



dures® XPC-2 Non-Metallic Wear Material for Pump Applications

Number: CW50B

Material References: dures® XPC-2, XC-2

Polymer Family: PEEK (Poly Ether Ether Ketone)

Description: Filament Wound PEEK / Continuous Carbon fiber composite

Property	ASTM Method	Parallel to Fiber	Perpendicular to Fiber	Units
Specific Gravity	D792	1.6	1.6	-
Water Absorption 24 hrs@73°	D570	0.3	0.3	%
Elongation at Break	D1708	1.5	1.50	%
Tensile Strength at Break	D3039	300 X 10 ³ (2068)	12.5 X 10 ³ (86)	PSI (MPa)
Tensile Modulus at Break	D3039	20 X 10 ⁶ (13.8 X 10 ⁴)	1.5 X 10 ⁶ (1.0 X 10 ⁴)	PSI (MPa)
Compressive Strength	D3412	197 X 10 ³ (1358)	---	PSI (MPa)
Compressive Modulus at Max. Load	D3412	18 X 10 ⁶ (12.4 X 10 ⁴)	---	PSI (MPa)
Flexural Strength	D790	290 X 10 ³ (2000)	20 X 10 ³ (140)	PSI (MPa)
Flexural Modulus	D790	18.1 X 10 ⁶ (12.4 X 10 ⁴)	---	PSI (MPa)
Coefficient of Thermal Expansion	D696	0.15 X 10 ⁻⁶ (0.27x10 ⁻⁶)	17 X 10 ⁻⁶ (30 X 10 ⁻⁶)	1/F° (1/°C)
Coefficient of Thermal Expansion of ID/OD Ring (-100 to 550°F)	Diametric Cross Section	5.8 X 10 ⁻⁶ (10 X 10 ⁻⁶) 28 X 10 ⁻⁶ (50 X 10 ⁻⁶)	N/A	1/F° (1/°C)
Recommended Service Temperature			550 (288) Max Continuous	°F (°C)