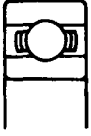
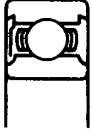
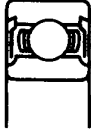


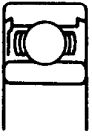
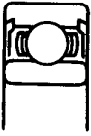
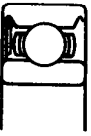

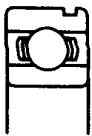
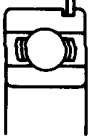
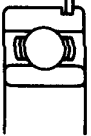
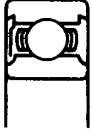
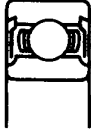


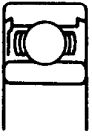
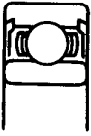
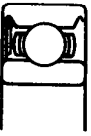

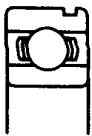
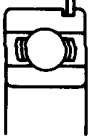
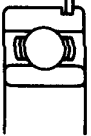
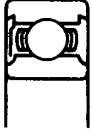
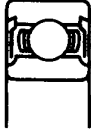


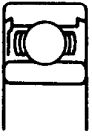
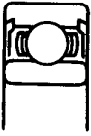
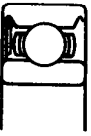

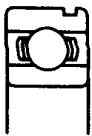
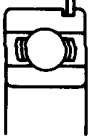
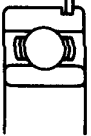
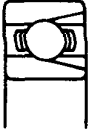
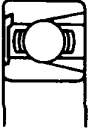
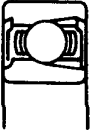


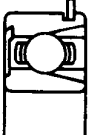
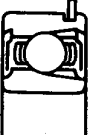
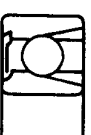
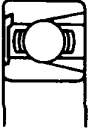
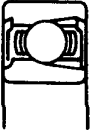


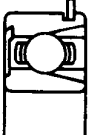
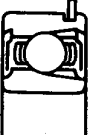
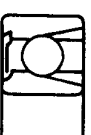
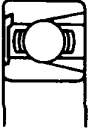
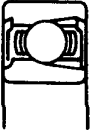


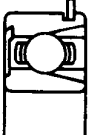
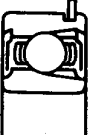
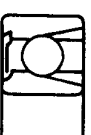


Single row radial ball bearings

RHP bearings

The most popular bearing type to be found in a wide range of operating conditions, from the simplest to the most complex. Designed to carry both radial

and axial loads and for easy fitting and maintenance. Most other ball bearings are a variation of this type.

 <p>Metric bearing references</p> <p>600 61800 62800 63800 61900 16000 6000 16100 98200 6200 98300 6300 6400</p> <p>Inch bearing references</p> <p>KLNJ R XLJ LJ MJ</p>	<table border="0"> <tr> <td data-bbox="699 539 794 730">  Z One shield </td> <td data-bbox="890 539 1177 763">  -2Z Two shields Seal recesses on the inner ring </td> <td data-bbox="1082 539 1177 730">  RS One seal </td> <td data-bbox="1273 539 1369 730">  -2RS Two seals </td> </tr> <tr> <td data-bbox="699 779 794 969">  ZR One shield </td> <td data-bbox="890 779 1185 1003">  -2ZR Two shields No seal recesses on the inner ring </td> <td data-bbox="1082 779 1177 969">  RSR One seal </td> <td data-bbox="1273 779 1369 969">  -2RSR Two seals </td> </tr> <tr> <td data-bbox="699 1025 794 1238">  N Snap ring groove </td> <td data-bbox="890 1025 986 1272">  NR Snap ring groove & snap ring </td> <td data-bbox="1082 1025 1193 1272">  ZNR One shield on opposite side to snap ring </td> <td></td> </tr> </table>	 Z One shield	 -2Z Two shields Seal recesses on the inner ring	 RS One seal	 -2RS Two seals	 ZR One shield	 -2ZR Two shields No seal recesses on the inner ring	 RSR One seal	 -2RSR Two seals	 N Snap ring groove	 NR Snap ring groove & snap ring	 ZNR One shield on opposite side to snap ring	
 Z One shield	 -2Z Two shields Seal recesses on the inner ring	 RS One seal	 -2RS Two seals										
 ZR One shield	 -2ZR Two shields No seal recesses on the inner ring	 RSR One seal	 -2RSR Two seals										
 N Snap ring groove	 NR Snap ring groove & snap ring	 ZNR One shield on opposite side to snap ring											
<p>Maximum capacity type (with filling slots)</p>  <p>Metric bearing references</p> <p>M200 M300</p>	<table border="0"> <tr> <td data-bbox="699 1312 794 1503">  M-Z One shield </td> <td data-bbox="890 1312 986 1503">  M-2Z Two shields </td> <td data-bbox="1082 1312 1177 1525">  M-N Snap ring groove </td> <td data-bbox="1273 1312 1369 1547">  M-NR Snap ring groove & snap ring </td> </tr> <tr> <td data-bbox="699 1563 794 1787">  M-ZNR One shield & snap ring </td> <td data-bbox="890 1563 986 1787">  M-2ZNR Two shields & snap ring </td> <td data-bbox="1082 1563 1177 1787">  M-ZV Full type & one shield </td> <td></td> </tr> </table>	 M-Z One shield	 M-2Z Two shields	 M-N Snap ring groove	 M-NR Snap ring groove & snap ring	 M-ZNR One shield & snap ring	 M-2ZNR Two shields & snap ring	 M-ZV Full type & one shield					
 M-Z One shield	 M-2Z Two shields	 M-N Snap ring groove	 M-NR Snap ring groove & snap ring										
 M-ZNR One shield & snap ring	 M-2ZNR Two shields & snap ring	 M-ZV Full type & one shield											

Suffixes

A*/*	Special axial clearance where */* represents the min/max values in micrometres.
C	Cleated (claw) type cage. Always follows cage material suffix.
C2	Radial internal clearance less than Normal—marked '0' or 'C2'.
CN	Normal grade of radial internal clearance—not marked.
C3	Radial internal clearance greater than Normal—marked '000' or 'C3'.
C4	Radial internal clearance greater than C3—marked '0000' or 'C4'.
C5	Radial internal clearance greater than C4—marked '00000' or 'C5'.
E	Inch bearings of 4 inches bore and over—not now used.
E	Metric bearings—extra load capacity.
EP1	Inch bearings to ABEC1 tolerances.
J	Pressed steel cage.
LOC	Bearing with reduced outside diameter for location duty.
M	Machined brass cage located on the rolling elements.
MA	Machined brass cage located in the outer ring bore.
MB	Machined brass cage located on the inner ring O.D.
N	Snap ring groove on the outer ring O.D.
NR	Snap ring groove on the outer ring O.D., with snap ring.
P6	ISO Class 6 tolerances.
Q**	Special features where ** is the specification number.
R*/*	Special radial internal clearance where */* represents the min/max values in micrometres.
RS	One synthetic rubber seal.
-2RS	Two synthetic rubber seals.
RSN	Seal fitted on opposite side to snap ring groove.
RSNR	As 'RSN' plus snap ring.
RSR	One synthetic rubber seal with the seal contact on the parallel O.D. of the inner ring.
-2RSR	Two synthetic rubber seals with the seal contacts on the parallel O.D. of the inner ring.

RSZ	Bearing fitted with one seal and one shield.
RSZN	As suffix 'RSZ' but with snap ring groove on same side as shield.
S*	Special heat stabilised bearing where * gives the specification number.
TBH	Laminated phenolic resin snap on cage located on the rolling elements.
TNB	Polyamide snap-on cage, located on inner ring outside diameter.
TNH	Polyamide snap-on cage, located on the rolling elements.
V	Full complement of rolling elements—no cage.
Y	Pressed brass cage.
Z	One metal shield.
-2Z	Two metal shields.
ZN	One metal shield fitted on opposite side to snap ring groove.
ZNB	One metal shield fitted on same side as snap ring groove.
ZR	One metal shield; no recesses on O.D. of inner ring.
-2ZR	Two metal shields; no recesses on O.D. of inner ring.

Special designations

A BJ... reference is used for a special design of single (or double) row radial ball bearing. In the past RHP has used other designations to identify special bearings of this type and these are listed on pages 6–8. Normally, a special bearing should not be replaced by a standard bearing. Where advice is needed contact RHP or your local RHP distributor.

Variants

Many of the bearings tabulated in this section can be supplied with shields, seals and/or snap rings and these are indicated by a (●) in the appropriate columns. Shielded and sealed bearings are usually supplied with seal recesses on the inner ring and are suffixed Z, -2Z, RS or -2RS. However, many of the smaller sized bearings (below 20 mm or $\frac{3}{4}$ " bore diameter) do not have these recesses and are suffixed ZR, -2ZR, RSR or -2RSR. Such bearings are indicated in the appropriate columns by a small circle 'o' instead of a (●).

Cages – material options

Brass, steel and polyamide 6-6.

Temperature ranges

Open (unsealed) bearings

–40°C to +125°C (+150°C peak).

Double shielded

–30°C to +100°C (+120°C peak).

Sealed

–20°C to +100°C (+120°C peak).

Misalignment range

0 to 0,001 radians

Radial internal clearance (RIC)

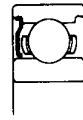
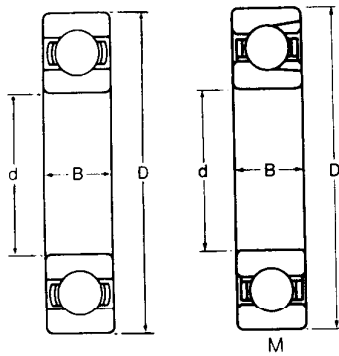
The standard clearance is CN. Bearings with C3 clearance are also normally available whereas other clearances are generally made to special order.

Radial internal clearance values for radial ball bearings 0,001 mm units

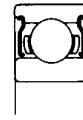
Bore diameter d mm	Radial internal clearance groups												
	C2		CN		C3		C4		C5				
	incl	inch over	incl	min	max	min	max	min	max	min	max	min	max
2,5	6	$\frac{1}{16}$	$\frac{7}{32}$	0	7	2	13	8	23	–	–	–	–
6	10	$\frac{3}{32}$	$\frac{3}{8}$	0	7	2	13	8	23	14	29	20	37
10	18	$\frac{3}{16}$	$\frac{7}{16}$	0	9	3	18	11	25	18	33	25	45
18	24	$\frac{1}{8}$	$\frac{7}{16}$	0	10	5	20	13	28	20	36	28	48
24	30	$\frac{1}{8}$	$1\frac{1}{16}$	1	11	5	20	13	28	23	41	30	53
30	40	$1\frac{1}{16}$	$1\frac{9}{16}$	1	11	6	20	15	33	28	46	40	64
40	50	$1\frac{9}{16}$	$1\frac{7}{8}$	1	11	6	23	18	36	30	51	45	73
50	65	$1\frac{7}{8}$	$2\frac{1}{2}$	1	15	8	28	23	43	38	61	55	90
65	80	$2\frac{1}{2}$	$3\frac{1}{8}$	1	15	10	30	25	51	46	71	65	105
80	100	$3\frac{1}{8}$	$3\frac{3}{8}$	1	18	12	36	30	58	53	84	75	120
100	120	$3\frac{3}{8}$	$4\frac{11}{16}$	2	20	15	41	36	66	61	97	90	140
120	140	$4\frac{11}{16}$	$5\frac{1}{2}$	2	23	18	48	41	81	71	114	105	160
140	160	$5\frac{1}{2}$	$6\frac{1}{4}$	2	23	18	53	46	91	81	130	120	180
160	180	$6\frac{1}{4}$	7	2	25	20	61	53	102	91	147	135	200
180	200	7	$7\frac{7}{8}$	2	30	25	71	63	117	107	163	150	230
200	225	$7\frac{7}{8}$	$8\frac{3}{8}$	2	35	25	85	75	140	125	195	175	265
225	250	$8\frac{3}{8}$	$9\frac{7}{8}$	2	40	30	95	85	160	145	225	205	300
250	280	$9\frac{7}{8}$	11	2	45	35	105	90	170	155	245	225	340
280	315	11	$12\frac{3}{8}$	2	55	40	115	100	190	175	270	245	370
315	355	$12\frac{3}{8}$	14	3	60	45	125	110	210	195	300	275	410
355	400	14	$15\frac{3}{4}$	3	70	55	145	130	240	225	340	315	460
400	450	$15\frac{3}{4}$	$17\frac{3}{4}$	3	80	60	170	150	270	250	380	350	510
450	500	$17\frac{3}{4}$	$19\frac{3}{4}$	3	90	70	190	170	300	280	420	390	570

Single row radial ball bearings

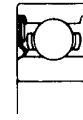
d 3–20 mm



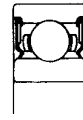
ZR



-2ZR



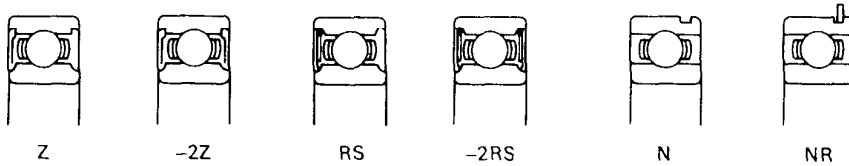
RSR



-2RSR

Primary dimensions			Basic bearing	Variants†						Basic load ratings		Limiting speeds			Mass kg
d	D	B		Z	-2Z	RS	-2RS	N	NR	dynamic C _r	static C _{0r}	grease	oil	RS/-2RS	
mm										N		rev/min			
3	7	3	638/3	o	o	o	o			436	148	45 000	52 000	26 000	0,00045
	8	3	619/3							643	209	42 000	49 000		0,00060
	8	4	639/3	o	o	o	o			643	209	42 000	49 000	26 000	0,00080
	10	4	623	o	o	o	o			668	228	40 000	48 000	26 000	0,00150
4	9	4	638/4	o	o	o	o			668	228	39 000	46 000	26 000	0,00100
	11	4	619/4	o	o	o	o			741	276	36 000	43 000	24 000	0,00175
	12	4	604	o	o	o	o			744	283	36 000	43 000	24 000	0,00215
	13	5	624	o	o	o	o			1 340	480	38 000	45 000	24 000	0,00315
	16	5	634	o	o	o	o			1 950	680	36 000	43 000	22 000	0,00500
5	11	3	618/5							744	283	36 000	43 000		0,00110
	11	5	638/5	o	o	o	o			744	283	36 000	43 000	24 000	0,00174
	13	4	619/5	o	o	o	o			1 100	425	36 000	43 000	24 000	0,00228
	14	5	605	o	o	o	o			1 380	507	35 000	42 000	22 000	0,00310
	16	5	625	o	o	o	o			1 990	699	36 000	43 000	22 000	0,00500
	19	6	635	o	o	o	o			2 500	1 000	32 000	38 000	22 000	0,00900
6	13	3,5	618/6							1 110	433	33 000	40 000		0,00180
	13	5	628/6	o	o	o	o			1 110	433	33 000	40 000	22 000	0,00244
	15	5	619/6	o	o	o	o			1 800	670	33 000	40 000	22 000	0,00358
	17	6	606	o	o	o	o			1 540	625	32 000	39 000	22 000	0,00600
	19	6	626	o	o	o	o			2 520	1 020	32 000	38 000	22 000	0,00800
7	14	3,5	618/7							1 200	504	38 000	45 000		0,0020
	14	5	628/7	o	o	o	o			1 200	504	38 000	45 000	22 000	0,0027
	17	5	619/7	o	o	o	o			1 670	716	36 000	43 000	20 000	0,0048
	19	6	607	o	o	o	o			2 540	1 040	32 000	38 000	22 000	0,0080
	22	7	627	o	o	o	o			3 390	1 350	30 000	36 000	20 000	0,0130
8	16	4	618/8							1 670	716	36 000	43 000		0,0030
	16	5	628/8	o	o	o	o			1 670	716	36 000	43 000	20 000	0,0036
	16	6	638/8	o	o	o	o			1 670	716	36 000	43 000	20 000	0,0042
	19	6	619/8	o	o	o	o			3 330	1 290	32 000	38 000	22 000	0,0075
	22	7	608	o	o	o	o			3 420	1 370	30 000	36 000	20 000	0,0120
9	17	4	618/9							1 790	813	36 000	43 000		0,0056
	17	5	628/9	o	o	o	o			1 790	813	36 000	43 000	19 000	0,0058
	17	6	638/9	o	o	o	o			1 790	813	32 000	40 000	18 000	0,0060
	20	6	619/9	o	o	o	o			1 900	924	32 000	40 000	18 000	0,0080
	24	7	609	o	o	o	o			3 810	1 640	30 000	36 000	19 000	0,0150
	26	8	629	o	o	o	o			4 720	1 950	28 000	34 000	18 000	0,0210
10	19	5	61900	o	o	o	o			1 900	924	32 000	40 000	18 000	0,005
	19	6	62800	o	o	o	o			1 900	924	32 000	40 000	18 000	0,006
	19	7	63800	o	o	o	o			1 900	924	32 000	40 000	18 000	0,007
	22	6	61900	o	o	o	o			2 800	1 270	30 000	36 000	18 000	0,013
	26	8	6000	o	o	o	o			4 750	1 970	28 000	34 000	18 000	0,020

† See "Variants" on page 22.

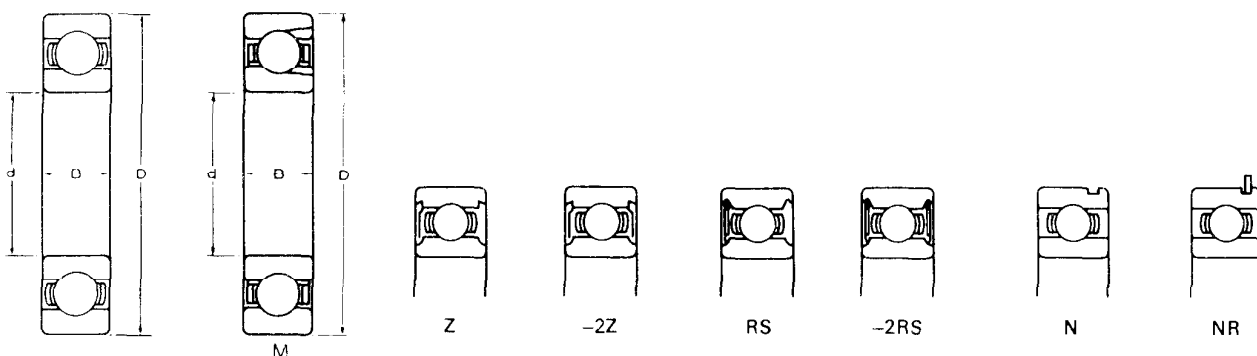


Primary dimensions			Basic bearing	Variants†						Basic load ratings		Limiting speeds			Mass
d	D	B		Z	-2Z	RS	-2RS	N	NR	dynamic C _r	static C _{or}	grease	oil	RS/-2RS	kg
mm										N		rev/min			
10	28	8	16100	o	o	o	o			4 800	2 030	28 000	34 000	18 000	0,020
	30	9	6200	o	o	o	o	•	•	6 190	2 620	26 000	32 000	17 000	0,031
	35	11	6300	o	o	o	o			8 410	3 440	22 000	28 000	15 000	0,052
12	21	5	61801	o	o	o	o			1 990	1 040	30 000	36 000	18 000	0,006
	21	6	62801	o	o	o	o			1 990	1 040	30 000	36 000	18 000	0,007
	21	7	63801	o	o	o	o			1 990	1 040	30 000	36 000	18 000	0,008
	24	6	61901	o	o	o	o			3 000	1 460	28 000	34 000	18 000	0,014
	28	8	6001	o	o	o	o			5 290	2 370	26 000	32 000	17 000	0,022
	30	8	16101	o	o	o	o			5 320	2 410	26 000	32 000	17 000	0,025
	32	10	6201	o	o	o	o	•	•	7 150	3 090	24 000	30 000	15 000	0,037
	32	10	M201							8 550	3 850	10 900	22 000		0,042
37	12	6301	o	o	o	o	•	•	8 670	3 600	20 000	26 000	14 000	0,060	
15	24	5	61802	o	o	o	o			2 150	1 260	28 000	34 000	16 000	0,007
	24	6	62802	o	o	o	o			2 150	1 260	28 000	34 000	16 000	0,008
	24	7	63802	o	o	o	o			2 150	1 260	28 000	34 000	16 000	0,009
	28	7	61902	o	o	o	o			3 160	1 690	26 000	32 000	15 000	0,015
	32	8	16002							5 800	2 840	24 000	30 000		0,027
	32	9	6002	o	o	o	o	•	•	5 800	2 840	24 000	30 000	14 000	0,031
	35	11	6202	o	o	o	o	•	•	8 020	3 740	20 000	26 000	13 000	0,046
	35	11	M202							9 550	4 650	9 800	19 500		0,054
	37	9	98202							8 060	3 600	20 000	27 000		0,043
	42	13	6302	o	o	o	o	•	•	10 800	4 900	18 000	22 000	12 000	0,083
42	13	M302							13 600	6 150	8 800	17 500		0,099	
17	26	5	61803	o	o	o	o			2 310	1 460	26 000	32 000	15 000	0,008
	26	6	62803	o	o	o	o			2 310	1 460	26 000	32 000	15 000	0,009
	26	7	63803	o	o	o	o			2 310	1 460	26 000	32 000	15 000	0,010
	30	7	61903	o	o	o	o			4 770	2 550	24 000	30 000	14 000	0,016
	35	8	16003							6 230	3 250	22 000	28 000		0,032
	35	10	6003	o	o	o	o	•	•	6 230	3 250	22 000	28 000	13 000	0,039
	40	12	6203	o	o	o	o	•	•	9 920	4 760	18 000	22 000	12 000	0,065
	40	12	M203							11 800	5 910	8 900	18 000		0,077
	47	14	6303	o	o	o	o	•	•	14 000	6 530	16 000	19 000	11 000	0,120
	47	14	M303							17 600	8 490	8 000	16 000		0,131
62	17	6403							22 100	11 000	12 200	16 500		0,255	
20	42	8	16004							7 200	4 090	18 000	22 000		0,050
	42	9	98204							9 740	5 030	16 500	22 500		0,055
	42	12	6004	•	•	•	•	•	•	9 750	5 050	16 500	22 500	11 600	0,069
	47	14	6204	•	•	•	•	•	•	13 300	6 580	15 500	21 000	10 800	0,099
	47	14	M 204							18 000	9 520	15 000	18 000		0,116
	52	10	98304							13 400	6 830	14 700	20 000		0,107
	52	15	6304	•	•	•	•	•	•	16 500	7 850	14 700	20 000	10 300	0,144
	52	15	M 304							19 600	10 100	7 400	14 700		0,174
	72	19	6404							30 700	13 200	10 600	14 300		0,390

† See "Variants" on page 22.

Single row radial ball bearings

d 25-75 mm

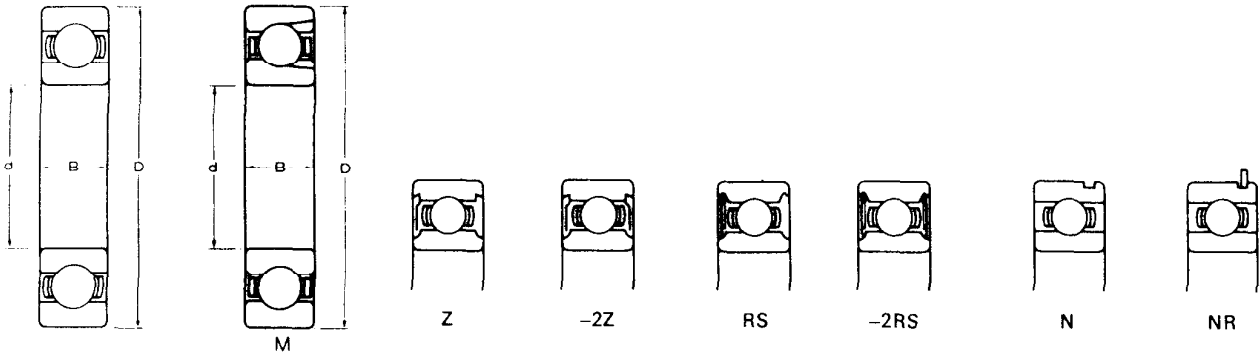


Primary dimensions			Basic bearing	Variants						Basic load ratings		Limiting speeds			Mass
d	D	B		Z	-2Z	RS	-2RS	N	NR	dynamic C _r	static C _{0r}	grease	oil	RS/-2RS	
mm										N		rev/min		kg	
25	47	8	16005							7 500	4 600	14 000	18 000		0,060
	47	12	6005	•	•	•	•	•	•	10 500	5 850	14 600	19 500	10 200	0,080
	52	9	98205							12 100	6 560	14 000	18 000		0,088
	52	15	6205	•	•	•	•	•	•	14 500	7 850	14 000	19 000	9 800	0,123
	52	15	M 205							20 800	12 200	13 000	16 000		0,141
	62	12	98305							14 600	8 140	12 000	16 500		0,185
	62	17	6305	•	•	•	•	•	•	22 100	11 000	12 200	16 500	8 500	0,220
	62	17	M 305							31 200	15 700	11 000	14 000		0,257
80	21	6405							34 700	19 200	9 400	12 700		0,526	
30	55	9	16006							11 700	7 350	12 000	15 000		0,085
	55	13	6006	•	•	•	•	•	•	13 100	8 160	12 600	17 000	8 800	0,116
	62	10	98206							16 600	10 300	11 200	15 000		0,149
	62	16	6206	•	•	•	•	•	•	20 200	11 300	11 700	15 500	8 200	0,198
	62	16	M 206							28 200	17 100	11 000	14 000		0,218
	72	19	6306	•	•	•	•	•	•	29 200	15 800	10 600	14 300	7 400	0,331
	72	19	M 306							35 700	20 800	9 500	12 000		0,378
90	23	6406							42 200	22 800	8 400	11 300		0,689	
35	62	9	16007							12 700	8 800	10 500	13 000		0,110
	62	14	6007	•	•	•	•	•	•	16 600	10 300	11 200	15 000	7 800	0,156
	70	10	98207							16 500	10 500	5 100	10 200		0,185
	72	17	6207	•	•	•	•	•	•	26 700	15 400	10 100	13 600	7 100	0,276
	72	17	M 207							36 400	22 800	7 500	10 100		0,304
	80	21	6307	•	•	•	•	•	•	34 600	19 200	9 400	12 700	6 600	0,446
	80	21	M 307							42 800	26 300	8 500	10 000		0,511
100	25	6407							55 000	31 700	7 500	10 200		0,916	
40	68	9	16008							13 700	10 300	9 500	12 000		0,125
	68	15	6008	•	•	•	•	•	•	17 700	11 700	10 100	13 600	7 100	0,191
	80	11	98208							22 900	15 100	4 600	9 100		0,264
	80	18	6208	•	•	•	•	•	•	30 200	17 900	9 000	12 200	6 300	0,351
	80	18	M 208							38 700	26 000	8 500	10 000		0,397
	90	23	6308	•	•	•	•	•	•	42 300	23 900	8 400	11 300	5 900	0,590
	90	23	M 308							60 500	36 000	7 500	9 000		0,796
	110	27	6408							64 500	37 900	6 800	9 200		1,21
45	75	10	16009							16 200	12 200	8 500	10 500		0,170
	75	16	6009	•	•	•	•	•	•	20 700	14 400	9 100	12 300	6 400	0,245
	85	11	98209							22 600	16 600	8 300	11 200		0,318
	85	19	6209	•	•	•	•	•	•	32 400	20 300	8 400	11 400	5 900	0,397
	85	19	M 209							45 700	31 700	8 000	9 500		0,460
	100	17	98309							36 400	23 200	7 800	10 600		0,412
	100	25	6309	•	•	•	•	•	•	54 900	31 700	7 500	10 200	5 300	0,794
	100	25	M 309							68 000	43 500	6 700	8 000		0,942
120	29	6409							74 500	44 700	6 200	8 400		1,53	

Primary dimensions			Basic bearing	Variants				Basic load ratings		Limiting speeds			Mass		
d	D	B		Z	-Z	RS	-2RS	N	NR	dynamic C _r	static C _{or}	grease		oil	RS/-2RS
mm								N		rev/min			kg		
50	80	10	16010							16 700	13 100	8 000	10 000		0,180
	80	16	6010	•	•	•	•	•	•	21 500	15 800	8 300	11 200	5 800	0,264
	90	11	98210							20 200	16 200	7 800	10 600		0,305
	90	20	6210	•	•	•	•	•	•	36 500	23 200	7 800	10 600	5 500	0,446
	90	20	M 210	•	•	•	•	•	•	47 800	34 800	7 500	9 000		0,511
	110	27	6310	•	•	•	•	•	•	64 500	37 900	6 800	9 200	4 800	1,06
	110	27	M 310					•	•	84 500	56 900	6 000	7 000		1,22
130	31	6410							85 000	52 000	5 700	7 700		1,90	
55	90	11	16011							20 100	16 200	7 500	9 000		0,271
	90	18	6011	•	•	•	•	•	•	29 400	21 300	7 600	10 300	5 300	0,394
	100	21	6211	•	•	•	•	•	•	45 100	29 300	7 100	9 500	4 900	0,590
	100	21	M 211	•	•	•	•	•	•	59 000	43 800	6 700	8 000		0,690
	120	29	6311	•	•	•	•	•	•	74 500	44 600	6 200	8 400	4 400	1,35
	120	29	M 311					•	•	97 000	61 300	5 300	6 300		1,67
140	33	6411							96 500	59 800	5 300	7 100		2,31	
60	95	11	16012							20 700	17 500	7 000	8 500		0,288
	95	18	6012	•	•	•	•	•	•	30 600	23 200	7 100	9 600	5 000	0,419
	105	12	98212							23 600	19 900	3 100	6 400		0,760
	110	22	6212	•	•	•	•	•	•	54 500	35 900	6 400	8 700	4 500	0,771
	110	22	M 212	•	•	•	•	•	•	71 500	54 000	6 000	7 000		0,886
	130	31	6312	•	•	•	•	•	•	85 000	52 000	5 700	7 700	4 000	1,69
	130	31	M 312	•	•	•	•	•	•	112 000	71 500	5 000	6 000		2,10
150	35	6412							108 000	68 200	4 900	6 600		2,80	
65	100	11	16013							22 000	19 600	6 300	7 500		0,300
	100	18	6013	•	•	•	•	•	•	31 800	25 200	6 700	9 000	4 700	0,449
	120	23	6213	•	•	•	•	•	•	59 500	40 100	5 900	7 900	4 100	0,966
	120	23	M 213	•	•	•	•	•	•	85 000	65 000	5 300	6 300		1,11
	140	33	6313	•	•	•	•	•	•	96 500	59 800	5 300	7 100	3 700	2,07
	140	33	M 313					•	•	126 000	89 800	4 500	5 300		2,37
160	37	6413							118 000	77 000	4 600	6 200		3,25	
70	110	13	16014							28 900	25 000	6 000	7 000		0,451
	110	20	6014	•	•	•	•	•	•	37 600	28 700	6 100	8 200	4 300	0,608
	125	24	6214	•	•	•	•	•	•	64 500	44 100	5 600	7 500	3 900	1,05
	125	24	M 214	•	•	•	•	•	•	88 500	70 500	5 000	6 000		1,22
	147	24	98314							81 300	54 400	2 600	5 000		2,95
	150	35	6314	•	•	•	•	•	•	108 000	68 200	4 900	6 600	3 400	2,49
	150	35	M 314					•	•	142 000	102 000	4 300	5 000		2,89
180	42	6414							138 000	96 500	4 000	5 400		5,03	
75	115	13	16015							29 800	26 800	5 600	6 700		0,476
	115	20	6015	•	•	•	•	•	•	41 100	33 500	5 800	7 800	4 050	0,680
	130	25	6215	•	•	•	•	•	•	69 000	49 300	5 300	7 100	3 700	1,13
	130	25	M 215	•	•	•	•	•	•	88 500	71 500	2 600	5 300		1,47

Single row radial ball bearings

d 75-260 mm



Primary dimensions			Basic bearing	Variants						Basic load ratings		Limiting speeds			Mass kg
d	D	B		Z	-2Z	RS	-2RS	N	NR	dynamic C _r	static C _{0r}	grease	oil	RS/-2RS	
mm										N		rev/min			
75	160	37	6315	•	•	•	•	•	•	118 000	77 000	4 600	6 200	3 200	2,98
	160	37	M 315	•						155 000	116 000	2 300	4 600		3,66
	190	45	6415							148 000	108 000	3 700	5 000		6,74
80	125	14	6016							33 400	31 200	5 300	6 300		0,634
	125	22	6016			•		•	•	49 600	39 700	5 300	7 200	3 700	0,907
	140	26	6216	•	•	•	•	•	•	75 400	53 000	4 900	6 600	3 400	1,37
	140	26	M 216	•						99 000	80 000	2 400	4 900		1,78
	170	39	6316	•	•	•	•	•	•	128 000	86 800	4 200	5 700	2 900	3,58
	170	39	M 316							158 000	119 000	2 100	4 200		4,54
200	48	6416							170 000	125 000	1 900	3 700		8,30	
85	130	14	6017							35 300	33 200	5 000	6 000		0,641
	130	22	6017			•		•	•	51 500	43 000	5 000	6 800	3 500	0,907
	150	28	6217	•	•	•	•	•	•	86 400	63 800	4 500	6 100	3 100	1,71
	150	28	M 217	•						115 000	93 000	2 300	4 500		2,13
	180	41	6317	•	•			•	•	138 000	96 500	4 000	5 400		4,25
	180	41	M 317							181 000	145 000	2 000	4 000		5,23
210	52	6417							159 000	120 000	1 700	3 400		9,84	
90	140	16	6018							43 100	39 300	4 500	5 300		0,856
	140	24	6018					•	•	60 500	49 700	4 500	6 300		1,16
	160	30	6218	•	•	•	•	•	•	93 000	69 500	4 300	5 800	3 000	2,57
	160	30	M 218	•						119 000	101 000	2 100	4 200		2,68
	190	43	6318	•	•			•	•	139 000	102 000	3 700	5 000		5,85
	190	43	M 318							195 000	161 000	1 900	3 700		6,23
225	54	6418							170 000	132 000	1 600	3 200		12,4	
95	145	16	6019							41 400	40 500	4 500	5 300		0,948
	145	24	6019			•	•			63 000	53 700	4 400	6 000	3 100	1,21
	170	32	6219					•	•	106 000	80 500	4 000	5 400		2,72
	170	32	M 219	•						148 000	123 000	2 000	4 000		3,31
	200	45	6319					•	•	149 000	110 000	3 500	4 700		6,80
200	45	M 319							195 000	165 000	1 800	3 500		7,23	
100	150	16	6020							45 600	44 200	4 100	4 900		0,910
	150	24	6020					•	•	62 500	54 200	4 300	5 800		1,42
	180	34	6220							120 000	88 500	3 800	5 100		3,12
	180	34	M 220	•						167 000	129 000	1 900	3 800		3,96
	215	47	6320	•	•					170 000	132 000	3 200	4 400		7,03
	215	47	M 320							223 000	198 000	1 600	3 200		8,64
250	58	6420							214 000	175 000	1 400	2 900		16,2	
105	160	26	6021							75 500	65 500	2 000	4 000		1,62
	190	36	6221							135 000	104 000	3 500	4 700		4,42
	225	49	6321							191 000	153 000	3 100	4 200		9,53

Primary dimensions			Basic bearing	Variants						Basic load ratings		Limiting speeds			Mass
d	D	B		Z	-2Z	RS	-2RS	N	NR	dynamic C _r	static C _{0r}	grease	oil	RS/-2RS	
mm									N	rev/min			kg		
110	170	19	16022							59 500	56 700	3 700	4 400		1,46
	170	28	6022					•	•	82 700	71 000	3 800	5 100		1,97
	200	38	6222	•	•					147 000	117 500	3 300	4 400		5,17
	200	38	M 222	•						181 000	160 000	1 600	3 300		5,43
	240	50	6322							203 000	168 000	2 900	3 900		9,70
120	180	19	16024							63 500	63 600	3 400	4 000		1,67
	180	28	6024							86 000	77 500	3 500	4 700		2,39
	215	40	6224							150 000	123 000	3 000	4 100		6,02
	215	40	M 224							212 000	197 000	1 500	3 000		6,52
	260	55	6324							226 000	197 000	2 600	3 500		15,4
130	200	33	6026							109 000	99 500	3 100	4 200		3,63
	230	40	6226							172 000	148 000	2 700	3 700		7,08
	230	40	M 226							220 000	215 000	1 400	2 700		7,32
	280	58	6326							250 000	227 000	2 400	3 200		18,4
140	210	33	6028							113 000	107 000	2 900	3 900		3,81
	250	42	6228							184 000	165 000	2 500	3 400		8,98
	300	62	6328							263 000	246 000	2 200	2 900		22,4
150	225	35	6030							128 000	124 000	1 300	2 700		4,94
	270	45	6230							183 000	168 000	2 300	3 100		11,0
	320	65	6330							288 000	280 000	2 000	2 700		24,9
160	240	38	6032							144 000	141 000	1 200	2 400		5,95
	290	48	6232							238 000	236 000	2 100	2 800		13,7
	340	68	6332							313 000	317 000	1 900	2 500		32,1
170	260	42	6034							175 000	172 000	2 200	3 000		7,74
	310	52	6234							237 000	239 000	1 000	2 000		16,7
	360	72	6334							339 000	355 000	1 700	2 300		37,4
180	280	46	6036							181 000	181 000	1 000	2 000		10,7
	320	52	6236							235 000	244 000	1 800	2 500		17,2
	380	75	6336							352 000	346 000	800	1 600		40,8
190	340	55	6238							281 000	258 000	1 700	2 300		21,7
	400	78	6338							397 000	454 000	750	1 500		49,8
200	360	58	6240							279 000	312 000	1 600	2 200		25,4
	420	80	6340							425 000	440 000	700	1 400		63,5
220	400	65	6244							356 000	421 000	1 400	1 900		36,4
240	440	72	6248							386 000	479 000	1 200	1 700		48,5
260	480	80	6252							405 000	541 000	1 100	1 500		70,3