APPLICATION

Freeze protection 40°F (5°C) of steam lines. Continuous exposure to 1100°F (593°C). TubeTrace HTX is a preengineered electric traced tube bundle for steam sample lines and impulse lines to pressure transmitters. TubeTrace HTX will provide water freeze protection in ambient conditions down to -50°F (-45°C) with 25 mph (40 kph) wind conditions.

In the past, the only option for tubing subject to high temperature exposure was heat traced with series resistance mineral insulated (MIQ) heat trace. MIQ heaters are custom made to fit each application, so long lead times and specific field measurements are often required. TubeTrace HTX solves this with Thermon parallel resistance HPT heat trace isolated from direct contact with high temperature tubing.

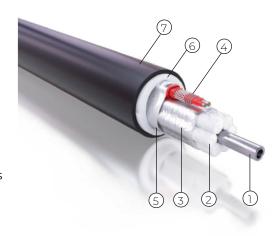
TubeTrace HTX bundles are designed to withstand continuous 1100°F (593°C) superheat steam temperature even when power is applied to the heat trace during ambient conditions of 40°F (5°C).

RATINGS

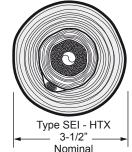
Watt density	10 w/ft @ 50°F (33 W/m @ 10°C)
Supply voltages ¹	120 or 240 Vac Nominal
Maintain temperature	40°F (5°C) (Freeze protection)
Minimum design ambient	-50°F (-45°C)
Max. continuous exposure temp.	1100°F (593°C)
Minimum bend radius	20" (508 mm)

PRODUCT FEATURES

- "Touch safe" jackets protect personnel
- "Cut-to-length" for faster installation
- Rated for 1100°F (593°C) continuous exposure temperatures
- Designed for ambient sensing control at +40°F (5°C)
- Freeze protect in ambient of -50°F (-45°C)



- 2 High temperature woven glass fiber thermal insulation
- 3 Heat reflective foil
- 4 HPT heat trace
- 5 Thermal diffusion foil
- 6 Non-hygroscopic glass fiber insulation
- 7 Polymer outer jacket



BASIC ACCESSORIES

END SEAL KIT FAK-7HTS-HT/HTX-1

- · Up to 3.50" o.d.
- · Single tube, single tracer

FAK-7HTS-HT/HTX-2

- · Up to 3.50" o.d.
- · Dual tube, single tracer



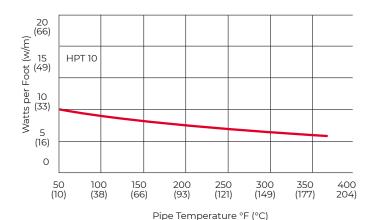
Note

 Higher voltages up to 480 Vac may be possible: contact TC-E for design assistance.

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

Catalog Number 120 Vac	Zone Length in (cm)	Catalog Number 240 Vac	Zone Length in (cm)	Power Output at 50°F (10°C)	
HPT 10-1	18 (46)	HPT 10-2	24 (61)	10 (33)	



CIRCUIT BREAKER SIZING

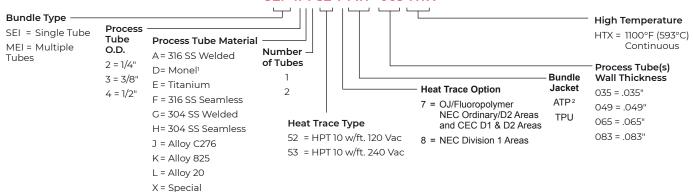
Maximum circuit lengths for various circuit breaker amperages are shown below. Breaker sizing should be based on the National Electrical Code, Canadian Electrical Code or any other applicable code. The National Electrical Code and Canadian Electrical Code require ground-fault protection of equipment for each branch circuit supplying electric heating equipment. Check local codes for ground-fault protection requirements.

	120 Vac Se	ervice Voltage	Max. C	ircuit Lena	uit Length vs. Breaker Size		
	Catalog Number		ft (m)				
	Number	°F (°C)	20A	30A	40A	50A	
	HDT 10 1	50 (10)	155 (47)	240 (73)	300 (91)		
HPT 10-1		O (-18)	145 (44)	215 (66)	300 (91)		
	-20 (-29)	135 (41)	210 (64)	290 (88)	300 (91)		
		-40 (-40)	130 (40)	200 (61)	275 (84)	300 (91)	

240 Vac S	ervice Voltage	Max. Circuit Lengt		h vs. Breaker Size		
Catalog Number	IAMPARATITA	ft (m)				
Number	°F (°C)	20A	30A	40A	50A	
	50 (10)	310 (95)	485 (148)	600 (183)		
HPT 10-2	O (-18)	280 (85)	435 (133)	600 (183)		
HP1 10-2	-20 (-29)	270 (82)	420 (128)	580 (177)	600 (183)	
	-40 (-40)	260 (79)	400 (122)	550 (168)	600 (183)	

HOW TO SPECIFY

SEI-4F1-52-7-ATP-065-HTX



Notes

Monel is a trademark of Inco Alloys International, Inc.
 Black ATP is standard.

CERTIFICATIONS/APPROVALS

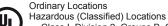
FM Approvals



Ordinary Locations
Hazardous (Classified) Locations
Class I, Division 2, Groups B, C and D
Class II, Division 2, Groups F & d G*
Class III, Divisions 1 and 2
Division 1 Locations
Requires Heater Cable Option 8:

vision 1 Locations equires Heater Cable Option 8: Class I, Division 1, Groups B, C and D Class II, Division 1, Groups E, F and G

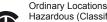
Underwriters Laboratories Inc



Hazardous (Classified) Locations
Class I, Division 2, Groups B, C and D
Class II, Division 2, Groups E, F and

Class III, Divisions 1 and 2 Class I, Zone 1, AExe II Class I, Zone 2, AExe II Division 1 Locations Requires Heater Cable Option 8: review. Class I, Division 1, Groups B, C and D Class II, Division 1, Groups E, F and G

Canadian Standards Association



Hazardous (Classified) Locations Class I, Division 2, Groups A, B, C and D Class II, Division 2, Groups E, F and G Class I, Division 1, Groups A, B, C and D Class II, Division 1, Groups E, F and G Ex e II

* CL. II, Div. 2 requires Thermon design