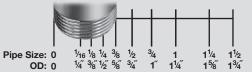
# Brass and Bronze Pipe Fittings & Pipe

For technical drawings and [AD 3-D models, go to mcmaster.com.

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".





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

## Standard-Wall Chrome-Plated Brass Threaded Pipe Nipples and Pipe



**Fully Threaded** 

Use with air, natural gas, oil, steam, water
Fittings: Use threaded Class 125 low-pressure chrome-plated brass (see page 49)

The polished chrome plating gives this brass pipe a bright, shiny appearance and provides extra corrosion resistance. Also known as Schedule 40 pipe, it is commonly used in low-pressure applications. Pipe is seamless so it has a smooth interior for unrestricted flow. All meet ASTM B43, B687, and B456.

Fully threaded pipe is also known as a close nipple; it is threaded on each end to the center.

Threaded on Both Ends

Pipe NPT Fully Threaded	NPT Threaded on Both Ends					
Size Lg.	Size 11/2" Lengths	2" Lengths	3" Lengths	31/2" Lengths	4" Lengths	
<sup>1</sup> / <sub>8</sub> <sup>3</sup> / <sub>4</sub> " <b>9176K111</b> \$4.35	<sup>1</sup> /8 <b>9176K121</b> \$4.89	9176K131 \$5.24	9176K141 \$6.43	9176K221 \$6.97	9176K151 \$7.80	
<sup>1</sup> / <sub>4</sub> <sup>7</sup> / <sub>8</sub> " <b>9176K112</b> 4.89	1/4 <b>9176K122</b> 5.66	9176K132 6.36	9176K142 8.09	<b>9176K222</b> 9.18	9176K152 10.36	
3/8 1" <b>9176K113</b> 3.84	3/8 <b>9176K123</b> 4.32	9176K133 5.15	9176K143 6.91	<b>9176K223</b> 7.93	9176K153 8.89	
½ 11/8" <b>9176K114</b> 4.73	½ <b>9176K124</b> 5.44	<b>9176K134</b> 6.49	<b>9176K144</b> 9.05	9176K224 10.55	9176K154 11.77	
3/4 13/8" <b>9176K115</b> 9.37	3/4 <b>9176K125</b> 9.91	9176K135 11.89	9176K145 15.83	9176K225 18.19	9176K155 20.62	
1 1½" <b>9176K116</b> 13.81	1	<b>9176K136</b> 16.95	9176K146 22.54	<b>9176K226</b> 26.06	<b>9176K156</b> 29.29	
NPT Threaded on Both Ends						
Pipe						
Size 41/2" Lengths	5" Lengths 6	6" Lengths	8" Lengths	10" Lengths	12" Lengths	

Pipe		_	_	_	_	_
Size	4 <sup>1</sup> / <sub>2</sub> " Lengths	5" Lengths	6" Lengths	8" Lengths	10" Lengths	12" Lengths
1/8	9176K231 \$8.82	9176K161 \$9.56	9176K171 \$11.06	9176K181 \$14.48	9176K191 \$17.46	9176K211 \$20.46
1/4	<b>9176K232</b> 11.73	<b>9176K162</b> 12.79	<b>9176K172</b> 14.93	<b>9176K182</b> 19.47	<b>9176K192</b> 23.76	<b>9176K212</b> 28.04
3/8	<b>9176K233</b> 10.04	<b>9176K163</b> 11.00	<b>9176K173</b> 12.95	<b>9176K183</b> 17.62	<b>9176K193</b> 20.97	<b>9176K213</b> 24.84
	<b>9176K234</b> 13.08					
3/4	<b>9176K235</b> 22.99	<b>9176K165</b> 25.35	<b>9176K175</b> 30.05	<b>9176K185</b> 40.67	<b>9176K195</b> 49.59	<b>9176K215</b> 58.93
1	<b>9176K236</b> 32.64	<b>9176K166</b> 36.03	<b>9176K176</b> 42.91	<b>9176K186</b> 57.30	<b>9176K196</b> 70.76	<b>9176K216</b> 84.25

### Medium-Pressure Brass and Bronze Threaded Pipe Fittings

- Use with air, natural gas, oil, water, except connectors with intermittent swivel are only for use with water
- Pipe Nipples and Pipe: Use threaded Schedule 80 thick-wall brass (see pages 51-52)

Choose these fittings when you need better strength than our low-pressure brass and bronze pipe fittings. They offer good corrosion resistance. Also known as Class 250 fittings.

#### NPT Connectors and Caps—Brass

• Maximum Pressure: 400 psi @ 72°F

All meet ASTM B584, as well as ANSI/ASME B.16.15 and B1.20.1. Unions separate into three pieces so you can access your line without unthreading pipe connections.















Pipe	a a contract of the contract o						
Size	90° Elbows	45° Elbows	Tees	Crosses	Straights	Unions	Caps
1/4	9152K11\$18.20		9152K76 \$28.52		9152K51 \$22.43	9152K61 \$41.67	
3/8	<b>9152K12</b> 18.20		<b>9152K31</b> 28.52		9152K52 22.43	<b>9152K62</b> 47.62	
						<b>9152K63</b> 41.67	
3/4	<b>9152K14</b> 36.00	<b>9152K21</b> \$37.98	<b>9152K33</b> 52.35	9152K41 80.03	<b>9152K54</b> 39.62	<b>9152K64</b> 59.10	<b>9152K72</b> 39.62
1	<b>9152K15</b> 53.58	<b>9152K22</b> 66.53	<b>9152K34</b> 71.42	9152K42 125.55	<b>9152K55</b> 60.12	<b>9152K65</b> 91.42	<b>9152K73</b> 60.12
						<b>9152K66</b> 127.12	
11/2	<b>9152K17</b> 129.66	<b>9152K24</b> 138.09	<b>9152K36</b> 172.77	<b>9152K44</b> 249.30	<b>9152K57</b> 110.42	<b>9152K67</b> 132.75	<b>9152K78</b> 108.45
2	<b>9152K18</b> 215.93	<b>9152K25</b> 225.23	<b>9152K37</b> 250.98	9152K45 403.06	<b>9152K58</b> 159.77	<b>9152K68</b> 209.68	<b>9152K75</b> 159.77

#### NPT Connectors with Intermittent Swivel-Bronze

Maximum Pressure: 300 psi @ 72°F

Fittings rotate 360° as needed to allow movement in a rigid metal piping system.

#### Thread Adapters, Male-Brass

Maximum Pressure: 250 psi @ 72°F

NPTF (Dryseal) threads are compatible with NPT threads.







Pipe		
Pipe Size	90° Elbows	Straights
1	53845K54 \$255.7	7 <b>53845K44</b> \$240.38
11/2	53845K56 271.1	5 <b>53845K46</b> 253.85
2	53845K58 413.4	6 <b>53845K48</b> 407.69

Size NPSM3			
1/4	4685T11	\$1.54	
3/8	4685T12	2.44	
1/2	4685T13	3.17	

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