



VERTEC 5035

Compression Molded

VERTEC 5035 is a lubricated, reinforced PEEK (polyetheretherketone) material. This material is specifically designed for rider bands and piston rings in reciprocating compressors.

<i>Physical Properties</i>	<i>ASTM Method</i>	<i>Typical Values</i>
Specific Gravity	D792	1.41 gr/cm ³
Water Absorption (24hrs. @73.4°F)	D570	0.15 %
Color	N/A	Black
<i>Mechanical Properties</i>		
Tensile Strength	D638	11000 psi
Tensile Elongation	D638	3.6 %
Flexural Strength	D790	
Flexural Modulus	D790	
Compressive Strength (5% strain)	D695	18,100 psi
Compressive Modulus	D695	381,000 psi
Impact Strength (Izod, notched)	D256	
Hardness	Shore D	86
<i>Tribological Properties</i>		
Coefficient of Friction		
Static	D3702	
Dynamic	D3702	.29
Wear Rate (PV: 20,000 psi-fpm)	D3702	12 μin/min
<i>Thermal Properties</i>		
Coefficient of Linear Thermal Expansion (78 to 400°F)	D696	17 10 ⁻⁶ /°F
Heat Deflection Temperature (@264 psi)	D648	325 °F
Glass Transition Temperature (T _g)	D3418	289 °F
Continuous Service Temperature (Max @ no load)		480 °F
Melting Point		644 °F
<i>Electrical Properties</i>		
Volume Resistivity	D257	
Dielectric Strength	D149	
Dielectric Constant	D150	

Note: Property values should be interpreted as typical rather than minimum value. All technical information and recommendations are presented in good faith, based upon laboratory and real-world tests believed to be reliable and practical. However, Vertec Polymers cannot guarantee the accuracy or completeness of this information, and it is the customer's responsibility to determine product suitability to any given application.

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