Product Reference Legend (English Units)

TubeTrace® Pre-Insulated & Heat Traced Tubing

Freeze Protection and Temperature Maintenance for the Process Industries

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-4A1-62-7-ATP-035

Bundle Type
SE = Single Tube
ME= Multiple Tubes

Process Tube O.D.
1 = 1/8"
2 = 1/4"
3 = 3/8"
4 = 1/2"
5 = 5/8"
6 = 3/4"
8 = 1"[1]

Process Tube Material
A = 316 SS Welded
B = #122 Copper
C = PFA Teflon[2]
D = Monel[3]
E = Titanium
F = 316 SS Seamless
G = 304 SS Welded
H = 304 SS Seamless
J = Alloy C276
K = Alloy 825
L = Alloy 20
M= FEP Teflon
N= Nylon
P = Polyethylene
T = TFE Teflon
X = Special
(i.e. passivated, polished, etc.)

Number of Tubes[6]
1
2
3
4

Heat Tracing Type (See Heat Trace Application Below). Contact Thermon for TubeTrace SE/ME instrument tubing bundles with alternative heat trace options such as parallel constant watt and series constant watt including mineral insulated heat tracing.

Self-Regulating Heat Trace		Power-Limiting Heat Trace
30 = VSX 5 w/ft. 120 Vac	60 = HTSX 3 w/ft. 120 Vac	50 = HPT 5 w/ft. 120 Vac
31 = VSX 5 w/ft. 240 Vac	61 = HTSX 3 w/ft. 240 Vac	51 = HPT 5 w/ft. 240 Vac
32 = VSX 10 w/ft. 120 Vac	62 = HTSX 6 w/ft. 120 Vac	52 = HPT 10 w/ft. 120 Vac
33 = VSX 10 w/ft. 240 Vac	63 = HTSX 6 w/ft. 240 Vac	53 = HPT 10 w/ft. 240 Vac
34 = VSX 15 w/ft. 120 Vac	64 = HTSX 9 w/ft. 120 Vac	54 = HPT 15 w/ft. 120 Vac
35 = VSX 15 w/ft. 240 Vac	65 = HTSX 9 w/ft. 240 Vac	55 = HPT 15 w/ft. 240 Vac
36 = VSX 20 w/ft. 120 Vac	66 = HTSX 12 w/ft. 120 Vac	56 = HPT 20 w/ft. 120 Vac
37 = VSX 20 w/ft. 240 Vac	67 = HTSX 12 w/ft. 240 Vac	57 = HPT 20 w/ft. 240 Vac
40 = BSX 3 w/ft. 120 Vac	68 = HTSX 15 w/ft. 120 Vac	
41 = BSX 3 w/ft. 240 Vac	69 = HTSX 15 w/ft. 240 Vac	
42 = BSX 5 w/ft. 120 Vac	70 = HTSX 20 w/ft. 120 Vac	
43 = BSX 5 w/ft. 240 Vac	71 = HTSX 20 w/ft. 240 Vac	
44 = BSX 8 w/ft. 120 Vac		
45 = BSX 8 w/ft. 240 Vac		
46 = BSX 10 w/ft. 120 Vac		
47 = BSX 10 w/ft. 240 Vac		

Jacket Type
ATP[5]
TPU

Process Tube(s) Wall Thickness
028 = .028"
030 = .030"
032 = .032" (Copper Only)
035 = .035"
040 = .040" (Plastic Only)
047 = .047" (Plastic Only)
049 = .049"
062 = .062" (Plastic Only)
065 = .065"
083 = .083" (SS Only)

Typical Steam Traced Bundles

SP-4F1-3F1-ATP-065/035

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.
1 = 1/8"
2 = 1/4"
3 = 3/8"
4 = 1/2"
5 = 5/8"

Process Tube(s) Material
A = 316 SS Welded
C = PFA Teflon[2]
D = Monel[3]
E = Titanium
F = 316 SS Seamless
G = 304 SS Welded
H = 304 SS Seamless
J = Alloy C276
K = Alloy 825
L = Alloy 20
M= FEP Teflon
T = TFE Teflon
X = Special

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

Tracer Tube O.D.
2 = 1/4"
3 = 3/8"
4 = 1/2"

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

Number of Tracer Tube(s)
1
2

Jacket Type
ATP[5]
TPU

Process Tube(s) Wall Thickness
028 = .028"
035 = .035"
040 = .040" (Plastic Only)
047 = .047" (Plastic Only)
049 = .049"
062 = .062" (Plastic Only)
065 = .065"
083 = .083" (SS Only)

Tracer Tube(s) Wall Thickness
035 = .035"
049 = .049"
065 = .065"
083 = .083" (SS Only)

ThermoTube® Type SL Pre-Insulated Tubing

(Not Heated)

SL-4B135-ATP

Bundle Type
SL = Single Tube

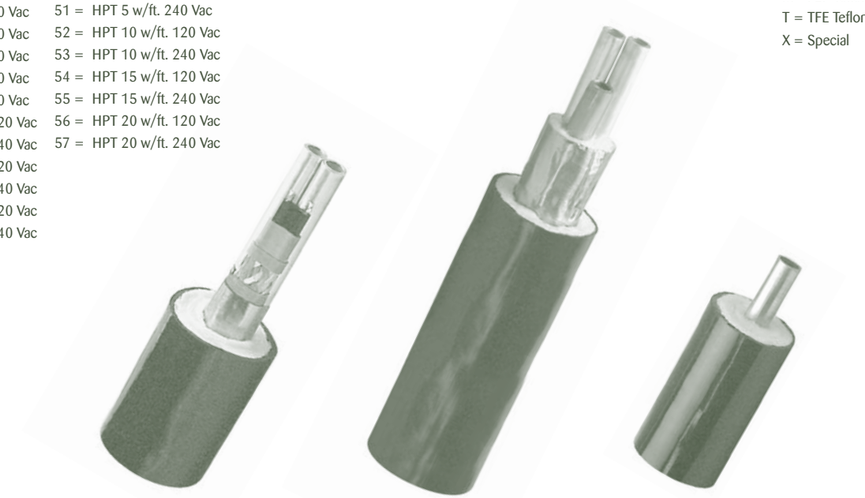
Tube O.D.
1 = 1/8"
2 = 1/4"
3 = 3/8"
4 = 1/2"
5 = 5/8"
6 = 3/4"
8 = 1"[1]

Tube Material
A = 316 SS Welded
B = #122 Copper
C = PFA Teflon[2]
D = Monel[3]
E = Titanium
F = 316 SS Seamless
G = 304 SS Welded
H = 304 SS Seamless
J = Alloy C276
K = Alloy 825
L = Alloy 20
M= FEP Teflon
N= Nylon
P = Polyethylene
X = Special

Number of Tubes
1

Tube Wall Thickness
30 = .030"
32 = .032" (Copper Only)
35 = .035"
49 = .049"
65 = .065"
83 = .083" (SS Only)

Jacket Type
ATP[5]
TPU



Typical TubeTrace Type ME **Typical TubeTrace Type MP** **Typical ThermoTube Type SL**

Notes . . .

1. Contact factory for availability of 1" O.D. coils. (Not available in all materials.)
2. Teflon is a trademark of E.I. du Pont de Nemours & Co., Inc.
3. Monel is a trademark 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. Complete line of accessories for TubeTrace and ThermoTube are available.

Electrical Heat Trace Application

For Freeze Protection or Maintain 150°F (65°C) NO STEAM OUTS

Heat Trace Exposure* Limited to 185°F (85°C)

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

40 = BSX 3 w/ft. 120 Vac
41 = BSX 3 w/ft. 240 Vac
42 = BSX 5 w/ft. 120 Vac
43 = BSX 5 w/ft. 240 Vac
44 = BSX 8 w/ft. 120 Vac
45 = BSX 8 w/ft. 240 Vac
46 = BSX 10 w/ft. 120 Vac
47 = BSX 10 w/ft. 240 Vac

For Freeze Protection or Maintain 250°F (121°C)

Heat Trace Exposure* to 420°F (215°C)

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

60 = HTSX 3 w/ft. 120 Vac
61 = HTSX 3 w/ft. 240 Vac
62 = HTSX 6 w/ft. 120 Vac
63 = HTSX 6 w/ft. 240 Vac
64 = HTSX 9 w/ft. 120 Vac
65 = HTSX 9 w/ft. 240 Vac
66 = HTSX 12 w/ft. 120 Vac
67 = HTSX 12 w/ft. 240 Vac
68 = HTSX 15 w/ft. 120 Vac
69 = HTSX 15 w/ft. 240 Vac
70 = HTSX 20 w/ft. 120 Vac
71 = HTSX 20 w/ft. 240 Vac

For Freeze Protection or Maintain 300°F (149°C)

Heat Trace Exposure* to 450°F (232°C)

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

30 = VSX 5 w/ft. 120 Vac
31 = VSX 5 w/ft. 240 Vac
32 = VSX 10 w/ft. 120 Vac
33 = VSX 10 w/ft. 240 Vac
34 = VSX 15 w/ft. 120 Vac
35 = VSX 15 w/ft. 240 Vac
36 = VSX 20 w/ft. 120 Vac
37 = VSX 20 w/ft. 240 Vac

For Freeze Protection or Maintain 400°F (205°C)

Exposure** to 500°F (260°C)

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

50 = HPT 5 w/ft. 120 Vac
51 = HPT 5 w/ft. 240 Vac
52 = HPT 10 w/ft. 120 Vac
53 = HPT 10 w/ft. 240 Vac
54 = HPT 15 w/ft. 120 Vac
55 = HPT 15 w/ft. 240 Vac
56 = HPT 20 w/ft. 120 Vac
57 = HPT 20 w/ft. 240 Vac

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

** Standard TubeTrace and ThermoTube bundles have a maximum tube temperature rating of 400°F (204°C) if outer jacket is to remain below 140°F (60°C) in a max ambient of 80°F (27°C) with no wind. Extra insulation (bundle option "XINS") maybe considered if tube temperatures approach HPT Power-limiting limits of 500°F (260°C), power off. For higher exposures [up to 1100°F (588°C)] consider TubeTrace HT or HTX bundles.

ISO 9001 REGISTERED

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