

PRODUCT MATERIAL INFORMATION

MATERIAL DATA SHEET: PCTG

Human Performance Tools for Transmission & Distribution Control House Devices

MATERIAL

All MMC Safety Solutions printed products, including Control Switch Handle Covers, FT-1 Switch Guards, HGA covers and FT-1 Block covers, are made from temperature- and impact-resistant PCTG (polycyclohexylenedimethylene terephthalate, glycol-modified).

We print with PCTG filament manufactured in the USA by Push Plastic in Springdale, Arkansas. Every product is made in the USA.

TYPICAL PROPERTIES

PROPERTY	TEST METHOD	VALUE (SI)	US EQUIVALENT
THERMAL			
Heat Deflection Temperature	ASTM D648	108 °C	(226 °F)
MECHANICAL			
Izod Impact	ASTM D256	66.8 J/m	(1.25 ft-lb/in)
Tensile Stress @ Yield	ASTM D638	35.9 MPa	(5,207 psi)
Tensile Stress @ Break	ASTM D638	32.3 MPa	(4,685 psi)
Tensile Strain @ Yield	ASTM D638	3.63 %	n/a
Tensile Strain @ Break	ASTM D638	4.8 %	n/a
Flexural Strength	ASTM D790	64.8 MPa	(9,398 psi)
Flexural Modulus	ASTM D790	1,722 MPa	(249,755 psi)
PHYSICAL			
Density	ASTM D792	1.21 g/cc	(0.0437 lb/in³)

Values are typical properties published by the filament manufacturer (Push Plastic PCTG Technical Data Sheet v1.0) for 3D-printed test specimens (100% infill, 0.2 mm layers). They are not guaranteed minimums or specifications for finished parts.

PENDING: Independent dielectric and impact testing of finished parts is in progress.