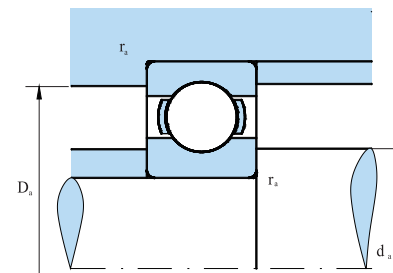
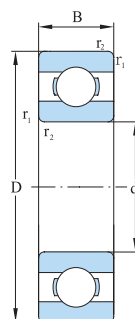


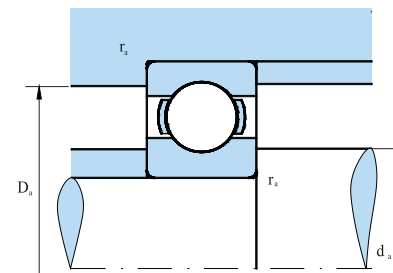
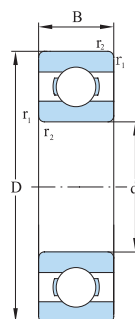
Deep groove ball bearings



Designations	Boundary dimensions				Basic load ratings	
	d	D	B	r _{1,2} min	Cr	Cor
	mm				kN	
625	5	16	5	0.3	1.46	0.56
635		19	6	0.3	2.24	0.863
606	6	17	6	0.3	2.19	0.865
626		19	6	0.3	2.23	0.895
636		22	7	0.3	3.3	1.35
607	7	19	6	0.3	2.24	0.895
627		22	7	0.3	3.28	1.36
637		26	6	0.3	3.34	1.35
608	8	22	7	0.3	3.28	1.36
628		24	8	0.3	3.32	1.43
638		28	9	0.3	3.53	1.94
609	9	24	7	0.3	3.32	1.43
629		26	8	0.3	4.55	1.96
639		30	10	0.6	5.1	2.23
61800 TN	10	19	5	0.3	1.83	0.924
61900		22	6	0.3	1.95	0.75
6000		26	8	0.3	4.59	1.97
6200		30	9	0.6	5.1	2.39
6300		35	11	0.6	7.66	3.47
61801 TN	12	21	5	0.3	1.91	1.04
61901		24	6	0.3	2.25	0.98
6001		28	8	0.3	5.1	2.39
16001		30	8	0.3	5.1	2.39
6201		32	10	0.6	6.76	3.05
6301		37	12	1	8.58	3.92
61802 TN	15	24	5	0.3	2.08	1.26
61802 TN		28	7	0.3	4.33	2.25
61902		24	5	0.3	2.08	1.26
6002		32	9	0.3	5.62	2.84
6202		35	11	0.6	7.66	3.72
6302			13	1	11.4	5.4
61803TN	17	26	5	0.3	2.22	1.46

Limiting speeds		Abutment and fillet dimensions			Mass
Grease	Oil	d _a min	D _a max	r _a max	
r/min		min			kg
43000	50000	7	14	0.3	0.0051
36000	43000	7	17	0.3	0.009
38000	45000	8	15	0.3	0.0081
36000	43000	8	17	0.3	0.0083
32000	38000	8.6	19.4	0.3	0.013
38000	45000	9	17	0.3	0.0078
32000	38000	9	20	0.3	0.0124
30000	36000	9.6	23.4	0.3	0.024
36000	43000	10	20	0.3	0.0117
30000	36000	9.3	21	0.3	0.0172
28000	34000	10.6	25.4	0.3	0.027
32000	38000	11	22	0.3	0.0147
28000	34000	11	24	0.3	0.0194
24000	30000	12.6	25.8	0.3	0.034
36000	43000	12	17	0.3	0.0054
34000	40000	12	20	0.3	0.01
30000	36000	12	24	0.3	0.0197
24000	30000	14	26	0.6	0.0317
20000	26000	14	31	0.6	0.0551
32000	38000	14	19	0.3	0.0061
30000	36000	14	22	0.3	0.011
26000	32000	14	26	0.3	0.0215
26000	32000	14	28	0.3	0.0192
22000	28000	16	28	0.6	0.0366
19000	24000	17	32	1	0.0633
28000	34000	17	22	0.3	0.0072
24000	30000	17	26	0.3	0.0155
28000	34000	17	22	0.3	0.0072
22000	28000	17	30	0.3	0.0308
19000	24000	19	31	0.6	0.0452
17000	20000	20	37	1	0.0827
24000	30000	19	24	0.3	0.008

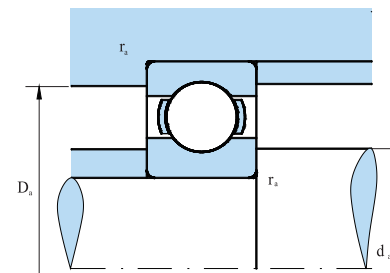
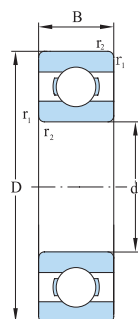
Deep groove ball bearings



Designations	Boundary dimensions				Basic load ratings	
	d	D	B	$r_{1,2} \text{ min}$	Cr	Cor
	mm				kN	
61903	17	30	7	0.3	4.6	2.55
16003		35	8	0.3	6.5	3.36
6003		35	10	0.3	6.5	3.36
6203		40	12	0.6	10.3	4.79
6303		47	14	1	13.5	6.55
6403		62	17	1.1	22.9	10.8
61804 TN	20	32	7	0.3	3.48	2.23
61904		37	9	0.3	6.38	3.65
16004		42	8	0.3	7.9	4.45
6004		42	12	0.6	9.44	5.03
6204		47	14	1	12.9	6.65
6304		52	15	1	16	7.88
6404		72	19	1	31.1	15.2
60/22	22	44	12	0.6	9.4	5.05
62/22		50	14	1	12.9	6.8
63/22		56	16	1.1	18.5	9.25
61805 TN	25	37	7	0.3	3.84	2.8
61905		42	9	0.3	7.32	4.56
16005		47	8	0.3	8.84	5.63
6005		47	12	0.6	10.1	5.85
6205		52	15	1	14	7.87
6305		62	17	1.1	22.5	11.5
6405		80	21	1.5	37.3	18.8
60/28	28	52	12	0.6	10.7	6.63
62/28		58	16	1	16.6	9.54
63/28		68	18	1.1	25	12.1
61806 TN	30	42	7	0.3	4.15	3.32
61906		47	9	0.3	8.05	5.37
16006		55	9	0.3	11.2	7.36
6006		55	13	1	13.3	8.36
6206		62	16	1	19.5	11.3
6306		72	19	1.1	26.7	14.9

Limiting speeds		Abutment and fillet dimensions			Mass
Grease	Oil	$d_a \text{ min}$	$D_a \text{ max}$	$r_a \text{ max}$	
r/min		min			kg
22000	28000	19	28	0.3	0.0177
19000	24000	19	33	0.3	0.0321
19000	24000	19	33	0.3	0.0392
17000	20000	21	36	0.6	0.0648
16000	19000	22	42	1	0.116
12000	15000	23.5	55.5	1	0.27
19000	24000	22	30	0.3	0.0181
18000	22000	22	35	0.3	0.0377
17000	20000	22	40	0.3	0.0506
17000	20000	24	38	0.6	0.0698
15000	18000	25	42	1	0.103
13000	16000	26.5	45.5	1	0.146
10000	13000	26.5	65.5	1	0.402
17000	20000	26	40	0.6	0.074
14000	16000	27	45	1	0.117
13000	16000	28.5	49.5	1	0.177
17000	20000	27	35	0.3	0.0218
16000	19000	27	40	0.3	0.0433
14000	17000	27	45	0.3	0.0583
15000	18000	29	43	0.6	0.0804
12000	15000	30	47	1	0.128
11000	14000	31.5	55.5	1	0.227
9000	11000	33	72	1.5	0.532
14000	16000	32	48	0.6	0.101
12000	14000	33	53	1	0.174
10000	13000	34.5	61.5	1	0.292
15000	18000	32	40	0.3	0.0255
14000	17000	32	45	0.3	0.0486
12000	15000	32	53	0.3	0.0885
12000	15000	35	50	1	0.117
10000	13000	35	57	1	0.203
9000	11000	36.5	65.5	1	0.355

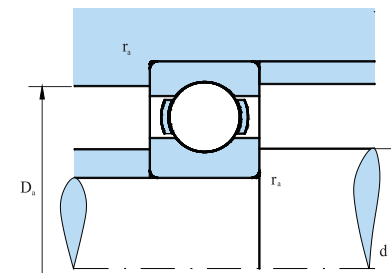
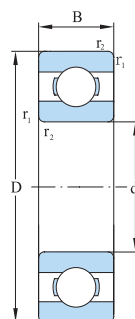
Deep groove ball bearings



Designations	Boundary dimensions				Basic load ratings	
	d	D	B	r _{1,2} min	Cr	Cor
	mm				kN	
6406	30	90	23	1.5	47.3	24.5
60/32	32	58	13	1	13.3	8.39
62/32		65	17	1	21.2	12.5
63/32		75	20	1.1	29.9	17
61807 TN	35	47	7	0.3	4.29	3.6
61907		55	10	0.6	9.54	6.83
16007		62	9	0.3	13.1	9.12
6007		62	14	1	16	10.3
6207		72	17	1.1	25.6	15.5
6307		80	21	1.5	33.4	19.2
6407		100	25	1.5	55.3	31
61808 TN	40	52	7	0.3	4.52	4.1
61908		62	12	0.6	12.2	8.9
16008		68	9	0.6	13.5	10
6008		68	15	1	16.8	11.6
6208		80	18	1.1	27.6	17.4
6308		90	23	1.5	40.8	24
6408		110	27	2	63.8	36.6
61809 TN	45	58	7	0.3	4.73	4.5
61909		68	12	0.6	14.2	10.9
16009		75	10	0.6	15.6	12.2
6009		75	16	1	19.9	14
6209		85	19	1.1	31.2	20.4
6309		100	25	1.5	48.9	29.3
6409		120	29	2	72.9	42.6
61810 TN	50	65	7	0.3	4.93	4.94
61910		72	12	0.6	14.6	11.7
16010		80	10	0.6	16.1	13.11
6010		80	16	1	20.7	15.4
6210		90	20	1.1	35.1	23.2
6310		110	27	2	57.6	35.3
6410		130	31	2.1	83.3	49.3

Limiting speeds		Abutment and fillet dimensions			Mass
Grease	Oil	d _a min	D _a max	r _a max	
r/min		min			kg
8500	10000	38	82	1.5	0.731
12000	14000	37	53	1	0.129
10000	12000	37	60	1	0.231
9000	11000	38.5	68.5	1	0.392
13000	16000	37	45	0.3	0.0289
11000	14000	39	51	0.6	0.0777
10000	13000	37	60	0.3	0.11
10000	13000	40	57	1	0.152
9000	11000	41.5	65.5	1	0.285
8500	10000	43	72	1.5	0.455
7000	8500	43	92	1.5	0.925
11000	14000	42	50	0.3	0.0325
10000	13000	44	58	0.6	0.114
9500	12000	42	66	0.3	0.127
9500	12000	45	63	1	0.189
8500	10000	46.5	73.5	1	0.373
7500	9000	48	82	1.5	0.641
6700	8000	49	101	2	1.24
9500	12000	47	56	0.3	0.0408
9000	11000	49	64	0.6	0.131
9000	11000	49	71	0.6	0.167
9000	11000	50	70	1	0.242
7500	9000	51.5	78.5	1	0.42
6700	8000	53	92	1.5	0.853
6000	7000	54	111	2	1.56
9000	11000	52	63	0.3	0.0555
8500	10000	54	68	0.6	0.139
8500	10000	54	76	0.6	0.182
8500	10000	55	75	1	0.262
7000	8500	56.5	83.5	1	0.467
6300	7500	59	101	2	1.1
5300	6300	61	119	2	1.92

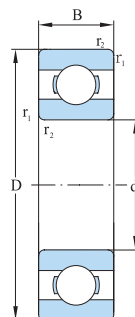
Deep groove ball bearings



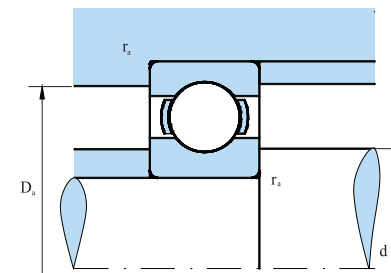
Designations	Boundary dimensions				Basic load ratings	
	d	D	B	r _{1,2} min	Cr	Cor
	mm				kN	
61811 TN	55	72	9	0.3	9.07	8.45
61911		80	13	1	18.9	15.1
16011		90	11	0.6	19.1	16.2
6011		90	18	1.1	26.7	20.1
6211		100	21	1.5	43.4	29.2
6311		120	29	2	71.6	44.8
6411		140	33	2.1	101	62.3
61812 TN	60	78	10	0.3	10.3	9.91
61912		85	13	1	19.4	16.2
16012		95	11	0.6	19.9	17.5
6012		95	18	1.1	30.2	23
6012 M		95	18	1.1	30.2	23
6212		110	22	1.5	47.8	32.9
6312		130	31	2.1	81.9	51.8
6412		150	35	2.1	109	70.1
61813 TN	65	85	10	0.6	10.8	10.7
61913		90	13	1	19.9	17.5
16013		100	11	0.6	20.7	18.6
6013		100	18	1.1	31.9	24.9
6013 M		100	18	1.1	31.9	24.9
6213		120	23	1.5	50.7	37.1
6313		140	33	2.1	92.8	59.7
6313 M		140	33	2.1	92.8	59.7
6413		160	37	2.1	118	78.6
61814 TN	70	90	10	0.6	11.2	11.5
61914		100	16	1	23.7	21.1
16014		110	13	0.6	24.3	22.5
6014		110	20	1.1	38.7	30.4
6014 M		110	20	1.1	38.7	30.4
6214		125	24	1.5	55.8	41.1
6314		150	35	2.1	104	68
6414		180	42	3	135	96.2

Limiting speeds		Abutment and fillet dimensions			Mass
Grease	Oil	d _a min	D _a max	r _a max	
r/min		min			kg
8500	10000	57	70	0.3	0.0806
8000	9500	60	75	1	0.18
7500	9000	59	86	0.6	0.267
7500	9000	61.5	83.5	1	0.382
6300	7500	63	92	1.5	0.609
5600	6700	64	111	2	1.35
5000	6000	66	129	2	2.3
7500	9000	62	76	0.3	0.101
7500	9000	65	80	1	0.193
6700	8000	64	91	0.6	0.285
6700	8000	66.5	88.5	1	0.399
6700	8000	66.5	88.5	1	0.497
6000	7000	68	102	1.5	0.804
5000	6000	71	119	2	1.71
4800	5600	71	139	2	2.78
7000	8500	69	81	0.6	0.127
6700	8000	70	85	1	0.206
6300	7500	69	96	0.6	0.303
6300	7500	71.5	93.5	1	0.416
6300	7500	71.5	93.5	1	0.553
5300	6300	73	112	1.5	1.04
4800	5600	76	129	2	2.11
5600	4800	76	129	2	2.11
4500	5300	76	149	2	3.36
6700	8000	74	86	0.6	0.135
6300	7500	75	95	1	0.342
6000	7000	74	106	0.6	0.447
6000	7000	76.5	103.5	1	0.586
6000	7000	76.5	103.5	1	0.757
5000	6000	78	117	1.5	1.12
4500	5300	81	139	2	2.55
3800	4500	83	167	2.5	4.95

Deep groove ball bearings

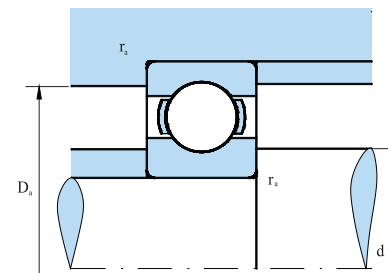
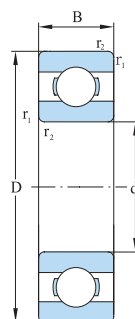


Designations	Boundary dimensions				Basic load ratings	
	d	D	B	$r_{1,2} \text{ min}$	Cr	Cor
	mm				kN	
61815 TN	75	95	10	0.6	11.3	11.9
61915		105	16	1	23.4	22.5
16015		115	13	0.6	25	23.9
6015		115	20	1.1	40.3	33.2
6015 M		115	20	1.1	40.3	33.2
6215		130	25	1.5	60.8	45.4
6215 M		130	25	1.5	60.8	45.4
6315		160	37	2.1	113	77
6315 M		160	37	2.1	113	77
6415		190	45	3	153	114
61816 TN	80	100	10	0.6	11.6	12.7
61916		110	16	1	25	23.9
16016		125	14	0.6	31.9	29.7
6016		125	22	1.1	42.4	35.6
6016 M		125	22	1.1	42.4	35.6
6216		140	26	2	71.5	54.3
6316		170	39	2.1	123	86.5
6416		200	48	3	163	125
61817 TN	85	110	13	1	16	16.8
61917		120	18	1.1	31.9	29.7
16017		130	14	0.6	32.8	31.5
6017		130	22	1.1	47.3	40.1
6017 M		130	22	1.1	47.3	40.1
6217		150	28	2	77.2	59.3



Limiting speeds		Abutment and fillet dimensions			Mass
Grease	Oil	$d_a \text{ min}$	$D_a \text{ max}$	$r_a \text{ max}$	
r/min		min			kg
6300	7500	79	91	0.6	0.143
6000	7000	80	100	1	0.362
5600	6700	79	111	0.6	0.471
5600	6700	81.5	108.5	1	0.617
5600	6700	81.5	108.5	1	0.804
4800	5600	83	122	1.5	1.2
4800	5600	83	122	1.5	1.45
4300	5000	86	149	2	3.05
4300	5000	86	149	2	3.77
3600	4300	88	177	2.5	6.8
6000	7000	84	96	0.6	0.152
5600	6700	85	105	1	0.382
5300	6300	84	121	0.6	0.606
5300	6300	86.5	118.5	1	0.858
5300	6300	86.5	118.5	1	1.08
4500	5300	89	131	2	1.45
3800	4500	91	159	2	3.61
3400	4000	93	187	2.5	8
5300	6300	90	105	1	0.268
5300	6300	91.5	113.5	1	0.525
5000	6000	89	126	0.6	0.63
5000	6000	91.5	123.5	1	0.88
5000	6000	91.5	123.5	1	1.12
4300	5000	94	141	2	1.83

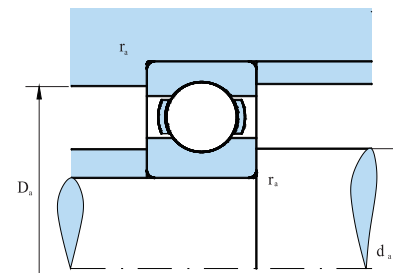
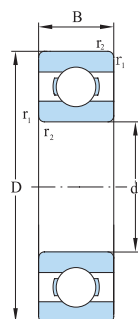
Deep groove ball bearings



Designations	Boundary dimensions				Basic load ratings	
	d	D	B	r _{1,2} min	Cr	Cor
	mm				kN	
6217 M	85	150	28	2	77.2	59.3
6317		180	41	3	133	96.6
6417		210	52	4	174	137
61818 TN	90	115	13	1	16.5	18
61918		125	18	1.1	32.8	31.5
61918 M		125	18	1.1	32.8	31.5
16018		140	16	1	42.5	39.2
16018 M		140	16	1	42.5	39.2
6018		140	24	1.5	52.3	45.1
6018 M		140	24	1.5	52.3	45.1
6218		160	30	2	96.1	71.5
6318		190	43	3	143	107
6418		225	54	4	186	150
61819 TN	95	120	13	1	18.6	18.6
61919		130	18	1.1	33.7	33.3
16019		145	16	1	43.9	42
6019		145	24	1.5	58	50.1
6219 M		170	32	2.1	109	81.7
6219		170	32	2.1	109	81.7
6319		200	45	3	153	118
6419		240	55	4	203	170
6419 M		240	55	4	203	170
61820 TN	100	125	13	1	16.9	19.1
61920		140	20	1.1	43.9	42
61920 M		140	20	1.1	43.9	42
16020		150	16	1	46.3	44.8
6020		150	24	1.1	63.7	50.4
6020 M		150	24	1.1	63.7	50.4
6220		180	34	2.1	122	92.7
6320		215	47	3	173	140
6420		250	58	4	224	195
6420 M		250	58	4	224	195

Limiting speeds		Abutment and fillet dimensions			Mass
Grease	Oil	d _a min	D _a max	r _a max	
r/min		min			kg
4300	5000	94	141	2	1.91
3600	4300	98	167	2.5	4.3
3200	3800	101	194	3	9.5
5300	6300	95	110	1	0.282
5000	6000	96.5	118.5	1	0.559
5000	6000	96.5	118.5	1	0.68
4800	5600	95	135	1	0.845
4800	5600	95	135	1	0.941
4800	5600	98	132	1.5	1.16
4800	5600	98	132	1.5	1.39
3800	4500	99	151	2	2.18
3400	4000	103	177	2.5	5
3000	3600	106	209	3	11.5
5000	6000	100	115	1	0.295
4800	5600	101.5	123.5	1	0.586
4500	5300	100	140	1	0.884
4500	5300	103	137	1.5	1.18
3600	4300	106	159	2	3.26
3600	4300	106	159	2	2.64
3200	3800	108	187	2.5	5.78
3000	3500	113	222	3	13.4
3000	3500	113	222	3	13.4
4800	5600	105	120	1	0.308
4500	5300	106.5	133.5	1	0.786
4500	5300	106.5	133.5	1	0.96
4300	5000	105	145	1	0.912
4300	5000	108	142	1.5	1.22
4300	5000	108	169	2	1.4
3400	4000	111	169	2	3.15
3000	3600	113	202	2.5	7.11
2900	3400	118	232	3	12.8
2900	3400	118	232	3	15.4

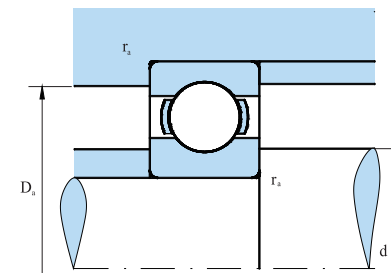
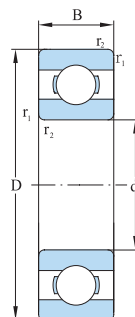
Deep groove ball bearings



Designations	Boundary dimensions				Basic load ratings	
	d	D	B	r _{1,2} min	Cr	Cor
	mm				kN	
61821 TN	105	130	13	1	17.4	20.4
61921		145	20	1.1	46.3	44.8
16021		160	18	1	52	51
6021		160	26	2	69.8	61.2
6021 M		160	26	2	69.8	61.2
6221		190	36	2.1	133	104
6321		225	49	3	182	153
61822 TN	110	140	16	1	24.3	27.2
61922		150	20	1.1	47.8	47.7
16022		170	19	1	57.2	57
6022		170	28	2	75.1	67.3
6022 M		170	28	2	75.1	67.3
6222		200	38	2.1	144	117
6222 M		200	38	2.1	144	117
6322		240	50	3	203	180
61824 TN	120	150	16	1	25	26
61924		165	22	1.1	57.2	56.9
61924 M		165	22	1.1	57.2	56.9
16024		180	19	1	60.5	64
16024 M		180	19	1	60.5	64
6024		180	28	2	88.3	79.7
6024 M		180	28	2	88.3	79.7
6224		215	40	2.1	156	131
6224 M		215	40	2.1	156	131
6324		260	55	3	208	186
61826 TN	130	165	18	1.1	32.5	34
61926 M		180	24	1.5	69.4	70
61926		180	24	1.5	69.4	70
16026		200	22	1.1	79.3	81.5
16026 M		200	22	1.1	79.3	81.5
6026		200	33	2	102	93.9
6026 M		200	33	2	102	93.9

Limiting speeds		Abutment and fillet dimensions			Mass
Grease	Oil	d _a min	D _a max	r _a max	
r/min		min			kg
4500	5300	110	125	1	0.323
4300	5000	111.5	138.5	1	0.805
4000	4800	110	155	1	1.2
4000	4800	114	151	2	1.56
4000	4800	114	151	2	1.92
3200	3800	116	179	2	3.82
2800	3400	118	212	2.5	8.25
4300	5000	115	135	1	0.499
4000	4800	116.5	143.5	1	0.84
3800	4500	115	165	1	1.45
3800	4500	119	161	2	1.96
3800	4500	119	162	2	2.72
3000	3600	121	189	2	4.45
3000	3600	121	189	2	5.46
2600	3200	123	227	2.5	9.55
3800	4500	125	145	1	0.54
3600	4300	126.5	158.5	1	1.15
3600	4300	126.5	158.5	1	1.54
3400	4000	125	175	1	1.6
3400	4000	125	171	1	1.82
3400	4000	129	171	2	2.05
3400	4000	129	171	2	2.68
2800	3400	131	204	2	5.3
2800	3400	131	204	2	6.33
2400	3000	133	247	2.5	14.5
3600	4300	136.5	158.5	1	0.774
3400	4000	138	172	1.5	1.92
3400	4000	138	172	1.5	1.51
3200	3800	136.5	193.5	1	2.42
3200	3800	136.5	193.5	1	2.42
3200	3800	139	191	2	3.16
3200	3800	139	191	2	3.96

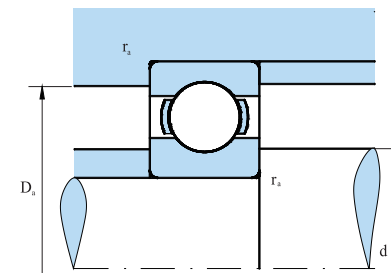
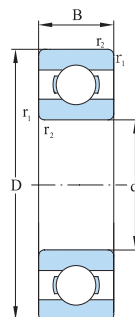
Deep groove ball bearings



Designations	Boundary dimensions				Basic load ratings	
	d	D	B	r _{1,2} min	Cr	Cor
	mm				kN	
6226	130	230	40	3	166	148
6326		280	58	4	229	216
6326 M		280	58	4	229	216
61828 TN	140	175	18	1.1	34	36.5
61828 M		175	18	1.1	34	36.5
61928		190	24	1.5	71.2	74.6
16028		210	22	1.1	80.6	86.5
16028 M		210	22	1.1	80.6	86.5
6028		210	33	2	115	109
6028 M		210	33	2	115	109
6228		250	42	3	165	150
6228 M		250	42	3	165	150
6328		300	62	4	251	245
6328 M		300	62	4	251	245
61830 TN		190	20	1.1	42.5	44
61930		210	28	2	88.4	93
16030		225	24	1.1	92.3	98
6030		225	35	2.1	125	125
6030 M	150	225	35	2.1	125	125
6230		270	45	3	174	166
6230 M		270	45	3	174	166
6330		320	65	4	276	285
6330 M		320	65	4	276	285
61832 TN	160	200	20	1.1	44	48
61932		220	28	2	92.3	98
16032		240	25	1.5	99.5	108
16032 M		240	25	1.5	99.5	108
6032		240	38	2.1	143	143
6032 M		240	38	2.1	143	143
6232		290	48	3	186	186
6232 M		290	48	3	186	186
6332		340	68	4	312	285

Limiting speeds		Abutment and fillet dimensions			Mass
Grease	Oil	d _a min	D _a max	r _a max	
r/min		min			kg
2600	3200	143	217	2.5	6.14
2200	2800	146	264	3	18
2200	2800	146	264	3	18.3
3400	4000	146.5	168.5	1	0.828
3400	4000	146.5	168.5	1	0.93
3200	3800	148	182	1.5	1.6
3000	3600	146.5	203.5	1	3.08
3000	3600	146.5	203.5	1	2.5
3000	3600	149	201	2	3.25
3000	3600	149	201	2	3.89
2400	3000	153	237	2.5	7.45
2400	3000	153	237	2.5	9.44
2000	2600	156	284	3	22
2000	2600	156	284	3	22.3
3000	3600	156.5	183.5	1	1.12
2800	3400	159	201	2	3.05
2600	3200	156.5	218.5	1	3.15
2600	3200	161	214	2	4.8
2600	3200	161	214	2	5.01
2000	2600	163	257	2.5	9.4
2000	2600	163	257	2.5	11.8
1900	2400	166	304	3	26
1900	2400	166	304	3	26.4
2800	3400	166.5	193.5	1	1.19
2600	3200	169	211	2	3.25
2400	3000	168	232	1.5	3.7
2400	3000	168	232	1.5	4.61
2400	3000	171	229	2	5.9
2400	3000	171	229	2	6.41
1900	2400	173	277	2.5	14.5
1900	2400	173	277	2.5	14.6
1800	2200	176	324	3	29

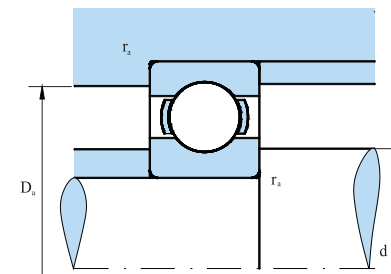
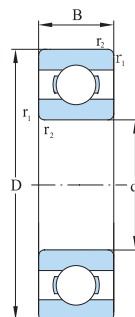
Deep groove ball bearings



Designations	Boundary dimensions				Basic load ratings	
	d	D	B	r _{1,2} min	Cr	Cor
	mm				kN	
6332 M	160	340	68	4	312	285
61834 TN	170	215	22	1.1	54	58.5
61834 M		215	22	1.1	54	58.5
61934		230	28	2	93.6	106
61934 M		230	28	2	93.6	106
16034		260	28	1.5	119	129
16034 M		260	28	1.5	119	129
6034		260	42	2.1	168	173
6034 M		260	42	2.1	168	173
6234		310	52	4	212	224
6234 M		310	52	4	212	224
6334		360	72	4	312	340
6334 M		360	72	4	312	340
61836 TN	180	225	22	1.1	56	63
61936		250	33	2	119	134
61936 M		250	33	2	119	134
16036		280	31	2	138	146
6036		280	46	2.1	190	200
6036 M		280	46	2.1	190	200
6236		320	52	4	229	240
6336		380	75	4	351	405
61838 TN	190	240	24	1.5	67	73.5
61838 M		240	24	1.5	67	73.5
61938		260	33	2	117	134
61938 M		260	33	2	117	134
16038		290	31	2	148	166
16038 M		290	31	2	148	166
6038		290	46	2.1	195	216
6038 M		290	46	2.1	195	216
6238		340	55	4	255	280
6238 M		340	55	4	255	280
6338		400	78	5	371	430

Limiting speeds		Abutment and fillet dimensions			Mass
Grease	Oil	d _a min	D _a max	r _a max	
r/min		min			kg
1800	2200	176	324	3	31.1
2600	3200	176.5	208.5	1	1.56
2600	3200	176.5	208.5	1	1.87
2400	3000	179	221	2	3.4
2400	3000	179	221	2	5.19
2200	2800	178	252	1.5	5
2200	2800	178	252	1.5	5.83
2200	2800	181	249	2	7.9
2200	2800	181	249	2	8.23
1900	2400	186	294	3	17.5
1900	2400	186	294	3	18.4
1700	2000	186	344	3	34.5
1700	2000	186	344	3	34.9
2400	3000	186.5	218.5	1	1.65
2200	2800	189	241	2	5.05
2200	2800	189	241	2	5.27
2000	2600	189	271	2	6.6
2000	2600	191	269	2	10.5
2000	2600	191	269	2	10.7
1800	2200	196	304	3	18.5
1600	2000	196	364	3	42.5
2200	2800	198	232	1.5	2.12
2200	2800	198	232	1.5	2.38
2200	2800	199	251	2	5.25
2200	2800	199	251	2	5.85
2000	2600	199	281	2	7.9
2000	2600	199	281	2	8.11
2000	2600	201	279	2	11
2000	2600	201	279	2	11.1
1700	2000	206	324	3	23
1700	2000	206	324	3	23.2
1600	1900	210	380	4	49

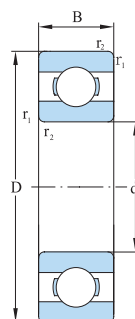
Deep groove ball bearings



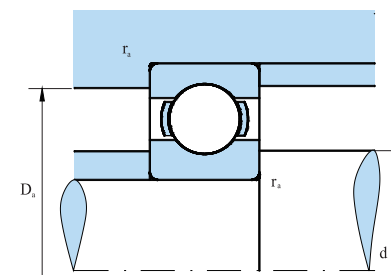
Designations	Boundary dimensions				Basic load ratings	
	d	D	B	r _{1,2} min	Cr	Cor
	mm				kN	
61840 M	200	250	24	1.5	76.1	102
61940		280	38	2.1	148	106
16040		310	34	2	168	190
16040 M		310	34	2	168	190
6040		310	51	2.1	216	245
6040 M		310	51	2.1	216	245
6240		360	58	4	270	310
61844 M	220	270	24	1.5	78	110
61944		300	38	2.1	151	180
61944 M		300	38	2.1	151	180
61944 X1M		309.5	38	2.1	151	180
16044		340	37	2.1	174	204
6044		340	56	3	247	290
6044 M		340	56	3	247	290
6244		400	65	4	296	365
61848 M	240	300	28	2	108	150
61948		320	38	2.1	159	200
61948 M		320	38	2.1	159	200
16048		360	37	2.1	178	220
6048		360	56	3	255	315
6048 M		360	56	3	255	315
6048 X1M		359.5	56	3	255	315
61852 M	260	320	28	2	111	163
61952		360	46	2.1	212	270
16052		400	44	3	238	310
6052		400	65	4	291	375
6052 M		400	65	4	291	375
61856 M	280	350	33	2	138	200
61956		380	46	2.1	216	285
61956 M		380	46	2.1	216	285
61956 X1M-1		390	46	4	216	285
61860 M	300	380	38	2.1	172	245

Limiting speeds		Abutment and fillet dimensions			Mass
Grease	Oil	d _a min	D _a max	r _a max	
r/min		min			kg
2200	2800	208	242	1.5	2.7
2000	2600	211	269	2	7.4
1900	2400	209	301	2	8.85
1900	2400	209	301	2	10.3
1900	2400	211	299	2	14
1900	2400	211	299	2	14.3
1700	2000	216	344	3	28
1900	2400	228	262	1.5	3
1900	2400	231	289	2	8
1900	2400	231	289	2	8.5
1900	2400	231	289.5	2	9.3
1800	2200	231	329	2	11.5
1800	2200	233	327	2.5	18.5
1800	2200	233	327	2.5	18.8
1500	1800	236	384	3	37
1800	2200	249	291	2	4.5
1800	2200	251	309	2	8.6
1800	2200	251	309	2	8.9
1700	2000	251	349	2	14.5
1700	2000	253	347	2.5	19.5
1700	2000	253	347	2.5	20.7
1700	2000	253	346.5	2.5	20.7
1700	2000	269	311	2	4.8
1600	1900	271	349	2	14.5
1500	1800	273	387	2.5	21.5
1500	1800	276	384	3	29.5
1500	1800	276	384	3	29.8
1600	1900	289	341	2	7.4
1500	1800	291	369	2	15.5
1500	1800	291	369	2	15.6
1500	1800	291	379	2	17.6
1400	1700	311	369	2	10.5

Deep groove ball bearings



Designations	Boundary dimensions				Basic load ratings	
	d	D	B	$r_{1,2} \text{ min}$	Cr	Cor
	mm				kN	
61864 M	320	400	38	2.1	172	255
61864		412	38	2.5	164	292
61964		440	56	3	214	395
6064		480	74	4	265	510
61968	340	460	56	3	282	420
61872	360	440	38	2.1	126	242
6072 F1		540	82	5	310	620
61876 F1	380	480	46	2.1	214	314
61976		520	65	4	266	550
61980 F3	400	540	65	4	273	582
6080 F1		600	90	5	370	780
61984 F1/C9	420	560	65	4	247	395
61984 F1		560	65	4	247	395
61988 F3	440	600	74	4	292	648
6088		650	94	6	390	880
61992 F3	460	620	74	4	299	678
619/500X3F1	500	660	75	5	304	716
60/500		720	100	6	415	1020
60/560N1MAS/C9	560	820	115	6	600	1500
160/800X2F1	800	1150	115	7.5	650	2080
618/850F1	850	1030	82	5	428	1303
618/1000F1	1000	1220	100	6	525	1720
618/1180F1	1180	1420	106	6	710	2580
618/1240X1	1240	1480	112	6	715	2660



Limiting speeds		Abutment and fillet dimensions			Mass
Grease	Oil	$d_a \text{ min}$	$D_a \text{ max}$	$r_a \text{ max}$	
r/min		min			kg
1300	1600	311	389	2	11
1300	1600	332	400	2.5	12.7
1300	1600	333	427	2.5	24.9
1100	1400	336	464	3	50.3
1100	1400	353	447	2.5	27
1100	1400	351	429	2	12.2
1000	1300	380	520	4	64.7
1000	1300	391	469	2	19
1000	1300	396	504	3	39.8
950	1200	416	524	3	39.4
900	1100	420	580	4	86.5
900	1100	436	544	3	41.9
900	1100	436	544	3	41.9
900	1100	456	584	3	60.5
850	1000	466	624	5	108
850	1000	476	604	3	63
750	900	520	650	4	68.8
750	900	526	694	5	135
630	750	586	794	5	208
500	550	820	1130	6	427
450	530	870	1010	4	144
340	400	1026	1194	5	230
320	360	1206	1394	5	310
300	340	1266	1454	5	356