

## Product Highlights

- Operating temperature from -70°C to +260°C (-94°F to +500°F)
- FAR Part 25
- VW-1 according to UL 1441
- Low toxicity, smoke generation and offgassing
- Halogen-free
- Does not trap heat or humidity
- Rot-free
- Expandable design accommodates a variety of sizes



**Expando® PEEK** (polyetheretherketone) is an expandable sleeve designed for mechanical protection in temperature extremes and hostile environmental conditions. Rated to +260°C (+500°F), Expando PEEK meets VW-1 flammability requirements.

The inherent properties of PEEK give Expando PEEK low levels of flammability, toxicity, smoke generation, and hard vacuum offgassing. Because of its high use temperature, Expando PEEK resists damage from high temperature air guns used with heat-shrinkable elements such as strain reliefs, terminations, and identification sleeves.

Expando PEEK is used in the aerospace industry for its outstanding properties in extreme environments. This product should be considered for aircraft, space, military, marine, and hostile-environment applications.

Expando products are tough, lightweight oversleeves used to protect cable assemblies, hoses and wire harnesses from chafing, cutting and abrading. The open-braid construction of Expando products enables each size to expand to fit several application shapes and diameters. This open-textile construction also makes them highly flexible and resistant to trapping water, heat and humidity.



Our manufacturing sites are certified ISO 9001, IATF 16949, or AS/EN 9100, ISO 14001 and ISO 45001 (Selected Sites)

# Performance Data – Expando® PEEK

Property	Test Method	Result	
Operating Temperature		-70°C to +260°C (-94°F to +500°F)	
Filament Diameter		.010"	
Melt Temperature	ASTM D-3418	+334°C	
Low Temperature Flexibility	MIL-DTL-23053E	-70°C	
Flammability	FAR Part 25 (60 s)	Pass	
	FAR Part 25 (12 s)	Pass	
	UL 1441	VW-1	
Smoke Density	ASTM E-662	D <sub>s_max</sub> = 50	
Hard Vacuum	ASTM E-595	Meets industry limits:	
		1.0% max	
		0.1% max	
Fluid Resistance	MIL-DTL-23053	No visible degradation	
			Jet Fuel JP-4 (MIL-T-5624)
			Hydraulic Fluid (MIL-H-5606)
			Lube Oil (MIL-I-7808)
			De-Ice Fluid (MIL-A-8243)
			Reference Oil #2 (ASTM D-471)
			Salt Water (O-S-1926)

All numeric performance data shows average or typical values. Please consult your sales representative for product drawings, test reports and OEM approvals.

## Product Specifications

Longitudinal shrinkage should be taken into account when utilizing expansion properties of the sleeve

Commercial Part Number	Recommended Application Range mm (in)		Maximum Weight g/m (lb/ft)	Standard Packaging m (ft)
	Min Ø	Max Ø		
Expando PEEK 3-X	2 (1/16")	6 (1/4")	2.46 (0.00165)	610 (2,000')
Expando PEEK 6-X	3 (1/8")	13 (1/2")	4.17 (0.00280)	305 (1,000')
Expando PEEK 13-X	6 (1/4")	22 (7/8")	11.61 (0.00780)	152 (500')
Expando PEEK 19-X	13 (1/2")	29 (1-1/8")	16.86 (0.01133)	152 (500')
Expando PEEK 25-X	19 (3/4")	45 (1-3/4")	21.94 (0.01474)	76 (250')
Expando PEEK 32-X	25 (1")	45 (1-3/4")	23.57 (0.01584)	76 (250')
Expando PEEK 45-X	32 (1-1/4")	64 (2-1/2")	41.09 (0.02761)	76 (250')
Expando PEEK 51-X	38 (1-1/2")	64 (2-1/2")	48.07 (0.03230)	76 (250')
Expando PEEK 64-X	51 (2")	76 (3")	55.66 (0.03740)	76 (250')

X = Color code: 0 = Black 9 = Natural

For other colors, consult the factory.

## Part Numbering System

Example	Product Name	Size	Color	Quantity
	Expando PEEK	3	0 (black)	610m



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