

AF825 low Temp PAEK

AF825 is a high-performance PAEK engineering thermoplastic for demanding low temperature applications. AF825 offers a lower static and dynamic coefficient of friction compared to PCTFE

- Lower Static/dynamic coefficient of friction compared to PCTFE
- Higher tensile strength with lower modulus compared to PCTFE
- Lower coefficient of thermal expansion compared to PCTFE
- Higher Thermal Conductivity compared to PCTFE

Typical Physical properties

Property	Test Method	Value
Specific Gravity	ISO 1183	1.40 g/cm ³
Tensile Strength +23°C	ISO 527	75 MPa
Tensile Strength -196 ^o C		140 MPa
Tensile Elongation +23°C	ISO 527	41%
Tensile Elongation -196 ⁰ C		4%
Compressive Strength -196°C	ISO 604	250 MPa
Compressive Modulus -196 ^o C	ISO 604	5.4 GPa
Flexural Strength +23 ^o C	ISO 178	132 MPa
Flexural Strength -196 ^o C		359 MPa
Flexural Modulus +23 ^o C	ISO 178	3.3 GPa
Flexural Modulus -196 ^o C		5.0 GPa
Hardness	Shore D	80
Coefficient of Thermal Expansion +23°C	ISO 11359	48 ppm K ⁻¹
Coefficient of Thermal Expansion -165°C	DIN 51909	42 ppm K ⁻¹
Melting Point		343 ^o C
Glass Transition (Tg)	ISO 11357	143 ⁰ C

Issued September 2022 AFT Fluorotec Technical Department All information is based on typical test results performed under specific conditions and limited sample size. This does not represent a legally binding guarantee of certain properties or the suitability for specific applications. All information is provided in good faith at time of print.

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Solutions and components in Fluoropolymer Plastics

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