

# **Shurjoint Grooved Fittings**

**Shurjoint** offers a wide range of grooved-end fittings in sizes through 24" (600mm). 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 refer to applicable groove specifications shown in this catalog.

#### **Pressure-Temperature Rating**

Size	Nom. Rating	Working Pressure (STD, Roll-grooved)	Max. Service Temperature		
1" - 6"	Class 300	750 psi @100°F			
(25 - 150)	Class 300	52 Bar @38°C	EPDM:		
8" - 12"	Class 250	400 psi @100°F	230°F / 110°C		
(200 - 300)	Class 250	28 Bar @38°C	Nitrile:		
14" - 24"	Class 150	300 psi @100°F	180°F / 82°C		
(250 - 600)	Class 150	20 Bar @38°C			

- \*Working pressure is based on roll- or cut-grooved standard wall carbon steel pipe.
- \*Proof test pressure: 1.5 times the working pressure, non-shock cold water.
- \*Burst pressure is engineered minimum 3 times the working pressure

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.



#### **Rubber Lined Fittings**

**Shurjoint** ductile iron grooved end fittings are also available with rubber lining for abrasive services. Contact Shurjoint for further information.





For abrasive services

For abrasive and corrosive services

## Flow Data / Frictional Resistance

### Expressed as equivalent length of straight pipe

			Elbows					Tees	
Nominal	Pipe	Pipe Wall	#7110 90°	#901 90°	#7110LR 90°	#7111 45°	#7111LR 45°	#7120	#903
Size	O.D.	Thickness	Std. Radius	Short. Radius	1½ D. LR	Std. Radius	1½ D. LR	Branch	Branch
mm / in	mm / in	mm / in	meters / feet						
25	33.4	3.4	0.5			0.2		1.3	
1	1.315	0.133	1.7			0.8		4.2	
32	42.2	3.6	0.8	0.8		0.3		1.4	1.4
11/4	1.660	0.140	2.5	2.5		1.0		4.7	4.7
40	48.3	40	1.1	1.1		0.5		2.0	2.0
1½	1.900	0.154	3.5	3.5		1.5		6.5	6.5
50	60.3	5.2	1.2	1.2	0.8	0.5	0.3	2.6	2.6
2	2.375	0.203	4.0	4.0	2.5	1.7	1.1	8.5	8.5
65	73.0	5.0	1.4	1.4	0.9	0.6	0.4	3.1	3.1
21/2	2.875	0.197	4.5	4.5	2.9	2.0	1.4	10.0	10.0
80	88.9	6.3	1.5	1.5	1.2	0.8	0.5	3.7	3.7
3	3.500	0.237	5.0	5.0	3.8	2.5	1.5	12.0	12.0
100	114.3	5.6	2.0	2.0	1.5	0.9	0.6	4.6	4.6
4	4.500	0.220	6.7	6.7	5.0	3.0	2.1	15.0	15.0
125	141.3	6.6	2.3	2.3	1.8	1.2	0.6	5.8	5.8
5	5.563	0.258	7.5	7.5	6.0	4.0	2.5	19.0	19.0
150	168.3	7.1	2.7	2.7	2.3	1.4	0.9	6.7	6.7
6	6.625	0.280	9.0	9.0	7.5	4.5	3.0	22.0	22.0
200	219.1	8.2	4.0	4.0	3.0	2.0	1.2	10.1	10.1
8	8.625	0.322	13.0	13.0	9.8	6.5	4.0	33.0	33.0
250	273.0	8.8	5.2		3.7	2.5	1.5	12.5	
10	10.750	0.365	17.0		12.0	8.3	5.0	41.0	
300	323.9	9.5	6.1		4.4	3.1	1.8	14.9	
12	12.750	0.375	20.0		14.5	10.0	6.0	49.0	

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 12.8 feet (3.9 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.

