POWER AND COMPOSITE TECHNOLOGIES LLC
Proven Composite Performance

GRADE # : PACTomite ER-1038 Filament Wound Products

High temperature filament wound E-glass-epoxy composite rings having excellent electrical, mechanical, and chemical properties. Used in the manufacturing of extreme performance applications structural and high voltage applications.

Filament Wound Ring Technical Information:
(Data represents a hoop wound ring. This resin system is available with helical winding and in broad cloth reinforcements.)

Composition ISO-1172	Epoxy Resin 20% / E-glass 80% +/-5 by weight.
Glass Transition Temperature DMA ASTM E1640 / ITS 851848	400+° F
Density ISO 1183	0.072 lb / in^3
Hardness (Rockwell)	100M
Flexural Strength @ 23°C ISO 178	970 MPa (114 KPSI)
Flexural Strength @ 155°C ISO 178	590 MPa (85.6 KPSI)
Flexural Modulus @ 23°C ISO 178	45000 MPa (6.2 MPSI)
Flexural Modulus @ 155°C ISO 178	26300 MPa (3.8 MPSI)
Compressive Strength (Axial) ISO 604	150 MPa (21.7 KPSI)
Compressive Strength (Radial) ISO 604	160 MPa (23.2 KPSI)
Compressive Strength (Tangential) ISO 604	590 MPa (85.6 KPSI)
Interlaminar Shear Strength	47 MPa (6.8 KPSI)
Tensile Strength (Tangential) ISO 527	920 MPa (133 KPSI)
Coefficient Thermal Expansion (CTE) ASTM E831	Axial 20.9 mm/mm º K Radial 29.8 mm/mm º K Tangential 6.9 mm/mm º K