|----------|----------|----------|----------|------------------|------------------------|------------|-------------------|------|--------------------|-------------|---------|
| d | D | T | B | C | Cone r (min) | Cup r (min) | | | | | Grease lubrication | Oil lubrication | da (min) | db (max) | Da (min) | Db (min) | S1 (min) | S2 (min) | Cone ra (max) | | | Cup ra (max) | Y1 | | | Y0 |
| 20 | 47 | 19.25 | 18 | 15 | 1 | 1 | E32204J | 2DD | 32500 | 34800 | 8700 | 12000 | 25.5 | 27 | 39 | 43 | 2 | 4 | 1 | 1 | 6.2 | 0.35 | 1.73 | 0.95 | 0.156 | E32204J |
| 25 | 52 | 19.25 | 18 | 16 | 1 | 1 | E32205J | 2CD | 39800 | 44800 | 7900 | 11000 | 30.5 | 31 | 43 | 48 | 2 | 4 | 1 | 1 | 5.7 | 0.36 | 1.67 | 0.92 | 0.188 | E32205J |
| 30 | 62 | 21.25 | 20 | 17 | 1 | 1 | E32206J | 3DC | 50700 | 57900 | 6500 | 8700 | 35.5 | 37 | 52 | 58 | 2 | 4 | 1 | 1 | 5.3 | 0.37 | 1.60 | 0.88 | 0.292 | E32206J |
| 35 | 72 | 24.25 | 23 | 19 | 1.5 | 1.5 | E32207J | 3DC | 69600 | 82400 | 5600 | 7500 | 43.5 | 43 | 61 | 67 | 3 | 5 | 1.5 | 1.5 | 6.0 | 0.37 | 1.60 | 0.88 | 0.453 | E32207J |
| 40 | 80 | 24.75 | 23 | 19 | 1.5 | 1.5 | E32208J | 3DC | 77700 | 90800 | 5000 | 6600 | 48.5 | 48 | 68 | 75 | 3 | 5.5 | 1.5 | 1.5 | 5.3 | 0.37 | 1.60 | 0.88 | 0.554 | E32208J |
| 45 | 85 | 24.75 | 23 | 19 | 1.5 | 1.5 | E32209J | 3DC | 78300 | 94100 | 4600 | 6100 | 53.5 | 53 | 73 | 81 | 3 | 5.5 | 1.5 | 1.5 | 3.8 | 0.40 | 1.48 | 0.81 | 0.587 | E32209J |
| 50 | 90 | 24.75 | 23 | 19 | 1.5 | 1.5 | E32210J | 3DC | 85000 | 105000 | 4300 | 5700 | 58.5 | 58 | 78 | 85 | 3 | 5.5 | 1.5 | 1.5 | 4.1 | 0.42 | 1.43 | 0.79 | 0.643 | E32210J |
| 55 | 100 | 26.75 | 25 | 21 | 2 | 1.5 | E32211J | 3DC | 107000 | 133000 | 3900 | 5200 | 65 | 63 | 87 | 95 | 4 | 5.5 | 2 | 1.5 | 3.7 | 0.40 | 1.48 | 0.81 | 0.863 | E32211J |
| 60 | 110 | 29.75 | 28 | 24 | 2 | 1.5 | E32212J | 3EC | 132000 | 167000 | 3500 | 4700 | 70 | 69 | 95 | 104 | 4 | 5.5 | 2 | 1.5 | 4.6 | 0.40 | 1.48 | 0.81 | 1.19 | E32212J |
| 65 | 120 | 32.75 | 31 | 27 | 2 | 1.5 | E32213J | 3EC | 157000 | 203000 | 3200 | 4300 | 75 | 76 | 104 | 115 | 4 | 5.5 | 2 | 1.5 | 6.1 | 0.40 | 1.48 | 0.82 | 1.58 | E32213J |
| 70 | 125 | 33.25 | 31 | 27 | 2 | 1.5 | E32214J | 3EC | 169000 | 225000 | 3100 | 4100 | 80 | 80 | 108 | 119 | 4 | 6 | 2 | 1.5 | 4.0 | 0.42 | 1.43 | 0.79 | 1.71 | E32214J |
| 75 | 130 | 33.25 | 31 | 27 | 2 | 1.5 | E32215J | 4DC | 174000 | 234000 | 2900 | 3900 | 85 | 85 | 114 | 123 | 4 | 6 | 2 | 1.5 | 3.0 | 0.44 | 1.38 | 0.76 | 1.77 | E32215J |
| 80 | 140 | 35.25 | 33 | 28 | 2.5 | 2 | E32216J | 3EC | 203000 | 271000 | 2700 | 3600 | 92 | 90 | 122 | 134 | 4 | 7 | 2 | 2 | 3.8 | 0.42 | 1.43 | 0.79 | 2.17 | E32216J |
| 85 | 150 | 38.5 | 36 | 30 | 2.5 | 2 | E32217J | 3EC | 232000 | 315000 | 2500 | 3300 | 97 | 96 | 130 | 142 | 5 | 8.5 | 2 | 2 | 4.3 | 0.42 | 1.43 | 0.79 | 2.8 | E32217J |
| 90 | 160 | 42.5 | 40 | 34 | 2.5 | 2 | E32218J | 3FC | 263000 | 362000 | 2400 | 3200 | 102 | 102 | 138 | 152 | 5 | 8.5 | 2 | 2 | 5.5 | 0.42 | 1.43 | 0.79 | 3.47 | E32218J |
| 95 | 170 | 45.5 | 43 | 37 | 3 | 2.5 | E32219J | 3FC | 311000 | 439000 | 2200 | 3000 | 109 | 108 | 145 | 161 | 5 | 8.5 | 2.5 | 2 | 6.6 | 0.42 | 1.43 | 0.79 | 4.34 | E32219J |
| 100 | 180 | 49 | 46 | 39 | 3 | 2.5 | E32220J | 3FC | 347000 | 495000 | 2100 | 2800 | 114 | 114 | 154 | 171 | 5 | 10 | 2.5 | 2 | 6.9 | 0.42 | 1.43 | 0.79 | 5.21 | E32220J |
| 105 | 190 | 53 | 50 | 43 | 3 | 2.5 | E32221J | 3FC | 392000 | 567000 | 2000 | 2700 | 119 | 120 | 161 | 180 | 6 | 10 | 2.5 | 2 | 8.2 | 0.42 | 1.43 | 0.79 | 6.37 | E32221J |
| 110 | 200 | 56 | 53 | 46 | 3 | 2.5 | E32222J | 3FC | 438000 | 640000 | 1900 | 2500 | 124 | 126 | 170 | 190 | 6 | 10 | 2.5 | 2 | 9.3 | 0.42 | 1.43 | 0.79 | 7.45 | E32222J |
| 120 | 215 | 61.5 | 58 | 50 | 3 | 2.5 | E32224J | 4FD | 470000 | 691000 | 1700 | 2300 | 134 | 136 | 181 | 204 | 7 | 11.5 | 2.5 | 2 | 9.9 | 0.44 | 1.38 | 0.76 | 9.04 | E32224J |
| 130 | 230 | 67.75 | 64 | 54 | 4 | 3 | E32226J | 4FD | 554000 | 830000 | 1600 | 2200 | 148 | 146 | 193 | 219 | 7 | 13.5 | 3 | 2.5 | 11.7 | 0.44 | 1.38 | 0.76 | 11.5 | E32226J |
| 140 | 250 | 71.75 | 68 | 58 | 4 | 3 | E32228J | 4FD | 636000 | 961000 | 1500 | 2000 | 158 | 158 | 210 | 238 | 9 | 13.5 | 3 | 2.5 | 11.7 | 0.44 | 1.39 | 0.76 | 14.7 | E32228J |
| 150 | 270 | 77 | 73 | 60 | 4 | 3 | E32230J | 4GD | 704000 | 1070000 | 1300 | 1800 | 168 | 170 | 226 | 254 | 8 | 17 | 3 | 2.5 | 11.8 | 0.44 | 1.38 | 0.76 | 18.2 | E32230J |
| 160 | 290 | 84 | 80 | 67 | 4 | 3 | E32232J | 4GD | 795000 | 1210000 | 1200 | 1700 | 178 | 182 | 242 | 274 | 10 | 17 | 3 | 2.5 | 13.7 | 0.44 | 1.38 | 0.76 | 23.2 | E32232J |

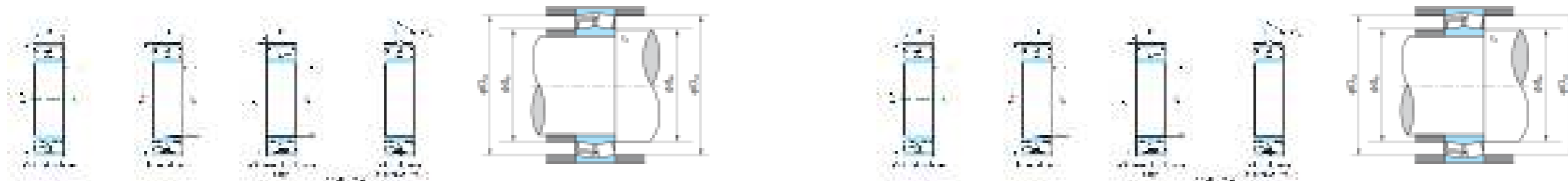


| Boundary dimensions (mm) | | | | | | | Bearing No. | (Ref.) ISO355 Dimension series | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | Abutment and fillet dimensions (mm) | | | | | | | | Load center (mm) a (1) | Constant e | Axial load factor | | Mass(kg) Reference | Bearing No. |
|--------------------------|-----|-------|----|----|-----------------|----------------|-------------|--------------------------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|-------------------------------------|----------|----------|----------|----------|----------|------------------|-----------------|------------------------|------------|-------------------|------|--------------------|-------------|
| d | D | T | B | C | Cone r (min) | Cup r (min) | | | | | Grease lubrication | Oil lubrication | da (min) | db (max) | Da (min) | Db (min) | S1 (min) | S2 (min) | Cone ra (max) | Cup ra (max) | | | Y1 | Y0 | | |
| 20 | 52 | 22.25 | 21 | 18 | 1.5 | 1.5 | E32304J | 2FD | 45100 | 46700 | 8400 | 11000 | 28.5 | 27 | 43 | 47 | 3 | 4 | 1.5 | 1.5 | 7.8 | 0.30 | 2.00 | 1.10 | 0.239 | E32304J |
| 25 | 62 | 25.25 | 24 | 20 | 1.5 | 1.5 | E32305J | 2FD | 61200 | 64100 | 6900 | 9100 | 33.5 | 33 | 52 | 57 | 3 | 5 | 1.5 | 1.5 | 8.6 | 0.30 | 2.00 | 1.10 | 0.386 | E32305J |
| 30 | 72 | 28.75 | 27 | 23 | 1.5 | 1.5 | E32306J | 2FD | 82200 | 91600 | 5900 | 7900 | 38.5 | 39 | 59 | 66 | 3 | 5.5 | 1.5 | 1.5 | 9.8 | 0.31 | 1.90 | 1.05 | 0.588 | E32306J |
| 35 | 80 | 32.75 | 31 | 25 | 2 | 1.5 | E32307J | 2FE | 101000 | 114000 | 5300 | 7000 | 45 | 44 | 66 | 74 | 3 | 7.5 | 2 | 1.5 | 12.2 | 0.31 | 1.90 | 1.05 | 0.776 | E32307J |
| 40 | 90 | 35.25 | 33 | 27 | 2 | 1.5 | E32308J | 2FD | 116000 | 139000 | 4600 | 6200 | 50 | 50 | 73 | 82 | 3 | 8 | 2 | 1.5 | 10.9 | 0.35 | 1.74 | 0.96 | 1.06 | E32308J |
| 45 | 100 | 38.25 | 36 | 30 | 2 | 1.5 | E32309J | 2FD | 146000 | 180000 | 4100 | 5500 | 55 | 56 | 82 | 93 | 3 | 8 | 2 | 1.5 | 11.4 | 0.35 | 1.74 | 0.96 | 1.43 | E32309J |
| 50 | 110 | 42.25 | 40 | 33 | 2.5 | 2 | E32310J | 2FD | 176000 | 220000 | 3700 | 5000 | 62 | 62 | 90 | 102 | 3 | 9 | 2 | 2 | 12.9 | 0.35 | 1.74 | 0.96 | 1.89 | E32310J |
| 55 | 120 | 45.5 | 43 | 35 | 2.5 | 2 | E32311J | 2FD | 200000 | 250000 | 3400 | 4500 | 67 | 68 | 99 | 111 | 4 | 10.5 | 2 | 2 | 13.1 | 0.35 | 1.74 | 0.96 | 2.38 | E32311J |
| 60 | 130 | 48.5 | 46 | 37 | 3 | 2.5 | E32312J | 2FD | 221000 | 275000 | 3100 | 4200 | 74 | 74 | 107 | 120 | 4 | 11.5 | 2.5 | 2 | 16.2 | 0.35 | 1.74 | 0.96 | 2.92 | E32312J |
| 65 | 140 | 51 | 48 | 39 | 3 | 2.5 | E32313J | 2GD | 276000 | 357000 | 2900 | 3900 | 79 | 80 | 117 | 130 | 4 | 12 | 2.5 | 2 | 16.3 | 0.35 | 1.74 | 0.96 | 3.64 | E32313J |
| 70 | 150 | 54 | 51 | 42 | 3 | 2.5 | E32314J | 2GD | 317000 | 414000 | 2700 | 3600 | 84 | 86 | 125 | 140 | 4 | 12 | 2.5 | 2 | 16.6 | 0.35 | 1.74 | 0.96 | 4.50 | E32314J |
| 80 | 170 | 61.5 | 58 | 48 | 3 | 2.5 | E32316J | 2GD | 378000 | 497000 | 2300 | 3100 | 94 | 98 | 142 | 159 | 4 | 13.5 | 2.5 | 2 | 19.5 | 0.35 | 1.73 | 0.95 | 6.32 | E32316J |
| 90 | 190 | 67.5 | 64 | 53 | 4 | 3 | E32318J | 2DG | 461000 | 461000 | 2100 | 2800 | 108 | 108 | 157 | 177 | 5 | 14.5 | 3 | 2.5 | 20.9 | 0.35 | 1.74 | 0.96 | 8.61 | E32318J |



| d | Boundary dimensions (mm) | | | | | | Bearing No. | | Basic load rating | | Limiting speed (min ⁻¹) | | Abutment and fillet dimensions (mm) | | | | | | Load center (mm) a (1) | Constant e | Axial load factor | | Mass(kg) Reference | | Bearing No. | |
|--------|--------------------------|--------|--------|--------|----------|----------|-------------|-----------|-------------------|----------|-------------------------------------|-------|-------------------------------------|------|------|------|------|------|------------------------|------------|-------------------|------|--------------------|-------|-------------|-----------|
| | D | T | B | C | r1 (min) | r2 (min) | Cone | Cup | Cr (kN) | Cor (kN) | Grease | Oil | da | db | Da | Db | r1a | r2a | | | Y1 | Y0 | Cone | Cup | Cone | Cup |
| 15.875 | 42.863 | 14.288 | 14.288 | 9.525 | 1.6 | 1.6 | H-11590 | H-11520 | 17.8 | 17.7 | 10000 | 14000 | 24.5 | 22.5 | 34.5 | 39.5 | 1.6 | 1.6 | 1.2 | 0.70 | 0.85 | 0.47 | 0.06 | 0.04 | H-11590 | H-11520 |
| 28.575 | 68.263 | 22.225 | 22.225 | 17.463 | 0.80 | 1.60 | H-02474 | H-02420 | 51.0 | 61.1 | 6000 | 8000 | 36.5 | 36.0 | 59.0 | 63.0 | 0.80 | 1.60 | 5.1 | 0.42 | 1.44 | 0.79 | 0.252 | 0.150 | H-02474 | H-02420 |
| 19.050 | 49.225 | 18.034 | 19.050 | 14.288 | 1.20 | 1.20 | H-09067 | H-09195 | 37.7 | 37.7 | 8900 | 12000 | 25.5 | 24.0 | 42.0 | 44.5 | 1.20 | 1.20 | 7.4 | 0.27 | 2.26 | 1.24 | 0.114 | 0.065 | H-09067 | H-09195 |
| | 45.237 | 15.494 | 16.637 | 12.065 | 1.20 | 1.20 | H-LM11949 | H-LM11910 | 29.4 | 30.1 | 9400 | 13000 | 25.0 | 23.5 | 39.5 | 41.5 | 1.20 | 1.20 | 5.5 | 0.30 | 2.00 | 1.10 | 0.081 | 0.044 | H-LM11949 | H-LM11910 |
| 34.925 | 65.088 | 18.034 | 18.288 | 13.970 | SP | 1.20 | H-LM48548 | H-LM48510 | 48.0 | 58.5 | 6000 | 8000 | 46.0 | 40.0 | 58.0 | 61.0 | SP | 1.20 | 3.7 | 0.38 | 1.59 | 0.88 | 0.164 | 0.086 | H-LM48548 | H-LM48510 |





E, EX, EX1 Series

| Boundary dimensions (mm) | | | | Bearing No. | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | Dimensions of lubrication holes and grooves | | | Abutment and fillet dimensions (mm) | | | Constant e | Axial load factor | | | Mass (kg) Cylindrical bore | Bearing No. | | |
|--------------------------|-----|----|---------|------------------|--------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|---|----------------|--------------|-------------------------------------|----------|----------|------------|-------------------|------|------|-------------------------------|------------------|--------------|---------|
| d | D | B | r (min) | Cylindrical bore | Tapered bore | | | Grease lubrication | Oil lubrication | Hole diameter du | Groove width A | Hole count N | da (min) | Da (max) | ra (max) | | Y1 | Y2 | Y0 | | Cylindrical bore | Tapered bore | |
| 35 | 80 | 21 | 1.5 | 21307E | 21307EK | 96000 | 76000 | 7,000 | 8,500 | | 3 | 5 | 4 | 44 | 71 | 1.5 | 0.27 | 2.49 | 3.71 | 2.43 | 0.57 | 21307E | 21307EK |
| 40 | 90 | 23 | 1.5 | 21308E | 21308EK | 119000 | 95500 | 6,000 | 7,500 | | 3 | 5 | 4 | 50 | 81 | 1.5 | 0.26 | 2.55 | 3.8 | 2.5 | 0.78 | 21308E | 21308EK |
| 45 | 100 | 25 | 1.5 | 21309E | 21309EK | 150000 | 124000 | 5,000 | 6,300 | | 3 | 5 | 4 | 55 | 92 | 1.5 | 0.26 | 2.62 | 3.9 | 2.56 | 1.05 | 21309E | 21309EK |
| 50 | 110 | 27 | 2 | 21310E | 21310EK | 178000 | 151000 | 4,500 | 5,600 | | 3 | 5 | 4 | 61 | 101 | 2 | 0.25 | 2.71 | 4.04 | 2.65 | 1.36 | 21310E | 21310EK |

EXQ Series

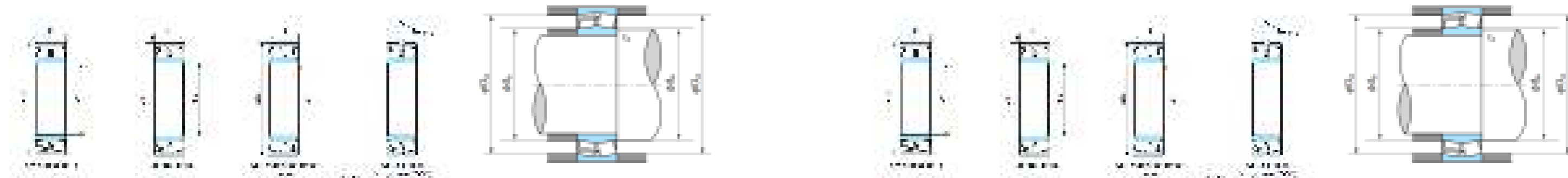
| Boundary dimensions (mm) | | | | Bearing No. | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | Dimensions of lubrication holes and grooves | | | Abutment and fillet dimensions (mm) | | | Constant e | Axial load factor | | | Mass (kg) Cylindrical bore | Bearing No. | | |
|--------------------------|-----|----|---------|------------------|--------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|---|----------------|--------------|-------------------------------------|----------|----------|------------|-------------------|------|------|-------------------------------|------------------|--------------|-----------|
| d | D | B | r (min) | Cylindrical bore | Tapered bore | | | Grease lubrication | Oil lubrication | Hole diameter du | Groove width A | Hole count N | da (min) | Da (max) | ra (max) | | Y1 | Y2 | Y0 | | Cylindrical bore | Tapered bore | |
| 55 | 120 | 29 | 2 | 21311EXQ | 21311EXQK | 200000 | 165000 | 5,000 | 5,900 | | 3 | 5 | 4 | 65 | 110 | 2 | 0.25 | 2.71 | 4.03 | 2.65 | 1.7 | 21311EXQ | 21311EXQK |
| 60 | 130 | 31 | 2.1 | 21312EXQ | 21312EXQK | 238000 | 193000 | 4,200 | 5,000 | | 3 | 5 | 4 | 72 | 118 | 2 | 0.24 | 2.78 | 4.14 | 2.72 | 2.1 | 21312EXQ | 21312EXQK |
| 65 | 140 | 33 | 2.1 | 21313EXQ | 21313EXQK | 270000 | 232000 | 4,000 | 4,700 | | 3 | 6 | 4 | 77 | 128 | 2 | 0.24 | 2.83 | 4.21 | 2.76 | 2.6 | 21313EXQ | 21313EXQK |
| 70 | 150 | 35 | 2.1 | 21314EXQ | 21314EXQK | 310000 | 260000 | 3,500 | 4,200 | | 3 | 6 | 4 | 82 | 138 | 2 | 0.24 | 2.84 | 4.23 | 2.78 | 3.1 | 21314EXQ | 21314EXQK |
| 75 | 160 | 37 | 2.1 | 21315EXQ | 21315EXQK | 340000 | 298000 | 3,500 | 4,200 | | 3 | 6 | 4 | 87 | 148 | 2 | 0.23 | 2.87 | 4.27 | 2.8 | 3.8 | 21315EXQ | 21315EXQK |
| 80 | 170 | 39 | 2.1 | 21316EXQ | 21316EXQK | 380000 | 339000 | 3,300 | 4,000 | | 4 | 8 | 4 | 92 | 158 | 2 | 0.23 | 2.88 | 4.29 | 2.82 | 4.5 | 21316EXQ | 21316EXQK |
| 85 | 180 | 41 | 3 | 21317EXQ | 21317EXQK | 415000 | 372000 | 3,300 | 4,200 | | 4 | 8 | 4 | 99 | 166 | 2.5 | 0.23 | 2.89 | 4.3 | 2.83 | 5.3 | 21317EXQ | 21317EXQK |
| 90 | 190 | 43 | 3 | 21318EXQ | 21318EXQK | 460000 | 410000 | 3,100 | 3,800 | | 4 | 8 | 6 | 104 | 176 | 2.5 | 0.23 | 2.91 | 4.33 | 2.84 | 6.1 | 21318EXQ | 21318EXQK |
| 95 | 200 | 45 | 3 | 21319EXQ | 21319EXQK | 500000 | 461000 | 3,000 | 3,600 | | 4 | 8 | 6 | 109 | 186 | 2.5 | 0.23 | 2.92 | 4.35 | 2.86 | 7.1 | 21319EXQ | 21319EXQK |
| 100 | 215 | 47 | 3 | 21320EXQ | 21320EXQK | 580000 | 524000 | 2,600 | 3,500 | | 4 | 8 | 6 | 114 | 201 | 2.5 | 0.22 | 3.02 | 4.49 | 2.95 | 8.7 | 21320EXQ | 21320EXQK |



| EXQ Series | | | | | | | | | | EXQ Series | | | | | | | | | | | | | |
|--------------------------|-----|----|---------|------------------|--------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|------------|---|----------------|--------------|-------------------------------------|----------|----------|------------|-------------------|------|------|-------------------------------|------------------|--------------|
| Boundary dimensions (mm) | | | | Bearing No. | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | | Dimensions of lubrication holes and grooves | | | Abutment and fillet dimensions (mm) | | | Constant e | Axial load factor | | | Mass (kg) Cylindrical bore | Bearing No. | |
| d | D | B | r (min) | Cylindrical bore | Tapered bore | | | Grease lubrication | Oil lubrication | | Hole diameter du | Groove width A | Hole count N | da (min) | Da (max) | ra (max) | | Y1 | Y2 | Y0 | | Cylindrical Bore | Tapered bore |
| 25 | 52 | 18 | 1 | 22205EXQ | 22205EXQK | 63000 | 48000 | 11,600 | 13,700 | | 3 | 5 | 4 | 30.5 | 46.5 | 1 | 0.35 | 1.91 | 2.85 | 1.87 | 0.19 | 22205EXQ | 22205EXQK |
| 30 | 62 | 20 | 1 | 22206EXQ | 22206EXQK | 84500 | 65000 | 9,400 | 11,600 | | 3 | 5 | 4 | 35.5 | 56.5 | 1 | 0.33 | 2.04 | 3.04 | 2 | 0.3 | 22206EXQ | 22206EXQK |
| 35 | 72 | 23 | 1.1 | 22207EXQ | 22207EXQK | 112000 | 88500 | 8,300 | 10,000 | | 3 | 6 | 4 | 42 | 65 | 1 | 0.32 | 2.1 | 3.13 | 2.06 | 0.46 | 22207EXQ | 22207EXQK |
| 40 | 80 | 23 | 1.1 | 22208EXQ | 22208EXQK | 126000 | 102000 | 7,400 | 8,900 | | 3 | 6 | 4 | 47 | 73 | 1 | 0.28 | 2.37 | 3.53 | 2.32 | 0.56 | 22208EXQ | 22208EXQK |
| 45 | 85 | 23 | 1.1 | 22209EXQ | 22209EXQK | 133000 | 110000 | 6,600 | 7,900 | | 3 | 6 | 4 | 52 | 78 | 1 | 0.26 | 2.55 | 3.8 | 2.5 | 0.61 | 22209EXQ | 22209EXQK |
| 50 | 90 | 23 | 1.1 | 22210EXQ | 22210EXQK | 142000 | 122000 | 6,200 | 7,500 | | 3 | 6 | 4 | 57 | 83 | 1 | 0.24 | 2.79 | 4.15 | 2.73 | 0.65 | 22210EXQ | 22210EXQK |
| 55 | 100 | 25 | 1.5 | 22211EXQ | 22211EXQK | 171000 | 144000 | 5,800 | 7,000 | | 3 | 6 | 4 | 63.5 | 91.5 | 1.5 | 0.24 | 2.84 | 4.23 | 2.78 | 0.88 | 22211EXQ | 22211EXQK |
| 60 | 110 | 28 | 1.5 | 22212EXQ | 22212EXQK | 210000 | 179000 | 5,300 | 6,300 | | 3 | 6 | 4 | 68.5 | 101.5 | 1.5 | 0.25 | 2.74 | 4.08 | 2.68 | 1.2 | 22212EXQ | 22212EXQK |
| 65 | 120 | 31 | 1.5 | 22213EXQ | 22213EXQK | 246000 | 209000 | 4,700 | 5,600 | | 3 | 6 | 4 | 73.5 | 111.5 | 1.5 | 0.25 | 2.69 | 4 | 2.63 | 1.56 | 22213EXQ | 22213EXQK |
| 70 | 125 | 31 | 1.5 | 22214EXQ | 22214EXQK | 257000 | 220000 | 4,400 | 5,600 | | 3 | 6 | 4 | 78.5 | 116.5 | 1.5 | 0.24 | 2.87 | 4.27 | 2.8 | 1.65 | 22214EXQ | 22214EXQK |
| 75 | 130 | 31 | 1.5 | 22215EXQ | 22215EXQK | 265000 | 234000 | 4,400 | 5,300 | | 3 | 6 | 4 | 83.5 | 121.5 | 1.5 | 0.22 | 3.07 | 4.58 | 3.01 | 1.74 | 22215EXQ | 22215EXQK |
| 80 | 140 | 33 | 2 | 22216EXQ | 22216EXQK | 299000 | 269000 | 4,000 | 4,700 | | 3 | 6 | 4 | 90 | 130 | 2 | 0.22 | 3.07 | 4.58 | 3.01 | 2.19 | 22216EXQ | 22216EXQK |
| 85 | 150 | 36 | 2 | 22217EXQ | 22217EXQK | 355000 | 320000 | 3,700 | 4,500 | | 4 | 7 | 4 | 95 | 140 | 2 | 0.22 | 3.01 | 4.48 | 2.94 | 2.75 | 22217EXQ | 22217EXQK |
| 90 | 160 | 40 | 2 | 22218EXQ | 22218EXQK | 410000 | 375000 | 3,500 | 4,200 | | 4 | 7 | 4 | 100 | 150 | 2 | 0.24 | 2.79 | 4.15 | 2.73 | 3.5 | 22218EXQ | 22218EXQK |
| 95 | 170 | 43 | 2.1 | 22219EXQ | 22219EXQK | 465000 | 420000 | 3,300 | 4,000 | | 5 | 8 | 4 | 107 | 158 | 2 | 0.24 | 2.76 | 4.11 | 2.7 | 4.24 | 22219EXQ | 22219EXQK |
| 100 | 180 | 46 | 2.1 | 22220EXQ | 22220EXQK | 520000 | 480000 | 3,100 | 3,800 | | 5 | 8 | 4 | 112 | 168 | 2 | 0.25 | 2.74 | 4.08 | 2.68 | 5.1 | 22220EXQ | 22220EXQK |
| 110 | 200 | 53 | 2.1 | 22222EXQ | 22222EXQK | 680000 | 640000 | 2,900 | 3,400 | | 5 | 10 | 6 | 122 | 188 | 2 | 0.26 | 2.64 | 3.93 | 2.58 | 7.36 | 22222EXQ | 22222EXQK |
| 120 | 215 | 58 | 2.1 | 22224EXQ | 22224EXQK | 785000 | 765000 | 2,600 | 3,200 | | 5 | 10 | 6 | 132 | 203 | 2 | 0.26 | 2.6 | 3.87 | 2.54 | 9.28 | 22224EXQ | 22224EXQK |
| 130 | 230 | 64 | 3 | 22226EXQ | 22226EXQK | 910000 | 915000 | 2,400 | 2,800 | | 5 | 10 | 6 | 144 | 216 | 2.5 | 0.26 | 2.55 | 3.8 | 2.5 | 11.6 | 22226EXQ | 22226EXQK |
| 140 | 250 | 68 | 3 | 22228EXQ | 22228EXQK | 1050000 | 1030000 | 2,100 | 2,600 | | 6 | 12 | 6 | 154 | 236 | 2.5 | 0.26 | 2.6 | 3.87 | 2.54 | 13.9 | 22228EXQ | 22228EXQK |
| 150 | 270 | 73 | 3 | 22230EXQ | 22230EXQK | 1200000 | 1200000 | 2,000 | 2,500 | | 6 | 14 | 6 | 164 | 256 | 2.5 | 0.25 | 2.69 | 4 | 2.63 | 18.9 | 22230EXQ | 22230EXQK |
| 160 | 290 | 80 | 3 | 22232E | 22232EK | 1230000 | 1330000 | 1,500 | 2,100 | | 6 | 14 | 6 | 174 | 276 | 2.5 | 0.26 | 2.57 | 3.83 | 2.52 | 23.7 | 22232E | 22232EK |
| 170 | 310 | 86 | 4 | 22234E | 22234EK | 1390000 | 1510000 | 1,400 | 1,900 | | 8 | 18 | 6 | 188 | 292 | 3 | 0.29 | 2.33 | 3.47 | 2.28 | 30 | 22234E | 22234EK |

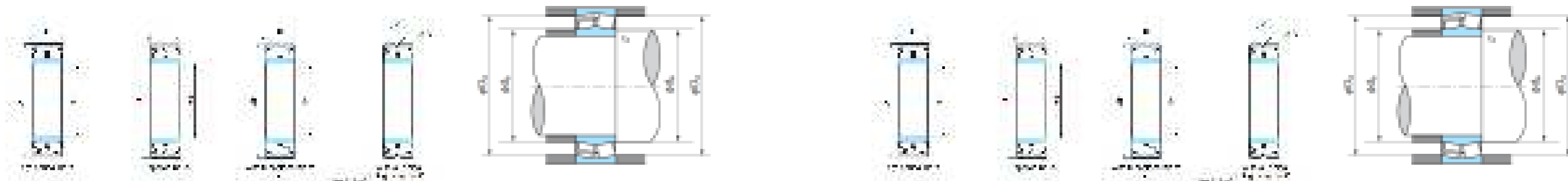
E, EX, EX1 Series

E, EX, EX1 Series



| EXQ Series | | | | | | | | | | | EXQ Series | | | | | | | | | | | |
|--------------------------|-----|-----|---------|------------------|--------------|----------------------------------|----------------------------------|------------------------|-----------------|---|-------------------------------------|----------------|--------------|------------|-------------------|----------|----------|-------------------------------|-------------|------|----------|------------------|
| Boundary dimensions (mm) | | | | Bearing No. | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min-1) | | Dimensions of lubrication holes and grooves | Abutment and fillet dimensions (mm) | | | Constant e | Axial load factor | | | Mass (kg) Cylindrical bore | Bearing No. | | | |
| d | D | B | r (min) | Cylindrical bore | Tapered bore | | | Grease lubrication | Oil lubrication | | Hole diameter du | Groove width A | Hole count N | | da (min) | Da (max) | ra (max) | | Y1 | Y2 | Y0 | Cylindrical bore |
| 40 | 90 | 33 | 1.5 | 22308EXQ | 22308EXQK | 185000 | 151000 | 5,800 | 7,000 | 4 | 7 | 4 | 48.5 | 81.5 | 1.5 | 0.37 | 1.83 | 2.72 | 1.79 | 1.07 | 22308EXQ | 22308EXQK |
| 45 | 100 | 36 | 1.5 | 22309EXQ | 22309EXQK | 230000 | 182000 | 5,000 | 5,900 | 4 | 8 | 4 | 53.5 | 91.5 | 1.5 | 0.37 | 1.83 | 2.72 | 1.79 | 1.41 | 22309EXQ | 22309EXQK |
| 50 | 110 | 40 | 2 | 22310EXQ | 22310EXQK | 280000 | 235000 | 4,700 | 5,600 | 4 | 8 | 4 | 60 | 100 | 2 | 0.36 | 1.85 | 2.75 | 1.81 | 1.92 | 22310EXQ | 22310EXQK |
| 55 | 120 | 43 | 2 | 22311EXQ | 22311EXQK | 325000 | 263000 | 4,200 | 5,000 | 4 | 8 | 4 | 65 | 110 | 2 | 0.36 | 1.85 | 2.75 | 1.81 | 2.4 | 22311EXQ | 22311EXQK |
| 60 | 130 | 46 | 2.1 | 22312EXQ | 22312EXQK | 390000 | 330000 | 4,000 | 4,700 | 4 | 8 | 4 | 72 | 118 | 2 | 0.36 | 1.86 | 2.77 | 1.82 | 3.05 | 22312EXQ | 22312EXQK |
| 65 | 140 | 48 | 2.1 | 22313EXQ | 22313EXQK | 415000 | 355000 | 3,500 | 4,200 | 4 | 8 | 4 | 77 | 128 | 2 | 0.34 | 1.98 | 2.94 | 1.93 | 3.67 | 22313EXQ | 22313EXQK |
| 70 | 150 | 51 | 2.1 | 22314EXQ | 22314EXQK | 480000 | 415000 | 3,300 | 4,000 | 5 | 10 | 4 | 82 | 138 | 2 | 0.34 | 1.98 | 2.94 | 1.93 | 4.45 | 22314EXQ | 22314EXQK |
| 75 | 160 | 55 | 2.1 | 22315EXQ | 22315EXQK | 550000 | 475000 | 3,100 | 3,800 | 5 | 10 | 4 | 87 | 148 | 2 | 0.35 | 1.95 | 2.9 | 1.91 | 5.44 | 22315EXQ | 22315EXQK |
| 80 | 170 | 58 | 2.1 | 22316EXQ | 22316EXQK | 595000 | 520000 | 2,900 | 3,600 | 5 | 10 | 4 | 92 | 158 | 2 | 0.35 | 1.95 | 2.9 | 1.91 | 6.42 | 22316EXQ | 22316EXQK |
| 85 | 180 | 60 | 3 | 22317EXQ | 22317EXQK | 665000 | 585000 | 2,600 | 3,400 | 6 | 11 | 4 | 99 | 166 | 2.5 | 0.33 | 2.02 | 3 | 1.97 | 7.46 | 22317EXQ | 22317EXQK |
| 90 | 190 | 64 | 3 | 22318EXQ | 22318EXQK | 745000 | 660000 | 2,600 | 3,200 | 6 | 11 | 6 | 104 | 176 | 2.5 | 0.34 | 2 | 2.98 | 1.96 | 8.82 | 22318EXQ | 22318EXQK |
| 95 | 200 | 67 | 3 | 22319EXQ | 22319EXQK | 815000 | 725000 | 2,400 | 3,000 | 6 | 12 | 6 | 109 | 186 | 2.5 | 0.33 | 2.02 | 3 | 1.97 | 10.2 | 22319EXQ | 22319EXQK |
| 100 | 215 | 73 | 3 | 22320EXQ | 22320EXQK | 975000 | 875000 | 2,200 | 2,900 | 6 | 12 | 6 | 114 | 201 | 2.5 | 0.35 | 1.95 | 2.9 | 1.91 | 13.1 | 22320EXQ | 22320EXQK |
| 110 | 240 | 80 | 3 | 22322EXQ | 22322EXQK | 1150000 | 1040000 | 2,100 | 2,800 | 6 | 12 | 6 | 124 | 226 | 2.5 | 0.33 | 2.03 | 3.02 | 1.98 | 18.1 | 22322EXQ | 22322EXQK |
| 130 | 280 | 93 | 4 | 22326EXQ | 22326EXQK | 1450000 | 1340000 | 1,900 | 2,600 | 8 | 16 | 6 | 148 | 262 | 3 | 0.33 | 2.03 | 3.02 | 1.98 | 28.4 | 22326EXQ | 22326EXQK |
| 140 | 300 | 102 | 4 | 22328E | 22328EK | 1540000 | 1520000 | 1,600 | 2,200 | 10 | 22 | 6 | 158 | 282 | 3 | 0.37 | 1.82 | 2.72 | 1.78 | 35.9 | 22328E | 22328EK |

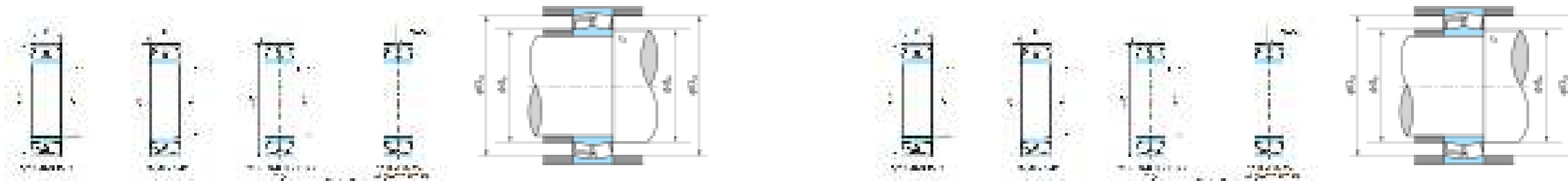
| E, EX, EX1 Series | | | | | | | | | | | E, EX, EX1 Series | | | | | | | | | | | |
|--------------------------|-----|-----|---------|------------------|--------------|----------------------------------|----------------------------------|------------------------|-----------------|---|-------------------------------------|----------------|--------------|------------|-------------------|----------|----------|-------------------------------|-------------|------|--------|------------------|
| Boundary dimensions (mm) | | | | Bearing No. | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min-1) | | Dimensions of lubrication holes and grooves | Abutment and fillet dimensions (mm) | | | Constant e | Axial load factor | | | Mass (kg) Cylindrical bore | Bearing No. | | | |
| d | D | B | r (min) | Cylindrical bore | Tapered bore | | | Grease lubrication | Oil lubrication | | Hole diameter du | Groove width A | Hole count N | | da (min) | Da (max) | ra (max) | | Y1 | Y2 | Y0 | Cylindrical bore |
| 150 | 320 | 108 | 4 | 22330E | 22330EK | 1770000 | 1740000 | 1,500 | 2,100 | 10 | 22 | 6 | 168 | 302 | 3 | 0.37 | 1.82 | 2.72 | 1.78 | 43.3 | 22330E | 22330EK |
| 160 | 340 | 114 | 4 | 22332E | 22332EK | 1950000 | 1950000 | 1,400 | 1,900 | 10 | 22 | 6 | 178 | 322 | 3 | 0.36 | 1.85 | 2.75 | 1.81 | 51.4 | 22332E | 22332EK |



| EXQ Series | | | | | | | | | | EXQ Series | | | | | | | | | | | | | |
|--------------------------|-----|----|---------|------------------|--------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|------------|---|----------------|--------------|-------------------------------------|----------|----------|------------|-------------------|------|------|-------------------------------|------------------|--------------|
| Boundary dimensions (mm) | | | | Bearing No. | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | | Dimensions of lubrication holes and grooves | | | Abutment and fillet dimensions (mm) | | | Constant e | Axial load factor | | | Mass (kg) Cylindrical bore | Bearing No. | |
| d | D | B | r (min) | Cylindrical bore | Tapered bore | | | Grease lubrication | Oil lubrication | | Hole diameter du | Groove width A | Hole count N | da (min) | Da (max) | ra (max) | | Y1 | Y2 | Y0 | | Cylindrical bore | Tapered bore |
| 100 | 150 | 37 | 1.5 | 23020EXQ | 23020EXQK | 286000 | 325000 | 3,000 | 3,900 | | 4 | 7 | 4 | 117 | 141 | 1.5 | 0.22 | 3.01 | 4.48 | 2.94 | 2.33 | 23020EXQ | 23020EXQK |
| 110 | 170 | 45 | 2 | 23022EXQ | 23022EXQK | 415000 | 475000 | 3,000 | 3,800 | | 5 | 9 | 4 | 120 | 160 | 2 | 0.24 | 2.84 | 4.23 | 2.78 | 3.84 | 23022EXQ | 23022EXQK |
| 120 | 180 | 46 | 2 | 23024EXQ | 23024EXQK | 430000 | 515000 | 2,800 | 3,500 | | 5 | 9 | 4 | 130 | 170 | 2 | 0.23 | 2.95 | 4.39 | 2.89 | 4.2 | 23024EXQ | 23024EXQK |
| 130 | 200 | 52 | 2 | 23026EXQ | 23026EXQK | 555000 | 660000 | 2,600 | 3,200 | | 5 | 10 | 6 | 140 | 190 | 2 | 0.24 | 2.87 | 4.27 | 2.8 | 6.14 | 23026EXQ | 23026EXQK |
| 140 | 210 | 53 | 2 | 23028EXQ | 23028EXQK | 585000 | 710000 | 2,600 | 2,900 | | 5 | 10 | 6 | 150 | 200 | 2 | 0.23 | 2.98 | 4.44 | 2.91 | 6.61 | 23028EXQ | 23028EXQK |
| 150 | 225 | 56 | 2.1 | 23030EXQ | 23030EXQK | 640000 | 790000 | 2,100 | 2,600 | | 5 | 11 | 6 | 162 | 213 | 2 | 0.22 | 3.04 | 4.53 | 2.97 | 8.01 | 23030EXQ | 23030EXQK |
| 160 | 240 | 60 | 2.1 | 23032EXQ | 23032EXQK | 735000 | 915000 | 2,000 | 2,500 | | 5 | 11 | 6 | 172 | 228 | 2 | 0.22 | 3.01 | 4.48 | 2.94 | 9.74 | 23032EXQ | 23032EXQK |
| 180 | 280 | 74 | 2.1 | 23036EXQ | 23036EXQK | 1070000 | 1330000 | 1,700 | 2,300 | | 8 | 15 | 6 | 192 | 268 | 2 | 0.24 | 2.84 | 4.23 | 2.78 | 17.4 | 23036EXQ | 23036EXQK |
| 190 | 290 | 75 | 2.1 | 23038E | 23038EK | 1080000 | 1330000 | 1,400 | 1,900 | | 6 | 14 | 6 | 202 | 278 | 2 | 0.25 | 2.69 | 4 | 2.63 | 18.4 | 23038E | 23038EK |

| E, EX, EX1 Series | | | | | | | | | | E, EX, EX1 Series | | | | | | | | | | | | | |
|--------------------------|-----|----|---------|------------------|--------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|-------------------|---|----------------|--------------|-------------------------------------|----------|----------|------------|-------------------|------|-----|-------------------------------|------------------|--------------|
| Boundary dimensions (mm) | | | | Bearing No. | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | | Dimensions of lubrication holes and grooves | | | Abutment and fillet dimensions (mm) | | | Constant e | Axial load factor | | | Mass (kg) Cylindrical bore | Bearing No. | |
| d | D | B | r (min) | Cylindrical bore | Tapered bore | | | Grease lubrication | Oil lubrication | | Hole diameter du | Groove width A | Hole count N | da (min) | Da (max) | ra (max) | | Y1 | Y2 | Y0 | | Cylindrical bore | Tapered bore |
| 240 | 360 | 92 | 3 | 23048E | 23048EK | 1530000 | 2000000 | 1,200 | 1,500 | | 8 | 18 | 6 | 254 | 346 | 2.5 | 0.24 | 2.76 | 4.11 | 2.7 | 33.5 | 23048E | 23048EK |

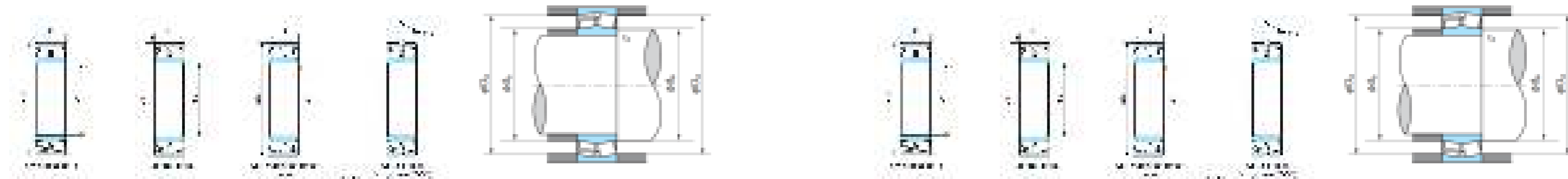




| EXQ Series | | | | | | | | | | | EXQ Series | | | | | | | | | | | | |
|--------------------------|-----|----|---------|------------------|--------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|---|----------------|--------------|-------------------------------------|----------|----------|------------|-------------------|------|------|-------------------------------|------------------|--------------|-----------|
| Boundary dimensions (mm) | | | | Bearing No. | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | Dimensions of lubrication holes and grooves | | | Abutment and fillet dimensions (mm) | | | Constant e | Axial load factor | | | Mass (kg) Cylindrical bore | Bearing No. | | |
| d | D | B | r (min) | Cylindrical bore | Tapered bore | | | Grease lubrication | Oil lubrication | Hole diameter du | Groove width A | Hole count N | da (min) | Da (max) | ra (max) | | Y1 | Y2 | Y0 | | Cylindrical bore | Tapered bore | |
| 100 | 165 | 52 | 2 | 23120EXQ | 23120EXQK | 450000 | 500000 | 3,000 | 3,900 | | 5 | 9 | 4 | 110 | 155 | 2 | 0.29 | 2.33 | 3.47 | 2.28 | 4.49 | 23120EXQ | 23120EXQK |
| 110 | 180 | 56 | 2 | 23122EXQ | 23122EXQK | 540000 | 610000 | 3,000 | 3,800 | | 5 | 9 | 4 | 120 | 170 | 2 | 0.29 | 2.36 | 3.51 | 2.31 | 5.7 | 23122EXQ | 23122EXQK |
| 130 | 210 | 64 | 2 | 23126EXQ | 23126EXQK | 690000 | 799000 | 2,400 | 3,200 | | 5 | 9 | 6 | 140 | 200 | 2 | 0.28 | 2.42 | 3.61 | 2.37 | 8.6 | 23126EXQ | 23126EXQK |
| 140 | 225 | 68 | 2.1 | 23128EXQ | 23128EXQK | 790000 | 940000 | 2,300 | 3,000 | | 6 | 11 | 6 | 152 | 213 | 2 | 0.28 | 2.45 | 3.65 | 2.4 | 10.5 | 23128EXQ | 23128EXQK |
| 150 | 250 | 80 | 2.1 | 23130EXQ | 23130EXQK | 1000000 | 1230000 | 2,100 | 2,600 | | 6 | 13 | 6 | 162 | 238 | 2 | 0.3 | 2.24 | 3.34 | 2.19 | 16.2 | 23130EXQ | 23130EXQK |
| 100 | 165 | 52 | 2 | 23120EX1 | 23120EX1K | 450000 | 500000 | 2,500 | 3,300 | | 5 | 9 | 4 | 110 | 155 | 2 | 0.29 | 2.33 | 3.47 | 2.28 | 4.49 | 23120EX1 | 23120EX1K |

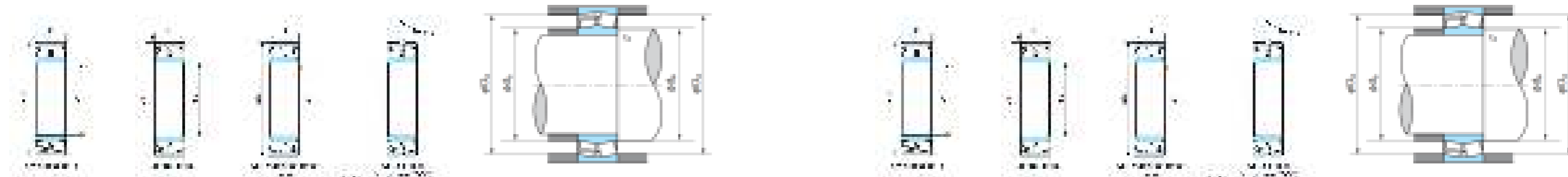
| E, EX, EX1 Series | | | | | | | | | | | E, EX, EX1 Series | | | | | | | | | | | | |
|--------------------------|-----|-----|---------|------------------|--------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|---|-------------------|--------------|-------------------------------------|----------|----------|------------|-------------------|------|------|-------------------------------|------------------|--------------|-----------|
| Boundary dimensions (mm) | | | | Bearing No. | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | Dimensions of lubrication holes and grooves | | | Abutment and fillet dimensions (mm) | | | Constant e | Axial load factor | | | Mass (kg) Cylindrical bore | Bearing No. | | |
| d | D | B | r (min) | Cylindrical bore | Tapered bore | | | Grease lubrication | Oil lubrication | Hole diameter du | Groove width A | Hole count N | da (min) | Da (max) | ra (max) | | Y1 | Y2 | Y0 | | Cylindrical bore | Tapered bore | |
| 110 | 180 | 56 | 2 | 23122EX1 | 23122EX1K | 540000 | 610000 | 2,700 | 3,600 | | 5 | 9 | 4 | 120 | 170 | 2 | 0.29 | 2.36 | 3.51 | 2.31 | 5.7 | 23122EX1 | 23122EX1K |
| 130 | 210 | 64 | 2 | 23126EX1 | 23126EX1K | 690000 | 799000 | 2,200 | 3,000 | | 5 | 9 | 6 | 140 | 200 | 2 | 0.28 | 2.42 | 3.61 | 2.37 | 8.6 | 23126EX1 | 23126EX1K |
| 140 | 225 | 68 | 2.1 | 23128EX1 | 23128EX1K | 790000 | 940000 | 2,100 | 2,850 | | 6 | 11 | 6 | 152 | 213 | 2 | 0.28 | 2.45 | 3.65 | 2.4 | 10.5 | 23128EX1 | 23128EX1K |
| 170 | 280 | 88 | 2.1 | 23134EX1 | 23134EX1K | 1260000 | 1530000 | 1,600 | 2,200 | | 8 | 16 | 6 | 182 | 268 | 2 | 0.29 | 2.3 | 3.43 | 2.25 | 21.6 | 23134EX1 | 23134EX1K |
| 190 | 320 | 104 | 3 | 23138E | 23138EK | 1720000 | 2120000 | 1,200 | 1,600 | | 10 | 22 | 6 | 204 | 306 | 2.5 | 0.32 | 2.09 | 3.11 | 2.04 | 35 | 23138E | 23138EK |





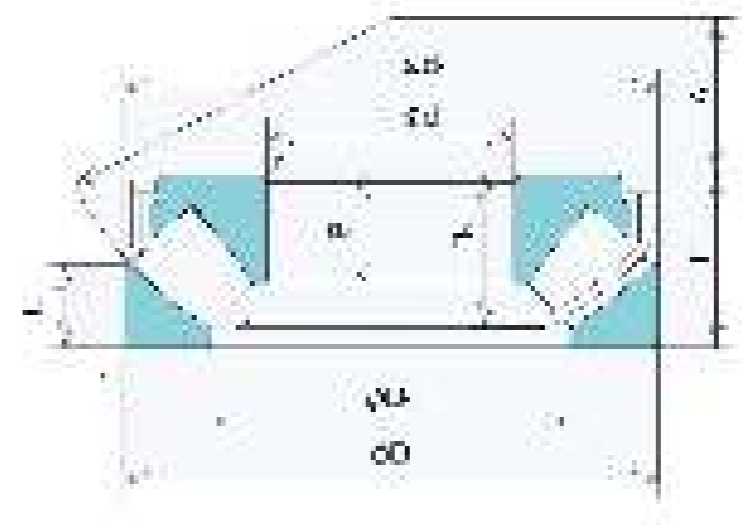
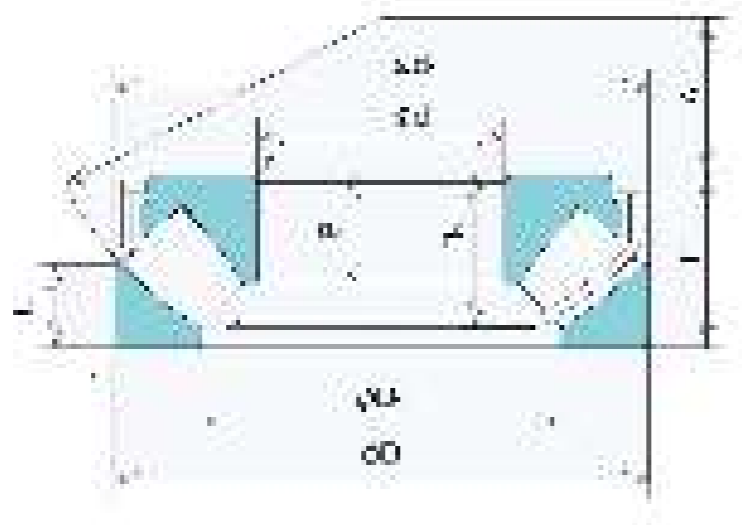
| EXQ Series | | | | | | | | | | | EXQ Series | | | | | | | | | | | |
|--------------------------|-----|------|---------|------------------|--------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|---|----------------|--------------|-------------------------------------|----------|----------|------------|-------------------|------|------|-------------------------------|------------------|--------------|
| Boundary dimensions (mm) | | | | Bearing No. | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | Dimensions of lubrication holes and grooves | | | Abutment and fillet dimensions (mm) | | | Constant e | Axial load factor | | | Mass (kg) Cylindrical bore | Bearing No. | |
| d | D | B | r (min) | Cylindrical bore | Tapered bore | | | Grease lubrication | Oil lubrication | Hole diameter du | Groove width A | Hole count N | da (min) | Da (max) | ra (max) | | Y1 | Y2 | Y0 | | Cylindrical bore | Tapered bore |
| 90 | 160 | 52.4 | 2 | 23218EXQ | 23218EXQK | 470000 | 482000 | 3,400 | 4,400 | 5 | 10 | 4 | 100 | 150 | 2 | 0.32 | 2.14 | 3.19 | 2.09 | 4.57 | 23218EXQ | 23218EXQK |
| 100 | 180 | 60.3 | 2.1 | 23220EXQ | 23220EXQK | 595000 | 629000 | 3,100 | 3,900 | 5 | 10 | 4 | 112 | 168 | 2 | 0.32 | 2.09 | 3.11 | 2.04 | 6.76 | 23220EXQ | 23220EXQK |
| 110 | 200 | 69.8 | 2.1 | 23222EXQ | 23222EXQK | 750000 | 793000 | 2,800 | 3,500 | 6 | 11 | 6 | 122 | 188 | 2 | 0.34 | 1.99 | 2.96 | 1.94 | 9.6 | 23222EXQ | 23222EXQK |
| 120 | 215 | 76 | 2.1 | 23224EXQ | 23224EXQK | 860000 | 956000 | 2,500 | 3,300 | 6 | 13 | 6 | 132 | 203 | 2 | 0.34 | 1.97 | 2.94 | 1.93 | 12 | 23224EXQ | 23224EXQK |
| 130 | 230 | 80 | 3 | 23226EXQ | 23226EXQK | 980000 | 1090000 | 2,300 | 2,900 | 6 | 13 | 6 | 144 | 216 | 2.5 | 0.33 | 2.05 | 3.05 | 2 | 14.2 | 23226EXQ | 23226EXQK |
| 140 | 250 | 88 | 3 | 23228EXQ | 23228EXQK | 1130000 | 1290000 | 2,100 | 2,600 | 8 | 15 | 6 | 154 | 236 | 2.5 | 0.34 | 1.99 | 2.96 | 1.95 | 18.8 | 23228EXQ | 23228EXQK |
| 150 | 270 | 96 | 3 | 23230EXQ | 23230EXQK | 1340000 | 1540000 | 2,000 | 2,500 | 8 | 15 | 6 | 164 | 256 | 2.5 | 0.34 | 1.96 | 2.93 | 1.92 | 24.2 | 23230EXQ | 23230EXQK |

| E, EX, EX1 Series | | | | | | | | | | | E, EX, EX1 Series | | | | | | | | | | | |
|--------------------------|-----|------|---------|------------------|--------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|---|-------------------|--------------|-------------------------------------|----------|----------|------------|-------------------|------|------|-------------------------------|------------------|--------------|
| Boundary dimensions (mm) | | | | Bearing No. | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | Dimensions of lubrication holes and grooves | | | Abutment and fillet dimensions (mm) | | | Constant e | Axial load factor | | | Mass (kg) Cylindrical bore | Bearing No. | |
| d | D | B | r (min) | Cylindrical bore | Tapered bore | | | Grease lubrication | Oil lubrication | Hole diameter du | Groove width A | Hole count N | da (min) | Da (max) | ra (max) | | Y1 | Y2 | Y0 | | Cylindrical bore | Tapered bore |
| 90 | 160 | 52.4 | 2 | 23218EX1 | 23218EX1K | 470000 | 482000 | 3,100 | 4,200 | 5 | 10 | 4 | 100 | 150 | 2 | 0.32 | 2.14 | 3.19 | 2.09 | 4.57 | 23218EX1 | 23218EX1K |
| 130 | 230 | 80 | 3 | 23226EX1 | 23226EX1K | 980000 | 1090000 | 2,100 | 2,800 | 6 | 13 | 6 | 144 | 216 | 2.5 | 0.33 | 2.05 | 3.05 | 2 | 14.2 | 23226EX1 | 23226EX1K |
| 170 | 310 | 110 | 4 | 23234E | 23234EK | 1720000 | 1970000 | 1,300 | 1,800 | 10 | 22 | 6 | 188 | 292 | 3 | 0.36 | 1.85 | 2.75 | 1.81 | 37 | 23234E | 23234EK |
| 190 | 340 | 120 | 4 | 23238E | 23238EK | 2070000 | 2450000 | 1,200 | 1,500 | 10 | 22 | 6 | 208 | 322 | 3 | 0.36 | 1.87 | 2.79 | 1.83 | 48 | 23238E | 23238EK |



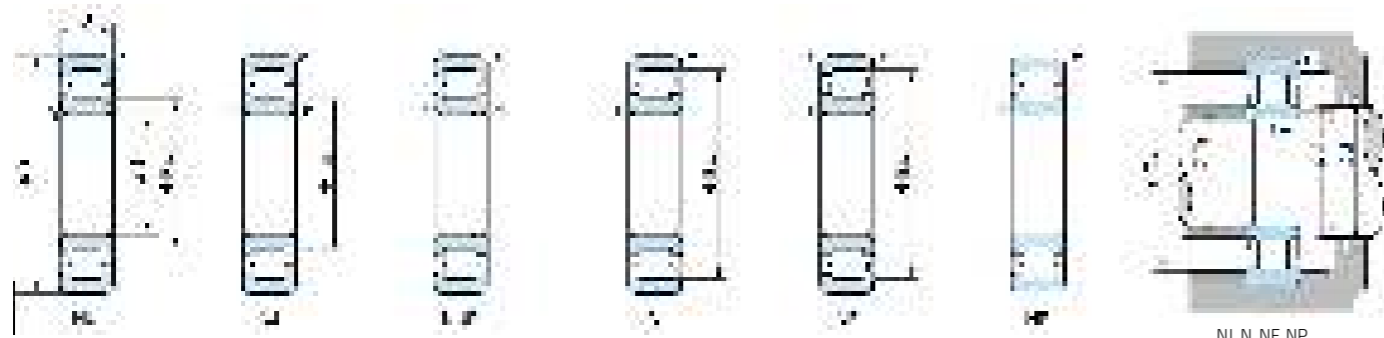
| 24000 Series | | | | | | | | | | 24000 Series | | | | | | | | | | |
|--------------------------|-----|----|---------|------------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|---|----------------|--------------|-------------------------------------|----------|----------|------------|-------------------|------|------|----------------------------|------------------|
| Boundary dimensions (mm) | | | | Bearing No. | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | Dimensions of lubrication holes and grooves | | | Abutment and fillet dimensions (mm) | | | Constant e | Axial load factor | | | Mass (kg) Cylindrical bore | Bearing No. |
| d | D | B | r (min) | Cylindrical bore | | | Grease lubrication | Oil lubrication | Hole diameter du | Groove width A | Hole count N | da (min) | Da (max) | ra (max) | | Y1 | Y2 | Y0 | | Cylindrical bore |
| 120 | 180 | 60 | 2 | 24024EXQ | 540000 | 683000 | 2,800 | 3,600 | 5 | 9 | 4 | 130 | 170 | 2 | 0.3 | 2.23 | 3.32 | 2.18 | 5.36 | 24024EXQ |
| 130 | 200 | 69 | 2 | 24026EXQ | 710000 | 900000 | 2600 | 3300 | 6 | 11 | 6 | 140 | 190 | 2 | 0.32 | 2.14 | 3.18 | 2.09 | 7.93 | 24026EXQ |
| 140 | 210 | 69 | 2 | 24028EXQ | 720000 | 920000 | 2,400 | 3,200 | 6 | 11 | 6 | 150 | 200 | 2 | 0.3 | 2.28 | 3.39 | 2.23 | 8.40 | 24028EXQ |
| 150 | 225 | 75 | 2.1 | 24030EXQ | 815000 | 1060000 | 2300 | 2800 | 6 | 11 | 6 | 162 | 213 | 2 | 0.3 | 2.23 | 3.32 | 2.18 | 10.05 | 24030EXQ |
| 160 | 240 | 80 | 2.1 | 24032EXQ | 950000 | 1280000 | 2,100 | 2,600 | 6 | 11 | 6 | 172 | 228 | 2 | 0.3 | 2.24 | 3.34 | 2.19 | 12.7 | 24032EXQ |
| 110 | 180 | 69 | 2 | 24122EXQ | 633000 | 743000 | 3000 | 3800 | 6 | 11 | 4 | 120 | 170 | 2 | 0.37 | 1.84 | 2.74 | 1.80 | 6.89 | 24122EXQ |

| 24100Series | | | | | | | | | | 24100Series | | | | | | | | | | |
|--------------------------|-----|-----|---------|------------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|---|----------------|--------------|-------------------------------------|----------|----------|------------|-------------------|------|------|----------------------------|------------------|
| Boundary dimensions (mm) | | | | Bearing No. | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | Dimensions of lubrication holes and grooves | | | Abutment and fillet dimensions (mm) | | | Constant e | Axial load factor | | | Mass (kg) Cylindrical bore | Bearing No. |
| d | D | B | r (min) | Cylindrical bore | | | Grease lubrication | Oil lubrication | Hole diameter du | Groove width A | Hole count N | da (min) | Da (max) | ra (max) | | Y1 | Y2 | Y0 | | Cylindrical bore |
| 130 | 210 | 80 | 2 | 24126EXQ | 840000 | 1030000 | 2,400 | 3,200 | 6 | 11 | 6 | 140 | 200 | 2 | 0.36 | 1.9 | 2.83 | 1.86 | 10.7 | 24126EXQ |
| 140 | 225 | 85 | 2.1 | 24128EXQ | 950000 | 1180000 | 2,300 | 2,900 | 8 | 14 | 6 | 152 | 213 | 2 | 0.36 | 1.87 | 2.79 | 1.83 | 13 | 24128EXQ |
| 150 | 250 | 100 | 2.1 | 24130EXQ | 1230000 | 1520000 | 2100 | 2600 | 8 | 14 | 6 | 162 | 238 | 2 | 0.38 | 1.77 | 2.64 | 1.73 | 19.6 | 24130EXQ |
| 160 | 270 | 109 | 2.1 | 24132EX1 | 1450000 | 1810000 | 1,800 | 2,400 | 10 | 17 | 6 | 172 | 258 | 2 | 0.39 | 1.74 | 2.59 | 1.7 | 25.5 | 24132EX1 |

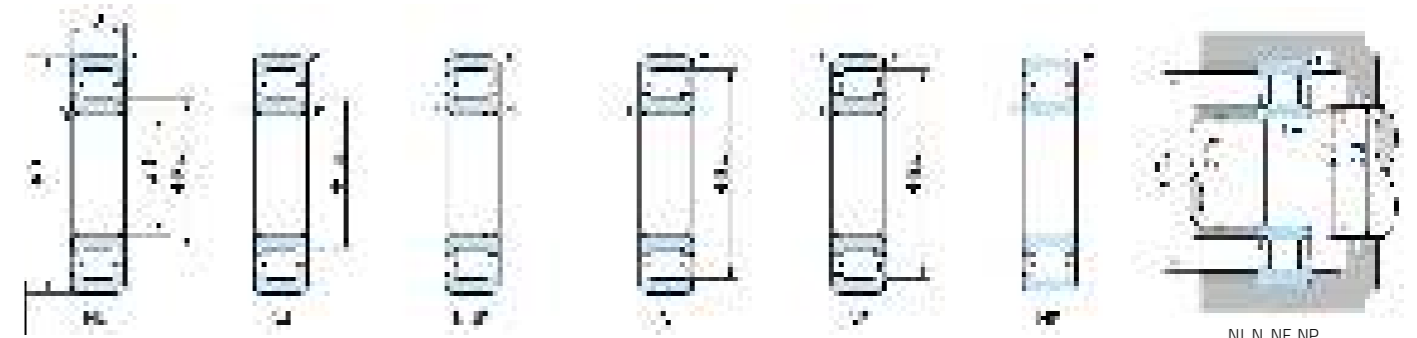


| 29300 Series | | | | | | | | | | 29300 Series | | | | | | | | | | | |
|--------------------------|-----|----|---------|------------|---------------------------------|----------------------------------|------------------------|-----------------|---------------------------|--------------|------|------|------|----|-------------------------------------|----------|----------|------------------------|-----------|-----------|------------|
| Boundary dimensions (mm) | | | | Bearing No | Basic dynamic load rating Ca(N) | Basic static load rating Coa (N) | Limiting speed (min-1) | | Reference Dimensions (mm) | | | | | | Abutment and fillet dimensions (mm) | | | Spacer dimensions (mm) | | Mass (kg) | Bearing No |
| d | D | T | r (min) | | | | Grease lubrication | Oil lubrication | d1 | D2 | B | B1 | C | A | da (min) | Da (max) | ra (max) | db1 (max) | db2 (max) | | |
| 85 | 150 | 39 | 1.5 | 29317EX | 365000 | 1060000 | 1600 | 2700 | 134 | 25 | 25 | 35 | 19 | 50 | 115 | 135 | 1.5 | 90.0 | 90.0 | 2.67 | 29317EX |
| 90 | 155 | 39 | 1.5 | 29318EX | 355000 | 1070000 | 1600 | 2700 | 135.2 | 116 | 23.8 | 35.1 | 19 | 52 | 120 | 140 | 1.5 | 95.0 | 95.0 | 2.75 | 29318EX |
| 100 | 170 | 42 | 1.5 | 29320E | 355000 | 1260000 | - | 2500 | 163 | 129 | 14 | 40 | 20.8 | 58 | 130 | 150 | 1.5 | - | - | 3.91 | 29320E |
| 110 | 190 | 48 | 2 | 29322EX | 550000 | 1730000 | 1300 | 2100 | 165.1 | 140.6 | 30.9 | 44 | 23 | 64 | 145 | 165 | 2.0 | 116.0 | 117.0 | 5.22 | 29322EX |
| 120 | 210 | 54 | 2.1 | 29324EX | 670000 | 2160000 | 1100 | 1900 | 184.5 | 155 | 34.5 | 48.7 | 26 | 70 | 160 | 180 | 2.0 | 127.0 | 128.0 | 7.30 | 29324EX |
| 130 | 225 | 58 | 2.1 | 29326E | 665000 | 2420000 | - | 1800 | 215 | 171 | 19 | 55 | 28 | 76 | 170 | 195 | 2.0 | - | - | 9.45 | 29326E |
| 60 | 130 | 42 | 1.5 | 29412E | 299000 | 890000 | - | 2800 | 123 | 89 | 15 | 39.5 | 20 | 38 | 91 | 108 | 1.5 | - | - | 2.75 | 29412E |

| 29400 Series | | | | | | | | | | 29400 Series | | | | | | | | | | | |
|--------------------------|-----|----|---------|------------|---------------------------------|----------------------------------|------------------------|-----------------|---------------------------|--------------|------|------|----|----|-------------------------------------|----------|----------|------------------------|-----------|-----------|------------|
| Boundary dimensions (mm) | | | | Bearing No | Basic dynamic load rating Ca(N) | Basic static load rating Coa (N) | Limiting speed (min-1) | | Reference Dimensions (mm) | | | | | | Abutment and fillet dimensions (mm) | | | Spacer dimensions (mm) | | Mass (kg) | Bearing No |
| d | D | T | r (min) | | | | Grease lubrication | Oil lubrication | d1 | D2 | B | B1 | C | A | da (min) | Da (max) | ra (max) | db1 (max) | db2 (max) | | |
| 65 | 140 | 45 | 2 | 29413EX | 410000 | 1110000 | 1700 | 2700 | 123 | 93.5 | 29.5 | 40 | 21 | 42 | 99 | 115 | 2.0 | 72.0 | 72.0 | 3.20 | 29413EX |
| 70 | 150 | 48 | 2 | 29414E | 375000 | 1110000 | - | 2400 | 142 | 103 | 17 | 45.5 | 23 | 44 | 106 | 125 | 2.0 | - | - | 4.16 | 29414E |
| 75 | 160 | 51 | 2 | 29415EX | 525000 | 1470000 | 1600 | 2300 | 140 | 105.6 | 34.5 | 45.6 | 24 | 47 | 113 | 132 | 2.0 | 82.5 | 82.5 | 4.70 | 29415EX |
| 85 | 180 | 58 | 2.1 | 29417EX | 640000 | 1810000 | 1300 | 2000 | 158.2 | 120.5 | 37 | 50.6 | 28 | 54 | 130 | 150 | 2.0 | 94.0 | 94.0 | 6.69 | 29417EX |
| 90 | 190 | 60 | 2.1 | 29418EX | 710000 | 2080000 | 1300 | 1900 | 162 | 127 | 40.5 | 53 | 29 | 56 | 135 | 157 | 2.0 | 99.0 | 99.0 | 7.83 | 29418EX |
| 120 | 250 | 78 | 4 | 29424E | 1030000 | 3450000 | - | 1400 | 236 | 174 | 29 | 74 | 37 | 74 | 180 | 205 | 3.0 | - | - | 18.5 | 29424E |
| 140 | 280 | 85 | 4 | 29428EX | 1410000 | 4350000 | 850 | 1200 | 246 | 196 | 53.6 | 74.4 | 41 | 86 | 205 | 235 | 3.0 | 153.0 | 160.0 | 22.8 | 29428EX |



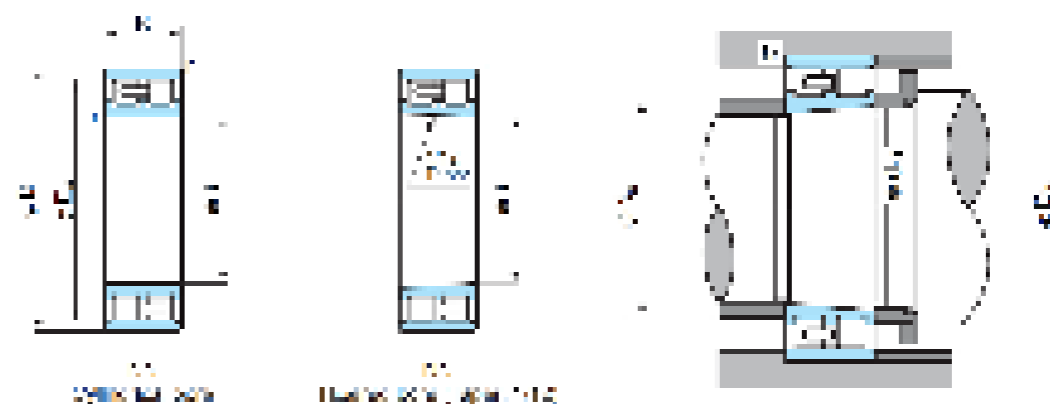
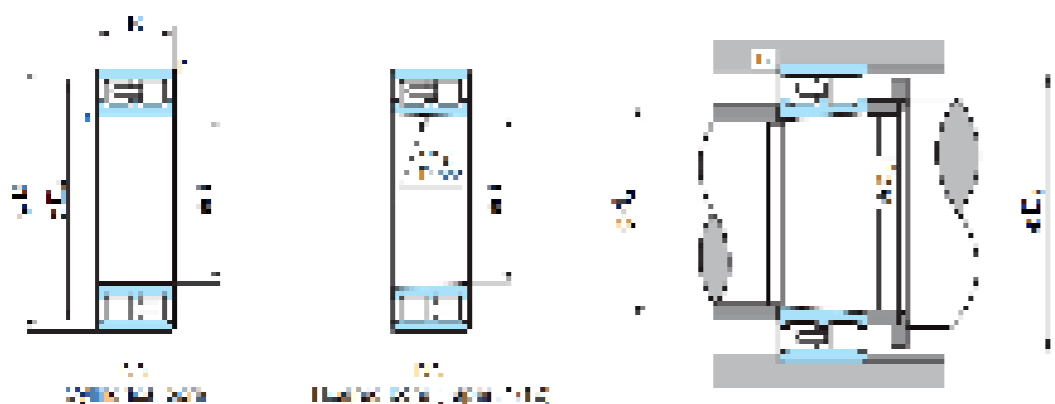
NU, N, NF, NP



HJ, NJ, N, NF, NP

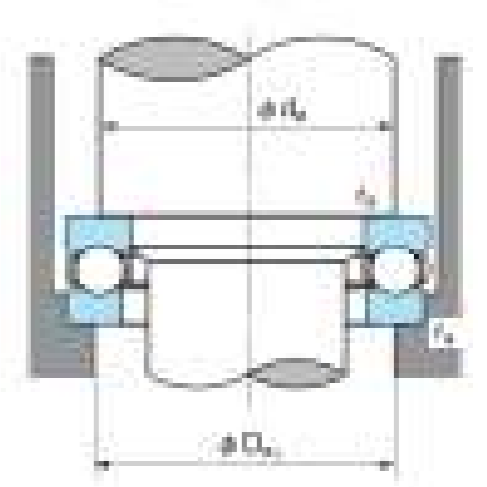
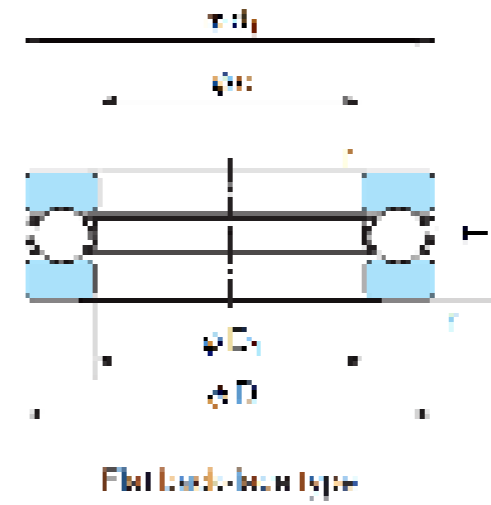
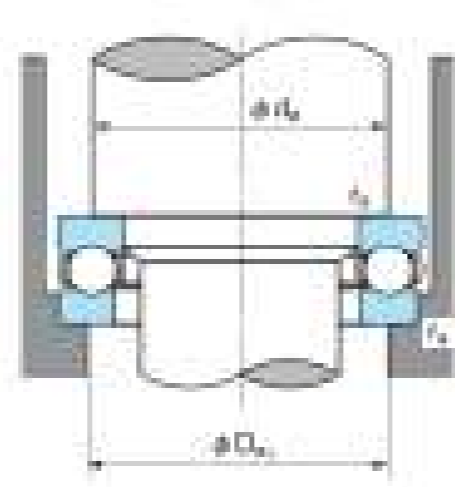
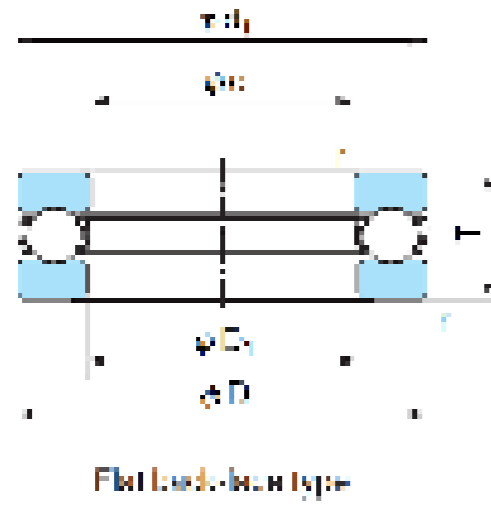
| Boundary dimensions (mm) | | | | | | | Bearing No. | | | | | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min-1)(1) | | Abutment and fillet dimensions (mm) | | | | | | | | | | Mass (kg) | | Dimensions of L-shaped thrust collar (mm) | | | | | | |
|--------------------------|-----|----|-------|------|---------|----------|-------------|----|------|----|-----|-----|----------------------------------|----------------------------------|---------------------------|-----------------|-------------------------------------|------|-----|----------|----------|----------|------|-----|----------|-----------|-----------|------|---|----|----------|----|------|----------|-----------|
| d | D | B | Ew | Fw | r (min) | r1 (min) | NU | NJ | NUP* | N* | NF | NP* | | | Grease lubrication | Oil lubrication | da (min) | db | | dc (min) | dd (min) | Da (max) | Db | | ra (max) | ra1 (max) | NU | N | Bearing No. | d | d1 (max) | B1 | B2 | r1 (min) | Mass (kg) |
| 20 | 52 | 15 | 44.5 | 28.5 | 1.1 | 0.6 | NU 304 | NJ | NUP | N | NF* | NP | 21400 | 17300 | 12000 | 15000 | 27 | 25 | 27 | 30 | 33 | 45 | 47 | 47 | 1 | 0.6 | 0.154 | 0.15 | HJ 304 | 20 | 31.8 | 4 | 7.5 | 0.6 | 0.017 |
| 25 | 62 | 17 | 53 | 35 | 1.1 | 1.1 | NU 305 | NJ | NUP | N | NF | NP | 29300 | 25200 | 10000 | 10000 | 32 | 32 | 33 | 37 | 40 | 55 | 55 | 55 | 1 | 1 | 0.238 | 0.23 | HJ 305 | 25 | 39 | 4 | 8 | 1.1 | 0.027 |
| 30 | 72 | 19 | 62 | 42 | 1.1 | 1.1 | NU 306 | NJ | NUP | N | NF | NP | 38500 | 35000 | 8500 | 11000 | 37 | 37 | 40 | 44 | 48 | 65 | 65 | 64 | 1 | 1 | 0.357 | 0.35 | HJ 306 | 30 | 45.9 | 5 | 9.5 | 1.1 | 0.044 |
| 35 | 80 | 21 | 68.2 | 46.2 | 1.5 | 1.1 | NU 307 | NJ | NUP | N | NF | NP | 49500 | 47000 | 8000 | 9500 | 43.5 | 42 | 45 | 48 | 53 | 71.5 | 73 | 71 | 1.5 | 1 | 0.47 | 0.46 | HJ 307 | 35 | 50.8 | 6 | 11 | 1.1 | 0.06 |
| 40 | 90 | 23 | 77.5 | 53.5 | 1.5 | 1.5 | NU 308 | NJ | NUP | N | NF | NP | 58500 | 57000 | 6700 | 8500 | 48.5 | 48.5 | 51 | 55 | 60 | 81.5 | 81.5 | 80 | 1.5 | 1.5 | 0.665 | 0.65 | HJ 308 | 40 | 58.4 | 7 | 12.5 | 1.5 | 0.09 |
| 45 | 100 | 25 | 86.5 | 58.5 | 1.5 | 1.5 | NU 309 | NJ | NUP | N | NF | NP | 78500 | 77500 | 6300 | 7500 | 53.5 | 53.5 | 57 | 60 | 66 | 91.5 | 91.5 | 89 | 1.5 | 1.5 | 0.871 | 0.85 | HJ 309 | 45 | 64 | 7 | 12.5 | 1.5 | 0.105 |
| 50 | 110 | 27 | 95 | 65 | 2 | 2 | NU 310 | NJ | NUP | N | NF | NP | 87000 | 86000 | 5600 | 6700 | 60 | 60 | 63 | 67 | 73 | 100 | 100 | 98 | 2 | 2 | 1.17 | 1.14 | HJ 310 | 50 | 71 | 8 | 14 | 2 | 0.145 |
| 55 | 120 | 29 | 104.5 | 70.5 | 2 | 2 | NU 311 | NJ | NUP | N | NF | NP | 111000 | 111000 | 5000 | 6300 | 65 | 65 | 69 | 72 | 80 | 110 | 110 | 107 | 2 | 2 | 1.43 | 1.4 | HJ 311 | 55 | 77.2 | 9 | 15 | 2 | 0.186 |
| 60 | 130 | 31 | 113 | 77 | 2.1 | 2.1 | NU 312 | NJ | NUP | N | NF | NP | 124000 | 126000 | 4800 | 5600 | 72 | 72 | 75 | 79 | 86 | 118 | 118 | 116 | 2 | 2 | 1.82 | 1.78 | HJ 312 | 60 | 84.2 | 9 | 15.5 | 2.1 | 0.224 |
| 65 | 140 | 33 | 121.5 | 83.5 | 2.1 | 2.1 | NU 313 | NJ | NUP | N | NF | NP | 135000 | 139000 | 4500 | 5300 | 77 | 77 | 81 | 85 | 93 | 128 | 128 | 125 | 2 | 2 | 2.27 | 2.22 | HJ 313 | 65 | 91 | 10 | 17 | 2.1 | 0.286 |
| 70 | 150 | 35 | 130 | 90 | 2.1 | 2.1 | NU 314 | NJ | NUP | N | NF | NP | 158000 | 220000 | 4000 | 5000 | 82 | 82 | 87 | 92 | 100 | 138 | 138 | 134 | 2 | 2 | 2.73 | 2.68 | HJ 314 | 70 | 98 | 10 | 17.5 | 2.1 | 0.336 |
| 75 | 160 | 37 | 139.5 | 95.5 | 2.1 | 2.1 | NU 315 | NJ | NUP | N | NF | NP | 190000 | 205000 | 3800 | 4800 | 87 | 87 | 93 | 97 | 106 | 148 | 148 | 143 | 2 | 2 | 3.21 | 3.15 | HJ 315 | 75 | 104.2 | 11 | 18.5 | 2.1 | 0.406 |
| 80 | 170 | 39 | 147 | 103 | 2.1 | 2.1 | NU 316 | NJ | NUP | N | NF* | NP | 190000 | 207000 | 3600 | 4300 | 92 | 92 | 99 | 105 | 114 | 158 | 158 | 151 | 2 | 2 | 3.93 | 3.83 | HJ 316 | 80 | 111.8 | 11 | 19.5 | 2.1 | 0.479 |
| 85 | 180 | 41 | 156 | 108 | 3 | 3 | NU 317 | NJ | NUP | N | NF* | NP | 224000 | 247000 | 3400 | 4000 | 99 | 99 | 106 | 110 | 119 | 166 | 166 | 160 | 2.5 | 2.5 | 4.54 | 4.44 | HJ 317 | 85 | 117.5 | 12 | 20.5 | 3 | 0.56 |

* Not a stocked range although available on request.

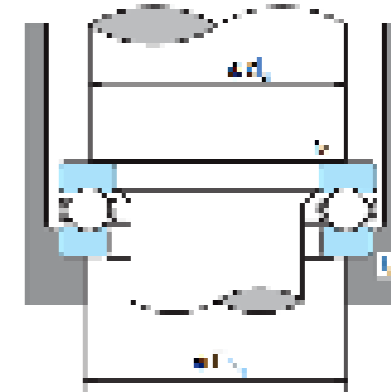
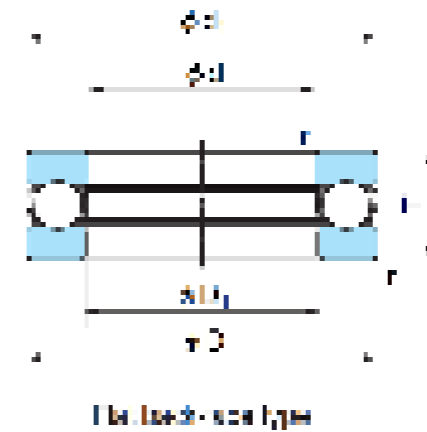
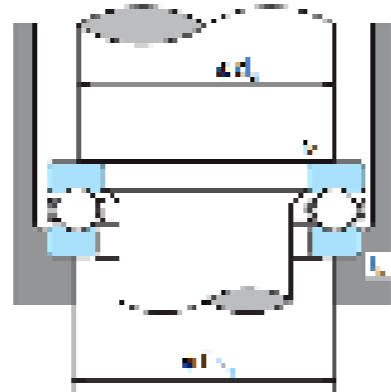
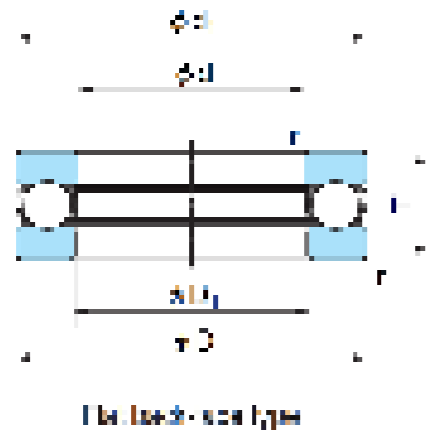


| Boundary dimensions (mm) | | | | | Bearing No. | | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min-1)(1) | | Boundary dimensions (mm) | | | | | Mass (kg) (Reference Tapered bore) | Bearing No. |
|--------------------------|-----|----|------|---------|------------------|--------------|----------------------------------|----------------------------------|---------------------------|-----------------|--------------------------|-----------|-------|------|----------|---------------------------------------|-------------|
| d | D | B | Ew | r (min) | Cylindrical bore | Tapered bore | | | Grease lubrication | Oil lubrication | da (min) | da1 (min) | Da | | ra (max) | | |
| | | | | | | | | | | (max) | (min) | | | | | | |
| 25 | 47 | 16 | 41.3 | 0.6 | NN3005 | NN3005K | 25800 | 30000 | 1500 | 17000 | 30 | 30 | 42 | 41.8 | 0.6 | 0.123 | NN3005K |
| 30 | 55 | 19 | 48.5 | 1 | NN3006 | NN3006K | 31000 | 37000 | 1200 | 15000 | 36 | 37 | 49 | 49 | 1 | 0.199 | NN3006K |
| 35 | 62 | 20 | 55 | 1 | NN3007 | NN3007K | 39500 | 50000 | 11000 | 13000 | 41 | 42 | 56 | 56 | 1 | 0.258 | NN3007K |
| 40 | 68 | 21 | 61 | 1 | NN3008 | NN3008K | 43500 | 55500 | 9800 | 11000 | 46 | 48 | 62 | 62 | 1 | 0.312 | NN3008K |
| 45 | 75 | 23 | 67.5 | 1 | NN3009 | NN3009K | 52000 | 68500 | 8800 | 10000 | 51 | 52 | 69 | 69 | 1 | 0.405 | NN3009K |
| 50 | 80 | 23 | 72.5 | 1 | NN3010 | NN3010K | 53000 | 72500 | 8200 | 9600 | 56 | 58 | 74 | 74 | 1 | 0.454 | NN3010K |
| 55 | 90 | 26 | 81 | 1.1 | NN3011 | NN3011K | 69500 | 96500 | 7300 | 8600 | 62 | 64 | 83 | 82 | 1 | 0.651 | NN3011K |
| 60 | 95 | 26 | 86.1 | 1.1 | NN3012 | NN3012K | 73500 | 106000 | 6800 | 8000 | 67 | 68 | 88 | 87 | 1 | 0.704 | NN3012K |
| 65 | 100 | 26 | 91 | 1.1 | NN3013 | NN3013K | 77000 | 116000 | 6400 | 7600 | 72 | 74 | 93 | 92 | 1 | 0.758 | NN3013K |
| 70 | 110 | 30 | 100 | 1.1 | NN3014 | NN3014K | 97500 | 148000 | 5700 | 6800 | 77 | 78 | 103 | 101 | 1 | 1.04 | NN3014K |
| 75 | 115 | 30 | 105 | 1.1 | NN3015 | NN3015K | 96500 | 149000 | 5500 | 6400 | 82 | 84 | 108 | 106 | 1 | 1.14 | NN3015K |
| 80 | 125 | 34 | 113 | 1.1 | NN3016 | NN3016K | 119000 | 186000 | 5000 | 6000 | 87 | 90 | 118 | 114 | 1 | 1.52 | NN3016K |
| 85 | 130 | 34 | 118 | 1.1 | NN3017 | NN3017K | 125000 | 201000 | 4800 | 5600 | 92 | 96 | 123 | 119 | 1 | 1.61 | NN3017K |
| 90 | 140 | 37 | 127 | 1.5 | NN3018 | NN3018K | 143000 | 228000 | 4500 | 5200 | 98.5 | 100 | 131.5 | 129 | 1.5 | 2.07 | NN3018K |
| 95 | 145 | 37 | 132 | 1.5 | NN3019 | NN3019K | 150000 | 246000 | 4300 | 5000 | 103.5 | 106 | 136.5 | 134 | 1.5 | 2.17 | NN3019K |
| 100 | 150 | 37 | 137 | 1.5 | NN3020 | NN3020K | 157000 | 265000 | 4000 | 4800 | 108.5 | 112 | 141.5 | 139 | 1.5 | 2.26 | NN3020K |
| 110 | 170 | 45 | 155 | 2 | NN3022 | NN3022K | 229000 | 375000 | 3600 | 4300 | 120 | 122 | 160 | 157 | 2 | 3.68 | NN3022K |
| 120 | 180 | 46 | 165 | 2 | NN3024 | NN3024K | 239000 | 405000 | 3300 | 3900 | 130 | 132 | 170 | 167 | 2 | 3.98 | NN3024K |
| 130 | 220 | 52 | 182 | 2 | NN3026 | NN3026K | 284000 | 475000 | 3000 | 3600 | 140 | 144 | 190 | 183 | 2 | 5.92 | NN3026K |
| 140 | 210 | 53 | 192 | 2 | NN3028 | NN3028K | 298000 | 515000 | 2800 | 3400 | 150 | 154 | 200 | 194 | 2 | 6.44 | NN3028K |
| 150 | 225 | 56 | 206 | 2.1 | NN3030 | NN3030K | 335000 | 585000 | 2600 | 3100 | 162 | 164 | 213 | 208 | 2 | 7.81 | NN3030K |
| 160 | 240 | 60 | 219 | 2.1 | NN3032 | NN3032K | 375000 | 660000 | 2500 | 2900 | 172 | 174 | 228 | 221 | 2 | 8.92 | NN3032K |

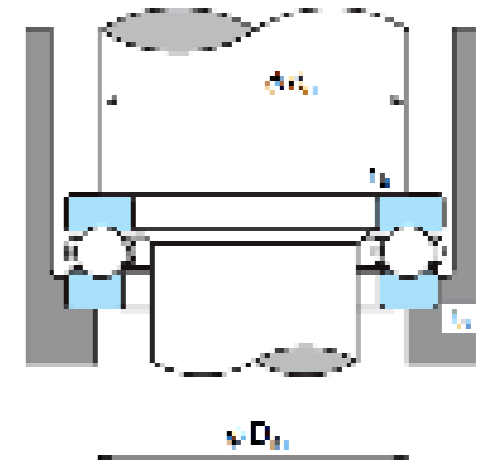
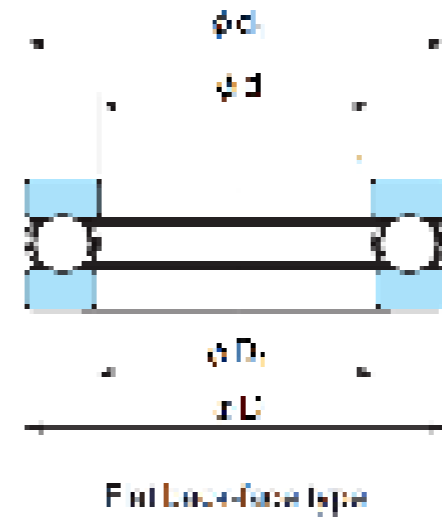
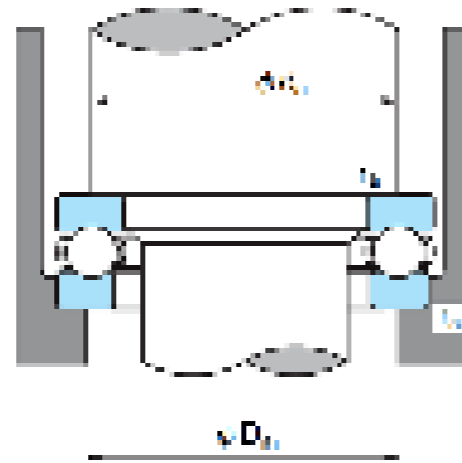
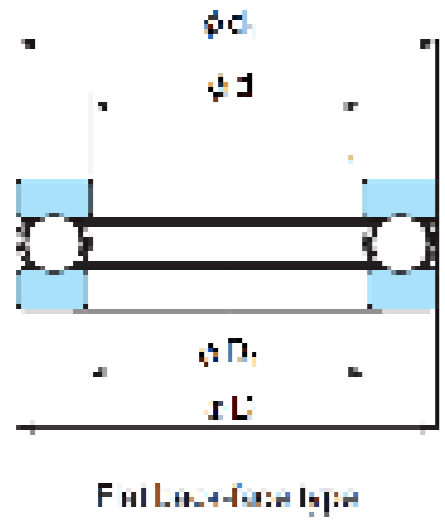
* Not a stocked range although available on request.



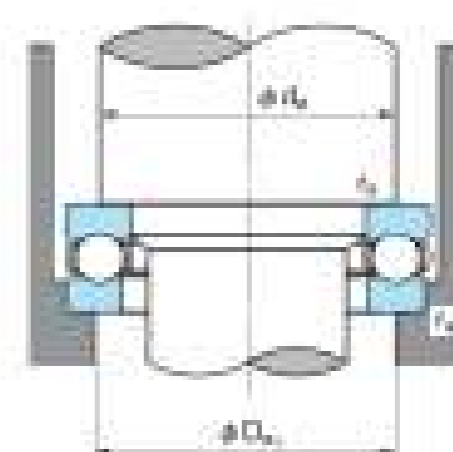
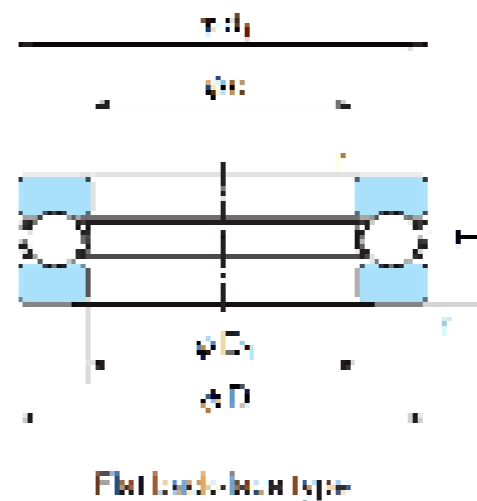
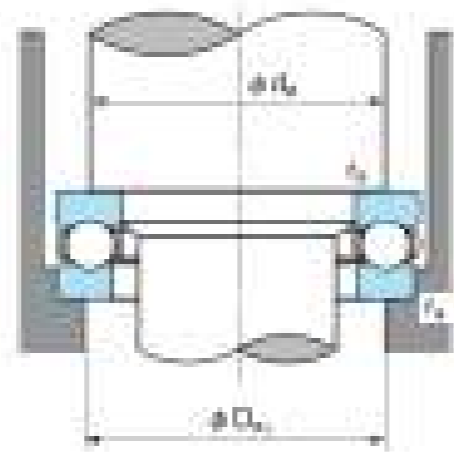
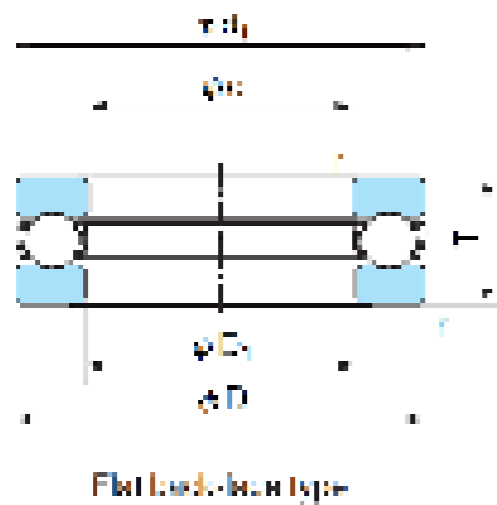
| Boundary dimensions (mm) | | | | Bearing No | Basic dynamic load rating Ca (N) | Basic static load rating Coa (N) | Limiting speed (min ⁻¹) | | | Dimensions (mm) | | Abutment and fillet dimensions (mm) | | | Mass (kg) Reference | Bearing No |
|--------------------------|-----|----|---------|------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|-----|-----------------|----------|-------------------------------------|-----------|----------|---------------------|------------|
| d | D | T | r (min) | | | | Grease lubrication | Oil lubrication | | D1 (min) | d1 (max) | da (min) | Da1 (max) | ra (max) | Flat back face type | |
| 10 | 24 | 9 | 0.3 | 51100 | 10000 | 14000 | 6800 | 10000 | 11 | 24 | 18 | 16 | 0.3 | 0.020 | 51100 | |
| 12 | 26 | 9 | 0.3 | 51101 | 10300 | 15400 | 6500 | 9800 | 13 | 26 | 20 | 18 | 0.3 | 0.022 | 51101 | |
| 15 | 28 | 9 | 0.3 | 51102 | 10500 | 16800 | 6200 | 9400 | 16 | 28 | 23 | 20 | 0.3 | 0.024 | 51102 | |
| 17 | 30 | 9 | 0.3 | 51103 | 10800 | 18200 | 6000 | 9100 | 18 | 30 | 25 | 22 | 0.3 | 0.028 | 51103 | |
| 20 | 35 | 10 | 0.3 | 51104 | 14300 | 24700 | 5300 | 8000 | 21 | 35 | 29 | 26 | 0.3 | 0.040 | 51104 | |
| 25 | 42 | 11 | 0.6 | 51105 | 19500 | 37000 | 4600 | 6900 | 26 | 42 | 35 | 32 | 0.6 | 0.059 | 51105 | |
| 30 | 47 | 11 | 0.6 | 51106 | 20400 | 42000 | 4300 | 6500 | 32 | 47 | 40 | 37 | 0.6 | 0.068 | 51106 | |
| 35 | 52 | 12 | 0.6 | 51107 | 20400 | 44500 | 4000 | 6000 | 37 | 52 | 45 | 42 | 0.6 | 0.085 | 51107 | |
| 40 | 60 | 13 | 0.6 | 51108 | 26900 | 63000 | 3500 | 5300 | 42 | 60 | 52 | 48 | 0.6 | 0.120 | 51108 | |
| 45 | 65 | 14 | 0.6 | 51109 | 27800 | 69000 | 3300 | 4900 | 47 | 65 | 57 | 53 | 0.6 | 0.150 | 51109 | |
| 50 | 70 | 14 | 0.6 | 51110 | 28800 | 75500 | 3100 | 4700 | 52 | 70 | 62 | 58 | 0.6 | 0.160 | 51110 | |
| 55 | 78 | 16 | 0.6 | 51111 | 35000 | 93000 | 2800 | 4200 | 57 | 78 | 69 | 64 | 0.6 | 0.240 | 51111 | |
| 60 | 85 | 17 | 1 | 51112 | 41500 | 113000 | 2600 | 3900 | 62 | 85 | 75 | 70 | 1 | 0.290 | 51112 | |
| 65 | 90 | 18 | 1 | 51113 | 41500 | 117000 | 2400 | 3700 | 67 | 90 | 80 | 75 | 1 | 0.340 | 51113 | |
| 70 | 95 | 18 | 1 | 51114 | 43000 | 127000 | 2400 | 3600 | 72 | 95 | 85 | 80 | 1 | 0.360 | 51114 | |
| 75 | 100 | 19 | 1 | 51115 | 44500 | 136000 | 2200 | 3400 | 77 | 100 | 90 | 85 | 1 | 0.420 | 51115 | |
| 80 | 105 | 19 | 1 | 51116 | 44500 | 141000 | 2200 | 3300 | 82 | 105 | 95 | 90 | 1 | 0.430 | 51116 | |
| 85 | 110 | 19 | 1 | 51117 | 46000 | 150000 | 2100 | 3200 | 87 | 110 | 100 | 95 | 1 | 0.460 | 51117 | |
| 90 | 120 | 22 | 1 | 51118 | 59500 | 190000 | 1900 | 2900 | 92 | 120 | 108 | 102 | 1 | 0.680 | 51118 | |
| 100 | 135 | 25 | 1 | 51120 | 85000 | 268000 | 1700 | 2500 | 102 | 135 | 121 | 114 | 1 | 0.990 | 51120 | |
| 120 | 155 | 25 | 1 | 51124 | 89000 | 305000 | 1600 | 2400 | 122 | 155 | 141 | 134 | 1 | 1.16 | 51124 | |
| 140 | 180 | 31 | 1 | 51128 | 107000 | 375000 | 1300 | 1900 | 142 | 178 | 164 | 156 | 1 | 2.03 | 51128 | |



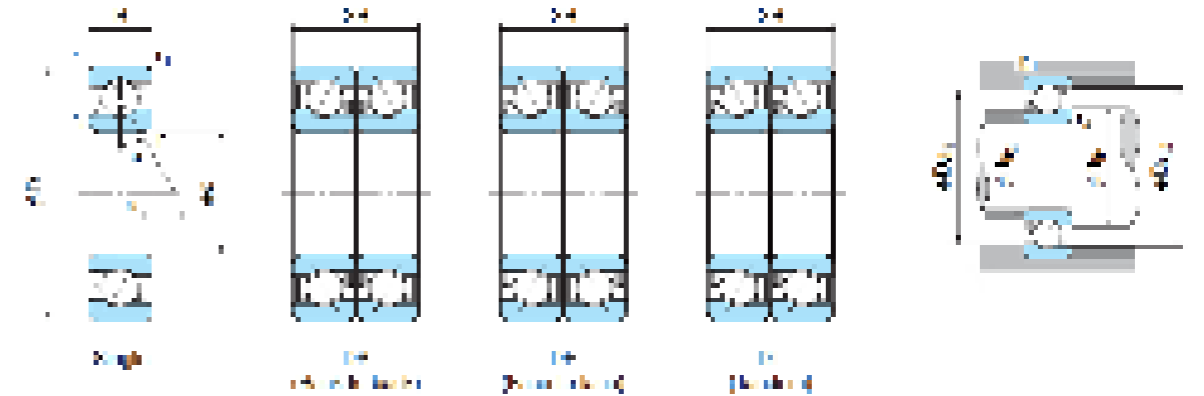
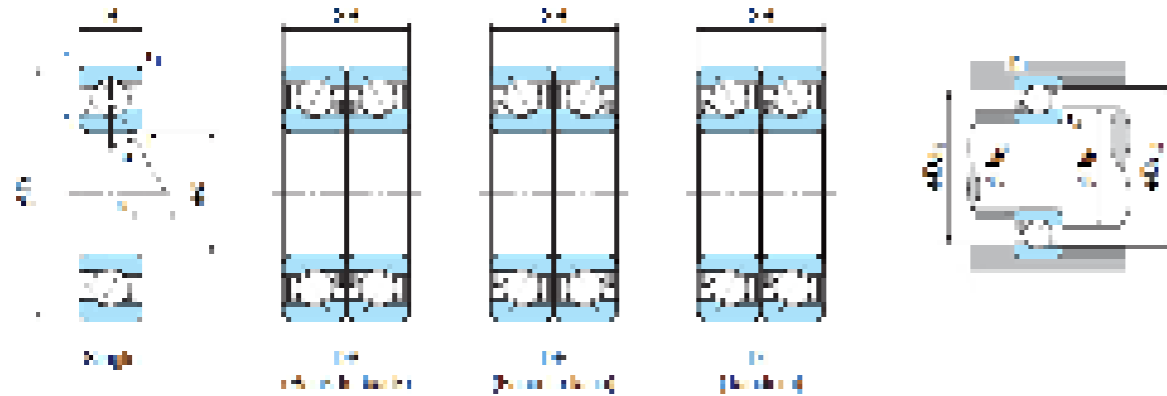
| Boundary dimensions (mm) | | | | Bearing No | Basic dynamic load rating Ca (N) | Basic static load rating Coa (N) | Limiting speed (min ⁻¹) | | | Dimensions (mm) | | Abutment and fillet dimensions (mm) | | | Mass (kg) Reference | Bearing No |
|--------------------------|-----|----|---------|------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|--|-----------------|----------|-------------------------------------|-----------|----------|---------------------|------------|
| d | D | T | r (min) | | | | Grease lubrication | Oil lubrication | | D1 (min) | d1 (max) | da (min) | Da1 (max) | ra (max) | Flat backface type | |
| 10 | 26 | 11 | 0.6 | 51200 | 12700 | 17100 | 5900 | 8800 | | 12 | 26 | 20 | 16 | 0.6 | 0.030 | 51200 |
| 12 | 28 | 11 | 0.6 | 51201 | 13200 | 19000 | 5600 | 8500 | | 14 | 28 | 22 | 18 | 0.6 | 0.034 | 51201 |
| 15 | 32 | 12 | 0.6 | 51202 | 16600 | 24800 | 5100 | 7600 | | 17 | 32 | 25 | 22 | 0.6 | 0.046 | 51202 |
| 17 | 35 | 12 | 0.6 | 51203 | 17100 | 27300 | 4800 | 7300 | | 19 | 35 | 28 | 24 | 0.6 | 0.053 | 51203 |
| 20 | 40 | 14 | 0.6 | 51204 | 22200 | 37500 | 4200 | 6300 | | 22 | 40 | 32 | 28 | 0.6 | 0.082 | 51204 |
| 25 | 47 | 15 | 0.6 | 51205 | 27800 | 50500 | 3700 | 5600 | | 27 | 47 | 38 | 34 | 0.6 | 0.120 | 51205 |
| 30 | 52 | 16 | 0.6 | 51206 | 29300 | 58000 | 3400 | 5200 | | 32 | 52 | 43 | 39 | 0.6 | 0.150 | 51206 |
| 35 | 62 | 18 | 1 | 51207 | 39000 | 78000 | 2900 | 4400 | | 37 | 62 | 51 | 46 | 1 | 0.220 | 51207 |
| 40 | 68 | 19 | 1 | 51208 | 47000 | 98500 | 2700 | 4100 | | 42 | 68 | 57 | 51 | 1 | 0.270 | 51208 |
| 45 | 73 | 20 | 1 | 51209 | 47500 | 105000 | 2600 | 3900 | | 47 | 73 | 62 | 56 | 1 | 0.320 | 51209 |
| 50 | 78 | 22 | 1 | 51210 | 48500 | 112000 | 2400 | 3600 | | 52 | 78 | 67 | 61 | 1 | 0.390 | 51210 |
| 55 | 90 | 25 | 1 | 51211 | 69500 | 159000 | 2100 | 3100 | | 57 | 90 | 76 | 69 | 1 | 0.610 | 51211 |
| 60 | 95 | 26 | 1 | 51212 | 73500 | 179000 | 2000 | 3000 | | 62 | 95 | 81 | 74 | 1 | 0.690 | 51212 |
| 65 | 100 | 27 | 1 | 51213 | 75000 | 189000 | 1900 | 2800 | | 67 | 100 | 86 | 79 | 1 | 0.770 | 51213 |
| 70 | 105 | 27 | 1 | 51214 | 76000 | 199000 | 1800 | 2800 | | 72 | 105 | 91 | 84 | 1 | 0.810 | 51214 |
| 85 | 125 | 31 | 1 | 51217 | 95500 | 264000 | 1600 | 2400 | | 88 | 125 | 109 | 101 | 1 | 1.29 | 51217 |
| 100 | 150 | 38 | 1.1 | 51220 | 146000 | 410000 | 1300 | 1900 | | 103 | 150 | 130 | 120 | 1 | 2.36 | 51220 |
| 110 | 160 | 38 | 1.1 | 51222 | 152000 | 450000 | 1200 | 1900 | | 113 | 160 | 140 | 130 | 1 | 2.57 | 51222 |



| Boundary dimensions (mm) | | | | Bearing No | Basic dynamic load rating Ca (N) | Basic static load rating Coa (N) | Limiting speed (min ⁻¹) | | | Dimensions (mm) | | Abutment and fillet dimensions (mm) | | | Mass (kg) Reference | Bearing No |
|--------------------------|-----|----|---------|------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|--|-----------------|----------|-------------------------------------|-----------|----------|---------------------|------------|
| d | D | T | r (min) | | | | Grease lubrication | Oil lubrication | | D1 (min) | d1 (max) | da (min) | Da1 (max) | ra (max) | Flat backface type | |
| 25 | 52 | 18 | 1 | 51305 | 35500 | 61500 | 3200 | 4900 | | 27 | 52 | 41 | 36 | 1 | 0.180 | 51305 |
| 30 | 60 | 21 | 1 | 51306 | 42500 | 78500 | 2800 | 4200 | | 32 | 60 | 48 | 42 | 1 | 0.270 | 51306 |
| 35 | 68 | 24 | 1 | 51307 | 55500 | 105000 | 2400 | 3700 | | 37 | 68 | 55 | 48 | 1 | 0.390 | 51307 |
| 40 | 78 | 26 | 1 | 51308 | 69000 | 135000 | 2200 | 3300 | | 42 | 78 | 63 | 55 | 1 | 0.550 | 51308 |
| 45 | 85 | 28 | 1 | 51309 | 80000 | 163000 | 2000 | 3000 | | 47 | 85 | 69 | 61 | 1 | 0.690 | 51309 |
| 50 | 95 | 31 | 1.1 | 51310 | 96500 | 202000 | 1800 | 2700 | | 52 | 95 | 77 | 68 | 1 | 1.00 | 51310 |
| 60 | 110 | 35 | 1.1 | 51312 | 123000 | 267000 | 1600 | 2400 | | 62 | 110 | 90 | 80 | 1 | 1.43 | 51312 |
| 65 | 115 | 36 | 1.1 | 51313 | 127000 | 287000 | 1500 | 2300 | | 67 | 115 | 95 | 85 | 1 | 1.57 | 51313 |
| 90 | 155 | 50 | 1.5 | 51318 | 213000 | 525000 | 1100 | 1600 | | 93 | 155 | 129 | 116 | 1.5 | 3.88 | 51318 |



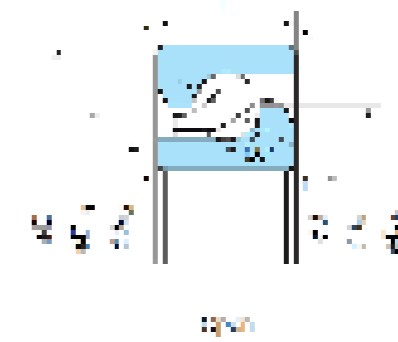
| d | | Boundary dimensions (mm) | | | Bearing No. | Basic dynamic load rating Ca (N) | Basic Static Load Rating Coa (N) | Limiting Speed (min-1) | | Dimensions (mm) | | Abutment and fillet dimensions (mm) | | | Mass (kg) Reference | Bearing No. |
|-------|--------|--------------------------|--------|---------|-------------|----------------------------------|----------------------------------|------------------------|------|-----------------|----------|-------------------------------------|----------|----------|---------------------|-------------|
| inch | mm | D | T | r (min) | | | | Grease | Oil | D1 (min) | d1 (max) | da (min) | Da (max) | ra (max) | | |
| 5/8 | 15.875 | 35.719 | 15.875 | 0.8 | 0-5 | 19400 | 28300 | 4100 | 6200 | 16.272 | 34.925 | 27.8 | 23.8 | 0.8 | 0.086 | 0-5 |
| 3/4 | 19.05 | 38.894 | 15.875 | 0.8 | 0-6 | 21400 | 34500 | 4000 | 6000 | 19.447 | 38.1 | 27.8 | 23.8 | 0.8 | 0.095 | 0-6 |
| 7/8 | 22.225 | 42.069 | 15.875 | 0.8 | 0-7 | 21900 | 37500 | 3800 | 5800 | 22.622 | 41.275 | 34 | 30 | 0.8 | 0.1 | 0-7 |
| 1 | 25.4 | 45.244 | 15.875 | 1.6 | 0-8 | 22500 | 41000 | 3700 | 5500 | 25.797 | 44.45 | 37 | 33 | 0.8 | 0.11 | 0-8 |
| 1 1/8 | 28.575 | 48.419 | 15.875 | 1.6 | 0-9 | 24100 | 47000 | 3600 | 5400 | 28.972 | 47.625 | 40 | 37 | 0.8 | 0.128 | 0-9 |
| 1 1/4 | 31.75 | 53.181 | 18.256 | 1.6 | 0-10 | 27900 | 54500 | 3200 | 4800 | 32.147 | 52.388 | 45 | 40 | 0.8 | 0.164 | 0-10 |
| 1 3/8 | 34.925 | 56.356 | 18.256 | 1.6 | 0-11 | 28600 | 58000 | 3100 | 4600 | 35.322 | 55.562 | 48 | 43 | 0.8 | - | 0-11 |
| 1 1/2 | 38.1 | 59.531 | 18.256 | 1.6 | 0-12 | 30500 | 66000 | 3000 | 4500 | 38.497 | 58.738 | 51 | 47 | 1 | 0.2 | 0-12 |
| 1 5/8 | 41.275 | 62.706 | 18.256 | 1.6 | 0-13 | 26700 | 63000 | 2900 | 4400 | 41.672 | 61.912 | 54 | 50 | 1 | 0.21 | 0-13 |
| 1 3/4 | 44.45 | 68.262 | 19.05 | 1.6 | 0-14 | 32500 | 77500 | 2700 | 4100 | 44.847 | 67.469 | 59 | 54 | 1 | 0.26 | 0-14 |
| 1 7/8 | 47.625 | 71.438 | 19.05 | 1.6 | 0-15 | 37500 | 89000 | 2700 | 4000 | 48.021 | 70.644 | 62 | 57 | 1 | 0.285 | 0-15 |
| 2 | 50.8 | 75.406 | 19.05 | 2.4 | 0-16 | 38000 | 94000 | 2600 | 3900 | 51.594 | 74.613 | 66 | 61 | 1 | 0.3 | 0-16 |
| 2 1/8 | 53.975 | 81.756 | 22.225 | 2.4 | 0-17 | 49500 | 118000 | 2300 | 3500 | 54.769 | 80.962 | 71 | 65 | 1.6 | 0.405 | 0-17 |
| 2 1/4 | 57.15 | 84.931 | 22.225 | 2.4 | 0-18 | 50500 | 125000 | 2300 | 3400 | 57.944 | 84.138 | 74 | 68 | 1.6 | 0.45 | 0-18 |



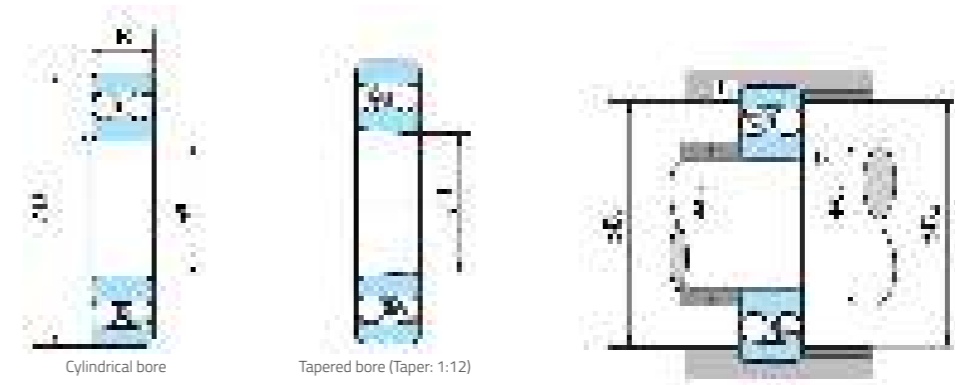
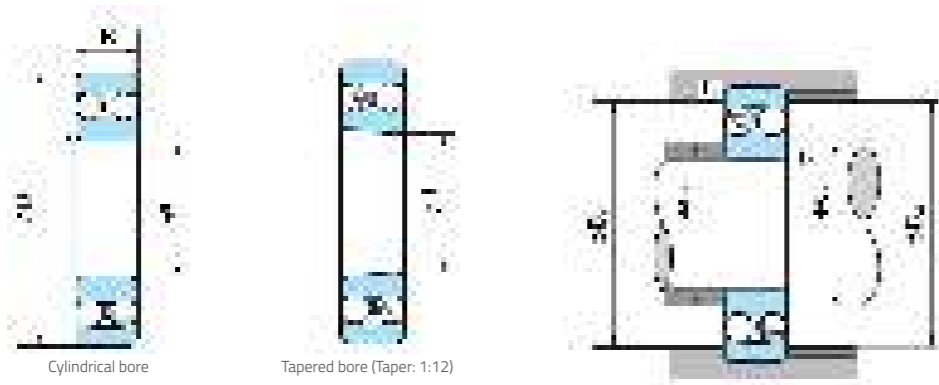
| Boundary dimensions (mm) | | | | | Load center (mm) a | Bearing No. | | | | Basic dynamic load rating Cr (N) | | | Basic static load rating Cor (N) | | Limiting speed (min ⁻¹) | | | | Abutment and fillet dimensions (mm) | | | | | | Mass (kg) Single | Bearing No. |
|--------------------------|-----|----|---------|----------|-----------------------|-------------|----------|---------|---------|----------------------------------|--------|--|----------------------------------|--------|-------------------------------------|--------|-----------------|--------|-------------------------------------|-----------|-----------|-----------|----------|-----------|---------------------|-------------|
| d | D | B | r (min) | r1 (min) | | Single | Duplex* | | | Single | Duplex | | Single | Duplex | Grease lubrication | | Oil lubrication | | da1 (min) | da2 (min) | Da1 (max) | Da2 (max) | ra (max) | ra1 (max) | | |
| | | | | | | | 7001CYDU | 7001CDB | 7001CDF | | | | | | 7001CDT | Single | Duplex | Single | | | | | | | | |
| 12 | 28 | 8 | 0.3 | 0.15 | -1.7 | 7001CYDU | 7001CDB | 7001CDF | 7001CDT | 5800 | 9450 | | 2910 | 5800 | 40000 | 32000 | 55000 | 44000 | 14 | 14 | 26 | 27 | 0.3 | 0.15 | 0.024 | 7001C |
| 15 | 32 | 9 | 0.3 | 0.15 | -1.8 | 7002CYDU | 7002CDB | 7002CDF | 7002CDT | 6650 | 10800 | | 3700 | 7450 | 34000 | 27000 | 47000 | 38000 | 17 | 17 | 30 | 31 | 0.3 | 0.15 | 0.035 | 7002C |
| 17 | 35 | 10 | 0.3 | 0.15 | -2.0 | 7003CYDU | 7003CDB | 7003CDF | 7003CDT | 7000 | 11400 | | 4150 | 8300 | 31000 | 25000 | 42000 | 34000 | 19 | 19 | 33 | 34 | 0.3 | 0.15 | 0.045 | 7003C |
| 20 | 42 | 12 | 0.6 | 0.3 | -2.4 | 7004CYDU | 7004CDB | 7004CDF | 7004CDT | 11200 | 18200 | | 6600 | 13200 | 26000 | 21000 | 35000 | 28000 | 24 | 24 | 38 | 40 | 0.6 | 0.3 | 0.079 | 7004C |
| 25 | 47 | 12 | 0.6 | 0.3 | -1.8 | 7005CYDU | 7005CDB | 7005CDF | 7005CDT | 12900 | 21000 | | 8650 | 17300 | 22000 | 18000 | 31000 | 25000 | 29 | 29 | 43 | 45 | 0.6 | 0.3 | 0.091 | 7005C |
| 30 | 55 | 13 | 1 | 0.6 | -1.6 | 7006CYDU | 7006CDB | 7006CDF | 7006CDT | 16000 | 25900 | | 11100 | 24000 | 19000 | 15000 | 26000 | 26000 | 35 | 35 | 60 | 52 | 1 | 0.6 | 0.135 | 7006C |
| 35 | 62 | 14 | 1 | 0.6 | -1.4 | 7007CYDU | 7007CDB | 7007CDF | 7007CDT | 19300 | 31000 | | 13700 | 27500 | 16000 | 13000 | 23000 | 18000 | 40 | 40 | 57 | 59 | 1 | 0.6 | 0.17 | 7007C |
| 40 | 68 | 15 | 1 | 0.6 | -1.3 | 7008CYDU | 7008CDB | 7008CDF | 7008CDT | 20700 | 33500 | | 16000 | 32000 | 15000 | 12000 | 20000 | 16000 | 45 | 45 | 63 | 65 | 1 | 0.6 | 0.21 | 7008C |
| 45 | 75 | 16 | 1 | 0.6 | -1.1 | 7009CYDU | 7009CDB | 7009CDF | 7009CDT | 24600 | 40000 | | 19400 | 39000 | 13000 | 10000 | 18000 | 14000 | 50 | 60 | 70 | 72 | 1 | 0.6 | 0.265 | 7009C |
| 50 | 80 | 16 | 1 | 0.6 | -0.5 | 7010CYDU | 7010CDB | 7010CDF | 7010CDT | 26200 | 42500 | | 22000 | 44000 | 12000 | 9600 | 17000 | 13000 | 55 | 55 | 75 | 77 | 1 | 0.6 | 0.285 | 7010C |
| 55 | 90 | 18 | 1.1 | 0.6 | -0.6 | 7011CYDU | 7011CDB | 7011CDF | 7011CDT | 34500 | 56000 | | 28800 | 57500 | 11000 | 8800 | 15000 | 12000 | 61 | 61 | 84 | 86 | 1 | 0.6 | 0.42 | 7011C |
| 60 | 95 | 18 | 1.1 | 0.6 | -0.1 | 7012CYDU | 7012CDB | 7012CDF | 7012CDT | 35500 | 57500 | | 30500 | 61500 | 10000 | 8000 | 14000 | 11000 | 66 | 66 | 89 | 91 | 1 | 0.6 | 0.45 | 7012C |
| 65 | 100 | 18 | 1.1 | 0.6 | 0.5 | 7013CYDU | 7013CDB | 7013CDF | 7013CDT | 37500 | 60500 | | 34500 | 69000 | 9700 | 7800 | 13000 | 10000 | 71 | 71 | 94 | 96 | 1 | 0.6 | 0.47 | 7013C |
| 70 | 110 | 20 | 1.1 | 0.6 | 0.4 | 7014CYDU | 7014CDB | 7014CDF | 7014CDT | 47000 | 76500 | | 43000 | 86500 | 8900 | 7100 | 12000 | 9600 | 76 | 76 | 104 | 106 | 1 | 0.6 | 0.66 | 7014C |
| 75 | 115 | 20 | 1.1 | 0.6 | 0.1 | 7015CYDU | 7015CDB | 7015CDF | 7015CDT | 48500 | 78500 | | 46000 | 92000 | 8400 | 6700 | 12000 | 9600 | 81 | 81 | 109 | 111 | 1 | 0.6 | 0.695 | 7015C |
| 80 | 125 | 22 | 1.1 | 0.6 | 0.8 | 7016CYDU | 7016CDB | 7016CDF | 7016CDT | 59000 | 96000 | | 55500 | 111000 | 7800 | 6200 | 11000 | 8800 | 86 | 86 | 119 | 121 | 1 | 0.6 | 0.925 | 7016C |
| 85 | 130 | 22 | 1.1 | 0.6 | 1.4 | 7017CYDU | 7017CDB | 7017CDF | 7017CDT | 60500 | 98500 | | 59000 | 118000 | 7400 | 5900 | 10000 | 8000 | 91 | 91 | 124 | 126 | 1 | 0.6 | 0.96 | 7017C |
| 90 | 140 | 24 | 1.5 | 1 | 1.3 | 7018CYDU | 7018CDB | 7018CDF | 7018CDT | 72000 | 117000 | | 69500 | 139000 | 7000 | 5600 | 9600 | 7800 | 97 | 97 | 133 | 135.6 | 1.5 | 1 | 1.26 | 7018C |

CYDU – P4 Precision Type; Stocked & sold per set

* Not a stocked range although available on request.



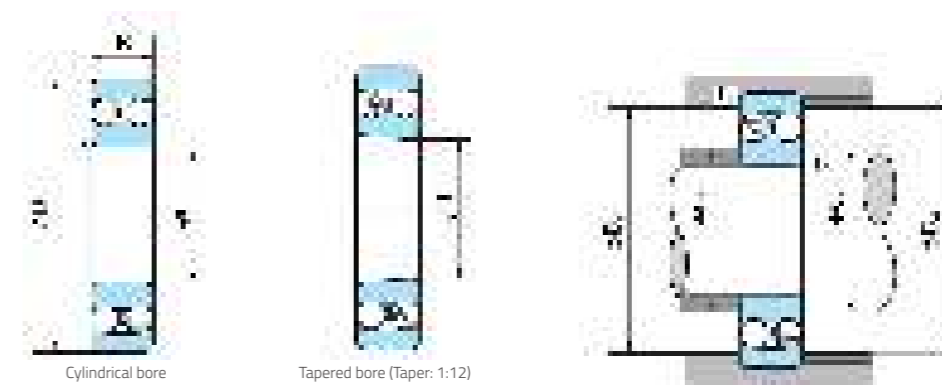
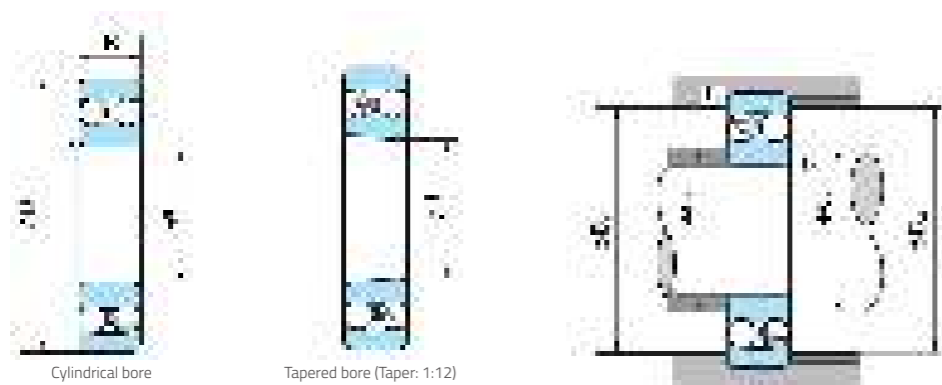
| Boundary dimensions (mm) | | | | | Bearing No | Basic dynamic load rating (2) Ca(N) | Axial limiting load (3) Coa (N) | | Limiting speed (min-1) | | Starting torque (N - cm) Grease lubrication | Reference Dimensions (mm) | | | | Mass (kg) Reference | Bearing No |
|--------------------------|-----|----|---------|----------|----------------|-------------------------------------|---------------------------------|--|------------------------|-----------------|---|---------------------------|-----------|------|-------|---------------------|----------------|
| d | D | B | r (min) | r1 (min) | | | | | Grease lubrication | Oil lubrication | | da1 (min) | da2 (min) | Da1 | Da2 | | |
| 15 | 47 | 15 | 1(1) | 0.6 | 15TAB04DU/GMP4 | 25900 | 32000 | | 6300 | 8000 | 15 | 33.7 | 26.8 | 33.5 | 41 | 0.14 | 15TAB04DU/GMP4 |
| 17 | 47 | 15 | 1 | 0.6 | 17TAB04DU/GMP4 | 25900 | 32000 | | 6300 | 8000 | 15 | 33.7 | 26.8 | 33.5 | 41 | 0.13 | 17TAB04DU/GMP4 |
| 20 | 47 | 15 | 1 | 0.6 | 20TAB04DU/GMP4 | 25900 | 32000 | | 6300 | 8000 | 15 | 33.7 | 26.8 | 33.5 | 41 | 0.12 | 20TAB04DU/GMP4 |
| 25 | 62 | 15 | 1 | 0.6 | 25TAB06DU/GMP4 | 29900 | 46400 | | 4650 | 6000 | 20 | 46.2 | 39.7 | 46 | 53.4 | 0.24 | 25TAB06DU/GMP4 |
| 30 | 62 | 15 | 1 | 0.6 | 30TAB06DU/GMP4 | 29900 | 46400 | | 4650 | 6000 | 20 | 46.2 | 39.7 | 46 | 53.4 | 0.21 | 30TAB06DU/GMP4 |
| 35 | 72 | 15 | 1 | 0.6 | 35TAB07DU/GMP4 | 32500 | 54300 | | 3750 | 5000 | 25 | 56.2 | 49.7 | 56 | 63.4 | 0.29 | 35TAB07DU/GMP4 |
| 40 | 72 | 15 | 1 | 0.6 | 40TAB07DU/GMP4 | 32500 | 54300 | | 3750 | 5000 | 25 | 56.2 | 49.7 | 56 | 63.4 | 0.26 | 40TAB07DU/GMP4 |
| 45 | 100 | 20 | 1 | 0.6 | 45TAB10DU/GMP4 | 68000 | 113000 | | 2850 | 3500 | 60 | 74.2 | 64.2 | 74 | 85.4 | 0.79 | 45TAB10DU/GMP4 |
| 50 | 100 | 20 | 1 | 0.6 | 50TAB10DU/GMP4 | 69500 | 119000 | | 2700 | 3500 | 65 | 78.2 | 68.2 | 78 | 89.4 | 0.72 | 50TAB10DU/GMP4 |
| 55 | 120 | 20 | 1 | 0.6 | 55TAB12DU/GMP4 | 73000 | 137000 | | 2300 | 3000 | 70 | 92.2 | 82.2 | 92 | 103.4 | 1.15 | 55TAB12DU/GMP4 |
| 60 | 120 | 20 | 1 | 0.6 | 60TAB12DU/GMP4 | 73000 | 137000 | | 2300 | 3000 | 70 | 92.2 | 82.2 | 92 | 103.4 | 1.08 | 60TAB12DU/GMP4 |



| 1200 Series | | | | | | | | | | 1200 Series | | | | | | | | |
|--------------------------|-----|----|---------|------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|-------------------|-------------|------|------------|-------------------------------------|----------|----------|-----------|------------|-------------|
| Boundary dimensions (mm) | | | | Bearing No | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | Axial load factor | | | Constant e | Abutment and fillet dimensions (mm) | | | Mass (kg) | Bearing No | |
| d | D | B | r (min) | | | | Grease lubrication | Oil lubrication | Y1 | Y2 | Y0 | | da (min) | Da (max) | ra (max) | | | Cylindrical |
| 10 | 30 | 9 | 0.6 | 1200 | 5500 | 1200 | 23000 | 28000 | 1.92 | 2.97 | 2.01 | 0.33 | 14 | 26 | 0.6 | 0.034 | 1200 | |
| 12 | 32 | 10 | 0.6 | 1201 | 5600 | 1250 | 21000 | 26000 | 1.89 | 2.93 | 1.98 | 0.33 | 16 | 28 | 0.6 | 0.04 | 1201 | |
| 15 | 35 | 11 | 0.6 | 1202 | 7450 | 1750 | 18000 | 22000 | 1.9 | 2.95 | 2 | 0.33 | 19 | 31 | 0.6 | 0.049 | 1202 | |
| 17 | 40 | 12 | 0.6 | 1203 | 7900 | 2000 | 16000 | 20000 | 2.03 | 3.14 | 2.12 | 0.31 | 21 | 36 | 0.6 | 0.073 | 1203 | |
| 20 | 47 | 14 | 1 | 1204 | 9900 | 2600 | 14000 | 17000 | 2.16 | 3.35 | 2.27 | 0.29 | 25 | 42 | 1 | 0.12 | 1204 | |
| 25 | 52 | 15 | 1 | 1205 | 12100 | 3300 | 12000 | 14000 | 2.28 | 3.52 | 2.39 | 0.28 | 30 | 47 | 1 | 0.141 | 1205 | |
| 30 | 62 | 16 | 1 | 1206 | 15600 | 4650 | 9900 | 12000 | 2.55 | 3.94 | 2.67 | 0.25 | 35 | 57 | 1 | 0.22 | 1206 | |
| 35 | 72 | 17 | 1.1 | 1207 | 15800 | 5100 | 8500 | 10000 | 2.71 | 4.2 | 2.84 | 0.23 | 41.5 | 65.5 | 1 | 0.323 | 1207 | |
| 40 | 80 | 18 | 1.1 | 1208 | 19200 | 6500 | 7500 | 9200 | 2.83 | 4.38 | 2.97 | 0.22 | 46.5 | 73.5 | 1 | 0.417 | 1208 | |
| 50 | 90 | 20 | 1.1 | 1210 | 22700 | 8100 | 6500 | 7900 | 3.07 | 4.76 | 3.22 | 0.21 | 56.5 | 83.5 | 1 | 0.525 | 1210 | |
| 55 | 100 | 21 | 1.5 | 1211 | 26800 | 10000 | 5800 | 7100 | 3.19 | 4.94 | 3.34 | 0.2 | 63 | 92 | 1.5 | 0.705 | 1211 | |
| 60 | 110 | 22 | 1.5 | 1212 | 30200 | 11500 | 5200 | 6400 | 3.37 | 5.22 | 3.53 | 0.19 | 68 | 102 | 1.5 | 0.9 | 1212 | |
| 15 | 42 | 13 | 1 | 1302 | 9550 | 2300 | 16000 | 20000 | 1.86 | 2.88 | 1.95 | 0.34 | 20 | 37 | 1 | 0.094 | 1302 | |

| 1300 Series | | | | | | | | | | 1300 Series | | | | | | | | |
|--------------------------|-----|----|---------|------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|-------------------|-------------|------|------------|-------------------------------------|----------|----------|-----------|------------|-------------|
| Boundary dimensions (mm) | | | | Bearing No | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | Axial load factor | | | Constant e | Abutment and fillet dimensions (mm) | | | Mass (kg) | Bearing No | |
| d | D | B | r (min) | | | | Grease lubrication | Oil lubrication | Y1 | Y2 | Y0 | | da (min) | Da (max) | ra (max) | | | Cylindrical |
| 17 | 47 | 14 | 1 | 1303 | 12500 | 3200 | 14000 | 17000 | 1.92 | 2.97 | 2.01 | 0.33 | 22 | 42 | 1 | 0.13 | 1303 | |
| 20 | 52 | 15 | 1.1 | 1304 | 12400 | 3300 | 13000 | 15000 | 2.12 | 3.28 | 2.22 | 0.3 | 26.5 | 45.5 | 1 | 0.163 | 1304 | |
| 25 | 62 | 17 | 1.1 | 1305 | 18000 | 5000 | 9900 | 12000 | 2.31 | 3.57 | 2.42 | 0.27 | 31.5 | 55.5 | 1 | 0.257 | 1305 | |
| 30 | 72 | 19 | 1.1 | 1306 | 21300 | 6300 | 8700 | 11000 | 2.4 | 3.72 | 2.52 | 0.26 | 36.5 | 65.5 | 1 | 0.387 | 1306 | |
| 35 | 80 | 21 | 1.5 | 1307 | 25100 | 7850 | 7600 | 9300 | 2.48 | 3.84 | 2.6 | 0.25 | 43 | 72 | 1.5 | 0.51 | 1307 | |
| 40 | 90 | 23 | 1.5 | 1308 | 29500 | 9700 | 6900 | 8400 | 2.57 | 3.98 | 2.69 | 0.25 | 48 | 82 | 1.5 | 0.715 | 1308 | |
| 45 | 100 | 25 | 1.5 | 1309 | 38100 | 12700 | 6100 | 7500 | 2.56 | 3.95 | 2.68 | 0.25 | 53 | 92 | 1.5 | 0.957 | 1309 | |
| 50 | 110 | 27 | 2 | 1310 | 43400 | 14100 | 5600 | 6800 | 2.7 | 4.17 | 2.83 | 0.23 | 59 | 101 | 2 | 1.21 | 1310 | |
| 20 | 47 | 18 | 1 | 2204 | 12600 | 3300 | 14000 | 17000 | 1.31 | 2.02 | 1.37 | 0.48 | 25 | 42 | 1 | 0.14 | 2204 | |
| 35 | 72 | 23 | 1.1 | 2207 | 21600 | 6600 | 8500 | 10000 | 1.71 | 2.65 | 1.79 | 0.37 | 41.5 | 65.5 | 1 | 0.403 | 2207 | |

| 2200 Series | | | | | | | | | | 2200 Series | | | | | | | | |
|--------------------------|-----|----|---------|------------|----------------------------------|----------------------------------|-------------------------------------|-----------------|-------------------|-------------|------|------------|-------------------------------------|----------|----------|-----------|------------|-------------|
| Boundary dimensions (mm) | | | | Bearing No | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min ⁻¹) | | Axial load factor | | | Constant e | Abutment and fillet dimensions (mm) | | | Mass (kg) | Bearing No | |
| d | D | B | r (min) | | | | Grease lubrication | Oil lubrication | Y1 | Y2 | Y0 | | da (min) | Da (max) | ra (max) | | | Cylindrical |
| 40 | 80 | 23 | 1.1 | 2208 | 22400 | 7400 | 7600 | 9300 | 1.92 | 2.96 | 2.01 | 0.33 | 46.5 | 73.5 | 1 | 0.505 | 2208 | |
| 45 | 85 | 23 | 1.1 | 2209 | 23300 | 8150 | 7000 | 8500 | 2.09 | 3.23 | 2.19 | 0.3 | 51.5 | 78.5 | 1 | 0.545 | 2209 | |
| 60 | 110 | 28 | 1.5 | 2212 | 34100 | 12600 | 5300 | 6500 | 2.26 | 3.49 | 2.36 | 0.28 | 68 | 102 | 1.5 | 1.09 | 2212 | |



| 1200 Series | | | | | | | | | | 1200 Series | | | | | | | | | |
|--------------------------|-----|----|---------|------------|----------------------------------|----------------------------------|------------------------|--------------------|-----------------|-------------|------------|-------------------------------------|------|----------|-----------|------------|----------|----------|-------------|
| Boundary dimensions (mm) | | | | Bearing No | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min-1) | Axial load factor | | | Constant e | Abutment and fillet dimensions (mm) | | | Mass (kg) | Bearing No | | | |
| d | D | B | r (min) | | | | | Grease lubrication | Oil lubrication | Y1 | | Y2 | Y0 | da (min) | | | Da (max) | ra (max) | Cylindrical |
| 25 | 52 | 15 | 1 | 1205K | 12100 | 3300 | 12000 | 14000 | 2.28 | 3.52 | 2.39 | 0.28 | 30 | 47 | 1 | 0.141 | 1205K | | |
| 30 | 62 | 16 | 1 | 1206K | 15600 | 4650 | 9900 | 12000 | 2.55 | 3.94 | 2.67 | 0.25 | 35 | 57 | 1 | 0.22 | 1206K | | |
| 35 | 72 | 17 | 1.1 | 1207K | 15800 | 5100 | 8500 | 10000 | 2.71 | 4.2 | 2.84 | 0.23 | 41.5 | 65.5 | 1 | 0.323 | 1207K | | |
| 40 | 80 | 18 | 1.1 | 1208K | 19200 | 6500 | 7500 | 9200 | 2.83 | 4.38 | 2.97 | 0.22 | 46.5 | 73.5 | 1 | 0.417 | 1208K | | |
| 45 | 85 | 19 | 1.1 | 1209K | 21800 | 7350 | 7000 | 8500 | 2.94 | 4.56 | 3.09 | 0.21 | 51.5 | 78.5 | 1 | 0.465 | 1209K | | |
| 50 | 90 | 20 | 1.1 | 1210K | 22700 | 8100 | 6500 | 7900 | 3.07 | 4.76 | 3.22 | 0.21 | 56.5 | 83.5 | 1 | 0.525 | 1210K | | |
| 55 | 100 | 21 | 1.5 | 1211K | 26800 | 10000 | 5800 | 7100 | 3.19 | 4.94 | 3.34 | 0.2 | 63 | 92 | 1.5 | 0.705 | 1211K | | |
| 65 | 120 | 23 | 1.5 | 1213K | 31000 | 12500 | 4800 | 5800 | 3.67 | 5.68 | 3.84 | 0.17 | 73 | 112 | 1.5 | 1.15 | 1213K | | |

| 1300 Series | | | | | | | | | | 1300 Series | | | | | | | | | |
|--------------------------|-----|----|---------|------------|----------------------------------|----------------------------------|------------------------|--------------------|-----------------|-------------|------------|-------------------------------------|------|----------|-----------|------------|----------|----------|-------------|
| Boundary dimensions (mm) | | | | Bearing No | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min-1) | Axial load factor | | | Constant e | Abutment and fillet dimensions (mm) | | | Mass (kg) | Bearing No | | | |
| d | D | B | r (min) | | | | | Grease lubrication | Oil lubrication | Y1 | | Y2 | Y0 | da (min) | | | Da (max) | ra (max) | Cylindrical |
| 25 | 62 | 17 | 1.1 | 1305K | 18000 | 5000 | 9900 | 12000 | 2.31 | 3.57 | 2.42 | 0.27 | 31.5 | 55.5 | 1 | 0.257 | 1305K | | |
| 30 | 72 | 19 | 1.1 | 1306K | 21300 | 6300 | 8700 | 11000 | 2.4 | 3.72 | 2.52 | 0.26 | 36.5 | 65.5 | 1 | 0.387 | 1306K | | |
| 35 | 80 | 21 | 1.5 | 1307K | 25100 | 7850 | 7600 | 9300 | 2.48 | 3.84 | 2.6 | 0.25 | 43 | 72 | 1.5 | 0.51 | 1307K | | |
| 40 | 90 | 23 | 1.5 | 1308K | 29500 | 9700 | 6900 | 8400 | 2.57 | 3.98 | 2.69 | 0.25 | 48 | 82 | 1.5 | 0.715 | 1308K | | |
| 45 | 100 | 25 | 1.5 | 1309K | 38100 | 12700 | 6100 | 7500 | 2.56 | 3.95 | 2.68 | 0.25 | 53 | 92 | 1.5 | 0.957 | 1309K | | |
| 50 | 110 | 27 | 2 | 1310K | 43400 | 14100 | 5600 | 6800 | 2.7 | 4.17 | 2.83 | 0.23 | 59 | 101 | 2 | 1.21 | 1310K | | |
| 55 | 120 | 29 | 2 | 1311K | 51300 | 17900 | 5000 | 6200 | 2.7 | 4.18 | 2.83 | 0.23 | 64 | 111 | 2 | 1.58 | 1311K | | |
| 25 | 52 | 18 | 1 | 2205K | 12600 | 3500 | 12000 | 15000 | 1.58 | 2.45 | 1.66 | 0.4 | 30 | 47 | 1 | 0.163 | 2205K | | |

| 2200 Series | | | | | | | | | | 2200 Series | | | | | | | | | |
|--------------------------|-----|----|---------|------------|----------------------------------|----------------------------------|------------------------|--------------------|-----------------|-------------|------------|-------------------------------------|------|----------|-----------|------------|----------|----------|-------------|
| Boundary dimensions (mm) | | | | Bearing No | Basic dynamic load rating Cr (N) | Basic static load rating Cor (N) | Limiting speed (min-1) | Axial load factor | | | Constant e | Abutment and fillet dimensions (mm) | | | Mass (kg) | Bearing No | | | |
| d | D | B | r (min) | | | | | Grease lubrication | Oil lubrication | Y1 | | Y2 | Y0 | da (min) | | | Da (max) | ra (max) | Cylindrical |
| 30 | 62 | 20 | 1 | 2206K | 15600 | 4650 | 10000 | 12000 | 1.79 | 2.77 | 1.87 | 0.35 | 35 | 57 | 1 | 0.26 | 2206K | | |
| 35 | 72 | 23 | 1.1 | 2207K | 21600 | 6600 | 8500 | 10000 | 1.71 | 2.65 | 1.79 | 0.37 | 41.5 | 65.5 | 1 | 0.403 | 2207K | | |
| 45 | 85 | 23 | 1.1 | 2209K | 23300 | 8150 | 7000 | 8500 | 2.09 | 3.23 | 2.19 | 0.3 | 51.5 | 78.5 | 1 | 0.545 | 2209K | | |
| 55 | 100 | 25 | 1.5 | 2211K | 26800 | 10000 | 5800 | 7100 | 2.35 | 3.64 | 2.47 | 0.27 | 63 | 92 | 1.5 | 0.81 | 2211K | | |

| Boundary Dimensions | | | Bearing No | Automotive Position |
|---------------------|----|--------|-------------------|---------------------|
| d | D | B | | |
| 12 | 42 | 10 | 12BC04S3C4 | Pilot |
| 15 | 40 | 14 | 15BC04S18SSU | Spigot |
| 22 | 62 | 17 | 22BC06S5XNC2C3 | Gearbox |
| 25 | 59 | 24 | 25RT59SNC3 | Gearbox |
| 30 | 62 | 24/16 | 30BCD52 (88506) | Rear-Wheel |
| 30 | 75 | 20 | 30BCS19-2NSLN | Gearbox |
| 30 | 75 | 21 | 30BCS36-2MT2NCS | Gearbox |
| 30 | 72 | 23 | 30BCX1-2NSL2NRC3 | Gearbox |
| 30 | 55 | 23 | 30BG05S5G-2DS | Air-Con |
| 30 | 52 | 20 | 30BG5220-2DSECS26 | Air-Con |
| 30 | 52 | 22 | 30BG5222-2DSECS20 | Air-Con |
| 30 | 52 | 20 | 30RFSNRW2CS/50 | Gearbox |
| 30 | 68 | 18 | 30RT06S3NR | Gearbox |
| 30 | 75 | 20 | 30RT07A1NRC3 | Gearbox |
| 30.6 | 59 | 16.7 | 031BC05NC2C3 | Gearbox |
| 31 | 55 | 18 | 31RUKSNRC3 | Gearbox |
| 31 | 55 | 20 | 31RUKS52NRC3 | Gearbox |
| 32 | 80 | 23 | 32BCS8-2MT2NCS | Gearbox |
| 32 | 72 | 45 | 32BVV07-8G | Front-Wheel |
| 34 | 64 | 22 | 34RUKS64NRC3 | Gearbox |
| 35 | 72 | 17/26 | 35BCD07S1CS46 | Rear-Wheel |
| 35 | 80 | 21/28 | 35BCD08S6CS | Rear-Wheel |
| 35 | 85 | 23 | 35BCS17-2NSL2N | Gearbox |
| 35 | 85 | 23 | 35BCS34-2MT2NC3 | Gearbox |
| 35 | 72 | 21 | 35BCV07S3C3 | Gearbox |
| 35 | 55 | 20 | 35BG05S16G-2DLCS | Air-Con |
| 35 | 50 | 20 | 35BG05S7G-2DST | Air-Con |
| 35 | 72 | 35 | 35BVV07X-6 | Gearbox |
| 35 | 72 | 35 | 35BVV07X-7-CCS | Gearbox |
| 35 | 80 | 30 | 35KC802 | Pinion |
| 36 | 72 | 23 | 36RFSNRW2X5CS | Gearbox |
| 37 | 60 | 23 | 37RUKS60NRC3 | Gearbox |
| 38 | 63 | 20 | 038RUS51NR | Gearbox |
| 38 | 74 | 36/33 | 38BVV07-26G | Front-Wheel |
| 38 | 72 | 36/33 | 38BVV07-30GCS | Front-Wheel |
| 38 | 68 | 34 | 68SCRN46P-3 | Clutch-release |
| 38 | 68 | 37.5 | 68SCRN48P-1 | Clutch-release |
| 38 | 68 | 47.5 | 68SCRN58P-5 | Clutch-release |
| 40 | 90 | 28/23 | 40BCV09S1-2NSLCS | Rear-Wheel |
| 40 | 62 | 24 | 40BG511G-2DS | Air-Con |
| 40 | 74 | 42 | 40BVV07-10GCS | Front-Wheel |
| 40 | 72 | 19.5 | 40KB722S266 | Gearbox |
| 40 | 62 | 20.625 | 712019 | Air-Con |
| 43 | 82 | 45 | 43BVV08-6GCS123 | Front-Wheel |
| 45 | 75 | 32 | 45BG07S5G-2DL | Air-Con |
| 45 | 84 | 45 | 45BVV08-11GCS119 | Front-Wheel |
| 50 | 80 | 16 | 50BC08C3 | Gearbox |
| 50 | 80 | 22 | 50KB801LT | Side-Carrier |
| 50 | 83 | 24 | 50KB8301 | Side-Carrier |