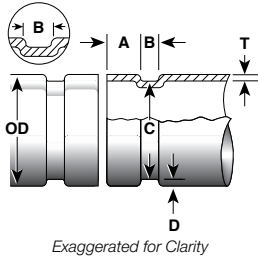


# Copper Tubing Grooving Dimensions

## COPPER TUBING TO CTS US STANDARD – ASTM B-88



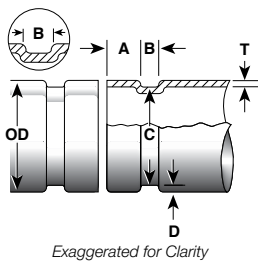
Nominal inches (Actual mm)	Dimensions – inches/millimeters											
	Copper Tubing Outside Dia. ‡		Gasket Seat "A"			Groove Width "B"		Groove Diameter "C"		Groove Depth "D" (Ref. Only)	Min. Allow. Wall Thick. "T"	Max. Allow. Flare Dia. "F"
	Max.	Min.	Basic	Max.	Min.	Max.	Min.	Max.	Min.			
2 54.0	2.127 54.0	2.123 53.9	0.610 15.5	0.640 16.3	0.580 14.7	0.330 8.4	0.300 7.6	2.029 51.5	2.009 51.0	0.048 1.2	DWV*	2.220 56.4
2½ 66.7	2.627 66.7	2.623 66.6	0.610 15.5	0.640 16.3	0.580 14.7	0.330 8.4	0.300 7.6	2.525 64.1	2.505 63.6	0.050 1.2	0.065 1.7	2.720 69.1
3 79.4	3.127 79.4	3.123 79.3	0.610 15.5	0.640 16.3	0.580 14.7	0.330 8.4	0.300 7.6	3.025 76.8	3.005 76.3	0.050 1.2	DWV*	3.220 81.8
4 104.8	4.127 104.8	4.123 104.7	0.610 15.5	0.640 16.3	0.580 14.7	0.330 8.4	0.300 7.6	4.019 102.1	3.999 101.6	0.053 1.4	DWV*	4.220 107.2
5 130.2	5.127 130.2	5.123 130.1	0.610 15.5	0.640 16.3	0.580 14.7	0.330 8.4	0.300 7.6	4.999 127.0	4.979 126.5	0.063 1.6	DWV*	5.220 132.6
6 155.6	6.127 155.6	6.123 155.5	0.610 15.5	0.640 16.3	0.580 14.7	0.330 8.4	0.300 7.6	5.999 152.3	5.979 151.9	0.063 1.6	DWV*	6.220 158.0
8 206.4	8.127 206.4	8.121 206.3	0.610 15.5	0.640 16.3	0.580 14.7	0.330 8.4	0.300 7.6	7.959 202.2	7.939 201.7	0.083 2.1	DWV*	8.220 208.8

‡ The outside diameter of roll grooved copper tubing cannot vary from the tolerance listed. The maximum allowable tolerance from square cut ends is 0.030"/0.8 mm for 2 – 3"/54.0 – 79.4 mm sizes and 0.045"/1.1 mm for 4 – 6"/104.8 – 155.6 mm sizes; this is measured from the true square line.

\* ASTM B-306 drain-waste and vent (DWV) is the minimum wall thickness of copper tubing that can be roll grooved.

See Notes on page 2.

## COPPER TUBING TO EUROPEAN STANDARD – EN 1057



Actual Size ‡ mm	Dimensions – millimeters/inches									Groove Depth "D" (Ref. Only)	Max. Allow. Flare Dia. "F"
	Actual OD *		Gasket Seat "A"			Groove Width "B"		Groove Dia. "C"			
	Max.	Min.	Basic	Max.	Min.	Max.	Min.	Max.	Min.		
54	54.07 2.129	53.93 2.123	15.87 0.625	16.64 0.655	15.11 0.595	8.38 0.330	7.62 0.300	51.51 2.028	51.00 2.008	1.25 0.049	56.39 2.220
64	64.07 2.522	63.93 2.517	15.87 0.625	16.64 0.655	15.11 0.595	8.38 0.330	7.62 0.300	61.47 2.420	60.96 2.400	1.27 0.050	66.41 2.615
66.7	66.77 2.629	66.63 2.623	15.87 0.625	16.64 0.655	15.11 0.595	8.38 0.330	7.62 0.300	64.14 2.525	63.63 2.505	1.27 0.050	69.09 2.720
76.1	76.17 2.999	76.03 2.993	15.87 0.625	16.64 0.655	15.11 0.595	8.38 0.330	7.62 0.300	73.41 2.890	72.90 2.870	1.35 0.053	78.61 3.095
88.9	88.97 3.496	88.83 3.497	15.87 0.625	16.64 0.655	15.11 0.595	8.38 0.330	7.62 0.300	85.70 3.374	85.19 3.354	1.60 0.063	91.63 3.607
108	108.07 4.255	107.93 4.249	15.87 0.625	16.64 0.655	15.11 0.595	8.38 0.330	7.62 0.300	104.80 4.126	104.29 4.106	1.60 0.063	110.54 4.352
133	133.20 5.244	132.80 5.228	15.87 0.625	16.64 0.655	15.11 0.595	8.38 0.330	7.62 0.300	129.29 5.090	128.78 5.070	1.85 0.073	135.79 5.346
159	159.20 6.280	158.80 6.252	15.87 0.625	16.64 0.655	15.11 0.595	8.38 0.330	7.62 0.300	155.30 6.114	154.79 6.094	1.85 0.073	161.80 6.370

‡ European Standard Copper Tubing: EN 1057 drawn copper tubing size

\* The outside diameter of roll grooved copper tubing cannot vary from the tolerance listed. The maximum allowable tolerance from square cut ends is 0.8 mm/0.030" for 54 – 88.9 mm sizes and 1.1 mm/0.045" for 108 – 159 mm sizes; this is measured from the true square line.

See Notes on page 2.

**JOB/OWNER**

System No. \_\_\_\_\_  
Location \_\_\_\_\_

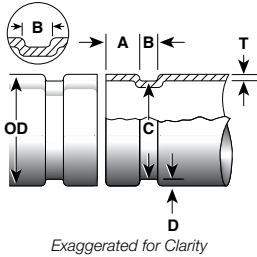
**CONTRACTOR**

Submitted By \_\_\_\_\_  
Date \_\_\_\_\_

**ENGINEER**

Spec Sect \_\_\_\_\_ Para \_\_\_\_\_  
Approved \_\_\_\_\_  
Date \_\_\_\_\_

# Copper Tubing Grooving Dimensions



## COPPER TUBING TO AUSTRALIAN STANDARD – AS 1432

Nominal Size ‡ mm	Dimensions – millimeters/inches								Groove Depth “D” (Ref. Only)	Max. Allow. Flare Dia. “F”	
	Actual OD *		Gasket Seat “A”			Groove Width “B”		Groove Dia. “C”			
	Max.	Min.	Basic	Max.	Min.	Max.	Min.	Max.			Min.
DN 50	50.80 2.000	50.67 1.995	15.87 0.625	16.64 0.655	15.11 0.595	8.38 0.330	7.62 0.300	48.21 1.898	47.70 1.878	1.25 0.049	53.06 2.089
DN 65	63.50 2.500	63.35 2.494	15.87 0.625	16.64 0.655	15.11 0.595	8.38 0.330	7.62 0.300	60.88 2.397	60.38 2.377	1.27 0.050	65.83 2.592
DN 80	76.20 3.000	76.02 2.993	15.87 0.625	16.64 0.655	15.11 0.595	8.38 0.330	7.62 0.300	73.56 2.896	73.05 2.876	1.27 0.050	78.51 3.091
DN 100	101.60 4.000	101.35 3.990	15.87 0.625	16.64 0.655	15.11 0.595	8.38 0.330	7.62 0.300	98.78 3.889	98.27 3.869	1.35 0.053	103.88 4.090
DN 125	127.00 5.000	126.75 4.990	15.87 0.625	16.64 0.655	15.11 0.595	8.38 0.330	7.62 0.300	123.67 4.869	123.16 4.849	1.60 0.063	128.77 5.070
DN 150	152.40 6.000	152.10 5.988	15.87 0.625	16.64 0.655	15.11 0.595	8.38 0.330	7.62 0.300	149.05 5.868	148.54 5.848	1.60 0.063	154.66 6.089

‡ Nominal AS 1432 drawn copper tubing size

\* The outside diameter of roll grooved copper tubing cannot vary from the tolerance listed. The maximum allowable tolerance from square cut ends is 0.8 mm/0.030" for DN 50 – 80 mm sizes and 1.1 mm/0.045" for DN 100 – 150 mm sizes; this is measured from the true square line.

See notes below.

### NOTES

**Gasket Seat “A”:** The tubing surface shall be free from indentations, roll marks, and projections from the end of the tubing to the groove, to provide a leak-tight seat for the gasket. All loose scales, dirt, chips and grease must be removed.

**Groove Width “B”:** Bottom of groove to be free of loose dirt, chips and scale that may interfere with proper coupling assembly.

**Groove Diameter “C”:** The groove must be uniform depth for the entire tubing circumference. Groove must be maintained within the “C” diameter tolerance listed.

**Groove Depth “D”:** For reference only. Groove must conform to the groove diameter “C” listed.

**Maximum Allowable Flare Diameter “F”:** measured at the most extreme tubing end diameter.

This product shall be manufactured by Victaulic or to Victaulic specifications. All products shall be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.



WCAS-7JHQF6

For complete contact information, visit [www.victaulic.com](http://www.victaulic.com)

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