

PMMA - Acrylic



A thermoplastic with excellent chemical properties and corrosion resistance to all chemicals.
With excellent electrical and mechanical properties. The coefficient of friction is extremely low.
Its electrical insulation is not affected by temperature. Extended use at -80~260°C.
Known as the "King of Plastics".

Continuous Use Temperature 75°C/167°F
Flame Retardant Grade UL94 HB

Torsional fracture torque unit: Nm

Head Type	M2	M3	M4	M5	M6	M8	M10	M12
Hexagon Head	-	-	0.14	0.2	0.45	0.75	-	-
Socket Hex Head	-	-	0.1	0.2	0.4	0.83	-	-
Slotted Countersunk Head	-	-	0.07	0.09	0.15	0.65	-	-
Cross Countersunk Head	-	-	0.08	0.1	0.18	0.38	-	-

Tensile Fracture Load : N

Head Type	M2	M3	M4	M5	M6	M8	M10	M12
Hexagon Head			121	208	306	430		

➡ **The flash (end stump) of the bolt length (L) is less than or equal to 5%**
If bolts are used with nuts, we recommend using bolts and nuts of the same material.

➡ **Table contains reference values. These are not guaranteed**
Please use a torque wrench for tightening. The recommended tightening torque is 50% of the breaking torque.



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Poly(methyl methacrylate) (PMMA) Properties

Property	Nominal Value	Unit	Test Method
Tensile Modulus	3200	MPa	ISO 527-1/-2
Stress at Break	67	MPa	ISO 527-1/-2
Strain at Break	3	%	ISO 527-1/-2
Tensile Creep Modulus (1h)	2600	MPa	ISO 899-1
Tensile Creep Modulus (1000h)	2200	MPa	ISO 899-1
Charpy Impact Strength (+23°C)	20	kJ/m ²	ISO 179/1eU
Glass Transition Temperature	99	°C	ISO 11357-1/-2
Temp. of Deflection Under Load (1.80 MPa)	90	°C	ISO 75-1/-2
Temp. of Deflection Under Load (0.45 MPa)	95	°C	ISO 75-1/-2
Vicat Softening Temperature	96	°C	ISO 306
Water Absorption	1.8	%	Sim. to ISO 62
Density	1190	kg/m ³	ISO 1183



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