



THERMAL MANAGEMENT

Clevaflex® A-A

Product Highlights

- High operating temperature
- Tubular and wrappable constructions
- Flexible and crimpable
- Easy installation
- Maintains shape and circular profile when bent
- Custom end finishing
- Fray resistant
- Durable
- Abrasion protection
- Fluid resistant
- Crush resistant

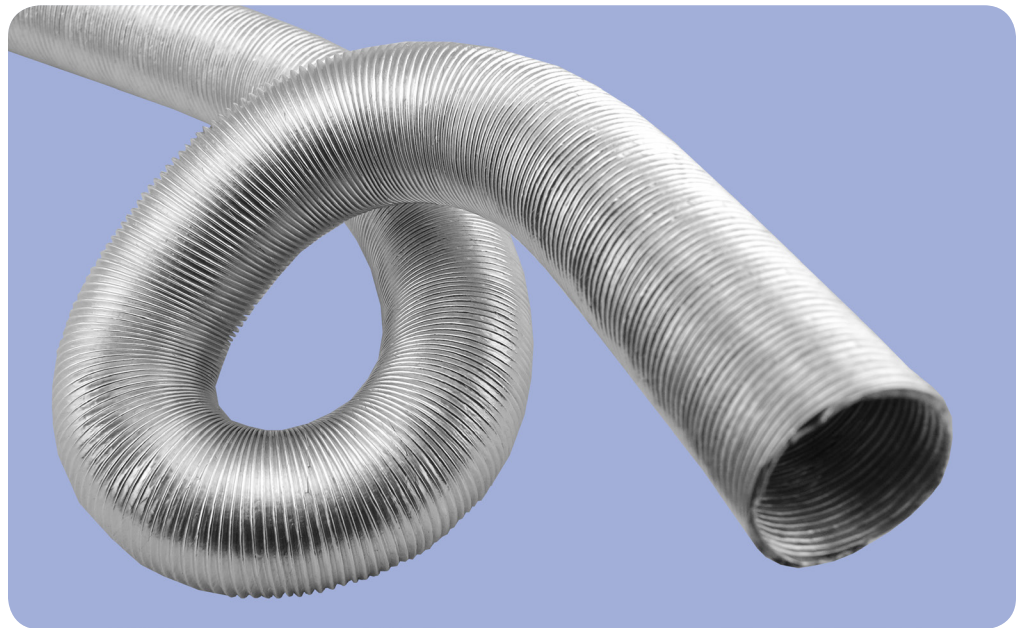
Typical Applications

- Exhaust pipes
- EGR systems
- Downpipes
- Turbo systems



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

CF_A-A_07202017



Clevaflex® A-A is a reflective corrugated tube designed to provide thermal protection for components in high temperature environments. Its multi-ply construction of aluminum layers allows for good insulation to components requiring stable temperatures for optimum performance efficiency.

Clevaflex A-A offers a complete 360° thermal protection for critical components when covering exhaust pipes, EGR tubes, down tubes or ducting carrying hot gases or liquids. Clevaflex A-A also helps maintain internal temperatures by reducing heat loss. The raw materials and proprietary manufacturing process used to form this layered product allow Clevaflex A-A to withstand high operating temperatures up to +400°C (+752°F) and excursion temperatures up to +600°C (+1112°F) while also providing durability in the high vibration conditions inherent in automotive applications. The manufacturing process produces a crush resistant and lightweight convoluted sleeve that can be precisely bent and routed without degradation or frayed ends. The highly engineered construction also allows for customization (slits, slots or notches) to increase the ease of installation along with enabling its positioning on the application due to its ability to be crimped at the ends.

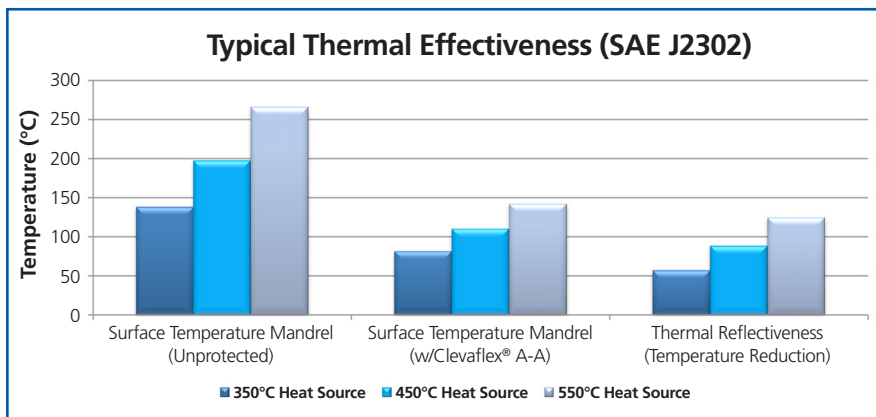
BentleyHarris®
Protection Products

Performance Data – Clevaflex® A-A

Property	Test Method	Result
Temperature Rating	240 hours at +425°C (400°C rating) 3,000 hours at +350°C 24 hours at +600°C	Pass +400°C (+752°F) Pass +350°C (+662°F) Pass +600°C (+1112°F)
Low Temperature Flexibility	BH100-016A	Pass -40°C (-40°F)
Flammability	SAE J369	Self-extinguishing
Fluid Resistance	BH100-003B	Pass
Stone Impingement	SAE J400	Pass, no holes in product

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

Availability

Clevaflex A-A is available in a range of sizes and cut to your specification. Color is aluminum (silver). Please contact your sales representative for availability.

The information and illustrations given herein are believed to be reliable. Federal-Mogul makes no warranties as to their accuracy or completeness and disclaims any liability in connection with their use. Federal-Mogul's only obligations are those in the standard term of sale for this product and Federal-Mogul will not be liable for any consequential or other damages arising out of the use or misuse of this product. Users should make their own evaluations to determine the suitability of the product for specific applications.

©2008 Federal-Mogul Systems Protection, manufacturer of Bentley-Harris protection products. The trademarks displayed are owned by Federal-Mogul Corporation, or its subsidiaries, in one or more countries.

**FEDERAL
MOGUL**
Systems Protection

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