

*powerblanket*<sup>®</sup>



## APPLICATION

Transport of gases and fluids in manufacturing and laboratory testing environments, including RATA studies, where consistent temperature control is required. HSL2000 prevents condensation or sample degradation from collection point to analyzer.

## GENERAL DESCRIPTION

The Powerblanket/Thermon HSL2000 is a flexible, heated sample line designed for the reliable transfer of gases or liquids in environments requiring precise thermal regulation. Utilizing Thermon Self Regulating Heat Cable, this heated sample line offers robust freeze protection and temperature maintenance in ordinary and hazardous (Zone 1, 2, 21 and 22 areas), and customizable performance to suit specific gas and fluid transfer requirements.

## KEY FEATURES

- Custom Power Density & Lengths: Tailored wattage output (5–20 W/f) and configurable line lengths (Typically 0.5 to 30 meters).
- Thermon Self Regulating Heat Cable varies in response to the surrounding temperature by reducing its thermal output with increasing temperature.
- Temperature Control Ready: Integrated Type K thermocouple at key points for precise closed-loop control.
- Flexible Construction: Maintains bend radius <100 mm even at low temperatures.
- Sample Integrity Protection: Maintains internal fluid or gas temperature between 20°C–200°C with ±1°C stability (with controller).
- Insulation: Closed-cell silicone foam (up to 1/2" thick) for energy retention and burn protection.
- End Connections: Custom swaged fittings or compression-style, with optional quick connects, or raw tube ends.

## CERTIFICATIONS/APPROVALS



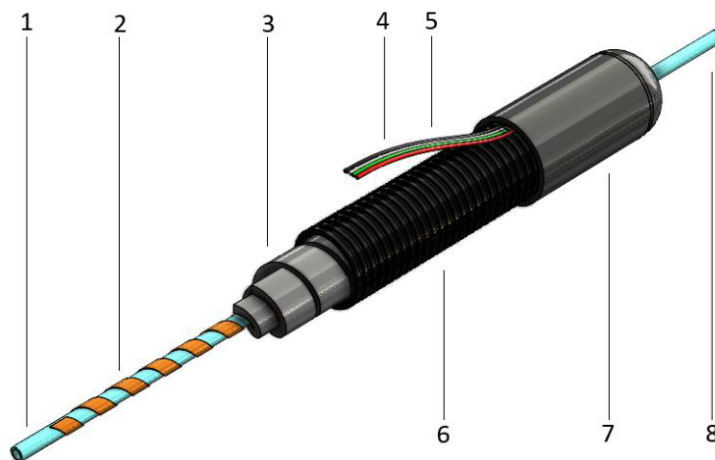
FM Approvals  
Ordinary Locations  
Hazardous (Classified) Locations  
Class I, Division 2, Groups B, C and D  
Class II, Division 2, Groups F and G  
Class III, Divisions 1 and 2  
Class I, Zones 1 and 2, AEx eb IIC, AEx tb IIIC



Canadian Standards Association  
Ordinary Locations  
Hazardous (Classified) Locations  
Class I, Division 1, Groups A, B, C and D  
Class II, Division 1, Groups E, F and G  
Class I, Division 2, Groups A, B, C and D  
Class II, Division 2, Groups E, F and G  
Ex eb IIC, Ex tb IIIC

## TECHNICAL SPECIFICATIONS

Parameter	Value/Range
Heating Element	Self Regulating Heat Cable
Heater Jacket	Fluoropolymer Overjacket
Max Operating Temp	Maintain 200C (400F)
Min Bend Radius	100 mm (4 in)
Voltage	120/208/240/277 VAC
Heated Length	Typically 0.5-30 meter (1.5-100 ft)
Optional Temp. Control	GHT2002J, ExoTouch, PID
Sensor Options	RTD, Thermistor, Type K, Type J
Fluid Line Material	PFA 3/8" OD x 0.062" Wall
Insulation	1/2" Closed Cell Foam or Felt
Outer Shell	Corrugated Tube or Braided Steeving



## HEATER CONSTRUCTION

1. PFA HOSE 3/8" OD x 0.02" WALL STANDARD
2. SELF REGULATING HEAT CABLE
3. CLOSED CELL FOAM 1/2" STANDARD
4. POWER LEADS
5. TEMPERATURE SENSOR
6. OUTER SHELL
7. END SEALS
8. OPTIONAL END CONNECTIONS

