T20D Series

Features

- Material: 316/316L, enhanced-316/316L
- O Working pressure up to 20,000 psig (1379 bar)
- ◎ Working temperature: -325°F to 800°F (-198°C to 427°C)
- O Cold-drawn 1/8-hard seamless tubing
- For use with FITOK 20D series (formerly DHL series) tube fittings
- Marked with brand, material grade, specification, pressure and heat number
- O Standard length: 20 ft and 6 m



Materials

UNS	Grade	FITOK Designator	Composition %							
			С	Mn	Р	S	Si	Cr	Ni	Мо
S31600/S31603	316/316L	SS	0.035	- ≤2.00	.00 <0.045	5 ≤0.03	≤1.00	16-18	10-14	2.0-3.0
Enhanced- S31600/S31603	Enhanced- ^① 316/316L	SH	0.030					17-18	12-14	2.6-3.0

① Enhanced-316/316L complying with GB50516-2021 Technical Code for Hydrogen Fuelling Station is available, in which Nieq is not less than 28.5%. Leave a note for your requirements when placing order.

Mechanical Properties

UNS	Grade	Yield Strength ksi	Tensile Strength ksi	Elongation %	Hardness
S31600/S31603	316/316L	97 +- 110	105 to 140	≥25	≤26 HRC
Enhanced- S31600/S31603	Enhanced- 316/316L	87 to 110			

Dimensional Tolerance

Tube O.D. in.	O.D. Tolerance in.	Wall Thickness Tolerance %
1/4		
3/8		
1/2	+/-0.005	+/-10
9/16		
3/4		
	I.	1



Working Pressure at Ambient Temperature

Tube O.D. in.	Wall Thickness Tolerance in.	Working Pressure ^① psig (bar)
1/4	0.065	
3/8	0.083	
1/2	0.109	20,000 (1379)
9/16	0.125	
3/4	0.165	

① Working pressures are calculated from an S value of 58,500 psi (400 MPa) at -20 to 100°F (-28 to 38°C) for ASME B31.3 Chapter IX High Pressure Piping.

Elevated Temperature Factors

Tempe			
°F	°C	Factor	
100	38		
200	93	1.00	
300	149		
400	204	0.96	
500	260	0.89	
600	316	0.85	
700	371	0.81	
800	427	0.79	

Ordering Information

Tube O.D. in.	Wall Thickness in.	Ordering Number ^{①②}		
1/4	0.065	□□-T20D-4-065-6M	□□-T20D-4-065-20	
3/8	0.083	□□-T20D-6-083-6M	□□-T20D-6-083-20	
1/2	0.109	□□-T20D-8-109-6M	□□-T20D-8-109-20	
9/16	0.125	□□-T20D-9-125-6M	□□-T20D-9-125-20	
3/4	0.165	□□-T20D-12-165-6M	□□-T20D-12-165-20	

 $[\]textcircled{1}$ In the ordering number, "6M" designates tubing length of 6 meters; "20" designates tubing length of 20 feet.



② To order, add the appropriate material designator as prefix: SS for 316/316L and SH for enhanced-316/316L.