

FD-LOK Stainless Steel Seamless Tubing

Features

- © Sizes range from 1/16" to 1 1/2" and 2 mm to 38 mm.
- © Marked to indicate material, size, specifications, and heat number.

Material Standards

Grade	UNS Designation	ASTM	ASME
316/316L	S31600/S31603	A269/A213	SA213
304/304L	S31400/S31403		
321	S32100		



Allowable Working Pressure

Fractional 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	5660	6870	8180	9490	12100											
1/8						8580	11000									
3/16						5450	7070	10300								
1/4						4040	5150	7570	10300							
5/16							4040	5860	8080							
3/8							3330	4850	5860							
1/2							2420	3530	4750	6260						
5/8								2930	4040	5250	6060					
3/4								2420	3330	4240	4950	5860				
7/8								2020	2830	3640	4240	4850				
1									2420	3130	3640	4240	4750			
1 1/4										2420	2830	3330	3640	4310	5250	
1 1/2											2320	2730	3030	3430	4040	4950

Metric 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	677															
6	313	424	545	717												
8		313	394	525												
10		242	303	404	515	586										
12		202	252	333	414	475										
14		162	202	273	343	384	434									
15		151	192	252	313	364	404									
16			172	232	293	333	374	404								
18			151	202	263	293	323	374								
20			141	182	232	263	293	333	384							
22			121	162	202	232	263	303	343							
25					182	202	232	263	293	323						
28						182	202	232	263	283	333					
30						172	182	212	242	263	313					
32						162	172	202	222	242	293	333				
38							141	162	192	202	242	273	313			

Note: The allowable working pressures of fractional and metric tubing are based on ANSI/ASME B31.3 for Process Piping.

Ordering Information

Fractional Tubing

Tube O.D. in.	Nominal Wall Thickness in.	Basic Ordering Number					Weight	
		316	316L	304	304L	321	lb/ft	Kg/m
1/8	0.028	SS-ST2-028-	6L-ST2-028-	S4-ST2-028-	4L-ST2-028-	S1-ST2-028-	0.030	0.044
1/4	0.035	SS-ST4-035-	6L-ST4-035-	S4-ST4-035-	4L-ST4-035-	S1-ST4-035-	0.082	0.122
	0.049	SS-ST4-049-	6L-ST4-049-	S4-ST4-049-	4L-ST4-049-	S1-ST4-049-	0.107	0.159
3/8	0.065	SS-ST4-065-	6L-ST4-065-	S4-ST4-065-	4L-ST4-065-	S1-ST4-065-	0.131	0.194
	0.035	SS-ST6-035-	6L-ST6-035-	S4-ST6-035-	4L-ST6-035-	S1-ST6-035-	0.129	0.192
	0.049	SS-ST6-049-	6L-ST6-049-	S4-ST6-049-	4L-ST6-049-	S1-ST6-049-	0.173	0.258
1/2	0.065	SS-ST6-065-	6L-ST6-065-	S4-ST6-065-	4L-ST6-065-	S1-ST6-065-	0.219	0.326
	0.035	SS-ST8-035-	6L-ST8-035-	S4-ST8-035-	4L-ST8-035-	S1-ST8-035-	0.177	0.263
	0.049	SS-ST8-049-	6L-ST8-049-	S4-ST8-049-	4L-ST8-049-	S1-ST8-049-	0.240	0.357
5/8	0.065	SS-ST8-065-	6L-ST8-065-	S4-ST8-065-	4L-ST8-065-	S1-ST8-065-	0.307	0.457
	0.065	SS-ST10-065-	6L-ST10-065-	S4-ST10-065-	4L-ST10-065-	S1-ST10-065-	0.396	0.589
3/4	0.065	SS-ST12-065-	6L-ST12-065-	S4-ST12-065-	4L-ST12-065-	S1-ST12-065-	0.484	0.720
1	0.083	SS-ST16-083-	6L-ST16-083-	S4-ST16-083-	4L-ST16-083-	S1-ST16-083-	0.827	1.231
1 1/4	0.109	SS-ST20-109-	6L-ST20-109-	S4-ST20-109-	4L-ST20-109-	S1-ST20-109-	1.352	2.012
1 1/2	0.134	SS-ST24-134-	6L-ST24-134-	S4-ST24-134-	4L-ST24-134-	S1-ST24-134-	2.989	2.961

Metric Tubing

Tube O.D. mm	Nominal Wall Thickness mm	Basic Ordering Number					Weight
		316	316L	304	304L	321	Kg/m
3	0.5	SS-STM3-0.5-	6L-STM3-0.5-	S4-STM3-0.5-	4L-STM3-0.5-	S1-STM3-0.5-	0.031
	0.7	SS-STM3-0.7-	6L-STM3-0.7-	S4-STM3-0.7-	4L-STM3-0.7-	S1-STM3-0.7-	0.404
6	1.0	SS-STM6-1.0-	6L-STM6-1.0-	S4-STM6-1.0-	4L-STM6-1.0-	S1-STM6-1.0-	0.125
	1.5	SS-STM6-1.5-	6L-STM6-1.5-	S4-STM6-1.5-	4L-STM6-1.5-	S1-STM6-1.5-	0.169
8	1.0	SS-STM8-1.0-	6L-STM8-1.0-	S4-STM8-1.0-	4L-STM8-1.0-	S1-STM8-1.0-	0.175
	1.5	SS-STM8-1.5-	6L-STM8-1.5-	S4-STM8-1.5-	4L-STM8-1.5-	S1-STM8-1.5-	0.244
10	1.0	SS-STM10-1.0-	6L-STM10-1.0-	S4-STM10-1.0-	4L-STM10-1.0-	S1-STM10-1.0-	0.226
	1.5	SS-STM10-1.5-	6L-STM10-1.5-	S4-STM10-1.5-	4L-STM10-1.5-	S1-STM10-1.5-	0.320
12	1.0	SS-STM12-1.0-	6L-STM12-1.0-	S4-STM12-1.0-	4L-STM12-1.0-	S1-STM12-1.0-	0.276
	1.5	SS-STM12-1.5-	6L-STM12-1.5-	S4-STM12-1.5-	4L-STM12-1.5-	S1-STM12-1.5-	0.395
	2.0	SS-STM12-2.0-	6L-STM12-2.0-	S4-STM12-2.0-	4L-STM12-2.0-	S1-STM12-2.0-	0.501
14	1.0	SS-STM14-1.0-	6L-STM14-1.0-	S4-STM14-1.0-	4L-STM14-1.0-	S1-STM14-1.0-	0.326
	1.5	SS-STM14-1.5-	6L-STM14-1.5-	S4-STM14-1.5-	4L-STM14-1.5-	S1-STM14-1.5-	0.470
	2.0	SS-STM14-2.0-	6L-STM14-2.0-	S4-STM14-2.0-	4L-STM14-2.0-	S1-STM14-2.0-	0.602
16	1.0	SS-STM16-1.0-	6L-STM16-1.0-	S4-STM16-1.0-	4L-STM16-1.0-	S1-STM16-1.0-	0.376
	1.5	SS-STM16-1.5-	6L-STM16-1.5-	S4-STM16-1.5-	4L-STM16-1.5-	S1-STM16-1.5-	0.545
	2.0	SS-STM16-2.0-	6L-STM16-2.0-	S4-STM16-2.0-	4L-STM16-2.0-	S1-STM16-2.0-	0.702
18	1.0	SS-STM18-1.0-	6L-STM18-1.0-	S4-STM18-1.0-	4L-STM18-1.0-	S1-STM18-1.0-	0.426
	1.5	SS-STM18-1.5-	6L-STM18-1.5-	S4-STM18-1.5-	4L-STM18-1.5-	S1-STM18-1.5-	0.620
	2.0	SS-STM18-2.0-	6L-STM18-2.0-	S4-STM18-2.0-	4L-STM18-2.0-	S1-STM18-2.0-	0.802
20	2.0	SS-STM20-2.0-	6L-STM20-2.0-	S4-STM20-2.0-	4L-STM20-2.0-	S1-STM20-2.0-	0.903
22	2.0	SS-STM22-2.0-	6L-STM22-2.0-	S4-STM22-2.0-	4L-STM22-2.0-	S1-STM22-2.0-	1.003
25	2.0	SS-STM25-2.0-	6L-STM25-2.0-	S4-STM25-2.0-	4L-STM25-2.0-	S1-STM25-2.0-	1.153
	2.5	SS-STM25-2.5-	6L-STM25-2.5-	S4-STM25-2.5-	4L-STM25-2.5-	S1-STM25-2.5-	1.410
28	2.8	SS-STM28-2.8-	6L-STM28-2.8-	S4-STM28-2.8-	4L-STM28-2.8-	S1-STM28-2.8-	1.769
30	3.0	SS-STM30-3.0-	6L-STM30-3.0-	S4-STM30-3.0-	4L-STM30-3.0-	S1-STM30-3.0-	2.031
32	3.5	SS-STM32-3.5-	6L-STM32-3.5-	S4-STM32-3.5-	4L-STM32-3.5-	S1-STM32-3.5-	2.501
38	4.0	SS-STM38-4.0-	6L-STM38-4.0-	S4-STM38-4.0-	4L-STM38-4.0-	S1-STM38-4.0-	3.410

Add the actual foot (feet)/meter (meters) as a suffix to the basic ordering number to get the complete ordering number.

For example: 12 feet length, outside diameter 1/2 in., wall thickness 0.049 in., 316L SS seamless tube, the complete ordering number is 6L-ST8-049-12.

4 meters length, outside diameter 1/2 in., wall thickness 0.049 in., 316L SS seamless tube, the complete ordering number is 6L-ST8-049-4M.

2 meters length, outside diameter 12 mm, wall thickness 1.0 mm, 316L SS seamless tube, the complete ordering number is 6L-STM12-1.0-2M.

FD-LOK Stainless Steel Seamless Pipe

Features

©Nominal pipe sizes from 1/8" to 2".

©Marked to indicate material, size, specifications, and heat number.



Material Standards

Grade	UNS Designation	ASTM	ASME
316/316L	S31600/S31603	A312	SA312
304/304L	S31400/S31403		
321	S32100		

Allowable Working Pressure

Nominal Pipe Size	Schedule Number (ASME B36.19M)			
	5S	10S	40S	80S
	Working Pressure, psig (bar)			
1/8	/	3950 (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)

Note: The allowable working pressures are based on ANSI/ASME B31.3 for Process Piping.

Ordering Information

Nominal Pipe Size	Schedule Number	Basic Ordering Number					Weight	
		316	316L	304	304L	321	lb/ft	Kg/m
1/8	40S	SS-SP2-40S-	6L-SP2-40S-	S4-SP2-40S-	4L-SP2-40S-	S1-SP2-40S-	0.250	0.372
	80S	SS-SP2-80S-	6L-SP2-80S-	S4-SP2-80S-	4L-SP2-80S-	S1-SP2-80S-	0.321	0.478
1/4	40S	SS-SP4-40S-	6L-SP4-40S-	S4-SP4-40S-	4L-SP4-40S-	S1-SP4-40S-	0.433	0.645
	80S	SS-SP4-80S-	6L-SP4-80S-	S4-SP4-80S-	4L-SP4-80S-	S1-SP4-80S-	0.546	0.812
3/8	40S	SS-SP6-40S-	6L-SP6-40S-	S4-SP6-40S-	4L-SP6-40S-	S1-SP6-40S-	0.579	0.862
	80S	SS-SP6-80S-	6L-SP6-80S-	S4-SP6-80S-	4L-SP6-80S-	S1-SP6-80S-	0.754	1.122
1/2	40S	SS-SP8-40S-	6L-SP8-40S-	S4-SP8-40S-	4L-SP8-40S-	S1-SP8-40S-	0.868	1.292
	80S	SS-SP8-80S-	6L-SP8-80S-	S4-SP8-80S-	4L-SP8-80S-	S1-SP8-80S-	1.110	1.652
3/4	40S	SS-SP12-40S-	6L-SP12-40S-	S4-SP12-40S-	4L-SP12-40S-	S1-SP12-40S-	1.154	1.717
	80S	SS-SP12-80S-	6L-SP12-80S-	S4-SP12-80S-	4L-SP12-80S-	S1-SP12-80S-	1.504	2.238
1	40S	SS-SP16-40S-	6L-SP16-40S-	S4-SP16-40S-	4L-SP16-40S-	S1-SP16-40S-	1.713	2.549
	80S	SS-SP16-80S-	6L-SP16-80S-	S4-SP16-80S-	4L-SP16-80S-	S1-SP16-80S-	2.216	3.297
1 1/4	40S	SS-SP20-40S-	6L-SP20-40S-	S4-SP20-40S-	4L-SP20-40S-	S1-SP20-40S-	2.319	3.450
	80S	SS-SP20-80S-	6L-SP20-80S-	S4-SP20-80S-	4L-SP20-80S-	S1-SP20-80S-	3.057	4.549
1 1/2	40S	SS-SP24-40S-	6L-SP24-40S-	S4-SP24-40S-	4L-SP24-40S-	S1-SP24-40S-	2.773	4.126
	80S	SS-SP24-80S-	6L-SP24-80S-	S4-SP24-80S-	4L-SP24-80S-	S1-SP24-80S-	3.705	5.513
2	40S	SS-SP32-40S-	6L-SP32-40S-	S4-SP32-40S-	4L-SP32-40S-	S1-SP32-40S-	3.727	5.546
	80S	SS-SP32-80S-	6L-SP32-80S-	S4-SP32-80S-	4L-SP32-80S-	S1-SP32-80S-	5.123	7.624

Add the actual foot (feet)/meter (meters) as a suffix to the basic ordering number to get the complete ordering number.

For example: 12 feet length, nominal pipe size 1/2 in., pipe schedule 40S, 316 SS seamless pipe, the complete ordering number is SS-SP8-40S-12.

2 meters length, nominal pipe size 1/2 in., pipe schedule 40S, 316 SS seamless pipe, the complete ordering number is SS-SP8-40S-2M.

Pipe Dimension

Nominal Pipe Size	Outside Diameter mm	Schedule Number																	
		Nominal Wall Thickness, mm																	
		5S	5	10S	10	20	30	40S	40	STD	60	80S	80	XS	100	120	140	160	XXS
1/8	10.287		0.889	1.245	1.245		1.727	1.727	1.727		2.413	2.413	2.413						
1/4	13.716		1.245	1.651	1.651		2.235	2.235	2.235		3.023	3.023	3.023						
3/8	17.145		1.245	1.651	1.651		2.311	2.311	2.311		3.200	3.200	3.200						
1/2	21.336	1.651	1.651	2.108	2.108		2.769	2.769	2.769		3.734	3.734	3.734					4.750	7.468
3/4	26.670	1.651	1.651	2.108	2.108		2.870	2.870	2.870		3.912	3.912	3.912					5.537	7.823
1	33.401	1.651	1.651	2.769	2.769		3.378	3.378	3.378		4.547	4.547	4.547					6.350	9.093
1 1/4	42.164	1.651	1.651	2.769	2.769		3.556	3.556	3.556		4.851	4.851	4.851					6.350	9.703
1 1/2	48.260	1.651	1.651	2.769	2.769		3.683	3.683	3.683		5.080	5.080	5.080					7.137	10.160
2	60.325	1.651	1.651	2.769	2.769		3.912	3.912	3.912		5.537	5.537	5.537					8.738	11.074
2 1/2	73.025	2.108	2.108	3.048	3.048		5.156	5.156	5.156		7.010	7.010	7.010					9.525	14.021
3	88.900	2.108	2.108	3.048	3.048		5.486	5.486	5.486		7.620	7.620	7.620					11.125	15.240
3 1/2	101.600	2.108	2.108	3.048	3.048		5.740	5.740	5.740		8.077	8.077	8.077					16.154	
4	114.300	2.108	2.108	3.048	3.048		6.020	6.020	6.020		8.560	8.560	8.560		11.125			13.487	17.120
4 1/2	127.000						6.274				9.017		9.017						
5	141.300	2.769	2.769	3.404	3.404		6.553	6.553	6.553		9.525	9.525	9.525		12.700			15.875	19.050
6	168.275	2.769	2.769	3.404	3.404		7.112	7.112	7.112		10.973	10.973	10.973		14.275			18.263	21.946
7	193.675						7.645				12.700		12.700					22.225	
8	219.075	2.769	2.769	3.759	3.759		8.179	8.179	8.179		12.700	12.700	12.700		15.088			23.012	22.225
9	244.475						8.687				12.700		12.700						
10	273.050	3.404	3.404	4.191	4.191		9.271	9.271	9.271		12.700	12.700	12.700		18.263			28.575	25.400
11	298.450						9.525				12.700		12.700						
12	323.850	3.962	4.191	4.572	4.572		9.525	10.312	9.525		14.275	12.700	12.700		21.438			33.325	25.400
14	355.600	3.962		4.775	6.350		9.525	11.125	9.525		15.088	12.700	12.700		23.825			35.712	
16	406.400	4.191		4.775	6.350		9.525	12.700	9.525		16.662	12.700	12.700		26.187			40.488	
18	457.200	4.191		4.775	6.350		11.125	14.275	9.525		19.050	12.700	12.700		29.362			45.237	
20	508.000	4.775		5.537	6.350		12.700	15.088	9.525		20.625	12.700	12.700		32.537			50.013	
22	558.800	4.775	4.775	5.537	6.350		12.700		9.525		22.225				34.925			53.975	
24	609.600	5.537		6.350	6.350		14.275	17.475	9.525		24.613	12.700	12.700		38.887			59.538	
26	660.400						14.275								46.025				
28	711.200						15.875								52.375				
30	762.000	6.350		7.925	12.700		15.875								60.013				
32	812.800						15.875								67.500				
34	863.600						15.875								75.000				
36	914.400						15.875								82.500				

Note:
The schedule numbers of 5S, 10S, 40S, and 80S comply with ASME B36.19M. The others comply with ASME B36.10M.