



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

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.



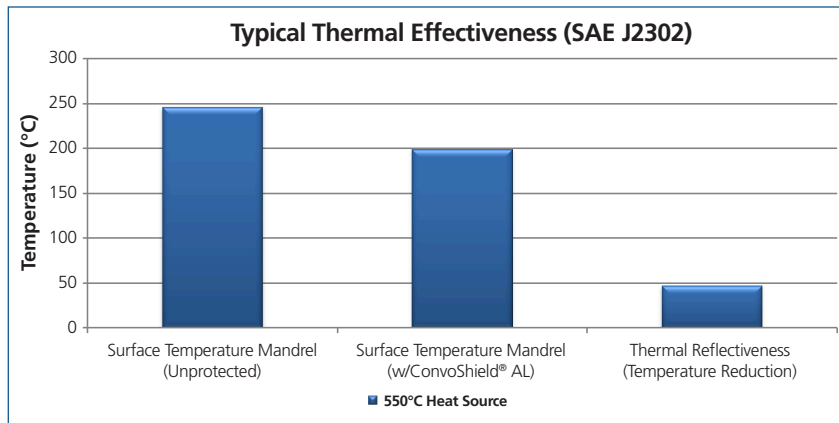
Our manufacturing sites are certified ISO 9001, IATF 16949, or AS/EN 9100, ISO 14001 and ISO 45001 (Selected Sites)

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) Brake Fluid Gasoline Diesel Fuel (60 minutes) Antifreeze Solution Motor Oil Transmission Fluid Power Steering Fluid Distilled Water 3% Salt Solution Washer Fluid	BH 100-003 (ref MS-NA1-7)	No sign of product degradation or delamination of coating
Thermal Performance	BH 100-004 (ref SAE J2302)	See graphic illustration below
Heat Aging Oven Aging at 170°C for 168 hours	(Ref DP Spec ES-C-836)	Product unaffected - per visual inspection

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

Thermal Effectiveness of Sleeving Insulation



Note: Mandrel is parallel to and 25mm (1") away from heat source

Construction and Typical Product Characteristics

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

Availability

ConvoShield AL is currently available in sizes from 6mm to 19mm (ID) in cut lengths from 50 mm to 1000 mm. Tubular and slit versions are available dependent upon specific application. Color is aluminum.

Product Specifications

Commercial Part Number	Nominal Diameter mm (in)	Standard Packaging
ConvoShield AL 6 - ALU	6 (1/4")	* Available in cut lengths only
ConvoShield AL 10 - ALU	10 (3/8")	
ConvoShield AL 13 - ALU	13 (1/2")	
ConvoShield AL 16 - ALU	16 (5/8")	
ConvoShield AL 19 - ALU	19 (3/4")	
ConvoShield AL 22 - ALU	22 (7/8")	
ConvoShield AL 25 - ALU	25 (1")	

* Note: Minimum length available: 50 mm. Maximum length available 1000 mm.

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