

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.)

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| 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 ° K Radial 29.8 mm/mm ° K Tangential 6.9 mm/mm ° K |

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