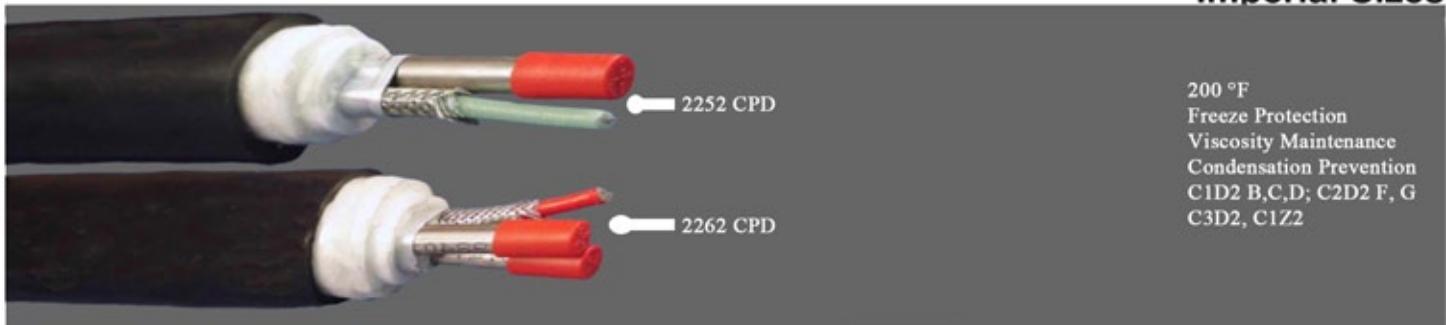


# Constant Power Density Electric Traced Tubing

## Series 2252 CPD, Series 2262 CPD

### Imperial Sizes



200 °F  
Freeze Protection  
Viscosity Maintenance  
Condensation Prevention  
C1D2 B,C,D; C2D2 F, G  
C3D2, C1Z2

## Applications

- Stack Gas Sampling Lines
- Analyzer and Instrument Lines
- Small Diameter Process Lines
- Impulse Lines

## Features

- Pre-insulated and pre-fabricated for installation costs up to 40% lower than field fabrication
- Pre-engineered for reduced design cost and predictable operational characteristics
- Bundles can contain integral power and signal wires that are pre-approved for use in specific hazardous areas
- Bundles are lightweight and easy to bend
- Smaller OD than field fabricated lines means better use of mounting space
- Maintenance-free; no open seams, no gaps in insulation
- Consistent and predictable thermal characteristics
- Alternate heating cables available from all major heater manufacturers
- Made in USA

## Standard Products in this Series:

Item No.	Tube OD	Tube Material	Heater
2252-20A14	1/4" x .035	WLD 316/316L	12/120 CPD
2252-24A14	1/4" x .040	SS PFA Fluoropolymer	12/120 CPD
2252-27A14	1/4" x .035	SMLS 316/316L SS	12/120 CPD
2252-30A14	3/8" x .035	WLD 316/316L SS	12/120 CPD
2252-34A14	3/8" x .062	PFA Fluoropolymer	12/120 CPD
2252-37A14	3/8" x .035	SMLS 316/316L SS	12/120 CPD

## Scope

Series 2252/2262 Constant Power Density (CPD) Electric Traced Tubing is a thermally insulated fluid transport line for use in applications requiring freeze protection, viscosity maintenance or condensation prevention, where a selfregulating heater is not appropriate.

Each line is comprised of the following elements:

- Single or multiple process tube(s)
- Constant Power Density heating element with tinned-copper braid and optional over-jacket
- Heat-reflecting foil wrap
- Moisture resistant, non-wicking, inorganic fibrous glass thermal insulation
- Choice of weather protective jacket

The Constant Power Density Heating Element allows for a wide range of temperature maintenance applications. The standard product is available with a 12 W/Ft, 120, 208, 240, or 277 VAC heater and will maintain a single process tube above 200°F at ambient temperatures to -40°F.

Bundles in this series are approved by FM Approvals for use in Class I Division 2, Groups B, C, and D; Class II Division 2 Groups F and G; Class III, Division 2, and Class I Zone 2 Group IIB+H2 hazardous areas. Optional power and control wires can be supplied in bundles approved for hazardous locations. Alternate heating cables can be specified based on customer requirement and preference. These heating cables will carry specific National Approvals from the manufacturer.

**Neptech Inc.**  
Manufacturer of **FLEXOTHERM** Products



# Series 2252/2262 CPD

# Electric Traced Tubing

## Technical Information

### Electrical Specification

Heater Type	Constant Power Density
Heater Insulation	PFA 600V Rated
Maximum Heater Exposure	446°F
Temperature (Power On)	
Circuit Length for	
25 A Circuit Breaker	260 feet or greater
Buss Wire Size	12 AWG
Power Output	12 Watts/Ft @ 208 VAC 12 Watts/Ft @ 240 VAC 12 Watts/Ft @ 277 VAC
Maximum Jacket Surface	
Temperature @ 400°F Tube	
Temperature and 80°F Ambient	140°F
Temperature Rating per	
NEC 500	T2C (446°F)

### Production Specification 2252/2262 CPD:

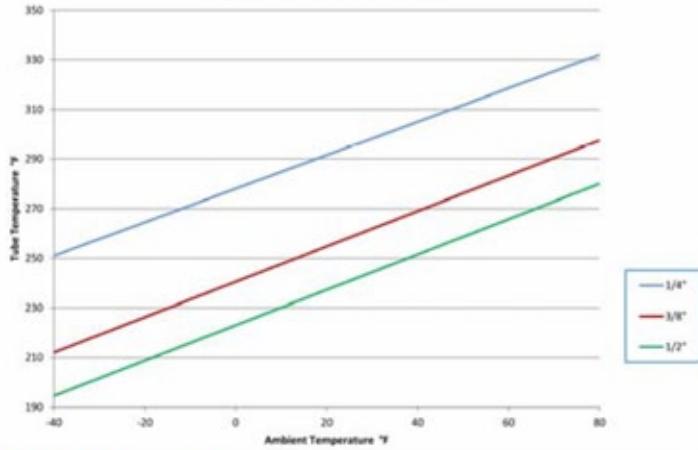
Tube OD	Standard Wall Thickness <sup>(1)</sup>	Material <sup>(2)</sup>	ASTM Std	Working Pressure @ 400°F <sup>(3)</sup>	Nominal Bundle OD	Nom. Weight lb/ft	Min Bend Rad
1/4"	0.035"	316/316L- S/S WLD	A-269	4125 PSI	1.35"	0.56	8"
3/8"	0.035"	316/316L- S/S WLD	A-269	2625 PSI	1.40"	0.60	9"
1/2"	0.035"	316/316L- S/S WLD	A-269	1925 PSI	1.50"	0.65	10"
1/4"	0.040"	PFA Fluoropolymer	D-6867	530 PSI	1.35"	0.50	8"
3/4"	0.049"	PFA Fluoropolymer	D-6867	340 PSI	1.40"	0.53	9"
1/4"	0.035"	PFA Fluoropolymer	D-6867	4125 PSI	1.50"	0.90	10"

Note: (1) other wall thickness are available

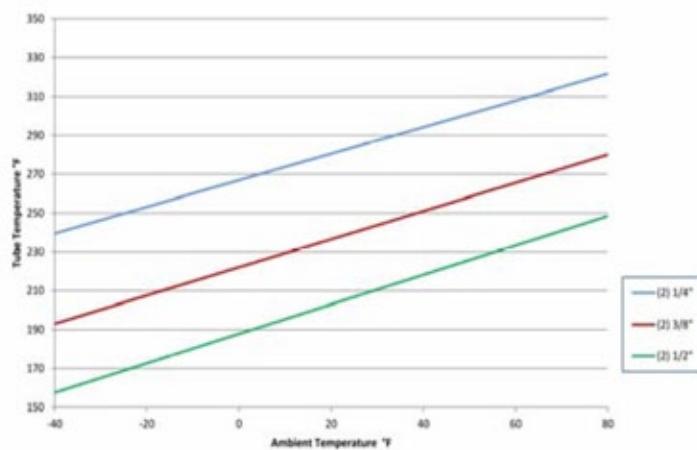
(2) alternate metal and polymer tubing materials are available

(3) working pressure based on welded tube, seamless will be higher.

Tube Temperature vs. Ambient Temperature 2252 CPD Heater  
12 W/ft Constant Power Density Heater



Tube Temperature vs. Ambient Temperature 2262 CPD Heater  
12 W/ft Constant Power Density Heater



### Installation Note:

Standard outer jacket is a 105°C Rated FRPVC. Alternate jacket materials include a 125°C Rated FRTPE, a 65°C Rated FRPE, and a flexible, halogen-free FRTPU.

Alternate tubing material include all 300 Series Stainless Steels that are available in tubing form. Also, most specialty alloys like UNS N06600, UNS N06625, UNS N10276, as well as some duplex stainless steels are available. Contact us for details.

Standard bundles are designed for a maximum core temperature of 400°F. Higher temperature ratings up to 1100°F are available. Contact us for details.

