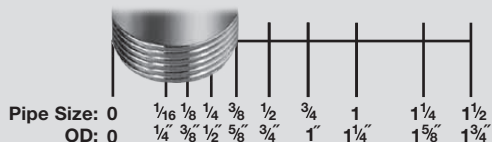



## How to Measure Pipe Size for NPT or BSP Threads—Example shows pipe size 3/8.

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

## Extreme-Pressure Stainless Steel Threaded Pipe Fittings (Continued)

With the strength to handle extreme pressures, these fittings can be used to connect equipment in hydraulic fluid lines. Fittings are 316 stainless steel and have excellent corrosion resistance.

### Thread Adapters, Female x Male (Cont.)



- Use with hydraulic fluid (petroleum base), oil, and water
- Maximum Pressure: See table

**BSPP** and **metric** male threads have a Buna-N gasket to prevent leaks. **UN/UNF (SAE)** threads are also known as O-ring boss threads; the male threads have a Buna-N gasket to prevent leaks.

UN/UNF (SAE) x NPT							
Thread Size	Pipe Size	Max. psi @ 72° F			Thread Size	Pipe Size	Max. psi @ 72° F
9/16"-18	1/4	15,000	51205K711	\$50.81	3/4"-16	3/8	15,000
9/16"-18	3/8	15,000	51205K712	58.52	3/4"-16	1/2	15,000
9/16"-18	1/2	15,000	51205K713	61.69	1 1/8"-12	1/4	15,000
3/4"-16	1/4	15,000	51205K714	63.45	1 1/8"-12	1/2	15,000

UN/UNF (SAE) x BSPT									
Thread Size	Pipe Size	Max. psi @ 72°F			Thread Size	Pipe Size	Max. psi @ 72°F		
7/16"-20	1/8	6,000	51205K822	\$30.31	7/8"-14	1/2	4,500	51205K826	\$43.65
1/2"-20	1/8	6,000	51205K823	31.75	1 1/16"-12	3/4	4,500	51205K827	61.31
9/16"-18	1/4	6,000	51205K824	34.15	1 5/16"-12	1	3,500	51205K828	48.92
3/4"-16	3/8	5,000	51205K825	35.87					

UN/UNF (SAE) x BSPP								
Thread Size	Pipe Size	Max. psi @ 72° F			Thread Size	Pipe Size	Max. psi @ 72° F	
7/16"-20	1/8	5,000	51205K811	\$87.73	9/16"-18	3/8	5,000	51205K816
7/16"-20	1/4	5,000	51205K812	35.27	3/4"-16	3/8	5,000	51205K817
7/16"-20	3/8	5,000	51205K814	40.79	7/8"-14	1/2	3,500	51205K818
1/2"-20	3/8	5,000	51205K815	40.44	1 1/4"-12	3/4	3,500	51205K819
9/16"-18	1/4	5,000	51205K813	41.02	1 5/16"-12	1	3,500	51205K821

UN/UNF (SAE) x Metric										
Thread Size		Max. psi @ 72° F				Thread Size		Max. psi @ 72° F		
Female	Male					Female	Male			
7/16"-20	M10 x 1	5,000	51205K781	\$33.44	7/8"-14	M22 x 1.5	3,500	51205K786	\$50.50	
9/16"-18	M10 x 1	5,000	51205K782	50.02	1 1/16"-12	M27 x 2	3,500	51205K787	60.65	
9/16"-18	M14 x 1.5	5,000	51205K783	48.25	1 5/16"-12	M33 x 2	3,000	51205K788	79.54	
3/4"-16	M16 x 1.5	5,000	51205K784	47.21	1 5/8"-12	M42 x 2	2,000	51205K789	60.08	
3/4"-16	M18 x 1.5	3,500	51205K785	58.46						

Metric x UN/UNF (SAE)									
Thread Size		Max. psi @ 72° F			Thread Size		Max. psi @ 72° F		
Female	Male				Female	Male			
M10 x 1	7/16"-20	6,000	51205K761	\$30.83	M18 x 1.5	3/4"-16	6,000	51205K766	\$36.73
M12 x 1.5	7/16"-20	6,000	51205K762	31.13	M22 x 1.5	7/8"-14	5,000	51205K767	73.67
M14 x 1.5	9/16"-18	6,000	51205K763	32.81	M27 x 2	1 1/16"-12	5,000	51205K768	69.40
M16 x 1.5	9/16"-18	6,000	51205K764	38.19	M33 x 2	1 5/16"-12	5,000	51205K769	67.87
M16 x 1.5	3/4"-16	6,000	51205K765	37.50					

### Reducing Thread Adapters, Male



- Use with hydraulic fluid, oil, and water
- Maximum Pressure: See table

**BSPP** threads have a Buna-N gasket and a 316 stainless steel washer to prevent leaks. For replacement washers see page 31.

NPT x BSPP									
Pipe Size		Max. psi @ 72° F			Pipe Size		Max. psi @ 72° F		
(A)	(B)				(A)	(B)			
1/4	1/8	5,000	4822T201	\$31.25	1	1/2	3,000	4822T214	\$95.52
3/8	1/8	5,500	4822T202	26.83	1	3/4	3,000	4822T217	83.29
3/8	1/4	5,500	4822T204	30.13	1 1/4	1	2,500	4822T221	116.27
1/2	1/4	4,500	4822T205	36.96	1 1/2	1	2,000	4822T223	181.69
1/2	3/8	4,500	4822T208	32.62	1 1/2	1 1/4	2,000	4822T226	155.46
3/4	3/8	3,500	4822T209	78.79	2	1 1/2	2,000	4822T231	211.68
3/4	1/2	3,500	4822T213	56.83					

(Continued on following page)