

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			Elbows					Tees	
	Pipe O.D.	Pipe Wall Thickness	#7110 90 ⁰ Standard Radius	#901 90 ⁰ Short. Radius	#7110LR 90 ⁰ Long Radius (1.5 D LR)	#7111 45 ⁰ Standard Radius	#7111LR 45 ⁰ Long Radius (1.5 D LR)	#7120 Branch	#903 Branch
in	in	in	feet	feet	feet	feet	feet	feet	feet
mm	mm	mm	meters	meters	meters	meters	meters	meters	meters
1	1.315	0.133	1.7			0.8		4.2	
25	33.4	3.4	0.5			0.2		1.3	
11/4	1.660	0.140	2.5	2.5		1.0		4.7	4.7
32	42.2	3.6	0.8	0.8		0.3		1.4	1.4
1½	1.900	0.154	3.5	3.5		1.5		6.5	6.5
40	48.3	4.0	1.1	1.1		0.5		2.0	2.0
2	2.375	0.203	4.0	4.0	2.5	1.7	1.1	8.5	8.5
50	60.3	5.2	1.2	1.2	0.8	0.5	0.3	2.6	2.6
21/2	2.875	0.197	4.5	4.5	2.9	2.0	1.4	10.0	10.0
65	73.0	5.0	1.4	1.4	0.9	0.6	0.4	3.1	3.1
3	3.500	0.237	5.0	5.0	3.8	2.5	1.5	12.0	12.0
80	88.9	6.3	1.5	1.5	1.2	0.8	0.5	3.7	3.7
4	4.500	0.220	6.7	6.7	5.0	3.0	2.1	15.0	15.0
100	114.3	5.6	2.0	2.0	1.5	0.9	0.6	4.6	4.6
5	5.563	0.258	7.5	7.5	6.0	4.0	2.5	19.0	19.0
125	141.3	6.6	2.3	2.3	1.8	1.2	0.6	5.8	5.8
6	6.625	0.280	9.0	9.0	7.5	4.5	3.0	22.0	22.0
150	168.3	7.1	2.7	2.7	2.3	1.4	0.9	6.7	6.7
8	8.625	0.322	13.0	13.0	9.8	6.5	4.0	33.0	33.0
200	219.1	8.2	4.0	4.0	3.0	2.0	1.2	10.1	10.1
10	10.750	0.365	17.0		12.0	8.3	5.0	41.0	
250	273.0	8.8	5.2		3.7	2.5	1.5	12.5	
12	12.750	0.375	20.0		14.5	10.0	6.0	49.0	
300	323.9	9.5	6.1		4.4	3.1	1.8	14.9	
14	14.000	0.375	24.5	22.3		13.8		69.9	69.9
350	355.6	9.5	7.5	6.8		4.8		21.3	21.3
16	16.000	0.375	28.0	25.3		15.8		80.0	80.0
400	406.4	9.5	8.5	7.7		4.8		24.4	24.4
18	18.000	0.375	31.0	28.2	555	18.7	555	89.9	89.9
450	457.2	9.5	9.5	8.6		5.7		27.4	27.4
20	20.000	0.375	34.0	30.8		20.9		100.0	100.0
500	508.0	9.5	10.4	9.4		6.3		30.5	30.5
24	24.000	0.375	42.0	37.7		24.2		120.0	120.0
600	609.6	9.5	12.8	11.5		7.4		36.6	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.

