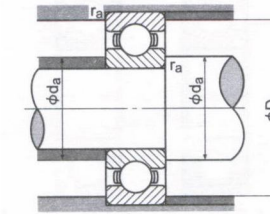
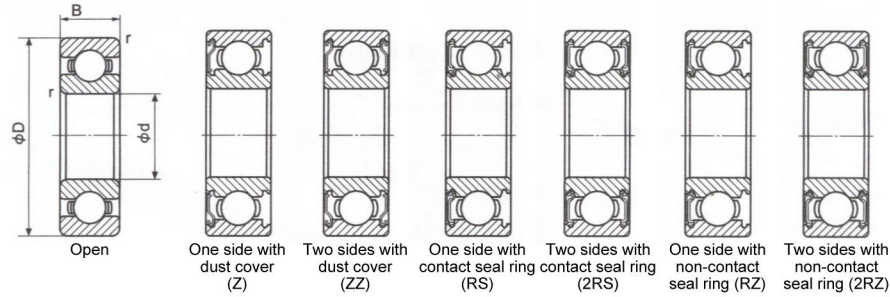


Deep Groove Ball Bearings

Deep groove ball bearings are the widely used bearing type with a broad dimension range and extensive varieties. Its outer diameter could be from 3mm to 1700mm. The raceways on inner ring and outer ring are round and can accommodate radial load, axial load and combined load.

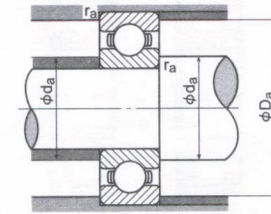
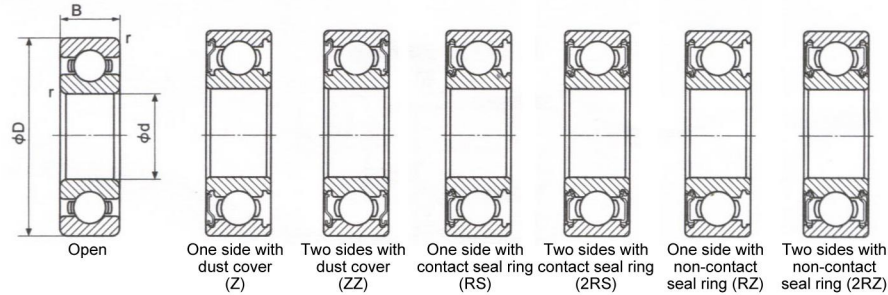
Bore diameter d: 1~4mm



Principal dimensions (mm)				Designation						
d	D	B	r (min)	Open	Shield ring		Contact seal ring		Non-contact seal ring	
1	3	1	0.05	618/1	-	-	-	-	-	-
	4	1.6	0.1	619/1	-	-	-	-	-	-
1.5	4	1.2	0.05	618/1.5	-	-	-	-	-	-
	5	2	0.15	619/1.5	-	-	-	-	-	-
	6	2.5	0.15	60/1.5	-	-	-	-	-	-
2	4	1.2	0.05	617/2	-	-	-	-	-	-
	5	1.5	0.08	618/2	-	-	-	-	-	-
	6	2.3	0.15	619/2	-	-	-	-	-	-
	7	2.8	0.15	602	-	-	-	-	-	-
2.5	5	1.5	0.08	617/2.5	-	-	-	-	-	-
	6	1.8	0.08	618/2.5	-	-	-	-	-	-
	7	2.5	0.15	619/2.5	-	-	-	-	-	-
3	6	2	0.08	617/3	617/3Z	617/3ZZ	617/3RS	617/3-2RS	617/3RZ	617/3-2RZ
	7	2	0.1	618/3	618/3Z	618/3ZZ	618/3RS	618/3-2RS	618/3RZ	618/3-2RZ
	8	3	0.15	619/3	619/3Z	619/3ZZ	619/3RS	619/3-2RS	619/3RZ	619/3-2RZ
	9	3	0.15	603	603Z	603ZZ	603RS	603-2RS	603RZ	603-2RZ
4	10	4	0.15	623	623Z	623ZZ	623RS	623-2RS	623RZ	623-2RZ
	7	2	0.08	617/4	617/4Z	617/4ZZ	617/4RS	617/4-2RS	617/4RZ	617/4-2RZ
	9	2.5	0.1	618/4	618/4Z	618/4ZZ	618/4RS	618/4-2RS	618/4RZ	618/4-2RZ
	9	3.5	0.1	628/4	628/4Z	628/4ZZ	628/4RS	628/4-2RS	628/4RZ	628/4-2RZ
	11	4	0.15	619/4	619/4Z	619/4ZZ	619/4RS	619/4-2RS	619/4RZ	619/4-2RZ
	12	4	0.2	604	604Z	604ZZ	604RS	604-2RS	604RZ	604-2RZ
	13	5	0.2	624	624Z	624ZZ	624RS	624-2RS	624RZ	624-2RZ
16	5	0.3	634	634Z	634ZZ	634RS	634-2RS	634RZ	634-2RZ	

Basic load rating		Limiting speed		Abutment and fillet Dimensions (mm)			Ref. Weight (g)
		Grease		Oil	Da (min)	Da (max)	
Dynamic Cr(N)	Static Cor(N)	Open, Z, ZZ, RZ, 2RZ	RS, 2RS	Open, Z	Da (min)	Da (max)	ra (max)
80	22	120000	-	140000	1.6	2.4	0.05
157	43	96000	-	110000	1.8	3.2	0.1
102	29	88000	-	100000	2.3	3.2	0.05
237	68	79000	-	93000	2.7	3.8	0.15
274	86	71000	-	84000	2.7	4.8	0.15
104	37	83000	-	98000	2.5	3.5	0.05
171	51	74000	-	87000	2.8	4.2	0.08
279	89	67000	-	79000	3.2	4.8	0.15
380	125	62000	-	73000	3.2	5.8	0.15
153	59	70000	-	82000	3.1	4.4	0.08
209	73	65000	-	76000	3.7	4.8	0.08
284	96	59000	-	70000	3.7	5.8	0.15
550	174	56000	-	66000	3.7	6.8	0.15
242	94	60000	-	71000	3.6	5.4	0.08
390	130	58000	-	68000	4.2	5.8	0.1
560	180	54000	-	63000	4.2	6.8	0.15
635	219	50000	-	59000	4.2	7.8	0.15
640	224	50000	-	58000	4.2	8.8	0.15
269	117	54000	-	63000	4.6	6.4	0.08
640	224	49000	-	57000	5.2	7.8	0.1
640	224	49000	-	57000	-	-	-
715	276	45000	-	52000	5.2	9.8	0.15
970	360	43000	-	51000	5.6	10.4	0.2
1310	490	42000	-	49000	5.6	11.4	0.2
1760	680	37000	-	44000	6	14	0.3

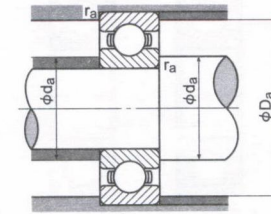
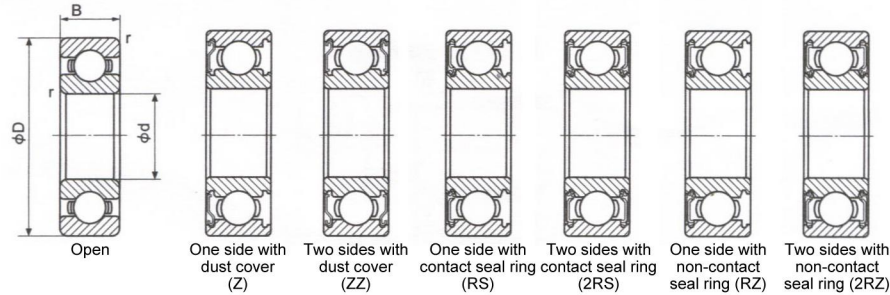
Bore diameter d: 5-9mm



Principal dimensions (mm)				Designation						
d	D	B	r (min)	Open	Shield ring	Contact seal ring		Non-contact seal ring		
5	8	2	0.08	617/5	617/5Z	617/5ZZ	617/5RS	617/5-2RS	617/5RZ	617/5-2RZ
	11	3	0.15	618/5	618/5Z	618/5ZZ	618/5RS	618/5-2RS	618/5RZ	618/5-2RZ
	11	4	0.15	628/5	628/5Z	628/5ZZ	628/5RS	628/5-2RS	628/5RZ	628/5-2RZ
	13	4	0.2	619/5	619/5Z	619/5ZZ	619/5RS	619/5-2RS	619/5RZ	619/5-2RZ
	14	5	0.2	605	605Z	605ZZ	605RS	605-2RS	605RZ	605-2RZ
	16	5	0.3	625	625Z	625ZZ	625RS	625-2RS	625RZ	625-2RZ
	19	6	0.3	635	635Z	635ZZ	635RS	635-2RS	635RZ	635-2RZ
6	10	2.5	0.1	617/6	617/6Z	617/6ZZ	617/6RS	617/6-2RS	617/6RZ	617/6-2RZ
	13	3.5	0.15	618/6	618/6Z	618/6ZZ	618/6RS	618/6-2RS	618/6RZ	618/6-2RZ
	13	5	0.15	628/6	628/6Z	628/6ZZ	628/6RS	628/6-2RS	628/6RZ	628/6-2RZ
	15	5	0.2	619/6	619/6Z	619/6ZZ	619/6RS	619/6-2RS	619/6RZ	619/6-2RZ
	17	6	0.3	606	606Z	606ZZ	606RS	606-2RS	606RZ	606-2RZ
	19	6	0.3	626	626Z	626ZZ	626RS	626-2RS	626RZ	626-2RZ
7	11	2.5	0.1	617/7	617/7Z	617/7ZZ	617/7RS	617/7-2RS	617/7RZ	617/7-2RZ
	14	3.5	0.15	618/7	618/7Z	618/7ZZ	618/7RS	618/7-2RS	618/7RZ	618/7-2RZ
	14	5	0.15	628/7	628/7Z	628/7ZZ	628/7RS	628/7-2RS	628/7RZ	628/7-2RZ
	17	5	0.3	619/7	619/7Z	619/7ZZ	619/7RS	619/7-2RS	619/7RZ	619/7-2RZ
	19	6	0.3	607	607Z	607ZZ	607RS	607-2RS	607RZ	607-2RZ
	22	7	0.3	627	627Z	627ZZ	627RS	627-2RS	627RZ	627-2RZ
8	12	2.5	0.1	617/8	617/8Z	617/8ZZ	617/8RS	617/8-2RS	617/8RZ	617/8-2RZ
	16	4	0.2	618/8	618/8Z	618/8ZZ	618/8RS	618/8-2RS	618/8RZ	618/8-2RZ
	16	5	0.2	628/8	628/8Z	628/8ZZ	628/8RS	628/8-2RS	628/8RZ	628/8-2RZ
	19	6	0.3	619/8	619/8Z	619/8ZZ	619/8RS	619/8-2RS	619/8RZ	619/8-2RZ
	22	7	0.3	608	608Z	608ZZ	608RS	608-2RS	608RZ	608-2RZ
	24	8	0.3	628	628Z	628ZZ	628RS	628-2RS	628RZ	628-2RZ
	9	14	3	0.1	617/9	617/9Z	617/9ZZ	617/9RS	617/9-2RS	617/9RZ
17		4	0.2	618/9	618/9Z	618/9ZZ	618/9RS	618/9-2RS	618/9RZ	618/9-2RZ
17		5	0.2	628/9	628/9Z	628/9ZZ	628/9RS	628/9-2RS	628/9RZ	628/9-2RZ
20		6	0.3	619/9	619/9Z	619/9ZZ	619/9RS	619/9-2RS	619/9RZ	619/9-2RZ
24		7	0.3	609	609Z	609ZZ	609RS	609-2RS	609RZ	609-2RZ
26		8	0.3	629	629Z	629ZZ	629RS	629-2RS	629RZ	629-2RZ

Basic load rating		Limiting speed			Abutment and fillet Dimensions (mm)			Ref. Weight (g)
		Grease		Oil	Da (min)	Da (max)	ra (max)	
Dynamic Cr(N)	Static Cor(N)	Open, Z, ZZ, RZ, 2RZ	RS, 2RS	Open, Z				
292	142	49000	-	57000	5.6	7.4	0.08	0.32
715	282	43000	-	51000	6.2	9.8	0.15	1.1
715	282	43000	-	51000	6.2	9.8	0.15	-
1080	430	40000	-	47000	6.6	11.4	0.2	2.4
1330	505	39000	-	46000	6.6	12.4	0.2	3.5
1760	680	37000	-	44000	7	14	0.3	4.8
2340	885	34000	-	40000	7	17	0.3	8.0
530	240	43000	-	51000	6.8	9.2	0.1	0.65
1080	440	39000	-	46000	7.2	11.8	0.15	1.9
1080	440	39000	-	46000	7.2	11.8	0.15	-
1350	530	37000	-	44000	7.6	13.4	0.2	3.8
2190	865	35000	-	42000	8	15	0.3	6.0
2340	885	34000	-	40000	8	17	0.3	8.1
555	269	40000	-	47000	7.8	10.2	0.1	0.67
1170	510	37000	-	44000	8.2	12.8	0.15	2.1
1170	510	37000	-	44000	8.2	12.8	0.15	-
1610	715	35000	-	41000	9	15	0.3	5.2
2240	910	34000	-	40000	9	17	0.3	8.0
3350	1400	32000	-	37000	9	20	0.3	13
575	298	38000	-	45000	8.8	11.2	0.1	0.75
1260	585	35000	-	41000	9.6	14.4	0.2	3.1
1260	585	35000	-	41000	9.6	14.4	0.2	-
1990	865	33000	-	39000	10	17	0.3	7.3
3350	1400	32000	-	37000	10	20	0.3	12
4000	1590	31000	-	36000	10	22	0.3	17
920	465	36000	-	42000	9.8	13.2	0.1	1.4
1720	820	33000	-	39000	10.6	15.4	0.2	3.2
1720	820	33000	-	39000	10.6	15.4	0.2	-
2480	1090	32000	-	38000	11	18	0.3	8.2
3400	1450	31000	-	36000	13	22	0.3	14
4550	1960	30000	-	35000	13	22	0.3	20

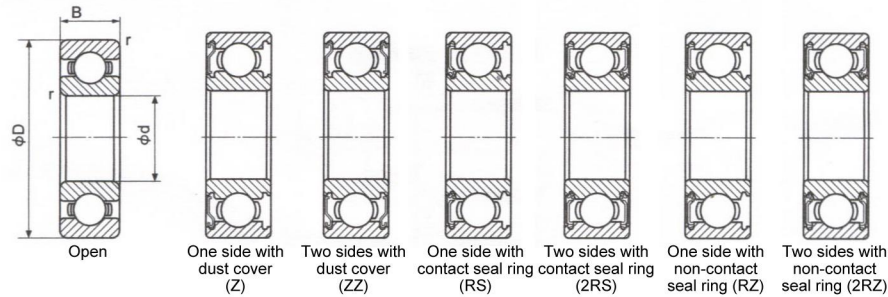
Bore diameter d: 10~17mm



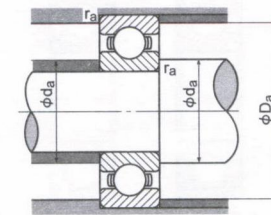
Principal dimensions (mm)				Designation						
d	D	B	r (min)	Open	Shield ring		Contact seal ring		Non-contact seal ring	
10	19	5	0.3	61800	61800Z	61800ZZ	61800RS	61800-2RS	61800RZ	61800-2RZ
	19	6	0.3	62800	62800Z	62800ZZ	62800RS	62800-2RS	62800RZ	62800-2RZ
	22	6	0.3	61900	61900Z	61900ZZ	61900RS	61900-2RS	61900RZ	61900-2RZ
	22	8	0.3	62900	62900Z	62900ZZ	62900RS	62900-2RS	62900RZ	62900-2RZ
	26	8	0.3	6000	6000Z	6000ZZ	6000RS	6000-2RS	6000RZ	6000-2RZ
	30	9	0.6	6200	6200Z	6200ZZ	6200RS	6200-2RS	6200RZ	6200-2RZ
	35	11	0.6	6300	6300Z	6300ZZ	6300RS	6300-2RS	6300RZ	6300-2RZ
12	21	5	0.3	61801	61801Z	61801ZZ	61801RS	61801-2RS	61801RZ	61801-2RZ
	21	6	0.3	62801	62801Z	62801ZZ	62801RS	62801-2RS	62801RZ	62801-2RZ
	24	6	0.3	61901	61901Z	61901ZZ	61901RS	61901-2RS	61901RZ	61901-2RZ
	24	5	0.3	62901	62901Z	62901ZZ	62901RS	62901-2RS	62901RZ	62901-2RZ
	28	8	0.3	6001	6001Z	6001ZZ	6001RS	6001-2RS	6001RZ	6001-2RZ
	32	10	0.6	6201	6201Z	6201ZZ	6201RS	6201-2RS	6201RZ	6201-2RZ
	37	12	1	6301	6301Z	6301ZZ	6301RS	6301-2RS	6301RZ	6301-2RZ
15	24	5	0.3	61802	61802Z	61802ZZ	61802RS	61802-2RS	61802RZ	61802-2RZ
	24	6	0.3	62802	62802Z	62802ZZ	62802RS	62802-2RS	62802RZ	62802-2RZ
	28	7	0.3	61902	61902Z	61902ZZ	61902RS	61902-2RS	61902RZ	61902-2RZ
	28	8.5	0.3	62902	62902Z	62902ZZ	62902RS	62902-2RS	62902RZ	62902-2RZ
	32	8	0.3	6002	6002Z	6002ZZ	6002RS	6002-2RS	6002RZ	6002-2RZ
	32	9	0.3	6002	6002Z	6002ZZ	6002RS	6002-2RS	6002RZ	6002-2RZ
	35	11	0.6	6202	6202Z	6202ZZ	6202RS	6202-2RS	6202RZ	6202-2RZ
42	13	1	6302	6302Z	6302ZZ	6302RS	6302-2RS	6302RZ	6302-2RZ	
17	26	5	0.3	61803	61803Z	61803ZZ	61803RS	61803-2RS	61803RZ	61803-2RZ
	26	6	0.3	62803	62803Z	62803ZZ	62803RS	62803-2RS	62803RZ	62803-2RZ
	30	7	0.3	61903	61903Z	61903ZZ	61903RS	61903-2RS	61903RZ	61903-2RZ
	30	8.5	0.3	62903	62903Z	62903ZZ	62903RS	62903-2RS	62903RZ	62903-2RZ
	35	8	0.3	6003	6003Z	6003ZZ	6003RS	6003-2RS	6003RZ	6003-2RZ
	35	10	0.3	6003	6003Z	6003ZZ	6003RS	6003-2RS	6003RZ	6003-2RZ
	40	12	0.6	6203	6203Z	6203ZZ	6203RS	6203-2RS	6203RZ	6203-2RZ
47	14	1	6303	6303Z	6303ZZ	6303RS	6303-2RS	6303RZ	6303-2RZ	

Basic load rating		Limiting speed			Abutment and fillet Dimensions (mm)			Ref. Weight (g)
		Grease		Oil	Da (min)	Da (max)	ra (max)	
Dynamic Cr(N)	Static Cor(N)	Open, Z, ZZ, RZ, 2RZ	RS, 2RS	Open, Z	Da (min)	Da (max)	ra (max)	
2120	985	37000	24000	44000	12	17	0.3	0.005
2120	985	37000	24000	44000	12	17	0.3	-
2490	1130	33000	22000	38000	12	20	0.3	0.009
2490	1130	33000	22000	38000	12	20	0.3	-
4550	1970	30000	20000	36000	12	24	0.3	0.019
5100	2390	24000	17000	30000	15	25	0.6	0.032
8100	3450	21000	17000	26000	15	30	0.6	0.053
1920	1040	32000	20000	39000	14	19	0.3	0.006
1920	1040	32000	20000	39000	14	19	0.3	-
2700	1320	30000	19000	35000	14	22	0.3	0.011
2700	1320	30000	19000	35000	14	22	0.3	-
5100	2390	27000	17000	32000	14	26	0.3	0.023
6800	3050	22000	16000	27000	17	27	0.6	0.037
9750	4250	19000	15000	24000	18	31	1.0	0.060
2080	1260	27000	16000	32000	17	22	0.3	0.007
2080	1260	27000	16000	32000	17	22	0.3	-
4300	2250	26000	15000	31000	17	26	0.3	0.016
4300	2250	26000	15000	31000	17	26	0.3	-
5600	2840	23000	-	28000	20	27	0.3	0.025
5600	2840	23000	14000	28000	17	30	0.3	0.032
7650	3700	19000	13000	24000	20	30	0.6	0.045
11400	5400	17000	12000	20000	21	36	1.0	0.082
2630	1570	25000	15000	30000	19	24	0.3	0.008
2630	1570	25000	15000	30000	19	24	0.3	-
4600	2550	24000	14000	29000	19	28	0.3	0.018
4600	2550	24000	14000	29000	19	28	0.3	-
6000	3250	20000	-	24000	22	30	0.3	0.032
6000	3250	20000	13000	25000	19	33	0.3	0.039
9550	4800	17000	12000	21000	22	35	0.6	0.065
13600	6550	15000	11000	18000	23	41	1.0	0.115

Bore diameter d: 20~30mm

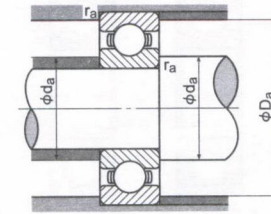
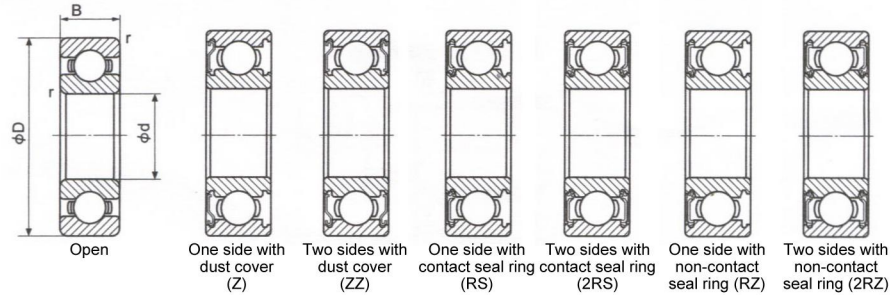


Principal dimensions (mm)				Designation							
d	D	B	r (min)	Open	Shield ring		Contact seal ring		Non-contact seal ring		
20	32	7	0.3	61804	61804Z	61804ZZ	61804RS	61804-2RS	61804RZ	61804-2RZ	
	32	8	0.3	62804	62804Z	62804ZZ	62804RS	62804-2RS	62804RZ	62804-2RZ	
	37	9	0.3	61904	61904Z	61904ZZ	61904RS	61904-2RS	61904RZ	61904-2RZ	
	37	11	0.3	62904	62904Z	62904ZZ	62904RS	62904-2RS	62904RZ	62904-2RZ	
	42	8	0.3	16004	16004Z	16004ZZ	16004RS	16004-2RS	16004RZ	16004-2RZ	
	42	12	0.6	6004	6004Z	6004ZZ	6004RS	6004-2RS	6004RZ	6004-2RZ	
	47	14	1	6204	6204Z	6204ZZ	6204RS	6204-2RS	6204RZ	6204-2RZ	
	52	15	1.1	6304	6304Z	6304ZZ	6304RS	6304-2RS	6304RZ	6304-2RZ	
	22	50	14	1	62/22	62/22Z	62/22ZZ	62/22RS	62/22-2RS	62/22RZ	62/22-2RZ
		50	11	1	629/22	629/22Z	629/22ZZ	629/22RS	629/22-2RS	629/22RZ	629/22-2RZ
56		16	1.1	63/22	63/22Z	63/22ZZ	63/22RS	63/22-2RS	63/22RZ	63/22-2RZ	
25	37	7	0.3	61805	61805Z	61805ZZ	61805RS	61805-2RS	61805RZ	61805-2RZ	
	37	8	0.3	62805	62805Z	62805ZZ	62805RS	62805-2RS	62805RZ	62805-2RZ	
	42	9	0.3	61905	61905Z	61905ZZ	61905RS	61905-2RS	61905RZ	61905-2RZ	
	42	11	0.3	62905	62905Z	62905ZZ	62905RS	62905-2RS	62905RZ	62905-2RZ	
	47	8	0.3	16005	16005Z	16005ZZ	16005RS	16005-2RS	16005RZ	16005-2RZ	
	47	12	0.6	6005	6005Z	6005ZZ	6005RS	6005-2RS	6005RZ	6005-2RZ	
	52	15	1	6205	6205Z	6205ZZ	6205RS	6205-2RS	6205RZ	6205-2RZ	
	62	17	1.1	6305	6305Z	6305ZZ	6305RS	6305-2RS	6305RZ	6305-2RZ	
28	58	16	1	62/28	62/28Z	62/28ZZ	62/28RS	62/28-2RS	62/28RZ	62/28-2RZ	
	58	11	1	629/28	629/28Z	629/28ZZ	629/28RS	629/28-2RS	629/28RZ	629/28-2RZ	
	68	18	1.1	63/28	63/28Z	63/28ZZ	63/28RS	63/28-2RS	63/28RZ	63/28-2RZ	
30	42	7	0.3	61806	61806Z	61806ZZ	61806RS	61806-2RS	61806RZ	61806-2RZ	
	42	8	0.3	62806	62806Z	62806ZZ	62806RS	62806-2RS	62806RZ	62806-2RZ	
	47	9	0.3	61906	61906Z	61906ZZ	61906RS	61906-2RS	61906RZ	61906-2RZ	
	47	9	0.3	62906	62906Z	62906ZZ	62906RS	62906-2RS	62906RZ	62906-2RZ	
	55	9	0.3	16006	16006Z	16006ZZ	16006RS	16006-2RS	16006RZ	16006-2RZ	
	55	13	1	6006	6006Z	6006ZZ	6006RS	6006-2RS	6006RZ	6006-2RZ	
	62	16	1	6206	6206Z	6206ZZ	6206RS	6206-2RS	6206RZ	6206-2RZ	
	72	19	1.1	6306	6306Z	6306ZZ	6306RS	6306-2RS	6306RZ	6306-2RZ	



Basic load rating		Limiting speed			Abutment and fillet Dimensions (mm)			Ref. Weight (g)
		Grease		Oil	Da (min)	Da (max)	ra (max)	
Dynamic Cr(N)	Static Cor(N)	Open, Z, ZZ, RZ, 2RZ	RS, 2RS	Open, Z				
4000	2640	20000	12000	24000	22	30	0.3	0.019
4000	2640	20000	12000	24000	22	30	0.3	-
6350	3700	19000	11000	23000	22	35	0.3	0.036
6350	3700	19000	11000	23000	22	35	0.3	-
7900	4500	17000	-	21000	25	37	0.3	0.050
9400	5000	17000	11000	21000	24	38	0.6	0.070
12800	6600	14000	10000	18000	26	41	1.0	0.106
15900	7900	13000	9500	16000	27	45	1.1	0.144
13900	6950	13000	9000	17000	28	44	1.0	0.120
-	-	-	-	-	-	-	-	-
18400	9250	12000	8000	15000	29	49	1.0	0.176
4300	2940	18000	10000	20000	27	35	0.3	0.022
4300	2940	18000	10000	20000	27	35	0.3	-
7000	4500	16000	9500	20000	27	40	0.3	0.042
7000	4500	16000	9500	20000	27	40	0.3	-
6950	4600	15000	-	18000	30	42	0.3	0.060
10100	5850	15000	9000	18000	29	43	0.6	0.079
14000	7900	12000	8500	16000	31	46	1.0	0.128
23600	12100	11000	8000	14000	32	55	1.0	0.232
17900	9750	11000	8200	14000	34	52	1.0	0.175
-	-	-	-	-	-	-	-	-
26800	14000	10000	7000	12000	35	61	1.0	0.287
5350	3800	15000	8700	17000	32	40	0.3	0.026
5350	3800	15000	8700	17000	32	40	0.3	-
7250	5000	14000	8200	16000	32	45	0.3	0.045
7250	5000	14000	8200	16000	32	45	0.3	-
9950	6550	12000	-	15000	35	50	0.3	0.085
13200	8300	12000	7700	15000	35	50	1.0	0.117
19500	11300	10000	7300	13000	36	56	1.0	0.199
26700	15000	9200	6600	11000	37	65	1.0	0.346

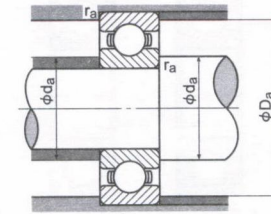
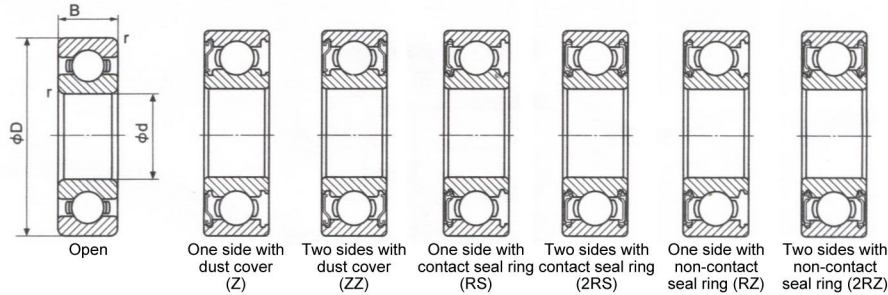
Bore diameter d: 32~50mm



Principal dimensions (mm)				Designation						
d	D	B	r (min)	Open	Shield ring		Contact seal ring		Non-contact seal ring	
32	65	17	1	62/32	62/32Z	62/32ZZ	62/32RS	62/32-2RS	62/32RZ	62/32-2RZ
	52	13	1	629/32	629/32Z	629/32ZZ	629/32RS	629/32-2RS	629/32RZ	629/32-2RZ
	75	20	1.1	63/32	63/32Z	63/32ZZ	63/32RS	63/32-2RS	63/32RZ	63/32-2RZ
35	47	7	0.3	61807	61807Z	61807ZZ	61807RS	61807-2RS	61807RZ	61807-2RZ
	47	8	0.3	62807	62807Z	62807ZZ	62807RS	62807-2RS	62807RZ	62807-2RZ
	55	10	0.6	61907	61907Z	61907ZZ	61907RS	61907-2RS	61907RZ	61907-2RZ
	55	13	0.6	62907	62907Z	62907ZZ	62907RS	62907-2RS	62907RZ	62907-2RZ
	62	9	0.3	16007	16007Z	16007ZZ	16007RS	16007-2RS	16007RZ	16007-2RZ
	62	14	1	6007	6007Z	6007ZZ	6007RS	6007-2RS	6007RZ	6007-2RZ
	72	17	1.1	6207	6207Z	6207ZZ	6207RS	6207-2RS	6207RZ	6207-2RZ
	80	21	1.5	6307	6307Z	6307ZZ	6307RS	6307-2RS	6307RZ	6307-2RZ
40	52	7	0.3	61808	61808Z	61808ZZ	61808RS	61808-2RS	61808RZ	61808-2RZ
	52	8	0.3	62808	62808Z	62808ZZ	62808RS	62808-2RS	62808RZ	62808-2RZ
	62	12	0.6	61908	61908Z	61908ZZ	61908RS	61908-2RS	61908RZ	61908-2RZ
	62	14	0.6	62908	62908Z	62908ZZ	62908RS	62908-2RS	62908RZ	62908-2RZ
	68	9	0.3	16008	16008Z	16008ZZ	16008RS	16008-2RS	16008RZ	16008-2RZ
	68	15	1	6008	6008Z	6008ZZ	6008RS	6008-2RS	6008RZ	6008-2RZ
	80	18	1.1	6208	6208Z	6208ZZ	6208RS	6208-2RS	6208RZ	6208-2RZ
	90	23	1.5	6308	6308Z	6308ZZ	6308RS	6308-2RS	6308RZ	6308-2RZ
45	58	7	0.3	61809	61809Z	61809ZZ	61809RS	61809-2RS	61809RZ	61809-2RZ
	58	8	0.3	62809	62809Z	62809ZZ	62809RS	62809-2RS	62809RZ	62809-2RZ
	68	12	0.6	61909	61909Z	61909ZZ	61909RS	61909-2RS	61909RZ	61909-2RZ
	68	14	0.6	62909	62909Z	62909ZZ	62909RS	62909-2RS	62909RZ	62909-2RZ
	75	10	0.6	16009	16009Z	16009ZZ	16009RS	16009-2RS	16009RZ	16009-2RZ
	75	16	1	6009	6009Z	6009ZZ	6009RS	6009-2RS	6009RZ	6009-2RZ
	85	19	1.1	6209	6209Z	6209ZZ	6209RS	6209-2RS	6209RZ	6209-2RZ
	100	25	1.5	6309	6309Z	6309ZZ	6309RS	6309-2RS	6309RZ	6309-2RZ
50	65	7	0.3	61810	61810Z	61810ZZ	61810RS	61810-2RS	61810RZ	61810-2RZ
	65	10	0.3	62810	62810Z	62810ZZ	62810RS	62810-2RS	62810RZ	62810-2RZ
	72	12	0.6	61910	61910Z	61910ZZ	61910RS	61910-2RS	61910RZ	61910-2RZ
	72	14	0.6	62910	62910Z	62910ZZ	62910RS	62910-2RS	62910RZ	62910-2RZ
	80	10	0.6	16010	16010Z	16010ZZ	16010RS	16010-2RS	16010RZ	16010-2RZ
	80	16	1	6010	6010Z	6010ZZ	6010RS	6010-2RS	6010RZ	6010-2RZ
	90	20	1.1	6210	6210Z	6210ZZ	6210RS	6210-2RS	6210RZ	6210-2RZ
110	27	2	6310	6310Z	6310ZZ	6310RS	6310-2RS	6310RZ	6310-2RZ	

Basic load rating		Limiting speed			Abutment and fillet Dimensions (mm)			Ref. Weight (g)
		Grease		Oil	Da (min)	Da (max)	ra (max)	
Dynamic Cr(N)	Static Cor(N)	Open, Z, ZZ,RZ,2RZ	RS,2RS	Open, Z	Da (min)	Da (max)	ra (max)	
22400	13100	9500	7000	12000	38	59	1.0	0.230
-	-	-	-	-	-	-	-	-
30000	16200	9000	6000	11000	39	68	1.0	0.382
4750	3800	13000	7600	15000	37	45	0.3	0.029
4750	3800	13000	7600	15000	37	45	0.3	-
10400	7150	12000	7000	14000	39	51	0.6	0.073
10400	7150	12000	7000	14000	39	51	0.6	-
11700	8150	11000	-	13000	40	57	0.3	0.110
16000	10300	11000	6800	13000	40	57	1.0	0.156
25700	15300	9000	6300	11000	42	65	1.0	0.288
33500	19200	8400	5900	10000	44	71	1.5	0.457
5950	4900	12000	6700	14000	42	50	0.3	0.033
5950	4900	12000	6700	14000	42	50	0.3	-
13700	9950	11000	6100	13000	44	58	0.6	0.108
13700	9950	11000	6100	13000	44	58	0.6	-
11100	8550	9700	-	12000	45	63	0.3	0.125
16800	11500	9500	6000	12000	45	63	1.0	0.194
29100	17900	8200	5600	10000	47	73	1.0	0.366
40500	24100	7500	5200	9000	49	81	1.5	0.633
5350	4900	11000	5900	13000	47	56	0.3	0.040
5350	4900	11000	5900	13000	47	56	0.3	-
14100	10900	10000	5600	12000	49	64	0.6	0.122
14100	10900	10000	5600	12000	49	64	0.6	-
12900	10500	9000	-	11000	52	68	0.6	0.170
20900	15200	8800	5300	11000	50	70	1.0	0.246
32500	20500	7600	5100	9300	52	78	1.0	0.407
53000	32000	6700	4600	8000	54	91	1.5	0.833
6400	5800	10000	5300	12000	52	63	0.3	0.052
6400	5800	10000	5300	12000	52	63	0.3	-
14500	11700	9500	5100	11000	54	68	0.6	0.125
14500	11700	9500	5100	11000	54	68	0.6	-
16100	13100	8300	-	10000	57	73	0.6	0.180
21800	16600	8300	4800	10000	55	75	1.0	0.264
35000	23200	7000	4700	8600	57	83	1.0	0.463
62000	38000	6200	4100	7300	60	100	2.0	1.070

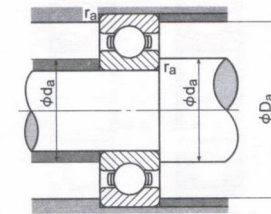
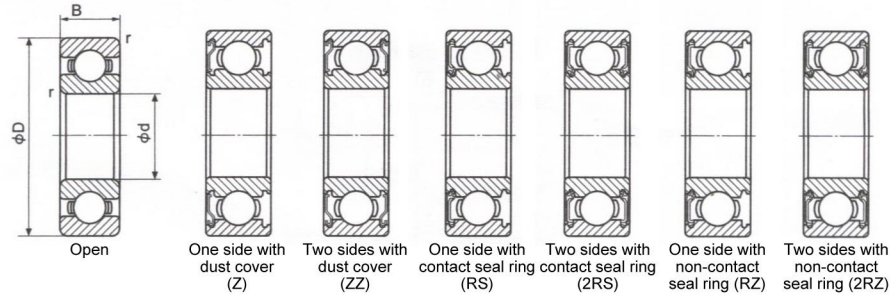
Bore diameter d: 55~70mm



Principal dimensions (mm)				Designation						
d	D	B	r (min)	Open	Shield ring		Contact seal ring		Non-contact seal ring	
55	72	9	0.3	61811	61811Z	61811ZZ	61811RS	61811-2RS	61811RZ	61811-2RZ
	72	11	0.3	62811	62811Z	62811ZZ	62811RS	62811-2RS	62811RZ	62811-2RZ
	80	13	1	61911	61911Z	61911ZZ	61911RS	61911-2RS	61911RZ	61911-2RZ
	80	16	1	62911	62911Z	62911ZZ	62911RS	62911-2RS	62911RZ	62911-2RZ
	90	11	0.6	16011	16011Z	16011ZZ	16011RS	16011-2RS	16011RZ	16011-2RZ
	90	18	1.1	6011	6011Z	6011ZZ	6011RS	6011-2RS	6011RZ	6011-2RZ
	100	21	1.5	6211	6211Z	6211ZZ	6211RS	6211-2RS	6211RZ	6211-2RZ
	120	29	2	6311	6311Z	6311ZZ	6311RS	6311-2RS	6311RZ	6311-2RZ
60	78	10	0.3	61812	61812Z	61812ZZ	61812RS	61812-2RS	61812RZ	61812-2RZ
	78	12	0.3	62812	62812Z	62812ZZ	62812RS	62812-2RS	62812RZ	62812-2RZ
	85	13	1	61912	61912Z	61912ZZ	61912RS	61912-2RS	61912RZ	61912-2RZ
	85	16	1	62912	62912Z	62912ZZ	62912RS	62912-2RS	62912RZ	62912-2RZ
	95	11	0.6	16012	16012Z	16012ZZ	16012RS	16012-2RS	16012RZ	16012-2RZ
	95	18	1.1	6012	6012Z	6012ZZ	6012RS	6012-2RS	6012RZ	6012-2RZ
	110	22	1.5	6212	6212Z	6212ZZ	6212RS	6212-2RS	6212RZ	6212-2RZ
	130	31	2.1	6312	6312Z	6312ZZ	6312RS	6312-2RS	6312RZ	6312-2RZ
65	85	10	0.6	61813	61813Z	61813ZZ	61813RS	61813-2RS	61813RZ	61813-2RZ
	85	13	0.6	62813	62813Z	62813ZZ	62813RS	62813-2RS	62813RZ	62813-2RZ
	90	13	1	61913	61913Z	61913ZZ	61913RS	61913-2RS	61913RZ	61913-2RZ
	90	16	1	62913	62913Z	62913ZZ	62913RS	62913-2RS	62913RZ	62913-2RZ
	100	11	0.6	16013	16013Z	16013ZZ	16013RS	16013-2RS	16013RZ	16013-2RZ
	100	18	1.1	6013	6013Z	6013ZZ	6013RS	6013-2RS	6013RZ	6013-2RZ
	120	22	1.5	6213	6213Z	6213ZZ	6213RS	6213-2RS	6213RZ	6213-2RZ
	140	31	2.1	6313	6313Z	6313ZZ	6313RS	6313-2RS	6313RZ	6313-2RZ
70	90	10	0.6	61814	61814Z	61814ZZ	61814RS	61814-2RS	61814RZ	61814-2RZ
	90	13	0.6	62814	62814Z	62814ZZ	62814RS	62814-2RS	62814RZ	62814-2RZ
	100	16	1	61914	61914Z	61914ZZ	61914RS	61914-2RS	61914RZ	61914-2RZ
	100	19	1	62914	62914Z	62914ZZ	62914RS	62914-2RS	62914RZ	62914-2RZ
	110	13	0.6	16014	16014Z	16014ZZ	16014RS	16014-2RS	16014RZ	16014-2RZ
	110	20	1.1	6014	6014Z	6014ZZ	6014RS	6014-2RS	6014RZ	6014-2RZ
	125	24	1.5	6214	6214Z	6214ZZ	6214RS	6214-2RS	6214RZ	6214-2RZ
	150	35	2.1	6314	6314Z	6314ZZ	6314RS	6314-2RS	6314RZ	6314-2RZ

Basic load rating		Limiting speed			Abutment and fillet Dimensions (mm)			Ref. Weight (g)
		Grease		Oil	Da (min)	Da (max)	ra (max)	
Dynamic Cr(N)	Static Cor(N)	Open, Z, ZZ, RZ, 2RZ	RS, 2RS	Open, Z				
8800	8100	8500	-	10000	57	70	0.3	0.083
8800	8100	8500	-	10000	57	70	0.3	-
16000	13200	8000	-	9000	60	75	1.0	0.177
16000	13200	8000	-	9000	60	75	1.0	-
15200	13500	7500	-	9000	62	83	0.6	0.260
28300	21300	7500	4400	9000	61	84	1.0	0.384
43500	29300	6300	4200	7700	64	91	1.5	0.607
71500	44500	5600	3800	6600	65	110	2.0	1.370
11500	10600	8000	-	9500	62	76	0.3	0.106
11500	10600	8000	-	9500	62	76	0.3	-
15200	13500	7500	-	9000	65	80	1.0	0.191
15200	13500	7500	-	9000	65	80	1.0	-
16200	14300	7000	-	8200	67	88	0.6	0.280
29400	23200	7000	4100	8300	66	89	1.0	0.418
52500	36000	5800	3800	7100	69	101	1.5	0.783
82000	52000	5100	3500	6100	72	118	2.0	1.700
11900	11500	7500	-	8500	69	81	0.6	0.125
11900	11500	7500	-	8500	69	81	0.6	-
17400	16000	7000	-	8500	65	85	1.0	0.200
17400	16000	7000	-	8500	65	85	1.0	-
20500	18600	6500	-	7500	67	93	0.6	0.300
30500	25200	6500	3800	7800	66	94	1.0	0.438
57000	40000	5300	3500	6500	69	111	1.5	0.990
92500	59500	4700	3300	5700	72	128	2.0	2.080
12100	11900	7000	-	8000	69	86	0.6	0.135
12100	11900	7000	-	8000	69	86	0.6	-
23700	21100	6500	-	7500	70	95	1.0	0.327
23700	21100	6500	-	7500	70	95	1.0	-
26800	23600	6000	-	7000	72	103	0.6	0.433
38000	31000	6000	3500	7100	71	104	1.0	0.607
62000	44000	5000	3300	5900	74	116	1.5	1.070
104000	68000	4400	3100	5300	77	138	2.0	2.520

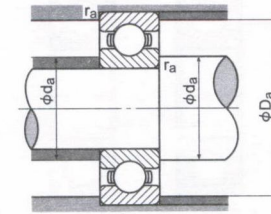
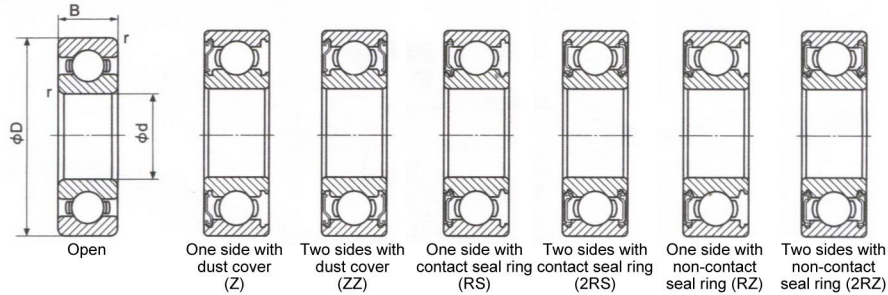
Bore diameter d: 75~90mm



Principal dimensions (mm)				Designation						
d	D	B	r (min)	Open	Shield ring		Contact seal ring		Non-contact seal ring	
75	95	10	0.6	61815	61815Z	61815ZZ	61815RS	61815-2RS	61815RZ	61815-2RZ
	95	13	0.6	62815	62815Z	62815ZZ	62815RS	62815-2RS	62815RZ	62815-2RZ
	105	16	1	61915	61915Z	61915ZZ	61915RS	61915-2RS	61915RZ	61915-2RZ
	105	19	1	62915	62915Z	62915ZZ	62915RS	62915-2RS	62915RZ	62915-2RZ
	115	13	0.6	16015	16015Z	16015ZZ	16015RS	16015-2RS	16015RZ	16015-2RZ
	115	20	1.1	6015	6015Z	6015ZZ	6015RS	6015-2RS	6015RZ	6015-2RZ
	130	25	1.5	6215	6215Z	6215ZZ	6215RS	6215-2RS	6215RZ	6215-2RZ
	160	37	2.1	6315	6315Z	6315ZZ	6315RS	6315-2RS	6315RZ	6315-2RZ
80	100	10	0.6	61816	61816Z	61816ZZ	61816RS	61816-2RS	61816RZ	61816-2RZ
	100	13	0.6	62816	62816Z	62816ZZ	62816RS	62816-2RS	62816RZ	62816-2RZ
	110	16	1	61916	61916Z	61916ZZ	61916RS	61916-2RS	61916RZ	61916-2RZ
	110	19	1	62916	62916Z	62916ZZ	62916RS	62916-2RS	62916RZ	62916-2RZ
	125	14	0.6	16016	16016Z	16016ZZ	16016RS	16016-2RS	16016RZ	16016-2RZ
	125	22	1.1	6016	6016Z	6016ZZ	6016RS	6016-2RS	6016RZ	6016-2RZ
	140	26	2	6216	6216Z	6216ZZ	6216RS	6216-2RS	6216RZ	6216-2RZ
	170	39	2.1	6316	6316Z	6316ZZ	6316RS	6316-2RS	6316RZ	6316-2RZ
85	110	13	1	61817	61817Z	61817ZZ	61817RS	61817-2RS	61817RZ	61817-2RZ
	110	16	1	62817	62817Z	62817ZZ	62817RS	62817-2RS	62817RZ	62817-2RZ
	120	18	1.1	61917	61917Z	61917ZZ	61917RS	61917-2RS	61917RZ	61917-2RZ
	120	22	1.1	62917	62917Z	62917ZZ	62917RS	62917-2RS	62917RZ	62917-2RZ
	130	14	0.6	16017	16017Z	16017ZZ	16017RS	16017-2RS	16017RZ	16017-2RZ
	130	22	1.1	6017	6017Z	6017ZZ	6017RS	6017-2RS	6017RZ	6017-2RZ
	150	28	2	6217	6217Z	6217ZZ	6217RS	6217-2RS	6217RZ	6217-2RZ
	180	41	3	6317	6317Z	6317ZZ	6317RS	6317-2RS	6317RZ	6317-2RZ
90	115	13	1	61818	61818Z	61818ZZ	61818RS	61818-2RS	61818RZ	61818-2RZ
	115	16	1	62818	62818Z	62818ZZ	62818RS	62818-2RS	62818RZ	62818-2RZ
	125	18	1.1	61918	61918Z	61918ZZ	61918RS	61918-2RS	61918RZ	61918-2RZ
	125	22	1.1	62918	62918Z	62918ZZ	62918RS	62918-2RS	62918RZ	62918-2RZ
	140	16	1	16018	16018Z	16018ZZ	16018RS	16018-2RS	16018RZ	16018-2RZ
	140	24	1.5	6018	6018Z	6018ZZ	6018RS	6018-2RS	6018RZ	6018-2RZ
	160	30	2	6218	6218Z	6218ZZ	6218RS	6218-2RS	6218RZ	6218-2RZ
	190	43	3	6318	6318Z	6318ZZ	6318RS	6318-2RS	6318RZ	6318-2RZ

Basic load rating		Limiting speed			Abutment and fillet Dimensions (mm)			Ref. Weight (g)
		Grease		Oil	Da (min)	Da (max)	ra (max)	
Dynamic Cr(N)	Static Cor(N)	Open, Z, ZZ, RZ, 2RZ	RS, 2RS	Open, Z	Da (min)	Da (max)	ra (max)	
12500	12800	6500	-	7500	79	91	0.6	0.145
12500	12800	6500	-	7500	79	91	0.6	-
20800	19700	6200	-	7200	80	100	1.0	0.345
20800	19700	6200	-	7200	80	100	1.0	-
27600	25300	5500	-	6500	82	108	0.6	0.457
39500	33500	5700	3300	6700	81	109	1.0	0.645
66000	49500	4800	3100	5600	84	121	1.5	1.18
113000	77000	4100	2900	5000	87	148	2.0	3.02
12700	13300	6000	-	7000	84	96	0.6	0.155
12700	13300	6000	-	7000	84	96	0.6	-
27600	25300	5500	-	6500	85	105	1.0	0.363
27600	25300	5500	-	6500	85	105	1.0	-
32000	29600	5300	-	6200	87	118	0.6	0.597
47500	39500	5300	-	6200	86	119	1.0	0.855
72500	53000	4500	3000	5200	90	130	2.0	1.40
123000	86500	3800	2700	4500	92	158	2.0	3.59
18700	19000	5500	-	6500	90	105	1.0	0.265
18700	19000	5500	-	6500	90	105	1.0	-
32000	29600	5200	-	6300	91	113	1.0	0.517
32000	29600	5200	-	6300	91	113	1.0	-
31500	29800	5000	-	6000	92	123	0.6	0.626
49500	43000	5000	-	6000	91	124	1.1	0.895
84000	62000	4200	2800	4900	95	140	2.0	1.79
133000	96500	3600	2600	4300	99	166	2.5	4.23
19000	19700	5300	-	6200	95	110	1.0	0.280
19000	19700	5300	-	6200	95	110	1.0	-
33000	31500	5000	-	6000	96	119	1.0	0.540
33000	31500	5000	-	6000	96	119	1.0	-
41500	39500	4800	-	5600	99	131	1.0	0.848
58000	49500	4700	-	5600	97	133	1.5	1.17
96000	71500	3900	2600	4600	100	150	2.0	2.15
143000	107000	3400	2400	4000	104	176	2.5	4.91

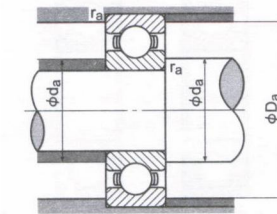
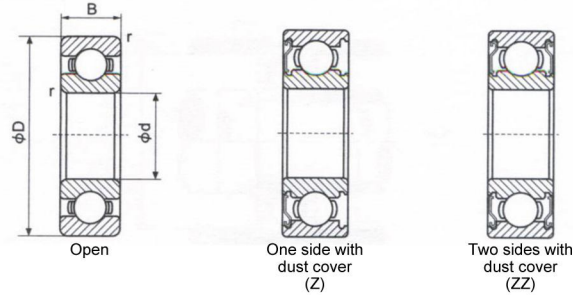
Bore diameter d: 95~110mm



Principal dimensions (mm)				Designation						
d	D	B	r (min)	Open	Shield ring	Contact seal ring	Non-contact seal ring			
95	120	13	1	61819	61819Z	61819ZZ	61819RS	61819-2RS	61819RZ	61819-2RZ
	120	16	1	62819	62819Z	62819ZZ	62819RS	62819-2RS	62819RZ	62819-2RZ
	130	18	1.1	61919	61919Z	61919ZZ	61919RS	61919-2RS	61919RZ	61919-2RZ
	130	22	1.1	62919	62919Z	62919ZZ	62919RS	62919-2RS	62919RZ	62919-2RZ
	145	16	1	16019	16019Z	16019ZZ	16019RS	16019-2RS	16019RZ	16019-2RZ
	145	24	1.5	6019	6019Z	6019ZZ	6019RS	6019-2RS	6019RZ	6019-2RZ
	170	32	2.1	6219	6219Z	6219ZZ	6219RS	6219-2RS	6219RZ	6219-2RZ
	200	45	3	6319	6319Z	6319ZZ	6319RS	6319-2RS	6319RZ	6319-2RZ
100	125	13	1	61820	61820Z	61820ZZ	61820RS	61820-2RS	61820RZ	61820-2RZ
	125	16	1	62820	62820Z	62820ZZ	62820RS	62820-2RS	62820RZ	62820-2RZ
	140	20	1.1	61920	61920Z	61920ZZ	61920RS	61920-2RS	61920RZ	61920-2RZ
	140	24	1.1	62920	62920Z	62920ZZ	62920RS	62920-2RS	62920RZ	62920-2RZ
	150	16	1	16020	16020Z	16020ZZ	16020RS	16020-2RS	16020RZ	16020-2RZ
	150	24	1.5	6020	6020Z	6020ZZ	6020RS	6020-2RS	6020RZ	6020-2RZ
	180	34	2.1	6220	6220Z	6220ZZ	6220RS	6220-2RS	6220RZ	6220-2RZ
	215	47	3	6320	6320Z	6320ZZ	6320RS	6320-2RS	6320RZ	6320-2RZ
105	130	13	1	61821	61821Z	61821ZZ	61821RS	61821-2RS	61821RZ	61821-2RZ
	130	16	1	62821	62821Z	62821ZZ	62821RS	62821-2RS	62821RZ	62821-2RZ
	145	20	1.1	61921	61921Z	61921ZZ	61921RS	61921-2RS	61921RZ	61921-2RZ
	145	24	1.1	62921	62921Z	62921ZZ	62921RS	62921-2RS	62921RZ	62921-2RZ
	160	18	1	16021	16021Z	16021ZZ	16021RS	16021-2RS	16021RZ	16021-2RZ
	160	26	2	6021	6021Z	6021ZZ	6021RS	6021-2RS	6021RZ	6021-2RZ
	190	36	2.1	6221	6221Z	6221ZZ	6221RS	6221-2RS	6221RZ	6221-2RZ
	225	49	3	6321	6321Z	6321ZZ	6321RS	6321-2RS	6321RZ	6321-2RZ
110	140	16	1	61822	61822Z	61822ZZ	61822RS	61822-2RS	61822RZ	61822-2RZ
	140	19	1	62822	62822Z	62822ZZ	62822RS	62822-2RS	62822RZ	62822-2RZ
	150	20	1.1	61922	61922Z	61922ZZ	61922RS	61922-2RS	61922RZ	61922-2RZ
	150	24	1.1	62922	62922Z	62922ZZ	62922RS	62922-2RS	62922RZ	62922-2RZ
	170	19	1	16022	16022Z	16022ZZ	16022RS	16022-2RS	16022RZ	16022-2RZ
	170	28	2	6022	6022Z	6022ZZ	6022RS	6022-2RS	6022RZ	6022-2RZ
	200	38	2.1	6222	6222Z	6222ZZ	6222RS	6222-2RS	6222RZ	6222-2RZ
	240	50	3	6322	6322Z	6322ZZ	6322RS	6322-2RS	6322RZ	6322-2RZ

Basic load rating		Limiting speed			Abutment and fillet Dimensions (mm)			Ref. Weight (g)
		Grease		Oil	Da (min)	Da (max)	ra (max)	
Dynamic Cr(N)	Static Cor(N)	Open, Z, ZZ, RZ, 2RZ	RS, 2RS	Open, Z	Da (min)	Da (max)	ra (max)	
19300	20500	5000	-	6000	100	115	1.0	0.298
19300	20500	5000	-	6000	100	115	1.0	-
33500	33500	4700	-	5500	101	124	1.0	0.567
33500	33500	4700	-	5500	101	124	1.0	-
41000	39500	4600	-	5300	104	136	1.0	0.885
60500	54000	4500	-	5300	102	138	1.5	1.22
109000	81500	3700	2400	4300	107	158	2.0	2.62
153000	118000	3200	2200	3800	109	186	2.5	5.67
19600	21200	4600	-	5500	105	120	1.0	0.311
19600	21200	4600	-	5500	105	120	1.0	-
37000	36500	4400	-	5300	106	134	1.0	0.771
37000	36500	4400	-	5300	106	134	1.0	-
37500	39500	4300	-	5000	109	141	1.0	0.910
60000	54000	4200	-	5000	107	143	2.0	1.26
122000	93000	3500	2300	4100	112	168	2.0	3.14
173000	141000	3000	2100	3600	114	201	2.5	7.00
19900	21900	4500	-	5500	110	125	1.0	0.325
19900	21900	4500	-	5500	110	125	1.0	-
42500	42000	4200	-	5100	111	139	1.0	0.793
42500	42000	4200	-	5100	111	139	1.0	-
37500	50500	4000	-	4800	114	151	1.0	1.20
72500	65500	4000	-	4800	113	152	2.0	1.60
133000	104000	3200	-	3900	117	178	2.0	3.76
184000	153000	2800	-	3400	119	211	2.5	8.05
27300	29400	4200	-	5100	115	135	1.0	0.510
27300	29400	4200	-	5100	115	135	1.0	-
38000	38500	4000	-	5000	116	144	1.0	0.830
38000	38500	4000	-	5000	116	144	1.0	-
44000	45000	3800	-	4500	119	161	1.0	1.46
84500	73000	3800	-	4500	118	162	2.0	1.97
144000	117000	3000	-	3700	122	188	2.0	4.36
205000	179000	2600	-	3200	124	226	2.5	9.54

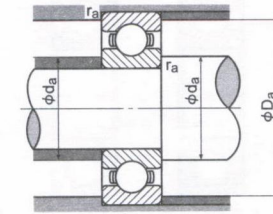
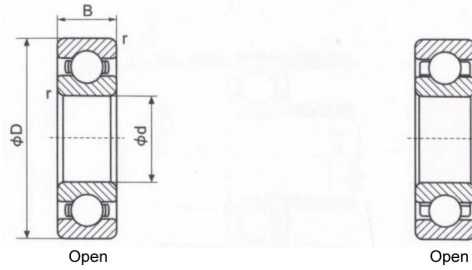
Bore diameter d: 120~150mm



Principal dimensions (mm)				Designation						
d	D	B	r (min)	Open	Shield ring	Contact seal ring	Non-contact seal ring			
120	150	16	1	61824	61824Z	61824ZZ	61824RS	61824-RS	61824RZ	61824-2RZ
	150	19	1	62824	62824Z	62824ZZ	62824RS	62824-RS	62824RZ	62824-2RZ
	165	22	1.1	61924	61924Z	61924ZZ	61924RS	61924-RS	61924RZ	61924-2RZ
	165	27	1.1	62924	62924Z	62924ZZ	62924RS	62924-RS	62924RZ	62924-2RZ
	180	19	1	16024	16024Z	16024ZZ	16024RS	16024-RS	16024RZ	16024-2RZ
	180	28	2	6024	6024Z	6024ZZ	6024RS	6024-RS	6024RZ	6024-2RZ
	215	40	2.1	6224	6224Z	6224ZZ	6224RS	6224-RS	6224RZ	6224-2RZ
	260	55	3	6324	6324Z	6324ZZ	6324RS	6324-RS	6324RZ	6324-2RZ
130	165	18	1.1	61826	61826Z	61826ZZ	61826RS	61826-RS	61826RZ	61826-2RZ
	165	22	1.1	62826	62826Z	62826ZZ	62826RS	62826-RS	62826RZ	62826-2RZ
	180	24	1.5	61926	61926Z	61926ZZ	61926RS	61926-RS	61926RZ	61926-2RZ
	180	30	1.5	62926	62926Z	62926ZZ	62926RS	62926-RS	62926RZ	62926-2RZ
	200	22	1.1	16026	16026Z	16026ZZ	16026RS	16026-RS	16026RZ	16026-2RZ
	200	33	2	6026	6026Z	6026ZZ	6026RS	6026-RS	6026RZ	6026-2RZ
	230	40	3	6226	6226Z	6226ZZ	6226RS	6226-RS	6226RZ	6226-2RZ
	280	58	4	6326	6326Z	6326ZZ	6326RS	6326-RS	6326RZ	6326-2RZ
140	175	18	1.1	61828	61828Z	61828ZZ	61828RS	61828-RS	61828RZ	61828-2RZ
	175	22	1.1	62828	62828Z	62828ZZ	62828RS	62828-RS	62828RZ	62828-2RZ
	190	24	1.5	61928	61928Z	61928ZZ	61928RS	61928-RS	61928RZ	61928-2RZ
	190	30	1.5	62928	62928Z	62928ZZ	62928RS	62928-RS	62928RZ	62928-2RZ
	210	22	1.1	16028	16028Z	16028ZZ	16028RS	16028-RS	16028RZ	16028-2RZ
	210	33	2	6028	6028Z	6028ZZ	6028RS	6028-RS	6028RZ	6028-2RZ
	250	42	3	6228	6228Z	6228ZZ	6228RS	6228-RS	6228RZ	6228-2RZ
	300	62	4	6328	6328Z	6328ZZ	6328RS	6328-RS	6328RZ	6328-2RZ
150	190	20	1.1	61830	61830Z	61830ZZ	61830RS	61830-RS	61830RZ	61830-2RZ
	190	24	1.1	62830	62830Z	62830ZZ	62830RS	62830-RS	62830RZ	62830-2RZ
	210	28	2	61930	61930Z	61930ZZ	61930RS	61930-RS	61930RZ	61930-2RZ
	210	36	2	62930	62930Z	62930ZZ	62930RS	62930-RS	62930RZ	62930-2RZ
	225	24	1.1	16030	16030Z	16030ZZ	16030RS	16030-RS	16030RZ	16030-2RZ
	225	35	2.1	6030	6030Z	6030ZZ	6030RS	6030-RS	6030RZ	6030-2RZ
	270	45	3	6230	6230Z	6230ZZ	6230RS	6230-RS	6230RZ	6230-2RZ
	320	65	4	6330	6330Z	6330ZZ	6330RS	6330-RS	6330RZ	6330-2RZ

Basic load rating		Limiting speed			Abutment and fillet Dimensions (mm)			Ref. Weight (g)
		Grease		Oil	Da (min)	Da (max)	ra (max)	
Dynamic Cr(N)	Static Cor(N)	Open, Z, ZZ, RZ, 2RZ	RS, 2RS	Open, Z				
28300	31500	4000	-	4800	125	145	1.0	0.549
28300	31500	4000	-	4800	125	145	1.0	-
53000	54000	3700	-	4600	126	159	1.0	1.13
53000	54000	3700	-	4600	126	159	1.0	-
48000	50000	3500	-	4200	129	171	1.0	1.80
88000	79500	3500	-	4200	128	172	2.0	2.67
145000	118000	2800	-	3400	132	203	2.0	5.15
207000	185000	2400	-	3000	134	246	2.5	14.6
37000	41000	3600	-	4400	136	158	1.0	0.790
37000	41000	3600	-	4400	136	158	1.0	-
65000	67000	3400	-	4200	137	173	1.5	1.78
65000	67000	3400	-	4200	137	173	1.5	-
55000	59500	3200	-	3600	144	186	1.0	2.69
106000	101000	3200	-	3800	138	192	2.0	3.92
167000	146000	2600	-	3200	144	216	2.5	5.82
229000	214000	2200	-	2800	148	262	3.0	18.2
38000	44500	3400	-	4000	146	169	1.0	0.840
38000	44500	3400	-	4000	146	169	1.0	-
66500	71000	3200	-	3800	147	183	1.5	1.90
66500	71000	3200	-	3800	147	183	1.5	-
56000	62000	3000	-	3500	154	196	1.0	2.86
110000	109000	3000	-	3600	148	202	2.0	4.15
166000	150000	2400	-	2900	154	236	2.5	7.47
253000	246000	2100	-	2600	158	282	3.0	21.8
47500	54500	3100	-	3500	156	184	1.0	1.20
47500	54500	3100	-	3500	156	184	1.0	-
85500	87000	2800	-	3100	158	202	2.0	2.64
85500	87000	2800	-	3100	158	202	2.0	-
76500	82500	2600	-	3200	164	211	1.0	3.58
126000	126000	2600	-	3200	159	216	2.0	4.48
176000	168000	2200	-	2600	164	256	2.5	9.41
274000	284000	2000	-	2400	168	302	3.0	26.2

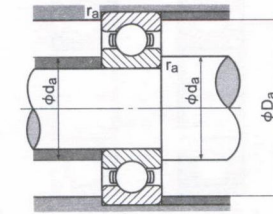
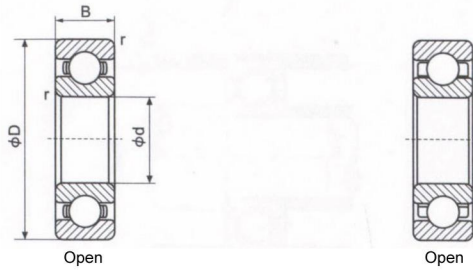
Bore diameter d: 180~200mm



Principal dimensions (mm)				Designation						
d	D	B	r (min)	Open	Shield ring	Contact seal ring	Non-contact seal ring			
160	200	20	1.1	61832	61832Z	61832ZZ	61832RS	61832-2RS	61832RZ	61832-2RZ
	200	24	1.1	62832	62832Z	62832ZZ	62832RS	62832-2RS	62832RZ	62832-2RZ
	220	28	2	61932	61932Z	61932ZZ	61932RS	61932-2RS	61932RZ	61932-2RZ
	220	36	2	62932	62932Z	62932ZZ	62932RS	62932-2RS	62932RZ	62932-2RZ
	240	38	2.1	6032	6032Z	6032ZZ	6032RS	6032-2RS	6032RZ	6032-2RZ
	290	48	3	6232	6232Z	6232ZZ	6232RS	6232-2RS	6232RZ	6232-2RZ
	340	68	4	6332	6332Z	6332ZZ	6332RS	6332-2RS	6332RZ	6332-2RZ
170	215	22	1.1	61834	61834Z	61834ZZ	61834RS	61834-2RS	61834RZ	61834-2RZ
	215	27	1.1	62834	62834Z	62834ZZ	62834RS	62834-2RS	62834RZ	62834-2RZ
	230	28	2	61934	61934Z	61934ZZ	61934RS	61934-2RS	61934RZ	61934-2RZ
	230	36	2	62934	62934Z	62934ZZ	62934RS	62934-2RS	62934RZ	62934-2RZ
	260	42	2.1	6034	6034Z	6034ZZ	6034RS	6034-2RS	6034RZ	6034-2RZ
	310	52	4	6234	6234Z	6234ZZ	6234RS	6234-2RS	6234RZ	6234-2RZ
	360	72	4	6334	6334Z	6334ZZ	6334RS	6334-2RS	6334RZ	6334-2RZ
180	225	22	1.1	61836	61836Z	61836ZZ	61836RS	61836-2RS	61836RZ	61836-2RZ
	225	27	1.1	62836	62836Z	62836ZZ	62836RS	62836-2RS	62836RZ	62836-2RZ
	250	33	2	61936	61936Z	61936ZZ	61936RS	61936-2RS	61936RZ	61936-2RZ
	250	42	2	62936	62936Z	62936ZZ	62936RS	62936-2RS	62936RZ	62936-2RZ
	280	46	2.1	6036	6036Z	6036ZZ	6036RS	6036-2RS	6036RZ	6036-2RZ
	320	52	4	6236	6236Z	6236ZZ	6236RS	6236-2RS	6236RZ	6236-2RZ
	380	75	4	6336	6336Z	6336ZZ	6336RS	6336-2RS	6336RZ	6336-2RZ
190	240	24	1.5	61838	61838Z	61838ZZ	61838RS	61838-2RS	61838RZ	61838-2RZ
	240	30	1.5	62838	62838Z	62838ZZ	62838RS	62838-2RS	62838RZ	62838-2RZ
	260	33	2	61938	61938Z	61938ZZ	61938RS	61938-2RS	61938RZ	61938-2RZ
	260	42	2	62938	62938Z	62938ZZ	62938RS	62938-2RS	62938RZ	62938-2RZ
	290	46	2.1	6038	6038Z	6038ZZ	6038RS	6038-2RS	6038RZ	6038-2RZ
	340	55	4	6238	6238Z	6238ZZ	6238RS	6238-2RS	6238RZ	6238-2RZ
	400	78	5	6338	6338Z	6338ZZ	6338RS	6338-2RS	6338RZ	6338-2RZ
200	250	24	1.5	61840	61840Z	61840ZZ	61840RS	61840-2RS	61840RZ	61840-2RZ
	250	30	1.5	62840	62840Z	62840ZZ	62840RS	62840-2RS	62840RZ	62840-2RZ
	280	38	2.1	61940	61940Z	61940ZZ	61940RS	61940-2RS	61940RZ	61940-2RZ
	280	48	2.1	62940	62940Z	62940ZZ	62940RS	62940-2RS	62940RZ	62940-2RZ
	310	51	2.1	6040	6040Z	6040ZZ	6040RS	6040-2RS	6040RZ	6040-2RZ
	360	58	4	6240	6240Z	6240ZZ	6240RS	6240-2RS	6240RZ	6240-2RZ
	420	80	5	6340	6340Z	6340ZZ	6340RS	6340-2RS	6340RZ	6340-2RZ

Basic load rating		Limiting speed			Abutment and fillet Dimensions (mm)			Ref. Weight (g)
		Grease		Oil	Da (min)	Da (max)	ra (max)	
Dynamic Cr(N)	Static Cor(N)	Open, Z, ZZ, RZ, 2RZ	RS, 2RS	Open, Z				
48500	56500	2800	-	3100	166	194	1.0	1.30
48500	56500	2800	-	3100	166	194	1.0	-
87500	95500	2600	-	2900	168	212	2.0	3.01
87500	95500	2600	-	2900	168	212	2.0	-
137000	135000	2400	-	3000	169	231	2.0	5.89
185000	186000	2000	-	2400	174	276	2.5	14.3
278000	287000	1800	-	2000	178	322	3.0	28.6
60000	70500	2600	-	3000	177	208	1.0	1.85
60000	70500	2600	-	3000	177	208	1.0	-
86000	95000	2400	-	2800	178	222	2.0	3.17
86000	95000	2400	-	2800	178	222	2.0	-
161000	160000	2200	-	2800	179	251	2.0	7.92
212000	224000	1900	-	2300	188	292	3.0	17.5
325000	360000	1600	-	1900	188	342	3.0	34.0
60500	73000	2400	-	2900	187	218	1.0	2.02
60500	73000	2400	-	2900	187	218	1.0	-
106000	117000	2200	-	2600	188	242	2.0	4.68
106000	117000	2200	-	2600	188	242	2.0	-
174000	180000	2100	-	2600	189	271	2.0	10.3
227000	242000	1800	-	2200	198	302	3.0	18.3
325000	360000	1500	-	1900	198	362	3.0	41.9
73000	88000	2200	-	2600	198	232	1.5	2.60
73000	88000	2200	-	2600	198	232	1.5	-
108000	123000	2100	-	2500	198	252	2.0	4.90
108000	123000	2100	-	2500	198	252	2.0	-
188000	200000	2000	-	2500	199	281	2.0	10.8
255000	282000	1700	-	2000	208	322	3.0	23.0
355000	415000	1500	-	1800	212	378	4.0	48.2
74000	91000	2100	-	2500	208	242	1.5	2.70
74000	91000	2100	-	2500	208	242	1.5	-
130000	146000	2000	-	2500	209	271	2.0	6.88
130000	146000	2000	-	2500	209	271	2.0	-
202000	222000	1900	-	2400	209	301	2.0	13.9
268000	310000	1600	-	1900	218	342	3.0	28.2
380000	445000	1300	-	1700	222	398	4.0	54.6

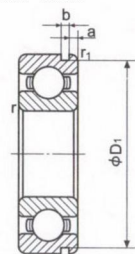
Bore diameter d: 220~320mm



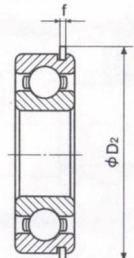
Principal dimensions (mm)				Designation						
d	D	B	r (min)	Open	Shield ring		Contact seal ring		Non-contact seal ring	
220	270	24	1.5	61844	61844Z	61844ZZ	61844RS	61844-2RS	61844RZ	61844-2RZ
	270	30	1.5	62844	62844Z	62844ZZ	62844RS	62844-2RS	62844RZ	62844-2RZ
	300	38	2.1	61944	61944Z	61944ZZ	61944RS	61944-2RS	61944RZ	61944-2RZ
	300	48	2.1	62944	62944Z	62944ZZ	62944RS	62944-2RS	62944RZ	62944-2RZ
	340	56	3	6044	6044Z	6044ZZ	6044RS	6044-2RS	6044RZ	6044-2RZ
	400	65	4	6244	6244Z	6244ZZ	6244RS	6244-2RS	6244RZ	6244-2RZ
240	300	28	2	61848	61848Z	61848ZZ	61848RS	61848-2RS	61848RZ	61848-2RZ
	300	36	2	62848	62848Z	62848ZZ	62848RS	62848-2RS	62848RZ	62848-2RZ
	320	38	2.1	61948	61948Z	61948ZZ	61948RS	61948-2RS	61948RZ	61948-2RZ
	320	48	2.1	62948	62948Z	62948ZZ	62948RS	62948-2RS	62948RZ	62948-2RZ
	360	56	3	6048	6048Z	6048ZZ	6048RS	6048-2RS	6048RZ	6048-2RZ
	440	72	4	6248	6248Z	6248ZZ	6248RS	6248-2RS	6248RZ	6248-2RZ
260	320	28	2	61852	61852Z	61852ZZ	61852RS	61852-2RS	61852RZ	61852-2RZ
	320	36	2	62852	62852Z	62852ZZ	62852RS	62852-2RS	62852RZ	62852-2RZ
	360	46	2.1	61952	61952Z	61952ZZ	61952RS	61952-2RS	61952RZ	61952-2RZ
	360	60	2.1	62952	62952Z	62952ZZ	62952RS	62952-2RS	62952RZ	62952-2RZ
	400	65	4	6052	6052Z	6052ZZ	6052RS	6052-2RS	6052RZ	6052-2RZ
	480	80	5	6252	6252Z	6252ZZ	6252RS	6252-2RS	6252RZ	6252-2RZ
280	350	33	2	61856	61856Z	61856ZZ	61856RS	61856-2RS	61856RZ	61856-2RZ
	350	42	2	62856	62856Z	62856ZZ	62856RS	62856-2RS	62856RZ	62856-2RZ
	380	46	2.1	61956	61956Z	61956ZZ	61956RS	61956-2RS	61956RZ	61956-2RZ
	380	60	2.1	62956	62956Z	62956ZZ	62956RS	62956-2RS	62956RZ	62956-2RZ
	420	65	4	6056	6056Z	6056ZZ	6056RS	6056-2RS	6056RZ	6056-2RZ
	500	80	5	6256	6256Z	6256ZZ	6256RS	6256-2RS	6256RZ	6256-2RZ
300	380	38	2.1	61860	61860Z	61860ZZ	61860RS	61860-2RS	61860RZ	61860-2RZ
	380	48	2.1	62860	62860Z	62860ZZ	62860RS	62860-2RS	62860RZ	62860-2RZ
	420	56	3	61960	61960Z	61960ZZ	61960RS	61960-2RS	61960RZ	61960-2RZ
	420	72	3	62960	62960Z	62960ZZ	62960RS	62960-2RS	62960RZ	62960-2RZ
	460	74	4	6060	6060Z	6060ZZ	6060RS	6060-2RS	6060RZ	6060-2RZ
	540	85	5	6260	6260Z	6260ZZ	6260RS	6260-2RS	6260RZ	6260-2RZ
320	400	38	2.1	61864	61864Z	61864ZZ	61864RS	61864-2RS	61864RZ	61864-2RZ
	400	48	2.1	62864	62864Z	62864ZZ	62864RS	62864-2RS	62864RZ	62864-2RZ
	440	56	3	61964	61964Z	61964ZZ	61964RS	61964-2RS	61964RZ	61964-2RZ
	440	72	3	62964	62964Z	62964ZZ	62964RS	62964-2RS	62964RZ	62964-2RZ
	480	74	4	6064	6064Z	6064ZZ	6064RS	6064-2RS	6064RZ	6064-2RZ

Basic load rating		Limiting speed			Abutment and fillet Dimensions (mm)			Ref. Weight (g)
		Grease		Oil	Da (min)	Da (max)	ra (max)	
Dynamic Cr(N)	Static Cor(N)	Open, Z, ZZ,RZ,2RZ	RS,2RS	Open, Z				
76500	98000	1900	-	2400	228	262	1.5	2.98
76500	98000	1900	-	2400	228	262	1.5	-
132000	154000	1800	-	2300	229	291	2.0	7.45
132000	154000	1800	-	2300	229	291	2.0	-
214000	248000	1700	-	2200	230	330	2.5	18.4
310000	375000	1400	-	1700	238	382	3.0	37.0
98500	127000	1800	-	2100	250	291	2.0	4.60
98500	127000	1800	-	2100	250	291	2.0	-
154000	186000	1700	-	2000	249	311	2.0	8.02
154000	186000	1700	-	2000	249	311	2.0	-
222000	268000	1600	-	1900	250	350	2.5	19.6
340000	430000	1200	-	1500	258	322	3.0	49.9
101000	136000	1600	-	2000	269	311	2.0	4.95
101000	136000	1600	-	2000	269	311	2.0	-
204000	254000	1500	-	1800	269	351	2.0	13.4
204000	254000	1500	-	1800	269	351	2.0	-
252000	320000	1400	-	1700	272	388	3.0	29.3
400000	540000	1100	-	1400	282	458	4.0	67.5
133000	177000	1500	-	1800	290	341	2.0	7.35
133000	177000	1500	-	1800	290	341	2.0	-
209000	270000	1400	-	1700	289	371	2.0	14.3
209000	270000	1400	-	1700	289	371	2.0	-
266000	350000	1300	-	1600	293	405	3.0	31.0
400000	550000	950	-	1200	302	478	4.0	71.0
166000	219000	1400	-	1600	311	369	2.0	10.4
166000	219000	1400	-	1600	311	369	2.0	-
269000	370000	1300	-	1500	311	409	2.5	22.8
269000	370000	1300	-	1500	311	409	2.5	-
355000	490000	1200	-	1500	313	447	3.0	43.8
465000	670000	850	-	1100	322	518	4.0	88.6
164000	218000	1300	-	1500	330	389	2.0	10.9
164000	218000	1300	-	1500	330	389	2.0	-
266000	370000	1200	-	1300	331	429	2.5	24.1
266000	370000	1200	-	1300	331	429	2.5	-
340000	470000	1100	-	1300	333	467	3.0	46.1

Deep groove ball bearings with snap groove/snap ring/snap ring and shield
Bore diameter: $d: 10\sim 30\text{mm}$



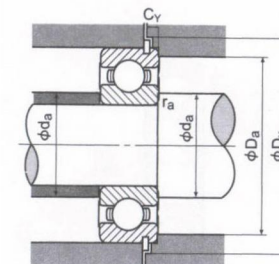
With snap groove (ZZ)



With snap groove (NR)



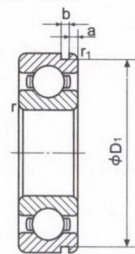
With dust cover and snap ring (2NR)



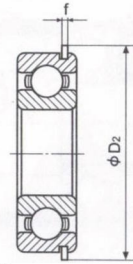
Principal dimensions (mm)					Dimension of snap groove and snap ring					Designation		
d	D	B	r (min)	r ₁ (min)	D ₁ (max)	a (max)	b (min)	D ₂ (max)	f (max)			
10	22	6	0.3	0.3	20.8	1.05	0.8	24.8	0.7	61900N	61900NR	61900ZNR
	30	9	0.6	0.5	28.17	2.06	1.35	34.7	1.12	6200N	6200NR	6200ZNR
	35	11	0.6	0.5	33.17	2.06	1.35	39.7	1.12	6300N	6300NR	6300ZNR
12	24	6	0.3	0.3	22.8	1.05	0.8	26.8	0.7	61901N	61901NR	61901ZNR
	32	10	0.6	0.5	30.15	2.06	1.35	36.7	1.12	6201N	6201NR	6201ZNR
	37	12	1	0.5	34.77	2.06	1.35	41.3	1.12	6301N	6301NR	6301ZNR
15	28	7	0.3	0.3	26.7	1.3	0.95	30.8	0.85	61902N	61902NR	61902ZNR
	32	9	0.3	0.3	30.15	2.06	1.35	36.7	0.85	6002N	6002NR	6002ZNR
	35	11	0.6	0.5	33.17	2.06	1.35	39.7	1.12	6202N	6202NR	6202ZNR
	42	13	1	0.5	39.75	2.06	1.35	46.3	1.12	6302N	6302NR	6302ZNR
17	30	7	0.3	0.3	28.7	1.3	0.95	32.8	0.85	61903N	61903NR	61903ZNR
	35	10	0.3	0.3	33.17	2.06	1.35	39.7	1.12	6003N	6003NR	6003ZNR
	40	12	0.6	0.5	38.1	2.06	1.35	44.6	1.12	6203N	6203NR	6203ZNR
	47	14	1	0.5	44.6	2.46	1.35	52.7	1.12	6303N	6303NR	6303ZNR
20	32	7	0.3	0.3	30.7	1.3	0.95	34.8	0.85	61804N	61804NR	61804ZNR
	37	9	0.3	0.3	35.7	1.7	0.95	39.8	0.85	61904N	61904NR	61904ZNR
	42	12	0.6	0.5	39.75	2.06	1.35	46.3	1.12	6004N	6004NR	6004ZNR
	47	14	1	0.5	44.6	2.46	1.35	52.7	1.12	6204N	6204NR	6204ZNR
	52	15	1.1	0.5	49.73	2.46	1.35	57.9	1.12	6304N	6304NR	6304ZNR
22	50	14	1	0.5	47.6	2.46	1.35	55.7	1.12	62/22N	62/22NR	62/22ZNR
	56	16	1.1	0.5	53.6	2.46	1.35	61.7	1.12	63/22N	63/22NR	63/22ZNR
25	37	7	0.3	0.3	35.7	1.3	0.95	39.8	0.85	61805N	61805NR	61805ZNR
	42	9	0.3	0.3	40.7	1.7	0.95	44.8	0.85	61905N	61905NR	61905ZNR
	47	12	0.6	0.5	44.6	2.06	1.35	52.7	1.12	6005N	6005NR	6005ZNR
	52	15	1	0.5	49.73	2.46	1.35	57.9	1.12	6205N	6205NR	6205ZNR
	62	17	1.1	0.5	59.61	3.28	1.9	67.7	1.7	6305N	6305NR	6305ZNR
28	58	16	1	0.5	55.6	2.46	1.35	63.7	1.12	62/28N	62/28NR	62/28ZNR
	68	18	1.1	0.5	64.82	3.28	1.9	74.6	1.7	63/28N	63/28NR	63/28ZNR
30	42	7	0.3	0.3	40.7	1.3	0.95	44.8	0.85	61806N	61806NR	61806ZNR
	47	9	0.3	0.3	45.7	1.7	0.95	49.8	0.85	61906N	61906NR	61906ZNR
	55	13	1	0.5	52.6	2.08	1.35	60.7	1.12	6006N	6006NR	6006ZNR
	62	16	1	0.5	59.61	3.28	1.9	67.7	1.7	6206N	6206NR	6206ZNR
	72	19	1.1	0.5	68.81	3.28	1.9	78.6	1.7	6306N	6306NR	6306ZNR

Basic load rating		Limiting speed		Abutment and fillet Dimensions (mm)					Ref. Weight (g)
Dynamic Cr(N)	Static Cor(N)	Grease	Oil	d _a (min)	D _a (max)	D _x (min)	r _a (max)	C _y (max)	
2490	1130	33000	38000	12	20	25.5	0.3	1.5	0.010
5100	2390	24000	30000	15	25	35.5	0.6	2.9	0.032
8100	3450	21000	26000	15	30	40.5	0.6	2.9	0.053
2700	1320	30000	35000	14	22	27.5	0.3	1.5	0.012
6800	3050	22000	27000	17	27	37.5	0.6	2.9	0.037
9750	4250	19000	24000	18	31	42	1	2.9	0.060
4300	2250	26000	31000	17	26	31.5	0.3	1.8	0.017
5600	2840	23000	28000	17	30	37.5	0.3	2.9	0.033
7650	3700	19000	24000	20	30	40.5	0.6	2.9	0.045
11400	5400	17000	20000	21	36	47	1	2.9	0.082
4600	2550	24000	29000	19	28	33.5	0.3	1.8	0.019
6000	3250	20000	25000	19	33	40.5	0.3	2.9	0.041
9550	4800	17000	21000	22	35	45.5	0.6	2.9	0.065
13600	6550	15000	18000	23	41	53.5	1	3.3	0.115
4000	2640	20000	24000	22	30	35.5	0.3	1.8	0.020
6350	3700	19000	23000	22	35	40.5	0.3	2.3	0.037
9400	5000	17000	21000	24	38	47	0.6	2.9	0.069
12800	6600	14000	18000	26	41	53.5	1	3.3	0.106
15900	7900	13000	16000	27	45	58.5	1	3.3	0.144
13900	6950	13000	17000	28	44	56.5	1	3.3	0.120
18400	9250	12000	15000	29	49	62.5	1	3.3	0.176
4300	2940	18000	20000	27	35	40.5	0.3	1.8	0.023
7000	4500	16000	20000	27	40	45.5	0.3	2.3	0.044
10100	5850	15000	18000	29	43	53.5	0.6	2.9	0.078
14000	7900	12000	16000	31	46	58.5	1	3.3	0.128
23600	12100	11000	14000	32	55	68.5	1	4.6	0.232
17900	9750	11000	14000	34	52	64.5	1	3.3	0.175
26800	14000	10000	12000	35	61	76	1	4.6	0.287
5350	3800	15000	17000	32	40	45.5	0.3	1.8	0.027
7250	5000	14000	16000	32	45	50.5	0.3	2.3	0.047
13200	8300	12000	15000	35	50	61.5	1	2.9	0.113
19500	11300	10000	13000	36	56	68.5	1	4.6	0.199
26700	15000	9200	11000	37	65	80	1	4.6	0.346

Deep groove ball bearings with snap groove/snap ring/snap ring and shield
Bore diameter d : 32~60mm



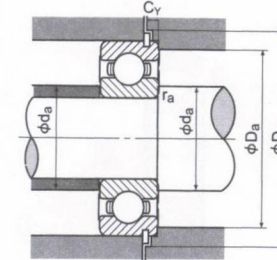
With snap groove (ZZ)



With snap groove (NR)



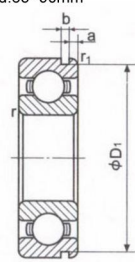
With dust cover and snap ring (2NR)



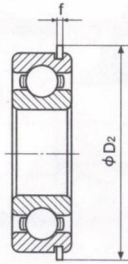
Principal dimensions (mm)					Dimension of snap groove and snap ring					Designation		
d	D	B	r (min)	r ₁ (min)	D ₁ (max)	a (max)	b (min)	D ₂ (max)	f (max)			
32	65	17	1	0.5	62.6	3.28	1.9	70.7	1.7	62/32N	62/32NR	62/32ENR
	75	20	1.1	0.5	71.83	3.28	1.9	81.6	1.7	63/32N	63/32NR	63/32ENR
35	47	7	0.3	0.3	45.7	1.3	0.95	49.8	0.85	61807N	61807NR	61807ENR
	55	10	0.6	0.5	53.7	1.7	0.95	57.8	0.85	61907N	61907NR	61907ENR
	62	14	1	0.5	59.61	2.08	1.9	67.7	1.7	6007N	6007NR	6007ENR
	72	17	1.1	0.5	68.81	3.28	1.9	78.6	1.6	6207N	6207NR	6207ENR
	80	21	1.5	0.5	76.81	3.28	1.9	86.6	1.6	6307N	6307NR	6307ENR
40	52	7	0.3	0.3	50.7	1.3	0.95	54.8	0.85	61808N	61808NR	61808ENR
	62	12	0.6	0.5	60.7	1.7	0.95	64.8	0.85	61908N	61908NR	61908ENR
	68	15	1	0.5	64.82	2.49	1.9	74.6	1.7	6008N	6008NR	6008ENR
	80	18	1.1	0.5	76.81	3.28	1.9	86.6	1.7	6208N	6208NR	6208ENR
	90	23	1.5	0.5	86.79	3.28	2.7	96.5	2.46	6308N	6308NR	6308ENR
45	58	7	0.3	0.3	56.7	1.3	0.95	60.8	0.85	61809N	61809NR	61809ENR
	68	12	0.6	0.5	66.7	1.7	0.95	70.8	0.85	61909N	61909NR	61909ENR
	75	16	1	0.5	71.83	2.49	1.9	81.6	1.7	6009N	6009NR	6009ENR
	85	19	1.1	0.5	81.81	3.28	1.9	91.6	1.7	6209N	6209NR	6209ENR
	100	25	1.5	0.5	96.8	3.28	2.7	106.5	2.46	6309N	6309NR	6309ENR
50	65	7	0.3	0.3	63.7	1.3	0.95	67.8	0.85	61810N	61810NR	61810ENR
	72	12	0.6	0.5	70.7	1.7	0.95	74.8	0.85	61910N	61910NR	61910ENR
	80	16	1	0.5	76.81	2.49	1.9	86.6	1.7	6010N	6010NR	6010ENR
	90	20	1.1	0.5	86.79	3.28	2.7	96.5	2.46	6210N	6210NR	6210ENR
	110	27	2	0.5	106.81	3.28	2.7	116.6	2.46	6310N	6310NR	6310ENR
55	72	9	0.3	0.3	70.7	1.7	0.95	74.8	0.85	61811N	61811NR	61811ZNR
	80	13	1	0.5	77.9	2.1	1.3	84.4	1.12	61911N	61911NR	61911ZNR
	90	18	1.1	0.5	86.79	2.87	2.7	96.5	2.46	6011N	6011NR	6011ENR
	100	21	1.5	0.5	96.8	3.28	2.7	106.5	2.46	6211N	6211NR	6211ENR
	120	29	2	0.5	115.21	4.06	3.1	129.7	2.82	6311N	6311NR	6311ENR
60	78	10	0.3	0.3	76.2	1.7	1.3	82.7	1.12	61812N	61812NR	61812ZNR
	85	13	1	0.5	82.9	2.1	1.3	89.4	1.12	61912N	61912NR	61912ZNR
	95	18	1.1	0.5	91.82	2.87	2.7	101.6	2.46	6012N	6012NR	6012ENR
	110	22	1.5	0.5	106.81	3.28	2.7	116.6	2.46	6212N	6212NR	6212ENR
	130	31	2.1	0.5	125.22	4.06	3.1	139.7	2.82	6312N	6312NR	6312ENR

Basic load rating		Limiting speed		Abutment and fillet Dimensions (mm)					Ref. Weight (g)
Dynamic Cr(N)	Static Cor(N)	Grease	Oil	d _a (min)	D _a (max)	D _x (min)	r _a (max)	C _Y (max)	
22400	13100	9500	12000	38	59	71.5	1	4.6	0.230
30000	16200	9000	11000	39	68	83	1	4.6	0.382
4750	3800	13000	15000	37	45	50.5	0.3	1.8	0.030
10400	7150	12000	14000	39	51	58.5	0.6	2.3	0.075
16000	10300	11000	13000	40	57	68.5	1	3.4	0.150
25700	15300	9000	11000	42	65	80	1	4.6	0.288
33500	19100	8400	10000	44	71	88	1.5	4.6	0.457
5950	4900	12000	14000	42	50	55.5	0.3	1.8	0.034
13700	9950	11000	13000	44	58	65.5	0.6	2.3	0.110
16800	11500	9500	12000	45	63	76	1	3.8	0.186
29100	17900	8200	10000	47	73	88	1	4.6	0.366
40500	24100	7500	9000	49	81	98	1.5	5.9	0.633
5350	4900	11000	13000	47	56	61.5	0.3	1.8	0.042
14100	10900	10000	12000	49	64	72	0.6	2.3	0.124
20900	15200	8800	11000	50	70	83	1	3.8	0.239
32500	20500	7600	9300	52	78	93	1	4.6	0.407
53000	32000	6700	8000	54	91	108	1.5	5.4	0.833
6400	5800	10000	12000	52	63	68.5	0.3	1.8	0.054
14500	11700	9500	11000	54	68	76	0.6	2.3	0.127
21800	16600	8300	10000	55	75	88	1	3.8	0.252
35000	23200	7000	8600	57	83	98	1	5.4	0.463
62000	38100	6200	7300	60	100	118	2	5.4	1.070
8800	8100	8500	10000	57	70	76	0.3	2.3	0.085
16000	13200	8000	9000	60	75	86	1	2.9	0.180
28300	21300	7500	9000	61	84	98	1	5	0.375
43500	29300	6300	7700	64	91	108	1.5	5.4	0.607
71500	44500	5600	6600	65	110	131.5	2	6.5	1.370
11500	10600	8000	9500	62	76	84	0.3	2.5	0.110
15200	13500	7500	9000	65	80	91	1	2.9	0.195
29400	23200	7000	8300	66	89	103	1	5	0.403
52500	36000	5800	7100	69	101	118	1.5	5.4	0.783
82000	52000	5100	6100	72	118	141.5	2	6.5	1.700

Deep groove ball bearings with snap groove/snap ring/snap ring and shield
Bore diameter d:65~90mm



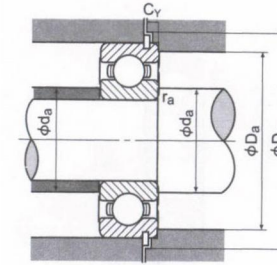
With snap groove (ZZ)



With snap groove (NR)



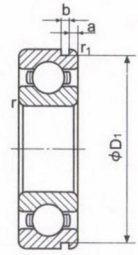
With dust cover and snap ring (2NR)



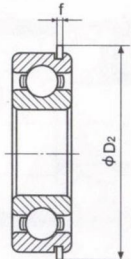
Principal dimensions (mm)					Dimension of snap groove and snap ring					Designation		
d	D	B	r (min)	r ₁ (min)	D ₁ (max)	a (max)	b (min)	D ₂ (max)	f (max)			
65	85	10	0.6	0.5	82.9	1.7	1.3	89.4	1.12	61813N	61813NR	61813ZNR
	90	13	1	0.5	87.9	2.1	1.3	94.4	1.12	61913N	61913NR	61913ZNR
	100	18	1.1	0.5	96.8	2.87	2.7	106.5	2.46	6013N	6013NR	6013ZNR
	120	23	1.5	0.5	115.21	4.06	3.1	129.7	2.82	6213N	6213NR	6213ZNR
	140	33	2.1	0.5	135.23	4.9	3.1	149.7	2.82	6313N	6313NR	6313ZNR
70	90	10	0.6	0.5	87.9	1.7	1.3	94.4	1.12	61814N	61814NR	61814ZNR
	100	16	1	0.5	97.9	2.5	1.3	104.4	1.12	61914N	61914NR	61914ZNR
	110	20	1.1	0.5	106.81	2.87	2.7	116.6	2.46	6014N	6014NR	6014ZNR
	125	24	1.5	0.5	120.22	4.06	3.1	134.7	2.82	6214N	6214NR	6214ZNR
	150	35	2.1	0.5	145.24	4.9	3.1	159.7	2.82	6314N	6314NR	6314ZNR
75	95	10	0.6	0.5	92.9	1.7	1.3	99.4	1.12	61815N	61815NR	61815ZNR
	105	16	1	0.5	102.6	2.5	1.3	110.7	1.12	61915N	61915NR	61915ZNR
	115	20	1.1	0.5	111.81	2.87	2.7	121.6	2.46	6015N	6015NR	6015ZNR
	130	25	1.5	0.5	125.22	4.06	3.1	139.7	2.82	6215N	6215NR	6215ZNR
	160	37	2.1	0.5	155.22	4.9	3.1	169.7	2.82	6315N	6315NR	6315ZNR
80	100	10	0.6	0.5	97.9	1.7	1.3	104.4	1.12	61816N	61816NR	61816ZNR
	110	16	1	0.5	107.6	2.5	1.3	115.7	1.12	61916N	61916NR	61916ZNR
	125	22	1.1	0.5	120.22	2.87	3.1	134.7	2.82	6016N	6016NR	6016ZNR
	140	26	2	0.5	135.23	4.9	3.1	149.7	2.82	6216N	6216NR	6216ZNR
	170	39	2.1	0.5	163.65	5.69	3.5	182.9	3.1	6316N	6316NR	6316ZNR
85	110	13	1	0.5	107.6	2.1	1.3	115.7	1.12	61817N	61817NR	61817ZNR
	120	18	1.1	0.5	117.6	3.3	1.3	125.7	1.12	61917N	61917NR	61917ZNR
	130	22	1.1	0.5	125.22	2.87	3.1	139.7	2.82	6017N	6017NR	6017ZNR
	150	28	2	0.5	145.24	4.9	3.1	159.7	2.82	6217N	6217NR	6217ZNR
	180	41	3	0.5	173.66	5.69	3.5	192.9	3.1	6317N	6317NR	6317ZNR
90	115	13	1	0.5	112.6	2.1	1.3	120.7	1.2	61818N	61818NR	61818ZNR
	125	18	1.1	0.5	122.6	3.3	1.3	130.7	1.12	61918N	61918NR	61918ZNR
	140	24	1.5	0.5	135.23	3.71	3.1	149.7	2.82	6018N	6018NR	6018ZNR
	160	30	2	0.5	155.22	4.9	3.1	169.7	2.82	6218N	6218NR	6218ZNR
	190	43	3	0.5	183.64	5.69	3.5	202.9	3.1	6318N	6318NR	6318ZNR

Basic load rating		Limiting speed		Abutment and fillet Dimensions (mm)					Ref. Weight (g)
Dynamic Cr(N)	Static Cor(N)	Grease	Oil	d _a (min)	D _a (max)	D _x (min)	r _a (max)	C _y (max)	
11900	11500	7500	8500	69	81	91	0.6	2.5	0.130
17400	16000	7000	8500	70	85	96	1	2.9	0.210
30500	25200	6500	7800	71	94	108	1	5	0.413
57000	40000	5300	6500	74	111	131.5	1.5	6.5	0.990
92500	59500	4700	5700	77	128	152	2	7.3	2.08
12100	11900	7000	8000	74	86	96	0.6	2.5	0.140
23700	21100	6500	7500	75	95	106	1	3.3	0.332
38000	31000	6000	7100	76	104	118	1	5	0.580
62000	44000	5000	5900	79	116	136.5	1.5	6.5	1.07
104000	68000	4400	5300	82	138	162	2	7.3	2.52
12500	12800	6500	7500	79	91	101	0.6	2.5	0.150
20800	19700	6200	7200	80	100	112	1	3.3	0.350
39500	33500	5700	6700	81	109	123	1	5	0.615
66000	49500	4800	5600	84	121	141.5	1.5	6.5	1.18
113000	77000	4100	5000	87	148	172	2	7.3	3.02
12700	13300	6000	7000	84	96	106	0.6	2.5	0.160
27600	25300	5500	6500	85	105	117	1	3.3	0.370
47500	39500	5300	6200	86	119	136.5	1	5.3	0.825
72500	53000	4500	5200	90	130	152	2	7.3	1.40
123000	86500	3800	4500	92	158	185	2	8.4	3.59
18700	19000	5500	6500	90	105	117	1	2.9	0.272
32000	29600	5200	6300	91	113	127	1	4.1	0.524
49500	43000	5000	6000	91	124	141.5	1	5.3	0.863
84000	62000	4200	4900	95	140	162	2	7.3	1.79
133000	96500	3600	4300	99	166	195	2.5	8.4	4.23
19000	19700	5300	6200	95	110	122	1	2.9	0.288
33000	31500	5000	6000	96	119	132	1	4.1	0.549
58000	49500	4700	5600	97	133	152	1.5	6.1	1.13
96000	71500	3900	4600	100	150	172	2	7.3	2.15
143000	107000	3400	4000	104	176	205	2.5	8.4	4.91

Deep groove ball bearings with snap groove/snap ring/snap ring and shield
Bore diameter d:95~130mm



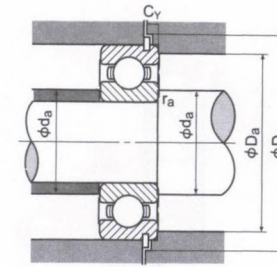
With snap groove (ZZ)



With snap groove (NR)



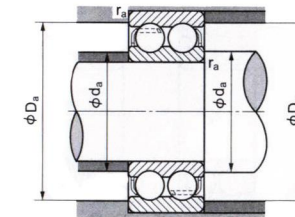
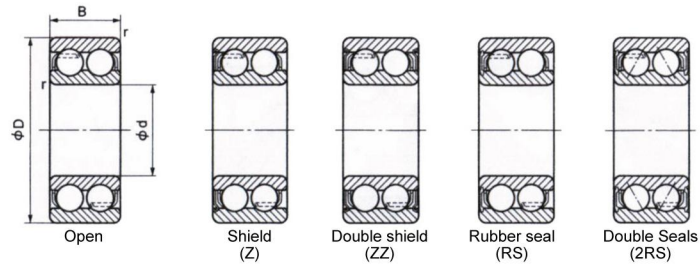
With dust cover and snap ring (2NR)



Principal dimensions (mm)					Dimension of snap groove and snap ring					Designation		
d	D	B	r (min)	r ₁ (min)	D ₁ (max)	a (max)	b (min)	D ₂ (max)	f (max)			
95	120	13	1	0.5	117.6	2.1	1.3	125.7	1.12	61819N	61819NR	61819ZNR
	130	18	1.1	0.5	127.6	3.3	1.3	135.7	1.12	61919N	61919NR	61919ZNR
	145	24	1.5	0.5	140.23	3.71	3.1	154.7	2.82	6019N	6019NR	6019ZNR
	170	32	2.1	0.5	163.65	5.69	3.5	182.9	3.1	6219N	6219NR	6219ZNR
	200	45	3	0.5	193.65	5.69	3.5	212.9	3.1	6319N	6319NR	6319ZNR
100	125	13	1	0.5	122.6	2.1	1.3	130.7	1.12	61820N	61820NR	61820ZNR
	140	20	1.1	0.5	137.6	3.3	1.9	145.7	1.7	61920N	61920NR	61920ZNR
	150	24	1.5	0.5	145.24	3.71	3.1	159.7	2.82	6020N	6020NR	6020ZNR
	180	34	2.1	0.5	173.66	5.69	3.5	192.9	3.1	6220N	6220NR	6220ZNR
105	130	13	1	0.5	127.6	2.1	1.3	135.7	1.12	61821N	61821NR	
	145	20	1.1	0.5	142.6	3.3	1.9	150.7	1.7	61921N	61921NR	
	160	26	2	0.5	155.22	3.71	3.1	169.7	2.82	6021N	6021NR	6021ZNR
	190	36	2.1	0.5	183.64	5.69	3.5	202.9	3.1	6221N	6221NR	6221ZNR
110	140	16	1	0.5	137.6	2.5	1.9	145.7	1.7	61822N	61822NR	
	150	20	1.1	0.5	147.6	3.3	1.9	155.7	1.7	61922N	61922NR	
	170	28	2	0.5	163.65	3.71	3.5	182.9	3.1	6022N	6022NR	6022ZNR
	200	38	2.1	0.5	193.65	5.69	3.5	212.9	3.1	6222N	6222NR	6222ZNR
120	150	16	1	0.5	147.6	2.5	1.9	155.7	1.7	61824N	61824NR	
	165	22	1.1	0.5	161.8	3.7	1.9	171.5	1.7	61924N	61924NR	
	180	28	2	0.5	173.66	3.71	3.5	192.9	3.1	6024N	6024NR	6024ZNR
130	165	18	1.1	0.5	161.8	3.3	1.9	171.5	1.7	61826N	61826NR	
	180	24	1.5	0.5	176.8	3.7	1.9	186.5	1.7	61926N	61926NR	
	200	33	2	0.5	193.65	5.69	3.5	212.9	3.1	6026N	6026NR	6026ZNR

Basic load rating		Limiting speed		Abutment and fillet Dimensions (mm)					Ref. Weight (g)
Dynamic Cr(N)	Static Cor(N)	Grease	Oil	d _a (min)	D _a (max)	D _x (min)	r _a (max)	C _Y (max)	
19300	20500	5000	6000	100	115	127	1	2.9	0.307
33500	33500	4700	5500	101	124	137	1	4.1	0.576
60500	54000	4500	5300	102	138	157	1.5	6.1	1.16
109000	81500	3700	4300	107	158	185	2	8.4	2.62
153000	118000	3200	3800	109	186	215	2.5	8.4	5.67
19600	21200	4600	5500	105	120	132	1	2.9	0.320
37000	36500	4400	5300	106	134	147	1	4.7	0.780
60000	54000	4200	5000	107	143	162	1.5	6.1	1.20
122000	93000	3500	4100	112	168	195	2	8.4	3.14
19900	21900	4500	5500	110	125	137	1	2.9	0.335
42500	42000	4200	5100	111	139	152	1	4.7	0.803
72500	65500	4000	4800	113	152	172	2	6.1	1.54
133000	104000	3200	3900	117	178	205	2	8.4	3.76
27300	29400	4200	5100	115	135	147	1	3.9	0.526
38000	38500	4000	5000	116	144	157	1	4.7	0.846
84500	73000	3800	4500	118	162	185	2	6.4	1.91
144000	117000	3000	3700	122	188	215	2	8.4	4.36
28300	31500	4000	4800	125	145	157	1	3.9	0.567
53000	54000	3700	4600	126	159	173	1	5.1	1.15
88000	79500	3500	4200	128	172	195	2	6.4	2.36
37000	41000	3600	4400	136	158	173	1	4.7	0.815
65000	67000	3400	4200	137	173	188	1.5	5.1	1.81
106000	101000	3200	3800	138	192	215	2	8.4	3.60

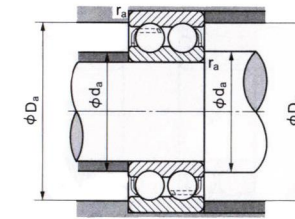
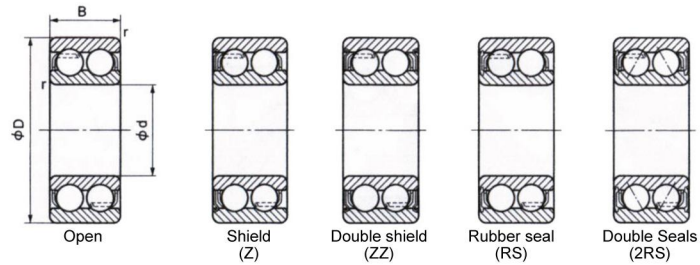
Bore diameter d: 10~55mm



Principal dimensions (mm)				Designation	Basic load rating	
d	D	B	r (min)		Dynamic Cr(N)	Static Cor(N)
10	30	14	0.6	4200	9230	5200
	35	17	0.6	4300	14300	8900
12	32	14	0.6	4201	10600	6200
	37	17	1.0	4301	13000	7800
15	35	14	0.6	4202	11900	7500
	42	17	1.0	4302	14800	9500
17	40	16	0.6	4203	14800	9500
	47	19	1.0	4303	19500	13200
20	47	18	1.0	4204	17800	12500
	52	21	1.1	4304	23400	16000
25	52	18	1.0	4205	19000	14600
	62	24	1.1	4305	31900	22400
30	62	20	1.0	4206	26000	20800
	72	27	1.1	4306	41000	30000
35	72	23	1.1	4207	35100	28500
	80	31	1.5	4307	50700	3800
40	80	23	1.1	4208	37100	32500
	90	33	1.5	4308	55900	45000
45	85	23	1.1	4209	39000	36000
	100	36	1.5	4309	68900	56000
50	90	23	1.1	4210	41000	40000
	110	40	2.0	4310	81900	69500
55	100	25	1.5	4211	44900	44000
	120	40	2.0	4311	97500	83000

Limiting speed		Abutment and fillet Dimensions (mm)			Ref. Weight (g)
Grease	Oil	da (min)	Da (max)	ra (max)	
18000	22000	14.0	26.0	0.6	0.049
8600	17500	-	-	-	0.091
17000	20000	16.0	28.0	0.6	0.053
15000	18000	17.0	32.0	1.0	0.092
14000	17000	19.0	31.0	0.6	0.059
12000	15000	20.0	37.0	1.0	0.120
12000	15000	21.0	36.0	0.6	0.090
10000	13000	22.0	42.0	1.0	0.160
10000	13000	25.0	42.0	1.0	0.140
9500	12000	26.5	45.0	1.0	0.210
9000	11000	30.0	47.0	1.0	0.160
8500	10000	31.	55.5	1.0	0.340
8000	9500	35.0	57.0	1.0	0.260
7000	8500	36.5	65.5	1.0	0.500
6700	8000	41.5	65.5	1.0	0.400
6300	7500	43.0	72.0	1.5	0.690
6000	7000	46.5	73.5	1.0	0.500
5600	6700	48.0	82.0	1.5	0.950
5600	6700	51.5	78.5	1.0	0.540
5000	6000	53.0	92.0	1.5	1.250
5000	6000	56.5	83.5	1.0	0.580
4500	5300	59.0	101.0	2.0	1.700
4800	5600	63.0	92.0	1.5	0.800
4300	5000	64.0	111.0	2.0	2.150

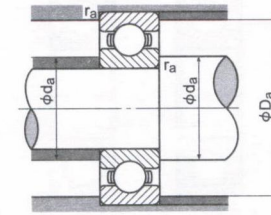
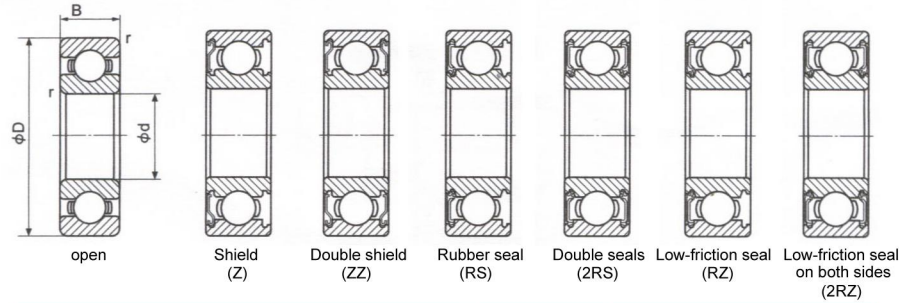
Bore diameter d: 60~110mm



Principal dimensions (mm)				Designation	Basic load rating	
d	D	B	r (min)		Dynamic Cr(N)	Static Cor(N)
60	110	28	1.5	4212	57200	55000
	130	46	2.1	4312	112000	98000
65	120	31	1.5	4213	67600	67000
	140	48	2.1	4313	121000	106000
70	125	31	1.5	4214	70200	73500
	150	51	2.1	4314	138000	125000
75	130	31	1.5	4215	72800	80000
	160	55	2.1	4315	156000	143000
80	140	33	2.0	4216	80600	90000
	170	58	2.1	4316	164000	155000
85	150	36	2.0	4217	93600	10200
	180	60	2.1	4317	168000	159000
90	160	40	2.0	4218	112000	122000
	190	64	2.1	4318	172000	163000
95	200	67	2.2	4319	176000	167000
100	180	46	2.1	4220	140000	156000
	215	73	2.2	4320	180000	170000
105	225	77	2.2	4321	185000	175000
110	240	80	2.2	4322	193000	182000

Limiting speed		Abutment and fillet Dimensions (mm)			Ref. Weight (g)
Grease	Oil	d _a (min)	D _a (max)	r _a (max)	
4500	5300	68	102.0	1.5	1.100
3800	4500	71	119.0	2.0	2.650
4000	4800	73	112.0	1.5	1.450
3600	4300	76	129.0	2.0	3.250
3600	4300	78	117.0	1.5	1.500
3200	3800	81	139.0	2.0	3.950
3400	4000	83	122.0	1.5	1.600
3000	3600	86	149.0	2.0	4.800
3200	3800	89	131.0	2.0	2.000
2800	3400	-	-	-	5.600
3000	3600	94	141.0	2.0	2.550
2750	3200	-	-	-	6.500
2800	3400	99	151.0	2.0	3.200
2600	3150	-	-	-	7.300
2500	3000	-	-	-	8.200
2400	3000	111	169.0	2.0	4.700
2300	2800	-	-	-	8.700
2200	2750	-	-	-	9.500
2100	2500	-	-	-	10.30

Bore diameter d: 1.016~9.525mm



Principal dimensions (mm)				Designation	Basic load rating	
d	D	B	r (min)		Dynamic Cr(N)	Static Cor(N)
1.016	3.175	1.191	0.08	R01	97	26
1.191	3.967	1.588	0.08	R0	159	44
1.397	4.762	1.984	0.08	R1	185	56
1.984	6.350	2.380	0.08	R1-4	279	89
2.380	4.762	1.588	0.08	R133	124	42
	7.938	2.779	0.13	R1-5	430	152
3.175	6.350	2.380	0.08	R144	284	96
	7.938	2.779	0.08	R2-5	560	180
	9.525	2.779	0.13	R2-6	640	224
	9.525	3.967	0.3	R2	640	224
3.967	12.700	4.366	0.3	RA2	1150	395
	7.938	2.779	0.08	R155	335	133
	7.938	2.799	0.08	R156	395	143
	9.525	63.175	0.08	R166	710	268
4.762	12.700	3.967	0.3	R3	1310	490
	12.700	4.978	0.3	RA3	1310	490
	9.525	3.175	0.08	R168	268	136
6.350	12.700	3.175	0.13	R188	830	370
	15.875	4.978	0.3	R4	1480	615
	19.050	-	0.41	R4A	2340	885
9.525	22.225	-	0.41	R6	3300	1400

Limiting speed		Abutment and fillet Dimensions (mm)			Ref. Weight (g)
Grease	Oil	d _a (min)	D _a (max)	r _a (max)	
110000	130000	1.6	2.5	0.08	0.05
93000	110000	2	3.2	0.08	0.11
81000	95000	2.2	3.8	0.08	0.21
67000	79000	2.8	5.5	0.08	0.41
73000	85000	3.2	4	0.08	0.16
56000	66000	3.2	7	0.1	0.76
59000	70000	4	5.5	0.08	0.33
54000	63000	4	7	0.08	0.68
49000	58000	4	8.7	0.1	0.96
49000	58000	4.8	7.8	0.3	1.5
43000	51000	4.8	11	0.3	2.5
51000	60000	4.8	7	0.08	0.61
49000	58000	5.6	7	0.08	0.51
46000	55000	5.6	8.7	0.08	0.89
41000	48000	6.4	11	0.3	2.2
41000	48000	6.4	11	0.3	2.7
43000	51000	7.2	8.7	0.08	0.69
39000	46000	7.2	11.8	0.1	1.7
36000	43000	8	14.2	0.3	4.8
34000	34000	8.4	17	0.4	11
31000	31000	11.5	20.2	0.4	15