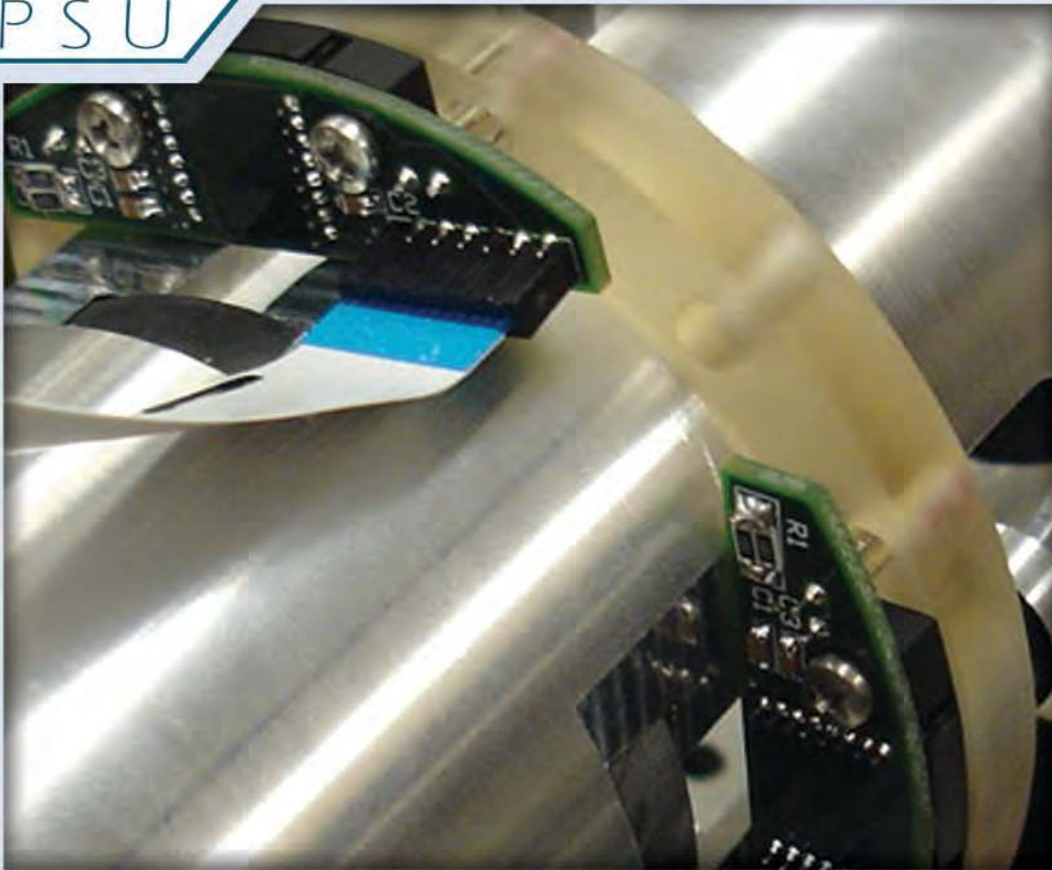




MECHETEC[®]
PSU



High Impact Resistance



Easily Machined and Fabricated

Polysulfone (PSU)

APPLICATIONS

Manifolds
Electrical Insulators
Electrical Connectors
Aircraft Instrumentation
Sensors & Analytical Instruments

KEY FEATURES

320 °F Continuous Use Temperature
Resistant to many Acids & Solvents
Gamma Radiation Resistance
Superior Electrical Properties
Low Moisture Absorption

SHAPES AND SIZES

ROD DIAMETER
PSU 0.375" - 8.0"

SHEET THICKNESS
PSU 0.25" - 4.0"



MECHETEC®

PSU

	Test Method	Units	PSU
Mechanical			
Specific Gravity	ASTM-D792	---	1.24
Tensile Strength	ASTM-D638	psi	10,200
Tensile Elongation	ASTM-D638	%	30
Tensile Modulus of Elasticity	ASTM-D638	psi	360,000
Flexural Strength	ASTM-D790	psi	15,400
Flexural Modulus of Elasticity	ASTM-D790	psi	390,000
Izod Notched Impact	ASTM-D256	ft.-lb./in.	1.3
Rockwell Hardness	ASTM-D785	M scale	M82
Thermal			
Coef. of Linear Thermal Expansion	ASTM-D696	in./in./deg F	3.2 x 10 ⁻⁵
Max. Continuous Use Temp.	Internal Std.	°F	320
Heat Deflection Temp. @ 264 psi	ASTM-D648	°F	345
Glass Transition Point	ASTM-D3418	°F	374
Melting Point	ASTM-D789	°F	650-750
Electrical			
Dielectric Strength-Short Term	ASTM-D149	volts/mil	425
Dielectric Constant @ 60 Hz	ASTM-D150	---	3.07
Dielectric Constant @ 10 ⁶ Hz	ASTM-D150	---	3.03
Dissipation Factor @ 60 Hz	ASTM-D150	---	0.0008
Volume Resistivity	ASTM-D257	ohm-cm	>10 ¹⁶
Miscellaneous			
Water Absorption/24 hrs.	ASTM-D570	% weight	0.25
Water Absorption @ Saturation	ASTM-D570	% weight	1.25
Flammability	UL-94	---	V-0 (0.125")
Agency Compliance			
FDA	---	---	Yes
USDA	---	---	Yes
3-A Dairy Standards	---	---	Yes
NSF Std. 61	---	---	Yes
USP Class VI	---	---	Available

MECHETEC® is a registered trademark of Polymer Industries

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