

Shurjoint Grooved Fittings

Shurjoint offers a wide range of grooved-end fittings in sizes through 24" (600 mm). Fittings are available in a number of styles and configurations to support a variety of applications. Shurjoint grooved-end fittings are manufactured and designed to meet ASTM F1548 and ANSI/AWWA C606 requirements for use with grooved mechanical couplings conforming to ASTM F1476. For sizes not specified in these standards, please contact Shurjoint for details.



Most fittings are provided in ductile iron conforming to ASTM A536 Gr. 65-45-12 and or ASTM A395 Gr. 65-45-15. Some styles and sizes larger than 14" (350mm) are fabricated from carbon steel pipe to ASTM A53 Gr. B or fabricated of segmentally welded steel of the same or equivalent grade. Fittings are painted orange or red, or as an option can be supplied hot-dip galvanized or epoxy coated. Pressure ratings conform to couplings and/or pipe being used.

Flow Data / Frictional Resistance

Expressed as equivalent length of straight pipe

Flow Data										
Nominal Pipe Size	Pipe O.D.	Pipe Wall Thickness	Elbows					Tees		
			#7110 90° Standard Radius	#901 90° Short Radius	#7110LR 90° Long Radius (1.5 D LR)	#7111 45° Standard Radius	#7111LR 45° Long Radius (1.5 D LR)	#7120 Branch	#903 Branch	
			feet meters	feet meters	feet meters	feet meters	feet meters	feet meters	feet meters	
1 25	1.315 33.4	0.133 3.4	1.7 0.5	---	---	0.8 0.2	---	4.2 1.3	---	
1¼ 32	1.660 42.2	0.140 3.6	2.5 0.8	2.5 0.8	---	1.0 0.3	---	4.7 1.4	4.7 1.4	
1½ 40	1.900 48.3	0.154 4.0	3.5 1.1	3.5 1.1	---	1.5 0.5	---	6.5 2.0	6.5 2.0	
2 50	2.375 60.3	0.203 5.2	4.0 1.2	4.0 1.2	2.5 0.8	1.7 0.5	1.1 0.3	8.5 2.6	8.5 2.6	
2½ 65	2.875 73.0	0.197 5.0	4.5 1.4	4.5 1.4	2.9 0.9	2.0 0.6	1.4 0.4	10.0 3.1	10.0 3.1	
3 80	3.500 88.9	0.237 6.3	5.0 1.5	5.0 1.5	3.8 1.2	2.5 0.8	1.5 0.5	12.0 3.7	12.0 3.7	
4 100	4.500 114.3	0.220 5.6	6.7 2.0	6.7 2.0	5.0 1.5	3.0 0.9	2.1 0.6	15.0 4.6	15.0 4.6	
5 125	5.563 141.3	0.258 6.6	7.5 2.3	7.5 2.3	6.0 1.8	4.0 1.2	2.5 0.6	19.0 5.8	19.0 5.8	
6 150	6.625 168.3	0.280 7.1	9.0 2.7	9.0 2.7	7.5 2.3	4.5 1.4	3.0 0.9	22.0 6.7	22.0 6.7	
8 200	8.625 219.1	0.322 8.2	13.0 4.0	13.0 4.0	9.8 3.0	6.5 2.0	4.0 1.2	33.0 10.1	33.0 10.1	
10 250	10.750 273.0	0.365 8.8	17.0 5.2	---	12.0 3.7	8.3 2.5	5.0 1.5	41.0 12.5	---	
12 300	12.750 323.9	0.375 9.5	20.0 6.1	---	14.5 4.4	10.0 3.1	6.0 1.8	49.0 14.9	---	
14 350	14.000 355.6	0.375 9.5	24.5 7.5	22.3 6.8	---	13.8 4.8	---	69.9 21.3	69.9 21.3	
16 400	16.000 406.4	0.375 9.5	28.0 8.5	25.3 7.7	---	15.8 4.8	---	80.0 24.4	80.0 24.4	
18 450	18.000 457.2	0.375 9.5	31.0 9.5	28.2 8.6	---	18.7 5.7	---	89.9 27.4	89.9 27.4	
20 500	20.000 508.0	0.375 9.5	34.0 10.4	30.8 9.4	---	20.9 6.3	---	100.0 30.5	100.0 30.5	
24 600	24.000 609.6	0.375 9.5	42.0 12.8	37.7 11.5	---	24.2 7.4	---	120.0 36.6	120.0 36.6	

The values listed in this table express the frictional resistance of representative Shurjoint fittings as equivalent feet (meters) of straight pipe. For the branch of a tee that is reduced in size, use the value that corresponds to the branch size. For example, the branch value of a 4" x 4" x 3" tee is 12.0 feet (3.7 meters). For fittings not listed in this table, the equivalent length of straight pipe can be estimated from the data provided. For example, the flow resistance of a 22½° elbow is approximately one half that of a 45° elbow.