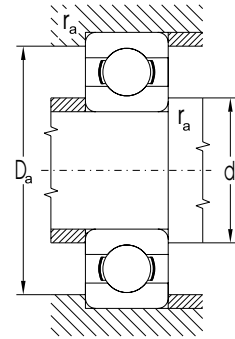
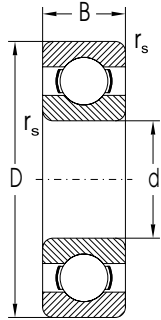


# Single Row Deep Groove Ball Bearings

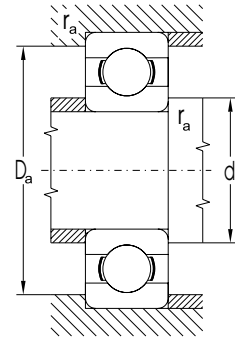
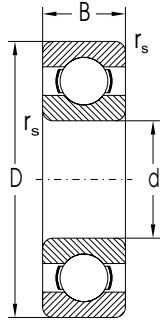
d = 2 to 17 mm



Dimensions				Basic Load Rating		Limiting Speed for Lubrication with		Bearing Designation	Abutment and Fillet Dimensions				Weight ~
d	D	B	r <sub>s</sub> min	Dynamic C <sub>r</sub>	Static C <sub>0r</sub>	Grease	Oil		d	d <sub>a</sub>	D <sub>a</sub>	r <sub>a</sub>	
mm				kN		min <sup>-1</sup>			mm				kg
									min	max	max		
2	6	2.3	0.10	0.279	0.090	63000	79000	<b>619/2</b>	3.2	4.8	0.1	0.0004	
3	10	4	0.15	0.645	0.229	40000	50000	<b>623</b>	4.2	8.5	0.1	0.0015	
4	13	5	0.20	1.168	0.412	38000	45000	<b>624</b>	5.6	11.2	0.2	0.0032	
	16	5	0.30	1.875	0.677	35000	42000	<b>634</b>	6.2	13.4	0.3	0.0050	
5	13	4	0.20	1.079	0.432	47000	56000	<b>619/5</b>	6.6	11.5	0.2	0.0025	
	16	5	0.30	1.875	0.677	35000	42000	<b>625</b>	7.0	14.0	0.3	0.0047	
	19	6	0.30	2.838	1.078	35000	42000	<b>635</b>	7.2	15.8	0.3	0.0090	
6	15	5	0.20	1.470	0.599	42000	50000	<b>619/6</b>	7.8	13.0	0.2	0.0040	
	19	6	0.30	2.838	1.078	35000	42000	<b>626</b>	8.2	17.0	0.3	0.0080	
7	19	6	0.30	2.838	1.078	35000	42000	<b>607</b>	9.0	17.2	0.3	0.0090	
	22	7	0.30	3.282	1.356	35000	42000	<b>627</b>	9.2	19.0	0.3	0.0123	
8	16	4	0.20	1.550	0.722	35000	42000	<b>618/8TNH</b>	9.8	14.0	0.2	0.0030	
	22	7	0.30	3.282	1.356	35000	42000	<b>608</b>	10.0	20.0	0.3	0.0150	
9	24	7	0.30	3.668	1.640	35000	42000	<b>609</b>	11.0	22.0	0.3	0.0180	
	26	8	0.30	4.557	1.955	35000	42000	<b>629</b>	11.0	24.0	0.3	0.0200	
10	26	8	0.30	4.557	1.955	28000	33000	<b>6000</b>	12.0	24.0	0.3	0.0190	
	30	9	0.60	6.047	2.510	25000	30000	<b>6200</b>	14.0	26.0	0.6	0.0310	
	30	14	0.60	6.047	2.510	25000	30000	<b>62200</b>	14.0	26.0	0.6	0.0400	
	35	11	0.60	8.072	3.430	22000	27000	<b>6300</b>	14.0	31.0	0.6	0.0540	
12	28	7	0.30	5.094	2.360	25000	30000	<b>16001</b>	14.0	26.0	0.3	0.0200	
	28	8	0.30	5.094	2.360	25000	30000	<b>6001</b>	14.0	26.0	0.3	0.0220	
	32	10	0.60	6.905	3.100	22000	27000	<b>6201</b>	16.0	28.0	0.6	0.0370	
	32	14	0.60	6.905	3.100	22000	27000	<b>62201</b>	16.0	28.0	0.6	0.0450	
	37	12	1.00	9.759	4.235	20000	24000	<b>6301</b>	17.0	32.0	1.0	0.0610	
15	32	8	0.30	5.594	2.860	21000	25000	<b>16002</b>	17.0	30.0	0.3	0.0270	
	32	9	0.30	5.594	2.865	21000	25000	<b>6002</b>	17.0	30.0	0.3	0.0300	
	35	11	0.60	7.718	3.745	20000	24000	<b>6202</b>	19.0	31.0	0.6	0.0460	
	35	14	0.60	7.718	3.745	20000	24000	<b>62202</b>	19.0	31.0	0.6	0.0540	
	42	13	1.00	11.310	5.330	18000	21000	<b>6302</b>	20.0	36.0	1.0	0.0850	
17	35	8.0	0.3	5.999	3.265	20000	24000	<b>16003</b>	19.0	33.0	0.3	0.0320	
	35	10.0	0.3	6.001	3.267	20000	24000	<b>6003</b>	19.0	33.0	0.3	0.0400	
	40	12.0	0.6	9.534	4.734	18000	21000	<b>6203</b>	21.0	36.0	0.6	0.0730	
	40	16.0	0.6	9.534	4.734	18000	21000	<b>62203</b>	21.0	36.0	0.6	0.0830	
	47	14.0	1.0	13.565	6.560	16000	19000	<b>6303</b>	23.0	41.0	1.0	0.1150	

# Single Row Deep Groove Ball Bearings

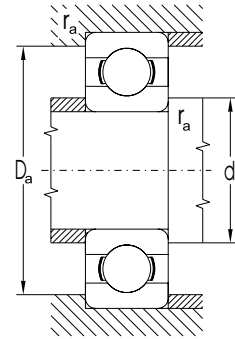
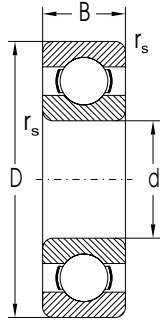
d = 20 to 50 mm



Dimensions				Basic Load Rating		Limiting Speed for Lubrication with		Bearing Designation	Abutment and Fillet Dimensions				Weight ~
d	D	B	r <sub>s</sub> min	Dynamic C <sub>r</sub>	Static C <sub>0r</sub>	Grease	Oil		d	d <sub>a</sub>	D <sub>a</sub>	r <sub>a</sub>	
mm				kN		min <sup>-1</sup>			mm				kg
20	42	8.0	0.3	9.371	4.972	17000	20000	<b>16004D</b>	20	22	40	0.3	0.0500
	42	12.0	0.6	9.371	4.972	17000	20000	<b>6004</b>		24	38	0.6	0.0700
	47	14.0	1.0	12.774	6.553	15000	18000	<b>6204</b>		25	42	1.0	0.1080
	47	18.0	1.0	12.774	6.553	15000	18000	<b>62204</b>		25	42	1.0	0.1300
	47	20.6	1.0	12.774	6.553	15000	18000	<b>63204</b>		25	42	1.0	0.1460
	52	15.0	1.1	15.866	7.811	14000	17000	<b>6304</b>		26	45	1.0	0.1450
	52	21.0	1.1	15.866	7.811	14000	17000	<b>62304</b>		26	45	1.0	0.2000
25	47	8.0	0.3	6.950	4.550	14000	17000	<b>16005</b>	25	27	43	0.3	0.0530
	47	8.0	0.3	10.070	5.806	14000	17000	<b>16005D</b>		27	43	0.3	0.0530
	47	12.0	0.6	10.070	5.806	14000	17000	<b>6005</b>		28	43	0.6	0.0820
	52	15.0	1.0	14.029	7.940	12000	15000	<b>6205</b>		30	47	1.0	0.1290
	52	18.0	1.0	14.029	7.940	12600	15000	<b>62205</b>		30	47	1.0	0.1500
	62	17.0	1.1	21.123	10.806	11000	13000	<b>6305</b>		31	55	1.0	0.2300
	62	24.0	1.1	21.123	10.806	11000	13000	<b>62305</b>		31	55	1.0	0.3200
	80	21.0	1.5	36.000	19.200	9400	11000	<b>6405</b>		34	70	1.5	0.5300
30	55	9.0	0.3	11.200	7.360	12000	14000	<b>16006</b>	30	32	53	0.3	0.0870
	55	13.0	1.0	13.243	8.250	12000	14000	<b>6006</b>		34	50	1.0	0.1190
	62	16.0	1.0	19.443	11.186	11000	13000	<b>6206</b>		35	57	1.0	0.2000
	62	20.0	1.0	19.443	11.186	11000	13000	<b>62206</b>		35	57	1.0	0.2400
	72	19.0	1.1	29.701	15.678	10000	12000	<b>6306</b>		36	65	1.0	0.3310
	90	23.0	1.5	43.000	23.700	8400	10000	<b>6406</b>		39	80	1.5	0.7250
	100	21.0	1.5	55.200	31.000	7500	8900	<b>6407</b>		39	80	1.5	0.9540
35	62	9.0	0.3	9.960	7.362	10600	12600	<b>16007</b>	35	37	60	0.3	0.1110
	62	14.0	1.0	15.956	10.328	10600	12600	<b>6007</b>		39.5	57	1.0	0.1540
	72	17.0	1.1	25.663	15.227	9400	11000	<b>6207</b>		42	65	1.0	0.2840
	80	21.0	1.5	33.367	19.230	8400	10000	<b>6307</b>		42	71	1.5	0.4470
	100	25.0	1.5	55.200	31.000	7500	8900	<b>6407</b>		44	90	1.5	0.9540
	110	27.0	2.0	63.100	36.200	6700	7900	<b>6408</b>		44	90	1.5	1.1230
40	68	9.0	0.3	12.667	9.617	9400	11000	<b>16008</b>	40	42	62	0.3	0.1250
	68	15.0	1.0	16.824	11.493	9400	11000	<b>6008</b>		44	63	1.0	0.1910
	80	18.0	1.1	32.633	19.887	8400	10000	<b>6208</b>		47	73	1.0	0.3490
	90	23.0	1.5	40.760	24.170	7900	9400	<b>6308</b>		47	81	1.5	0.6250
	110	27.0	2.0	63.100	36.200	6700	7900	<b>6408</b>		50	97	2.0	1.1230
45	75	10.0	0.6	15.659	12.172	8400	10000	<b>16009</b>	45	49	71	1.0	0.1700
	75	16.0	1.0	21.100	15.300	8400	10000	<b>6009</b>		49	70	1.0	0.2410
	85	19.0	1.1	32.678	20.325	7900	9400	<b>6209</b>		52	78	1.0	0.4040
	100	25.0	1.5	52.804	31.715	7100	8400	<b>6309</b>		52	91	1.5	0.8280
	120	29.0	2.0	76.500	44.700	6000	7100	<b>6409</b>		55	107	2.0	1.5400
	130	31.0	2.1	87.400	52.100	5600	6700	<b>6410</b>		55	107	2.0	1.5400
50	80	10.0	0.6	16.092	13.147	7900	9400	<b>16010</b>	50	54	76	0.6	0.1880
	80	16.0	1.0	21.720	16.650	7900	9400	<b>6010</b>		54	75	1.0	0.2600
	90	20.0	1.1	35.066	23.226	7100	8400	<b>6210</b>		57	83	1.0	0.4600
	110	27.0	2.0	61.754	37.754	6300	7500	<b>6310</b>		60	100	2.0	1.0600
	130	31.0	2.1	87.400	52.100	5600	6700	<b>6410</b>		63	116	2.0	1.8900
	140	33.0	2.2	99.000	56.000	5200	6300	<b>6411</b>		63	116	2.0	2.1500

# Single Row Deep Groove Ball Bearings

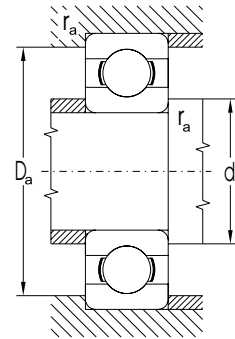
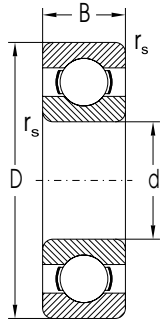
d = 55 to 90 mm



Dimensions				Basic Load Rating		Limiting Speed for Lubrication with		Bearing Designation	Abutment and Fillet Dimensions			Weight ~	
d	D	B	r <sub>s</sub> min	C <sub>r</sub>	C <sub>0r</sub>	Grease	Oil		d	d <sub>a</sub>	D <sub>a</sub>		r <sub>a</sub>
mm				kN		min <sup>-1</sup>			mm			kg	
55	90	18.0	1.1	28.216	21.318	7100	8400	<b>6011</b>	55	60	84	1.0	0.3830
	100	21.0	1.5	43.350	29.397	6700	7900	<b>6211</b>		62	91	1.5	0.5970
	120	29.0	2.0	71.000	44.700	5600	6700	<b>6311</b>		65	110	2.0	1.3800
	140	33.0	2.1	100.000	61.900	5300	6300	<b>6411</b>		68	126	2.0	2.2900
60	95	18.0	1.1	29.343	23.256	6700	7900	<b>6012</b>	60	65	88	1.0	0.4110
	110	22.0	1.5	52.846	35.786	6000	7100	<b>6212</b>		67	101	1.5	0.7710
	130	31.0	2.1	81.500	52.100	5300	6300	<b>6312</b>		72	118	2.0	1.7200
	150	35.0	2.1	110.000	69.400	4700	5600	<b>6412</b>		73	136	2.0	2.7600
65	100	11.0	0.6	21.200	19.600	6300	7500	<b>16013</b>	65	69	96	0.6	0.3000
	100	18.0	1.1	30.500	25.100	6300	7500	<b>6013</b>		70	93	1.0	0.4370
	120	23.0	1.5	57.210	40.011	5300	6300	<b>6213</b>		72	111	1.5	0.9970
	140	33.0	2.1	92.600	59.600	5000	6000	<b>6313</b>		76	128	2.0	2.1000
70	160	37.0	2.1	117.950	78.329	4500	5300	<b>6413</b>	70	78	146	2.0	3.2800
	110	13.0	0.6	27.600	25.100	5600	6700	<b>16014</b>		74	106	0.6	0.4330
	110	20.0	1.1	37.960	30.959	5600	6700	<b>6014</b>		75	103	1.0	0.6040
	125	24.0	1.5	62.000	43.800	5300	6300	<b>6214</b>		77	116	1.5	1.0700
75	150	35.0	2.1	104.000	63.100	4700	5600	<b>6314</b>	75	81	138	2.0	2.5400
	180	42.0	3.0	144.000	104.000	4000	4700	<b>6414</b>		85	164	2.5	4.8500
	115	13.0	0.6	28.700	26.600	5300	6300	<b>16015</b>		79	111	0.6	0.4570
	115	20.0	1.1	39.747	33.170	5300	6300	<b>6015</b>		80	108	1.0	0.6380
80	130	25.0	1.5	66.179	49.311	5000	6000	<b>6215</b>	80	82	122	1.5	1.1800
	160	37.0	2.1	114.000	76.400	4200	5000	<b>6315</b>		86	148	2.0	3.0600
	190	45.0	3.0	152.525	112.922	3800	4500	<b>6415</b>		90	174	2.5	5.7400
	125	14.0	0.6	32.900	31.600	5000	6000	<b>16016</b>		84	121	0.6	0.5970
85	125	22.0	1.1	47.500	39.800	5000	6000	<b>6016</b>	85	85	118	1.0	0.8450
	140	26.0	2.0	72.200	53.100	4700	5600	<b>6216</b>		90	130	2.0	1.4000
	170	37.0	2.1	122.850	86.226	4000	4700	<b>6316</b>		91	158	2.0	3.6300
	200	48.0	3.0	163.587	124.984	3500	4200	<b>6416</b>		95	184	2.5	6.7200
90	130	14.0	0.6	34.100	32.900	4700	5600	<b>16017</b>	90	89	126	0.6	0.6260
	130	22.0	1.1	49.794	42.609	4700	5600	<b>6017</b>		90	123	1.0	0.8920
	150	28.0	2.0	83.299	63.675	4200	5000	<b>6217</b>		95	140	2.0	1.8000
	180	41.0	3.0	132.507	96.069	3800	4500	<b>6317</b>		98	166	2.5	4.2000
90	210	52.0	4.0	174.000	136.000	3300	4000	<b>6417</b>	90	105	190	3.0	7.8800
	140	24.0	1.5	58.400	49.200	4500	5300	<b>6018</b>		96	132	1.5	1.1700
	160	30.0	2.0	96.200	70.800	4000	4700	<b>6218</b>		100	150	2.0	2.1600
	190	43.0	3.0	144.000	108.000	3500	4200	<b>6318</b>		103	176	2.5	4.9500
	225	54.0	4.0	192.000	158.000	3200	3800	<b>6418</b>		110	205	3.0	11.4000

# Single Row Deep Groove Ball Bearings

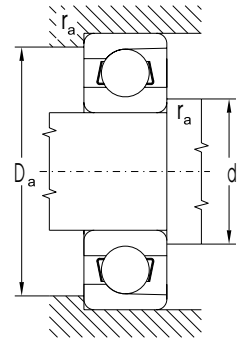
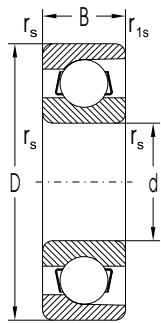
d = 95 to 170 mm



Dimensions				Basic Load Rating		Limiting Speed for Lubrication with		Bearing Designation	Abutment and Fillet Dimensions				Weight ~
d	D	B	r <sub>s</sub> min	Dynamic C <sub>r</sub>	Static C <sub>0r</sub>	Grease	Oil		d	d <sub>a</sub> min	D <sub>a</sub> max	r <sub>a</sub> max	
mm				kN		min <sup>-1</sup>			mm				kg
95	145	16.0	1.0	42.300	41.500	4200	5000	<b>16019</b>	95	100	140	1.0	0.8900
	145	24.0	1.5	60.700	54.100	4200	5000	<b>6019</b>		102	137	1.5	1.2200
	170	32.0	2.1	108.000	81.000	3800	4500	<b>6219</b>		107	158	2.0	2.6000
	200	45.0	3.0	152.444	117.366	3300	4000	<b>6319</b>		109	186	2.5	5.7200
100	150	16.0	1.0	44.000	43.800	4200	5000	<b>16020</b>	100	105	145	1.0	0.9100
	150	24.0	1.5	60.096	54.244	4200	5000	<b>6020</b>		106	142	1.5	1.2700
	180	34.0	2.1	123.000	92.600	3500	4200	<b>6220</b>		112	169	2.0	3.1300
	215	47.0	3.0	174.000	141.000	3200	3800	<b>6320</b>		113	201	2.5	7.0700
105	160	26.0	2.0	72.200	65.600	4000	4700	<b>6021</b>	105	113	151	2.0	1.5900
	190	36.0	2.1	132.927	104.833	3300	4000	<b>6221</b>		117	178	2.0	3.7400
	225	49.0	3.0	185.000	153.000	3000	3500	<b>6321</b>		119	211	2.5	8.0000
110	170	19.0	1.0	57.600	56.200	3800	4500	<b>16022</b>	110	115	165	1.0	1.4600
	170	28.0	2.0	82.500	72.200	3800	4500	<b>6022</b>		118	161	2.0	1.9500
	200	38.0	2.1	144.000	117.000	3200	3800	<b>6222</b>		122	188	2.0	4.3700
120	180	19.0	1.0	61.000	63.100	3300	4000	<b>16024</b>	120	125	175	1.0	1.8000
	180	28.0	2.0	85.000	79.400	3300	4000	<b>6024</b>		128	171	2.0	2.1000
	215	40.0	2.1	144.000	117.000	3000	3500	<b>6224</b>		132	203	2.0	5.1500
130	180	24.0	1.5	65.503	67.193	3200	3800	<b>61926</b>	130	137	172	1.0	1.8600
	200	33.0	2.0	106.986	99.667	3200	3800	<b>6026</b>		138	191	2.0	3.2600
	230	40.0	3.0	153.000	133.000	2800	3300	<b>6226</b>		144	216	2.5	6.2000
140	210	33.0	2.0	110.000	108.000	3000	3500	<b>6028</b>	140	148	200	2.0	3.3900
	250	42.0	3.0	166.000	150.000	2500	3000	<b>6228</b>		154	236	2.5	7.5600
150	225	35.0	2.1	126.000	126.000	2700	3200	<b>6030</b>	150	159	213	2.0	4.1600
	270	45.0	3.0	190.000	181.000	2200	2700	<b>6230</b>		164	256	2.5	9.8500
170	260	42.0	2.1	168.000	171.000	2200	2700	<b>6034</b>	170	179	248	2.0	6.9100

# Separable Single Row Ball Bearings

d = 10 to 20 mm



Dimensions					Basic Load Rating		Limiting Speed for Lubrication with		Bearing Designation	Abutment and Fillet Dimensions				Weight
d	D	B	r <sub>s</sub> min	r <sub>1s</sub> min	Dynamic C <sub>r</sub>	Static C <sub>or</sub>	Grease	Oil		d	d <sub>a</sub> min	D <sub>a</sub> max	r <sub>a</sub> max	
mm					kN		min <sup>-1</sup>			mm				kg
10	28	8.0	0.30	0.15	6.448	2.914	25000	31000	<b>E10Y</b>	10	12.0	25.5	0.3	0.0220
12	32	7.0	0.30	0.15	6.363	3.369	22000	28000	<b>E12TNG</b>	12	14.0	29.0	0.3	0.0290
15	35	8.0	0.30	0.15	8.395	4.584	20000	24000	<b>E15</b>	15	17.2	31.8	0.3	0.0340
	35	8.0	0.30	0.15	8.395	4.584	20000	24000	<b>E15Y</b>		17.2	31.8	0.3	0.0340
17	44	11.0	0.60	0.30	10.713	6.077	16000	19000	<b>E17</b>	17	22.0	39.0	0.6	0.0790
	44	11.0	0.60	0.30	14.723	8.066	14000	17000	<b>B017</b>		22.0	39.0	0.6	0.0750
20	47	12.0	1.00	0.60	15.876	9.149	14000	17000	<b>E20</b>	20	26.0	42.0	1.0	0.0890