



Product Reference Legend (Metric Units)

TubeTrace® & ThermoTube

Pre-Insulated and/or Heat Traced Tubing Bundles

For design assistance contact Thermon or visit www.thermon.com and download CompuTrace® IT Computer Design Software for Instrument Tubing

Typical Electrically Heat Traced Bundles

Bundle Type	Process Tube O.D.	Process Tube Material	Number of Tubes ⁶	Heater Cable Option	Jacket Type	Process Tube(s) Wall Thickness (inches)	M or I Metric or Imperial
SE = Single Tube ME = Multiple Tubes	Metric 6 = 6 mm 8 = 8 mm 10 = 10 mm 12 = 12 mm Imperial 1 = 1/8" 2 = 1/4" 3 = 3/8"	A = 316L SS Welded As = 316Ti SS Welded B = B68 Copper C = PFA Teflon ² D = Monel ³ E = Titanium F = 316L SS Seamless Fs = 316Ti SS Seamless G = 304 SS Welded H = 304 SS Seamless J = Hastaloy C276 K = Alloy 825 M = FEP Teflon P = Polyethylene T = PTFE Teflon X = Special	1 2 3 4	1 = BN (HPT Only) 3 = OJ (BSX Only) 7 = OJ/Fluoropolymer 8 = Division 1 Approved ⁴	ATP ⁵ TPU	030 = .030 032 = .032 (Copper Only) 035 = .035 040 = .040 (Plastic Only) 047 = .047 (Plastic Only) 049 = .049 062 = .062 (Plastic Only) 065 = .065 1 = 1 mm 1.5 = 1.5 mm ⁷	
Heat Trace Type (See Heat Trace Application Below)							
Self-Regulating Cables				Power-Limiting Cables			
31 = VSX 15 W/m 230 V				51 = HPT 14 W/m 230 V			
33 = VSX 32 W/m 230 V				53 = HPT 28 W/m 230 V			
35 = VSX 48 W/m 230 V				55 = HPT 42 W/m 230 V			
37 = VSX 64 W/m 230 V				57 = HPT 57 W/m 230 V			
41 = BSX 9 W/m 230 V							
43 = BSX 15 W/m 230 V							
45 = BSX 25 W/m 230 V							
47 = BSX 32 W/m 230 V							
61 = HTSX 9 W/m 230 V							
63 = HTSX 18 W/m 230 V							
65 = HTSX 27 W/m 230 V							
67 = HTSX 37 W/m 230 V							
69 = HTSX 48 W/m 230 V							
71 = HTSX 64 W/m 230 V							

Notes . . .

- Contact factory for options of tubing 25mm (1") O.D. (not available in all materials).
- Teflon is a trademark of E.I. du Pont de Nemours & Co., Inc.
- Monel and Inconel are trademarks of Inco Alloys International, Inc.
- Contact factory for design review.
- Black ATP is standard, other jacket materials include TPU (Urethane)
- Maximum number of tubes dependent on tube size.
- Ensure distinction between metric and imperial tubing are noted.
- A complete line of accessories for TubeTrace and ThermoTube are available.



Typical TubeTrace Type ME

Typical TubeTrace Type MP

Typical ThermoTube Type SL

Typical Steam Traced Bundles

Bundle Type	Process Tube(s) O.D.	Process Tube Material	Number of Process Tube(s) ⁶	Tracer Tube O.D.	Number of Tracer Tube	Jacket Type	Process Tube(s) Wall Thickness	Tracer Tube(s) Wall Thickness (inches)	M or I (Metric or Imperial)
SI = Single Isolated Tube Light Steam Traced MI = Multiple Isolated Tubes Light Steam Traced SP = Single Tube Heavy Steam Traced MP = Multiple Tubes Heavy Steam Traced	Metric 6 = 6 mm 8 = 8 mm 10 = 10 mm 12 = 12 mm Imperial 1 = 1/8" 2 = 1/4" 3 = 3/8" 4 = 1/2"	A = 316L SS Welded As = 316Ti SS Welded B = B68 Copper C = PFA Teflon ² D = Monel ³ E = Titanium F = 316L SS Seamless Fs = 316Ti SS Seamless G = 304 SS Welded H = 304 SS Seamless J = Hastaloy C276 K = Alloy 825 M = FEP Teflon P = Polyethylene T = PTFE Teflon X = Special	1 2	Metric 6 = 6 mm 10 = 10 mm 12 = 12 mm Imperial 2 = 1/4" 3 = 3/8" 4 = 1/2"	1	ATP ⁵ TPU	035 = .035 040 = .040 (Plastic Only) 047 = .047 (Plastic Only) 049 = .049 062 = .062 (Plastic Only) 065 = .065 1 = 1 mm 1.5 = 1.5 mm ⁷	035 = .035 040 = .040 (Plastic Only) 047 = .047 (Plastic Only) 049 = .049 062 = .062 (Plastic Only) 065 = .065 1 = 1 mm 1.5 = 1.5 mm ⁷	
Tracer Tube Material									
A = 316 SS Welded B = 122 Copper F = 316 SS Seamless									

ThermoTube® Type SL Pre-Insulated Tubing (For Steam Supply and Condensate Return-Not Heated)

Bundle Type	Tube O.D.	Tube Material	Number of Process Tubes	Tube Wall Thickness (inches)	Jacket Type	M or I (Metric or Imperial)
SL = Single Tube	Metric 6 = 6 mm 8 = 8 mm 10 = 10 mm 12 = 12 mm Imperial 2 = 1/4" 3 = 3/8" 4 = 1/2"	A = 316L SS Welded As = 316Ti SS Welded B = B68 Copper C = PFA Teflon ² D = Monel ³ E = Titanium F = 316L SS Seamless Fs = 316Ti SS Seamless G = 304 SS Welded H = 304 SS Seamless J = Hastaloy C276 K = Alloy 825 M = FEP Teflon	1	30 = .030 32 = .032 (Copper Only) 35 = .035 40 = .040 (Plastic Only) 47 = .047 (Plastic Only) 49 = .049 62 = .062 (Plastic Only) 65 = .065 1 = 1 mm 1.5 = 1.5 mm ⁷	ATP ⁵ TPU	
Jacket Type						
P = Polyethylene T = PTFE Teflon X = Special						

Electrical Heat Trace Application

For Freeze Protection or Maintain 65°C NO STEAM OUTS
Heat Trace Exposure* Limited to 85°C

BSX Self-Regulating Heat Tracing (All BSX includes braid & overjacket. Standard overjacket is polyolefin, also available with an optional fluoropolymer overjacket.)

- 41 = BSX 9 W/m 230 V
- 45 = BSX 25 W/m 230 V
- 43 = BSX 15 W/m 230 V
- 47 = BSX 32 W/m 230 V

For Freeze Protection or Maintain 121°C
Heat Trace Exposure* to 215°C

HTSX Self-Regulating Heat Tracing (All HTSX cables include braid & overjacket BNOJ)

- 61 = HTSX 9 W/m 230 V
- 65 = HTSX 27 W/m 230 V
- 69 = HTSX 48 W/m 230 V
- 63 = HTSX 18 W/m 230 V
- 67 = HTSX 37 W/m 230 V
- 71 = HTSX 64 W/m 230 V

For Freeze Protection or Maintain 149°C
Heat Trace Exposure* to 232°C

VSX Self-Regulating Heat Tracing (All VSX cables include braid & overjacket BNOJ)

- 31 = VSX 15 W/m 230 V
- 35 = VSX 48 W/m 230 V
- 33 = VSX 32 W/m 230 V
- 37 = VSX 64 W/m 230 V

For Freeze Protection or Maintain 205°C
Exposure** to 260°C

HPT Power-Limiting Heat Tracing (All HPT cables include BN braid & may include OJ)

- 51 = HPT 14 W/m 230 V
- 55 = HPT 42 W/m 230 V
- 53 = HPT 28 W/m 230 V
- 57 = HPT 57 W/m 230 V

* Exposure temperatures are generally with cable de-energized (off). Exceptions are for HTSX and VSX self-regulating heat tracing ratings which allow intermittent exposure, on or off.

** Standard TubeTrace and ThermoTube bundles have a maximum tube temperature rating of 204°C if outer jacket is to remain below 60°C in a max ambient of 27°C with no wind. Extra insulation (bundle option "XINS") maybe considered if tube temperatures approach HPT Power-limiting heating cable limits of 260°C, power off. For higher exposures (up to 588°C) consider TubeTrace HT or HTX bundles.