



THERMAL MANAGEMENT

ConvoShield® AL

Product Highlights

- Operating temperature from -40°C to +150°C (-40°F to +302°F)
- Reflects radiant heat away from protected component
- Reduces component temperature
- Enhances harness rigidity
- Fluid resistant

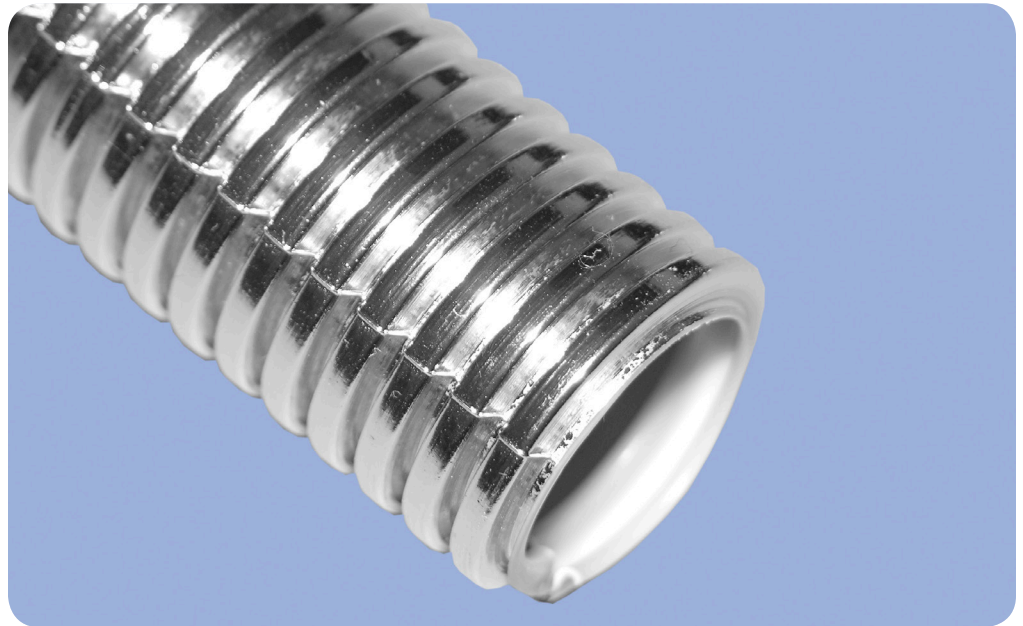
Typical Applications

- Battery cables
- Wiring systems
- Electronic sensor control wiring
- Critical harnesses exposed to radiant heat



Our manufacturing sites are certified ISO 9000, QS 9000, ISO/TS 16949, or AS/EN 9100, and ISO 14001

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ConvoShield® AL is a reflective convolute sleeve designed to provide thermal protection for components in radiant heat environments. Composed of a high temperature nylon 4,6 polymer base substrate and a highly reflective coating, ConvoShield AL provides protection for wires, cables and hoses in applications that have radiant heat source temperatures as high as +538°C (+1000°F).

The reflective surface is extremely resistant to automotive fluids and may be classed as insulative against 12 volt automotive currents. Because of its unique blend of thermal and insulative properties, as well as its aesthetic appearance, it is ideal for applications such as battery cables and alternator wiring harnesses.

BentleyHarris®
Protection Products

Performance Data – ConvoShield® AL

Property	Test Method	Result
Operating Temperature Range		-40°C to +150°C (-40°F to +302°F)
Cold Bend Test	(Ref DP Spec ES-C-836)	-40°C (-40°F)
Fluid Resistance (30 min soak)	BH 100-003 (ref MS-NA1-7)	No sign of product degradation or delamination of coating
Brake Fluid		
Gasoline		
Diesel Fuel (60 minutes)		
Antifreeze Solution		
Motor Oil		
Transmission Fluid		
Power Steering Fluid		
Distilled Water		
3% Salt Solution		
Washer Fluid		
Thermal Performance	BH 100-004 (ref SAE J2302)	See graphic illustration below
Heat Aging	(Ref DP Spec ES-C-836)	Product unaffected - per visual inspection
Oven Aging at 170°C for 168 hours		

All numeric performance data shows average or typical values.

Construction and Typical Product Characteristics

Exterior Surface	Highly Reflective Aluminum Coating
Substrate Base	Nylon 4, 6 Polymer
Substrate Surface	Thermoplastic Molded Tubing

Product Specifications

Commercial Part Number	Nominal Diameter mm (in)	Standard Packaging* (Number of 37" pieces)
ConvoShield AL 6 - ALU	6 (1/4")	300
ConvoShield AL 10 - ALU	10 (3/8")	300
ConvoShield AL 13 - ALU	13 (1/2")	100
ConvoShield AL 16 - ALU	16 (5/8")	100
ConvoShield AL 19 - ALU	19 (3/4")	75
ConvoShield AL 22 - ALU	22 (7/8")	50
ConvoShield AL 25 - ALU	25 (1")	50

* Note: Minimum length available: 51 mm (2"). Maximum length available: 950 mm (37")

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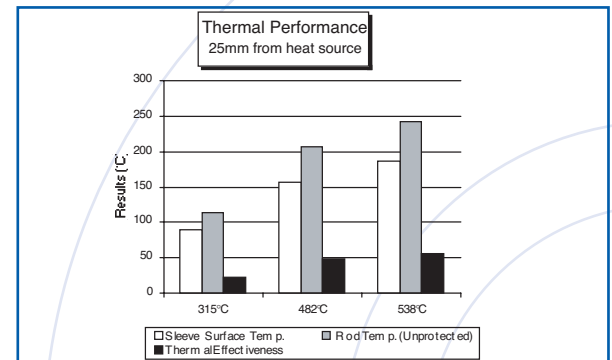
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Availability

ConvoShield AL is currently available in sizes from 6mm to 19mm (ID) cut to your specifications. Tubular and slit versions are available dependent upon specific application. Color is aluminum.

Thermal Efficiency Measurements

BH 100-004 (ref. SAE J2302)



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