

DEEP GROOVE BALL BEARINGS SINGLE ROW

Series: 60... 62... 63... 64... 622.. 623... 160... 618... 619...



Subject	Symbol	Description
Seal type	ZZ	Metal shields on both sides
	2RS	Rubber seals on both sides
	Z	Metal shield on one side
	RS	Rubber seal on one side
Radial internal clearance	C2	Less than normal
	CN	Normal clearance. Is not indicated as a standard
	C3	Greater clearance than normal
	C4	Greater than C3
	C5	Greater than C4
Other technical modifications	NR	Groove with inserted snap ring in outer ring
	N	Snap ring groove in the outer ring
	SS	Stainless steel
Cage type	M	Brass cage ball guided
	MB	Brass cage, inner ring centered
	MA	Brass cage, outer ring centered
Speed ratings	V	Normal vibration level. Is not indicated as a standard
	V2	Lower vibration level than normal
	V3	Lower vibration level than V2
	V4	Lower vibration level than V3
Tolerances	P0	Normal tolerance level. Is not indicated as a standard
	P6	Greater tolerance level than P0
	P5	Greater tolerance level than P6

Features

Single row deep groove ball bearings are most frequently used bearing type. They are versatile, self-retaining bearings with solid outer rings, inner rings and ball and cage assemblies. Due to their low frictional torque, they are suitable for high and even very high speeds and are robust in operation, little maintenance. Due to the raceway geometry and the balls used as rolling elements, deep groove ball bearings can support relatively high radial loads, as well as small axial loads.

Sealing and lubrication

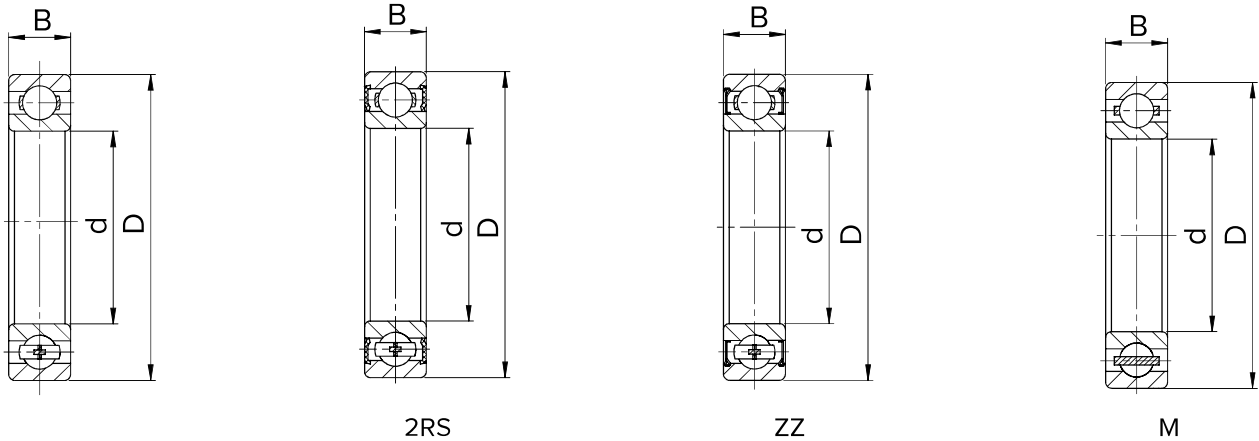
The most popular sizes of deep groove ball bearings are also produced in sealed versions. These bearings with Z and ZZ are greased using a high quality grease, lubricated for life and suitable for high speeds. Bearings with the suffix RS or 2RS have lip seals on one or both sides made from nitrile butadiene rubber. CRAFT bearings grease is a low noise bearing grease which is thickened by lithium 12-hydroxy stearic, it is made from deeply refined mineral oil with rust and oxidation inhibitors through special technical process. Applied temperature range -20 C - +120 C.

Radial internal clearance

Bearing internal clearance is defined as the total distance through which one bearing ring can be moved relative to the other in the radial direction (radial internal clearance). CRAFT bearings single row deep groove ball bearings are manufactured with normal radial internal clearance as standard (CN). Most of the bearings are also available with C3 radial internal clearance. Depending on working conditions you can choose bearing with different internal clearances, the values of radial internal clearance are in accordance to ISO 5753:1 and are valid for unmounted bearings under zero measuring load.

Cages

CRAFT single row deep groove ball bearings are supplied with one of the following cages: steel cage or brass cage. Single row deep groove ball bearings without a cage suffix have a steel cage. Most frequently deep groove ball bearing with ball-guided solid brass cages are indicated by suffix M. These brass cage bearings can also be with inner ring centered (MB), or outer ring centered (MA).



ISO	GOST	Dimensions (mm)			Basic Load Ratings (N)		Limiting speed (r/min)		Weight (kg)
							Lubrication		
		d	D	B	Dyn. C	Stat. C ₀	Grease	Oil	
16001	7000101	12	28	7	5100	2390	26000	30000	0,022
16001 ZZ	7000101 ZZ	12	28	7	5100	2390	26000	30000	0,022
16001 2RS	7000101 2RS	12	28	7	5100	2390	26000	-	0,022
16002	7000102	15	32	8	5590	2850	22000	26000	0,025
16002 ZZ	7000102 ZZ	15	32	8	5590	2850	22000	26000	0,025
16002 2RS	7000102 2RS	15	32	8	5590	2850	22000	-	0,025
16003	7000103	17	35	8	6050	3250	20000	24000	0,032
16003 ZZ	7000103 ZZ	17	35	8	6050	3250	20000	24000	0,032
16003 2RS	7000103 2RS	17	35	8	6050	3250	20000	-	0,032
16004	7000104	20	42	8	6890	4500	18000	21000	0,050
16004 ZZ	7000104 ZZ	20	42	8	6890	4500	18000	21000	0,050
16004 2RS	7000104 2RS	20	42	8	6890	4500	18000	-	0,050
16005	7000105	25	47	8	7610	4750	15000	18000	0,060
16005 ZZ	7000105 ZZ	25	47	8	7610	4750	15000	18000	0,060
16005 2RS	7000105 2RS	25	47	8	7610	4750	15000	-	0,060
16006	7000106	30	55	9	11200	7350	13000	15000	0,085
16006 ZZ	7000106 ZZ	30	55	9	11200	7350	13000	15000	0,085
16006 2RS	7000106 2RS	30	55	9	11200	7350	13000	-	0,085
16007	7000107	35	62	9	12400	8150	12000	14000	0,110
16007 ZZ	7000107 ZZ	35	62	9	12400	8150	12000	14000	0,110
16007 2RS	7000107 2RS	35	62	9	12400	8150	12000	-	0,110
16008	7000108	40	68	9	13300	9150	10000	12000	0,130
16008 ZZ	7000108 ZZ	40	68	9	13300	9150	10000	12000	0,130
16008 2RS	7000108 2RS	40	68	9	13300	9150	10000	-	0,130
16009	7000109	45	75	10	15600	10800	9200	11000	0,170
16009 ZZ	7000109 ZZ	45	75	10	15600	10800	9200	11000	0,170
16009 2RS	7000109 2RS	45	75	10	15600	10800	9200	-	0,170
16010	7000110	50	80	10	16300	11400	8400	9800	0,180
16010 ZZ	7000110 ZZ	50	80	10	16300	11400	8400	9800	0,180
16010 2RS	7000110 2RS	50	80	10	16300	11400	8400	-	0,180
16011	7000111	55	90	11	19500	14000	7700	9000	0,260
16011 ZZ	7000111 ZZ	55	90	11	19500	14000	7700	9000	0,260
16011 2RS	7000111 2RS	55	90	11	19500	14000	7700	-	0,260
16012	7000112	60	95	11	19900	15000	7000	8300	0,280
16012 ZZ	7000112 ZZ	60	95	11	19900	15000	7000	8300	0,280
16012 2RS	7000112 2RS	60	95	11	19900	15000	7000	-	0,280
16013	7000113	65	100	11	21200	16600	6500	7700	0,300
16013 ZZ	7000113 ZZ	65	100	11	21200	16600	6500	7700	0,300
16013 2RS	7000113 2RS	65	100	11	21200	16600	6500	-	0,300
16014	7000114	70	110	13	27800	25000	6000	7100	0,430
16014 ZZ	7000114 ZZ	70	110	13	27800	25000	6000	7100	0,430
16014 2RS	7000114 2RS	70	110	13	27800	25000	6000	-	0,430
16015	7000115	75	115	13	28600	27000	5600	6600	0,460
16015 ZZ	7000115 ZZ	75	115	13	28600	27000	5600	6600	0,460
16015 2RS	7000115 2RS	75	115	13	28600	27000	5600	-	0,460

ISO	GOST	Dimensions (mm)			Basic Load Ratings (N)		Limiting speed (r/min)		Weight (kg)
							Lubrication		
		d	D	B	Dyn. C	Stat. C ₀	Grease	Oil	
16016	7000116	80	125	14	33200	31500	5300	6200	0,600
16016 ZZ	7000116 ZZ	80	125	14	33200	31500	5300	6200	0,600
16016 2RS	7000116 2RS	80	125	14	33200	31500	5300	-	0,600
16017	7000117	85	130	14	33800	33500	5000	5900	0,630
16017 ZZ	7000117 ZZ	85	130	14	33800	33500	5000	5900	0,630
16017 2RS	7000117 2RS	85	130	14	33800	33500	5000	-	0,630
16018	7000118	90	140	16	33500	33500	4700	5600	0,850
16018 ZZ	7000118 ZZ	90	140	16	33500	33500	4700	5600	0,850
16018 2RS	7000118 2RS	90	140	16	33500	33500	4700	-	0,850
16019	7000119	95	145	16	34500	35000	4500	5300	0,890
16019 ZZ	7000119 ZZ	95	145	16	34500	35000	4500	5300	0,890
16019 2RS	7000119 2RS	95	145	16	34500	33500	4500	-	0,890
16020	7000120	100	150	16	44200	44000	4200	5000	0,910
16020 ZZ	7000120 ZZ	100	150	16	35000	36500	4200	5000	0,910
16020 2RS	7000120 2RS	100	150	16	35000	36500	4200	-	0,910
16021	7000121	105	160	18	52000	51000	4000	4700	1,200
16022	7000122	110	170	19	57200	57000	3800	4500	1,450
16024	7000124	120	180	19	60500	64000	3500	4100	1,600
16026	7000126	130	200	22	79300	81500	3200	3800	2,350
16028	7000128	140	210	22	80600	86500	3000	3500	2,500
16030	7000130	150	225	24	92300	98000	2800	3200	3,150
16032	7000132	160	240	25	99500	108000	2600	3000	3,700
16034	7000134	170	260	28	119000	129000	2400	2800	5,000
16036	7000136	180	280	31	138000	146000	2300	2700	6,600
16038	7000138	190	290	31	148000	166000	2100	2500	7,900
16040	7000140	200	310	34	168000	190000	2000	2400	8,850
16044	7000144	220	340	37	174000	204000	1800	2200	11,500
16048	7000148	240	360	37	178000	217000	1700	2000	12,100
16052	7000152	260	400	44	227000	299000	1500	1800	18,500
16056	7000156	280	420	44	232000	315000	1400	1600	23,000
16060	7000160	300	460	50	292000	410000	1300	1500	32,500
16064	7000164	320	480	50	300000	440000	1200	1400	34,200
16068	7000168	340	520	57	340000	515000	1100	1300	47,100
16072	7000172	360	540	57	350000	550000	1100	1200	49,300
16076	7000176	380	560	57	377000	620000	950	1200	51,000
16080	7000180	400	600	63	358000	587000	890	1080	65,000
16084	7000184	420	620	63	367000	617000	810	1000	69,900
16088	7000188	440	650	67	407000	710000	730	920	81,700
16092	7000192	460	680	71	431000	767000	650	840	91,200
16096	7000196	480	700	71	444000	807000	570	760	98,500