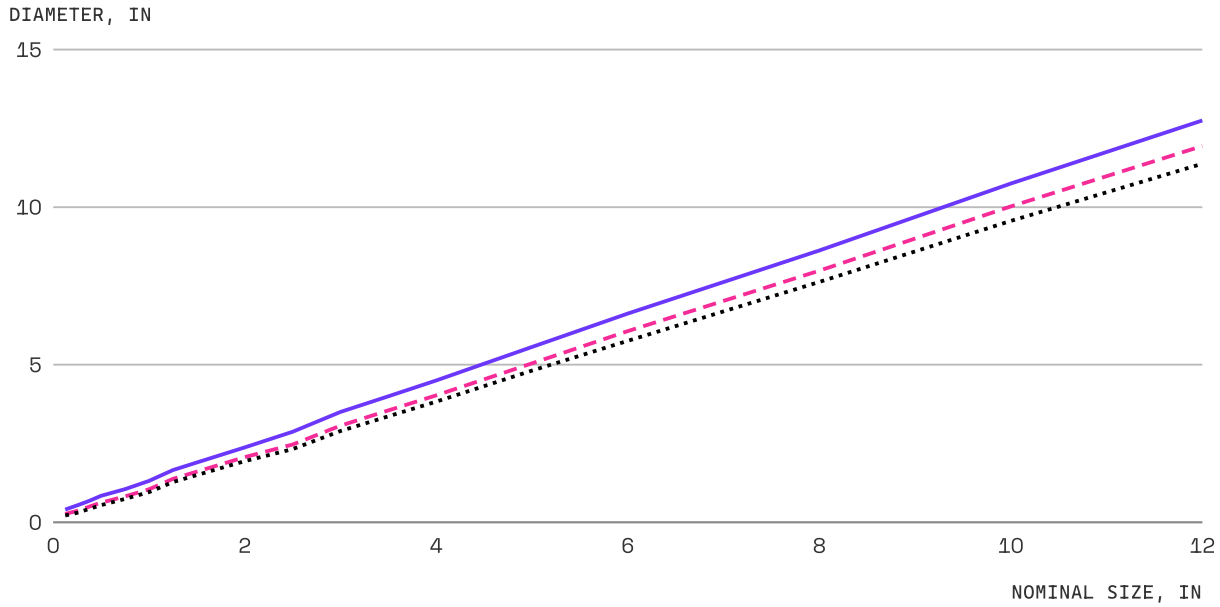
Pipe size chart: steel pipe dimensions

Steel pipe (black and galvanized) from 1/8 to 12 inch runs from 0.405 to 12.750 in outside diameter (10.3 to 323.8 mm), with Schedule 40, Schedule 80 for each size. Steel pipe uses iron pipe sizes (IPS): each nominal size has one outside diameter, and the wall grows with the schedule.

Steel pipe (black and galvanized) by nominal size: outside diameter in inches and millimeters, and the wall and inside diameter of each schedule, in inches, as published

NOMINAL SIZE	OD, IN	OD, MM	SCHEDULE 40 WALL, IN	SCHEDULE 40 ID, IN	SCHEDULE 80 WALL, IN	SCHEDULE 80 ID, IN	SCHEDULE 40 GALLONS PER FOOT
1/8"	0.405	10.3	0.068	0.269	0.095	0.215	0.003
1/4"	0.540	13.7	0.088	0.364	0.119	0.302	0.0054
3/8"	0.675	17.1	0.091	0.493	0.126	0.423	0.0099
1/2"	0.840	21.3	0.109	0.622	0.147	0.546	0.0158
3/4"	1.050	26.7	0.113	0.824	0.154	0.742	0.0277
1"	1.315	33.4	0.133	1.049	0.179	0.957	0.0449
1-1/4"	1.660	42.2	0.140	1.380	0.191	1.278	0.0777
1-1/2"	1.900	48.3	0.145	1.610	0.200	1.500	0.1058
2"	2.375	60.3	0.154	2.067	0.218	1.939	0.1743
2-1/2"	2.875	73.0	0.203	2.469	0.276	2.323	0.2487
3"	3.500	88.9	0.216	3.068	0.300	2.900	0.384
3-1/2"	4.000	101.6	0.226	3.548	0.318	3.364	0.5136
4"	4.500	114.3	0.237	4.026	0.337	3.826	0.6613
5"	5.563	141.3	0.258	5.047	0.375	4.813	1.0393
6"	6.625	168.3	0.280	6.065	0.432	5.761	1.5008
8"	8.625	219.1	0.322	7.981	0.500	7.625	2.5988
10"	10.750	273.1	0.365	10.020	0.594	9.564	4.0963

NOMINAL SIZE	OD, IN	OD, MM	SCHEDULE 40 WALL, IN	SCHEDULE 40 ID, IN	SCHEDULE 80 WALL, IN	SCHEDULE 80 ID, IN	SCHEDULE 40 GALLONS PER FOOT
12"	12.750	323.8	0.406	11.938	0.688	11.376	5.8146



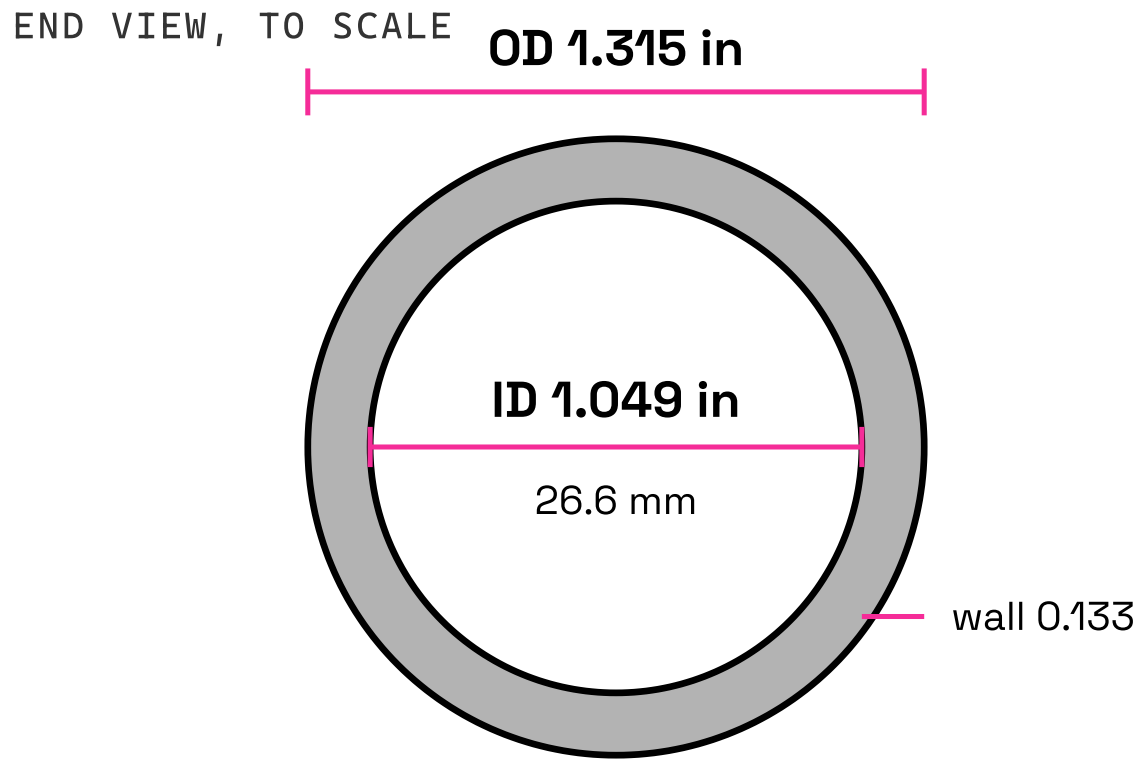
Outside and inside diameter of steel pipe (black and galvanized) by nominal size.

Why a 1 inch steel pipe is not 1 inch across

The nominal size is a trade name, not a measurement. 1 inch steel pipe measures 1.315 in outside and 1.049 in inside at Schedule 40. Steel pipe uses iron pipe sizes (IPS): each nominal size has one outside diameter, and the wall grows with the schedule. To match a fitting, compare outside diameters; to work out how much water a pipe holds, use the inside diameter.

How to measure steel 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 schedule. 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 Schedule 40 steel pipe, outside and inside diameter

SOURCES

- Wheatland Tube (a Zekelman company) (WST-042125): Standard Pipe (SureThread and ERW brochure): Standard Pipe Schedule 40 - ASTM A53 Grades A and B; Extra-Heavy Pipe Schedule 80 - ASTM A53, Type F, Grade B
- USA Industries (2.0.1, PDF dated 2026-06-23 in metadata): Pipe Schedule Chart
- Cooney Brothers, Inc. (PDF, date not stated): Steel Pipe Dimensions and Weights SCH 5 to SCH 40
- Cooney Brothers, Inc. (PDF, date not stated): Steel Pipe Dimensions and Weights SCH 60 to XXH

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

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