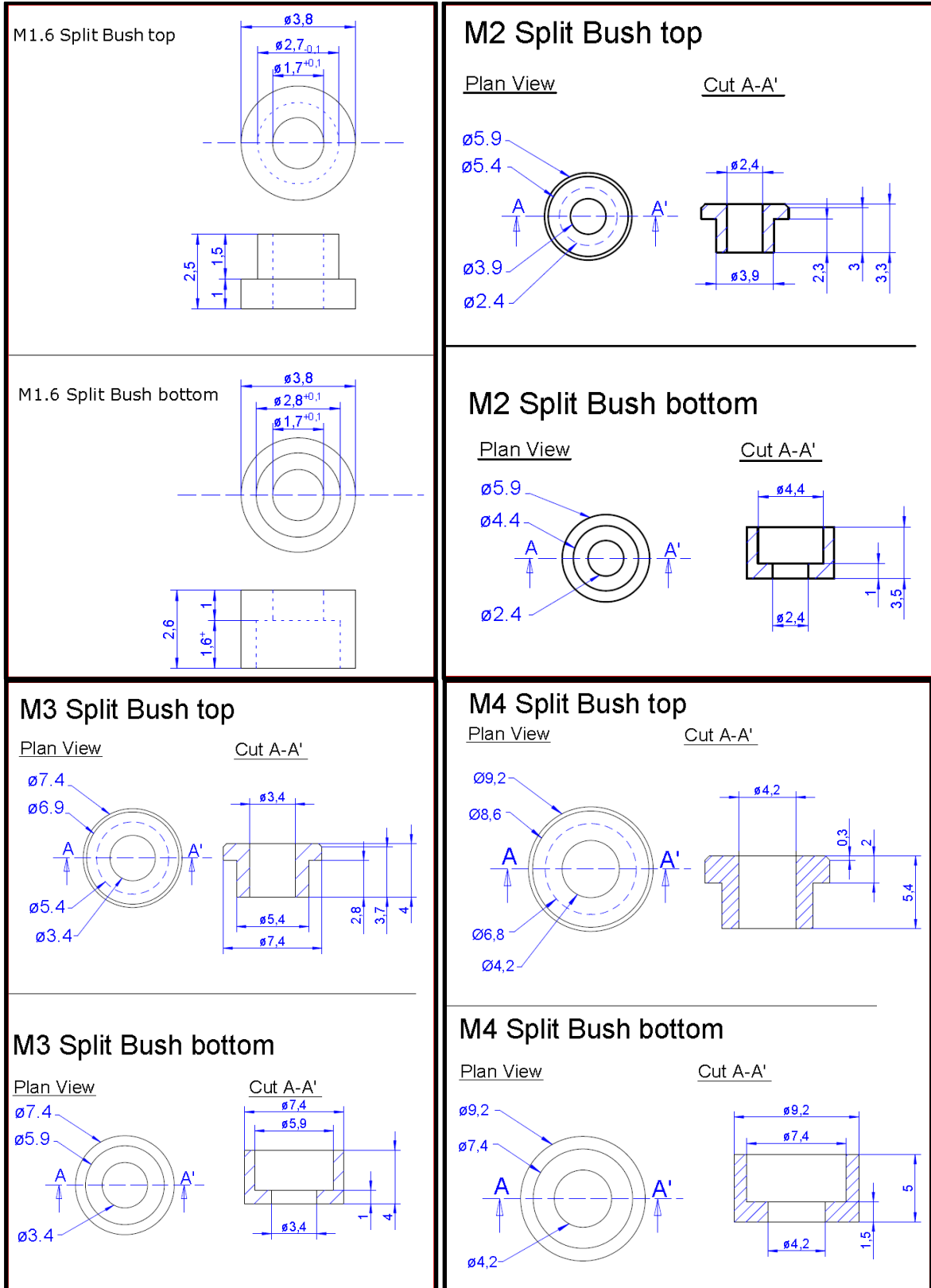


Alumina (Al₂O₃) Ceramics

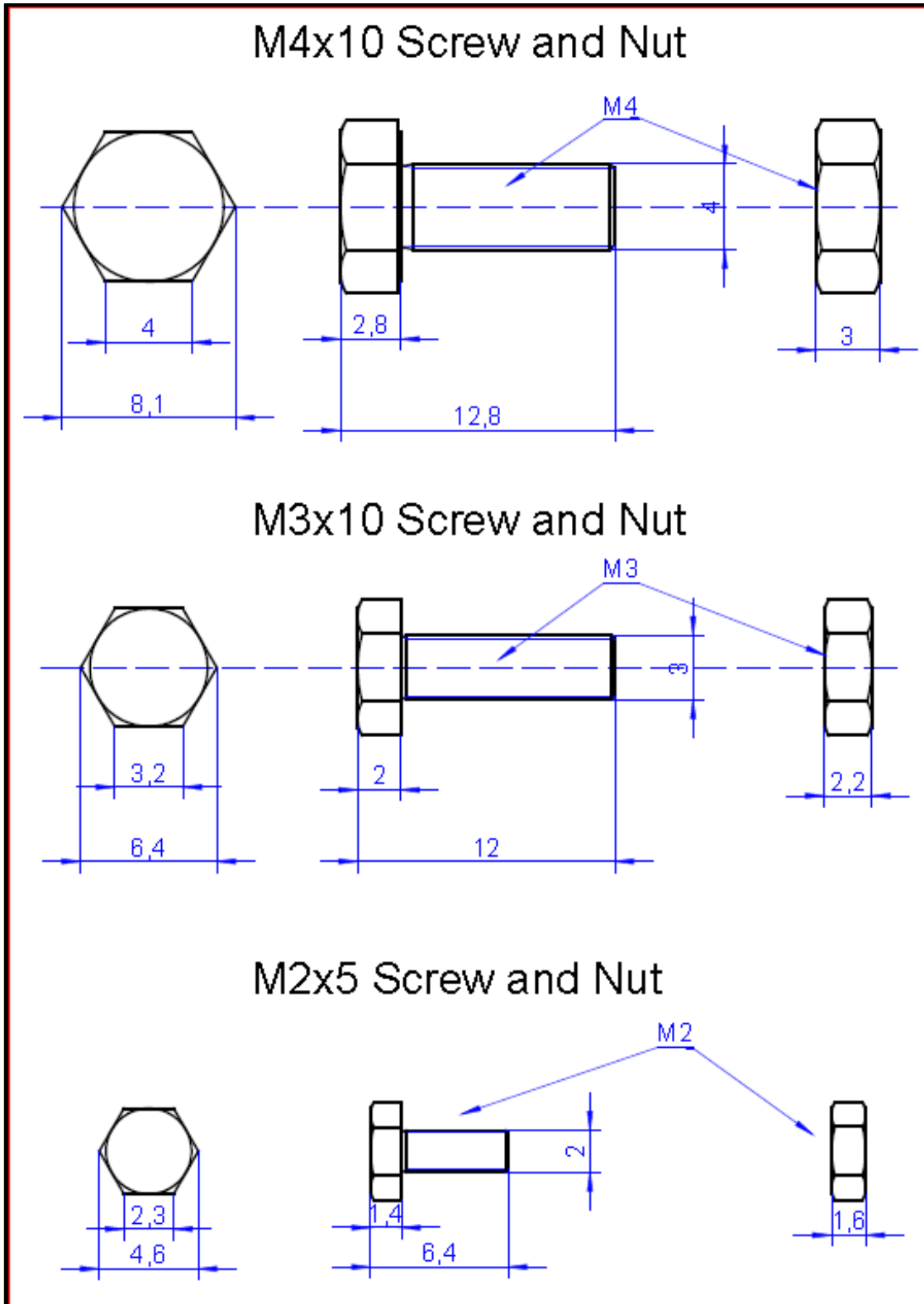
Alumina Split Bushes



All dimensions are mm

Package Size: 10 pair

Alumina Screws and Nuts

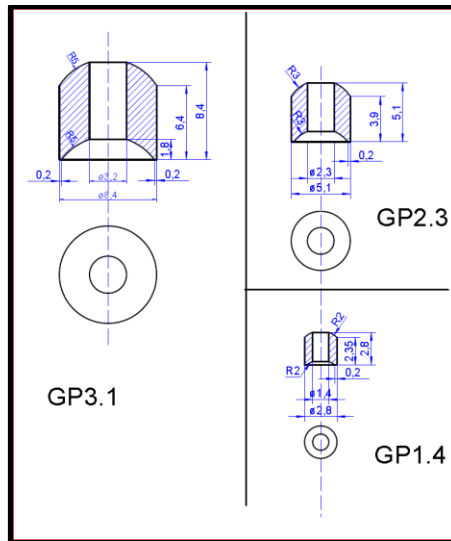


Note: we recommend to use the screws only together with the supplied nut. The usage with metallic threads might not fit as the ceramic parts are manufactured in molds and reach their final dimension after sintering. Hence they have other tolerances than metallic threads.

All dimensions are mm

Package Size: 4 screws / 4 nuts

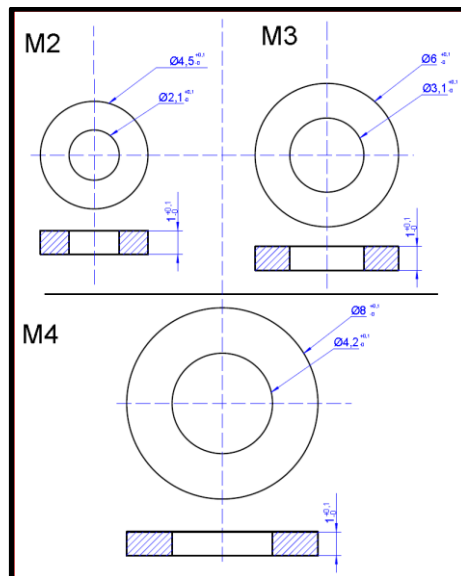
Alumina Beads



All dimensions in mm

Package Size: 30 cm length

Alumina Washers



All dimensions in mm

Package Size: 10 pcs

Alumina Tubes

Item	Type (Bore)	Outer Diameter (mm)	Inner Diameter (mm)	Length (mm)
		Typ. Tolerance +0/-0,1 mm	Typ. Tolerance +0,1/-0 mm	Typ. Tolerance +/- 1 mm
CT2-1	Single	2	1	400
CT2,5-1,5	Single	2,5	1,5	400
CT3-2	Single	3	2	400
CT4-2	Single	4	2	400
CT6-5	Single	6	5	400
CT7-3	Single	7	3	400
CT2-2x0,4	Double	2	0,4	400
CT2-2x0,6	Double	2	1,6	400
CT3-2x1	Double	3	1	400

Package Size: 4 pieces

Typical Properties

Properties*	Unit	Alumina						
		95,0%	96,0%	99,0%	99,3%	99,5%	99,7%	99,9%
Standard Product		Disk				Split Bushes/ Washer/ Screws	CT Tubes	
Color		White	White	White	White	Ivory	Ivory	Translucent
Density	g/cm ³	3,60	3,78	3,88	3,88	3,90	3,93	3,98
Water Absorption	%	0	0	0	0	0	0	0
Grain Size	µm	5 to 10	5 to 10	2 to 5	2 to 5	2 to 5	2 to 5	2 to 4
Flexural Strength	MPa	350	380	350	360	360	360	300
Hardness (Vickers)	GPa	12,2	13	14	14	14	14	15
Young's Modulus of Elasticity (RT)	GPa	320	360	370	370	370	370	390
Thermal Conductivity	W/mK	16	24	28	35	35	32	34
Coefficient of Thermal Expansion	10 ⁶ /K	7,1	6,7	7,2	7,6	7,6	7,2	7,2
Dielectric Constant (1 MHz)		9	9,1	9,5	9,7	9,7	9,6	9,9
Dielectric Loss Angle (1 MHz)		0,00015	0,0002	0,0001	0,0001	0,0001	0,0001	0,0001
Dielectric Strength	ac-kV/mm	8	10	10	10	10	10	10
Volume Resistivity (RT)	Ohm cm	>10 ¹⁴	>10 ¹⁴	>10 ¹⁴	>10 ¹⁴	>10 ¹⁴	>10 ¹⁴	>10 ¹⁴
Maximum Use Temperature	°C	1.500+	1.500+	1.500+	1.500+	1.500+	1.500+	1.500+

* The table is illustrating typical properties only. Values may vary with size, shape and method of manufacture. These data are typical values only. They do not constitute a warranty for which tectra GmbH assumes legal responsibility.