

Deep Groove Ball Bearings

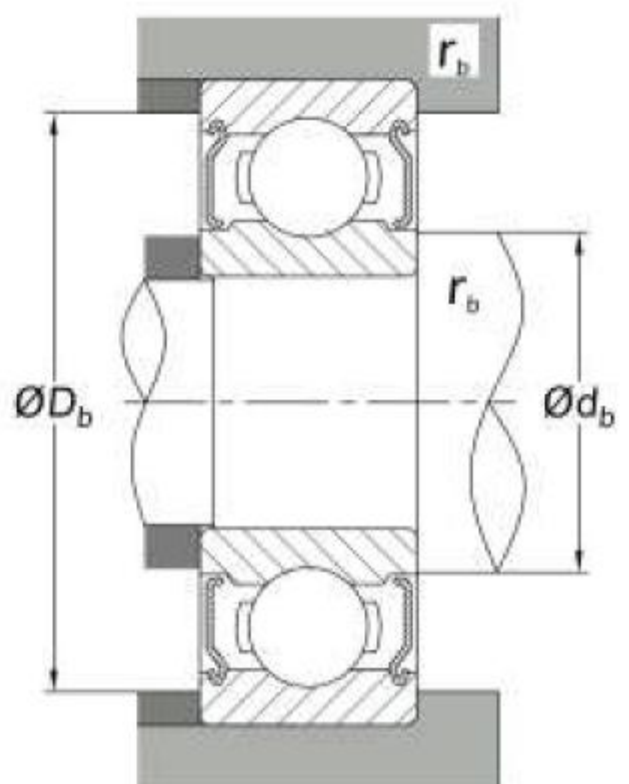
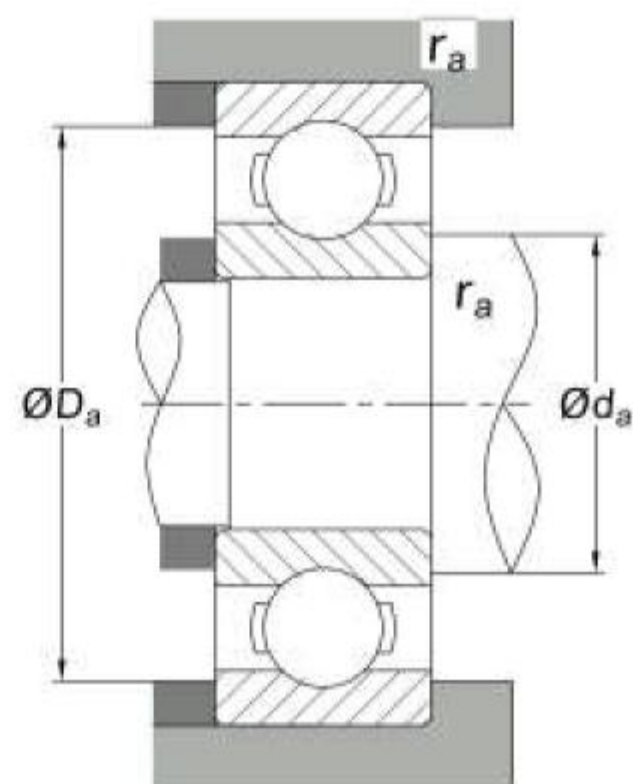
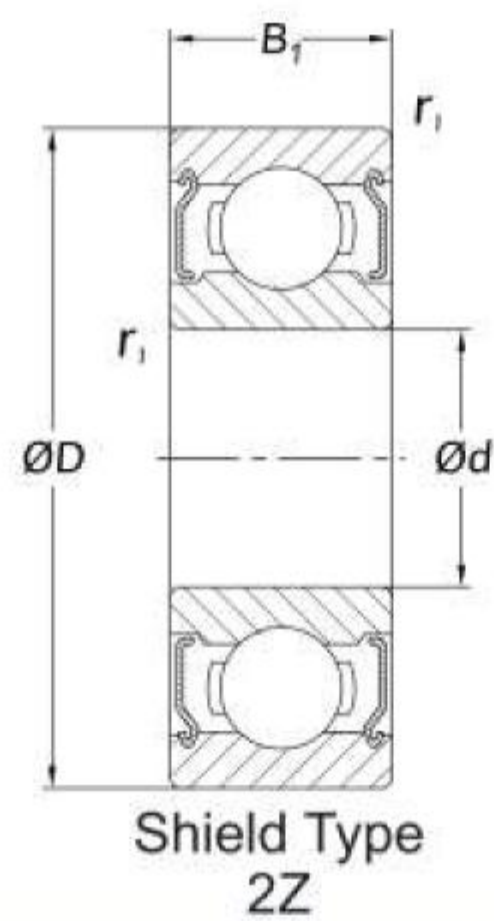
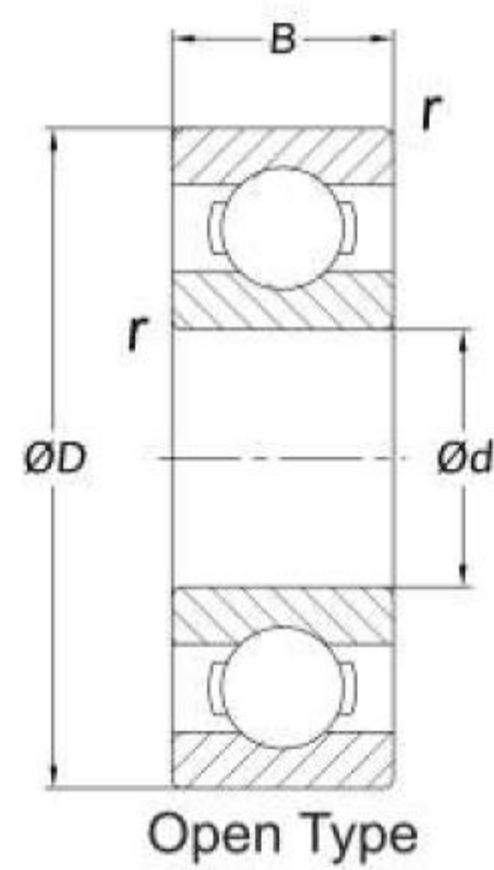


Deep groove ball bearings are the most widely used bearing type with a broad dimension range and extensive varieties.

Deep groove ball bearings mainly accommodate radial load, and limited axial load. With small friction torque. Applicable to applications with high rotation precision and high rotation speed.

Miniature Ball Bearings

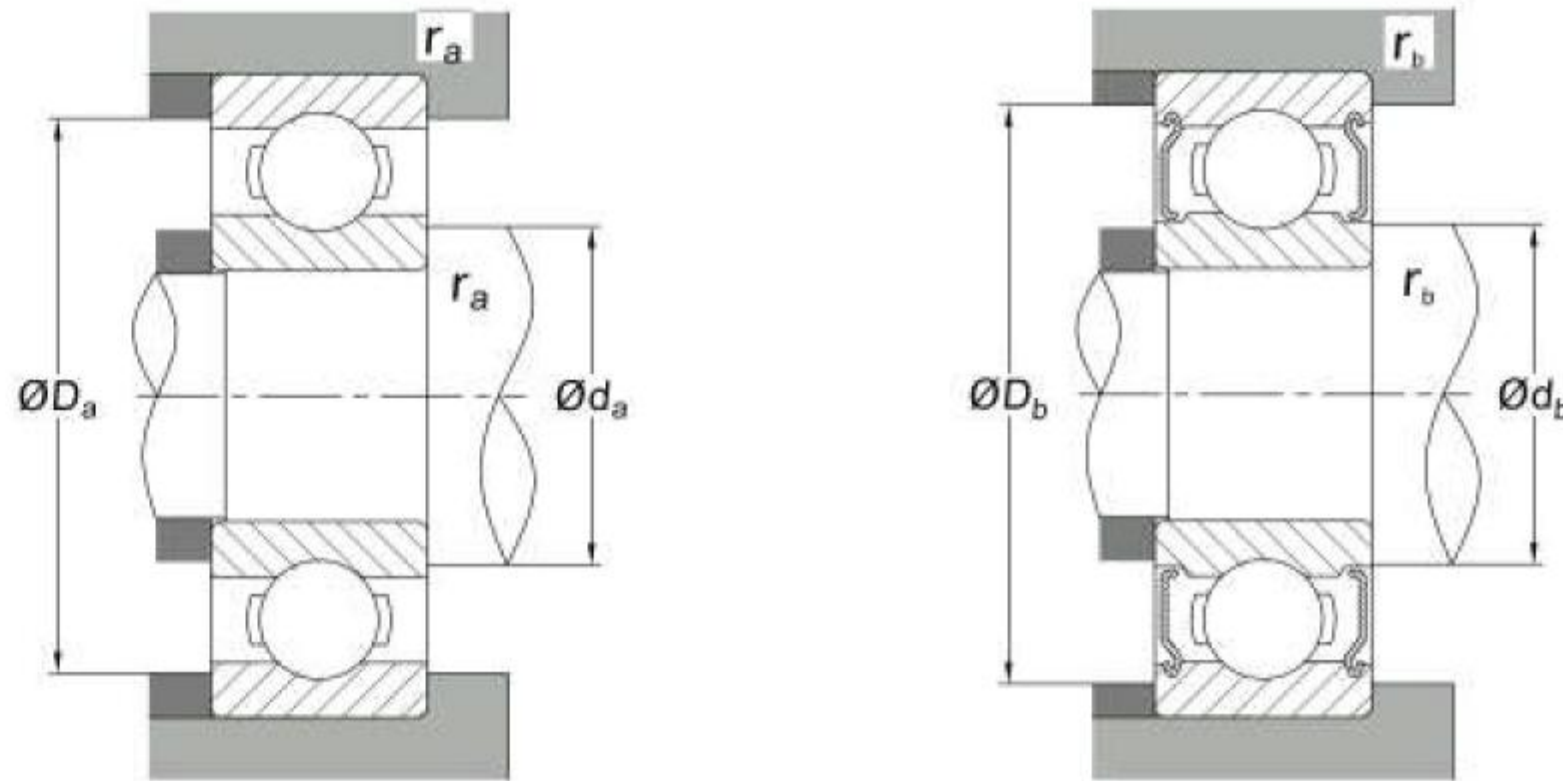
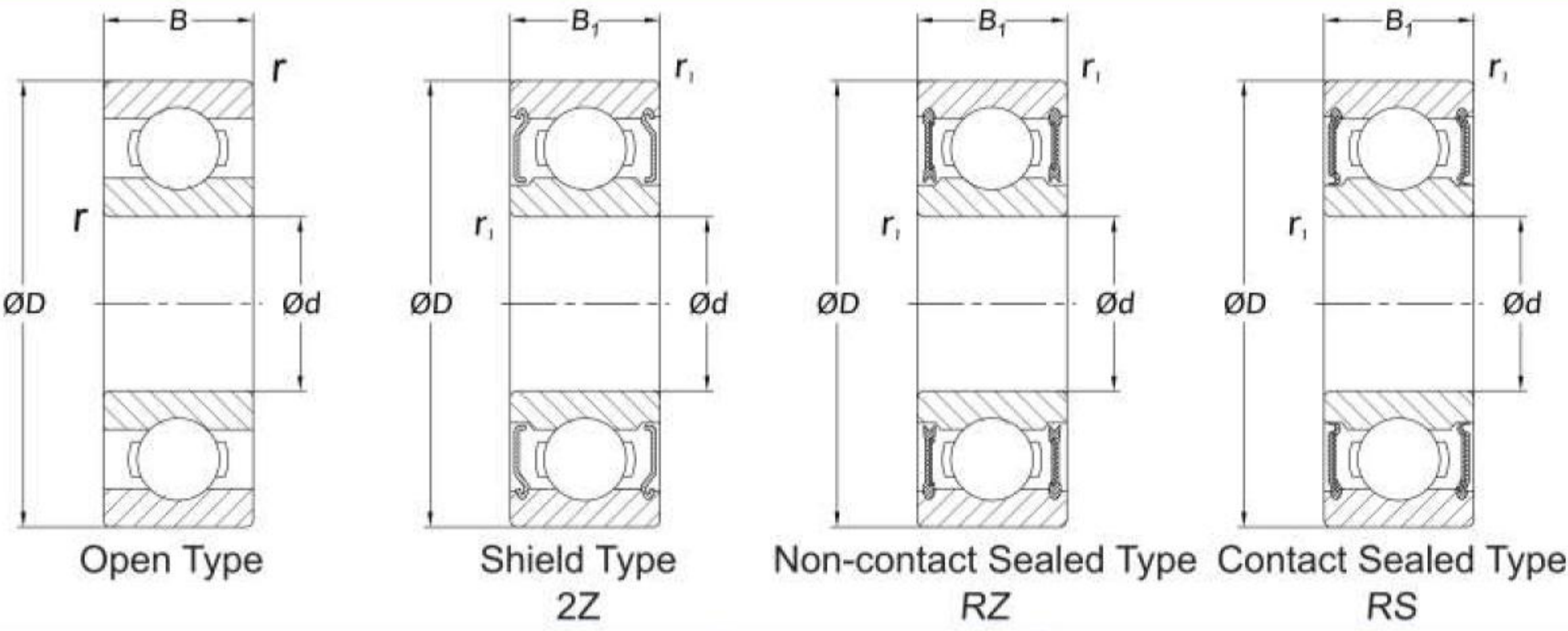
Metric Size
d: 1~4mm



Principal Dimensions (mm)						Basic Load Ratings (N)		Limiting Speed (rpm)			Bearing Designations				Abutment and Fillet Dimensions (mm)						Weight (g)	
d	D	B	B ₁	r (min)	r ₁ (min)	Dynamic C _r	Static C _{0r}	Grease	Oil		Open	Shield Type	Sealed Type		d _a (min)	d _b (max)	D _a (max)	D _b (min)	r _a (max)	r _b (max)	Open	Sealed Type
1	3	1.0	-	0.05	-	80	23	130,000	150,000		681	-	-	-	1.4	-	2.6	-	0.05	-	0.03	-
	3	1.5	-	0.05	-	80	23	130,000	150,000		MR31	-	-	-	1.4	-	2.6	-	0.05	-	0.04	-
	4	1.6	-	0.10	-	138	35	100,000	120,000		691	-	-	-	1.8	-	3.2	-	0.10	-	0.09	-
1.2	4	1.8	2.5	0.10	0.10	138	35	110,000	130,000		MR4/1.2	MR4/1.2-2Z	-	-	2.0	1.9	3.2	3.5	0.10	0.10	0.10	0.14
1.5	4	1.2	2.0	0.05	0.05	112	33	100,000	120,000		68/1.5	68/1.5-2Z	-	-	1.9	2.1	3.6	3.6	0.05	0.05	0.07	0.11
	5	2.0	2.6	0.15	0.15	237	69	85,000	100,000		69/1.5	69/1.5-2Z	-	-	2.7	2.5	3.8	4.3	0.15	0.15	0.17	0.20
	6	2.5	3.0	0.15	0.15	330	98	75,000	90,000		60/1.5	60/1.5-2Z	-	-	2.7	3.0	4.8	5.4	0.15	0.15	0.33	0.38
2	5	1.5	2.3	0.08	0.08	169	50	85,000	100,000		682	682-2Z	-	-	2.6	2.7	4.4	4.2	0.08	0.08	0.12	0.17
	5	2.0	2.5	0.10	0.10	187	58	85,000	100,000		MR52	MR52-2Z	-	-	2.8	2.7	4.2	4.4	0.10	0.10	0.16	0.23
	6	2.3	3.0	0.15	0.15	330	98	75,000	90,000		692	692-2Z	-	-	3.2	3.0	4.8	5.4	0.15	0.15	0.28	0.38
	6	2.5	2.5	0.15	0.15	330	98	75,000	90,000		MR62	MR62-2Z	-	-	3.2	3.0	4.8	5.2	0.15	0.15	0.30	0.29
	7	2.5	3.0	0.15	0.15	385	127	63,000	75,000		MR72	MR72-2Z	-	-	3.2	3.8	5.8	6.2	0.15	0.15	0.45	0.49
	7	2.8	3.5	0.15	0.15	385	127	63,000	75,000		602	602-2Z	-	-	3.2	3.8	5.8	6.2	0.15	0.15	0.51	0.58
2.5	6	1.8	2.6	0.08	0.08	208	74	71,000	80,000		68/2.5	68/2.5-2Z	-	-	3.1	3.7	5.4	5.4	0.08	0.08	0.23	0.29
	7	2.5	3.5	0.15	0.15	385	127	63,000	75,000		69/2.5	69/2.5-2Z	-	-	3.7	3.8	5.8	6.2	0.15	0.15	0.41	0.55
	8	2.5	-	0.20	-	560	179	60,000	67,000		MR8/2.5	-	-	-	4.1	-	6.4	-	0.20	-	0.56	-
	8	2.8	4.0	0.15	0.15	550	175	60,000	71,000		60/2.5	60/2.5-2Z	-	-	3.7	4.1	6.8	7.0	0.15	0.15	0.63	0.83
3	6	2.0	2.5	0.10	0.10	208	74	71,000	80,000		MR63	MR63-2Z	-	-	3.8	3.7	5.2	5.4	0.10	0.10	0.20	0.27
	7	2.0	3.0	0.10	0.10	390	130	63,000	75,000		683	683-2Z	-	-	3.8	4.0	6.2	6.4	0.10	0.10	0.32	0.45
	8	2.5	-	0.15	-	560	179	60,000	67,000		MR83	-	-	-	4.2	-	6.8	-	0.15	-	0.54	-
	8	3.0	4.0	0.15	0.15	560	179	60,000	67,000		693	693-2Z	-	-	4.2	4.3	6.8	7.3	0.15	0.15	0.61	0.83
	9	2.5	4.0	0.20	0.15	570	187	56,000	67,000		MR93	MR93-2Z	-	-	4.6	4.3	7.4	7.9	0.20	0.15	0.73	1.18
	9	3.0	5.0	0.15	0.15	570	187	56,000	67,000		603	603-2Z	-	-	4.2	4.3	7.8	7.9	0.15	0.15	0.87	1.45
	10	4.0	4.0	0.15	0.15	630	218	50,000	60,000		623	623-2Z	-	-	4.2	4.3	8.8	8.0	0.15	0.15	1.65	1.66
	13	5.0	5.0	0.20	0.20	1300	485	40,000	48,000		633	633-2Z	-	-	4.6	6.0	11.4	11.3	0.20	0.20	3.38	3.33
4	7	2.0	-	0.10	-	310	115	60,000	67,000		MR74	-	-	-	4.8	-	6.2	-	0.10	-	0.22	-
	7	-	2.5	-	0.10	255	107	60,000	71,000		-	MR74-2Z	-	-	-	4.8	-	6.3	-	0.10	-	0.29
	8	2.0	3.0	0.15	0.10	395	139	56,000	67,000		MR84	MR84-2Z	-	-	5.2	5.0	6.8	7.4	0.15	0.10	0.36	0.56
	9	2.5	4.0	0.15	0.15	640	225	53,000	63,000		684	684-2Z	-	-	4.8	5.2	8.2	8.1	0.10	0.10	0.63	1.01
	10	3.0	4.0	0.20	0.15	710	270	50,000	60,000		MR104	MR104-2Z	-	-	5.6	5.9	8.4	8.8	0.20	0.15	1.04	1.42
	11	4.0	4.0	0.15	0.15	960	345	48,000	56,000		694	694-2Z	-	-	5.2	5.6	9.8	9.9	0.15	0.15	1.70	1.75
	12	4.0	4.0	0.20	0.20	960	345	48,000	56,000		604	604-2Z	-	-	5.6	5.6	10.4	9.9	0.20	0.20	2.25	2.29
	13	5.0	5.0	0.20	0.20	1300	485	40,000	48,000		624	624-2Z	-	-	5.6	6.0	11.4	11.3	0.20	0.20	3.03	3.04
	16	5.0	5.0	0.30	0.30	1730	670	36,000	43,000		634	634-2Z	-	-	6.0	7.5	14.0	13.8	0.30	0.30	5.24	5.21

Miniature Ball Bearings

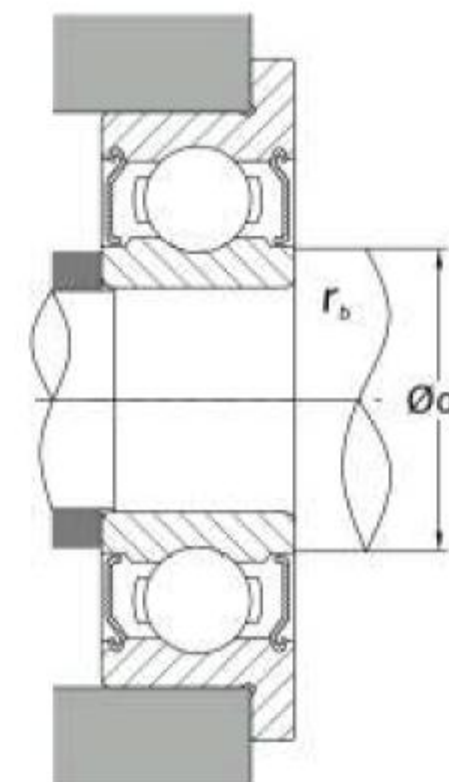
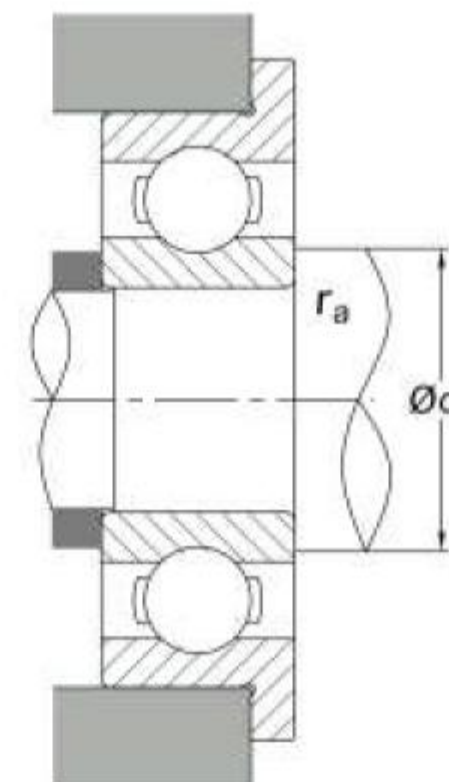
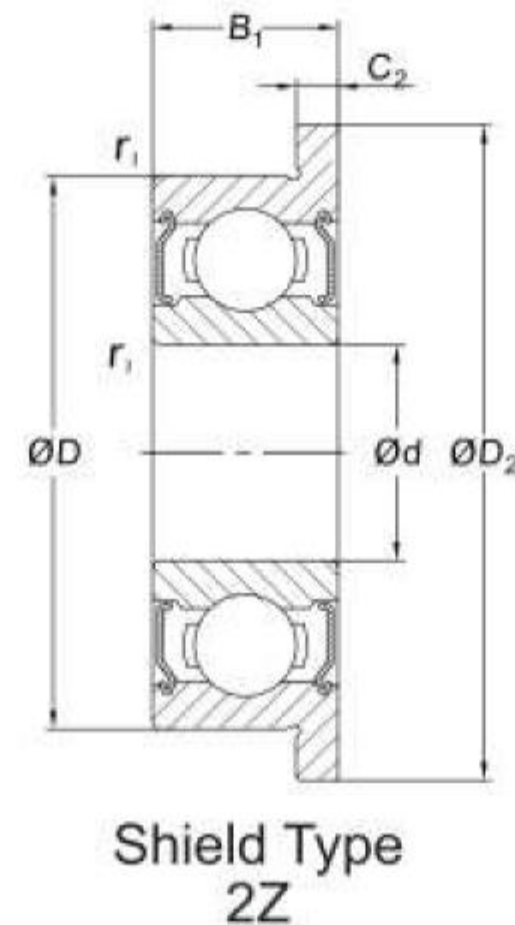
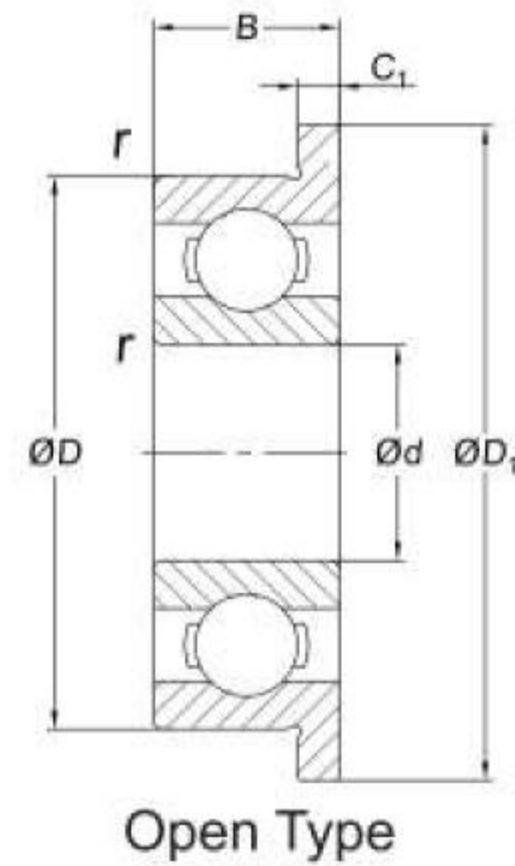
Metric Size
d: 5~9mm



Principal Dimensions (mm)						Basic Load Ratings (N)		Limiting Speed (rpm)				Bearing Designations				Abutment and Fillet Dimensions (mm)						Weight (g)	
								Grease		Oil													
d	D	B	B ₁	r (min)	r ₁ (min)	Dynamic C _r	Static C _{0r}	Z, 2Z, RZ, 2RZ	RS, 2RS	Open, Z		Open	Shield Type	Sealed Type		d _a (min)	d _b (max)	D _a (max)	D _b (min)	r _a (max)	r _b (max)	Open	Sealed Type
5	8	2.0	-	0.10	-	310	120	53,000	-	63,000		MR85	-	-	-	5.8	-	7.2	-	0.10	-	0.26	-
	8	-	2.5	-	0.10	278	131	53,000	-	63,000		-	MR85-2Z	-	-	-	5.8	-	7.4	-	0.10	-	0.34
	9	2.5	3.0	0.15	0.15	430	168	50,000	-	60,000		MR95	MR95-2Z	-	-	6.2	6.0	7.8	8.2	0.15	0.15	0.50	0.58
	10	3.0	4.0	0.15	0.15	430	168	50,000	-	60,000		MR105	MR105-2Z	-	-	6.2	6.0	8.8	8.4	0.15	0.15	0.95	1.29
	11	-	4.0	-	0.15	715	276	48,000	-	56,000		-	MR115-2Z	2RZ	-	-	6.3	-	9.8	-	0.15	-	1.49
	11	3.0	5.0	0.15	0.15	715	281	45,000	-	53,000		685	685-2Z	-	-	6.2	6.2	9.8	9.9	0.15	0.15	1.20	1.96
	13	4.0	4.0	0.20	0.20	1080	430	43,000	40,000	50,000		695	695-2Z	2RZ	2RS	6.6	6.6	11.4	11.2	0.20	0.20	2.45	2.50
	14	5.0	5.0	0.20	0.20	1330	505	40,000	38,000	50,000		605	605-2Z	-	2RS	6.6	6.9	12.4	12.2	0.20	0.20	3.54	3.48
	16	5.0	5.0	0.30	0.30	1730	670	36,000	32,000	43,000		625	625-2Z	2RZ	2RS	7.0	7.5	14.0	13.8	0.30	0.30	4.95	4.86
19	6.0	6.0	0.30	0.30	2340	885	32,000	30,000	40,000		635	635-2Z	2RZ	2RS	7.0	8.5	17.0	16.5	0.30	0.30	8.56	8.34	
6	10	2.5	3.0	0.15	0.10	495	218	45,000	-	53,000		MR106	MR106-2Z	-	-	7.2	7.0	8.8	9.3	0.15	0.10	0.56	0.68
	12	3.0	4.0	0.20	0.15	715	292	43,000	40,000	50,000		MR126	MR 126-2Z	-	2RS	7.6	7.2	10.4	10.9	0.20	0.15	1.27	1.74
	13	3.5	5.0	0.15	0.15	1080	440	40,000	38,000	50,000		686	686-2Z	2RZ	2RS	7.2	7.4	11.8	11.7	0.15	0.15	1.91	2.69
	15	5.0	5.0	0.20	0.20	1730	670	40,000	36,000	45,000		696	696-2Z	2RZ	2RS	7.6	7.9	13.4	13.3	0.20	0.20	3.88	3.72
	17	6.0	6.0	0.30	0.30	2260	835	38,000	34,000	45,000		606	606-2Z	2RZ	2RS	8.0	8.2	15.0	14.8	0.30	0.30	5.97	6.08
	19	6.0	6.0	0.30	0.30	2340	885	32,000	30,000	40,000		626	626-2Z	2RZ	2RS	8.0	8.5	17.0	16.5	0.30	0.30	8.15	7.94
	22	7.0	7.0	0.30	0.30	3300	1370	30,000	28,000	36,000		636	636-2Z	2RZ	2RS	8.0	10.5	20.0	19.0	0.30	0.30	14.00	14.00
7	11	2.5	3.0	0.15	0.10	455	201	43,000	-	50,000		MR117	MR117-2Z	-	-	8.2	8.0	9.8	10.5	0.15	0.10	0.62	0.72
	13	3.0	4.0	0.20	0.15	540	276	40,000	-	48,000		MR137	MR137-2Z	-	-	8.6	9.0	11.4	11.6	0.20	0.15	1.58	2.02
	14	3.5	5.0	0.15	0.15	1170	510	40,000	34,000	45,000		687	687-2Z	2RZ	2RS	8.2	8.5	12.8	12.7	0.15	0.15	2.13	2.97
	17	5.0	5.0	0.30	0.30	1610	710	36,000	28,000	43,000		697	697-2Z	2RZ	2RS	9.0	10.2	15.0	14.8	0.30	0.30	5.26	5.12
	19	6.0	6.0	0.30	0.30	2340	885	36,000	32,000	43,000		607	607-2Z	2RZ	2RS	9.0	9.1	17.0	16.5	0.30	0.30	7.67	7.51
	22	7.0	7.0	0.30	0.30	3300	1370	30,000	28,000	36,000		627	627-2Z	2RZ	2RS	9.0	10.5	20.0	19.0	0.30	0.30	12.70	12.90
	26	9.0	9.0	0.30	0.30	4550	1970	28,000	22,000	34,000		637	637-2Z	2RZ	2RS	9.0	12.8	24.0	22.8	0.30	0.30	24.00	25.00
8	12	2.5	3.5	0.15	0.10	545	274	40,000	-	48,000		MR128	MR128-2Z	-	-	9.2	9.0	10.8	11.3	0.15	0.10	0.71	0.97
	14	3.5	4.0	0.20	0.15	820	385	38,000	32,000	45,000		MR148	MR148-2Z	2RZ	2RS	9.6	9.2	12.4	12.8	0.20	0.15	1.86	2.16
	16	4.0	5.0	0.20	0.20	1610	710	36,000	28,000	43,000		688	688-2Z	2RZ	2RS	9.6	10.2	14.4	14.2	0.20	0.20	3.12	4.02
	19	6.0	6.0	0.30	0.30	2240	910	36,000	28,000	43,000		698	698-2Z	2RZ	2RS	10.0	10.0	17.0	16.5	0.30	0.30	7.23	7.18
	22	7.0	7.0	0.30	0.30	3300	1370	34,000	28,000	40,000		608	608-2Z	2RZ	2RS	10.0	10.5	20.0	19.0	0.30	0.30	12.10	12.20
	24	8.0	8.0	0.30	0.30	3350	1430	28,000	24,000	34,000		628	628-2Z	2RZ	2RS	10.0	12.0	22.0	20.5	0.30	0.30	17.20	17.40
	28	9.0	9.0	0.30	0.30	4550	1970	28,000	22,000	34,000		638	638-2Z	2RZ	2RS	10.0	12.8	26.0	22.8	0.30	0.30	28.30	28.60
9	17	4.0	5.0	0.20	0.20	1330	665	36,000	24,000	43,000		689	689-2Z	2RZ	2RS	10.6	11.5	15.4	15.2	0.20	0.20	3.53	4.43
	20	6.0	6.0	0.30	0.30	1720	840	34,000	24,000	40,000		699	699-2Z	2RZ	2RS	11.0	12.0	18.0	17.2	0.30	0.30	8.45	8.33
	24	7.0	7.0	0.30	0.30	3350	1430	32,000	24,000	38,000		609	609-2Z	2RZ	2RS	11.0	12.0	22.8	20.5	0.30	0.30	14.50	14.70
	26	8.0	8.0	0.60	0.60	4550	1970	28,000	22,000	34,000		629	629-2Z	2RZ	2RS	11.0	12.8	24.0	22.8	0.30	0.30	19.50	19.30
	30	10.0	10.0	0.60	0.60	5100	2390	24,000	-	30,000		639	639-2Z	2RZ	-	13.0	16.1	26.0	25.6	0.60	0.60	36.50	36.00

Miniature Ball Bearings

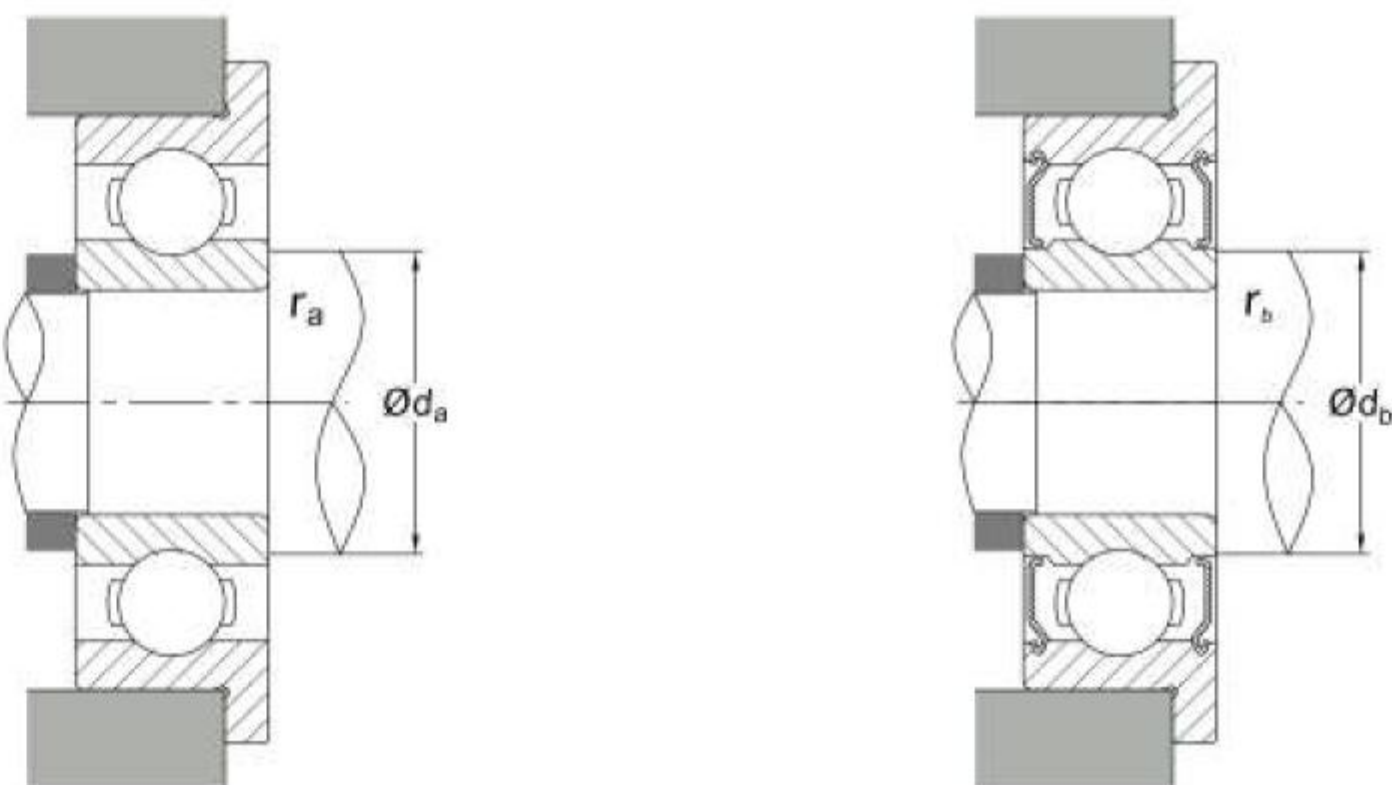
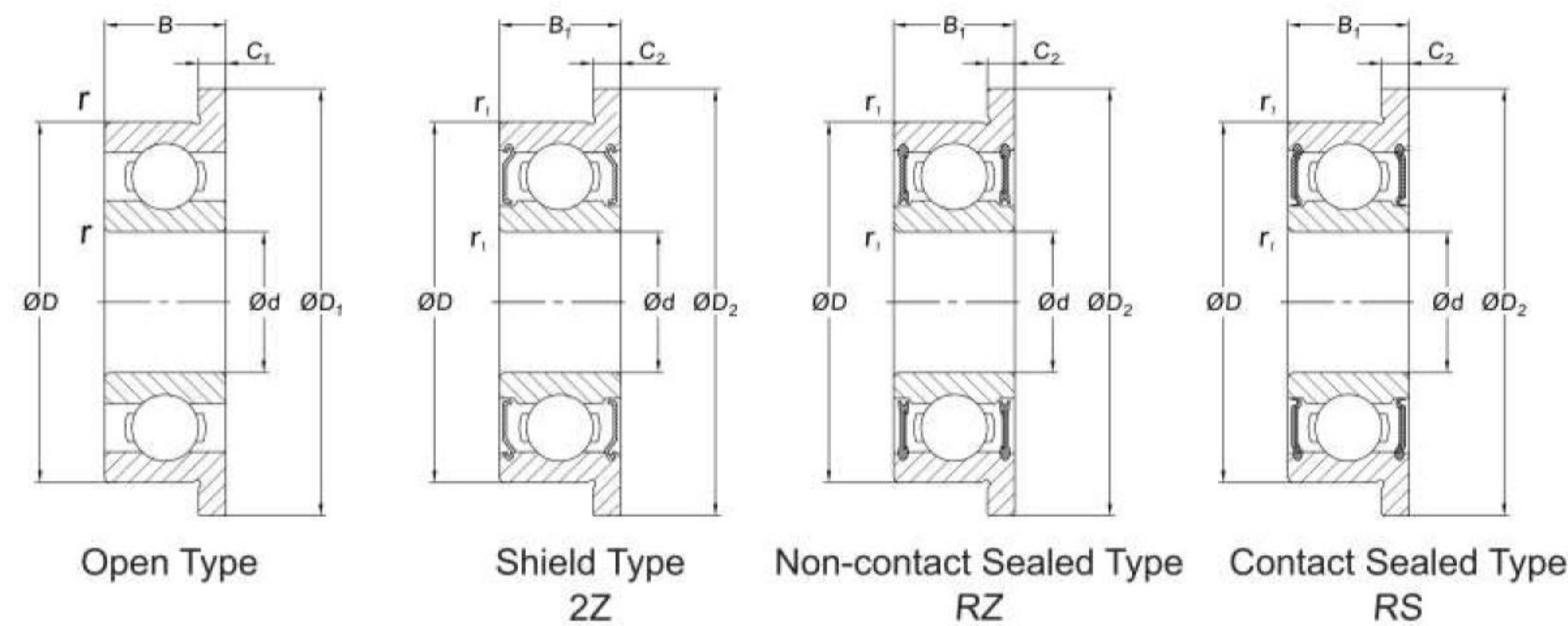
Metric Size With Flanged Outer Ring
d: 1~4mm



Principal Dimensions (mm)										Basic Load Ratings (N)		Limiting Speed (rpm)				Bearing Designations				Abutment and Fillet Dimensions (mm)				Weight (g)	
d	D	D ₁	D ₂	B	B ₁	C ₁	C ₂	r (min)	r ₁ (min)	Dynamic C _r	Static C _{or}	Grease	Oil			Open	Shield Type	Sealed Type	d _a (min)	d _b (max)	r _a (max)	r _b (max)	Open	Sealed Type	
1	3	3.8	-	1.0	-	0.3	-	0.05	-	80	23	130,000	150,000		F681	-	-	-	1.4	-	0.05	-	0.04	-	
	4	5.0	-	1.6	-	0.5	-	0.10	-	140	36	100,000	120,000		F691	-	-	-	1.8	-	0.10	-	0.14	-	
1.2	4	4.8	-	1.8	-	0.4	-	0.10	-	138	35	110,000	130,000		MF4/1.2	-	-	-	2.0	-	0.10	-	0.12	-	
1.5	4	5.0	5.0	1.2	2.0	0.4	0.6	0.05	0.05	112	33	100,000	120,000		F68/1.5	F68/1.5-2Z	-	-	1.9	2.1	0.05	0.05	0.09	0.14	
	5	6.5	6.5	2.0	2.6	0.6	0.8	0.15	0.15	237	69	85,000	100,000		F69/1.5	F69/1.5-2Z	-	-	2.7	2.5	0.15	0.15	0.23	0.28	
	6	7.5	7.5	2.5	3.0	0.6	0.8	0.15	0.15	330	98	75,000	90,000		F60/1.5	F60/1.5-2Z	-	-	2.7	3.0	0.15	0.15	0.42	0.52	
2	5	6.1	6.1	1.5	2.3	0.5	0.6	0.08	0.08	169	50	85,000	100,000		F682	F682-2Z	-	-	2.6	2.7	0.08	0.08	0.16	0.22	
	5	6.2	6.2	2.0	2.5	0.6	0.6	0.10	0.10	187	58	85,000	100,000		MF52	MF52-2Z	-	-	2.8	2.7	0.10	0.10	0.21	0.27	
	6	7.5	7.5	2.3	3.0	0.6	0.8	0.15	0.15	330	98	75,000	90,000		F692	F692-2Z	-	-	3.2	3.0	0.15	0.15	0.35	0.48	
	6	7.2	-	2.5	-	0.6	-	0.15	-	330	98	75,000	90,000		MF62	-	-	-	3.2	-	0.15	-	0.36	-	
	7	8.2	8.2	2.5	3.0	0.6	0.6	0.15	0.15	385	127	63,000	75,000		MF72	MF72-2Z	-	-	3.2	3.8	0.15	0.15	0.52	0.56	
	7	8.5	8.5	2.8	3.5	0.7	0.9	0.15	0.15	385	127	63,000	75,000		F602	F602-2Z	-	-	3.2	3.1	0.15	0.15	0.60	0.71	
2.5	6	7.1	7.1	1.8	2.6	0.5	0.8	0.08	0.08	208	74	71,000	80,000		F68/2.5	F68/2.5-2Z	-	-	3.1	3.7	0.08	0.08	0.25	0.36	
	7	8.5	8.5	2.5	3.5	0.7	0.9	0.15	0.15	385	127	63,000	75,000		F69/2.5	F69/2.5-2Z	-	-	3.7	3.8	0.15	0.15	0.51	0.68	
	8	9.2	-	2.5	-	0.6	-	0.20	-	560	179	60,000	67,000		MF8/2.5	-	-	-	4.1	-	0.20	-	0.62	-	
	8	9.5	9.5	2.8	4.0	0.7	0.9	0.15	0.15	550	175	60,000	71,000		F60/2.5	F60/2.5-2Z	-	-	3.7	3.5	0.15	0.15	0.74	0.98	
3	6	7.2	7.2	2.0	2.5	0.6	0.6	0.10	0.10	208	74	71,000	80,000		MF63	MF63-2Z	-	-	3.8	3.7	0.10	0.10	0.27	0.33	
	7	8.1	8.1	2.0	3.0	0.5	0.8	0.10	0.10	390	130	63,000	75,000		F683	F683-2Z	-	-	3.8	4.0	0.10	0.10	0.37	0.53	
	8	9.2	-	2.5	-	0.6	-	0.15	-	560	179	60,000	67,000		MF83	-	-	-	4.2	-	0.15	-	0.56	-	
	8	9.5	9.5	3.0	4.0	0.7	0.9	0.15	0.15	560	179	60,000	67,000		F693	F693-2Z	-	-	4.2	4.3	0.15	0.15	0.70	0.97	
	9	10.2	10.6	2.5	4.0	0.6	0.8	0.20	0.15	570	187	56,000	67,000		MF93	MF93-2Z	-	-	4.6	4.3	0.20	0.15	0.81	1.34	
	9	10.5	10.5	3.0	5.0	0.7	1.0	0.15	0.15	570	187	56,000	67,000		F603	F603-2Z	-	-	4.2	4.3	0.15	0.15	1.00	1.63	
	10	11.5	11.5	4.0	4.0	1.0	1.0	0.15	0.15	630	218	50,000	60,000		F623	F623-2Z	-	-	4.2	4.3	0.15	0.15	1.85	1.86	
	13	15.0	15.0	5.0	5.0	1.0	1.0	0.20	0.20	1300	485	36,000	43,000		F633	F633-2Z	-	-	4.6	6.0	0.20	0.20	3.73	3.59	
4	7	8.2	-	2.0	-	0.6	-	0.10	-	310	115	60,000	67,000		MF74	-	-	-	4.8	-	0.10	-	0.29	-	
	7	-	8.2	-	2.5	-	0.6	-	0.10	255	107	60,000	71,000		-	MF74-2Z	-	-	-	4.8	-	0.10	-	0.35	-
	8	9.2	9.2	2.0	3.0	0.6	0.6	0.15	0.10	395	139	56,000	67,000		MF84	MF84-2Z	-	-	5.2	5.0	0.15	0.10	0.44	0.63	
	9	10.3	10.3	2.5	4.0	0.6	1.0	0.15	0.15	640	225	53,000	63,000		F684	F684-2Z	-	-	4.8	5.2	0.10	0.10	0.70	1.14	
	10	11.2	11.6	3.0	4.0	0.6	0.8	0.20	0.15	710	270	50,000	60,000		MF104	MF1042Z	-	-	5.6	5.9	0.20	0.15	1.13	1.59	
	11	12.5	12.5	4.0	4.0	1.0	1.0	0.15	0.15	960	345	48,000	56,000		F694	F694-2Z	-	-	5.2	5.6	0.15	0.15	1.91	1.96	
	12	13.5	13.5	4.0	4.0	1.0	1.0	0.20	0.20	960	345	48,000	56,000		F604	F604-2Z	-	-	5.6	5.6	0.20	0.20	2.53	2.53	
	13	15.0	15.0	5.0	5.0	1.0	1.0	0.20	0.20	1300	485	40,000	48,000		F624	F624-2Z	-	-	5.6	6.0	0.20	0.20	3.38	3.53	
	16	18.0	18.0	5.0	5.0	1.0	1.0	0.30	0.30	1730	670	36,000	43,000		F634	F634-2Z	-	-	6.0	7.5	0.30	0.30	5.73	5.62	

Miniature Ball Bearings

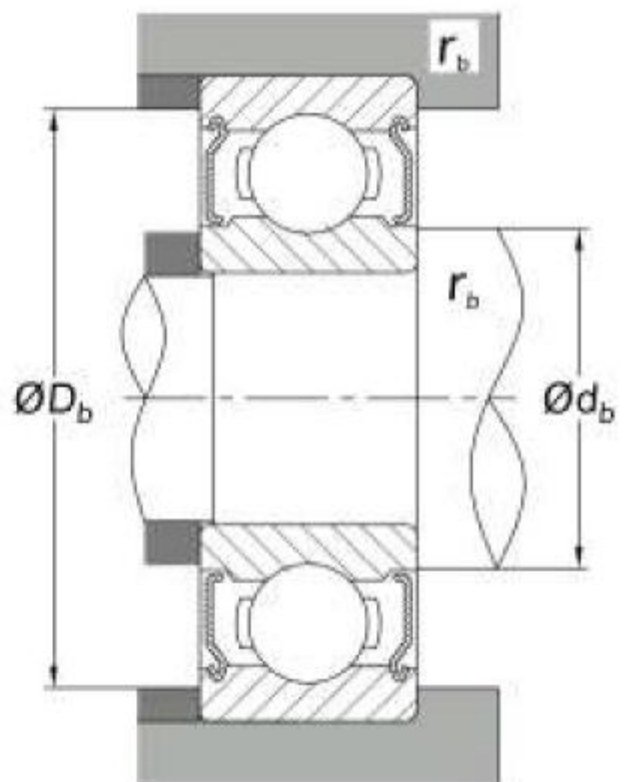
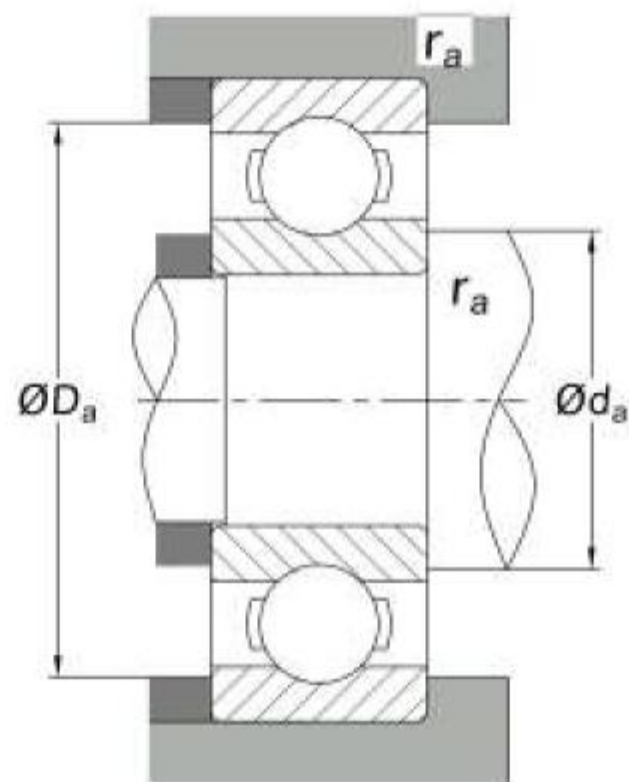
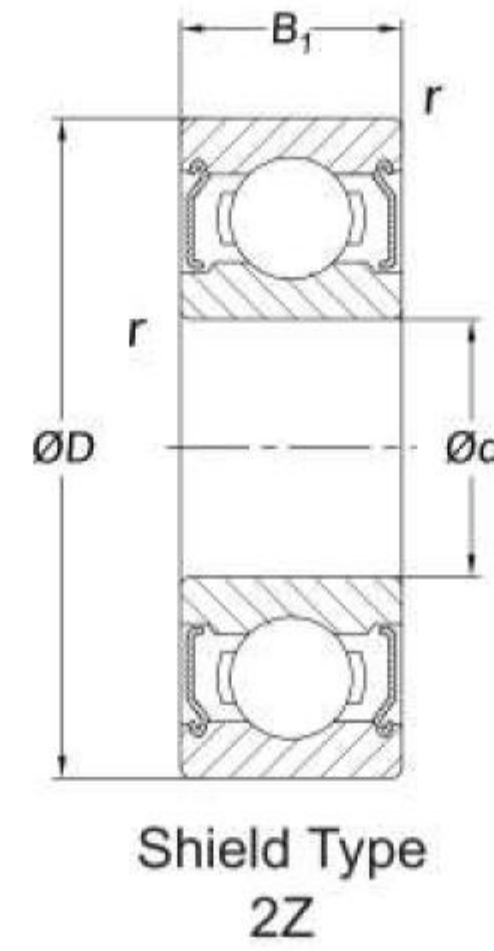
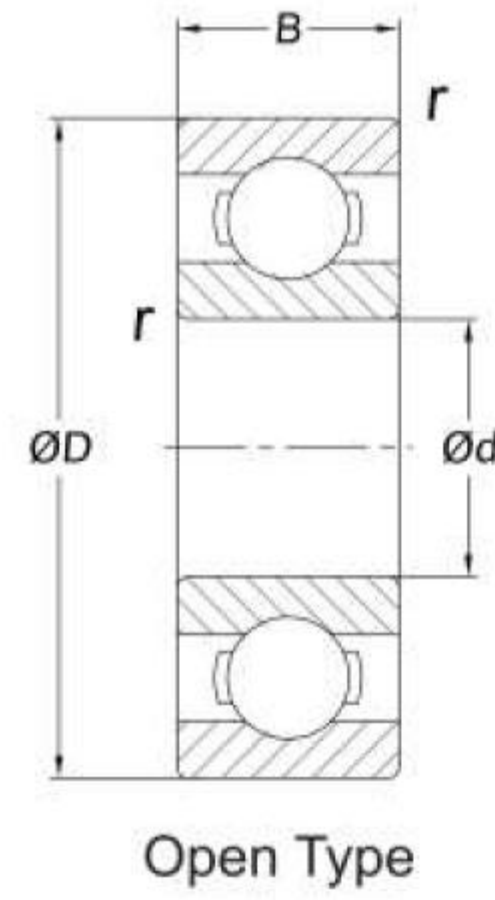
Metric Size With Flanged Outer Ring
d: 5~9mm



Principal Dimensions (mm)										Basic Load Ratings (N)		Limiting Speed (rpm)				Bearing Designations				Abutment and Fillet Dimensions (mm)				Weight (g)	
												Grease		Oil											
d	D	D ₁	D ₂	B	B ₁	C ₁	C ₂	r (min)	r ₁ (min)	Dynamic C _r	Static C _{or}	Z, 2Z, RZ, 2RZ	RS, 2RS	Open, Z		Open	Shield Type	Sealed Type		d _a (min)	d _b (max)	r _a (max)	r _b (max)	Open	Sealed Type
5	8	9.2	-	2.0	-	0.6	-	0.10	-	310	120	53,000	-	63,000		MF85	-	-	-	5.8	-	0.10	-	0.33	-
	8	-	9.2	-	2.5	-	0.6	-	0.10	278	131	53,000	-	63,000		-	MF85-2Z	-	-	-	5.8	-	0.10	-	0.41
	9	10.2	10.2	2.5	3.0	0.6	0.6	0.15	0.15	430	168	50,000	-	60,000		MF95	MF95-2Z	-	-	6.2	6.0	0.15	0.15	0.59	0.66
	10	11.2	11.6	3.0	4.0	0.6	0.8	0.15	0.15	430	168	50,000	-	60,000		MF105	MF105-2Z	-	-	6.2	6.0	0.15	0.15	1.05	1.46
	11	12.5	12.5	3.0	5.0	0.8	1.0	0.15	0.15	715	281	45,000	-	53,000		F685	F685-2Z	-	-	6.2	6.2	0.15	0.15	1.37	2.18
	13	15.0	15.0	4.0	4.0	1.0	1.0	0.20	0.20	1080	430	43,000	40,000	50,000		F695	F695-2Z	2RZ	2RS	6.6	6.6	0.20	0.20	2.79	2.84
	14	16.0	16.0	5.0	5.0	1.0	1.0	0.20	0.20	1330	505	40,000	38,000	50,000		F605	F605-2Z	-	2RS	6.6	6.9	0.20	0.20	3.90	3.85
	16	18.0	18.0	5.0	5.0	1.0	1.0	0.30	0.30	1730	670	36,000	32,000	43,000		F625	F625-2Z	2RZ	2RS	7.0	7.5	0.30	0.30	5.37	5.27
	19	22.0	22.0	6.0	6.0	1.5	1.5	0.30	0.30	2340	885	32,000	30,000	40,000		F635	F635-2Z	2RZ	2RS	7.0	8.5	0.30	0.30	9.49	9.49
6	10	11.2	11.2	2.5	3.0	0.6	0.6	0.15	0.10	495	218	45,000	-	53,000		MF106	MF106-2Z	-	-	7.2	7.0	0.15	0.10	0.65	0.77
	12	13.2	13.6	3.0	4.0	0.6	0.8	0.20	0.15	715	292	43,000	40,000	50,000		MF126	MF126-2Z	-	2RS	7.6	7.2	0.20	0.15	1.38	1.94
	13	15.0	15.0	3.5	5.0	1.0	1.1	0.15	0.15	1080	440	40,000	38,000	50,000		F686	F686-2Z	2RZ	2RS	7.2	7.4	0.15	0.15	2.25	3.04
	15	17.0	17.0	5.0	5.0	1.2	1.2	0.20	0.20	1730	670	40,000	36,000	45,000		F696	F696-2Z	2RZ	2RS	7.6	7.9	0.20	0.20	4.34	4.26
	17	19.0	19.0	6.0	6.0	1.2	1.2	0.30	0.30	2260	835	38,000	34,000	45,000		F606	F606-2Z	2RZ	2RS	8.0	8.2	0.30	0.30	6.58	6.61
	19	22.0	22.0	6.0	6.0	1.5	1.5	0.30	0.30	2340	885	32,000	30,000	40,000		F626	F626-2Z	2RZ	2RS	8.0	8.5	0.30	0.30	9.09	9.09
	22	25.0	25.0	7.0	7.0	1.5	1.5	0.30	0.30	3300	1370	30,000	28,000	36,000		F636	F636-2Z	2RZ	2RS	8.0	10.5	0.30	0.30	14.60	14.70
7	11	12.2	12.2	2.5	3.0	0.6	0.6	0.15	0.10	455	201	43,000	-	50,000		MF117	MF117-2Z	-	-	8.2	8.0	0.15	0.10	0.72	0.82
	13	14.2	14.6	3.0	4.0	0.6	0.8	0.20	0.15	540	276	40,000	-	48,000		MF137	MF137-2Z	-	-	8.6	9.0	0.20	0.15	1.70	2.23
	14	16.0	16.0	3.5	5.0	1.0	1.1	0.15	0.15	1170	510	40,000	34,000	45,000		F687	F687-2Z	2RZ	2RS	8.2	8.5	0.15	0.15	2.48	3.37
	17	19.0	19.0	5.0	5.0	1.2	1.2	0.30	0.30	1610	715	36,000	28,000	43,000		F697	F697-2Z	2RZ	2RS	9.0	10.2	0.30	0.30	5.65	5.65
	19	22.0	22.0	6.0	6.0	1.5	1.5	0.30	0.30	2340	885	36,000	32,000	43,000		F607	F607-2Z	2RZ	2RS	9.0	9.1	0.30	0.30	8.66	8.66
	22	25.0	25.0	7.0	7.0	1.5	1.5	0.30	0.30	3300	1370	30,000	28,000	36,000		F627	F627-2Z	2RZ	2RS	9.0	10.5	0.30	0.30	14.20	14.20
8	12	13.2	13.6	2.5	3.5	0.6	0.8	0.15	0.10	545	274	40,000	-	48,000		MF128	MF128-2Z	-	-	9.2	9.0	0.15	0.10	0.82	1.15
	14	15.6	15.6	3.5	4.0	0.8	0.8	0.20	0.15	820	385	38,000	32,000	45,000		MF148	MF148-2Z	2RZ	2RS	9.6	9.2	0.20	0.15	2.09	2.39
	16	18.0	18.0	4.0	5.0	1.0	1.1	0.20	0.20	1610	710	36,000	30,000	43,000		F688	F688-2Z	2RZ	2RS	9.6	10.2	0.20	0.20	3.54	4.47
	19	22.0	22.0	6.0	6.0	1.5	1.5	0.30	0.30	2240	910	36,000	28,000	43,000		F698	F698-2Z	2RZ	2RS	10.0	10.0	0.30	0.30	8.35	8.30
	22	25.0	25.0	7.0	7.0	1.5	1.5	0.30	0.30	3300	1370	34,000	28,000	40,000		F608	F608-2Z	2RZ	2RS	10.0	10.5	0.30	0.30	13.40	13.50
9	17	19.0	19.0	4.0	5.0	1.0	1.1	0.20	0.20	1330	665	36,000	24,000	43,000		F689	F689-2Z	2RZ	2RS	10.6	11.5	0.20	0.20	3.97	4.91
	20	23.0	23.0	6.0	6.0	1.5	1.5	0.30	0.30	1720	840	34,000	24,000	40,000		F699	F699-2Z	2RZ	2RS	11.0	12.0	0.30	0.30	9.51	9.51

Miniature Ball Bearings

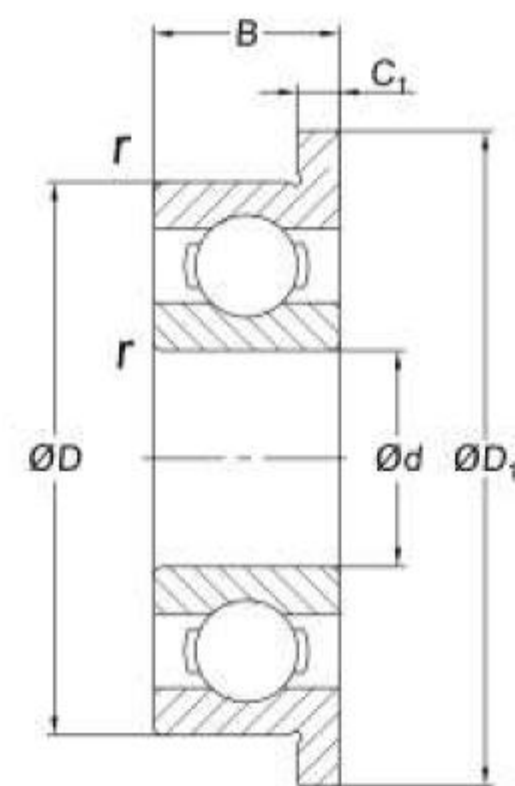
Inch Size
d: 1.016~9.525mm



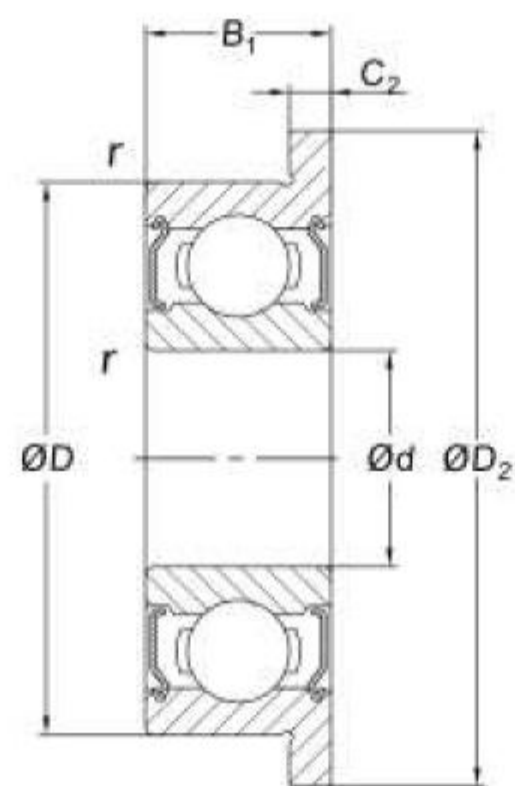
Principal Dimensions (mm)					Basic Load Ratings (N)		Limiting Speed (rpm)			Bearing Designations		Abutment and Fillet Dimensions (mm)					Weight (g)	
							Grease	Oil										
d	D	B	B ₁	r (min)	Dynamic C _r	Static C _{0r}	Open, Z, 2Z ₁	Open, Z		Open	Shield Type	d _a (min)	d _b (max)	D _a (max)	D _b (min)	r _a (max)	Open	Sealed Type
1.016	3.175	1.191	-	0.10	80	23	130,000	150,000	R09	-	1.9	-	2.3	-	0.10	0.04	-	
1.191	3.967	1.588	2.380	0.10	138	35	110,000	130,000	R0	R0-2Z	2.0	1.9	3.1	3.5	0.10	0.09	0.11	
1.397	4.762	1.984	2.779	0.10	231	66	90,000	110,000	R1	R1-2Z	2.2	2.3	3.9	4.1	0.10	0.15	0.19	
1.984	6.350	2.380	3.571	0.10	310	108	67,000	80,000	R1-4	R1-4-2Z	2.8	3.9	5.5	5.9	0.10	0.35	0.50	
2.380	4.762	1.588	2.380	0.10	143	52	80,000	95,000	R133	R133-2Z	3.2	3.0	3.9	4.2	0.10	0.10	0.13	
	7.938	2.779	3.571	0.15	550	175	60,000	71,000	R1-5	R1-5-2Z	3.6	4.1	6.7	7.0	0.15	0.60	0.72	
3.175	6.350	2.380	2.779	0.10	283	95	67,000	80,000	R144	R144-2Z	4.0	3.9	5.5	5.9	0.10	0.25	0.27	
	7.938	2.779	3.571	0.10	560	179	60,000	67,000	R2-5	R2-5-2Z	4.0	4.3	7.1	7.3	0.10	0.55	0.72	
	9.525	2.779	3.571	0.15	640	225	53,000	63,000	R2-6	R2-6-2Z	4.4	4.6	8.3	8.2	0.15	0.96	1.13	
	9.525	3.967	3.967	0.30	630	218	56,000	67,000	R2	R2-2Z	5.2	4.8	7.5	8.0	0.30	1.36	1.39	
	12.700	4.366	4.366	0.30	640	225	53,000	63,000	R2A	R2A-2Z	5.2	4.6	10.7	8.2	0.30	3.30	3.23	
3.967	7.938	2.779	3.175	0.10	360	149	53,000	63,000	R155	R155-2Z	4.8	5.5	7.1	7.3	0.10	0.51	0.56	
4.762	7.938	2.779	3.175	0.10	360	149	53,000	63,000	R156	R156-2Z	5.6	5.5	7.1	7.3	0.10	0.39	0.42	
	9.525	3.175	3.175	0.10	710	270	50,000	60,000	R166	R166-2Z	5.6	5.9	8.7	8.8	0.10	0.81	0.85	
	12.700	3.967	4.978	0.30	1300	485	43,000	53,000	R3	R3-2Z	6.8	6.5	10.7	11.2	0.30	2.21	2.79	
6.350	9.525	3.175	3.175	0.10	420	204	48,000	56,000	R168	R168-2Z	7.2	7.0	8.7	8.9	0.10	0.58	0.62	
	12.700	3.175	4.762	0.15	1080	440	40,000	50,000	R188	R188-2Z	7.6	7.4	11.5	11.7	0.15	1.53	2.24	
	15.875	4.978	4.978	0.30	1610	660	38,000	45,000	R4	R4-2Z	8.4	8.4	13.8	13.8	0.30	4.50	4.43	
	19.050	5.558	7.142	0.40	2340	885	36,000	43,000	R4A	R4A-2Z	9.4	9.0	16.0	16.6	0.40	7.48	9.17	
7.938	12.700	3.967	3.967	0.15	540	276	40,000	48,000	R1810	R1810-2Z	9.2	9.0	11.5	11.6	0.15	1.56	1.48	
9.525	22.225	5.558	7.142	0.40	3350	1410	32,000	38,000	R6	R6-2Z	12.6	11.9	19.2	20.0	0.40	9.02	11.00	

Miniature Ball Bearings

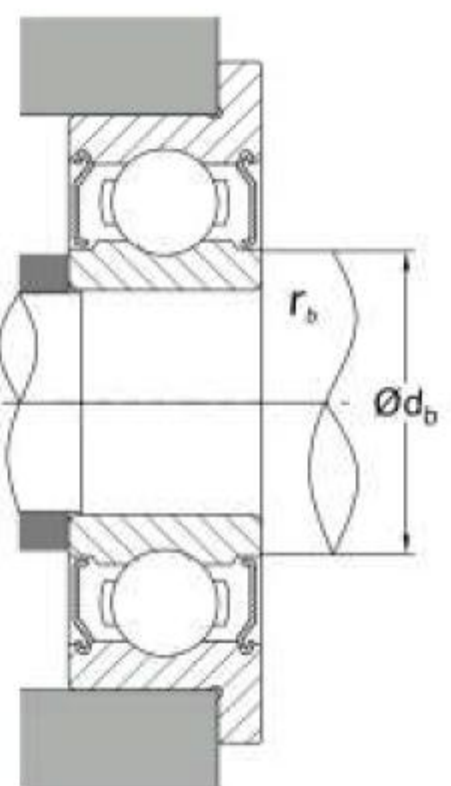
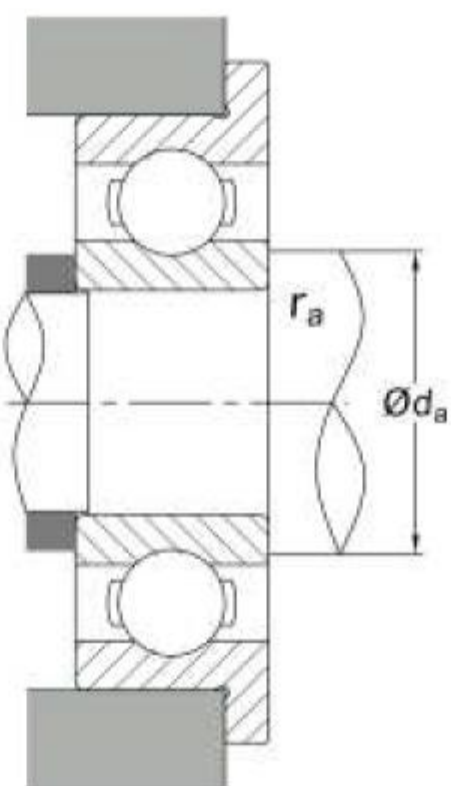
Inch Size With Flanged Outer Ring
d: 1.191~9.525mm



Open Type



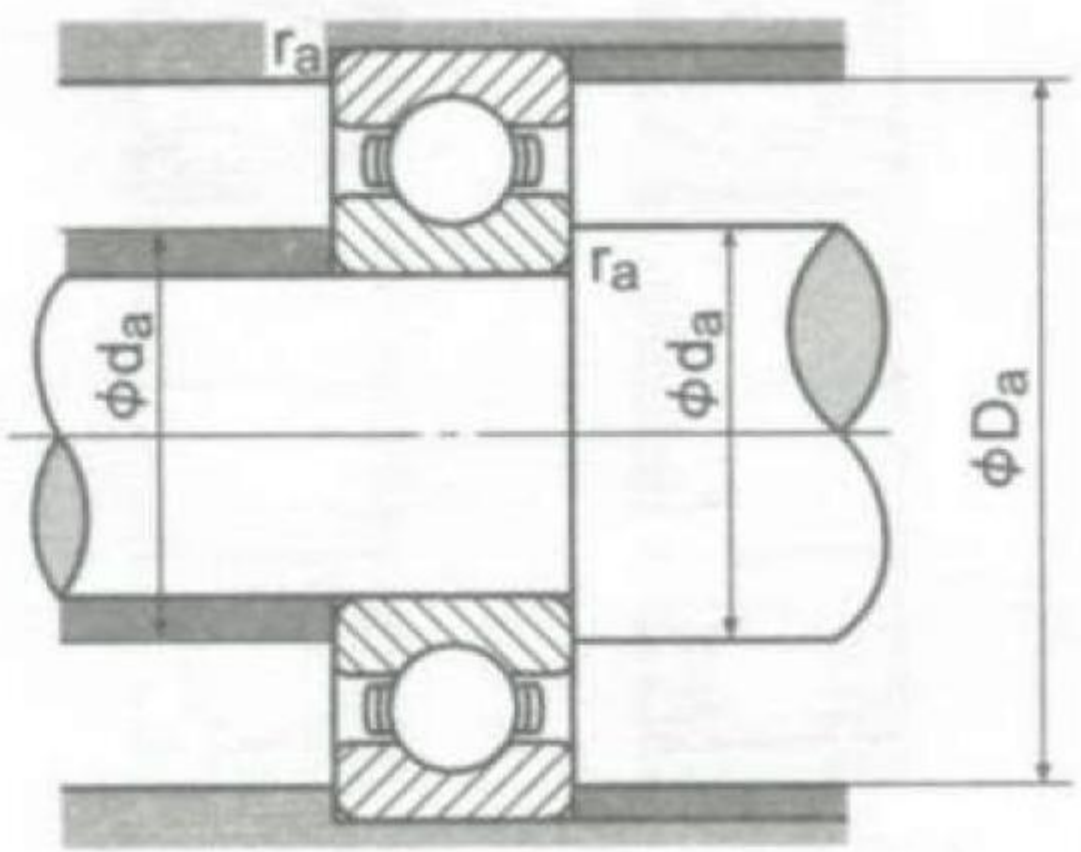
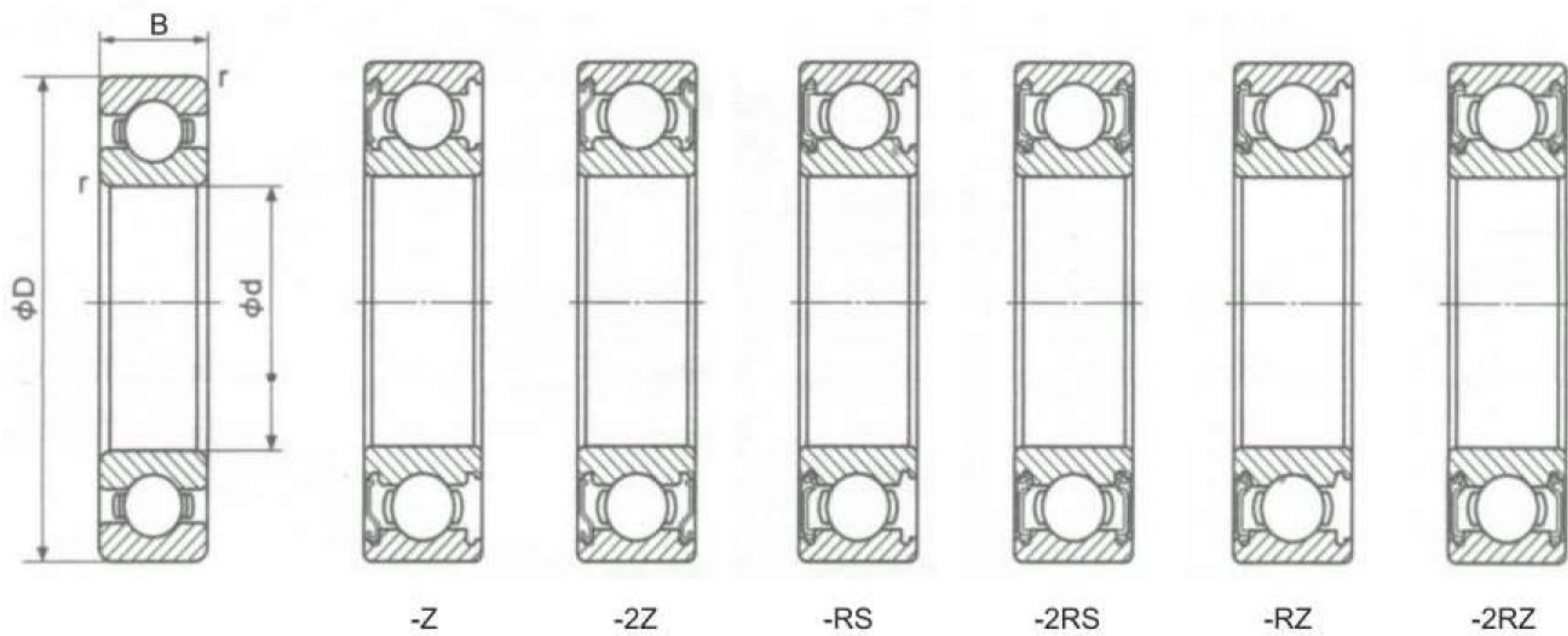
Shield Type
2Z



Principal Dimensions (mm)								Basic Load Ratings (N)		Limiting Speed (rpm)			Bearing Designations		Abutment and Fillet Dimensions (mm)			Weight (g)	
d	D	D ₁	B	B ₁	C ₁	C ₂	r (min)	Dynamic C _r	Static C _{0r}	Grease Z, 2Z	Oil Open, Z		Open	Shield Type	d _a (min)	d _b (max)	r _a (max)	Open	Sealed Type
1.191	3.967	5.156	1.588	2.380	0.330	0.787	0.10	138	35	110,000	130,000		FR0	FR0-2Z	2.0	1.9	0.10	0.11	0.16
1.397	4.762	5.944	1.984	2.779	0.584	0.787	0.10	231	66	90,000	110,000		FR1	FR1-2Z	2.2	2.3	0.10	0.20	0.25
1.984	6.350	7.518	2.380	3.571	0.584	0.787	0.10	310	108	67,000	80,000		FR1-4	FR1-4-2Z	2.8	3.9	0.10	0.41	0.58
2.380	4.762	5.944	1.588	2.380	0.460	0.790	0.10	143	52	80,000	95,000		FR133	FR133-2Z	3.2	3.0	0.10	0.13	0.19
	7.938	9.119	2.779	3.571	0.584	0.787	0.15	550	175	60,000	71,000		FR1-5	FR1-5-2Z	3.6	3.5	0.15	0.68	0.82
3.175	6.350	7.518	2.380	2.779	0.584	0.787	0.10	283	95	67,000	80,000		FR144	FR144-2Z	4.0	3.9	0.10	0.31	0.35
	7.938	9.119	2.779	3.571	0.584	0.787	0.10	560	179	60,000	67,000		FR2-5	FR2-5-2Z	4.0	4.3	0.10	0.62	0.81
	9.525	10.719	2.779	3.571	0.584	0.787	0.15	640	225	53,000	63,000		FR2-6	FR2-6-2Z	4.4	4.6	0.15	1.04	1.25
	9.525	11.176	3.967	3.967	0.762	0.762	0.30	630	218	56,000	67,000		FR2	FR2-2Z	5.2	4.8	0.30	1.51	1.55
3.967	7.938	9.119	2.779	3.175	0.584	0.914	0.10	360	149	53,000	63,000		FR155	FR155-2Z	4.8	5.5	0.10	0.59	0.67
4.762	7.938	9.119	2.779	3.175	0.584	0.914	0.10	360	149	53,000	63,000		FR156	FR156-2Z	5.6	5.5	0.10	0.47	0.53
	9.525	10.719	3.175	3.175	0.584	0.787	0.10	710	270	50,000	60,000		FR166	FR166-2Z	5.6	5.9	0.10	0.90	0.98
	12.700	14.351	4.978	4.978	1.067	1.067	0.30	1300	485	43,000	53,000		FR3	FR3-2Z	6.8	6.5	0.30	2.97	3.09
6.350	9.525	10.719	3.175	3.175	0.584	0.914	0.10	420	204	48,000	56,000		FR168	FR168-2Z	7.2	7.0	0.10	0.66	0.75
	12.700	13.894	3.175	4.762	0.584	1.143	0.15	1080	440	40,000	50,000		FR188	FR188-2Z	7.6	7.4	0.15	1.64	2.49
	15.875	17.526	4.978	4.978	1.067	1.067	0.30	1610	660	38,000	45,000		FR4	FR4-2Z	8.4	8.4	0.30	4.82	4.78
7.938	12.700	13.894	3.967	3.967	0.787	0.787	0.15	540	276	40,000	48,000		FR1810	FR1810-2Z	9.2	9.0	0.15	1.71	1.63
9.525	22.225	24.613	7.142	7.142	1.570	1.570	0.40	3350	1410	32,000	38,000		FR6	FR6-2Z	12.6	11.9	0.40	10.10	12.10

Deep Groove Ball Bearings

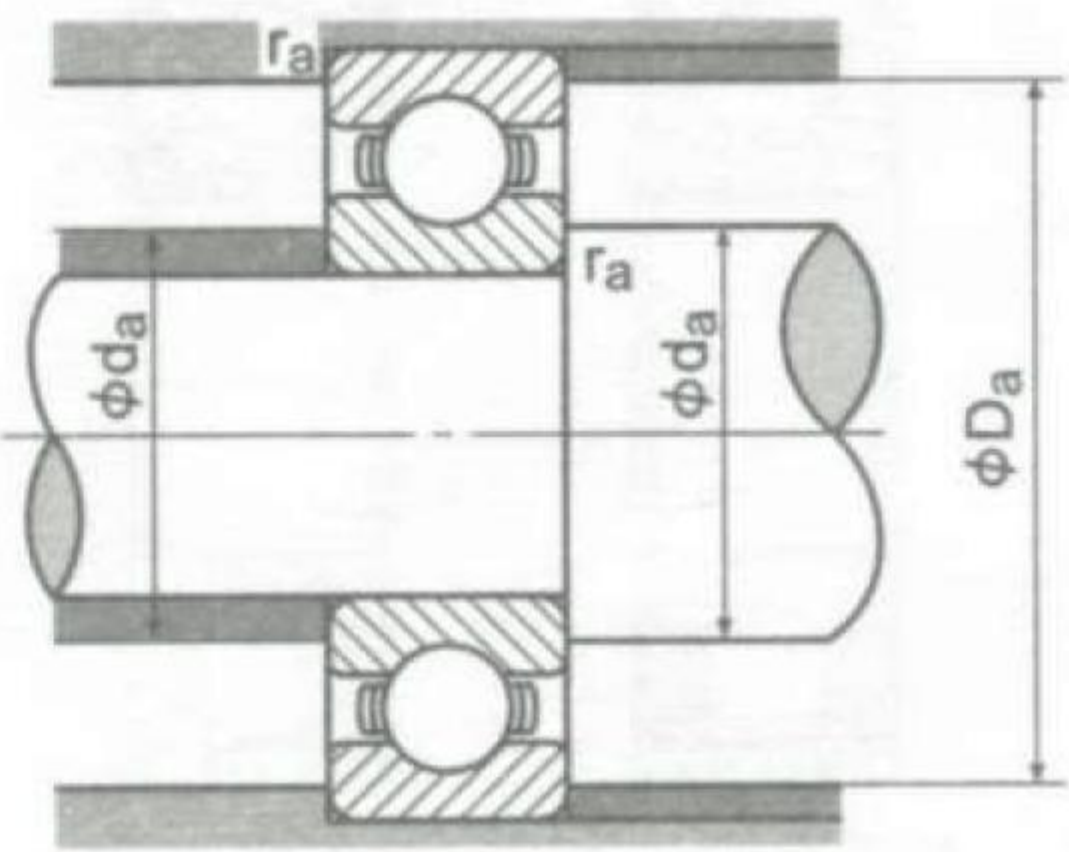
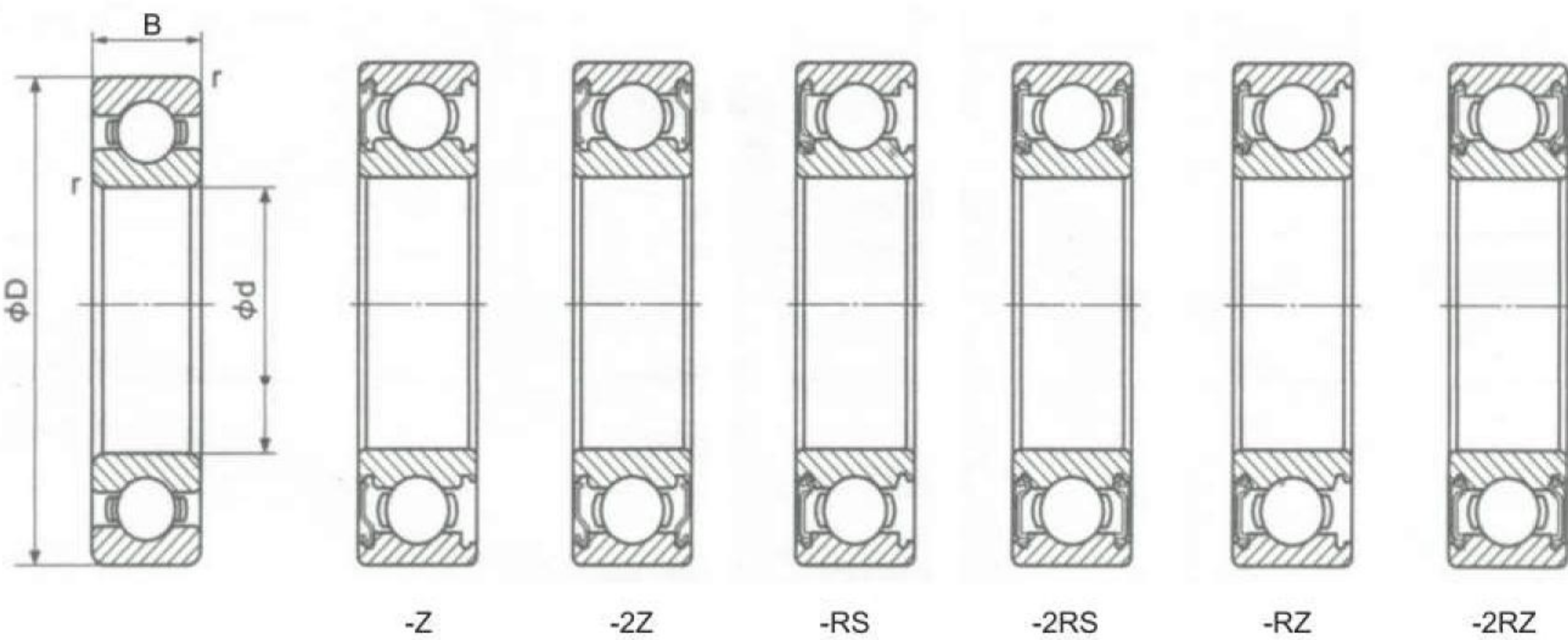
d: 10 ~ 20 mm



Principal Dimensions (mm)				Bearing Designations							Basic Load Rating (N)		Limiting Speed (rpm)			Abutment And Fillet Dimensions (mm)			Weight (kg)
d	D	B	r _(min)	Open	Shield Type		Contact Seal Type		Non-Contact Seal Type		Dynamic Cr	Static Cor	Grease		Oil	d _a (min)	D _a (max)	r _a (max)	
10	19	5	0.3	61800	61800-Z	61800-2Z	61800-RS	61800-2RS	61800-RZ	61800-2RZ	1720	840	34000	24000	40000	12	17	0.3	0.005
	22	6	0.3	61900	61900-Z	61900-2Z	61900-RS	61900-2RS	61900-RZ	61900-2RZ	2700	1270	32000	22000	38000	12	20	0.3	0.009
	26	8	0.3	6000	6000-Z	6000-2Z	6000-RS	6000-2RS	6000-RZ	6000-2RZ	4550	1970	30000	22000	36000	12	24	0.3	0.019
	30	9	0.6	6200	6200-Z	6200-2Z	6200-RS	6200-2RS	6200-RZ	6200-2RZ	5100	2390	24000	18000	30000	15	25	0.6	0.032
	35	11	0.6	6300	6300-Z	6300-2Z	6300-RS	6300-2RS	6300-RZ	6300-2RZ	8100	3450	22000	17000	26000	15	30	0.6	0.053
12	21	5	0.3	61801	61801-Z	61801-2Z	61801-RS	61801-2RS	61801-RZ	61801-2RZ	1920	1040	32000	20000	38000	14	19	0.3	0.006
	24	6	0.3	61901	61901-Z	61901-2Z	61901-RS	61901-2RS	61901-RZ	61901-2RZ	2890	1460	30000	20000	36000	14	22	0.3	0.011
	28	7	0.3	16001	16001-Z	16001-2Z	16001-RS	16001-2RS	16001-RZ	16001-2RZ	5100	2370	28000	-	32000	14	26	0.3	0.019
	28	8	0.3	6001	6001-Z	6001-2Z	6001-RS	6001-2RS	6001-RZ	6001-2RZ	5100	2370	28000	18000	32000	14	26	0.3	0.023
	32	10	0.6	6201	6201-Z	6201-2Z	6201-RS	6201-2RS	6201-RZ	6201-2RZ	6800	3050	22000	17000	28000	17	27	0.6	0.037
	37	12	1	6301	6301-Z	6301-2Z	6301-RS	6301-2RS	6301-RZ	6301-2RZ	9700	4200	20000	16000	24000	18	31	1.0	0.060
15	24	5	0.3	61802	61802-Z	61802-2Z	61802-RS	61802-2RS	61802-RZ	61802-2RZ	2070	1260	28000	17000	34000	17	22	0.3	0.007
	28	7	0.3	61902	61902-Z	61902-2Z	61902-RS	61902-2RS	61902-RZ	61902-2RZ	4350	2260	26000	17000	30000	17	26	0.3	0.016
	32	8	0.3	16002	16002-Z	16002-2Z	16002-RS	16002-2RS	16002-RZ	16002-2RZ	5600	2830	24000	-	28000	20	27	0.3	0.025
	32	9	0.3	6002	6002-Z	6002-2Z	6002-RS	6002-2RS	6002-RZ	6002-2RZ	5600	2830	24000	15000	28000	17	30	0.3	0.032
	35	11	0.6	6202	6202-Z	6202-2Z	6202-RS	6202-2RS	6202-RZ	6202-2RZ	7650	3750	20000	14000	24000	20	30	0.6	0.045
	42	13	1	6302	6302-Z	6302-2Z	6302-RS	6302-2RS	6302-RZ	6302-2RZ	11400	5450	17000	13000	20000	21	36	1.0	0.082
17	26	5	0.3	61803	61803-Z	61803-2Z	61803-RS	61803-2RS	61803-RZ	61803-2RZ	2630	1570	26000	15000	30000	19	24	0.3	0.008
	30	7	0.3	61903	61903-Z	61903-2Z	61903-RS	61903-2RS	61903-RZ	61903-2RZ	4600	2550	24000	15000	28000	19	28	0.3	0.018
	35	8	0.3	16003	16003-Z	16003-2Z	16003-RS	16003-2RS	16003-RZ	16003-2RZ	6000	3250	22000	-	26000	22	30	0.3	0.032
	35	10	0.3	6003	6003-Z	6003-2Z	6003-RS	6003-2RS	6003-RZ	6003-2RZ	6000	3250	22000	13000	26000	19	33	0.3	0.039
	40	12	0.6	6203	6203-Z	6203-2Z	6203-RS	6203-2RS	6203-RZ	6203-2RZ	9550	4800	17000	12000	20000	22	35	0.6	0.065
	47	14	1	6303	6303-Z	6303-2Z	6303-RS	6303-2RS	6303-RZ	6303-2RZ	13600	6650	15000	11000	18000	23	41	1.0	0.115
20	62	17	1.1	6403	6403-Z	6403-2Z	6403-RS	6403-2RS	6403-RZ	6403-2RZ	22700	10800	14000	-	16000	24	55	1	0.270
	32	7	0.3	61804	61804-Z	61804-2Z	61804-RS	61804-2RS	61804-RZ	61804-2RZ	4000	2470	22000	13000	26000	22	30	0.3	0.019
	37	9	0.3	61904	61904-Z	61904-2Z	61904-RS	61904-2RS	61904-RZ	61904-2RZ	6400	3700	19000	12000	22000	22	35	0.3	0.036
	42	8	0.3	16004	16004-Z	16004-2Z	16004-RS	16004-2RS	16004-RZ	16004-2RZ	7900	4450	18000	-	20000	25	37	0.3	0.050
	42	12	0.6	6004	6004-Z	6004-2Z	6004-RS	6004-2RS	6004-RZ	6004-2RZ	9400	5000	18000	11000	20000	24	38	0.6	0.070
	47	14	1	6204	6204-Z	6204-2Z	6204-RS	6204-2RS	6204-RZ	6204-2RZ	12800	6600	15000	11000	18000	26	41	1.0	0.106
	52	15	1.1	6304	6304-Z	6304-2Z	6304-RS	6304-2RS	6304-RZ	6304-2RZ	15900	7900	14000	10000	17000	27	45	1.1	0.144
20	72	19	1.1	6404	6404-Z	6404-2Z	6404-RS	6404-2RS	6404-RZ	6404-2RZ	28500	13900	12000	-	14000	27	65	1	0.400

Deep Groove Ball Bearings

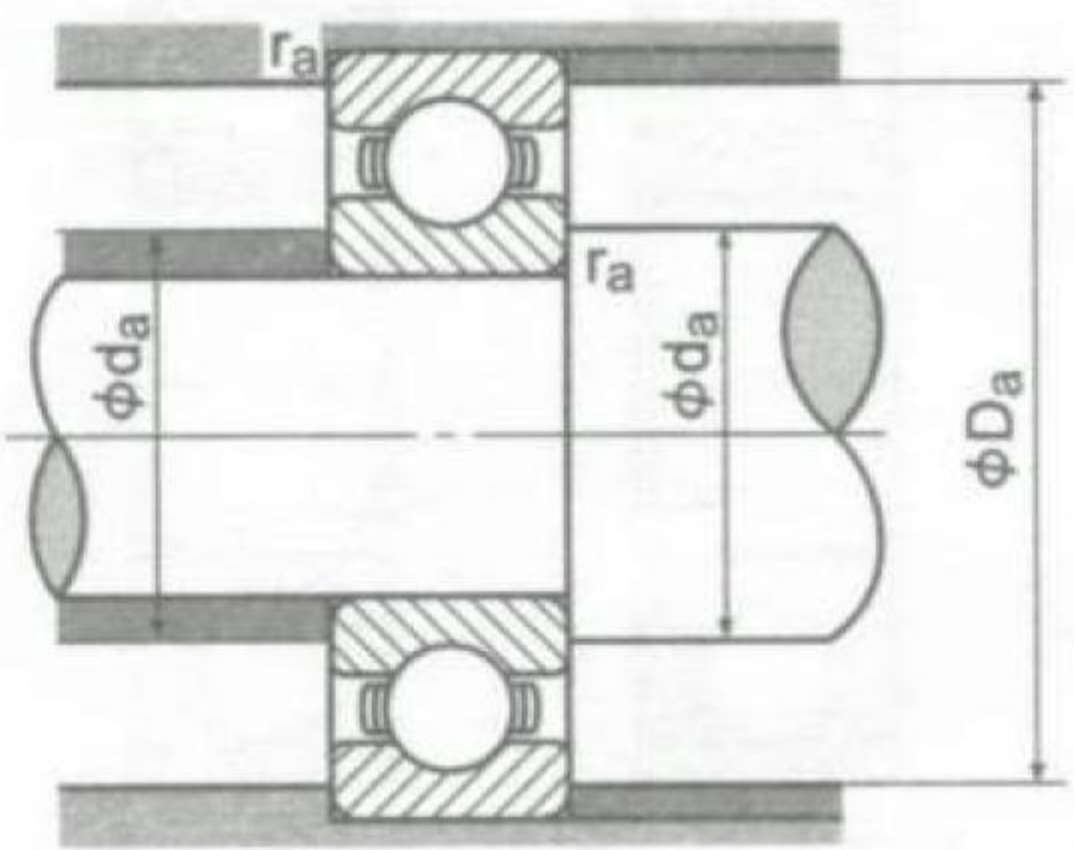
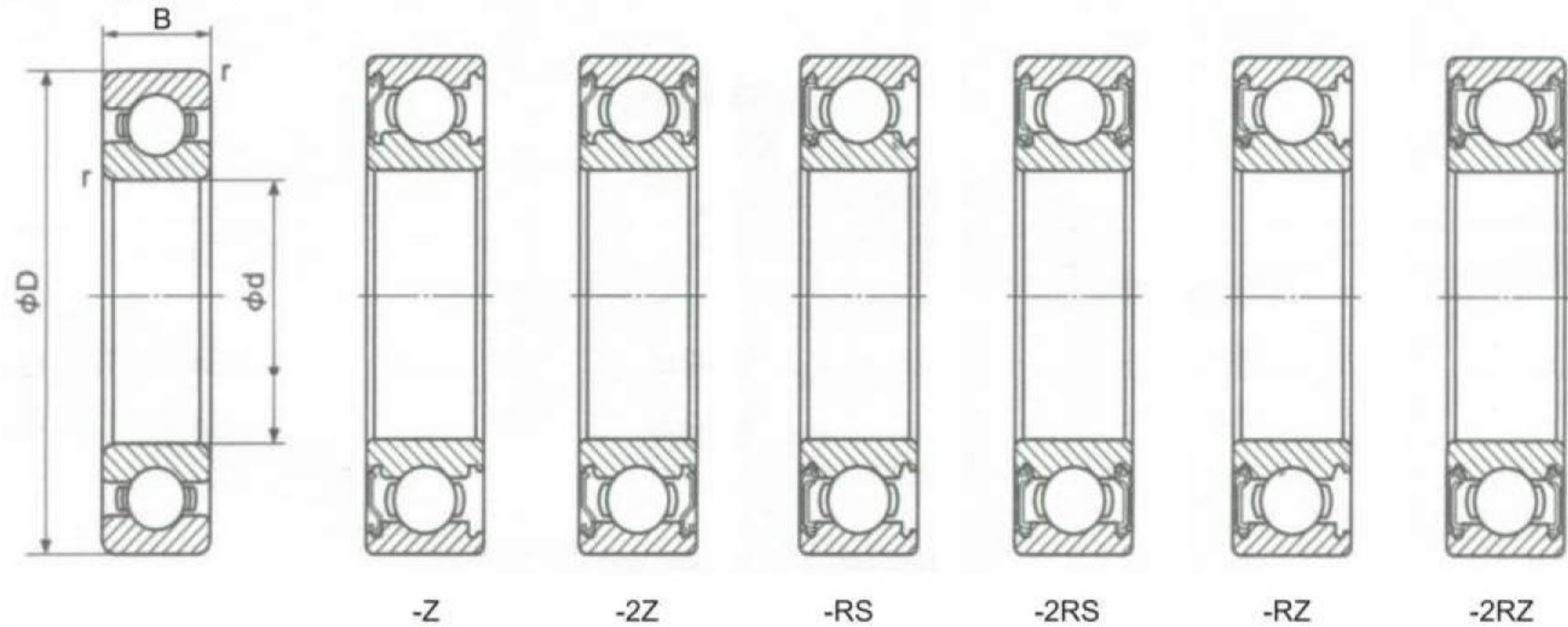
d: 22 ~ 40 mm



Principal Dimensions (mm)				Bearing Designations							Basic Load Rating (N)		Limiting Speed (rpm)			Abutment And Fillet Dimensions (mm)			Weight (kg)
d	D	B	r (min)	Open	Shield Type	Contact Seal Type	Non-Contact Seal Type				Dynamic Cr	Static Cor	Grease		Oil	d _a (min)	D _a (max)	r _a (max)	
22	44	12	0.6	60/22	60/22-Z	60/22-2Z	60/22-RS	60/22-2RS	60/22-RZ	60/22-2RZ	9400	5050	17000	11000	20000	27	39	0.6	0.074
	50	14	1	62/22	62/22-Z	62/22-2Z	62/22-RS	62/22-2RS	62/22-RZ	62/22-2RZ	12900	6800	14000	9500	16000	28	44	1.0	0.120
	56	16	1.1	63/22	63/22-Z	63/22-2Z	63/22-RS	63/22-2RS	63/22-RZ	63/22-2RZ	18400	9250	13000	9500	16000	29	49	1.0	0.176
25	37	7	0.3	61805	61805-Z	61805-2Z	61805-RS	61805-2RS	61805-RZ	61805-2RZ	4500	3150	18000	10000	22000	27	35	0.3	0.022
	42	9	0.3	61905	61905-Z	61905-2Z	61905-RS	61905-2RS	61905-RZ	61905-2RZ	7050	4550	16000	10000	19000	27	40	0.3	0.042
	47	8	0.3	16005	16005-Z	16005-2Z	16005-RS	16005-2RS	16005-RZ	16005-2RZ	8850	5600	15000	-	18000	30	42	0.3	0.060
	47	12	0.6	6005	6005-Z	6005-2Z	6005-RS	6005-2RS	6005-RS	6005-2RZ	10100	5850	15000	9500	18000	29	43	0.6	0.079
	52	15	1	6205	6205-Z	6205-2Z	6205-RS	6205-2RS	6205-RZ	6205-2RZ	14000	7850	13000	9000	15000	31	46	1.0	0.128
	62	17	1.1	6305	6305-Z	6305-2Z	6305-RS	6305-2RS	6305-RZ	6305-2RZ	20600	11200	11000	8000	13000	32	55	1.0	0.232
28	80	21	1.5	6405	6405-Z	6405-2Z	6405-RS	6405-2RS	6405-RZ	6405-2RZ	34500	17500	10000	-	12000	33.5	71.5	1.5	0.530
	52	12	0.6	60/28	60/28-Z	60/28-2Z	60/28-RS	60/28-2RS	60/28-RZ	60/28-2RZ	12500	7400	14000	8500	16000	33	47	0.6	0.098
	58	16	1	62/28	62/28-Z	62/28-2Z	62/28-RS	62/28-2RS	62/28-RZ	62/28-2RZ	16600	9500	12000	8000	14000	34	52	1.0	0.175
30	68	18	1.1	63/28	63/28-Z	63/28-2Z	63/28-RS	63/28-2RS	63/28-RZ	63/28-2RZ	26700	14000	10000	7500	13000	35	61	1.0	0.287
	42	7	0.3	61806	61806-Z	61806-2Z	61806-RS	61806-2RS	61806-RZ	61806-2RZ	4700	3650	15000	9000	18000	32	40	0.3	0.026
	47	9	0.3	61906	61906-Z	61906-2Z	61906-RS	61906-2RS	61906-RZ	61906-2RZ	7250	5000	14000	8500	17000	32	45	0.3	0.045
	55	9	0.3	16006	16006-Z	16006-2Z	16006-RS	16006-2RS	16006-RZ	16006-2RZ	11200	7350	13000	-	15000	35	50	0.3	0.085
	55	13	1	6006	6006-Z	6006-2Z	6006-RS	6006-2RS	6006-RZ	6006-2RZ	13200	8300	13000	8000	15000	35	50	1.0	0.117
	62	16	1	6206	6206-Z	6206-2Z	6206-RS	6206-2RS	6206-RZ	6206-2RZ	19500	11300	11000	7500	13000	36	56	1.0	0.199
	72	19	1.1	6306	6306-Z	6306-2Z	6306-RS	6306-2RS	6306-RZ	6306-2RZ	26700	15000	9500	6700	12000	37	65	1.0	0.346
32	90	23	1.5	6406	6406-Z	6406-2Z	6406-RS	6406-2RS	6406-RZ	6406-2RZ	43500	23900	8800	-	10000	38.5	81.5	1.5	0.735
	58	13	1	60/32	60/32-Z	60/32-2Z	60/32-RS	60/32-2RS	60/32-RZ	60/32-2RZ	15100	9150	12000	7500	14000	38	52	1	0.129
	65	17	1	62/32	62/32-Z	62/32-2Z	62/32-RS	62/32-2RS	62/32-RZ	62/32-2RZ	20700	11600	10000	7100	12000	38	59	1.0	0.230
35	75	20	1.1	63/32	63/32-Z	63/32-2Z	63/32-RS	63/32-2RS	63/32-RZ	63/32-2RZ	29900	17000	9000	6300	11000	39	68	1.0	0.382
	47	7	0.3	61807	61807-Z	61807-2Z	61807-RS	61807-2RS	61807-RZ	61807-2RZ	4900	4100	14000	7500	16000	37	45	0.3	0.029
	55	10	0.6	61907	61907-Z	61907-2Z	61907-RS	61907-2RS	61907-RZ	61907-2RZ	10600	7250	12000	7500	15000	39	51	0.6	0.073
	62	9	0.3	16007	16007-Z	16007-2Z	16007-RS	16007-2RS	16007-RZ	16007-2RZ	11700	8200	11000	-	13000	40	57	0.6	0.110
	62	14	1	6007	6007-Z	6007-2Z	6007-RS	6007-2RS	6007-RZ	6007-2RZ	16000	10300	11000	6700	13000	40	57	1.0	0.156
	72	17	1.1	6207	6207-Z	6207-2Z	6207-RS	6207-2RS	6207-RZ	6207-2RZ	25700	15300	9500	6300	11000	42	65	1.0	0.288
40	80	21	1.5	6307	6307-Z	6307-2Z	6307-RS	6307-2RS	6307-RZ	6307-2RZ	33500	19200	8500	6000	10000	44	71	1.5	0.457
	100	25	1.5	6407	6407-Z	6407-2Z	6407-RS	6407-2RS	6407-RZ	6407-2RZ	55000	31000	7800	-	9100	43.5	91.5	1.5	0.952
	52	7	0.3	61808	61808-Z	61808-2Z	61808-RS	61808-2RS	61808-RZ	61808-2RZ	6350	5550	12000	6700	14000	42	50	0.3	0.033
	62	12	0.6	61908	61908-Z	61908-2Z	61908-RS	61908-2RS	61908-RZ	61908-2RZ	13700	10000	11000	6300	13000	44	58	0.6	0.108
40	68	9	0.3	16008	16008-Z	16008-2Z	16008-RS	16008-2RS	16008-RZ	16008-2RZ	12600	9650	10000	-	12000	45	63	0.3	0.125

Deep Groove Ball Bearings

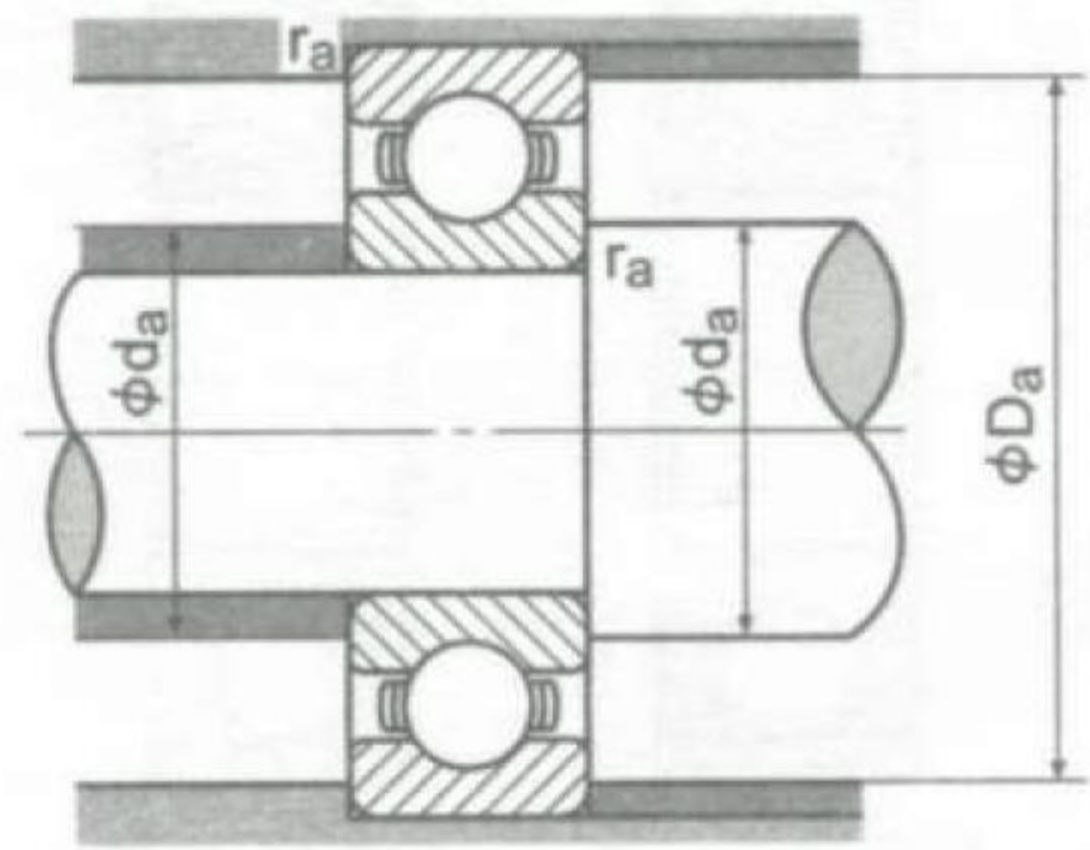
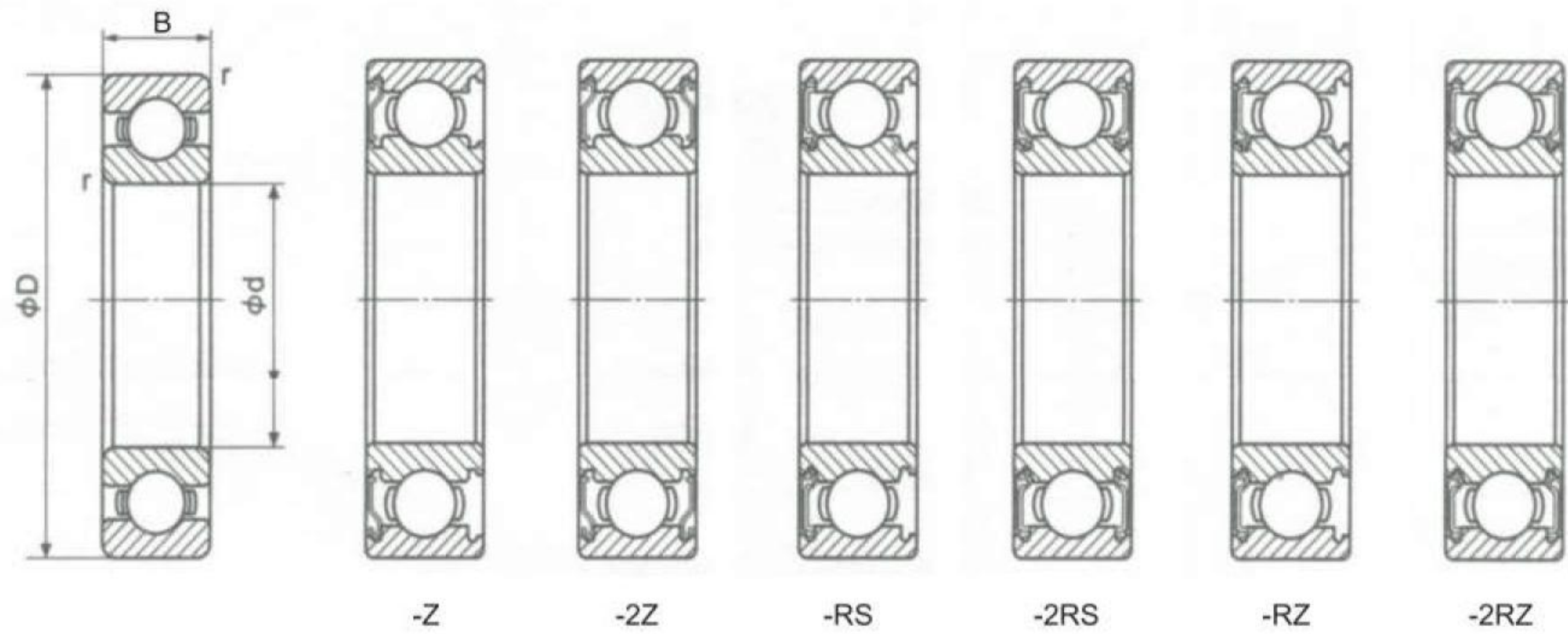
d: 40 ~ 65 mm



Principal Dimensions (mm)				Bearing Designations								Basic Load Rating (N)		Limiting Speed (rpm)		Abutment And Fillet Dimensions (mm)			Weight (kg)	
d	D	B	r (min)	Open	Shield Type	Contact Seal Type	Non-Contact Seal Type				Dynamic Cr	Static Cor	Open, Z, 2Z,RZ,2RZ	RS,2RS	Open, Z	da (min)	Da (max)	ra (max)		
40	68	15	1	6008	6008-Z	6008-2Z	6008-RS	6008-2RS	6008-RZ	6008-2RZ		16800	11500	10000	6000	12000	45	63	1.0	0.194
	80	18	1.1	6208	6208-Z	6208-2Z	6208-RS	6208-2RS	6208-RZ	6208-2RZ		29100	17900	8500	5600	10000	47	73	1.0	0.366
	90	23	1.5	6308	6308-Z	6308-2Z	6308-RS	6308-2RS	6308-RZ	6308-2RZ		40500	24000	7500	5300	9000	49	81	1.5	0.633
	110	27	2	6408	6408-Z	6408-2Z	6408-RS	6408-2RS	6408-RZ	6408-2RZ		63500	36500	7000	-	8200	50	100	2	1.230
45	58	7	0.3	61809	61809-Z	61809-2Z	61809-RS	61809-2RS	61809-RZ	61809-2RZ		6600	6150	11000	6000	13000	47	56	0.3	0.040
	68	12	0.6	61909	61909-Z	61909-2Z	61909-RS	61909-2RS	61909-RZ	61909-2RZ		14100	10900	9500	5600	12000	49	64	0.6	0.122
	75	10	0.6	16009	16009-Z	16009-2Z	16009-RS	16009-2RS	16009-RZ	16009-2RZ		14900	11400	9000	-	11000	52	68	0.6	0.170
	75	16	1	6009	6009-Z	6009-2Z	6009-RS	6009-2RS	6009-RZ	6009-2RZ		20900	15200	9000	5300	11000	50	70	1.0	0.246
	85	19	1.1	6209	6209-Z	6209-2Z	6209-RS	6209-2RS	6209-RZ	6209-2RZ		31500	20400	7500	5300	9000	52	78	1.0	0.407
	100	25	1.5	6309	6309-Z	6309-2Z	6309-RS	6309-2RS	6309-RZ	6309-2RZ		53000	32000	6700	4800	8000	54	91	1.5	0.833
	120	29	2	6409	6409-Z	6409-2Z	6409-RS	6409-2RS	6409-RZ	6409-2RZ		77000	45000	6300	-	7400	55	110	2	1.530
50	65	7	0.3	61810	61810-Z	61810-2Z	61810-RS	61810-2RS	61810-RZ	61810-2RZ		6400	6200	9500	5300	11000	52	63	0.3	0.052
	72	12	0.6	61910	61910-Z	61910-2Z	61910-RS	61910-2RS	61910-RZ	61910-2RZ		14500	11700	9000	5300	11000	54	68	0.6	0.125
	80	10	0.6	16010	16010-Z	16010-2Z	16010-RS	16010-2RS	16010-RZ	16010-2RZ		15400	12400	8500	-	10000	57	73	0.6	0.180
	80	16	1	6010	6010-Z	6010-2Z	6010-RS	6010-2RS	6010-RZ	6010-2RZ		21800	16600	8500	4800	10000	55	75	1.0	0.264
	90	20	1.1	6210	6210-Z	6210-2Z	6210-RS	6210-2RS	6210-RZ	6210-2RZ		35000	23200	7100	4800	8500	57	83	1.0	0.463
	110	27	2	6310	6310-Z	6310-2Z	6310-RS	6310-2RS	6310-RZ	6310-2RZ		62000	38500	6000	4300	7500	60	100	2.0	1.070
	130	31	2.1	6410	6410-Z	6410-2Z	6410-RS	6410-2RS	6410-RZ	6410-2RZ		83000	49500	5700	-	6700	62	118	2	1.880
55	72	9	0.3	61811	61811-Z	61811-2Z	61811-RS	61811-2RS	61811-RZ	61811-2RZ		8800	8500	8500	4800	10000	57	70	0.3	0.083
	80	13	1	61911	61911-Z	61911-2Z	61911-RS	61911-2RS	61911-RZ	61911-2RZ		16000	13300	8000	4500	9500	60	75	1.0	0.177
	90	11	0.6	16011	16011-Z	16011-2Z	16011-RS	16011-2RS	16011-RZ	16011-2RZ		19400	16300	7500	-	9000	62	83	0.6	0.260
	90	18	1.1	6011	6011-Z	6011-2Z	6011-RS	6011-2RS	6011-RZ	6011-2RZ		28300	21200	7500	4500	9000	61	84	1.0	0.384
	100	21	1.5	6211	6211-Z	6211-2Z	6211-RS	6211-2RS	6211-RZ	6211-2RZ		43500	29300	6300	4300	7500	64	91	1.5	0.607
	120	29	2	6311	6311-Z	6311-2Z	6311-RS	6311-2RS	6311-RZ	6311-2RZ		71500	44500	5600	4000	6700	65	110	2.0	1.370
	140	33	2.1	6411	6411-Z	6411-2Z	6411-RS	6411-2RS	6411-RZ	6411-2RZ		89000	54000	5200	-	6100	67	128	2	2.290
60	78	10	0.3	61812	61812-Z	61812-2Z	61812-RS	61812-2RS	61812-RZ	61812-2RZ		11500	10900	8000	4500	9500	62	76	0.3	0.106
	85	13	1	61912	61912-Z	61912-2Z	61912-RS	61912-2RS	61912-RZ	61912-2RZ		19400	16300	7500	4300	9000	65	80	1.0	0.191
	95	11	0.6	16012	16012-Z	16012-2Z	16012-RS	16012-2RS	16012-RZ	16012-2RZ		20000	17500	7100	-	8500	67	88	0.6	0.280
	95	18	1.1	6012	6012-Z	6012-2Z	6012-RS	6012-2RS	6012-RZ	6012-2RZ		29500	23200	7100	4000	8500	66	89	1.0	0.418
	110	22	1.5	6212	6212-Z	6212-2Z	6212-RS	6212-2RS	6212-RZ	6212-2RZ		52500	36000	5600	3800	7100	69	101	1.5	0.783
	130	31	2.1	6312	6312-Z	6312-2Z	6312-RS	6312-2RS	6312-RZ	6312-2RZ		82000	52000	5300	3600	6300	72	118	2.0	1.700
	150	35	2.1	6412	6412-Z	6412-2Z	6412-RS	6412-2RS	6412-RZ	6412-2RZ		102000	64500	4800	-	5700	72	138	2	2.770
65	85	10	0.6	61813	61813-Z	61813-2Z	61813-RS	61813-2RS	61813-RZ	61813-2RZ		11900	12100	7500	4000	8500	69	81	0.6	0.125
	90	13	1	61913	61913-Z	61913-2Z	61913-RS	61913-2RS	61913-RZ	61913-2RZ		17400	16100	7100	4000	8500	70	85	1.0	0.200

Deep Groove Ball Bearings

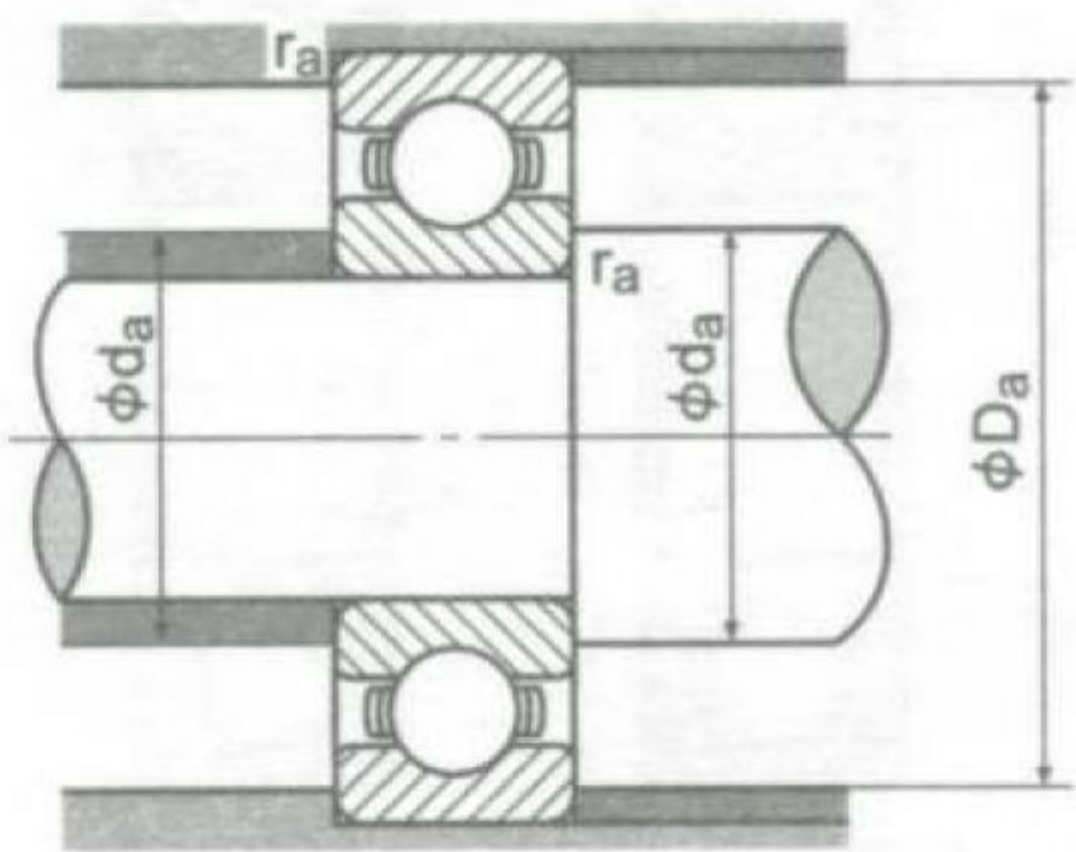
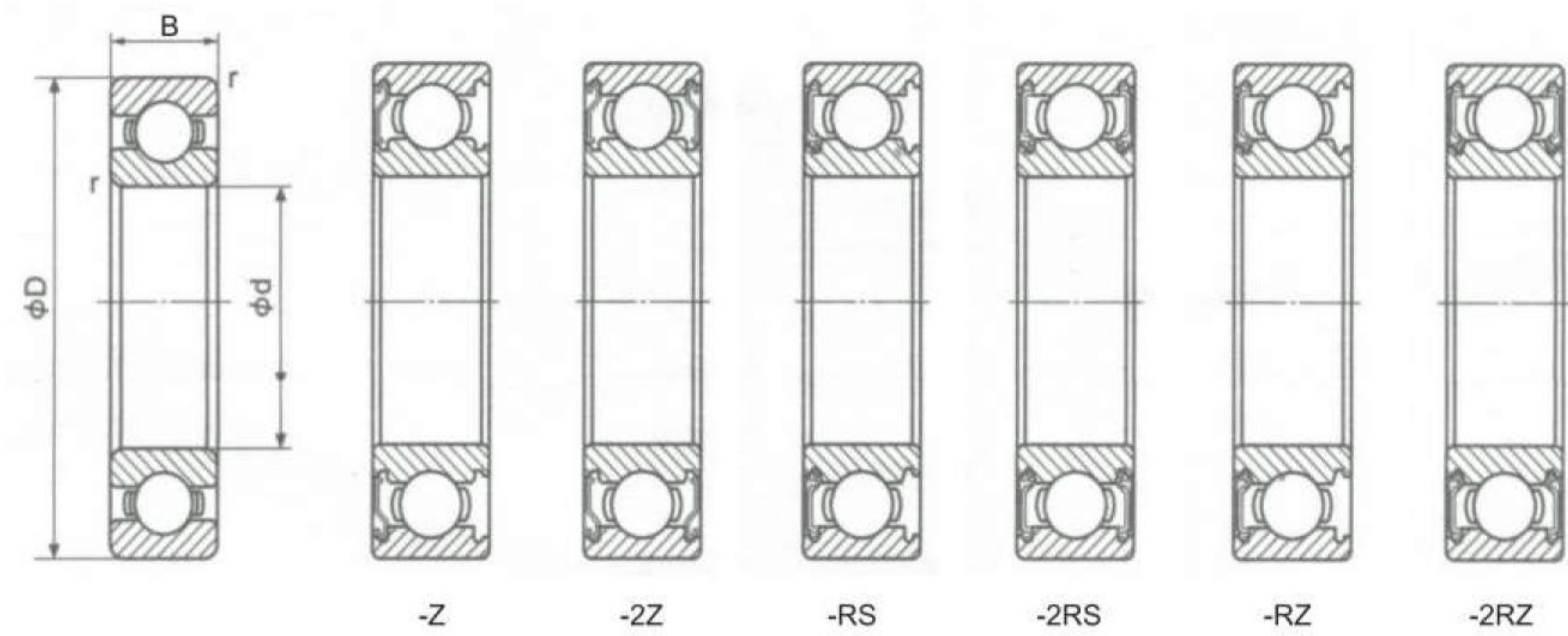
d: 65 ~ 85 mm



Principal Dimensions (mm)				Bearing Designations								Basic Load Rating (N)		Limiting Speed (rpm)		Abutment And Fillet Dimensions (mm)			Weight (kg)	
d	D	B	r (min)	Open	Shield Type		Contact Seal Type		Non-Contact Seal Type			Dynamic Cr	Static Cor	Grease Open, Z, 2Z,RZ,2RZ	Oil RS,2RS	Open, Z	da (min)	Da (max)		ra (max)
65	100	11	0.6	16013	-	-	-	-	-	-		20500	18700	6700	-	8000	72	93	0.6	0.300
	100	18	1.1	6013	6013-Z	6013-2Z	6013-RS	6013-2RS	6013-RZ	6013-2RZ		30500	25200	6700	4000	8000	71	94	1.0	0.438
	120	23	1.5	6213	6213-Z	6213-2Z	6213-RS	6213-2RS	6213-RZ	6213-2RZ		57500	40000	5300	3600	6300	74	111	1.5	0.990
	140	33	2.1	6313	6313-Z	6313-2Z	6313-RS	6313-2RS	6313-RZ	6313-2RZ		92500	60000	4800	3400	6000	77	128	2.0	2.080
	160	37	2.1	6413	6413-Z	6413-2Z	6413-RS	6413-2RS	6413-RZ	6413-2RZ		111000	72500	4400	-	5200	77	148	2	3.300
70	90	10	0.6	61814	61814-Z	61814-2Z	61814-RS	61814-2RS	61814-RZ	61814-2RZ		12100	12700	6700	3800	8000	74	86	0.6	0.135
	100	16	1	61914	61914-Z	61914-2Z	61914-RS	61914-2RS	61914-RZ	61914-2RZ		23700	21200	6300	3600	7500	75	95	1.0	0.327
	110	13	0.6	16014	-	-	-	-	-	-		26800	23600	6000	-	7100	77	103	0.6	0.433
	110	20	1.1	6014	6014-Z	6014-2Z	6014-RS	6014-2RS	6014-RZ	6014-2RZ		38000	31000	6000	3600	7100	76	104	1.0	0.607
	125	24	1.5	6214	6214-Z	6214-2Z	6214-RS	6214-2RS	6214-RZ	6214-2RZ		62000	44000	5000	3400	6300	79	116	1.5	1.070
	150	35	2.1	6314	6314-Z	6314-2Z	6314-RS	6314-2RS	6314-RZ	6314-2RZ		104000	68000	4500	3200	5300	82	138	2.0	2.520
	180	42	3	6414	6414-Z	6414-2Z	6414-RS	6414-2RS	6414 RZ	6414-2RZ		128000	89500	4100	-	4800	84	166	2.5	4.830
75	95	10	0.6	61815	61815-Z	61815-2Z	61815-RS	61815-2RS	61815-RZ	61815-2RZ		12500	13900	6300	-	7500	79	91	0.6	0.145
	105	16	1	61915	61915-Z	61915-2Z	61915-RS	61915-2RS	61915-RZ	61915-2RZ		24400	22600	6000	-	7100	80	100	1.0	0.345
	115	13	0.6	16015	-	-	-	-	-	-		27600	25300	5600	-	6700	82	108	0.6	0.457
	115	20	1.1	6015	6015-Z	6015-2Z	6015-RS	6015-2RS	6015-RZ	6015-2RZ		39500	33500	5600	3400	6700	81	109	1.0	0.645
	130	25	1.5	6215	6215-Z	6215-2Z	6215-RS	6215-2RS	6215-RZ	6215-2RZ		66000	49500	4800	3200	5600	84	121	1.5	1.18
	160	37	2.1	6315	6315-Z	6315-2Z	6315-RS	6315-2RS	6315-RZ	6315-2RZ		113000	77000	4300	2800	5000	87	148	2.0	3.02
	190	45	3	6415	6415-Z	6415-2Z	6415-RS	6415-2RS	6415-RZ	6415-2RZ		138000	99000	3800	-	4500	89	176	2.5	5.720
80	100	10	0.6	61816	61816-Z	61816-2Z	61816-RS	61816-2RS	61816-RZ	61816-2RZ		12700	14500	6000	3400	7100	84	96	0.6	0.155
	110	16	1	61916	61916-Z	61916-2Z	61916-RS	61916-2RS	61916-RZ	61916-2RZ		25000	24000	5600	3200	6700	85	105	1.0	0.363
	125	14	0.6	16016	-	-	-	-	-	-		32000	29600	5300	-	6300	87	118	0.6	0.597
	125	22	1.1	6016	6016-Z	6016-2Z	6016-RS	6016-2RS	6016-RZ	6016-2RZ		47500	40000	5300	3200	6300	86	119	1.0	0.855
	140	26	2	6216	6216-Z	6216-2Z	6216-RS	6216-2RS	6216-RZ	6216-2RZ		72500	53000	4500	3000	5300	90	130	2.0	1.40
	170	39	2.1	6316	6316-Z	6316-2Z	6316-RS	6316-2RS	6316-RZ	6316-2RZ		123000	86500	4000	2800	4800	92	158	2.0	3.59
	200	48	3	6416	6416-Z	6416-2Z	6416-RS	6416-2RS	6416-RZ	6416-2RZ		164000	125000	3600	-	4200	94	186	2.5	6.760
85	110	13	1	61817	61817-Z	61817-2Z	61817-RS	61817-2RS	61817-RZ	61817-2RZ		18700	20000	5600	-	6700	90	105	1.0	0.265
	120	18	1.1	61917	61917-Z	61917-2Z	61917-RS	61917-2RS	61917-RZ	61917-2RZ		32000	29600	5300	-	6300	91	113	1.0	0.517
	130	14	0.6	16017	-	-	-	-	-	-		33000	31500	5000	-	6000	92	123	0.6	0.626
	130	22	1.1	6017	6017-Z	6017-2Z	6017-RS	6017-2RS	6017-RZ	6017-2RZ		49500	43000	5000	3000	6000	91	124	1.1	0.895
	150	28	2	6217	6217-Z	6217-2Z	6217-RS	6217-2RS	6217-RZ	6217-2RZ		84000	62000	4300	2800	5000	95	140	2.0	1.79
	180	41	3	6317	6317-Z	6317-2Z	6317-RS	6317-2RS	6317-RZ	6317-2RZ		133000	97000	3800	2600	4500	99	166	2.5	4.23

Deep Groove Ball Bearings

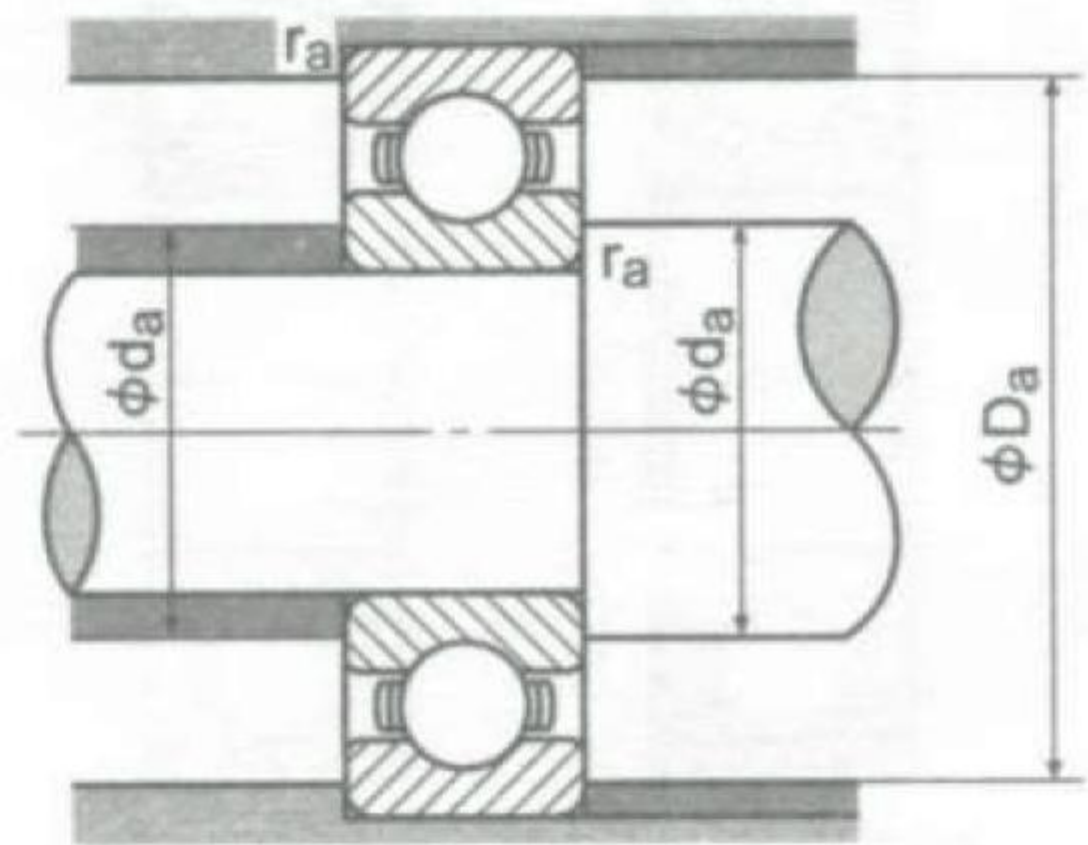
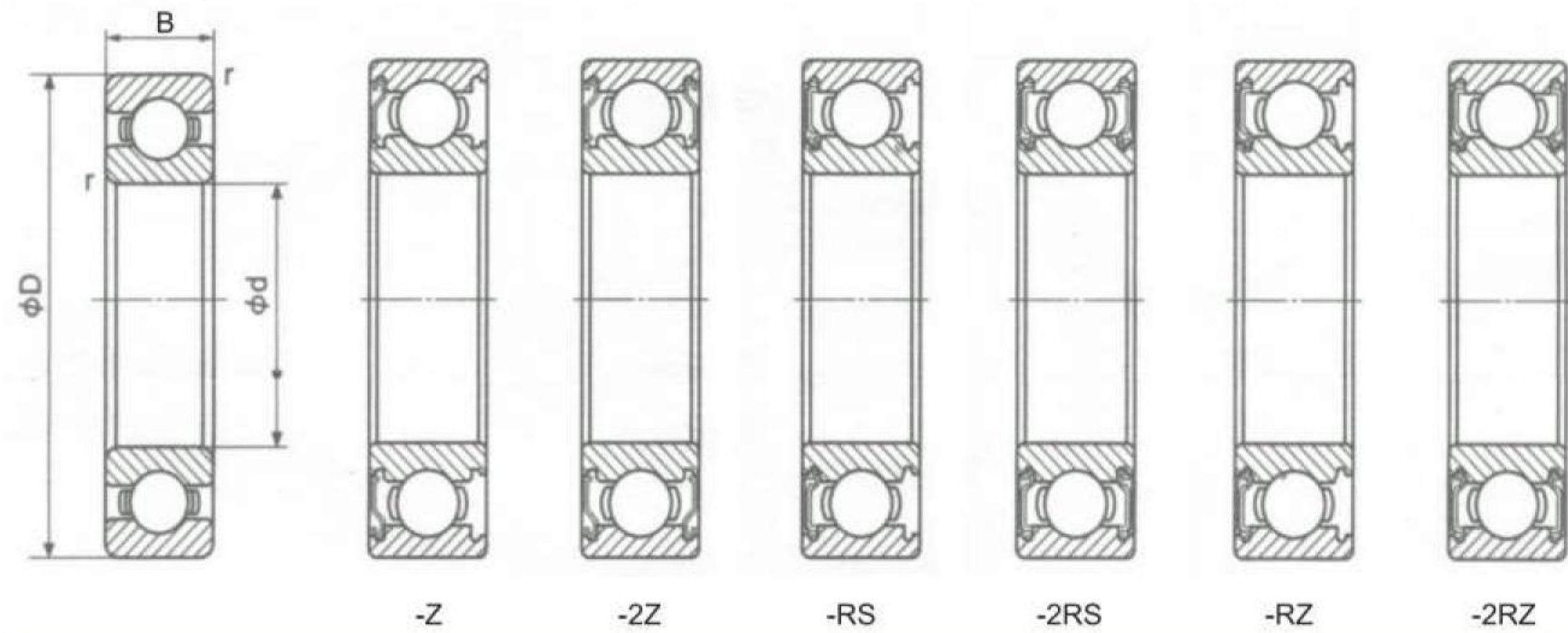
d: 85 ~ 110 mm



Principal Dimensions (mm)				Bearing Designations								Basic Load Rating (N)		Limiting Speed (rpm)		Abutment And Fillet Dimensions (mm)			Weight (kg)	
d	D	B	r (min)	Open	Shield Type		Contact Seal Type		Non-Contact Seal Type			Dynamic Cr	Static Cor	Grease		Oil	da (min)	Da (max)		ra (max)
85	210	52	4	6417	6417-Z	6417-2Z	6417-RS	6417-2RS	6417-RZ	6417-2RZ		165000	128000	3400	-	4000	103	192	3	7.950
90	115	13	1	61818	61818-Z	61818-2Z	61818-RS	61818-2RS	61818-RZ	61818-2RZ		19000	21000	5300	-	6300	95	110	1.0	0.280
	125	18	1.1	61918	61918-Z	61918-2Z	61918-RS	61918-2RS	61918-RZ	61918-2RZ		33000	31500	5000	2800	6000	96	119	1.0	0.540
	140	16	1	16018	16018-Z	16018-2Z	16018-RS	16018-2RS	16018-RZ	16018-2RZ		41500	39500	4800	-	5600	99	131	1.0	0.848
	140	24	1.5	6018	6018-Z	6018-2Z	6018-RS	6018-2RS	6018-RZ	6018-2RZ		58000	50000	4800	2800	5600	97	133	1.5	1.17
	160	30	2	6218	6218-Z	6218-2Z	6218-RS	6218-2RS	6218-RZ	6218-2RZ		96000	71500	4000	2600	4800	100	150	2.0	2.15
	190	43	3	6318	6318-Z	6318-2Z	6318-RS	6318-2RS	6318-RZ	6318-2RZ		143000	107000	3600	2400	4300	104	176	2.5	4.91
	225	54	4	6418	6418-Z	6418-2Z	6418-RS	6418-2RS	6418-RZ	6418-2RZ		184000	149000	3200	-	3800	108	207	3	11.400
95	120	13	1	61819	61819-Z	61819-2Z	61819-RS	61819-2RS	61819-RZ	61819-2RZ		19300	22000	5000	2800	6000	100	115	1.0	0.298
	130	18	1.1	61919	61919-Z	61919-2Z	61919-RS	61919-2RS	61919-RZ	61919-2RZ		33500	33500	4800	-	5600	101	124	1.0	0.567
	145	16	1	16019	-	-	-	-	-	-		43000	42000	4500	-	5300	104	136	1.0	0.885
	145	24	1.5	6019	6019-Z	6019-2Z	6019-RS	6019-2RS	6019-RZ	6019-2RZ		60500	54000	4500	2600	5300	102	138	1.5	1.22
	170	32	2.1	6219	6219-Z	6219-2Z	6219-RS	6219-2RS	6219-RZ	6219-2RZ		109000	82000	3800	2600	4500	107	158	2.0	2.62
	200	45	3	6319	6319-Z	6319-2Z	6319-RS	6319-2RS	6319-RZ	6319-2RZ		153000	119000	3000	2400	3600	109	186	2.5	5.67
	240	55	4	6419	6419-Z	6419-2Z	6419-RS	6419-2RS	6419-RZ	6419-2RZ		186000	153000	3000	-	3500	113	222	3	13.400
100	125	13	1	61820	61820-Z	61820-2Z	61820-RS	61820-2RS	61820-RZ	61820-2RZ		19600	23000	4800	2800	5600	105	120	1.0	0.311
	140	20	1.1	61920	61920-Z	61920-2Z	61920-RS	61920-2RS	61920-RZ	61920-2RZ		43000	42000	4500	2600	5300	106	134	1.0	0.771
	150	16	1	16020	-	-	-	-	-	-		42500	42000	4300	-	5300	109	141	1.0	0.910
	150	24	1.5	6020	6020-Z	6020-2Z	6020-RS	6020-2RS	6020-RZ	6020-2RZ		60000	54000	4300	2600	5300	107	143	1.5	1.26
	180	34	2.1	6220	6220-Z	6220-2Z	6220-RS	6220-2RS	6220-RZ	6220-2RZ		122000	93000	3600	2400	4300	112	168	2.0	3.14
	215	47	3	6320	6320-Z	6320-2Z	6320-RS	6320-2RS	6320-RZ	6320-2RZ		173000	141000	2800	2200	3400	114	201	2.5	7.00
	250	58	4	6420	6420-Z	6420-2Z	6420-RS	6420-2RS	6420-RZ	6420-2RZ		206000	175000	2900	-	3400	118	232	3	15.000
105	130	13	1	61821	61821-Z	61821-2Z	61821-RS	61821-2RS	61821-RZ	61821-2RZ		19800	23900	4800	-	5600	110	125	1.0	0.325
	145	20	1.1	61921	61921-Z	61921-2Z	61921-RS	61921-2RS	61921-RZ	61921-2RZ		42500	42000	4300	-	5300	111	139	1.0	0.793
	160	18	1	16021	-	-	-	-	-	-		52000	50500	4000	-	4800	114	151	1.0	1.20
	160	26	2	6021	6021-Z	6021-2Z	6021-RS	6021-2RS	6021-RZ	6021-2RZ		72500	66000	4000	2400	4800	113	152	2.0	1.60
	190	36	2.1	6221	6221-Z	6221-2Z	6221-RS	6221-2RS	6221-RZ	6221-2RZ		133000	105000	3400	2200	4000	117	178	2.0	3.76
	225	49	3	6321	6321-Z	6321-2Z	6321-RS	6321-2RS	6321-RZ	6321-2RZ		184000	154000	2600	2000	3200	119	211	2.5	8.05
	260	60	4	6421	6421-Z	6421-2Z	6421-RS	6421-2RS	6421-RZ	6421-2RZ		207000	179000	2700	-	3200	123	242	3	16.800
110	140	16	1	61822	61822-Z	61822-2Z	61822-RS	61822-2RS	61822-RZ	61822-2RZ		28100	32500	4300	-	5300	115	135	1.0	0.510
	150	20	1.1	61922	61922-Z	61922-2Z	61922-RS	61922-2RS	61922-RZ	61922-2RZ		43500	44500	4300	2400	5000	116	144	1.0	0.830
	170	19	1	16022	-	-	-	-	-	-		57500	56500	3800	-	4500	119	161	1.0	1.46

Deep Groove Ball Bearings

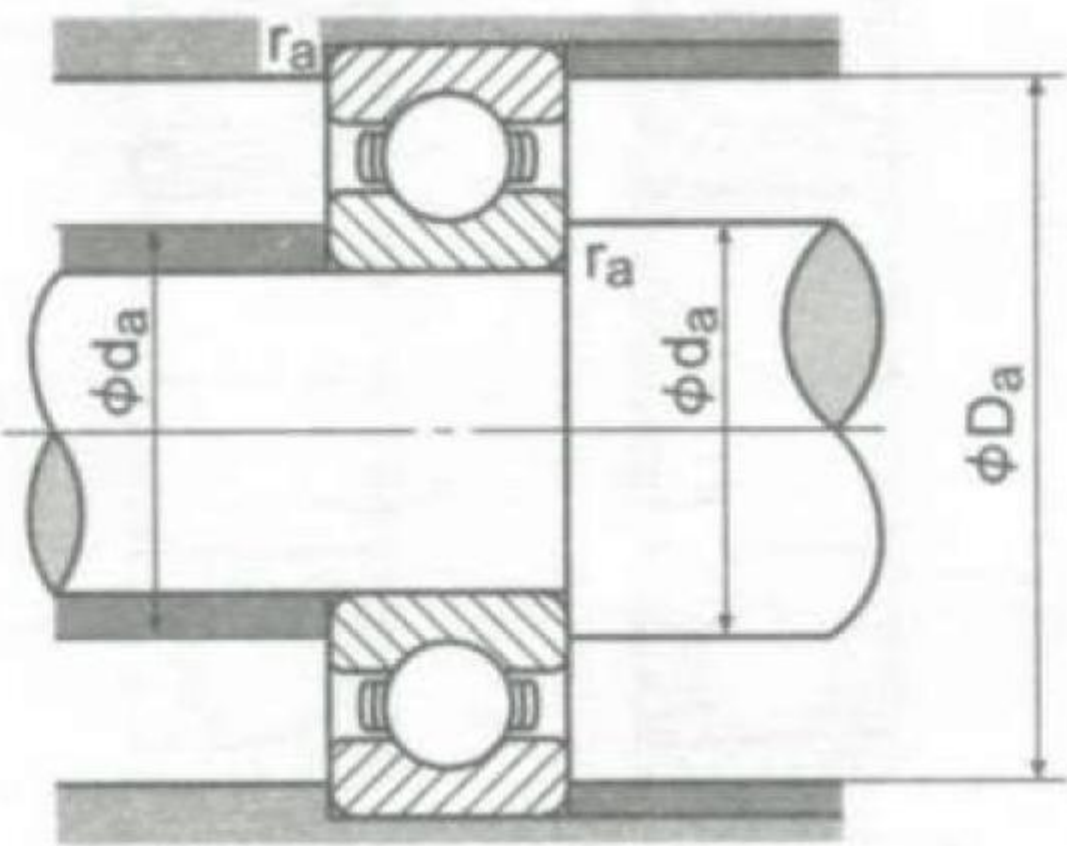
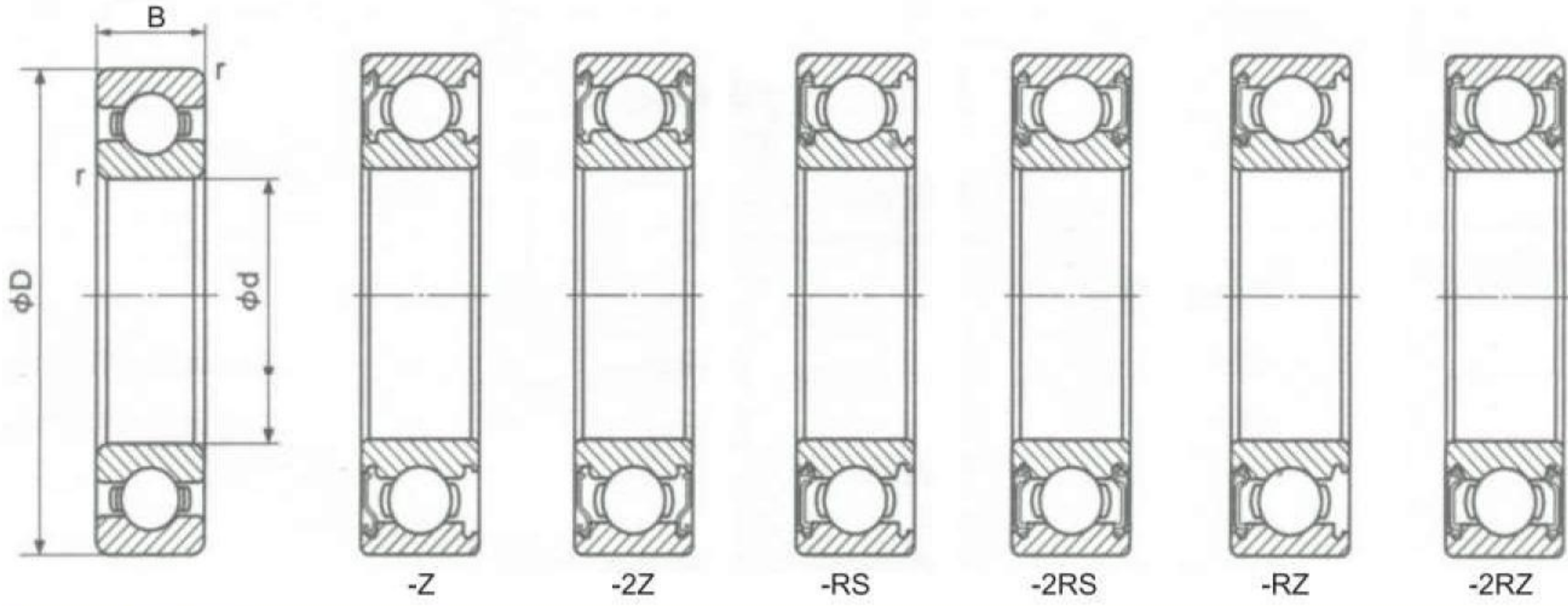
d: 110 ~ 150 mm



Principal Dimensions (mm)				Bearing Designations							Basic Load Rating (N)		Limiting Speed (rpm)			Abutment And Fillet Dimensions (mm)			Weight (kg)
d	D	B	r (min)	Open	Shield Type		Contact Seal Type		Non-Contact Seal Type		Dynamic Cr	Static Cor	Grease		Oil	da (min)	Da (max)	ra (max)	
													Open, Z, 2Z, RZ, 2RZ	RS, 2RS	Open, Z				
110	170	28	2	6022	6022-Z	6022-2Z	6022-RS	6022-2RS	6022-RZ	6022-2RZ	85000	73000	3800	2200	4500	118	162	2.0	1.97
	200	38	2.1	6222	6222-Z	6222-2Z	6222-RS	6222-2RS	6222-RZ	6222-2RZ	144000	117000	2800	2200	3400	122	188	2.0	4.36
	240	50	3	6322	6322-Z	6322-2Z	6322-RS	6322-2RS	6322-RZ	6322-2RZ	205000	179000	2400	-	3000	124	226	2.5	9.54
	280	65	4	6422	6422-Z	6422-2Z	6422-RS	6422-2RS	6422-RZ	6422-2RZ	247000	227000	2600	-	3000	128	262	3	21.300
120	150	16	1	61824	-	-	-	-	-	-	28900	35500	4000	2200	4800	125	145	1.0	0.549
	165	22	1.1	61924	-	-	-	-	-	-	53000	54000	3800	-	4500	126	159	1.0	1.13
	180	19	1	16024	-	-	-	-	-	-	56500	57500	3600	-	4300	129	171	1.0	1.80
	180	28	2	6024	6024-Z	6024-2Z	-	-	-	-	88000	80000	3600	2200	4300	128	172	2.0	2.67
	215	40	2.1	6224	6224-Z	6224-2Z	-	-	-	-	155000	131000	2600	2000	3200	132	203	2.0	5.15
	260	55	3	6324	6324-Z	6324-2Z	-	-	-	-	207000	185000	2200	1800	2800	134	246	2.5	14.6
	310	72	5	6424	-	-	-	-	-	-	291000	287000	2300	-	2800	142	282	4	29.000
130	165	18	1.1	61826	-	-	-	-	-	-	37000	44000	3600	-	4300	136	158	1.0	0.790
	180	24	1.5	61926	-	-	-	-	-	-	65000	67500	3400	-	4000	137	173	1.5	1.78
	200	22	1.1	16026	-	-	-	-	-	-	75500	77500	3000	-	3600	144	186	1.0	2.69
	200	33	2	6026	6026-Z	6026-2Z	-	-	-	-	106000	101000	3000	1900	3600	138	192	2.0	3.92
	230	40	3	6226	6226-Z	6226-2Z	-	-	-	-	167000	146000	2400	-	3000	144	216	2.5	5.82
	280	58	4	6326	6326-Z	6326-2Z	-	-	-	-	229000	214000	2200	-	2600	148	262	3.0	18.2
	340	78	5	6426	-	-	-	-	-	-	300000	298000	2200	-	2500	152	318	4	38.000
140	175	18	1.1	61828	-	-	-	-	-	-	38500	48000	3400	1900	4000	146	169	1.0	0.840
	190	24	1.5	61928	-	-	-	-	-	-	66500	72000	3200	-	3800	147	183	1.5	1.90
	210	22	1.1	16028	-	-	-	-	-	-	77500	82500	2800	-	3400	154	196	1.0	2.86
	210	33	2	6028	6028-Z	6028-2Z	-	-	-	-	110000	109000	2800	1800	3400	148	202	2.0	4.15
	250	42	3	6228	6228-Z	6228-2Z	-	-	-	-	166000	150000	2200	1700	2800	154	236	2.5	7.47
	300	62	4	6328	6328-Z	6328-2Z	-	-	-	-	253000	246000	2000	-	2400	158	282	3.0	21.8
150	190	20	1.1	61830	-	-	-	-	-	-	47500	58500	3200	-	3800	156	184	1.0	1.20
	210	28	2	61930	-	-	-	-	-	-	85000	90500	2600	-	3200	158	202	2.0	2.64
	225	24	1.1	16030	-	-	-	-	-	-	84000	91000	2600	-	3000	164	211	1.0	3.58
	225	35	2.1	6030	6030-Z	6030-2Z	-	-	-	-	126000	126000	2600	1700	3000	159	216	2.0	4.48
	270	45	3	6230	6230-Z	6230-2Z	-	-	-	-	176000	168000	2000	-	2600	164	256	2.5	9.41
	320	65	4	6330	6330-Z	6330-2Z	-	-	-	-	274000	284000	1800	-	2200	168	302	3.0	26.2

Deep Groove Ball Bearings

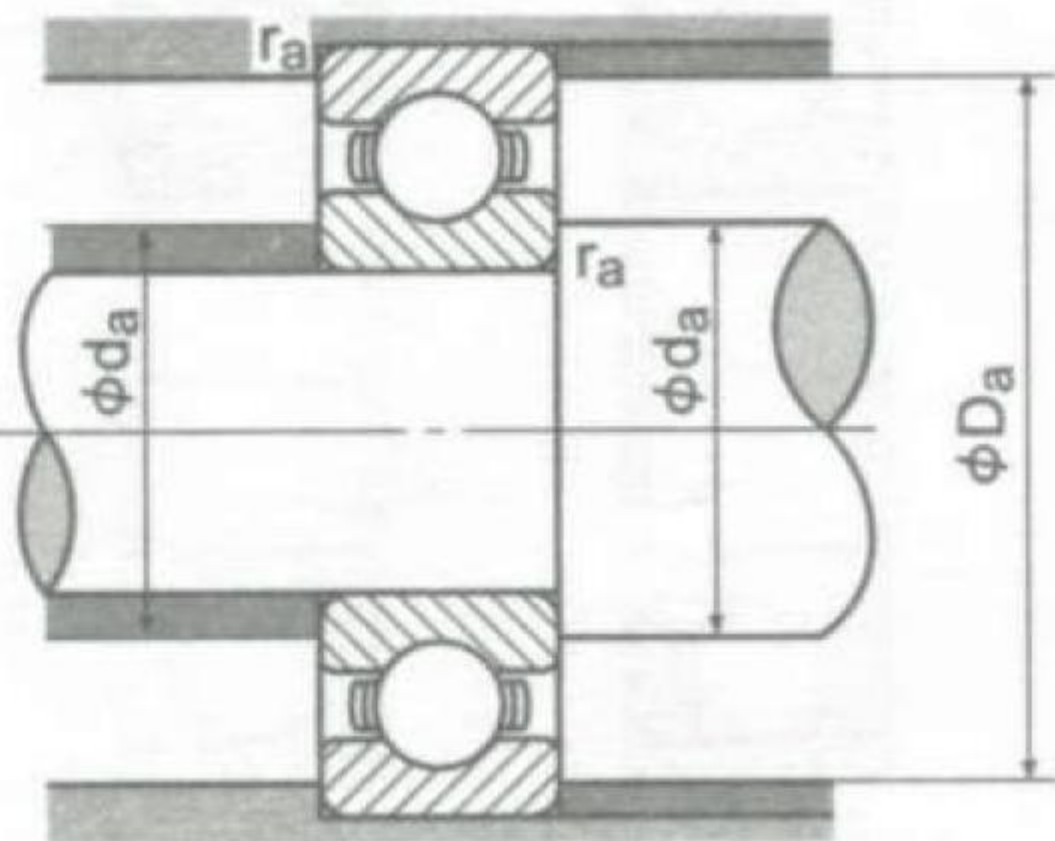
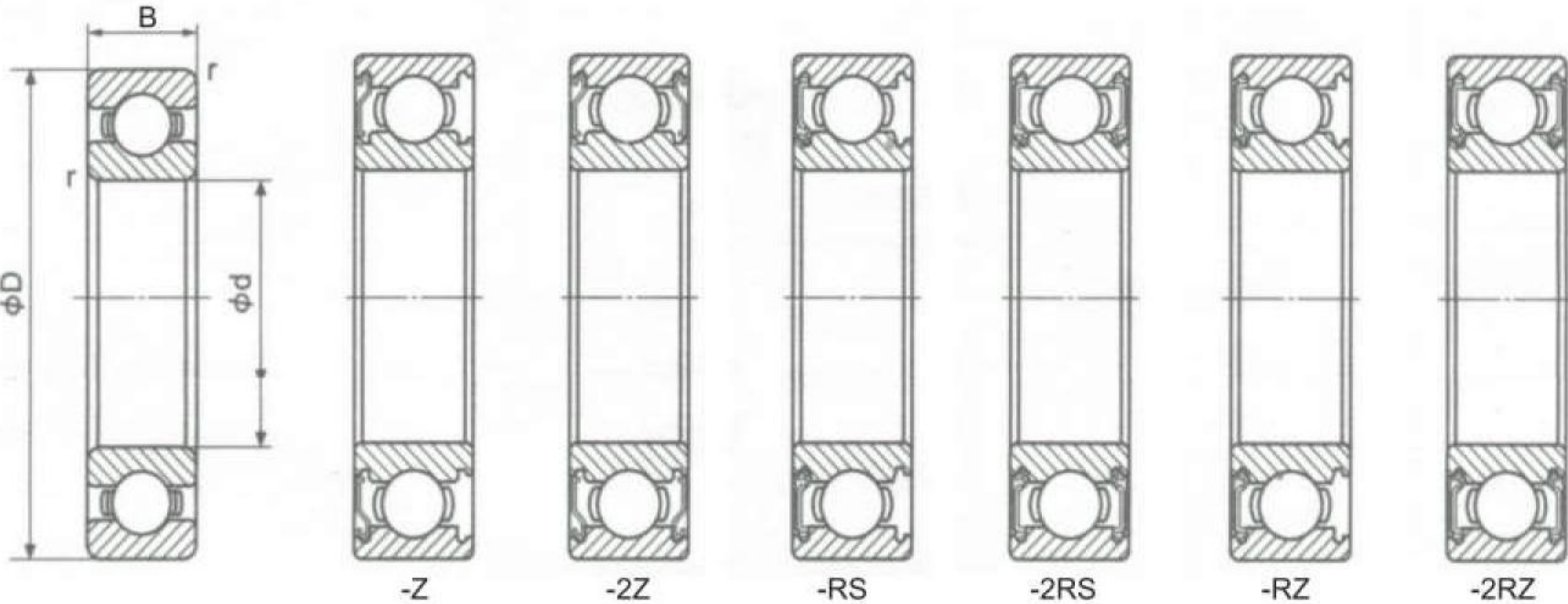
d: 160 ~ 200 mm



Principal Dimensions (mm)				Bearing Designations							Basic Load Rating (N)		Limiting Speed (rpm)			Abutment And Fillet Dimensions (mm)			Weight (kg)
d	D	B	r _(min)	Open	Shield Type	Contact Seal Type	Non-Contact Seal Type				Dynamic Cr	Static Cor	Grease		Oil	da _(min)	Da _(max)	ra _(max)	
													Open, Z, 2Z, RZ, 2RZ	RS, 2RS	Open, Z				
160	200	20	1.1	61832	61832-Z	61832-2Z	61832-RS	61832-2RS	61832-RZ	61832-2RZ	48500	61000	2600	1700	3200	166	194	1.0	1.30
	220	28	2	61932	61932-Z	61932-2Z	61932-RS	61932-2RS	61932-RZ	61932-2RZ	87000	96000	2600	1600	3000	168	212	2.0	3.01
	240	25	1.5	16032	-	-	-	-	-	-	99000	108000	2400	-	2800	168	232	1.5	4.2
	240	38	2.1	6032	6032-Z	6032-2Z	6032-RS	6032-2RS	6032-RZ	6032-2RZ	137000	135000	2400	1600	2800	169	231	2.0	5.89
	290	48	3	6232	6232-Z	6232-2Z	6232-RS	6232-2RS	6232-RZ	6232-2RZ	185000	186000	1900	-	2400	174	276	2.5	14.3
	340	68	4	6332	6332-Z	6332-2Z	6332-RS	6332-2RS	6332-RZ	6332-2RZ	278000	287000	1700	-	2000	178	322	3.0	28.6
170	215	22	1.1	61834	61834-Z	61834-2Z	61834-RS	61834-2RS	61834-RZ	61834-2RZ	60000	75000	2600	1600	3000	177	208	1.0	1.85
	230	28	2	61934	61934-Z	61934-2Z	61934-RS	61934-2RS	61934-RZ	61934-2RZ	86000	97000	2400	-	2800	178	222	2.0	3.17
	260	28	1.5	16034	-	-	-	-	-	-	114000	126000	2200	-	2600	178	252	1.5	5.71
	260	42	2.1	6034	6034-Z	6034-2Z	6034-RS	6034-2RS	6034-RZ	6034-2RZ	161000	161000	2200	-	2600	179	251	2.0	7.92
	310	52	4	6234	6234-Z	6234-2Z	6234-RS	6234-2RS	6234-RZ	6234-2RZ	212000	224000	1800	-	2200	188	292	3.0	17.5
	360	72	4	6334	6334-Z	6334-2Z	6334-RS	6334-2RS	6334-RZ	6334-2RZ	325000	355000	1600	-	2000	188	342	3.0	34.0
180	225	22	1.1	61836	61836-Z	61836-2Z	61836-RS	61836-2RS	61836-RZ	61836-2RZ	60500	78500	2400	-	2800	187	218	1.0	2.02
	250	33	2	61936	61936-Z	61936-2Z	61936-RS	61936-2RS	61936-RZ	61936-2RZ	119000	128000	2200	-	2600	188	242	2.0	4.68
	280	31	2	16036	-	-	-	-	-	-	145000	157000	2000	-	2400	189	271	2	7.5
	280	46	2.1	6036	6036-Z	6036-2Z	6036-RS	6036-2RS	6036-RZ	6036-2RZ	180000	185000	2000	-	2400	189	271	2.0	10.3
	320	52	4	6236	6236-Z	6236-2Z	6236-RS	6236-2RS	6236-RZ	6236-2RZ	227000	241000	1700	-	2000	198	302	3.0	18.3
	380	75	4	6336	6336-Z	6336-2Z	6336-RS	6336-2RS	6336-RZ	6336-2RZ	355000	405000	1500	-	1800	198	362	3.0	41.9
190	240	24	1.5	61838	61838-Z	61838-2Z	61838-RS	61838-2RS	61838-RZ	61838-2RZ	73000	93500	2200	-	2600	198	232	1.5	2.60
	260	33	2	61938	61938-Z	61938-2Z	61938-RS	61938-2RS	61938-RZ	61938-2RZ	113000	127000	2200	-	2600	198	252	2.0	4.90
	290	31	2	16038	-	-	-	-	-	-	149000	168000	2000	-	2400	199	281	2	7.78
	290	46	2.1	6038	6038-Z	6038-2Z	6038-RS	6038-2RS	6038-RZ	6038-2RZ	188000	201000	2000	-	2400	199	281	2.0	10.8
	340	55	4	6238	6238-Z	6238-2Z	6238-RS	6238-2RS	6238-RZ	6238-2RZ	255000	282000	1600	-	2000	208	322	3.0	23.0
	400	78	5	6338	6338-Z	6338-2Z	6338-RS	6338-2RS	6338-RZ	6338-2RZ	355000	415000	1400	-	1700	212	378	4.0	48.2
200	250	24	1.5	61840	61840-Z	61840-2Z	61840-RS	61840-2RS	61840-RZ	61840-2RZ	74000	98000	2200	-	2600	208	242	1.5	2.70
	280	38	2.1	61940	61940-Z	61940-2Z	61940-RS	61940-2RS	61940-RZ	61940-2RZ	143000	158000	2000	-	2400	209	271	2.0	6.88
	310	34	2	16040	-	-	-	-	-	-	161000	180000	1900	-	2200	209	301	2	10
	310	51	2.1	6040	6040-Z	6040-2Z	6040-RS	6040-2RS	6040-RZ	6040-2RZ	207000	226000	1900	-	2200	209	301	2.0	13.9
	360	58	4	6240	6240-Z	6240-2Z	6240-RS	6240-2RS	6240-RZ	6240-2RZ	269000	310000	1500	-	1800	218	342	3.0	28.2
	420	80	5	6340	6340-Z	6340-2Z	6340-RS	6340-2RS	6340-RZ	6340-2RZ	380000	445000	1300	-	1600	222	398	4.0	54.6

Deep Groove Ball Bearings

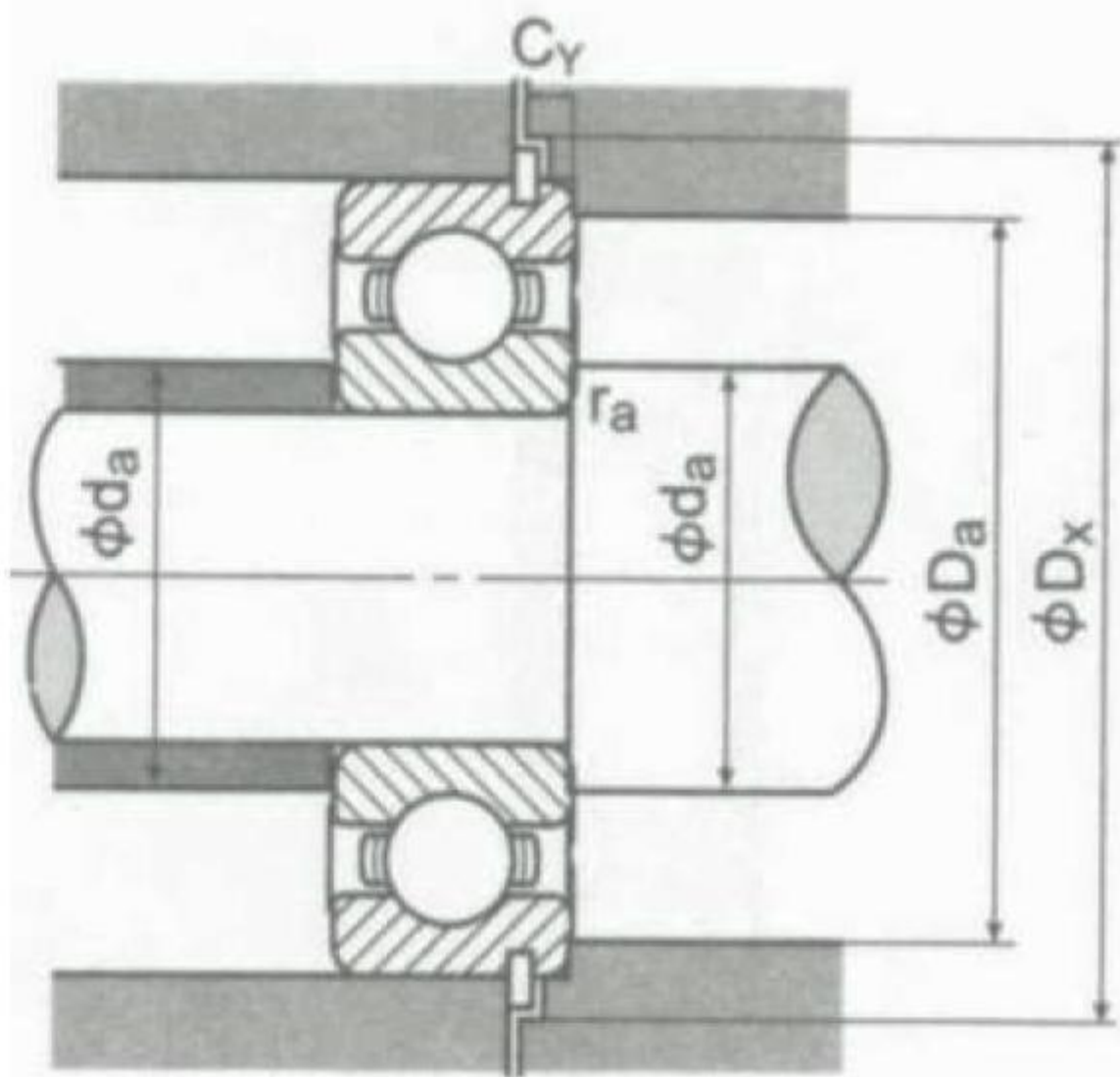
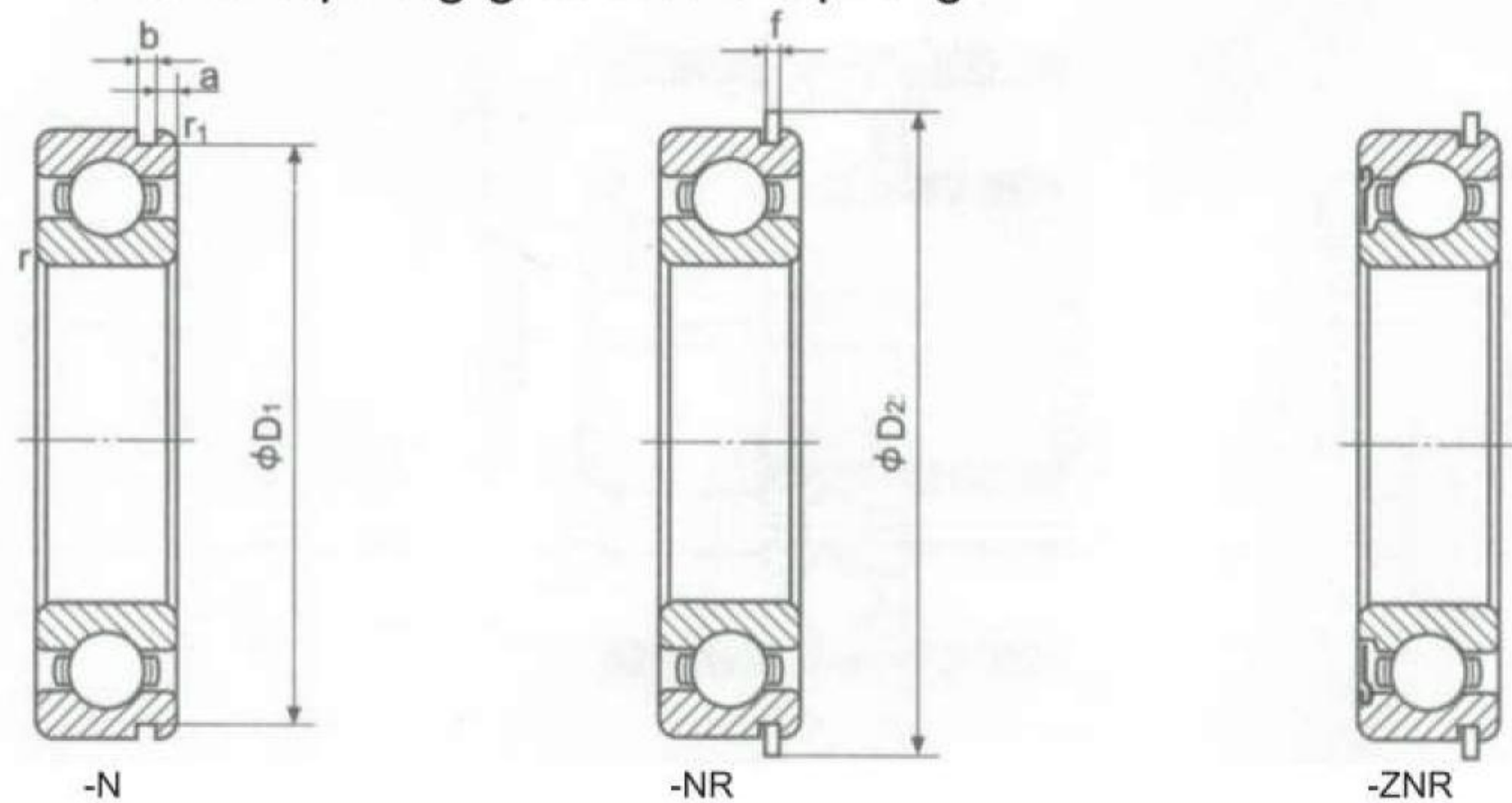
d: 220 ~ 320 mm



Principal Dimensions (mm)				Bearing Designations								Basic Load Rating (N)		Limiting Speed (rpm)			Abutment And Fillet Dimensions (mm)			Weight (kg)
d	D	B	r (min)	Open	Shield Type	Contact Seal Type	Non-Contact Seal Type	Dynamic Cr	Static Cor	Open, Z, 2Z,RZ,2RZ		RS,2RS	Oil Open, Z	da (min)	Da (max)	ra (max)				
220	270	24	1.5	61844	61844-Z	61844-2Z	61844-RS	61844-2RS	61844-RZ	61844-2RZ		76500	107000	1900	-	2400	228	262	1.5	2.98
	300	38	2.1	61944	61944-Z	61944-2Z	61944-RS	61944-2RS	61944-RZ	61944-2RZ		146000	169000	1800	-	2200	229	291	2.0	7.45
	340	37	2.1	16044	-	-	-	-	-	-		180000	217000	1600	-	2000	231	329	2	13.1
	340	56	3	6044	6044-Z	6044-2Z	6044-RS	6044-2RS	6044-RZ	6044-2RZ		235000	271000	1700	-	2000	230	330	2.5	18.4
	400	65	4	6244	6244-Z	6244-2Z	6244-RS	6244-2RS	6244-RZ	6244-2RZ		310000	375000	1300	-	1600	238	382	3.0	37.0
240	300	28	2	61848	61848-Z	61848-2Z	61848-RS	61848-2RS	61848-RZ	61848-2RZ		98500	137000	1700	-	2000	250	291	2.0	4.60
	320	38	2.1	61948	61948-Z	61948-2Z	61948-RS	61948-2RS	61948-RZ	61948-2RZ		154000	190000	1700	-	2000	249	311	2.0	8.02
	360	37	2.1	16048	-	-	-	-	-	-		196000	243000	1500	-	1900	251	349	2	13.9
	360	56	3	6048	6048-Z	6048-2Z	6048-RS	6048-2RS	6048-RZ	6048-2RZ		244000	296000	1500	-	1900	250	350	2.5	19.6
	440	72	4	6248	6248-Z	6248-2Z	6248-RS	6248-2RS	6248-RZ	6248-2RZ		340000	430000	1200	-	1500	258	322	3.0	49.9
260	320	28	2	61852	61852-Z	61852-2Z	61852-RS	61852-2RS	61852-RZ	61852-2RZ		101000	148000	1600	-	1900	269	311	2.0	4.95
	360	46	2.1	61952	61952-Z	61952-2Z	61952-RS	61952-2RS	61952-RZ	61952-2RZ		204000	255000	1500	-	1800	269	351	2.0	13.4
	400	44	3	16052	-	-	-	-	-	-		237000	310000	1400	-	1700	273	387	2.5	21.1
	400	65	4	6052	6052-Z	6052-2Z	6052-RS	6052-2RS	6052-RZ	6052-2RZ		291000	375000	1400	-	1700	272	388	3.0	29.3
	480	80	5	6252	6252-Z	6252-2Z	6252-RS	6252-2RS	6252-RZ	6252-2RZ		400000	540000	1100	-	1300	282	458	4.0	67.5
280	350	33	2	61856	61856-Z	61856-2Z	61856-RS	61856-2RS	61856-RZ	61856-2RZ		133000	191000	1500	-	1700	290	341	2.0	7.35
	380	46	2.1	61956	61956-Z	61956-2Z	61956-RS	61956-2RS	61956-RZ	61956-2RZ		209000	272000	1400	-	1700	289	371	2.0	14.3
	420	44	3	16056	-	-	-	-	-	-		243000	330000	1300	-	1600	293	407	2.5	22.7
	420	65	4	6056	6056-Z	6056-2Z	6056-RS	6056-2RS	6056-RZ	6056-2RZ		300000	410000	1300	-	1600	293	405	3.0	31.0
	500	80	5	6256	6256-Z	6256-2Z	6256-RS	6256-2RS	6256-RZ	6256-2RZ		400000	550000	1000	-	1300	302	478	4.0	71.0
300	380	38	2.1	61860	61860-Z	61860-2Z	61860-RS	61860-2RS	61860-RZ	61860-2RZ		166000	233000	1300	-	1600	311	369	2.0	10.4
	420	56	3	61960	61960-Z	61960-2Z	61960-RS	61960-2RS	61960-RZ	61960-2RZ		269000	370000	1300	-	1500	311	409	2.5	22.8
	460	50	4	16060	-	-	-	-	-	-		285000	405000	1200	-	1400	316	444	3	31.9
	460	74	4	6060	6060-Z	6060-2Z	6060-RS	6060-2RS	6060-RZ	6060-2RZ		355000	500000	1200	-	1400	313	447	3.0	43.8
	540	85	5	6260	6260-Z	6260-2Z	6260-RS	6260-2RS	6260-RZ	6260-2RZ		465000	670000	950	-	1200	322	518	4.0	88.6
320	400	38	2.1	61864	61864-Z	61864-2Z	61864-RS	61864-2RS	61864-RZ	61864-2RZ		168000	244000	1300	-	1500	330	389	2.0	10.9
	440	56	3	61964	61964-Z	61964-2Z	61964-RS	61964-2RS	61964-RZ	61964-2RZ		266000	375000	1200	-	1400	331	429	2.5	24.1
	480	50	4	16064	-	-	-	-	-	-		293000	430000	1100	-	1300	336	464	3	33.2
	480	74	4	6064	6064-Z	6064-2Z	6064-RS	6064-2RS	6064-RZ	6064-2RZ		390000	570000	1100	-	1300	333	467	3.0	46.1

Deep Groove Ball Bearings

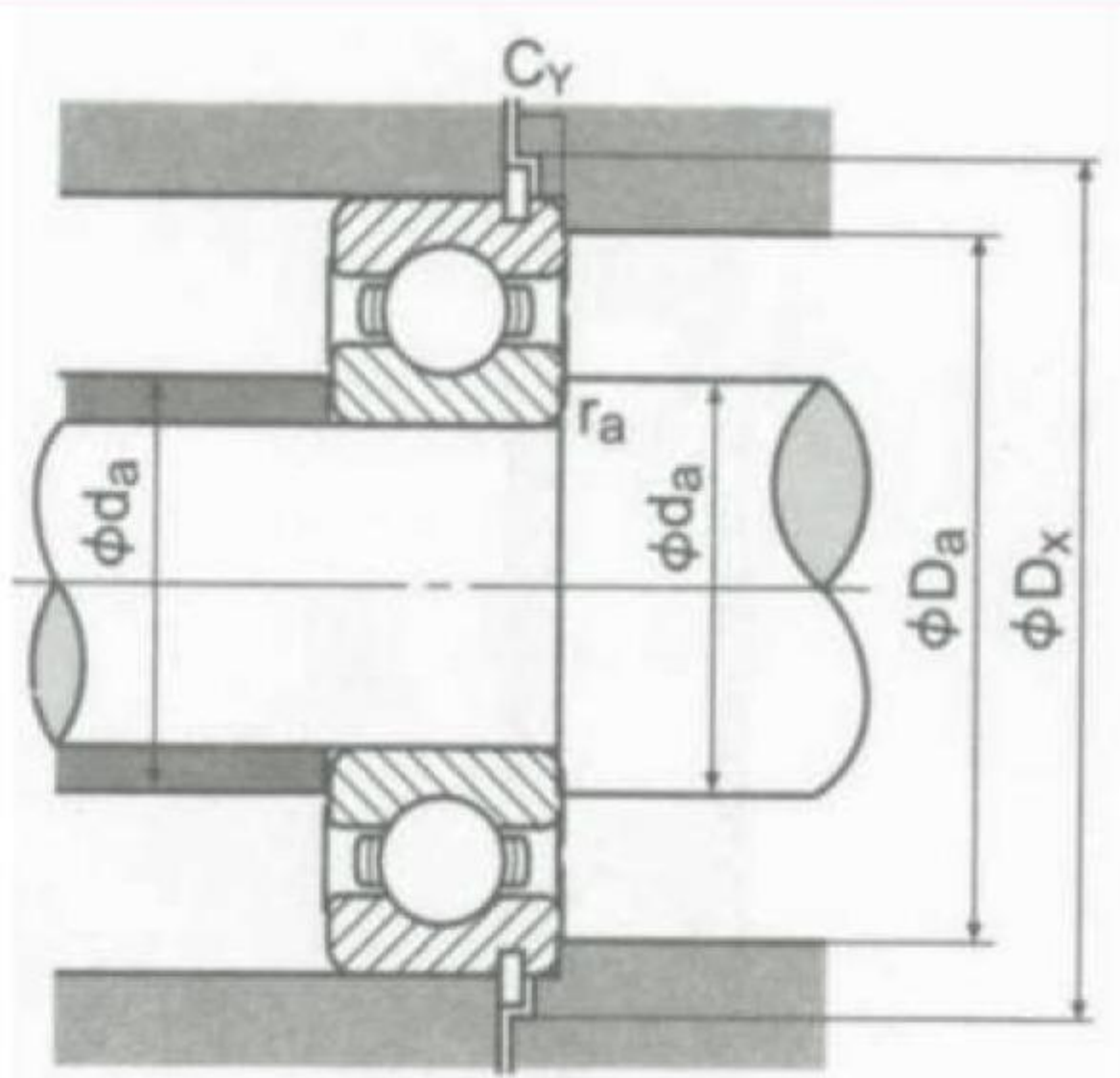
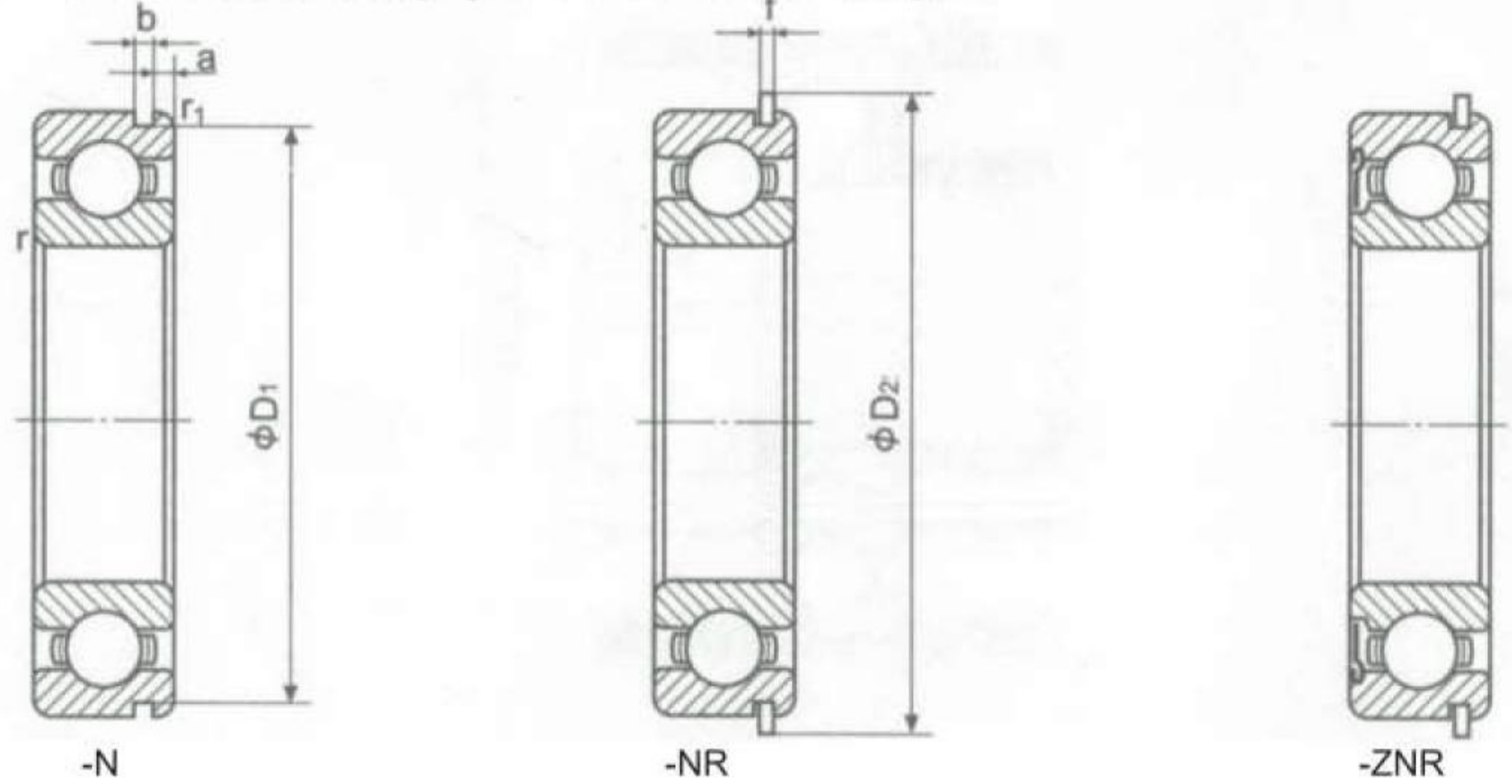
d: 10 ~ 30 mm With snap ring groove / snap ring



Principal Dimensions (mm)					Dimension Of Snap Groove And Snap Type					Bearing Designations			Basic Load Rating (N)		Limiting Speed (rpm)		Abutment And Fillet Dimensions (mm)					Weight (kg)
d	D	B	r (min)	r1 (min)	D1 (max)	a (max)	b (min)	D2 (max)	f (max)				Dynamic Cr	Static Cor	Grease	Oil	da (min)	Da (max)	Dx (min)	ra (max)	Cy (max)	
10	22	6	0.3	0.3	20.8	1.05	0.8	24.8	0.7	61900N	61900NR	61900ZNR	2700	1270	32000	38000	12	20	25.5	0.3	1.5	0.010
	30	9	0.6	0.5	28.17	2.06	1.35	34.7	1.12	6200N	6200NR	6200ZNR	5100	2390	24000	30000	15	25	35.5	0.6	2.9	0.032
	35	11	0.6	0.5	33.17	2.06	1.35	39.7	1.12	6300N	6300NR	6300ZNR	8100	3450	22000	26000	15	30	40.5	0.6	2.9	0.053
12	24	6	0.3	0.3	22.8	1.05	0.8	26.8	0.7	61901N	61901NR	61901ZNR	2890	1460	30000	36000	14	22	27.5	0.3	1.5	0.012
	32	10	0.6	0.5	30.15	2.06	1.35	36.7	1.12	6201N	6201NR	6201ZNR	6800	3050	22000	28000	17	27	37.5	0.6	2.9	0.037
	37	12	1	0.5	34.77	2.06	1.35	41.3	1.12	6301N	6301NR	6301ZNR	9700	4200	20000	24000	18	31	42	1	2.9	0.060
15	28	7	0.3	0.3	26.7	1.3	0.95	30.8	0.85	61902N	61902NR	61902ZNR	4350	2260	26000	30000	17	26	31.5	0.3	1.8	0.017
	32	9	0.3	0.3	30.15	2.06	1.35	36.7	0.85	6002N	6002NR	6002ZNR	5600	2830	24000	28000	17	30	37.5	0.3	2.9	0.033
	35	11	0.6	0.5	33.17	2.06	1.35	39.7	1.12	6202N	6202NR	6202ZNR	7650	3750	20000	24000	20	30	40.5	0.6	2.9	0.045
	42	13	1	0.5	39.75	2.06	1.35	46.3	1.12	6302N	6302NR	6302ZNR	11400	5450	17000	20000	21	36	47	1	2.9	0.082
17	30	7	0.3	0.3	28.7	1.3	0.95	32.8	0.85	61903N	61903NR	61903ZNR	4600	2550	24000	28000	19	28	33.5	0.3	1.8	0.019
	35	10	0.3	0.3	33.17	2.06	1.35	39.7	1.12	6003N	6003NR	6003ZNR	6000	3250	22000	26000	19	33	40.5	0.3	2.9	0.041
	40	12	0.6	0.5	38.1	2.06	1.35	44.6	1.12	6203N	6203NR	6203ZNR	9550	4800	17000	20000	22	35	45.5	0.6	2.9	0.065
	47	14	1	0.5	44.6	2.46	1.35	52.7	1.12	6303N	6303NR	6303ZNR	13600	6650	15000	18000	23	41	53.5	1	3.3	0.115
20	32	7	0.3	0.3	30.7	1.3	0.95	34.8	0.85	61804N	61804NR	61804ZNR	4000	2470	22000	26000	22	30	35.5	0.3	1.8	0.020
	37	9	0.3	0.3	35.7	1.7	0.95	39.8	0.85	61904N	61904NR	61904ZNR	6400	3700	19000	22000	22	35	40.5	0.3	2.3	0.037
	42	12	0.6	0.5	39.75	2.06	1.35	46.3	1.12	6004N	6004NR	6004ZNR	9400	5000	18000	20000	24	38	47	0.6	2.9	0.069
	47	14	1	0.5	44.6	2.46	1.35	52.7	1.12	6204N	6204NR	6204ZNR	12800	6600	15000	18000	26	41	53.5	1	3.3	0.106
	52	15	1.1	0.5	49.73	2.46	1.35	57.9	1.12	6304N	6304NR	6304ZNR	15900	7900	14000	17000	27	45	58.5	1	3.3	0.144
22	44	12	0.6	0.5	41.75	2.06	1.35	48.3	1.07	60/22N	60/22NR	60/22ZNR	9400	5050	17000	20000	27	39	49	0.6	2.9	0.077
	50	14	1	0.5	47.6	2.46	1.35	55.7	1.12	62/22N	62/22NR	62/22ZNR	12900	6800	14000	16000	28	44	56.5	1	3.3	0.120
	56	16	1.1	0.5	53.6	2.46	1.35	61.7	1.12	63/22N	63/22NR	63/22ZNR	18400	9250	13000	16000	29	49	62.5	1	3.3	0.176
25	37	7	0.3	0.3	35.7	1.3	0.95	39.8	0.85	61805N	61805NR	61805ZNR	4500	3150	18000	22000	27	35	40.5	0.3	1.8	0.023
	42	9	0.3	0.3	40.7	1.7	0.95	44.8	0.85	61905N	61905NR	61905ZNR	7050	4550	16000	19000	27	40	45.5	0.3	2.3	0.044
	47	12	0.6	0.5	44.6	2.06	1.35	52.7	1.12	6005N	6005NR	6005ZNR	10100	5850	15000	18000	29	43	53.5	0.6	2.9	0.078
	52	15	1	0.5	49.73	2.46	1.35	57.9	1.12	6205N	6205NR	6205ZNR	14000	7850	13000	15000	31	46	58.5	1	3.3	0.128
	62	17	1.1	0.5	59.61	3.28	1.9	67.7	1.7	6305N	6305NR	6305ZNR	20600	11200	11000	13000	32	55	68.5	1	4.6	0.232
28	52	12	0.6	0.5	49.73	2.06	1.35	57.9	1.07	60/28N	60/28NR	60/28ZNR	12500	7400	14000	16000	33	47	58.5	0.6	2.9	0.102
	58	16	1	0.5	55.6	2.46	1.35	63.7	1.12	62/28N	62/28NR	62/28ZNR	16600	9500	12000	14000	34	52	64.5	1	3.3	0.175
	68	18	1.1	0.5	64.82	3.28	1.9	74.6	1.7	63/28N	63/28NR	63/28ZNR	26700	14000	10000	13000	35	61	76	1	4.6	0.287
30	42	7	0.3	0.3	40.7	1.3	0.95	44.8	0.85	61806N	61806NR	61806ZNR	4700	3650	15000	18000	32	40	45.5	0.3	1.8	0.027
	47	9	0.3	0.3	45.7	1.7	0.95	49.8	0.85	61906N	61906NR	61906ZNR	7250	5000	14000	17000	32	45	50.5	0.3	2.3	0.047
	55	13	1	0.5	52.6	2.08	1.35	60.7	1.12	6006N	6006NR	6006ZNR	13200	8300	13000	15000	35	50	61.5	1	2.9	0.113
	62	16	1	0.5	59.61	3.28	1.9	67.7	1.7	6206N	6206NR	6206ZNR	19500	11300	11000	13000	36	56	68.5	1	4.6	0.199
	72	19	1.1	0.5	68.81	3.28	1.9	78.6	1.7	6306N	6306NR	6306ZNR	26700	15000	9500	12000	37	65	80	1	4.6	0.346

Deep Groove Ball Bearings

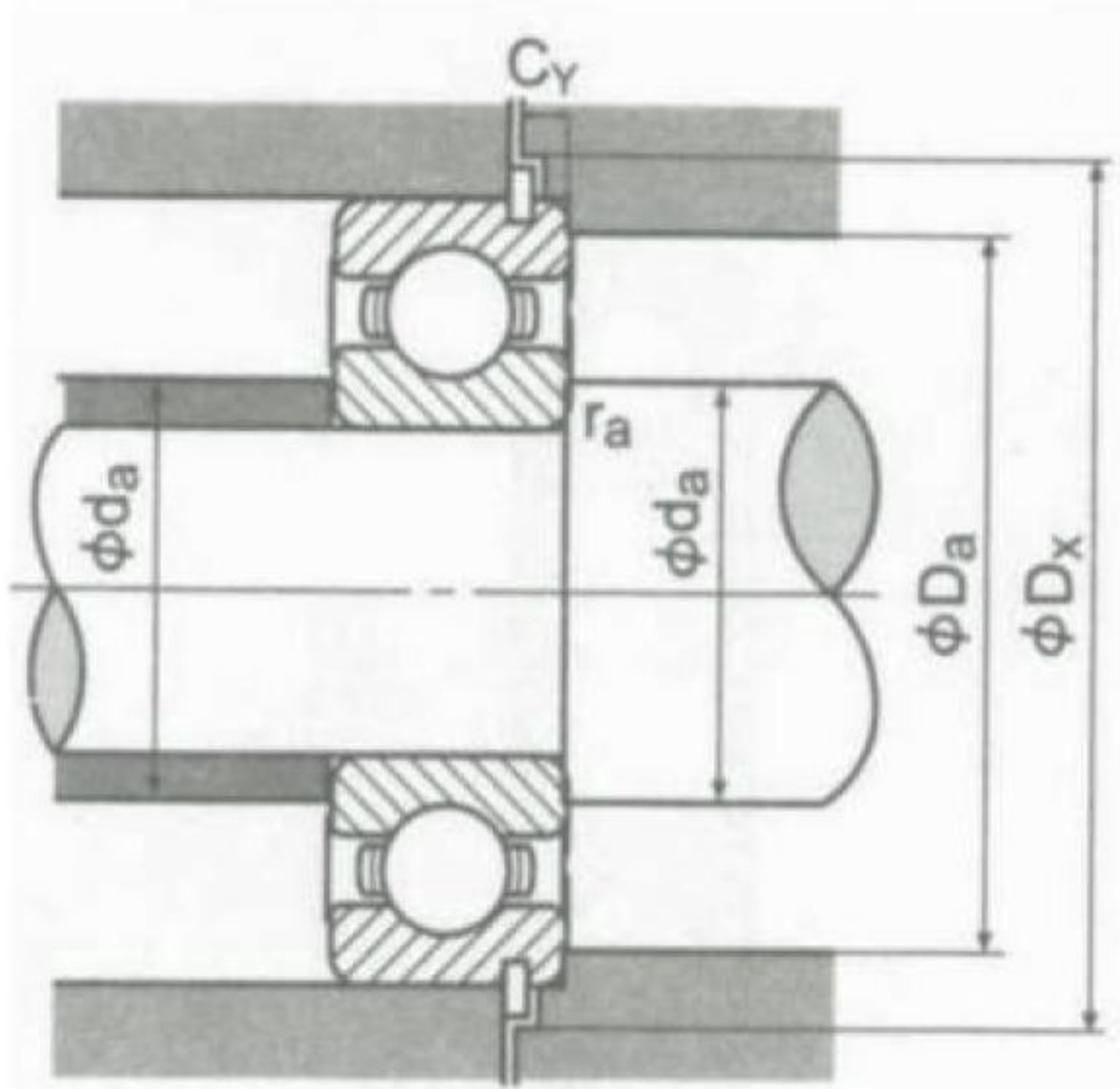
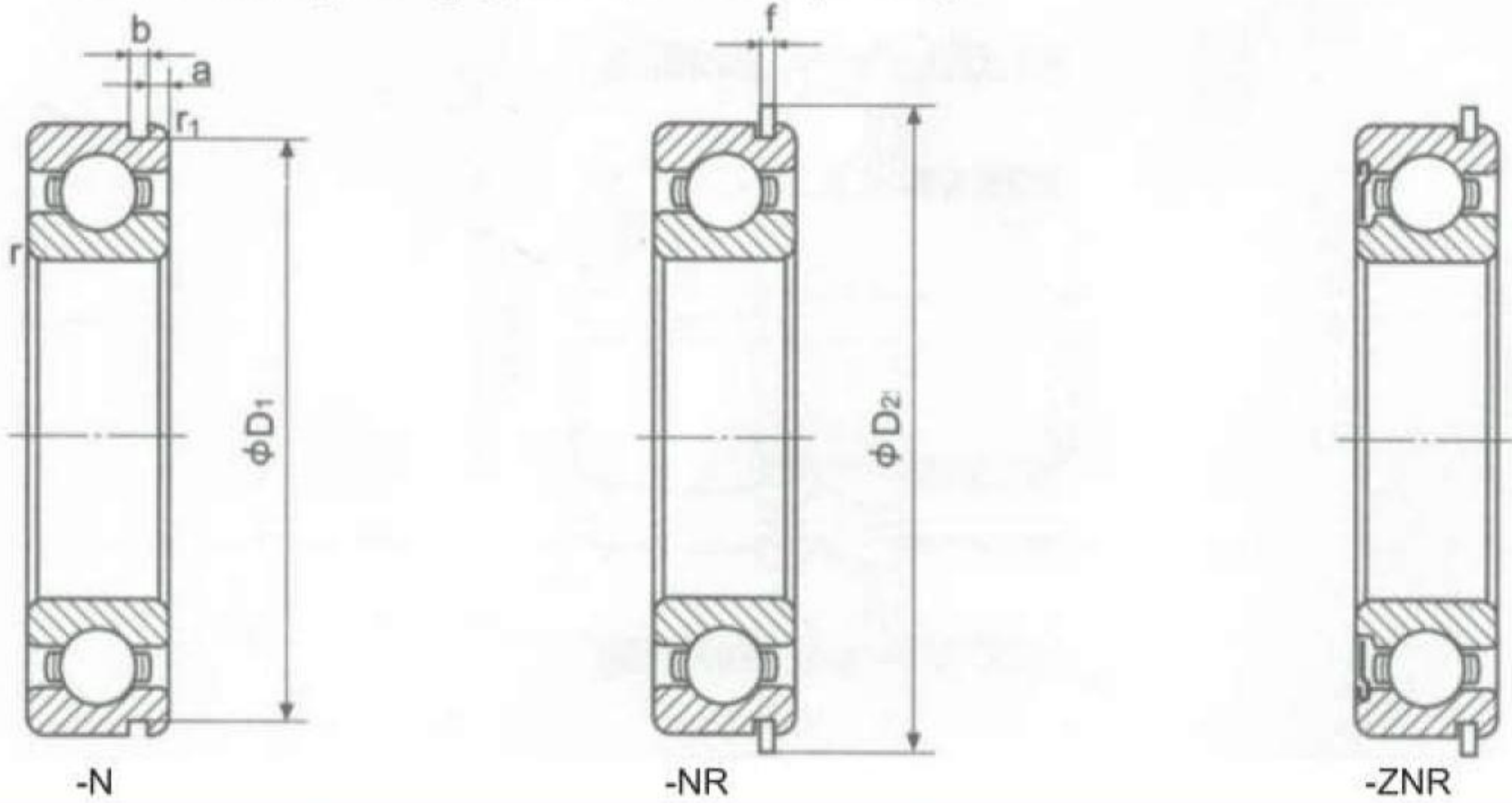
d: 32 ~ 60 mm With snap ring groove / snap ring



Principal Dimensions (mm)					Dimension Of Snap Groove And Snap Type					Bearing Designations			Basic Load Rating (N)		Limiting Speed (rpm)		Abutment And Fillet Dimensions (mm)					Weight (kg)
d	D	B	r (min)	r1 (min)	D1 (max)	a (max)	b (min)	D2 (max)	f (max)				Dynamic Cr	Static Cor	Grease	Oil	da (min)	Da (max)	Dx (min)	ra (max)	Cγ (max)	
32	58	13	1	0.5	55.6	2.08	1.35	63.7	1.07	60/32N	60/32NR	60/32ZNR	15100	9150	12000	14000	38	52	64.5	1	2.9	0.133
	65	17	1	0.5	62.6	3.28	1.9	70.7	1.7	62/32N	62/32NR	62/32ZNR	20700	11600	10000	12000	38	59	71.5	1	4.6	0.230
	75	20	1.1	0.5	71.83	3.28	1.9	81.6	1.7	63/32N	63/32NR	63/32ZNR	29900	17000	9000	11000	39	68	83	1	4.6	0.382
35	47	7	0.3	0.3	45.7	1.3	0.95	49.8	0.85	61807N	61807NR	61807ZNR	4900	4100	14000	16000	37	45	50.5	0.3	1.8	0.030
	55	10	0.6	0.5	53.7	1.7	0.95	57.8	0.85	61907N	61907NR	61907ZNR	10600	7250	12000	15000	39	51	58.5	0.6	2.3	0.075
	62	14	1	0.5	59.61	2.08	1.9	67.7	1.7	6007N	6007NR	6007ZNR	16000	10300	11000	13000	40	57	68.5	1	3.4	0.150
	72	17	1.1	0.5	68.81	3.28	1.9	78.6	1.6	6207N	6207NR	6207ZNR	25700	15300	9500	11000	42	65	80	1	4.6	0.288
	80	21	1.5	0.5	76.81	3.28	1.9	86.6	1.6	6307N	6307NR	6307ZNR	33500	19200	8500	10000	44	71	88	1.5	4.6	0.457
40	52	7	0.3	0.3	50.7	1.3	0.95	54.8	0.85	61808N	61808NR	61808ZNR	6350	5550	12000	14000	42	50	55.5	0.3	1.8	0.034
	62	12	0.6	0.5	60.7	1.7	0.95	64.8	0.85	61908N	61908NR	61908ZNR	13700	10000	11000	13000	44	58	65.5	0.6	2.3	0.110
	68	15	1	0.5	64.82	2.49	1.9	74.6	1.7	6008N	6008NR	6008ZNR	16800	11500	10000	12000	45	63	76	1	3.8	0.186
	80	18	1.1	0.5	76.81	3.28	1.9	86.6	1.7	6208N	6208NR	6208ZNR	29100	17900	8500	10000	47	73	88	1	4.6	0.366
	90	23	1.5	0.5	86.79	3.28	2.7	96.5	2.46	6308N	6308NR	6308ZNR	40500	24000	7500	9000	49	81	98	1.5	5.9	0.633
45	58	7	0.3	0.3	56.7	1.3	0.95	60.8	0.85	61809N	61809NR	61809ZNR	6600	6150	11000	13000	47	56	61.5	0.3	1.8	0.042
	68	12	0.6	0.5	66.7	1.7	0.95	70.8	0.85	61909N	61909NR	61909ZNR	14100	10900	9500	12000	49	64	72	0.6	2.3	0.124
	75	16	1	0.5	71.83	2.49	1.9	81.6	1.7	6009N	6009NR	6009ZNR	20900	15200	9000	11000	50	70	83	1	3.8	0.239
	85	19	1.1	0.5	81.81	3.28	1.9	91.6	1.7	6209N	6209NR	6209ZNR	31500	20400	7500	9000	52	78	93	1	4.6	0.407
	100	25	1.5	0.5	96.8	3.28	2.7	106.5	2.46	6309N	6309NR	6309ZNR	53000	32000	6700	8000	54	91	108	1.5	5.4	0.833
50	65	7	0.3	0.3	63.7	1.3	0.95	67.8	0.85	61810N	61810NR	61810ZNR	6400	6200	9500	11000	52	63	68.5	0.3	1.8	0.054
	72	12	0.6	0.5	70.7	1.7	0.95	74.8	0.85	61910N	61910NR	61910ZNR	14500	11700	9000	11000	54	68	76	0.6	2.3	0.127
	80	16	1	0.5	76.81	2.49	1.9	86.6	1.7	6010N	6010NR	6010ZNR	21800	16600	8500	10000	55	75	88	1	3.8	0.252
	90	20	1.1	0.5	86.79	3.28	2.7	96.5	2.46	6210N	6210NR	6210ZNR	35000	23200	7100	8500	57	83	98	1	5.4	0.463
	110	27	2	0.5	106.81	3.28	2.7	116.6	2.46	6310N	6310NR	6310ZNR	62000	38500	6000	7500	60	100	118	2	5.4	1.070
55	72	9	0.3	0.3	70.7	1.7	0.95	74.8	0.85	61811N	61811NR	61811ZNR	8800	8500	8500	10000	57	70	76	0.3	2.3	0.085
	80	13	1	0.5	77.9	2.1	1.3	84.4	1.12	61911N	61911NR	61911ZNR	16000	13300	8000	9500	60	75	86	1	2.9	0.180
	90	18	1.1	0.5	86.79	2.87	2.7	96.5	2.46	6011N	6011NR	6011ZNR	28300	21200	7500	9000	61	84	98	1	5	0.375
	100	21	1.5	0.5	96.8	3.28	2.7	106.5	2.46	6211N	6211NR	6211ZNR	43500	29300	6300	7500	64	91	108	1.5	5.4	0.607
	120	29	2	0.5	115.21	4.06	3.1	129.7	2.82	6311N	6311NR	6311ZNR	71500	44500	5600	6700	65	110	131.5	2	6.5	1.370
60	78	10	0.3	0.3	76.2	1.7	1.3	82.7	1.12	61812N	61812NR	61812ZNR	11500	10900	8000	9500	62	76	84	0.3	2.5	0.110
	85	13	1	0.5	82.9	2.1	1.3	89.4	1.12	61912N	61912NR	61912ZNR	19400	16300	7500	9000	65	80	91	1	2.9	0.195
	95	18	1.1	0.5	91.82	2.87	2.7	101.6	2.46	6012N	6012NR	6012ZNR	29500	23200	7100	8500	66	89	103	1	5	0.403
	110	22	1.5	0.5	106.81	3.28	2.7	116.6	2.46	6212N	6212NR	6212ZNR	52500	36000	5600	7100	69	101	118	1.5	5.4	0.783
	130	31	2.1	0.5	125.22	4.06	3.1	139.7	2.82	6312N	6312NR	6312ZNR	82000	52000	5300	6300	72	118	141.5	2	6.5	1.700

Deep Groove Ball Bearings

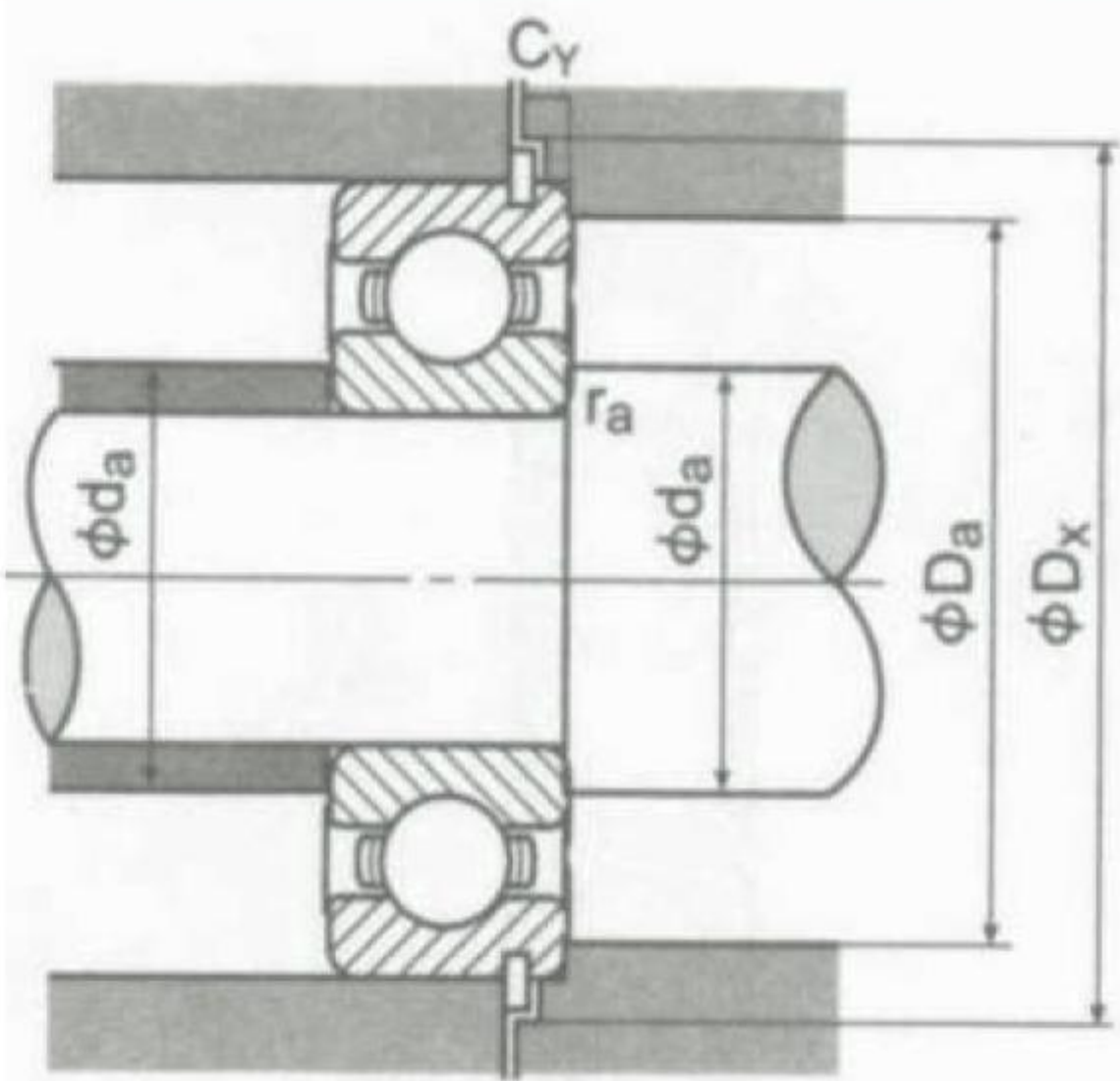
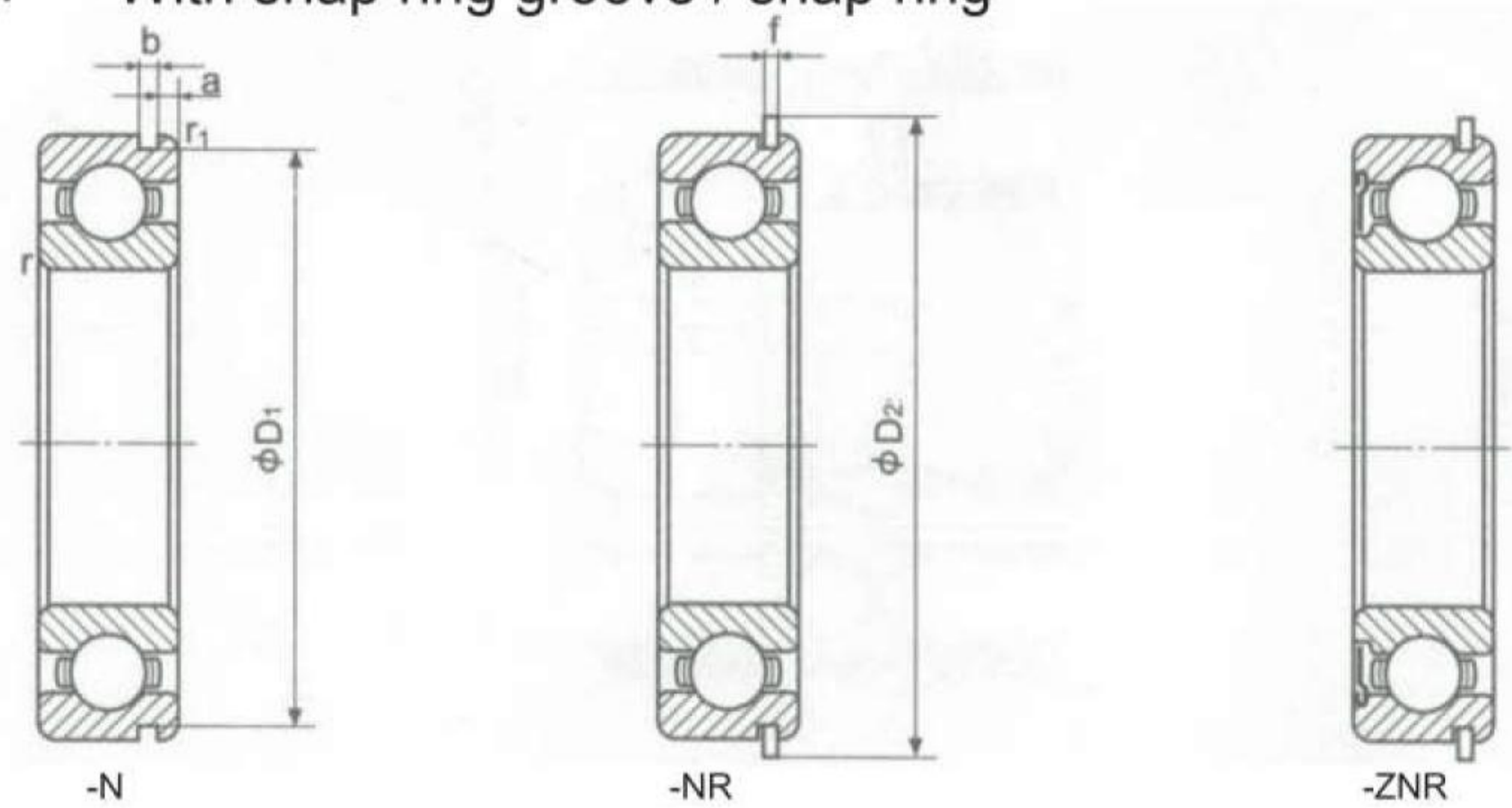
d: 65 ~ 90 mm With snap ring groove / snap ring



Principal Dimensions (mm)					Dimension Of Snap Groove And Snap Ring					Bearing Designations			Basic Load Rating (N)		Limiting Speed (rpm)		Abutment And Fillet Dimensions (mm)					Ref. Weight (kg)
d	D	B	r (min)	r1 (min)	D1 (max)	a (max)	b (min)	D2 (max)	f (max)				Dynamic Cr	Static Cor	Grease	Oil	da (min)	Da (max)	Dx (min)	ra (max)	Cy (max)	
65	85	10	0.6	0.5	82.9	1.7	1.3	89.4	1.12	61813N	61813NR	61813ZNR	11900	12100	7500	8500	69	81	91	0.6	2.5	0.130
	90	13	1	0.5	87.9	2.1	1.3	94.4	1.12	61913N	61913NR	61913ZNR	17400	16100	7100	8500	70	85	96	1	2.9	0.210
	100	18	1.1	0.5	96.8	2.87	2.7	106.5	2.46	6013N	6013NR	6013ZNR	30500	25200	6700	8000	71	94	108	1	5	0.413
	120	23	1.5	0.5	115.21	4.06	3.1	129.7	2.82	6213N	6213NR	6213ZNR	57500	40000	5300	6300	74	111	131.5	1.5	6.5	0.990
	140	33	2.1	0.5	135.23	4.9	3.1	149.7	2.82	6313N	6313NR	6313ZNR	92500	60000	4800	6000	77	128	152	2	7.3	2.08
70	90	10	0.6	0.5	87.9	1.7	1.3	94.4	1.12	61814N	61814NR	61814ZNR	12100	12700	6700	8000	74	86	96	0.6	2.5	0.140
	100	16	1	0.5	97.9	2.5	1.3	104.4	1.12	61914N	61914NR	61914ZNR	23700	21200	6300	7500	75	95	106	1	3.3	0.332
	110	20	1.1	0.5	106.81	2.87	2.7	116.6	2.46	6014N	6014NR	6014ZNR	38000	31000	6000	7100	76	104	118	1	5	0.580
	125	24	1.5	0.5	120.22	4.06	3.1	134.7	2.82	6214N	6214NR	6214ZNR	62000	44000	5000	6300	79	116	136.5	1.5	6.5	1.07
	150	35	2.1	0.5	145.24	4.9	3.1	159.7	2.82	6314N	6314NR	6314ZNR	104000	68000	4500	5300	82	138	162	2	7.3	2.52
75	95	10	0.6	0.5	92.9	1.7	1.3	99.4	1.12	61815N	61815NR	61815ZNR	12500	13900	6300	7500	79	91	101	0.6	2.5	0.150
	105	16	1	0.5	102.6	2.5	1.3	110.7	1.12	61915N	61915NR	61915ZNR	24400	22600	6000	7100	80	100	112	1	3.3	0.350
	115	20	1.1	0.5	111.81	2.87	2.7	121.6	2.46	6015N	6015NR	6015ZNR	39500	33500	5600	6700	81	109	123	1	5	0.615
	130	25	1.5	0.5	125.22	4.06	3.1	139.7	2.82	6215N	6215NR	6215ZNR	66000	49500	4800	5600	84	121	141.5	1.5	6.5	1.18
	160	37	2.1	0.5	155.22	4.9	3.1	169.7	2.82	6315N	6315NR	6315ZNR	113000	77000	4300	5000	87	148	172	2	7.3	3.02
80	100	10	0.6	0.5	97.9	1.7	1.3	104.4	1.12	61816N	61816NR	61816ZNR	12700	14500	6000	7100	84	96	106	0.6	2.5	0.160
	110	16	1	0.5	107.6	2.5	1.3	115.7	1.12	61916N	61916NR	61916ZNR	25000	24000	5600	6700	85	105	117	1	3.3	0.370
	125	22	1.1	0.5	120.22	2.87	3.1	134.7	2.82	6016N	6016NR	6016ZNR	47500	40000	5300	6300	86	119	136.5	1	5.3	0.825
	140	26	2	0.5	135.23	4.9	3.1	149.7	2.82	6216N	6216NR	6216ZNR	72500	53000	4500	5300	90	130	152	2	7.3	1.40
	170	39	2.1	0.5	163.65	5.69	3.5	182.9	3.1	6316N	6316NR	6316ZNR	123000	86500	4000	4800	92	158	185	2	8.4	3.59
85	110	13	1	0.5	107.6	2.1	1.3	115.7	1.12	61817N	61817NR	61817ZNR	18700	20000	5600	6700	90	105	117	1	2.9	0.272
	120	18	1.1	0.5	117.6	3.3	1.3	125.7	1.12	61917N	61917NR	61917ZNR	32000	29600	5300	6300	91	113	127	1	4.1	0.524
	130	22	1.1	0.5	125.22	2.87	3.1	139.7	2.82	6017N	6017NR	6017ZNR	49500	43000	5000	6000	91	124	141.5	1	5.3	0.863
	150	28	2	0.5	145.24	4.9	3.1	159.7	2.82	6217N	6217NR	6217ZNR	84000	62000	4300	5000	95	140	162	2	7.3	1.79
	180	41	3	0.5	173.66	5.69	3.5	192.9	3.1	6317N	6317NR	6317ZNR	133000	97000	3800	4500	99	166	195	2.5	8.4	4.23
90	115	13	1	0.5	112.6	2.1	1.3	120.7	1.2	61818N	61818NR	61818ZNR	19000	21000	5300	6300	95	110	122	1	2.9	0.288
	125	18	1.1	0.5	122.6	3.3	1.3	130.7	1.12	61918N	61918NR	61918ZNR	33000	31500	5000	6000	96	119	132	1	4.1	0.549
	140	24	1.5	0.5	135.23	3.71	3.1	149.7	2.82	6018N	6018NR	6018ZNR	58000	50000	4800	5600	97	133	152	1.5	6.1	1.13
	160	30	2	0.5	155.22	4.9	3.1	169.7	2.82	6218N	6218NR	6218ZNR	96000	71500	4000	4800	100	150	172	2	7.3	2.15
	190	43	3	0.5	183.64	5.69	3.5	202.9	3.1	6318N	6318NR	6318ZNR	143000	107000	3600	4300	104	176	205	2.5	8.4	4.91

Deep Groove Ball Bearings

d: 95 ~ 130 mm With snap ring groove / snap ring



Principal Dimensions (mm)					Dimension Of Snap Groove And Snap Ring					Bearing Designations			Basic Load Rating (N)		Limiting Speed (rpm)		Abutment And Fillet Dimensions (mm)					Ref. Weight (kg)
d	D	B	r (min)	r1 (min)	D1 (max)	a (max)	b (min)	D2 (max)	f (max)				Dynamic Cr	Static Cor	Grease	Oil	da (min)	Da (max)	Dx (min)	ra (max)	Cy (max)	
95	120	13	1	0.5	117.6	2.1	1.3	125.7	1.12	61819N	61819NR	61819ZNR	19300	22000	5000	6000	100	115	127	1	2.9	0.307
	130	18	1.1	0.5	127.6	3.3	1.3	135.7	1.12	61919N	61919NR	61919ZNR	33500	33500	4800	5600	101	124	137	1	4.1	0.576
	145	24	1.5	0.5	140.23	3.71	3.1	154.7	2.82	6019N	6019NR	6019ZNR	60500	54000	4500	5300	102	138	157	1.5	6.1	1.16
	170	32	2.1	0.5	163.65	5.69	3.5	182.9	3.1	6219N	6219NR	6219ZNR	109000	82000	3800	4500	107	158	185	2	8.4	2.62
	200	45	3	0.5	193.65	5.69	3.5	212.9	3.1	6319N	6319NR	6319ZNR	153000	119000	3000	3600	109	186	215	2.5	8.4	5.67
100	125	13	1	0.5	122.6	2.1	1.3	130.7	1.12	61820N	61820NR	61820ZNR	19600	23000	4800	5600	105	120	132	1	2.9	0.320
	140	20	1.1	0.5	137.6	3.3	1.9	145.7	1.7	61920N	61920NR	61920ZNR	43000	42000	4500	5300	106	134	147	1	4.7	0.780
	150	24	1.5	0.5	145.24	3.71	3.1	159.7	2.82	6020N	6020NR	6020ZNR	60000	54000	4300	5300	107	143	162	1.5	6.1	1.20
	180	34	2.1	0.5	173.66	5.69	3.5	192.9	3.1	6220N	6220NR	6220ZNR	122000	93000	3600	4300	112	168	195	2	8.4	3.14
105	130	13	1	0.5	127.6	2.1	1.3	135.7	1.12	61821N	61821NR	-	19800	23900	4800	5600	110	125	137	1	2.9	0.335
	145	20	1.1	0.5	142.6	3.3	1.9	150.7	1.7	61921N	61921NR	-	42500	42000	4300	5300	111	139	152	1	4.7	0.803
	160	26	2	0.5	155.22	3.71	3.1	169.7	2.82	6021N	6021NR	6021ZNR	72500	66000	4000	4800	113	152	172	2	6.1	1.54
	190	36	2.1	0.5	183.64	5.69	3.5	202.9	3.1	6221N	6221NR	6221ZNR	133000	105000	3400	4000	117	178	205	2	8.4	3.76
110	140	16	1	0.5	137.6	2.5	1.9	145.7	1.7	61822N	61822NR	-	28100	32500	4300	5300	115	135	147	1	3.9	0.526
	150	20	1.1	0.5	147.6	3.3	1.9	155.7	1.7	61922N	61922NR	-	43500	44500	4300	5000	116	144	157	1	4.7	0.846
	170	28	2	0.5	163.65	3.71	3.5	182.9	3.1	6022N	6022NR	6022ZNR	85000	73000	3800	4500	118	162	185	2	6.4	1.91
	200	38	2.1	0.5	193.65	5.69	3.5	212.9	3.1	6222N	6222NR	6222ZNR	144000	117000	2800	3400	122	188	215	2	8.4	4.36
120	150	16	1	0.5	147.6	2.5	1.9	155.7	1.7	61824N	61824NR	-	28900	35500	4000	4800	125	145	157	1	3.9	0.567
	165	22	1.1	0.5	161.8	3.7	1.9	171.5	1.7	61924N	61924NR	-	53000	54000	3800	4500	126	159	173	1	5.1	1.15
	180	28	2	0.5	173.66	3.71	3.5	192.9	3.1	6024N	6024NR	6024ZNR	88000	80000	3600	4300	128	172	195	2	6.4	2.36
130	165	18	1.1	0.5	161.8	3.3	1.9	171.5	1.7	61826N	61826NR	-	37000	44000	3600	4300	136	158	173	1	4.7	0.815
	180	24	1.5	0.5	176.8	3.7	1.9	186.5	1.7	61926N	61926NR	-	65000	67500	3400	4000	137	173	188	1.5	5.1	1.81
	200	33	2	0.5	193.65	5.69	3.5	212.9	3.1	6026N	6026NR	6026ZNR	106000	101000	3000	3600	138	192	215	2	8.4	3.60