



## VERTEC 5030

Compression Molded

VERTEC 5030 is an industry standard, lubricated, reinforced bearing grade PEEK material. This 10/10/10 Carbon-fiber, Graphite, PTFE composite is popular for a number of medium PV dynamic applications. It is equivalent to Victrex 450FC30.

<i>Physical Properties</i>	<i>ASTM Method</i>	<i>Typical Values</i>
Specific Gravity	D792	1.44 gr/cm <sup>3</sup>
Water Absorption (24hrs. @73.4 °F)	D570	0.5 %
Color	N/A	Tan
<i>Mechanical Properties</i>		
Tensile Strength	DD638	9,500 psi
Tensile Elongation	D638	2.9 %
Flexural Strength	D790	20,000 psi
Flexural Modulus	D790	700,000 psi
Compressive Strength	D695	13,000 psi
Compressive Modulus	D695	
Impact Strength (Izod, notched)	D256	1 ft-lb/in
Hardness	Shore D	86
<i>Tribological Properties</i>		
Coefficient of Friction		
Static	D3702	
Dynamic	D3702	0.4
Wear Rate (PV: 20,000 psi-fpm)	D3702	µin/min
<i>Thermal Properties</i>		
Coefficient of Linear Thermal Expansion (78 to 400 °F)	D696	30 10 <sup>-6</sup> /°F
Heat Deflection Temperature (@264 psi)	D648	325 °F
Glass Transition Temperature (T <sub>g</sub> )	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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