



THERMAL MANAGEMENT

ThermFlex® 1224

Product Highlights

- Operating temperature up to +650°C (+1202°F)
- Peak temperature +750°C (+1382°F)
- Excellent thermal insulation
- Extremely flexible
- Conforms to component
- Low profile

Typical Applications

- Exhaust Gas Recirculation (EGR) Tubes
- Exhaust System Components



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

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ThermFlex® 1224 is a knitted sleeve developed for insulation of high temperature exhaust systems. Designed with basalt yarns, ThermFlex 1224 can withstand temperatures up to +750°C (+1382°F).

The high degree of insulation provided by ThermFlex 1224 enables exhaust gas to maintain temperature as it moves through the exhaust system. Maintenance of exhaust gas temperature is important in order to ensure complete conversion of exhaust gas and particulates. Complete conversion is necessary to meet the increasingly strict emission regulations set in place by government mandate.

ThermFlex 1224's innovative design can expand up to 1.5 times its own diameter and accommodates flanges and bends typically seen on exhaust system components.

BentleyHarris®
Protection Products

Performance Data – ThermFlex® 1224

Property	Test Method	Result
PHYSICAL		
Thermal Endurance	BH100-521	Pass - No degradation
Cold/Wet Endurance	BH100-522	Pass - No degradation
Thermal Containment	BH100-509	See table below
Flammability	SAE J369 D45 133	Does not ignite Type A - No ignition
Flammability with Oil Contamination	BH100-524 (ref. SAE J369)	Self-extinguishing
Vibration	BH100-507	Retains Structural Integrity
CHEMICAL		
Fluid Resistance	BH100-003F 50/50 Antifreeze/Distilled Water 5% NaCl Transmission Fluid Diesel Fluid LSRD-4 ASTM Reference Fuel C SAE 5W30 Brake Fluid SAE RM-66 Power Steering Fluid Windshield Washer Fluid	No degradation or loss of flexibility
Salt Spray	ASTM G85	Pass
RESISTANCE TO WASHING		
Power Washing Endurance	BH 100-539	No degradation

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

Thermal Containment Test per BH100-509 on ThermFlex® 1224 2" (51mm)

Exhaust Pipe Parameters	
Inlet Gas Temperature	+832°C
Pipe Surface Temperature (w/ ThermFlex® 1224)	+649°C
Sleeve Surface Temperature (w/ ThermFlex® 1224)	+387°C
Results	
Thermal Containment (Temperature Reduction)	+262°C
Temperature at 10mm away from sleeve (ambient)	+137°C
Temperature at 25mm away from sleeve (ambient)	+106°C
Temperature at 100mm away from sleeve (ambient)	+76°C

Note: Thermal Containment = Pipe Surface Temperature - Sleeve Surface Temperature

Availability

ThermFlex 1224 is available in a range of sizes and lengths designed to meet specific application requirements. Please contact your sales representative for availability.



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