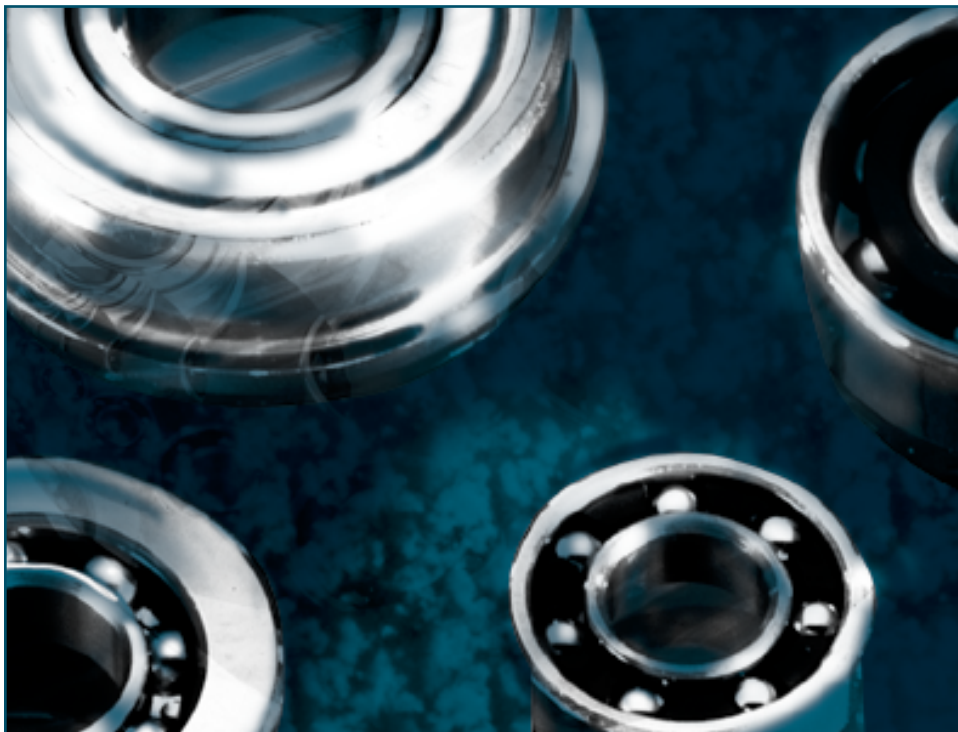




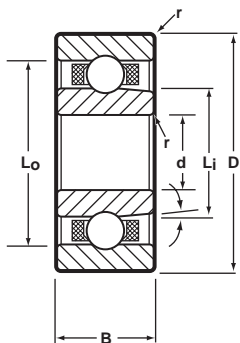
Hi-Speed Specialty Bearings

Angular Contact	23
Radial	24-25

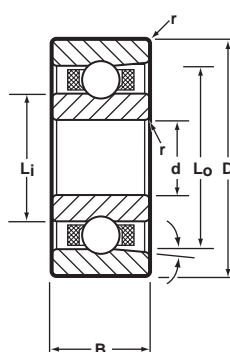




Angular Contact



Inner Ring Relieved



Outer Ring Relieved

Notes:

1. Inch to metric conversion—see page 57.
2. See page 7 for ABEC tolerances.
3. r =Maximum shaft or housing fillet radius that bearing corners will clear.
4. Please consult with factory for machined cage options.
5. Metric/inch conversions given for reference only.

■ Also available in flange version. Please consult with factory.

** Load ratings are based on ABMA Standard #12.

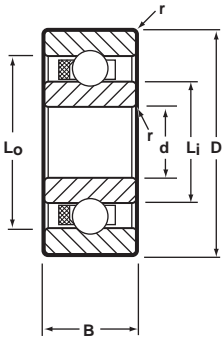
BASIC P/N	BORE d		O. D. D		WIDTH B		LAND DIAMETER (REFERENCE)		FILLET RADIUS r	BALL COMPLEMENT		LOAD RATINGS**		N_{max}/n rpm/1000
	INCH	(mm)	INCH	(mm)	INCH	(mm)	L_i	L_o		NO. Z	SIZE D_b	DYN. C	STATIC C_o	
SSMDR-620MC	.0787	2.000	.2362	6.000	.0906	2.301	.124	.186	.003	7	.0394	29	10	98
SSMBRI-5SD502	.0937	2.380	.3125	7.938	.1094	2.779	.157	.246	.005	6	1/16	60	22	75
MBRI-5SD507	.0937	2.380	.3125	7.938	.1094	2.779	.157	.246	.005	6	1/16	60	22	75
MBR-1630	.1181	3.000	.6299	16.000	.1969	5.000	.300	.596	.016	6	1/8	200	85	39
SSMDRI-418MC■	.1250	3.175	.2500	6.350	.0937	2.380	.166	.220	.003	8	.0394	33	12	79
SSMDRI-418ZWO5MC■	.1250	3.175	.2500	6.350	.1094	2.779	.166	.220	.003	8	.0394	33	12	79
SSMERE-518	.1250	3.175	.3125	7.938	.1094	2.779	.182	.272	.003	6	1/16	60	22	68
SSMBR-2	.1250	3.175	.3750	9.525	.1562	3.967	.205	.292	.012	7	1/16	66	26	61
MBR-2SD512	.1250	3.175	.3750	9.525	.1562	3.967	.205	.292	.012	7	1/16	66	26	61
SSMDL-740MC	.1575	4.000	.2756	7.000	.0787	2.000	.189	.232	.003	7	1/32	19	7	72
MBR-1640SD509	.1575	4.000	.6299	16.000	.1969	5.000	.300	.596	.016	6	1/8	200	85	39
MBR-3SD503	.1875	4.763	.5000	12.700	.1562	3.967	.276	.412	.012	8	3/32	159	70	44
MER-3SD509	.1875	4.763	.5000	12.700	.1562	3.967	.276	.412	.012	8	3/32	152	67	44
SSMER-3SD509	.1875	4.763	.5000	12.700	.1562	3.967	.276	.412	.012	8	3/32	152	67	44
MER-1650SD505	.1969	5.000	.6299	16.000	.1969	5.000	.308	.478	.016	6	1/8	200	85	39
MBR-1960	.2362	6.000	.7480	19.000	.2362	6.000	.383	.596	.016	6	5/32	300	135	31
MER-1960	.2362	6.000	.7480	19.000	.2362	6.000	.383	.596	.016	6	5/32	338	154	31
SSMDRI-814XZZF	.2500	6.350	.5000	12.700	.1875	4.763	.303	.460	.005	12	3/32	200	100	16
SSMBR-4	.2500	6.350	.6250	15.875	.1960	4.978	.375	.502	.012	8	3/32	159	70	35
SSMDR-4ZZSD501F	.2500	6.350	.6250	15.875	.1960	4.978	.375	.522	.012	10	1/8	442	244	14
MER-4SD504	.2500	6.350	.6250	15.875	.1960	4.978	.375	.502	.012	9	3/32	172	79	35
MBR-2280SD503	.3150	8.000	.8661	22.000	.2756	7.000	.463	.690	.016	7	5/32	344	162	26
MER-2280SD503	.3150	8.000	.8661	22.000	.2756	7.000	.478	.690	.016	9	5/32	640	375	26
SSMER-2280SD502	.3150	8.000	.8661	22.000	.2756	7.000	.478	.690	.016	9	5/32	640	375	26
SSMER-2490	.3543	9.000	.9449	24.000	.2756	7.000	.559	.772	.016	10	5/32	663	376	24
SSMER-2690	.3543	9.000	1.0236	26.000	.3150	8.000	.583	.836	.016	9	3/16	903	505	24
SSMBRI-1438	.3750	9.525	.8750	22.225	.2188	5.558	.520	.742	.016	7	5/32	569	273	24
SSMERE-1438	.3750	9.525	.8750	22.225	.2188	5.558	.520	.730	.016	9	5/32	671	351	24

High Speed Specialty Bearings (HSSB) have been developed for applications that require precise running accuracy and high speed capability with the option of autoclavability.

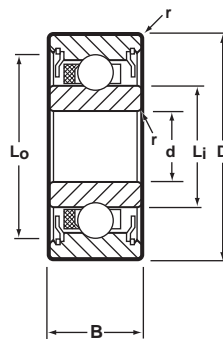
These bearings are widely used in critical Dental/Medical Applications although they are ideally suited for any high speed (up to 500,000 RPM) application. The design of these bearings incorporated the advantage of super precision tolerances, balanced design, raceway super finishes and a variety of retainer options. All of the sizes listed represent current production sizes, although almost any part can be designed to take advantage of the operating characteristics of the HSSB's.



Radial



**Open
Machined Cage**



**2 Shields
Machined Cage**

Notes:

1. Inch to metric conversion—see page 57.
2. Basic part numbers shown below include code "SS" for AISI 440C stainless steel. If SAE 52100 chrome alloy steel is desired delete SS.
3. See page 7 for ABEC tolerances.
4. r=Maximum shaft or housing fillet radius that bearing corners will clear.
5. Please consult with factory for machined cage options.
6. Metric/inch conversions given for reference only.

■ Also available in flange version. Please consult with factory.

** Load ratings are based on ABMA Standard #12.

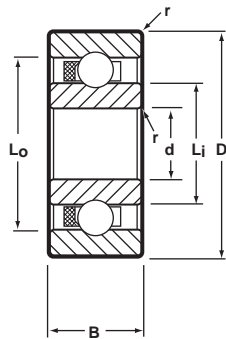
BASIC P/N	BORE d		O.D. D		WIDTH B		LAND DIAMETER (REFERENCE)		FILLET RADIUS r	BALL COMPLEMENT		LOAD RATINGS** Lbs.		N _{max} /f _n rpm/1000
	INCH	(mm)	INCH	(mm)	INCH	(mm)	L _i	L _o		NO. Z	SIZE D _b	DYN. C	STATIC C ₀	
SSRI-3332MC■	.0937	2.380	.1875	4.763	.0625	1.588	.118	.161	.003	7	1/32	19	6.5	109
SSRI-3332X3ZZMC■	.0937	2.380	.1875	4.763	.0937	2.380	.118	.167	.003	7	1/32	19	6.5	109
SSL-525MC	.0984	2.500	.1969	5.000	.0591	1.500	.126	.170	.003	7	1/32	20	7	102
SSL-730MC	.1181	3.000	.2756	7.000	.0787	2.000	.161	.227	.003	7	3/64	40	15	78
SSRI-418X5MC■	.1250	3.175	.2500	6.350	.0937	2.380	.159	.213	.003	8	.0394	33	12	79
SSRI-418X7ZZMC■	.1250	3.175	.2500	6.350	.1094	2.779	.159	.220	.003	8	.0394	33	12	79
SSRI-518MC■	.1250	3.175	.3125	7.938	.1094	2.779	.173	.270	.003	6	1/16	60	22	68
SSRI-518X3ZZMC■	.1250	3.175	.3125	7.938	.1406	3.571	.173	.284	.003	6	1/16	60	22	68
SSRI-618X3ZZMC	.1250	3.175	.3750	9.525	.1406	3.571	.173	.284	.005	6	1/16	60	22	68
SSR-2XZZMC■	.1250	3.175	.3750	9.525	.1562	3.967	.200	.321	.012	7	1/16	66	26	61
SSR-2ZZAMC	.1250	3.175	.5000	12.700	.1719	4.366	.200	.301	.012	7	1/16	66	26	61
SSRI-5532MC■	.1562	3.967	.3125	7.938	.1094	2.779	.221	.279	.003	7	3/64	41	15	61
SSRI-5532ZZMC■	.1562	3.967	.3125	7.938	.1250	3.175	.221	.285	.003	7	3/64	41	15	61
SSL-740MC	.1575	4.000	.2756	7.000	.0787	2.000	.189	.232	.003	7	1/32	20	7	72
SSL-940MC	.1575	4.000	.3543	9.000	.0984	2.500	.200	.300	.012	7	1/16	66	26	61
SSRI-5632MC■	.1875	4.763	.3125	7.938	.1094	2.779	.221	.279	.003	7	3/64	41	15	61
SSRI-5632ZZMC■	.1875	4.763	.3125	7.938	.1250	3.175	.221	.285	.003	7	3/64	41	15	61
SSRI-6632MC■	.1875	4.763	.3750	9.525	.1250	3.175	.235	.325	.003	8	1/16	76	31	54
SSRI-6632X5ZZMC■	.1875	4.763	.3750	9.525	.1250	3.175	.235	.341	.003	8	1/16	76	31	54
SSR-3MC■	.1875	4.763	.5000	12.700	.1562	3.967	.276	.412	.012	7	3/32	140	59	44
SSR-3X6ZZMC■	.1875	4.763	.5000	12.700	.1960	4.978	.276	.433	.012	7	3/32	140	59	44
SSL-1150ZZMC	.1969	5.000	.4331	11.000	.1969	5.000	.252	.374	.006	7	1/16	66	26	48
SSL-1360ZZMC	.2362	6.000	.5118	13.000	.1969	5.000	.315	.450	.014	8	.0787	115	49	41
SSRI-814MC■	.2500	6.350	.5000	12.700	.1250	3.175	.330	.431	.005	10	1/16	88	40	40
SSRI-8516ZSD502MC■	.2500	6.350	.5000	12.700	.1562	3.967	.362	.450	.005	11	1/16	93	43	37
SSRI-814ZZMC■	.2500	6.350	.5000	12.700	.1875	4.763	.330	.452	.005	10	1/16	88	40	40
SSR-4ZZMC■	.2500	6.350	.6250	15.875	.1960	4.978	.364	.544	.012	8	3/32	159	70	35
SSR-4X3ZZMC■	.2500	6.350	.6250	15.875	.1960	4.978	.323	.513	.012	8	3/32	159	70	35
SSRI-1214MC	.2500	6.350	.7500	19.050	.2188	5.558	.386	.597	.016	6	9/64	412	193	31
SSRI-1214ZZMC	.2500	6.350	.7500	19.050	.2812	7.142	.341	.639	.016	6	9/64	412	193	31

High Speed Specialty Bearings (HSSB) have been developed for applications that require precise running accuracy and high speed capability with the option of autoclavability.

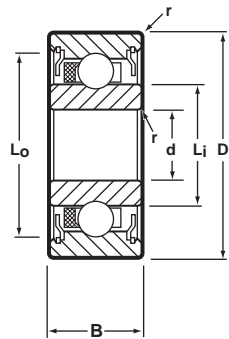
These bearings are widely used in critical Dental/Medical Applications although they are ideally suited for any high speed (up to 500,000 RPM) application. The design of these bearings incorporated the advantage of super precision tolerances, balanced design, raceway super finishes and a variety of retainer options. All of the sizes listed represent current production sizes, although almost any part can be designed to take advantage of the operating characteristics of the HSSB's.



Radial (continued)



**Open
Machined Cage**



**2 Shields
Machined Cage**

Notes:

1. Inch to metric conversion—see page 57.
2. Basic part numbers shown below include code "SS" for AISI 440C stainless steel. If SAE 52100 chrome alloy steel is desired delete SS.
3. See page 7 for ABEC tolerances.
4. r=Maximum shaft or housing fillet radius that bearing corners will clear.
5. Please consult with factory for machined cage options.
6. Metric/inch conversions given for reference only.

■ Also available in flange version. Please consult with factory.

★★ Load ratings are based on ABMA Standard #12.

BASIC P/N	BORE d		O.D. D		WIDTH B		LAND DIAMETER (REFERENCE)		FILLET RADIUS r	BALL COMPLEMENT		LOAD RATINGS** Lbs.		N _{max} /f _n rpm/1000
	INCH	(mm)	INCH	(mm)	INCH	(mm)	L _i	L _o		NO. Z	SIZE D _b	DYN. C	STATIC C ₀	
SSR-2270ZZW301MC	.2756	7.000	.8661	22.000	.4060	10.312	.463	.744	.016	7	5/32	569	273	26
SSRI-8516MC■	.3125	7.938	.5000	12.700	.1562	3.967	.362	.450	.005	11	1/16	93	43	37
SSRI-8516ZZSD505MC	.3125	7.938	.5000	12.700	.1562	3.967	.362	.460	.005	11	1/16	93	43	37
SSL-1680ZZW06MC	.3150	8.000	.6299	16.000	.2362	6.000	.409	.554	.012	9	3/32	170	79	32
SSR-2280MC	.3150	8.000	.8661	22.000	.2756	7.000	.463	.704	.016	7	5/32	569	273	26
SSR-2280ZZW301MC	.3150	8.000	.8661	22.000	.4060	10.312	.463	.744	.016	7	5/32	569	273	26
SSRI-1038ZMC	.3750	9.525	.6250	15.875	.1562	3.967	.458	.557	.010	12	1/16	96	53	30
SSRI-1038ZZW11MC	.3750	9.525	.6250	15.875	.1960	4.978	.458	.557	.010	12	1/16	96	53	30
SSRI-1438MC■	.3750	9.525	.8750	22.225	.2188	5.558	.521	.741	.016	7	5/32	569	273	24
SSRI-1438ZZMC■	.3750	9.525	.8750	22.225	.2812	7.142	.476	.783	.016	7	5/32	569	273	24
SSRI-1212ZMC	.5000	12.700	.7500	19.050	.1562	3.967	.587	.687	.010	16	1/16	111	71	24
SSRI-1212ZZW11MC	.5000	12.700	.7500	19.050	.1960	4.978	.587	.687	.010	16	1/16	111	71	24
SSRI-1458ZMC	.6250	15.875	.8750	22.225	.1562	3.967	.713	.797	.010	18	1/16	116	81	20
SSRI-1458ZZW11MC	.6250	15.875	.8750	22.225	.1960	4.978	.713	.797	.010	18	1/16	116	81	20
SSRI-1634ZMC	.7500	19.050	1.0000	25.400	.1562	3.967	.837	.922	.010	22	1/16	127	99	17

High Speed Specialty Bearings (HSSB) have been developed for applications that require precise running accuracy and high speed capability with the option of autoclavability.

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