

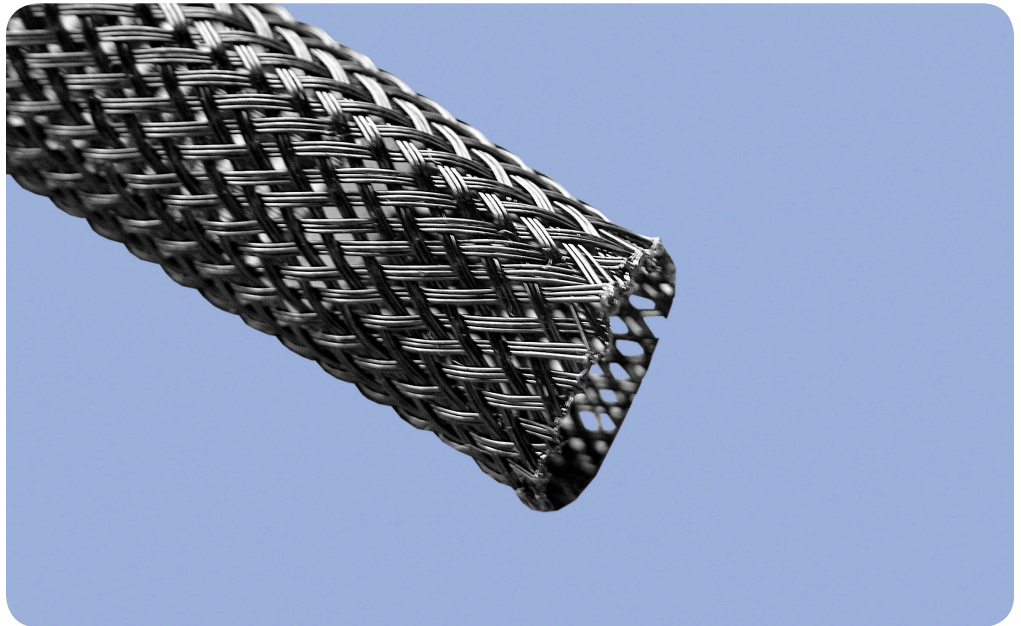


ABRASION/MECHANICAL

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



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.

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 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.



Our manufacturing sites are certified ISO 9001, ISO/TS 16949, or AS/EN 9100, and ISO 14001

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BentleyHarris[®]
Protection Products

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 | $D_{mc} = 1.37$ |
| 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') |



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

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

Part Numbering System

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

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