

Metric Pipe Sizes to Inches

Metric copper (EN 1057 Table X), DN steel pipe and US copper, outside diameters in mm and inches.

SIZE	OUTSIDE (OD)	OD IN INCHES	WALL	INSIDE (ID)	ID IN INCHES
10mm	10 mm	0.394"	0.6 mm	8.8 mm	0.346"
12mm	12 mm	0.472"	0.6 mm	10.8 mm	0.425"
15mm	15 mm	0.591"	0.7 mm	13.6 mm	0.535"
22mm	22 mm	0.866"	0.9 mm	20.2 mm	0.795"
28mm	28 mm	1.102"	0.9 mm	26.2 mm	1.031"
35mm	35 mm	1.378"	1.2 mm	32.6 mm	1.283"
42mm	42 mm	1.654"	1.2 mm	39.6 mm	1.559"
54mm	54 mm	2.126"	1.2 mm	51.6 mm	2.031"

DN	INCH SIZE (NPS)	OUTSIDE (OD)	OD IN INCHES
DN15	1/2"	21.3 mm	0.840"
DN20	3/4"	26.7 mm	1.050"
DN25	1"	33.4 mm	1.315"
DN32	1-1/4"	42.2 mm	1.660"
DN40	1-1/2"	48.3 mm	1.900"
DN50	2"	60.3 mm	2.375"
DN65	2-1/2"	73.0 mm	2.875"
DN80	3"	88.9 mm	3.500"
DN90	3-1/2"	101.6 mm	4.000"
DN100	4"	114.3 mm	4.500"

US COPPER	OUTSIDE (OD)	OD IN MM	NEAREST METRIC COPPER
3/8"	0.500"	12.7 mm	12mm
1/2"	0.625"	15.9 mm	15mm
3/4"	0.875"	22.2 mm	22mm
1"	1.125"	28.6 mm	28mm
1-1/4"	1.375"	34.9 mm	35mm
1-1/2"	1.625"	41.3 mm	42mm



US COPPER	OUTSIDE (OD)	OD IN MM	NEAREST METRIC COPPER
2"	2.125"	54.0 mm	54mm

Metric copper is named by its outside diameter: 15mm copper is 15 mm (0.591") across.

DN names a pipe size. DN15 steel pipe is 21.3 mm (0.840") across.

US 1/2" copper is 0.625" (15.9 mm) across, so 15mm and US 1/2" copper are different sizes.

Metric compression fittings are sold pipe size by BSP thread, such as 15mm x 1/2" and 22mm x 3/4".

Sources: Lawton Tubes catalogue (Table X), InfraBuild and Wheatland Tube pipe data, Copper Development Association tube tables.

