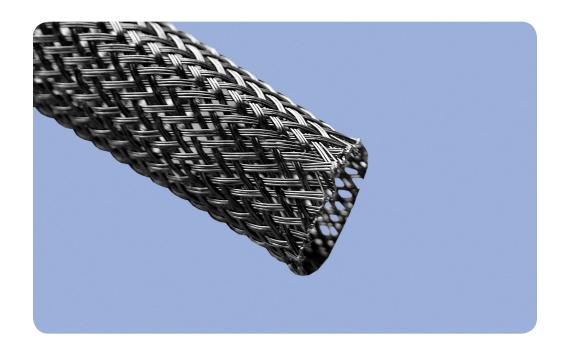# Expando® DM

Product Highlights

- Operating temperature from -70°C to +125°C (-94°F to +257°F)

- UL recognized component

- Outstanding protection against abrasion and cut-through

- Does not trap heat or humidity

- Rot-free

- Self-fitting over many shapes and sizes

- Cost effective

RoHS COMPLIANT

Our manufacturing sites are certified ISO 9000, QS 9000 or ISO/TS 16949 and ISO 14001

EXPANDODM_08312010

Bentley-Harris® 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 sizes. This open-textile construction also makes them highly flexible and resistant to trapping water, heat and humidity.

Expando DM offers maximum resistance to abrasion and impact damage without sacrificing the valuable features provided in traditional Expando products. Rated to +125°C and featuring a dual-monofilament construction, Expando DM smoothly blends tougher, nylon (guard) strands with customary resilient polyester (support) strands. The carefully calculated mix of guard strands and support strands provides an excellent balance of key features including toughness, expandability, resilience, and flexibility.

Expando DM extends the service life of fluid, hydraulic, pneumatic or thermally insulated hoses, and wire harnesses where physical abuse is the major hazard. This product should be considered wherever handling, repeated flexing, abrasion, impact or similar hazards indicate a need for a high performance protective oversleeve. Expando DM is ideally suited for applications in electronics, marine, vehicular and industrial environments.

Performance Data – Expando® DM

Property	Test Method	Result
Operating Temperature		-70°C to +125°C (-94°F to +257°F)
Melt Temperature	ASTM D-3418	Nylon: 257°C
		Polyester: 250°C
Low Temperature Flexibility	MIL-DTL-23053E	-70°C
Smoke Density	ASTM E-1354	$D_{mc} = 1.37$
Hard Vacuum	ASTM E-595	
TML		1.10%
CVCM		.01%
Fluid Resistance	MIL-DTL-23053	Tensile Retention
Jet Fuel JP-4 (MIL-T-5624)		98%
Hydraulic Fluid (MIL-H-5606)		99%
Lube Oil (MIL-I-7808)		99%
De-Ice Fluid (MIL-A-8243)		99%
Reference Oil #2 (ASTM D-471)		100%
Salt Water (O-S-1926)		88%

Product Specifications

Commercial Part Number	Recommended Application Range mm (in)		Max Weight g/m (lbs/ft)	Standard Packaging m (ft)
	Min Ø	Max Ø		
Expando DM 3-X	2 (1/16")	6 (1/4")	3.27 (0.0022)	610 (2000')
Expando DM 6-X	3 (1/8")	13 (1/2")	4.91 (0.0033)	305 (1000')
Expando DM 10-X	6 (1/4")	13 (1/2")	11.46 (0.0077)	152 (500')
Expando DM 13-X	6 (1/4")	22 (7/8")	16.37 (0.0110)	152 (500')
Expando DM 19-X	13 (1/2")	32 (1-1/4")	22.92 (0.0154)	152 (500')
Expando DM 25-X	16 (5/8")	51 (2")	29.47 (0.0198)	76 (250')
Expando DM 32-X	19 (3/4")	57 (2-1/4")	31.10 (0.0209)	76 (250')
Expando DM 38-X	22 (7/8")	64 (2-1/2")	40.92 (0.0275)	76 (250')
Expando DM 51-X	29 (1-1/8")	76 (3")	52.38 (0.0352)	76 (250')

X = Color Code: 0 = Black   2 = Red   3 = Orange   4 = Yellow   6 = Blue   9 = Natural

End view (enlarged diameter) of Expando DM showing nylon guard strands (larger) and polyester support strands (smaller, gray) in a typical configuration.

Part Numbering System

Example	Product Name	Size	Color	Quantity
	Expando DM	13	0 (Black)	152m

USA: (1) 800 926 2472
Europe: (33) 3 44 39 06 06
Japan: (81) 45 479 0201
China: (86) 21 6182 7688

www.federalmogul.com/sp

BentleyHarris®
Protection Products

FEDERAL MOGUL
Systems Protection