

Deep groove ball bearing are the most common type and are used in a wide variety of applications. Not only are they capable of supporting radial loads but also moderate axial loads in either direction. Due to their low torque, they are suitable for applications where high speed and low power loss is required. They are easy to mount and suitable for many different configurations.

Deep groove ball bearing are manufactured in a varied range, both of standard design and various constructive versions.

Deep groove ball bearings can take double direction radial and axial loads and also allow good operation at high speeds.

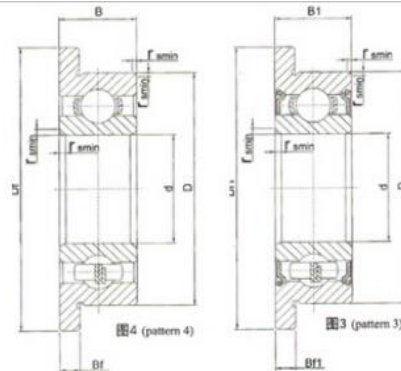
For these reasons, they can be widely used. Therefore, single row deep groove ball bearings are manufactured in many constructive versions as shown below.

Deep groove ball bearing are the most widely used bearing type, especially in electric motors. These non-separable bearings are suitable for high speeds. The deep uninterrupted raceway grooves have a close osculation with the balls, enabling the bearings to accommodate radial loads and axial loads in both directions. Bearings with a bore diameter $d \leq 45$ mm are most suitable for electric motors in the power range of 0,15 up to 15 kW as well as power tools and high-speed drives.

Deep Groove ball bearing are the most popular of all the ball bearing types because they are available in a wide variety of seal, shield and snap-ring arrangements. The bearing ring grooves are circular arcs made slightly larger than the radius of the ball. The balls make point contact with the raceways (elliptical contact when loaded). The inner ring shoulders are of equal height (as the outer ring shoulders). Deep Groove ball bearings can sustain radial, axial, or composite loads and because of simple design, this bearing type can be produced to provide both high-running accuracy and high-speed operation. Standard ball retainers (cages) are made from pressed steel. Machined cages are used in bearing operation at very high speed or for large diameter bearings.

Deep Groove ball bearing with seals or shields are standardized. They contain proper amount of grease in advance.

Single row deep groove ball bearing



Motion(shanghai)Industrial Development Co.,Ltd

Part No.	Boundary dimensions(mm)				Basic load ratings(kN)		Steel Ball Parameter		Limiting speeds(rpm)		Mass(Kg)
	d	D	B	rs min	Cr	Cor	Quantity	Size(mm)	Grease	Oil	(Approx.)
6000	10	26	8	0.3	4.55	1.96			29,000	34,000	0.019
6001	12	28	8	0.3	5.1	2.39			26,000	30,000	0.021
6002	15	32	9	0.3	5.6	2.83			22,000	26,000	0.03
6003	17	35	10	0.3	6.8	3.35			20,000	24,000	0.039
6004	20	42	12	0.6	9.4	5.05			18,000	21,000	0.069
6005	25	47	12	0.6	10.1	5.85			15,000	18,000	0.08
6006	30	55	13	1	13.2	8.3			13,000	15,000	0.116
6007	35	62	14	1	16	10.3			12,000	14,000	0.155
6008	40	68	15	1	16.8	11.5			10,000	12,000	0.19
6009	45	75	16	1	21	15.1			9,200	11,000	0.237
6010	50	80	16	1	21.8	16.6			8,400	9,800	0.261
6011	55	90	18	1.1	28.3	21.2			7,700	9,000	0.388
6012	60	95	18	1.1	29.5	23.2			7,000	8,300	0.414
6013	65	100	18	1.1	30.5	25.2			6,500	7,700	0.421
6014	70	110	20	1.1	38	31			6,100	7,100	0.604
6015	75	115	20	1.1	39.5	33.5			5,700	6,700	0.649
6016	80	125	22	1.1	47.5	40			5,300	6,200	0.854

6017	85	130	22	1.1	49.5	43			5,000	5,900	0.89
6018	90	140	24	1.5	58	49.5			4,700	5,600	1.02
6019	95	145	24	1.5	60.5	54			4,500	5,300	1.08
6020	100	150	24	1.5	60	54			4,200	5,000	1.15
6200	10	30	9	0.6	5.1	2.39			25,000	30,000	0.032
6201	12	32	10	0.6	6.1	2.75			22,000	26,000	0.037
6202	15	35	11	0.6	7.75	3.6			19,000	23,000	0.045
6203	17	40	12	0.6	9.6	4.6			18,000	21,000	0.066
6204	20	47	14	1	12.8	6.65			16,000	18,000	0.106
6205	25	52	15	1	14	7.85			13,000	15,000	0.128
6206	30	62	16	1	19.5	11.3			11,000	13,000	0.199
6207	35	72	17	1.1	25.7	15.3			9,800	11,000	0.288
6208	40	80	18	1.1	29.1	17.8			8,700	10,000	0.366
6209	45	85	19	1.1	32.5	20.4			7,800	9,200	0.398
6210	50	90	20	1.1	35	23.2			7,100	8,300	0.454
6211	55	100	21	1.5	43.5	29.2			6,400	7,600	0.601
6212	60	110	22	1.5	52.5	36			6,000	7,000	0.783
6213	65	120	23	1.5	57.5	40			5,500	6,500	0.99
6214	70	125	24	1.5	62	44			5,100	6,000	1.07
6215	75	130	25	1.5	66	49.5			4,800	5,600	1.18
6216	80	140	26	2	72.5	53			4,500	5,300	1.4
6217	85	150	28	2	83.5	64			4,200	5,000	1.79
6218	90	160	30	2	96	71.5			4,000	4,700	2.15
6219	95	170	32	2.1	109	82			3,700	4,400	2.62
6220	100	180	34	2.1	122	93			3,500	4,200	3.14
6300	10	35	11	0.6	8.2	3.5			27,000		0.053
6301	12	37	12	1	9.7	4.2			24,000		0.06
6302	15	42	13	1	11.4	5.45			17,000		0.082
6303	17	47	14	1	13.5	6.55			19,000		0.115
6304	20	52	15	1.1	15.9	7.9			14,000		0.144
6305	25	62	17	1.1	21.2	10.9			12,000		0.232
6306	30	72	19	1.1	26.7	15			10,000		0.36
6307	35	80	21	1.5	33.5	19.1			8,800		0.457
6308	40	90	23	1.5	40.5	24			7,800		0.63
6309	45	100	25	1.5	53	32			8,200		0.814
6310	50	110	27	2	62	38.5			6,400		1.07
6311	55	120	29	2	71.5	45			5,800		1.37
6312	60	130	31	2.1	82	52			5,400		1.73
6313	65	140	33	2.1	92.5	60			4,900		2.08
6314	70	150	35	2.1	104	68			4,600		2.52
6315	75	160	37	2.1	113	77			4,300		3.02
6316	80	170	39	2.1	123	86.5			4,000		3.59
6317	85	180	41	3	133	97			3,800		4.23
6318	90	190	43	3	143	107			3,600		4.91
6319	95	200	45	3	153	119			3,300		5.67
6320	100	215	47	3	173	141			3,200		7
6700	10	15	3	0.1	1.01	0.555			36,000	42,000	0.0015
6701	12	18	4	0.2	0.93	0.53			8,300	9,500	0.002
6702	15	21	4	0.2	0.94	0.585			6,600	7,600	0.0025
6703	17	23	4	0.2	1	0.66			5,000	6,700	0.0025
6704	20	27	4	0.2	1.04	0.73			5,000	5,700	0.0045
6705	25	32	4	0.2	1.1	0.84			4,000	4,600	0.005
6706	30	37	4	0.2	1.14	0.95			3,300	3,800	0.006
6800	10	19	5	0.3	1.83	0.925			32,000	38,000	0.005
6801	12	21	5	0.3	1.92	1.04			29,000	35,000	0.006
6802	15	24	5	0.3	2.08	1.26			26,000	31,000	0.007
6803	17	26	5	0.3	2.23	1.46			24,000	28,000	0.008
6804	20	32	7	0.3	4	2.47			21,000	25,000	0.019
6805	25	37	7	0.3	4.3	2.95			18,000	21,000	0.022
6806	30	42	7	0.3	4.7	3.65			15,000	18,000	0.026
6807	35	47	7	0.3	4.9	4.05			13,000	16,000	0.029
6808	40	52	7	0.3	5.1	4.4			12,000	14,000	0.033
6809	45	58	7	0.3	5.35	4.95			11,000	12,000	0.04
6810	50	65	7	0.3	6.6	6.1			9,600	11,000	0.052
6811	55	72	9	0.3	8.8	8.1			8,700	10,000	0.083
6812	60	78	10	0.3	11.5	10.6			8,000	9,400	0.106
6813	65	85	10	0.6	11.6	11			7,400	8,700	0.128
6814	70	90	10	0.6	12.1	11.9			6,900	8,100	0.137
6815	75	95	10	0.6	12.5	12.9			6,400	7,600	0.145
6816	80	100	10	0.6	12.7	13.3			6,000	7,100	0.154
6817	85	110	13	1	18.7	19			5,700	6,700	0.27
6818	90	115	13	1	19	19.7			5,400	6,300	0.285
6819	95	120	13	1	19.3	20.5			5,000	5,900	0.3
6820	100	125	13	1	19.6	21.2			4,800	5,600	0.313
6900	10	22	6	0.3	2.7	1.27			30,000	36,000	0.009

6901	12	24	6	0.3	2.89	1.46			27,000	32,000	0.011
6902	15	28	7	0.3	3.65	2			24,000	28,000	0.016
6903	17	30	7	0.3	4.65	2.58			22,000	26,000	0.018
6904	20	37	9	0.3	6.4	3.7			19,000	23,000	0.036
6905	25	42	9	0.3	7.05	4.55			16,000	19,000	0.042
6906	30	47	9	0.3	7.25	5			14,000	17,000	0.048
6907	35	55	10	0.6	9.55	6.85			12,000	15,000	0.074
6908	40	62	12	0.6	12.2	8.9			11,000	13,000	0.11
6909	45	68	12	0.6	13.1	10.4			9,800	12,000	0.128
6910	50	72	12	0.6	13.4	11.2			8,900	11,000	0.132
6911	55	80	13	1	16	13.3			8,200	9,600	0.18
6912	60	85	13	1	16.4	14.3			7,600	8,900	0.193
6913	65	90	13	1	17.4	16.1			7,000	8,200	0.206
6914	70	100	16	1	23.7	21.2			6,500	7,700	0.334
6915	75	105	16	1	24.4	22.6			6,100	7,200	0.353
6916	80	110	16	1	24.9	24			5,700	6,700	0.373
6917	85	120	18	1.1	32	29.6			5,400	6,300	0.536
6918	90	125	18	1.1	33	31.5			5,100	6,000	0.554
6919	95	130	18	1.1	33.5	33.5			4,800	5,700	0.579
6920	100	140	20	1.1	41	39.5			4,500	5,300	0.785
16001	12	28	7		5.1	2.4	8	4.763	26000	30000	0.019
16002	15	32	8		5.6	2.8	9	4.763	22000	26000	0.025
16003	17	35	8		6.8	3.35	10	4.763	20000	24000	0.032
16004	20	42	8		7.9	4.5	10	5.556	18000	21000	0.051
16005	25	47	8		8.35	5.1	11	5.556	15000	18000	0.059
16006	30	55	9		11.2	7.4	12	6.35	13000	15000	0.091
16007	35	62	9		11.7	8.2	13	6.35	12000	14000	0.107
16008	40	68	9		12.6	9.65	15	6.35	10000	12000	0.125
16009	45	75	10		12.9	10.5	16	6.35	9200	11000	0.171
16010	50	80	10		13.2	11.3	16	7.144	8400	9800	0.180
16011	55	90	11		18.6	15.3	16	7.938	7700	9000	0.258
16012	60	95	11		20	17.5	18	7.144	7000	8300	0.283
16013	65	100	11		20.5	18.7	20	7.144	6500	7700	0.307
16014	70	110	13		24.4	22.6	15	9.525	6100	7100	0.441
16015	75	115	13		25	24	16	9.525	5700	6700	0.464
16016	80	125	14		25.4	25.1	15	11.112	5300	6200	0.597
16017	85	130	14		25.9	26.2	16	11.112	5000	5900	0.626
16018	90	140	16		33.5	33.5	15	12.7	4700	5600	0.848
16019	95	145	16		34.5	35	16	12.7	4500	5300	0.885
16020	100	150	16		35	36.5	17	12.7	4200	5000	0.910
62200	10	30	14		5.1	2.39	8	4.763	25000	30000	0.040
62201	12	32	14		6.1	2.75	7	5.953	22000	26000	0.045
62202	15	35	14		7.75	3.6	8	5.953	19000	23000	0.054
62203	17	40	16		9.6	4.6	8	6.747	18000	21000	0.083
62204	20	47	18		12.8	6.65	8	7.938	16000	18000	0.130
62205	25	52	18		14	7.85	9	7.938	13000	15000	0.150
62206	30	62	20		19.5	11.3	9	9.525	11000	13000	0.240
62207	35	72	23		25.7	15.3	9	11.112	9800	11000	0.370
62208	40	80	23		29.1	17.8	9	12	8700	10000	0.440
62209	45	85	23		32.5	20.4	10	12	7800	9200	0.480
62210	50	90	23		35	23.2	10	12.7	7100	8300	0.520
62211	55	100	25		43.5	29.2	10	14.288	6400	7600	0.700
62212	60	110	28		52.5	36	10	15.081	6000	7000	0.970
62213	65	120	31		57.5	40	10	16.669	5500	6500	1.250
62214	70	125	31		62	44	11	16.669	5100	6000	1.300
62215	75	130	31		66	49.5	11	17.462	4800	5600	1.390
62216	80	140	33		72.5	53	11	18.256	4500	5300	1.450
62217	85	150	36		83.5	64	11	19.844	4200	5000	1.980
62218	90	160	40		96	71.5	10	22.225	4000	4700	2.300
62300	10	35	17		8.2	3.5	6	7.144	23000	27000	0.073
62301	12	37	17		9.7	4.2	6	7.938	20000	24000	0.081
62302	15	42	17		11.4	5.45	7	7.938	17000	21000	0.105
62303	17	47	19		13.5	6.55	7	8.731	16000	19000	0.146
62304	20	52	21		15.9	7.9	7	9.525	14000	17000	0.195
62305	25	62	24		21.2	10.9	7	11.5	12000	14000	0.306
62306	30	72	27		26.7	15	7	12	10000	12000	0.478
62307	35	80	31		33.5	19.1	8	13.494	8800	10000	0.647
62308	40	90	33		40.5	24	8	15.081	7800	9200	0.885
62309	45	100	36		53	32	8	17.462	7000	8200	1.156
62310	50	110	40		62	38.5	8	19.05	6400	7500	1.498
62311	55	120	43		71.5	45	8	20.638	5800	6800	1.918
62312	60	130	46		82	52	8	22.225	5400	6300	2.422
62313	65	140	48		92.5	60	8	24	4900	5800	2.933
62314	70	150	51		104	68	8	25.4	4600	5400	3.556

62315	75	160	55		113	77	8	26.988	4300	5000	4.023
62316	80	170	58		123	86.5	8	28.575	4000	4700	4.836
62317	85	180	60		133	97	8	30.1625	3800	4500	5.369
62318	90	190	64		143	107	8	31.75	3600	4200	5.563

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