



Product Information

ASTM B392 and ASTM B393: Dimensional Tolerances for Niobium and Nb Alloy Products



ASTM B392: Dimensional Tolerances for Nb and Nb Alloys Rolled, Swagged or Drawn Rod and Wire

Diameter in. (mm)	Tolerance, plus and minus in. (mm)
0.010 to 0.020 excl (0.25 to 0.51)	0.0003 (0.0076)
0.020 to 0.030 excl (0.51 to 0.76)	0.00075 (0.019)
0.030 to 0.060 excl (0.76 to 1.52)	0.001 (0.025)
0.060 to 0.090 excl (1.52 to 2.29)	0.0015 (0.038)
0.090 to 0.125 excl (2.29 to 3.18)	0.002 (0.051)
0.125 to 0.187 excl (3.18 to 4.75)	0.003 (0.076)
0.187 to 0.375 excl (4.75 to 9.53)	0.004 (0.102)
0.375 to 0.500 excl (9.53 to 12.7)	0.005 (0.127)
0.500 to 0.625 excl (12.7 to 15.9)	0.007 (0.178)
0.625 to 0.750 excl (15.9 to 19.1)	0.008 (0.203)
0.750 to 1.000 excl (19.1 to 25.4)	0.010 (0.254)
1.000 to 1.500 excl (25.4 to 38.1)	0.015 (0.381)
1.500 to 2.000 excl (38.1 to 50.8)	0.020 (0.508)
2.000 to 2.500 excl (50.8 to 63.5)	0.030 (0.762)

(continued on back)

ASTM B393: Dimensional Tolerances for Nb and Nb1Zr

ASTM B393: Dimensional Tolerances for Nb and Nb1Zr Flat Rolled Products

Material Thickness in. (mm)	Thickness ^A Tolerance plus/minus, in. (mm)		Width (slit) ^B Tolerance plus/minus, in. (mm)		Sheared Length Tolerance in. (mm)			
	Width <6 in. (152 mm)	Width 6 to 25 in. (152 to 610 mm)	Width <6 in. (152 mm)	Width 6 to 24 in. (152 to 610 mm)	Length <12 in. (305 mm)		Length >12 in. (305 mm)	
					Plus	Minus	Plus	Minus
Inches								
0.003 to 0.004	0.0004	0.001	0.012	-	1/32	0	3/32	0
0.005 to 0.010	0.0005	0.001	0.012	-	1/32	0	3/32	0
0.011 to 0.015	0.0007	0.001	0.015	0.015	1/32	0	3/32	0
0.016 to 0.020	0.0008	0.0015	0.015	0.015	1/32	0	3/32	0
0.021 to 0.030	0.0015	0.0025	0.020	0.025	1/32	0	3/32	0
0.031 to 0.060	0.0025	0.0035	0.025	0.030	3/64	0	3/32	0
0.061 to 0.090	0.004	0.005	0.025	0.035	3/64	0	3/32	0
0.091 to 0.125	0.006	0.007	-	-	3/64	0	3/32	0
0.126 to 0.187	0.010	0.010	-	-	3/64	0	3/32	0
0.188 to 0.250	0.015	0.015	-	-	3/32	0	1/8	0
0.251 to 0.312	0.020	0.020	-	-	1/8	0	5/32	0
0.313 to 0.375	0.025	0.025	-	-	3/16	0	7/32	0
Millimeters								
0.08 to 0.10	0.013	0.025	0.30	-	0.79	0	2.38	0
0.13 to 0.25	0.013	0.025	0.30	-	0.79	0	2.38	0
0.28 to 0.38	0.018	0.025	0.38	0.38	0.79	0	2.38	0
0.41 to 0.51	0.020	0.038	0.38	0.38	0.79	0	2.38	0
0.53 to 0.76	0.038	0.064	0.51	0.64	0.79	0	2.38	0
0.79 to 1.52	0.064	0.089	0.64	0.76	1.19	0	2.38	0
1.55 to 2.29	0.102	0.127	0.64	0.89	1.19	0	2.38	0
2.31 to 3.19	0.15	0.18	-B	-B	1.19	0	2.38	0
3.20 tp 4.75	0.25	0.25	-B	-B	1.19	0	2.38	0
4.78 to 6.35	0.38	0.38	-B	-B	2.38	0	3.18	0
6.38 to 7.92	0.51	0.51	-B	-B	3.18	0	3.97	0
7.95 to 9.53	0.64	0.64	-B	-B	4.76	0	5.56	0

^A Tolerance on sheet over 24 in. (610 mm) wide shall \pm 10% of the thickness

^B Tolerance on width of sheared sheet shall be \pm 1/16 in. (1.59 mm) and on sheared plate \pm 1/8 in. (1.59 mm) up to thickness of 0.375 in. (9.53 mm)

Cabot Supermetals

1223 County Line Road, P.O. Box 1608, Boyertown, PA 19512-1608 USA

Phone: 888-390-9430 • Fax: 678-297-1489

www.cabot-corp.com