



Product Highlights

- Operating temperature from -70°C to +260°C (-94°F to +500°F)
- BMS 13-52 Type IV
- FAR Part 25
- Does not trap heat or humidity
- Rot-free
- Expandable design accommodates a variety of sizes

Expando® PFA is an expandable sleeve constructed of PFA (perfluoroalkoxy) that is designed for applications up to +260°C (+500°F). Expando PFA has low flammability and resists damage from most chemicals.

Expando PFA protective oversleeve is widely used in the aerospace industry for its high temperature capability and ability to retain flexibility at low temperatures.

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® PFA

Property	Test Method	Result
Operating Temperature		-70°C to +260°C (-94°F to +500°F)
Melt Temperature	ASTM D-3418	+302°C
Low Temperature Flexibility	MIL-DTL-23053E	-70°C
Hard Vacuum	ASTM E-595	Meets industry limits:
TML		1.0% max
CVCM		0.1% max
Fluid Resistance	MIL-DTL-23053 24 hour immersion	No visible degradation Maintains >80% tensile strength
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.

Standard Sizes

Commercial Part Number	Recommended Application Range mm (in)		Maximum Weight g/m (lb/ft)	Standard Packaging m (ft)
	Min Ø	Max Ø		
Expando PFA 3-9	1 (1/32")	6 (1/4")	7.9 (0.0053)	610 (2,000')
Expando PFA 6-9	2 (1/16")	11 (7/16")	10.8 (0.0073)	305 (1,000')
Expando PFA 10-9	5 (3/16")	16 (5/8")	33.7 (0.0226)	152 (500')
Expando PFA 13-9	8 (5/16")	19 (3/4")	40.8 (0.0274)	152 (500')
Expando PFA 19-9	10 (3/8")	25 (1")	50.6 (0.0340)	152 (500')
Expando PFA 32-9	16 (5/8")	38 (1-1/2")	82.2 (0.0552)	76 (250')
Expando PFA 45-9	17 (11/16")	51 (2")	101.3 (0.0680)	76 (250')
Expando PFA 51-9	19 (3/4")	76 (3")	144.4 (0.0970)	76 (250')

Part Numbering System

Example	Product Name	Size	Color	Quantity
	Expando PFA	19	9 (natural)	152m

United States: (1) 800 926 2472 • México: (52) 442 101 8100 • Brazil: (55) 19 3116 1600

EMEA: (33) 3 44 39 06 06 • Japan: (81) 45 330 0300 • China: (86) 21 6182 7560

Southeast Asia: (66) 35 276 400 • Korea: (82) 44 861 6368 • India: (91) 124 4784565

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