



Copper Water Tube- Calculated Bursting Pressure*

Nominal Tube Size, Inches	Outside Dia. (In.)	Inside Diameter Inches			Wall Thickness Inches		Bursting Pressure Lb. per Sq. Inc.			
		Types K-L	Type K	Type L	Type K	Type L	Type K		Type L	
							Hard (Drawn)	Soft (Annealed)	Hard (Drawn)	Soft (Annealed)
1/4	.375	.305	.315	.035	.030	6,700	5,600	5,800	4,800	
3/8	.500	.402	.430	.049	.035	7,100	5,900	5,000	4,200	
1/2	.625	.527	.545	.049	.040	5,600	4,700	4,600	3,800	
5/8	.750	.652	.666	.049	.042	4,700	3,900	4,000	3,400	
3/4	.875	.745	.785	.065	.045	5,300	4,500	3,700	3,100	
1	1.125	.995	1.025	.065	.050	4,200	3,500	3,200	2,700	
1 1/4	1.375	1.245	1.265	.065	.055	3,400	2,800	2,900	2,400	
1 1/2	1.625	1.481	1.505	.072	.060	3,200	2,700	2,700	2,200	
2	2.125	1.959	1.985	.083	.070	2,800	2,300	2,400	2,000	
2 1/2	2.625	2.435	2.465	.095	.080	2,600	2,200	2,200	1,800	
3	3.125	2.907	2.945	.109	.090	2,500	2,100	2,100	1,700	
3 1/2	3.625	3.385	3.425	.120	.100	2,400	2,000	2,000	1,700	
4	4.125	3.857	3.905	.134	.110	2,300	1,900	1,900	1,600	
5	5.125	4.805	4.875	.160	.125	2,200	1,900	1,800	1,500	
6	6.125	5.741	5.845	.192	.140	2,300	1,900	1,600	1,400	
8	8.125	7.583	7.725	.271	.200	2,400	2,000	1,800	1,500	

Sizes of Copper Tube	
OD Size	Nominal Size
1/8	-
3/16	-
1/4	1/8
5/16	-
3/8	1/4
1/2	3/8
5/8	1/2
3/4	5/8
7/8	3/4
1	7/8
1 1/8	1
1 1/4	1 1/8
1 3/8	1 1/4
1 5/8	1 1/2
2 1/8	2
2 5/8	2 1/2
3 1/8	3
3 5/8	3 1/2
4 1/8	4
5 1/8	5
6 1/8	6
8 1/8	8

*Bursting Pressures are calculated from the following formula for thin, hollow cylinders under tension.

where P = Bursting Press, Lb. per Sq. In.

t = Wall Thickness, Inches

$$P = \frac{2tS}{D}$$

D = Outside Tube Diameter, Inches

S = Tensile Strength (36,000 Lb. per Sq. In. for hard tubes and 30,000 for soft tubes)

Copper Water Tube - Standard Dimensions and Weights

Nominal Tube Size, Inches	Outside Dia. (In.)	Inside Diameter Inches				Wall Thickness Inches				** Pounds per Linear Foot			
		Types K-L-M DWV	Type K	Type L	Type M	Type DWV	Type K	Type L	Type M	Type DWV	Type K	Type L	Type M
1/4	.375	.305	.315	-	-	.035	.030	.025	-	.145	.126	.106	-
3/8	.500	.402	.430	-	-	.049	.035	.025	-	.269	.198	.145	-
1/2	.625	.527	.545	-	-	.049	.040	.028	-	.344	.285	.204	-
5/8	.750	.652	.666	-	-	.049	.042	.030	-	.418	.362	2.63	-
3/4	.875	.745	.785	-	-	.065	.045	.032	-	.641	.455	.328	-
1	1.125	.995	1.025	-	-	.065	.050	.035	-	.839	.655	.465	-
1 1/4	1.375	1.245	1.265	1.291	1.295	.065	.055	.042	.040	1.04	.884	.682	.650
1 1/2	1.625	1.481	1.505	1.527	1.541	.072	.060	.049	.042	1.36	1.14	.940	.809
2	2.125	1.959	1.985	2.009	2.041	.083	.070	.058	.042	2.06	1.75	1.46	1.07
2 1/2	2.625	2.435	2.465	2.495	-	.095	.080	.065	-	2.93	2.48	2.03	-
3	3.125	2.907	2.945	2.981	3.035	.109	.090	.072	.045	4.00	3.33	2.68	1.69
3 1/2	3.625	3.385	3.425	3.459	-	.120	.100	.083	-	5.12	4.29	3.58	-
4	4.125	3.857	3.905	3.935	4.009	.134	.110	.095	.058	6.51	5.38	4.66	2.87
5	5.125	4.805	4.875	4.907	4.981	.160	.125	.109	.072	9.67	7.61	6.66	4.43
6	6.125	5.741	5.845	5.881	5.959	.192	.140	.122	.083	13.9	10.2	8.9	6.10
8	8.125	7.583	7.725	7.785	-	.271	.200	.170	-	25.9	19.3	16.5	-

** Slight variations from these weights must be expected in practice.