

## Ordering Information, Dimensions, and Pressure Ratings

### Metric Sizes

Allowable working pressures are based on equations from ASME B31.3 and ASME B31.1 for EN ISO 1127 tubing (D4, T4 tolerance for 3 to 12 mm; D4, T3 tolerance 14 to 50 mm), using a stress value of 137.8 MPa (20 000 psi) and tensile strength of 516.4 MPa (74 900 psi).

Tubing nominal length is 6 m.

Tube OD mm	Tube Wall mm	Ordering Number	Weight kg/m	Working Pressure bar
3	0.5 <sup>①</sup>	SS-T3M-S-0,5M-6ME	0.021	330
	0.7 <sup>①</sup>	SS-T3M-S-0,7M-6ME	0.027	560
6	1.0	SS-T6M-S-1,0M-6ME	0.125	420
	1.5	SS-T6M-S-1,5M-6ME	0.169	710
8	1.0	SS-T8M-S-1,0M-6ME	0.175	310
	1.5	SS-T8M-S-1,5M-6ME	0.244	520
10	1.0	SS-T10M-S-1,0M-6ME	0.225	240
	1.5	SS-T10M-S-1,5M-6ME	0.319	400
12	1.0	SS-T12M-S-1,0M-6ME	0.275	200
	1.5	SS-T12M-S-1,5M-6ME	0.394	330
	2.0	SS-T12M-S-2,0M-6ME	0.500	470
16	1.0 <sup>①</sup>	SS-T16M-S-1,0M-6ME	0.375	140
	1.5	SS-T16M-S-1,5M-6ME	0.507	230
	2.0	SS-T16M-S-2,0M-6ME	0.651	330
18	1.0 <sup>①</sup>	SS-T18M-S-1,0M-6ME	0.425	120
	1.5	SS-T18M-S-1,5M-6ME	0.619	200
	2.0	SS-T18M-S-2,0M-6ME	0.801	290
20	2.0	SS-T20M-S-2,0M-6ME	0.901	260
22	2.0	SS-T22M-S-2,0M-6ME	1.00	230
25	2.0 <sup>②</sup>	SS-T25M-S-2,0M-6ME	1.15	200
	2.5	SS-T25M-S-2,5M-6ME	1.41	260

① Not recommended for use with Swagelok tube fittings.

② Not recommended for use with Swagelok tube fittings in gas service.

### Imperial Sizes

Allowable working pressures are calculated from an S value of 20 000 psi (137.8 MPa) for ASTM A269 tubing at –20 to 100°F (–28 to 37°C), as listed in ASME B31.3 and ASME B31.1.

Tubing nominal length is 6 m.

Tube OD in.	Tube Wall in.	Ordering Number	Weight kg/m	Working Pressure psig
1/16	0.014	SS-T1-S-014-6ME	0.01	8 100
	0.020	SS-T1-S-020-6ME	0.01	12 000
1/8	0.028	SS-T2-S-028-6ME	0.04	8 500
	0.035	SS-T2-S-035-6ME	0.05	10 900
1/4	0.035	SS-T4-S-035-6ME	0.12	5 100
	0.049	SS-T4-S-049-6ME	0.16	7 500
	0.065	SS-T4-S-065-6ME	0.19	10 200
3/8	0.035	SS-T6-S-035-6ME	0.19	3 300
	0.049	SS-T6-S-049-6ME	0.25	4 800
	0.065	SS-T6-S-065-6ME	0.32	6 500
1/2	0.035 <sup>①</sup>	SS-T8-S-035-6ME	0.26	2 600
	0.049	SS-T8-S-049-6ME	0.35	3 700
	0.065	SS-T8-S-065-6ME	0.45	5 100
	0.083	SS-T8-S-083-6ME	0.55	6 700
5/8	0.049 <sup>①</sup>	SS-T10-S-049-6ME	0.45	2 900
	0.065	SS-T10-S-065-6ME	0.58	4 000
3/4	0.049 <sup>①</sup>	SS-T12-S-049-6ME	0.56	2 400
	0.065	SS-T12-S-065-6ME	0.71	3 300
1	0.083	SS-T16-S-083-6ME	1.2	3 100

① Not recommended for use with Swagelok tube fittings in gas service.

## Pressure Ratings at Elevated Temperatures

To determine elevated-temperature pressure ratings in accordance with B31.3 and B31.1, multiply the pressure ratings provided in the tables above by the factors in the table below.

Temperature		Material	
°F	°C	304, 304 / 304L	316, 316 / 316L
200	93	1.00	1.00
400	204	0.93	0.96
600	315	0.82	0.85
800	426	0.76	0.79
1000	537	0.69	0.76

Dual-certified grades 304 / 304L and 316 / 316L meet the requirements for the lower maximum carbon content of the L grades and for the higher minimum yield and tensile strength of the non-L grades.

### Example:

Type 316 stainless steel 1/2 in. OD × 0.035 in. wall at 1000°F

- The allowable working pressure at –20 to 100°F (–28 to 37°C) is 2600 psig (**Fractional Sizes**, page 3).
- The elevated temperature factor for 1000°F (537°C) is 0.76:

$$2600 \text{ psig} \times 0.76 = 1976 \text{ psig}$$

The allowable working pressure for 316 SS 1/2 in. OD × 0.035 in. wall tubing at 1000°F (537°C) is 1976 psig.