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grooved mechanical couplings



The Shurjoint grooved piping system is one of the most advanced, versatile, economical and reliable systems available today. After the pipe ends are grooved a gasket is mounted over the pipe ends. The coupling segments are then placed over the gasket and the bolts and nuts are fastened resulting in a secure and leak free joint.

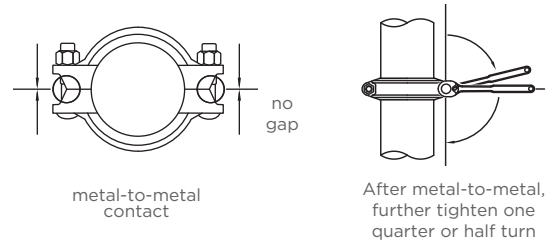
A coupling can be installed 3 – 4 times faster than a comparable welded or brazed joint and there is no need for a flame or welding torch on the job site. A grooved mechanical coupling can be installed by fastening a pair of bolts and nuts while using only a wrench or spanner, whereas a comparable flanged joint requires the fastening of many bolts and nuts with a pair of wrenches. The grooved system allows for easy material take-offs and unlike a threaded system, there is no need to allow for added pipe length for thread engagement. With removal of just a few bolts one can easily access the system for cleaning, maintenance, changes and or system expansion.

helpful information to ensure proper assembly

Some couplings and components require the housing bolt pads to make metal-to-metal contact for proper assembly, while others require a specific bolt torque while maintaining equal bolt pad gaps. The icons and information below will help to identify those items to ensure proper assembly. Read and follow all installation instructions for the component being installed.



Metal-to-metal contact: Tighten bolts and nuts until bolt pads make metal-to-metal contact. After metal-to-metal contact is achieved, tighten nuts by another one quarter or one half turn to make sure the bolts and nuts are snug and secure. No torque wrench is required. Excessive torque may lead to bolt or joint failure.



Torque required! Bolts and nuts must always be tightened to the required torque by using a torque wrench. Normally there will be some gaps seen between the bolt pads after the bolts and nuts are fully tightened. Bolt pad gaps should be equal on both sides of the coupling. Models that require torque tightening include 2" through 4" of model XH-1000, all sizes of models XH-70EP, SS-7X and 79 couplings.



#SS-7X 10" ~ 24"



#79 2" ~ 20"

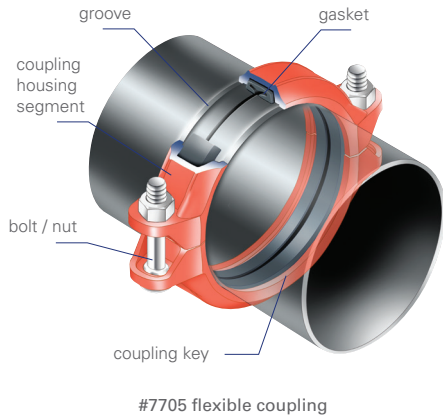


rigid & flexible couplings

Grooved mechanical couplings (GMC) are available in both rigid and flexible models. A rigid coupling is used in applications where a rigid joint is desired, similar to that of a traditional flanged, welded, and or threaded connection. To be considered rigid, a coupling would allow less than one degree of deflection or angular movement.

Flexible couplings are designed to accommodate axial displacement, rotation and a minimum one degree of angular movement. Flexible couplings are used in applications that call for curved or deflected layouts and or when systems are exposed to outside forces beyond normal static conditions, such as seismic events or where vibration and or noise attenuation are a concern.

Grooved couplings become less flexible as the pipe size increases. For sizes in excess of 18" (450 mm) couplings are very limited in their angular movement. Please refer to the following definition and test methods.

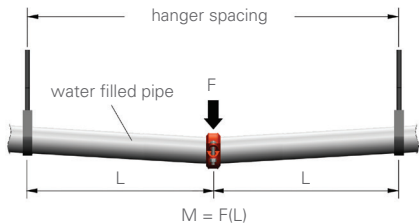


definition

Grooved couplings are subjected to internal pressures and exterior bending forces during service. ASTM F1476-07 defines a rigid coupling as a joint where there is essentially no available free angular or axial pipe movement and a flexible coupling as a joint wherein there is available limited angular and axial pipe movement.

bending moment

Test bending moments are calculated by the equation $M = F(L)$, where F is weight of water filled pipe (Lbs) and L is hanger spacing x 1/2 (feet). The table below shows test bending moments calculated using sch. 40 pipe with NFPA 13 hanger spacing.

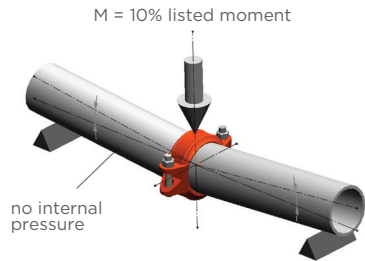


test bending moment (ASTM F1476)

nom. size	moment Nm	moment lbs-ft
1½"	549	405
2"	780	575
2½"	1200	885
3"	1645	1213
4"	2471	1823
5"	3551	2619
6"	4803	3543
8"	7663	5652
10"	11379	8393
12"	15558	11475
14"	18609	13725
16"	24299	17922

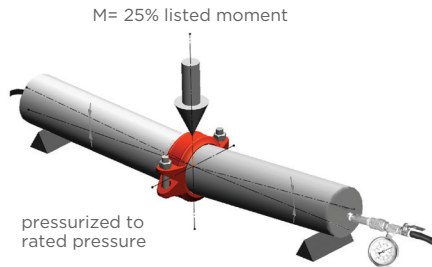
flexibility proof test

Flexibility proof testing is conducted by applying a small bending moment, 10% of the listed moment, to the test assembly with no internal pressure. A 4" model 7705 or 7707 flexible coupling deflects 3 - 4 degrees depending on the type of groove processed.



rigidity proof test

Rigidity proof testing is conducted by applying 25% of the listed moment to the test assembly which is internally pressurized to the rated pressure.



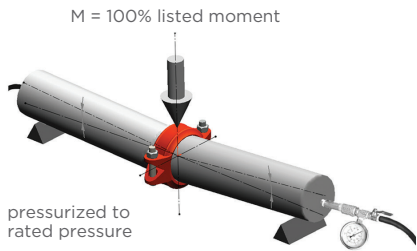
The rigid coupling shall pass the test when the angle has not changed more than angle θ . θ shall be calculated as follows: $\theta^\circ = 60' \text{ (minutes)} - [2' \text{ (minutes)} \times (\text{nominal pipe size in inches})]$. In other words, when θ is less than 1 degree (60 minutes), the grooved mechanical coupling is verified as a rigid coupling and when θ is more than 1 degree (60 minutes), the GMC is regarded as a flexible coupling. The maximum angles θ for rigid couplings are shown in the table below:

rigid coupling - max. deflection

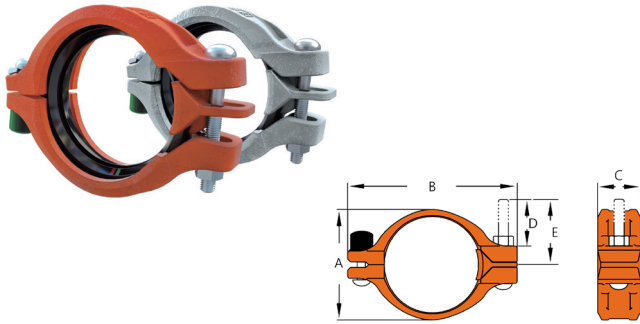
nom. size (in)	θ , max (minutes)	θ , max (degrees)
1½"	57	0.95
2"	56	0.93
2½"	55	0.92
3"	54	0.90
4"	52	0.87
5"	50	0.83
6"	48	0.80
8"	44	0.73
10"	40	0.67
12"	36	0.60
14"	32	0.53
16"	28	0.47

bending moment proof test

The coupling shall resist a 100% listed bending moment while the assembly is internally pressurized to the rated pressure.



M07 quick install coupling



caution: Ensure coupling bolt pads make metal-to-metal contact. Wedge allowed 1/16" gap top and bottom on 8" M07.

The Shurjoint Model M07 is a ready to install rigid coupling for general piping applications where rigidity is required including valve connections, mechanical rooms, risers and long straight runs. This proprietary design provides a rigid joint that resists flexural and torsional loads. Support and hanging requirements corresponding to ANSI B31.1, B31.9 and NFPA 13.

The Shurjoint Model M07 is available with a proprietary EPDM gasket, which includes a GapSeal and a center leg feature to support the coupling during installation. The M07 includes two identical housing segments and a fully constrained wedge. Proper installation requires the tightening of only one bolt/nut. As this bolt/nut is tightened, the wedge applies uniform compression to the gasket, reducing the chance of pinching. The hinge bolt/nut is factory pre-set and requires no adjustment.

general notes

- Maximum Working Pressure (CWP) listed is the maximum cold water pressure for general piping services tested to ASTM F1476 and or AWWA C606 methods. Figures listed are based on roll- or cut-grooved standard wall carbon steel pipe. For other pipe schedules or pipe materials, contact Shurjoint for additional information.
- max. end load is calculated based on the maximum working pressure (CWP).
- field joint test: For one time only the system may be tested hydrostatically at 1.5 times the maximum working pressure listed (AWWA C606 5.2.3).
- the 10 year limited warranty applies to manufacturing defects only and does not cover severe service/temperature applications or wear parts.

dimensions



nom. size run x branch	pipe O.D.	max. working pressure (CWP)**	max. end load (CWP)	A	B	C	D	E	bolt size	weight
2"	2.375"	750 psi	3320 lbs	3.36"	5.58"	1.90"	2.39"	3.26"	½ x 3.8"	2.9 lbs
50	(60.3 mm)	(52 bar)	(14.84 kN)	(85 mm)	(142 mm)	(48 mm)	(61 mm)	(83 mm)	(M12 x 97 mm)	(1.3 Kgs)
2½"	2.875"	750 psi	4860 lbs	3.80"	6.29"	1.90"	2.39"	3.26"	½ x 3.8"	3.3 lbs
65	(73.0 mm)	(52 bar)	(21.75 kN)	(97 mm)	(160 mm)	(48 mm)	(61 mm)	(83 mm)	(M12 x 97 mm)	(1.5 Kgs)
76.1 mm	3.000"	750 psi	5310 lbs	3.88"	6.42"	2.01"	2.07"	2.88"	½ x 3.8"	3.30 lbs
	(76.1 mm)	(52 bar)	(23.64 kN)	(99 mm)	(163 mm)	(51 mm)	(53 mm)	(73 mm)	(M12 x 97 mm)	(1.5 Kgs)
3"	3.500"	750 psi	7210 lbs	4.42"	7.10"	1.90"	2.39"	3.26"	½ x 3.8"	3.8 lbs
80	(88.9 mm)	(52 bar)	(32.26 kN)	(112 mm)	(180 mm)	(48 mm)	(61 mm)	(83 mm)	(M12 x 97 mm)	(1.7 Kgs)
4"	4.500"	750 psi	11920 lbs	5.44"	8.35"	2.11"	2.29"	3.21"	½ x 3.8"	5.1 lbs
100	(114.3 mm)	(52 bar)	(53.33 kN)	(138 mm)	(212 mm)	(54 mm)	(58 mm)	(82 mm)	(M12 x 97 mm)	(2.3 Kgs)
139.7 mm	5.500"	750 psi	17900 lbs	6.73"	9.84"	2.13"	2.17"	3.09"	5/8 x 4.0"	7.71 lbs
	(139.7 mm)	(52 bar)	(79.66 kN)	(171 mm)	(250 mm)	(54 mm)	(55 mm)	(79 mm)	(M16 x 102 mm)	(3.5 Kgs)
5"	5.563"	750 psi	17900 lbs	6.73"	9.84"	2.11"	2.17"	3.09"	5/8 x 4.0"	7.71 lbs
125	(141.3 mm)	(52 bar)	(79.66 kN)	(171 mm)	(250 mm)	(54 mm)	(55 mm)	(79 mm)	(M16 x 102 mm)	(3.5 Kgs)
6"	6.625"	700 psi	24110 lbs	7.77"	10.90"	2.11"	2.56"	3.49"	5/8 x 4.0"	8.4 lbs
150	(168.3 mm)	(48 bar)	(106.73 kN)	(197 mm)	(277 mm)	(54 mm)	(65 mm)	(89 mm)	(M16 x 102 mm)	(3.8 Kgs)
8"	8.625"	600 psi	35580 lbs	10.74"	13.79"	2.52"	2.46"	3.43"	5/8 x 4.0"	17.40 lbs
200	(219.1 mm)	(42 bar)	(158.27 kN)	(273 mm)	(350 mm)	(64 mm)	(62 mm)	(87 mm)	(M16 x 102 mm)	(7.9 Kgs)

note: Shurjoint reserves the right to change specifications, designs and or standard without notice and without incurring any obligations.

performance data

The following table show the maximum working pressures (CWP) of Shurjoint Model M07 Coupling used on carbon steel and stainless steel. Model M07 can be installed into applications with pressures ranging from full vacuum (29.9 inHg/760 mmHg) up to 750 psi/52 bar.

warning: piping systems must always be depressurized and drained before attempting disassembly and or removal of any components.

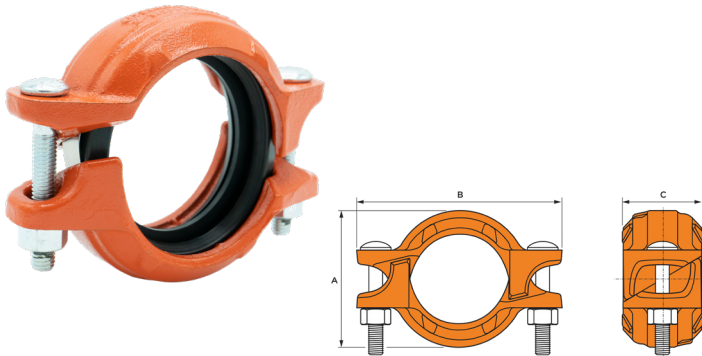
carbon steel pipe

nom. size (in.)	cut-grooved		roll-grooved	
	XS	STD	STD	sch. 10
2"	750 psi	750 psi	750 psi	750 psi
50	(52 bar)	(52 bar)	(52 bar)	(52 bar)
2½"	750 psi	750 psi	750 psi	600 psi
65	(52 bar)	(52 bar)	(52 bar)	(42 bar)
3"	750 psi	750 psi	750 psi	600 psi
80	(52 bar)	(52 bar)	(52 bar)	(42 bar)
4"	750 psi	750 psi	750 psi	600 psi
100	(52 bar)	(52 bar)	(52 bar)	(42 bar)
5"	750 psi	750 psi	750 psi	500 psi
125	(52 bar)	(52 bar)	(52 bar)	(35 bar)
6"	500 psi	500 psi	600 psi	300 psi
150	(35 bar)	(35 bar)	(42 bar)	(21 bar)
8"	600 psi	600 psi	600 psi	300 psi
200	(42 bar)	(42 bar)	(42 bar)	(21 bar)

stainless steel pipe

nom. size (in.)	cut-grooved		roll-grooved	
	XS	STD	sch. 40S	sch. 10S
2"	600 psi	600 psi	600 psi	300 psi
50	(42 bar)	(42 bar)	(42 bar)	(21 bar)
2½"	600 psi	600 psi	600 psi	300 psi
65	(42 bar)	(42 bar)	(42 bar)	(21 bar)
3"	600 psi	600 psi	600 psi	300 psi
80	(42 bar)	(42 bar)	(42 bar)	(21 bar)
4"	600 psi	600 psi	600 psi	300 psi
100	(42 bar)	(42 bar)	(42 bar)	(21 bar)
5"	600 psi	600 psi	600 psi	300 psi
125	(42 bar)	(42 bar)	(42 bar)	(21 bar)
6"	500 psi	500 psi	600 psi	300 psi
150	(35 bar)	(35 bar)	(42 bar)	(21 bar)
8"	500 psi	500 psi	600 psi	300 psi
200	(35 bar)	(35 bar)	(42 bar)	(21 bar)

F09 quick install coupling



The Shurjoint Model F09 is a ready to install rigid coupling for moderate pressure piping services including fire mains, long straight runs, and valve connections. The angle-pad design allows for easy installation over grooved pipe ends and provides a rigid joint which resists so called snaking on long straight pipe runs. The Support and hanging requirements correspond to ANSI B31.1, B31.9 and NFPA 13.

The Shurjoint Model F09 is available with an EPDM prelubricated gasket, which includes a GapSeal and a center leg feature to support the coupling during installation. The F09 has a support barrier ring seated between the gasket and the housing segments. This barrier ring acts as a stabilizing force, ensuring rigidity to assist in easier key-to-groove alignment during vertical installations. This barrier ring also helps prevent accidental gasket pinching during the installation process.

The F09 bolts are supplied with a torque resistant adhesive strategically placed to assist and provide the installer with touch feedback, while equally and alternately tightening the nuts. factory pre-set and requires no adjustment.

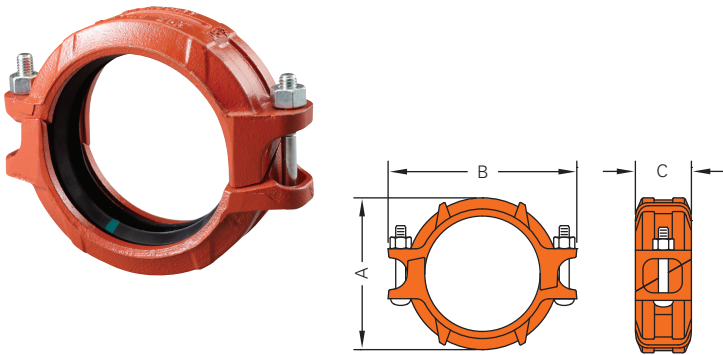
dimensions



nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions			bolt		weight
					A	B	C	no.	size	
1¼"	1.660"	365 psi	790 lbs	0.16"	2.76"	4.40"	1.93"	2	¾ x 2½"	1.58 lbs
32	(42.2 mm)	(25 bar)	3.51 kN	(4.0 mm)	(70 mm)	(112.5 mm)	(49 mm)		(M10 x 55 mm)	(0.72 Kgs)
1½"	1.900"	365 psi	1035 lbs	0.17"	2.95"	4.70"	1.93"	2	¾ x 2½"	1.59 lbs
40	(48.3 mm)	(25 bar)	4.60 kN	(4.3 mm)	(72 mm)	(119.3 mm)	(49 mm)		(M10 x 55 mm)	(0.72 Kgs)
2"	2.375"	365 psi	1617 lbs	0.19"	3.43"	5.06"	1.93"	2	¾ x 2¾"	1.85 lbs
50	(60.3 mm)	(25 bar)	7.19 kN	(4.8 mm)	(87 mm)	(128.5 mm)	(49 mm)		(M10 x 65 mm)	(0.84 Kgs)
2½"	2.875"	365 psi	2370 lbs	0.20"	3.94"	5.50"	1.93"	2	¾ x 2¾"	2.13 lbs
65	(73.0 mm)	(25 bar)	10.54 kN	(5.0 mm)	(100 mm)	(139.8 mm)	(49 mm)		(M10 x 65 mm)	(0.97 Kgs)
76.1 mm	3.000"	365 psi	2747 lbs	0.20"	4.06"	5.60"	1.93"	2	¾ x 2¾"	2.19 lbs
	(76.1 mm)	(25 bar)	11.00 kN	(5.0 mm)	(103 mm)	(142.2 mm)	(49 mm)		(M10 x 65 mm)	(0.99 Kgs)
3"	3.500"	365 psi	3512 lbs	0.20"	4.53"	6.25"	1.93"	2	¾ x 2¾"	2.47 lbs
80	(88.9 mm)	(25 bar)	15.62 kN	(5.0 mm)	(115 mm)	(158.8 mm)	(49 mm)		(M10 x 65 mm)	(1.20 Kgs)
4"	4.500"	365 psi	5805 lbs	0.22"	5.60"	7.33"	2.01"	2	¾ x 2¾"	3.22 lbs
100	(114.3 mm)	(25 bar)	25.82 kN	(5.7 mm)	(142 mm)	(186.2 mm)	(51 mm)		(M10 x 65 mm)	(1.46 Kgs)

note: Shurjoint reserves the right to change specifications, designs and or standard without notice and without incurring any obligations.

Z05 rigid coupling
angle-pad design



note: The angle pad design allows for fast and easy swing-over installation with the removal of a single bolt.

The Shurjoint Model Z05 is an angle-pad design rigid coupling for moderate pressure piping services including fire mains, long straight runs and valve connections. The angle-pad design allows the coupling housings to slide along the bolt pads when tightened. The result is an offset clamping action which provides a rigid joint which resists so-called ‘snaking’ of a long straight run. Support and hanging requirements correspond to ANSI B31.1, B31.9 and NFPA 13. With the removal of only one bolt you can make a fast and easy ‘swing-over’ installation.

dimensions

dimensions



nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions			bolt		weight
					A	B	C	no.	size	
1¼"	1.660"	500 psi	1080 lbs	0 - 0.05"	2.60"	4.00"	1.81"	2	¾ x 2½"	1.41 lbs
32	(42.2 mm)	(35 bar)	4.89 kN	(0 - 1.2 mm)	(66 mm)	(102 mm)	(46 mm)		(M10 x 55 mm)	(0.64 Kgs)
1½"	1.900"	500 psi	1410 lbs	0 - 0.05"	2.83"	4.29"	1.81"	2	¾ x 2½"	1.46 lbs
40	(48.3 mm)	(35 bar)	6.41 kN	(0 - 1.2 mm)	(72 mm)	(109 mm)	(46 mm)		(M10 x 55 mm)	(0.66 Kgs)
2"	2.375"	500 psi	2210 lbs	0 - 0.07"	3.35"	4.61"	1.85"	2	¾ x 2¾"	1.74 lbs
50	(60.3 mm)	(35 bar)	9.99 kN	(0 - 1.7 mm)	(85 mm)	(117 mm)	(47 mm)		(M10 x 70 mm)	(0.79 Kgs)
2½"	2.875"	500 psi	3240 lbs	0 - 0.07"	3.86"	5.24"	1.85"	2	¾ x 2¾"	2.05 lbs
65	(73.0 mm)	(35 bar)	14.64 kN	(0 - 1.7 mm)	(98 mm)	(133 mm)	(47 mm)		(M10 x 70 mm)	(0.93 Kgs)
76.1 mm	3.000"	500 psi	3530 lbs	0 - 0.07"	3.94"	5.35"	1.85"	2	¾ x 2¾"	2.16 lbs
	(76.1 mm)	(35 bar)	15.91 kN	(0 - 1.7 mm)	(100 mm)	(136 mm)	(47 mm)		(M10 x 70 mm)	(0.98 Kgs)
3"	3.500"	500 psi	4800 lbs	0 - 0.07"	4.45"	5.91"	1.88"	2	¾ x 2¾"	2.60 lbs
80	(88.9 mm)	(35 bar)	21.71 kN	(0 - 1.7 mm)	(113 mm)	(150 mm)	(48 mm)		(M10 x 70 mm)	(1.20 Kgs)
108.0 mm	4.250"	500 psi	7080 lbs	0 - 0.16"	5.59"	6.93"	2.13"	2	¾ x 2¾"	3.62 lbs
	(108.0 mm)	(35 bar)	32.05 kN	(0 - 4.1 mm)	(142 mm)	(176 mm)	(54 mm)		(M10 x 70 mm)	(1.64 Kgs)
4"	4.500"	500 psi	7940 lbs	0 - 0.16"	5.75"	7.20"	2.13"	2	¾ x 2¾"	4.12 lbs
100	(114.3 mm)	(35 bar)	35.89 kN	(0 - 4.1 mm)	(146 mm)	(183 mm)	(54 mm)		(M10 x 70 mm)	(1.87 Kgs)
133.0 mm	5.250"	350 psi	7570 lbs	0 - 0.16"	6.69"	8.82"	2.13"	2	½ x 3"	5.14 lbs
	(133.0 mm)	(24 bar)	33.33 kN	(0 - 4.1 mm)	(170 mm)	(224 mm)	(54 mm)		(M12 x 75 mm)	(2.33 Kgs)
139.7 mm	5.500"	350 psi	8310 lbs	0 - 0.16"	6.81"	8.98"	2.09"	2	½ x 3"	5.67 lbs
	(139.7 mm)	(24 bar)	36.77 kN	(0 - 4.1 mm)	(173 mm)	(228 mm)	(53 mm)		(M12 x 75 mm)	(2.57 Kgs)

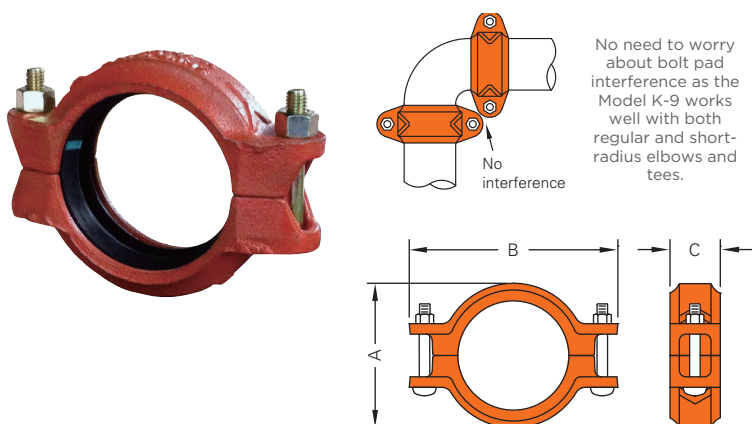
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nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions			bolt		weight
					A	B	C	no.	size	
5"	5.563"	350 psi	8500 lbs	0 - 0.16"	6.89"	9.06"	2.13"	2	½ x 3"	5.69 lbs
125	(141.3 mm)	(24 bar)	37.62 kN	(0 - 4.1 mm)	(175 mm)	(230 mm)	(54 mm)		(M12 x 75 mm)	(2.58 Kgs)
159.0 mm	6.250"	350 psi	10730 lbs	0 - 0.16"	7.80"	9.84"	2.09"	2	½ x 3"	6.06 lbs
	(159.0 mm)	(24 bar)	47.63 kN	(0 - 4.1 mm)	(198 mm)	(250 mm)	(53 mm)		(M12 x 75 mm)	(2.75 Kgs)
165.1 mm	6.500"	350 psi	11600 lbs	0 - 0.16"	7.87"	9.92"	2.09"	2	½ x 3"	6.72 lbs
	(165.1 mm)	(24 bar)	51.35 kN	(0 - 4.1 mm)	(200 mm)	(252 mm)	(53 mm)		(M12 x 75 mm)	(3.05 Kgs)
6"	6.625"	350 psi	12050 lbs	0 - 0.16"	8.00"	10.0"	2.09"	2	½ x 3"	6.77 lbs
150	(168.3 mm)	(24 bar)	53.36 kN	(0 - 4.1 mm)	(203 mm)	(254 mm)	(53 mm)		(M12 x 75 mm)	(3.07 Kgs)
8"	8.625"	350 psi	20430 lbs	0 - 0.19"	10.40"	12.68"	2.52"	2	¾ x 5 ½/16"	13.38 lbs
200	(219.1 mm)	(24 bar)	90.44 kN	(0 - 4.8 mm)	(264 mm)	(322 mm)	(64 mm)		(M16 x 135 mm)	(6.07 Kgs)
200 JIS	8.516"	350 psi	19920 lbs	0 - 0.19"	10.24"	13.35"	2.50"	2	¾ x 4 ¾"	15.43 lbs
	(216.3 mm)	(24 bar)	88.14 kN	(0 - 4.8 mm)	(260 mm)	(339 mm)	(64 mm)		(M20 x 120 mm)	(7.00 Kgs)

* Working Pressure is based on roll grooved standard wall carbon steel pipe.

† Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation purposes these figures should be reduced by: 50% for ¾"/DN20 - 3½"/DN90; 25% for 4"/DN100 and larger to compensate for jobsite conditions.

K-9 rigid coupling t & g design



Model K-9 works well with both regular and short-radius elbows and tees to prevent bolt pad interference.

The Shurjoint Model K-9 is a T&G (tongue & groove) design rigid coupling for moderate pressure applications where rigidity is required including valve connections, mechanical rooms, fire mains and long straight runs. The built-in teeth and T&G mechanism firmly grasp the pipe ends to eliminate undesired flex. Support and hanging requirements correspond to ANSI B31.1, B31.9 and NFPA 13.

**only sold in EMEA and APAC territories

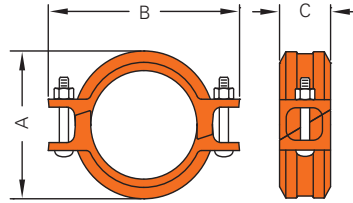
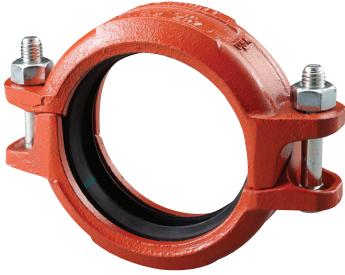
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions			bolt size	weight
					A	B	C		
1¼"	1.660"	500 psi	1080 lbs	0-0.06"	2.56"	4.33"	1.73"	¾ x 1¼"	1.3 lbs
32	(42.2 mm)	35 bar	(4.82 kN)	(0-1.6 mm)	(65 mm)	(110 mm)	(44 mm)	(M10 x 45 mm)	(0.6 Kgs)
1½"	1.900"	500 psi	1410 lbs	0-0.06"	2.80"	4.45"	1.73"	¾ x 2½"	1.3 lbs
40	(48.3 mm)	35 bar	(6.32 kN)	(0-1.6 mm)	(71 mm)	(113 mm)	(44 mm)	(M10 x 55 mm)	(0.6 Kgs)
2"	2.375"	500 psi	2210 lbs	0-0.06"	3.27"	4.88"	1.73"	¾ x 2½"	1.5 lbs
50	(60.3 mm)	35 bar	(9.85 kN)	(0-1.6 mm)	(83 mm)	(124 mm)	(44 mm)	(M10 x 55 mm)	(0.7 Kgs)
2½"	2.875"	500 psi	3240 lbs	0-0.06"	3.86"	5.39"	1.73"	¾ x 2½"	1.8 lbs
65	(73.0 mm)	35 bar	(14.43 kN)	(0-1.6 mm)	(98 mm)	(137 mm)	(44 mm)	(M10 x 55 mm)	(0.8 Kgs)
76.1 mm	3.000"	500 psi	3530 lbs	0-0.06"	4.00"	5.51"	1.73"	¾ x 2½"	1.8 lbs
	(76.1 mm)	35 bar	(15.68 kN)	(0-1.6 mm)	(102 mm)	(140 mm)	(44 mm)	(M10 x 55 mm)	(0.8 Kgs)
3"	3.500"	500 psi	4800 lbs	0-0.06"	4.50"	5.94"	1.73"	¾ x 2¾"	2.6 lbs
80	(88.9 mm)	35 bar	(21.40 kN)	(0-1.6 mm)	(114 mm)	(151 mm)	(44 mm)	(M10 x 70 mm)	(1.2 Kgs)
4"	4.500"	350 psi	5560 lbs	0-0.06"	5.63"	7.52"	1.97"	¾ x 2¾"	3.6 lbs
100	(114.3 mm)	24 bar	(24.72 kN)	(0-1.6 mm)	(143 mm)	(191 mm)	(50 mm)	(M10 x 70 mm)	(1.7 Kgs)
139.7 mm	5.500"	350 psi	8310 lbs	0-0.13"	6.77"	9.21"	2.00"	½ x 3"	4.6 lbs
	(139.7 mm)	24 bar	(36.92 kN)	(0-3.2 mm)	(172 mm)	(234 mm)	(51 mm)	(M12 x 75 mm)	(2.1 Kgs)
5"	5.563"	350 psi	8500 lbs	0-0.13"	6.89"	8.98"	1.97"	½ x 3"	4.6 lbs
125	(141.3 mm)	24 bar	(37.77 kN)	(0-3.2 mm)	(175 mm)	(228 mm)	(50 mm)	(M12 x 75 mm)	(2.1 Kgs)
165.1 mm	6.500"	350 psi	11600 lbs	0-0.13"	7.75"	9.92"	2.09"	½ x 3"	5.3 lbs
	(165.1 mm)	24 bar	(51.57 kN)	(0-3.2 mm)	(197 mm)	(252 mm)	(53 mm)	(M12 x 75 mm)	(2.4 Kgs)
6"	6.625"	350 psi	12050 lbs	0-0.13"	7.87"	10.04"	2.09"	½ x 3"	5.9 lbs
150	(168.3 mm)	24 bar	(53.59 kN)	(0-3.2 mm)	(200 mm)	(255 mm)	(53 mm)	(M12 x 75 mm)	(2.7 Kgs)
8"	8.625"	350 psi	20430 lbs	0-0.13"	10.16"	13.15"	2.44"	¾ x 3½"	9.7 lbs
200	(219.1 mm)	24 bar	(90.82 kN)	(0-3.2 mm)	(258 mm)	(334 mm)	(62 mm)	(M16 x 90 mm)	(4.4 Kgs)
8 (K-9H)"	8.625"	350 psi	20430 lbs	0-0.13"	10.29"	13.08"	2.44"	¾ x 4¼"	15.8 lbs
200	(219.1 mm)	24 bar	(90.82 kN)	(0-3.2 mm)	(261 mm)	(332 mm)	(62 mm)	(M20 x 120 mm)	(7.2 Kgs)

All DIN size K-9 couplings up to DN150 size and the DN200 K-9H coupling are VdS approved in addition to cULus and FM approvals.

** Working Pressure is based on roll grooved standard wall carbon steel pipe.

Z07 heavy duty rigid coupling



The Shurjoint Model Z07 is an angle-pad design rigid coupling for general piping applications where rigidity is required including, mechanical rooms, valve connections fire mains and long straight runs. The angle-pad design allows the coupling housings to slide along the bolt pads when tightened. The result is an offset clamping action which provides a rigid joint that resists flexural and torsional loads. Support and hanging requirements correspond to ANSI B31.1, B31.9 and NFPA 13.

dimensions



nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions			bolt		weight
					A	B	C	no.	size	
1¼"	1.660"	750 psi	1620 lbs	0 - 0.05"	2.68"	4.13"	1.85"	2	¾ x 2½"	1.6 lbs
32	(42.2 mm)	(52 bar)	7.27 kN	(0-1.2 mm)	(68 mm)	(105 mm)	(47 mm)		(M10 x 55 mm)	(0.7 Kgs)
1½"	1.900"	750 psi	2120 lbs	0 - 0.05"	2.91"	4.53"	1.85"	2	¾ x 2½"	2.0 lbs
40	(48.3 mm)	(52 bar)	9.52 kN	(0-1.2 mm)	(74 mm)	(115 mm)	(47 mm)		(M10 x 55 mm)	(0.9 Kgs)
2"	2.375"	750 psi	3320 lbs	0 - 0.07"	3.39"	4.69"	1.88"	2	¾ x 2½"	2.4 lbs
50	(60.3 mm)	(52 bar)	14.84 kN	(0-1.7 mm)	(86 mm)	(119 mm)	(48 mm)		(M10 x 70 mm)	(1.1 Kgs)
2½"	2.875"	750 psi	4860 lbs	0 - 0.07"	3.94"	5.50"	1.88"	2	¾ x 2½"	2.4 lbs
65	(73.0 mm)	(52 bar)	21.75 kN	(0-1.7 mm)	(100 mm)	(140 mm)	(48 mm)		(M10 x 70 mm)	(1.1 Kgs)
76.1 mm	3.000"	750 psi	5290 lbs	0 - 0.07"	4.00"	5.75"	1.88"	2	¾ x 2½"	2.4 lbs
	(76.1 mm)	(52 bar)	23.64 kN	(0-1.7 mm)	(102 mm)	(146 mm)	(48 mm)		(M10 x 70 mm)	(1.1 Kgs)
3"	3.500"	750 psi	7210 lbs	0 - 0.07"	4.53"	6.54"	1.88"	2	½ x 3"	3.1 lbs
80	(88.9 mm)	(52 bar)	32.26 kN	(0-1.7 mm)	(115 mm)	(166 mm)	(48 mm)		(M12 x 75 mm)	(1.4 Kgs)
4"	4.500"	750 psi	11920 lbs	0 - 0.16"	5.78"	8.11"	2.13"	2	½ x 3"	4.4 lbs
100	(114.3 mm)	(52 bar)	53.33 kN	(0-4.1 mm)	(147 mm)	(206 mm)	(54 mm)		(M12 x 75 mm)	(2.0 Kgs)
139.7 mm	5.500"	750 psi	17810 lbs	0 - 0.16"	6.88"	9.37"	2.09"	2	¾ x 3½"	6.6 lbs
	(139.7 mm)	(52 bar)	79.66 kN	(0-4.1 mm)	(175 mm)	(238 mm)	(53 mm)		(M16 x 90 mm)	(3.0 Kgs)
5"	5.563"	750 psi	18220 lbs	0 - 0.16"	6.97"	9.45"	2.09"	2	¾ x 3½"	6.6 lbs
125	(141.3 mm)	(52 bar)	81.50 kN	(0-4.1 mm)	(177 mm)	(240 mm)	(53 mm)		(M16 x 90 mm)	(3.0 Kgs)
165.1 mm	6.500"	700 psi	23210 lbs	0 - 0.16"	7.87"	10.47"	2.09"	2	¾ x 3½"	7.5 lbs
	(165.1 mm)	(48 bar)	102.71 kN	(0-4.1 mm)	(200 mm)	(266 mm)	(53 mm)		(M16 x 90 mm)	(3.4 Kgs)
6"	6.625"	700 psi	24110 lbs	0 - 0.16"	8.00"	10.67"	2.09"	2	¾ x 3½"	7.1 lbs
150	(168.3 mm)	(48 bar)	106.73 kN	(0-4.1 mm)	(203 mm)	(271 mm)	(53 mm)		(M16 x 90 mm)	(3.2 Kgs)
8"	8.625"	600 psi	35030 lbs	0 - 0.19"	10.55"	13.46"	2.52"	2	¾ x 4½"	15.7 lbs
200	(219.1 mm)	(42 bar)	158.27 kN	(0-4.8 mm)	(268 mm)	(342 mm)	(64 mm)		(M20 x 120 mm)	(7.1 Kgs)
10"	10.750"	500 psi	45350 lbs	0 - 0.13"	12.86"	15.60"	2.56"	2	¾ x 6½"	27.4 lbs
250	(273.0 mm)	(35 bar)	204.77 kN	(0-3.2 mm)	(327 mm)	(396 mm)	(65 mm)		---	(10.4 Kgs)

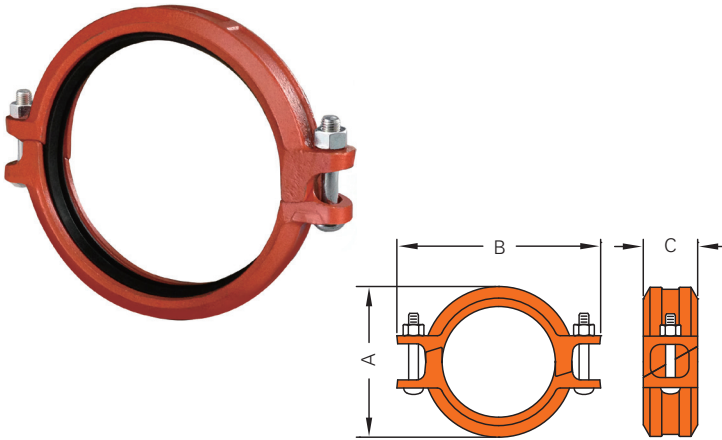
graph continues on next page

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions			bolt		weight
					A	B	C	no.	size	
12" 300	12.750" (323.9 mm)	400 psi (28 bar)	51040 lbs (230.59 kN)	0 - 0.13" (0-3.2 mm)	14.86" (377 mm)	17.80" (452 mm)	2.56" (65 mm)	2	⅞ x 6½" ---	26.0 lbs (11.8 Kgs)
200 JIS	8.516" (216.3 mm)	600 psi (42 bar)	34150 lbs (154.25 kN)	0 - 0.13" (0-3.2 mm)	10.39" (264 mm)	13.35" (339 mm)	2.56" (65 mm)	2	¾ x 4¾" (M20 x 120 mm)	16.3 lbs (7.4 Kgs)
250 JIS	10.528" (267.4 mm)	500 psi (35 bar)	43500 lbs (196.45 kN)	0 - 0.13" (0-3.2 mm)	12.63" (321 mm)	15.63" (397 mm)	2.56" (65 mm)	2	⅞ x 6½" ---	23.1 lbs (10.5 Kgs)
300 JIS	12.539" (318.5 mm)	400 psi (28 bar)	49360 lbs (222.97 kN)	0 - 0.13" (0-3.2 mm)	14.65" (372 mm)	17.80" (452 mm)	2.56" (65 mm)	2	⅞ x 6½" ---	27.4 lbs (12.4 Kgs)

* Working Pressure is based on roll grooved standard wall carbon steel pipe.

† Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation purposes these figures should be reduced by: 50% for ¾" - 3½"; 25% for 4" and larger to compensate for jobsite conditions.

Z07N heavy duty rigid coupling



The Shurjoint Model Z07N is a two-segment, rigid coupling for general piping applications where rigidity is required. Sizes 14" - 24" are now available.

dimensions

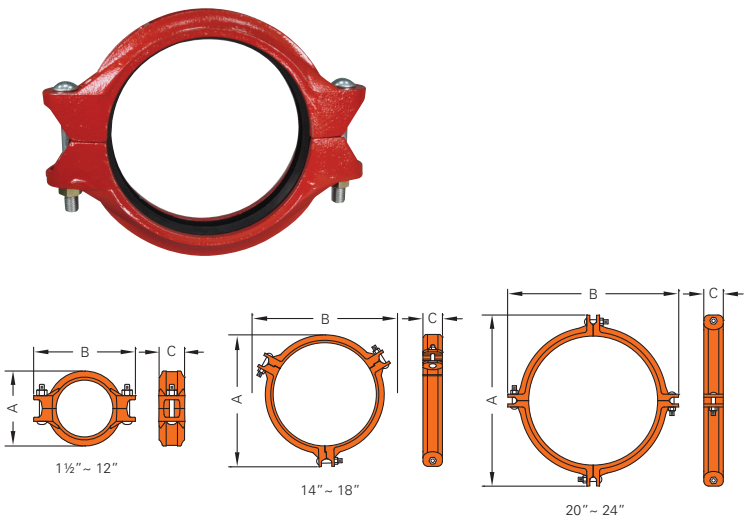


nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions			bolt		weight
					A	B	C	no.	size	
14"	14.000 in	250 psi	38460 lbs	0 - 0.13"	16.06"	20.00"	2.95"	2	¾ x 5½"	35.3 lbs
350	(355.6 mm)	17 bar	168.75 kN	(0-3.2 mm)	(408 mm)	(508 mm)	(75 mm)	---	---	(16.0 Kgs)
16"	16.000	250 psi	50240 lbs	0 - 0.13"	18.39"	22.05"	2.95"	2	¾ x 5½"	30.5 lbs
400	(406.4 mm)	17 bar	220.41 kN	(0-3.2 mm)	(467 mm)	(660 mm)	(75 mm)	---	---	(17.9 Kgs)
18"	18.000	250 psi	63580 lbs	0 - 0.13"	20.68"	24.29"	3.11"	2	¾ x 5½"	40.1 lbs
450	(457.2 mm)	17 bar	278.95 kN	(0-3.2 mm)	(525 mm)	(617 mm)	(79 mm)	---	---	(22.3 Kgs)
20"	20.000	250 psi	78500 lbs	0 - 0.13"	22.93"	27.99"	3.00"	2	1 x 5½"	57.8 lbs
500	(508.0 mm)	17 bar	344.39 kN	(0-3.2 mm)	(582 mm)	(711 mm)	(76 mm)	---	---	(26.2 Kgs)
24"	24.000	250 psi	113040 lbs	0 - 0.13"	27.05"	30.55"	3.06"	2	1 x 5½"	70.8 lbs
600	(609.6 mm)	17 bar	495.92 kN	(0-3.2 mm)	(687 mm)	(776 mm)	(78 mm)	---	---	(32.1 Kgs)

* Working Pressure is based on roll grooved standard wall carbon steel pipe.

† Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation purposes these figures should be reduced by: 50% for ¾" - 3½"; 25% for 4" and larger to compensate for jobsite conditions.

7771 standard rigid coupling
t & g design



The Shurjoint Model 7771 is a T&G (tongue & groove) design standard rigid coupling for general piping applications where rigidity is required including valve connections, mechanical rooms, fire mains and long straight runs. The T&G mechanism provides a rigid, locked-in connection that resists flexural and torsional loads.

**only sold in EMEA and APAC territories

dimensions



nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions			bolt		
					A	B	C	no.	size	weight
1½"	1.900"	500 psi	1410 lbs	0-0.06"	2.91"	4.41"	1.81"	2	¾ x 2½"	1.5 lbs
40	(48.3 mm)	(35 bar)	(6.23 kN)	(0-1.6 mm)	(74 mm)	(112 mm)	(46 mm)		(M10 x 55 mm)	(0.7 Kgs)
2"	2.375"	500 psi	2210 lbs	0-0.06"	3.34"	4.96"	1.81"	2	¾ x 2½"	1.9 lbs
50	(60.3 mm)	(35 bar)	(9.70 kN)	(0-1.6 mm)	(85 mm)	(126 mm)	(46 mm)		(M10 x 55 mm)	(0.9 Kgs)
2½"	2.875"	500 psi	3240 lbs	0-0.06"	3.89"	5.59"	1.81"	2	¾ x 2½"	2.6 lbs
65	(73.0 mm)	(35 bar)	(14.22 kN)	(0-1.6 mm)	(99 mm)	(142 mm)	(46 mm)		(M10 x 55 mm)	(1.2 Kgs)
76.1 mm	3.000"	500 psi	3530 lbs	0-0.06"	4.00"	5.90"	1.81"	2	¾ x 2½"	2.6 lbs
	(76.1 mm)	(35 bar)	(15.46 kN)	(0-1.6 mm)	(102 mm)	(150 mm)	(46 mm)		(M10 x 55 mm)	(1.2 Kgs)
3"	3.500"	500 psi	4800 lbs	0-0.06"	4.52"	6.50"	1.81"	2	½ x 3"	3.3 lbs
80	(88.9 mm)	(35 bar)	(21.09 kN)	(0-1.6 mm)	(115 mm)	(165 mm)	(46 mm)		(M12 x 75 mm)	(1.5 Kgs)
108.0 mm	4.250"	500 psi	7090 lbs	0-0.16"	5.54"	7.59"	2.00"	2	½ x 3"	4.8 lbs
	(108.0 mm)	(35 bar)	(31.13 kN)	(0-4.1 mm)	(141 mm)	(193 mm)	(51 mm)		(M12 x 75 mm)	(2.2 Kgs)
4"	4.500"	500 psi	7940 lbs	0-0.16"	5.82"	7.79"	2.00"	2	½ x 3"	4.8 lbs
100	(114.3 mm)	(35 bar)	(34.87 kN)	(0-4.1 mm)	(148 mm)	(198 mm)	(51 mm)		(M12 x 75 mm)	(2.2 Kgs)
133.0 mm	5.250"	450 psi	9730 lbs	0-0.16"	6.61"	9.72"	2.00"	2	¾ x 3½"	6.0 lbs
	(133.0 mm)	(31 bar)	(43.05 kN)	(0-4.1 mm)	(168 mm)	(247 mm)	(51 mm)		(M16 x 90 mm)	(2.7 Kgs)
139.7 mm	5.500"	450 psi	10680 lbs	0-0.16"	6.8"	9.45"	2.00"	2	¾ x 3½"	6.4 lbs
	(139.7 mm)	(31 bar)	(47.49 kN)	(0-4.1 mm)	(173 mm)	(240 mm)	(51 mm)		(M16 x 90 mm)	(2.9 Kgs)
5"	5.563"	450 psi	10930 lbs	0-0.16"	6.88"	9.84"	2.00"	2	¾ x 3½"	6.4 lbs
125	(141.3 mm)	(31 bar)	(48.59 kN)	(0-4.1 mm)	(175 mm)	(250 mm)	(51 mm)		(M16 x 90 mm)	(2.9 Kgs)
165.1 mm	6.500"	450 psi	14920 lbs	0-0.16"	7.87"	11.02"	2.09"	2	¾ x 3½"	7.7 lbs
	(165.1 mm)	(31 bar)	(66.33 kN)	(0-4.1 mm)	(200 mm)	(280 mm)	(53 mm)		(M16 x 90 mm)	(3.5 Kgs)
6"	6.625"	450 psi	15500 lbs	0-0.16"	8.07"	11.18"	2.09"	2	¾ x 3½"	8.1 lbs
150	(168.3 mm)	(31 bar)	(68.93 kN)	(0-4.1 mm)	(205 mm)	(284 mm)	(53 mm)		(M16 x 90 mm)	(3.7 Kgs)

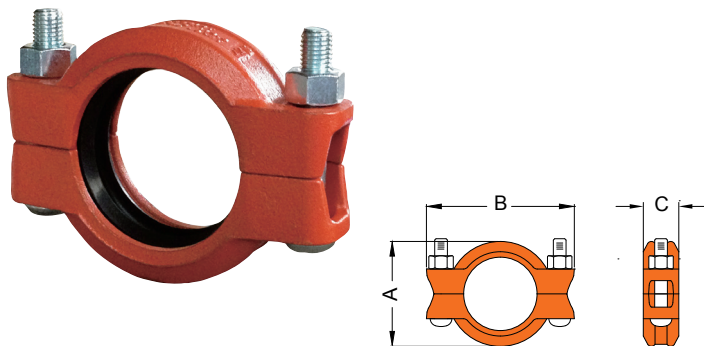
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nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions			bolt		weight
					A	B	C	no.	size	
8"	8.625"	300 psi	17510 lbs	0-0.16"	10.27"	13.58"	2.48"	2	5/8 x 5"	14.6 lbs
200	(219.1 mm)	(20 bar)	(75.37 kN)	(0-4.1 mm)	(261 mm)	(345 mm)	(63 mm)		(M16 x 135 mm)	(6.6 Kgs)
10"	10.750"	300 psi	27210 lbs	0-0.16"	12.44"	15.51"	2.50"	2	3/4 x 4 3/4"	18.6 lbs
250	(273.0 mm)	(20 bar)	(117.01 kN)	(0-4.1 mm)	(316 mm)	(394 mm)	(64 mm)		(M20 x 120 mm)	(8.4 Kgs)
12"	12.750"	300 psi	38280 lbs	0-0.16"	14.17"	18.00"	2.50"	2	7/8 x 6 1/2"	24.5 lbs
300	(323.9 mm)	(20 bar)	(164.71 kN)	(0-4.1 mm)	(360 mm)	(457 mm)	(64 mm)		---	(11.1 Kgs)
200 JIS	8.516"	300 psi	17070 lbs	0-0.16"	10.00"	13.58"	2.48"	2	5/8 x 5"	15.2 lbs
	(216.3 mm)	(20 bar)	(73.45 kN)	(0-4.1 mm)	(254 mm)	(345 mm)	(63 mm)		(M16 x 135 mm)	(6.9 Kgs)
250 JIS	10.528"	300 psi	26100 lbs	0-0.16"	12.20"	15.20"	2.50"	2	3/4 x 4 3/4"	19.3 lbs
	(267.4 mm)	(20 bar)	(112.26 kN)	(0-4.1 mm)	(310 mm)	(386 mm)	(64 mm)		(M20 x 120 mm)	(8.7 Kgs)
300 JIS	12.539"	300 psi	37020 lbs	0-0.16"	13.94"	17.48"	2.50"	2	7/8 x 6 1/2"	26.0 lbs
	(318.5 mm)	(20 bar)	(159.26 kN)	(0-4.1 mm)	(354 mm)	(444 mm)	(64 mm)		---	(11.2 Kgs)
14"	14.000"	300 psi	46150 lbs	0-0.13"	16.25"	20.28"	2.95"	3	7/8 x 4"	31.9 lbs
350	(355.6 mm)	(20 bar)	(198.53 kN)	(0-3.2 mm)	(413 mm)	(515 mm)	(75 mm)		---	(14.5 Kgs)
16"	16.000"	300 psi	60280 lbs	0-0.13"	18.11"	22.17"	2.95"	3	7/8 x 4"	35.2 lbs
400	(406.4 mm)	(20 bar)	(259.30 kN)	(0-3.2 mm)	(460 mm)	(563 mm)	(75 mm)		---	(16.0 Kgs)
18"	18.000"	300 psi	76300 lbs	0-0.13"	20.51"	24.21"	3.11"	3	7/8 x 4"	37.4 lbs
450	(457.2 mm)	(20 bar)	(328.18 kN)	(0-3.2 mm)	(521 mm)	(615 mm)	(79 mm)		---	(17.0 Kgs)
20"	20.000"	300 psi	94200 lbs	0-0.13"	22.87"	26.26"	3.11"	4	1 x 3 1/2"	52.8 lbs
500	(508.0 mm)	(20 bar)	(405.16 kN)	(0-3.2 mm)	(581 mm)	(667 mm)	(79 mm)		---	(24.0 Kgs)
22"	22.000"	250 psi	94980 lbs	0-0.13"	24.49"	28.35"	3.11"	4	1 x 3 1/2"	58.3 lbs
550	(558.8 mm)	(17 bar)	(416.71 kN)	(0-3.2 mm)	(622 mm)	(720 mm)	(79 mm)		---	(26.5 Kgs)
24"	24.000"	250 psi	113040 lbs	0-0.13"	27.12"	30.24"	3.11"	4	1 x 3 1/2"	62.6 lbs
600	(609.6 mm)	(17 bar)	(495.92 kN)	(0-3.2 mm)	(689 mm)	(768 mm)	(79 mm)		---	(28.4 Kgs)

** Working Pressure is based on roll grooved standard wall carbon steel pipe.

† Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation purposes these figures should be reduced by: 50% for 3/4" - 3 1/2"; 25% for 4" and larger to compensate for jobsite conditions.

XH-1000 extra heavy rigid coupling

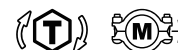


 Sizes 2" through 4" require a bolt torque of 60 – 70 Lbs-Ft (80 – 95 Nm). Normally you can see some gaps between the bolt pads. Bolt pad gaps should be equal on both sides of the coupling.

 Sizes 6" through 12" are designed to make a metal-to-metal contact when properly installed.

The Shurjoint Model XH-1000 is an extra heavy rigid coupling designed for high pressure services up to 1000 psi (70 Bar). This coupling is painted orange and is supplied with a standard C-shaped gasket and heavy duty bolts and nuts. The Model XH-1000 can be installed on standard roll or cut grooved pipes or components. Sizes 2" through 4" require a bolt torque of 60 - 70 Lbs-Ft. with some bolt gaps. For sizes 6" and above, the bolt pads will make metal to metal contact when properly installed with no torque wrench required.

dimensions

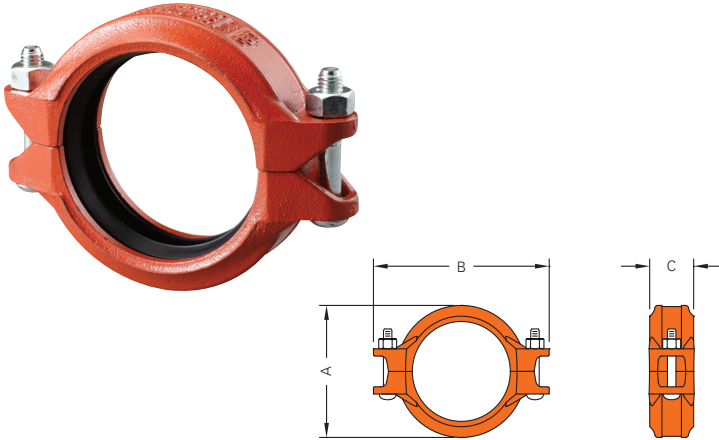


nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions			bolt		weight
					A	B	C	no.	size	
2"	2.375"	1000 psi	4420 lbs	0 - 0.14"	3.50"	5.71"	1.92"	2	5/8 x 2 3/4"	3.4 lbs
50	(60.3 mm)	(69 bar)	(19.98 kN)	(0 - 3.6 mm)	(90 mm)	(145 mm)	(49 mm)			(1.6 Kgs)
2 1/2"	2.875"	1000 psi	6480 lbs	0 - 0.14"	4.02"	6.61"	1.92"	2	5/8 x 2 3/4"	3.8 lbs
65	(73.0 mm)	(69 bar)	(29.28 kN)	(0 - 3.6 mm)	(102 mm)	(168 mm)	(49 mm)			(1.7 Kgs)
3"	3.500"	1000 psi	9610 lbs	0 - 0.14"	4.86"	7.40"	1.92"	2	5/8 x 2 3/4"	4.8 lbs
80	(88.9 mm)	(69 bar)	(43.43 kN)	(0 - 3.6 mm)	(123 mm)	(188 mm)	(49 mm)			(2.2 Kgs)
4"	4.500"	1000 psi	15890 lbs	0 - 0.25"	6.09"	8.74"	2.10"	2	3/4 x 4 1/2"	8.4 lbs
100	(114.3 mm)	(69 bar)	(71.79 kN)	(0 - 6.4 mm)	(155 mm)	(222 mm)	(53 mm)			(3.8 Kgs)
6"	6.625"	1000 psi	34450 lbs	0 - 0.25"	8.58"	11.61"	2.25"	2	7/8 x 5 1/2"	17.6 lbs
150	(168.3 mm)	(69 bar)	(155.65 kN)	(0 - 6.4 mm)	(218 mm)	(295 mm)	(57 mm)			(8.0 Kgs)
8"	8.625"	800 psi	46710 lbs	0 - 0.25"	10.83"	14.33"	2.75"	2	1 x 5 1/2"	24.0 lbs
200	(219.1 mm)	(55 bar)	(207.26 kN)	(0 - 6.4 mm)	(275 mm)	(364 mm)	(70 mm)			(10.9 Kgs)
10"	10.750"	800 psi	72570 lbs	0 - 0.25"	13.15"	16.70"	2.95"	2	1 x 5 1/2"	31.2 lbs
250	(273.0 mm)	(55 bar)	(321.78 kN)	(0 - 6.4 mm)	(334 mm)	(424 mm)	(75 mm)			(14.2 Kgs)
12"	12.750"	800 psi	102080 lbs	0 - 0.25"	15.35"	18.90"	2.95"	2	1 x 5 1/2"	36.7 lbs
300	(323.9 mm)	(55 bar)	(452.95 kN)	(0 - 6.4 mm)	(390 mm)	(480 mm)	(75 mm)			(16.7 Kgs)

* Working Pressure is based on roll grooved standard wall carbon steel pipe. Stated pressure ratings have been developed with a safety factor. Please see Shurjoint's online installation instructions for most recently updated instructions. Proper installation is important to proper performance.

† Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation purposes these figures should be reduced by: 50% for 3/4" - 3 1/4"; 25% for 4" and larger to compensate for jobsite conditions.

7705 flexible coupling



The Shurjoint Model 7705 is a standard flexible coupling designed for use in a variety of moderate pressure general piping applications. The Model 7705 coupling features flexibility that can accommodate misalignment, distortion, thermal stress, vibration, noise and seismic tremors. The Model 7705 can even accommodate an arced or curved piping layout.

dimensions

					angular movement** †		dimensions				
nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	degree per coupling	per pipe	A	B	C	bolt size	weight
1"	1.315"	500 psi	670 lbs	0.0625"	2° - 45'	0.58"/ft	2.24"	3.94"	1.81"	¾ x 1¼"	1.3 lbs
25	(33.4 mm)	(35 bar)	(3.12 kN)	(1.6 mm)		(48 mm/m)	(57 mm)	(100 mm)	(46 mm)	(M10 x 45 mm)	(0.6 Kgs)
1¼"	1.660"	500 psi	1080 lbs	0.0625"	2° - 10'	0.46"/ft	2.60"	4.06"	1.81"	¾ x 2½"	1.5 lbs
32	(42.2 mm)	(35 bar)	(4.94 kN)	(1.6 mm)		(38 mm/m)	(66 mm)	(103 mm)	(46 mm)	(M10 x 55 mm)	(0.7 Kgs)
1½"	1.900"	500 psi	1410 lbs	0.0625"	1° - 54'	0.4"/ft	2.83"	4.25"	1.81"	¾ x 2½"	1.6 lbs
40	(48.3 mm)	(35 bar)	(6.41 kN)	(1.6 mm)		(33 mm/m)	(72 mm)	(108 mm)	(46 mm)	(M10 x 55 mm)	(0.7 Kgs)
2"	2.375"	500 psi	2210 lbs	0.0625"	1° - 31'	0.32"/ft	3.31"	5.08"	1.85"	¾ x 2½"	1.8 lbs
50	(60.3 mm)	(35 bar)	(9.99 kN)	(1.6 mm)		(27 mm/m)	(84 mm)	(129 mm)	(47 mm)	(M10 x 55 mm)	(0.8 Kgs)
2½"	2.875"	500 psi	3240 lbs	0.0625"	1° - 15'	0.26"/ft	3.90"	5.59"	1.85"	¾ x 2½"	2.0 lbs
65	(73.0 mm)	(35 bar)	(14.64 kN)	(1.6 mm)		(22 mm/m)	(99 mm)	(142 mm)	(47 mm)	(M10 x 55 mm)	(0.9 Kgs)
76.1 mm	3.000"	500 psi	3530 lbs	0.0625"	1° - 12'	0.25"/ft	4.02"	5.79"	1.85"	¾ x 2½"	2.1 lbs
	(76.1 mm)	(35 bar)	(15.91 kN)	(1.6 mm)		(21 mm/m)	(102 mm)	(147 mm)	(47 mm)	(M10 x 55 mm)	(1.0 Kgs)
3"	3.500"	500 psi	4800 lbs	0.0625"	1° - 02'	0.22"/ft	4.57"	6.46"	1.85"	½ x 3"	2.8 lbs
80	(88.9 mm)	(35 bar)	(21.71 kN)	(1.6 mm)		(18 mm/m)	(116 mm)	(164 mm)	(47 mm)	(M12 x 75 mm)	(1.3 Kgs)
101.6 mm	4.000"	500 psi	6280 lbs	0.0625"	0° - 54'	0.19"/ft	5.07"	7.24"	1.85"	½ x 3"	3.6 lbs
	(101.6 mm)	(35 bar)	(28.36 kN)	(1.6 mm)		(16 mm/m)	(129 mm)	(184 mm)	(47 mm)	(M12 x 75 mm)	(1.6 Kgs)
108.0 mm	4.250"	500 psi	7080 lbs	0.1250"	1° - 42'	0.36"/ft	5.43"	7.56"	2.05"	½ x 3"	4.1 lbs
	(108.0 mm)	(35 bar)	(32.05 kN)	(3.2 mm)		(30 mm/m)	(138 mm)	(192 mm)	(52 mm)	(M12 x 75 mm)	(1.9 Kgs)
4"	4.500"	500 psi	7940 lbs	0.1250"	1° - 36'	0.34"/ft	5.71"	7.76"	2.05"	½ x 3"	4.1 lbs
100	(114.3 mm)	(35 bar)	(35.89 kN)	(3.2 mm)		(28 mm/m)	(145 mm)	(197 mm)	(52 mm)	(M12 x 75 mm)	(1.9 Kgs)
133.0 mm	5.250"	450 psi	9730 lbs	0.1250"	1° - 23'	0.29"/ft	6.50"	9.09"	2.05"	¾ x 3½"	5.1 lbs
	(133.0 mm)	(31 bar)	(43.05 kN)	(3.2 mm)		(24 mm/m)	(165 mm)	(231 mm)	(52 mm)	(M16 x 90 mm)	(2.3 Kgs)
139.7 mm	5.500"	450 psi	10680 lbs	0.1250"	1° - 18'	0.28"/ft	6.69"	9.76"	2.05"	¾ x 3½"	5.1 lbs
	(139.7 mm)	(31 bar)	(47.49 kN)	(3.2 mm)		(23 mm/m)	(170 mm)	(248 mm)	(52 mm)	(M16 x 90 mm)	(2.3 Kgs)
5"	5.563"	450 psi	10930 lbs	0.1250"	1° - 18'	0.27"/ft	6.77"	9.17"	2.05"	¾ x 3½"	5.9 lbs
125	(141.3 mm)	(31 bar)	(48.59 kN)	(3.2 mm)		(23 mm/m)	(172 mm)	(233 mm)	(52 mm)	(M16 x 90 mm)	(2.7 Kgs)

graph continues on next page

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	angular movement** †		dimensions			bolt size	weight
					degree per coupling	per pipe	A	B	C		
159.0 mm	6.250" (159.0 mm)	450 psi (31 bar)	13790 lbs (61.52 kN)	0.1250" (3.2 mm)	1° - 09'	0.24"/ft (20 mm/m)	7.48" (190 mm)	9.96" (253 mm)	2.05" (52 mm)	5/8 x 3 1/2"	6.6 lbs (3.0 Kgs)
165.1 mm	6.500" (165.1 mm)	450 psi (31 bar)	14920 lbs (66.33 kN)	0.1250" (3.2 mm)	1° - 07'	0.24"/ft (20 mm/m)	7.72" (196 mm)	10.28" (261 mm)	2.09" (53 mm)	5/8 x 3 1/2"	6.8 lbs (3.1 Kgs)
6"	6.625" (168.3 mm)	450 psi (31 bar)	15500 lbs (68.93 kN)	0.1250" (3.2 mm)	1° - 05'	0.23"/ft (19 mm/m)	7.87" (200 mm)	10.55" (268 mm)	2.09" (53 mm)	5/8 x 3 1/2"	7.0 lbs (3.2 Kgs)
150	8.625" (219.1 mm)	300 psi (20 bar)	17510 lbs (75.37 kN)	0.1250" (3.2 mm)	0° - 50'	0.18"/ft (15 mm/m)	10.24" (260 mm)	13.27" (337 mm)	2.44" (62 mm)	5/8 x 3 1/2"	12.8 lbs (5.8 Kgs)
8 (7705H)"	8.625" (219.1 mm)	450 psi (31 bar)	26270 lbs (116.82 kN)	0.1250" (3.2 mm)	0° - 50'	0.18"/ft (15 mm/m)	10.47" (266 mm)	13.27" (337 mm)	2.44" (62 mm)	5/8 x 3 1/2"	15.7 lbs (7.1 Kgs)
200	10.750" (273.0 mm)	300 psi (20 bar)	27210 lbs (117.01 kN)	0.1250" (3.2 mm)	0° - 40'	0.14"/ft (12 mm/m)	12.64" (321 mm)	15.59" (396 mm)	2.56" (65 mm)	3/4 x 4 3/4"	18.0 lbs (8.2 Kgs)
10"	12.750" (323.9 mm)	300 psi (20 bar)	38280 lbs (164.71 kN)	0.1250" (3.2 mm)	0° - 34'	0.12"/ft (10 mm/m)	14.56" (372 mm)	17.72" (450 mm)	2.56" (65 mm)	3/4 x 4 3/4"	23.8 lbs (10.8 Kgs)
200	8.516" (216.3 mm)	300 psi (20 bar)	17079 lbs (73.45 kN)	0.1250" (3.2 mm)	0° - 51'	0.18"/ft (15 mm/m)	10.00" (254 mm)	13.70" (348 mm)	2.36" (60 mm)	3/4 x 4 3/4"	12.8 lbs (5.8 Kgs)
250 JIS	10.528" (267.4 mm)	300 psi (20 bar)	26103 lbs (112.26 kN)	0.1250" (3.2 mm)	0° - 41'	0.15"/ft (12 mm/m)	13.27" (337 mm)	15.28" (388 mm)	2.56" (65 mm)	3/4 x 4 3/4"	17.6 lbs (8.0 Kgs)
300 JIS	12.539" (318.5 mm)	300 psi (20 bar)	37027 lbs (159.26 kN)	0.1250" (3.2 mm)	0° - 35'	0.12"/ft (10 mm/m)	15.31" (389 mm)	17.48" (444 mm)	2.56" (65 mm)	3/4 x 6 1/2"	22.6 lbs (10.3 Kgs)

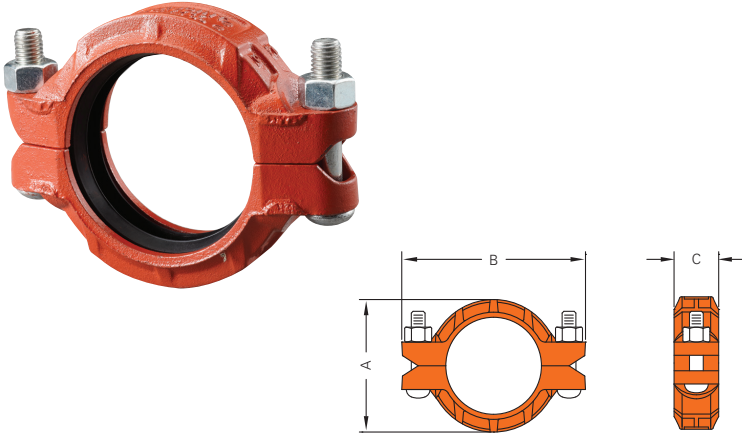
All DIN size 7705 couplings up to DN150 size and the DN200 7705H coupling are VdS approved in addition to cULus and FM approvals.

* Working Pressure is based on roll grooved standard wall carbon steel pipe.

† Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation purposes these figures should be reduced by: 50% for 3/4"/DN20 - 3 1/2"/DN90; 25% for 4"/DN100 and larger to compensate for jobsite conditions.

** Deflection or angular movement given is the maximum value that a coupling allows. When using the given maximum angles for a curved layout, proper bracing should be used to counter pressure thrust that will occur when the system is pressurized. Flexible couplings can be used for angular movement and or thermal expansion, though please note individual coupling(s) cannot be used to their maximums for both types of movement within a system at the same time.

7707 heavy duty flexible coupling



The Shurjoint Model 7707 heavy duty flexible coupling is designed for use in a variety of general piping applications of moderate or high pressure services. Working pressure is usually dictated by the wall thickness and rating of the pipe being used. The Model 7707 couplings feature flexibility that can accommodate misalignment, distortion, thermal stress, vibration, noise and seismic tremors. The Model 7707 can even accommodate an arced or curved piping layout.

dimensions



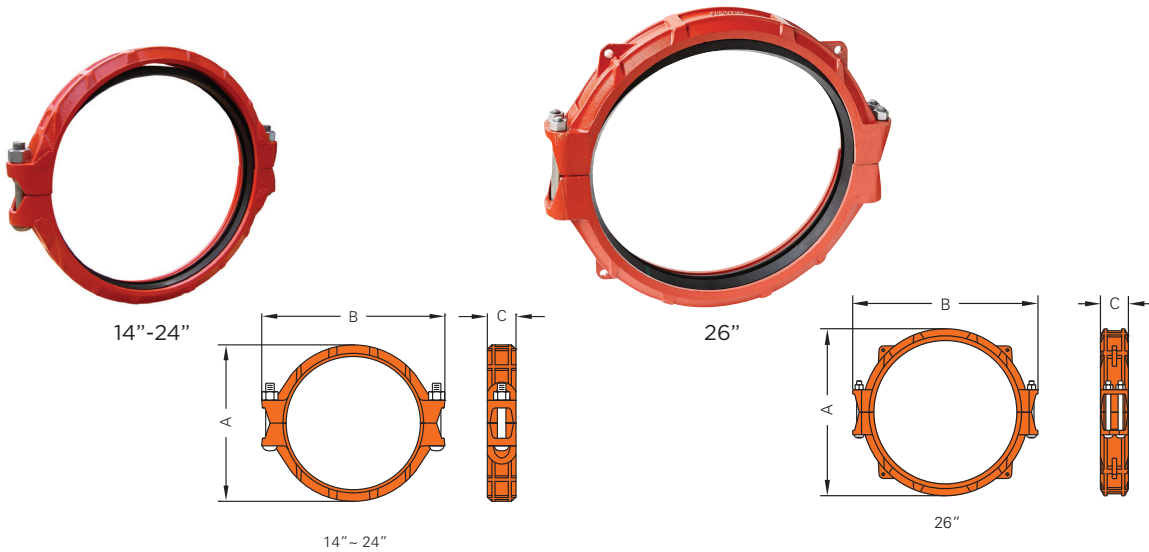
nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	angular movement		dimensions			bolt		
					degree per coupling	per pipe	A	B	C	no.	size	weight
¾"	1.050"	1000 psi	865 lbs	0.0625"	3° - 23'	0.71"/ft	2.13"	3.74"	1.81"	2	¾ x 2½"	1.3 lbs
20	(26.7 mm)	(69 bar)	(3.79 kN)	(1.6 mm)		(58 mm/m)	(54 mm)	(95 mm)	(46 mm)		(M10x55 mm)	(0.6 Kgs)
1"	1.315"	1000 psi	1360 lbs	0.0625"	2° - 45'	0.58"/ft	2.40"	4.02"	1.81"	2	¾ x 2½"	1.7 lbs
25	(33.4 mm)	(69 bar)	(6.15 kN)	(1.6 mm)		(48 mm/m)	(61 mm)	(102 mm)	(46 mm)		(M10x55 mm)	(0.8 Kgs)
1¼"	1.660"	1000 psi	2160 lbs	0.0625"	2° - 10'	0.45"/ft	2.76"	4.45"	1.81"	2	½ x 3"	2.1 lbs
32	(42.2 mm)	(69 bar)	(9.64 kN)	(1.6 mm)		(38 mm/m)	(70 mm)	(113 mm)	(46 mm)		(M12x75 mm)	(1.0 Kgs)
1½"	1.900"	1000 psi	2830 lbs	0.0625"	1° - 54'	0.40"/ft	3.00"	4.57"	1.81"	2	½ x 2½"	2.1 lbs
40	(48.3 mm)	(69 bar)	(12.64 kN)	(1.6 mm)		(33 mm/m)	(76 mm)	(116 mm)	(46 mm)		(M12x60 mm)	(1.0 Kgs)
2"	2.375"	1000 psi	4430 lbs	0.0625"	1° - 31'	0.31"/ft	3.50"	5.35"	1.81"	2	½ x 3"	2.6 lbs
50	(60.3 mm)	(69 bar)	(19.69 kN)	(1.6 mm)		(26 mm/m)	(90 mm)	(136 mm)	(46 mm)		(M12x75 mm)	(1.2 Kgs)
2½"	2.875"	1000 psi	6490 lbs	0.0625"	1° - 15'	0.26"/ft	4.00"	5.98"	1.85"	2	½ x 3"	2.9 lbs
65	(73.0 mm)	(69 bar)	(28.86 kN)	(1.6 mm)		(22 mm/m)	(102 mm)	(152 mm)	(47 mm)		(M12x75 mm)	(1.3 Kgs)
76.1 mm	3.000"	1000 psi	7065 lbs	0.0625"	1° - 12'	0.25"/ft	4.06"	6.02"	1.85"	2	½ x 3"	2.9 lbs
	(76.1 mm)	(69 bar)	(31.37 kN)	(1.6 mm)		(21 mm/m)	(103 mm)	(153 mm)	(47 mm)		(M12x75 mm)	(1.3 Kgs)
3"	3.500"	1000 psi	9620 lbs	0.0625"	1° - 02'	0.21"/ft	4.88"	6.34"	1.85"	2	½ x 3"	3.3 lbs
80	(88.9 mm)	(69 bar)	(42.81 kN)	(1.6 mm)		(18 mm/m)	(124 mm)	(161 mm)	(47 mm)		(M12x75 mm)	(1.5 Kgs)
4"	4.500"	1000 psi	15900 lbs	0.1250"	1° - 36'	0.33"/ft	6.18"	8.03"	2.05"	2	¾ x 3½"	4.6 lbs
100	(114.3 mm)	(69 bar)	(70.76 kN)	(3.2 mm)		(27 mm/m)	(157 mm)	(204 mm)	(52 mm)		(M16x90 mm)	(2.1 Kgs)
139.7 mm	5.500"	1000 psi	23750 lbs	0.1250"	1° - 18'	0.27"/ft	7.32"	9.41"	2.09"	2	¾ x 3½"	6.8 lbs
	(139.7 mm)	(69 bar)	(105.71 kN)	(3.2 mm)		(23 mm/m)	(186 mm)	(239 mm)	(53 mm)		(M16x90 mm)	(3.1 Kgs)
5"	5.563"	1000 psi	24295 lbs	0.1250"	1° - 18'	0.27"/ft	7.32"	9.65"	2.09"	2	¾ x 3½"	7.2 lbs
125	(141.3 mm)	(69 bar)	(108.14 kN)	(3.2 mm)		(22 mm/m)	(186 mm)	(245 mm)	(53 mm)		(M16x90 mm)	(3.3 Kgs)

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nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	angular movement		dimensions			bolt		
					degree per coupling	per pipe	A	B	C	no.	size	weight
165.1 mm	6.500" (165.1 mm)	1000 psi (69 bar)	33170 lbs (147.64 kN)	0.1250" (3.2 mm)	1° - 07'	0.23"/ft (19 mm/m)	8.11" (211 mm)	10.24" (260 mm)	2.09" (53 mm)	2	¾ x 4¾" (M20x120 mm)	7.9 lbs (3.6 Kgs)
6"	6.625" (168.3 mm)	1000 psi (69 bar)	34455 lbs (153.42 kN)	0.1250" (3.2 mm)	1° - 05'	0.22"/ft (19 mm/m)	8.24" (214 mm)	10.75" (273 mm)	2.09" (53 mm)	2	¾ x 4¾" (M20x120 mm)	8.1 lbs (3.7 Kgs)
8"	8.625" (219.1 mm)	800 psi (55 bar)	46720 lbs (207.26 kN)	0.1250" (3.2 mm)	0° - 50'	0.18"/ft (15 mm/m)	10.86" (276 mm)	13.23" (336 mm)	2.44" (62 mm)	2	¾ x 4¾" (M20x120 mm)	14.5 lbs (6.6 Kgs)
10"	10.750" (273.0 mm)	800 psi (55 bar)	72575 lbs (321.78 kN)	0.1250" (3.2 mm)	0° - 40'	0.14"/ft (11 mm/m)	13.50" (343 mm)	16.10" (409 mm)	2.56" (65 mm)	2	¾ x 6½" ---	23.3 lbs (10.6 Kgs)
12"	12.750" (323.9 mm)	800 psi (55 bar)	102090 lbs (452.95 kN)	0.1250" (3.2 mm)	0° - 34'	0.12"/ft (10 mm/m)	15.35" (390 mm)	18.50" (470 mm)	2.60" (66 mm)	2	¾ x 6½" ---	26.4 lbs (12.0 Kgs)
200 JIS	8.516" (216.3 mm)	800 psi (55 bar)	45545 lbs (202.00 kN)	0.1250" (3.2 mm)	0° - 51'	0.18"/ft (15 mm/m)	10.86" (276 mm)	13.03" (331 mm)	2.36" (60 mm)	2	¾ x 4¾" (M20x120 mm)	13.9 lbs (6.3 Kgs)
250 JIS	10.528" (267.4 mm)	800 psi (55 bar)	69610 lbs (308.71 kN)	0.1250" (3.2 mm)	0° - 41'	0.14"/ft (12 mm/m)	13.27" (337 mm)	15.87" (403 mm)	2.60" (66 mm)	2	¾ x 6½" ---	22.4 lbs (10.2 Kgs)
300 JIS	12.539" (318.5 mm)	800 psi (55 bar)	98740 lbs (437.98 kN)	0.1250" (3.2 mm)	0° - 35'	0.12"/ft (10 mm/m)	15.31" (389 mm)	18.11" (460 mm)	2.60" (66 mm)	2	¾ x 6½" ---	25.5 lbs (11.6 Kgs)

- ** Working Pressure is based on roll grooved standard wall carbon steel pipe.
- † Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation purposes these figures should be reduced by: 50% for ¾" - 3½"; 25% for 4" and larger to compensate for jobsite conditions.
- ** Deflection or angular movement given is the maximum value that a coupling allows. When using the given maximum angles for a curved layout, proper bracing should be used to counter pressure thrust that will occur when the system is pressurized. Flexible couplings can be used for angular movement and or thermal expansion, though please note individual coupling(s) cannot be used to their maximums for both types of movement within a system at the same time.
- * Non-standard/stock items may require longer lead time.
- * Data for 5", 8", 10", and 12" 7707 couplings sold in North America, please refer to the Shurjoint 7707A datasheet. Data showing in this table above is for 7707 models sold in EMEA and APAC territories.

7707N flexible coupling



The Shurjoint Model 7707N is a two-segment, flexible coupling for use with standard pipe, roll or cut grooved to AWWA C606 specifications.

dimensions



nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	angular movement		dimensions			bolt		
					degree per coupling	per pipe	A	B	C	no.	size	weight
14"	14.00"	300 psi	46150 lbs	0.125"	0° - 31'	0.06"/ft	16.23"	19.80"	2.95"	2	¾ x 6½"	34.5 lbs
350	(355.6 mm)	(20 bar)	(198.53 kN)	(3.2 mm)		4.5 mm/m	(412.0 mm)	(503.0 mm)	(75.0 mm)			(15.7 Kgs)
16"	16.00"	300 psi	60280 lbs	0.125"	0° - 27'	0.05"/ft	18.23"	21.85"	2.95"	2	1 x 6½"	37.0 lbs
400	(406.4 mm)	(20 bar)	(259.30 kN)	(3.2 mm)		4.0 mm/m	(463.0 mm)	(555.0 mm)	(75.0 mm)			(16.8 Kgs)
18"	18.00"	300 psi	76300 lbs	0.125"	0° - 24'	0.04"/ft	20.45"	24.06"	3.11"	2	1 x 6½"	47.1 lbs
450	(457.2 mm)	(20 bar)	(327.89 kN)	(3.2 mm)		3.5 mm/m	(520.0 mm)	(611.0 mm)	(79.0 mm)			(22.3 Kgs)
20"	20.00"	300 psi	94200 lbs	0.125"	0° - 22'	0.04"/ft	22.48"	26.38"	3.11"	2	1 x 6½"	54.4 lbs
500	(508.0 mm)	(20 bar)	(405.16 kN)	(3.2 mm)		3.0 mm/m	(571.0 mm)	(670.0 mm)	(79.0 mm)			(24.7 Kgs)
22"	22.00"	300 psi	113980 lbs	0.125"	0° - 19'	0.04"/ft	24.46"	30.16"	3.11"	2	1½ x 6½"	63.0 lbs
550	(558.8 mm)	(20 bar)	(490.60 kN)	(3.2 mm)		3.0 mm/m	(621.4 mm)	(766.0 mm)	(79.0 mm)			(28.6 Kgs)
24"	24.00"	300 psi	135640 lbs	0.125"	0° - 18'	0.03"/ft	26.55"	30.43"	3.11"	2	1½ x 6½"	65.1 lbs
600	(609.6 mm)	(20 bar)	(584.20 kN)	(3.2 mm)		2.5 mm/m	(674.0 mm)	(773.0 mm)	(79.0 mm)			(29.5 Kgs)
26"	26.00"	300 psi	159190 lbs	0.125"	0° - 17'	0.03"/ft	29.68"	33.15"	4.94"	4	¾ x 9¾"	143.0 lbs
650	(660.4 mm)	(20 bar)	(684.72 kN)	(3.2 mm)		2.5 mm/m	(754.0 mm)	(842.0 mm)	(125.6 mm)			(65.0 Kgs)

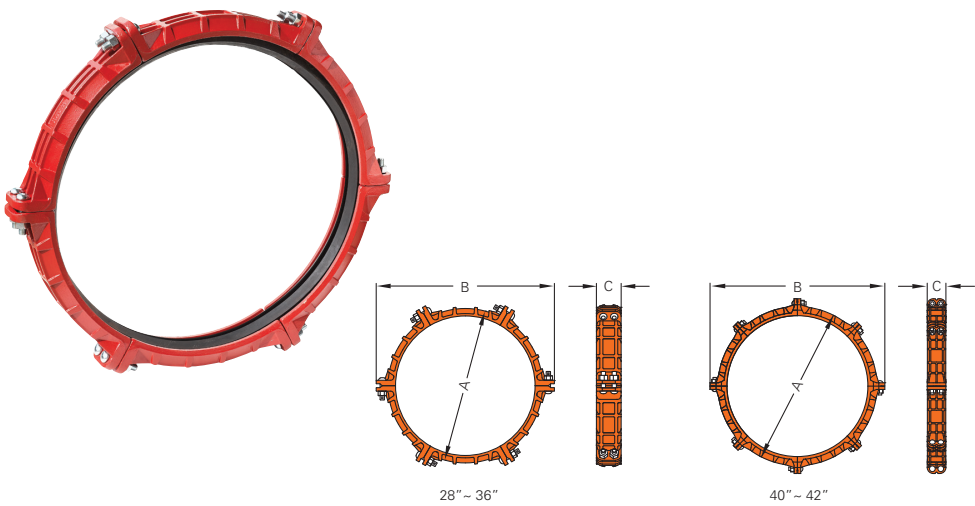
* Working pressure is based on roll-grooved standard wall carbon steel pipe.

Pressure ratings are based on cut-grooved XS carbon steel pipe, refer to page 74 on STD & LW carbon steel pipes.

† Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation purposes these figures should be reduced by: 50% for ¾" - 3½"; 25% for 4" and larger to compensate for jobsite conditions.

** Deflection or angular movement given is the maximum value that a coupling allows. When using the given maximum angles for a curved layout, proper bracing should be used to counter pressure thrust that will occur when the system is pressurized. Flexible couplings can be used for angular movement and or thermal expansion, though please note individual coupling(s) cannot be used to their maximums for both types of movement within a system at the same time.

7707L large diameter coupling



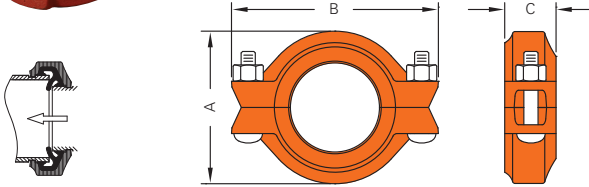
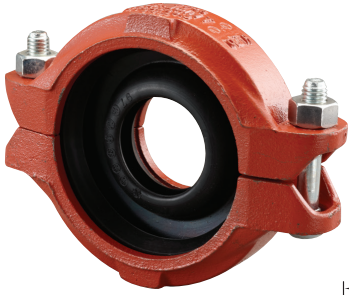
The Shurjoint Model 7707L large diameter couplings in sizes 28" - 42" (700 mm - 1050 mm) are designed for joining large diameter IPS pipe that can be roll grooved. All couplings feature a six to eight segment design, incorporating two bolts at each segment joint to ensure a positive connection and seal.

dimensions

		max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	angular movement		dimensions			bolt		
nom. size	pipe O.D.				degree per coupling	per pipe	A	B	C	no.	size	weight
28"	28.0"	175 psi	107700 lbs	0.250"	---	---	32.0"	35.98"	5.0"	12	7/8 x 4"	180 lbs
700	(711.2 mm)	(12 bar)	(476.47 kN)	(6.4 mm)	---	---	(813 mm)	(914 mm)	(127 mm)			(82 Kgs)
30"	30.0"	175 psi	123630 lbs	0.250"	---	---	34.0"	38.07	5.0"	12	7/8 x 4"	209 lbs
750	(762.0 mm)	(12 bar)	(546.97 kN)	(6.4 mm)	---	---	(864 mm)	(967 mm)	(127 mm)			(95 Kgs)
32"	32.0"	175 psi	140670 lbs	0.250"	---	---	36.0"	40.08	5.0"	12	7/8 x 4"	207 lbs
800	(812.8 mm)	(12 bar)	(622.33 kN)	(6.4 mm)	---	---	(914 mm)	(1018 mm)	(127 mm)			(94 Kgs)
34"	34.0"	175 psi	158800 lbs	0.250"	---	---	38.3"	42.00	5.0"	12	7/8 x 4"	198 lbs
850	(863.6 mm)	(12 bar)	(702.55 kN)	(6.4 mm)	---	---	(974 mm)	(1066 mm)	(127 mm)			(90 Kgs)
36"	36.0"	175 psi	178030 lbs	0.250"	---	---	40.0"	44.02	5.0"	12	7/8 x 4"	212 lbs
900	(914.4 mm)	(12 bar)	(787.63 kN)	(6.4 mm)	---	---	(1016 mm)	(1118 mm)	(127 mm)			(96 Kgs)
40"	40.0"	175 psi	219800 lbs	0.250"	---	---	43.5"	49.49	5.4"	16	1 x 3 1/2"	271 lbs
1000	(1016.0 mm)	(12 bar)	(972.39 kN)	(6.4 mm)	---	---	(1105 mm)	(1257 mm)	(138 mm)			(123 Kgs)
42"	42.0"	175 psi	242330 lbs	0.250"	---	---	45.5"	51.57	5.4"	16	1 x 3 1/2"	313 lbs
1050	(1066.8 mm)	(12 bar)	(1072.05 kN)	(6.4 mm)	---	---	(1156 mm)	(1310 mm)	(138 mm)			(142 Kgs)

* Working pressure is based on roll-grooved standard wall carbon steel pipe.
Pressure ratings are based on cut-grooved XS carbon steel pipe, refer to page 74 on STD & LW carbon steel pipes.
† Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation purposes these figures should be reduced by: 50% for ¾" - 3½"; 25% for 4" and larger to compensate for jobsite conditions.
** Deflection or angular movement given is the maximum value that a coupling allows. When using the given maximum angles for a curved layout, proper bracing should be used to counter pressure thrust that will occur when the system is pressurized. Flexible couplings can be used for angular movement and or thermal expansion, though please note individual coupling(s) cannot be used to their maximums for both types of movement within a system at the same time.

7706 reducing coupling



caution: must not be used with an end cap, as the end cap could be sucked into the pipe by the vacuum created when a system is being drained.

The Shurjoint Model 7706 reducing coupling allows for direct reduction on a piping run and eliminates the need for a concentric reducer and additional couplings. The specially designed rubber gasket helps prevent small pipe from telescoping into larger pipe during vertical assembly.

dimensions



nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	angular movement		dimensions			bolt size	weight
					degree per coupling	per pipe	A	B	C		
1½ x 1¼"	1.900 x 1.660"	500 psi	1410 lbs	0 - 0.065"	1° - 54'	0.20"/ft	2.83"	4.65"	1.81"	¾ x 2½"	1.8 lbs
40 x 32	(48.3 x 42.2 mm)	(35 bar)	(6.23 kN)	(0 - 1.6 mm)		(17 mm/m)	(72 mm)	(118 mm)	(46 mm)	(M10 x 55 mm)	(0.8 Kgs)
2 x 1½"	2.375 x 1.900"	500 psi	2210 lbs	0 - 0.065"	1° - 31'	0.16"/ft	3.35"	4.80"	1.89"	¾ x 2½"	2.0 lbs
50 x 40	(60.3 x 48.3 mm)	(35 bar)	(9.70 kN)	(0 - 1.6 mm)		(13 mm/m)	(85 mm)	(122 mm)	(48 mm)	(M10 x 55 mm)	(0.9 Kgs)
2½ x 2"	2.875 x 2.375"	500 psi	3240 lbs	0 - 0.065"	1° - 15'	0.13"/ft	3.78"	5.67"	1.89"	¾ x 2½"	2.6 lbs
65 x 50	(73.0 x 60.3 mm)	(35 bar)	(14.22 kN)	(0 - 1.6 mm)		(11 mm/m)	(96 mm)	(144 mm)	(48 mm)	(M10 x 55 mm)	(1.2 Kgs)
76.1 mm x 50	3.000 x 2.375"	500 psi	3530 lbs	0 - 0.065"	1° - 12'	0.13"/ft	4.02"	5.67"	1.89"	¾ x 2½"	2.6 lbs
	(76.1 x 60.3 mm)	(35 bar)	(15.46 kN)	(0 - 1.6 mm)		(11 mm/m)	(102 mm)	(144 mm)	(48 mm)	(M10 x 55 mm)	(1.2 Kgs)
3 x 2"	3.500 x 2.375"	500 psi	4800 lbs	0 - 0.065"	1° - 02'	0.11"/ft	4.57"	6.61"	1.89"	½ x 3"	3.3 lbs
80 x 50	(88.9 x 60.3 mm)	(35 bar)	(21.09 kN)	(0 - 1.6 mm)		(9 mm/m)	(116 mm)	(168 mm)	(48 mm)	(M12 x 75 mm)	(1.5 Kgs)
3 x 2½"	3.500 x 2.875"	500 psi	4800 lbs	0 - 0.065"	1° - 02'	0.11"/ft	4.57"	6.61"	1.89"	½ x 3"	3.7 lbs
80 x 65	(88.9 x 73.0 mm)	(35 bar)	(21.09 kN)	(0 - 1.6 mm)		(9 mm/m)	(116 mm)	(168 mm)	(48 mm)	(M12 x 75 mm)	(1.7 Kgs)
80 x 76.1 mm	3.500 x 3.000"	500 psi	4800 lbs	0 - 0.065"	1° - 02'	0.11"/ft	4.57"	6.61"	1.89"	½ x 3"	3.7 lbs
	(88.9 x 76.1 mm)	(35 bar)	(21.09 kN)	(0 - 1.6 mm)		(9 mm/m)	(116 mm)	(168 mm)	(48 mm)	(M12 x 75 mm)	(1.7 Kgs)
4 x 2"	4.500 x 2.375"	500 psi	7940 lbs	0 - 0.095"	1° - 12'	0.13"/ft	5.75"	7.80"	1.93"	½ x 3"	5.3 lbs
100 x 50	(114.3 x 60.3 mm)	(35 bar)	(34.87 kN)	(0 - 2.4 mm)		(11 mm/m)	(146 mm)	(198 mm)	(49 mm)	(M12 x 75 mm)	(2.4 Kgs)
4 x 2½"	4.500 x 2.875"	500 psi	7940 lbs	0 - 0.095"	1° - 12'	0.13"/ft	5.75"	7.80"	1.93"	½ x 3"	5.7 lbs
100 x 65	(114.3 x 73.0 mm)	(35 bar)	(34.87 kN)	(0 - 2.4 mm)		(11 mm/m)	(146 mm)	(198 mm)	(49 mm)	(M12 x 75 mm)	(2.6 Kgs)
100 x 76.1 mm	4.500 x 3.000"	500 psi	7940 lbs	0 - 0.095"	1° - 12'	0.13"/ft	5.75"	7.80"	1.93"	½ x 3"	5.7 lbs
	(114.3 x 76.1 mm)	(35 bar)	(34.87 kN)	(0 - 2.4 mm)		(11 mm/m)	(146 mm)	(198 mm)	(49 mm)	(M12 x 75 mm)	(2.6 Kgs)
4 x 3"	4.500 x 3.500"	500 psi	7940 lbs	0 - 0.095"	1° - 12'	0.13"/ft	5.75"	7.80"	2.01"	½ x 3"	5.3 lbs
100 x 80	(114.3 x 88.9 mm)	(35 bar)	(34.87 kN)	(0 - 2.4 mm)		(11 mm/m)	(146 mm)	(198 mm)	(51 mm)	(M12 x 75 mm)	(2.4 Kgs)
139.7 mm x 100	5.500 x 4.500"	400 psi	9490 lbs	0 - 0.125"	1° - 18'	0.14"/ft	6.30"	9.45"	2.01"	¾ x 3½"	8.4 lbs
	(139.7 x 114.3 mm)	(28 bar)	(42.90 kN)	(0 - 3.2 mm)		(12 mm/m)	(160 mm)	(240 mm)	(51 mm)	(M16 x 90 mm)	(3.8 Kgs)
5 x 4"	5.563 x 4.500"	400 psi	9710 lbs	0 - 0.125"	1° - 18'	0.14"/ft	6.30"	9.84"	2.01"	¾ x 3½"	7.9 lbs
125 x 100	(141.3 x 114.3 mm)	(28 bar)	(43.88 kN)	(0 - 3.2 mm)		(12 mm/m)	(160 mm)	(242 mm)	(51 mm)	(M16 x 90 mm)	(3.6 Kgs)

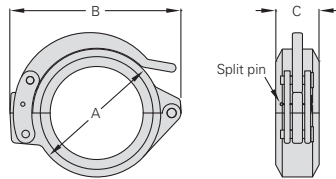
graph continues on next page

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	angular movement		dimensions			bolt size	weight
					degree per coupling	per pipe	A	B	C		
165.1 mm x 80	6.500 x 3.500" (165.1 x 88.9 mm)	400 psi (28 bar)	13260 lbs (59.91 kN)	0 - 0.125" (0 - 3.2 mm)	1° - 07'	0.12"/ft (10 mm/m)	7.95" (202 mm)	10.63" (270 mm)	2.05" (52 mm)	¾ x 3½"	10.1 lbs (4.6 Kgs)
6 x 3"	6.625 x 3.500" (168.3 x 88.9 mm)	400 psi (28 bar)	13780 lbs (62.26 kN)	0 - 0.125" (0 - 3.2 mm)	1° - 06'	0.12"/ft (10 mm/m)	8.19" (208 mm)	10.63" (270 mm)	2.05" (52 mm)	¾ x 3½"	10.1 lbs (4.6 Kgs)
165.1 mm x 100	6.500 x 4.500" (165.1 x 114.3 mm)	400 psi (28 bar)	13260 lbs (59.91 kN)	0 - 0.125" (0 - 3.2 mm)	1° - 07'	0.12"/ft (10 mm/m)	7.95" (202 mm)	10.67" (271 mm)	2.05" (52 mm)	¾ x 3½"	9.9 lbs (4.5 Kgs)
6 x 4"	6.625 x 4.500" (168.3 x 114.3 mm)	400 psi (28 bar)	13780 lbs (62.26 kN)	0 - 0.125" (0 - 3.2 mm)	1° - 06'	0.12"/ft (10 mm/m)	8.19" (208 mm)	10.63" (270 mm)	2.05" (52 mm)	¾ x 3½"	9.9 lbs (4.5 Kgs)
8 x 6"	8.625 x 6.625" (219.1 x 168.3 mm)	400 psi (28 bar)	23350 lbs (105.51 kN)	0 - 0.125" (0 - 3.2 mm)	0° - 50'	0.09"/ft (8 mm/m)	10.24" (260 mm)	13.11" (333 mm)	2.09" (53 mm)	¾ x 4¾"	14.3 lbs (6.5 Kgs)
200 x 150	8.625 x 6.625" (219.1 x 168.3 mm)	400 psi (28 bar)	23350 lbs (105.51 kN)	0 - 0.125" (0 - 3.2 mm)	0° - 50'	0.09"/ft (8 mm/m)	10.24" (260 mm)	13.11" (333 mm)	2.20" (56 mm)	¾ x 4¾"	14.3 lbs (6.5 Kgs)
200 x 165.1 mm	8.625 x 6.500" (219.1 x 165.1 mm)	400 psi (28 bar)	23350 lbs (105.51 kN)	0 - 0.125" (0 - 3.2 mm)	0° - 50'	0.09"/ft (8 mm/m)	10.24" (260 mm)	13.11" (333 mm)	2.20" (56 mm)	¾ x 4¾"	14.3 lbs (6.5 Kgs)

** Working Pressure is based on roll grooved standard wall carbon steel pipe.

† Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation purposes these figures should be reduced by: 50% for ¾" - 3½"; 25% for 4" and larger to compensate for jobsite conditions.

G28 hinged lever coupling



expansion pipe

lever handles are factory assembled tight for safety. The use of an expansion pipe will aid the easy opening and closing. Expansion pipes are available upon request.

The Model G28 Hinged Lever Coupling is designed for quick connect and disconnect services. The housing segments are hinged with a locking lever handle for easy assembly. The use of the split pin can secure and prevent the accidental opening of the coupling.

dimensions

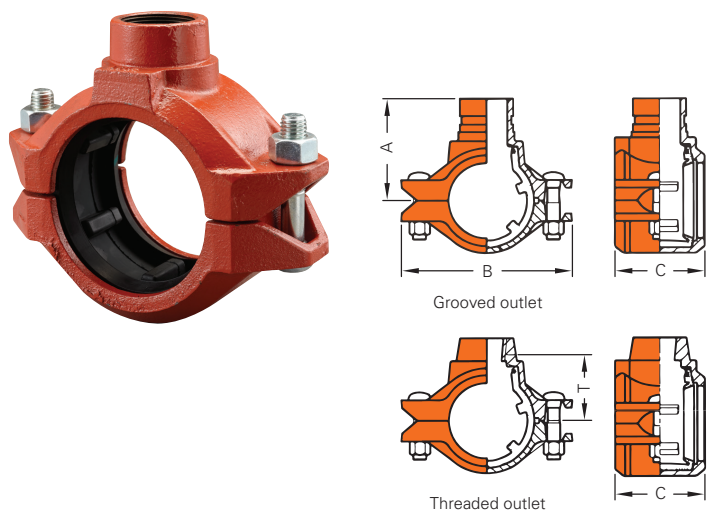
nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	angular movement / deflection ** †	dimensions			weight
						A	B	C	
1½"	1.900"	300 psi	850 lbs	0 - 0.06"	1° - 54'	2.95"	4.65"	1.85"	2.2 lbs
40	(48.3 mm)	(20 bar)	(3.66 kN)	(0 - 1.6 mm)		(75 mm)	(118 mm)	(47 mm)	(1.0 Kgs)
2"	2.375"	300 psi	1320 lbs	0 - 0.06"	1° - 45'	3.43"	5.08"	1.85"	2.4 lbs
50	(60.3 mm)	(20 bar)	(5.71 kN)	(0 - 1.6 mm)		(87 mm)	(129 mm)	(47 mm)	(1.1 Kgs)
2½"	2.875"	300 psi	1940 lbs	0 - 0.06"	1° - 15'	3.94"	5.63"	1.85"	3.1 lbs
65	(73.0 mm)	(20 bar)	(8.37 kN)	(0 - 1.6 mm)		(100 mm)	(143 mm)	(47 mm)	(1.4 Kgs)
76.1 mm	3.000"	300 psi	2120 lbs	0 - 0.06"	1° - 12'	4.06"	5.67"	1.85"	3.1 lbs
	(76.1 mm)	(20 bar)	(9.09 kN)	(0 - 1.6 mm)		(103 mm)	(144 mm)	(47 mm)	(1.4 Kgs)
3"	3.500"	300 psi	2880 lbs	0 - 0.06"	1° - 12'	4.69"	6.46"	1.85"	4.0 lbs
80	(88.9 mm)	(20 bar)	(12.41 kN)	(0 - 1.6 mm)		(119 mm)	(164 mm)	(47 mm)	(1.7 Kgs)
4"	4.500"	300 psi	4760 lbs	0 - 0.13"	1° - 36'	5.98"	7.95"	2.05"	5.9 lbs
100	(114.3 mm)	(20 bar)	(20.51 kN)	(0 - 3.2 mm)		(152 mm)	(202 mm)	(52 mm)	(2.7 Kgs)
139.7 mm	5.500"	300 psi	7120 lbs	0 - 0.13"	1° - 18'	6.97"	9.80"	2.05"	10.8 lbs
	(139.7 mm)	(20 bar)	(30.64 kN)	(0 - 3.2 mm)		(177 mm)	(249 mm)	(52 mm)	(4.9 Kgs)
5"	5.563"	300 psi	7280 lbs	0 - 0.13"	1° - 18'	7.05"	10.00"	2.05"	10.8 lbs
125	(141.3 mm)	(20 bar)	(31.35 kN)	(0 - 3.2 mm)		(179 mm)	(254 mm)	(52 mm)	(4.9 Kgs)
165.1 mm	6.500"	300 psi	9950 lbs	0 - 0.13"	1° - 07'	7.80"	10.87"	2.05"	13.2 lbs
	(165.1 mm)	(20 bar)	(42.80 kN)	(0 - 3.2 mm)		(198 mm)	(276 mm)	(52 mm)	(6.0 Kgs)
6"	6.625"	300 psi	10330 lbs	0 - 0.13"	1° - 05'	8.11"	11.02"	2.05"	13.2 lbs
150	(168.3 mm)	(20 bar)	(44.47 kN)	(0 - 3.2 mm)		(206 mm)	(280 mm)	(52 mm)	(6.0 Kgs)
8"	8.625"	300 psi	17510 lbs	0 - 0.13"	0° - 50'	10.08"	13.58"	2.44"	15.2 lbs
200	(219.1 mm)	(20 bar)	(75.37 kN)	(0 - 3.2 mm)		(256 mm)	(345 mm)	(62 mm)	(6.9 Kgs)
10"	10.750"	300 psi	27210 lbs	0 - 0.13"	0° - 40'	12.68"	17.48"	2.60"	36.1 lbs
250	(273.0 mm)	(20 bar)	(117.01 kN)	(0 - 3.2 mm)		(322 mm)	(444 mm)	(66 mm)	(16.4 Kgs)

* Working pressure is based on roll grooved standard wall carbon steel pipe.

† Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation purposes these figures should be reduced by: 50% for ¾" - 3½"; 25% for 4" and larger to compensate for jobsite conditions.

** Deflection or angular movement given is the maximum value that a coupling allows. When using the given maximum angles for a curved layout, proper bracing should be used to counter pressure thrust that will occur when the system is pressurized. Flexible couplings can be used for angular movement and or thermal expansion, though please note individual coupling(s) cannot be used to their maximums for both types of movement within a system at the same time.

C-7 outlet coupling



The Model C-7 Outlet Coupling combines the features of a coupling and a reducing outlet. The C-7 facilitates an easy reducing branch outlet without the need of a mechanical tee or reducing tee and couplings. The C-7 is available with grooved, male threaded or female threaded outlets. This fitting is recommended for fire sprinkler and other pipelines of moderate pressure. The C-7 Outlet Coupling can be used for dry pipe systems or vacuum services up to 10 inHg or 254 mmHg, which may occur when the system is drained.

dimensions



nom. size											
run pipe	outlet		max. working pressure (CWP) ‡	axial displacement	max. end load (CWP)	dimensions				bolt size	weight
	FPT	Gr/MPT				T**	A	B	C		
1½" 40	½"	---	500 psi (35 bar)	0.81-0.88" (20-22 mm)	1050 lbs (4.7 kN)	2.06" (52 mm)	---	4.50" (114.3 mm)	2.75" (70.0 mm)	¾ x 2½" (M10 x 55 mm)	2.6 lbs (1.2 Kgs)
	15	---	---	---		---	---	---	---		---
	¾"	---	500 psi (35 bar)	0.81-0.88" (20-22 mm)		2.06" (52 mm)	---	4.50" (114.3 mm)	2.75" (70.0 mm)		2.6 lbs (1.2 Kgs)
	20	---	---	---		---	---	---	---		---
2" 50	1"	---	500 psi (35 bar)	0.81-0.88" (20-22 mm)	2180 lbs (9.7 kN)	1.94" (49 mm)	---	4.50" (114.3 mm)	2.75" (70.0 mm)	¾ x 2½" (M10 x 55 mm)	2.9 lbs (1.3 Kgs)
	25	---	---	---		---	---	---	---		---
	½"	---	500 psi (35 bar)	0.81-0.88" (20-22 mm)		2.32" (59 mm)	---	5.00" (127.0 mm)	2.75" (70.0 mm)		3.1 lbs (1.4 Kgs)
	15	---	---	---		---	---	---	---		---
	¾"	---	500 psi (35 bar)	0.81-0.88" (20-22 mm)		2.32" (59 mm)	---	5.00" (127.0 mm)	2.75" (70.0 mm)		3.1 lbs (1.4 Kgs)
	20	---	---	---		---	---	---	---		---
2½" 65	1"	1"	500 psi (35 bar)	0.81-0.88" (20-22 mm)	3200 lbs (14.2 kN)	2.20" (56 mm)	3.50" (89.0 mm)	5.00" (127.0 mm)	2.75" (70.0 mm)	½ x 2½" (M12 X 60 mm)	3.3 lbs (1.5 Kgs)
	25	(33.4 mm)	---	---		---	---	---	---		---
	½"	---	500 psi (35 bar)	1.25-1.50" (32-38 mm)		2.20" (56 mm)	---	6.33" (161.0 mm)	3.25" (83.0 mm)		4.8 lbs (2.2 Kgs)
	15	---	---	---		---	---	---	---		---
	¾"	---	500 psi (35 bar)	1.25-1.50" (32-38 mm)		2.56" (65 mm)	---	6.33" (161.0 mm)	3.25" (83.0 mm)		4.6 lbs (2.1 Kgs)
	20	---	---	---		---	---	---	---		---
	1"	---	500 psi (35 bar)	1.25-1.50" (32-38 mm)		2.44" (62 mm)	---	6.33" (161.0 mm)	3.25" (83.0 mm)		4.4 lbs (2.0 Kgs)
	25	---	---	---		---	---	---	---		---
	1¼"	1¼"	500 psi (35 bar)	1.25-1.50" (32-38 mm)		2.36" (60 mm)	3.70" (94.0 mm)	6.33" (161.0 mm)	3.25" (83.0 mm)		5.1 lbs (2.3 Kgs)
	32	(42.2 mm)	---	---		---	---	---	---		---
	---	1½"	500 psi (35 bar)	1.25-1.50" (32-38 mm)		---	3.70" (94.0 mm)	6.33" (161.0 mm)	3.25" (83.0 mm)		5.9 lbs (2.4 Kgs)
	---	(48.3 mm)	---	---		---	---	---	---		---

graph continues on next page

nom. size			max. working pressure (CWP) ‡	axial displacement	max. end load (CWP)	dimensions				bolt size	weight
run pipe	outlet					T**	A	B	C		
3" 80	¾"	---	500 psi	1.25-1.50"	4750" (21.0 mm)	2.83"	---	6.87"	3.25"	½ x 3" (M12 X 75 mm)	5.9 lbs
	20	---	(35 bar)	(32-38 mm)		(72 mm)	---	(175.0 mm)	(83.0 mm)		(2.7 Kgs)
	1"	1"	500 psi	1.25-1.50"		2.75"	4.00"	6.87"	3.25"		6.2 lbs
	(33.4 mm)	(35 bar)	(32-38 mm)	(70 mm)		(102.0 mm)	(175.0 mm)	(83.0 mm)	(2.8 Kgs)		
	25										6.4 lbs
4" 100	1½"	1½"	500 psi	1.25-1.50"	7840" (34.9 mm)	2.75"	4.00"	6.87"	3.25"	¾ x 3½" (M16 X 90 mm)	6.4 lbs
	(48.3 mm)	(35 bar)	(32-38 mm)	(70 mm)		(102.0 mm)	(175.0 mm)	(83.0 mm)	(2.9 Kgs)		
	¾"	---	500 psi	1.63-1.81"		3.70"	---	8.31"	3.66"		9.2 lbs
	20	---	(35 bar)	(41-46 mm)		(94 mm)	---	(211.0 mm)	(93.0 mm)		(4.2 Kgs)
	1"	1"	500 psi	1.63-1.81"		3.58"	4.88"	8.31"	3.66"		9.5 lbs
	(33.4 mm)	(35 bar)	(41-46 mm)	(91 mm)		(124.0 mm)	(211.0 mm)	(93.0 mm)	(4.3 Kgs)		
	25										9.5 lbs
6" 150	1½"	1½"	500 psi	1.63-1.81"	14000" (62.3 mm)	3.31"	4.88"	8.31"	3.66"	¾ x 3½" (M16 X 90 mm)	9.5 lbs
	(48.3 mm)	(35 bar)	(41-46 mm)	(84 mm)		(124.0 mm)	(211.0 mm)	(93.0 mm)	(4.3 Kgs)		
	2"	2"	500 psi	1.63-1.81"		3.50"	4.88"	8.31"	3.66"		9.9 lbs
	(60.3 mm)	(35 bar)	(41-46 mm)	(89 mm)		(124.0 mm)	(211.0 mm)	(93.0 mm)	(4.5 Kgs)		
	¾"	---	400 psi	1.63-1.81"		4.76"	---	10.86"	3.70"		13.2 lbs
	20	---	(28 bar)	(41-46 mm)		(121 mm)	---	(276.0 mm)	(94.0 mm)		(6.0 Kgs)
	1"	---	400 psi	1.63-1.81"		4.76"	---	10.86"	3.70"		13.2 lbs
	25	---	(28 bar)	(41-46 mm)		(121 mm)	---	(276.0 mm)	(94.0 mm)		(6.0 Kgs)
	1½"	1½"	400 psi	1.63-1.81"		4.76"	6.06"	10.86"	3.70"		13.6 lbs
(48.3 mm)	(28 bar)	(41-46 mm)	(121 mm)	(154.0 mm)	(276.0 mm)	(94.0 mm)	(6.2 Kgs)				
2"	2"	400 psi	1.63-1.81"	4.40"	6.06"	10.86"	3.70"	14.3 lbs			
(60.3 mm)	(28 bar)	(41-46 mm)	(111 mm)	(154.0 mm)	(276.0 mm)	(94.0 mm)	(6.5 Kgs)				

FPT: Female threaded outlet

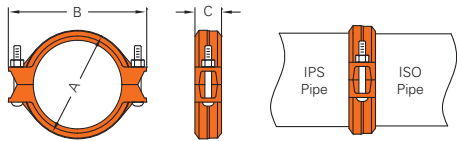
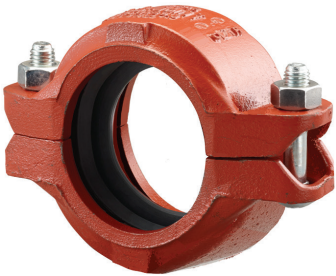
Gr: Grooved outlet

MPT: Male threaded outlet.

** T: Center of run pipe to end of outlet pipe (dimensions approximate). Female threaded outlet only.

‡ Working pressure is based on roll grooved standard wall carbon steel pipe.

7706-T transition coupling



Model 7706-T Transition Couplings allows for a direct transition from IPS pipe sizes to ISO pipe sizes.

dimensions



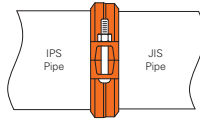
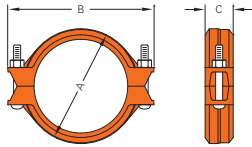
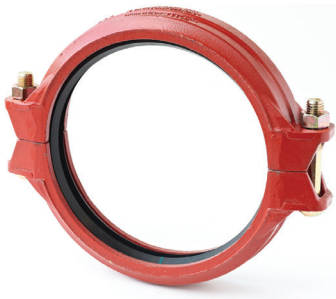
nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	angular movement**		dimensions			bolt size	weight
					degree per coupling	per pipe	A	B	C		
2½ x 76.1 mm	2.875 x 3.000" (73.0 x 76.1 mm)	500 psi (35 bar)	2110 lbs (9.09 kN)	0 - 0.065" (0 - 1.6 mm)	1° - 12'	0.13"/ft (11 mm/m)	4.02" (102 mm)	5.43" (138 mm)	1.89" (48 mm)	¾ x 2½"	2.6 lbs (1.2 Kgs)
6 x 165.1 mm	6.625 x 6.500" (168.3 x 165.1 mm)	400 psi (28 mm)	9940 lbs (42.80 kN)	0 - 0.125" (0 - 3.2 mm)	0° - 33'	0.12"/ft (10 mm/m)	7.87" (200 mm)	10.63" (270 mm)	2.09" (53 mm)	¾ x 3½"	7.7 lbs (3.5 Kgs)

* Working Pressure is based on roll grooved standard wall carbon steel pipe.

† Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation purposes these figures should be reduced by: 50% for ¾" - 3½"; 25% for 4" and larger to compensate for jobsite conditions.

** Deflection or angular movement given is the maximum value that a coupling allows. When using the given maximum angles for a curved layout, proper bracing should be used to counter pressure thrust that will occur when the system is pressurized. Flexible couplings can be used for angular movement and or thermal expansion, though please note individual coupling(s) cannot be used to their maximums for both types of movement within a system at the same time.

7771-T transition coupling



The stepped exterior design of the housings help to ensure the correct positioning of IPS and JIS sides.

The Shurjoint Model 7771-T Transition Coupling allows for a direct transition from IPS pipe sizes to JIS pipe sizes. Available in nominal pipe sizes from 8" through 12" this coupling can accommodate a combination of pipes, valves and or fittings with a single coupling. Bolt pads are designed to make metal to metal contact to provide for a secure and rigid joint.

dimensions



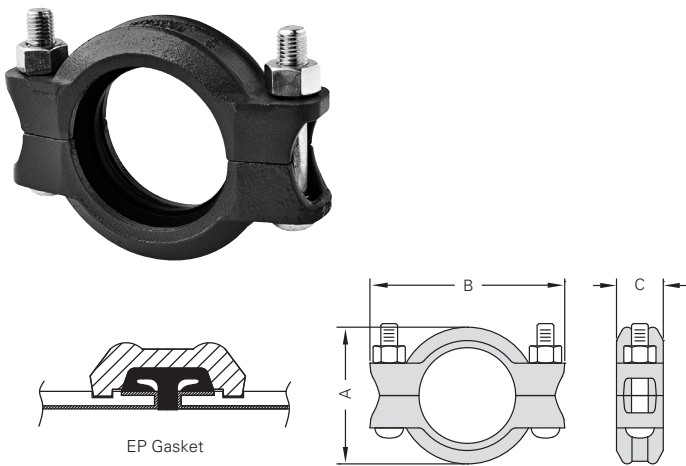
nom. size	actual pipe O.D.		max working pressure (CWP)*	max. end load (CWP)	total axial displacement †	dimensions			bolt size	weight
	IPS	JIS				A	B	C		
200 JIS	8.625" (219.1 mm)	8.515" (216.3 mm)	300 psi (20 bar)	17520 lbs (75.37 kN)	0.13" (3.2 mm)	10.20" (259 mm)	13.19" (335 mm)	2.50" (63 mm)	M16 x 135 mm	15.4 lbs (7.0 Kgs)
250 JIS	10.750" (273.0 mm)	10.528" (267.4 mm)	300 psi (20 bar)	27190 lbs (117.01 kN)	0.13" (3.2 mm)	12.46" (316 mm)	15.20" (386 mm)	2.50" (63 mm)	M20 x 120 mm	19.8 lbs (9.0 Kgs)
300 JIS	12.750" (323.9 mm)	12.539" (318.5 mm)	300 psi (20 bar)	38280 lbs (164.71 kN)	0.13" (3.2 mm)	14.45" (367 mm)	17.64" (448 mm)	2.50" (63 mm)	M22 x 165 mm	24.2 lbs (11.0 Kgs)

For 6" (168.3) x 6" (165.1), see Model 7706-T.

* Working Pressure is based on roll- or cut-grooved standard wall carbon steel pipe.

† Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation purposes these figures should be reduced by: 50% for ¾" - 3½"; 25% for 4" and larger to compensate for jobsite conditions.

XH-70EP extra rigid coupling
end protection (EP) gasket



“EP” end protection cut grooved specification

- 1. EP cut-grooves are for plastic coated or cement lined pipe to be connected with Shurjoint XH-70EP couplings only. Do not roll groove pipe, which can damage the coating or lining and or create flared pipe ends.
- 2. always use plain-end square cut pipe. Do not use beveled end pipe.
- 3. always use an EP gasket with a XH-70EP coupling. Do not use a standard gasket.
- 4. the gasket seating area shall be free from deep scores, marks, or ridges that could prevent a positive seal.

caution: always fasten the bolts to the required torque.

note: reference page 46 for dimensions of “EP” end protection cut grooved specification

The Model XH-70EP is designed for use with plastic coated or cement lined pipe. The EP (end protection) gasket serves to form a continuous lined surface at the joint and also helps protect the pipe ends from corrosion. This coupling is rated up to 2500 psi (175 Bar) when used in conjunction with machined EP cut grooves and the applicable pipe.

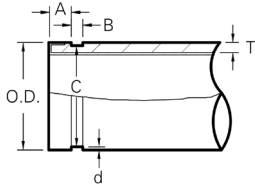
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)	dimensions			bolt		bolt torque	weight
				A	B	C	no.	size		
2"	2.375"	2500 psi	11070 lbs	3.54"	5.71"	1.92"	2	5/8 x 2 3/4"	100 - 130 lbs-ft	3.3 lbs
50	(60.3 mm)	(175 bar)	(50.0 kN)	(90 mm)	(145 mm)	(49 mm)			(135 - 175 Nm)	(1.5 Kgs)
2 1/2"	2.875"	2500 psi	16220 lbs	4.06"	6.61"	1.92"	2	5/8 x 2 3/4"	100 - 130 lbs-ft	4.0 lbs
65	(73.0 mm)	(175 bar)	(73.2 kN)	(103 mm)	(168 mm)	(49 mm)			(135 - 175 Nm)	(1.8 Kgs)
3"	3.500"	2500 psi	24040 lbs	4.80"	7.40"	2.00"	2	5/8 x 2 3/4"	100 - 130 lbs-ft	4.8 lbs
80	(88.9 mm)	(175 bar)	(108.6 kN)	(122 mm)	(188 mm)	(51 mm)			(135 - 175 Nm)	(2.2 Kgs)
4"	4.500"	2500 psi	39740 lbs	6.18"	8.74"	2.17"	2	3/4 x 4 3/4"	150 - 200 lbs-ft	8.8 lbs
100	(114.3 mm)	(175 bar)	(179.5 kN)	(157 mm)	(222 mm)	(55 mm)			(200 - 270 Nm)	(4.0 Kgs)
6"	6.625"	2000 psi	68910 lbs	8.58"	11.61"	2.25"	2	7/8 x 5 1/2"	180 - 220 lbs-ft	17.6 lbs
150	(168.3 mm)	(140 bar)	(311.3 kN)	(218 mm)	(295 mm)	(57 mm)			(240 - 300 Nm)	(8.0 Kgs)
8"	8.625"	1500 psi	116790 lbs	10.83"	14.33"	2.75"	2	1 x 5 1/2"	200 - 300 lbs-ft	24.0 lbs
200	(219.1 mm)	(105 bar)	(527.6 kN)	(275 mm)	(364 mm)	(70 mm)			(270 - 400 Nm)	(10.9 Kgs)
10"	10.750"	1250 psi	113400 lbs	13.15"	16.70"	2.95"	2	1 x 5 1/2"	200 - 300 lbs-ft	31.2 lbs
250	(273.0 mm)	(88 bar)	(514.8 kN)	(334 mm)	(424 mm)	(75 mm)			(270 - 400 Nm)	(14.2 Kgs)
12"	12.750"	1250 psi	159510 lbs	15.35"	18.90"	2.95"	2	1 x 5 1/2"	200 - 300 lbs-ft	36.7 lbs
300	(323.9 mm)	(88 bar)	(724.7 kN)	(390 mm)	(480 mm)	(75 mm)			(270 - 400 Nm)	(16.7 Kgs)

* Pressures quoted are based on EP cut grooved XS (Sch. 80) pipe.



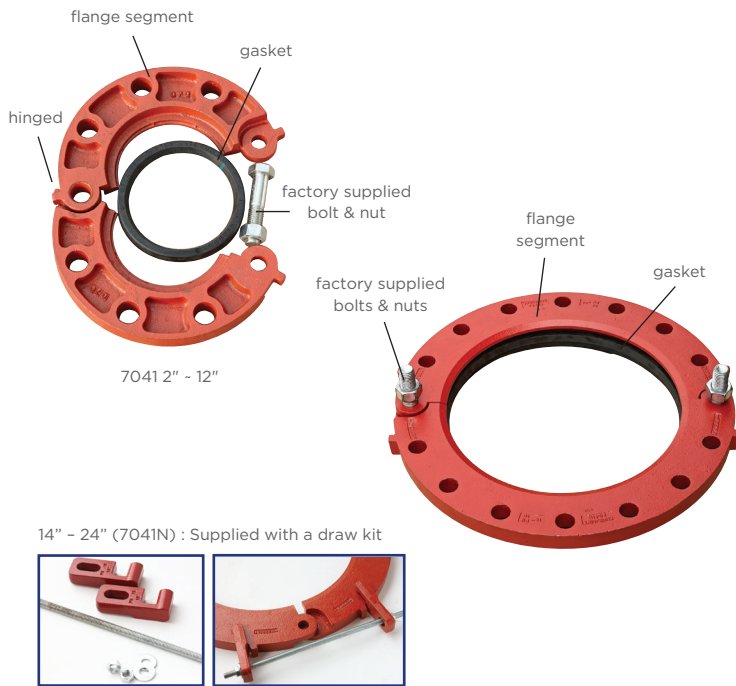
“EP” end protection cut grooved specification
for XH-70EP coupling (IPS sizes)



dimensions

nom. size	pipe O.D.		A		B		C		d groove depth (ref.)	t min. allowed wall thickness	
	basic	tolerance		basic seat		groove width		groove dia.			
		+	-	basic	Tol. ±	basic	Tol. +0.010 / +0.25	basic			Tol. +/- +0
2"	2.375"	+0.024"	-0.024"	0.562"	±0.010"	0.255"	-0.005"	2.250"	-0.015"	0.063"	0.154"
50	(60.3 mm)	(+0.61 mm)	(-0.61 mm)	(14.27 mm)	(±0.25 mm)	(6.48 mm)	(-0.13 mm)	(57.15 mm)	(-0.38 mm)	(1.60 mm)	(3.91 mm)
2½"	2.875"	+0.029"	-0.029"	0.562"	±0.010"	0.255"	-0.005"	2.720"	-0.018"	0.078"	0.188"
65	(73.0 mm)	(+0.74 mm)	(-0.74 mm)	(14.27 mm)	(±0.25 mm)	(6.48 mm)	(-0.13 mm)	(69.09 mm)	(-0.46 mm)	(1.98 mm)	(4.78 mm)
3"	3.500"	+0.035"	-0.031"	0.562"	±0.010"	0.255"	-0.005"	3.344"	-0.018"	0.078"	0.188"
80	(88.9 mm)	(+0.89 mm)	(-0.79 mm)	(14.27 mm)	(±0.25 mm)	(6.48 mm)	(-0.13 mm)	(84.94 mm)	(-0.46 mm)	(1.98 mm)	(4.78 mm)
4"	4.500"	+0.045"	-0.031"	0.605"	±0.015"	0.305"	-0.005"	4.334"	-0.020"	0.083"	0.203"
100	(114.3 mm)	(+1.14 mm)	(-0.79 mm)	(15.37 mm)	(±0.38 mm)	(7.75 mm)	(-0.13 mm)	(110.08 mm)	(-0.51 mm)	(2.11 mm)	(5.16 mm)
6"	6.625"	+0.063"	-0.031"	0.605"	±0.015"	0.305"	-0.005"	6.455"	-0.022"	0.085"	0.219"
150	(168.3 mm)	(+1.60 mm)	(-0.79 mm)	(15.37 mm)	(±0.38 mm)	(7.75 mm)	(-0.13 mm)	(163.96 mm)	(-0.56 mm)	(2.16 mm)	(5.56 mm)
8"	8.625"	+0.063"	-0.031"	0.714"	±0.015"	0.400"	-0.010"	8.441"	-0.025"	0.092"	0.238"
200	(219.1 mm)	(+1.60 mm)	(-0.79 mm)	(18.14 mm)	(±0.38 mm)	(10.16 mm)	(-0.25 mm)	(214.40 mm)	(-0.64 mm)	(2.34 mm)	(6.05 mm)
10"	10.750"	+0.063"	-0.031"	0.714"	±0.015"	0.400"	-0.010"	10.562"	-0.027"	0.094"	0.250"
250	(273.0 mm)	(+1.60 mm)	(-0.79 mm)	(18.14 mm)	(±0.38 mm)	(10.16 mm)	(-0.25 mm)	(268.28 mm)	(-0.69 mm)	(2.39 mm)	(6.35 mm)
12"	12.750"	+0.063"	-0.031"	0.714"	±0.015"	0.400"	-0.010"	12.531"	-0.030"	0.109"	0.279"
300	(323.9 mm)	(+1.60 mm)	(-0.79 mm)	(18.14 mm)	(±0.38 mm)	(10.16 mm)	(-0.25 mm)	(318.29 mm)	(-0.76 mm)	(2.77 mm)	(7.09 mm)

flange adapter

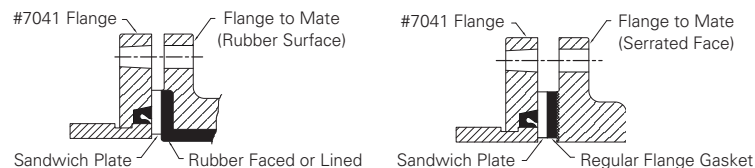


Shurjoint offers a variety of flange adapters 2" through 24" (50 mm – 600 mm) to transition from a flanged system to a grooved system. Flange drillings available include ANSI Class 125/150, Class 300, PN 10/16 and BS 10 Table E.

Flange adapters 2" through 12" are supplied hinged as a single assembly while 14" through 24" are supplied with four independent segments. For BS 10 Table E, 14" through 24" are supplied with two independent segments and a draw kit. Always use factory-supplied bolts and nuts to assemble flange segments. The use of other bolts may cause joint failure. If the factory supplied bolts cannot be used for the component that is being connected consult Shurjoint technical services for further

models 7041 / 7043 flange adapters

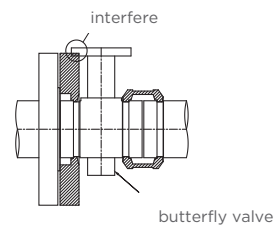
1. The Model 7041 flange adapter requires a hard flat face for effective sealing. Sealing surface D is the maximum inside face requirement, sealing surface E is the minimum outside face requirement. If the mating flange face is outside these dimensions, a flange gasket and model 49 sandwich plate (Model #49, see cut sheet #V-03) must be used. With the serrated faces of some valves or rubber-faced wafer valves, the mating surface might also be inadequate and a sandwich plate must be used.



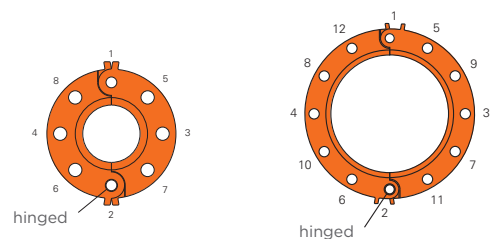
2. The Model 7041 flange adapter has small triangular teeth inside the key shoulder to prevent the pipe from rotating. These teeth should be removed when being connected to schedule 5 pipe, plastic pipe or components or surfaces that could be damaged by these teeth.

3. The Model 7041 flange adapter shall not be used as anchor points for tie-rods across non-restrained joints.

4. When assembling a Model 7041 flange adapter against a butterfly valve or ball valve, make sure that the outside diameter of the flange adapters do not interfere with the valve actuator or the mounting pad of the actuator.

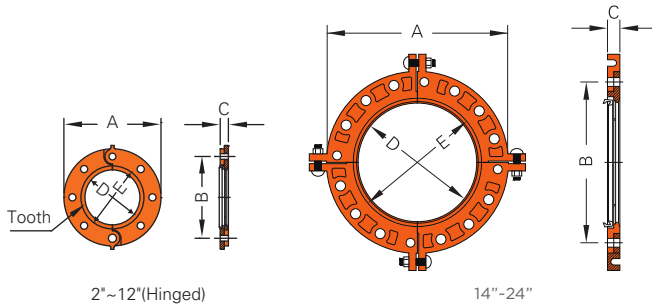


5. Bolt tightening sequence: Like a regular flange joint, it is important to make flange faces contact parallel. Tighten nuts alternately in the sequence of diagonally opposite pairs as shown below until the flange faces meet and make a metal-to-metal contact. When using two model 7041 flange adapters to mate pipe, or wafer / lug valves, the hinge point locations must be staggered 90° to each other, a model 49 sandwich plate must be used where appropriate, and flange adapter segment housings must remain parallel during nut tightening sequence.



7041 flange adapter

ANSI class 125/150



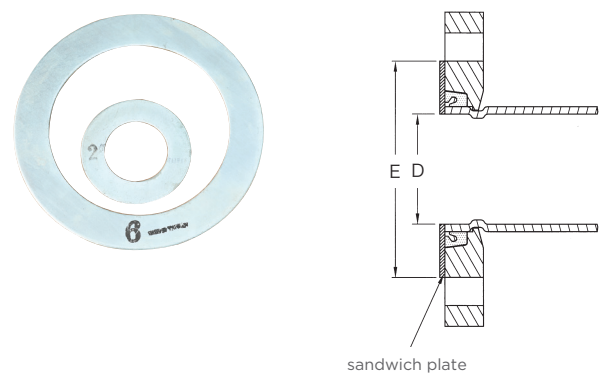
The Shurjoint Model 7041 flange adapters 2" through 12" are supplied hinged as a single assembly, while 14" - 24" are supplied with four independent segments.

dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)	dimensions			sealing surface		bolt		weight
				A	B	C	D	E	no.	size	
2"	2.375"	300 psi	1330 lbs	6.00"	4.75"	0.75"	2.38"	3.07"	4	5/8"	4.0 lbs
50	(60.3 mm)	(20 bar)	(5.71 kN)	(152 mm)	(121 mm)	(19 mm)	(60 mm)	(78 mm)			(1.8 Kgs)
2½"	2.875"	300 psi	1950 lbs	7.00"	5.50"	0.87"	2.88"	3.54"	4	5/8"	5.1 lbs
65	(73.0 mm)	(20 bar)	(8.37 kN)	(178 mm)	(140 mm)	(22 mm)	(73 mm)	(90 mm)			(2.3 Kgs)
3"	3.500"	300 psi	2880 lbs	7.52"	6.00"	0.94"	3.50"	4.17"	4	5/8"	6.2 lbs
80	(88.9 mm)	(20 bar)	(12.41 kN)	(191 mm)	(152 mm)	(24 mm)	(89 mm)	(106 mm)			(2.8 Kgs)
4"	4.500"	300 psi	4770 lbs	9.00"	7.50"	0.94"	4.50"	5.20"	8	5/8"	8.3 lbs
100	(114.3 mm)	(20 bar)	(20.51 kN)	(229 mm)	(191 mm)	(24 mm)	(114 mm)	(132 mm)			(3.8 Kgs)
5"	5.563"	300 psi	7290 lbs	10.00"	8.50"	1.00"	5.56"	6.26"	8	¾"	10.3 lbs
125	(141.3 mm)	(20 bar)	(31.35 kN)	(254 mm)	(216 mm)	(25 mm)	(141 mm)	(159 mm)			(4.7 Kgs)
6"	6.625"	300 psi	10340 lbs	11.00"	9.50"	1.00"	6.63"	7.32"	8	¾"	11.1 lbs
150	(168.3 mm)	(20 bar)	(44.47 kN)	(279 mm)	(241 mm)	(25 mm)	(168 mm)	(186 mm)			(5.0 Kgs)
8"	8.625"	300 psi	17520 lbs	13.50"	11.75"	1.14"	8.63"	9.29"	8	¾"	17.2 lbs
200	(219.1 mm)	(20 bar)	(75.37 kN)	(343 mm)	(298 mm)	(29 mm)	(219 mm)	(236 mm)			(7.8 Kgs)
10"	10.750"	300 psi	27210 lbs	16.00"	14.25"	1.18"	10.75"	11.61"	12	7/8"	25.7 lbs
250	(273.0 mm)	(20 bar)	(117.01 kN)	(406 mm)	(362 mm)	(30 mm)	(273 mm)	(295 mm)			(11.7 Kgs)
12"	12.750"	300 psi	38280 lbs	19.02"	17.00"	1.25"	12.75"	13.62"	12	7/8"	37.6 lbs
300	(323.9 mm)	(20 bar)	(164.71 kN)	(483 mm)	(432 mm)	(32 mm)	(324 mm)	(346 mm)			(17.1 Kgs)
14"	14.000"	300 psi	46160 lbs	21.00"	18.75"	1.42"	14.00"	15.08"	12	1"	61.7 lbs
350	(355.6 mm)	(20 bar)	(198.5 kN)	(533 mm)	(476 mm)	(36 mm)	(356 mm)	(383 mm)			(28.0 Kgs)
16"	16.000"	300 psi	60290 lbs	23.50"	21.25"	1.42"	16.00"	16.97"	16	1"	77.1 lbs
400	(406.4 mm)	(20 bar)	(259.3 kN)	(597 mm)	(540 mm)	(36 mm)	(406 mm)	(431 mm)			(35.0 Kgs)
18"	18.000"	300 psi	76300 lbs	25.00"	22.75"	1.56"	18.00"	19.13"	16	1½"	86.0 lbs
450	(457.2 mm)	(20 bar)	(328.2 kN)	(635 mm)	(578 mm)	(40 mm)	(457 mm)	(486 mm)			(39.0 Kgs)
20"	20.000"	300 psi	94200 lbs	27.50"	25.00"	1.73"	20.00"	21.14"	20	1½"	109.1 lbs
500	(508.0 mm)	(20 bar)	(405.2 kN)	(699 mm)	(635 mm)	(44 mm)	(508 mm)	(537 mm)			(49.5 Kgs)
24"	24.000"	300 psi	135650 lbs	32.00"	29.50"	1.89"	24.00"	25.00"	20	1¼"	157.6 lbs
600	(609.6 mm)	(20 bar)	(583.4 kN)	(813 mm)	(749 mm)	(48 mm)	(610 mm)	(635 mm)			(71.5 Kgs)

** Working Pressure is based on roll grooved standard wall carbon steel pipe.

49 sandwich plate



material: Mild-steel,electro-zinc plated. Stainless steel, type 304 or 316 is available on request..

The Model 7041, 7043, SS-41, and C-341 flange adapters require a hard flat surface for effective gasket sealing. A sandwich plate is required and should always be used when the mating surface is not adequate as with the serrated faces of some valves or the rubber-faced or rubber-lined flange adapters of a wafer valve.

dimensions

nom. size	E	D
2"	3.74"	2.13"
50	(95 mm)	(54 mm)
2½"	4.65"	2.64"
65	(118 mm)	(67 mm)
3"	5.12"	3.19"
80	(130 mm)	(81 mm)
4"	6.22"	4.13"
100	(158 mm)	(105 mm)
5"	7.40"	5.00"
125	(188 mm)	(128 mm)
6"	8.50"	6.10"
150	(216 mm)	(155 mm)
8"	10.67"	8.07"
200	(271 mm)	(205 mm)
10"	12.83"	10.15"
250	(326 mm)	(258 mm)
12"	15.00"	12.00"
300	(381 mm)	(305 mm)
14"	17.40"	13.46"
350	(442 mm)	(342 mm)
16"	19.92"	15.43"
400	(506 mm)	(392 mm)
18"	21.26"	17.44"
450	(540 mm)	(443 mm)
20"	23.50"	19.45"
500	(597 mm)	(494 mm)
24"	27.87"	23.46"
600	(708 mm)	(596 mm)

7041 flange adapter

PN 10 / PN 16

The Shurjoint Model 7041 flange adapter allows for a direct connection with PN 10/16 flanges. The two-segment design provides an easy and fast installation. 2" through 12" flange adapters are supplied hinged as a single assembly, while 14" - 24" are supplied with four independent segments.

dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)	dimensions			sealing surface		bolt		weight
				A	B	C	D	E	no.	size	
2"	2.375"	300 psi	1000 lbs	165 mm	125 mm	22 mm	60 mm	78 mm	4	M16 mm	5.1 lbs
50	(60.3 mm)	(20 bar)	(4.6 kN)								(2.3 Kgs)
2½" (7041D)	2.875"	300 psi	1950 lbs	185 mm	145 mm	22 mm	73 mm	90 mm	4	M16 mm	5.7 lbs
65	(73.0 mm)	(20 bar)	(8.37 kN)								(2.6 Kgs)
76.1 mm	3.000"	300 psi	1590 lbs	185 mm	145 mm	22 mm	76 mm	92 mm	4	M16 mm	5.7 lbs
	(76.1 mm)	(20 bar)	(7.3 kN)								(2.6 Kgs)
3"	3.500"	300 psi	2165 lbs	200 mm	160 mm	24 mm	89 mm	106 mm	8	M16 mm	7.1 lbs
80	(88.9 mm)	(20 bar)	(9.9 kN)								(3.2 Kgs)
4"	4.500"	300 psi	3580 lbs	220 mm	180 mm	24 mm	114 mm	132 mm	8	M16 mm	7.5 lbs
100	(114.3 mm)	(20 bar)	(16.4 kN)								(3.4 Kgs)
139.7 mm	5.500"	300 psi	5340 lbs	250 mm	210 mm	25 mm	140 mm	159 mm	8	M16 mm	9.8 lbs
	(139.7 mm)	(20 bar)	(24.5 kN)								(4.4 Kgs)
165.1 mm	6.500"	300 psi	7460 lbs	285 mm	240 mm	24 mm	165 mm	182 mm	8	M20 mm	11.3 lbs
	(165.1 mm)	(20 bar)	(34.2 kN)								(5.1 Kgs)
6"	6.625"	300 psi	7750 lbs	285 mm	240 mm	24 mm	168 mm	182 mm	8	M20 mm	10.1 lbs
150	(168.3 mm)	(20 bar)	(35.6 kN)								(4.6 Kgs)
8"	8.625"	300 psi	13140 lbs	340 mm	295 mm	29 mm	219 mm	236 mm	12	M20 mm	17.2 lbs
200	(219.1 mm)	(20 bar)	(60.3 kN)								(7.8 Kgs)
10"	10.750"	300 psi	20410 lbs	405 mm	355 mm	30 mm	273 mm	295 mm	12	M24 mm	25.2 lbs
250	(273.0 mm)	(20 bar)	(93.6 kN)								(11.4 Kgs)
12"	12.750"	300 psi	28710 lbs	460 mm	410 mm	32 mm	324 mm	346 mm	12	M24 mm	30.2 lbs
300	(323.9 mm)	(20 bar)	(131.8 kN)								(13.7 Kgs)
14"	14.000"	300 psi	46160 lbs	520 mm	470 mm	36 mm	356 mm	383 mm	16	M24 mm	48.7 lbs
350	(355.6 mm)	(20 bar)	(198.5 kN)								(22.1 Kgs)
16"	16.000"	300 psi	60290 lbs	580 mm	525 mm	38 mm	406 mm	431 mm	16	M27 mm	59.7 lbs
400	(406.4 mm)	(20 bar)	(259.3 kN)								(27.1 Kgs)
18"	18.000"	300 psi	76300 lbs	640 mm	585 mm	40 mm	457 mm	486 mm	20	M27 mm	71.6 lbs
450	(457.2 mm)	(20 bar)	(328.2 kN)								(32.5 Kgs)
20"	20.000"	300 psi	94200 lbs	715 mm	650 mm	43 mm	508 mm	537 mm	20	M30 mm	103.4 lbs
500	(508.0 mm)	(20 bar)	(405.2 kN)								(47.0 Kgs)
24"	24.000"	300 psi	135650 lbs	840 mm	770 mm	48 mm	610 mm	635 mm	20	M33 mm	160.6 lbs
600	(609.6 mm)	(20 bar)	(583.4 kN)								(73.0 Kgs)

Note: 2" - 6" flange drilling to PN10 / PN16 and 8" and above to PN16. See below for required bolt torque.

* Working Pressure is based on roll grooved standard wall carbon steel pipe.

required bolt torque

note: The tables show standard torque values for proper assembly of Shurjoint flange adapters. Use a torque wrench so that all the nuts are tightened equally with the same torque value. Shurjoint flange adapters are sealed with elastic (rubber) gaskets, which require much lower torques than those that utilize metallic gaskets.

**required torque for model 7041 flange
adapters (ANSI class 125 / 150, BS 10-E)**

bolt		required torque		
nom. size	size (in)	no.	lbs-ft	Nm
2"	5/8	4	110 - 140	149 - 190
2½"	5/8	4	110 - 140	149 - 190
3"	5/8	4	110 - 140	149 - 190
4"	5/8	8	110 - 140	149 - 190
5"	¾	8	220 - 250	298 - 339
6"	¾	8	220 - 250	298 - 339
8"	¾	8	220 - 250	298 - 339
10"	7/8	12	320 - 400	434 - 542
12"	7/8	12	320 - 400	434 - 542
14"	1	12	360 - 520	488 - 705
16"	1	16	360 - 520	488 - 705
18"	1½	16	450 - 725	610 - 982
20"	1½	20	450 - 725	610 - 982
24"	1½	20	620 - 1000	841 - 1356

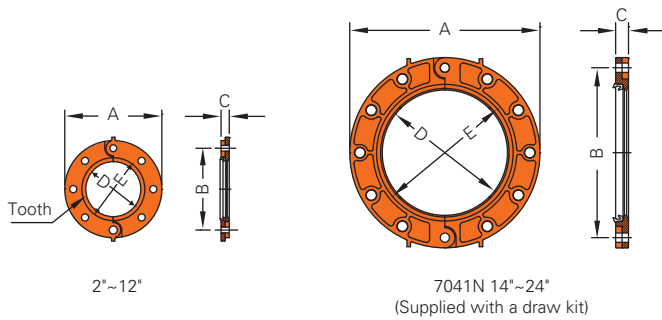
**required torque for model 7043
flange adapters (ANSI class 300)**

bolt		required torque		
nom. size	size (in)	no.	lbs-ft	Nm
2"	5/8	8	110 - 140	149 - 190
2½"	¾	8	220 - 250	298 - 339
3"	¾	8	220 - 250	298 - 339
4"	¾	8	220 - 250	298 - 339
5"	¾	8	220 - 250	298 - 339
6"	¾	12	220 - 250	298 - 339
8"	7/8	12	320 - 400	434 - 542
10"	1	16	360 - 520	488 - 705
12"	1½	16	450 - 725	610 - 982

**required torque for model 7041
flange adapters (PN 10 / 16)**

bolt		required torque		
nom. size	size (in)	no.	lbs-ft	Nm
50"	M16	4	110 - 140	149 - 190
65"	M16	4	110 - 140	149 - 190
80"	M16	8	110 - 140	149 - 190
100"	M16	8	110 - 140	149 - 190
125"	M20	8	220 - 250	298 - 339
150"	M20	8	220 - 250	298 - 339
200"	M20	12	220 - 250	298 - 339
250"	M24	12	320 - 400	434 - 542
300"	M24	12	320 - 400	434 - 542
350"	M24	16	320 - 400	434 - 542
400"	M27	16	360 - 520	488 - 705
450"	M27	20	360 - 520	488 - 705
500"	M30	20	450 - 725	610 - 982
600"	M33	20	620 - 1000	841 - 1356

7041 flange adapter BS 10-E



The Shurjoint Model 7041 flange adapter allows for a direct connection with BS 10 Table E flanges. The two-segment design provides an easy and fast installation. 76.1 mm – DN250 flange adapters come in two segments. The DN350 – DN600 (7041N) come in two segments and are supplied with a draw kit to assist with assembly.

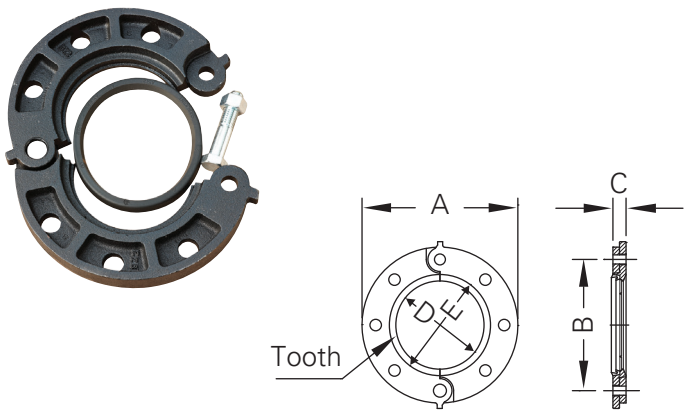
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)	dimensions			sealing surface		bolt		weight
				A	B	C	D	E	no.	size	
76.1 mm	76.1 mm	20 bar	6.36 kN	165 mm	127 mm	22 mm	76 mm	92 mm	4	5/8"	2.5 Kgs
80	88.9 mm	20 bar	8.69 kN	184 mm	146 mm	24 mm	89 mm	106 mm	4	5/8"	2.8 Kgs
100	114.3 mm	20 bar	14.36 kN	216 mm	178 mm	24 mm	114 mm	132 mm	8	5/8"	3.4 Kgs
139.7 mm	139.7 mm	20 bar	21.45 kN	254 mm	210 mm	24 mm	140 mm	170 mm	8	5/8"	4.5 Kgs
165.1 mm	165.1 mm	20 bar	29.96 kN	279 mm	235 mm	24 mm	165 mm	182 mm	8	3/4"	5.0 Kgs
200	219.1 mm	20 bar	52.76 kN	343 mm	292 mm	29 mm	219 mm	236 mm	8	3/4"	8.4 Kgs
250	273.0 mm	20 bar	81.91 kN	405 mm	356 mm	30 mm	273 mm	295 mm	12	3/4"	10.8 Kgs
350 (7041N)	355.6 mm	20 bar	198.53 kN	527 mm	470 mm	32 mm	356 mm	383 mm	12	7/8"	20.8 Kgs
400 (7041N)	406.4 mm	20 bar	259.30 kN	578 mm	521 mm	32 mm	406 mm	431 mm	12	7/8"	21.0 Kgs
450 (7041N)	457.2 mm	20 bar	328.18 kN	641 mm	584 mm	36 mm	457 mm	486 mm	16	7/8"	28.9 Kgs
500 (7041N)	508.0 mm	20 bar	405.16 kN	705 mm	641 mm	38 mm	508 mm	537 mm	16	7/8"	38.1 Kgs
600 (7041N)	609.6 mm	20 bar	583.43 kN	826 mm	756 mm	42 mm	610 mm	635 mm	16	1 1/8"	54.6 Kgs

See page 52 for required bolt torque.

** Working Pressure is based on roll grooved standard wall carbon steel pipe.

7043 flange adapter
ANSI class 300



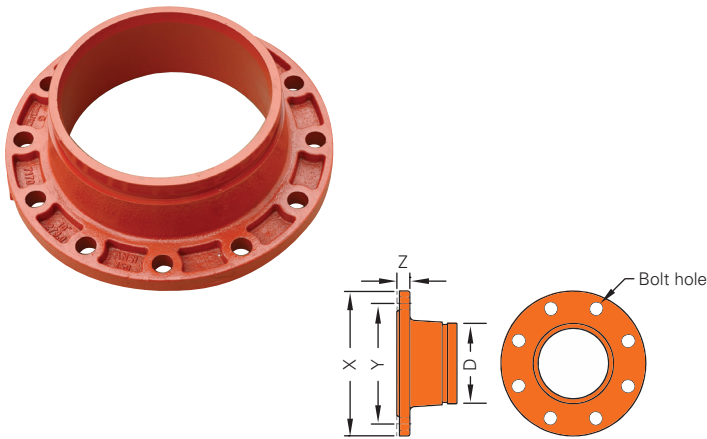
The Shurjoint Model 7043 flange adapter allows for direct connection of a grooved system to ANSI Class 300 flanged components. 2" through 8" Model 7043 flange adapters are supplied hinged as a single assembly, while large sizes are supplied with separate segments.

dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)	dimensions			sealing surface		bolt		weight
				A	B	C	D	E	no.	size	
2"	2.375"	750 psi	3320 lbs	6.50"	5.00"	0.94"	2.38"	3.07"	8	5/8"	5.3 lbs
50	(60.3 mm)	(52 bar)	(14.84 kN)	(165 mm)	(127 mm)	(24 mm)	(60 mm)	(78 mm)			(2.4 Kgs)
2½"	2.875"	750 psi	4860 lbs	7.50"	5.88"	1.06"	2.88"	3.54"	8	¾"	7.9 lbs
65	(73.0 mm)	(52 bar)	(21.75 kN)	(191 mm)	(149 mm)	(27 mm)	(73 mm)	(90 mm)			(3.6 Kgs)
3"	3.500"	750 psi	7210 lbs	8.25"	6.63"	1.19"	3.50"	4.17"	8	¾"	10.0 lbs
80	(88.9 mm)	(52 bar)	(32.26 kN)	(210 mm)	(168 mm)	(30 mm)	(89 mm)	(106 mm)			(4.6 Kgs)
4"	4.500"	750 psi	11920 lbs	10.00"	7.95"	1.31"	4.50"	5.20"	8	¾"	17.3 lbs
100	(114.3 mm)	(52 bar)	(53.33 kN)	(254 mm)	(202 mm)	(33 mm)	(114 mm)	(132 mm)			(7.8 Kgs)
5"	5.563"	750 psi	18220 lbs	11.00"	9.25"	1.44"	5.56"	5.55"	8	¾"	21.3 lbs
125	(141.3 mm)	(52 bar)	(81.50 kN)	(279 mm)	(235 mm)	(37 mm)	(141 mm)	(141 mm)			(9.7 Kgs)
6"	6.625"	750 psi	25840 lbs	12.50"	10.63"	1.50"	6.63"	7.32"	12	¾"	28.9 lbs
150	(168.3 mm)	(52 bar)	(115.62 kN)	(318 mm)	(270 mm)	(38 mm)	(168 mm)	(186 mm)			(9.7 Kgs)
8"	8.625"	750 psi	43790 lbs	15.00"	13.00"	1.61"	8.63"	9.29"	12	7/8"	36.2 lbs
200	(219.1 mm)	(52 bar)	(195.96 kN)	(381 mm)	(330 mm)	(41 mm)	(219 mm)	(236 mm)			(16.4 Kgs)
10"	10.750"	750 psi	68030 lbs	17.68"	15.25"	1.89"	10.75"	11.61"	16	1"	56.9 lbs
250	(273.0 mm)	(52 bar)	(304.23 kN)	(449 mm)	(387 mm)	(48 mm)	(273 mm)	(295 mm)			(25.8 Kgs)
12"	12.750"	750 psi	95700 lbs	20.50"	17.75"	1.93"	12.75"	13.62"	16	1½"	77.7 lbs
300	(323.9 mm)	(52 bar)	(428.25 kN)	(521 mm)	(451 mm)	(49 mm)	(324 mm)	(346 mm)			(35.2 Kgs)

See page 52 for required bolt torque.
* Working Pressure is based on roll grooved standard wall carbon steel pipe.

7170 flange adapter
ANSI class 125 / 150

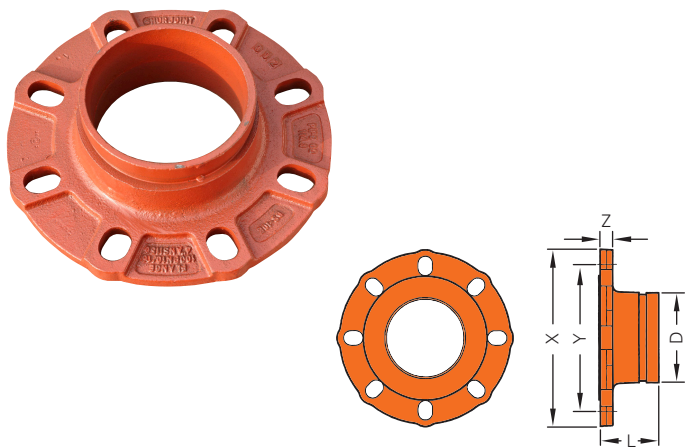


The Model 7170 Flange Adapter provides a rigid transition between ANSI class 125/150 flanged components and a grooved system.

dimensions

nom. size	X	Y	Z	bolt size	bolt hole		D	L	weight
					dia.	no.			
10" 250	15.98" (406.0 mm)	14.25" (362.0 mm)	1.18" (30.0 mm)	3/8"	1"	12	10.75" (273.0 mm)	5.00" (127.0 mm)	48.4 lbs (22.0 Kgs)
12" 300	19.00" (483.0 mm)	17.00" (432.0 mm)	1.25" (32.0 mm)	3/8"	1"	12	12.75" (323.9 mm)	5.00" (127.0 mm)	61.6 lbs (28.0 Kgs)
14" 350	21.00" (533.0 mm)	18.75" (476.3 mm)	1.38" (35.0 mm)	1"	1 1/8"	12	14.00" (355.6 mm)	5.00" (127.0 mm)	108.9 lbs (49.5 Kgs)
16" 400	23.50" (597.0 mm)	21.25" (539.7 mm)	1.46" (37.0 mm)	1"	1 1/8"	16	16.00" (406.4 mm)	5.00" (127.0 mm)	110.0 lbs (50.0 Kgs)
18" 450	25.00" (635.0 mm)	22.75" (577.8 mm)	1.57" (40.0 mm)	1 1/8"	1 1/4"	16	18.00" (457.2 mm)	5.50" (140.0 mm)	137.5 lbs (62.5 Kgs)
20" 500	27.50" (699.0 mm)	25.00" (635.0 mm)	1.69" (43.0 mm)	1 1/8"	1 1/4"	20	20.00" (508.0 mm)	5.71" (145.0 mm)	158.4 lbs (72.0 Kgs)
24" 600	32.00" (813.6 mm)	29.50" (749.3 mm)	1.89" (48.0 mm)	1 1/4"	1 3/8"	20	24.00" (609.6 mm)	6.00" (152.0 mm)	218.9 lbs (99.5 Kgs)

7180 universal flange adapter

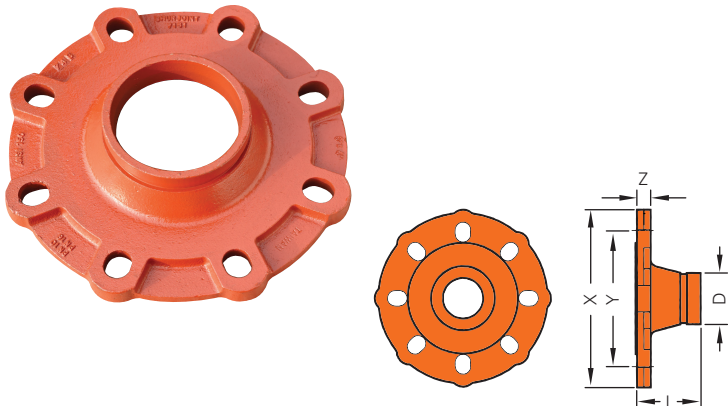


The Model 7180 Universal Flange Adapter provides a rigid transition from a flanged component to a grooved system. The single unit is compatible for a range of flange types including ANSI Class 125/150, PN10, PN16, and JIS 10K.

dimensions

nom. size	pipe O.D.	L	X	Y: flange drilling				Z	bolt size		
				ANSI 125 / 150	PN 10 / 16	JIS 10K	BS 10E		dia.	no.	weight
2"	2.375"	2.50"	6.50"	4.75"	4.92"	4.72"	4.49"	0.63"	⅝"	4	5.10 lbs
50	(60.3 mm)	(64 mm)	(165 mm)	(121 mm)	(125 mm)	(120 mm)	(114 mm)	(16 mm)	(M16 mm)	4	(2.30 Kgs)
2½"	2.875"	2.99"	7.28"	5.50"	5.70"	5.50"	5.00"	0.63"	⅝"	4	6.53 lbs
65	(73.0 mm)	(76 mm)	(185 mm)	(140 mm)	(145 mm)	(140 mm)	(127 mm)	(16 mm)	(M16 mm)	4	(2.96 Kgs)
76.1 mm	3.000"	2.99"	7.28"	5.50"	5.70"	5.50"	5.00"	0.63"	⅝"	4	6.40 lbs
										4	(2.90 Kgs)
3"	3.500"	2.95"	7.87"	6.00"	6.30"	5.90"	5.75"	0.63"	⅝"	4 / 8	7.47 lbs
80	(88.9 mm)	(75 mm)	(200 mm)	(152 mm)	(160 mm)	(150 mm)	(146 mm)	(16 mm)	(M16 mm)	4 / 8	(3.39 Kgs)
4"	4.500"	2.95"	8.86"	7.50"	7.09"	6.89"	7.00"	0.63"	⅝"	8	8.49 lbs
100	(114.3 mm)	(75 mm)	(225 mm)	(191 mm)	(180 mm)	(175 mm)	(178 mm)	(16 mm)	(M16 mm)	8	(3.85 Kgs)
139.7 mm	5.500"	2.95"	10.00"	8.50"	8.27"	8.27"	8.27"	0.63"	⅝" / ¾"	8	14.33 lbs
										8	(6.50 Kgs)
5"	5.563"	2.95"	10.00"	8.50"	8.27"	8.27"	---	0.87"	⅝" / ¾"	8	14.33 lbs
125	(141.3 mm)	(75 mm)	(254 mm)	(216 mm)	(210 mm)	(210 mm)	---	(22 mm)	(M16 / M20 mm)	8	(6.50 Kgs)
165.1 mm	6.500"	2.95"	10.71"	9.50"	9.45"	9.45"	9.30"	0.63"	¾"	8	13.86 lbs
										8	(6.30 Kgs)
6"	6.625"	2.95"	10.71"	9.50"	9.45"	9.45"	---	0.63"	¾"	8	12.58 lbs
150	(168.3 mm)	(75 mm)	(272 mm)	(241 mm)	(240 mm)	(240 mm)	---	(16 mm)	(M20 mm)	8	(5.72 Kgs)
8"	8.625"	4.00"	13.50"	11.75"	11.61"	11.42"	11.50"	0.87"	¾"	8 / 12	30.09 lbs
200	(219.1 mm)	(102 mm)	(343 mm)	(298 mm)	(295 mm)	(290 mm)	(292 mm)	(22 mm)	(M20 mm)	8 / 12	(13.65 Kgs)
200 JIS	8.516"	4.00"	13.50"	11.75"	11.61"	11.42"	---	0.87"	¾"	8 / 12	30.09 lbs
										8 / 12	(13.65 Kgs)

7181 universal reducing flange adapter



The Model 7181 Universal Reducing Flange Adapter provides a rigid transition between a flanged piping system and a one or two-size reduced grooved system without the need of a concentric reducer. The flange drilling is compatible to ANSI 125/150, PN10/16, BS-10E and JIS 10K.

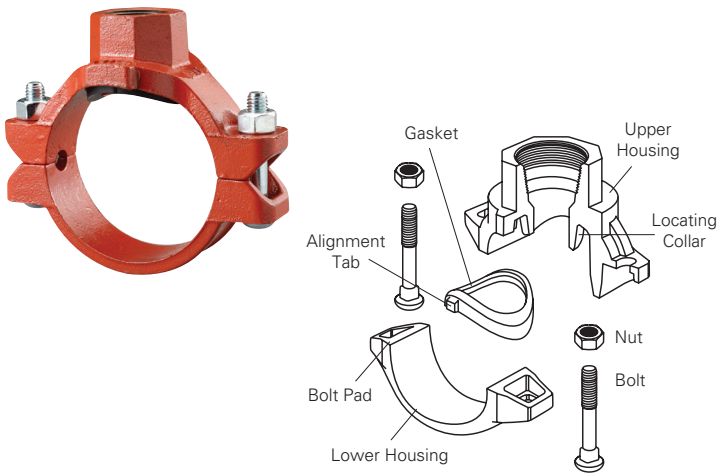
dimensions

nom. size	pipe O.D.	L	X	Z	Y: flange drilling			D	bolt		
					ANSI 125 / 150	PN 10 / 16	JIS 10K		dia.	no.	weight
3 x 2"	3.500 x 2.375"	2.95"	8.19"	0.63"	8.00"	6.30"	5.90"	2.000"	5/8"	8	5.95 lbs
80 x 50	(88.9 x 60.3 mm)	(75.0 mm)	(208.0 mm)	(16.0 mm)	(152 mm)	(160 mm)	(150 mm)	(60.3 mm)	(M16 mm)		(2.70 Kgs)
4 x 2½"	4.500 x 2.875"	3.00"	8.88"	0.63"	7.52"	7.09"	6.89"	2.875"	5/8"	8	8.80 lbs
100 x 65	(114.3 x 73.0 mm)	(76.0 mm)	(225.5 mm)	(16.0 mm)	(191 mm)	(180 mm)	(175 mm)	(73.0 mm)	(M16 mm)		(4.00 Kgs)
100 x 76.1 mm	4.500 x 3.000"	3.00"	8.88"	0.63"	7.52"	7.09"	6.89"	3.000"	5/8"	8	8.80 lbs
	(114.3 x 76.1 mm)	(76.0 mm)	(225.5 mm)	(16.0 mm)	(191 mm)	(180 mm)	(175 mm)	(76.1 mm)	(M16 mm)		(4.00 Kgs)
4 x 3"	4.500 x 3.500"	2.95"	8.88"	0.63"	7.50"	7.09"	6.89"	3.000"	5/8"	8	7.61 lbs
100 x 80	(114.3 x 88.9 mm)	(75.0 mm)	(225.5 mm)	(16.0 mm)	(191 mm)	(180 mm)	(175 mm)	(88.9 mm)	(M16 mm)		(3.45 Kgs)
6 x 4"	6.625 x 4.500"	2.95"	11.46"	0.95"	9.50"	9.45"	9.45"	4.000"	¾"	8	15.61 lbs
150 x 100	(168.3 x 114.3 mm)	(75.0 mm)	(291.0 mm)	(24.0 mm)	(241 mm)	(240 mm)	(240 mm)	(114.3 mm)	(M20 mm)		(7.08 Kgs)

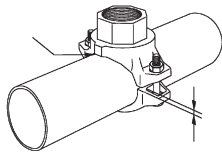
mechanical tees

Shurjoint mechanical tees provide a fast and easy mid-point branch outlet, eliminating the need for welding or the use of multiple fittings.

The Model M21 features a female threaded outlet and M22 features a grooved end outlet. Model 7721 (female threaded outlet) and 7722 (grooved end outlet) are available in 8" sizes. The Model 723 Saddle-let features a compact-design for making direct connections to sprinkler heads, drop nipples and or gauges.



When bolts are tightened with a proper torque, the outlet housing makes metal to metal contact with the outer surface of the pipe.

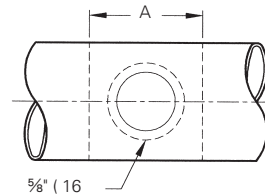


It is normal to see bolt pad gaps, though they should be equal on both sides of the mechanical tee.

caution: The hole must be cleanly cut using the correct size hole-saw and shall have a smooth edge. Never use a torch for cutting a hole.

hole-cutting

The hole-cut method of pipe preparation is required when using mechanical tees, mechanical crosses, and saddle-lets. The method of pipe preparation requires the cutting or drilling of a specified hole size on the centerline of the pipe.



Always use the correct hole saw size as shown in each data chart and never use a torch for cutting a hole. After the hole has been cut all rough edges must be removed and the area within $\frac{5}{8}$ " (16 mm) of the hole should be inspected to ensure a clean smooth surface, free of any indentations or projections that could affect proper gasket sealing. The area within the "A" dimension should also be inspected and must be free of dirt, scale or any imperfection that could affect proper seating or assembly of the fitting.

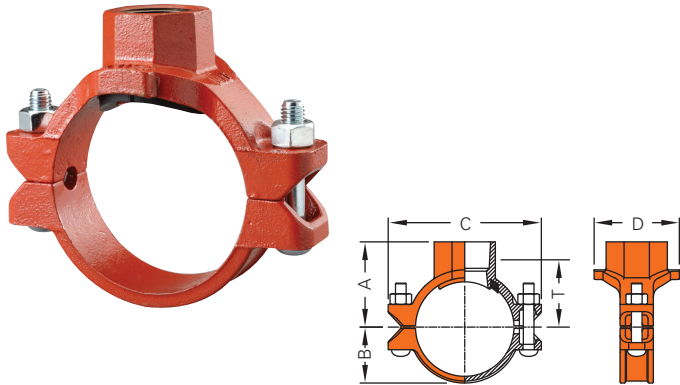
hole size

The hole sizes are dictated by the branch size of the mechanical tee. Refer to product data chart.



ridgid model no. hc-300
hole cutting tool

7721 mechanical tee female threaded outlet



The Model 7721 & M21 Mechanical Tees provide a fast and easy mid-pipe threaded branch outlet. The 7721 & M21 eliminate the need for welding or multiple fittings. The mechanical tee utilizes ductile iron housings, a grade E moulded gasket and heat-treated carbon steel track bolts and nuts. UL/FM working pressure of Model 7721 rated to 300 psi (20 Bar).

dimensions

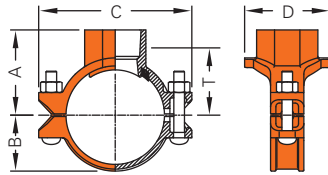
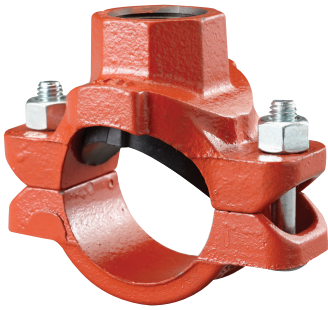
nom. size run x branch	max. working pressure (CWP)*	hole dia. † +3.2, -0 / +0.13, -0	dimensions					bolt size	weight
			T‡	A	B	C	D		
2" x ½"	300 psi (20 bar)	1.50" (38 mm)	1.97" (50 mm)	2.50" (64 mm)	1.57" (40 mm)	5.04" (128 mm)	2.87" (73 mm)	¾ x 2⅝"	2.4 lbs (1.1 Kgs)
50 x 15								(M10 x 55 mm)	
2" x ¾"	300 psi (20 bar)	1.50" (38 mm)	1.97" (50 mm)	2.50" (64 mm)	1.57" (40 mm)	5.04" (128 mm)	2.87" (73 mm)	¾ x 2⅝"	2.4 lbs (1.1 Kgs)
50 x 20								(M10 x 55 mm)	
2" x 1"	300 psi (20 bar)	1.50" (38 mm)	2.00" (51 mm)	2.68" (68 mm)	1.57" (40 mm)	5.04" (128 mm)	2.87" (73 mm)	¾ x 2⅝"	2.6 lbs (1.2 Kgs)
50 x 25								(M10 x 55 mm)	
2" x 1¼"	300 psi (20 bar)	1.75" (45 mm)	2.08" (53 mm)	2.80" (71 mm)	1.57" (40 mm)	5.04" (128 mm)	3.22" (82 mm)	¾ x 2⅝"	2.9 lbs (1.3 Kgs)
50 x 32								(M10 x 55 mm)	
2" x 1½"	300 psi (20 bar)	1.75" (45 mm)	2.08" (53 mm)	2.80" (71 mm)	1.57" (40 mm)	5.04" (128 mm)	3.22" (82 mm)	¾ x 2⅝"	2.9 lbs (1.3 Kgs)
50 x 40								(M10 x 55 mm)	
2½" x ½"	300 psi (20 bar)	1.50" (38 mm)	2.25" (57 mm)	2.80" (71 mm)	1.89" (48 mm)	5.75" (146 mm)	2.87" (73 mm)	½ x 3"	3.1 lbs (1.4 Kgs)
50 x 15								(M12 x 75 mm)	
2½" x ¾"	300 psi (20 bar)	1.50" (38 mm)	2.32" (59 mm)	2.88" (73 mm)	1.89" (48 mm)	5.75" (146 mm)	2.87" (73 mm)	½ x 3"	3.1 lbs (1.4 Kgs)
65 x 20								(M12 x 75 mm)	
2½" x 1"	300 psi (20 bar)	1.50" (38 mm)	2.28" (58 mm)	2.95" (75 mm)	1.89" (48 mm)	5.75" (146 mm)	2.87" (73 mm)	½ x 3"	3.3 lbs (1.5 Kgs)
65 x 25								(M12 x 75 mm)	
2½" x 1¼"	300 psi (20 bar)	2.00" (51 mm)	2.40" (61 mm)	3.11" (79 mm)	1.89" (48 mm)	5.75" (146 mm)	3.22" (82 mm)	½ x 3"	3.5 lbs (1.6 Kgs)
65 x 32								(M12 x 75 mm)	
2½" x 1½"	300 psi (20 bar)	2.00" (51 mm)	2.40" (61 mm)	3.11" (79 mm)	1.89" (48 mm)	5.75" (146 mm)	3.22" (82 mm)	½ x 3"	3.5 lbs (1.6 Kgs)
65 x 40								(M12 x 75 mm)	
3" x ½"	300 psi (20 bar)	1.50" (38 mm)	2.47" (63 mm)	3.19" (81 mm)	2.20" (56 mm)	6.39" (160 mm)	2.63" (67 mm)	½ x 3"	3.5 lbs (1.6 Kgs)
80 x 15								(M12 x 75 mm)	
3" x ¾"	300 psi (20 bar)	1.50" (38 mm)	2.44" (62 mm)	3.07" (78 mm)	2.09" (53 mm)	6.30" (160 mm)	2.76" (70 mm)	½ x 3"	3.5 lbs (1.6 Kgs)
80 x 20								(M12 x 75 mm)	
3" x 1"	300 psi (20 bar)	1.50" (38 mm)	2.50" (64 mm)	3.19" (81 mm)	2.20" (56 mm)	6.39" (160 mm)	2.63" (67 mm)	½ x 3"	3.7 lbs (1.7 Kgs)
80 x 25								(M12 x 75 mm)	
3" x 1¼"	300 psi (20 bar)	2.00" (51 mm)	2.80" (71 mm)	3.50" (89 mm)	2.20" (56 mm)	6.39" (160 mm)	3.46" (88 mm)	½ x 3"	4.2 lbs (1.9 Kgs)
80 x 32								(M12 x 75 mm)	
3" x 1½"	300 psi (20 bar)	2.00" (51 mm)	2.80" (71 mm)	3.50" (89 mm)	2.20" (56 mm)	6.39" (160 mm)	3.46" (88 mm)	½ x 3"	4.4 lbs (2.0 Kgs)
80 x 40								(M12 x 75 mm)	
3" x 2"	300 psi (20 bar)	2.50" (64 mm)	2.83" (72 mm)	3.58" (91 mm)	2.20" (56 mm)	6.39" (160 mm)	3.98" (101 mm)	½ x 3"	5.1 lbs (2.3 Kgs)
80 x 50								(M12 x 75 mm)	

graph continues on to next page

nom. size run x branch	max. working pressure (CWP)*	hole dia. † +3.2, -0 / +0.13, -0	dimensions					bolt size	weight
			T‡	A	B	C	D		
4" x ½"	300 psi	1.50"	3.00"	3.70"	2.83"	7.48"	2.63"	½ x 3"	4.2 lbs
100 x 15	(20 bar)	(38 mm)	(76 mm)	(94 mm)	(72 mm)	(190 mm)	(67 mm)	(M12 x 75 mm)	(1.9 Kgs)
4" x ¾"	300 psi	1.50"	2.95"	3.58"	2.68"	7.48"	2.91"	½ x 3"	4.2 lbs
100 x 20	(20 bar)	(38 mm)	(75 mm)	(91 mm)	(68 mm)	(190 mm)	(74 mm)	(M12 x 75 mm)	(1.9 Kgs)
4" x 1"	300 psi	1.50"	3.03"	3.70"	2.83"	7.48"	2.63"	½ x 3"	4.4 lbs
100 x 25	(20 bar)	(38 mm)	(77 mm)	(94 mm)	(72 mm)	(190 mm)	(67 mm)	(M12 x 75 mm)	(2.0 Kgs)
4" x 1¼"	300 psi	2.00"	3.19"	3.89"	2.83"	7.48"	3.35"	½ x 3"	4.8 lbs
100 x 32	(20 bar)	(51 mm)	(81 mm)	(99 mm)	(72 mm)	(190 mm)	(85 mm)	(M12 x 75 mm)	(2.2 Kgs)
4" x 1½"	300 psi	2.00"	3.19"	3.89"	2.83"	7.48"	3.35"	½ x 3"	5.1 lbs
100 x 40	(20 bar)	(51 mm)	(81 mm)	(99 mm)	(72 mm)	(190 mm)	(85 mm)	(M12 x 75 mm)	(2.3 Kgs)
4" x 2"	300 psi	2.50"	3.38"	4.13"	2.83"	7.48"	3.98"	½ x 3"	5.9 lbs
100 x 50	(20 bar)	(64 mm)	(86 mm)	(105 mm)	(72 mm)	(190 mm)	(101 mm)	(M12 x 75 mm)	(2.7 Kgs)
4" x 2½"	300 psi	2.75"	3.23"	4.37"	2.83"	7.48"	4.40"	½ x 3"	7.3 lbs
100 x 65	(20 bar)	(70 mm)	(82 mm)	(111 mm)	(72 mm)	(190 mm)	(112 mm)	(M12 x 75 mm)	(3.3 Kgs)
4" x 3"	300 psi	3.50"	3.23"	4.40"	2.83"	7.48"	5.35"	¾ x 3½"	12.3 lbs
100 x 80	(20 bar)	(89 mm)	(82 mm)	(112 mm)	(72 mm)	(190 mm)	(136 mm)	(M16 x 90 mm)	(5.6 Kgs)
5" x 2"	300 psi	2.50"	4.13"	4.88"	3.39"	9.29"	4.00"	¾ x 3½"	9.2 lbs
125 x 50	(20 bar)	(64 mm)	(105 mm)	(124 mm)	(86 mm)	(236 mm)	(102 mm)	(M16 x 90 mm)	(4.2 Kgs)
5" x 2½"	300 psi	2.75"	3.89"	5.00"	3.39"	9.29"	4.65"	¾ x 3½"	9.9 lbs
125 x 65	(20 bar)	(70 mm)	(99 mm)	(127 mm)	(86 mm)	(236 mm)	(118 mm)	(M16 x 90 mm)	(4.5 Kgs)
6" x 1½"	300 psi	2.00"	4.48"	4.96"	3.78"	10.24"	3.54"	¾ x 5½"	9.7 lbs
150 x 15	(20 bar)	(51 mm)	(114 mm)	(126 mm)	(96 mm)	(260 mm)	(90 mm)	(M16 x 135 mm)	(4.4 Kgs)
6" x 1"	300 psi	2.00"	4.33"	5.00"	3.86"	10.07"	3.50"	¾ x 5½"	9.7 lbs
150 x 25	(20 bar)	(51 mm)	(110 mm)	(127 mm)	(98 mm)	(256 mm)	(89 mm)	(M16 x 135 mm)	(4.4 Kgs)
6" x 1¼"	300 psi	2.00"	4.29"	5.00"	3.86"	10.07"	3.66"	¾ x 5½"	9.7 lbs
150 x 32	(20 bar)	(51 mm)	(109 mm)	(127 mm)	(98 mm)	(256 mm)	(93 mm)	(M16 x 135 mm)	(4.4 Kgs)
6" x 1½"	300 psi	2.00"	4.29"	5.00"	3.86"	10.07"	3.66"	¾ x 5½"	9.7 lbs
150 x 40	(20 bar)	(51 mm)	(109 mm)	(127 mm)	(98 mm)	(256 mm)	(93 mm)	(M16 x 135 mm)	(4.4 Kgs)
6" x 2"	300 psi	2.50"	4.45"	5.29"	3.86"	10.07"	3.98"	¾ x 5½"	10.6 lbs
150 x 50	(20 bar)	(64 mm)	(113 mm)	(132 mm)	(98 mm)	(256 mm)	(101 mm)	(M16 x 135 mm)	(4.8 Kgs)
6" x 2½"	300 psi	2.75"	4.37"	5.50"	3.86"	10.07"	4.65"	¾ x 5½"	11.9 lbs
150 x 65	(20 bar)	(70 mm)	(111 mm)	(140 mm)	(98 mm)	(256 mm)	(118 mm)	(M16 x 135 mm)	(5.4 Kgs)
6" x 3"	300 psi	3.50"	4.33"	5.50"	3.86"	10.07"	5.39"	¾ x 5½"	13.2 lbs
150 x 80	(20 bar)	(89 mm)	(110 mm)	(140 mm)	(98 mm)	(256 mm)	(137 mm)	(M16 x 135 mm)	(6.0 Kgs)
6" x 4"	300 psi	4.50"	4.21"	5.50"	3.86"	10.07"	6.46"	¾ x 5½"	14.5 lbs
150 x 100	(20 bar)	(114 mm)	(107 mm)	(140 mm)	(98 mm)	(256 mm)	(164 mm)	(M16 x 135 mm)	(6.6 Kgs)
8" x ½"	300 psi	2.75"	5.31"	5.82"	4.72"	12.87"	4.40"	¾ x 4¾"	12.5 lbs
200 x 15	(20 bar)	(70 mm)	(135 mm)	(148 mm)	(120 mm)	(327 mm)	(112 mm)	(M20 x 120 mm)	(5.7 Kgs)
8" x 1"	300 psi	2.75"	5.31"	5.98"	4.72"	12.87"	4.40"	¾ x 4¾"	12.5 lbs
200 x 25	(20 bar)	(70 mm)	(135 mm)	(152 mm)	(120 mm)	(327 mm)	(112 mm)	(M20 x 120 mm)	(5.7 Kgs)
8" x 1¼"	300 psi	2.75"	5.31"	5.98"	4.72"	12.87"	3.98"	¾ x 4¾"	12.5 lbs
200 x 32	(20 bar)	(70 mm)	(135 mm)	(152 mm)	(120 mm)	(327 mm)	(101 mm)	(M20 x 120 mm)	(5.7 Kgs)
8" x 1½"	300 psi	2.75"	5.31"	5.98"	4.72"	12.87"	3.98"	¾ x 4¾"	12.5 lbs
200 x 40	(20 bar)	(70 mm)	(135 mm)	(152 mm)	(120 mm)	(327 mm)	(101 mm)	(M20 x 120 mm)	(5.7 Kgs)
8" x 2"	300 psi	2.75"	5.31"	6.54"	4.72"	12.87"	3.98"	¾ x 4¾"	13.6 lbs
200 x 50	(20 bar)	(70 mm)	(135 mm)	(166 mm)	(120 mm)	(327 mm)	(101 mm)	(M20 x 120 mm)	(6.2 Kgs)
8" x 2½"	300 psi	2.75"	5.39"	6.54"	4.72"	12.87"	4.09"	¾ x 4¾"	13.9 lbs
200 x 65	(20 bar)	(70 mm)	(137 mm)	(166 mm)	(120 mm)	(327 mm)	(104 mm)	(M20 x 120 mm)	(6.3 Kgs)
8" x 3"	300 psi	3.50"	5.35"	6.54"	4.72"	12.87"	5.04"	¾ x 4¾"	15.6 lbs
200 x 80	(20 bar)	(89 mm)	(136 mm)	(166 mm)	(120 mm)	(327 mm)	(128 mm)	(M20 x 120 mm)	(7.1 Kgs)
8" x 4"	300 psi	4.50"	5.24"	6.54"	4.72"	12.87"	6.46"	¾ x 4¾"	17.6 lbs
200 x 100	(20 bar)	(114 mm)	(133 mm)	(166 mm)	(120 mm)	(327 mm)	(164 mm)	M20 x 120	(8.0 Kgs)

† Hole diameters listed are suggested hole diameters.
‡ T: Take-Out (Center of run to end of pipe to be engaged.)
* Working pressure is based on standard wall carbon steel pipe.

M21 mechanical tee female threaded outlet



Threads are NPT per ANSI B1.20.1 or BSPT per ISO 7. UL/FM working pressure is 300 psi (20 Bar).

dimensions

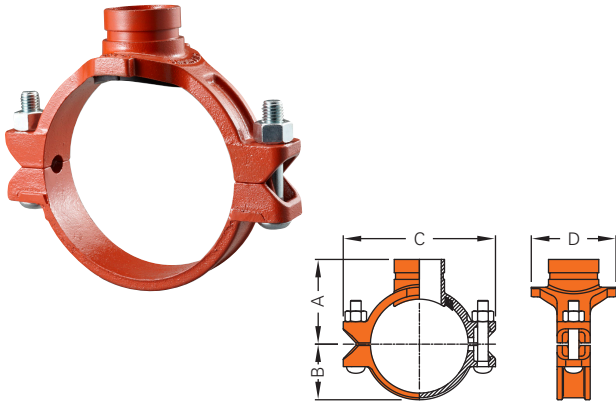
nom. size run x branch	pipe O.D.	max. working pressure (CWP)**	hole dia. T +3.2, -0 / +0.13, -0	dimensions					bolt size	weight
				T‡	A	B	C	D		
2 x ½"	2.375 x 0.840"	300 psi	1.50"	1.97"	2.50"	1.50"	4.56"	3.19"	¾ x 2½"	2.18 lbs
50 x 15	(60.3 x 21.3 mm)	(20 bar)	(38 mm)	(50 mm)	(63.5 mm)	(38.1 mm)	(115.9 mm)	(81 mm)	(M10 x 55 mm)	(0.99 Kgs)
2 x ¾"	2.375 x 1.050"	300 psi	1.50"	1.97"	2.50"	1.50"	4.56"	3.19"	¾ x 2½"	2.22 lbs
50 x 20	(60.3 x 26.7 mm)	(20 bar)	(38 mm)	(50 mm)	(63.5 mm)	(38.1 mm)	(115.9 mm)	(81 mm)	(M10 x 55 mm)	(1.01 Kgs)
2 x 1"	2.375 x 1.315"	300 psi	1.50"	1.85"	2.50"	1.50"	4.56"	3.19"	¾ x 2½"	2.40 lbs
50 x 25	(60.3 x 33.4 mm)	(20 bar)	(38 mm)	(47 mm)	(63.5 mm)	(38.1 mm)	(115.9 mm)	(81 mm)	(M10 x 55 mm)	(1.09 Kgs)
2 x 1¼"	2.375 x 1.660"	300 psi	[1.75]"	2.05"	2.87"	1.50"	4.56"	3.19"	¾ x 2½"	2.77 lbs
50 x 32	(60.3 x 42.2 mm)	(20 bar)	[45 mm]	(52 mm)	(73.0 mm)	(38.1 mm)	(115.9 mm)	(81 mm)	(M10 x 55 mm)	(1.26 Kgs)
2 x 1½"	2.375 x 1.900"	300 psi	[1.75]"	2.08"	3.00"	1.50"	4.56"	3.19"	¾ x 2½"	3.01 lbs
50 x 40	(60.3 x 48.3 mm)	(20 bar)	[45 mm]	(52 mm)	(76.2 mm)	(38.1 mm)	(115.9 mm)	(81 mm)	(M10 x 55 mm)	(1.37 Kgs)
2½ x ½"	2.875 x 0.840"	300 psi	1.50"	2.20"	2.75"	1.75"	5.56"	3.19"	½ x 2½"	2.60 lbs
65 x 15	(73.0 x 21.3 mm)	(20 bar)	(38 mm)	(56 mm)	(69.9 mm)	(44.5 mm)	(141.3 mm)	(81 mm)	(M12 x 60 mm)	(1.20 Kgs)
2½ x ¾"	2.875 x 1.050"	300 psi	1.50"	2.20"	2.75"	1.75"	5.56"	3.19"	½ x 2½"	2.70 lbs
65 x 20	(73.0 x 26.7 mm)	(20 bar)	(38 mm)	(56 mm)	(69.9 mm)	(44.5 mm)	(141.3 mm)	(81 mm)	(M12 x 60 mm)	(1.20 Kgs)
2½ x 1"	2.875 x 1.315"	300 psi	1.50"	2.09"	2.75"	1.75"	5.56"	3.19"	½ x 2½"	2.86 lbs
65 x 25	(73.0 x 33.4 mm)	(20 bar)	(38 mm)	(53 mm)	(69.9 mm)	(44.5 mm)	(141.3 mm)	(81 mm)	(M12 x 60 mm)	(1.30 Kgs)
2½ x 1¼"	2.875 x 1.660"	300 psi	2.00"	2.28"	3.00"	1.75"	5.56"	3.70"	½ x 2½"	3.21 lbs
65 x 32	(73.0 x 42.2 mm)	(20 bar)	(51 mm)	(58 mm)	(76.2 mm)	(44.5 mm)	(141.3 mm)	(94 mm)	(M12 x 60 mm)	(1.46 Kgs)
2½ x 1½"	2.875 x 1.900"	300 psi	2.00"	2.28"	3.00"	1.75"	5.56"	3.70"	½ x 2½"	3.43 lbs
65 x 40	(73.0 x 48.3 mm)	(20 bar)	(51 mm)	(58 mm)	(76.2 mm)	(44.5 mm)	(141.3 mm)	(94 mm)	(M12 x 60 mm)	(1.56 Kgs)
76.1 mm x 15	3.000 x 0.840"	300 psi	1.50"	2.20"	2.75"	1.81"	5.56"	3.19"	½ x 2½"	2.64 lbs
	(76.1 x 21.3 mm)	(20 bar)	(38 mm)	(56 mm)	(69.9 mm)	(46.1 mm)	(141.3 mm)	(81 mm)	(M12 x 60 mm)	(1.20 Kgs)
76.1 mm x 20	3.000 x 1.050"	300 psi	1.50"	2.20"	2.75"	1.81"	5.56"	3.19"	½ x 2½"	2.64 lbs
	(76.1 x 26.7 mm)	(20 bar)	(38 mm)	(56 mm)	(69.9 mm)	(46.1 mm)	(141.3 mm)	(81 mm)	(M12 x 60 mm)	(1.20 Kgs)
76.1 mm x 25	3.000 x 1.315"	300 psi	1.50"	2.09"	2.75"	1.81"	5.56"	3.19"	½ x 2½"	2.86 lbs
	(76.1 x 33.4 mm)	(20 bar)	(38 mm)	(53 mm)	(69.9 mm)	(46.1 mm)	(141.3 mm)	(81 mm)	(M12 x 60 mm)	(1.30 Kgs)
76.1 mm x 32	3.000 x 1.660"	300 psi	2.00"	2.28"	3.00"	1.81"	5.56"	3.70"	½ x 2½"	3.21 lbs
	(76.1 x 42.2 mm)	(20 bar)	(51 mm)	(58 mm)	(76.2 mm)	(46.1 mm)	(141.3 mm)	(94 mm)	(M12 x 60 mm)	(1.46 Kgs)
76.1 mm x 40	3.000 x 1.900"	300 psi	2.00"	2.28"	3.00"	1.81"	5.56"	3.70"	½ x 2½"	3.43 lbs
	(76.1 x 48.3 mm)	(20 bar)	(51 mm)	(58 mm)	(76.2 mm)	(46.1 mm)	(141.3 mm)	(94 mm)	(M12 x 60 mm)	(1.56 Kgs)
3 x ½"	3.500 x 0.840"	300 psi	1.50"	2.36"	3.06"	2.09"	6.19"	3.19"	½ x 3"	3.17 lbs
	(88.9 x 21.3 mm)	(20 bar)	(38 mm)	(60 mm)	(77.8 mm)	(53.2 mm)	(157.2 mm)	(81 mm)	(M12 x 75 mm)	(1.44 Kgs)
3 x ¾"	3.500 x 1.050"	300 psi	1.50"	2.32"	3.06"	2.09"	6.19"	3.19"	½ x 3"	3.21 lbs
	(88.9 x 26.7 mm)	(20 bar)	(38 mm)	(59 mm)	(77.8 mm)	(53.2 mm)	(157.2 mm)	(81 mm)	(M12 x 75 mm)	(1.46 Kgs)
3 x 1"	3.500 x 1.315"	300 psi	1.50"	2.40"	3.06"	2.09"	6.19"	3.19"	½ x 3"	3.37 lbs
	(88.9 x 33.4 mm)	(20 bar)	(38 mm)	(61 mm)	(77.8 mm)	(53.2 mm)	(157.2 mm)	(81 mm)	(M12 x 75 mm)	(1.53 Kgs)
3 x 1¼"	3.500 x 1.660"	300 psi	2.00"	2.56"	3.25"	2.09"	6.19"	3.70"	½ x 3"	3.98 lbs
	(88.9 x 42.2 mm)	(20 bar)	(51 mm)	(65 mm)	(82.6 mm)	(53.2 mm)	(157.2 mm)	(94 mm)	(M12 x 75 mm)	(1.81 Kgs)

graph continues on to next page

nom. size run x branch	pipe O.D.	max. working pressure (CWP)**	hole dia. † +3.2, -0 / +0.13, -0	dimensions					bolt size	weight
				T‡	A	B	C	D		
3 x 1½"	3.500 x 1.900"	300 psi	2.00"	2.80"	3.50"	2.09"	6.19"	3.70"	½ x 3"	4.14 lbs
80 x 40	(88.9 x 48.3 mm)	(20 bar)	(51 mm)	(71 mm)	(88.9 mm)	(53.2 mm)	(157.2 mm)	(94 mm)	(M12 x 75 mm)	(1.88 Kgs)
3 x 2"	3.500 x 2.375"	300 psi	2.50"	2.76"	3.50"	2.09"	6.19"	4.25"	½ x 3"	4.55 lbs
80 x 50	(88.9 x 60.3 mm)	(20 bar)	(64 mm)	(70 mm)	(88.9 mm)	(53.2 mm)	(157.2 mm)	(108 mm)	(M12 x 75 mm)	(2.07 Kgs)
4 x ½"	3.500 x 0.840"	300 psi	1.50"	2.83"	3.69"	2.63"	6.19"	3.13"	½ x 3"	3.59 lbs
100 x 15	(114.3 x 21.3 mm)	(20 bar)	(38 mm)	(72 mm)	(93.7 mm)	(66.7 mm)	(157.2 mm)	(79.4 mm)	(M12 x 75 mm)	(1.63 Kgs)
4 x ¾"	4.500 x 1.050"	300 psi	1.50"	2.79"	3.69"	2.63"	7.19"	3.13"	½ x 3"	3.61 lbs
100 x 20	(114.3 x 26.7 mm)	(20 bar)	(38 mm)	(71 mm)	(93.7 mm)	(66.7 mm)	(182.6 mm)	(79.4 mm)	(M12 x 75 mm)	(1.64 Kgs)
4 x 1"	4.500 x 1.315"	300 psi	1.50"	2.87"	3.69"	2.63"	7.19"	3.13"	½ x 3"	3.74 lbs
100 x 25	(114.3 x 33.4 mm)	(20 bar)	(38 mm)	(73 mm)	(93.7 mm)	(66.7 mm)	(182.6 mm)	(79.4 mm)	(M12 x 75 mm)	(1.70 Kgs)
4 x 1¼"	4.500 x 1.660"	300 psi	2.00"	3.07"	3.63"	2.63"	7.19"	4.00"	½ x 3"	4.18 lbs
100 x 32	(114.3 x 42.2 mm)	(20 bar)	(51 mm)	(78 mm)	(92.1 mm)	(66.7 mm)	(182.6 mm)	(101.6 mm)	(M12 x 75 mm)	(1.90 Kgs)
4 x 1½"	4.500 x 1.900"	300 psi	2.00"	3.31"	3.63"	2.63"	7.19"	4.00"	½ x 3"	4.49 lbs
100 x 40	(114.3 x 48.3 mm)	(20 bar)	(51 mm)	(84 mm)	(92.1 mm)	(66.7 mm)	(182.6 mm)	(101.6 mm)	(M12 x 75 mm)	(2.04 Kgs)
4 x 2"	4.500 x 2.375"	300 psi	2.50"	3.27"	4.00"	2.63"	7.19"	4.00"	½ x 3"	5.00 lbs
100 x 50	(114.3 x 60.3 mm)	(20 bar)	(64 mm)	(83 mm)	(101.6 mm)	(66.7 mm)	(182.6 mm)	(101.6 mm)	(M12 x 75 mm)	(2.27 Kgs)
4 x 2½"	4.500 x 2.875"	300 psi	2.75"	2.87"	4.00"	2.63"	7.19"	4.44"	½ x 3"	5.43 lbs
100 x 65	(114.3 x 73.0 mm)	(20 bar)	(70 mm)	(73 mm)	(101.6 mm)	(66.7 mm)	(182.6 mm)	(112.7 mm)	(M12 x 75 mm)	(2.47 Kgs)
100 x 76.1 mm	4.500 x 3.000"	300 psi	2.75"	2.87"	4.00"	2.63"	7.19"	4.44"	½ x 3"	5.65 lbs
	(114.3 x 76.1 mm)	(20 bar)	(70 mm)	(73 mm)	(101.6 mm)	(66.7 mm)	(182.6 mm)	(112.7 mm)	(M12 x 75 mm)	(2.57 Kgs)
4 x 3"	4.500 x 3.500"	300 psi	3.50"	3.31"	4.13"	2.63"	7.19"	5.06"	½ x 3"	6.41
100 x 80	(114.3 x 88.9 mm)	(20 bar)	(89 mm)	(84 mm)	(104.8 mm)	(66.7 mm)	(182.6 mm)	(128.6 mm)	(M12 x 75 mm)	(2.91 Kgs)
139.7 mm x 50	5.500 x 2.375"	300 psi	2.50"	3.27"	4.75"	3.19"	8.81"	4.19"	¾ x 3½"	6.38
	(139.7 x 60.3 mm)	(20 bar)	(64 mm)	(83 mm)	(120.7 mm)	(81.0 mm)	(223.8 mm)	(106.4 mm)	(M16 x 90 mm)	(2.90 Kgs)
139.7 mm x 76.1 mm	5.500 x 3.000"	300 psi	2.75"	3.67"	4.75"	3.19"	8.81"	4.57"	¾ x 3½"	7.40 lbs
	(139.7 x 76.1 mm)	(20 bar)	(70 mm)	(93 mm)	(120.2 mm)	(81.0 mm)	(223.8 mm)	(115.9 mm)	(M16 x 90 mm)	(3.40 Kgs)
139.7 mm x 80	5.500 x 3.500"	300 psi	3.50"	3.82"	4.75"	3.19"	8.81"	5.19"	¾ x 3½"	8.41 lbs
	(139.7 x 88.9 mm)	(20 bar)	(89 mm)	(97 mm)	(120.7 mm)	(81.0 mm)	(223.8 mm)	(131.8 mm)	(M16 x 90 mm)	(3.82 Kgs)
5 x 2"	5.563 x 2.375"	300 psi	2.50"	3.27"	4.75"	3.19"	8.81"	4.19"	¾ x 3"	6.38 lbs
125 x 50	(141.3 x 60.3 mm)	(20 bar)	(64 mm)	(83 mm)	(120.7 mm)	(81.0 mm)	(223.8 mm)	(106.4 mm)	(M16 x 90 mm)	(2.90 Kgs)
5 x 2½"	5.563 x 2.875"	300 psi	2.75"	3.67"	4.75"	3.19"	8.81"	4.44"	¾ x 3½"	7.46 lbs
125 x 65	(141.3 x 73.0 mm)	(20 bar)	(70 mm)	(93 mm)	(120.7 mm)	(81.0 mm)	(223.8 mm)	(112.7 mm)	(M16 x 90 mm)	(3.39 Kgs)
5 x 3"	5.563 x 3.500"	300 psi	3.50"	3.82"	4.75"	3.19"	8.81"	5.19"	¾ x 3½"	8.40 lbs
125 x 80	(141.3 x 88.9 mm)	(20 bar)	(89 mm)	(97 mm)	(120.7 mm)	(81.0 mm)	(223.8 mm)	(131.8 mm)	(M16 x 90 mm)	(3.82 Kgs)
165.1 mm x 32	6.500 x 1.660"	300 psi	2.00"	4.41"	5.13"	3.72"	9.87"	3.63"	¾ x 3½"	5.57 lbs
	(165.1 x 42.2 mm)	(20 bar)	(51 mm)	(112 mm)	(130.2 mm)	(94.5 mm)	(250.8 mm)	(92.1 mm)	(M16 x 90 mm)	(2.53 Kgs)
165.1 mm x 40	6.500 x 1.900"	300 psi	2.00"	4.41"	5.13"	3.72"	9.87"	3.63"	¾ x 3½"	6.60 lbs
	(165.1 x 48.3 mm)	(20 bar)	(51 mm)	(112 mm)	(130.2 mm)	(94.5 mm)	(250.8 mm)	(92.1 mm)	(M16 x 90 mm)	(3.00 Kgs)
165.1 mm x 50	6.500 x 2.375"	300 psi	2.50"	4.37"	5.13"	3.72"	9.87"	4.19"	¾ x 3½"	6.97 lbs
	(165.1 x 60.3 mm)	(20 bar)	(64 mm)	(111 mm)	(130.2 mm)	(94.5 mm)	(250.8 mm)	(106.4 mm)	(M16 x 90 mm)	(3.17 Kgs)
165.1 mm x 76.1 mm	6.500 x 2.875"	300 psi	2.75"	3.98"	5.13"	3.72"	9.87"	4.56"	¾ x 3½"	8.25 lbs
	(165.1 x 76.1 mm)	(20 bar)	(70 mm)	(101 mm)	(130.2 mm)	(94.5 mm)	(250.8 mm)	(115.9 mm)	(M16 x 90 mm)	(3.75 Kgs)
165.1 mm x 80	6.500 x 3.500"	300 psi	3.50"	4.33"	5.50"	3.72"	9.87"	5.19"	¾ x 3½"	9.09 lbs
	(165.1 x 88.9 mm)	(20 bar)	(89 mm)	(110 mm)	(139.7 mm)	(94.5 mm)	(250.8 mm)	(131.8 mm)	(M16 x 90 mm)	(4.13 Kgs)
165.1 mm x 100	6.500 x 4.500"	300 psi	4.50"	4.45"	5.75"	3.72"	9.87"	6.25"	¾ x 3½"	10.50 lbs
	(165.1 x 114.3 mm)	(20 bar)	(114 mm)	(113 mm)	(146.1 mm)	(94.5 mm)	(250.8 mm)	(158.8 mm)	(M16 x 90 mm)	(4.77 Kgs)
6 x 1¼"	6.625 x 1.660"	300 psi	2.00"	4.41"	5.13"	3.72"	9.87"	3.63"	¾ x 3½"	6.41 lbs
150 x 32	(168.3 x 42.2 mm)	(20 bar)	(51 mm)	(112 mm)	(130.2 mm)	(94.5 mm)	(250.8 mm)	(92.1 mm)	(M16 x 90 mm)	(2.91 Kgs)
6 x 1½"	6.625 x 1.900"	300 psi	2.00"	4.41"	5.13"	3.72"	9.87"	3.63"	¾ x 3½"	6.58 lbs
150 x 40	(168.3 x 48.3 mm)	(20 bar)	(51 mm)	(112 mm)	(130.2 mm)	(94.5 mm)	(250.8 mm)	(92.1 mm)	(M16 x 90 mm)	(2.99 Kgs)
6 x 2"	6.625 x 2.375"	300 psi	2.50"	4.37"	5.13"	3.72"	9.87"	4.19"	¾ x 3½"	7.00 lbs
150 x 50	(168.3 x 60.3 mm)	(20 bar)	(64 mm)	(111 mm)	(130.2 mm)	(94.5 mm)	(250.8 mm)	(106.4 mm)	(M16 x 90 mm)	(3.18 Kgs)
6 x 2½"	6.625 x 2.875"	300 psi	2.75"	3.98"	5.13"	3.72"	9.87"	4.44"	¾ x 3½"	7.88 lbs
150 x 65	(168.3 x 73.0 mm)	(20 bar)	(70 mm)	(101 mm)	(130.2 mm)	(94.5 mm)	(250.8 mm)	(112.7 mm)	(M16 x 90 mm)	(3.58 Kgs)
6 x 3"	6.625 x 3.500"	300 psi	3.50"	4.33"	5.50"	3.72"	9.87"	5.19"	¾ x 3½"	9.02 lbs
150 x 80	(168.3 x 88.9 mm)	(20 bar)	(89 mm)	(110 mm)	(139.7 mm)	(94.5 mm)	(250.8 mm)	(131.8 mm)	(M16 x 90 mm)	(4.10 Kgs)
6 x 4"	6.625 x 4.500"	300 psi	4.50"	4.45"	5.75"	3.72"	9.87"	6.25"	¾ x 3½"	10.47 lbs
150 x 100	(168.3 x 114.3 mm)	(20 bar)	(114 mm)	(113 mm)	(146.1 m)	(94.5 mm)	(250.8 mm)	(158.8 mm)	(M16 x 90 mm)	(4.76 Kgs)

† Hole diameters listed are suggested hole diameters.
‡ T: Take-Out (Center of run to end of pipe to be engaged.)
[] Important: Make special note of the hole saw size and maximum diameter allowed on these sizes, deviation could lead to joint failure.
*Non-standard/stock items may require longer lead time.
**Working pressure is based on standard wall carbon steel pipe.

7722 mechanical tee grooved-end outlet



The Model 7722 Mechanical Tee provides a fast and easy mid-pipe threaded branch outlet. The mechanical tee utilizes ductile iron housings, a grade E gasket and heat-treated carbon steel track bolts and nuts. Housings are painted orange or red, or as an option can be supplied hot dipped zinc galvanized or epoxy coated. Maximum working pressure: 300 psi (20 Bar). Gaskets are interchangeable between Models 7721 & 7722.

dimensions

nom. size run x branch	pipe O.D.	max. working pressure (CWP)**	hole dia. † +0.13, -0 / +3.2, -0	dimensions				bolt size	weight
				A	B	C	D		
*2 x 1"	2.375 x 1.315"	300 psi	1.50"	2.68"	1.57"	5.04"	2.87"	¾ x 2½"	2.2 lbs
50 x 25	(60.3 x 33.4 mm)	(20 bar)	(38 mm)	(68 mm)	(40 mm)	(128 mm)	(73 mm)	(M10 x 55 mm)	(1.0 Kgs)
2 x 1¼"	2.375 x 1.660"	300 psi	1.75"	2.80"	1.57"	5.04"	3.22"	¾ x 2½"	2.2 lbs
50 x 32	(60.3 x 42.2 mm)	(20 bar)	(45 mm)	(71 mm)	(40 mm)	(128 mm)	(82 mm)	(M10 x 55 mm)	(1.0 Kgs)
2 x 1½"	2.375 x 1.900"	300 psi	1.75"	2.80"	1.57"	5.04"	3.22"	¾ x 2½"	2.6 lbs
50 x 40	(60.3 x 48.3 mm)	(20 bar)	(45 mm)	(71 mm)	(40 mm)	(128 mm)	(82 mm)	(M10 x 55 mm)	(1.2 Kgs)
*2½ x 1"	2.875/3.000 x 1.315"	300 psi	1.50"	2.95"	1.89"	5.75"	2.87"	½ x 3"	4.0 lbs
65 x 25	(73.0/76.1 x 33.4 mm)	(20 bar)	(38 mm)	(75 mm)	(48 mm)	(146 mm)	(73 mm)	(M12 x 75 mm)	(1.8 Kgs)
2½ x 1¼"	2.875/3.000 x 1.660"	300 psi	2.00"	3.11"	1.89"	5.75"	3.22"	½ x 3"	3.7 lbs
65 x 32	(73.0/76.1 x 42.2 mm)	(20 bar)	(51 mm)	(79 mm)	(48 mm)	(146 mm)	(82 mm)	(M12 x 75 mm)	(1.7 Kgs)
2½ x 1½"	2.875/3.000 x 1.900"	300 psi	2.00"	3.11"	1.89"	5.75"	3.22"	½ x 3"	4.2 lbs
65 x 40	(73.0/76.1 x 48.3 mm)	(20 bar)	(51 mm)	(79 mm)	(48 mm)	(146 mm)	(82 mm)	(M12 x 75 mm)	(1.9 Kgs)
3 x 1"	3.500 x 1.315"	300 psi	1.50"	3.30"	2.20"	6.30"	2.91"	½ x 3"	3.7 lbs
80 x 25	(88.9 x 33.4 mm)	(20 bar)	(38 mm)	(84 mm)	(56 mm)	(160 mm)	(74 mm)	(M12 x 75 mm)	(1.7 Kgs)
3 x 1¼"	3.500 x 1.660"	300 psi	2.00"	3.50"	2.20"	6.30"	3.46"	½ x 3"	4.0 lbs
80 x 32	(88.9 x 42.2 mm)	(20 bar)	(51 mm)	(89 mm)	(56 mm)	(160 mm)	(88 mm)	(M12 x 75 mm)	(1.8 Kgs)
3 x 1½"	3.500 x 1.900"	300 psi	2.00"	3.50"	2.20"	6.30"	3.46"	½ x 3"	4.2 lbs
80 x 40	(88.9 x 48.3 mm)	(20 bar)	(51 mm)	(89 mm)	(56 mm)	(160 mm)	(88 mm)	(M12 x 75 mm)	(1.9 Kgs)
3 x 2"	3.500 x 2.375"	300 psi	2.50"	3.58"	2.20"	6.30"	3.98"	½ x 3"	4.8 kbs
80 x 50	(88.9 x 60.3 mm)	(20 bar)	(64 mm)	(91 mm)	(56 mm)	(160 mm)	(101 mm)	(M12 x 75 mm)	(2.2 Kgs)
4 x 1"	4.500 x 1.315"	300 psi	1.50"	3.89"	2.83"	7.48"	2.63"	½ x 3"	4.4 lbs
100 x 25	(114.3 x 33.4 mm)	(20 bar)	(38 mm)	(94 mm)	(72 mm)	(190 mm)	(67 mm)	(M12 x 75 mm)	(2.0 Kgs)
4 x 1¼"	4.500 x 1.660"	300 psi	2.00"	3.89"	2.83"	7.48"	3.35"	½ x 3"	4.6 lbs
100 x 32	(114.3 x 42.2 mm)	(20 bar)	(51 mm)	(99 mm)	(72 mm)	(190 mm)	(85 mm)	(M12 x 75 mm)	(2.1 Kgs)
4 x 1½"	4.500 x 1.900"	300 psi	2.00"	3.89"	2.83"	7.48"	3.35"	½ x 3"	4.8 lbs
100 x 40	(114.3 x 48.3 mm)	(20 bar)	(51 mm)	(99 mm)	(72 mm)	(190 mm)	(85 mm)	(M12 x 75 mm)	(2.2 Kgs)
4 x 2"	4.500 x 2.375"	300 psi	2.50"	4.13"	2.83"	7.48"	3.98"	½ x 3"	5.9 lbs
100 x 50	(114.3 x 60.3 mm)	(20 bar)	(64 mm)	(105 mm)	(72 mm)	(190 mm)	(101 mm)	(M12 x 75 mm)	(2.7 Kgs)
4 x 2½"	4.500 x 2.875"	300 psi	2.75"	4.37"	2.83"	7.48"	4.40"	½ x 3"	6.6 lbs
100 x 65	(114.3 x 73.0 mm)	(20 bar)	(70 mm)	(111 mm)	(72 mm)	(190 mm)	(112 mm)	(M12 x 75 mm)	(3.0 Kgs)

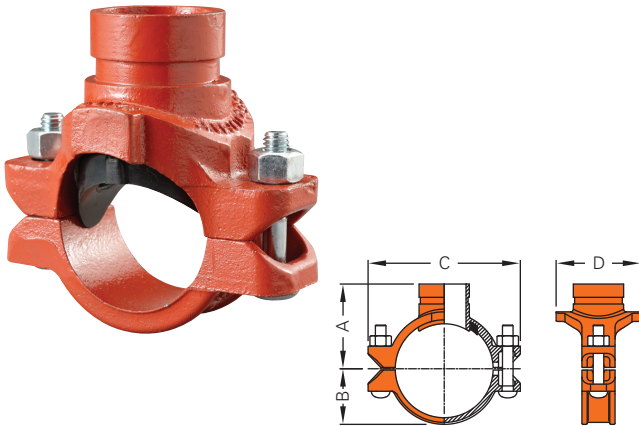
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nom. size run x branch	pipe O.D.	max. working pressure (CWP)**	hole dia. † +0.13, -0 / +3.2, -0	dimensions				bolt size	weight
				A	B	C	D		
4 x 2½"	4.500 x 3.000"	300 psi	2.75"	4.37"	2.83"	7.48"	4.40"	½ x 3"	6.6 lbs
100 x 65	(114.3 x 76.1 mm)	(20 bar)	(70 mm)	(111 mm)	(72 mm)	(190 mm)	(112 mm)	(M12 x 75 mm)	(3.0 Kgs)
4 x 3"	4.500 x 3.500"	300 psi	3.50"	4.40"	2.83"	7.48"	5.35"	¾ x 3½"	11.4 lbs
100 x 80	(114.3 x 88.9 mm)	(20 bar)	(89 mm)	(112 mm)	(72 mm)	(190 mm)	(136 mm)	(M16 x 90 mm)	(5.2 Kgs)
5 x 2"	5.500/5.563 x 2.375"	300 psi	2.50"	4.88"	3.39"	9.29"	4.00"	¾ x 3½"	9.2 lbs
125 x 50	(139.7/141.3 x 60.3 mm)	(20 bar)	(64 mm)	(124 mm)	(86 mm)	(236 mm)	(102 mm)	(M16 x 90 mm)	(4.2 Kgs)
5 x 2½"	5.563 x 2.875"	300 psi	2.75"	5.00"	3.39"	9.29"	4.65"	¾ x 3½"	9.5 lbs
125 x 65	(141.3 x 73.0 mm)	(20 bar)	(70 mm)	(127 mm)	(86 mm)	(236 mm)	(118 mm)	(M16 x 90 mm)	(4.2 Kgs)
5 x 2½"	5.500 x 3.000"	300 psi	2.75"	5.00"	3.39"	9.29"	4.65"	¾ x 3½"	9.5 lbs
125 x 65	(139.7 x 76.1 mm)	(20 bar)	(70 mm)	(127 mm)	(86 mm)	(236 mm)	(118 mm)	(M16 x 90 mm)	(4.3 Kgs)
6 x 1¼"	6.500/6.625 x 1.660"	300 psi	2.00"	5.00"	3.39"	10.08"	3.66"	¾ x 5½"	9.2 lbs
150 x 32	(165.1/168.3 x 42.2 mm)	(20 bar)	(51 mm)	(127 mm)	(86 mm)	(256 mm)	(93 mm)	(M16 x 135 mm)	(4.2 Kgs)
6 x 1½"	6.500/6.625 x 1.900"	300 psi	2.00"	5.00"	3.39"	10.08"	3.66"	¾ x 5½"	9.5 lbs
150 x 40	(165.1/168.3 x 48.3 mm)	(20 bar)	(51 mm)	(127 mm)	(86 mm)	(256 mm)	(93 mm)	(M16 x 135 mm)	(4.3 Kgs)
6 x 2"	6.500/6.625 x 2.375"	300 psi	2.50"	5.20"	3.39"	10.08"	3.98"	¾ x 5½"	10.6 lbs
150 x 50	(165.1/168.3 x 60.3 mm)	(20 bar)	(64 mm)	(132 mm)	(86 mm)	(256 mm)	(101 mm)	(M16 x 135 mm)	(4.8 Kgs)
6 x 2½"	6.625 x 2.875"	300 psi	2.75"	5.50"	3.39"	10.08"	4.65"	¾ x 5½"	12.1 lbs
150 x 65	(168.3 x 73.0 mm)	(20 bar)	(70 mm)	(140 mm)	(86 mm)	(256 mm)	(118 mm)	(M16 x 135 mm)	(5.5 Kgs)
6 x 2½"	6.500 x 3.000"	300 psi	2.75"	5.50"	3.39"	10.08"	4.65"	¾ x 5½"	12.1 lbs
150 x 65	(165.1 x 76.1 mm)	(20 bar)	(70 mm)	(140 mm)	(86 mm)	(256 mm)	(118 mm)	(M16 x 135 mm)	(5.5 Kgs)
6 x 3"	6.500/6.625 x 3.500"	300 psi	3.50"	5.50"	3.39"	10.08"	5.39"	¾ x 5½"	12.3 lbs
150 x 80	(165.1/168.3 x 88.9 mm)	(20 bar)	(89 mm)	(140 mm)	(86 mm)	(256 mm)	(137 mm)	(M16 x 135 mm)	(5.6 Kgs)
6 x 4"	6.500/6.625 x 4.500"	300 psi	4.50"	5.50"	3.39"	10.08"	6.46"	¾ x 5½"	15.4 lbs
150 x 100	(165.1/168.3 x 114.3 mm)	(20 bar)	(114 mm)	(140 mm)	(86 mm)	(256 mm)	(164 mm)	(M16 x 135 mm)	(7.0 Kgs)
8 x 2"	8.625 x 2.375"	300 psi	2.75"	6.54"	4.72"	12.87"	3.89"	¾ x 4¾"	12.8 lbs
200 x 50	(219.1 x 60.3 mm)	(20 bar)	(70 mm)	(166 mm)	(120 mm)	(327 mm)	(104 mm)	(M20 x 120 mm)	(5.8 Kgs)
8 x 2½"	8.625 x 2.875"	300 psi	2.75"	6.54"	4.72"	12.87"	4.09"	¾ x 4¾"	13.2 lbs
200 x 65	(219.1 x 73.0 mm)	(20 bar)	(70 mm)	(166 mm)	(120 mm)	(327 mm)	(104 mm)	(M20 x 120 mm)	(6.0 Kgs)
8 x 2½"	8.625 x 3.000"	300 psi	2.75"	6.54"	4.72"	12.87"	4.09"	¾ x 4¾"	13.2 lbs
200 x 65	(219.1 x 76.1 mm)	(20 bar)	(70 mm)	(166 mm)	(120 mm)	(327 mm)	(104 mm)	(M20 x 120 mm)	(6.0 Kgs)
8 x 3"	8.625 x 3.500"	300 psi	3.50"	6.54"	4.72"	12.87"	5.04"	¾ x 4¾"	15.8 lbs
200 x 80	(219.1 x 88.9 mm)	(20 bar)	(89 mm)	(166 mm)	(120 mm)	(327 mm)	(128 mm)	(M20 x 120 mm)	(7.2 Kgs)
8 x 4"	8.625 x 4.500"	300 psi	4.50"	6.54"	4.72"	12.87"	6.46"	¾ x 4¾"	16.5 lbs
200 x 100	(219.1 x 114.3 mm)	(20 bar)	(114 mm)	(166 mm)	(120 mm)	(327 mm)	(164 mm)	(M20 x 120 mm)	(7.5 Kgs)

† Hole diameters listed are suggested hole diameters.

**Working pressure is based on roll- or cut-grooved standard wall carbon steel pipe..

M22 mechanical tee grooved-end outlet



The groove dimensions conform to AWWA C606. UL/FM working pressure is 300 psi (20 Bar).

dimensions

nom. size run x branch	pipe O.D.	max. working pressure (CWP)**	hole dia. † +0.13, -0 / +3.2, -0	dimensions				bolt s"	weight
				A	B	C	D		
2 x 1"	2.375 x 1.315"	300 psi (20 bar)	1.50"	2.87"	1.50"	4.57"	3.19"	¾ x 2¼"	2.27 lbs
50 x 25	(60.3 x 33.4 mm)		(38 mm)	(73.0 mm)	(38.1 mm)	(115.9 mm)	(81.0 mm)	(M10 x 55 mm)	(1.03 Kgs)
2 x 1¼"	2.375 x 1.660"	300 psi (20 bar)	1.75"	3.00"	1.50"	4.57"	3.31"	¾ x 2¼"	2.44 lbs
50 x 32	(60.3 x 42.2 mm)		(45 mm)	(76.2 mm)	(38.1 mm)	(115.9 mm)	(84.0 mm)	(M10 x 55 mm)	(1.11 Kgs)
2 x 1½"	2.375 x 1.900"	300 psi (20 bar)	1.75"	3.00"	1.50"	4.57"	3.31"	¾ x 2¼"	2.60 lbs
50 x 40	(60.3 x 48.3 mm)		(45 mm)	(76.2 mm)	(38.1 mm)	(115.9 mm)	(84.0 mm)	(M10 x 55 mm)	(1.18 Kgs)
2½ x 1"	2.875 x 1.315"	300 psi (20 bar)	1.50"	3.13"	1.75"	5.56"	3.19"	½ x 2½"	2.71 lbs
65 x 25	(73.0 x 33.4 mm)		(38 mm)	(79.4 mm)	(44.5 mm)	(141.3 mm)	(81.0 mm)	(M12 x 60 mm)	(1.23 Kgs)
2½ x 1¼"	2.875 x 1.660"	300 psi (20 bar)	2.00"	3.25"	1.75"	5.56"	3.70"	½ x 2½"	3.06 lbs
65 x 32	(73.0 x 42.2 mm)		(51 mm)	(82.6 mm)	(44.5 mm)	(141.3 mm)	(94.0 mm)	(M12 x 60 mm)	(1.39 Kgs)
2.5 x 1½"	2.875 x 1.900"	300 psi (20 bar)	2.00"	3.25"	1.75"	5.56"	3.70"	½ x 2½"	3.12 lbs
65 x 40	(73.0 x 48.3 mm)		(51 mm)	(82.6 mm)	(44.5 mm)	(141.3 mm)	(94.0 mm)	(M12 x 60 mm)	(1.42 Kgs)
76.1 mm x 25	3.000 x 1.315"	300 psi (20 bar)	1.50"	3.13"	1.81"	5.69"	3.19"	½ x 2½"	2.71 lbs
	(76.1 x 33.4 mm)		(38 mm)	(79.4 mm)	(46.1 mm)	(144.5 mm)	(81.0 mm)	(M12 x 60 mm)	(1.23 Kgs)
76.1 mm x 32	3.000 x 1.660"	300 psi (20 bar)	2.00"	3.25"	1.81"	5.69"	3.70"	½ x 2½"	3.06 lbs
	(76.1 x 42.2 mm)		(51 mm)	(82.6 mm)	(46.1 mm)	(144.5 mm)	(94.0 mm)	(M12 x 60 mm)	(1.39 Kgs)
76.1 mm x 40	3.000 x 1.900"	300 psi (20 bar)	2.00"	3.25"	1.81"	5.69"	3.70"	½ x 2½"	3.12 lbs
	(76.1 x 48.3 mm)		(51 mm)	(82.6 mm)	(46.1 mm)	(144.5 mm)	(94.0 mm)	(M12 x 60 mm)	(1.42 Kgs)
3 x 1"	3.500 x 1.315"	300 psi (20 bar)	1.50"	3.37"	2.09"	6.19"	3.19"	½ x 3"	3.19 lbs
80 x 25	(88.9 x 33.4 mm)		(38 mm)	(85.7 mm)	(53.2 mm)	(157.2 mm)	(81.0 mm)	(M12 x 75 mm)	(1.45 Kgs)
3 x 1¼"	3.500 x 1.660"	300 psi (20 bar)	2.00"	3.56"	2.09"	6.19"	3.70"	½ x 3"	3.70 lbs
80 x 32	(88.9 x 42.2 mm)		(51 mm)	(90.5 mm)	(53.2 mm)	(157.2 mm)	(94.0 mm)	(M12 x 75 mm)	(1.68 Kgs)
3 x 1½"	3.500 x 1.900"	300 psi (20 bar)	2.00"	3.56"	2.09"	6.19"	3.70"	½ x 3"	3.74 lbs
80 x 40	(88.9 x 48.3 mm)		(51 mm)	(90.5 mm)	(53.2 mm)	(157.2 mm)	(94.0 mm)	(M12 x 75 mm)	(1.70 Kgs)
3 x 2"	3.500 x 2.375	300 psi (20 bar)	2.50"	3.56"	2.09"	6.19"	4.25"	½ x 3"	4.03 lbs
80 x 50	(88.9 x 60.3 mm)		(64 mm)	(90.5 mm)	(53.2 mm)	(157.2 mm)	(108.0 mm)	(M12 x 75 mm)	(1.83 Kgs)
4 x 1"	4.500 x 1.315	300 psi (20 bar)	1.50"	3.69"	2.63"	7.19"	3.13"	½ x 3"	3.63 lbs
100 x 25	(114.3 x 33.4 mm)		(38 mm)	(93.7 mm)	(66.7 mm)	(182.6 mm)	(79.4 mm)	(M12 x 75 mm)	(1.65 Kgs)
4 x 1¼"	4.500 x 1.660	300 psi (20 bar)	2.00"	3.63"	2.63"	7.19"	4.00"	½ x 3"	3.96 lbs
100 x 32	(114.3 x 42.2 mm)		(51 mm)	(92.1 mm)	(66.7 mm)	(182.6 mm)	(101.6 mm)	(M12 x 75 mm)	(1.80 Kgs)
4 x 1½"	4.500 x 1.900	300 psi (20 bar)	2.00"	3.63"	2.63"	7.19"	4.00"	½ x 3"	3.98 lbs
100 x 40	(114.3 x 48.3 mm)		(51 mm)	(92.1 mm)	(66.7 mm)	(182.6 mm)	(101.6 mm)	(M12 x 75 mm)	(1.81 Kgs)
4 x 2"	4.500 x 2.375	300 psi (20 bar)	2.50"	4.00"	2.63"	7.19"	4.00"	½ x 3"	4.25 lbs
100 x 50	(114.3 x 60.3 mm)		(64 mm)	(101.6 mm)	(66.7 mm)	(182.6 mm)	(101.6 mm)	(M12 x 75 mm)	(1.93 Kgs)
4 x 2½"	4.500 x 2.875	300 psi (20 bar)	2.75"	4.00"	2.63"	7.19"	4.44"	½ x 3"	5.85 lbs
100 x 65	(114.3 x 73.0 mm)		(70 mm)	(101.6 mm)	(66.7 mm)	(182.6 mm)	(112.7 mm)	(M12 x 75 mm)	(2.66 Kgs)

graph continues onto next page

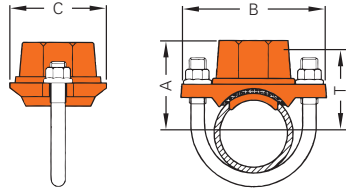
nom. size run x branch	pipe O.D.	max. working pressure (CWP)**	hole dia. † +0.13, -0 / +3.2, -0	dimensions				bolt size	weight
				A	B	C	D		
100 x 76.1 mm	4.500 x 3.000" (114.3 x 76.1 mm)	300 psi (20 bar)	2.75" (70 mm)	4.00" (101.6 mm)	2.63" (66.7 mm)	7.19" (182.6 mm)	4.44" (112.7 mm)	½ x 3"	4.78 lbs (2.17 Kgs)
4 x 3" 100 x 80	4.500 x 3.500" (114.3 x 88.9 mm)	300 psi (20 bar)	3.50" (89 mm)	4.13" (104.8 mm)	2.63" (66.7 mm)	7.19" (182.6 mm)	5.06" (128.6 mm)	½ x 3"	5.30 lbs (2.41 Kgs)
139.7 mm x 50	5.500 x 2.375" (139.7 x 60.3 mm)	300 psi (20 bar)	2.50" (64 mm)	4.75" (120.7 mm)	3.19" (81.0 mm)	8.81" (223.8 mm)	4.19" (106.4 mm)	⅝ x 3½"	5.79 lbs (2.63 Kgs)
139.7 mm x 76.1 mm	5.500 x 3.000" (139.7 x 76.1 mm)	300 psi (20 bar)	2.75" (70 mm)	4.75" (120.7 mm)	3.19" (81.0 mm)	8.81" (223.8 mm)	4.44" (112.7 mm)	⅝ x 3½"	6.50 lbs (2.95-Kgs)
139.7 mm x 80	5.500 x 3.500" (139.7 x 88.9 mm)	300 psi (20 bar)	2.75" (70 mm)	4.63" (117.5 mm)	3.19" (81.0 mm)	8.81" (223.8 mm)	5.19" (131.8 mm)	⅝ x 3½"	6.78 lbs (3.08 Kgs)
5 x 2" 125 x 50	5.563 x 2.375" (141.3 x 60.3 mm)	300 psi (20 bar)	2.50" (64 mm)	4.75" (120.7 mm)	3.19" (81.0 mm)	8.81" (223.8 mm)	4.19" (106.4 mm)	⅝ x 3½"	5.79 lbs (2.63 Kgs)
5 x 2½" 125 x 65	5.563 x 2.875" (141.3 x 73.0 mm)	300 psi (20 bar)	2.75" (70 mm)	4.75" (120.7 mm)	3.19" (81.0 mm)	8.81" (223.8 mm)	4.44" (112.7 mm)	⅝ x 3½"	6.34 lbs (2.88 Kgs)
125 x 76.1 mm	5.563 x 3.000" (141.3 x 76.1 mm)	300 psi (20 bar)	2.75" (70 mm)	4.75" (120.7 mm)	3.19" (81.0 mm)	8.81" (223.8 mm)	4.44" (112.7 mm)	⅝ x 3½"	6.49 lbs (2.95 Kgs)
5 x 3" 125 x 80	5.563 x 3.500" (141.3 x 88.9 mm)	300 psi (20 bar)	3.50" (89 mm)	4.63" (117.5 mm)	3.19" (81.0 mm)	8.81" (223.8 mm)	5.19" (131.8 mm)	⅝ x 3½"	6.78 lbs (3.08 Kgs)
165.1 mm x 32	6.500 x 1.660" (165.1 x 42.2 mm)	300 psi (20 bar)	2.00" (51 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	3.63" (92.1 mm)	⅝ x 3½"	6.03 lbs (2.74 Kgs)
165.1 mm x 40	6.500 x 1.900" (165.1 x 48.3 mm)	300 psi (20 bar)	2.00" (51 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	3.63" (92.1 mm)	⅝ x 3½"	6.12 lbs (2.78 Kgs)
165.1 mm x 50	6.500 x 2.375" (165.1 x 60.3 mm)	300 psi (20 bar)	2.50" (64 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	4.19" (106.4 mm)	⅝ x 3½"	6.40 lbs (2.91 Kgs)
6 x 2½" 150 x 65	6.625 x 2.875" (168.3 x 73.0 mm)	300 psi (20 bar)	2.75" (70 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	4.44" (112.7 mm)	⅝ x 3½"	7.08 lbs (3.22 Kgs)
165.1 mm x 76.1 mm	6.500 x 3.000" (165.1 x 76.1 mm)	300 psi (20 bar)	2.75" (70 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	4.56" (115.9 mm)	⅝ x 3½"	7.44 lbs (3.38 Kgs)
165.1 mm x 80	6.500 x 3.500" (165.1 x 88.9 mm)	300 psi (20 bar)	3.50" (89 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	5.19" (131.8 mm)	⅝ x 3½"	8.01 lbs (3.64 Kgs)
165.1 mm x 100	6.500 x 4.500" (165.1 x 114.3 mm)	300 psi (20 bar)	4.50" (114 mm)	5.40" (137.1 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	6.25" (158.8 mm)	⅝ x 3½"	8.91 lbs (4.05 Kgs)
6 x 1¼" 150 x 32	6.625 x 1.660" (168.3 x 42.2 mm)	300 psi (20 bar)	2.00" (51 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	3.63" (92.1 mm)	⅝ x 3½"	6.05 lbs (2.75 Kgs)
6 x 1½" 150 x 40	6.625 x 1.900" (168.3 x 48.3 mm)	300 psi (20 bar)	2.00" (51 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	3.63" (92.1 mm)	⅝ x 3½"	6.12 lbs (2.78 Kgs)
6 x 2" 150 x 50	6.625 x 2.375" (168.3 x 60.3 mm)	300 psi (20 bar)	2.50" (64 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	4.19" (106.4 mm)	⅝ x 3½"	6.42 lbs (2.92 Kgs)
6 x 2½" 150 x 65	6.625 x 2.875" (168.3 x 73.0 mm)	300 psi (20 bar)	2.75" (70 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	4.44" (112.7 mm)	⅝ x 3½"	7.08 lbs (3.22 Kgs)
6 x 3" 150 x 80	6.625 x 3.500" (168.3 x 88.9 mm)	300 psi (20 bar)	3.50" (89 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	5.19" (131.8 mm)	⅝ x 3½"	8.10 lbs (3.68 Kgs)
6 x 4" 150 x 100	6.625 x 4.500" (168.3 x 114.3 mm)	300 psi (20 bar)	4.50" (114 mm)	5.40" (137.1 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	6.25" (158.8 mm)	⅝ x 3½"	8.91 lbs (4.05 Kgs)

† Hole diameters listed are suggested hole diameters.

[] Important: Make special note of the hole saw size and maximum diameter allowed on these sizes, deviation could lead to joint failure.

**Working pressure is based on grooved standard wall carbon steel pipe.

723 saddle-let



hole cutting

the method of pipe preparation requires the cutting or drilling of a specified hole size on the centerline of the pipe. Always use the correct hole saw size as shown in the table and never use a torch for cutting a hole. After the hole has been cut all rough edges must be removed and the area within $\frac{5}{16}$ " (16 mm) of the hole should be inspected to ensure a clean smooth surface, free of any indentations or projections that could affect proper gasket sealing.

The Model 723 Saddle-Let is the ideal outlet fitting for making direct connections to sprinkler heads, drop nipples and or gauges. No need for welding, just cut or drill a hole at the desired outlet location.

saddle-let branch size	hole dimensions		surface preparation "A"
	hole saw size	max. dia. allowed	
$\frac{1}{2}$ ", $\frac{3}{4}$ ", 1" (15, 20, 25)	$1\frac{3}{16}$ " (30 mm)	1 $\frac{1}{4}$ " (32 mm)	3 $\frac{1}{2}$ " (89 mm)

dimensions

nom. size run x branch	max. working pressure (CWP)	hole dia. † +3.2, -0 / +0.13, -0	dimensions			take-out, T‡	bolt size	bolt torque	weight
			A	B	C				
1 $\frac{1}{4}$ x $\frac{1}{2}$ "	300 psi (20 bar)	1.18" (30 mm)	1.97" (50.0 mm)	3.50" (89.0 mm)	2.20" (56.0 mm)	1.73" (44.0 mm)	$\frac{3}{8}$ " Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
1 $\frac{1}{4}$ x $\frac{3}{4}$ "	300 psi (20 bar)	1.18" (30 mm)	1.97" (50.0 mm)	3.50" (89.0 mm)	2.20" (56.0 mm)	1.73" (44.0 mm)	$\frac{3}{8}$ " Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
1 $\frac{1}{4}$ x 1"	300 psi (20 bar)	1.18" (30 mm)	2.13" (54.0 mm)	3.50" (89.0 mm)	2.20" (56.0 mm)	1.85" (47.0 mm)	$\frac{3}{8}$ " Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
1 $\frac{1}{2}$ x $\frac{1}{2}$ "	300 psi (20 bar)	1.18" (30 mm)	2.09" (53.0 mm)	3.50" (89.0 mm)	2.24" (57.0 mm)	1.81" (46.0 mm)	$\frac{3}{8}$ " Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
1 $\frac{1}{2}$ x $\frac{3}{4}$ "	300 psi (20 bar)	1.18" (30 mm)	2.09" (53.0 mm)	3.50" (89.0 mm)	2.24" (57.0 mm)	1.81" (46.0 mm)	$\frac{3}{8}$ " Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
1 $\frac{1}{2}$ x 1"	300 psi (20 bar)	1.18" (30 mm)	2.28" (58.0 mm)	3.50" (89.0 mm)	2.24" (57.0 mm)	1.93" (49.0 mm)	$\frac{3}{8}$ " Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
2 x $\frac{1}{2}$ "	300 psi (20 bar)	1.18" (30 mm)	2.36" (60.0 mm)	3.82" (97.0 mm)	2.24" (57.0 mm)	2.09" (53.0 mm)	$\frac{3}{8}$ " Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
2 x $\frac{3}{4}$ "	300 psi (20 bar)	1.18" (30 mm)	2.36" (60.0 mm)	3.82" (97.0 mm)	2.24" (57.0 mm)	2.09" (53.0 mm)	$\frac{3}{8}$ " Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
2 x 1"	300 psi (20 bar)	1.18" (30 mm)	2.52" (64.0 mm)	3.82" (97.0 mm)	2.24" (57.0 mm)	2.20" (56.0 mm)	$\frac{3}{8}$ " Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
2 $\frac{1}{2}$ x $\frac{1}{2}$ "	300 psi (20 bar)	1.18" (30 mm)	2.60" (66.0 mm)	4.37" (111.0 mm)	2.24" (57.0 mm)	2.28" (58.0 mm)	$\frac{3}{8}$ " Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
2 $\frac{1}{2}$ x $\frac{3}{4}$ "	300 psi (20 bar)	1.18" (30 mm)	2.60" (66.0 mm)	4.37" (111.0 mm)	2.24" (57.0 mm)	2.28" (58.0 mm)	$\frac{3}{8}$ " Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
2 $\frac{1}{2}$ x 1"	300 psi (20 bar)	1.18" (30 mm)	2.76" (70.0 mm)	4.37" (111.0 mm)	2.24" (57.0 mm)	2.40" (61.0 mm)	$\frac{3}{8}$ " Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	1.1 lbs (0.5 Kgs)

† Hole diameters listed are suggested hole saw diameters.

‡ T: Take-out (Center of run to end of pipe to be engaged)

* Working Pressure is based on standard wall carbon steel pipe.

pressure performance data

ductile iron couplings on carbon steel & stainless steel pipe

The following tables show maximum working pressures (CWP) of Shurjoint ductile iron couplings and flange adapters used on both carbon steel and stainless steel pipes. Shurjoint ductile iron couplings can be used in conjunction with stainless steel pipe in non-corrosive environment as the flow media does not come in direct contact with the coupling housings but rather only the gasket. Stated pressure ratings have been developed with a safety factor. Please see Shurjoint's online installation instruction for most recently updated instructions. Proper installation is important to proper performance.

model Z05 on carbon steel pipe

nom. size	cut-grooved		roll-grooved		
	XS	STD	STD	sch. 10	sch. 7
1¼" 32	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	250 psi (17 bar)
1½" 40	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	250 psi (17 bar)
2" 50	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	250 psi (17 bar)
2½" 65	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	250 psi (17 bar)
3" 80	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	250 psi (17 bar)
4" 100	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	232 psi (16 bar)
5" 125	450 psi (31 bar)	450 psi (31 bar)	350 psi (24 bar)	350 psi (24 bar)	232 psi (16 bar)
6" 150	450 psi (31 bar)	450 psi (31 bar)	350 psi (24 bar)	350 psi (24 bar)	232 psi (16 bar)
8" 200	450 psi (31 bar)	450 psi (31 bar)	350 psi (24 bar)	350 psi (24 bar)	NR

* Schedule 7 is in reference to "Fire Protection Specialty Pipe", or "Flow Pipe" and are based on UL and FM agency listings. Please refer to these listings for particular pipe manufacturers which can be found on our UL and FM listing pages, or downloaded from our web site.

model Z05 on stainless steel pipe

nom. size	cut-grooved		roll-grooved		
	sch. 80S	sch. 40S	sch. 40S	sch. 10S	sch. 5S
1¼" 32	600 psi (42 bar)	600 psi (42 bar)	450 psi (31 bar)	300 psi (20 bar)	250 psi (17 bar)
1½" 40	600 psi (42 bar)	600 psi (42 bar)	450 psi (31 bar)	300 psi (20 bar)	250 psi (17 bar)
2" 50	600 psi (42 bar)	600 psi (42 bar)	450 psi (31 bar)	300 psi (20 bar)	250 psi (17 bar)
2½" 65	600 psi (42 bar)	600 psi (42 bar)	450 psi (31 bar)	300 psi (20 bar)	250 psi (17 bar)
3" 80	600 psi (42 bar)	600 psi (42 bar)	450 psi (31 bar)	300 psi (20 bar)	250 psi (17 bar)
4" 100	600 psi (42 bar)	600 psi (42 bar)	450 psi (31 bar)	300 psi (20 bar)	232 psi (16 bar)
5" 125	450 psi (31 bar)	450 psi (31 bar)	300 psi (20 bar)	200 psi (14 bar)	NR
6" 150	450 psi (31 bar)	450 psi (31 bar)	300 psi (20 bar)	232 psi (16 bar)	232 psi (16 bar)
8" 200	450 psi (31 bar)	450 psi (31 bar)	300 psi (20 bar)	150 psi (10 bar)	150 psi (10 bar)

model K-9 on carbon steel pipe

nom. size	cut-grooved		roll-grooved		
	XS	STD	STD	sch. 10	sch. 7
1¼" 32	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	300 psi (20 bar)
1½" 40	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	300 psi (20 bar)
2" 50	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	300 psi (20 bar)
2½" 65	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	300 psi (20 bar)
3" 80	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	300 psi (20 bar)
4" 100	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	300 psi (20 bar)
5" 125	450 psi (31 bar)	450 psi (31 bar)	450 psi (31 bar)	350 psi (24 bar)	250 psi (17 bar)
6" 150	450 psi (31 bar)	450 psi (31 bar)	450 psi (31 bar)	350 psi (24 bar)	250 psi (17 bar)
8" 200	450 psi (31 bar)	450 psi (31 bar)	350 psi (24 bar)	250 psi (17 bar)	200 psi (14 bar)
8 (K-9H)" 200	450 psi (31 bar)	450 psi (31 bar)	350 psi (24 bar)	250 psi (17 bar)	200 psi (14 bar)

model K-9 on stainless steel pipe

nom. size	cut-grooved		roll-grooved		
	sch. 80S	sch. 40S	sch. 40S	sch. 10S	sch. 5S
1¼" 32	600 psi (42 bar)	600 psi (42 bar)	450 psi (31 bar)	300 psi (20 bar)	250 psi (17 bar)
1½" 40	600 psi (42 bar)	600 psi (42 bar)	450 psi (31 bar)	300 psi (20 bar)	250 psi (17 bar)
2" 50	600 psi (42 bar)	600 psi (42 bar)	450 psi (31 bar)	300 psi (20 bar)	250 psi (17 bar)
2½" 65	600 psi (42 bar)	600 psi (42 bar)	450 psi (31 bar)	300 psi (20 bar)	250 psi (17 bar)
3" 80	600 psi (42 bar)	600 psi (42 bar)	450 psi (31 bar)	300 psi (20 bar)	250 psi (17 bar)
4" 100	600 psi (42 bar)	600 psi (42 bar)	450 psi (31 bar)	300 psi (20 bar)	200 psi (14 bar)
5" 125	450 psi (31 bar)	450 psi (31 bar)	300 psi (20 bar)	200 psi (14 bar)	NR
6" 150	450 psi (31 bar)	450 psi (31 bar)	300 psi (20 bar)	125 psi (9 bar)	NR
8" 200	450 psi (31 bar)	450 psi (31 bar)	300 psi (20 bar)	100 psi (7 bar)	NR
8 (K-9H)" 200	450 psi (31 bar)	450 psi (31 bar)	300 psi (20 bar)	100 psi (7 bar)	NR

model Z07 on carbon steel pipe

nom. size	cut-grooved		roll-grooved		
	XS	STD	STD	sch. 10	sch. 7
1¼"	750 psi	750 psi	750 psi	600 psi	400 psi
32	(52 bar)	(52 bar)	(52 bar)	(42 bar)	(28 bar)
1½"	750 psi	750 psi	750 psi	600 psi	400 psi
40	(52 bar)	(52 bar)	(52 bar)	(42 bar)	(28 bar)
2"	750 psi	750 psi	750 psi	600 psi	400 psi
50	(52 bar)	(52 bar)	(52 bar)	(42 bar)	(28 bar)
2½"	750 psi	750 psi	750 psi	600 psi	400 psi
65	(52 bar)	(52 bar)	(52 bar)	(42 bar)	(28 bar)
3"	750 psi	750 psi	750 psi	600 psi	400 psi
80	(52 bar)	(52 bar)	(52 bar)	(42 bar)	(28 bar)
4"	750 psi	750 psi	750 psi	600 psi	400 psi
100	(52 bar)	(52 bar)	(52 bar)	(42 bar)	(28 bar)
5"	750 psi	750 psi	750 psi	500 psi	350 psi
125	(52 bar)	(52 bar)	(52 bar)	(35 bar)	(24 bar)
6"	700 psi	700 psi	700 psi	400 psi	300 psi
150	(48 bar)	(48 bar)	(48 bar)	(28 bar)	(20 bar)
8"	600 psi	600 psi	600 psi	400 psi	250 psi
200	(42 bar)	(42 bar)	(42 bar)	(28 mm)	(17 bar)
10"	500 psi	500 psi	500 psi	350 psi	200 psi
250	(35 bar)	(35 bar)	(35 bar)	(24 bar)	(14 bar)
12"	400 psi	400 psi	400 psi	350 psi	150 psi
300	(28 bar)	(28 bar)	(28 bar)	(24 bar)	(10 bar)

model Z07 on stainless steel pipe

nom. size	cut-grooved		roll-grooved		
	sch. 80S	sch. 40S	sch. 40S	sch. 10S	sch. 5S
1¼"	750 psi	750 psi	750 psi	500 psi	300 psi
32	(52 bar)	(52 bar)	(52 bar)	(35 bar)	(20 bar)
1½"	750 psi	750 psi	750 psi	500 psi	300 psi
40	(52 bar)	(52 bar)	(52 bar)	(35 bar)	(20 bar)
2"	750 psi	750 psi	750 psi	500 psi	300 psi
50	(52 bar)	(52 bar)	(52 bar)	(35 bar)	(20 bar)
2½"	750 psi	750 psi	750 psi	500 psi	300 psi
65	(52 bar)	(52 bar)	(52 bar)	(35 bar)	(20 bar)
3"	750 psi	750 psi	750 psi	500 psi	300 psi
80	(52 bar)	(52 bar)	(52 bar)	(35 bar)	(20 bar)
4"	750 psi	750 psi	750 psi	500 psi	232 psi
100	(52 bar)	(52 bar)	(52 bar)	(35 bar)	(16 bar)
5"	750 psi	750 psi	650 psi	500 psi	NR
125	(52 bar)	(52 bar)	(45 bar)	(35 bar)	
6"	700 psi	700 psi	600 psi	232 psi	232 psi
150	(48 bar)	(48 bar)	(42 bar)	(16 bar)	(16 bar)
8"	600 psi	600 psi	450 psi	150 psi	150 psi
200	(42 bar)	(42 bar)	(31 bar)	(10 bar)	(10 bar)
10"	500 psi	500 psi	450 psi	150 psi	NR
250	(35 bar)	(35 bar)	(31 bar)	(10 bar)	
12"	400 psi	400 psi	400 psi	125 psi	NR
300	(28 bar)	(28 bar)	(28 bar)	(9 bar)	

model 7771 on carbon steel pipe

nom. size	cut-grooved		roll-grooved		
	XS	STD	STD	sch. 10	sch. 7
1½"	500 psi	500 psi	500 psi	500 psi	400 psi
40	(35 bar)	(35 bar)	(35 bar)	(35 bar)	(28 bar)
2"	500 psi	500 psi	500 psi	500 psi	400 psi
50	(35 bar)	(35 bar)	(35 bar)	(35 bar)	(28 bar)
2½"	500 psi	500 psi	500 psi	500 psi	400 psi
65	(35 bar)	(35 bar)	(35 bar)	(35 bar)	(28 bar)
3"	500 psi	500 psi	500 psi	500 psi	400 psi
80	(35 bar)	(35 bar)	(35 bar)	(35 bar)	(28 bar)
4"	500 psi	500 psi	500 psi	500 psi	400 psi
100	(35 bar)	(35 bar)	(35 bar)	(35 bar)	(28 bar)
5"	500 psi	500 psi	500 psi	500 psi	350 psi
125	(35 bar)	(35 bar)	(35 bar)	(35 bar)	(24 bar)
6"	500 psi	500 psi	500 psi	400 psi	300 psi
150	(35 bar)	(35 bar)	(35 bar)	(28 bar)	(20 bar)
8"	450 psi	450 psi	450 psi	350 psi	250 psi
200	(31 bar)	(31 bar)	(31 bar)	(24 bar)	(17 bar)
10"	450 psi	450 psi	450 psi	300 psi	200 psi
250	(31 bar)	(31 bar)	(31 bar)	(20 bar)	(14 bar)
12"	450 psi	450 psi	450 psi	250 psi	150 psi
300	(31 bar)	(31 bar)	(31 bar)	(17 bar)	(10 bar)

model 7771 on stainless steel pipe

nom. size	cut-grooved		roll-grooved		
	sch. 80S	sch. 40S	sch. 40S	sch. 10S	sch. 5S
1½"	500 psi	500 psi	500 psi	500 psi	300 psi
40	(35 bar)	(35 bar)	(35 bar)	(35 bar)	(20 bar)
2"	500 psi	500 psi	500 psi	500 psi	300 psi
50	(35 bar)	(35 bar)	(35 bar)	(35 bar)	(20 bar)
2½"	500 psi	500 psi	500 psi	500 psi	300 psi
65	(35 bar)	(35 bar)	(35 bar)	(35 bar)	(20 bar)
3"	500 psi	500 psi	500 psi	500 psi	300 psi
80	(35 bar)	(35 bar)	(35 bar)	(35 bar)	(20 bar)
4"	500 psi	500 psi	500 psi	400 psi	250 psi
100	(35 bar)	(35 bar)	(35 bar)	(28 bar)	(17 bar)
5"	500 psi	500 psi	500 psi	300 psi	NR
125	(35 bar)	(35 bar)	(35 bar)	(20 bar)	
6"	500 psi	500 psi	500 psi	200 psi	NR
150	(35 bar)	(35 bar)	(35 bar)	(14 bar)	
8"	450 psi	450 psi	450 psi	150 psi	NR
200	(31 bar)	(31 bar)	(31 bar)	(10 bar)	
10"	450 psi	450 psi	450 psi	100 psi	NR
250	(31 bar)	(31 bar)	(31 bar)	(7 bar)	
12"	450 psi	450 psi	450 psi	100 psi	NR
300	(31 bar)	(31 bar)	(31 bar)	(7 bar)	

model XH-1000 on carbon steel pipe

nom. size	cut-grooved		roll-grooved		
	XS	STD	STD	sch. 10	sch. 7
2" 50	1000 psi (69 bar)	1000 psi (69 bar)	1000 psi (69 bar)	750 psi (52 bar)	NR
2½" 65	1000 psi (69 bar)	1000 psi (69 bar)	1000 psi (69 bar)	600 psi (42 bar)	NR
3" 80	1000 psi (69 bar)	1000 psi (69 bar)	1000 psi (69 bar)	600 psi (42 bar)	NR
4" 100	1000 psi (69 bar)	1000 psi (69 bar)	1000 psi (69 bar)	600 psi (42 bar)	NR
6" 150	1000 psi (69 bar)	1000 psi (69 bar)	1000 psi (69 bar)	450 psi (31 bar)	NR
8" 200	800 psi (55 bar)	800 psi (55 bar)	800 psi (55 bar)	300 psi (20 bar)	NR
10" 250	800 psi (55 bar)	800 psi (55 bar)	800 psi (55 bar)	300 psi (20 bar)	NR
12" 300	800 psi (55 bar)	800 psi (55 bar)	800 psi (55 bar)	200 psi (14 bar)	NR

model XH-1000 on stainless steel pipe

nom. size	cut-grooved		roll-grooved		
	sch. 80S	sch. 40S	sch. 40S	sch. 10S	sch. 5S
2" 50	1000 psi (69 bar)	1000 psi (69 bar)	750 psi (52 bar)	700 psi (48 bar)	NR
2½" 65	1000 psi (69 bar)	1000 psi (69 bar)	750 psi (52 bar)	700 psi (48 bar)	NR
3" 80	1000 psi (69 bar)	1000 psi (69 bar)	750 psi (52 bar)	500 psi (35 bar)	NR
4" 100	1000 psi (69 bar)	1000 psi (69 bar)	750 psi (52 bar)	500 psi (35 bar)	NR
6" 150	1000 psi (69 bar)	1000 psi (69 bar)	750 psi (52 bar)	350 psi (24 bar)	NR
8" 200	800 psi (55 bar)	800 psi (55 bar)	650 psi (45 bar)	350 psi (24 bar)	NR
10" 250	800 psi (55 bar)	800 psi (55 bar)	600 psi (42 bar)	300 psi (20 bar)	NR
12" 300	800 psi (55 bar)	800 psi (55 bar)	600 psi (42 bar)	300 psi (20 bar)	NR

model G28 on carbon steel pipe

nom. size	cut-grooved		roll-grooved		
	XS	STD	STD	sch. 10	sch. 7
1½" 40	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	NR
2" 50	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	NR
2½" 65	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	NR
3" 80	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	NR
4" 100	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	NR
5" 125	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	NR
6" 150	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	NR
8" 200	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)	NR
10" 250	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)	NR

model G28 on stainless steel pipe

nom. size	cut-grooved		roll-grooved		
	sch. 80S	sch. 40S	sch. 40S	sch. 10S	sch. 5S
1½" 40	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	NR
2" 50	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	NR
2½" 65	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	NR
3" 80	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	NR
4" 100	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	175 psi (12 bar)	NR
5" 125	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)	150 psi (10 bar)	NR
6" 150	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)	150 psi (10 bar)	NR
8" 200	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)	NR	NR
10" 250	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)	NR	NR

model 7705 on carbon steel pipe

nom. size	cut-grooved		roll-grooved		
	XS	STD	STD	sch. 10	sch. 7
1"	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	300 psi (20 bar)
25					
1¼"	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	300 psi (20 bar)
32					
1½"	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	300 psi (20 bar)
40					
2"	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	300 psi (20 bar)
50					
2½"	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	300 psi (20 bar)
65					
3"	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	300 psi (20 bar)
80					
4"	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	300 psi (20 bar)
100					
5"	450 psi (31 bar)	450 psi (31 bar)	450 psi (31 bar)	350 psi (24 bar)	250 psi (17 bar)
125					
6"	450 psi (31 bar)	450 psi (31 bar)	450 psi (31 bar)	350 psi (24 bar)	250 psi (17 bar)
150					
8"	450 psi (31 bar)	450 psi (31 bar)	300 psi (20 bar)	250 psi (17 bar)	200 psi (14 bar)
200					
10"	350 psi (24 bar)	350 psi (24 bar)	300 psi (20 bar)	200 psi (14 bar)	175 psi (12 bar)
250					
12"	350 psi (24 bar)	350 psi (24 bar)	300 psi (20 bar)	200 psi (14 bar)	175 psi (12 bar)
300					

model 7705 on stainless steel pipe

nom. size	cut-grooved		roll-grooved		
	sch. 80S	sch. 40S	sch. 40S	sch. 10S	sch. 5S
1"	600 psi (42 bar)	600 psi (42 bar)	750 psi (52 bar)	500 psi (35 bar)	250 psi (17 bar)
25					
1¼"	600 psi (42 bar)	600 psi (42 bar)	750 psi (52 bar)	500 psi (35 bar)	250 psi (17 bar)
32					
1½"	600 psi (42 bar)	600 psi (42 bar)	650 psi (45 bar)	500 psi (35 bar)	250 psi (17 bar)
40					
2"	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	500 psi (35 bar)	250 psi (17 bar)
50					
2½"	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	500 psi (35 bar)	250 psi (17 bar)
65					
3"	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	250 psi (17 bar)
80					
4"	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	200 psi (14 bar)
100					
5"	450 psi (31 bar)	450 psi (31 bar)	450 psi (31 bar)	350 psi (24 bar)	NR
125					
6"	450 psi (31 bar)	450 psi (31 bar)	300 psi (20 bar)	300 psi (20 bar)	NR
150					
8"	450 psi (31 bar)	450 psi (31 bar)	300 psi (20 bar)	300 psi (20 bar)	NR
200					
10"	350 psi (24 bar)	350 psi (24 bar)	200 psi (14 bar)	75 psi (5 bar)	NR
250					
12"	350 psi (24 bar)	350 psi (24 bar)	200 psi (14 bar)	50 psi (3 bar)	NR
300					

model 7707 on carbon steel pipe

nom. size	cut-grooved		roll-grooved		
	XS	STD	STD	sch. 10	sch. 7
¾"	1000 psi (69 bar)	1000 psi (69 bar)	1000* / 750 psi (69* / 52 bar)	750* / 600 psi (52* / 42 bar)	500 psi (35 bar)
20					
1"	1000 psi (69 bar)	1000 psi (69 bar)	1000* / 750 psi (69* / 52 bar)	750* / 600 psi (52* / 42 bar)	500 psi (35 bar)
25					
1¼"	1000 psi (69 bar)	1000 psi (69 bar)	1000* / 750 psi (69* / 52 bar)	750* / 600 psi (52* / 42 bar)	500 psi (35 bar)
32					
1½"	1000 psi (69 bar)	1000 psi (69 bar)	1000* / 750 psi (69* / 52 bar)	750* / 600 psi (52* / 42 bar)	500 psi (35 bar)
40					
2"	1000 psi (69 bar)	1000 psi (69 bar)	1000* / 750 psi (69* / 52 bar)	750* / 600 psi (52* / 42 bar)	500 psi (35 bar)
50					
2½"	1000 psi (69 bar)	1000 psi (69 bar)	1000* / 750 psi (69* / 52 bar)	600 psi (42 bar)	500 psi (35 bar)
65					
3"	1000 psi (69 bar)	1000 psi (69 bar)	1000* / 750 psi (69* / 52 bar)	600 psi (42 bar)	500 psi (35 bar)
80					
4"	1000 psi (69 bar)	1000 psi (69 bar)	1000* / 750 psi (69* / 52 bar)	600 psi (42 bar)	400 psi (28 bar)
100					
5"	1000 psi (69 bar)	1000 psi (69 bar)	1000* / 750 psi (69* / 52 bar)	500 psi (35 bar)	350 psi (24 bar)
125					
6"	1000 psi (69 bar)	1000 psi (69 bar)	1000* / 700 psi (69* / 48 bar)	450 psi (31 bar)	300 psi (20 bar)
150					
8"	800 psi (55 bar)	800 psi (55 bar)	800* / 600 psi (55* / 42 bar)	350 psi (24 bar)	250 psi (17 bar)
200					
10"	800 psi (55 bar)	800 psi (55 bar)	800* / 550 psi (55* / 38 bar)	300 psi (20 bar)	200 psi (14 bar)
250					
12"	800 psi (55 bar)	800 psi (55 bar)	800* / 500 psi (55* / 35 bar)	300 psi (20 bar)	200 psi (14 bar)
300					

model 7707 on stainless steel pipe

nom. size	cut-grooved		roll-grooved		
	sch. 80S	sch. 40S	sch. 40S	sch. 10S	sch. 5S
¾"	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	325 psi (22 bar)
20					
1"	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	325 psi (22 bar)
25					
1¼"	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	325 psi (22 bar)
32					
1½"	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	325 psi (22 bar)
40					
2"	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	325 psi (22 bar)
50					
2½"	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	325 psi (22 bar)
65					
3"	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	325 psi (22 bar)
80					
4"	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	250 psi (17 bar)
100					
5"	750 psi (52 bar)	750 psi (52 bar)	650 psi (45 bar)	500 psi (35 bar)	NR
125					
6"	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	200 psi (14 bar)	NR
150					
8"	600 psi (42 bar)	600 psi (42 bar)	450 psi (31 bar)	300 psi (20 bar)	NR
200					
10"	600 psi (42 bar)	600 psi (42 bar)	400 psi (28 bar)	125 psi (9 bar)	NR
250					
12"	600 psi (42 bar)	600 psi (42 bar)	400 psi (28 bar)	125 psi (9 bar)	NR
300					

note: * Maximum line pressure, including surge, to which a joint should be subjected.

model 7706 on carbon steel pipe

nom. size	cut-grooved		roll-grooved		
	XS	STD	STD	sch. 10	sch. 7
1½ x 1¼" 40 x 32	500 psi (35 bar)	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)
2 x 1½" 50 x 40	500 psi (35 bar)	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)
2½ x 2" 65 x 50	500 psi (35 bar)	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)
3 x 2" 80 x 50	500 psi (35 bar)	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)
3 x 2½" 80 x 65	500 psi (35 bar)	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)
4 x 2" 100 x 50	500 psi (35 bar)	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)
4 x 2½" 100 x 65	500 psi (35 bar)	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)
4 x 3" 100 x 80	500 psi (35 bar)	500 psi (35 bar)	500 psi (35 bar)	300 psi (20 bar)	250 psi (17 bar)
5 x 4" 125 x 100	400 psi (28 bar)	400 psi (28 bar)	400 psi (28 bar)	300 psi (20 bar)	250 psi (17 bar)
6 x 3" 150 x 80	400 psi (28 bar)	400 psi (28 bar)	400 psi (28 bar)	300 psi (20 bar)	200 psi (14 bar)
6 x 4" 150 x 100	400 psi (28 bar)	400 psi (28 bar)	400 psi (28 bar)	300 psi (20 bar)	175 psi (12 bar)
8 x 6" 200 x 150	400 psi (28 bar)	400 psi (28 bar)	400 psi (28 bar)	300 psi (20 bar)	175 psi (12 bar)

model 7706 on stainless steel pipe

nom. size	cut-grooved		roll-grooved		
	sch. 80S	sch. 40S	sch. 40S	sch. 10S	sch. 5S
1½ x 1¼" 40 x 32	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)	250 psi (17 bar)
2 x 1½" 50 x 40	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)	250 psi (17 bar)
2½ x 2" 65 x 50	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)	250 psi (17 bar)
3 x 2" 80 x 50	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)	250 psi (17 bar)
3 x 2½" 80 x 65	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)	250 psi (17 bar)
4 x 2" 100 x 50	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)	250 psi (17 bar)
4 x 2½" 100 x 65	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)	200 psi (14 bar)
4 x 3" 100 x 80	500 psi (35 bar)	500 psi (35 bar)	300 psi (20 bar)	250 psi (17 bar)	200 psi (14 bar)
5 x 4" 125 x 100	400 psi (28 bar)	400 psi (28 bar)	300 psi (20 bar)	250 psi (17 bar)	NR
6 x 3" 150 x 80	400 psi (28 bar)	400 psi (28 bar)	300 psi (20 bar)	200 psi (14 bar)	NR
6 x 4" 150 x 100	400 psi (28 bar)	400 psi (28 bar)	300 psi (20 bar)	175 psi (12 bar)	NR
8 x 6" 200 x 150	400 psi (28 bar)	400 psi (28 bar)	300 psi (20 bar)	175 psi (12 bar)	NR

model C-7 on carbon steel pipe

nom. size	cut-grooved		roll-grooved		
	XS	STD	STD	sch. 10	sch. 7
1½ x *" 40 x *	500 psi (35 bar)	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)
2 x *" 50 x *	500 psi (35 bar)	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)
2½ x *" 65 x *	500 psi (35 bar)	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)
3 x *" 80 x *	500 psi (35 bar)	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)
4 x *" 100 x *	500 psi (35 bar)	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)
6 x *" 150 x *	400 psi (28 bar)	400 psi (28 bar)	400 psi (28 bar)	350 psi (24 bar)	300 psi (20 bar)

* = all branch sizes, threaded and grooved

model C-7 on stainless steel pipe

nom. size	cut-grooved		roll-grooved		
	sch. 80S	sch. 40S	sch. 40S	sch. 10S	sch. 5S
1½ x *" 40 x *	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)	250 psi (17 bar)
2 x *" 50 x *	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)	250 psi (17 bar)
2½ x *" 65 x *	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)	250 psi (17 bar)
3 x *" 80 x *	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)	250 psi (17 bar)
4 x *" 100 x *	500 psi (35 bar)	500 psi (35 bar)	350 psi (24 bar)	300 psi (20 bar)	250 psi (17 bar)
6 x *" 150 x *	400 psi (28 bar)	400 psi (28 bar)	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)

* = all branch sizes, threaded and grooved

model 7043 on carbon steel pipe

nom. size	cut-grooved			roll-grooved	
	XS	STD	STD	sch. 10	sch. 7
2" 50	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	NR
2½" 65	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	NR
3" 80	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	NR
4" 100	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	NR
5" 125	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	450 psi (31 bar)	NR
6" 150	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	450 psi (31 bar)	NR
8" 200	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	300 psi (20 bar)	NR
10" 250	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	300 psi (20 bar)	NR
12" 300	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	250 psi (17 bar)	NR

Hydrostatic shell test: 1125 psi (77 Bar) per ANSI B16.5

model 7043 on stainless steel pipe

nom. size	cut-grooved			roll-grooved	
	sch. 80S	sch. 40S	sch. 40S	sch. 10S	sch. 5S
2" 50	400 psi (28 bar)	400 psi (28 bar)	400 psi (28 bar)	NR	NR
2½" 65	400 psi (28 bar)	400 psi (28 bar)	400 psi (28 bar)	NR	NR
3" 80	400 psi (28 bar)	400 psi (28 bar)	400 psi (28 bar)	NR	NR
4" 100	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	NR	NR
5" 125	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)	NR	NR
6" 150	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)	NR	NR
8" 200	250 psi (17 bar)	250 psi (17 bar)	150 psi (10 bar)	NR	NR
10" 250	250 psi (17 bar)	250 psi (17 bar)	150 psi (10 bar)	NR	NR
12" 300	250 psi (17 bar)	250 psi (17 bar)	150 psi (10 bar)	NR	NR

model 7041 on carbon steel pipe

nom. size	cut-grooved			roll-grooved	
	XS	STD	STD	sch. 10	sch. 7
2" 50	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)	NR
2½" 65	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)	NR
3" 80	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)	NR
4" 100	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)	NR
5" 125	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)	NR
6" 150	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)	NR
8" 200	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)	NR
10" 250	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)	NR
12" 300	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)	NR
14" 350	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)	NR
16" 400	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	175 psi (12 bar)	NR
18" 450	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	175 psi (12 bar)	NR
20" 500	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	150 psi (10 bar)	NR
24" 600	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	150 psi (10 bar)	NR

model 7041 on stainless steel pipe

nom. size	cut-grooved			roll-grooved	
	sch. 80S	sch. 40S	sch. 40S	sch. 10S	sch. 5S
2" 50	300 psi (20 bar)	300 psi (20 bar)	275 psi (19 bar)	275 psi (19 bar)	250 psi (17 bar)
2½" 65	300 psi (20 bar)	300 psi (20 bar)	275 psi (19 bar)	275 psi (19 bar)	250 psi (17 bar)
3" 80	300 psi (20 bar)	300 psi (20 bar)	275 psi (19 bar)	275 psi (19 bar)	250 psi (17 bar)
4" 100	300 psi (20 bar)	300 psi (20 bar)	275 psi (19 bar)	275 psi (19 bar)	250 psi (17 bar)
5" 125	300 psi (20 bar)	300 psi (20 bar)	275 psi (19 bar)	200 psi (14 bar)	200 psi (14 bar)
6" 150	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)	200 psi (14 bar)	200 psi (14 bar)
8" 200	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)	75 psi (5 bar)	NR
10" 250	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)	75 psi (5 bar)	NR
12" 300	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)	50 psi (3 bar)	NR
14" 350	250 psi (17 bar)	250 psi (17 bar)	125 psi (9 bar)	NR	NR
16" 400	250 psi (17 bar)	250 psi (17 bar)	125 psi (9 bar)	NR	NR
18" 450	250 psi (17 bar)	250 psi (17 bar)	125 psi (9 bar)	NR	NR
20" 500	250 psi (17 bar)	250 psi (17 bar)	100 psi (7 bar)	NR	NR
24" 600	250 psi (17 bar)	250 psi (17 bar)	100 psi (7 bar)	NR	NR

model 7707N on carbon steel pipe

nom. size	cut-grooved	roll-grooved	
	XS (0.500")	STD (0.375")	LW (0.312")
14" 350	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)
16" 400	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)
18" 450	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)
20" 500	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)
22" 550	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)
24" 600	300 psi (20 bar)	300 psi (20 bar)	250 psi (17 bar)

model 7707N on stainless steel pipe

nom. size	cut-grooved	roll-grooved	
	XS (0.500")	STD (0.375")	LW (0.312")
14" 350	NR	250 psi (17 bar)	200 psi (14 bar)
16" 400	NR	250 psi (17 bar)	200 psi (14 bar)
18" 450	NR	250 psi (17 bar)	200 psi (14 bar)
20" 500	NR	250 psi (17 bar)	200 psi (14 bar)
24" 600	NR	250 psi (17 bar)	200 psi (14 bar)

model 7707L on carbon steel pipe

nom. size	cut-grooved	roll-grooved	
	XS (0.500")	STD (0.375")	LW (0.312")
28" 700	250 psi (17 bar)	175 psi (12 bar)	125 psi (9 bar)
30" 750	250 psi (17 bar)	175 psi (12 bar)	125 psi (9 bar)
32" 800	250 psi (17 bar)	175 psi (12 bar)	125 psi (9 bar)
34" 850	250 psi (17 bar)	175 psi (12 bar)	125 psi (9 bar)
36" 900	250 psi (17 bar)	175 psi (12 bar)	125 psi (9 bar)
40" 1000	250 psi (17 bar)	175 psi (12 bar)	125 psi (9 bar)
42" 1050	250 psi (17 bar)	175 psi (12 bar)	125 psi (9 bar)

Stated pressure ratings have been developed with a safety factor. Please see Shurjoint's online installation instructions for most recently updated instructions. Proper installation is important to proper performance.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.