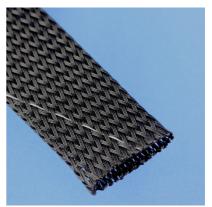
Raytronics AG

EXPANDO HR, mechanical protection

Expando® HR is an expandable sleeve constructed of Halar® (E-CTFE) fluoropolymer that is designed for applications up to +150°C (+302°F). Inherently flame-retardant, it is a UL Recognized Component which meets VW-1 requirements, and will not melt and drip on direct exposure to flame. Expando HR is a special purpose, highly reliable solution for military and aerospace applications. It offers good mechanical properties, performs well in both high and low temperature environments, and has outstanding chemical resistance. Expando HR protective oversleeve has many uses in the aerospace, marine, electronic, military, nuclear and general manufacturing industries. Expando products are tough, lightweight oversleeves used to protect cable assemblies, hoses and wire harnesses from chafing, cutting and abrading. The open-weave construction of Expando products enables each size to expand to fit several application shapes and sizes. This open-weave construction also makes them highly flexible and resistant to trapping water, heat and humidity.



Product facts of braided sleeve EXPANDO HR

- VW-1 according to UL 1441
- FAR 25 § 853
- UL recognized component
- Does not trap heat or humidity
- Rot-free

Property	Test Method	Result
Operating Temperature		-70°C to +150°C (-94°F to +302°F)
Low Temperature Flexibility	MIL-DTL-23053D	-70°C
Flammability	UL 1441	VW-1
	FAR Part 25 / 853	Pass
Smoke Density	ASTM E-662	
	Flaming Mode	Dmax <50
	Non-Flaming Mode	Dmax <50
Oxygen Index	ASTM D-2863	0.365
Hard Vacuum	ASTM E-595	Meet industry limits:
- TML		1.0% max.
- CVCM		0.1% max.
Abrasion Resistance	EN 6059 Part 403	Pass

This datasheet is issued without guarantee according to the correctness of the containing information, product and service descriptions. The data has been carefully checked, Raytronics AG is not liable for any loss or damage resulting from errors or omission in hereby contained information.

Raytronics AG

Wärmeschrumpftechnik

Dimensions in mm

Part Number	Diameter		Weight	Packing unit
	min.	max.	g/m	
Expando HR 3	2.00	6.00	4.42	600
Expando HR 6	3.00	11.00	6.06	300
Expando HR 13	6.00	19.00	19.64	150
Expando HR 19	12.00	32.00	27.83	150
Expando HR 32	19.00	45.00	37.65	75
Expando HR 45	32.00	70.00	62.21	75

Standard Colours (white available on request)

Colour	Black (with white tracer)
Ordering Code	-0

Federal Mogul, Tenneco, Bentley Harris