



## Wrot Copper Solder-Joint Drainage Fittings

Dimensions of Soldered-Joint Ends (in inches) See Diagram Page 39

Size	Male End			Female End			Metal Thickness T	Inside Diameter of Fitting O
	Outside Diameter A		Length K	Inside Diameter F		Depth G		
	Min.	Max.	Min.	Min.	Max.	Min.		
1 1/4	1.372	1.377	0.56	1.378	1.382	0.50	0.040	1.29
1 1/2	1.621	1.627	0.62	1.628	1.633	0.56	0.042	1.53
2	2.121	2.127	0.69	2.128	2.133	0.62	0.042	2.01
3	3.121	3.127	0.81	3.128	3.133	0.75	1.045	2.98
4	4.121	4.127	1.06	4.128	4.133	1.00	0.058	3.93

Extracted from American National Standard Wrought Copper and Bronze Solder-Joint Drainage Fittings (ANSI B16.29) with permission of the publisher. The American Society of Mechanical Engineers, 3 Park Ave., New York, N.Y. 10016-5990

## Wrot Copper Fittings Large Diameter Welded Design

### Fitting Material:

Copper Alloy #122, Phosphorus  
Deoxidized-High Residual Phosphorus (DHP).  
Composition: 99% Copper; .015-.040% Phosphorus.

### Weld Material:

Silicon Bronze. Meets specification  
American Welding Society (AWS) A5.7-91R  
and American Metals Society. (AMS) 4616 B

### Weld Specifications:

Tensile Strength-Up to 58,000 PSI  
Yield Strength-Up to 25,000 PSI  
Elongation in 2"-53% to 55%  
Hardness-80 to 100 Brinell (500kg. Load)  
Temperature: Melt 1832°F, Flow 1931°F.

### Method of Joining:

Electric Weld.

### Dimensions & Specifications:

EPC Welded fittings are produced in accordance with specifications shown in Manufacturers Standardization Society (MSS) SP-109 for wrought copper, and copper alloy solder-joint pressure fittings.

### Testing:

Each fitting is individually tested with air under water. The burst pressure of EPC welded fittings exceeds the recommended working pressure of comparable diameter, annealed, straight, seamless ASTM B88-96-A type L copper water tube by a safety factor

## 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	Type DWV
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	.263	-
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	8.92	6.10
8	8.125	7.583	7.725	7.785	-	.271	.200	.170	-	25.9	19.3	16.5	-