

CrushShield® 2442





Product Highlights

- Operating temperature up to +150°C (+302°F)
- Superior energy absorption
- Excellent cut-through resistance
- Lightweight, flexible & easy to install
- Available in black or orange

Typical Applications

- High Voltage Cables
- Wire Harnesses
- Fuel Lines
- Other Hose & Tubing Applications



CrushShield® 2442 is a self-wrapping sleeve designed to provide superior cut-through protection for electrical cables. The tough, multilayer construction enables the product to absorb and disperse energy, thus preventing damage to the electrical cable inside. CrushShield's ability to prevent cut through of electrical cables has made it a product of choice for vehicle manufacturers concerned with isolating HEV cables from the vehicles' electricity-conducting chassis in crash situations. CrushShield helps protect the HEV cable enabling the vehicle to meet stringent industry standards yet its lightweight, flexible structure does not impede cable routing or add unnecessary weight. CrushShield 2442 long term endurance will be secured through the installation of attachment methods, plastic ties or tapes, qualified for the maximum operating temperature.

CrushShield 2442 is available in orange for identification of the high voltage cables in hybrid-electric or electric vehicles. CrushShield 2442 is available as well in black for low voltage application and as tube protection for fuel lines.



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

Performance Data - CrushShield® 2442

| Property | Test Method | Result | |
|-----------------------------|-------------------------------------|--|--|
| Operating Temperature | 240 hours at +175°C (+150°C rating) | Pass +150°C (+302°F) | |
| | ISO 6722 | No visible degradation nor loss of flexibility - Shrinkage < 10% | |
| Flammability | SAE J369 | Self-extinguishing | |
| Low Temperature Flexibility | SAE J2192 | Pass -70°C (-94°F) | |
| Chipping Resistance | SAE J400 | Pass | |
| Dynamic Cut-Through | ASTM D3032-10 | 650 N avg. | |
| | Section 22 (modified) | | |
| Fluid Resistance | D47 1924 | Pass | |

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

Construction and Typical Product Characteristics

Warp Yarn: Polyester (PET) multifilament

Fill Yarns: Polyester (PET) monofilament and multifilaments



End view of CrushShield 2442 illustrating self-curling wrappable construction with nominal overlap.

Standard Sizes

| Commercial Part Number | Nominal Diameter mm | Recommended Application Range mm | |
|---------------------------|------------------------|-------------------------------------|-------|
| Part Number | | Min Ø | Max Ø |
| CrushShield 2442 7-C | 7 | 5 | 7 |
| CrushShield 2442 10-C | 10 | 8 | 10 |
| CrushShield 2442 13-C | 13 | 11 | 13 |
| CrushShield 2442 16-C | 16 | 14 | 16 |
| CrushShield 2442 19-C | 19 | 17 | 19 |
| CrushShield 2442 25-C | 25 | 20 | 25 |
| CrushShield 2442 29-C | 29 | 26 | 29 |
| CrushShield 2442 32-C | 32 | 30 | 34 |
| CrushShield 2442 38-C | 38 | 35 | 38 |

C = Color Code: Orange: 3 | Black: 0

A reduced overlap could be acceptable in certain applications allowing for a larger max diameter harness. Please consult your local sales representative for recommendations and guidance.

Availability

Standard sizes are listed here, Additional sizes could be available upon request.

Available in spools and custom cut lengths. Recommended cut lengths are in 5mm increments. Please see regional drawings for cut length tolerances.

Standard colors are black and orange. Additional colors may be available.

Please consult your local sales representative for regional packaging details and standards.





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^{*} Max diameter is defined as a nominal 90° sleeve overwrap. A variety of application-based variables will dictate the appropriate sleeve size for use on each harness. Proper sleeve sizing is at the discretion of the end user.