

Capillary Tubes TP316L UNS S31603

Designation		Wall Thickness		Mass per Unit Length	Calculated Inside Diameter	Tubing Area (Sq.in)		Tube Load Body		Internal Pressure (psi)		Collapse Strength	Internal Capacity per 1000ft		Torsional Yield	
		Specified	Min			W/min.	Internal min.	Yield min	Tensile min	Hydro Test 90%	Internal Yield min.					
		OD	WT	inch	inch	lb/ft	inch	inch ²	inch ²	lb	lb	psig	psig	psig	gal	bar
1/8	0.125	0.028	0.028	0.025	0.03	0.069	0.008	0.004	300	600	13,100	14,500	12,800	0.19	0.005	1
	0.125	0.035	0.035	0.032	0.04	0.055	0.009	0.003	400	700	15,600	17,300	15,100	0.12	0.003	1
1/4	0.250	0.035	0.035	0.032	0.09	0.180	0.022	0.027	900	1,700	8,700	9,700	8,800	1.32	0.031	4
	0.250	0.049	0.049	0.044	0.11	0.152	0.029	0.021	1,200	2,200	11,800	13,100	11,700	0.94	0.022	5
	0.250	0.065	0.065	0.059	0.14	0.120	0.035	0.014	1,500	2,600	14,800	16,400	14,300	0.59	0.014	5
3/8	0.375	0.035	0.035	0.032	0.13	0.305	0.034	0.076	1,500	2,600	5,900	6,600	6,200	3.79	0.090	10
	0.375	0.049	0.049	0.044	0.18	0.277	0.046	0.065	2,000	3,500	8,200	9,100	8,300	3.13	0.075	13
	0.375	0.065	0.065	0.059	0.22	0.245	0.058	0.052	2,500	4,400	10,500	11,700	10,500	2.45	0.058	15
	0.375	0.080	0.080	0.072	0.26	0.215	0.069	0.042	3,000	5,200	12,600	14,000	12,000	1.88	0.045	17
1/2	0.500	0.049	0.049	0.044	0.25	0.402	0.063	0.133	2,800	4,900	6,300	7,000	6,500	6.59	0.157	25
	0.500	0.065	0.065	0.059	0.31	0.370	0.081	0.115	3,600	6,200	8,100	9,000	8,300	5.58	0.133	31
	0.500	0.080	0.080	0.072	0.37	0.340	0.097	0.100	4,200	7,400	9,800	10,900	9,900	4.71	0.112	35
5/8	0.625	0.049	0.049	0.044	0.31	0.527	0.080	0.226	3,500	6,200	5,000	5,600	5,300	11.32	0.270	42
	0.625	0.065	0.065	0.059	0.40	0.495	0.104	0.203	4,600	8,000	6,600	7,300	6,800	9.99	0.238	52

Chemistry Composition

C,% 0.035 max Mn,% 2.00 max P,% 0.045 max S,% 0.030 max Si,% 1.00 max

Cr,% 16.0-18.0 Ni,% 10.0-14.0 Mo,% 2.00-3.00

Mechanical Properties

Tensile Strength: 70,000psi (483MPa) min

Yield Strength: 40,000psi (276MPa) min

Hardness: 192HBW, 200HV or 90HRB max

Tensile strength & yield strength minimum are calculated on specified wall.

Other dimensions are available on request.