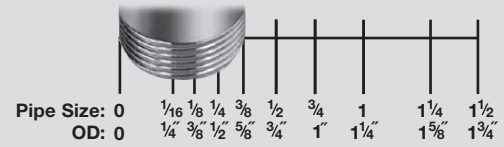
How to Measure Pipe Size for NPT or BSP Threads—Example shows pipe size 3/8.

Pipe size is not an actual measured size, but rather an industry designation. Align your pipe or fitting with the "0" line as shown. The line on the opposite edge gives the pipe size. You can also measure the OD of male threads or the ID of female threads, then find the corresponding pipe size in the chart. If your measurement doesn't match an OD or ID listed, round to the nearest 1/8".



To measure larger pipe sizes, go to mcmaster.com and search for **4464KAC**. For information about fittings and pipe, see pages 2-3.

British Standard Low-Pressure Bronze Threaded Pipe Fittings CAD

- Use with air, natural gas, oil, steam, water
- Maximum Pressure: 200 psi @ 72° F; 125 psi @ 400° F for steam
- Pipe Nipples and Pipe: Use threaded Schedule 40 standard-wall brass (see page 47-48)
- Flanges: Use threaded Class 150 low-pressure bronze (see below)

Use these Class 125 fittings in low-pressure flow applications. They have good corrosion resistance. Fittings meet ANSI/ASME B16.15, ASTM B584, and BS21, except unions only meet ASTM B584 and BS21.

BSPT (British Standard Pipe Taper) Connectors and Caps

Unions separate into three pieces so you can access your line without unthreading pipe connections.

Pipe Size, BSPT	90° Elbows		45° Elbows		Tees		Straights		Unions		Caps	
1/8	4978K101	$7.06	4978K111	$7.81	4978K121	$9.87	4978K131	$7.06	4978K161	$25.12	4978K141	$5.26
1/4	4978K102	7.06	4978K112	7.81	4978K122	9.87	4978K132	7.06	4978K162	25.12	4978K142	5.26
3/8	4978K103	7.06	4978K113	7.81	4978K123	9.87	4978K133	7.06	4978K163	25.12	4978K143	5.26
1/2	4978K104	10.74	4978K114	9.87	4978K124	12.40	4978K134	8.90	4978K164	27.35	4978K144	7.06
3/4	4978K105	14.47	4978K115	14.47	4978K125	17.80	4978K135	11.71	4978K165	37.83	4978K145	9.38
1	4978K106	22.35	4978K116	24.50	4978K126	31.69	4978K136	17.80	4978K166	49.74	4978K146	14.60
1 1/4	4978K107	35.53	4978K117	39.14	4978K127	44.40	4978K137	27.83	4978K167	67.73	4978K147	22.30
1 1/2	4978K108	44.40	4978K118	49.05	4978K128	61.10	4978K138	37.83	4978K168	79.99	4978K148	30.11
2	4978K109	66.72	4978K119	73.44	4978K129	92.41	4978K139	57.46	4978K169	114.33	4978K149	51.07

BSPT (British Standard Pipe Taper) Reducers

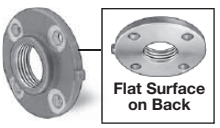
Straights

Pipe Size, BSPT (A)	(B)			Pipe Size, BSPT (A)	(B)		
1/4	1/8	4978K211	$7.58	1	3/4	4978K221	$23.46
3/8	1/4	4978K212	7.58	1 1/4	3/4	4978K222	37.83
1/2	1/8	4978K213	10.95	1 1/4	1	4978K223	37.83
1/2	1/4	4978K214	9.51	1 1/2	3/4	4978K224	53.87
1/2	3/8	4978K215	9.51	1 1/2	1	4978K225	47.82
3/4	1/4	4978K216	15.64	1 1/2	1 1/4	4978K226	47.82
3/4	3/8	4978K217	14.08	2	1	4978K227	73.92
3/4	1/2	4978K218	14.08	2	1 1/4	4978K228	65.59
1	1/2	4978K219	23.46	2	1 1/2	4978K229	65.59

Bushings, Male × Female

Pipe Size, BSPT (A)	(B)			Pipe Size, BSPT (A)	(B)		
1/2	1/8	4978K171	$6.70	1 1/4	1	4978K181	$19.98
1/2	1/4	4978K172	5.61	1 1/2	1/4	4978K182	31.21
1/2	3/8	4978K173	5.61	1 1/2	1/2	4978K183	31.21
3/4	1/4	4978K174	9.38	1 1/2	3/4	4978K184	31.21
3/4	3/8	4978K175	7.81	1 1/2	1	4978K185	25.60
3/4	1/2	4978K176	7.81	1 1/2	1 1/4	4978K186	25.60
1	1/2	4978K177	11.71	2	1	4978K188	45.61
1	3/4	4978K178	11.71	2	1 1/4	4978K189	37.83
1 1/4	3/4	4978K179	19.98	2	1 1/2	4978K191	37.83

Low-Pressure Brass and Bronze Threaded Pipe Flanges CAD



- Pipe Nipples and Pipe: Use threaded Schedule 40 standard-wall brass (see pages 47-48)

Also known as Class 150 flanges, these are designed for low-pressure applications. Bolt two same-size flanges together with a gasket (sold separately on pages 3619-3620) to create an access point within a line. Flanges have good corrosion resistance.

NPT Flanges—Brass

- Use with air, drinking water, natural gas, oil
- Maximum Pressure: 200 psi @ 72° F
- Fittings: Use threaded Class 125 low-pressure brass (see pages 44-45 and 48)

Flanges meet ANSI/ASME B1.20.1 and B16.24, ASTM B584, and NSF/ANSI Standard 61 for drinking water.

Pipe Size	Flange OD	For Bolt Dia. (No.)		
1/2	3 1/2"	1/2" (4)	4429K551	$63.00
3/4	3 7/8"	1/2" (4)	4429K552	95.02
1	4 1/4"	1/2" (4)	4429K553	83.00
1 1/4	4 5/8"	1/2" (4)	4429K554	102.93
1 1/2	5"	1/2" (4)	4429K555	117.56
2	6"	5/8" (4)	4429K556	143.61
2 1/2	7"	5/8" (4)	4429K557	195.86
3	7 1/2"	5/8" (4)	4429K558	232.95
4	9"	5/8" (8)	4429K559	309.46

BSPT (British Standard Pipe Taper) Flanges—Bronze

- Use with air, natural gas, oil, steam, water
- Maximum Pressure: 200 psi @ 72° F; 125 psi @ 400° F for steam
- Fittings: Use threaded Class 125 low-pressure bronze (see above)

All meet ASTM B584 and BS21.

Pipe Size, BSPT	Flange OD	For Bolt Dia. (No.)		
1/2	3 1/2"	1/2" (4)	4978K194	$59.88
3/4	3 7/8"	1/2" (4)	4978K195	80.07
1	4 1/4"	1/2" (4)	4978K196	105.60
1 1/4	4 5/8"	1/2" (4)	4978K197	138.94
1 1/2	5"	1/2" (4)	4978K198	160.28
2	6"	5/8" (4)	4978K199	233.34