TubeTrace® & ThermoTube Product Reference Legend (Metric Units)

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

SE-12 F1-63-7-ATP-1-M[7]

Bundle Type
SE = Single Tube
ME = Multiple Tubes

Process Tube O.D.
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″
6 = 3/4″

Process Tube Material
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

Number of Tubes[6]
1
2
3
4

Heater Cable Option
1=BN (HPT Only)
3=OJ (BSX Only)
7=OJ/Fluoropolymer
8=Division 1 Approved[4]

Heat Trace Type (See Heat Trace Application Below)

Self-Regulating Cables
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
91 = VSX-HT 16 W/m 230 V
93 = VSX-HT 33 W/m 230 V
95 = VSX-HT 49 W/m 230 V
97 = VSX-HT 66 W/m 230 V

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

Jacket Type
ATP[5]
TPU

Process Tube(s) Wall Thickness (inches)
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]

M or I
Metric or Imperial

Notes
1. Contact factory for options of tubing 25 mm (1″) O.D. (not available in all materials).
2. Teflon is a trademark of E.I. du Pont de Nemours & Co., Inc.
3. Monel and Inconel are trademarks of Inco Alloys International, Inc.
4. Contact factory for design review.
5. Black ATP is standard, other jacket materials include TPU (Urethane)
6. Maximum number of tubes dependent on tube size.
7. 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

SP-12F1-10F1-ATP-1/1-M[7]

Bundle Type
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

Process Tube(s) O.D.
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″

Process Tube Material
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

Number of Process Tube(s)[6]
1
2

Tracer Tube O.D.
Metric
6 = 6 mm
10 = 10 mm
12 = 12 mm
Imperial
2 = 1/4″
3 = 3/8″
4 = 1/2″

Number of Tracer Tubes
1

Tracer Tube Material
A = 316 SS Welded
B = 122 Copper
F = 316 SS Seamless

Jacket Type
ATP[5]
TPU

Process Tube(s) Wall Thickness
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(s) Wall Thickness (inches)
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]

M or I (Metric or Imperial)

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

SL-12B1-01-ATP-M[7]

Bundle Type
SL = Single Tube

Tube O.D.
Metric
6 = 6 mm
8 = 8 mm
10 = 10 mm
12 = 12 mm
Imperial
2 = 1/4″
3 = 3/8″
4 = 1/2″

Tube Material
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

Number of Process Tubes
1

Tube Wall Thickness (inches)
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]

Jacket Type
ATP[5]
TPU

M or I (Metric or Imperial)

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
43 = BSX 15 W/m 230 V
45 = BSX 25 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
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

For Freeze Protection or Maintain 200°C
Heat Trace Exposure* to 250°C

VSX-HT Self-Regulating Heat Tracing (All VSX-HT cables include braid & overjacket BNOJ)
91 = VSX-HT 15 W/m 230 V
93 = VSX-HT 32 W/m 230 V
95 = VSX-HT 48 W/m 230 V
97 = VSX-HT 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
53 = HPT 28 W/m 230 V
55 = HPT 42 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-HT 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.

THERMON INDUSTRIAL HEAT TRACE SOLUTIONS