AMILON™ 56

AMILON™ 56 has been developed for use in applications where excellent thermal conductivity is necessary. Material has heat dissipation almost 5 times higher than unfilled PTFE. Besides its excellent thermal properties, Amilon 56 has excellent dielectric properties. With a permittivity (dielectric constant) of 2.6 and dielectric strength of 1,014 V/mil, it's an excellent choice for connectors and heat exchangers in cables and electronic equipment.

In addition to its thermal and dielectric properties, Amilon 56 has great lubricity which makes it a good choice for sealing applications.

Material is available in molded rods, sheets and cylinders or it can be custom made to complex shapes and dimensions, thanks to Technetics' full range of machining capabilities. As an optional feature, any basic or custom shape can be supplied with chemically modified surfaces for bonding.

Applications

- Cable connectors
- Heat exchangers in electronic devices
- Insulators
- Sealing

FEATURES

- Color: white
- Excellent thermal conductivity
- Good dielectric strength and permittivity
- No additional lubrication required
- Good hardness with good deformation under load
- Good mechanical properties

TYPICAL PROPERTIES

AMILON™ 56 Material Properties			
Property	Test Method	Unit	Value
Color			White
Operating Temperature Range		°F	-400 to +500
Specific Gravity	ASTM D4745	g/cc	2.16
Hardness (initial)	ASTM D2240	Shore D	62
Hardness (15 second)	ASTM D2240	Shore D	57
Tensile Strength	ASTM D4745	psi	2250
Elongation	ASTM D4745	%	126
Coefficient of Thermal Expansion 75 - 200 F, Molded Direction 75 - 300 F, Molded Direction	ASTM E831	in/in F	 11.5×10^{-5} 12.9×10^{-5}
Thermal Conductivity	ASTM D7984	W/m K	1.14
Dialectric Strength	ASTM D149	Volts/mil	1014
Diaelectric Constant (1MHz)	ASTM D150		2.6
Dissapation Factor (1MHz)	ASTM D150		< 0.001

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