



Tubing and Pipe

FT, MT and PI Series

Tubing and Pipe

Tubing Standards

Grade	Standard specification
TP316L TP316 TP304L TP304	ASTM A269, ASTM A213, ASME SA-213

Pipe Standards

Grade	Standard specification
TP316L TP316 TP304L TP304	ASTM A312, ASME SA-312

Suggested Allowable Working Pressure for Stainless Steel Tubing

Fractional Stainless Steel Seamless Tubing

Tube O.D. (in.)	Nominal Wall Thickness, in.															
	0.010	0.012	0.014	0.016	0.020	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120	0.134	0.156	0.188
	Working Pressure, psig															
	Note: For gas service, select a tube thickness outside of the shaded area															
1/16	5600	6800	8100	9400	12000											
1/8						8500	10900									
3/16						5400	7000	10200								
1/4						4000	5100	7500	10200							
5/16							4000	5800	8000							
3/8							3300	4800	6500	7500						
1/2							2600	3700	5100	6700						
5/8								2900	4000	5200	6000					
3/4								2400	3300	4200	4900	5800				
7/8								2000	2800	3600	4200	4800				
1									2400	3100	3600	4200	4700			
1 1/4										2400	2800	3300	3600	4100	4900	
1 1/2											2300	2700	3000	3400	4000	4900
2												2000	2200	2500	2900	3600

Metric Stainless Steel Seamless Tubing

Tube O.D. (mm)	Nominal Wall Thickness, mm													
	0.8	1.0	1.2	1.5	1.8	2.0	2.2	2.5	2.8	3.0	3.5	4.0	4.5	5.0
	Working Pressure, bar													
	Note: For gas service, select a tube thickness outside of the shaded area													
3	670													
6	310	420	540	710										
8		310	390	520										
10		240	300	400	510	580								
12		200	250	330	410	470								
14		160	200	270	340	380	430							
15		150	190	250	310	360	400							
16			170	230	290	330	370	400						
18			150	200	260	290	320	370						
20			140	180	230	260	290	330	380					
22			120	160	200	230	260	300	340					
25					180	200	230	260	290	320				
28						180	200	230	260	280	330			
30						170	180	210	240	260	310			
32						160	170	200	220	240	290	330		
38							140	160	190	200	240	270	310	
50										150	180	210	240	270

Suggested Allowable Working Pressure for Stainless Steel Pipe

NPS	Schedule Number (ASME B36.19M)			
	5S	10S	40S	80S
	Working Pressure, psig (bar)			
1/8		3940 (272)	5750 (397)	8700 (600)
1/4		3960 (273)	5620 (387)	8130 (560)
3/8		3110 (215)	4540 (313)	6660 (459)
1/2	2470 (170)	3220 (222)	4370 (301)	6190 (427)
3/4	1960 (135)	2540 (175)	3550 (245)	5040 (348)
1	1550 (107)	2680 (185)	3330 (229)	4650 (320)
1 1/4	1230 (85)	2110 (146)	2760 (190)	3890 (268)
1 1/2	1070 (74)	1830 (126)	2460 (170)	3520 (243)
2	840 (58)	1430 (99)	2060 (142)	2990 (206)

Tubing Dimensions

Fractional Sizes

Tube O.D. (in.)	Nominal Wall Thickness in.	Ordering Number	Nominal Length m	Weight lb/ft
1/16	0.012	FT-1-0.012-3M-TP316	3	0.010
1/8	0.028	FT-2-0.028-3M-TP316		0.029
1/4	0.035	FT-4-0.035-3M-TP316		0.080
	0.049	FT-4-0.049-3M-TP316		0.105
	0.065	FT-4-0.065-3M-TP316		0.128
3/8	0.035	FT-6-0.035-3M-TP316		0.127
	0.049	FT-6-0.049-3M-TP316		0.171
	0.065	FT-6-0.065-3M-TP316		0.215
1/2	0.035	FT-8-0.035-3M-TP316		0.174
	0.049	FT-8-0.049-3M-TP316		0.236
	0.065	FT-8-0.065-3M-TP316		0.302
5/8	0.065	FT-10-0.065-3M-TP316		0.389
3/4	0.065	FT-12-0.065-3M-TP316		0.476
1	0.083	FT-16-0.083-3M-TP316		0.813

Metric Sizes

Tube O.D. (mm)	Nominal Wall Thickness mm	Ordering Number	Nominal Length m	Weight kg/m
3	0.5	MT-3-0.5-3M-TP316	3	0.021
	0.8	MT-3-0.8-3M-TP316		0.027
6	1.0	MT-6-1.0-3M-TP316		0.125
	1.5	MT-6-1.5-3M-TP316		0.169
8	1.0	MT-8-1.0-3M-TP316		0.175
	1.5	MT-8-1.5-3M-TP316		0.244
10	1.0	MT-10-1.0-3M-TP316		0.225
	1.5	MT-10-1.5-3M-TP316		0.319
12	1.0	MT-12-1.0-3M-TP316		0.275
	1.5	MT-12-1.5-3M-TP316		0.394
	2.0	MT-12-2.0-3M-TP316		0.500
16	1.0	MT-16-1.0-3M-TP316		0.375
	1.5	MT-16-1.5-3M-TP316		0.507
	2.0	MT-16-2.0-3M-TP316		0.651
18	1.0	MT-18-1.0-3M-TP316		0.425
	1.5	MT-18-1.5-3M-TP316		0.619
	2.0	MT-18-2.0-3M-TP316		0.801
20	2.0	MT-20-2.0-3M-TP316		0.901
22	2.0	MT-22-2.0-3M-TP316		1.00
25	2.0	MT-25-2.0-3M-TP316		1.15
	2.5	MT-25-2.5-3M-TP316		1.41

Pipe Dimensions

NPS	Outside Diameter		Schedule Number																		
	In.	mm	5S	5	10S	10	20	30	40S	40	STD	60	80S	80	XS	100	120	140	160	XXS	
Nominal Wall Thickness, mm																					
1/8	0.4	10.3			1.2	1.2		1.4	1.7	1.7	1.7		2.4	2.4	2.4						
1/4	0.5	13.7			1.7	1.7			2.2	2.2	2.2		3.0	3.0	3.0						
3/8	0.7	17.1			1.7	1.7		1.8	2.3	2.3	2.3		3.2	3.2	3.2						
1/2	0.8	21.3	1.7	1.7	2.1	2.1		2.4	2.8	2.8	2.8		3.7	3.7	3.7				4.8	7.5	
3/4	1.1	26.7	1.7	1.7	2.1	2.1		2.4	2.9	2.9	2.9		3.9	3.9	3.9				5.6	7.8	
1	1.3	33.4	1.7	1.7	2.8	2.8		2.9	3.4	3.4	3.4		4.5	4.5	4.5				6.4	9.1	
1 1/4	1.7	42.2	1.7	1.7	2.8	2.8		3.0	3.6	3.6	3.6		4.9	4.9	4.9				6.4	9.7	
1 1/2	1.9	48.3	1.7	1.7	2.8	2.8		3.2	3.7	3.7	3.7		5.1	5.1	5.1				7.1	10.2	
2	2.4	60.3	1.7	1.7	2.8	2.8		3.2	3.9	3.9	3.9		5.5	5.5	5.5				8.7	11.1	
2 1/2	2.9	73.0	2.1	2.1	3.1	3.0		4.8	5.2	5.2	5.2		7.0	7.0	7.0				9.5	14.0	
3	3.5	88.9	2.1	2.1	3.1	3.0		4.8	5.9	5.5	5.5		7.6	7.6	7.6				11.1	15.2	
3 1/2	4.0	101.6	2.1	2.1	3.1	3.0		4.8	5.7	5.7	5.7		8.1	8.1	8.1				13.5		
4	4.5	114.3	2.1	2.1	3.1	3.0		4.8	6.0	6.0	6.0		8.6	8.6	8.6		11.1		15.9	17.1	
5	5.6	141.3	2.8	2.8	3.4	3.4			6.6	6.6	6.6		9.5	9.5	9.5		12.7		18.3	19.1	
6	6.6	168.3	2.8	2.8	3.4	3.4			7.1	7.1	7.1		11.0	11.0	11.1		14.3		23.0	21.9	
8	8.6	219.1	2.8	2.8	3.8	3.8	6.4	7.0	8.2	8.2	8.2	10.3	12.7	12.7	12.7	15.1	18.3	20.6	28.6	22.2	
10	10.8	273.1	3.4	3.4	4.2	4.2	6.4	7.8	9.3	9.3	9.3	12.7	12.7	15.1	12.7	18.3	21.4	25.4	33.3	25.4	
12	12.8	323.9	4.0	4.0	4.6	4.6	6.4	8.4	9.5	10.3	9.5	14.3	12.7	17.5	12.7	21.4	25.4	28.6	35.7	25.4	
14	14.0	355.6	4.0	4.0	4.8	6.4	7.9	9.5	9.5	11.1	9.5	15.1	12.7	19.1	12.7	23.8	27.8	31.8	40.5		
16	16.0	406.4	4.2	4.2	4.8	6.4	7.9	9.5	9.5	12.7	9.5	16.7	12.7	21.4	12.7	26.2	31.0	36.5	45.2		
18	18.0	457.2	4.2	4.2	4.8	6.4	7.9	11.1	9.5	14.3	9.5	19.1	12.7	23.8	12.7	29.4	34.9	39.7	50.0		
20	20.0	508.0	4.8	4.8	5.5	6.4	9.5	12.7	9.5	15.1	9.5	20.6	12.7	26.2	12.7	32.5	38.1	44.5	54.0		
22	22.0	558.8	4.8	4.8	5.5	6.4	9.5	12.7			9.5	22.2		28.6	12.7	34.9	41.3	47.6	59.5		
24	24.0	609.6	5.5	5.5	6.4	6.4	9.5	14.3	9.5	17.5	9.5	24.6	12.7	31.0	12.7	38.9	46.0	52.4			
26	26.0	660.4				8.0	12.7				9.5				12.7						
28	28.0	711.2				8.0	12.7	15.9			9.5				12.7						
30	30.0	762.0	6.4	6.4	8.0	8.0	12.7	15.9			9.5				12.7						
32	32.0	812.8				8.0	12.7	15.9		17.5	9.5				12.7						
34	34.0	863.6				8.0	12.7	15.9		17.5	9.5				12.7						
36	36.0	914.4				8.0	12.7	15.9		19.1	9.5				12.7						

How to Order

FT — 4 — 0.035 — 6M — TP316L — EP						
Tubing or Pipe	Tubing O.D. or Pipe NPS	Nominal Wall Thickness or Schedule Number	Nominal Length	Grade	Geometrical Shape	Surface Condition
FT Fractional Tubing	1 1/16 in.	0.010	6M 6 meter	TP316L 316L S.S.	S Straight Tubing or Pipe O Coil Tubing	Mechanically Polished
MT Metric Tubing	2 1/8 in.	0.012	3M 3 meter	TP316 316 S.S.		BA Bright Annealed
PI Pipe	4 1/4 in.	0.014		TP304L 304L S.S.		EP Electropolishing
	6 3/8 in. or 6 mm	0.016		TP304 304 S.S.		
	8 1/2 in. or 8 mm	0.020				
	10 10 mm	0.028				
	12 3/4 in. or 12 mm	0.035				
	14 14 mm	0.049				
	16 1 in. or 16 mm	0.8				
	18 18 mm	1.0				
	20 1 1/4 in. or 20 mm	1.2				
	22 22 mm	55				
	25 25mm	80				
	.	160				
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Notes:

- ❖ The length of the straight Tubing or Pipe is 6 meters and 3 meters
- ❖ Please consult your local branch or authorized agent for coil tubing lengths.
- ❖ Coils Tubing Working Pressure: Refer to the working pressure of Stainless Steel Tubing