

# Heat Trace Tubing

## TST Series

### Features

- ⦿ Steam trace
- ⦿ Materials: stainless steel or copper process tube and tracer tube, fibrous glass insulation, PVC or TPU jacket
- ⦿ Sizes: process and tracer tube: 1/4" to 1/2", 6 to 14 mm
- ⦿ Maintains process temperature from 50°F to 355°F (10°C to 179°C)
- ⦿ For use with FITOK 6D series tube fittings, 4:1 safety factor for tubing and connection part of fitting and tubing
- ⦿ Marked with brand, and ordering number



### Materials of Process Tube and Tracer Tube

UNS	Grade	ASTM Standard	FITOK Designator	Composition %					Mechanical Properties			
				C	Cr	Ni	Mo	Cu	Yield Strength MPa	Tensile Strength MPa	Elongation %	Hardness
S31600/ S31603	316/ 316L	A269	SS	≤0.035 <sup>①</sup>	16-18	10-14	2.0-3.0	-	≥205	≥515	≥35	≤80HRB
C12200	-	B75	CU	-	-	-	-	99.9	≥62	≥205	-	-

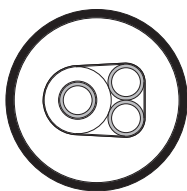
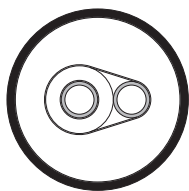
① The carbon content of tubing with outside diameter smaller than 1/2" or wall thickness smaller than 0.049" is allowed up to 0.04%.

### PVC Jacket

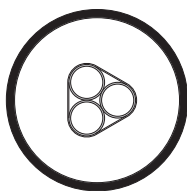
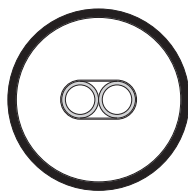
Min. Tensile Strength	1530 psig (105 bar)
Min. Elongation	300%
Shore Hardness	80 HA
Max. Working Temperature	194°F (90°C)
Min. Installation Temperature	-31°F (-35°C)
Min. Working Temperature	-31°F (-35°C)
Resistance to Chloride	Yes
Max. Water Absorption	0.06%

### Types

#### Light Heat Trace



#### Heavy Heat Trace



One Process Tube Two Process Tubes

One Process Tube Two Process Tubes

#### Temperature Maintenance Range

Light Heat Trace	Heavy Heat Trace
50°F to 200°F (10°C to 93°C)	200°F to 355°F (93°C to 179°C)

## Technical Data of Light Heat Trace

### Fractional

Process Tube Tube O.D. x Wall Thickness, in.	Tracer Tube Tube O.D. x Wall Thickness, in.	Product O.D. in. ±0.157 in.	Min. Bend Radius in.	Max. Coil Length <sup>①</sup> ft	Straight- Length Tubing ft
Process Tube and Tracer Tube					
1/4 × 0.035	1/4 × 0.035	1.65	13.8	1312	20
3/8 × 0.049	3/8 × 0.049	1.89			
1/2 × 0.065	1/2 × 0.065	2.32			
Two Process Tubes and Tracer Tube					
1/4 × 0.035	1/4 × 0.035	1.65	13.8	984	20
3/8 × 0.049	3/8 × 0.049	1.89			
1/2 × 0.065	1/2 × 0.065	2.32			

① Contact FITOK Group for more information.

### Metric

Process Tube Tube O.D. x Wall Thickness, mm	Tracer Tube Tube O.D. x Wall Thickness, mm	Product O.D. mm ±4 mm	Min. Bend Radius mm	Max. Coil Length <sup>①</sup> m	Straight- Length Tubing m
Process Tube and Tracer Tube					
6 × 1	6 × 1	41	350	400	6
8 × 1	8 × 1	45			
10 × 1	10 × 1	49			
12 × 1	12 × 1	57			
14 × 2	14 × 2	61	/	/	
Two Process Tubes and Tracer Tube					
6 × 1	6 × 1	41	350	300	6
8 × 1	8 × 1	45			
10 × 1	10 × 1	49			
12 × 1	12 × 1	57			
14 × 2	14 × 2	61	/	/	

① Contact FITOK Group for more information.

## Technical Data of Heavy Heat Trace

### Fractional

Process Tube Tube O.D. x Wall Thickness, in.	Tracer Tube Tube O.D. x Wall Thickness, in.	Product O.D. in. ±0.157 in.	Min. Bend Radius in.	Max. Coil Length <sup>①</sup> ft	Straight- Length Tubing ft
Process Tube and Tracer Tube					
1/4×0.035	1/4×0.035	1.65	13.8	1312	20
3/8×0.049	3/8×0.049	1.89			
1/2×0.065	1/2×0.065	2.32			
Two Process Tubes and Tracer Tube					
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### Metric

Process Tube Tube O.D. x Wall Thickness, mm	Tracer Tube Tube O.D. x Wall Thickness, mm	Product O.D. mm ±4 mm	Min. Bend Radius mm	Max. Coil Length <sup>①</sup> m	Straight- Length Tubing m
Process Tube and Tracer Tube					
6×1	6×1	41	350	400	6
8×1	8×1	45			
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Two Process Tubes and Tracer Tube					
6×1	6×1	41	350	300	6
8×1	8×1	45			
10×1	10×1	49			
12×1	12×1	57			
14×2	14×2	61	/	/	

① Contact FITOK Group for more information.

### Working Pressure

Refer to the working pressure of TMP series tubing.

## Ordering Information

### Fractional

Refer to Part Number Description to get a complete ordering number.

Process Tube Tube O.D. x Wall Thickness, in.	Process Tube Material	Tracer Tube Tube O.D. x Wall Thickness, in.	Ordering Number	
			Light Heat Trace	Heavy Heat Trace
Process Tube and Tracer Tube				
1/4 × 0.035	316/316L	1/4 × 0.035	SS-TST-L2-4035-SS4035-□-□-□□	SS-TST-H2-4035-SS4035-□-□-□□
3/8 × 0.049	C12200	3/8 × 0.049	CU-TST-L2-6049-SS6049-□-□-□□	CU-TST-H2-6049-SS6049-□-□-□□
Two Process Tubes and Tracer Tube				
1/4 × 0.035	316/316L	1/4 × 0.035	SS-TST-L3-4035-SS4035-□-□-□□	SS-TST-H3-4035-SS4035-□-□-□□
3/8 × 0.049	C12200	3/8 × 0.049	CU-TST-L3-6049-SS6049-□-□-□□	CU-TST-H3-6049-SS6049-□-□-□□

### Metric

Refer to Part Number Description to get a complete ordering number.

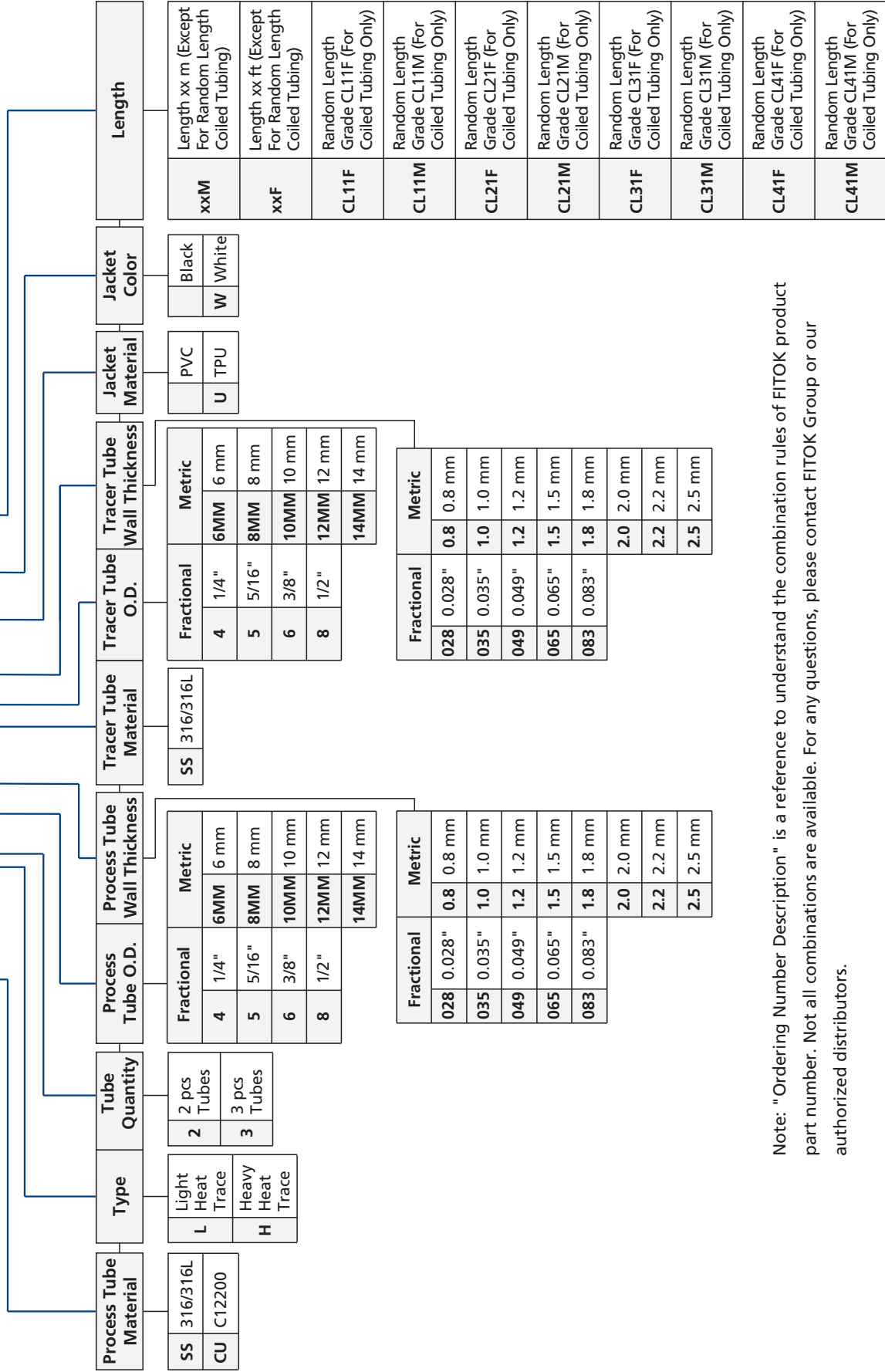
Process Tube Tube O.D. x Wall Thickness mm	Process Tube Material	Tracer Tube Tube O.D. x Wall Thickness mm	Ordering Number	
			Light Heat Trace	Heavy Heat Trace
Process Tube and Tracer Tube				
6 × 1	316/316L	6 × 1	SS-TST-L2-6MM1.0-SS6MM1.0-□-□-□□	SS-TST-H2-6MM1.0-SS6MM1.0-□-□-□□
10 × 1	C12200	10 × 1	CU-TST-L2-10MM1.0-SS10MM1.0-□-□-□□	CU-TST-H2-10MM1.0-SS10MM1.0-□-□-□□
Two Process Tubes and Tracer Tube				
6 × 1	316/316L	6 × 1	SS-TST-L3-6MM1.0-SS6MM1.0-□-□-□□	SS-TST-H3-6MM1.0-SS6MM1.0-□-□-□□
10 × 1	C12200	10 × 1	CU-TST-L3-10MM1.0-SS10MM1.0-□-□-□□	CU-TST-H3-10MM1.0-SS10MM1.0-□-□-□□

① Standard length: 20 ft and 6 m

② S31600/S31603 material jacketed tubing is ordered in the same way as TCT series coiled tubing, for different lengths see Ordering Information of TCT series.

### Ordering Number Description

SS - TST - L2 - 6035 - SS6035 - U - W - 6M



Note: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available. For any questions, please contact FITOK Group or our authorized distributors.