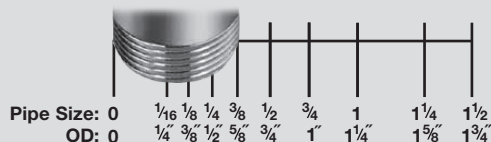



## How to Measure Pipe Size for NPT Threads—Example shows pipe size 3/8.

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](http://mcmaster.com) and search for **4464KAC**. For information about fittings and pipe, see pages 2-3.

## Miniature Medium-Pressure Stainless Steel Threaded Pipe Fittings (Continued)

- Use with air, natural gas, oil, steam, water
- Maximum Pressure: 500 psi @ 72° F;  
100 psi @ 350° F for steam

When space is at a premium choose these compact fittings. Though small in size, they have the strength to handle medium-pressure applications. Fittings are 303 stainless steel for very good corrosion resistance. They meet ASTM A314, ASTM A320, and ASTM A582.

**Metric and UN/UNF (SAE)** male threads have a fluor elastomer gasket to protect against leaks. UN/UNF (SAE) threads are also known as O-ring boss threads.

### Thread Adapters, Male—Straights (Cont.)



NPT x Metric					
Pipe Size	Thread Size		Pipe Size	Thread Size	
1/16	M3 x 0.5	<a href="#">2684K748</a>	1/8	M3 x 0.5	<a href="#">2684K821</a>
1/16	M5 x 0.5	<a href="#">2684K757</a>	1/8	M5 x 0.5	<a href="#">2684K831</a>
1/16	M6 x 1	<a href="#">2684K772</a>	1/8	M6 x 1	<a href="#">2684K842</a>
1/16	M8 x 1	<a href="#">2684K774</a>	1/8	M8 x 1	<a href="#">2684K853</a>
1/16	M10 x 1.25	<a href="#">2684K782</a>	1/8	M10 x 1.25	<a href="#">2684K858</a>

### Reducing Thread Adapters, Male x Female—Bushings



NPT x UN/UNF (SAE)					
Pipe Size (A)	Thread Size (B)		Pipe Size (A)	Thread Size (B)	
1/16	10-32	<a href="#">2684K334</a>	1/4	10-32	<a href="#">2684K36</a>
1/8	10-32	<a href="#">2684K35</a>	1/4	1/4"-28	<a href="#">2684K684</a>
1/8	1/4"-28	<a href="#">2684K655</a>			

Metric x UN/UNF (SAE)					
Thread Size (A)	Thread Size (B)		Thread Size (A)	Thread Size (B)	
M6 x 1	10-32	<a href="#">2684K31</a>			
M8 x 1	10-32	<a href="#">2684K32</a>			

NPT x Metric					
Pipe Size (A)	Thread Size (B)		Pipe Size (A)	Thread Size (B)	
1/16	M3 x 0.5	<a href="#">2684K637</a>	1/8	M6 x 1	<a href="#">2684K677</a>
1/16	M5 x 0.5	<a href="#">2684K642</a>	1/8	M8 x 1	<a href="#">2684K681</a>
1/8	M3 x 0.5	<a href="#">2684K673</a>	1/4	M3 x 0.5	<a href="#">2684K695</a>
1/8	M5 x 0.5	<a href="#">2684K676</a>	1/4	M5 x 0.5	<a href="#">2684K704</a>

## High-Pressure Stainless Steel Threaded Pipe Flanges



- Use with air, hydraulic fluid, natural gas, oil, steam, water
- Pipe Nipples and Pipe: Use threaded Schedule 80 thick-wall stainless steel (see pages 22-23)

Forged for high strength, these heavy duty flanges can handle high-pressure applications. They are also known as ANSI flanges. Bolt two same-size flanges together with a gasket (sold separately) to create an access point within a line. For gaskets, see pages 3621-3624. Flanges meet ASTM A182 and ANSI/ASME B16.5.

**304 stainless steel** flanges provide very good corrosion resistance. **316 stainless steel** flanges have excellent corrosion resistance.

### NPT Class 300 Forged Flanges

- Maximum Pressure: 300 psi @ 72° F;  
300 psi @ 300° F for steam

Pipe Size	Flange OD	For Bolt Dia. (No.)	304/304L Stainless Steel	316/316L Stainless Steel
1/2	33/4"	1/2" (4)	<a href="#">7977K11</a> \$42.74	<a href="#">7469T31</a> \$54.36
3/4	45/8"	5/8" (4)	<a href="#">7977K12</a> 44.45	<a href="#">7469T32</a> 68.44
1	47/8"	5/8" (4)	<a href="#">7977K13</a> 45.35	<a href="#">7469T33</a> 73.33
1 1/4	51/4"	5/8" (4)	<a href="#">7977K14</a> 68.44	<a href="#">7469T34</a> 101.68
1 1/2	61/8"	3/4" (4)	<a href="#">7977K15</a> 69.69	<a href="#">7469T35</a> 123.54
2	61/2"	5/8" (8)	<a href="#">7977K16</a> 82.63	<a href="#">7469T36</a> 132.68
2 1/2	71/2"	3/4" (8)	<a href="#">7977K17</a> 135.58	<a href="#">7469T37</a> 232.91
3	81/4"	3/4" (8)	<a href="#">7977K18</a> 140.96	<a href="#">7469T38</a> 237.56
4	10"	3/4" (8)	<a href="#">7977K19</a> 184.04	<a href="#">7469T39</a> 305.56
6	121/2"	3/4" (12)	<a href="#">7977K21</a> 516.91	<a href="#">7469T41</a> 595.46
8	15"	7/8" (12)	<a href="#">7977K22</a> 521.78	<a href="#">7469T42</a> 790.55

### NPT Class 600 Forged Flanges

- Maximum Pressure: 1,200 psi @ 72° F;  
840 psi @ 400° F for steam

Pipe Size	Flange OD	For Bolt Dia. (No.)	304/304L Stainless Steel	316/316L Stainless Steel
1/2	33/4"	1/2" (4)	<a href="#">1441N25</a> \$69.78	<a href="#">1501N21</a> \$76.12
3/4	45/8"	5/8" (4)	<a href="#">1441N26</a> 76.12	<a href="#">1501N22</a> 85.40
1	47/8"	5/8" (4)	<a href="#">1441N27</a> 83.94	<a href="#">1501N23</a> 90.40
1 1/4	51/4"	5/8" (4)	<a href="#">1441N28</a> 143.75	<a href="#">1501N24</a> 156.16
1 1/2	61/8"	3/4" (4)	<a href="#">1441N29</a> 119.56	<a href="#">1501N25</a> 122.56
2	61/2"	5/8" (8)	<a href="#">1441N31</a> 126.87	<a href="#">1501N26</a> 135.75
2 1/2	71/2"	3/4" (8)	<a href="#">1441N32</a> 195.20	<a href="#">1501N27</a> 251.12
3	81/4"	3/4" (8)	<a href="#">1441N33</a> 207.40	<a href="#">1501N28</a> 256.20
4	103/4"	7/8" (8)	<a href="#">1441N34</a> 401.78	<a href="#">1501N29</a> 392.28