

Jacketed Tubing

TJT Series

Features

- ⦿ Materials: stainless steel or copper tubing, PVC or TPU jacket
- ⦿ Sizes: 1/4" to 1 1/4", 6 mm to 32 mm
- ⦿ Working temperature: -31°F to 194°F (-35°C to 90°C)
- ⦿ Stainless steel tubing bright annealed with machined finished external surface
- ⦿ For use with FITOK 6D series tube fittings, 4:1 safety factor for the tubing and connection part of fitting and tubing
- ⦿ Marked with brand, tubing material grade, standard, specification, heat number



Materials

Tubing

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 ^①	16-18	10-14	2.0-3.0	-	≥205	≥515	≥35	≤80 HRB
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%

Technical Data

Fractional

Material Designator	UNS	Tube O.D. in.	Wall Thickness ^① in.	Max. Working Temperature °F (°C)	Min. Working Temperature °F (°C)	Working Pressure psig	Min. Bend Radius in.	Jacket O.D. in. ±0.016 in.	Max. Coil Length ft	Straight-Length Tubing ft
SS	S31600/ S31603	1/4	0.028	194 (90)	-31 (-35)	4000	8	0.407	6560	20
		5/16	0.035			4000		0.471	4170	
		3/8	0.049			4800		0.533	2530	
		1/2	0.065			5100		0.657	1430	
		5/8	0.083			5200		0.783	900	
		3/4	0.095			4900	/	0.907	/	
		7/8	0.095			4200		1.033		
		1	0.109			4200		1.157		
		1 1/4	0.120			3600		1.407		
CU	C12200	1/4	0.035			1600	8	0.407	4800	
		3/8	0.035			1000		0.533	3050	
		1/2	0.035 ^②			800		0.657	2200	
			0.049			1100		0.657	1650	

Metric

Material Designator	UNS	Tube O.D. mm	Wall Thickness mm ^①	Max. Working Temperature °C (°F)	Min. Working Temperature °C (°F)	Working Pressure bar	Min. Bend Radius cm	Jacket O.D. mm ±0.4 mm	Max. Coil Length m	Straight-Length Tubing m
SS	S31600/ S31603	6	1.0	90 (194)	-35 (-31)	420	20.3	10	1600	6
		8	1.0			310		12	1140	
		10	1.2			300		14	750	
		12	1.5			330		16	500	
		14	2.0			380		18	330	
		15	2.0			360		19	300	
		16	2.0			330		20	280	
		18	2.0			290	22	/		
		20	2.0			260	24			
		22	2.0			230	26			
		25	3.0			320	29			
		28	3.0			280	32			
		30	3.0			260	34			
		32	3.0			240	36			
		CU	C12200			6	1.0			
10	1.0			80	14	750				
12	1.0 ^②			60	16	650				
	1.5			100	16	450				

① Refer to TMP series tubing for other wall thicknesses of S31600/S31603.

② Not recommended for use with 6D series tube fittings in gas service.

Ordering Information

- Standard length: 20 ft and 6 m
- 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

