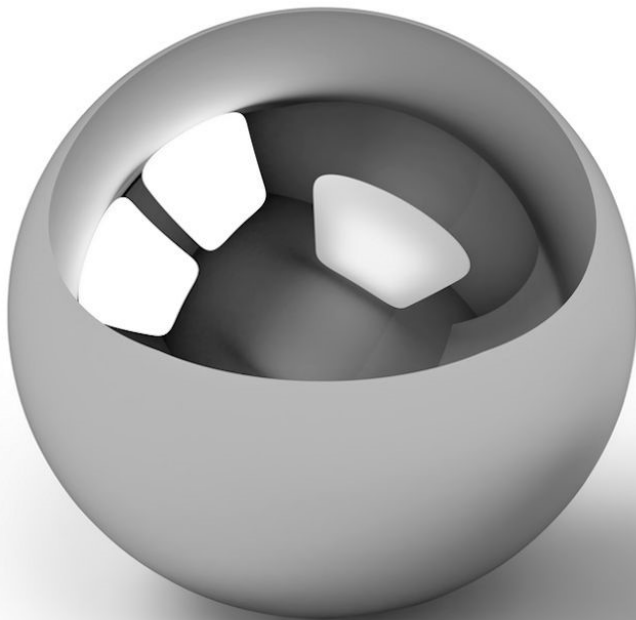


# MBA

# 2020

## Balls Range

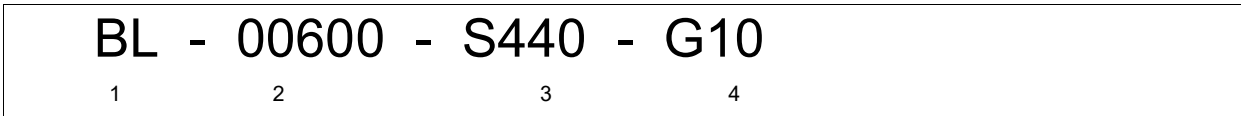
Precision - Commercial - Steel - Plastic - Rubber



TYPE	PAGE
Ceramic	3-5
- Ruby - Sapphire	
- Silicon Nitride (Si3N4)	
- Zirconia (ZRO2)	
Fixture / Checking	5-6
Metallic	7-13
- Bronze	
- Chrome Steel	
- Stainless Steel	
- Threaded	
- Titanium	
- Tungsten Carbide	
Metallic - Bored	13
Plastic	13-17
- Acetal	
- Acrylic	
- Nylon	
- Polypropylene	
- PTFE	
- PVC	
Plastic - Bored	17-18
Rubber	18-19
Threaded	19
Tooling	19-22

To find and order parts online, simply type the part number from this catalogue into the search box on any web page.

# Prefixes and Suffixes



**1 Ball:**  
BL: Code for all balls

**2 Diameter:**  
Shifted 2 decimal places. 00600 is 6mm diameter

**3 Material:**  
AC: Acetal  
ACR: Acrylic  
CH: Bearing Grade Chrome Steel  
NY: Nylon  
PB: Phosphor Bronze  
PP: Polypropylene  
PTF: Polytetrafluoroethylene

PVC: Polyvinyl Chloride  
R40D: Santoprene Rubber 40D  
R87A: Santoprene Rubber 87A  
RY: Synthetic Ruby  
S4: AIS 304 Grade Stainless  
S440: 440C Bearing Grade Stainless.  
S6: AIS 316 Grade Stainless  
S6L: AIS 316L Grade Stainless

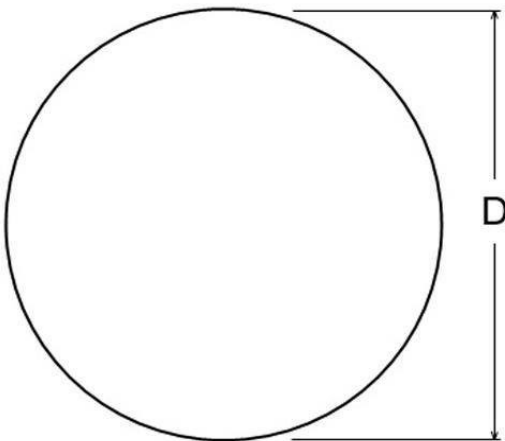
**Grade:**  
4 G10: AFBMA Grade 10

The lower the number the higher the precision of the ball. Refer to our website for a full description of AFBMA ball grading.

These are just some of the most commonly used suffixes. Please refer to MBA for information on suffixes not listed.

## Diagrams

**Basic Ball**



**Tooling / Inspection Ball**

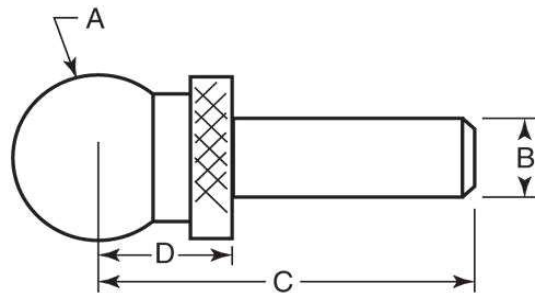


Diagram is for reference only. Not all tooling balls have shoulders. Please refer to the online listings for more comprehensive information.

# Ceramic Balls

Diameter (D) mm	Material	Precision Grade	Hardness		Part Number
0.150 (0.006") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	* BL-00015-SP-G25
0.150 (0.006") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	* BL-00015-RY-G25
0.198 (0.008") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00020-SP-G25
0.198 (0.008") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00020-RY-G25
0.300 (0.012") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00030-SP-G25
0.300 (0.012") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00030-RY-G25
0.351 (0.014") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00035-SP-G25
0.351 (0.014") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00035-RY-G25
0.381 (0.015") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00038-SP-G25
0.381 (0.015") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00038-RY-G25
0.397 (0.016") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00039-RY-G25
0.397 (0.016") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00039-SP-G25
0.483 (0.019") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00048-RY-G25
0.483 (0.019") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00048-SP-G25
0.500 (0.020") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00050-RY-G25
0.500 (0.020") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00050-SP-G25
0.599 (0.024") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00060-RY-G25
0.599 (0.024") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00060-SP-G25
0.653 (0.026") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00065-RY-G25
0.653 (0.026") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00065-SP-G25
0.673 (0.026") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00067-SP-G25
0.673 (0.026") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00067-RY-G25
0.794 (0.031") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00079-RY-G25
0.794 (0.031") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00079-SP-G25
1.000 (0.039") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00100-SP-G25
1.000 (0.039") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00100-RY-G25
1.199 (0.047") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00120-RY-G25
1.199 (0.047") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00120-SP-G25
1.501 (0.059") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00150-RY-G25
1.501 (0.059") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00150-SP-G25
1.588 (0.063") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-00159-SN-G10
1.588 (0.063") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00159-SP-G25
1.588 (0.063") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00159-RY-G25



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

\* Large Minimum Quantities

\*\* Available only while stock lasts

# Ceramic Balls

Diameter (D) mm	Material	Precision Grade	Hardness		Part Number
1.999 (0.079") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00200-SP-G25
1.999 (0.079") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00200-RY-G25
2.000 (0.079") +/-0.00254	ZRO2	Grade 10	1300 kg/mm.sq	Taiwan	BL-00200-ZR-G10
2.381 (0.094") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-00238-SN-G10
2.381 (0.094") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00238-SP-G25
2.381 (0.094") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00238-RY-G25
2.499 (0.098") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00250-SP-G25
2.499 (0.098") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00250-RY-G25
2.500 (0.098") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-00250-SN-G10
2.779 (0.109") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00278-SP-G25
2.779 (0.109") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00278-RY-G25
3.000 (0.118") +/-0.00254	ZRO2	Grade 10	1300 kg/mm.sq	Taiwan	BL-00300-ZR-G10
3.000 (0.118") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-00300-SN-G10
3.000 (0.118") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00300-SP-G25
3.000 (0.118") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00300-RY-G25
3.175 (0.125") +/-0.00635	ZRO2	Grade 25	1300 kg/mm.sq	USA	BL-00318-ZR-G25
3.175 (0.125") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-00318-SN-G10
3.175 (0.125") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00318-RY-G25
3.175 (0.125") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00318-SP-G25
3.500 (0.138") +/-0.00127	Si3N4	Grade 5	1580 kg/mm.sq	Taiwan	BL-00350-SN-G5
3.969 (0.156") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-00397-SN-G10
3.969 (0.156") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00397-RY-G25
3.969 (0.156") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00397-SP-G25
4.000 (0.157") +/-0.00254	ZRO2	Grade 10	1300 kg/mm.sq	Taiwan	BL-00400-ZR-G10
4.000 (0.157") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-00400-SN-G10
4.000 (0.157") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00400-RY-G25
4.000 (0.157") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00400-SP-G25
4.762 (0.187") +/-0.00127	Si3N4	Grade 5	1580 kg/mm.sq	Taiwan	BL-00476-SN-G5
4.763 (0.188") +/-0.00635	ZRO2	Grade 25	1300 kg/mm.sq	USA	BL-00476-ZR-G25
4.763 (0.188") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-00476-SN-G10
4.763 (0.188") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00476-RY-G25
4.763 (0.188") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00476-SP-G25
5.000 (0.197") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-00500-SN-G10



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

\* Large Minimum Quantities

\*\* Available only while stock lasts

# Ceramic Balls

Diameter (D) mm	Material	Precision Grade	Hardness		Part Number
5.000 (0.197") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00500-SP-G25
5.000 (0.197") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00500-RY-G25
5.556 (0.219") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00556-RY-G25
5.556 (0.219") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00556-SP-G25
6.000 (0.236") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-00600-SN-G10
6.000 (0.236") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00600-SP-G25
6.000 (0.236") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00600-RY-G25
6.350 (0.250") +/-0.00635	ZRO2	Grade 25	1300 kg/mm.sq		** BL-00635-ZR-G25
6.350 (0.250") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-00635-SN-G10
6.350 (0.250") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00635-SP-G25
6.350 (0.250") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00635-RY-G25
7.938 (0.313") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-00794-SN-G10
7.938 (0.313") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00794-RY-G25
7.938 (0.313") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00794-SP-G25
8.000 (0.315") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-00800-SN-G10
9.525 (0.375") +/-0.00635	ZRO2	Grade 25	1300 kg/mm.sq	Taiwan	BL-00953-ZR-G25
9.525 (0.375") +/-0.00635	Si3N4	Grade 25	1580 kg/mm.sq	Taiwan	BL-00953-SN-G25
9.525 (0.375") +/-0.00635	Synthetic Sapphire	Grade 25	9 Mohs	USA	BL-00953-SP-G25
9.525 (0.375") +/-0.00635	Synthetic Ruby	Grade 25	9 Mohs	USA	BL-00953-RY-G25
10.000 (0.394") +/-0.00635	ZRO2	Grade 25	1300 kg/mm.sq	Taiwan	BL-01000-ZR-G25
10.000 (0.394") +/-0.00635	Si3N4	Grade 25	1580 kg/mm.sq	Taiwan	BL-01000-SN-G25
10.318 (0.406") +/-0.00635	Si3N4	Grade 25	1580 kg/mm.sq	Taiwan	BL-01032-SN-G25
12.000 (0.472") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-01200-SN-G10
12.700 (0.500") +/-0.00635	ZRO2	Grade 25	1300 kg/mm.sq	USA	BL-01270-ZR-G25
12.700 (0.500") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-01270-SN-G10
12.700 (0.500") +/-0.00127	Si3N4	Grade 5	1580 kg/mm.sq	Taiwan	BL-01270-SN-G5
15.081 (0.594") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-01508-SN-G10
15.875 (0.625") +/-0.00254	ZRO2	Grade 10	1300 kg/mm.sq	Taiwan	BL-01588-ZR-G10
15.875 (0.625") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-01588-SN-G10
17.463 (0.688") +/-0.00635	Si3N4	Grade 25	1580 kg/mm.sq	Taiwan	BL-01746-SN-G25
19.050 (0.750") +/-0.00635	ZRO2	Grade 25	1300 kg/mm.sq	Taiwan	BL-01905-ZR-G25
19.050 (0.750") +/-0.00254	Si3N4	Grade 10	1580 kg/mm.sq	Taiwan	BL-01905-SN-G10



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

\* Large Minimum Quantities

\*\* Available only while stock lasts

# Fixture and Checking Balls

Diameter (A) mm	Shank Diameter (D) mm	Base to Centre (B) mm	Shoulder to Centre (C) mm		Part Number
3.175 (0.125") +/- 0.0051	3.188 +/- 0.0051	9.525 +/- 0.1270	2.383	Stainless Steel	BCHK-00318-S440
6.350 (0.250") +/- 0.0025	3.167 +0/- 0.0051	14.224 +/- 0.127		Stainless Steel	BFX-00635-S440
6.350 (0.250") +/- 0.0013	3.167 +/- 0.1270	14.224 +/- 0.0076		Tungsten Carbide	BFX-00635-TC
6.350 (0.250") +/- 0.0051	3.167 +/- 0.0051	14.224 +/- 0.1270	5.080	Tungsten Carbide	BCHK-00635-TC
6.350 (0.250") +/- 0.0051	3.167 +/- 0.0051	14.224 +/- 0.1270	5.080	Stainless Steel	BCHK-00635-S440
6.350 (0.250") +0.0/-0.0051	3.167 +0.0/-0.0051	14.732 +/-0.0051	5.080	Carbon Steel	* BIN-00635-HS-SOL
9.525 (0.375") +0.0/-0.0051	4.755 +0.0/-0.0051	18.796 +/-0.0051	7.620	Carbon Steel	* BIN-00953-HS-SOL
9.525 (0.375") +/- 0.0025	4.755 +0/- 0.0051	19.050 +/- 0.127		Stainless Steel	BFX-00953-S440
9.525 (0.375") +/- 0.0013	4.755 +/- 0.1270	19.050 +/- 0.0076		Tungsten Carbide	BFX-00953-TC
9.525 (0.375") +/- 0.0051	4.755 +/- 0.0051	19.050 +/- 0.1270	7.620	Stainless Steel	BCHK-00953-S440
9.525 (0.375") +/- 0.0051	4.755 +/- 0.0051	19.050 +/- 0.1270	7.620	Tungsten Carbide	BCHK-00953-TC
9.525 (0.375") +0.0/-0.0051	7.938 +0.0/-0.0051	18.796 +/-0.0051	7.620	Carbon Steel	BIN-00953-HS
12.700 (0.500") +0.0/-0.0051	6.342 +0.0/-0.0051	16.002 +/-0.0051	7.938	Carbon Steel	BIN-01270-HS-A
12.700 (0.500") +0.0/-0.0051	6.342 +0.0/-0.0051	22.352 +/-0.0051	12.700	Carbon Steel	* BIN-01270-HS-B
12.700 (0.500") +0.0/-0.0051	6.342 +0.0/-0.0051	23.622 +/-0.0051	10.160	Carbon Steel	* BIN-01270-HS-C
12.700 (0.500") +/- 0.0025	6.342 +0/- 0.0051	23.876 +/- 0.127		Stainless Steel	BFX-01270-S440
12.700 (0.500") +/- 0.0051	6.342 +/- 0.0051	23.876 +/- 0.1270	10.160	Tungsten Carbide	BCHK-01270-TC
12.700 (0.500") +/- 0.0051	6.342 +/- 0.0051	23.876 +/- 0.1270	10.160	Stainless Steel	BCHK-01270-S440
12.700 (0.500") +/- 0.00051	6.350 +0/-0.0051	24.384 +/-0.0051	7.938	Stainless Steel	BCHK-01270-S440T
12.700 (0.500") +0.0/-0.0051	9.525 +0.0/-0.0051	33.274 +/-0.0051	9.525	Carbon Steel	* BIN-01270-HS-D
15.875 (0.625") +/- 0.0025	7.930 +0/- 0.0051	26.924 +/- 0.127		Stainless Steel	BFX-01588-S440
15.875 (0.625") +/- 0.0051	7.930 +/- 0.0051	26.924 +/- 0.1270	11.430	Stainless Steel	BCHK-01588-S440
15.875 (0.625") +0.0/-0.0051	7.930 +0.0/-0.0051	27.432 +/-0.0051	11.430	Carbon Steel	* BIN-01588-HS-A
15.875 (0.625") +0.0/-0.0051	9.525 +0.0/-0.0051	36.068 +/-0.0051	11.430	Carbon Steel	* BIN-01588-HS-B
19.050 (0.750") +/- 0.0025	9.517 +0/- 0.0051	31.750 +/- 0.127		Stainless Steel	BFX-01905-S440
19.050 (0.750") +/- 0.0127	9.517 +/- 0.0051	31.750 +/- 0.1270	12.700	Stainless Steel	BCHK-01905-S440
19.050 (0.750") +/- 0.0127	9.517 +/- 0.0051	31.750 +/- 0.1270	12.700	Tungsten Carbide	BCHK-01905-TC
19.050 (0.750") +0.0/-0.0051	9.525 +0.0/-0.0051	38.862 +/-0.0051	14.288	Carbon Steel	* BIN-01905-HS
22.225 (0.875") +/- 0.0127	11.105 +/- 0.0051	36.576 +/- 0.1270	15.240	Stainless Steel	BCHK-02223-S440
25.400 (1.000") +/- 0.0025	12.692 +0/- 0.0051	41.148 +/- 0.127		Stainless Steel	BFX-02540-S440
25.400 (1.000") +/- 0.0127	12.692 +/- 0.0051	41.148 +/- 0.1270	17.780	Stainless Steel	BCHK-02540-S440
25.400 (1.000") +0.0/-0.0051	12.700 +0.0/-0.0051	41.656 +/-0.0051	17.780	Carbon Steel	BIN-02540-HS



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

\* Large Minimum Quantities

\*\* Available only while stock lasts

# Metallic Balls

Diameter (D) mm	Material	Precision Grade	Hardness		Part Number
0.200 (0.008") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		* BL-00020-S440-G3
0.250 (0.010") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		* BL-00025-S440-G3
0.397 (0.016") +/-0.000762	SAE52100 Chrome	Grade 3	60-70 Rockwell C		* BL-00039-CH-G3
0.397 (0.016") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		* BL-00039-S440-G3
0.400 (0.016") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-00040-CH-G28
0.500 (0.020") +/-0.00635	Tungsten Carbide	Grade 25	91.5 Rockwell A	USA	BL-00050-TC-G25
0.500 (0.020") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		* BL-00050-S440-G3
0.600 (0.024") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		* BL-00060-S440-G3
0.650 (0.026") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		* BL-00065-S440-G3
0.700 (0.028") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-00070-CH-G28
0.794 (0.031") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		** BL-00079-S440-G3
1.000 (0.039") +/-0.000406	SAE52100 Chrome	Grade 16	60-70 Rockwell C	Japan	BL-00100-CH-G16
1.000 (0.039") +/-0.00635	Tungsten Carbide	Grade 25	91.5 Rockwell A		* BL-00100-TC-G25
1.000 (0.039") +/-0.00254	440C Stainless	Grade 10	55-60 Rockwell C	Taiwan	BL-00100-S440-G10
1.000 (0.039") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		* BL-00100-S440-G3
1.150 (0.045") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		* BL-00115-S440-G3
1.191 (0.047") +/-0.000762	SAE52100 Chrome	Grade 3	60-70 Rockwell C	Switzerland	** BL-00119-CH-G3
1.191 (0.047") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		* BL-00119-S440-G3
1.200 (0.047") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-00120-CH-G28
1.250 (0.049") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		** BL-00125-S440-G3
1.450 (0.057") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		** BL-00145-S440-G3
1.500 (0.059") +/-0.051	SAE52100 Chrome	Grade 2000	60-70 Rockwell C	Taiwan	BL-00150-CH-G2000-1KG
1.500 (0.059") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-00150-CH-G28
1.500 (0.059") +/-0.00254	440C Stainless	Grade 10	55-60 Rockwell C	Taiwan	BL-00150-S440-G10
1.500 (0.059") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		* BL-00150-S440-G3
1.588 (0.063") +/-0.00635	SAE52100 Chrome	Grade 25	60-70 Rockwell C	Taiwan	BL-00159-CH-G25
1.588 (0.063") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00159-S4-G100
1.588 (0.063") +/-0.00254	316 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00159-S6-G100
1.588 (0.063") +/-0.00254	440C Stainless	Grade 10	55-60 Rockwell C	Taiwan	BL-00159-S440-G10
1.588 (0.063") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		* BL-00159-S440-G3
1.750 (0.069") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		* BL-00175-S440-G3
1.915 (0.075") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		** BL-00192-S440-G3
2.000 (0.079") +/-0.00254	SAE52100 Chrome	Grade 10	60-70 Rockwell C	Taiwan	BL-00200-CH-G10



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

\* Large Minimum Quantities

\*\* Available only while stock lasts

# Metallic Balls

Diameter (D) mm	Material	Precision Grade	Hardness		Part Number
2.000 (0.079") +/-0.00635	Tungsten Carbide - 6% Nickel Binder	Grade 25	91.5 Rockwell A	USA	BL-00200-TC-G25
2.000 (0.079") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00200-S4-G100
2.000 (0.079") +/-0.00254	316 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00200-S6-G100
2.000 (0.079") +/-0.00254	316 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00200-S6-G100-B
2.000 (0.079") +/-0.0102	316 Stainless	Grade 400	25-39 Rockwell C	Taiwan	BL-00200-S6-G400-B
2.000 (0.079") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		** BL-00200-S440-G3
2.100 (0.083") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		** BL-00210-S440-G3
2.381 (0.094") +/-0.00635	SAE52100 Chrome	Grade 25	60-70 Rockwell C	USA	BL-00238-CH-G25
2.381 (0.094") +/-0.00635	Tungsten Carbide	Grade 25	91.5 Rockwell A	USA	BL-00238-TC-G25
2.381 (0.094") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00238-S4-G100
2.381 (0.094") +/-0.0051	316 Stainless	Grade 200	25-39 Rockwell C	Taiwan	BL-00238-S6-G200
2.381 (0.094") +/-0.00127	440C Stainless	Grade 50	55-60 Rockwell C	Taiwan	BL-00238-S440-G50
2.381 (0.094") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		** BL-00238-S440-G3
2.381 (0.094") +/-0.000711	440C Stainless	Grade 28	55-60 Rockwell C	Taiwan	BL-00238-S440-G28
2.450 (0.096") +/-0.000762	SAE52100 Chrome	Grade 3	60-70 Rockwell C		* BL-00245-CH-G3
2.450 (0.096") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		** BL-00245-S440-G3
2.500 (0.098") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-00250-CH-G28
2.500 (0.098") +/-0.00254	440C Stainless	Grade 10	55-60 Rockwell C	Taiwan	BL-00250-S440-G10
2.500 (0.098") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		* BL-00250-S440-G3
2.500 (0.098") +/-0.001016	440C Stainless	Grade 40	55-60 Rockwell C		** BL-00250-S440-G40
2.778 (0.109") +/-0.001016	440C Stainless	Grade 40	55-60 Rockwell C	Taiwan	BL-00278-S440-G40
2.778 (0.109") +/-0.000762	440C Stainless	Grade 3	55-60 Rockwell C		* BL-00278-S440-G3
3.000 (0.118") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-00300-CH-G28
3.000 (0.118") +/-0.00635	Tungsten Carbide	Grade 25	91.5 Rockwell A	USA	BL-00300-TC-G25
3.000 (0.118") +/-0.010	Ti-Gr23/Ti-6AL4V-ELI	Grade 100	35 Rockwell C	Taiwan	BL-00300-T23-G100
3.000 (0.118") +/-0.0051	304 Stainless	Grade 200	25-39 Rockwell C	Taiwan	BL-00300-S4-G200
3.000 (0.118") +/-0.0051	316 Stainless	Grade 200	25-39 Rockwell C	Taiwan	BL-00300-S6-G200
3.000 (0.118") +/-0.000406	440C Stainless	Grade 16	55-60 Rockwell C	Taiwan	BL-00300-S440-G16
3.175 (0.125") +/-0.00635	SAE52100 Chrome	Grade 25	60-70 Rockwell C	Taiwan	BL-00318-CH-G25
3.175 (0.125") +/-0.00635	Tungsten Carbide	Grade 25	91.5 Rockwell A	UK	BL-00318-TC-G25
3.175 (0.125") +/-0.0254	Phosphor Bronze	Grade 1000	75-98 Rockwell B	UK	BL-00318-PB-G1000
3.175 (0.125") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00318-S4-G100



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

\* Large Minimum Quantities

\*\* Available only while stock lasts



# Metallic Balls

Diameter (D) mm	Material	Precision Grade	Hardness		Part Number
3.175 (0.125") +/-0.00254	316 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00318-S6-G100
3.175 (0.125") +/-0.000508	420 Stainless	Grade 20	55-60 Rockwell C	Taiwan	BL-00318-S420-G28
3.175 (0.125") +/-0.000508	440C Stainless	Grade 20	55-60 Rockwell C	Taiwan	BL-00318-S440-G20
3.400 (0.134") +/-0.00635	SAE52100 Chrome	Grade 25	60-70 Rockwell C	USA	BL-00340-CH-G25
3.500 (0.138") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C	Taiwan	BL-00350-CH-G28
3.500 (0.138") +/-0.000711	440C Stainless	Grade 28	55-60 Rockwell C	Taiwan	BL-00350-S440-G28
3.969 (0.156") +/-0.00061	Tungsten Carbide	Grade 24	91.5 Rockwell A		BL-00397-TC-G24
3.969 (0.156") +/-0.00635	SAE52100 Chrome	Grade 25	60-70 Rockwell C	Taiwan	BL-00397-CH-G25
3.969 (0.156") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C		** BL-00397-S4-G100
3.969 (0.156") +/-0.00254	316 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00397-S6-G100
3.969 (0.156") +/-0.00127	440C Stainless	Grade 50	55-60 Rockwell C	Taiwan	BL-00397-S440-G50
4.000 (0.157") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-00400-CH-G28
4.000 (0.157") +/-0.00254	SAE52100 Chrome	Grade 100	60-70 Rockwell C	Taiwan	BL-00400-CH-G100
4.000 (0.157") +/-0.00635	Tungsten Carbide	Grade 25	91.5 Rockwell A	UK	BL-00400-TC-G25
4.000 (0.157") +/-0.010	Ti-Gr23/Ti-6AL4V-ELI	Grade 100	35 Rockwell C	Taiwan	BL-00400-T23-G100
4.000 (0.157") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C		** BL-00400-S4-G100
4.000 (0.157") +/-0.0051	316 Stainless	Grade 200	25-39 Rockwell C	Taiwan	BL-00400-S6-G200
4.000 (0.157") +/-0.00254	316L Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00400-S6L-G100
4.000 (0.157") +/-0.00254	316 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00400-S6-G100
4.000 (0.157") +/-0.000406	440C Stainless	Grade 16	55-60 Rockwell C	Taiwan	BL-00400-S440-G16
4.500 (0.177") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C	Taiwan	BL-00450-CH-G28
4.762 (0.187") +/-0.0254	Phosphor Bronze	Grade 1000	75-98 Rockwell B	UK	BL-00476-PB-G1000
4.763 (0.188") +/-0.00635	SAE52100 Chrome	Grade 25	60-70 Rockwell C	USA	BL-00476-CH-G25
4.763 (0.188") +/-0.000508	SAE52100 Chrome	Grade 20	60-70 Rockwell C	Japan	BL-00476-CH-G20
4.763 (0.188") +/-0.00635	Tungsten Carbide	Grade 25	91.5 Rockwell A	UK	BL-00476-TC-G25
4.763 (0.188") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C		** BL-00476-S4-G100
4.763 (0.188") +/-0.0051	316 Stainless	Grade 200	25-39 Rockwell C	Taiwan	BL-00476-S6-G200
4.763 (0.188") +/-0.000711	440C Stainless	Grade 28	55-60 Rockwell C	Taiwan	BL-00476-S440-G28
4.763 (0.188") +/-0.00127	440C Stainless	Grade 50	55-60 Rockwell C	USA	BL-00476-S440-G50
5.000 (0.197") +/-0.000762	SAE52100 Chrome	Grade 3	60-70 Rockwell C		* BL-00500-CH-G3
5.000 (0.197") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C	Taiwan	BL-00500-CH-G28
5.000 (0.197") +/-0.010	Ti-Gr23/Ti-6AL4V-ELI	Grade 100	35 Rockwell C	Taiwan	BL-00500-T23-G100
5.000 (0.197") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00500-S4-G100



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

\* Large Minimum Quantities

\*\* Available only while stock lasts

# Metallic Balls

Diameter (D) mm	Material	Precision Grade	Hardness		Part Number
5.000 (0.197") +/-0.0051	316 Stainless	Grade 200	25-39 Rockwell C	Taiwan	BL-00500-S6-G200
5.000 (0.197") +/-0.000406	440C Stainless	Grade 16	55-60 Rockwell C	Taiwan	BL-00500-S440-G16
5.500 (0.217") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-00550-CH-G28
5.556 (0.219") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-00556-CH-G28
5.556 (0.219") +/-0.00635	SAE52100 Chrome	Grade 25	60-70 Rockwell C	USA	BL-00556-CH-G25
5.556 (0.219") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C		** BL-00556-S4-G100
5.556 (0.219") +/-0.00254	316 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00556-S6-G100
5.556 (0.219") +/-0.00254	440C Stainless	Grade 10	55-60 Rockwell C	Taiwan	BL-00556-S440-G40
6.000 (0.236") +/-0.0051	SAE52100 Chrome	Grade 200	60-70 Rockwell C	Taiwan	BL-00600-CH-G200
6.000 (0.236") +/-0.010	Ti-Gr23/Ti-6AL4V-ELI	Grade 100	35 Rockwell C	Taiwan	BL-00600-T23-G100
6.000 (0.236") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00600-S4-G100
6.000 (0.236") +/-0.000406	440C Stainless	Grade 16	55-60 Rockwell C	Taiwan	BL-00600-S440-G16
6.000 (0.236") +/-0.001016	440C Stainless	Grade 40	55-60 Rockwell C	Japan	BL-00600-S440-G40
6.350 (0.250") +/-0.00635	SAE52100 Chrome	Grade 25	60-70 Rockwell C	USA	BL-00635-CH-G25
6.350 (0.250") +/-0.000508	SAE52100 Chrome	Grade 20	60-70 Rockwell C	Japan	BL-00635-CH-G20
6.350 (0.250") +/-0.00635	Tungsten Carbide	Grade 25	91.5 Rockwell A	USA	BL-00635-TC-G25
6.350 (0.250") +/-0.0254	Phosphor Bronze	Grade 1000	75-98 Rockwell B	UK	BL-00635-PB-G1000
6.350 (0.250") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00635-S4-G100
6.350 (0.250") +/-0.00254	316 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00635-S6-G100
6.350 (0.250") +/-0.000711	440C Stainless	Grade 28	55-60 Rockwell C	Taiwan	BL-00635-S440-G28
6.500 (0.256") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-00650-CH-G28
7.000 (0.276") +/-0.001016	SAE52100 Chrome	Grade 40	60-70 Rockwell C	Taiwan	BL-00700-CH-G40
7.000 (0.276") +/-0.000406	440C Stainless	Grade 16	55-60 Rockwell C		* BL-00700-S440-G16
7.144 (0.281") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C	Taiwan	BL-00714-CH-G28
7.144 (0.281") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C		** BL-00714-S4-G100
7.144 (0.281") +/-0.000711	440C Stainless	Grade 28	55-60 Rockwell C	Taiwan	BL-00714-S440-G28
7.500 (0.295") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-00750-CH-G28
7.938 (0.313") +/-0.00635	SAE52100 Chrome	Grade 25	60-70 Rockwell C	USA	BL-00794-CH-G25
7.938 (0.313") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-00794-CH-G28
7.938 (0.313") +/-0.0254	Phosphor Bronze	Grade 1000	75-98 Rockwell B	UK	BL-00794-PB-G1000
7.938 (0.313") +/-0.0051	304 Stainless	Grade 200	25-39 Rockwell C	Taiwan	BL-00794-S4-G200
7.938 (0.313") +/-0.0051	316 Stainless	Grade 200	25-39 Rockwell C	Taiwan	BL-00794-S6-G200
7.938 (0.313") +/-0.000711	440C Stainless	Grade 28	55-60 Rockwell C	Taiwan	BL-00794-S440-G28



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

\* Large Minimum Quantities

\*\* Available only while stock lasts

# Metallic Balls

Diameter (D) mm	Material	Precision Grade	Hardness		Part Number
8.000 (0.315") +/-0.000711	440C Stainless	Grade 28	55-60 Rockwell C		BL-00800-S440-G28
8.000 (0.315") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		BL-00800-CH-G28
8.000 (0.315") +/-0.010	Ti-Gr23/Ti-6AL4V-ELI	Grade 100	35 Rockwell C	Taiwan	BL-00800-T23-G100
8.500 (0.335") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-00850-CH-G28
8.731 (0.344") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-00873-CH-G28
8.731 (0.344") +/-0.0051	304 Stainless	Grade 200	25-39 Rockwell C		** BL-00873-S4-G200
9.000 (0.354") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C	Taiwan	BL-00900-CH-G28
9.000 (0.354") +/-0.000711	440C Stainless	Grade 28	55-60 Rockwell C	Taiwan	BL-00900-S440-G28
9.525 (0.375") +/-0.00635	SAE52100 Chrome	Grade 25	60-70 Rockwell C	Taiwan	BL-00953-CH-G25
9.525 (0.375") +/-0.00635	Tungsten Carbide	Grade 25	91.5 Rockwell A	USA	BL-00953-TC-G25
9.525 (0.375") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00953-S4-G100
9.525 (0.375") +/-0.00254	316 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-00953-S6-G100
9.525 (0.375") +/-0.001016	440C Stainless	Grade 40	55-60 Rockwell C	Taiwan	BL-00953-S440-G40
9.525 (0.375") +/-0.000508	440C Stainless	Grade 20	55-60 Rockwell C	Taiwan	BL-00953-S440-G20
10.000 (0.394") +/-0.001016	SAE52100 Chrome	Grade 40	60-70 Rockwell C	Taiwan	BL-01000-CH-G40
10.000 (0.394") +/-0.00635	Tungsten Carbide	Grade 25	91.5 Rockwell A	UK	BL-01000-TC-G25
10.000 (0.394") +/-0.0051	316 Stainless	Grade 200	25-39 Rockwell C	Taiwan	BL-01000-S6-G200
10.000 (0.394") +/-0.001016	440C Stainless	Grade 40	55-60 Rockwell C	Taiwan	BL-01000-S440-G40
10.319 (0.406") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-01032-CH-G28
11.000 (0.433") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-01100-CH-G28
11.000 (0.433") +/-0.000406	440C Stainless	Grade 16	55-60 Rockwell C	Taiwan	BL-01100-S440-G16
11.112 (0.437") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C	Taiwan	BL-01111-CH-G28
11.113 (0.438") +/-0.0051	316 Stainless	Grade 200	25-39 Rockwell C	Taiwan	BL-01111-S6-G200
11.500 (0.453") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-01150-CH-G28
11.906 (0.469") +/-0.00127	SAE52100 Chrome	Grade 50	60-70 Rockwell C	Taiwan	BL-01191-CH-G50
12.000 (0.472") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-01200-CH-G28
12.000 (0.472") +/-0.000406	440C Stainless	Grade 16	55-60 Rockwell C	Taiwan	BL-01200-S440-G16
12.500 (0.492") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C		* BL-01250-CH-G28
12.700 (0.500") +/-0.00635	SAE52100 Chrome	Grade 25	60-70 Rockwell C	Taiwan	BL-01270-CH-G25
12.700 (0.500") +/-0.0254	Phosphor Bronze	Grade 1000	75-98 Rockwell B	UK	BL-01270-PB-G1000
12.700 (0.500") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-01270-S4-G100
12.700 (0.500") +/-0.00254	316 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-01270-S6-G100
12.700 (0.500") +/-0.00254	316L Grade Stainless	Grade 100	25-39 Rockwell C	USA	BL-01270-S6L-G100



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

\* Large Minimum Quantities

\*\* Available only while stock lasts

# Metallic Balls

Diameter (D) mm	Material	Precision Grade	Hardness		Part Number
12.700 (0.500") +/-0.00127	440C Stainless	Grade 50	55-60 Rockwell C	Taiwan	BL-01270-S440-G50
12.700 (0.500") +/-0.000406	440C Stainless	Grade 16	55-60 Rockwell C	Taiwan	BL-01270-S440-G16
14.288 (0.563") +/-0.0051	304 Stainless	Grade 200	25-39 Rockwell C		* BL-01429-S4-G200
15.000 (0.591") +/-0.000711	SAE52100 Chrome	Grade 28	60-70 Rockwell C	Taiwan	BL-01500-CH-G28
15.000 (0.591") +/-0.00254	316 Stainless	Grade 100	25-39 Rockwell C	UK	BL-01500-S6-G100
15.875 (0.625") +/-0.001016	SAE52100 Chrome	Grade 40	60-70 Rockwell C	Taiwan	BL-01588-CH-G40
15.875 (0.625") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-01588-S4-G100
15.875 (0.625") +/-0.00254	316 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-01588-S6-G100
17.463 (0.688") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C		* BL-01746-S4-G100
19.050 (0.750") +/-0.00127	SAE52100 Chrome	Grade 50	60-70 Rockwell C	Taiwan	BL-01905-CH-G50
19.050 (0.750") +/-0.00635	Tungsten Carbide	Grade 25	91.5 Rockwell A	USA	BL-01905-TC-G25
19.050 (0.750") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C		* BL-01905-S4-G100
19.050 (0.750") +/-0.0051	316 Stainless	Grade 200	25-39 Rockwell C	Taiwan	BL-01905-S6-G200
20.000 (0.787") +/-0.0051	316 Stainless	Grade 200	25-39 Rockwell C	Taiwan	BL-02000-S6-G200
22.000 (0.866") +/-0.001016	SAE52100 Chrome	Grade 40	60-70 Rockwell C	Taiwan	BL-02200-CH-G40
22.223 (0.875") +/-0.00254	316 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-02223-S6-G100
22.225 (0.875") +/-0.001016	SAE52100 Chrome	Grade 40	60-70 Rockwell C	Taiwan	BL-02223-CH-G40
22.225 (0.875") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C		BL-02223-S4-G100
22.225 (0.875") +/-0.00635	Tungsten Carbide	Grade 25	91.5 Rockwell A	USA	BL-02223-TC-G25
25.000 (0.984") +/-0.001016	AISI 420 Stainless	Grade 40	55-60 Rockwell C	Taiwan	BL-02500-S420-G40
25.400 (1.000") +/-0.00254	304 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-02540-S4-G100
25.400 (1.000") +/-0.00254	316 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-02540-S6-G100
26.988 (1.063") +/-0.001016	SAE52100 Chrome	Grade 40	60-70 Rockwell C	Taiwan	BL-02699-CH-G40
30.163 (1.188") +/-0.001016	SAE52100 Chrome	Grade 40	60-70 Rockwell C	Taiwan	BL-03016-CH-G40
31.750 (1.250") +/-0.0051	304 Stainless	Grade 200	25-39 Rockwell C	Taiwan	BL-03175-S4-G200
31.750 (1.250") +/-0.00254	316 Stainless	Grade 100	25-39 Rockwell C	Taiwan	BL-03175-S6-G100
35.000 (1.378") +/-0.001016	SAE52100 Chrome	Grade 40	60-70 Rockwell C	Taiwan	BL-03500-CH-G40
36.513 (1.438") +/-0.001016	SAE52100 Chrome	Grade 40	60-70 Rockwell C	Taiwan	BL-03651-CH-G40
38.100 (1.500") +/-0.00127	SAE52100 Chrome	Grade 50	60-70 Rockwell C	Taiwan	BL-03810-CH-G50
38.100 (1.500") +/-0.00635	Tungsten Carbide	Grade 25	91.5 Rockwell A	USA	BL-03810-TC-G25
44.450 (1.750") +/-0.00127	SAE52100 Chrome	Grade 50	60-70 Rockwell C	Taiwan	BL-04445-CH-G50
44.450 (1.750") +/-0.0051	316 Stainless	Grade 200	25-39 Rockwell C	Taiwan	BL-04445-S6-G200
44.450 (1.750") +/-0.00127	440C Stainless	Grade 50	55-60 Rockwell C	Taiwan	BL-04445-S440-G50



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

\* Large Minimum Quantities

\*\* Available only while stock lasts

## Metallic Balls

Diameter (D) mm	Material	Precision Grade	Hardness		Part Number
50.000 (1.969") +/-0.001016	SAE52100 Chrome	Grade 40	60-70 Rockwell C	Taiwan	BL-05000-CH-G40
69.85 (2.750") +/-0.0051	AISI 440C Stainless	Grade 200	55-60 Rockwell C	Taiwan	BL-06985-S440-G200
100.00 (3.937") +/-0.0051	SAE52100 Chrome	Grade 200	60-70 Rockwell C	Taiwan	BL-10000-CH-G200

## Metallic Balls - Bored

Diameter (D) mm	Bore (B) mm	Width (W) mm	Flat Diameter (d1) mm		Part Number
7.938 (0.313")	3.000	6.000	5.100	Chrome Steel	* BLB-00794-00300-SUJ
9.525 (0.375")	4.000	7.000	7.400	Chrome Steel	* BLB-00953-00400-SUJ
11.112 (0.437")	5.000	8.000	7.710	Chrome Steel	BLB-01111-00500-SUJ
12.700 (0.500")	6.000	9.000	8.960	Chrome Steel	BLB-01270-00600-SUJ
15.875 (0.625")	8.000	12.000	10.390	Chrome Steel	* BLB-01588-00800-SUJ
19.050 (0.750")	10.000	14.000	12.920	Chrome Steel	* BLB-01905-01000-SUJ
22.225 (0.875")	12.000	16.000	15.430	Chrome Steel	* BLB-02223-01200-SUJ
25.400 (1.000")	14.000	19.000	16.860	Chrome Steel	* BLB-02540-01400-SUJ
28.575 (1.125")	16.000	21.000	19.390	Chrome Steel	* BLB-02858-01600-SUJ
31.750 (1.250")	18.000	23.000	21.890	Chrome Steel	* BLB-03175-01800-SUJ
34.925 (1.375")	20.000	25.000	24.380	Chrome Steel	* BLB-03493-02000-SUJ
38.100 (1.500")	22.000	28.000	25.840	Chrome Steel	* BLB-03810-02200-SUJ
42.863 (1.688")	25.000	31.000	29.600	Chrome Steel	* BLB-04286-02500-SUJ
50.800 (2.000")	30.000	37.000	34.810	Chrome Steel	* BLB-05080-03000-SUJ

## Plastic Balls

Diameter (D) mm	Material	Precision Grade	Hardness		Part Number
0.79 (0.031") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-00079-ACR
0.79 (0.031") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-00079-PTF
1.59 (0.063") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-00159-NY
1.59 (0.063") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-00159-ACR
1.59 (0.063") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-00159-PTF
2.38 (0.094") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-00238-PTF
2.38 (0.094") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-00238-NY
2.38 (0.094") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-00238-AC
3.00 (0.118") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-00300-ACR
3.18 (0.125") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-00318-NY
3.18 (0.125") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-00318-AC
3.18 (0.125") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-00318-ACR
3.18 (0.125") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-00318-PTF
3.18 (0.125") +/-0.051	Torlon (Polyamide-imide)	Grade II	Rockwell E86 or M109-119	USA	BL-00318-TO
3.18 (0.125") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-00318-PP
3.97 (0.156") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-00397-NY
3.97 (0.156") +/-0.051	Acetal	Grade II	118 Rockwell R	Taiwan	BL-00397-AC

Stocked or Short Delivery

Usually Available Short Delivery

Long delivery or not in current production

\* Large Minimum Quantities

\*\* Available only while stock lasts

# Plastic Balls

Diameter (D) mm	Material	Precision Grade	Hardness		Part Number
3.97 (0.156") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-00397-ACR
3.97 (0.156") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-00397-PTF
3.97 (0.156") +/-0.051	Torlon (Polyamide-imide)	Grade II	Rockwell E86 or M109-119	USA	BL-00397-TO
3.97 (0.156") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-00397-PP
4.76 (0.187") +/-0.051	PVC	Grade II	114 Rockwell R	USA	BL-00476-PVC
4.76 (0.187") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-00476-PP
4.76 (0.187") +/-0.051	Torlon (Polyamide-imide)	Grade II	Rockwell E86 or M109-119	USA	BL-00476-TO
4.76 (0.188") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-00476-NY
4.76 (0.188") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-00476-AC
4.76 (0.188") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-00476-ACR
4.76 (0.188") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-00476-PTF
5.00 (0.197") +/-0.051	Torlon (Polyamide-imide)	Grade II	Rockwell E86 or M109-119	USA	BL-00500-TO
5.56 (0.219") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-00556-NY
5.56 (0.219") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-00556-AC
5.56 (0.219") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-00556-PTF
5.56 (0.219") +/-0.051	Torlon (Polyamide-imide)	Grade II	Rockwell E86 or M109-119	USA	BL-00556-TO
5.56 (0.219") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-00556-PP
6.00 (0.236") +/-0.051	Torlon (Polyamide-imide)	Grade II	Rockwell E86 or M109-119	USA	BL-00600-TO
6.35 (0.250") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-00635-NY
6.35 (0.250") +/-0.051	PVC	Grade II	114 Rockwell R	USA	BL-00635-PVC
6.35 (0.250") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-00635-AC
6.35 (0.250") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-00635-ACR
6.35 (0.250") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-00635-PTF
6.35 (0.250") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-00635-PP
6.35 (0.250") +/-0.051	Torlon (Polyamide-imide)	Grade II	Rockwell E86 or M109-119	USA	BL-00635-TO
7.14 (0.281") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-00714-NY
7.14 (0.281") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-00714-AC
7.14 (0.281") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-00714-PTF
7.94 (0.313") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-00794-NY
7.94 (0.313") +/-0.051	Acetal	Grade II	118 Rockwell R	Taiwan	BL-00794-AC
7.94 (0.313") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-00794-ACR
7.94 (0.313") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-00794-PTF
7.94 (0.313") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-00794-PP



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

\* Large Minimum Quantities

\*\* Available only while stock lasts

# Plastic Balls

Diameter (D) mm	Material	Precision Grade	Hardness		Part Number
7.94 (0.313") +/-0.051	Torlon (Polyamide-imide)	Grade II	Rockwell E86 or M109-119	USA	BL-00794-TO
8.73 (0.344") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-00873-NY
9.53 (0.375") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-00953-NY
9.53 (0.375") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-00953-AC
9.53 (0.375") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-00953-ACR
9.53 (0.375") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-00953-PTF
9.53 (0.375") +/-0.051	Torlon (Polyamide-imide)	Grade II	Rockwell E86 or M109-119	USA	BL-00953-TO
9.53 (0.375") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-00953-PP
11.11 (0.437") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-01111-AC
11.11 (0.437") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-01111-NY
11.11 (0.438") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-01111-ACR
11.11 (0.438") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-01111-PTF
12.00 (0.472") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-01200-AC
12.00 (0.472") +/-0.051	Acrylic	Grade II	132 Rockwell R	Taiwan	BL-01200-ACR
12.70 (0.500") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-01270-NY
12.70 (0.500") +/-0.051	PVC	Grade II	114 Rockwell R	USA	BL-01270-PVC
12.70 (0.500") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-01270-AC
12.70 (0.500") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-01270-ACR
12.70 (0.500") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-01270-PTF
12.70 (0.500") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-01270-PP
12.70 (0.500") +/-0.051	Torlon (Polyamide-imide)	Grade II	Rockwell E86 or M109-119	USA	BL-01270-TO
14.29 (0.563") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-01429-NY
14.29 (0.563") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-01429-AC
14.29 (0.563") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-01429-ACR
14.29 (0.563") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-01429-PTF
15.88 (0.625") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-01588-NY
15.88 (0.625") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-01588-AC
15.88 (0.625") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-01588-ACR
15.88 (0.625") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-01588-PTF
15.88 (0.625") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-01588-PP
17.46 (0.687") +/-0.051	PVC	Grade II	114 Rockwell R	USA	BL-01746-PVC
17.46 (0.687") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-01746-PP
17.46 (0.687") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-01746-NY



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

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\*\* Available only while stock lasts

# Plastic Balls

Diameter (D) mm	Material	Precision Grade	Hardness		Part Number
17.46 (0.687") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-01746-ACR
19.05 (0.750") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-01905-NY
19.05 (0.750") +/-0.051	PVC	Grade II	114 Rockwell R	USA	BL-01905-PVC
19.05 (0.750") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-01905-AC
19.05 (0.750") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-01905-ACR
19.05 (0.750") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-01905-PTF
19.05 (0.750") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-01905-PP
20.64 (0.813") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-02064-NY
22.23 (0.875") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-02223-NY
22.23 (0.875") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-02223-AC
22.23 (0.875") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-02223-ACR
22.23 (0.875") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-02223-PTF
22.23 (0.875") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-02223-PP
25.40 (1.000") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-02540-NY
25.40 (1.000") +/-0.051	PVC	Grade II	114 Rockwell R	USA	BL-02540-PVC
25.40 (1.000") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-02540-AC
25.40 (1.000") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-02540-ACR
25.40 (1.000") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-02540-PTF
25.40 (1.000") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-02540-PP
28.58 (1.125") +/-0.000762	PVC	Grade 3	114 Rockwell R	USA	BL-02858-PVC
28.58 (1.125") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-02858-AC
28.58 (1.125") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-02858-ACR
28.58 (1.125") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-02858-PP
30.00 (1.181") +/-0.000762	PVC	Grade 3	114 Rockwell R	USA	BL-03000-PVC
30.16 (1.188") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-03016-AC
30.16 (1.188") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-03016-PTF
31.75 (1.250") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R		* BL-03175-NY
31.75 (1.250") +/-0.000762	PVC	Grade 3	114 Rockwell R	USA	BL-03175-PVC
31.75 (1.250") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-03175-AC
31.75 (1.250") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-03175-ACR
31.75 (1.250") +/-0.127	PTFE	Commercial	68 Rockwell R	USA	BL-03175-PTF
31.75 (1.250") +/-0.127	Polypropylene	Commercial	86 Rockwell R	USA	BL-03175-PP
34.93 (1.375") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-03493-AC



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

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## Plastic Balls

Diameter (D) mm	Material	Precision Grade	Hardness		Part Number
34.93 (1.375") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-03493-ACR
34.93 (1.375") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-03494-NY
34.93 (1.375") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-03493-PP
38.10 (1.500") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-03810-NY
38.10 (1.500") +/-0.000762	PVC	Grade 3	114 Rockwell R	USA	BL-03810-PVC
38.10 (1.500") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-03810-AC
38.10 (1.500") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-03810-ACR
38.10 (1.500") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-03810-PTF
38.10 (1.500") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-03810-PP
44.45 (1.750") +/-0.051	Nylon (Polyamide 6/6)	Grade II	108 Rockwell R	USA	BL-04445-NY
44.45 (1.750") +/-0.000762	PVC	Grade 3	114 Rockwell R	USA	BL-04445-PVC
44.45 (1.750") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-04445-AC
44.45 (1.750") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-04445-ACR
44.45 (1.750") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-04445-PP
50.80 (2.000") +/-0.051	Acetal	Grade II	118 Rockwell R	USA	BL-05080-AC
50.80 (2.000") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-05080-ACR
50.80 (2.000") +/-0.051	PTFE	Grade II	68 Rockwell R	USA	BL-05080-PTF
50.80 (2.000") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-05080-PP
57.15 (2.250") +/-0.000762	PVC	Grade 3	114 Rockwell R	USA	BL-05715-PVC
57.15 (2.250") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-05715-ACR
57.15 (2.250") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-05715-PP
63.50 (2.500") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-06350-ACR
63.50 (2.500") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-06350-PP
69.85 (2.750") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-06985-ACR
69.85 (2.750") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-06985-PP
76.20 (3.000") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-07620-ACR
76.20 (3.000") +/-0.051	Polypropylene	Grade II	86 Rockwell R	USA	BL-07620-PP
101.60 (4.000") +/-0.051	Acrylic	Grade II	132 Rockwell R	USA	BL-10160-ACR
101.60 (4.000") +/-0.000762	Polypropylene	Grade 3	86 Rockwell R	USA	BL-10160-PP

## Plastic Balls - Bored

Diameter (D) mm	Inside Diameter (d1) mm	Width (B) mm	Shoulder Diameter (dn) mm		Part Number
5.20 (0.205")	2.000	4.00	3.90	Plastic	BLB-00520-00200-W3
7.90 (0.311")	3.000	6.00	5.40	Plastic	BLB-00790-00300-W3



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

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## Plastic Balls - Bored

Diameter (D) mm	Inside Diameter (d1) mm	Width (B) mm	Shoulder Diameter (dn) mm		Part Number
8.25 (0.325")	4.000	5.00	6.25	Plastic	BLB-00825-00400-W3
10.20 (0.402")	5.000	6.00	8.00	Plastic	BLB-01020-00500-W3
10.20 (0.402")	6.000	6.00	8.00	Plastic	BLB-01020-00600-W3
11.10 (0.437")	5.000	8.00	7.70	Plastic	BLB-01110-00500-W3
11.28 (0.444")	4.830	7.92	7.62	Plastic	BLB-01128-00483-W3
12.70 (0.500")	6.000	9.00	8.90	Plastic	BLB-01270-00600-W3
13.11 (0.516")	6.350	9.53	8.99	Plastic	BLB-01311-00635-W3
13.20 (0.520")	8.000	8.00	10.00	Plastic	BLB-01320-00800-W3
15.80 (0.622")	8.000	12.00	10.30	Plastic	BLB-01580-00800-W3
15.88 (0.625")	7.940	11.10	11.35	Plastic	BLB-01588-00794-W3
16.00 (0.630")	10.000	9.00	13.00	Plastic	BLB-01600-01000-W3
18.00 (0.709")	12.000	10.00	15.00	Plastic	BLB-01800-01200-W3
18.24 (0.718")	9.530	12.70	12.80	Plastic	BLB-01824-00953-W3
19.00 (0.748")	10.000	14.00	12.90	Plastic	BLB-01900-01000-W3
21.03 (0.828")	11.110	14.27	15.27	Plastic	BLB-02103-01111-W3
22.00 (0.866")	15.000	12.00	18.00	Plastic	BLB-02200-01500-W3
22.22 (0.875")	12.000	16.00	15.40	Plastic	BLB-02222-01200-W3
23.83 (0.938")	12.700	15.88	17.78	Plastic	BLB-02383-01270-W3
25.10 (0.988")	17.000	14.00	20.00	Plastic	BLB-02510-01700-W3
25.25 (0.994")	14.000	19.00	16.80	Plastic	BLB-02525-01400-W3
28.30 (1.114")	16.000	21.00	19.30	Plastic	BLB-02830-01600-W3
28.58 (1.125")	15.880	19.05	21.28	Plastic	BLB-02858-01588-W3
28.90 (1.138")	20.000	16.00	24.00	Plastic	BLB-02890-02000-W3
31.35 (1.234")	18.000	23.00	21.80	Plastic	BLB-03135-01800-W3
33.32 (1.312")	19.050	22.23	24.84	Plastic	BLB-03332-01905-W3
34.90 (1.374")	20.000	25.00	24.30	Plastic	BLB-03490-02000-W3
35.50 (1.398")	25.000	20.00	29.00	Plastic	BLB-03550-02500-W3
38.10 (1.500")	22.000	28.00	25.80	Plastic	BLB-03810-02200-W3
40.90 (1.610")	30.000	22.00	34.00	Plastic	BLB-04090-03000-W3
42.80 (1.685")	25.000	31.00	29.50	Plastic	BLB-04280-02500-W3
44.45 (1.750")	25.400	34.93	32.23	Plastic	BLB-04445-02540-W3
51.00 (2.008")	30.000	37.00	34.80	Plastic	BLB-05100-03000-W3

## Rubber Balls

Diameter (D) mm	Material	Grade	Hardness		Part Number
4.76 (0.187") +/-0.051	Santoprene Rubber	Grade II	Shore 40D	USA	BL-00476-R40D
4.76 (0.187") +/-0.051	Santoprene Rubber	Grade II	Shore 87A	USA	BL-00476-R87A
12.70 (0.500") +/-0.051	Santoprene Rubber	Grade II	Shore 40D	USA	BL-01270-R40D
15.88 (0.625") +/-0.051	Santoprene Rubber	Grade II	Shore 87A	USA	BL-01588-R87A
19.05 (0.750") +/-0.051	Santoprene Rubber	Grade II	Shore 40D	USA	BL-01905-R40D
19.05 (0.750") +/-0.051	Santoprene Rubber	Grade II	Shore 87A	USA	BL-01905-R87A
25.40 (1.000") +/-0.051	Santoprene Rubber	Grade II	Shore 87A	USA	BL-02540-R87A
31.75 (1.250") +/-0.127	Santoprene Rubber	Grade III	Shore 40D	USA	BL-03175-R40D
31.75 (1.250") +/-0.127	Santoprene Rubber	Grade III	Shore 87A	USA	BL-03175-R87A
38.10 (1.500") +/-0.127	Santoprene Rubber	Grade III	Shore 40D	USA	BL-03810-R40D
38.10 (1.500") +/-0.127	Santoprene Rubber	Grade III	Shore 87A	USA	BL-03810-R87A
44.45 (1.750") +/-0.127	Santoprene Rubber	Grade III	Shore 40D	USA	BL-04445-R40D



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

\* Large Minimum Quantities

\*\* Available only while stock lasts

## Rubber Balls

Diameter (D) mm	Material	Grade	Hardness		Part Number
44.45 (1.750") +/-0.127	Santoprene Rubber	Grade III	Shore 87A	USA	BL-04445-R87A
50.80 (2.000") +/-0.127	Santoprene Rubber	Grade III	Shore 87A	USA	BL-05080-R87A
57.15 (2.250") +/-0.127	Santoprene Rubber	Grade III	Shore 40D	USA	BL-05715-R40D
63.50 (2.500") +/-0.127	Santoprene Rubber	Grade III	Shore 87A	USA	BL-06350-R87A
69.85 (2.750") +/-0.127	Santoprene Rubber	Grade III	Shore 87A	USA	BL-06985-R87A
82.55 (3.250") +/-0.127	Santoprene Rubber	Grade III	Shore 87A	USA	BL-08255-R87A
95.25 (3.750") +/-0.127	Santoprene Rubber	Grade III	Shore 87A	USA	BL-09525-R87A

## Threaded Metallic Balls

Diameter (D) mm	Thread Size	Precision Grade	Hardness		Part Number
3.000 (0.118") +/-0.010	M1.2x0.25 Thread x 1.5mm Deep	Grade 100	35 Rockwell C	Titanium Ti-Gr23 Ti-6Al4V-ELI	BLT-00300-T23-12
3.000 (0.118") +/-0.010	M1.6x0.35 Thread x 1.5mm Deep	Grade 100	35 Rockwell C	Titanium Ti-Gr23 Ti-6Al4V-ELI	BLT-00300-T23-16
4.000 (0.157") +/-0.010	M1.2x0.25 Thread x 2mm Deep	Grade 100	35 Rockwell C	Titanium Ti-Gr23 Ti-6Al4V-ELI	BLT-00400-T23-12
4.000 (0.157") +/-0.010	M1.6x0.35 Thread x 2mm Deep	Grade 100	35 Rockwell C	Titanium Ti-Gr23 Ti-6Al4V-ELI	BLT-00400-T23-16
5.000 (0.197") +/-0.010	M1.6x0.35 Thread x 2.5mm Deep	Grade 100	35 Rockwell C	Titanium Ti-Gr23 Ti-6Al4V-ELI	BLT-00500-T23-16
5.000 (0.197") +/-0.010	M1.2x0.25 Thread x 2.5mm Deep	Grade 100	35 Rockwell C	Titanium Ti-Gr23 Ti-6Al4V-ELI	BLT-00500-T23-12
6.000 (0.236") +/-0.010	M1.2x0.25 Thread x 3mm Deep	Grade 100	35 Rockwell C	Titanium Ti-Gr23 Ti-6Al4V-ELI	BLT-00600-T23-12
6.000 (0.236") +/-0.010	M1.6x0.35 Thread x 3mm Deep	Grade 100	35 Rockwell C	Titanium Ti-Gr23 Ti-6Al4V-ELI	BLT-00600-T23-16
8.000 (0.315") +/-0.010	M1.6x0.35 Thread x 4mm Deep	Grade 100	35 Rockwell C	Titanium Ti-Gr23 Ti-6Al4V-ELI	BLT-00800-T23-16
8.000 (0.315") +/-0.010	M1.2x0.25 Thread x 4mm Deep	Grade 100	35 Rockwell C	Titanium Ti-Gr23 Ti-6Al4V-ELI	BLT-00800-T23-12

## Tooling Balls

Diameter (A) mm	Shank Diameter (B) mm	Base to Centre (C) mm	Shoulder to Centre (D) mm		Part Number
6.000 (0.236") +/- 0.0051	3.000 +0.0000 / -0.0076	10.000 +/- 0.0051	6.000	Stainless Steel	BLTO-00600-S440-1SP
6.000 (0.236") +/- 0.0051	3.000 +0.0000 / -0.0102	10.000 +/- 0.0051	6.000	Carbon Steel	BLTO-00600-CS-1S
6.350 (0.250") +/- 0.0051	3.175 +0.0000 / -0.0102	14.224	5.080	Carbon Steel	BLTO-00635-CS-S2
6.350 (0.250") +/- 0.0051	3.175 +0.0000 / -0.0076	14.224	5.080	Carbon Steel	BLTO-00635-CS-S2P
6.350 (0.250") +/-0.0051	3.175 +0.0000 / -0.0102	14.300		Stainless Steel	BLTO-00635-S440-1
6.350 (0.250") +/-0.0051	3.175 +0.0000 / -0.0076	14.300		Carbon Steel	BLTO-00635-CS-1P
6.350 (0.250") +/-0.0051	3.175 +0.0000 / -0.0076	14.300		Stainless Steel	BLTO-00635-S440-1P
6.350 (0.250") +/-0.0051	3.175 +0.0000 / -0.0102	14.300		Carbon Steel	BLTO-00635-CS-1

Stocked or Short Delivery

Usually Available Short Delivery

Long delivery or not in current production

\* Large Minimum Quantities


\*\* Available only while stock lasts

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# Tooling Balls

Diameter (A) mm	Shank Diameter (B) mm	Base to Centre (C) mm	Shoulder to Centre (D) mm		Part Number
6.350 (0.250") +/- 0.0051	3.175 +0.0000 / - 0.0076	14.300		Carbon Steel	BLTO-00635-CS-2P
6.350 (0.250") +/- 0.0051	3.175 +0.0000 / -0.0102	14.300		Carbon Steel	BLTO-00635-CS-2
6.350 (0.250") +/- 0.0051	3.175 +0.0000 / -0.0102	14.300	5.080	Carbon Steel	BLTO-00635-CS-1S
6.350 (0.250") +/- 0.0051	3.175 +0.0000 / -0.0076	14.300	5.080	Carbon Steel	BLTO-00635-CS-1SP
6.350 (0.250") +/- 0.0051	3.175 +0.0000 / -0.0076	14.300	5.080	Stainless Steel	BLTO-00635-S440-1SP
6.350 (0.250") +/- 0.0051	3.175 +0.0000 / -0.0102	14.300	5.080	Stainless Steel	BLTO-00635-S440-1S
9.525 (0.375") +/-0.0051	4.763 +0.0000 / -0.0076	19.050		Carbon Steel	BLTO-00953-CS-1P
9.525 (0.375") +/-0.0051	4.763 +0.0000 / -0.0102	19.050		Stainless Steel	BLTO-00953-S440-1
9.525 (0.375") +/-0.0051	4.763 +0.0000 / -0.0102	19.050		Carbon Steel	BLTO-00953-CS-1
9.525 (0.375") +/- 0.0051	4.763 +0.0000 / - 0.0076	19.050		Carbon Steel	BLTO-00953-CS-2P
9.525 (0.375") +/- 0.0051	4.763 +0.0000 / -0.0102	19.050		Carbon Steel	BLTO-00953-CS-2
9.525 (0.375") +/-0.0051	4.763 +0.0000 / -0.0076	19.050		Stainless Steel	BLTO-00953-S440-1P
9.525 (0.375") +/- 0.0051	4.763 +0.0000 / -0.0102	19.050	7.620	Carbon Steel	BLTO-00953-CS-S2
9.525 (0.375") +/- 0.0051	4.763 +0.0000 / - 0.0076	19.050	7.620	Carbon Steel	BLTO-00953-CS-S2P
9.525 (0.375") +/- 0.0051	4.763 +0.0000 / -0.0102	19.050	7.620	Carbon Steel	BLTO-00953-CS-1S
9.525 (0.375") +/- 0.0051	4.763 +0.0000 / -0.0076	19.050	7.620	Carbon Steel	BLTO-00953-CS-1SP
9.525 (0.375") +/- 0.0051	4.763 +0.0000 / -0.0076	19.050	7.620	Stainless Steel	BLTO-00953-S440-1SP
9.525 (0.375") +/- 0.0051	4.763 +0.0000 / -0.0102	19.050	7.620	Stainless Steel	BLTO-00953-S440-1S
12.000 (0.472") +/- 0.0051	6.000 +/- 0.0051	22.000	12.000	Carbon Steel	BLTO-01200-CS-C1
12.000 (0.472") +/- 0.0051	6.000 +/- 0.0051	22.000	12.000	Carbon Steel	BLTO-01200-CS-C1-T
12.700 (0.500") +/- 0.0051	6.350 +/- 0.0051	7.925	7.938	Carbon Steel	BLTO-01270-CS-C1
12.700 (0.500") +/- 0.0051	6.350 +/- 0.0051	7.925	7.938	Carbon Steel	BLTO-01270-CS-C1-T
12.700 (0.500") +/- 0.0051	6.350 +/- 0.0051	7.925	7.938	Stainless Steel	BLTO-01270-S440-C1-T
12.700 (0.500") +/- 0.0051	6.350 +/- 0.0051	7.925	7.938	Stainless Steel	BLTO-01270-S440-C1
12.700 (0.500") +/- 0.0051	6.350 +/- 0.0051	15.875	7.938	Carbon Steel	BLTO-01270-CS-C2-A
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0102	15.875	7.938	Carbon Steel	BLTO-01270-CS-S2-A
12.700 (0.500") +/- 0.0051	6.350 +/- 0.0051	22.225	12.700	Carbon Steel	BLTO-01270-CS-C2-B
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / - 0.0076	23.876		Carbon Steel	* BLTO-01270-CS-2P-A
12.700 (0.500") +/-0.0051	6.350 +0.0000 / -0.0076	23.876		Carbon Steel	BLTO-01270-CS-1P-A
12.700 (0.500") +/-0.0051	6.350 +0.0000 / -0.0102	23.876		Carbon Steel	BLTO-01270-CS-1-A
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0102	23.876		Carbon Steel	BLTO-01270-CS-2-A
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0076	23.876	10.160	Carbon Steel	BLTO-01270-CS-1SP-A

 Stocked or Short Delivery

 Usually Available Short Delivery

 Long delivery or not in current production

\* Large Minimum Quantities

\*\* Available only while stock lasts

# Tooling Balls

Diameter (A) mm	Shank Diameter (B) mm	Base to Centre (C) mm	Shoulder to Centre (D) mm		Part Number
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0102	23.876 +/- 0.0051	10.160	Stainless Steel	BLTO-01270-S440-1S-A
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0076	23.876 +/- 0.0051	10.160	Stainless Steel	BLTO-01270-S440-1SP-A
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0102	23.876 +/- 0.0051	10.160	Carbon Steel	BLTO-01270-CS-1S-A
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0076	23.876	10.160	Carbon Steel	BLTO-01270-CS-S2P-A
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0102	23.876	10.160	Carbon Steel	BLTO-01270-CS-S2-B
12.700 (0.500") +/- 0.0051	6.350 +/- 0.0051	23.876	12.700	Carbon Steel	BLTO-01270-CS-C2-C
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0076	28.575	12.700	Carbon Steel	BLTO-01270-CS-S2P-B
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0102	28.575	12.700	Carbon Steel	BLTO-01270-CS-S2-C
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0102	34.925	12.700	Carbon Steel	BLTO-01270-CS-S2-D
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0102	34.925 +/- 0.0051	12.700	Stainless Steel	BLTO-01270-S440-1S-B
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0076	34.925 +/- 0.0051	12.700	Stainless Steel	BLTO-01270-S440-1SP-B
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0076	34.925	12.700	Carbon Steel	BLTO-01270-CS-S2P-C
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0102	34.925 +/- 0.0051	12.700	Carbon Steel	BLTO-01270-CS-1S-B
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0076	34.925 +/- 0.0051	12.700	Carbon Steel	BLTO-01270-CS-1SP-B
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0076	38.100		Carbon Steel	BLTO-01270-CS-2P-B
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0076	38.100		Carbon Steel	BLTO-01270-CS-1P-B
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0102	38.100		Carbon Steel	BLTO-01270-CS-2-B
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0102	38.100		Carbon Steel	BLTO-01270-CS-1-B
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0102	38.100	12.700	Carbon Steel	BLTO-01270-CS-S2-E
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0102	41.275	25.400	Carbon Steel	BLTO-01270-CS-S2-F
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0076	41.275	25.400	Carbon Steel	BLTO-01270-CS-S2P-D
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0102	47.625	31.750	Carbon Steel	BLTO-01270-CS-S2-G
12.700 (0.500") +/- 0.0051	6.350 +0.0000 / -0.0102	73.025		Carbon Steel	BLTO-01270-CS-2-C
12.700 (0.500") +/- 0.0051	7.938 +/- 0.0051	23.876	12.700	Carbon Steel	BLTO-01270-CS-C2-D
12.700 (0.500") +/- 0.0051	7.938 +0.0000 / -0.0102	38.100		Carbon Steel	BLTO-01270-CS-2-D
12.700 (0.500") +/- 0.0051	7.938 +0.0000 / -0.0102	38.100	12.700	Carbon Steel	BLTO-01270-CS-S2-H
12.700 (0.500") +/- 0.0051	9.525 +0.0000 / -0.0076	38.100		Carbon Steel	BLTO-01270-CS-1P-C
12.700 (0.500") +/- 0.0051	9.525 +0.0000 / -0.0102	38.100		Carbon Steel	BLTO-01270-CS-1-C
12.700 (0.500") +/- 0.0051	9.525 +0.0000 / -0.0102	38.100	12.700	Carbon Steel	BLTO-01270-CS-S2-J
15.875 (0.625") +/- 0.0051	7.938 +0.0000 / -0.0076	26.670	11.430	Carbon Steel	BLTO-01588-CS-S2P
15.875 (0.625") +/- 0.0051	7.938 +0.0000 / -0.0102	26.670	11.430	Carbon Steel	BLTO-01588-CS-S2
15.875 (0.625") +/- 0.0051	7.938 +0.0000 / -0.0102	27.000		Carbon Steel	BLTO-01588-CS-2



Stocked or Short Delivery



Usually Available Short Delivery



Long delivery or not in current production

\* Large Minimum Quantities

\*\* Available only while stock lasts

## Tooling Balls

Diameter (A) mm	Shank Diameter (B) mm	Base to Centre (C) mm	Shoulder to Centre (D) mm		Part Number
15.875 (0.625") +/- 0.0051	7.938 +0.0000 / - 0.0076	27.000		Carbon Steel	BLTO-01588-CS-2P
19.050 (0.750") +/- 0.0051	9.525 +0.0000 / - 0.0076	31.750		Carbon Steel	BLTO-01905-CS-2P
19.050 (0.750") +/- 0.0051	9.525 +0.0000 / -0.0102	31.750		Carbon Steel	BLTO-01905-CS-2
19.050 (0.750") +/- 0.0051	9.525 +0.0000 / -0.0076	31.750 +/- 0.0051	12.700	Stainless Steel	BLTO-01905-S440-1SP
19.050 (0.750") +/- 0.0051	9.525 +0.0000 / -0.0102	31.750 +/- 0.0051	12.700	Carbon Steel	BLTO-01905-CS-1S
19.050 (0.750") +/- 0.0051	9.525 +0.0000 / -0.0102	31.750	12.700	Carbon Steel	BLTO-01905-CS-S2
19.050 (0.750") +/- 0.0051	9.525 +0.0000 / - 0.0076	31.750	12.700	Carbon Steel	BLTO-01905-CS-S2P
22.225 (0.875") +/- 0.0051	11.113 +0.0000 / - 0.0076	36.576		Carbon Steel	BLTO-02223-CS-2P
25.400 (1.000") +/- 0.0051	12.700 +0.0000 / - 0.0076	41.275		Carbon Steel	BLTO-02540-CS-2P
25.400 (1.000") +/- 0.0051	12.700 +0.0000 / -0.0102	41.275		Carbon Steel	BLTO-02540-CS-2
25.400 (1.000") +/- 0.0051	12.700 +0.0000 / - 0.0076	41.275	17.780	Carbon Steel	BLTO-02540-CS-S2P
25.400 (1.000") +/- 0.0051	12.700 +0.0000 / -0.0102	41.275	17.780	Carbon Steel	BLTO-02540-CS-S2

Stocked or Short Delivery

Usually Available Short Delivery

Long delivery or not in current production

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\*\* Available only while stock lasts

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## TIPS

Chrome steel and 440C stainless are bearing grade balls. 304 and 316 grade stainless are softer and used for corrosion resistance and low load.

440C grade stainless is highly magnetic. 304 and 316 grade stainless are slightly magnetic.

Threaded Titanium balls are suitable for body piercings.

Silicon Nitride ( $\text{Si}_3\text{N}_4$ ) is a grey ceramic. Zirconia ( $\text{ZrO}_2$ ) is off white. Ruby is a reddish colour and sapphire has a glassy appearance, but not perfectly clear.

Precision grades indicate the tolerance of the diameter and the roundness. The lower the number the more precise.

<http://www.minibearings.com.au/technical/balls/grades/>

Polypropylene balls float in water and can be used for float levels.

Rubber balls are not toys. They are used for chemical applications. Refer to the website for full details.

<http://www.minibearings.com.au/store/categories/santoprene/>



## Distributed By

Miniature Bearings Australia  
<http://www.minibearings.com.au>  
[sales@minibearings.com.au](mailto:sales@minibearings.com.au)

Resellers: Please place your contact sticker over our details

## Avoid verbal communication

We sell an extensive range of products with varying amounts of technical data. Please assist us to provide you with accurate information by placing your orders and enquiries online or by e-mail.

# Balls Range