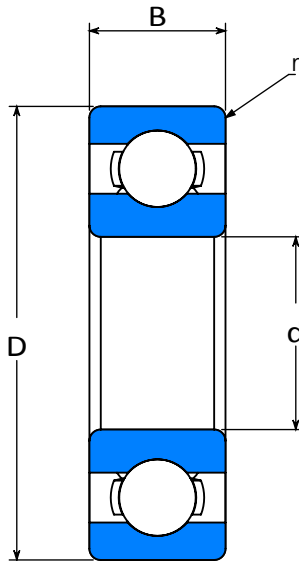


Miniature & Instrument Ball Bearing

d 1— 3 mm



Ring Material: Standard AISI 52100 or 440C stainless steel equivalent.

Ball Material: Silicon nitride (SiN₄) ceramic balls are available upon request.

Closures: Open, shields, and seals.

Seal materials: NBR, EPDM, ACM, FKM and Silicone

Seal contact type: Non-contact, light, standard and tight contact

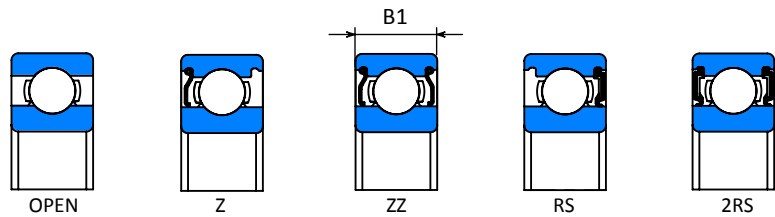
Cage Design: Crimped steel ribbon, crown steel cage, molded plastic cage, etc.

Radial clearance: C0 to C5, or as specified by the customer

Precision level: Abec 1 to Abec 5

Bearing noise level: Standard (i.e. Z1 or V1) to EMQ (Electric Motor Quality)

Lubricant: Special low noise and low/high temperature are available as needed

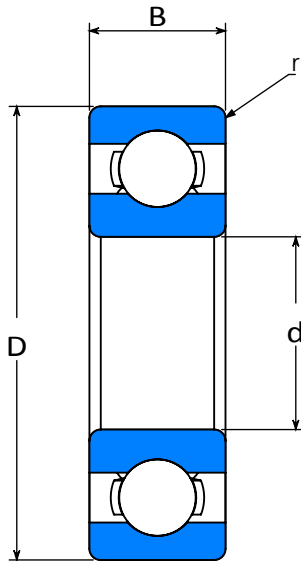


Bearing No.	Dimensions are in mm							Basic Load Rating (N)		Weight (g)	
	Bore d	OD D	Width		Radius r* min	Ball Complement		Dynamic Cr	Static Cor	Open	Shield/ Seal
			Open B	Shield/seal B1		No.	Size				
681	1	3	1	-----	0.05	7	0.500	80	22	0.03	-----
MR31	1	3	1.5	-----	0.05	7	0.500	80	22	0.04	-----
691	1	4	1.6	-----	0.10	6	0.794	107	36	0.09	-----
MR41X	1.2	4	1.8	2.5	0.10	6	0.794	107	36	0.10	0.14
681X	1.5	4	1.2	2	0.05	7	0.635	89	31	0.07	0.11
691X	1.5	5	2	2.6	0.15	7	0.794	129	49	0.17	0.20
601X	1.5	6	2.5	3	0.15	6	1.191	245	98	0.33	0.38
682	2	5	1.5	2.3	0.08	7	0.794	129	49	0.12	0.17
MR52 B	2	5	2	2.5	0.10	6	1.191	245	98	0.16	0.23
692	2	6	3	2.5	0.15	6	1.191	267	98	0.28	0.38
MR62	2	6	2.5	3	0.15	6	1.191	289	116	0.30	0.39
MR72	2	7	2.5	3	0.15	7	1.191	289	116	0.45	0.49
602	2	7	2.8	3.5	0.15	7	1.191	383	125	0.51	0.58
682X	2.5	6	1.8	2.6	0.08	8	0.794	156	62	0.23	0.29
692X	2.5	7	2.5	3.5	0.15	7	1.191	294	129	0.41	0.55
MR82X	2.5	8	2.5	-----	0.20	6	1.588	285	107	0.56	-----
602X	2.5	8	2.8	4	0.15	6	1.588	285	107	0.63	0.83
MR63	3	6	2	2.5	0.10	8	0.794	156	62	0.20	0.27
683	3	7	2	3	0.10	7	1.191	294	129	0.32	0.45
MR83	3	8	2.5	-----	0.15	6	1.588	285	107	0.54	-----
693	3	8	3	4	0.15	6	1.588	285	107	0.61	0.83
MR93	3	9	2.5	4	0.20	7	1.588	311	133	0.73	1.18
603	3	9	3	4	0.15	7	1.588	440	187	0.87	1.45

*Maximum fillet which corner radius of bearing will clear

Miniature & Instrument Ball Bearing

d 3— 6 mm



Ring Material: Standard AISI 52100 or 440C stainless steel equivalent.

Ball Material: Silicon nitride (SiN₄) ceramic balls are available upon request.

Closures: Open, shields, and seals.

Seal materials: NBR, EPDM, ACM, FKM and Silicone

Seal contact type: Non-contact, light, standard and tight contact

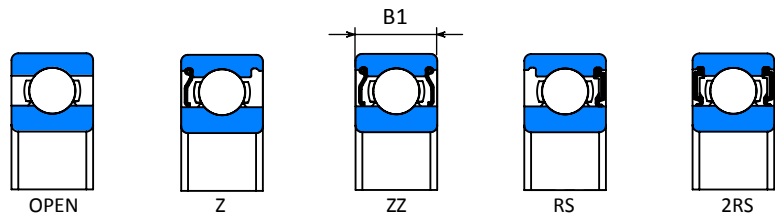
Cage Design: Crimped steel ribbon, crown steel cage, molded plastic cage, etc.

Radial clearance: C0 to C5, or as specified by the customer

Precision level: Abec 1 to Abec 5

Bearing noise level: Standard (i.e. Z1 or V1) to EMQ (Electric Motor Quality)

Lubricant: Special low noise and low/high temperature are available as needed

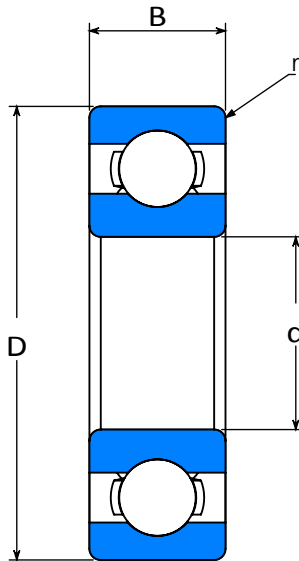


Bearing No.	Dimensions are in mm							Basic Load Rating (N)		Weight (g)	
	Bore d	OD D	Width		Radius r* min	Ball Complement					
			Open B	Shield/seal B1		No.	Size	Dynamic Cr	Static Cor	Open	Shield/ Seal
623	3	10	4	4	0.15	7	1.588	440	187	1.65	1.66
633	3	13	5	5	0.20	-----	-----	1183	436	3.38	3.33
MR74	4	7	2	2.5	0.10	11	0.794	258	111	0.22	0.29
MR84	4	8	2	3	0.15	7	1.191	391	147	0.36	0.56
684 A	4	9	2.5	4	0.10	7	1.588	440	187	0.63	1.01
MR104 B	4	10	3	4	0.20	8	1.588	440	187	1.04	1.42
694	4	11	4	4	0.15	9	1.588	547	254	1.70	1.75
604	4	12	4	4	0.20	7	2.000	743	343	2.25	2.29
624	4	13	5	5	0.20	6	2.381	996	480	3.03	3.04
634	4	16	5	5	0.30	8	2.381	1334	623	5.24	5.21
MR85	5	8	2	2.5	0.10	13	0.794	276	138	0.25	0.34
MR95	5	9	2.5	3	0.15	10	1.191	498	205	0.50	0.58
MR105	5	10	3	4	0.15	8	1.588	512	245	0.95	1.29
MR115	5	11	3	4	0.15	8	1.588	547	254	1.36	1.49
685	5	11	3	5	0.15	9	1.588	547	254	1.20	1.96
695	5	13	4	4	0.20	8	2.000	832	400	2.45	2.50
605	5	14	5	5	0.20	7	2.381	1019	489	3.48	3.56
625	5	16	5	5	0.30	8	2.381	1334	623	4.86	4.95
635	5	19	6	6	0.30	6	3.969	1779	845	8.34	8.56
MR106	6	10	2.5	3	0.15	9	1.191	547	254	0.56	0.68
MR126	6	12	3	4	0.20	10	1.588	832	365	1.27	1.74
686 A	6	13	3.5	5	0.15	8	2.000	832	400	1.91	2.69
696	6	15	5	5	0.20	8	2.381	1334	623	3.72	3.88

*Maximum fillet which corner radius of bearing will clear

Miniature & Instrument Ball Bearing

d 6— 9 mm



Ring Material: Standard AISI 52100 or 440C stainless steel equivalent.

Ball Material: Silicon nitride (SiN₄) ceramic balls are available upon request.

Closures: Open, shields, and seals.

Seal materials: NBR, EPDM, ACM, FKM and Silicone

Seal contact type: Non-contact, light, standard and tight contact

Cage Design: Crimped steel ribbon, crown steel cage, molded plastic cage, etc.

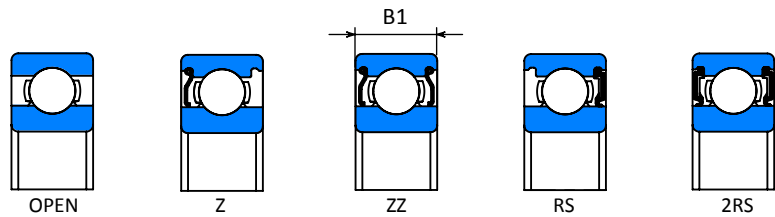
Radial clearance: C0 to C5, or as specified by the customer

Precision level: Abec 1 to Abec 5

Bearing noise level: Standard (i.e. Z1 or V1) to EMQ (Electric Motor Quality)

Lubricant: Special low noise and low/high temperature are available as needed

Snap ring: Available for certain sizes in this page upon request



Bearing No.	Dimensions are in mm							Basic Load Rating (N)		Weight (g)	
	Bore d	OD D	Width		Radius r* min	Ball Complement					
			Open B	Shield/seal B1			No.	Size	Dynamic Cr	Static Cor	Open
606	6	17	6	6	0.30	8	2.381	1334	623	5.97	6.08
626	6	19	6	6	0.30	6	3.969	1799	845	7.94	8.15
636	6	22	7	7	0.30	7	3.969	2980	1246	-----	14.00
MR117	7	11	2.5	3	0.15	9	1.191	449	205	0.62	0.72
MR137	7	13	3	4	0.20	11	1.588	881	391	1.58	2.02
687	7	14	3.5	5	0.15	9	2	899	458	2.13	2.97
697	7	17	5	5	0.30	7	3	1045	534	5.12	5.26
607	7	19	6	6	0.30	6	3.969	1713	801	7.51	7.67
627	7	22	7	7	0.30	7	3.969	2580	1290	12.70	12.90
637	7	26	9	9	0.30	-----	-----	3648	1468	24.00	25.00
MR128	8	12	2.5	3.5	0.15	11	1.191	512	254	0.71	0.97
MR148	8	14	3.5	4	0.20	11	1.588	881	391	1.86	2.16
688 A	8	16	4	5	0.20	9	2.381	1379	712	3.12	4.02
698	8	19	6	6	0.30	7	3.5	1268	645	7.18	7.23
X117	8	22	6	6	0.30	7	3.969	2580	1290	9.07	-----
608	8	22	7	7	0.30	7	3.969	2580	1290	10.88	11.80
628	8	24	8	8	0.30	7	3.969	3069	1557	17.20	17.40
638	8	28	9	9	0.30	-----	-----	4502	1957	28.30	28.60
689	9	17	4	5	0.20	9	2.381	1379	636	3.53	4.43
699	9	20	6	6	0.30	9	2.381	2349	1028	8.33	8.45
609	9	24	7	7	0.30	7	2.381	2580	1246	14.50	14.70
629	9	26	8	8	0.30	7	4.763	3514	1779	19.30	19.50
639	9	30	10	10	0.60	-----	-----	4648	2055	36.50	36.00

*Maximum fillet which corner radius of bearing will clear