

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.

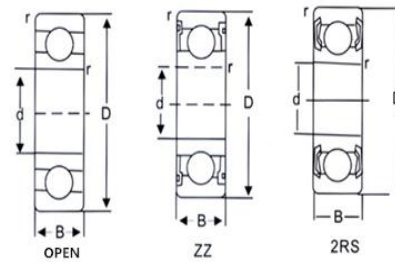
For these reasons, they can be widely used. Therefore, single row deep groove ball bearings are manufactured in many constructive versions as shown below.

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.

Inch Deep Groove Ball Bearings



Motion(shanghai)Industrial Development Co.,Ltd

Part No.			Inner Diameter		Outer Diameter		Width(B)				Load Rating		Weight (g)
			d		D		Open Type		Shield Type		Cr(N)	Cor(N)	
Open	ZZ	2RS	mm	inch	mm	inch	mm	inch	mm	inch			
1601	--	--	4.762	0.1875	17.462	0.6875	6.35	0.25	7.938	0.3125	--	--	--
1602	--	--	6.35	0.25	17.462	0.6875	6.35	0.25	7.938	0.3125	--	--	--
1603	--	--	7.938	0.3125	22.225	0.875	7.144	0.2813	8.731	0.3437	--	--	--
1604	--	--	9.525	0.375	22.225	0.875	7.144	0.2813	8.731	0.3437	--	--	--
1605	--	--	7.938	0.3125	23.019	0.9063	7.938	0.3125	7.938	0.3125	--	--	--
1606	--	--	9.525	0.375	23.019	0.9063	7.938	0.3125	7.938	0.3125	--	--	--
1607	--	--	11.112	0.4375	23.019	0.9063	7.938	0.3125	7.938	0.3125	--	--	--
1608	--	--	9.525	0.375	28.575	1.125	9.525	0.375	9.525	0.375	--	--	--
1609	--	--	11.112	0.4375	28.575	1.125	9.525	0.375	9.525	0.375	--	--	--
1610	--	--	12.7	0.5	28.575	1.125	9.525	0.375	9.525	0.375	--	--	--
1611	--	--	11.112	0.4375	34.925	1.375	11.112	0.4375	11.112	0.4375	--	--	--
1612	--	--	12.7	0.5	34.925	1.375	11.112	0.4375	11.112	0.4375	--	--	--
1613	--	--	14.288	0.5625	34.925	1.375	11.112	0.4375	11.112	0.4375	--	--	--
1614	--	--	15.875	0.625	34.925	1.375	11.112	0.4375	11.112	0.4375	--	--	--
1615	--	--	15.875	0.625	41.275	1.625	12.7	0.5	12.7	0.5	--	--	--
1616	--	--	19.05	0.75	41.275	1.625	12.7	0.5	12.7	0.5	--	--	--
1617	--	--	15.875	0.625	44.45	1.75	12.7	0.5	12.7	0.5	--	--	--
1618	--	--	19.05	0.75	44.45	1.75	12.7	0.5	12.7	0.5	--	--	--
1619	--	--	19.05	0.75	50.8	2	14.288	0.5625	14.288	0.5625	--	--	--
1620	--	--	22.225	0.875	50.8	2	14.288	0.5625	14.288	0.5625	--	--	--
1621	--	--	25.4	1	50.8	2	14.288	0.5625	14.288	0.5625	--	--	--
1622	--	--	28.575	1.125	63.5	2.5	15.875	0.625	15.875	0.625	--	--	--
1623	--	--	31.75	1.25	63.5	2.5	15.875	0.625	15.875	0.625	--	--	--
1624	--	--	31.75	1.25	65.087	2.5625	17.462	0.6875	17.462	0.6875	--	--	--
1625	--	--	33.337	1.3125	65.087	2.5625	17.462	0.6867	17.462	0.6875	--	--	--
R2	--	--	3.175	0.125	9.525	0.375	3.969	0.1563	3.969	0.1563	--	--	--
R2A	--	--	3.175	0.125	12.7	0.5	4.366	0.1719	4.366	0.1719	--	--	--
R3	--	--	4.762	0.1875	12.7	0.5	3.969	0.1563	4.978	0.196	--	--	--
R4	--	--	6.35	0.25	15.875	0.625	4.978	0.196	4.978	0.196	--	--	--
R4A	--	--	6.35	0.25	19.05	0.75	5.556	0.2187	7.144	0.2813	--	--	--
R6	--	--	9.525	0.375	22.225	0.875	5.556	0.2187	7.144	0.2813	--	--	--
R8	--	--	12.7	0.5	28.575	1.125	6.35	0.25	7.938	0.3125	--	--	--
R10	--	--	15.875	0.625	34.925	1.375	7.144	0.2813	8.731	0.3437	--	--	--
R12	--	--	19.05	0.75	41.275	1.625	7.938	0.3125	11.112	0.4375	--	--	--
R14	--	--	22.225	0.875	47.625	1.875	9.525	0.375	12.7	0.5	--	--	--
R16	--	--	25.4	1	50.8	2	9.525	0.375	12.7	0.5	--	--	--
R18	--	--	28.575	1.125	53.925	2.125	9.525	0.375	12.7	0.5	--	--	--
R20	--	--	31.75	1.25	57.15	2.25	9.525	0.375	12.7	0.5	--	--	--
R22	--	--	34.925	1.375	63.5	2.5	11.112	0.4375	14.288	0.5625	--	--	--
R24	--	--	38.1	1.5	66.675	2.625	11.112	0.4375	14.288	0.5625	--	--	--
R144	--	--	3.175	0.125	6.35	0.25	2.779	0.1094	2.779	0.1094	--	--	--
R155	--	--	3.969	0.1563	7.938	0.3125	2.779	0.1094	3.175	0.125	--	--	--
R156	--	--	4.762	0.1875	7.938	0.3125	2.779	0.1094	3.175	0.125	--	--	--
R166	--	--	4.762	0.1875	9.525	0.375	3.175	0.125	3.175	0.125	--	--	--

R168	--	--	6.35	0.25	9.525	0.375	3.175	0.125	3.175	0.125	--	--	--
R186	--	--	4.762	0.1875	12.7	0.5	2.779	0.1094	3.969	0.1563	--	--	--
R188	--	--	6.25	0.25	12.7	0.5	3.175	0.125	4.762	0.1875	--	--	--
R1810	--	--	7.938	0.3125	12.7	0.5	3.969	0.1563	3.969	0.1563	--	--	--
EE0	--	--	3.175	0.125	12.7	0.5	4.366	0.1719	4.366	0.1719	--	--	--
EE1	--	--	4.762	0.1875	12.7	0.5	3.969	0.1563	4.978	0.1960	--	--	--
EE2	--	--	6.35	0.25	19.05	0.75	5.556	0.2187	7.144	0.2813	--	--	--
EE3	--	--	9.525	0.375	22.225	0.875	5.556	0.2187	7.144	0.2813	--	--	--
EE4	--	--	12.7	0.5	28.575	1.125	6.35	0.25	7.938	0.3125	--	--	--
EE5	--	--	15.875	0.625	34.925	1.375	7.144	0.2813	8.731	0.3437	--	--	--
EE6	--	--	19.05	0.75	41.275	1.625	7.938	0.3125	11.112	0.4375	--	--	--
EE7	--	--	19.05	0.75	44.45	1.75	9.525	0.375	12.7	0.5	--	--	--
EE8	--	--	22.225	0.875	47.625	1.875	9.525	0.375	12.7	0.5	--	--	--
EE9	--	--	25.4	1	50.8	2	9.525	0.375	12.7	0.5	--	--	--
EE10	--	--	28.575	1.125	53.975	2.125	9.525	0.375	12.7	0.5	--	--	--
EE11	--	--	31.75	1.25	57.15	2.25	9.525	0.375	12.7	0.5	--	--	--
EE12	--	--	34.925	1.375	63.5	2.5	11.112	0.4375	14.288	0.5625	--	--	--
EE13	--	--	38.1	1.5	66.675	2.625	11.112	0.4375	14.288	0.5625	--	--	--
RLS4	RLS4ZZ	RLS4-2RS	12.7	1/2"	33.338	1-5/16"	9.525	3/8"	--	--	6820	3050	30
RMS4	RMS4ZZ	RMS4-2RS	12.7	1/2"	41.275	1-5/8"	15.875	5/8"	--	--	11500	5420	100
RLS5	RLS5ZZ	RLS5-2RS	15.875	5/8"	39.688	1-9/16"	11.112	7/16"	--	--	7650	3720	60
RMS5	RMS5ZZ	RMS5-2RS	15.875	5/8"	46.038	2-13/16"	15.875	5/8"	--	--	13500	6550	110
RLS6	RLS6ZZ	RLS6-2RS	19.05	3/4"	47.625	1-7/8"	14.288	9/16"	--	--	12800	6650	110
RMS6	RMS6ZZ	RMS6-2RS	19.05	3/4"	50.8	2"	17.46	11/16"	--	--	15900	7800	160
RLS7	RLS7ZZ	RLS7-2RS	22.225	7/8"	50.8	2"	14.288	9/16"	--	--	12800	6650	130
RMS7	RMS7ZZ	RMS7-2RS	22.225	7/8"	57.15	2-1/4"	17.46	11/16"	--	--	18600	9150	200
RLS8	RLS8ZZ	RLS8-2RS	25.4	1"	57.15	2-1/4"	15.875	5/8"	--	--	14000	7880	170
RMS8	RMS8ZZ	RMS8-2RS	25.4	1"	63.5	2-1/2"	19.05	3/4"	--	--	22500	11400	250
RLS9	RLS9ZZ	RLS9-2RS	28.575	1-1/8"	63.5	2-1/2"	15.88	5/8"	--	--	19500	10000	210
RMS9	RMS9ZZ	RMS9-2RS	28.575	1-1/8"	71.438	3-13/16"	20.625	13/16"	--	--	28100	14600	380
RLS10	RLS10ZZ	RLS10-2RS	31.75	1-1/4"	69.85	2-3/4"	17.46	11/16"	--	--	22500	11800	280
RMS10	RMS10ZZ	RMS10-2RS	31.75	1-1/4"	79.375	3-1/8"	22.225	7/8"	--	--	33200	18000	510
RLS11	RLS11ZZ	RLS11-2RS	34.925	1-3/8"	76.2	3"	17.46	11/16"	--	--	25500	13700	370
RMS11	RMS11ZZ	RMS11-2RS	34.925	1-3/8"	88.9	3-1/2"	22.225	7/8"	--	--	41000	22400	610
RLS12	RLS12ZZ	RLS12-2RS	38.1	1-1/2"	82.55	3-1/4"	19.05	3/4"	--	--	30700	16600	430
RMS12	RMS12ZZ	RMS12-2RS	38.1	1-1/2"	95.25	3-3/4"	23.81	15/16"	--	--	41000	22400	750
RLS13	RLS13ZZ	RLS13-2RS	41.275	1-5/8"	88.9	3-1/2"	19.05	3/4"	--	--	33200	18600	480
RMS13	RMS13ZZ	RMS13-2RS	41.275	1-5/8"	101.6	4"	23.81	15/16"	--	--	52700	30000	860
RLS14	RLS14ZZ	RLS14-2RS	44.45	1-3/4"	95.25	3-3/4"	20.64	13/16"	--	--	35100	19600	590
RMS14	RMS14ZZ	RMS14-2RS	44.45	1-3/4"	107.95	4-1/4"	26.99	1-1/16"	--	--	61800	36000	1060
RLS15	RLS15ZZ	RLS15-2RS	47.625	1-7/8"	101.6	4"	20.64	13/16"	--	--	43600	25000	710
RMS15	RMS15ZZ	RMS15-2RS	47.625	1-7/8"	114.3	4-1/2"	26.99	1-1/16"	--	--	61800	36000	1220
RLS16	RLS16ZZ	RLS16-2RS	50.8	2"	101.6	4"	20.64	13/16"	--	--	43600	25000	670
RMS16	RMS16ZZ	RMS16-2RS	50.8	2"	114.3	4-1/2"	26.99	1-1/16"	--	--	61800	36000	1170
RLS18	RLS18ZZ	RLS18-2RS	57.15	2-1/4"	114.3	4-1/2"	22.23	7/8"	--	--	47500	28000	890
RMS18	RMS18ZZ	RMS18-2RS	57.15	2-1/4"	127	5"	31.75	1-1/4"	--	--	81900	48000	1600
RLS20	RLS20ZZ	RLS20-2RS	63.5	2-1/2"	127	5"	23.81	15/16"	--	--	61800	37500	1220
RMS20	RMS20ZZ	RMS20-2RS	63.5	2-1/2"	139.7	5-1/2"	31.75	1-1/4"	--	--	92300	56000	2040
RLS22	RLS22ZZ	RLS22-2RS	69.85	2-3/4"	133.34	5-1/4"	23.81	15/16"	--	--	66300	40500	1330