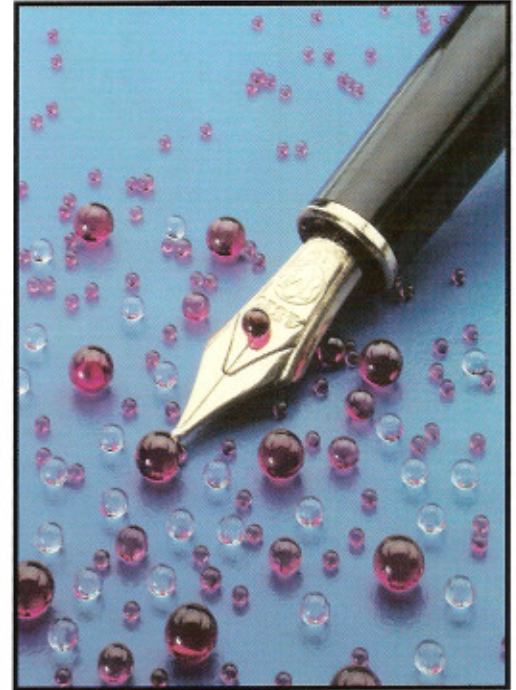


Sapphire Precision Balls

Series MSB precision manufactured sapphire balls are inventoried in a wide variety of sizes. These spheres are manufactured to A.F.B.M. A. Grade 25 standards and are also available in Ruby for enhanced visibility. The basic diameter tolerance is +/- 0.0001" with a tolerance of 0.00005" on spheres from the same lot.

Series MSB spheres can be used not only as ball bearings, but also as spacers in metrology applications, check valve ball seats, piston valve seats, in flow meters, bar code readers and fiber optics. Series MSB spheres can also be ground and polished in half or to a specific diameter and center thickness to make an inexpensive plano-convex lens. Most sizes below are in inventory. Other sizes can be special ordered.



- Size Availability**..... Per chart
Material Single Crystal Sapphire
Sphericity 0.000025"
Basic Diameter Tolerance +/-0.0001"
Surface Quality 80-50 scratch-dig per MIL-O-13830A
Sapphire Prefix Number..... MSB
Ruby Prefix Number..... MRB

<i>Series MSB Sapphire Precision Spheres</i>					
Replace MSB Prefix with MRB when ordering Ruby					
Nominal Size	Actual Size (Inches)	Item Number	Nominal Size	Actual Size (Inches)	Item Number
1/64"	0.015625	MSB015D	5/32"	0.156250	MSB156D
0.5mm	0.019685	MSB05MD	4.0mm	0.157480	MSB40MD
0.6mm	0.023622	MSB06MD	3/16"	0.187500	MSB188D
0.7mm	0.027559	MSB07MD	5.0mm	0.196850	MSB50MD
1/32"	0.031250	MSB031D	6.0mm	0.236220	MSB60MD
0.8mm	0.031496	MSB08MD	1/4"	0.250000	MSB250D
0.9mm	0.035433	MSB09MD	7.0mm	0.275591	MSB70MD
1.0mm	0.039370	MSB10MD	5/16"	0.312500	MSB313D
1/16"	0.062500	MSB062D	3/8"	0.375000	MSB375D
2.0mm	0.078740	MSB20MD	1/2"	0.500000	MSB500D
3/32"	0.093750	MSB094D	5/8"	0.625000	MSB625D
3.0mm	0.118110	MSB30MD	3/4"	0.750000	MSB750D
1/8"	0.125000	MSB125D			

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