## Shurjoint Grooved Fittings

Shurjoint offers a wide range of grooved-end fittings in sizes through $24 "(600 \mathrm{~mm})$. 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" ( 350 mm ) 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 |  |  |  | \#7111 45 ${ }^{\circ}$ Standard Radius | \#7111LR 45 ${ }^{\circ}$ | Tees |  |
|  |  |  | \#7110 90ㅇ <br> Standard <br> Radius | \#901 90 Short. Radius | \#7110LR 90ㅇ Long Radius (1.5 D LR) |  |  | \#7120 | \#903 |
|  |  |  |  |  |  |  | Long Radius | Branch | Branch |
|  |  |  |  |  |  |  | (1.5 D LR) | Branch | 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 |
| $11 / 2$ | 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 | --- | 18.7 | --- | 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 |

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[^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 " $\times 4$ " $\times 3$ " 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 $221 / 2{ }^{\circ}$ elbow is approximately one half that of a $45^{\circ}$ elbow.

