

# PRODUCT DATASHEET **TUBETRACE<sup>®</sup> TYPE SE/ME**ELECTRICALLY HEATED INSTRUMENT TUBING

With **HTSX™** Self-Regulating Heat Tracing

## APPLICATION

TubeTrace, with "cut-to-length" HTSX selfregulating heat tracing, is designed to provide freeze protection or temperature maintenance from 5°C to 150°C for tubing where high temperature exposure capability is possible. HTSX withstands temperature exposures of 250°C.

Self-regulating HTSX heat tracing:

- Varies in response to the surrounding conditions along the entire length of a circuit.
- Lower risk of overheating the tube or product.
- Installed cost is lower because "cut-to-length" HTSX makes end connections easy with minimal waste.
- HTSX is approved for use in ordinary (nonclassified) areas and hazardous (classified) areas.

### RATINGS

HTSX	Ratings
Available watt densities	9, 19, 29, 39, 49, 66 W/m @ 10°C
Supply voltages	110-120 or 208-277 Vac
Tube temperature range	5°C to 150°C
Max. exposure temperature <sup>1</sup> Intermittent power on or off Continuous power-off	250°C 205°C
T-rating 3, 6, 9, 12, 15-2 W/ft 20-2 W/ft	T3: 200°C T2C: 230°C

### Note

 This reflects maximum exposure for heater. If bundle jacket is to remain below 60°C in +27°C ambient (in consideration of personnel burn risk) tube temperature must remain below 205°C. Alternative designs to keep jacket below 60°C in higher ambients and/or with higher tube temperatures are available. Contact Thermon.



# CONSTRUCTION

1 Process tube(s)

- 2 HTSX self-regulating electrical heat tracing
- 3 Heat reflective tape
- 4 Non-hygroscopic glass fiber insulation
- 5 Polymer outer jacket (ATP or TPU available)

### **PRODUCT FEATURES**

- Self-regulating
- "Cut-to-length"
- Hazardous area approvals

For additional information on HTSX and other Thermon heat tracing products and services, visit www.thermon.com.

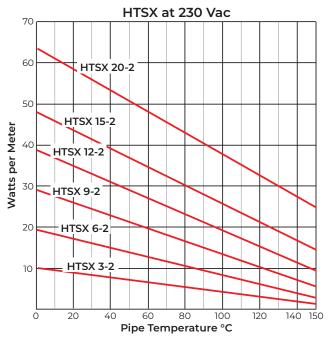
European Headquarters: Boezemweg 25 · PO Box 205 · 2640 AE Pijnacker · The Netherlands · Phone: +31 (0) 15-36 15 370 United States: 100 Thermon Dr · PO Box 609 San Marcos, TX 78667-0609 · Phone: 512-396-5801 · 1-800-820-4328 For the Thermon office nearest you visit us at www.thermon.com



**PRODUCT DATASHEET** TUBETRACE<sup>®</sup> TYPE SE/ME ELECTRICALLY HEATED INSTRUMENT TUBING With **HTSX™** Self-Regulating Heat Tracing

### **POWER OUTPUT CURVES**

The power outputs shown apply to cable installed on insulated metallic pipe (using the procedures outlined in IEEE Standard 515) at the service voltages stated below. For use on other service voltages, contact Thermon.



### **DESIGN TOOLS**

Technical Design Information and CompuTrace® -IT computer design program for TubeTrace heated instrument tubing are available online at

www.thermon.com.

### TUBETRACE ACCESSORIES

Sealing the ends of pre-insulated tubing bundles ensures their efficient and reliable performance. A variety of termination kits and accessories are available and can be found on Form CLX0020U.

### **ELECTRICAL HEAT TRACE ACCESSORIES**

Co., Inc.

available

are noted

International, Inc.

3. Monel and Inconel are trademarks of Inco Alloys

4. Black ATP is standard, other jacket materials are

5. Ensure distinction between metric and imperial tubing

Thermon manufactures every type of electrical resistance heat tracing available in the world today. Power connection and termination kits (Form CLX0024U) and a variety of controls are all available for heated instrument tubing applications.

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### SE-12F -63-7-ATP Bundle Type Metric or Imperial Process M or I SE = Single Tube Tube O.D. **Process Tube** ME = Multiple Tubes 2 = 1/4" Material Process Tube(s) Numbe Wall Thickness A = 316 SS Welded 3 = 3/8" of Tubes Bundle 030 = 030'B = #122 Copper 4 = 1/2" 1 Heat Trace Option Jacket 032 = .032" (Copper Only) C = PFA Teflon<sup>2</sup> 6 = 6 mm2 7 = Ordinary (nonclassified) ATP<sup>4</sup> 035 = .035'D = Monel 3 areas and in potentially 8 = 8 mm 3 TPU explosive atmospheres 040 = .040" (Plastic Only) E = Titanium 10= 10 mm 4 in accordance with the 047 = .047" (Plastic Only) F = 316 SS Seamless 12= 12 mm ATEX Directive and the 049 = .049' G= 304 SS Welded **IECEx Scheme** 062 = .062" (Plastic Only) H = 304 SS Seamless Heat Trace Type 065 = .065" J = Alloy C276 61 = HTSX 3 w/ft 240 Vac 083 = .083" (SS Only) K = Alloy 825 63 = HTSX 6 w/ft 240 Vac L = Alloy 20 $1 = 1 \, \text{mm}$ 65 = HTSX 9 w/ft. 240 Vac 1.5 = 1.5 mm M= FEP Teflon 67 = HTSX 12 w/ft. 240 Vac N = Nvlon 69 = HTSX 15 w/ft. 240 Vac Notes P = Polyethylene 1. Contact factory for availability of long length coils 1" O.D. 71 = HTSX 20 w/ft. 240 Vac T = TFE Teflon 2. Teflon is a trademark of E.I. du Pont de Nemours & X = Special

## **CERTIFICATIONS/APPROVALS**



Certificate FM12 ATEX 0014X in accordance with the EU ATEX Directive 94/9/EC



International Electrotechnical Commission IEC Certification Scheme for Explosive Atmospheres FMG 12.0004X

BSX has additional hazardous area approvals including: DNV • Lloyd's • TIIS • CCE/CSIR • GOST-R Contact Thermon for additional approvals and specific information.