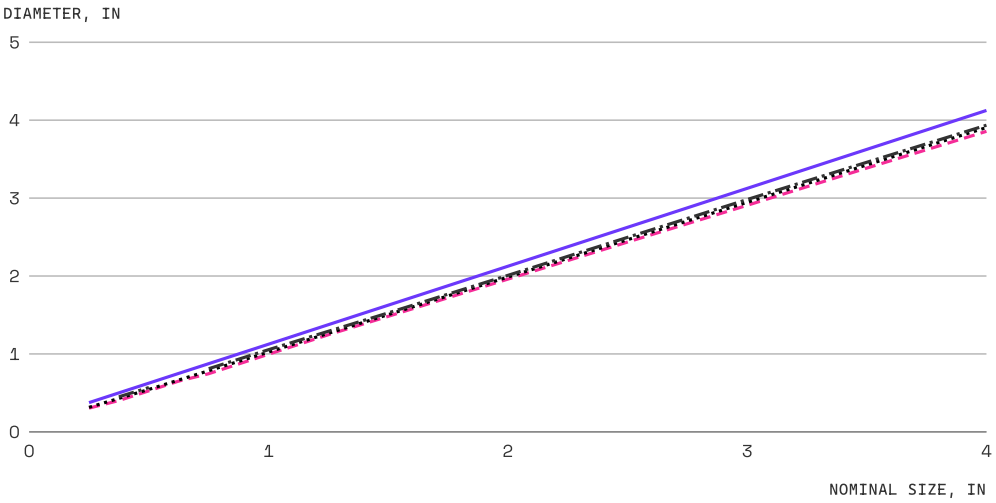
Copper pipe size chart

Copper tube from 1/4 to 4 inch runs from 0.375 to 4.125 in outside diameter (9.5 to 104.8 mm), with Type K, Type L, Type M, DWV for each size. Copper tube uses copper tube sizes (CTS): Types K, L and M of one nominal size share the outside diameter and differ in wall thickness.

Copper tube by nominal size: outside diameter in inches and millimeters, and the wall and inside diameter of each type, in inches, as published

NOMINAL SIZE	OD, IN	OD, MM	TYPE K WALL, IN	TYPE K ID, IN	TYPE L WALL, IN	TYPE L ID, IN	TYPE M WALL, IN	TYPE M ID, IN	DWV WALL, IN	DWV ID, IN	TYPE L GALLONS PER FOOT
1/4"	0.375	9.5	0.035	0.305	0.030	0.315	—	—	—	—	0.004
3/8"	0.500	12.7	0.049	0.402	0.035	0.430	0.025	0.450	—	—	0.0075
1/2"	0.625	15.9	0.049	0.527	0.040	0.545	0.028	0.569	—	—	0.0121
5/8"	0.750	19.0	0.049	0.652	0.042	0.666	—	—	—	—	0.0181
3/4"	0.875	22.2	0.065	0.745	0.045	0.785	0.032	0.811	—	—	0.0251
1"	1.125	28.6	0.065	0.995	0.050	1.025	0.035	1.055	—	—	0.0429
1-1/4"	1.375	34.9	0.065	1.245	0.055	1.265	0.042	1.291	0.040	1.295	0.0653
1-1/2"	1.625	41.3	0.072	1.481	0.060	1.505	0.049	1.527	0.042	1.541	0.0924
2"	2.125	54.0	0.083	1.959	0.070	1.985	0.058	2.009	0.042	2.041	0.1608
2-1/2"	2.625	66.7	0.095	2.435	0.080	2.465	0.065	2.495	—	—	0.2479
3"	3.125	79.4	0.109	2.907	0.090	2.945	0.072	2.981	0.045	3.030	0.3539
3-1/2"	3.625	92.1	0.120	3.385	0.100	3.425	0.083	3.459	—	—	0.4786
4"	4.125	104.8	0.134	3.857	0.110	3.905	0.095	3.935	0.058	4.009	0.6222



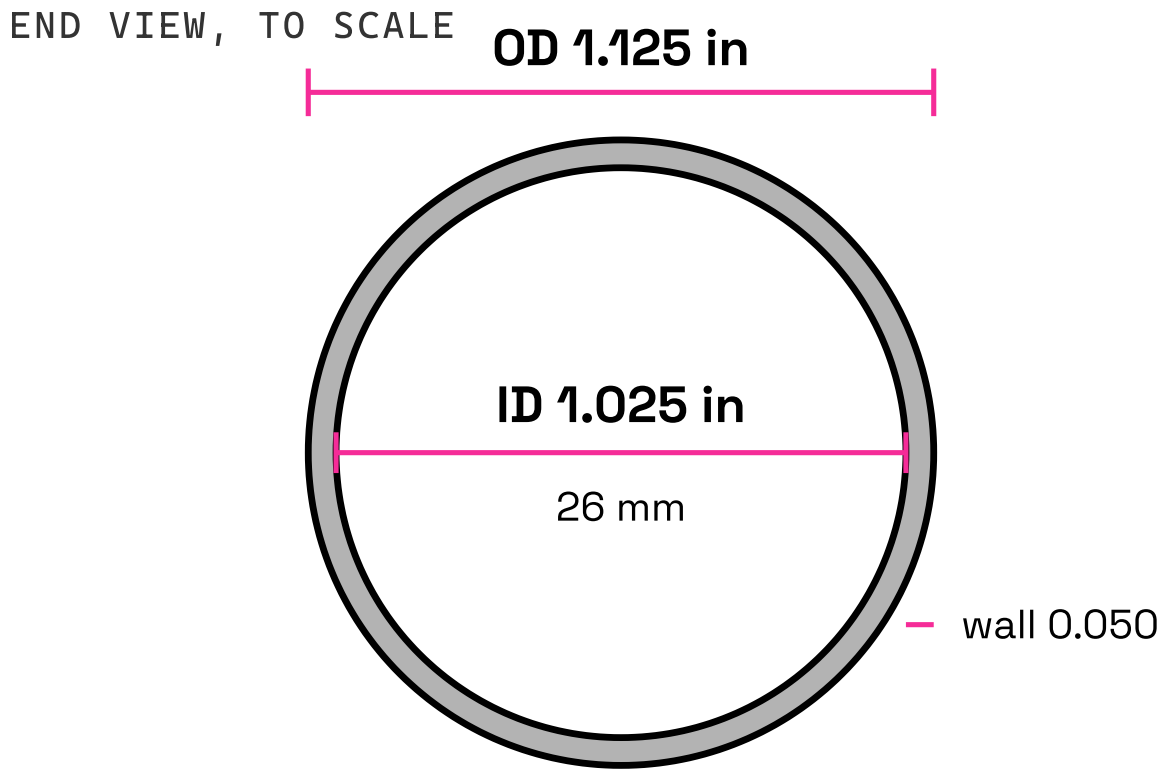
Outside and inside diameter of copper tube by nominal size.

Why a 1 inch copper pipe is not 1 inch across

The nominal size is a trade name, not a measurement. 1 inch copper pipe measures 1.125 in outside and 1.025 in inside at Type L. Copper tube uses copper tube sizes (CTS): Types K, L and M of one nominal size share the outside diameter and differ in wall thickness. To match a fitting, compare outside diameters; to work out how much water a pipe holds, use the inside diameter.

How to measure copper pipe to find its size

Measure the outside diameter: calipers across the widest point, or a tape wrapped once around the pipe divided by 3.1416. Find the nearest outside diameter in the chart; the print on the pipe gives the type. The pipe size identifier matches a measurement against every material at once. For the water a run holds, use the pipe volume calculator.



1 in Type L copper pipe, outside and inside diameter

SOURCES

- Copper Development Association (CDA Publication A4015-26/24): Copper Tube Handbook (Tables 14.2a-14.2d: Dimensions and Physical Characteristics of Copper Tube, Types K, L, M, DWV)

Values compared with these documents, last on 2026-11-15.

Methodology. Values are the published figures of the documents above.