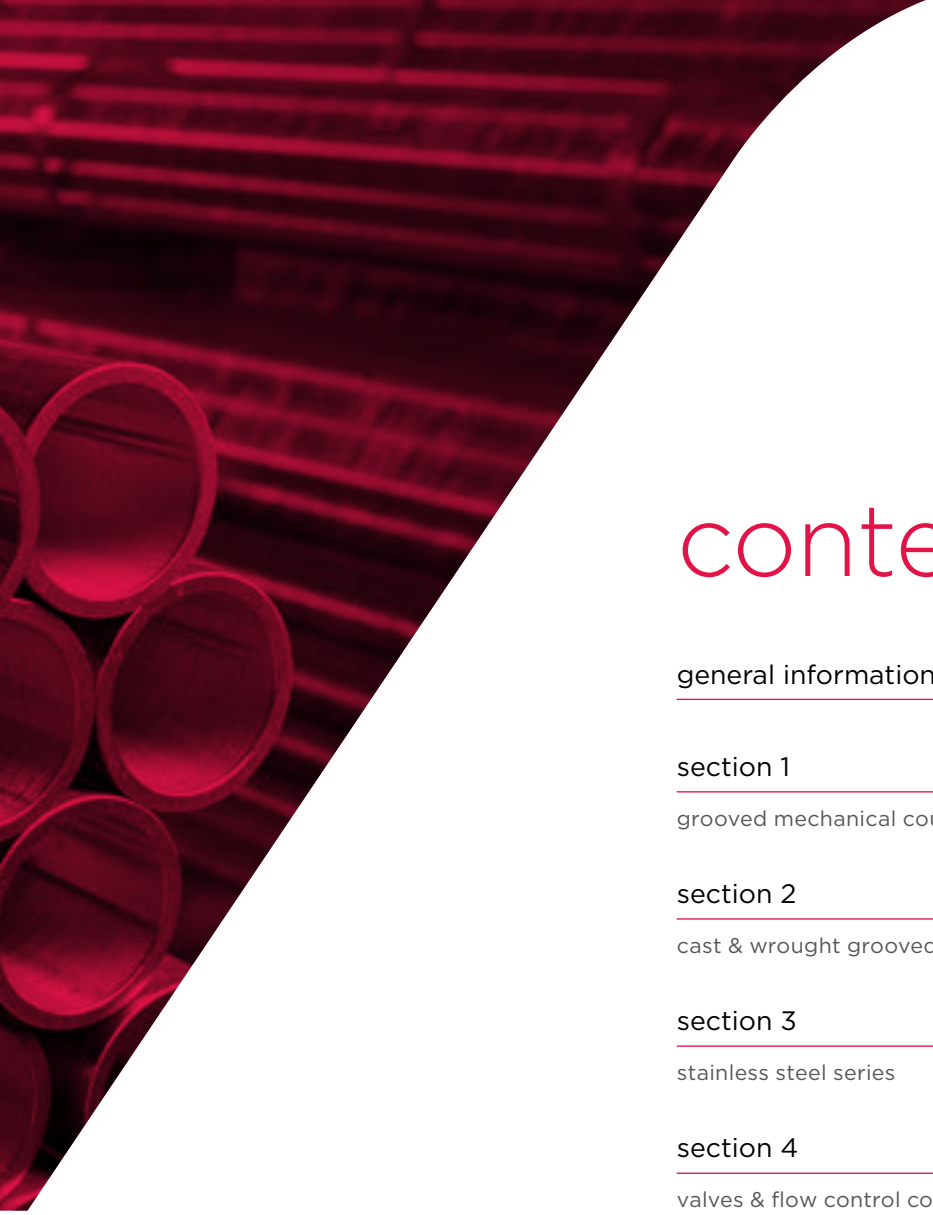
aalberts integrated piping systems

SHURJOINT®



EN catalog





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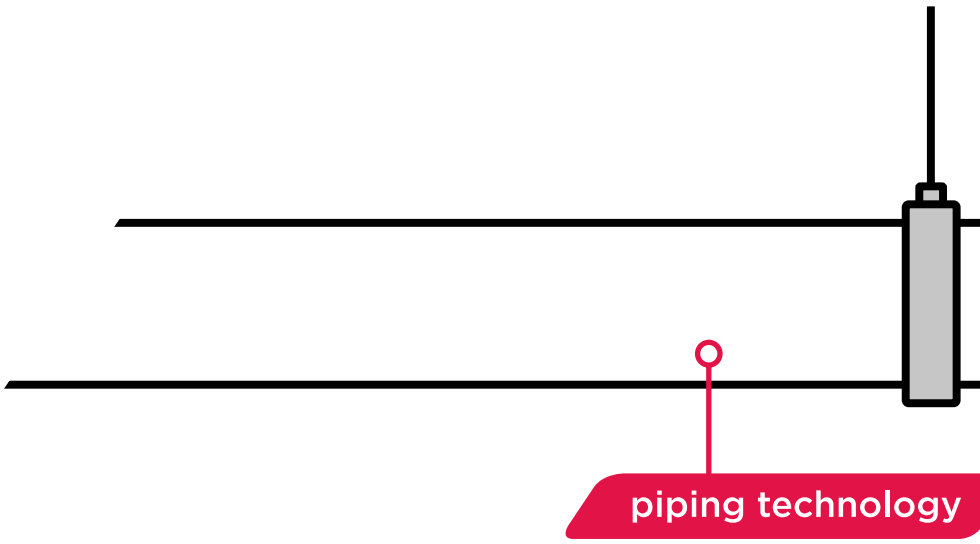
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technical information

Aalberts integrated piping systems

don’t just buy products, buy solutions.



piping technology

SHURJOINT®

a world leader in mechanical piping components

Mechanical couplings were first developed in the 1920's and evolved into Grooved Mechanical Couplings during the 1950's & 60's. This revolution was further spurred in the latter half of the 20th century by advanced engineering and innovative materials such as Ductile Iron and EPDM elastomers.

past to present

The history of Shurjoint dates back to 1974, when the founders produced their first grooved couplings. These first couplings were produced from malleable iron, the casting material of choice at this time. Before long foundry production was converted to ductile iron. Ductile iron was the ideal material, providing for precision castings and superior strength, without the need for further heat treatment. EPDM (ethylene propylene diene monomer) provided a great advancement in synthetic rubber elastomer compounds. This new compound offered a service life equal to or in some cases longer than that of carbon steel pipe. EPDM was an ideal gasket material for grooved piping systems.

a world leader

With over four decades of experience, Shurjoint is recognized as a world leader in the design and manufacture of mechanical piping components. Shurjoint has developed and currently offers over 3000 individual piping components in sizes from ½" to 104", for use with a variety of piping materials including carbon steel, stainless steel, ductile iron, PVC, HDPE, CPVC and copper tubing.

our mission

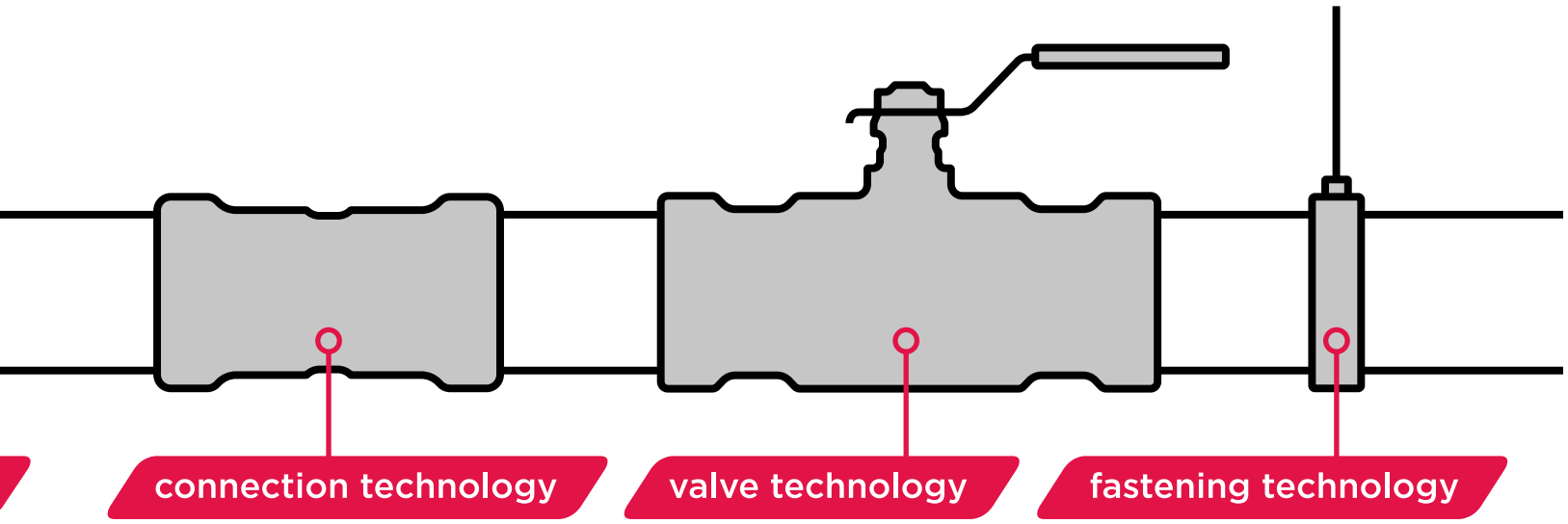
Our mission is to supply the highest quality products to customers worldwide with an unmatched level of customer service at a superior value. In addition to these hallmarks, Shurjoint continuously invests in research, engineering and development, resulting in innovative products and new solutions for the changing needs of industry.

this catalog

This catalog features our general product offering. For the latest and most complete listing of products, news and additional information please visit our website www.shurjoint.com or contact our Customer Service Representative.

applications

- HVAC
- fire protection
- water supply & treatment
- fire plumbing
- municipal
- food processing
- pulp & paper
- agriculture
- reverse osmosis
- desalination
- mining & tunnel boring
- marine
- gas
- chemical
- oil
- air





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general notes

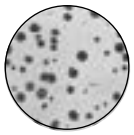
1. Always read and understand all Shurjoint installation instructions before installing any Shurjoint product.
2. Always depressurize and drain the piping system before attempting disassembly, adjustment or removal of any piping components.
3. Designers must know and understand all relevant building and or piping standards, codes and specifications. It is the responsibility of the designer to select and or specify the appropriate product for the intended use and service.
4. Always refer to the maximum pressure rating and service temperature range allowed for Shurjoint products and ensure that they are used within these parameters.
5. Special attention is required for selection of suitable gasket grades for the intended service application.
6. All information and data contained herein supersede all previous published data. Shurjoint reserves the right to change product designs and or specifications without notice and or obligation. Please refer to the Shurjoint web site for the latest information.

ductile iron - housing material

Ductile iron is an ideal material for grooved mechanical components, as it provides similar or greater strength to that of wrought or cast steel piping materials such as; forged steel flanges - ASTM A105, carbon steel valves - ASTM A216 WCB, wrought carbon steel pipe - ASTM A53 Gr. B, etc. Most Shurjoint components are made of ductile iron conforming to ASTM A536 Gr. 65-45-12 and or ASTM A395 Gr. 65-45-15.

ductile iron

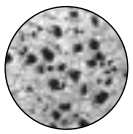
Ductile iron was first invented in the U.S.A. and U.K. in the late 1940's. Superior strength was achieved by crystallizing graphite in the shape of nodules. The result was ductile iron that had tensile and yield strength properties that were equal to or greater than some steel castings. This superior strength combined with ductile irons excellent castability helped to reduce the weight and cost of many components. Because of these advantages and benefits, many components have been converted from gray iron, malleable iron and steel castings to ductile iron over the past 80 years. Please visit the Ductile Iron Society website; www.ductile.org, for further information.



ductile iron
superior tensile strength
with good castability



gray iron
excellent castability but
'brittle' – less strength



malleable iron
stronger than gray iron
but poor castability

International ductile iron specifications equivalent to ASTM A536 Gr. 65-45-12 and or ASTM A395 Gr. 65-45-15 are:

- SAE J434: D4512
- EN1563: EN-GJS-450-10 or EN-GJS-450-15
- JIS G5502: FCD450-10
- SABS 936/937: SG42

physical strength of materials comparative

	ASTM designation	tensile strength, min. psi (MPa)	yield strength, min. psi (MPa)	elongation in 2",%
ductile iron castings	A536: Gr. 65-45-12	65,000 (448)	45,000 (310)	12
ductile iron castings	A395: Gr. 65-45-15	65,000 (448)	45,000 (310)	15
forged carbon steel	A105	70,000 (485)	40,000 (250)	20
cast carbon steel	A216: WCB	70,000 (485)	36,000 (205)	22
carbon steel pipe	A53: Gr. B	60,000 (415)	35,000 (240)	(29.5)
malleable iron castings	A47: Gr. 32510	51,000 (345)	32,000 (224)	10
gray iron castings	A126: Gr. B	31,000 (214)	not specified	not specified

ASTM A536, grade 65-45-12 (UNS F33100)

chemical requirements*	min.	max.
carbon, %	3.0	3.9
silicon, %	2.5	3.0
manganese, %	0.1	0.4
phosphorus, %		0.07
sulfur, %		0.02
magnesium, %	0.03	0.05
chromium, %		0.1

physical properties	min.	max.
tensile strength, psi (MPa)	65,000 (448)	-
yield strength, psi (MPa)	45,000 (310)	-
elongation, %	12	-

*Reference only as chemical requirements are not specified in ASTM A536.

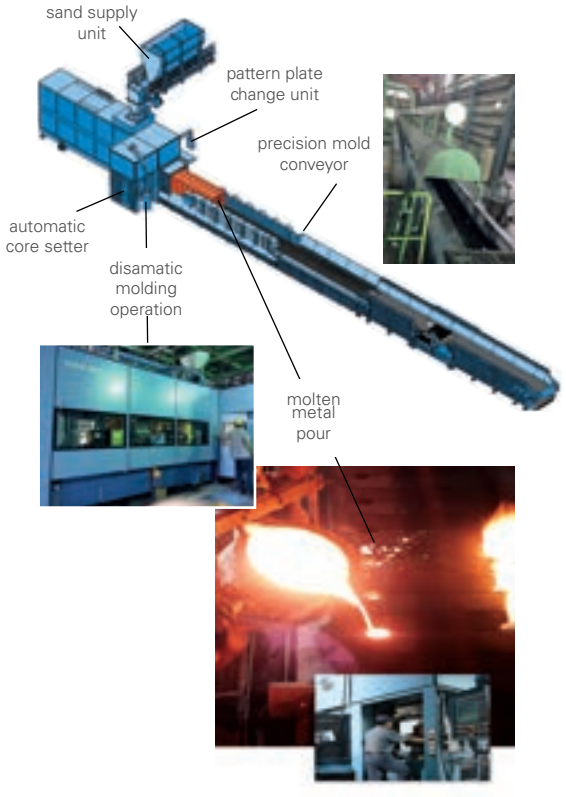
ASTM A395, grade 65-45-15 (UNS F33100)

chemical requirements	min.	max.
carbon, %	3.0	
silicon, %		2.5
manganese, %	not specified	
phosphorus, %		0.08
sulfur, %	not specified	
magnesium, %	not specified	
chromium, %	not specified	

physical properties	min.	max.
tensile strength, psi (MPa)	65,000 (448)	-
yield strength, psi (MPa)	45,000 (310)	-
elongation, %	12	-

disamatic molding line

max. 360 molds per hour



bolts & nuts

carbon steel bolts & nuts

Shurjoint products utilize oval neck track bolts conforming to ASTM A449 or ASTM A183 Gr. 2 and heavy duty nuts to ASTM A563 Gr. B, available with UNC threads or ISO metric threads. The UNC track bolts and nuts are supplied electro zinc plated in a silver chromate color and ISO metric bolts and nuts in a gold chromate color. Hot-dip galvanized bolts and nuts are also available upon request.

ASTM A449, quenched and tempered steel bolts*

chemical requirements*	min.	max.
carbon, %	0.28	0.55
manganese, %	0.60	
phosphorus, %		0.040
sulfur, %		0.050

physical properties	min.	max.
tensile strength, psi (MPa)	120.000 (825)	-
yield strength, psi (MPa)	92,000 (635)	-
elongation, %	14	-

*Equivalent to property class 8.8 bolts per ISO 898.

ASTM A183, grade 2 carbon steel track bolts

chemical requirements	min.	max.
carbon, %	0.30	
phosphorus, %		0.05
sulfur, %		0.06

physical properties	min.	max.
tensile strength, psi (MPa)	110,000 (760)	-
yield strength, psi (MPa)	80,000 (550)	-
elongation, %	12	-

ASTM A183, grade 2 carbon steel track bolts

chemical requirements (bolts)	min.	max.
carbon, %		0.55
phosphorus, %		0.12
sulfur, %		0.15

physical properties	min.	max.
hardness, rockwell	B69	C32

stainless steel bolts & nuts

Stainless steel track bolts and nuts, type 304 or type 316, are supplied with Shurjoint stainless steel couplings. Track bolts and nuts are molybdenum disulfide (MoS2) coated to inhibit galling. As an option, silicon bronze nuts are also available to further reduce the chance of galling.

ASTM A193, grade B8 (type 304) stainless steel bolts

chemical requirements*	min.	max.
carbon, %		0.08
manganese, %		2.00
phosphorus, %		0.045
sulfur, %		0.030
silicon, %		1.00
chromium, %	18.00	20.00
nickel, %	8.00	10.50

physical properties	min.	max.
tensile strength, psi (MPa)	75,000 (515)	-
yield strength, psi (MPa)	30,000 (205)	-
elongation, %	30	-





a stainless steel bolt fastened with a silicon bronze nut

ASTM A193, grade B8M (type 316) stainless steel bolts

chemical requirements*	min.	max.
carbon, %		0.08
manganese, %		2.00
phosphorus, %		0.045
sulfur, %		0.030
silicon, %		1.00
chromium, %	16.00	18.00
nickel, %	10.00	14.00
molybdenum	2.00	3.00

physical properties	min.	max.
tensile strength, psi (MPa)	75,000 (515)	-
yield strength, psi (MPa)	30,000 (205)	-
elongation, %	30	-

ASTM B98 alloy B copper-silicon alloy (UNS no. C65100)

chemical requirements*	min.	max.
copper, %	96.0	
lead, %		0.05
iron, %		0.80
zinc, %		1.50
magnesium, %		0.70
silicon, %	0.8	2.00

physical properties	min.	max.
tensile strength, psi (MPa)	55,000 (380)	-
yield strength, psi (MPa)	20,000 (140)	-
elongation, %	11	12

recommended bolt torque range

Always use factory supplied bolts and nuts for assembly of Shurjoint couplings. Shown below are the general recommended torque ranges for common sizes of carbon steel bolts. Never exceed the recommended torque range by more than 25% as excessive torque can lead to joint failure, personal injury and/or property damage. Always depressurize and drain the piping system before attempting disassembly, adjustment or removal of any piping component. Follow installation instructions for proper assembly of all Shurjoint components. For questions contact Shurjoint.

bolt size		proper torque range	
mm	**in**	**nm**	**lbs-ft**
M10	⅜”	40-55	30-40
M12	½”	120-140	90-105
M16	⅝”	135-175	100-130
M20	¾”	200-270	150-200
M22	⅞”	240-300	180-220
M24	1”	270-305	200-225
-	1⅛”	-	225-275

For stainless steel bolts, reduce by 20%

rubber gasket compounds

The 20th century was the era of innovation in plastic and rubber materials. Among the new synthetic rubber compounds that most impacted our industry were EPDM (ethylene propylene diene monomer) and Nitrile rubbers. Note: please refer to the Gasket Selection Guide beginning on page 251 for additional information relating to service temperatures and chemical resistance.

EPDM

EPDM is recognized as the most water resistant rubber available today. Good for cold & hot water up to 230ºF (110ºC), waste water, water with acid, deionized water and seawater. EPDM is not recommended for use with petroleum based oils and fuels, hydrocarbon solvents and aromatic hydrocarbons.

Shurjoint Grade "E" EPDM is compounded per ASTM D2000 designation 2CA615A25B24F17Z. Peroxide curing and post curing give a higher crosslink density, which provides a higher aging resistance than required in AWWA C606.



green stripe
Grade "E"



violet stripe
Grade "Lube-E"



double green stripe

basic requirements	AWWA C606 2CA615A25B24F17Z	Shurjoint standard
hardness, durometer A, point	65±7	60±5
tensile strength, psi, min.	1500 psi (10.34 MPa)	1500 psi (10.34 MPa)
elongation, %, min.	300%	300%
heat aging properties	after aged at 212°F (100°C) for 70 hours	after aged at 257°F (125°C) for 70 hours
change in durometer hardness, max.	+10 points	+5 points
change in tensile strength, max.	-25%	-10%
change in ultimate elongation, max.	-25%	-20%
compression set, method b, max.	25%	20%

Use Shurjoint Grade "E-pw" for potable water and food processing services. The Grade "E-pw" is UL classified per NSF/ANSI 61 and NSF/ANSI 372 for cold +86°F (30°C) and hot +180°F (82°C) potable water services. EPDM seals are recommended for use in breweries as they have the least impact on the characteristics of beer or wort.

note: EPDM materials used in domestic water applications with high levels of chlorine and or chloramines should be subjected to resistance testing, as not all materials will be suitable. EPDM materials with higher saturated ethylene content and lower carbon black content are recommended for chloramine and chlorine resistance. Contact Shurjoint for further information.

NBR, buna-n, and nitrile

All represent the same copolymer of butadiene and acrylonitrile (ACN), which is inherently resistant to hydraulic fluids, lubricating oils, transmission fluids and other non-polar petroleum based products and water less than 150º F (65º C). The higher the ACN content, the higher the resistance to oils and heat, but the lower elastic characteristics and compression set. NBR displays poor resistance to hot water and steam.



orange stripe

Shurjoint grade “T” NBR rubber is compounded based on ASTM D2000 designation 5BG615A14B24Z and exceeds the requirements of AWWA C606. Grade “T” is a general purpose compound with a medium ACN level. For fuels, especially those with a low aniline point, such as premium or unleaded gasoline, ASTM referenced fuels B & C and naphtha, use Shurjoint grade “M2” Epichloro-Hydrin or grade “O” Fluoroelastomer.

basic requirements	AWWA C606 G615A14B24Z	Shurjoint standard
hardness, durometer A, point	60±7	60±5
tensile strength, psi, min.	1500 psi (10.34 MPa)	1500 psi (10.34 MPa)
elongation, %, min.	300%	300%
when heat aged at 212°F (100°C) for 70 hours	-	-
change in durometer hardness, max.	+10 points	+5 points
change in tensile strength, max.	-25%	-20%
change in ultimate elongation, max.	-30%	-30%
compression set, method b, max.	25%	25%

Use Shurjoint Grade "A" white Nitrile gaskets for oily and greasy food products and processing, as well as pharmaceutical and cosmetics manufacturing. The Grade "A" is compounded from FDA approved ingredients (CFR Title 21 Part 177.2600).



white gasket



red stripe

Use Shurjoint Grade "S" Nitrile gaskets for joints with AWWA ductile iron pipe. Good for mineral oils, vegetable oils, air with oil vapors and water less than 150°F (65°C).

silicone (VMQ)

Shurjoint Grade "L" Silicone compound features high temperature range stability and low temperature flexibility. Recommended for dry heat and air without hydrocarbons up to 350ºF (177ºC). Silicone compounds are used in many food and medical applications as they do not impart odor or taste. Not recommended for hot water or steam services.



red gasket

chloroprene (CR, neoprene)

Shurjoint Grade "V" chloroprene rubber is a general purpose elastomer that demonstrates good resistance to lubricating oils, animal & vegetable fats and greases. Chloroprene is not effective in aromatic and oxygenated solvent environments and is not recommended for hot water and steam services.



yellow stripe

fluoroelastomer (FKM)

FKM is a highly fluorinated carbon backboned compound and offers excellent resistance to harsh chemical and ozone attack with a thermal stability to 300°F (149°C). Shurjoint Grade "O" fluoroelastomer gasket is recommended for use with oils, gasoline, hydraulic fluids, hydrocarbon solvents and extended fuels that fall outside the service parameters of grade T / NBR compounds. Not recommended for steam services.



blue stripe

epichloro-hydrin (ECO)

Shurjoint Grade "M2" compound offers good to excellent resistance to aliphatic hydrocarbon and aromatic hydrocarbon fuels at low temperatures, LP gases & fuels, mineral oils and many solvents. ECO offers limited resistance to many organic chemicals.



white stripe

halogenated butyl (CIIR)

Shurjoint Grade "M" CIIR is specially compounded for use with AWWA ductile iron pipe for water services, mild dilute acids, oil-free air and many chemicals. The compound is UL classified for potable water use per NSF/ANSI 61 and NSF/ANSI 372.



brown stripe

data chart notes

					angular movement		dimensions					
nom. size	pipe O.D.	max working pressure (CWP)	max. end load (CWP)	axial displacement	degree per coupling	pipe	A	B	C	bolt size	bolt torque	weight
in	in	psi	lbs	in	(°)	ft / in	in	in	in	in	lbs-ft	lbs
DN	mm	bar	kN	in / mm		mm / m	mm	mm	mm		nm	kgs
1	2	3	4	5	6		7			8	9	10

1. **nominal size:** Shurjoint couplings and fittings are identified by the nominal IPS pipe size in inches or nominal diameter of pipe (DN) in millimeters. Refer to the chart on the next page which shows a comparison between typical metric and IPS pipe sizes

2. **pipe O.D.:** Actual outside diameter of pipe in inches and millimeters.

3. **maximum working pressure (CWP):** Maximum working pressures listed are CWP (cold water pressure) or maximum allowed working pressure within the service temperature range of the gasket used in the coupling, based on standard wall or sch. 40 steel pipe, cut or roll-grooved to ANSI/AWWA C606 (latest edition) specifications and tested to ASTM F1476. Burst test pressures are minimum 3 times the maximum working pressures unless otherwise specified.
   These ratings may occasionally differ from maximum working pressures listed and/or approved by UL, ULC, and/or FM as testing conditions and test pipes differ. For performance data on other pipe schedules contact Shurjoint.

   note: For one time field test only the maximum joint working pressure may be increased 1½ times the figures shown.

4. **maximum end load:** Maximum end loads listed are total of internal and external forces to which the joint can be subjected, based on standard wall or sch. 40 steel pipe, cut or roll-grooved to ANSI/AWWA C606 (latest edition) specifications.

5. **axial displacement:** Designed range of the gap between pipe ends based on roll grooved pipe.

6. **angular movement (deflection):** 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.

   Maximum allowable deflection of pipe from centerline when the joint is used with cut or roll-grooved steel pipe under no internal pressure.

7. **dimensions:** "A", "B", "C" and so on are external dimensions for reference purpose only in inches and millimeters.

8. **bolt size:** UNC bolt size and length in inches and ISO metric bolt size and length in millimeters with numbers of bolts where applicable.

9. **bolt torque:** Recommended bolt fastening torque in Nm and Lbs-Ft.

10. **weight:** Weight of a coupling complete with gasket, bolts and nuts or of a fitting in kilograms and pounds.

nominal size / pipe o.d.

nominal size

While Shurjoint fittings are normally identified by the nominal size, always check the actual O.D. of the pipe and fittings to be connected, as in some markets it is customary to refer to different O.D. pipes with the same nominal size. For example: The nominal size 65 (2½") is referred to 73.0 mm (2.875") pipe O.D. in IPS and 76.1 mm (3.000") pipe O.D. in BS, ISO or JIS pipes. Refer to pipe & tubing standards for details.

pipe & tubing standards

(ANSI) American National Standards Institute B36.10 & B36.19
(API) American Petroleum Institute API 5L
(ASTM) American Society of Testing and Materials A135, A795 & B88
(BS) British Standards BS1387, BS3600, BS3601 & BS3605
(ISO) International Standard Organization 65 & 4200
(JIS) Japan Industrial Standard G3452 & G3459

global pipe size designations

Shurjoint product data & technical data are identified by the nominal IPS pipe size in inches or nominal diameter of pipe (DN) in millimeters.

The following chart shows a comparison between typical IPS size and metric (DIN) sizes.

nominal size		outside diameter (O.D.)								
									india	
inches (imperial)	DN (metric, mm)	(actual pipe O.D.)	DIN	BS	ISO	JIS	ANSI	GB	IS 1239	IS 3589
½	15	21.3 mm	DN 15	DN 15	DN 15	21.7 mm	½"	DN 15	DN 15	–
¾	20	26.7 mm	26.9 mm	DN 20	DN 20	27.2 mm	¾"	DN 20	DN 20	–
1	25	33.4 mm	33.7 mm	DN 25	DN 25	34.0 mm	1"	DN 25	DN 25	–
1¼	32	42.2 mm	42.4 mm	DN 32	DN 32	42.7 mm	1¼"	DN 32	DN 32	–
1½	40	48.3 mm	DN 40	DN 40	DN 40	48.6 mm	1½"	DN 40	DN 40	–
2	50	60.3 mm	DN 50	DN 50	DN 50	60.5 mm	2"	DN 50	DN 50	–
2 ½	65	73.0 mm	–	–	–	–	2½"	–	–	–
		76.1 mm BS/ISO	76.1 mm	76.1 mm	76.1 mm	76.3 mm	–	76.1 mm**	76.1 mm	–
3	80	88.9 mm	DN 80	DN 80	DN 80	DN 80	3"	DN 80	DN 80	–
3½	90	101.6 mm	–	–	–	–	–	–	–	–
4	100	108.0 mm China (& old DIN)	DIN 133.0 mm	–	–	–	–	108.0 mm**	–	–
		114.3 mm	DN 100	DN 100	DN 101	DN 100	4"	DN 100	DN 100	–
-	127.0 mm	127.0 mm	-	–	–	–	–	–	–	–
5	125	133.0 mm China	–	–	–	–	–	133.0 mm**	–	–
		139.7 mm BS/ISO	DN 125	139.7 mm	139.7 mm	139.8 mm	–	139.7 mm	139.7 mm	–
		141.3 mm	–	–	–	–	5"	–	–	–
–	152.4 mm	152.4 mm	–	–	–	–	–	–	–	–
6	150	159.0 mm China	–	–	–	–	–	159.0 mm	–	
		165.1 mm JIS/BS	–	165.1 mm	–	165.2 mm	–	–	165.1 mm	–
		168.3 mm	DN 150	–	DN 150	–	6"	DN 150	–	DN 150
–	6	193.7 mm	–	–	–	–	–	–	–	193.7 mm
–	203.2 mm	203.2 mm	–	–	–	–	–	–	–	–
8	200	216.3 mm JIS	–	–	–	216.3 mm	–	–	–	–
		219.1 mm	DN 200	DN 200	DN 200	–	8"	DN 200	DN 200	DN 200
–	254.0 mm	254.0 mm	–	–	–	–	–	–	–	–
10	250	267.4 mm JIS	–	–	–	267.4 mm	–	–	–	–
		273.0 mm	DN 250	DN 250	DN 250	–	10"	DN 250	DN 250	DN 250
–	304.8 mm	304.8 mm	–	–	–	–	–	–	–	–
12	300	318.5 mm JIS	–	–	–	318.5 mm	–	–	–	–
		323.9 mm	DN 300	DN 300	DN 300	–	12"	–	–	–
14	350	355.6 mm	DN 350	DN 350	DN 350	DN 350	14"	DN 350	–	–
		377.0 mm China	–	–	–	–	–	377.0 mm	–	–
16	400	406.4 mm	DN 400	DN 400	DN 400	DN 400	16"	DN 400	–	–
		426.0 mm China	–	–	–	–	–	426.0 mm	–	–
18	450	457.2 mm	DN 450	DN 450	DN 450	DN 450	18"	DN 450	–	–
		480.0 mm China	–	–	–	–	–	480.0 mm	–	–
20	500	508.0 mm	DN 500	DN 500	DN 500	DN 500	20"	DN 500	–	–
		530.0 mm China	–	–	–	–	–	530.0 mm	–	–
22	550	558.8 mm	–	–	–	DN 550	22"	559.0 mm	–	–
		580.0 mm China	–	–	–	–	–	580.0 mm	–	–
24	600	610.0 mm	DN 600	DN 600	DN 600	DN 600	24"	DN 600	–	–
		630.0 mm China	–	–	–	–	–	630.0 mm	–	–

important note:
Nominal designations are used where the actual O.D. of the pipe matches the ANSI size.
Otherwise both the nominal and actual O.D. are listed.
China sizes are listed as actual O.D. in mm.
** China sizes are tubing sizes.

specifications, standards, codes & organizations

Shurjoint production facilities are certified to ISO 9001. Products are designed to conform and meet or exceed all applicable domestic and international standards and are listed, approved and or certified by various approval bodies and registration authorities. Shurjoint is also active in industry and environmental organizations.

ANSI
American National Standards Institute

ANSI/AWWA
American Water Works Association
C606 (latest edition)

ASME
American Society of Mechanical Engineers
Power Piping, B31.1
Building Services Piping, B31.9

ASTM
American Society of Testing and Materials
F 1476-01 Couplings
F 1548-01 Fittings
F 1155 Shipbuilding

CNBOP-PIB
Scientific and Research Centre for Fire Protection - National Research Institute

CSA
Canadian Standards Association B-242

DLEG
State of Michigan Board of Mechanical Rules

FM
Factory Mutual Research Corp. - Approved for Fire Protection Services

FESC
Japan Fire Equipment Safety Center

IAPMO R&T
IAPMO Research and Testing, Inc.

LLOYD
Lloyd's Register Quality Assurance
ISO 9001:2015

LPCB
Loss Prevention Certification Board
LPS-1219

NFPA
National Fire Protection Association
NFPA 13

NSF
NSF/ANSI 61 Drinking Water System Components - Health Effects
NSF/ANSI 372 Drinking Water System Components - Lead Content

NYC MEA
New York City Department of Buildings, Material & Equipment Acceptance

NYPA
New York Power Authority

PED
Pressure Equipment Directory
2014/68/EU

UL
Underwriter's Laboratories, Inc. - UL213

ULC
Underwriter's Laboratories of Canada

TSUS
Technický a Skúýobný Ústav Stavebný, n. o.

VdS
VdS Schadenverhütung





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grooved mechanical couplings



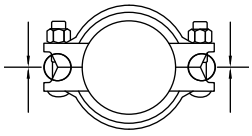
The Shurjoint grooved piping system is one of the most advanced, versatile, economical and reliable systems available today. After the pipe ends are grooved a gasket is mounted over the pipe ends. The coupling segments are then placed over the gasket and the bolts and nuts are fastened resulting in a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

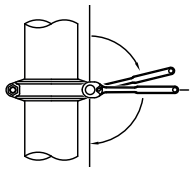
helpful information to ensure proper assembly

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.



metal-to-metal contact



After metal-to-metal, further tighten one quarter or half turn

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”



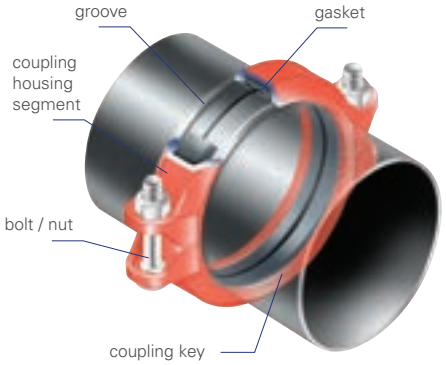
always use a torque wrench

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.



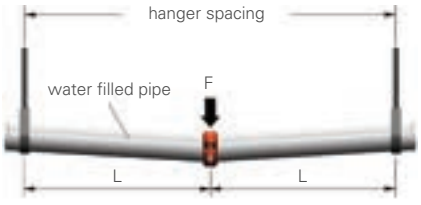
#7705 flexible coupling

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.



M = F(L)

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.

M = 10% listed moment



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.

M= 25% listed moment



The rigid coupling shall pass the test when the angle has not changed more than angle θ. θ shall be calculated as follows: θ° = 60' (minutes) – [2' (minutes) x (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

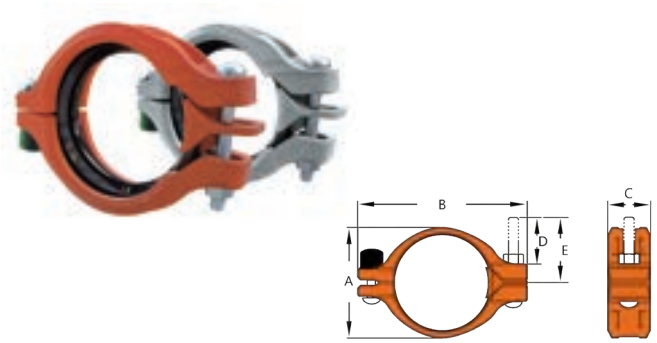
nom. size (in)	θ, max (minutes)	θ, max (degrees)
1½"	57	0.95
2"	56	0.93
2½"	55	0.92
3"	54	0.90
4"	52	0.87
5"	50	0.83
6"	48	0.80
8"	44	0.73
10"	40	0.67
12"	36	0.60
14"	32	0.53
16"	28	0.47

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

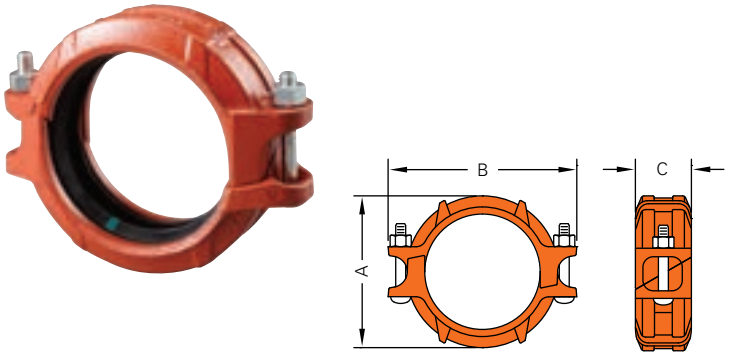
carbon steel pipe

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

stainless steel pipe

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

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

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions			bolt		weight
					A	B	C	no.	size	
1¼" 32	1.660" (42.2 mm)	500 psi (35 bar)	1080 lbs 4.89 kN	0 - 0.05" (0 - 1.2 mm)	2.60" (66 mm)	4.00" (102 mm)	1.81" (46 mm)	2	⅜ x 2⅛" (M10 x 55 mm)	1.41 lbs (0.64 Kgs)
1½" 40	1.900" (48.3 mm)	500 psi (35 bar)	1410 lbs 6.41 kN	0 - 0.05" (0 - 1.2 mm)	2.83" (72 mm)	4.29" (109 mm)	1.81" (46 mm)	2	⅜ x 2⅛" (M10 x 55 mm)	1.46 lbs (0.66 Kgs)
2" 50	2.375" (60.3 mm)	500 psi (35 bar)	2210 lbs 9.99 kN	0 - 0.07" (0 - 1.7 mm)	3.35" (85 mm)	4.61" (117 mm)	1.85" (47 mm)	2	⅜ x 2¾" (M10 x 70 mm)	1.74 lbs (0.79 Kgs)
2½" 65	2.875" (73.0 mm)	500 psi (35 bar)	3240 lbs 14.64 kN	0 - 0.07" (0 - 1.7 mm)	3.86" (98 mm)	5.24" (133 mm)	1.85" (47 mm)	2	⅜ x 2¾" (M10 x 70 mm)	2.05 lbs (0.93 Kgs)
76.1 mm	3.000" (76.1 mm)	500 psi (35 bar)	3530 lbs 15.91 kN	0 - 0.07" (0 - 1.7 mm)	3.94" (100 mm)	5.35" (136 mm)	1.85" (47 mm)	2	⅜ x 2¾" (M10 x 70 mm)	2.16 lbs (0.98 Kgs)
3" 80	3.500" (88.9 mm)	500 psi (35 bar)	4800 lbs 21.71 kN	0 - 0.07" (0 - 1.7 mm)	4.45" (113 mm)	5.91" (150 mm)	1.88" (48 mm)	2	⅜ x 2¾" (M10 x 70 mm)	2.60 lbs (1.20 Kgs)
108.0 mm	4.250" (108.0 mm)	500 psi (35 bar)	7080 lbs 32.05 kN	0 - 0.16" (0 - 4.1 mm)	5.59" (142 mm)	6.93" (176 mm)	2.13" (54 mm)	2	⅜ x 2¾" (M10 x 70 mm)	3.62 lbs (1.64 Kgs)
4" 100	4.500" (114.3 mm)	500 psi (35 bar)	7940 lbs 35.89 kN	0 - 0.16" (0 - 4.1 mm)	5.75" (146 mm)	7.20" (183 mm)	2.13" (54 mm)	2	⅜ x 2¾" (M10 x 70 mm)	4.12 lbs (1.87 Kgs)
133.0 mm	5.250" (133.0 mm)	350 psi (24 bar)	7570 lbs 33.33 kN	0 - 0.16" (0 - 4.1 mm)	6.69" (170 mm)	8.82" (224 mm)	2.13" (54 mm)	2	½ x 3" (M12 x 75 mm)	5.14 lbs (2.33 Kgs)
139.7 mm	5.500" (139.7 mm)	350 psi (24 bar)	8310 lbs 36.77 kN	0 - 0.16" (0 - 4.1 mm)	6.81" (173 mm)	8.98" (228 mm)	2.09" (53 mm)	2	½ x 3" (M12 x 75 mm)	5.67 lbs (2.57 Kgs)

graph continues on next page

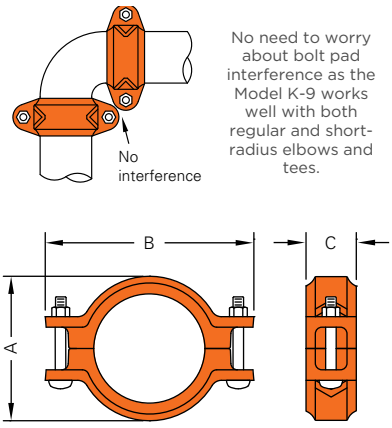
nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions			bolt		weight
					A	B	C	no.	size	
5” 125	5.563” (141.3 mm)	350 psi (24 bar)	8500 lbs 37.62 kN	0 - 0.16” (0 - 4.1 mm)	6.89” (175 mm)	9.06” (230 mm)	2.13” (54 mm)	2	½ x 3” (M12 x 75 mm)	5.69 lbs (2.58 Kgs)
159.0 mm	6.250” (159.0 mm)	350 psi (24 bar)	10730 lbs 47.63 kN	0 - 0.16” (0 - 4.1 mm)	7.80” (198 mm)	9.84” (250 mm)	2.09” (53 mm)	2	½ x 3” (M12 x 75 mm)	6.06 lbs (2.75 Kgs)
165.1 mm	6.500” (165.1 mm)	350 psi (24 bar)	11600 lbs 51.35 kN	0 - 0.16” (0 - 4.1 mm)	7.87” (200 mm)	9.92” (252 mm)	2.09” (53 mm)	2	½ x 3” (M12 x 75 mm)	6.72 lbs (3.05 Kgs)
6” 150	6.625” (168.3 mm)	350 psi (24 bar)	12050 lbs 53.36 kN	0 - 0.16” (0 - 4.1 mm)	8.00” (203 mm)	10.0” (254 mm)	2.09” (53 mm)	2	½ x 3” (M12 x 75 mm)	6.77 lbs (3.07 Kgs)
8” 200	8.625” (219.1 mm)	350 psi (24 bar)	20430 lbs 90.44 kN	0 - 0.19” (0 - 4.8 mm)	10.40” (264 mm)	12.68” (322 mm)	2.52” (64 mm)	2	⅝ x 5 5/16” (M16 x 135 mm)	13.38 lbs (6.07 Kgs)
200 JIS	8.516” (216.3 mm)	350 psi (24 bar)	19920 lbs 88.14 kN	0 - 0.19” (0 - 4.8 mm)	10.24” (260 mm)	13.35” (339 mm)	2.50” (64 mm)	2	¾ x 4¾” (M20 x 120 mm)	15.43 lbs (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

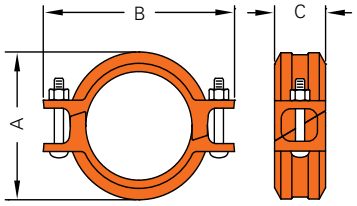
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions A	dimensions B	dimensions C	bolt size	weight
1¼" 32	1.660" (42.2 mm)	500 psi 35 bar	1080 lbs (4.82 kN)	0-0.06" (0-1.6 mm)	2.56" (65 mm)	4.33" (110 mm)	1.73" (44 mm)	⅜ x 1¾" (M10 x 45 mm)	1.3 lbs (0.6 Kgs)
1½" 40	1.900" (48.3 mm)	500 psi 35 bar	1410 lbs (6.32 kN)	0-0.06" (0-1.6 mm)	2.80" (71 mm)	4.45" (113 mm)	1.73" (44 mm)	⅜ x 2⅛" (M10 x 55 mm)	1.3 lbs (0.6 Kgs)
2" 50	2.375" (60.3 mm)	500 psi 35 bar	2210 lbs (9.85 kN)	0-0.06" (0-1.6 mm)	3.27" (83 mm)	4.88 (124 mm)	1.73" (44 mm)	⅜ x 2⅛" (M10 x 55 mm)	1.5 lbs (0.7 Kgs)
2½" 65	2.875" (73.0 mm)	500 psi 35 bar	3240 lbs (14.43 kN)	0-0.06" (0-1.6 mm)	3.86" (98 mm)	5.39 (137 mm)	1.73" (44 mm)	⅜ x 2⅛" (M10 x 55 mm)	1.8 lbs (0.8 Kgs)
76.1 mm	3.000" (76.1 mm)	500 psi 35 bar	3530 lbs (15.68 kN)	0-0.06" (0-1.6 mm)	4.00" (102 mm)	5.51 (140 mm)	1.73" (44 mm)	⅜ x 2⅛" (M10 x 55 mm)	1.8 lbs (0.8 Kgs)
3" 80	3.500" (88.9 mm)	500 psi 35 bar	4800 lbs (21.40 kN)	0-0.06" (0-1.6 mm)	4.50" (114 mm)	5.94 (151 mm)	1.73" (44 mm)	⅜ x 2¾" (M10 x 70 mm)	2.6 lbs (1.2 Kgs)
4" 100	4.500" (114.3 mm)	350 psi 24 bar	5560 lbs (24.72 kN)	0-0.06" (0-1.6 mm)	5.63" (143 mm)	7.48 (190 mm)	1.97" (50 mm)	⅜ x 2¾" (M10 x 70 mm)	3.6 lbs (1.7 Kgs)
139.7 mm	5.500" (139.7 mm)	350 psi 24 bar	8310 lbs (36.92 kN)	0-0.13" (0-3.2 mm)	6.77" (172 mm)	9.21 (234 mm)	2.00" (51 mm)	½ x 3" (M12 x 75 mm)	4.6 lbs (2.1 Kgs)
5" 125	5.563" (141.3 mm)	350 psi 24 bar	8500 lbs (37.77 kN)	0-0.13" (0-3.2 mm)	6.89" (175 mm)	8.98 (228 mm)	1.97" (50 mm)	½ x 3" (M12 x 75 mm)	4.6 lbs (2.1 Kgs)
165.1 mm	6.500" (165.1 mm)	350 psi 24 bar	11600 lbs (51.57 kN)	0-0.13" (0-3.2 mm)	7.75" (197 mm)	9.92 (252 mm)	2.09" (53 mm)	½ x 3" (M12 x 75 mm)	5.3 lbs (2.4 Kgs)
6" 150	6.625" (168.3 mm)	350 psi 24 bar	12050 lbs (53.59 kN)	0-0.13" (0-3.2 mm)	7.87" (200 mm)	10.04 (255 mm)	2.09" (53 mm)	½ x 3" (M12 x 75 mm)	5.9 lbs (2.7 Kgs)
8" 200	8.625" (219.1 mm)	350 psi 24 bar	20430 lbs (90.82 kN)	0-0.13" (0-3.2 mm)	10.16" (258 mm)	13.15 (334 mm)	2.44" (62 mm)	⅝ x 3½" (M16 x 90 mm)	9.7 lbs (4.4 Kgs)
8 (K-9H)" 200	8.625" (219.1 mm)	350 psi 24 bar	20430 lbs (90.82 kN)	0-0.13" (0-3.2 mm)	10.29" (261 mm)	13.08 (332 mm)	2.44" (62 mm)	¾ x 4¾" (M20 x 120 mm)	15.8 lbs (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 approvls.
** 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" 32	1.660" (42.2 mm)	750 psi (52 bar)	1620 lbs 7.27 kN	0 - 0.05" (0-1.2 mm)	2.68" (68 mm)	4.13" (105 mm)	1.85" (47 mm)	2	⅜ x 2⅛" (M10 x 55 mm)	1.6 lbs (0.7 Kgs)
1½" 40	1.900" (48.3 mm)	750 psi (52 bar)	2120 lbs 9.52 kN	0 - 0.05" (0-1.2 mm)	2.91" (74 mm)	4.53" (115 mm)	1.85" (47 mm)	2	⅜ x 2⅛" (M10 x 55 mm)	2.0 lbs (0.9 Kgs)
2" 50	2.375" (60.3 mm)	750 psi (52 bar)	3320 lbs 14.84 kN	0 - 0.07" (0-1.7 mm)	3.39" (86 mm)	4.69" (119 mm)	1.88" (48 mm)	2	⅜ x 2¾" (M10 x 70 mm)	2.4 lbs (1.1 Kgs)
2½" 65	2.875" (73.0 mm)	750 psi (52 bar)	4860 lbs 21.75 kN	0 - 0.07" (0-1.7 mm)	3.94" (100 mm)	5.50" (140 mm)	1.88" (48 mm)	2	⅜ x 2¾" (M10 x 70 mm)	2.4 lbs (1.1 Kgs)
76.1 mm	3.000" (76.1 mm)	750 psi (52 bar)	5290 lbs 23.64 kN	0 - 0.07" (0-1.7 mm)	4.00" (102 mm)	5.75" (146 mm)	1.88" (48 mm)	2	⅜ x 2¾" (M10 x 70 mm)	2.4 lbs (1.1 Kgs)
3" 80	3.500" (88.9 mm)	750 psi (52 bar)	7210 lbs 32.26 kN	0 - 0.07" (0-1.7 mm)	4.53" (115 mm)	6.54" (166 mm)	1.88" (48 mm)	2	½ x 3" (M12 x 75 mm)	3.1 lbs (1.4 Kgs)
4" 100	4.500" (114.3 mm)	750 psi (52 bar)	11920 lbs 53.33 kN	0 - 0.16" (0-4.1 mm)	5.78" (147 mm)	8.11" (206 mm)	2.13" (54 mm)	2	½ x 3" (M12 x 75 mm)	4.4 lbs (2.0 Kgs)
139.7 mm	5.500" (139.7 mm)	750 psi (52 bar)	17810 lbs 79.66 kN	0 - 0.16" (0-4.1 mm)	6.88" (175 mm)	9.37" (238 mm)	2.09" (53 mm)	2	⅝ x 3½" (M16 x 90 mm)	6.6 lbs (3.0 Kgs)
5" 125	5.563" (141.3 mm)	750 psi (52 bar)	18220 lbs 81.50 kN	0 - 0.16" (0-4.1 mm)	6.97" (177 mm)	9.45" (240 mm)	2.09" (53 mm)	2	⅝ x 3½" (M16 x 90 mm)	6.6 lbs (3.0 Kgs)
165.1 mm	6.500" (165.1 mm)	700 psi (48 bar)	23210 lbs 102.71 kN	0 - 0.16" (0-4.1 mm)	7.87" (200 mm)	10.47" (266 mm)	2.09" (53 mm)	2	⅝ x 3½" (M16 x 90 mm)	7.5 lbs (3.4 Kgs)
6" 150	6.625" (168.3 mm)	700 psi (48 bar)	24110 lbs 106.73 kN	0 - 0.16" (0-4.1 mm)	8.00" (203 mm)	10.67" (271 mm)	2.09" (53 mm)	2	⅝ x 3½" (M16 x 90 mm)	7.1 lbs (3.2 Kgs)
8" 200	8.625" (219.1 mm)	600 psi (42 bar)	35030 lbs 158.27 kN	0 - 0.19" (0-4.8 mm)	10.55" (268 mm)	13.46" (342 mm)	2.52" (64 mm)	2	¾ x 4¾" (M20 x 120 mm)	15.7 lbs (7.1 Kgs)
10" 250	10.750" (273.0 mm)	500 psi (35 bar)	45350 lbs 204.77 kN	0 - 0.13" (0-3.2 mm)	12.86" (327 mm)	15.60" (396 mm)	2.56" (65 mm)	2	⅞ x 6½" ---	27.4 lbs (10.4 Kgs)

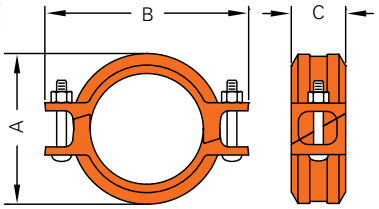
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nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions			bolt		weight
					A	B	C	no.	size	
12" 300	12.750" (323.9 mm)	400 psi (28 bar)	51040 lbs (230.59 kN)	0 - 0.13" (0-3.2 mm)	14.86" (377 mm)	17.80" (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.

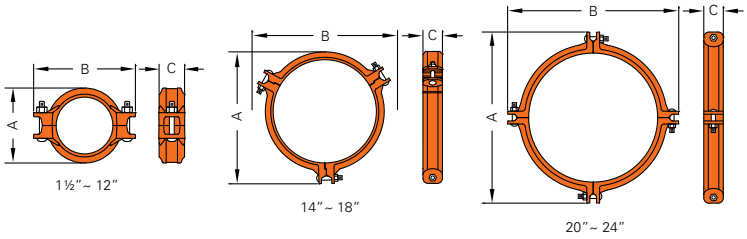
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions A	dimensions B	dimensions C	bolt no.	bolt size	weight
14" 350	14.000 in (355.6 mm)	250 psi 17 bar	38460 lbs 168.75 kN	0 - 0.13" (0-3.2 mm)	16.06" (408 mm)	20.00" (508 mm)	2.95" (75 mm)	2	⅞ x 5½" ---	35.3 lbs (16.0 Kgs)
16" 400	16.000 (406.4 mm)	250 psi 17 bar	50240 lbs 220.41 kN	0 - 0.13" (0-3.2 mm)	18.39" (467 mm)	22.05" (660 mm)	2.95" (75 mm)	2	⅞ x 5½" ---	30.5 lbs (17.9 Kgs)
18" 450	18.000 (457.2 mm)	250 psi 17 bar	63580 lbs 278.95 kN	0 - 0.13" (0-3.2 mm)	20.68" (525 mm)	24.29" (617 mm)	3.11" (79 mm)	2	⅞ x 5½" ---	40.1 lbs (22.3 Kgs)
20" 500	20.000 (508.0 mm)	250 psi 17 bar	78500 lbs 344.39 kN	0 - 0.13" (0-3.2 mm)	22.93" (582 mm)	27.99" (711 mm)	3.00" (76 mm)	2	1 x 5½" ---	57.8 lbs (26.2 Kgs)
24" 600	24.000 (609.6 mm)	250 psi 17 bar	113040 lbs 495.92 kN	0 - 0.13" (0-3.2 mm)	27.05" (687 mm)	30.55" (776 mm)	3.06" (78 mm)	2	1 x 5½" ---	70.8 lbs (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		weight
					A	B	C	no.	size	
1½" 40	1.900" (48.3 mm)	500 psi (35 bar)	1410 lbs (6.23 kN)	0-0.06" (0-1.6 mm)	2.91" (74 mm)	4.41" (112 mm)	1.81" (46 mm)	2	⅜ x 2⅛" (M10 x 55 mm)	1.5 lbs (0.7 Kgs)
2" 50	2.375" (60.3 mm)	500 psi (35 bar)	2210 lbs (9.70 kN)	0-0.06" (0-1.6 mm)	3.34" (85 mm)	4.96" (126 mm)	1.81" (46 mm)	2	⅜ x 2⅛" (M10 x 55 mm)	1.9 lbs (0.9 Kgs)
2½" 65	2.875" (73.0 mm)	500 psi (35 bar)	3240 lbs (14.22 kN)	0-0.06" (0-1.6 mm)	3.89" (99 mm)	5.59" (142 mm)	1.81" (46 mm)	2	⅜ x 2⅛" (M10 x 55 mm)	2.6 lbs (1.2 Kgs)
76.1 mm	3.000" (76.1 mm)	500 psi (35 bar)	3530 lbs (15.46 kN)	0-0.06" (0-1.6 mm)	4.00" (102 mm)	5.90" (150 mm)	1.81" (46 mm)	2	⅜ x 2⅛" (M10 x 55 mm)	2.6 lbs (1.2 Kgs)
3" 80	3.500" (88.9 mm)	500 psi (35 bar)	4800 lbs (21.09 kN)	0-0.06" (0-1.6 mm)	4.52" (115 mm)	6.50" (165 mm)	1.81" (46 mm)	2	½ x 3" (M12 x 75 mm)	3.3 lbs (1.5 Kgs)
108.0 mm	4.250" (108.0 mm)	500 psi (35 bar)	7090 lbs (31.13 kN)	0-0.16" (0-4.1 mm)	5.54" (141 mm)	7.59" (193 mm)	2.00" (51 mm)	2	½ x 3" (M12 x 75 mm)	4.8 lbs (2.2 Kgs)
4" 100	4.500" (114.3 mm)	500 psi (35 bar)	7940 lbs (34.87 kN)	0-0.16" (0-4.1 mm)	5.82" (148 mm)	7.79" (198 mm)	2.00" (51 mm)	2	½ x 3" (M12 x 75 mm)	4.8 lbs (2.2 Kgs)
133.0 mm	5.250" (133.0 mm)	450 psi (31 bar)	9730 lbs (43.05 kN)	0-0.16" (0-4.1 mm)	6.61" (168 mm)	9.72" (247 mm)	2.00" (51 mm)	2	⅝ x 3½" (M16 x 90 mm)	6.0 lbs (2.7 Kgs)
139.7 mm	5.500" (139.7 mm)	450 psi (31 bar)	10680 lbs (47.49 kN)	0-0.16" (0-4.1 mm)	6.8" (173 mm)	9.45" (240 mm)	2.00" (51 mm)	2	⅝ x 3½" (M16 x 90 mm)	6.4 lbs (2.9 Kgs)
5" 125	5.563" (141.3 mm)	450 psi (31 bar)	10930 lbs (48.59 kN)	0-0.16" (0-4.1 mm)	6.88" (175 mm)	9.84" (250 mm)	2.00" (51 mm)	2	⅝ x 3½" (M16 x 90 mm)	6.4 lbs (2.9 Kgs)
165.1 mm	6.500" (165.1 mm)	450 psi (31 bar)	14920 lbs (66.33 kN)	0-0.16" (0-4.1 mm)	7.87" (200 mm)	11.02" (280 mm)	2.09" (53 mm)	2	⅝ x 3½" (M16 x 90 mm)	7.7 lbs (3.5 Kgs)
6" 150	6.625" (168.3 mm)	450 psi (31 bar)	15500 lbs (68.93 kN)	0-0.16" (0-4.1 mm)	8.07" (205 mm)	11.18" (284 mm)	2.09" (53 mm)	2	⅝ x 3½" (M16 x 90 mm)	8.1 lbs (3.7 Kgs)

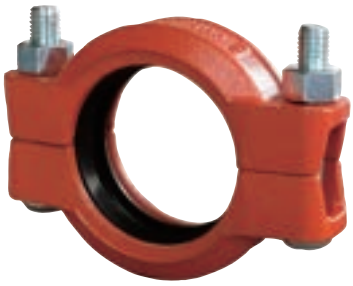
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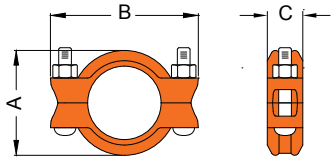
nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions			bolt		weight
					A	B	C	no.	size	
8” 200	8.625” (219.1 mm)	300 psi (20 bar)	17510 lbs (75.37 kN)	0-0.16” (0-4.1 mm)	10.27” (261 mm)	13.58” (345 mm)	2.48” (63 mm)	2	⅝ x 5” (M16 x 135 mm)	14.6 lbs (6.6 Kgs)
10” 250	10.750” (273.0 mm)	300 psi (20 bar)	27210 lbs (117.01 kN)	0-0.16” (0-4.1 mm)	12.44” (316 mm)	15.51” (394 mm)	2.50” (64 mm)	2	¾ x 4¾” (M20 x 120 mm)	18.6 lbs (8.4 Kgs)
12” 300	12.750” (323.9 mm)	300 psi (20 bar)	38280 lbs (164.71 kN)	0-0.16” (0-4.1 mm)	14.17” (360 mm)	18.00” (457 mm)	2.50” (64 mm)	2	⅞ x 6½” ---	24.5 lbs (11.1 Kgs)
200 JIS	8.516” (216.3 mm)	300 psi (20 bar)	17070 lbs (73.45 kN)	0-0.16” (0-4.1 mm)	10.00” (254 mm)	13.58” (345 mm)	2.48” (63 mm)	2	⅝ x 5” (M16 x 135 mm)	15.2 lbs (6.9 Kgs)
250 JIS	10.528” (267.4 mm)	300 psi (20 bar)	26100 lbs (112.26 kN)	0-0.16” (0-4.1 mm)	12.20” (310 mm)	15.20” (386 mm)	2.50” (64 mm)	2	¾ x 4¾” (M20 x 120 mm)	19.3 lbs (8.7 Kgs)
300 JIS	12.539” (318.5 mm)	300 psi (20 bar)	37020 lbs (159.26 kN)	0-0.16” (0-4.1 mm)	13.94” (354 mm)	17.48” (444 mm)	2.50” (64 mm)	2	⅞ x 6½” ---	26.0 lbs (11.2 Kgs)
14” 350	14.000” (355.6 mm)	300 psi (20 bar)	46150 lbs (198.53 kN)	0-0.13” (0-3.2 mm)	16.25” (413 mm)	20.28” (515 mm)	2.95” (75 mm)	3	⅞ x 4” ---	31.9 lbs (14.5 Kgs)
16” 400	16.000” (406.4 mm)	300 psi (20 bar)	60280 lbs (259.30 kN)	0-0.13” (0-3.2 mm)	18.11” (460 mm)	22.17” (563 mm)	2.95” (75 mm)	3	⅞ x 4” ---	35.2 lbs (16.0 Kgs)
18” 450	18.000” (457.2 mm)	300 psi (20 bar)	76300 lbs (328.18 kN)	0-0.13” (0-3.2 mm)	20.51” (521 mm)	24.21” (615 mm)	3.11” (79 mm)	3	⅞ x 4” ---	37.4 lbs (17.0 Kgs)
20” 500	20.000” (508.0 mm)	300 psi (20 bar)	94200 lbs (405.16 kN)	0-0.13” (0-3.2 mm)	22.87” (581 mm)	26.26” (667 mm)	3.11” (79 mm)	4	1 x 3½” ---	52.8 lbs (24.0 Kgs)
22” 550	22.000” (558.8 mm)	250 psi (17 bar)	94980 lbs (416.71 kN)	0-0.13” (0-3.2 mm)	24.49” (622 mm)	28.35” (720 mm)	3.11” (79 mm)	4	1 x 3½” ---	58.3 lbs (26.5 Kgs)
24” 600	24.000” (609.6 mm)	250 psi (17 bar)	113040 lbs (495.92 kN)	0-0.13” (0-3.2 mm)	27.12” (689 mm)	30.24” (768 mm)	3.11” (79 mm)	4	1 x 3½” ---	62.6 lbs (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 ¾” - 3½”; 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.

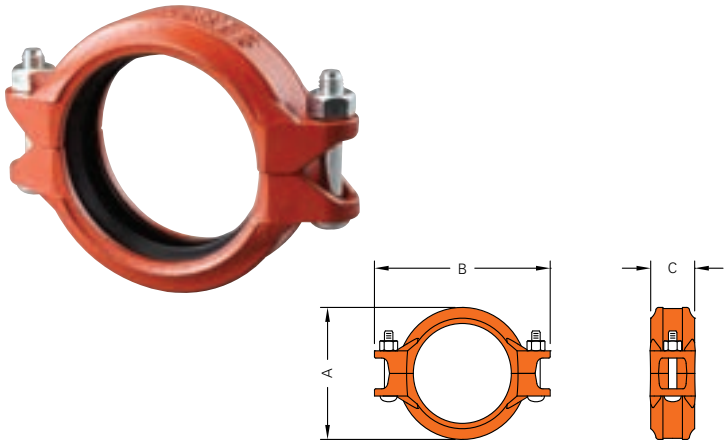
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	dimensions A	dimensions B	dimensions C	bolt no.	bolt size	weight
2” 50	2.375” (60. 3 mm)	1000 psi (69 bar)	4420 lbs (19.98 kN)	0 - 0.14” (0 - 3.6 mm)	3.50” (90 mm)	5.71” (145 mm)	1.92” (49 mm)	2	⅝ x 2¾”	3.4 lbs (1.6 Kgs)
2½” 65	2.875” (73.0 mm)	1000 psi (69 bar)	6480 lbs (29.28 kN)	0 - 0.14” (0 - 3.6 mm)	4.02” (102 mm)	6.61” (168 mm)	1.92” (49 mm)	2	⅝ x 2¾”	3.8 lbs (1.7 Kgs)
3” 80	3.500” (88.9 mm)	1000 psi (69 bar)	9610 lbs (43.43 kN)	0 - 0.14” (0 - 3.6 mm)	4.86” (123 mm)	7.40” (188 mm)	1.92” (49 mm)	2	⅝ x 2¾”	4.8 lbs (2.2 Kgs)
4” 100	4.500” (114.3 mm)	1000 psi (69 bar)	15890 lbs (71.79 kN)	0 - 0.25” (0 - 6.4 mm)	6.09” (155 mm)	8.74” (222 mm)	2.10” (53 mm)	2	¾ x 4¾”	8.4 lbs (3.8 Kgs)
6” 150	6.625” (168.3 mm)	1000 psi (69 bar)	34450 lbs (155.65 kN)	0 - 0.25” (0 - 6.4 mm)	8.58” (218 mm)	11.61” (295 mm)	2.25” (57 mm)	2	⅞ x 5½”	17.6 lbs (8.0 Kgs)
8” 200	8.625” (219.1 mm)	800 psi (55 bar)	46710 lbs (207.26 kN)	0 - 0.25” (0 - 6.4 mm)	10.83” (275 mm)	14.33” (364 mm)	2.75” (70 mm)	2	1 x 5½”	24.0 lbs (10.9 Kgs)
10” 250	10.750” (273.0 mm)	800 psi (55 bar)	72570 lbs (321.78 kN)	0 - 0.25” (0 - 6.4 mm)	13.15” (334 mm)	16.70” (424 mm)	2.95” (75 mm)	2	1 x 5½”	31.2 lbs (14.2 Kgs)
12” 300	12.750” (323.9 mm)	800 psi (55 bar)	102080 lbs (452.95 kN)	0 - 0.25” (0 - 6.4 mm)	15.35” (390 mm)	18.90” (480 mm)	2.95” (75 mm)	2	1 x 5½”	36.7 lbs (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 2017 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 ¾” - 3½”; 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" 25	1.315" (33.4 mm)	500 psi (35 bar)	670 lbs (3.12 kN)	0.0625" (1.6 mm)	2° - 45'	0.58"/ft (48 mm/m)	2.24" (57 mm)	3.94" (100 mm)	1.81" (46 mm)	⅜ x 1¾" (M10 x 45 mm)	1.3 lbs (0.6 Kgs)
1¼" 32	1.660" (42.2 mm)	500 psi (35 bar)	1080 lbs (4.94 kN)	0.0625" (1.6 mm)	2° - 10'	0.46"/ft (38 mm/m)	2.60" (66 mm)	4.06" (103 mm)	1.81" (46 mm)	⅜ x 2⅛" (M10 x 55 mm)	1.5 lbs (0.7 Kgs)
1½" 40	1.900" (48.3 mm)	500 psi (35 bar)	1410 lbs (6.41 kN)	0.0625" (1.6 mm)	1° - 54'	0.4"/ft (33 mm/m)	2.83" (72 mm)	4.25" (108 mm)	1.81" (46 mm)	⅜ x 2⅛" (M10 x 55 mm)	1.6 lbs (0.7 Kgs)
2" 50	2.375" (60.3 mm)	500 psi (35 bar)	2210 lbs (9.99 kN)	0.0625" (1.6 mm)	1° - 31'	0.32"/ft (27 mm/m)	3.31" (84 mm)	5.08" (129 mm)	1.85" (47 mm)	⅜ x 2⅛" (M10 x 55 mm)	1.8 lbs (0.8 Kgs)
2½" 65	2.875" (73.0 mm)	500 psi (35 bar)	3240 lbs (14.64 kN)	0.0625" (1.6 mm)	1° - 15'	0.26"/ft (22 mm/m)	3.90" (99 mm)	5.59" (142 mm)	1.85" (47 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.0 lbs (0.9 Kgs)
76.1 mm	3.000" (76.1 mm)	500 psi (35 bar)	3530 lbs (15.91 kN)	0.0625" (1.6 mm)	1° - 12'	0.25"/ft (21 mm/m)	4.02" (102 mm)	5.79" (147 mm)	1.85" (47 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.1 lbs (1.0 Kgs)
3" 80	3.500" (88.9 mm)	500 psi (35 bar)	4800 lbs (21.71 kN)	0.0625" (1.6 mm)	1° - 02'	0.22"/ft (18 mm/m)	4.57" (116 mm)	6.46" (164 mm)	1.85" (47 mm)	½ x 3" (M12 x 75 mm)	2.8 lbs (1.3 Kgs)
101.6 mm	4.000" (101.6 mm)	500 psi (35 bar)	6280 lbs (28.36 kN)	0.0625" (1.6 mm)	0° - 54'	0.19"/ft (16 mm/m)	5.07" (129 mm)	7.24" (184 mm)	1.85" (47 mm)	½ x 3" (M12 x 75 mm)	3.6 lbs (1.6 Kgs)
108.0 mm	4.250" (108.0 mm)	500 psi (35 bar)	7080 lbs (32.05 kN)	0.1250" (3.2 mm)	1° - 42'	0.36"/ft (30 mm/m)	5.43" (138 mm)	7.56" (192 mm)	2.05" (52 mm)	½ x 3" (M12 x 75 mm)	4.1 lbs (1.9 Kgs)
4" 100	4.500" (114.3 mm)	500 psi (35 bar)	7940 lbs (35.89 kN)	0.1250" (3.2 mm)	1° - 36'	0.34"/ft (28 mm/m)	5.71" (145 mm)	7.76" (197 mm)	2.05" (52 mm)	½ x 3" (M12 x 75 mm)	4.1 lbs (1.9 Kgs)
133.0 mm	5.250" (133.0 mm)	450 psi (31 bar)	9730 lbs (43.05 kN)	0.1250" (3.2 mm)	1° - 23'	0.29"/ft (24 mm/m)	6.50" (165 mm)	9.09" (231 mm)	2.05" (52 mm)	⅝ x 3½" (M16 x 90 mm)	5.1 lbs (2.3 Kgs)
139.7 mm	5.500" (139.7 mm)	450 psi (31 bar)	10680 lbs (47.49 kN)	0.1250" (3.2 mm)	1° - 18'	0.28"/ft (23 mm/m)	6.69" (170 mm)	9.76" (248 mm)	2.05" (52 mm)	⅝ x 3½" (M16 x 90 mm)	5.1 lbs (2.3 Kgs)
5" 125	5.563" (141.3 mm)	450 psi (31 bar)	10930 lbs (48.59 kN)	0.1250" (3.2 mm)	1° - 18'	0.27"/ft (23 mm/m)	6.77" (172 mm)	9.17" (233 mm)	2.05" (52 mm)	⅝ x 3½" (M16 x 90 mm)	5.9 lbs (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)	⅝ x 3½" (M16 x 90 mm)	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)	⅝ x 3½" (M16 x 90 mm)	6.8 lbs (3.1 Kgs)
6" 150	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)	⅝ x 3½" (M16 x 90 mm)	7.0 lbs (3.2 Kgs)
8" 200	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)	⅝ x 3½" (M16 x 90 mm)	12.8 lbs (5.8 Kgs)
8 (7705H)" 200	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)	¾ x 4¾" (M20 x 120 mm)	15.7 lbs (7.1 Kgs)
10" 250	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)	¾ x 4¾" (M20 x 120 mm)	18.0 lbs (8.2 Kgs)
12" 300	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)	⅞ x 6½ ---	23.8 lbs (10.8 Kgs)
200 JIS	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)	¾ x 4¾" (M20 x 120 mm)	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)	¾ x 4¾" (M20 x 120 mm)	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)	⅞ x 6½ ---	22.6 lbs (10.3 Kgs)

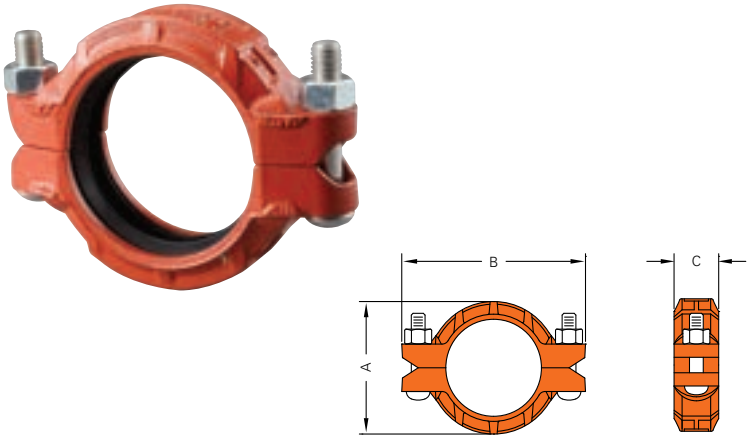
All DIN size 7705 couplings up to DN150 size and the DN200 7705H coupling are VdS approved in addition to cULus and FM approvals.

* 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 ¾"/DN20 - 3½"/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		weight
					degree per coupling	per pipe	A	B	C	no.	size	
¾" 20	1.050" (26.7 mm)	1000 psi (69 bar)	865 lbs (3.79 kN)	0.0625" (1.6 mm)	3° – 23'	0.71"/ft (58 mm/m)	2.13" (54 mm)	3.74" (95 mm)	1.81" (46 mm)	2	⅜ x 2⅛" (M10x55 mm)	1.3 lbs (0.6 Kgs)
1" 25	1.315" (33.4 mm)	1000 psi (69 bar)	1360 lbs (6.15 kN)	0.0625" (1.6 mm)	2° – 45'	0.58"/ft (48 mm/m)	2.40" (61 mm)	4.02" (102 mm)	1.81" (46 mm)	2	⅜ x 2⅛" (M10x55 mm)	1.7 lbs (0.8 Kgs)
1¼" 32	1.660" (42.2 mm)	1000 psi (69 bar)	2160 lbs (9.64 kN)	0.0625" (1.6 mm)	2° – 10'	0.45"/ft (38 mm/m)	2.76" (70 mm)	4.45" (113 mm)	1.81" (46 mm)	2	½ x 3" (M12x75 mm)	2.1 lbs (1.0 Kgs)
1½" 40	1.900" (48.3 mm)	1000 psi (69 bar)	2830 lbs (12.64 kN)	0.0625" (1.6 mm)	1° – 54'	0.40"/ft (33 mm/m)	3.00" (76 mm)	4.57" (116 mm)	1.81" (46 mm)	2	½ x 2⅜" (M12x60 mm)	2.1 lbs (1.0 Kgs)
2" 50	2.375" (60.3 mm)	1000 psi (69 bar)	4430 lbs (19.69 kN)	0.0625" (1.6 mm)	1° – 31'	0.31"/ft (26 mm/m)	3.50" (90 mm)	5.35" (136 mm)	1.81" (46 mm)	2	½ x 3" (M12x75 mm)	2.6 lbs (1.2 Kgs)
2½" 65	2.875" (73.0 mm)	1000 psi (69 bar)	6490 lbs (28.86 kN)	0.0625" (1.6 mm)	1° – 15'	0.26"/ft (22 mm/m)	4.00" (102 mm)	5.98" (152 mm)	1.85" (47 mm)	2	½ x 3" (M12x75 mm)	2.9 lbs (1.3 Kgs)
76.1 mm	3.000" (76.1 mm)	1000 psi (69 bar)	7065 lbs (31.37 kN)	0.0625" (1.6 mm)	1° – 12'	0.25"/ft (21 mm/m)	4.06" (103 mm)	6.02" (153 mm)	1.85" (47 mm)	2	½ x 3" (M12x75 mm)	2.9 lbs (1.3 Kgs)
3" 80	3.500" (88.9 mm)	1000 psi (69 bar)	9620 lbs (42.81 kN)	0.0625" (1.6 mm)	1° – 02'	0.21"/ft (18 mm/m)	4.88" (124 mm)	6.34" (161 mm)	1.85" (47 mm)	2	½ x 3" (M12x75 mm)	3.3 lbs (1.5 Kgs)
4" 100	4.500" (114.3 mm)	1000 psi (69 bar)	15900 lbs (70.76 kN)	0.1250" (3.2 mm)	1° – 36'	0.33"/ft (27 mm/m)	6.18" (157 mm)	8.03" (204 mm)	2.05" (52 mm)	2	⅝ x 3½" (M16x90 mm)	4.6 lbs (2.1 Kgs)
139.7 mm	5.500" (139.7 mm)	1000 psi (69 bar)	23750 lbs (105.71 kN)	0.1250" (3.2 mm)	1° – 18'	0.27"/ft (23 mm/m)	7.32" (186 mm)	9.41" (239 mm)	2.09" (53 mm)	2	⅝ x 3½" (M16x90 mm)	6.8 lbs (3.1 Kgs)
5" 125	5.563" (141.3 mm)	1000 psi (69 bar)	24295 lbs (108.14 kN)	0.1250" (3.2 mm)	1° – 18'	0.27"/ft (22 mm/m)	7.32" (186 mm)	9.65" (245 mm)	2.09" (53 mm)	2	⅝ x 3½" (M16x90 mm)	7.2 lbs (3.3 Kgs)

graph continues on next page

					angular movement		dimensions			bolt		
nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	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" 150	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" 200	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" 250	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	⅞ x 6½" ---	23.3 lbs (10.6 Kgs)
12" 300	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	⅞ 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	⅞ 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	⅞ 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.

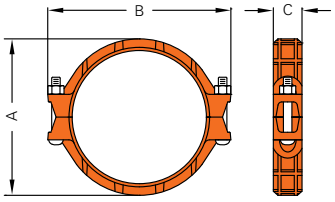
* Non-standard/stock items may require longer lead time.

* 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



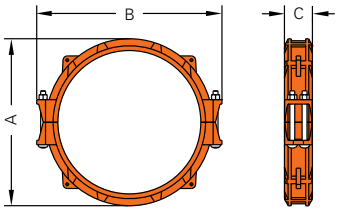
14”-24”



14”~ 24”



26”



26”

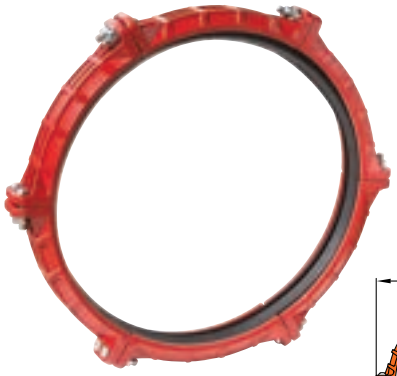
The Shurjoint Model 7707N is a two-segment, flexible coupling for use with standard pipe, roll or cut grooved to AWWA C606 specifications.

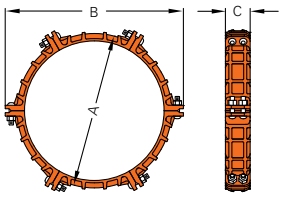
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	angular movement		dimensions			bolt		weight
					degree per coupling	per pipe	A	B	C	no.	size	
14” 350	14.00” (355.6 mm)	300 psi (20 bar)	46150 lbs (198.53 kN)	0.125” (3.2 mm)	0° – 31’	0.06”/ft 4.5 mm/m	16.23” (412.0 mm)	19.80” (503.0 mm)	2.95” (75.0 mm)	2	⅞ x 6½”	34.5 lbs (15.7 Kgs)
16” 400	16.00” (406.4 mm)	300 psi (20 bar)	60280 lbs (259.30 kN)	0.125” (3.2 mm)	0° – 27’	0.05”/ft 4.0 mm/m	18.23” (463.0 mm)	21.85” (555.0 mm)	2.95” (75.0 mm)	2	1 x 6½”	37.0 lbs (16.8 Kgs)
18” 450	18.00” (457.2 mm)	300 psi (20 bar)	76300 lbs (327.89 kN)	0.125” (3.2 mm)	0° – 24’	0.04”/ft 3.5 mm/m	20.45” (520.0 mm)	24.06” (611.0 mm)	3.11” (79.0 mm)	2	1 x 6½”	47.1 lbs (22.3 Kgs)
20” 500	20.00” (508.0 mm)	300 psi (20 bar)	94200 lbs (405.16 kN)	0.125” (3.2 mm)	0° – 22’	0.04”/ft 3.0 mm/m	22.48” (571.0 mm)	26.38” (670.0 mm)	3.11” (79.0 mm)	2	1 x 6½”	54.4 lbs (24.7 Kgs)
22” 550	22.00” (558.8 mm)	300 psi (20 bar)	113980 lbs (490.60 kN)	0.125” (3.2 mm)	0° – 19’	0.04”/ft 3.0 mm/m	24.46” (621.4 mm)	30.16” (766.0 mm)	3.11” (79.0 mm)	2	1⅛ x 6½”	63.0 lbs (28.6 Kgs)
24” 600	24.00” (609.6 mm)	300 psi (20 bar)	135640 lbs (584.20 kN)	0.125” (3.2 mm)	0° – 18’	0.03”/ft 2.5 mm/m	26.55” (674.0 mm)	30.43” (773.0 mm)	3.11” (79.0 mm)	2	1⅛ x 6½”	65.1 lbs (29.5 Kgs)
26” 650	26.00” (660.4 mm)	300 psi (20 bar)	159190 lbs (684.72 kN)	0.125” (3.2 mm)	0° – 17’	0.03”/ft 2.5 mm/m	29.68” (754.0 mm)	33.15” (842.0 mm)	4.94” (125.6 mm)	4	⅞ x 9⅝”	143.0 lbs (65.0 Kgs)

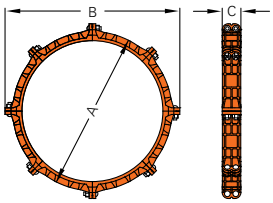
* Working pressure is based on roll-grooved standard wall carbon steel pipe.
Pressure ratings are based on cut-grooved XS carbon steel pipe, refer to page 73 on STD & LW carbon steel pipes.
† Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. 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





28″ ~ 36″



40″ ~ 42″

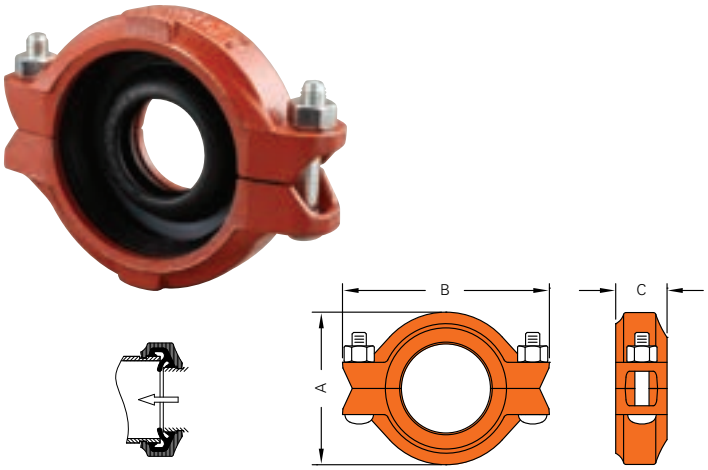
The Shurjoint Model 7707L large diameter couplings in sizes 28” - 42” (700 mm - 1050 mm) are designed for joining large diameter IPS pipe that can be roll grooved. All couplings feature a six to eight segment design, incorporating two bolts at each segment joint to ensure a positive connection and seal.

dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	angular movement		dimensions			bolt		weight
					degree per coupling	per pipe	A	B	C	no.	size	
28“ 700	28.0” (711.2 mm)	175 psi (12 bar)	107700 lbs (476.47 kN)	0.250” (6.4 mm)	---	--- ---	32.0” (813 mm)	35.98” (914 mm)	5.0” (127 mm)	12	⅞ x 4”	180 lbs (82 Kgs)
30” 750	30.0” (762.0 mm)	175 psi (12 bar)	123630 lbs (546.97 kN)	0.250” (6.4 mm)	---	--- ---	34.0” (864 mm)	38.07 (967 mm)	5.0” (127 mm)	12	⅞ x 4”	209 lbs (95 Kgs)
32” 800	32.0” (812.8 mm)	175 psi (12 bar)	140670 lbs (622.33 kN)	0.250” (6.4 mm)	---	--- ---	36.0” (914 mm)	40.08 (1018 mm)	5.0” (127 mm)	12	⅞ x 4”	207 lbs (94 Kgs)
34” 850	34.0” (863.6 mm)	175 psi (12 bar)	158800 lbs (702.55 kN)	0.250” (6.4 mm)	---	--- ---	38.3” (974 mm)	42.00 (1066 mm)	5.0” (127 mm)	12	⅞ x 4”	198 lbs (90 Kgs)
36” 900	36.0” (914.4 mm)	175 psi (12 bar)	178030 lbs (787.63 kN)	0.250” (6.4 mm)	---	--- ---	40.0” (1016 mm)	44.02 (1118 mm)	5.0” (127 mm)	12	⅞ x 4”	212 lbs (96 Kgs)
40” 1000	40.0” (1016.0 mm)	175 psi (12 bar)	219800 lbs (972.39 kN)	0.250” (6.4 mm)	---	--- ---	43.5” (1105 mm)	49.49 (1257 mm)	5.4” (138 mm)	16	1 x 3½”	271 lbs (123 Kgs)
42” 1050	42.0” (1066.8 mm)	175 psi (12 bar)	242330 lbs (1072.05 kN)	0.250” (6.4 mm)	---	--- ---	45.5” (1156 mm)	51.57 (1310 mm)	5.4” (138 mm)	16	1 x 3½”	313 lbs (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 73 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" 40 x 32	1.900 x 1.660" (48.3 x 42.2 mm)	500 psi (35 bar)	1410 lbs (6.23 kN)	0 - 0.065" (0 - 1.6 mm)	1° - 54'	0.20"/ft (17 mm/m)	2.83" (72 mm)	4.65" (118 mm)	1.81" (46 mm)	⅜ x 2⅛" (M10 x 55 mm)	1.8 lbs (0.8 Kgs)
2 x 1½" 50 x 40	2.375 x 1.900" (60.3 x 48.3 mm)	500 psi (35 bar)	2210 lbs (9.70 kN)	0 - 0.065" (0 - 1.6 mm)	1° - 31'	0.16"/ft (13 mm/m)	3.35" (85 mm)	4.80" (122 mm)	1.89" (48 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.0 lbs (0.9 Kgs)
2½ x 2" 65 x 50	2.875 x 2.375" (73.0 x 60.3 mm)	500 psi (35 bar)	3240 lbs (14.22 kN)	0 - 0.065" (0 - 1.6 mm)	1° - 15'	0.13"/ft (11 mm/m)	3.78" (96 mm)	5.67" (144 mm)	1.89" (48 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.6 lbs (1.2 Kgs)
76.1 mm x 50	3.000 x 2.375" (76.1 x 60.3 mm)	500 psi (35 bar)	3530 lbs (15.46 kN)	0 - 0.065" (0 - 1.6 mm)	1° - 12'	0.13"/ft (11 mm/m)	4.02" (102 mm)	5.67" (144 mm)	1.89" (48 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.6 lbs (1.2 Kgs)
3 x 2" 80 x 50	3.500 x 2.375" (88.9 x 60.3 mm)	500 psi (35 bar)	4800 lbs (21.09 kN)	0 - 0.065" (0 - 1.6 mm)	1° - 02'	0.11"/ft (9 mm/m)	4.57" (116 mm)	6.61" (168 mm)	1.89" (48 mm)	½ x 3" (M12 x 75 mm)	3.3 lbs (1.5 Kgs)
3 x 2½" 80 x 65	3.500 x 2.875" (88.9 x 73.0 mm)	500 psi (35 bar)	4800 lbs (21.09 kN)	0 - 0.065" (0 - 1.6 mm)	1° - 02'	0.11"/ft (9 mm/m)	4.57" (116 mm)	6.61" (168 mm)	1.89" (48 mm)	½ x 3" (M12 x 75 mm)	3.7 lbs (1.7 Kgs)
80 x 76.1 mm	3.500 x 3.000" (88.9 x 76.1 mm)	500 psi (35 bar)	4800 lbs (21.09 kN)	0 - 0.065" (0 - 1.6 mm)	1° - 02'	0.11"/ft (9 mm/m)	4.57" (116 mm)	6.61" (168 mm)	1.89" (48 mm)	½ x 3" (M12 x 75 mm)	3.7 lbs (1.7 Kgs)
4 x 2" 100 x 50	4.500 x 2.375" (114.3 x 60.3 mm)	500 psi (35 bar)	7940 lbs (34.87 kN)	0 - 0.095" (0 - 2.4 mm)	1° - 12'	0.13"/ft (11 mm/m)	5.75" (146 mm)	7.80" (198 mm)	1.93" (49 mm)	½ x 3" (M12 x 75 mm)	5.3 lbs (2.4 Kgs)
4 x 2½" 100 x 65	4.500 x 2.875" (114.3 x 73.0 mm)	500 psi (35 bar)	7940 lbs (34.87 kN)	0 - 0.095" (0 - 2.4 mm)	1° - 12'	0.13"/ft (11 mm/m)	5.75" (146 mm)	7.80" (198 mm)	1.93" (49 mm)	½ x 3" (M12 x 75 mm)	5.7 lbs (2.6 Kgs)
100 x 76.1 mm	4.500 x 3.000" (114.3 x 76.1 mm)	500 psi (35 bar)	7940 lbs (34.87 kN)	0 - 0.095" (0 - 2.4 mm)	1° - 12'	0.13"/ft (11 mm/m)	5.75" (146 mm)	7.80" (198 mm)	1.93" (49 mm)	½ x 3" (M12 x 75 mm)	5.7 lbs (2.6 Kgs)
4 x 3" 100 x 80	4.500 x 3.500" (114.3 x 88.9 mm)	500 psi (35 bar)	7940 lbs (34.87 kN)	0 - 0.095" (0 - 2.4 mm)	1° - 12'	0.13"/ft (11 mm/m)	5.75" (146 mm)	7.80" (198 mm)	2.01" (51 mm)	½ x 3" (M12 x 75 mm)	5.3 lbs (2.4 Kgs)
139.7 mm x 100	5.500 x 4.500" (139.7 x 114.3 mm)	400 psi (28 bar)	9490 lbs (42.90 kN)	0 - 0.125" (0 - 3.2 mm)	1° - 18'	0.14"/ft (12 mm/m)	6.30" (160 mm)	9.45" (240 mm)	2.01" (51 mm)	⅝ x 3½" (M16 x 90 mm)	8.4 lbs (3.8 Kgs)
5 x 4" 125 x 100	5.563 x 4.500" (141.3 x 114.3 mm)	400 psi (28 bar)	9710 lbs (43.88 kN)	0 - 0.125" (0 - 3.2 mm)	1° - 18'	0.14"/ft (12 mm/m)	6.30" (160 mm)	9.84" (242 mm)	2.01" (51 mm)	⅝ x 3½" (M16 x 90 mm)	7.9 lbs (3.6 Kgs)

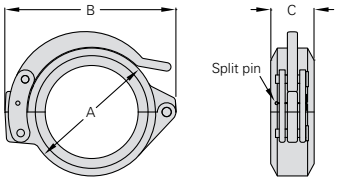
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nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)*	axial displacement †	angular movement		dimensions			bolt size	weight
					degree per coupling	per pipe	A	B	C		
165.1 mm x 80	6.500 x 3.500" (165.1 x 88.9 mm)	400 psi (28 bar)	13260 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)	⅝ x 3½" (M16 x 90 mm)	10.1 lbs (4.6 Kgs)
6 x 3" 150 x 80	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)	⅝ x 3½" (M16 x 90 mm)	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)	⅝ x 3½" (M16 x 90 mm)	9.9 lbs (4.5 Kgs)
6 x 4" 150 x 100	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)	⅝ x 3½" (M16 x 90 mm)	9.9 lbs (4.5 Kgs)
8 x 6" 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)	2.09" (53 mm)	¾ x 4¾" (M20 x 120 mm)	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" (M20 x 120 mm)	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.

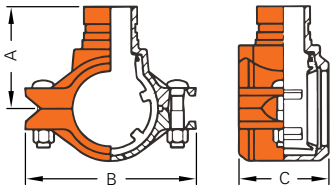
dimensions

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

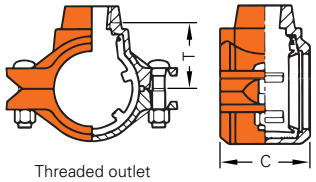
* Working pressure is based on roll grooved standard wall carbon steel pipe.
† Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation 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





Grooved outlet



Threaded outlet

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											
	outlet		max. working pressure	axial	max. end	dimensions					
run pipe	FPT	Gr/MPT	(CWP) ‡	displacement	load (CWP)	T**	A	B	C	bolt size	weight
	½"	---	500 psi	0.81-0.88"		2.06"	---	4.50"	2.75"		2.6 lbs
	15	---	(35 bar)	(20-22 mm)		(52 mm)	---	(114.3 mm)	(70.0 mm)		(1.2 Kgs)
1½"	¾"	---	500 psi	0.81-0.88"	1050 lbs	2.06"	---	4.50"	2.75"	⅜ x 2⅛"	2.6 lbs
40	20	---	(35 bar)	(20-22 mm)	(4.7 kN)	(52 mm)	---	(114.3 mm)	(70.0 mm)	(M10 x 55 mm)	(1.2 Kgs)
	1"	---	500 psi	0.81-0.88"		1.94"	---	4.50"	2.75"		2.9 lbs
	25	---	(35 bar)	(20-22 mm)		(49 mm)	---	(114.3 mm)	(70.0 mm)		(1.3 Kgs)
	½"	---	500 psi	0.81-0.88"		2.32"	---	5.00"	2.75"		3.1 lbs
	15	---	(35 bar)	(20-22 mm)		(59 mm)	---	(127.0 mm)	(70.0 mm)		(1.4 Kgs)
2"	¾"	---	500 psi	0.81-0.88"	2180 lbs	2.32"	---	5.00"	2.75"	⅜ x 2⅛"	3.1 lbs
50	20	---	(35 bar)	(20-22 mm)	(9.7 kN)	(59 mm)	---	(127.0 mm)	(70.0 mm)	(M10 x 55 mm)	(1.4 Kgs)
	1"	1"	500 psi	0.81-0.88"		2.20"	3.50"	5.00"	2.75"		3.3 lbs
	25	(33.4 mm)	(35 bar)	(20-22 mm)		(56 mm)	(89.0 mm)	(127.0 mm)	(70.0 mm)		(1.5 Kgs)
	½"	---	500 psi	1.25-1.50"		2.20"	---	6.33"	3.25"		4.8 lbs
	15	---	(35 bar)	(32-38 mm)		(56 mm)	---	(161.0 mm)	(83.0 mm)		(2.2 Kgs)
	¾"	---	500 psi	1.25-1.50"		2.56"	---	6.33"	3.25"		4.6 lbs
	20	---	(35 bar)	(32-38 mm)		(65 mm)	---	(161.0 mm)	(83.0 mm)		(2.1 Kgs)
2½"	1"	---	500 psi	1.25-1.50"	3200 lbs	2.44"	---	6.33"	3.25"	½ x 2⅜"	4.4 lbs
65	25	---	(35 bar)	(32-38 mm)	(14.2 kN)	(62 mm)	---	(161.0 mm)	(83.0 mm)	(M12 X 60 mm)	(2.0 Kgs)
	1¼"	1¼"	500 psi	1.25-1.50"		2.36"	3.70"	6.33"	3.25"		5.1 lbs
	32	(42.2 mm)	(35 bar)	(32-38 mm)		(60 mm)	(94.0 mm)	(161.0 mm)	(83.0 mm)		(2.3 Kgs)
	---	1½"	500 psi	1.25-1.50"		---	3.70"	6.33"	3.25"		5.9 lbs
	---	(48.3 mm)	(35 bar)	(32-38 mm)		---	(94.0 mm)	(161.0 mm)	(83.0 mm)		(2.4 Kgs)

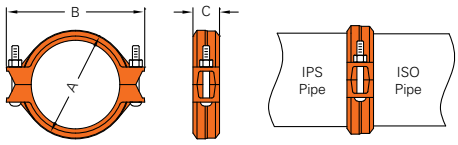
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nom. size											
	outlet		max. working pressure	axial	max. end	dimensions					
run pipe	FPT	Gr/MPT	(CWP) ‡	displacement	load (CWP)	T**	A	B	C	bolt size	weight
	¾"	---	500 psi	1.25-1.50"		2.83"	---	6.87"	3.25"		5.9 lbs
	20	---	(35 bar)	(32-38 mm)		(72 mm)	---	(175.0 mm)	(83.0 mm)		(2.7 Kgs)
3"	1"	1"	500 psi	1.25-1.50"	4750"	2.75"	4.00"	6.87"	3.25"	½ x 3"	6.2 lbs
80	25	(33.4 mm)	(35 bar)	(32-38 mm)	(21.0 mm)	(70 mm)	(102.0 mm)	(175.0 mm)	(83.0 mm)	(M12 X 75 mm)	(2.8 Kgs)
	1½"	1½"	500 psi	1.25-1.50"		2.75"	4.00"	6.87"	3.25"		6.4 lbs
	40	(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
4"	25	(33.4 mm)	(35 bar)	(41-46 mm)	7840"	(91 mm)	(124.0 mm)	(211.0 mm)	(93.0 mm)	⅝ x 3½"	(4.3 Kgs)
100	1½"	1½"	500 psi	1.63-1.81"	(34.9 mm)	3.31"	4.88"	8.31"	3.66"	(M16 X 90 mm)	9.5 lbs
	40	(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
	50	(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
6"	25	---	(28 bar)	(41-46 mm)	14000"	(121 mm)	---	(276.0 mm)	(94.0 mm)	⅝ x 3½"	(6.0 Kgs)
150	1½"	1½"	400 psi	1.63-1.81"	(62.3 mm)	4.76"	6.06"	10.86"	3.70"	(M16 X 90 mm)	13.6 lbs
	40	(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
	50	(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.

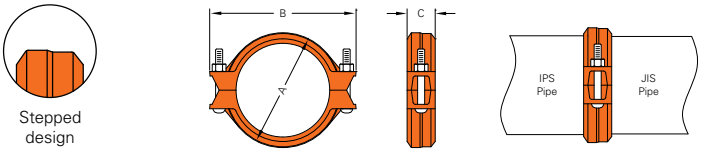
dimensions

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)	⅜ x 2⅛" (M10 x 55 mm)	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)	⅝ x 3½" (M16 x 90 mm)	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. IPS	actual pipe O.D. JIS	max working pressure (CWP)*	max. end load (CWP)	total axial displacement †	dimensions A	dimensions B	dimensions C	bolt size	weight
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)

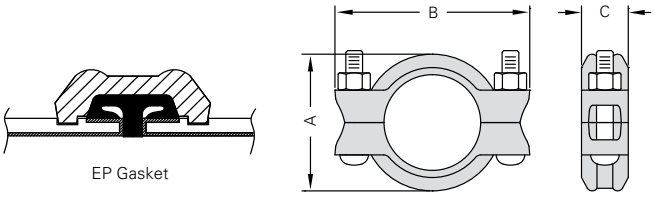
For 6" (168.3) x 6" (165.1), see Model 7706-T.

* 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.

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

caution: always fasten the bolts to the required torque.

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.

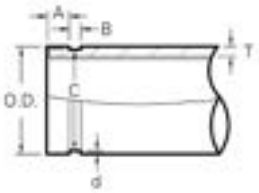
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)	dimensions			bolt		bolt torque	weight
				A	B	C	no.	size		
2" 50	2.375" (60.3 mm)	2500 psi (175 bar)	11070 lbs (50.0 kN)	3.54" (90 mm)	5.71" (145 mm)	1.92" (49 mm)	2	⅝ x 2¾"	60 - 90 lbs-ft (80 - 120 Nm)	3.3 lbs (1.5 Kgs)
2½" 65	2.875" (73.0 mm)	2500 psi (175 bar)	16220 lbs (73.2 kN)	4.06" (103 mm)	6.61" (168 mm)	1.92" (49 mm)	2	⅝ x 2¾"	60 - 90 lbs-ft (80 - 120 Nm)	4.0 lbs (1.8 Kgs)
3" 80	3.500" (88.9 mm)	2500 psi (175 bar)	24040 lbs (108.6 kN)	4.80" (122 mm)	7.40" (188 mm)	2.00" (51 mm)	2	⅝ x 2¾"	60 - 90 lbs-ft (80 - 120 Nm)	4.8 lbs (2.2 Kgs)
4" 100	4.500" (114.3 mm)	2500 psi (175 bar)	39740 lbs (179.5 kN)	6.18" (157 mm)	8.74" (222 mm)	2.17" (55 mm)	2	¾ x 4¾"	74 - 170 lbs-ft (100 - 235 Nm)	8.8 lbs (4.0 Kgs)
6" 150	6.625" (168.3 mm)	2000 psi (140 bar)	68910 lbs (311.3 kN)	8.58" (218 mm)	11.61" (295 mm)	2.25" (57 mm)	2	⅞ x 5½"	125 - 200 lbs-ft (170 - 275 Nm)	17.6 lbs (8.0 Kgs)
8" 200	8.625" (219.1 mm)	1500 psi (105 bar)	116790 lbs (527.6 kN)	10.83" (275 mm)	14.33" (364 mm)	2.75" (70 mm)	2	1 x 5½"	200 - 300 lbs-ft (275 - 400 Nm)	24.0 lbs (10.9 Kgs)
10" 250	10.750" (273.0 mm)	1250 psi (88 bar)	113400 lbs (514.8 kN)	13.15" (334 mm)	16.70" (424 mm)	2.95" (75 mm)	2	1 x 5½"	200 - 300 lbs-ft (275 - 400 Nm)	31.2 lbs (14.2 Kgs)
12" 300	12.750" (323.9 mm)	1250 psi (88 bar)	159510 lbs (724.7 kN)	15.35" (390 mm)	18.90" (480 mm)	2.95" (75 mm)	2	1 x 5½"	200 - 300 lbs-ft (275 - 400 Nm)	36.7 lbs (16.7 Kgs)

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

“EP” end protection cut grooved specification

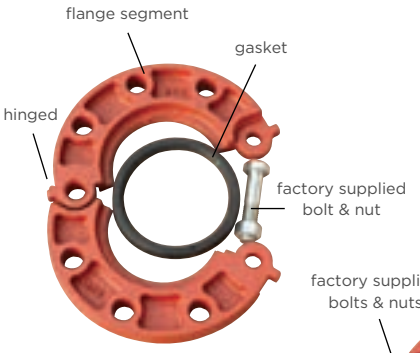
for XH-70EP coupling (IPS sizes)



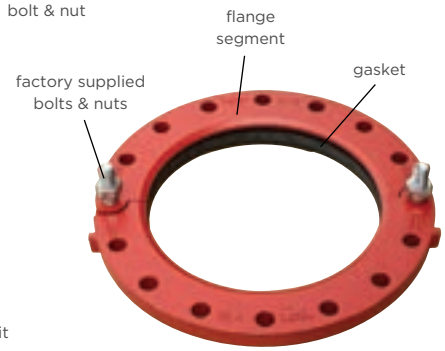
dimensions

	pipe O.D.			A		B		C		d	t
		tolerance		basic seat		groove width		groove dia.		groove depth	min. allowed
nom. size	basic	+	-	basic	Tol. ±	basic	Tol. +0.010 / +0.25	basic	Tol. +/ +0	(ref.)	wall thickness
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



7041 2" ~ 12"



7041N 14" ~ 24"
(With a draw kit)

14" ~ 24": Supplied with a draw kit

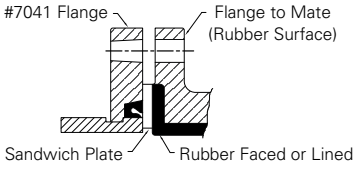


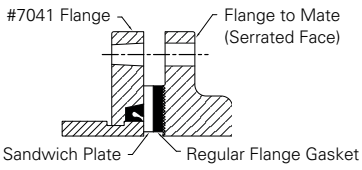
Shurjoint offers a variety of flange adapters 2" through 24" (50 mm – 600 mm) to transition from a flanged system to a grooved system. Flange drillings available include ANSI Class 125/150, Class 300, PN 10/16 and BS 10 Table E.

Flange adapters 2" through 12" are supplied hinged as a single assembly while 14" through 24" (7041N) 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 guidance.

models 7041 / 7043 flange adapaters

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.

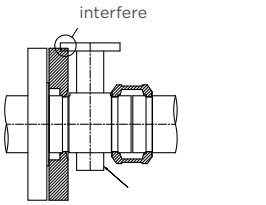




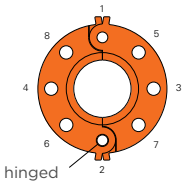
2. The Model 7041 flange adapter has small triangular teeth inside the key shoulder to prevent the pipe from rotating. These teeth should be removed when being connected to schedule 5 pipe, plastic pipe or components or surfaces that could be damaged by these teeth.

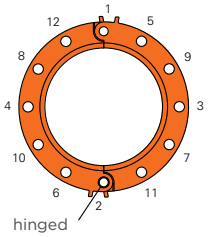
3. The Model 7041 flange adapter shall not be used as anchor points for tie-rods across non-restrained joints.

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.

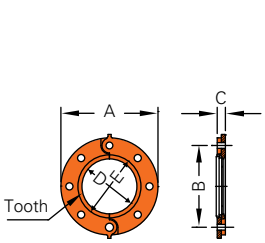


5. Bolt tightening sequence: Like a regular flange joint, it is important to make flange faces contact parallel. Tighten nuts alternately in the sequence of diagonally opposite pairs as shown below until the flange faces meet and make a metal-to-metal contact. When using two model 7041 flange adapters 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.

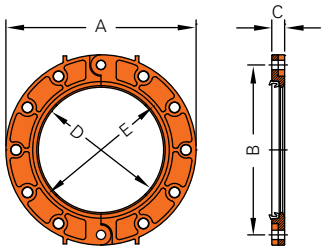




7041 flange adapter
ANSI class 125/150



2"~12"(Hinged)



7041N 14"~24"
(Supplied with a draw kit)

The Shurjoint Model 7041 flange adapters 2" through 12" are supplied hinged as a single assembly, while 14" - 24" (7041N) are supplied with two independent segments and a draw kit.

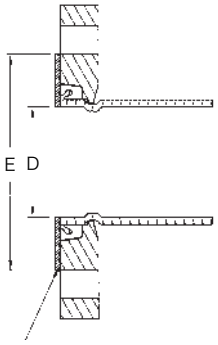
dimensions

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" 50	2.375" (60.3 mm)	300 psi (20 bar)	1330 lbs (5.71 kN)	6.00" (152 mm)	4.75" (121 mm)	0.75" (19 mm)	2.38" (60 mm)	3.07" (78 mm)	4	⅝"	4.0 lbs (1.8 Kgs)
2½" 65	2.875" (73.0 mm)	300 psi (20 bar)	1950 lbs (8.37 kN)	7.00" (178 mm)	5.50" (140 mm)	0.87" (22 mm)	2.88" (73 mm)	3.54" (90 mm)	4	⅝"	5.1 lbs (2.3 Kgs)
3" 80	3.500" (88.9 mm)	300 psi (20 bar)	2880 lbs (12.41 kN)	7.52" (191 mm)	6.00" (152 mm)	0.94" (24 mm)	3.50" (89 mm)	4.17" (106 mm)	4	⅝"	6.2 lbs (2.8 Kgs)
4" 100	4.500" (114.3 mm)	300 psi (20 bar)	4770 lbs (20.51 kN)	9.00" (229 mm)	7.50" (191 mm)	0.94" (24 mm)	4.50" (114 mm)	5.20" (132 mm)	8	⅝"	8.3 lbs (3.8 Kgs)
5" 125	5.563" (141.3 mm)	300 psi (20 bar)	7290 lbs (31.35 kN)	10.00" (254 mm)	8.50" (216 mm)	1.00" (25 mm)	5.56" (141 mm)	6.26" (159 mm)	8	¾"	10.3 lbs (4.7 Kgs)
6" 150	6.625" (168.3 mm)	300 psi (20 bar)	10340 lbs (44.47 kN)	11.00" (279 mm)	9.50" (241 mm)	1.00" (25 mm)	6.63" (168 mm)	7.32" (186 mm)	8	¾"	11.1 lbs (5.0 Kgs)
8" 200	8.625" (219.1 mm)	300 psi (20 bar)	17520 lbs (75.37 kN)	13.50" (343 mm)	11.75" (298 mm)	1.14" (29 mm)	8.63" (219 mm)	9.29" (236 mm)	8	¾"	17.2 lbs (7.8 Kgs)
10" 250	10.750" (273.0 mm)	300 psi (20 bar)	27210 lbs (117.01 kN)	16.00" (406 mm)	14.25" (362 mm)	1.18" (30 mm)	10.75" (273 mm)	11.61" (295 mm)	12	⅞"	25.7 lbs (11.7 Kgs)
12" 300	12.750" (323.9 mm)	300 psi (20 bar)	38280 lbs (164.71 kN)	19.02" (483 mm)	17.00" (432 mm)	1.25" (32 mm)	12.75" (324 mm)	13.62" (346 mm)	12	⅞"	37.6 lbs (17.1 Kgs)
14 (7041N)" 350	14.000" (355.6 mm)	300 psi (20 bar)	46160 lbs (198.5 kN)	21.00" (533 mm)	18.75" (476 mm)	1.42" (36 mm)	14.00" (356 mm)	15.08" (383 mm)	12	1"	61.7 lbs (28.0 Kgs)
16 (7041N)" 400	16.000" (406.4 mm)	300 psi (20 bar)	60290 lbs (259.3 kN)	23.50" (597 mm)	21.25" (540 mm)	1.42" (36 mm)	16.00" (406 mm)	16.97" (431 mm)	16	1"	77.1 lbs (35.0 Kgs)
18 (7041N)" 450	18.000" (457.2 mm)	300 psi (20 bar)	76300 lbs (328.2 kN)	25.00" (635 mm)	22.75" (578 mm)	1.56" (40 mm)	18.00" (457 mm)	19.13" (486 mm)	16	1⅛"	86.0 lbs (39.0 Kgs)
20 (7041N)" 500	20.000" (508.0 mm)	300 psi (20 bar)	94200 lbs (405.2 kN)	27.50" (699 mm)	25.00" (635 mm)	1.73" (44 mm)	20.00" (508 mm)	21.14" (537 mm)	20	1⅛"	109.1 lbs (49.5 Kgs)
24 (7041N)" 600	24.000" (609.6 mm)	300 psi (20 bar)	135650 lbs (583.4 kN)	32.00" (813 mm)	29.50" (749 mm)	1.89" (48 mm)	24.00" (610 mm)	25.00" (635 mm)	20	1¼"	157.6 lbs (71.5 Kgs)

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

49 sandwich plate





sandwich plate

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

The Model 7041 and 7043 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” 50	3.74” (95 mm)	2.13” (54 mm)
2½” 65	4.65” (118 mm)	2.64” (67 mm)
3” 80	5.12” (130 mm)	3.19” (81 mm)
4” 100	6.22” (158 mm)	4.13” (105 mm)
5” 125	7.40” (188 mm)	5.00” (128 mm)
6” 150	8.50” (216 mm)	6.10” (155 mm)
8” 200	10.67” (271 mm)	8.07” (205 mm)
10” 250	12.83” (326 mm)	10.15” (258 mm)
12” 300	15.00” (381 mm)	12.00” (305 mm)
14” 350	17.40” (442 mm)	13.46” (342 mm)
16” 400	19.92” (506 mm)	15.43” (392 mm)
18” 450	21.26” (540 mm)	17.44” (443 mm)
20” 500	23.50” (597 mm)	19.45” (494 mm)
24” 600	27.87” (708 mm)	23.46” (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" (7041N) are supplied with two independent segments and a draw kit.

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" 50	2.375" (60.3 mm)	300 psi (20 bar)	1000 lbs (4.6 kN)	165 mm	125 mm	22 mm	60 mm	78 mm	4	M16 mm	5.1 lbs (2.3 Kgs)
76.1 mm	3.000" (76.1 mm)	300 psi (20 bar)	1590 lbs (7.3 kN)	185 mm	145 mm	22 mm	76 mm	92 mm	4	M16 mm	5.7 lbs (2.6 Kgs)
3" 80	3.500" (88.9 mm)	300 psi (20 bar)	2165 lbs (9.9 kN)	200 mm	160 mm	24 mm	89 mm	106 mm	8	M16 mm	7.1 lbs (3.2 Kgs)
4" 100	4.500" (114.3 mm)	300 psi (20 bar)	3580 lbs (16.4 kN)	220 mm	180 mm	24 mm	114 mm	132 mm	8	M16 mm	7.5 lbs (3.4 Kgs)
139.7 mm	5.500" (139.7 mm)	300 psi (20 bar)	5340 lbs (24.5 kN)	250 mm	210 mm	25 mm	140 mm	159 mm	8	M16 mm	9.8 lbs (4.4 Kgs)
165.1 mm	6.500" (165.1 mm)	300 psi (20 bar)	7460 lbs (34.2 kN)	285 mm	240 mm	24 mm	165 mm	182 mm	8	M20 mm	11.3 lbs (5.1 Kgs)
6" 150	6.625" (168.3 mm)	300 psi (20 bar)	7750 lbs (35.6 kN)	285 mm	240 mm	24 mm	168 mm	182 mm	8	M20 mm	10.1 lbs (4.6 Kgs)
8" 200	8.625" (219.1 mm)	300 psi (20 bar)	13140 lbs (60.3 kN)	340 mm	295 mm	29 mm	219 mm	236 mm	12	M20 mm	17.2 lbs (7.8 Kgs)
10" 250	10.750" (273.0 mm)	300 psi (20 bar)	20410 lbs (93.6 kN)	405 mm	355 mm	30 mm	273 mm	295 mm	12	M24 mm	25.2 lbs (11.4 Kgs)
12" 300	12.750" (323.9 mm)	300 psi (20 bar)	28710 lbs (131.8 kN)	460 mm	410 mm	32 mm	324 mm	346 mm	12	M24 mm	30.2 lbs (13.7 Kgs)
14 (7041N)" 350	14.000" (355.6 mm)	300 psi (20 bar)	46160 lbs (198.5 kN)	520 mm	470 mm	36 mm	356 mm	383 mm	16	M24 mm	48.7 lbs (22.1 Kgs)
16 (7041N)" 400	16.000" (406.4 mm)	300 psi (20 bar)	60290 lbs (259.3 kN)	580 mm	525 mm	38 mm	406 mm	431 mm	16	M27 mm	59.7 lbs (27.1 Kgs)
18 (7041N)" 450	18.000" (457.2 mm)	300 psi (20 bar)	76300 lbs (328.2 kN)	640 mm	585 mm	40 mm	457 mm	486 mm	20	M27 mm	71.6 lbs (32.5 Kgs)
20 (7041N)" 500	20.000" (508.0 mm)	300 psi (20 bar)	94200 lbs (405.2 kN)	715 mm	650 mm	43 mm	508 mm	537 mm	20	M30 mm	103.4 lbs (47.0 Kgs)
24 (7041N)" 600	24.000" (609.6 mm)	300 psi (20 bar)	135650 lbs (583.4 kN)	840 mm	770 mm	48 mm	610 mm	635 mm	20	M33 mm	160.6 lbs (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 adapaters (ANSI class 125 / 150, BS 10-E)

	bolt		required torque	
nom. size	size (in)	no.	lbs-ft	Nm
2"	⅝	4	110 - 140	149 - 190
2½"	⅝	4	110 - 140	149 - 190
3"	⅝	4	110 - 140	149 - 190
4"	⅝	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"	⅞	12	320 - 400	434 - 542
12"	⅞	12	320 - 400	434 - 542
14"	1	12	360 - 520	488 - 705
16"	1	16	360 - 520	488 - 705
18"	1⅛	16	450 - 725	610 - 982
20"	1⅛	20	450 - 725	610 - 982
24"	1¼	20	620 - 1000	841 - 1356

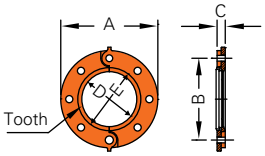
required torque for model 7041 flange adapters (PN 10 / 16)

	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

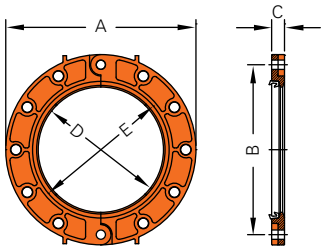
required torque for model 7043 flange adapters (ANSI class 300)

	bolt		required torque	
nom. size	size (in)	no.	lbs-ft	Nm
2"	⅝	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"	⅞	12	320 - 400	434 - 542
10"	1	16	360 - 520	488 - 705
12"	1⅛	16	450 - 725	610 - 982

7041 flange adapter
BS 10-E



2"~12"(Hinged)



7041N 14"~24"
(Supplied with a draw kit)

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.

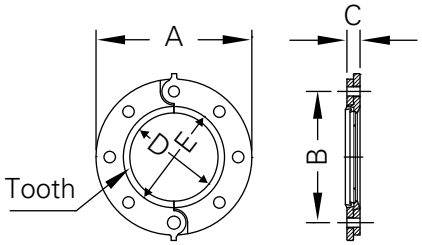
dimensions

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	⅝"	2.5 Kgs
80	88.9 mm	20 bar	8.69 kN	184 mm	146 mm	24 mm	89 mm	106 mm	4	⅝"	2.8 Kgs
100	114.3 mm	20 bar	14.36 kN	216 mm	178 mm	24 mm	114 mm	132 mm	8	⅝"	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	⅝"	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	¾"	5.0 Kgs
200	219.1 mm	20 bar	52.76 kN	343 mm	292 mm	29 mm	219 mm	236 mm	8	¾"	8.4 Kgs
250	273.0 mm	20 bar	81.91 kN	405 mm	356 mm	30 mm	273 mm	295 mm	12	¾"	10.8 Kgs
350 (7041N)	355.6 mm	20 bar	198.53 kN	527 mm	470 mm	32 mm	356 mm	383 mm	12	⅞"	20.8 Kgs
400 (7041N)	406.4 mm	20 bar	259.30 kN	578 mm	521 mm	32 mm	406 mm	431 mm	12	⅞"	21.0 Kgs
450 (7041N)	457.2 mm	20 bar	328.18 kN	641 mm	584 mm	36 mm	457 mm	486 mm	16	⅞"	28.9 Kgs
500 (7041N)	508.0 mm	20 bar	405.16 kN	705 mm	641 mm	38 mm	508 mm	537 mm	16	⅞"	38.1 Kgs
600 (7041N)	609.6 mm	20 bar	583.43 kN	826 mm	756 mm	42 mm	610 mm	635 mm	16	1⅛"	54.6 Kgs

See page 51 for required bolt torque.
** Working Pressure is based on roll grooved standard wall carbon steel pipe.

7043 flange adapter
ANSI class 300





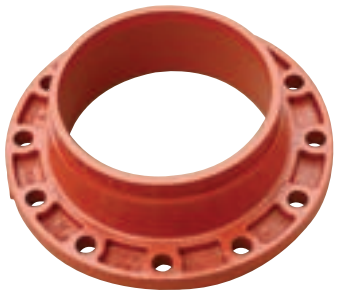
The Shurjoint Model 7043 flange adapter allows for direct connection of a grooved system to ANSI Class 300 flanged components. 2" through 8" Model 7043 flange adapters are supplied hinged as a single assembly, while large sizes are supplied with separate segments.

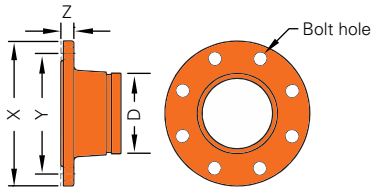
dimensions

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" 50	2.375" (60.3 mm)	750 psi (52 bar)	3320 lbs (14.84 kN)	6.50" (165 mm)	5.00" (127 mm)	0.94" (24 mm)	2.38" (60 mm)	3.07" (78 mm)	8	⅝"	5.3 lbs (2.4 Kgs)
2½" 65	2.875" (73.0 mm)	750 psi (52 bar)	4860 lbs (21.75 kN)	7.50" (191 mm)	5.88" (149 mm)	1.06" (27 mm)	2.88" (73 mm)	3.54" (90 mm)	8	¾"	7.9 lbs (3.6 Kgs)
3" 80	3.500" (88.9 mm)	750 psi (52 bar)	7210 lbs (32.26 kN)	8.25" (210 mm)	6.63" (168 mm)	1.19" (30 mm)	3.50" (89 mm)	4.17" (106 mm)	8	¾"	10.0 lbs (4.6 Kgs)
4" 100	4.500" (114.3 mm)	750 psi (52 bar)	11920 lbs (53.33 kN)	10.00" (254 mm)	7.95" (202 mm)	1.31" (33 mm)	4.50" (114 mm)	5.20" (132 mm)	8	¾"	17.3 lbs (7.8 Kgs)
5" 125	5.563" (141.3 mm)	750 psi (52 bar)	18220 lbs (81.50 kN)	11.00" (279 mm)	9.25" (235 mm)	1.44" (37 mm)	5.56" (141 mm)	5.55" (141 mm)	8	¾"	21.3 lbs (9.7 Kgs)
6" 150	6.625" (168.3 mm)	750 psi (52 bar)	25840 lbs (115.62 kN)	12.50" (318 mm)	10.63" (270 mm)	1.50" (38 mm)	6.63" (168 mm)	7.32" (186 mm)	12	¾"	28.9 lbs (9.7 Kgs)
8" 200	8.625" (219.1 mm)	750 psi (52 bar)	43790 lbs (195.96 kN)	15.00" (381 mm)	13.00" (330 mm)	1.61" (41 mm)	8.63" (219 mm)	9.29" (236 mm)	12	⅞"	36.2 lbs (16.4 Kgs)
10" 250	10.750" (273.0 mm)	750 psi (52 bar)	68030 lbs (304.23 kN)	17.68" (449 mm)	15.25" (387 mm)	1.89" (48 mm)	10.75" (273 mm)	11.61" (295 mm)	16	1"	56.9 lbs (25.8 Kgs)
12" 300	12.750" (323.9 mm)	750 psi (52 bar)	95700 lbs (428.25 kN)	20.50" (521 mm)	17.75" (451 mm)	1.93" (49 mm)	12.75" (324 mm)	13.62" (346 mm)	16	1⅛"	77.7 lbs (35.2 Kgs)

See page 51 for required bolt torque.
* Working Pressure is based on roll grooved standard wall carbon steel pipe.

7170 flange adapter
ANSI class 125 / 150





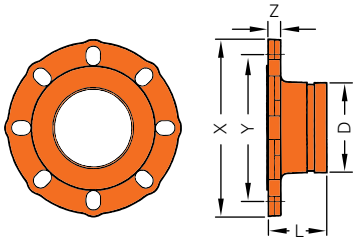
The Model 7170 Flange Adapter provides a rigid transition between ANSI class 125/150 flanged components and a grooved system.

dimensions

					bolt hole				
nom. size	X	Y	Z	bolt size	dia.	no.	D	L	weight
10” 250	15.98” (406.0 mm)	14.25” (362.0 mm)	1.18” (30.0 mm)	⅞”	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)	⅞”	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”	1⅛”	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”	1⅛”	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)	1⅛”	1¼”	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)	1⅛”	1¼”	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)	1¼”	1⅜”	20	24.00” (609.6 mm)	6.00” (152.0 mm)	218.9 lbs (99.5 Kgs)

7180 universal flange adapter





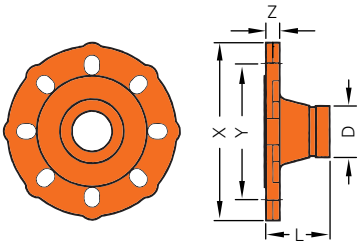
The Model 7180 Universal Flange Adapter provides a rigid transition from a flanged component to a grooved system. The single unit is compatible for a range of flange types including ANSI Class 125/150, PN10, PN16, and JIS 10K.

dimensions

				Y: flange drilling					bolt size		
nom. size	pipe O.D.	L	X	ANSI 125 / 150	PN 10 / 16	JIS 10K	BS 10E	Z	dia.	no.	weight
2" 50	2.375" (60.3 mm)	2.50" (64 mm)	6.50" (165 mm)	4.75" (121 mm)	4.92" (125 mm)	4.72" (120 mm)	4.49" (114 mm)	0.63" (16 mm)	⅝" (M16 mm)	4 4	5.10 lbs (2.30 Kgs)
2½" 65	2.875" (73.0 mm)	2.99" (76 mm)	7.28" (185 mm)	5.50" (140 mm)	5.70" (145 mm)	5.50" (140 mm)	5.00" (127 mm)	0.63" (16 mm)	⅝" (M16 mm)	4 4	6.53 lbs (2.96 Kgs)
76.1 mm	3.000" (76.1 mm)	2.99" (76 mm)	7.28" (185 mm)	5.50" (140 mm)	5.70" (145 mm)	5.50" (140 mm)	5.00" (127 mm)	0.63" (16 mm)	⅝" (M16 mm)	4 4	6.40 lbs (2.90 Kgs)
3" 80	3.500" (88.9 mm)	2.95" (75 mm)	7.87" (200 mm)	6.00" (152 mm)	6.30" (160 mm)	5.90" (150 mm)	5.75" (146 mm)	0.63" (16 mm)	⅝" (M16 mm)	4 / 8 4 / 8	7.47 lbs (3.39 Kgs)
4" 100	4.500" (114.3 mm)	2.95" (75 mm)	8.86" (225 mm)	7.50" (191 mm)	7.09" (180 mm)	6.89" (175 mm)	7.00" (178 mm)	0.63" (16 mm)	⅝" (M16 mm)	8 8	8.49 lbs (3.85 Kgs)
139.7 mm	5.500" (139.7 mm)	2.95" (75 mm)	10.00" (254 mm)	8.50" (216 mm)	8.27" (210 mm)	8.27" (210 mm)	8.27" (210 mm)	0.63" (16 mm)	⅝ / ¾" (M16 / M20 mm)	8 8	14.33 lbs (6.50 Kgs)
5" 125	5.563" (141.3 mm)	2.95" (75 mm)	10.00" (254 mm)	8.50" (216 mm)	8.27" (210 mm)	8.27" (210 mm)	--- ---	0.87" (22 mm)	⅝ / ¾" (M16 / M20 mm)	8 8	14.33 lbs (6.50 Kgs)
165.1 mm	6.500" (165.1 mm)	2.95" (75 mm)	10.71" (272 mm)	9.50" (241 mm)	9.45" (240 mm)	9.45" (240 mm)	9.30" (235 mm)	0.63" (16 mm)	¾" (M20 mm)	8 8	13.86 lbs (6.30 Kgs)
6" 150	6.625" (168.3 mm)	2.95" (75 mm)	10.71" (272 mm)	9.50" (241 mm)	9.45" (240 mm)	9.45" (240 mm)	--- ---	0.63" (16 mm)	¾" (M20 mm)	8 8	12.58 lbs (5.72 Kgs)
8" 200	8.625" (219.1 mm)	4.00" (102 mm)	13.50" (343 mm)	11.75" (298 mm)	11.61" (295 mm)	11.42" (290 mm)	11.50" (292 mm)	0.87" (22 mm)	¾" (M20 mm)	8 / 12 8 / 12	30.09 lbs (13.65 Kgs)
200 JIS	8.516" (216.3 mm)	4.00" (102 mm)	13.50" (343 mm)	11.75" (298 mm)	11.61" (295 mm)	11.42" (290 mm)	--- ---	0.87" (22 mm)	¾" (M20 mm)	8 / 12 8 / 12	30.09 lbs (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.

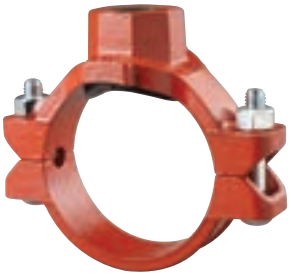
dimensions

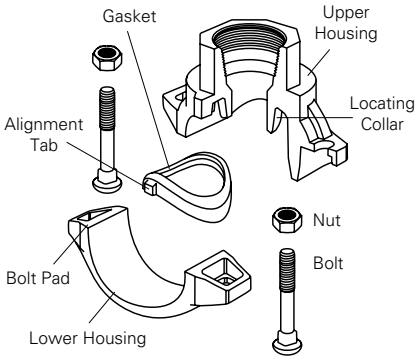
					Y: flange drilling				bolt		
nom. size	pipe O.D.	L	X	Z	ANSI 125 / 150	PN 10 / 16	JIS 10K	D	dia.	no.	weight
3 x 2" 80 x 50	3.500 x 2.375" (88.9 x 60.3 mm)	2.95" (75.0 mm)	8.19" (208.0 mm)	0.63" (16.0 mm)	8.00" (152 mm)	6.30" (160 mm)	5.90" (150 mm)	2.000" (60.3 mm)	⅝" (M16 mm)	8	5.95 lbs (2.70 Kgs)
4 x 2½" 100 x 65	4.500 x 2.875" (114.3 x 73.0 mm)	3.00" (76.0 mm)	8.88" (225.5 mm)	0.63" (16.0 mm)	7.52" (191 mm)	7.09" (180 mm)	6.89" (175 mm)	2.875" (73.0 mm)	⅝" (M16 mm)	8	8.80 lbs (4.00 Kgs)
100 x 76.1 mm	4.500 x 3.000 (114.3 x 76.1 mm)	3.00" (76.0 mm)	8.88 (225.5 mm)	0.63" (16.0 mm)	7.52" (191 mm)	7.09" (180 mm)	6.89" (175 mm)	3.000" (76.1 mm)	⅝" (M16 mm)	8	8.80 lbs (4.00 Kgs)
4 x 3" 100 x 80	4.500 x 3.500 (114.3 x 88.9 mm)	2.95" (75.0 mm)	8.88 (225.5 mm)	0.63" (16.0 mm)	7.50" (191 mm)	7.09" (180 mm)	6.89" (175 mm)	3.000" (88.9 mm)	⅝" (M16 mm)	8	7.61 lbs (3.45 Kgs)
6 x 4" 150 x 100	6.625 x 4.500 (168.3 x 114.3 mm)	2.95" (75.0 mm)	11.46 (291.0 mm)	0.95" (24.0 mm)	9.50" (241 mm)	9.45 (240 mm)	9.45 (240 mm)	4.000" (114.3 mm)	¾" (M20 mm)	8	15.61 lbs (7.08 Kgs)

mechanical tees

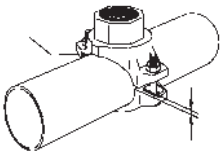
Shurjoint mechanical tees provide a fast and easy mid-point branch outlet, eliminating the need for welding or the use of multiple fittings.

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.

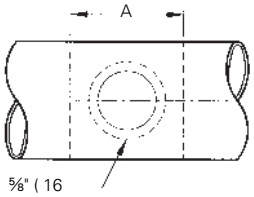


It is normal to see bolt pad gaps, though they should be equal on both sides of the mechanical tee.

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 ⅝" (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.

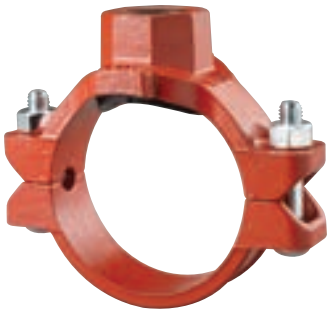
hole size

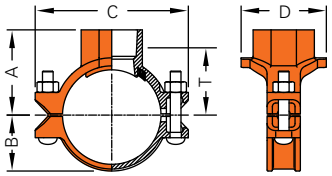
The hole sizes are dictated by the branch size of the mechanical tee. Refer to product data chart.



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

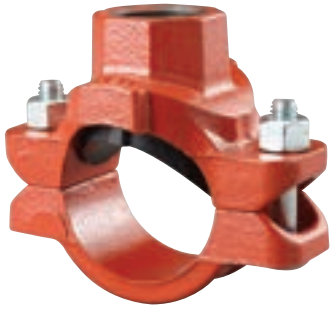
nom. size run x branch	max. working pressure (CWP)*	hole dia. ŦT +3.2, -0 / +0.13, -0	dimensions					bolt size	weight
			T‡	A	B	C	D		
2" x ½" 50 x 15	300 psi (20 bar)	1.50" (38 mm)	1.97" (50 mm)	2.50" (64 mm)	1.57" (40 mm)	5.04" (128 mm)	2.87" (73 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.4 lbs (1.1 Kgs)
2" x ¾" 50 x 20	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)	⅜ x 2⅛" (M10 x 55 mm)	2.4 lbs (1.1 Kgs)
2" x 1" 50 x 25	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)	⅜ x 2⅛" (M10 x 55 mm)	2.6 lbs (1.2 Kgs)
2" x 1¼" 50 x 32	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)	⅜ x 2⅛" (M10 x 55 mm)	2.9 lbs (1.3 Kgs)
2" x 1½" 50 x 40	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)	⅜ x 2⅛" (M10 x 55 mm)	2.9 lbs (1.3 Kgs)
2½" x ½" 50 x 15	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" (M12 x 75 mm)	3.1 lbs (1.4 Kgs)
2½" x ¾" 65 x 20	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" (M12 x 75 mm)	3.1 lbs (1.4 Kgs)
2½" x 1" 65 x 25	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" (M12 x 75 mm)	3.3 lbs (1.5 Kgs)
2½" x 1¼" 65 x 32	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" (M12 x 75 mm)	3.5 lbs (1.6 Kgs)
2½" x 1½" 65 x 40	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" (M12 x 75 mm)	3.5 lbs (1.6 Kgs)
3" x ½" 80 x 15	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" (M12 x 75 mm)	3.5 lbs (1.6 Kgs)
3" x ¾" 80 x 20	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" (M12 x 75 mm)	3.5 lbs (1.6 Kgs)
3" x 1" 80 x 25	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" (M12 x 75 mm)	3.7 lbs (1.7 Kgs)
3" x 1¼" 80 x 32	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" (M12 x 75 mm)	4.2 lbs (1.9 Kgs)
3" x 1½" 80 x 40	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" (M12 x 75 mm)	4.4 lbs (2.0 Kgs)
3" x 2" 80 x 50	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" (M12 x 75 mm)	5.1 lbs (2.3 Kgs)

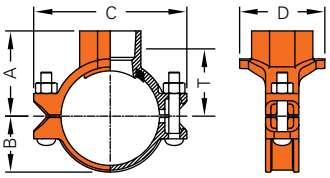
graph continues on to next page

nom. size run x branch	max. working pressure (CWP)*	hole dia. Ŧ +3.2, -0 / +0.13, -0	dimensions					bolt size	weight
			T‡	A	B	C	D		
4" x ½" 100 x 15	300 psi (20 bar)	1.50" (38 mm)	3.00" (76 mm)	3.70" (94 mm)	2.83" (72 mm)	7.48" (190 mm)	2.63" (67 mm)	½ x 3" (M12 x 75 mm)	4.2 lbs (1.9 Kgs)
4" x ¾" 100 x 20	300 psi (20 bar)	1.50" (38 mm)	2.95" (75 mm)	3.58" (91 mm)	2.68" (68 mm)	7.48" (190 mm)	2.91" (74 mm)	½ x 3" (M12 x 75 mm)	4.2 lbs (1.9 Kgs)
4" x 1" 100 x 25	300 psi (20 bar)	1.50" (38 mm)	3.03" (77 mm)	3.70" (94 mm)	2.83" (72 mm)	7.48" (190 mm)	2.63" (67 mm)	½ x 3" (M12 x 75 mm)	4.4 lbs (2.0 Kgs)
4" x 1¼" 100 x 32	300 psi (20 bar)	2.00" (51 mm)	3.19" (81 mm)	3.89" (99 mm)	2.83" (72 mm)	7.48" (190 mm)	3.35" (85 mm)	½ x 3" (M12 x 75 mm)	4.8 lbs (2.2 Kgs)
4" x 1½" 100 x 40	300 psi (20 bar)	2.00" (51 mm)	3.19" (81 mm)	3.89" (99 mm)	2.83" (72 mm)	7.48" (190 mm)	3.35" (85 mm)	½ x 3" (M12 x 75 mm)	5.1 lbs (2.3 Kgs)
4" x 2" 100 x 50	300 psi (20 bar)	2.50" (64 mm)	3.38" (86 mm)	4.13" (105 mm)	2.83" (72 mm)	7.48" (190 mm)	3.98" (101 mm)	½ x 3" (M12 x 75 mm)	5.9 lbs (2.7 Kgs)
4" x 2½" 100 x 65	300 psi (20 bar)	2.75" (70 mm)	3.23" (82 mm)	4.37" (111 mm)	2.83" (72 mm)	7.48" (190 mm)	4.40" (112 mm)	½ x 3" (M12 x 75 mm)	7.3 lbs (3.3 Kgs)
4" x 3" 100 x 80	300 psi (20 bar)	3.50" (89 mm)	3.23" (82 mm)	4.40" (112 mm)	2.83" (72 mm)	7.48" (190 mm)	5.35" (136 mm)	⅝ x 3½" (M16 x 90 mm)	12.3 lbs (5.6 Kgs)
5" x 2" 125 x 50	300 psi (20 bar)	2.50" (64 mm)	4.13" (105 mm)	4.88" (124 mm)	3.39" (86 mm)	9.29" (236 mm)	4.00" (102 mm)	⅝ x 3½" (M16 x 90 mm)	9.2 lbs (4.2 Kgs)
5" x 2½" 125 x 65	300 psi (20 bar)	2.75" (70 mm)	3.89" (99 mm)	5.00" (127 mm)	3.39" (86 mm)	9.29" (236 mm)	4.65" (118 mm)	⅝ x 3½" (M16 x 90 mm)	9.9 lbs (4.5 Kgs)
6" x ½" 150 x 15	300 psi (20 bar)	2.00" (51 mm)	4.48" (114 mm)	4.96" (126 mm)	3.78" (96 mm)	10.24" (260 mm)	3.54" (90 mm)	⅝ x 5 5/16" (M16 x 135 mm)	9.7 lbs (4.4 Kgs)
6" x 1" 150 x 25	300 psi (20 bar)	2.00" (51 mm)	4.33" (110 mm)	5.00" (127 mm)	3.86" (98 mm)	10.07" (256 mm)	3.50" (89 mm)	⅝ x 5 5/16" (M16 x 135 mm)	9.7 lbs (4.4 Kgs)
6" x 1¼" 150 x 32	300 psi (20 bar)	2.00" (51 mm)	4.29" (109 mm)	5.00" (127 mm)	3.86" (98 mm)	10.07" (256 mm)	3.66" (93 mm)	⅝ x 5 5/16" (M16 x 135 mm)	9.7 lbs (4.4 Kgs)
6" x 1½" 150 x 40	300 psi (20 bar)	2.00" (51 mm)	4.29" (109 mm)	5.00" (127 mm)	3.86" (98 mm)	10.07" (256 mm)	3.66" (93 mm)	⅝ x 5 5/16" (M16 x 135 mm)	9.7 lbs (4.4 Kgs)
6" x 2" 150 x 50	300 psi (20 bar)	2.50" (64 mm)	4.45" (113 mm)	5.29" (132 mm)	3.86" (98 mm)	10.07" (256 mm)	3.98" (101 mm)	⅝ x 5 5/16" (M16 x 135 mm)	10.6 lbs (4.8 Kgs)
6" x 2½" 150 x 65	300 psi (20 bar)	2.75" (70 mm)	4.37" (111 mm)	5.50" (140 mm)	3.86" (98 mm)	10.07" (256 mm)	4.65" (118 mm)	⅝ x 5 5/16" (M16 x 135 mm)	11.9 lbs (5.4 Kgs)
6" x 3" 150 x 80	300 psi (20 bar)	3.50" (89 mm)	4.33" (110 mm)	5.50" (140 mm)	3.86" (98 mm)	10.07" (256 mm)	5.39" (137 mm)	⅝ x 5 5/16" (M16 x 135 mm)	13.2 lbs (6.0 Kgs)
6" x 4" 150 x 100	300 psi (20 bar)	4.50" (114 mm)	4.21" (107 mm)	5.50" (140 mm)	3.86" (98 mm)	10.07" (256 mm)	6.46" (164 mm)	⅝ x 5 5/16" (M16 x 135 mm)	14.5 lbs (6.6 Kgs)
8" x ½" 200 x 15	300 psi (20 bar)	2.75" (70 mm)	5.31" (135 mm)	5.82" (148 mm)	4.72" (120 mm)	12.87" (327 mm)	4.40" (112 mm)	¾ x 4¾" (M20 x 120 mm)	12.5 lbs (5.7 Kgs)
8" x 1" 200 x 25	300 psi (20 bar)	2.75" (70 mm)	5.31" (135 mm)	5.98" (152 mm)	4.72" (120 mm)	12.87" (327 mm)	4.40" (112 mm)	¾ x 4¾" (M20 x 120 mm)	12.5 lbs (5.7 Kgs)
8" x 1¼" 200 x 32	300 psi (20 bar)	2.75" (70 mm)	5.31" (135 mm)	5.98" (152 mm)	4.72" (120 mm)	12.87" (327 mm)	3.98" (101 mm)	¾ x 4¾" (M20 x 120 mm)	12.5 lbs (5.7 Kgs)
8" x 1½" 200 x 40	300 psi (20 bar)	2.75" (70 mm)	5.31" (135 mm)	5.98" (152 mm)	4.72" (120 mm)	12.87" (327 mm)	3.98" (101 mm)	¾ x 4¾" (M20 x 120 mm)	12.5 lbs (5.7 Kgs)
8" x 2" 200 x 50	300 psi (20 bar)	2.75" (70 mm)	5.31" (135 mm)	6.54" (166 mm)	4.72" (120 mm)	12.87" (327 mm)	3.98" (101 mm)	¾ x 4¾" (M20 x 120 mm)	13.6 lbs (6.2 Kgs)
8" x 2½" 200 x 65	300 psi (20 bar)	2.75" (70 mm)	5.39" (137 mm)	6.54" (166 mm)	4.72" (120 mm)	12.87" (327 mm)	4.09" (104 mm)	¾ x 4¾" (M20 x 120 mm)	13.9 lbs (6.3 Kgs)
8" x 3" 200 x 80	300 psi (20 bar)	3.50" (89 mm)	5.35" (136 mm)	6.54" (166 mm)	4.72" (120 mm)	12.87" (327 mm)	5.04" (128 mm)	¾ x 4¾" (M20 x 120 mm)	15.6 lbs (7.1 Kgs)
8" x 4" 200 x 100	300 psi (20 bar)	4.50" (114 mm)	5.24" (133 mm)	6.54" (166 mm)	4.72" (120 mm)	12.87" (327 mm)	6.46" (164 mm)	¾ x 4¾ M20 x 120	17.6 lbs (8.0 Kgs)

Ŧ 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

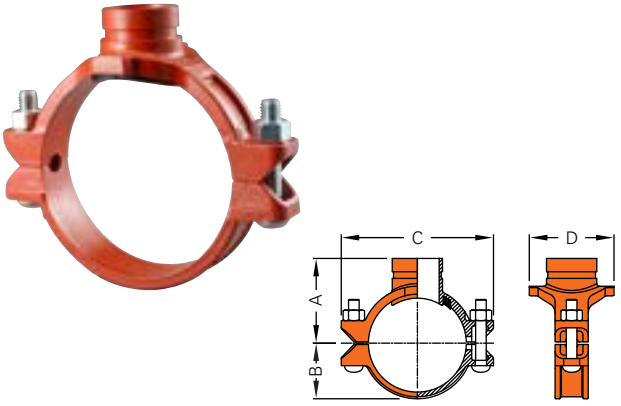
nom. size run x branch	pipe O.D.	max. working pressure (CWP)**	hole dia. ŦŦ +3.2, -0 / +0.13, -0	dimensions T‡	A	B	C	D	bolt size	weight
2 x ½" 50 x 15	2.375 x 0.840" (60.3 x 21.3 mm)	300 psi (20 bar)	1.50" (38 mm)	1.97" (50 mm)	2.50" (63.5 mm)	1.50" (38.1 mm)	4.56" (115.9 mm)	3.19" (81 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.18 lbs (0.99 Kgs)
2 x ¾" 50 x 20	2.375 x 1.050" (60.3 x 26.7 mm)	300 psi (20 bar)	1.50" (38 mm)	1.97" (50 mm)	2.50" (63.5 mm)	1.50" (38.1 mm)	4.56" (115.9 mm)	3.19" (81 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.22 lbs (1.01 Kgs)
2 x 1" 50 x 25	2.375 x 1.315" (60.3 x 33.4 mm)	300 psi (20 bar)	1.50" (38 mm)	1.85" (47 mm)	2.50" (63.5 mm)	1.50" (38.1 mm)	4.56" (115.9 mm)	3.19" (81 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.40 lbs (1.09 Kgs)
2 x 1¼" 50 x 32	2.375 x 1.660" (60.3 x 42.2 mm)	300 psi (20 bar)	[1.75]" [45 mm]	2.05" (52 mm)	2.87" (73.0 mm)	1.50" (38.1 mm)	4.56" (115.9 mm)	3.19" (81 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.77 lbs (1.26 Kgs)
2 x 1½" 50 x 40	2.375 x 1.900" (60.3 x 48.3 mm)	300 psi (20 bar)	[1.75]" [45 mm]	2.08" (52 mm)	3.00" (76.2 mm)	1.50" (38.1 mm)	4.56" (115.9 mm)	3.19" (81 mm)	⅜ x 2⅛" (M10 x 55 mm)	3.01 lbs (1.37 Kgs)
2½ x ½" 65 x 15	2.875 x 0.840" (73.0 x 21.3 mm)	300 psi (20 bar)	1.50" (38 mm)	2.20" (56 mm)	2.75" (69.9 mm)	1.75" (44.5 mm)	5.56" (141.3 mm)	3.19" (81 mm)	½ x 2⅜" (M12 x 60 mm)	2.60 lbs (1.20 Kgs)
2½ x ¾" 65 x 20	2.875 x 1.050" (73.0 x 26.7 mm)	300 psi (20 bar)	1.50" (38 mm)	2.20" (56 mm)	2.75" (69.9 mm)	1.75" (44.5 mm)	5.56" (141.3 mm)	3.19" (81 mm)	½ x 2⅜" (M12 x 60 mm)	2.70 lbs (1.20 Kgs)
2½ x 1" 65 x 25	2.875 x 1.315" (73.0 x 33.4 mm)	300 psi (20 bar)	1.50" (38 mm)	2.09" (53 mm)	2.75" (69.9 mm)	1.75" (44.5 mm)	5.56" (141.3 mm)	3.19" (81 mm)	½ x 2⅜" (M12 x 60 mm)	2.86 lbs (1.30 Kgs)
2½ x 1¼" 65 x 32	2.875 x 1.660" (73.0 x 42.2 mm)	300 psi (20 bar)	2.00" (51 mm)	2.28" (58 mm)	3.00" (76.2 mm)	1.75" (44.5 mm)	5.56" (141.3 mm)	3.70" (94 mm)	½ x 2⅜" (M12 x 60 mm)	3.21 lbs (1.46 Kgs)
2½ x 1½" 65 x 40	2.875 x 1.900" (73.0 x 48.3 mm)	300 psi (20 bar)	2.00" (51 mm)	2.28" (58 mm)	3.00" (76.2 mm)	1.75" (44.5 mm)	5.56" (141.3 mm)	3.70" (94 mm)	½ x 2⅜" (M12 x 60 mm)	3.43 lbs (1.56 Kgs)
76.1 mm x 15	3.000 x 0.840" (76.1 x 21.3 mm)	300 psi (20 bar)	1.50" (38 mm)	2.20" (56 mm)	2.75" (69.9 mm)	1.81" (46.1 mm)	5.56" (141.3 mm)	3.19" (81 mm)	½ x 2⅜" (M12 x 60 mm)	2.64 lbs (1.20 Kgs)
76.1 mm x 20	3.000 x 1.050" (76.1 x 26.7 mm)	300 psi (20 bar)	1.50" (38 mm)	2.20" (56 mm)	2.75" (69.9 mm)	1.81" (46.1 mm)	5.56" (141.3 mm)	3.19" (81 mm)	½ x 2⅜" (M12 x 60 mm)	2.64 lbs (1.20 Kgs)
76.1 mm x 25	3.000 x 1.315" (76.1 x 33.4 mm)	300 psi (20 bar)	1.50" (38 mm)	2.09" (53 mm)	2.75" (69.9 mm)	1.81" (46.1 mm)	5.56" (141.3 mm)	3.19" (81 mm)	½ x 2⅜" (M12 x 60 mm)	2.86 lbs (1.30 Kgs)
76.1 mm x 32	3.000 x 1.660" (76.1 x 42.2 mm)	300 psi (20 bar)	2.00" (51 mm)	2.28" (58 mm)	3.00" (76.2 mm)	1.81" (46.1 mm)	5.56" (141.3 mm)	3.70" (94 mm)	½ x 2⅜" (M12 x 60 mm)	3.21 lbs (1.46 Kgs)
76.1 mm x 40	3.000 x 1.900" (76.1 x 48.3 mm)	300 psi (20 bar)	2.00" (51 mm)	2.28" (58 mm)	3.00" (76.2 mm)	1.81" (46.1 mm)	5.56" (141.3 mm)	3.70" (94 mm)	½ x 2⅜" (M12 x 60 mm)	3.43 lbs (1.56 Kgs)
3 x ½" 80 x 15	3.500 x 0.840" (88.9 x 21.3 mm)	300 psi (20 bar)	1.50" (38 mm)	2.36" (60 mm)	3.06" (77.8 mm)	2.09" (53.2 mm)	6.19" (157.2 mm)	3.19" (81 mm)	½ x 3" (M12 x 75 mm)	3.17 lbs (1.44 Kgs)
3 x ¾" 80 x 20	3.500 x 1.050" (88.9 x 26.7 mm)	300 psi (20 bar)	1.50" (38 mm)	2.32" (59 mm)	3.06" (77.8 mm)	2.09" (53.2 mm)	6.19" (157.2 mm)	3.19" (81 mm)	½ x 3" (M12 x 75 mm)	3.21 lbs (1.46 Kgs)
3 x 1" 80 x 25	3.500 x 1.315" (88.9 x 33.4 mm)	300 psi (20 bar)	1.50" (38 mm)	2.40" (61 mm)	3.06" (77.8 mm)	2.09" (53.2 mm)	6.19" (157.2 mm)	3.19" (81 mm)	½ x 3" (M12 x 75 mm)	3.37 lbs (1.53 Kgs)
3 x 1¼" 80 x 32	3.500 x 1.660" (88.9 x 42.2 mm)	300 psi (20 bar)	2.00" (51 mm)	2.56" (65 mm)	3.25" (82.6 mm)	2.09" (53.2 mm)	6.19" (157.2 mm)	3.70" (94 mm)	½ x 3" (M12 x 75 mm)	3.98 lbs (1.81 Kgs)

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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" 80 x 40	3.500 x 1.900" (88.9 x 48.3 mm)	300 psi (20 bar)	2.00" (51 mm)	2.80" (71 mm)	3.50" (88.9 mm)	2.09" (53.2 mm)	6.19" (157.2 mm)	3.70" (94 mm)	½ x 3" (M12 x 75 mm)	4.14 lbs (1.88 Kgs)
3 x 2" 80 x 50	3.500 x 2.375" (88.9 x 60.3 mm)	300 psi (20 bar)	2.50" (64 mm)	2.76" (70 mm)	3.50" (88.9 mm)	2.09" (53.2 mm)	6.19" (157.2 mm)	4.25" (108 mm)	½ x 3" (M12 x 75 mm)	4.55 lbs (2.07 Kgs)
4 x ½" 100 x 15	3.500 x 0.840" (114.3 x 21.3 mm)	300 psi (20 bar)	1.50" (38 mm)	2.83" (72 mm)	3.69" (93.7 mm)	2.63" (66.7 mm)	6.19" (157.2 mm)	3.13" (79.4 mm)	½ x 3" (M12 x 75 mm)	3.59 lbs (1.63 Kgs)
4 x ¾" 100 x 20	4.500 x 1.050" (114.3 x 26.7 mm)	300 psi (20 bar)	1.50" (38 mm)	2.79" (71 mm)	3.69" (93.7 mm)	2.63" (66.7 mm)	7.19" (182.6 mm)	3.13" (79.4 mm)	½ x 3" (M12 x 75 mm)	3.61 lbs (1.64 Kgs)
4 x 1" 100 x 25	4.500 x 1.315" (114.3 x 33.4 mm)	300 psi (20 bar)	1.50" (38 mm)	2.87" (73 mm)	3.69" (93.7 mm)	2.63" (66.7 mm)	7.19" (182.6 mm)	3.13" (79.4 mm)	½ x 3" (M12 x 75 mm)	3.74 lbs (1.70 Kgs)
4 x 1¼" 100 x 32	4.500 x 1.660" (114.3 x 42.2 mm)	300 psi (20 bar)	2.00" (51 mm)	3.07" (78 mm)	3.63" (92.1 mm)	2.63" (66.7 mm)	7.19" (182.6 mm)	4.00" (101.6 mm)	½ x 3" (M12 x 75 mm)	4.18 lbs (1.90 Kgs)
4 x 1½" 100 x 40	4.500 x 1.900" (114.3 x 48.3 mm)	300 psi (20 bar)	2.00" (51 mm)	3.31" (84 mm)	3.63" (92.1 mm)	2.63" (66.7 mm)	7.19" (182.6 mm)	4.00" (101.6 mm)	½ x 3" (M12 x 75 mm)	4.49 lbs (2.04 Kgs)
4 x 2" 100 x 50	4.500 x 2.375" (114.3 x 60.3 mm)	300 psi (20 bar)	2.50" (64 mm)	3.27" (83 mm)	4.00" (101.6 mm)	2.63" (66.7 mm)	7.19" (182.6 mm)	4.00" (101.6 mm)	½ x 3" (M12 x 75 mm)	5.00 lbs (2.27 Kgs)
4 x 2½" 100 x 65	4.500 x 2.875" (114.3 x 73.0 mm)	300 psi (20 bar)	2.75" (70 mm)	2.87" (73 mm)	4.00" (101.6 mm)	2.63" (66.7 mm)	7.19" (182.6 mm)	4.44" (112.7 mm)	½ x 3" (M12 x 75 mm)	5.43 lbs (2.47 Kgs)
100 x 76.1 mm	4.500 x 3.000" (114.3 x 76.1 mm)	300 psi (20 bar)	2.75" (70 mm)	2.87" (73 mm)	4.00" (101.6 mm)	2.63" (66.7 mm)	7.19" (182.6 mm)	4.44" (112.7 mm)	½ x 3" (M12 x 75 mm)	5.65 lbs (2.57 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)	3.31" (84 mm)	4.13" (104.8 mm)	2.63" (66.7 mm)	7.19" (182.6 mm)	5.06" (128.6 mm)	½ x 3" (M12 x 75 mm)	6.41 (2.91 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)	3.27" (83 mm)	4.75" (120.7 mm)	3.19" (81.0 mm)	8.81" (223.8 mm)	4.19" (106.4 mm)	⅝ x 3½" (M16 x 90 mm)	6.38 (2.90 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)	3.67" (93 mm)	4.75" (120.7 mm)	3.19" (81.0 mm)	8.81" (223.8 mm)	4.57" (115.9 mm)	⅝ x 3½" (M16 x 90 mm)	7.40 lbs (3.40 Kgs)
139.7 mm x 80	5.500 x 3.500" (139.7 x 88.9 mm)	300 psi (20 bar)	3.50" (89 mm)	3.82" (97 mm)	4.75" (120.7 mm)	3.19" (81.0 mm)	8.81" (223.8 mm)	5.19" (131.8 mm)	⅝ x 3½" (M16 x 90 mm)	8.41 lbs (3.82 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)	3.27" (83 mm)	4.75" (120.7 mm)	3.19" (81.0 mm)	8.81" (223.8 mm)	4.19" (106.4 mm)	⅝ x 3½" (M16 x 90 mm)	6.38 lbs (2.90 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)	3.67" (93 mm)	4.75" (120.7 mm)	3.19" (81.0 mm)	8.81" (223.8 mm)	4.44" (112.7 mm)	⅝ x 3½" (M16 x 90 mm)	7.46 lbs (3.39 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)	3.82" (97 mm)	4.75" (120.7 mm)	3.19" (81.0 mm)	8.81" (223.8 mm)	5.19" (131.8 mm)	⅝ x 3½" (M16 x 90 mm)	8.40 lbs (3.82 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)	4.41" (112 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	3.63" (92.1 mm)	⅝ x 3½" (M16 x 90 mm)	5.57 lbs (2.53 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)	4.41" (112 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	3.63" (92.1 mm)	⅝ x 3½" (M16 x 90 mm)	6.60 lbs (3.00 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)	4.37" (111 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	4.19" (106.4 mm)	⅝ x 3½" (M16 x 90 mm)	6.97 lbs (3.17 Kgs)
165.1 mm x 65	6.500 x 2.875" (165.1 x 73.0 mm)	300 psi (20 bar)	2.75" (70 mm)	3.98" (101 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	4.44" (112.7 mm)	⅝ x 3½" (M16 x 90 mm)	7.88 lbs (3.58 Kgs)
165.1 mm x 76.1 mm	6.500 x 2.875" (165.1 x 76.1 mm)	300 psi (20 bar)	2.75" (70 mm)	3.98" (101 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	4.56" (115.9 mm)	⅝ x 3½" (M16 x 90 mm)	8.25 lbs (3.75 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)	4.33" (110 mm)	5.50" (139.7 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	5.19" (131.8 mm)	⅝ x 3½" (M16 x 90 mm)	9.09 lbs (4.13 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)	4.45" (113 mm)	5.75" (146.1 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	6.25" (158.8 mm)	⅝ x 3½" (M16 x 90 mm)	10.50 lbs (4.77 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)	4.41" (112 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	3.63" (92.1 mm)	⅝ x 3½" (M16 x 90 mm)	6.41 lbs (2.91 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)	4.41" (112 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	3.63" (92.1 mm)	⅝ x 3½" (M16 x 90 mm)	6.58 lbs (2.99 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)	4.37" (111 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	4.19" (106.4 mm)	⅝ x 3½" (M16 x 90 mm)	7.00 lbs (3.18 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)	3.98" (101 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	4.44" (112.7 mm)	⅝ x 3½" (M16 x 90 mm)	7.88 lbs (3.58 Kgs)
150 x 76.1 mm	6.625 x 2.875" (168.3 x 76.1 mm)	300 psi (20 bar)	2.75" (70 mm)	3.98" (101 mm)	5.13" (130.2 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	4.56" (115.9 mm)	⅝ x 3½" (M16 x 90 mm)	7.88 lbs (3.58 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)	4.33" (110 mm)	5.50" (139.7 mm)	3.72" (94.5 mm)	9.87" (250.8 mm)	5.19" (131.8 mm)	⅝ x 3½" (M16 x 90 mm)	9.02 lbs (4.10 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)	4.45" (113 mm)	5.75" (146.1 m)	3.72" (94.5 mm)	9.87" (250.8 mm)	6.25" (158.8 mm)	⅝ x 3½" (M16 x 90 mm)	10.47 lbs (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.
**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

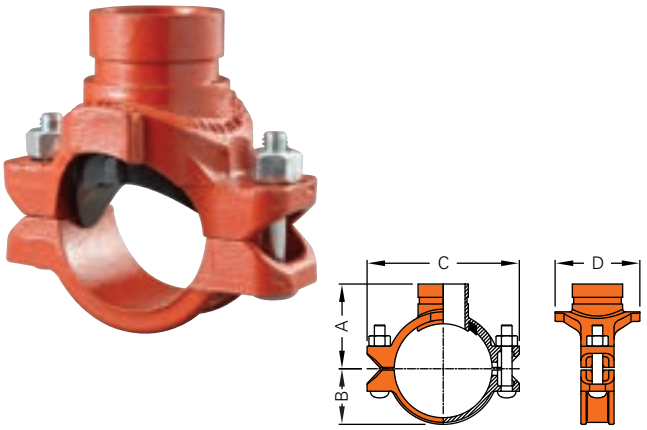
nom. size run x branch	pipe O.D.	max. working pressure (CWP)**	hole dia. ŦT +0.13, -0 / +3.2, -0	dimensions A	B	C	D	bolt size	weight
2 x 1" 50 x 25	2.375 x 1.315" (60.3 x 33.4 mm)	300 psi (20 bar)	1.50" (38 mm)	2.68" (68 mm)	1.57" (40 mm)	5.04" (128 mm)	2.87" (73 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.2 lbs (1.0 Kgs)
2 x 1¼" 50 x 32	2.375 x 1.660" (60.3 x 42.2 mm)	300 psi (20 bar)	1.75" (45 mm)	2.80" (71 mm)	1.57" (40 mm)	5.04" (128 mm)	3.22" (82 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.2 lbs (1.0 Kgs)
2 x 1½" 50 x 40	2.375 x 1.900" (60.3 x 48.3 mm)	300 psi (20 bar)	1.75" (45 mm)	2.80" (71 mm)	1.57" (40 mm)	5.04" (128 mm)	3.22" (82 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.6 lbs (1.2 Kgs)
2½ x 1" 65 x 25	2.875/3.000 x1.315" (73.0/76.1 x 33.4 mm)	300 psi (20 bar)	1.50" (38 mm)	2.95" (75 mm)	1.89" (48 mm)	5.75" (146 mm)	2.87" (73 mm)	½ x 3" (M12 x 75 mm)	4.0 lbs (1.8 Kgs)
2½ x 1¼" 65 x 32	2.875/3.000 x 1.660" (73.0/76.1 x 42.2 mm)	300 psi (20 bar)	2.00" (51 mm)	3.11" (79 mm)	1.89" (48 mm)	5.75" (146 mm)	3.22" (82 mm)	½ x 3" (M12 x 75 mm)	3.7 lbs (1.7 Kgs)
2½ x 1½" 65 x 40	2.875/3.000 x 1.900" (73.0/76.1 x 48.3 mm)	300 psi (20 bar)	2.00" (51 mm)	3.11" (79 mm)	1.89" (48 mm)	5.75" (146 mm)	3.22" (82 mm)	½ x 3" (M12 x 75 mm)	4.2 lbs (1.9 Kgs)
3 x 1" 80 x 25	3.500 x 1.315" (88.9 x 33.4 mm)	300 psi (20 bar)	1.50" (38 mm)	3.30" (84 mm)	2.20" (56 mm)	6.30" (160 mm)	2.91" (74 mm)	½ x 3" (M12 x 75 mm)	3.7 lbs (1.7 Kgs)
3 x 1¼" 80 x 32	3.500 x 1.660" (88.9 x 42.2 mm)	300 psi (20 bar)	2.00" (51 mm)	3.50" (89 mm)	2.20" (56 mm)	6.30" (160 mm)	3.46" (88 mm)	½ x 3" (M12 x 75 mm)	4.0 lbs (1.8 Kgs)
3 x 1½" 80 x 40	3.500 x 1.900" (88.9 x 48.3 mm)	300 psi (20 bar)	2.00" (51 mm)	3.50" (89 mm)	2.20" (56 mm)	6.30" (160 mm)	3.46" (88 mm)	½ x 3" (M12 x 75 mm)	4.2 lbs (1.9 Kgs)
3 x 2" 80 x 50	3.500 x 2.375" (88.9 x 60.3 mm)	300 psi (20 bar)	2.50" (64 mm)	3.58" (91 mm)	2.20" (56 mm)	6.30" (160 mm)	3.98" (101 mm)	½ x 3" (M12 x 75 mm)	4.8 kbs (2.2 Kgs)
4 x 1" 100 x 25	4.500 x 1.315" (114.3 x 33.4 mm)	300 psi (20 bar)	1.50" (38 mm)	3.89" (94 mm)	2.83" (72 mm)	7.48" (190 mm)	2.63" (67 mm)	½ x 3" (M12 x 75 mm)	4.4 lbs (2.0 Kgs)
4 x 1¼" 100 x 32	4.500 x 1,660" (114.3 x 42.2 mm)	300 psi (20 bar)	2.00" (51 mm)	3.89" (99 mm)	2.83" (72 mm)	7.48" (190 mm)	3.35" (85 mm)	½ x 3" (M12 x 75 mm)	4.6 lbs (2.1 Kgs)
4 x 1½" 100 x 40	4.500 x 1.900" (114.3 x 48.3 mm)	300 psi (20 bar)	2.00" (51 mm)	3.89" (99 mm)	2.83" (72 mm)	7.48" (190 mm)	3.35" (85 mm)	½ x 3" (M12 x 75 mm)	4.8 lbs (2.2 Kgs)
4 x 2" 100 x 50	4.500 x 2.375" (114.3 x 60.3 mm)	300 psi (20 bar)	2.50" (64 mm)	4.13" (105 mm)	2.83" (72 mm)	7.48" (190 mm)	3.98" (101 mm)	½ x 3" (M12 x 75 mm)	5.9 lbs (2.7 Kgs)
4 x 2½" 100 x 65	4.500 x 2.875" (114.3 x 73.0 mm)	300 psi (20 bar)	2.75" (70 mm)	4.37" (111 mm)	2.83" (72 mm)	7.48" (190 mm)	4.40" (112 mm)	½ x 3" (M12 x 75 mm)	6.6 lbs (3.0 Kgs)

graph continues on to the 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		
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"	⅝ 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"	⅝ 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"	⅝ 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"	⅝ 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"	⅝ x 5⁵⁄₁₆"	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"	⅝ x 5⁵⁄₁₆"	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"	⅝ x 5⁵⁄₁₆"	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"	⅝ x 5⁵⁄₁₆"	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"	⅝ x 5⁵⁄₁₆"	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"	⅝ x 5⁵⁄₁₆"	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"	⅝ x 5⁵⁄₁₆"	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. ŦT +0.13, -0 / +3.2, -0	dimensions A	B	C	D	bolt s"	weight
2 x 1" 50 x 25	2.375 x 1.315" (60.3 x 33.4 mm)	300 psi (20 bar)	1.50" (38 mm)	2.87" (73.0 mm)	1.50" (38.1 mm)	4.57" (115.9 mm)	3.19" (81.0 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.27 lbs (1.03 Kgs)
2 x 1¼" 50 x 32	2.375 x 1.660" (60.3 x 42.2 mm)	300 psi (20 bar)	1.75" (45 mm)	3.00" (76.2 mm)	1.50" (38.1 mm)	4.57" (115.9 mm)	3.31" (84.0 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.44 lbs (1.11 Kgs)
2 x 1½" 50 x 40	2.375 x 1.900" (60.3 x 48.3 mm)	300 psi (20 bar)	1.75" (45 mm)	3.00" (76.2 mm)	1.50" (38.1 mm)	4.57" (115.9 mm)	3.31" (84.0 mm)	⅜ x 2⅛" (M10 x 55 mm)	2.60 lbs (1.18 Kgs)
2½ x 1" 65 x 25	2.875 x 1.315" (73.0 x 33.4 mm)	300 psi (20 bar)	1.50" (38 mm)	3.13" (79.4 mm)	1.75" (44.5 mm)	5.56" (141.3 mm)	3.19" (81.0 mm)	½ x 2⅜" (M12 x 60 mm)	2.71 lbs (1.23 Kgs)
2½ x 1¼" 65 x 32	2.875 x 1.660" (73.0 x 42.2 mm)	300 psi (20 bar)	2.00" (51 mm)	3.25" (82.6 mm)	1.75" (44.5 mm)	5.56" (141.3 mm)	3.70" (94.0 mm)	½ x 2⅜" (M12 x 60 mm)	3.06 lbs (1.39 Kgs)
2.5 x 1½" 65 x 40	2.875 x 1.900" (73.0 x 48.3 mm)	300 psi (20 bar)	2.00" (51 mm)	3.25" (82.6 mm)	1.75" (44.5 mm)	5.56" (141.3 mm)	3.70" (94.0 mm)	½ x 2⅜" (M12 x 60 mm)	3.12 lbs (1.42 Kgs)
76.1 mm x 25	3.000 x 1.315" (76.1 x 33.4 mm)	300 psi (20 bar)	1.50" (38 mm)	3.13" (79.4 mm)	1.81" (46.1 mm)	5.69" (144.5 mm)	3.19" (81.0 mm)	½ x 2⅜" (M12 x 60 mm)	2.71 lbs (1.23 Kgs)
76.1 mm x 32	3.000 x 1.660" (76.1 x 42.2 mm)	300 psi (20 bar)	2.00" (51 mm)	3.25" (82.6 mm)	1.81" (46.1 mm)	5.69" (144.5 mm)	3.70" (94.0 mm)	½ x 2⅜" (M12 x 60 mm)	3.06 lbs (1.39 Kgs)
76.1 mm x 40	3.000 x 1.900" (76.1 x 48.3 mm)	300 psi (20 bar)	2.00" (51 mm)	3.25" (82.6 mm)	1.81" (46.1 mm)	5.69" (144.5 mm)	3.70" (94.0 mm)	½ x 2⅜" (M12 x 60 mm)	3.12 lbs (1.42 Kgs)
3 x 1" 80 x 25	3.500 x 1.315" (88.9 x 33.4 mm)	300 psi (20 bar)	1.50" (38 mm)	3.37" (85.7 mm)	2.09" (53.2 mm)	6.19" (157.2 mm)	3.19" (81.0 mm)	½ x 3" (M12 x 75 mm)	3.19 lbs (1.45 Kgs)
3 x 1¼" 80 x 32	3.500 x 1.660" (88.9 x 42.2 mm)	300 psi (20 bar)	2.00" (51 mm)	3.56" (90.5 mm)	2.09" (53.2 mm)	6.19" (157.2 mm)	3.70" (94.0 mm)	½ x 3" (M12 x 75 mm)	3.70 lbs (1.68 Kgs)
3 x 1½" 80 x 40	3.500 x 1.900" (88.9 x 48.3 mm)	300 psi (20 bar)	2.00" (51 mm)	3.56" (90.5 mm)	2.09" (53.2 mm)	6.19" (157.2 mm)	3.70" (94.0 mm)	½ x 3" (M12 x 75 mm)	3.74 lbs (1.70 Kgs)
3 x 2" 80 x 50	3.500 x 2.375 (88.9 x 60.3 mm)	300 psi (20 bar)	2.50" (64 mm)	3.56" (90.5 mm)	2.09" (53.2 mm)	6.19" (157.2 mm)	4.25" (108.0 mm)	½ x 3" (M12 x 75 mm)	4.03 lbs (1.83 Kgs)
4 x 1" 100 x 25	4.500 x 1.315 (114.3 x 33.4 mm)	300 psi (20 bar)	1.50" (38 mm)	3.69" (93.7 m)	2.63" (66.7 mm)	7.19" (182.6 mm)	3.13" (79.4 mm)	½ x 3" (M12 x 75 mm)	3.63 lbs (1.65 Kgs)
4 x 1¼" 100 x 32	4.500 x 1,660 (114.3 x 42.2 mm)	300 psi (20 bar)	2.00" (51 mm)	3.63" (92.1 mm)	2.63" (66.7 mm)	7.19" (182.6 mm)	4.00" (101.6 mm)	½ x 3" (M12 x 75 mm)	3.96 lbs (1.80 Kgs)
4 x 1½" 100 x 40	4.500 x 1.900 (114.3 x 48.3 mm)	300 psi (20 bar)	2.00" (51 mm)	3.63" (92.1 mm)	2.63" (66.7 mm)	7.19" (182.6 mm)	4.00" (101.6 mm)	½ x 3" (M12 x 75 mm)	3.98 lbs (1.81 Kgs)
4 x 2" 100 x 50	4.500 x 2.375 (114.3 x 60.3 mm)	300 psi (20 bar)	2.50" (64 mm)	4.00" (101.6 mm)	2.63" (66.7 mm)	7.19" (182.6 mm)	4.00" (101.6 mm)	½ x 3" (M12 x 75 mm)	4.25 lbs (1.93 Kgs)
4 x 2½" 100 x 65	4.500 x 2.875 (114.3 x 73.0 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" (M12 x 75 mm)	5.85 lbs (2.66 Kgs)

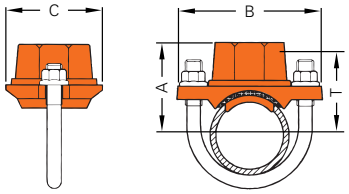
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nom. size run x branch	pipe O.D.	max. working pressure (CWP)**	hole dia. ₸ +0.13, -0 / +3.2, -0	dimensions A	B	C	D	bolt size	weight
100 x 76.1 mm	4.500 x 3.000" (114.3 x 76.1 mm)	300 psi (20 bar)	2.75" (70 mm)	4.00" (101.6 mm)	2.63" (66.7 mm)	7.19" (182.6 mm)	4.44" (112.7 mm)	½ x 3" (M12 x 75 mm)	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" (M12 x 75 mm)	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" (M16 x 90 mm)	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" (M16 x 90 mm)	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" (M16 x 90 mm)	6.78 lbs (3.08 Kgs)
5 x 2" 125 x 50	5.563 x2.375" (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" (M16 x 90 mm)	5.79 lbs (2.63 Kgs)
5 x 2½" 125 x 65	5.563x 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" (M16 x 90 mm)	6.34 lbs (2.88 Kgs)
125 x 76.1 mm	5.563x 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" (M16 x 90 mm)	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" (M16 x 90 mm)	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" (M16 x 90 mm)	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" (M16 x 90 mm)	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" (M16 x 90 mm)	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" (M16 x 90 mm)	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" (M16 x 90 mm)	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" (M16 x 90 mm)	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" (M16 x 90 mm)	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" (M16 x 90 mm)	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" (M16 x 90 mm)	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" (M16 x 90 mm)	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" (M16 x 90 mm)	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" (M16 x 90 mm)	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" (M16 x 90 mm)	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 ⅝" (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 preperation "A"
	hole saw size	max. dia. allowed	
½", ¾", 1" (15, 20, 25)	1 3/16" (30 mm)	1¼" (32 mm)	3½" (89 mm)

dimensions

nom. size run x branch	max. working pressure (CWP)	hole dia. Ŧ +3.2, -0 / +0.13, -0	dimensions			take-out, T‡	bolt size	bolt torque	weight
			A	B	C				
1¼ x ½" 32 x 15	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)	⅜Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
1¼ x ¾" 32 x 20	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)	⅜Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
1¼ x 1" 32 x 25	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)	⅜Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
1½ x ½" 40 x 15	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)	⅜Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
1½ x ¾" 40 x 20	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)	⅜Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
1½ x 1" 40 x 25	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)	⅜Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
2 x ½" 50 x 15	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)	⅜Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
2 x ¾" 50 x 20	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)	⅜Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
2 x 1" 50 x 25	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)	⅜Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
2½ x ½" 65 x 15	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)	⅜Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
2½ x ¾" 65 x 20	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)	⅜Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	0.9 lbs (0.4 Kgs)
2½ x 1" 65 x 25	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)	⅜Ø U-Bolt	15-22 lbs-ft (20-30 Nm)	1.1 lbs (0.5 Kgs)

Ŧ 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 2017 online installation for most recently updated instructions. Proper installation is important to proper performance.

model Z05 on carbon steel pipe

	cut-grooved		roll-grooved		
nom. size	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)	200 psi (14 bar)
5" 125	450 psi (31 bar)	450 psi (31 bar)	350 psi (24 bar)	300 psi (20 bar)	175 psi (12 bar)
6" 150	450 psi (31 bar)	450 psi (31 bar)	350 psi (24 bar)	300 psi (20 bar)	175 psi (12 bar)
8" 200	450 psi (31 bar)	450 psi (31 bar)	350 psi (24 bar)	300 psi (20 bar)	150 psi (10 bar)

* 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

	cut-grooved		roll-grooved		
nom. size	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

model K-9 on carbon steel pipe

	cut-grooved		roll-grooved		
nom. size	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

	cut-grooved		roll-grooved		
nom. size	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

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

model Z07 on stainless steel pipe

	cut-grooved		roll-grooved		
nom. size	sch. 80S	sch. 40S	sch. 40S	sch. 10S	sch. 5S
1¼" 32	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	300 psi (20 bar)
1½" 40	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	300 psi (20 bar)
2" 50	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	700 psi (48 bar)	300 psi (20 bar)
2½" 65	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	700 psi (48 bar)	300 psi (20 bar)
3" 80	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	300 psi (20 bar)
4" 100	750 psi (52 bar)	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	250 psi (17 bar)
5" 125	750 psi (52 bar)	750 psi (52 bar)	650 psi (45 bar)	500 psi (35 bar)	NR
6" 150	700 psi (48 bar)	700 psi (48 bar)	600 psi (42 bar)	300 psi (20 bar)	NR
8" 200	600 psi (42 bar)	600 psi (42 bar)	450 psi (31 bar)	300 psi (20 bar)	NR
10" 250	500 psi (35 bar)	500 psi (35 bar)	450 psi (31 bar)	150 psi (10 bar)	NR
12" 300	400 psi (28 bar)	400 psi (28 bar)	400 psi (28 bar)	125 psi (9 bar)	NR

model 7771 on carbon steel pipe

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

model 7771 on stainless steel pipe

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

model XH-1000 on carbon steel pipe

	cut-grooved		roll-grooved		
nom. size	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

	cut-grooved		roll-grooved		
nom. size	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

	cut-grooved		roll-grooved		
nom. size	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

	cut-grooved		roll-grooved		
nom. size	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

	cut-grooved		roll-grooved		
nom. size	XS	STD	STD	sch. 10	sch. 7
1″ 25	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	400 psi (28 bar)	300 psi (20 bar)
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)	300 psi (20 bar)	250 psi (17 bar)	200 psi (14 bar)
10″ 250	350 psi (24 bar)	350 psi (24 bar)	300 psi (20 bar)	200 psi (14 bar)	175 psi (12 bar)
12″ 300	350 psi (24 bar)	350 psi (24 bar)	300 psi (20 bar)	200 psi (14 bar)	175 psi (12 bar)

model 7705 on stainless steel pipe

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

model 7707 on carbon steel pipe

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

model 7707 on stainless steel pipe

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

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

model 7706 on carbon steel pipe

	cut-grooved		roll-grooved		
nom. size	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

	cut-grooved		roll-grooved		
nom. size	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

	cut-grooved		roll-grooved		
nom. size	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

	cut-grooved		roll-grooved		
nom. size	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

	cut-grooved		roll-grooved		
nom. size	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

	cut-grooved		roll-grooved		
nom. size	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

	cut-grooved		roll-grooved		
nom. size	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

	cut-grooved		roll-grooved		
nom. size	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

	cut-grooved	roll-grooved	
nom. size	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

	cut-grooved	roll-grooved	
nom. size	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

	cut-grooved	roll-grooved	
nom. size	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 2017 online installation instructions for most recently updated instructions. Proper installation is important to proper performance.





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Shurjoint grooved fittings



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

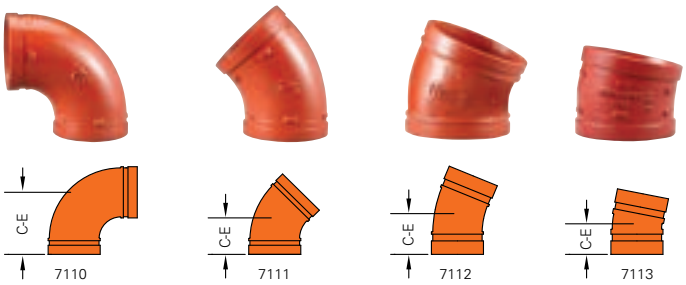
Most fittings are provided in ductile iron conforming to ASTM A536 Gr. 65-45-12 and or ASTM A395 Gr. 65-45-15. Some styles and sizes larger than 14” (350 mm) are fabricated from carbon steel pipe to ASTM A53 Gr. B or fabricated of segmentally welded steel of the same or equivalent grade. Fittings are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

flow data / frictional resistance

			elbows					tees	
								#7120	#903
nom. size	pipe O.D.	pipe wall thickness	#7110 90° std. radius	#901 90° short radius	#7110LR 90° 1½ D. LR	#7111 45° std. radius	#7111LR 45° 1½ D. LR	branch	weight
1"	1.315"	0.133"	1.7 ft	---	---	0.8 ft	---	4.2 ft	---
25	(33.4 mm)	(3.4 mm)	(0.5 m)	---	---	(0.2 m)	---	(1.3 m)	---
1¼"	1.660"	0.140"	2.5 ft	2.5 ft	---	1.0 ft	---	4.7 ft	4.7 ft
32	(42.2 mm)	3.6 mm)	(0.8 m)	(0.8 m)	---	(0.3 m)	---	(1.4 m)	(1.4 m)
1½"	1.900"	0.154"	3.5 ft	3.5 ft	---	1.5 ft	---	4.7 ft	4.7 ft
40	(48.3 mm)	(4.0 mm)	(1.1 m)	(1.1 m)	---	(0.5 m)	---	(1.4 m)	(1.4 m)
2"	2.375"	0.203"	4.0 ft	4.0 ft	2.5 ft	1.7 ft	1.1 ft	4.7 ft	4.7 ft
50	(60.3 mm)	(5.2 mm)	(1.2 m)	(1.2 m)	(0.8 m)	(0.5 m)	(0.3 m)	(1.4 m)	(1.4 m)
2½"	2.875"	0.197"	4.5 ft	4.5 ft	2.9 ft	2.0 ft	1.4 ft	4.7 ft	4.7 ft
65	(73.0 mm)	(5.0 mm)	(1.4 m)	(1.4 m)	(0.9 m)	(0.6 m)	(0.4 m)	(1.4 m)	(1.4 m)
3"	3.500"	0.237"	5.0 ft	5.0 ft	3.8 ft	2.5 ft	1.5 ft	4.7 ft	4.7 ft
80	(88.9 mm)	(6.3 mm)	(1.5 m)	(1.5 m)	(1.2 m)	(0.8 m)	(0.5 m)	(1.4 m)	(1.4 m)
4"	4.500"	0.220"	6.7 ft	6.7 ft	5.0 ft	3.0 ft	2.1 ft	15.0 ft	15.0 ft
100	(114.3 mm)	(5.6 mm)	(2.0 m)	(2.0 m)	(1.5 m)	(0.9 m)	(0.6 m)	(4.6 m)	(4.6 m)
5"	5.563"	0.258"	7.5 ft	7.5 ft	6.0 ft	4.0 ft	2.5 ft	19.0 ft	19.0 ft
125	(141.3 mm)	(6.6 mm)	(2.3 m)	(2.3 m)	(1.8 m)	(1.2 m)	(0.6 m)	(5.8 m)	(5.8 m)
6"	6.625"	0.280"	9.0 ft	9.0 ft	7.5 ft	4.5 ft	3.0 ft	22.0 ft	22.0 ft
150	(168.3 mm)	(7.1 mm)	(2.7 m)	(2.7 m)	(2.3 m)	(1.4 m)	(0.9 m)	(6.7 m)	(6.7 m)
8"	8.625"	0.322"	13.0 ft	13.0 ft	9.8 ft	6.5 ft	4.0 ft	33.0 ft	33.0 ft
200	(219.1 mm)	(8.2 mm)	(4.0 m)	(4.0 m)	(3.0 m)	(2.0 m)	(1.2 m)	(10.1 m)	(10.1 m)
10"	10.750"	0.365"	17.0 ft	---	12.0 ft	8.3 ft	5.0 ft	41.0 ft	---
250	(273.0 mm)	(8.8 mm)	(5.2 m)	---	(3.7 m)	(2.5 m)	(1.5 m)	(12.5 m)	---
12"	12.750"	0.375"	20.0 ft	---	14.5 ft	10.0 ft	6.0 ft	49.0 ft	---
300	(323.9 mm)	(9.5 mm)	(6.1 m)	---	(4.4 m)	(3.1 m)	(1.8 m)	(14.9 m)	---
14"	14.000"	0.375"	24.5 ft	22.3 ft	---	13.8 ft	---	69.9 ft	69.9 ft
350	(355.6 mm)	(9.5 mm)	(7.5 m)	(6.8 m)	---	(4.8 m)	---	(21.3 m)	(21.3 m)
16"	16.000"	0.375"	28.0 ft	25.3 ft	---	15.8 ft	---	80.0 ft	80.0 ft
400	(406.4 mm)	(9.5 mm)	(8.5 m)	(7.7 m)	---	(4.8 m)	---	(24.4 m)	(24.4 m)

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

7110 90° elbow
7111 45° elbow
7112 22 ½° elbow
7113 11 ¼° elbow



Shurjoint ductile iron grooved-end fittings are made of ductile iron per ASTM A536 Gr. 65-45-12 and or ASTM A395 Gr. 65-45-15. C-E dimensions are manufacturer's standard.

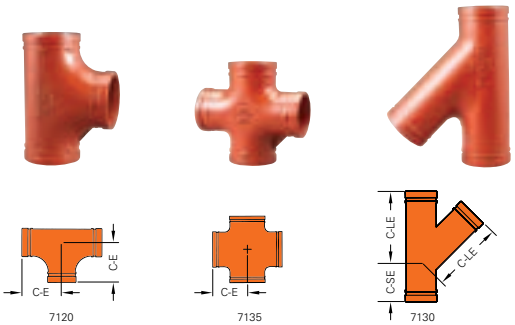
dimensions

		#7110 90° elbow		#7111 45° elbow		#7112 22 ½ " elbow		#7113 11 ¼ " elbow	
nom. size	pipe O.D.	C-E	weight	C-E	weight	C-E	weight	C-E	weight
1" 25	1.315" (33.4 mm)	2.25" (57 mm)	0.7 lbs (0.3 Kgs)	1.75" (45 mm)	0.5 lbs (0.2 Kgs)	--- ---	--- ---	1.38" (35 mm)	0.4 lbs (0.2 Kgs)
1¼" 32	1.660" (42.2 mm)	2.75" (70 mm)	1.1 lbs (0.5 Kgs)	1.75" (45 mm)	0.7 lbs (0.3 Kgs)	1.75" (45 mm)	0.7 lbs (0.3 Kgs)	1.38" (35 mm)	0.7 lbs (0.3 Kgs)
1½" 40	1.900" (48.3 mm)	2.75" (70 mm)	1.3 lbs (0.6 Kgs)	1.75" (45 mm)	0.9 lbs (0.4 Kgs)	1.75" (45 mm)	1.1 lbs (0.5 Kgs)	1.38" (35 mm)	0.7 lbs (0.3 Kgs)
2" 50	2.375" (60.3 mm)	3.25" (83 mm)	2.0 lbs (0.9 Kgs)	2.00" (51 mm)	1.5 lbs (0.7 Kgs)	1.88" (48 mm)	1.6 lbs (0.7 Kgs)	1.38" (35 mm)	1.0 lbs (0.4 Kgs)
2½" 65	2.875" (73.0 mm)	3.75" (95 mm)	2.6 lbs (1.2 Kgs)	2.25" (57 mm)	2.1 lbs (0.9 Kgs)	2.01" (51 mm)	2.6 lbs (1.2 Kgs)	1.50" (38 mm)	1.6 lbs (0.7 Kgs)
76.1 mm	3.000" (76.1 mm)	3.75" (95 mm)	3.1 lbs (1.4 Kgs)	2.25" (57 mm)	2.1 lbs (0.9 Kgs)	2.01" (51 mm)	2.5 lbs (1.1 Kgs)	1.50" (38 mm)	1.7 lbs (0.8 Kgs)
3" 80	3.500" (88.9 mm)	4.25" (108 mm)	4.3 lbs (2.0 Kgs)	2.50" (64 mm)	2.9 lbs (1.3 Kgs)	2.25" (57 mm)	3.1 lbs (1.4 Kgs)	1.50" (38 mm)	1.8 lbs (0.8 Kgs)
101.6 mm	4.000" (101.6 mm)	4.50" (114 mm)	5.5 lbs (2.5 Kgs)	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---
108.0 mm	4.250" (108.0 mm)	5.00" (127 mm)	5.5 lbs (2.5 Kgs)	3.00" (76 mm)	4.4 lbs (2.0 Kgs)	--- ---	--- ---	--- ---	--- ---
4" 100	4.500" (114.3 mm)	5.00" (127 mm)	6.9 lbs (3.1 Kgs)	3.00" (76 mm)	4.4 lbs (2.0 Kgs)	2.88" (73 mm)	4.4 lbs (2.0 Kgs)	1.75" (45 mm)	2.2 lbs (1.0 Kgs)
133.0 mm	5.250" (133.0 mm)	5.50" (140 mm)	9.0 lbs (4.1 Kgs)	3.25" (83 mm)	5.9 lbs (2.7 Kgs)	--- ---	--- ---	--- ---	--- ---
139.7 mm	5.500" (139.7 mm)	5.50" (140 mm)	9.5 lbs (4.3 Kgs)	3.25" (83 mm)	6.4 lbs (2.9 Kgs)	--- ---	--- ---	2.00" (51 mm)	4.5 lbs (2.0 Kgs)
5" 125	5.563" (141.3 mm)	5.50" (140 mm)	11.0 lbs (5.0 Kgs)	3.25" (83 mm)	6.6 lbs (3.0 Kgs)	--- ---	--- ---	2.00" (51 mm)	4.5 lbs (2.1 Kgs)
159.0 mm	6.250" (159.0 mm)	6.50" (165 mm)	13.2 lbs (6.0 Kgs)	3.50" (89 mm)	8.4 lbs (3.8 Kgs)	--- ---	--- ---	--- ---	--- ---
165.1 mm	6.500" (165.1 mm)	6.50" (165 mm)	12.5 lbs (5.7 Kgs)	3.50" (89 mm)	8.9 lbs (4.0 Kgs)	3.12" (79 mm)	10.7 lbs (4.9 Kgs)	2.00" (51 mm)	5.5 lbs (2.5 Kgs)

graph continues on next page

		#7110 90° elbow		#7111 45° elbow		#7112 22 ½ " elbow		#7113 11 ¼ " elbow	
nom. size	pipe O.D.	C-E	weight	C-E	weight	C-E	weight	C-E	weight
6" 150	6.625" (168.3 mm)	6.50" (165 mm)	12.8 lbs (5.8 Kgs)	3.50" (89 mm)	8.9 lbs (4.0 Kgs)	3.12" (79 mm)	9.3 lbs (4.2 Kgs)	2.00" (51 mm)	5.5 lbs (2.5 Kgs)
8" 200	8.625" (219.1 mm)	7.75" (197 mm)	28.7 lbs (13.0 Kgs)	4.25" (108 mm)	19.0 lbs (8.6 Kgs)	3.88" (98 mm)	17.8 lbs (8.1 Kgs)	2.00" (51 mm)	10.1 lbs (4.6 Kgs)
10" 250	10.750" (273.0 mm)	9.00" (229 mm)	53.1 lbs (24.1 Kgs)	4.75" (121 mm)	34.2 lbs (15.5 Kgs)	4.38" (111 mm)	39.0 lbs (17.7 Kgs)	2.13" (54 mm)	22.1 lbs (10.0 Kgs)
12" 300	12.750" (323.9 mm)	10.00" (254 mm)	81.0 lbs (36.7 Kgs)	5.25" (133 mm)	49.5 lbs (22.5 Kgs)	4.88" (124 mm)	43.0 lbs (19.5 Kgs)	2.25" (57 mm)	27.3 lbs (12.4 Kgs)
200 JIS	8.516" (216.3 mm)	7.75" (197 mm)	27.2 lbs (12.4 Kgs)	4.25" (108 mm)	18.5 lbs (8.4 Kgs)	3.88" (98 mm)	13.9 lbs (6.3 Kgs)	--- ---	--- ---
250 JIS	10.528" (267.4 mm)	9.00" (229 mm)	52.8 lbs (24.0 Kgs)	4.75" (121 mm)	34.2 lbs (15.5 Kgs)	--- ---	--- ---	--- ---	--- ---
300 JIS	12.539" (318.5 mm)	10.00" (254 mm)	77.0 lbs (35.0 Kgs)	5.25" (133 mm)	49.5 lbs (22.5 Kgs)	--- ---	--- ---	--- ---	--- ---
14" 350	14.000" (355.6 mm)	11.00" (280 mm)	77.5 lbs (35.2 Kgs)	6.00" (152 mm)	48.4 lbs (22.0 Kgs)	--- ---	--- ---	--- ---	--- ---
16" 400	16.000" (406.4 mm)	12.00" (305 mm)	94.6 lbs (43.0 Kgs)	7.25" (184 mm)	96.8 lbs (44.0 Kgs)	--- ---	--- ---	--- ---	--- ---

7120 tee
7135 cross
7130 45° lateral



Shurjoint ductile iron grooved-end fittings are made of ductile iron per ASTM A536 Gr. 65-45-12 and or ASTM A395 Gr. 65-45-15. C-E dimensions are manufacturer's standard.

dimensions

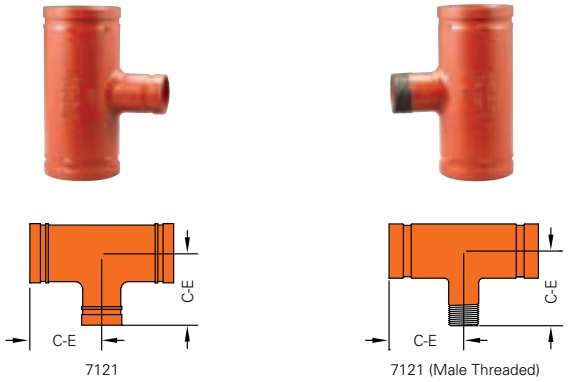
		#7120 tee		#7135 cross		#7130 45° lateral		
nom. size	pipe O.D.	C-E	weight	C-E	weight	C-E	C-SE	weight
1" 25	1.315" (33.4 mm)	2.25" (57 mm)	0.9 lbs (0.4 Kgs)	2.25" (57 mm)	--- ---	--- ---	--- ---	--- ---
1¼" 32	1.660" (42.2 mm)	2.75" (70 mm)	1.5 lbs (0.7 Kgs)	2.75" (70 mm)	--- ---	--- ---	--- ---	--- ---
1½" 40	1.900" (48.3 mm)	2.75" (70 mm)	2.0 lbs (0.9 Kgs)	2.75" (70 mm)	--- ---	--- ---	--- ---	--- ---
2" 50	2.375" (60.3 mm)	3.25" (83 mm)	2.9 lbs (1.3 Kgs)	3.25" (83 mm)	2.7 lbs (1.2 Kgs)	7.00" (178 mm)	2.75" (70 mm)	4.4 lbs (2.0 Kgs)
2½" 65	2.875" (73.0 mm)	3.75" (95 mm)	4.8 lbs (2.2 Kgs)	3.75" (95 mm)	6.6 lbs (3.0 Kgs)	7.75" (197 mm)	3.00" (76 mm)	6.2 lbs (2.8 Kgs)
76.1 mm	3.000" (76.1 mm)	3.75" (95 mm)	5.1 lbs (2.3 Kgs)	3.75" (95 mm)	6.6 lbs (3.0 Kgs)	7.75" (197 mm)	3.00" (76 mm)	6.2 lbs (2.8 Kgs)
3" 80	3.500" (88.9 mm)	4.25" (108 mm)	6.8 lbs (3.1 Kgs)	4.25" (108 mm)	6.8 lbs (3.1 Kgs)	8.50" (216 mm)	3.25" (83 mm)	9.2 lbs (4.2 Kgs)
4" 100	4.500" (114.3 mm)	5.00" (127 mm)	9.9 lbs (4.5 Kgs)	5.00" (127 mm)	11.5 lbs (5.2 Kgs)	10.50" (267 mm)	3.75" (95 mm)	17.6 lbs (8.0 Kgs)
108.0 mm	4.250" (108.0 mm)	5.00" (127 mm)	9.0 lbs (4.1 Kgs)	--- ---	--- ---	--- ---	--- ---	--- ---
133.0 mm	5.250" (133.0 mm)	5.50" (140 mm)	13.2 lbs (6.0 Kgs)	--- ---	--- ---	--- ---	--- ---	--- ---
139.7 mm	5.500" (139.7 mm)	5.50" (140 mm)	14.3 lbs (6.5 Kgs)	5.50" (140 mm)	13.0 lbs (5.9 Kgs)	12.50" (318 mm)	4.00" (102 mm)	27.5 lbs (12.5 Kgs)
5" 125	5.563" (141.3 mm)	5.50" (140 mm)	14.3 lbs (6.5 Kgs)	5.50" (140 mm)	13.0 lbs (5.9 Kgs)	12.50" (318 mm)	4.00" (102 mm)	27.5 lbs (12.5 Kgs)
6" 150	6.250" (159.0 mm)	6.50" (165 mm)	18.9 lbs (8.6 Kgs)	--- ---	--- ---	--- ---	--- ---	--- ---
165.1 mm	6.500" (165.1 mm)	6.50" (165 mm)	21.7 lbs (9.9 Kgs)	6.50" (165 mm)	32.0 lbs (14.5 Kgs)	14.00" (356 mm)	4.50" (114 mm)	40.7 lbs (18.5 Kgs)
6" 150	6.625" (168.3 mm)	6.50" (165 mm)	22.0 lbs (10.0 Kgs)	6.50" (165 mm)	32.0 lbs (14.5 Kgs)	14.00" (356 mm)	4.50" (114 mm)	40.7 lbs (18.5 Kgs)
8" 200	8.625" (219.1 mm)	7.75" (197 mm)	44.0 lbs (20.0 Kgs)	7.75" (197 mm)	44.1 lbs (20.0 Kgs)	18.00" (457 mm)	6.00" (152 mm)	70.4 lbs (32.0 Kgs)
10" 250	10.750" (273.0 mm)	9.00" (229 mm)	68.2 lbs (31.0 Kgs)	--- ---	--- ---	20.50" (521 mm)	6.50" (165 mm)	138.9 lbs (63.0 Kgs)

graph continues on next page

		#7120 tee		#7135 cross		#7130 45° lateral		
nom. size	pipe O.D.	C-E	weight	C-E	weight	C-E	C-SE	weight
200 JIS	8.516" (216.3 mm)	7.75" (197 mm)	44.0 lbs (20.0 Kgs)	--- ---	--- ---	--- ---	--- ---	--- ---
250 JIS	10.528" (267.4 mm)	9.00" (229 mm)	68.2 lbs (31.0 Kgs)	--- ---	--- ---	--- ---	--- ---	--- ---
300 JIS	12.539" (318.5 mm)	10.00" (254 mm)	96.7 lbs (43.9 Kgs)	--- ---	--- ---	--- ---	--- ---	--- ---
14" 350	14.000" (355.6 mm)	11.00" (280 mm)	114.6 lbs (52.0 Kgs)	--- ---	--- ---	--- ---	--- ---	--- ---

7121 reducing tee

7121 & 7121 male thread



Shurjoint ductile iron grooved-end fittings are made of ductile iron per ASTM A536 Gr. 65-45-12 and or ASTM A395 Gr. 65-45-15. C-E dimensions are manufacturer's standard.

dimensions

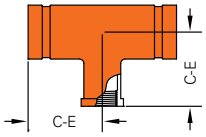
nom. size	pipe O.D.	standard C-E	threaded br. C-E	weight	nom. size	pipe O.D.	standard C-E	threaded br. C-E	weight
2 x 2 x 1¼" 50 x 50 x 32	2.375 x 2.375 x 1.660" (60.3 x 60.3 x 42.2 mm)	3.25" (83 mm)	--- ---	2.6 lbs (1.2 Kgs)	5 x 5 x 2½" 125 x 125 x 65	5.563 x 5.563 x 2.875" (141.3 x 141.3 x 73.0 mm)	5.50" (140 mm)	5.50" * (140 mm)	12.8 lbs (5.8 Kgs)
2 x 2 x 1½" 50 x 50 x 40	2.375 x 2.375 x 1.900" (60.3 x 60.3 x 48.3 mm)	3.25" (83 mm)	3.25" * (83 mm)	2.6 lbs (1.2 Kgs)	5 x 5 x 3" 125 x 125 x 80	5.563 x 5.563 x 3.500" (141.3 x 141.3 x 88.9 mm)	5.50" (140 mm)	5.50" * (140 mm)	12.6 lbs (5.7 Kgs)
2½ x 2½ x 1" 65 x 65 x 25	2.875 x 2.875 x 1.315" (73.0 x 73.0 x 33.4 mm)	3.75" (95 mm)	3.75" (95 mm)	3.7 lbs (1.7 Kgs)	5 x 5 x 4" 125 x 125 x 100	5.563 x 5.563 x 4.500" (141.3 x 141.3 x 114.3 mm)	5.50" (140 mm)	5.50" * (140 mm)	13.6 lbs (6.2 Kgs)
2½ x 2½ x 1¼" 65 x 65 x 32	2.875 x 2.875 x 1.660" (73.0 x 73.0 x 42.2 mm)	3.75" (95 mm)	3.75" (95 mm)	3.7 lbs (1.7 Kgs)	165.1 mm x 165.1 mm x 50	6.500 x 6.500 x 2.375" (165.1 x 165.1 x 60.3 mm)	6.50" (165 mm)	6.50" * (165 mm)	17.6 lbs (8.0 Kgs)
2½ x 2½ x 1½" 65 x 65 x 40	2.875 x 2.875 x 1.900" (73.0 x 73.0 x 48.3 mm)	3.75" (95 mm)	3.75" (95 mm)	4.0 lbs (1.8 Kgs)	165.1 mm x 165.1 mm x 76.1 mm	6.500 x 6.500 x 3.000" (165.1 x 165.1 x 76.1 mm)	6.50" (165 mm)	6.50" * (165 mm)	18.7 lbs (8.5 Kgs)
2½ x 2½ x 2" 65 x 65 x 50	2.875 x 2.875 x 2.375" (73.0 x 73.0 x 60.3 mm)	3.75" (95 mm)	3.75" (95 mm)	4.4 lbs (2.0 Kgs)	165.1 mm x 165.1 mm x 80	6.500 x 6.500 x 3.500" (165.1 x 165.1 x 88.9 mm)	6.50" (165 mm)	6.50" * (165 mm)	20.2 lbs (9.2 Kgs)
76.1 mm x 76.1 mm x 25	3.000 x 3.000 x 1.315" (76.1 x 76.1 x 33.4 mm)	3.75" (95 mm)	3.75" (95 mm)	3.7 lbs (1.7 Kgs)	165.1 mm x 165.1 mm x 100	6.500 x 6.500 x 4.500" (165.1 x 165.1 x 114.3 mm)	6.50" (165 mm)	6.50" * (165 mm)	19.4 lbs (8.8 Kgs)
76.1 mm x 76.1 mm x 32	3.000 x 3.000 x 1.660" (76.1 x 76.1 x 42.2 mm)	3.75" (95 mm)	3.75" (95 mm)	4.4 lbs (2.0 Kgs)	6 x 6 x 2" 150 x 150 x 50	6.625 x 6.625 x 2.375" (168.3 x 168.3 x 60.3 mm)	6.50" (165 mm)	6.50" (165 mm)	17.6 lbs (8.0 Kgs)
76.1 mm x 76.1 mm x 40	3.000 x 3.000 x 1.900" (76.1 x 76.1 x 48.3 mm)	3.75" (95 mm)	3.75" (95 mm)	4.2 lbs (1.9 Kgs)	6 x 6 x 2½" 150 x 150 x 65	6.625 x 6.625 x 2.875" (168.3 x 168.3 x 73.0 mm)	6.50" (165 mm)	6.50" * (165 mm)	18.7 lbs (8.5 Kgs)
76.1 mm x 76.1 mm x 50	3.000 x 3.000 x 2.375" (76.1 x 76.1 x 60.3 mm)	3.75" (95 mm)	3.75" * (95 mm)	4.4 lbs (2.0 Kgs)	6 x 6 x 3" 150 x 150 x 80	6.625 x 6.625 x 3.500" (168.3 x 168.3 x 88.9 mm)	6.50" (165 mm)	6.50" (165 mm)	20.2 lbs (9.2 Kgs)
3 x 3 x 1" 80 x 80 x 25	3.500 x 3.500 x 1.315" (88.9 x 88.9 x 33.4 mm)	4.25" (108 mm)	4.25" * (108 mm)	5.5 lbs (2.5 Kgs)	6 x 6 x 4" 150 x 150 x 100	6.625 x 6.625 x 4.500" (168.3 x 168.3 x 114.3 mm)	6.50" (165 mm)	6.50" * (165 mm)	19.4 lbs (8.8 Kgs)
3 x 3 x 1¼" 80 x 80 x 32	3.500 x 3.500 x 1.660" (88.9 x 88.9 x 42.2 mm)	4.25" (108 mm)	4.25" * (108 mm)	5.2 lbs (2.4 Kgs)	8 x 8 x 2" 200 x 200 x 50	8.625 x 8.625 x 2.375" (219.1 x 219.1 x 60.3 mm)	7.75" (197 mm)	7.75" (197 mm)	32.5 lbs (14.8 Kgs)
3 x 3 x 1½" 80 x 80 x 40	3.500 x 3.500 x 1.900" (88.9 x 88.9 x 48.3 mm)	4.25" (108 mm)	4.25" (108 mm)	5.2 lbs (2.4 Kgs)	8 x 8 x 2½" 200 x 200 x 65	8.625 x 8.625 x 2.875" (219.1 x 219.1 x 73.0 mm)	7.75" (197 mm)	--- ---	31.9 lbs (14.5 Kgs)
3 x 3 x 2" 80 x 80 x 50	3.500 x 3.500 x 2.375" (88.9 x 88.9 x 60.3 mm)	4.25" (108 mm)	4.25" (108 mm)	6.2 lbs (2.8 Kgs)	8 x 8 x 3" 200 x 200 x 80	8.625 x 8.625 x 3.500 (219.1 x 219.1 x 88.9 mm)	7.75" (197 mm)	7.75" (197 mm)	34.2 lbs (15.5 Kgs)
3 x 3 x 2½" 80 x 80 x 65	3.500 x 3.500 x 2.875" (88.9 x 88.9 x 73.0 mm)	4.25" (108 mm)	4.25" (108 mm)	6.2 lbs (2.8 Kgs)	8 x 8 x 4" 200 x 200 x 100	8.625 x 8.625 x 4.500 (219.1 x 219.1 x 114.3 mm)	7.75" (197 mm)	7.75" (197 mm)	44.0 lbs (20.0 Kgs)
80 x 80 x 76.1 mm	3.500 x 3.500 x 3.000" (88.9 x 88.9 x 76.1 mm)	4.25" (108 mm)	4.25" * (108 mm)	6.2 lbs (2.8 Kgs)	8 x 8 x 6" 200 x 200 x 150	8.625 x 8.625 x 6.625 (219.1 x 219.1 x 168.3 mm)	7.75" (197 mm)	--- ---	46.2 lbs (21.0 Kgs)
4 x 4 x 1" 100 x 100 x 25	4.500 x 4.500 x 1.315" (114.3 x 114.3 x 33.4 mm)	5.00" (127 mm)	5.00" (127 mm)	8.9 lbs (4.0 Kgs)	10 x 10 x 4" 250 x 250 x 100	10.750 x 10.750 x 4.500 (273.0 x 273.0 x 114.3 mm)	9.00" (229 mm)	9.00" * (229 mm)	62.8 lbs (28.5 Kgs)

graph continues on next page

nom. size	pipe O.D.	standard C-E	threaded br. C-E	weight	nom. size	pipe O.D.	standard C-E	threaded br. C-E	weight
4 x 4 x 1½" 100 x 100 x 40	4.500 x 4.500 x 1.900" (114.3 x 114.3 x 48.3 mm)	5.00" (127 mm)	5.00" (127 mm)	9.3 lbs (4.2 Kgs)	10 x 10 x 6" 250 x 250 x 150	10.750 x 10.750 x 6.625" (273.0 x 273.0 x 168.3 mm)	9.00" (229 mm)	- -	66.0 lbs (30.0 Kgs)
4 x 4 x 2" 100 x 100 x 50	4.500 x 4.500 x 2.375" (114.3 x 114.3 x 60.3 mm)	5.00" (127 mm)	5.00" (127 mm)	8.8 lbs (4.0 Kgs)	10 x 10 x 8" 250 x 250 x 200	10.750 x 10.750 x 8.625" (273.0 x 273.0 x 219.1 mm)	9.00" (229 mm)	- -	69.3 lbs (31.5 Kgs)
4 x 4 x 2½" 100 x 100 x 65	4.500 x 4.500 x 2.875" (114.3 x 114.3 x 73.0 mm)	5.00" (127 mm)	5.00" (127 mm)	9.5 lbs (4.3 KGs)	12 x 12 x 3" 300 x 300 x 80	12.750 x 12.750 x 3.500" (323.9 x 323.9 x 88.9 mm)	10.00" (254 mm)	10.00" * (254 mm)	88.1 lbs (40.0 KGs)
100 x 100 x 76.1 mm	4.500 x 4.500 x 3.000" (114.3 x 114.3 x 76.1 mm)	5.00" (127 mm)	5.00" (127 mm)	9.5 lbs (4.3 KGs)	12 x 12 x 4" 300 x 300 x 100	12.750 x 12.750 x 4.500" (323.9 x 323.9 x 114.3 mm)	10.00" (254 mm)	10.00" * (254 mm)	90.4 lbs (41.0 Kgs)
4 x 4 x 3" 100 x 100 x 80	4.500 x 4.500 x 3.500" (114.3 x 114.3 x 88.9 mm)	5.00" (127 mm)	5.00" (127 mm)	9.4 lbs (4.3 Kgs)	12 x 12 x 6" 300 x 300 x 150	12.750 x 12.750 x 6.625" (323.9 x 323.9 x 168.3 mm)	10.00" (254 mm)	- -	83.6 lbs (38.0 Kgs)
139.7 mm x 139.7 mm x 50	5.500 x 5.500 x 2.375" (139.7 x 139.7 x 60.3 mm)	5.50" (140 mm)	5.50" * (140 mm)	12.4 lbs (5.6 Kgs)	12 x 12 x 8" 300 x 300 x 200	12.750 x 12.750 x 8.625" (323.9 x 323.9 x 219.1 mm)	10.00" (254 mm)	- -	83.6 lbs (38.0 Kgs)
139.7 mm x 139.7 mm x 65	5.500 x 5.500 x 2.875" (139.7 x 139.7 x 73.0 mm)	5.50" (140 mm)	5.50" * (140 mm)	12.8 lbs (5.8 Kgs)	12 x 12 x 10" 300 x 300 x 250	12.750 x 12.750 x 10.750" (323.9 x 323.9 x 273.0 mm)	10.00" (254 mm)	- -	88.0 lbs (40.0 Kgs)
5 x 5 x 2" 125 x 125 x 50	5.563 x 5.563 x 2.375" (141.3 x 141.3 x 60.3 mm)	5.50" (140 mm)	5.50" * (140 mm)	12.4 lbs (5.6 Kgs)	- -	- -	- -	- -	- -

*Non-standard/stock items may require longer lead time.

7121 reducing tee
7121 female thread



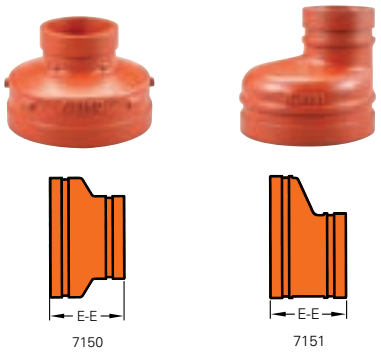
7121 (Female Threaded)

Shurjoint ductile iron grooved-end fittings are made of ductile iron per ASTM A536 Gr. 65-45-12 and or ASTM A395 Gr. 65-45-15. C-E dimensions are manufacturer's standard.

dimensions

		female threaded branch				female threaded branch	
nom. size	pipe O.D.	C-E	weight	nom. size	pipe O.D.	C-E	weight
2 x 2 x 1¼" 50 x 50 x 32	2.375 x 2.375 x 1.660" (60.3 x 60.3 x 42.2 mm)	3.25" (83 mm)	2.9 lbs (1.3 Kgs)	3 x 3 x 1¼" 80 x 80 x 32	3.500 x 3.500 x 1.660" (88.9 x 88.9 x 42.2 mm)	4.25" (108 mm)	5.1 lbs (2.3 Kgs)
2 x 2 x 1½" 50 x 50 x 40	2.375 x 2.375 x 1.900" (60.3 x 60.3 x 48.3 mm)	3.25" (83 mm)	4.0 lbs (1.8 Kgs)	3 x 3 x 1½" 80 x 80 x 40	3.500 x 3.500 x 1.900" (88.9 x 88.9 x 48.3 mm)	4.25" (108 mm)	6.0 lbs (2.7 Kgs)
2½ x 2½ x 1" 65 x 65 x 25	2.875 x 2.875 x 1.315" (73.0 x 73.0 x 33.4 mm)	3.75" (95 mm)	4.0 lbs (1.8 Kgs)	3 x 3 x 2" 80 x 80 x 50	3.500 x 3.500 x 2.375" (88.9 x 88.9 x 60.3 mm)	4.25" (108 mm)	6.2 lbs (2.8 Kgs)
2½ x 2½ x 1¼" 65 x 65 x 32	2.875 x 2.875 x 1.660" (73.0 x 73.0 x 42.2 mm)	3.75" (95 mm)	3.7 lbs (1.7 Kgs)	3 x 3 x 2½" 80 x 80 x 65	3.500 x 3.500 x 2.875" (88.9 x 88.9 x 73.0 mm)	4.25" (108 mm)	7.3 lbs (3.3 Kgs)
2½ x 2½ x 1½" 65 x 65 x 40	2.875 x 2.875 x 1.900" (73.0 x 73.0 x 48.3 mm)	3.75" (95 mm)	4.4 lbs (2.0 Kgs)	4 x 4 x 1½" 100 x 100 x 40	4.500 x 4.500 x 1.900" (114.3 x 114.3 x 48.3 mm)	5.00" (127 mm)	9.3 lbs (4.2 Kgs)
2½ x 2½ x 2" 65 x 65 x 50	2.875 x 2.875 x 2.375" (73.0 x 73.0 x 60.3 mm)	3.75" (95 mm)	4.6 lbs (2.1 Kgs)	4 x 4 x 2" 100 x 100 x 50	4.500 x 4.500 x 2.375" (114.3 x 114.3 x 60.3 mm)	5.00" (127 mm)	9.3 lbs (4.2 Kgs)
76.1 mm x 76.1 mm x 25	3.000 x 3.000 x 1.315" (76.1 x 76.1 x 33.4 mm)	3.75" (95 mm)	4.4 lbs (2.0 Kgs)	4 x 4 x 2½" 100 x 100 x 65	4.500 x 4.500 x 2.875" (114.3 x 114.3 x 73.0 mm)	5.00" (127 mm)	10.8 lbs (4.9 Kgs)
76.1 mm x 76.1 mm x 32	3.000 x 3.000 x 1.660" (76.1 x 76.1 x 42.2 mm)	3.75" (95 mm)	4.4 lbs (2.0 Kgs)	100 x 100 x 76.1 mm	4.500 x 4.500 x 3.000" (114.3 x 114.3 x 76.1 mm)	5.00" (127 mm)	9.9 lbs (4.5 Kgs)
76.1 mm x 76.1 mm x 40	3.000 x 3.000 x 1.900" (76.1 x 76.1 x 48.3 mm)	3.75" (95 mm)	4.0 lbs (1.8 Kgs)	139.7 mm x 139.7 mm x 50	5.500 x 5.500 x 2.375" (139.7 x 139.7 x 60.3 mm)	5.50" (140 mm)	11.9 lbs (5.4 Kgs)
76.1 mm x 76.1 mm x 50	3.000 x 3.000 x 2.375" (76.1 x 76.1 x 60.3 mm)	3.75" (95 mm)	4.9 lbs (2.2 Kgs)	5 x 5 x 2" 125 x 125 x 50	5.563 x 5.563 x 2.375" (141.3 x 141.3 x 60.3 mm)	5.50" (140 mm)	12.3 lbs (5.6 Kgs)
3 x 3 x ½" 80 x 80 x 15	3.500 x 3.500 x 0.840" (88.9 x 88.9 x 21.3 mm)	4.25" (108 mm)	5.1 lbs (2.3 Kgs)	165.1 mm x 165.1 mm x 50	6.500 x 6.500 x 2.375" (165.1 x 165.1 x 60.3 mm)	6.50" (165 mm)	17.6 lbs (8.0 Kgs)
3 x 3 x ¾" 80 x 80 x 20	3.500 x 3.500 x 1.050" (88.9 x 88.9 x 26.7 mm)	4.25" (108 mm)	5.1 lbs (2.3 Kgs)	6 x 6 x 2" 150 x 150 x 50	6.625 x 6.625 x 2.375" (168.3 x 168.3 x 60.3 mm)	6.50" (165 mm)	20.5 lbs (9.3 Kgs)
3 x 3 x 1" 80 x 80 x 25	3.500 x 3.500 x 1.315" (88.9 x 88.9 x 33.4 mm)	4.25" (108 mm)	5.1 lbs (2.3 Kgs)	6 x 6 x 2½" 150 x 150 x 65	6.625 x 6.625 x 2.875" (168.3 x 168.3 x 73.0 mm)	6.50" (165 mm)	15.7 lbs (7.1 Kgs)

7150 concentric reducer
7151 eccentric reducer



Shurjoint ductile iron grooved-end fittings are made of ductile iron per ASTM A536 Gr. 65-45-12 and or ASTM A395 Gr. 65-45-15. E-E dimensions are manufacturer's standard.

dimensions

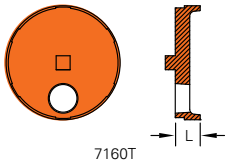
		#7150 conc. reducer		#7151 Ecc. reducer				#7150 conc. reducer		#7151 Ecc. reducer	
nom. size	pipe O.D.	E-E	weight	E-E	weight	nom. size	pipe O.D.	E-E	weight	E-E	weight
1¼ x 1" 32 x 25	1.660 x 1.315" (42.2 x 33.4 mm)	2.50" (64 mm)	0.4 lbs (0.2 Kgs)	--- ---	--- ---	5 x 4" 125 x 100	5.563 x 4.500" (141.3 x 114.3 mm)	3.50" (89 mm)	3.6 lbs (1.6 Kgs)	4.00" (102 mm)	6.2 lbs (2.8 Kgs)
1½ x 1" 40 x 25	1.900 x 1.315" (48.3 x 33.4 mm)	2.50" (64 mm)	0.5 lbs (0.2 Kgs)	--- ---	--- ---	139.7 mm x 80	5.500 x 3.500" (139.7 x 88.9 mm)	3.50" (89 mm)	3.3 lbs (1.5 Kgs)	--- ---	--- ---
1½ x 1¼" 40 x 32	1.900 x 1.660" (48.3 x 42.2 mm)	2.50" (64 mm)	0.6 lbs (0.3 Kgs)	--- ---	--- ---	139.7 mm x 100	5.500 x 4.500" (139.7 x 114.3 mm)	3.50" (89 mm)	3.6 lbs (1.6 Kgs)	4.00" (102 mm)	6.2 lbs (2.8 Kgs)
2 x 1" 50 x 25	2.375 x 1.315" (60.3 x 33.4 mm)	2.50" (64 mm)	0.9 lbs (0.4 Kgs)	--- ---	--- ---	6 x 2" 150 x 50	6.625 x 2.375" (168.3 x 60.3 mm)	4.00" (102 mm)	4.2 lbs (1.9 Kgs)	4.00" (102 mm)	4.4 lbs (2.0 Kgs)
2 x 1¼" 50 x 32	2.375 x 1.660" (60.3 x 42.2 mm)	2.50" (64 mm)	0.7 lbs (0.3 Kgs)	--- ---	--- ---	6 x 2½" 150 x 65	6.625 x 2.875" (168.3 x 73.0 mm)	4.00" (102 mm)	4.4 lbs (2.0 Kgs)	--- ---	--- ---
2 x 1½" 50 x 40	2.375 x 1.900" (60.3 x 48.3 mm)	2.50" (64 mm)	0.8 lbs (0.4 Kgs)	--- ---	--- ---	6 x 3" 150 x 80	6.625 x 3.500" (168.3 x 88.9 mm)	4.00" (102 mm)	4.4 lbs (2.0 Kgs)	4.00" (102 mm)	7.8 lbs (3.5 Kgs)
2½ x 1¼" 65 x 32	2.875 x 1.660" (73.0 x 42.2 mm)	2.50" (64 mm)	1.1 lbs (0.5 Kgs)	--- ---	--- ---	6 x 4" 150 x 100	6.625 x 4.500" (168.3 x 114.3 mm)	4.00" (102 mm)	4.6 lbs (2.1 Kgs)	4.00" (102 mm)	5.8 lbs (2.7 Kgs)
2½ x 1½" 65 x 40	2.875 x 1.900" (73.0 x 48.3 mm)	2.50" (64 mm)	1.1 lbs (0.5 Kgs)	--- ---	--- ---	6 x 5" 150 x 125	6.625 x 5.563" (168.3 x 141.3 mm)	4.00" (102 mm)	5.5 lbs (2.5 Kgs)	4.00" (102 mm)	9.9 lbs (4.5 Kgs)
2½ x 2" 65 x 50	2.875 x 2.375" (73.0 x 60.3 mm)	2.50" (64 mm)	1.1 lbs (0.5 Kgs)	3.50" (89 mm)	1.4 lbs (0.7 kgs)	165.1 mm x 50	6.500 x 2.375" (165.1 x 60.3 mm)	4.00" (102 mm)	4.2 lbs (1.9 Kgs)	4.00" (102 mm)	4.4 lbs (2.0 Kgs)
76.1 mm x 32	3.000 x 1.660" (76.1 x 42.2 mm)	2.50" (64 mm)	1.1 lbs (0.5 Kgs)	--- ---	--- ---	165.1 mm x 76.1 mm	6.500 x 3.000" (165.1 x 76.1 mm)	4.00" (102 mm)	4.2 lbs (1.9 Kgs)	--- ---	--- ---
76.1 mm x 40	3.000 x 1.900" (76.1 x 48.3 mm)	2.50" (64 mm)	1.1 lbs (0.5 Kgs)	--- ---	--- ---	165.1 mm x 80	6.500 x 3.500" (165.1 x 88.9 mm)	4.00" (102 mm)	4.4 lbs (2.0 Kgs)	4.00" (102 mm)	7.7 lbs (3.5 Kgs)
76.1 mm x 50	3.000 x 2.375" (76.1 x 60.3 mm)	2.50" (64 mm)	1.1 lbs (0.5 Kgs)	3.50" (89 mm)	1.6 lbs (0.7 kgs)	165.1 mm x 100	6.500 x 4.500" (165.1 x 114.3 mm)	4.00" (102 mm)	4.6 lbs (2.1 Kgs)	4.00" (102 mm)	5.8 lbs (2.7 Kgs)
3 x 1" 80 x 25	3.500 x 1.315" (88.9 x 33.4 mm)	2.50" (64 mm)	1.3 lbs (0.6 Kgs)	--- ---	--- ---	165.1 mm x 139.7 mm	6.500 x 5.500" (165.1 x 139.7 mm)	4.00" (102 mm)	5.5 lbs (2.5 Kgs)	4.00" (102 mm)	9.9 lbs (4.5 Kgs)
3 x 1¼" 80 x 32	3.500 x 1.660" (88.9 x 42.2 mm)	2.50" (64 mm)	1.3 lbs (0.6 Kgs)	--- ---	--- ---	8 x 3" 200 x 80	8.625 x 3.500" (219.1 x 88.9 mm)	5.00" (127 mm)	9.5 lbs (4.3 Kgs)	--- ---	--- ---
3 x 1½" 80 x 40	3.500 x 1.900" (88.9 x 48.3 mm)	2.50" (64 mm)	1.3 lbs (0.6 Kgs)	--- ---	--- ---	8 x 4" 200 x 125	8.625 x 4.500" (219.1 x 114.3 mm)	5.00" (127 mm)	11.2 lbs (5.1 Kgs)	5.00" (127 mm)	14.6 lbs (6.6 Kgs)
3 x 2" 80 x 50	3.500 x 2.375" (88.9 x 60.3 mm)	2.50" (64 mm)	1.3 lbs (0.6 Kgs)	3.50" (89 mm)	2.2 lbs (1.0 kgs)	8 x 5" 200 x 125	8.625 x 5.563" (219.1 x 141.3 mm)	5.00" (127 mm)	9.5 lbs (4.3 Kgs)	5.00" (127 mm)	9.5 lbs (4.3 Kgs)
3 x 2½" 80 x 65	3.500 x 2.875" (88.9 x 73.0 mm)	2.50" (64 mm)	1.3 lkbs (0.6 Kgs)	3.50" (89 mm)	2.2 lbs (1.0 kgs)	216.3 mm x 139.7 mm	8.516 x 5.500" (216.3 x 139.7 mm)	5.00" (127 mm)	10.4 lbs (4.7 Kgs)	5.00" (127 mm)	10.8 lbs (4.8 Kgs)

graph continues on next page

		#7150 conc. reducer		#7151 Ecc. reducer				#7150 conc. reducer		#7151 Ecc. reducer	
nom. size	**pipe O.D.**	**E-E**	**weight**	**E-E**	**weight**	**nom. size**	**pipe O.D.**	**E-E**	**weight**	**E-E**	**weight**
80 x 76.1 mm	3.500 x 3.000” (88.9 x 76.1 mm)	2.50” (64 mm)	1.3 lbs (0.6 Kgs)	3.50” (89 mm)	2.2 lbs (1.0 Kgs)	8 x 6” 200 x 150	8.625 x 6.625” (219.1 x 168.3 mm)	5.00” (127 mm)	11.4 lbs (5.2 Kgs)	5.00” (127 mm)	12.0 lbs (5.5 Kgs)
4 x 1¼” 100 x 32	4.500 x 1.660” (114.3 x 42.2 mm)	3.00” (76 mm)	2.0 lbs (0.9 Kgs)	--- ---	--- ---	10 x 4” 250 x 100	10.750 x 4.500” (273.0 x 114.3 mm)	6.00” (152 mm)	19.8 lbs (9.0 Kgs)	6.00” (152 mm)	26.4 lbs (12.0 Kgs)
4 x 1½” 100 x 40	4.500 x 1.900” (114.3 x 48.3 mm)	3.00” (76 mm)	2.2 lbs (1.0 Kgs)	--- ---	--- ---	10 x 6” 250 x 150	10.750 x6.625” (273.0 x 168.3 mm)	6.00” (152 mm)	19.8 lbs (9.0 Kgs)	6.00” (152 mm)	25.3 lbs (11.5 Kgs)
4 x 2” 100 x 50	4.500 x 2.375” (114.3 x 60.3 mm)	3.00” (76 mm)	2.0 lbs (0.9 Kgs)	4.00” (102 mm)	2.8 lbs (1.3 Kgs)	10 x 8” 250 x 200	10.750 x 8.625” (273.0 x 219.1 mm)	6.00” (152 mm)	20.9 lbs (9.5 Kgs)	7.00” (178 mm)	26.8 lbs (12.2 Kgs)
4 x 2½” 100 x 65	4.500 x 2.875” (114.3 x 73.0 mm)	3.00” (76 mm)	2.2 lbs (1.0 Kgs)	4.00” (102 mm)	3.3 lbs (1.5 Kgs)	12 x 6” 300 x 150	12.750 x 6.625” (323.9 x 168.3 mm)	7.00” (178 mm)	30.9 lbs (14.0 Kgs)	7.00” (178 mm)	39.7 lbs (18.0 Kgs)
100 x 76.1 mm	4.500 x 3.000” (114.3 x 76.1 mm)	3.00” (76 mm)	2.3 lbs (1.0 Kgs)	4.00” (102 mm)	3.3 lbs (1.5 Kgs)	12 x 8” 300 x 200	12.750 x 8.625” (323.9 x 219.1 mm)	7.00” (178 mm)	30.9 lbs (14.0 Kgs)	7.00” (178 mm)	40.8 lbs (18.5 Kgs)
4 x 3” 100 x 80	4.500 x 3.500” (114.3 x 88.9 mm)	3.00” (76 mm)	2.2 lbs (1.0 Kgs)	4.00” (102 mm)	2.9 lbs (1.3 Kgs)	12 x 10” 300 x 250	12.750 x 10.750” (323.9 x 273.0 mm)	7.00” (178 mm)	30.1 lbs (13.7 Kgs)	7.00” (178 mm)	44.1 lbs (20.0 Kgs)
5 x 3” 125 x 80	5.563 x 3.500” (141.3 x 88.9 mm)	3.50” (89 mm)	3.3 lbs (1.5 Kgs)	--- ---	--- ---						

7160T transition cap

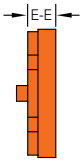




7160T

7160 end cap





7160

Shurjoint ductile iron grooved-end fittings are made of ductile iron per ASTM A536 Gr. 65-45-12 and or ASTM A395 Gr. 65-45-15. C-E dimensions are manufacturer's standard.

dimensions

nom. size	NPT / BSP	E-E	weight
2 x 50 x	½" 15	0.94" (23.8 mm)	0.55 lbs (0.25 kgs)
	¾" 20	0.94" (23.8 mm)	0.55 lbs (0.25 kgs)
2½ x 65 x	1" 25	0.94" (23.8 mm)	0.97 lbs (0.44 kgs)
	1¼" 32	0.94" (23.8 mm)	0.77 lbs (0.35 kgs)
	1½" 40	0.94" (23.8 mm)	0.70 lbs (0.30 kgs)
3 x 80 x	1" 25	1.00" (25.4 mm)	1.43 lbs (0.65 kgs)
	1¼" 32	1.00" (25.4 mm)	1.43 lbs (0.65 kgs)
	1½" 40	1.00" (25.4 mm)	1.30 lbs (0.60 kgs)
	2" 50	1.00" (25.4 mm)	1.33 lbs (0.60 kgs)
4 x 100 x	1" 25	1.00" (25.4 mm)	2.09 lbs (0.95 kgs)
	1¼" 32	1.00" (25.4 mm)	2.09 lbs (0.95 kgs)
	1½" 40	1.00" (25.4 mm)	2.09 lbs (0.95 kgs)
	2" 50	1.00" (25.4 mm)	2.09 lbs (0.95 kgs)
6 x 150 x	1" 25	1.00" (25.4 mm)	5.52 lbs (2.50 kgs)
	1¼" 32	1.00" (25.4 mm)	5.52 lbs (2.50 kgs)
	1½" 40	1.00" (25.4 mm)	5.52 lbs (2.50 kgs)
	2" 50	1.00" (25.4 mm)	5.52 lbs (2.50 kgs)

dimensions

		#7160 end cap	
nom. size	pipe O.D.	E-E	weight
1" 25	1.315" (33.4 mm)	0.87" (22 mm)	0.2 lbs (0.1 Kgs)
1¼" 32	1.660" (42.2 mm)	1.00" (25 mm)	0.3 lbs (0.2 Kgs)
1½" 40	1.900" (48.3 mm)	1.00" (25 mm)	0.4 lbs (0.2 Kgs)
2" 50	2.375" (60.3 mm)	1.00" (25 mm)	0.7 lbs (0.3 Kgs)
2½" 65	2.875" (73.0 mm)	1.00" (25 mm)	0.9 lbs (0.4 Kgs)
76.1 mm	3.000" (76.1 mm)	1.00" (25 mm)	0.9 lbs (0.4 Kgs)
3" 80	3.500" (88.9 mm)	1.00" (25 mm)	1.5 lbs (0.7 Kgs)
108.0 mm	4.250" (108.0 mm)	1.00" (25 mm)	2.4 lbs (1.1 Kgs)
4" 100	4.500" (114.3 mm)	1.00" (25 mm)	2.2 lbs (1.0 Kgs)
133.0 mm	5.250" (133.0 mm)	1.00" (25 mm)	3.7 lbs (1.7 Kgs)
139.7 mm	5.500" (139.7 mm)	1.00" (25 mm)	3.7 lbs (1.7 Kgs)
5" 125	5.563" (141.3 mm)	1.00" (25 mm)	3.7 lbs (1.7 Kgs)
159.0 mm	6.250" (159.0 mm)	1.00" (25 mm)	5.1 lbs (2.3 Kgs)
165.1 mm	6.500" (165.1 mm)	1.00" (25 mm)	6.0 lbs (2.7 Kgs)
6" 150	6.625" (168.3 mm)	1.00" (25 mm)	6.0 lbs (2.7 Kgs)
8" 200	8.625" (219.1 mm)	1.18" (30 mm)	10.1 lbs (4.6 Kgs)
10" 250	10.750" (273.0 mm)	1.25" (32 mm)	15.4 lbs (7.0 Kgs)
12" 300	12.750" (323.9 mm)	1.25" (32 mm)	22.0 lbs (10.0 Kgs)

7160P end cap with plug

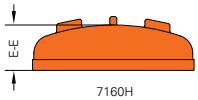


dimensions

nom. size	pipe O.D.	plug size
1"	1.315"	---
25	(33.4 mm)	---
1¼"	1.660"	---
32	(42.2 mm)	---
1½"	1.900"	---
40	(48.3 mm)	---
2"	2.375"	½"
50	(60.3 mm)	15
2½"	2.875"	½"
65	(73.0 mm)	15
76.1 mm	3.000"	½"
	(76.1 mm)	15
3"	3.500"	½"
80	(88.9 mm)	15
108.0 mm	4.250"	---
	(108.0 mm)	---
4"	4.500"	1"
100	(114.3 mm)	25
133.0 mm	5.250"	---
	(133.0 mm)	---
139.7 mm	5.500"	1"
	(139.7 mm)	25
5"	5.563"	1"
125	(141.3 mm)	25
159.0 mm	6.250"	---
	(159.0 mm)	---
165.1 mm	6.500"	1"
	(165.1 mm)	25
6"	6.625"	1"
150	(168.3 mm)	25
8"	8.625"	1½"
200	(219.1 mm)	40
10"	10.750"	1½"
250	(273.0 mm)	40
12"	12.750"	1½"
300	(323.9 mm)	40
200 JIS	8.516"	---
	(216.3 mm)	---
250 JIS	10.528"	---
	(267.4 mm)	---
300 JIS	12.539"	---
	(318.5 mm)	---

7160H domed end cap



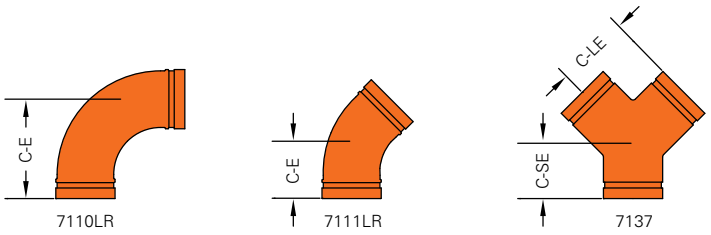


The Shurjoint Model 7160H end caps are cast of ductile iron and are designed to withstand pressure evenly over the entire spherical surface. The Model 7160H End Cap is designed for use on 10" - 24" mechanical piping applications.

dimensions

		#7160H domed end cap	
nom. size	pipe O.D.	E-E	weight
10"	10.750"	3.00"	12.1 lbs
250	(273.0 mm)	(76.1 mm)	(5.5 Kgs)
12"	12.750"	3.00"	16.3 lbs
300	(323.9 mm)	(76.1 mm)	(7.4 Kgs)
14"	14.000"	4.00"	26.4 lbs
350	(355.6 mm)	(102.0 mm)	(12.0 Kgs)
16"	16.000"	4.00"	32.0 lbs
400	(406.4 mm)	(102.0 mm)	(14.5 Kgs)
18"	18.000"	5.00"	39.2 lbs
450	(457.2 mm)	(127.0 mm)	(17.8 Kgs)
20"	20.000"	6.00"	53.9 lbs
500	(508.0 mm)	(152.0 mm)	(24.5 Kgs)
24"	24.000"	6.00"	75.9 lbs
600	(609.6 mm)	(152.0 mm)	(34.5 Kgs)

7110LR 1.5D 90° elbow
7111LR 1.5D 45° elbow
7137 true-y

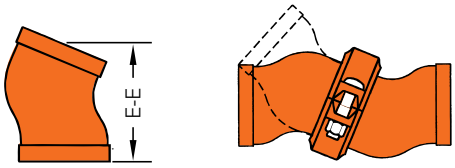


Shurjoint ductile iron grooved-end fittings are made of ductile iron per ASTM A536 Gr. 65-45-12 and or ASTM A395 Gr. 65-45-15. C-E dimensions are manufacturer's standard.

dimensions

		#7110LR 1.5D LR 90° elbow		#7111LR 1.5D LR 45° elbow		#7137 true-Y		
nom. size	**pipe O.D.**	**C-E**	**weight**	**C-E**	**weight**	**C-LE**	**C-SE**	**weight**
2" 50	2.375" (60.3 mm)	4.38" (111 mm)	2.4 lbs (1.1 Kgs)	2.75" (70 mm)	1.8 lbs (0.8 Kgs)	3.25" (83 mm)	2.75" (70 mm)	2.5 lbs (1.1 Kgs)
2½" 65	2.875" (73.0 mm)	5.00" (127 mm)	4.0 lbs (1.8 Kgs)	3.00" (76 mm)	3.1 lbs (1.4 Kgs)	3.75" (95 mm)	3.00" (76 mm)	3.8 lbs (1.7 Kgs)
76.1 mm	3.000" (76.1 mm)	5.00" (127 mm)	4.0 lbs (1.8 Kgs)	3.00" (76 mm)	3.2 lbs (1.5 Kgs)	3.75" (95 mm)	3.00" (76 mm)	4.0 lbs (1.8 Kgs)
3" 80	3.500" (88.9 mm)	5.88" (149 mm)	5.8 lbs (2.6 Kgs)	3.38" (86 mm)	4.0 lbs (1.8 Kgs)	4.25" (108 mm)	3.25" (83 mm)	5.5 lbs (2.5 Kgs)
4" 100	4.500" (114.3 mm)	7.50" (191 mm)	10.3 lbs (4.7 Kgs)	4.00" (102 mm)	7.7 lbs (3.5 Kgs)	5.00" (127 mm)	3.75" (95 mm)	10.4 lbs (4.7 Kgs)
139.7 mm	5.500" (139.7 mm)	9.50" (241 mm)	18.1 lbs (8.2 Kgs)	5.00" (127 mm)	10.1 lbs (4.6 Kgs)	5.50" (140 mm)	4.00" (102 mm)	15.0 lbs (6.8 Kgs)
5" 125	5.563" (141.3 mm)	9.50" (241 mm)	18.1 lbs (8.2 Kgs)	5.00" (127 mm)	10.1 lbs (4.6 Kgs)	5.50" (140 mm)	4.00" (102 mm)	11.6 lbs (5.3 Kgs)
165.1 mm	6.500" (165.1 mm)	10.75" (273 mm)	25.3 lbs (11.5 Kgs)	5.50" (140 mm)	18.0 lbs (8.2 Kgs)	6.50" (165 mm)	4.50" (114 mm)	19.6 lbs (8.9 Kgs)
6" 150	6.625" (168.3 mm)	10.75" (273 mm)	25.3 lbs (11.5 Kgs)	5.50" (140 mm)	18.0 lbs (8.2 Kgs)	6.50" (165 mm)	4.50" (114 mm)	19.6 lbs (8.9 Kgs)
8" 200	8.625" (219.1 mm)	14.25" (362 mm)	50.7 lbs (23.0 Kgs)	7.25" (184 mm)	35.3 lbs (16.0 Kgs)	7.75" (197 mm)	6.00" (152 mm)	34.3 lbs (15.6 Kgs)
10" 250	10.750" (273.0 mm)	17.25" (438 mm)	73.0 lbs (42.2 Kgs)	8.50" (216 mm)	78.6 lbs (36.1 Kgs)	9.00" * (229 mm)	6.50" (165 mm)	56.2 lbs (25.5 Kgs)
12" 300	12.750" (323.9 mm)	20.50" (521 mm)	157.6 lbs (71.5 Kgs)	10.00" (254 mm)	73.9 lbs (33.5 Kgs)	10.00" * (254 mm)	7.00" (178 mm)	79.4 lbs (36.0 Kgs)

7112G goose neck 22½° elbow



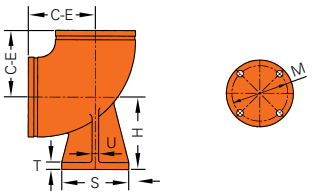
Two Shurjoint Model 7112G elbows in combination with a coupling will serve as a universal joint and is ideal for instances where a pipe line is in need of a slight adjustment during make-up.

dimensions

		#7112G 22½° elbows	
nom. size	**pipe O.D.**	**E-E**	**weight**
1½" 40	1.900" (48.3 mm)	3.75" (95 G mm)	1.3 lbs (0.6 Kgs)
2" 50	2.375" (60.3 mm)	3.75" (95 G mm)	1.3 lbs (0.8 Kgs)
2½" 65	2.875" (73.0 mm)	4.00" (102 G mm)	2.2 lbs (1.0 Kgs)
76.1 mm	3.000" (76.1 mm)	4.00" (102 G mm)	2.2 lbs (1.0 Kgs)
3" 80	3.500" (88.9 mm)	4.50" (114 G mm)	3.1 lbs (1.4 Kgs)
4" 100	4.500" (114.3 mm)	5.00" (127 G mm)	4.4 lbs (2.0 Kgs)
139.7 mm	5.500" (139.7 mm)	5.00" (127 G mm)	6.5 lbs (2.9 Kgs)
5" 125	5.563" (141.3 mm)	5.00" (127 G mm)	6.8 lbs (3.0 Kgs)
165.1 mm	6.500" (165.1 mm)	6.25" (159 G mm)	11.0 lbs (5.0 Kgs)
6" 150	6.625" (168.3 mm)	6.25" (159 G mm)	11.0 lbs (5.0 Kgs)
8" 200	8.625" (219.1 mm)	7.75" (197 G mm)	22.0 lbs (10.0 Kgs)
200 JIS	8.516" (216.3 mm)	7.75" (197 G mm)	19.2 lbs (8.8 Kgs)

7110-B 90° elbow with base support



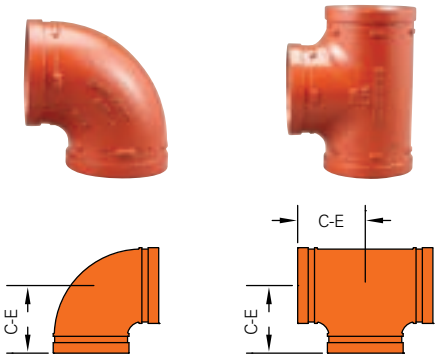


The Shurjoint Model 7110-B is a ductile iron 90° grooved-end elbow with base support, designed for installation at the bottom of a riser system. An anchor can be placed in conjunction with the base to support the weight of the pipe, coupling and fluid.

dimensions

		dimensions						
nom. size	**pipe O.D.**	**C-E**	**H**	**U**	**T**	**S**	**M**	**weight**
3" 80	3.500" (88.9 mm)	4.25" (108 mm)	4.88" (124 mm)	0.50" (13 mm)	0.56" (14 mm)	5.00" (127 mm)	3.88" (99 mm)	10.5 lbs (4.8 Kgs)
4" 100	4.500" (114.3 mm)	5.00" (127 mm)	5.50" (140 mm)	0.50" (13 mm)	0.62" (16 mm)	6.00" (152 mm)	4.75" (121 mm)	15.2 lbs (6.9 Kgs)
6" 150	6.625" (168.3 mm)	6.50" (165 mm)	7.00" (178 mm)	0.62" (16 mm)	0.69" (18 mm)	7.00" (178 mm)	5.50" (140 mm)	26.3 lbs (11.9 Kgs)
8" 200	8.625" (219.1 mm)	7.76" (197 mm)	8.38" (213 mm)	0.88" (22 mm)	0.94" (24 mm)	9.00" (229 mm)	7.50" (191 mm)	56.9 lbs (25.8 Kgs)
10" 250	10.750" (273.0 mm)	9.02" (229 mm)	9.75" (248 mm)	0.88" (22 mm)	0.94" (24 mm)	9.00" (229 mm)	7.50" (191 mm)	88.9 lbs (40.3 Kgs)

901 90° SR elbow
903 SR tee

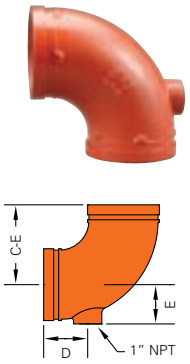


Shurjoint short radius fittings, while primarily designed for fire protection applications, can also be used for general service requirements.

dimensions

		#901 SR 90° elbow		#903 SR straight tee	
nom. size	**pipe O.D.**	**C-E**	**weight**	**C-E**	**weight**
2” 50	2.375” (60.3 mm)	2.75” (70 mm)	1.5 lbs (0.7 Kgs)	2.75” (70 mm)	2.2 lbs (1.0 Kgs)
2½” 65	2.875” (73.0 mm)	3.00” (76 mm)	2.0 lbs (0.9 Kgs)	3.00” (76 mm)	2.9 lbs (1.3 Kgs)
76.1 mm	3.000” (76.1 mm)	3.00” (76 mm)	2.5 lbs (1.1 Kgs)	3.00” (76 mm)	2.9 lbs (1.3 Kgs)
3” 80	3.500” (88.9 mm)	3.38” (86 mm)	3.1 lbs (1.4 Kgs)	3.38” (86 mm)	4.4 lbs (2.0 Kgs)
4” 100	4.500” (114.3 mm)	4.00” (102 mm)	4.9 lbs (2.2 Kgs)	4.00” (102 mm)	7.9 lbs (3.6 Kgs)
139.7 mm	5.500” (139.7 mm)	4.88” (124 mm)	7.9 lbs (3.6 Kgs)	4.88” (124 mm)	11.1 lbs (5.1 Kgs)
5” 125	5.563” (141.3 mm)	4.88” (124 mm)	7.9 lbs (3.6 Kgs)	4.88” (124 mm)	10.1 lbs (4.6 Kgs)
165.1 mm	6.500” (165.1 mm)	5.50” (140 mm)	12.9 lbs (5.9 Kgs)	5.50” (140 mm)	16.5 lbs (7.5 Kgs)
6” 150	6.625” (168.3 mm)	5.50” (140 mm)	12.9 lbs (5.9 Kgs)	5.50” (140 mm)	17.2 lbs (7.8 Kgs)
8” 200	8.625” (219.1 mm)	6.94” (176 mm)	23.4 lbs (10.6 Kgs)	6.94” (176 mm)	36.3 lbs (16.5 Kgs)

7110DR drain elbow



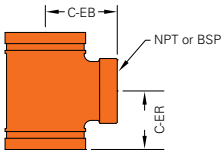
The Shurjoint Model 7110DR is a grooved-end ductile iron cast elbow with an integral 1" NPT or BSP drain. The 7110DR is designed for use in fire protection and general service applications.

dimensions

		dimensions			
nom. size	pipe O.D.	C-E	D	E	weight
2" 50	2.375" (60.3 mm)	3.27" (83 mm)	2.25" (57 mm)	1.57" (40 mm)	2.2 lbs (1.0 Kgs)
2½" 65	2.875" (73.0 mm)	3.75" (95 mm)	2.75" (70 mm)	1.57" (40 mm)	2.8 lbs (1.3 Kgs)
76.1mm	3.000" (76.1 mm)	3.75" (95 mm)	2.75" (70 mm)	1.57" (40 mm)	2.8 lbs (1.3 Kgs)
3" 80	3.500" (88.9 mm)	4.25" (108 mm)	2.75" (70 mm)	1.93" (49 mm)	4.6 lbs (2.1 Kgs)
4" 100	4.500" (114.3 mm)	5.00" (127 mm)	2.75" (70 mm)	2.48" (63 mm)	6.6 lbs (3.0 Kgs)
165.1mm	6.500" (165.1 mm)	6.50" (165 mm)	2.75" (70 mm)	3.54" (90 mm)	13.4 lbs (6.1 Kgs)
6" 150	6.625" (168.3 mm)	6.50" (165 mm)	2.75" (70 mm)	3.54" (90 mm)	13.4 lbs (6.1 Kgs)
8" 200	8.625" (219.1 mm)	7.76 (197 mm)	3.27" (83 mm)	4.49" (114 mm)	25.6 lbs (11.6 Kgs)

7127 standpipe tee





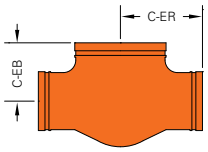
The Shurjoint Model 7127 is a grooved-end tee with a 2½" NPT/ BSP threaded branch, specially designed for use on fire protection standpipes.

dimensions

		dimensions		
nom. size	**pipe O.D.**	**C-ER**	**C-EB**	**weight**
4 x 4 x 2½" 100 x 100 x 65	4.500 x 4.500 x 2.875" (114.3 x 114.3 x 73.0 mm)	3.25" (83 mm)	4.00" (102 mm)	5.84 lbs (2.65 Kgs)
6 x 6 x 2½" 150 x 150 x 65	6.625 x 6.625 x 2.875" (168.3 x 168.3 x 73.0 mm)	3.25" (83 mm)	5.00" (127 mm)	9.48 lbs (4.30 Kgs)

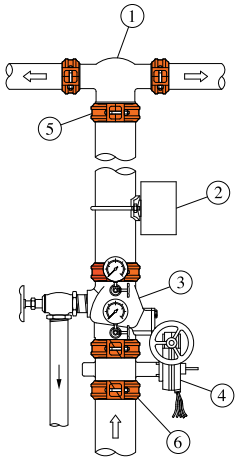
7125 bullhead tee





The Shurjoint Model 7125 is a grooved-end bullhead tee, specifically designed for use on fire protection systems. The 7125 allows you to directly split the flow into two reduced branch lines without the need for concentric reducers and multiple couplings.

fire protection applications



1. 7125 Bullhead Tee
2. Waterflow Indicator
3. RCV Riser Check Valve With Trim Kit
4. SJ-300F Butterfly Valve
5. 7707/7705 Flexible Couplings
6. Z07/7771 Rigid Couplings

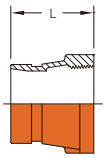
dimensions

		dimensions		
nom. size	**pipe O.D.**	**C-ER**	**C-EB**	**weight**
2 x 2 x 2½" 50 x 50 x 65	2.375 x 2.375 x 2.875" (60.3 x 60.3 x 73.0 mm)	3.74" (95 mm)	3.27" (83 mm)	4.03 lbs (1.83 Kgs)
2 x 2 x 3" 50 x 50 x 80	2.375 x 2.375 x 3.500" (60.3 x 60.3 x 88.9 mm)	4.25" (108 mm)	3.74" (95 mm)	4.34 lbs (1.97 Kgs)
2 x 2 x 4" 50 x 50 x 100	2.375 x 2.375 x 4.500" (60.3 x 60.3 x 114.3 mm)	5.00" (127 mm)	4.02" (102 mm)	7.05 lbs (3.20 Kgs)
2½ x 2½ x 3" 65 x 65 x 80	2.875 x 2.875 x 3.500" (73.0x 73.0 x 88.9 mm)	4.25" (108 mm)	3.75" (95 mm)	5.62 lbs (2.55 Kgs)
2½ x 2½ x 4" 65 x 65 x 100	2.875 x 2.875 x 4.500" (73.0 x 73.0 x 114.3 mm)	5.00" (127 mm)	4.00" (102 mm)	7.32 lbs (3.32 Kgs)
3 x 3 x 4" 80 x 80 x 100	3.500 x 3.500 x 4.500" (88.9 x 88.9 x 114.3 mm)	5.00" (127 mm)	4.00" (102 mm)	7.94 lbs (3.60 Kgs)
4 x 4 x 6" 100x 100 x 150	4.500 x 4.500 x 6.625" (114.3 x 114.3 x 168.3 mm)	6.50" (165 mm)	5.00" (127 mm)	14.99 lbs (6.80 Kgs)
5 x 5 x 8" 125 x 125 x 200	5.563 x 5.563 x 8.625" (141.3 x 141.3 x 219.1 mm)	7.75" (197 mm)	5.50" (140 mm)	31.00 lbs (14.00 Kgs)
6 x 6 x 8" 150 x 150 x 200	6.625 x 6.625 x 8.625" (168.3 x 168.3 x 219.1 mm)	7.75" (197 mm)	6.50" (165 mm)	29.12 lbs (13.21 Kgs)

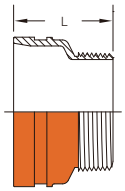
7150F reducing socket (GR x FT)
7150M reducing nipple (GR x MT)







7150F



7150M

The Shurjoint Models 7150F & 7150M are designed for making a direct reduction from a grooved system to a female or male threaded system without the need for more costly swaged nipples or adapters.

dimensions

nom. size Gr. x Th.	pipe O.D.	7150F L	7150F weight	7150M L	7150M weight
1½ x 1" 40 x 25	1.900 x 1.315" (48.3 x 33.4 mm)	2.5" (63.5 mm)	0.60 lbs (0.27 Kgs)	2.5" (63.5 mm)	0.53 lbs (0.24 Kgs)
2 x 1" 50 x 25	2.375 x 1.315" (60.3 x 33.4 mm)	2.5" (63.5 mm)	0.92 lbs (0.42 Kgs)	2.5" (63.5 mm)	0.88 lbs (0.40 Kgs)
2 x 1¼" 50 x 32	2.375 x 1.660" (60.3 x 42.2 mm)	2.5" (63.5 mm)	1.01 lbs (0.46 Kgs)	2.5" (63.5 mm)	0.70 lbs (0.32 Kgs)
2 x 1½" 50 x 40	2.375 x 1.900" (60.3 x 48.3 mm)	2.5" (63.5 mm)	0.95 lbs (0.43 Kgs)	2.5" (63.5 mm)	1.04 lbs (0.47 Kgs)
2½ x 1" 65 x 25	2.875 x 1.315" (73.0 x 33.4 mm)	2.5" (63.5 mm)	1.21 lbs (0.55 Kgs)	2.5" (63.5 mm)	0.88 lbs (0.40 Kgs)
76.1 mm x 25	3.000 x 1.315" (76.1 x 33.4 mm)	2.5" (63.5 mm)	1.21 lbs (0.55 Kgs)	2.5" (63.5 mm)	1.64 lbs (0.75 Kgs)
2½ x 1¼" 65 x 32	2.875 x 1.660" (73.0 x 42.2 mm)	2.5" (63.5 mm)	1.17 lbs (0.53 Kgs)	2.5" (63.5 mm)	1.59 lbs (0.72 Kgs)
76.1 mm x 32	3.000 x 1.660" (76.1 x 42.2 mm)	2.5" (63.5 mm)	1.17 lbs (0.53 Kgs)	2.5" (63.5 mm)	1.59 lbs (0.72 Kgs)
2½ x 1½" 65 x 40	2.875 x 1.900" (73.0 x 48.3 mm)	2.5" (63.5 mm)	1.08 lbs (0.49 Kgs)	2.5" (63.5 mm)	1.72 lbs (0.78 Kgs)
76.1 mm x 40	3.000 x 1.900" (76.1 x 48.3 mm)	2.5" (63.5 mm)	1.08 lbs (0.49 Kgs)	2.5" (63.5 mm)	1.72 lbs (0.78 Kgs)
2½ x 2" 65 x 50	2.875x 2.375" (73.0 x 60.3 mm)	2.5" (63.5 mm)	1.52 lbs (0.69 Kgs)	2.5" (63.5 mm)	0.92 lbs (0.42 Kgs)
76.1 mm x 50	3.000 x 2.375" (76.1 x 60.3 mm)	2.5" (63.5 mm)	1.52 lbs (0.69 Kgs)	2.5" (63.5 mm)	1.09 lbs (0.49 Kgs)
3 x 1" 80 x 25	3.500 x 1.315" (88.9 x 33.4 mm)	2.5" (63.5 mm)	1.91 lbs (0.87 Kgs)	2.5" (63.5 mm)	1.25 lbs (0.57 Kgs)
3 x 1¼" 80 x 32	3.500 x 1.660" (88.9 x 42.2 mm)	2.5" (63.5 mm)	1.50 lbs (0.68 Kgs)	2.5" (63.5 mm)	1.67 lbs (0.76 Kgs)
3 x 1½" 80 x 40	3.500 x 1.900" (88.9 x 48.3 mm)	2.5" (63.5 mm)	1.63 lbs (0.74 Kgs)	2.5" (63.5 mm)	1.53 lbs (0.74 Kgs)
3 x 2" 80 x 50	3.500 x 2.375" (88.9 x 60.3 mm)	2.5" (63.5 mm)	1.56 lbs (0.71 Kgs)	2.5" (63.5 mm)	1.32 lbs (0.60 Kgs)
3 x 2½" 80 x 65	3.500 x 2.875" (88.9 x 73.0 mm)	2.5" (63.5 mm)	2.20 lbs (1.00 Kgs)	2.5" (63.5 mm)	2.20 lbs (1.00 Kgs)

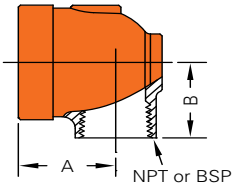
graph continues on to next page

nom. size Gr. x Th.	pipe O.D.	7150F		7150M	
		L	weight	L	weight
80 x 76.1 mm	3.500 x 3.000" (88.9 x 76.1 mm)	2.5" (63.5 mm)	2.20 lbs (1.00 Kgs)	2.5" * (63.5 mm)	2.20 lbs (1.00 Kgs)
4 x 1¼" 100 x 32	4.500 x 1.660" (114.3 x 42.2 mm)	3" (76.1 mm)	2.33 lbs (1.06 Kgs)	3" (76.1 mm)	2.19 lbs (0.99 Kgs)
4 x 1½" 100 x 40	4.500 x 1.900" (114.3 x 48.3 mm)	3" (76.1 mm)	2.05 lbs (0.93 Kgs)	3" (76.1 mm)	2.05 lbs (0.93 Kgs)
4 x 2" 100 x 50	4.500 x 2.375" (114.3 x 60.3 mm)	3" (76.1 mm)	2.29 lbs (1.03 Kgs)	3" (76.1 mm)	2.31 lbs (1.05 Kgs)
4 x 2½" 100 x 65	4.500 x 2.875" (114.3 x 73.0 mm)	3" (76.1 mm)	2.25 lbs (1.02 Kgs)	3" (76.1 mm)	2.05 lbs (0.93 Kgs)
100 x 76.1 mm	4.500 x 3.000 (114.3 x 76.1 mm)	3" (76.1 mm)	2.25 lbs (1.02 Kgs)	3" * (76.1 mm)	2.05 lbs (0.93 Kgs)
5 x 1½" 125 x 40	5.563 x 1.900 (141.3 x 48.3 mm)	3.5" * (88.9 mm)	3.94 lbs (1.79 Kgs)	3.5" * (88.9 mm)	2.05 lbs (0.93 Kgs)
139.7 mm x 40	5.500 x 1.900 (139.7 x 48.3 mm)	3.5" * (88.9 mm)	3.94 lbs (1.79 Kgs)	3.5" * (88.9 mm)	2.05 lbs (0.93 Kgs)
6 x 1½" 150 x 40	6.625 x 1.900 (168.3 x 48.3 mm)	4" (101.6 mm)	6.47 lbs (2.94 Kgs)	4" (101.6 mm)	4.84 lbs (2.20 Kgs)
165.1 mm x 40	6.500 x 1.900 (165.1 x 48.3 mm)	4" (101.6 mm)	5.56 lbs (2.52 Kgs)	4" (101.6 mm)	4.75 lbs (2.15 Kgs)
6 x 2" 150 x 50	6.625 x 2.375 (168.3 x 60.3 mm)	4" (101.6 mm)	5.28 lbs (2.40 Kgs)	4" (101.6 mm)	4.91 lbs (2.23 Kgs)
165.1 mm x 50	6.500 x 2.375 (165.1 x 60.3 mm)	4" (101.6 mm)	5.28 lbs (2.40 Kgs)	4" (101.6 mm)	4.91 lbs (2.23 Kgs)
6 x 2½" 150 x 65	6.625x 2.875 (168.3 x 73.0 mm)	4" (101.6 mm)	5.46 lbs (2.48 Kgs)	4" (101.6 mm)	4.91 lbs (2.23 Kgs)
165.1 mm x 76.1 mm	6.500 x 3.000 (165.1 x 76.1 mm)	4" (101.6 mm)	4.40 lbs (2.00 Kgs)	4" (101.6 mm)	4.97 lbs (2.26 Kgs)
6 x 4" 150 x 100	6.625 x 4.500 (168.3 x 114.3 mm)	4" (101.6 mm)	6.37 lbs (2.89 Kgs)	4" (101.6 mm)	4.52 lbs (2.10 Kgs)
165.1 mm x 100	6.500 x 4.500 (165.1 x 114.3 mm)	4" (101.6 mm)	4.52 lbs (2.10 Kgs)	4" (101.6 mm)	4.52 lbs (2.10 Kgs)

*Non-standard/stock items may require longer lead time.

899 end-all fitting







sprinkler head

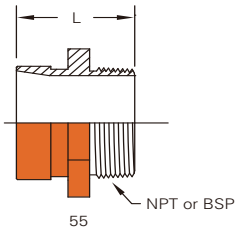
The Shurjoint Model 899 End-All fitting is a unique domed end cap fitting available with a ½", ¾" or 1" NPT or BSP threaded outlet. Designed as an end of line fitting, the End-All features two multi-function bosses which can be used for the direct connection of sprinkler heads, sprigs, drops, drains and or gauges.

dimensions

nom. size grooved x threaded	dimensions A	dimensions B	weight
1¼ x ½" 32 x 15	1.750" (44.5 mm)	1.190" (30.1 mm)	
1¼ x ¾" 32 x 20	1.750" (44.5 mm)	1.190" (30.1 mm)	0.7 lbs (0.3 Kgs)
1¼ x 1" 32 x 25	1.900" (48.3 mm)	1.250" (31.8 mm)	
1½ x ½" 40 x 15	1.750" (44.5 mm)	1.313" (33.3 mm)	
1½ x ¾" 40 x 20	1.750" (44.5 mm)	1.313" (33.3 mm)	0.9 lbs (0.4 Kgs)
1½ x 1" 40 x 25	1.900" (48.3 mm)	1.375" (34.9 mm)	
2 x ½" 50 x 15	1.750" (44.5 mm)	1.562" (39.7 mm)	
2 x ¾" 50 x 20	1.750" (44.5 mm)	1.562" (39.7 mm)	1.1 lbs (0.5 Kgs)
2 x 1" 50 x 25	1.900" (48.3 mm)	1.625" (41.3 mm)	
2½ x ½" 65 x 15	1.750" (44.5 mm)	1.750" (44.5 mm)	
2½ x ¾" 65 x 20	1.750" (44.5 mm)	1.750" (44.5 mm)	1.3 lbs (0.6 Kgs)
2½ x 1" 65 x 25	1.900" (48.3 mm)	1.813" (46.0 mm)	

55 adapter nipple (GR x MT)





The Shurjoint Model 55 is an integral cast adapter that allows for a direct transition from a grooved system to a male threaded system or component. For other sizes see page 69, Model 57, 58 & 59 nipples.

dimensions

nom. size grooved x threaded	pipe O.D.	L	weight lbs / Kgs
1½ x 1½M" (40 x 40M)	1.900" (48.3 mm)	2.50" (63.5 mm)	0.77 lbs (0.35 Kgs)
2 x 2M" (50 x 50M)	2.375" (60.3 mm)	2.50" (63.5 mm)	0.90 lbs (0.40 Kgs)

56 hose nipple



material: Ductile iron ASTM A536 Gr. 65-45-12 and or ASTM A395 Gr. 65-45-15.

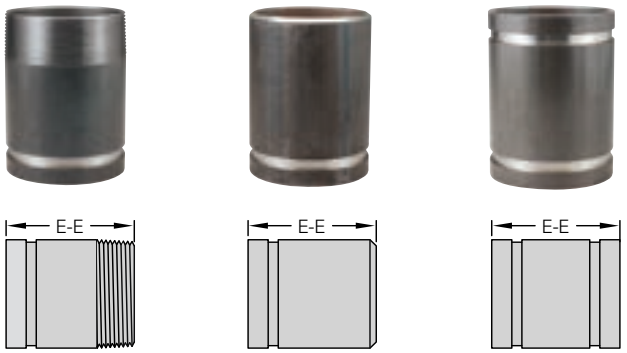
The Shurjoint Model 56 hose nipple allows for a direct connection with rubber or plastic hoses.

dimensions

nom. size	pipe O.D.	E-E	weight
1½" 40	1.900" (48.3 mm)	4.0" (102 mm)	0.7 lbs (0.3 Kgs)
2" 50	2.375" (60.3 mm)	4.6" (117 mm)	1.2 lbs (0.6 Kgs)
2½" 65	2.875" (73.0 mm)	5.5" (140 mm)	2.2 lbs (1.0 Kgs)
3" 80	3.500" (88.9 mm)	6.0" (152 mm)	3.3 lbs (1.5 Kgs)
4" 100	4.500" (114.3 mm)	7.25" (184 mm)	5.5 lbs (2.5 Kgs)
5" * 125	5.563" (141.3 mm)	9.75" (248 mm)	8.1 lbs (3.7 Kgs)
6" 150	6.625" (168.3 mm)	11.0" (279 mm)	14.5 lbs (6.6 Kgs)
8" 200	8.625" (219.1 mm)	12.5" (318 mm)	24.2 lbs (11.0 Kgs)
10" * 250	10.750" (273.0 mm)	14.0" (356 mm)	29.0 lbs (13.2 Kgs)
12" * 300	12.750" (323.9 mm)	16.0" (406 mm)	46.0 lbs (20.9 Kgs)

* Note: non-standard/stock items may require longer lead time.

57 nipple, groove x groove
58 nipple, groove x bevel
59 nipple, groove x thread



59
Gr. x Th

58
Gr. x Bev.

57
Gr. x Gr.

dimensions

nom. pipe size	pipe O.D.	57 (Gr x Gr) E-E	57 (Gr x Gr) weight	58 (Gr x Bev) E-E	58 (Gr x Bev) weight	59 (Gr x Th) E-E	59 (Gr x Th) weight
¾" 20	1.050" (26.7 mm)	3" (76 mm)	0.29 lbs (0.13 Kgs)	3" (76 mm)	0.29 lbs (0.13 Kgs)	3" (76 mm)	0.29 lbs (0.13 Kgs)
1" 25	1.315" (33.4 mm)	3" (76 mm)	0.42 lbs (0.19 Kgs)	3" (76 mm)	0.42 lbs (0.19 Kgs)	4" (102 mm)	0.46 lbs (0.21 Kgs)
1¼" 32	1.660" (42.2 mm)	4" (102 mm)	0.68 lbs (0.31 Kgs)	4" (102 mm)	0.70 lbs (0.32 Kgs)	4" (102 mm)	0.66 lbs (0.30 Kgs)
1½" 40	1.900" (48.3 mm)	4" (102 mm)	0.82 lbs (0.37 Kgs)	4" (102 mm)	0.84 lbs (0.38 Kgs)	4" (102 mm)	0.79 lbs (0.36 Kgs)
2" 50	2.375" (60.3 mm)	4" (102 mm)	1.10 lbs (0.50 Kgs)	4" (102 mm)	1.10 lbs (0.50 Kgs)	4" (102 mm)	1.10 lbs (0.50 Kgs)
2½" 65	2.875" (73.0 mm)	4" (102 mm)	1.76 lbs (0.80 Kgs)	4" (102 mm)	1.76 lbs (0.80 Kgs)	4" (102 mm)	1.54 lbs (0.72 Kgs)
76.1 mm	3.000" (76.1 mm)	4" (102 mm)	1.98 lbs (0.90 Kgs)	4" (102 mm)	1.98 lbs (0.90 Kgs)	4" (102 mm)	1.98 lbs (0.90 Kgs)
3" 80	3.500" (88.9 mm)	4" (102 mm)	2.40 lbs (1.10 Kgs)	4" (102 mm)	2.40 lbs (1.10 Kgs)	4" (102 mm)	2.20 lbs (1.00 Kgs)
4" 100	4.500" (114.3 mm)	6" (152 mm)	5.17 lbs (2.35 Kgs)	6" (152 mm)	5.17 lbs (2.35 Kgs)	6" (152 mm)	4.84 lbs (2.20 Kgs)
5" 125	5.563" (141.3 mm)	6" (152 mm)	7.26 lbs (3.30 Kgs)	6" (152 mm)	7.26 lbs (3.30 Kgs)	6" (152 mm)	6.60 lbs (3.00 Kgs)
139.7 mm	5.500" (139.7 mm)	6" (152 mm)	7.26 lbs (3.30 Kgs)	6" (152 mm)	7.26 lbs (3.30 Kgs)	6" (152 mm)	6.60 lbs (3.00 Kgs)
6" 150	6.625" (168.3 mm)	6" (152 mm)	9.90 lbs (4.50 Kgs)	6" (152 mm)	9.90 lbs (4.50 Kgs)	6" (152 mm)	9.81 lbs (4.46 Kgs)
165.1 mm	6.500" (165.1 mm)	6" (152 mm)	9.46 lbs (4.30 Kgs)	6" (152 mm)	9.46 lbs (4.30 Kgs)	6" (152 mm)	9.81 lbs (4.46 Kgs)
8" 200	8.625" (219.1 mm)	6" (152 mm)	14.30 lbs (6.50 Kgs)	6" (152 mm)	14.30 lbs (6.50 Kgs)	--- ---	--- ---
10" 250	10.750" (273.0 mm)	8" (203 mm)	27.06 lbs (12.30 Kgs)	8" (203 mm)	19.00 lbs (8.66 Kgs)	--- ---	--- ---
12" 300	12.750" (323.9 mm)	8" (203 mm)	35.64 lbs (16.20 Kgs)	8" (203 mm)	22.35 lbs (10.16 Kgs)	--- ---	--- ---
200 JIS	8.516" (216.3 mm)	8" (203 mm)	14.30 lbs (6.50 Kgs)	6" (152 mm)	14.30 lbs (6.50 Kgs)	--- ---	--- ---
250 JIS	10.528" (267.4 mm)	8" (203 mm)	27.06 lbs (12.30 Kgs)	8" (203 mm)	19.00 lbs (8.66 Kgs)	--- ---	--- ---
300 JIS	12.539" (318.5 mm)	8" (203 mm)	35.64 lbs (16.20 Kgs)	8" (203 mm)	22.35 lbs (10.16 Kgs)	--- ---	--- ---

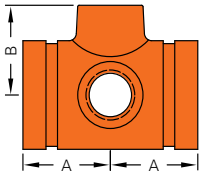
* Note: Present dimensions and other information for the model 54 which is the groove by female.

sprinkler hubs

The Shurjoint Sprinkler Hubs are grooved-end manifold fittings with a number of threaded outlets to accommodate flexible sprinkler hoses. The Sprinkler Hubs can also be used in combination with flexible sprinkler hoses and traditional hard piping depending on your requirements. These fittings work as a hub for multiple flexible hoses and or hard pipe runs, thus reducing the number or headers, drop nipples and fittings required. All outlets are 1" NPT or BSPT. Maximum working pressure is 300 psi (20 Bar, 2.0 MPa) CWP. cULus listed and FM approved. The C-E dimensions conform to ANSI B16.3 Class 150.

850 sprinkler hub 3 outlets





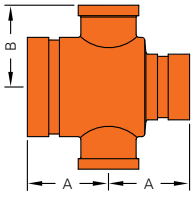
dimensions

size	A	B	weight
2" x 2" x 1" (3) 50 x 50 x 25 (3)	2.38" (60 mm)	2.02" (51 mm)	2.20 lbs (1.00 Kgs)
2½" x 2½" x 1" (3) 65 x 65 x 25 (3)	2.38" (60 mm)	2.25" (57 mm)	2.75 lbs (1.25 Kgs)

( ): Number of outlets

851 reducing sprinkler hub 3 outlets





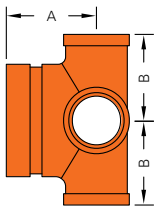
dimensions

size	A	B	weight
2" x 1½" x 1" (3) 50 x 40 x 25 (3)	2.38" (60 mm)	2.02" (51 mm)	2.20 lbs (1.00 Kgs)
2½" x 1½" x 1" (3) 65 x 40 x 25 (3)	2.38" (60 mm)	2.25" (57 mm)	2.65 lbs (1.20 Kgs)
2½" x 2" x 1" (3) 65 x 50 x 25 (3)	2.38" (60 mm)	2.25" (60 mm)	2.86 lbs (1.30 Kgs)

( ): Number of outlets

853 sprinkler end hub 4 outlets





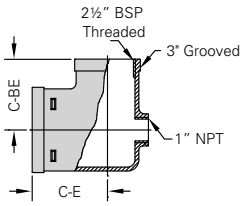
dimensions

size	A	B	weight
1½" x 1" (4) 40 x 25 (4)	2.38" (60 mm)	1.80" (46 mm)	1.76 lbs (0.8 Kgs)
2" x 1" (4) 50 x 25 (4)	2.38" (60 mm)	2.02" (51 mm)	2.20 lbs (1.00 Kgs)
2½" x 1" (4) 65 x 25 (4)	2.38" (60 mm)	2.25" (57 mm)	2.64 lbs (1.20 Kgs)

( ): Number of outlets

7114 hydrant elbow





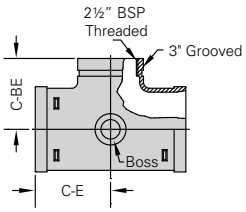
The Shurjoint Model 7114 Hydrant Elbow is designed for use on fire protection systems. The small end of the elbow offers both a 2½" BSP threaded outlet as well as a 3" grooved connection. The boss can be factory tapped to 1" BSP on request.

dimensions

		dimensions		
nom. pipe size	**pipe O.D.**	**C-E**	**C-BE**	**weight**
4 x 3 x 1"	4.500 x 3.500 x 1.315"	4.00"	3.75"	5.95 lbs
100 x 80 x 25	(114.3 x 88.9 x 33.4 mm)	(102 mm)	(95 mm)	(2.70 Kgs)

7122 hydrant tee





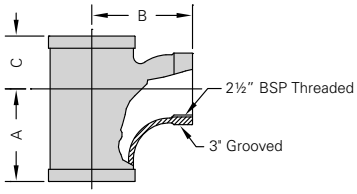
The Shurjoint Model 7122 Hydrant Tee is designed for use on fire protection systems. The 7122 tee offers both a 2½" BSP threaded and a 3" grooved outlet. The boss can be factory tapped to 1" BSP on request.

dimensions

		dimensions		
nom. pipe size	**pipe O.D.**	**C-E**	**C-BE**	**weight**
4 x 4 x 3" 100 x 100 x 80	4.500 x 4.500 x 3.500" (114.3 x 114.3 x 88.9 mm)	4.00" (102 mm)	4.00" (102 mm)	7.72 lbs (3.50 Kgs)
165.1 mm x 165.1 mm x 80	6.500 x 6.500 x 3.500" (165.1 x 165.1 x 88.9 mm)	5.13" (130 mm)	5.13" (130 mm)	12.21 lbs (5.54 Kgs)

7133 pitcher tee



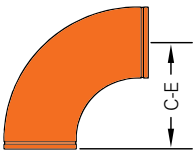


The Shurjoint Model 7133 pitcher tee provides a quick and easy connection and transition from a grooved riser system to a threaded hydrant valve outlet. The pitcher tee is designed for 3", 4" and 6" steel pipe risers with a 2½" BSP threaded or 3" grooved hydrant connection outlet.

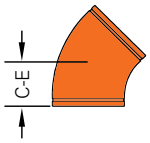
dimensions

nom. pipe size	pipe O.D.	hydrant outlet	dimensions			weight
			A	B	C	
80 x 80 x 76.1 mm	3.500 x 3.500 x 3.000" (88.9 x 88.9 x 76.1 mm)	Taper BSP	4.75" (121 mm)	4.75" (121 mm)	2.72" (69 mm)	6.2 lbs (2.8 Kgs)
100 x 100 x 76.1 mm	4.500 x 4.500 x 3.000" (114.3 x 114.3 x 76.1 mm)	Taper BSP	4.75" (121 mm)	5.25" (133 mm)	2.72" (69 mm)	7.5 lbs (3.4 Kgs)

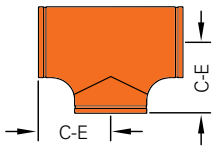
W110LR 90° elbow
W111LR 45° elbow
W120 tee
W160 cap



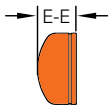
W1110LR



W111LR



W120



W160

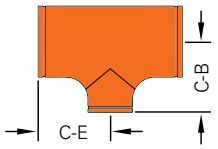
Shurjoint wrought steel grooved fittings are fabricated from standard weight (0.375" or 9.5 mm) carbon steel pipe to ASTM A234 Gr. WPB or equivalent, or segmentally welded with carbon steel of the same or equivalent grade. C-E dimensions conform to ANSI B16.9.

dimensions

nom. pipe size	pipe O.D.	W110LR 90° LR elbows C-E	W110LR 90° LR elbows weight	W111LR 45° LR elbows C-E	W111LR 45° LR elbows weight	W120 tee C-E	W120 tee weight	W160 cap E-E	W160 cap weight
10" 250	10.750" (273.0 mm)	15.00" (381.0 mm)	78.0 lbs (35.4 Kgs)	6.25" (158.8 mm)	39.0 lbs (17.7 Kgs)	--- ---	--- ---	--- ---	--- ---
12" 300	12.750" (323.9 mm)	18.00" (457.2 mm)	114.6 lbs (52.0 Kgs)	7.50" (190.5 mm)	57.3 lbs (26.0 Kgs)	--- ---	--- ---	--- ---	--- ---
14" 350	14.000" (355.6 mm)	21.00" (533.4 mm)	149.4 lbs (67.9 Kgs)	8.75" (222.3 mm)	74.8 lbs (34.0 Kgs)	11.00" (279.4 mm)	110.2 lbs (50.0 Kgs)	6.50" (165.0 mm)	35.0 lbs (15.9 Kgs)
16" 400	16.000" (406.4 mm)	24.00" (609.6 mm)	195.8 lbs (89.0 Kgs)	10.00" (254.0 mm)	98.1 lbs (44.6 Kgs)	12.00" (304.8 mm)	145.4 lbs (66.1 Kgs)	7.00" (178.0 mm)	44.0 lbs (20.0 Kgs)
18" 450	18.000" (457.2 mm)	27.00" (685.8 mm)	248.6 lbs (113.0 Kgs)	11.25" (285.5 mm)	124.3 lbs (56.5 Kgs)	13.50" (342.9 mm)	169.8 lbs (77.0 Kgs)	8.00" (203.0 mm)	56.1 lbs (25.5 Kgs)
20" 500	20.000" (508.0 mm)	30.00" (762.0 mm)	308.0 lbs (140.0 Kgs)	12.50" (317.5 mm)	154.0 lbs (70.0 Kgs)	15.00" (381.0 mm)	209.4 lbs (95.0 Kgs)	9.00" (229.0 mm)	70.0 lbs (31.8 Kgs)
22"* 500	22.000" (558.8 mm)	33.00" (838.2 mm)	371.8 lbs (169.0 Kgs)	13.50" (342.9 mm)	187.0 lbs (85.0 Kgs)	16.50" (419.1 mm)	277.2 lbs (126.0 Kgs)	10.00" (254.0 mm)	85.4 lbs (38.8 Kgs)
24" 600	24.000" (609.6 mm)	36.00" (914.4 mm)	444.4 lbs (202.0 Kgs)	15.00" (381.0 mm)	222.2 lbs (101.0 Kgs)	17.00" (431.8 mm)	267.9 lbs (121.5 Kgs)	10.50" (267.0 mm)	99.2 lbs (45.1 Kgs)

* 22" availability upon request

W121 reducing tee



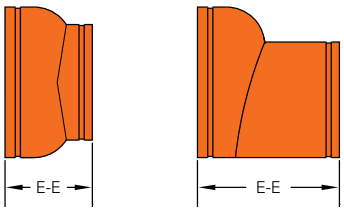
W121

material: ASTM A234 Gr. WPB, standard weight (0.375" or 9.5 mm), or carbon steel of the same or equivalent grade. C-E & C-B dimensions conform to ANSI B16.9

dimensions

		W121 reducing tee					W121 reducing tee		
nom. size	**pipe O.D.**	**C-E**	**C-B**	**weight**	**nom. size**	**pipe O.D.**	**C-E**	**C-B**	**weight**
14 x 6" 350 x 150	14.000 x 6.625" (355.6 x 168.3 mm)	11.0" (279.0 mm)	9.37" (238.0 mm)	99.0 lbs (45.0 Kgs)	20 x 6" 500 x 150	20.000 x 6.625" (508.0 x 168.3 mm)	15.0" (381.0 mm)	12.36" (314.0 mm)	196.9 lbs (89.5 Kgs)
14 x 8" 350 x 200	14.000 x 8.625" (355.6 x 219.1 mm)	11.0" (279.0 mm)	9.76" (248.0 mm)	101.0 lbs (46.0 Kgs)	20 x 8" 500 x 200	20.000 x 8.625" (508.0 x 219.1 mm)	15.0" (381.0 mm)	12.76" (324.0 mm)	198.0 lbs (90.0 Kgs)
14 x 10" 350 x 250	14.000 x 10.750" (355.6 x 273.0 mm)	11.0" (279.0 mm)	10.12" (257.0 mm)	104.0 lbs (47.0 Kgs)	20 x 10" 500 x 250	18.000 x 10.750" (508.0 x 273.0 mm)	15.0" (381.0 mm)	13.11" (333.0 mm)	200.0 lbs (90.9 Kgs)
14 x 12" 350 x 300	14.000 x 12.750" (355.6 x 323.9 mm)	11.0" (279.0 mm)	10.63" (270.0 mm)	106.0 lbs (48.0 Kgs)	20 x 12" 500 x 300	20.000 x 12.750" (508.0 x 323.9 mm)	15.0" (381.0 mm)	13.62" (346.0 mm)	202.4 lbs (92.0 Kgs)
16 x 6" 400 x 150	16.000 x 6.625" (406.4 x 168.3 mm)	12.0" (305.0 mm)	10.40" (264.0 mm)	125.8 lbs (57.2 Kgs)	20 x 14" 500 x 350	20.000 x 14.000" (508.0 x 355.6 mm)	15.0" (381.0 mm)	14.02" (356.0 mm)	204.4 lbs (92.9 Kgs)
16 x 8" 400 x 200	16.000 x 8.625" (406.4 x 219.1 mm)	12.0" (305.0 mm)	10.75" (273.0 mm)	127.2 lbs (57.8 Kgs)	20 x 16" 500 x 400	20.000 x 16.000" (508.0 x 406.4 mm)	15.0" (381.0 mm)	14.02" (356.0 mm)	204.6 lbs (93.6 Kgs)
16 x 10" 400 x 250	16.000 x 10.750" (406.4 x 273.0 mm)	12.0" (305.0 mm)	11.14" (283.0 mm)	129.6 lbs (58.9 Kgs)	20 x 18" 500 x 450	20.000 x 18.000" (508.0 x 457.2 mm)	15.0" (381.0 mm)	14.50" (368.0 mm)	207.9 lbs (94.5 Kgs)
16 x 12" 400 x 300	16.000 x 12.750" (406.4 x 323.9 mm)	12.0" (305.0 mm)	11.61" (295.0 mm)	132.2 lbs (60.1 Kgs)	24 x 6" 600 x 150	20.000 x 6.625" (609.6 x 168.3 mm)	17.0" (432.0 mm)	14.38" (365.0 mm)	268.4 lbs (122.0 Kgs)
16 x 14" 400 x 350	16.000 x 14.000" (406.4 x 355.6 mm)	12.0" (305.0 mm)	12.00" (305.0 mm)	134.4 lbs (61.1 Kgs)	24 x 8" 600 x 200	20.000 x 8.625" (609.6 x 219.1 mm)	17.0" (432.0 mm)	14.76" (375.0 mm)	270.6 lbs (123.0 Kgs)
18 x 6" 450 x 150	18.000 x 6.625" (457.2 x 168.3 mm)	13.5" (343.0 mm)	11.38" (289.0 mm)	159.7 lbs (72.6 Kgs)	24 x 10" 600 x 250	24.000 x 10.750" (609.6 x 273.0 mm)	17.0" (432.0 mm)	15.12" (384.0 mm)	271.0 lbs (123.2 Kgs)
18 x 8" 450 x 200	18.000 x 8.625" (457.2 x 219.1 mm)	13.5" (343.0 mm)	11.75" (298.0 mm)	160.6 lbs (73.0 Kgs)	24 x 12" 600 x 300	24.000 x 12.750" (609.6 x 323.9 mm)	17.0" (432.0 mm)	15.63" (397.0 mm)	273.2 lbs (124.2 Kgs)
18 x 10" 450 x 250	18.000 x 10.750" (457.2 x 273.0 mm)	13.5" (343.0 mm)	12.13" (308.0 mm)	162.8 lbs (74.0 Kgs)	24 x 14" 600 x 350	24.000 x 14.000" (609.6 x 355.6 mm)	17.0" (432.0 mm)	16.00" (406.0 mm)	275.0 lbs (125.0 Kgs)
18 x 12" 450 x 300	18.000 x 12.750" (457.2 x 323.9 mm)	13.5" (343.0 mm)	12.64" (321.0 mm)	165.2 lbs (75.1 Kgs)	24 x 16" 600 x 400	24.000 x 16.000" (609.6 x 406.4 mm)	17.0" (432.0 mm)	16.00" (406.0 mm)	275.0 lbs (125.0 Kgs)
18 x 14" 450 x 350	18.000 x 14.000" (457.2 x 355.6 mm)	13.5" (343.0 mm)	13.00" (330.0 mm)	167.2 lbs (76.0 Kgs)	24 x 18" 600 x 450	24.000 x 18.000" (609.6 x 457.2 mm)	17.0" (432.0 mm)	16.50" (419.0 mm)	279.6 lbs (127.1 Kgs)
18 x 16" 450 x 400	18.000 x 16.000" (457.2 x 406.4 mm)	13.5" (343.0 mm)	13.00" (330.0 mm)	167.9 lbs (76.3 Kgs)	24 x 20" 600 x 500	24.000 x 20.000" (609.6 x 508.0 mm)	17.0" (432.0 mm)	17.00" (432.0 mm)	281.6 lbs (128.0 Kgs)

W150 wrought concentric reducer
W151 wrought eccentric reducer



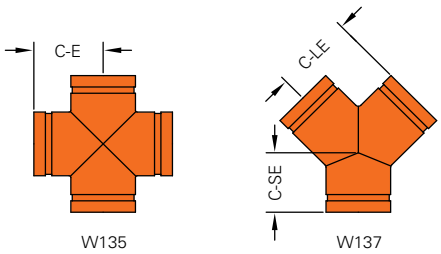
W150 W151

material: ASTM A234 Gr. WPB, standard weight (0.375" or 9.5 mm), or segmentally welded carbon steel of the same or equivalent grade E-E dimensions conform to ANSI B16.9.

dimensions

nom. pipe size	pipe O.D.	W150 concentric reducer E-E	W150 concentric reducer weight	W151 eccentric reducer E-E	W151 eccentric reducer weight
14 x 6" 350 x 150	14.000 x 6.625" (355.6 x 168.3 mm)	13.00" (330.0 mm)	67.76 lbs (30.8 Kgs)	13.00" (330.0 mm)	67.76 lbs (30.8 Kgs)
14 x 8" 350 x 200	14.000 x 8.625" (355.6 x 219.1 mm)	13.00" (330.0 mm)	69.96 lbs (31.8 Kgs)	13.00" (330.0 mm)	69.96 lbs (31.8 Kgs)
14 x 10" 350 x 250	14.000 x 10.750" (355.6 x 273.0 mm)	13.00" (330.0 mm)	71.94 lbs (32.7 Kgs)	13.00" (330.0 mm)	71.94 lbs (32.7 Kgs)
14 x 12" 350 x 300	14.000 x 12.750" (355.6 x 323.9 mm)	13.00" (330.0 mm)	73.92 lbs (33.6 Kgs)	13.00" (330.0 mm)	73.92 lbs (33.6 Kgs)
16 x 8" 400 x 200	16.000 x 8.625" (406.4 x 219.1 mm)	14.00" (356.0 mm)	87.78 lbs (39.9 Kgs)	14.00" (356.0 mm)	87.78 lbs (39.9 Kgs)
16 x 10" 400 x 250	16.000 x 10.750" (406.4 x 273.0 mm)	14.00" (356.0 mm)	90.86 lbs (41.3 Kgs)	14.00" (356.0 mm)	90.86 lbs (41.3 Kgs)
16 x 12" 400 x 300	16.000 x 12.750" (406.4 x 323.9 mm)	14.00" (356.0 mm)	92.84 lbs (42.2 Kgs)	14.00" (356.0 mm)	92.84 lbs (42.2 Kgs)
16 x 14" 400 x 350	16.000 x 14.000" (406.4 x 355.6 mm)	14.00" (356.0 mm)	94.82 lbs (43.1 Kgs)	14.00" (356.0 mm)	94.82 lbs (43.1 Kgs)
18 x 10" 450 x 250	18.000 x 10.750" (457.2 x 273.0 mm)	15.00" (381.0 mm)	111.76 lbs (50.8 Kgs)	15.00" (381.0 mm)	111.76 lbs (50.8 Kgs)
18 x 12" 450 x 300	18.000 x 12.750" (457.2 x 323.9 mm)	15.00" (381.0 mm)	114.84 lbs (52.2 Kgs)	15.00" (381.0 mm)	114.84 lbs (52.2 Kgs)
18 x 14" 450 x 350	18.000 x 14.000" (457.2 x 355.6 mm)	15.00" (381.0 mm)	117.70 lbs (53.5 Kgs)	15.00" (381.0 mm)	117.70 lbs (53.5 Kgs)
18 x 16" 450 x 400	18.000 x 16.000" (457.2 x 406.4 mm)	15.00" (381.0 mm)	120.78 lbs (54.9 Kgs)	15.00" (381.0 mm)	120.78 lbs (54.9 Kgs)
20 x 12" 500 x 300	20.000 x 12.750" (508.0 x 323.9 mm)	20.00" (508.0 mm)	159.72 lbs 72.6 Kgs)	20.00" (508.0 mm)	159.72 lbs 72.6 Kgs)
20 x 14" 500 x 350	20.000 x 14.000" (508.0 x 355.6 mm)	20.00" (508.0 mm)	163.68 lbs (74.4 Kgs)	20.00" (508.0 mm)	163.68 lbs (74.4 Kgs)
20 x 16" 500 x 400	20.000 x 16.000" (508.0 x 406.4 mm)	20.00" (508.0 mm)	167.64 lbs (76.2 Kgs)	20.00" (508.0 mm)	167.64 lbs (76.2 Kgs)
20 x 18" 500 x 450	20.000 x 18.000" (508.0 x 457.2 mm)	20.00" (508.0 mm)	171.60 lbs (78.0 Kgs)	20.00" (508.0 mm)	171.60 lbs (78.0 Kgs)
24 x 16" 600 x 400	24.000 x 16.000" (609.6 x 406.4 mm)	20.00" (508.0 mm)	197.56 lbs (89.8 Kgs)	20.00" (508.0 mm)	197.56 lbs (89.8 Kgs)
24 x 18" 600 x 450	24.000 x 18.000" (609.6 x 457.2 mm)	20.00" (508.0 mm)	199.54 lbs (90.7 Kgs)	20.00" (508.0 mm)	199.54 lbs (90.7 Kgs)
24 x 20" 600 x 500	24.000 x 20.000" (609.6 x 508.0 mm)	20.00" (508.0 mm)	203.50 lbs (92.5 Kgs)	20.00" (508.0 mm)	203.50 lbs (92.5 Kgs)

W135 cross
W137 true-y

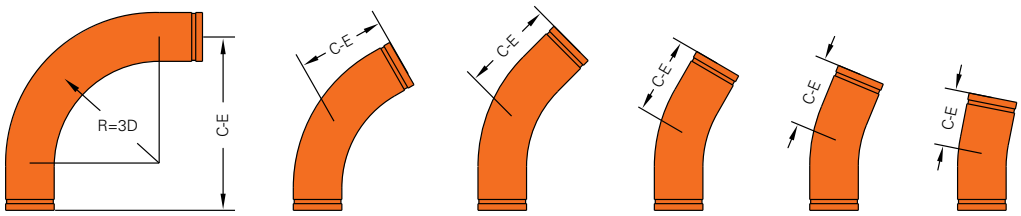


material: Fabricated with ASTM A234 Gr. WPB, standard weight (0.375" or 9.5 mm), or segmentally welded carbon steel of the same or equivalent grade. C-LE and C-SE dimensions: manufacturer's standard.

dimensions

nom. pipe size	pipe O.D.	W135 cross C-E	W135 cross weight	W137 true-y C-LE	W137 true-y C-SE	W137 true-y weight
14" 350	14.000" (355.6 mm)	11.00" (279 mm)	121.0 lbs (54.9 Kgs)	11.00" (279 mm)	7.50" (191 mm)	98.0 lbs (44.4 Kgs)
16" 400	16.000" (406.4 mm)	12.00" (305 mm)	146.4 lbs (66.4 Kgs)	12.00" (305 mm)	8.00" (203 mm)	119.3 lbs (54.1 Kgs)
18" 450	18.000" (457.2 mm)	13.50" (343 mm)	185.4 lbs (84.1 Kgs)	13.50" (343 mm)	8.50" (216 mm)	148.3 lbs (67.3 Kgs)
20" 500	20.000" (508.0 mm)	15.00" (381 mm)	229.1 lbs (103.9 Kgs)	15.00" (381 mm)	9.00" (229 mm)	180.4 lbs (81.8 Kgs)
24" 600	24.000" (609.6 mm)	17.00" (432 mm)	298.7 lbs (135.5 Kgs)	17.00" (432 mm)	10.00" (254 mm)	238.3 lbs (108.1 Kgs)

wrought long radius elbows (bends)



L90-3D L60-3D L45-3D L30-3D L22-3D L11-3D

1. Long radius 90° elbows 3D, 5D, and 6D in sizes up to and including 4" are provided with 4" (102 mm) long tangents, sizes 5" to 10" are provided with 1D long tangents and sizes 12" to 24" are provided with 12" (305 mm) long tangents. Remaining models are provided with tangent lengths equal to nominal pipe size.
2. **end preparation:** Roll-grooved to AWWA C606-04 and or ISO/FDIS 6182-12. For dimensional tolerances of cast fittings, refer to ISO/FDIS 6182-12 Table 3.
3. **material:** Standard wall steel pipe to ASTM A53, Grade B. Other materials also available on request.
4. **C to E tolerances:** 2" through 6" ±⅛" (3.2 mm); 8" through 16" ±¼" (6.4 mm); 18" through 24" ±⅜" (9.5 mm).
5. All weights are approximate, based on calculated weight of pipe.

L90-3D 90°
L60-3D 60°
L45-3D 45°
L30-3D 30°
L22-3D 22 ½°
L11-3D 11 ¼°

dimensions

		L90-3D 90° elbow		L60-3D 60° elbow		L45-3D 45° elbow		L30-3D 30° elbow		L22-3D 22 ½° elbow		L11-3D 11 ¼° elbow	
nom. size	**pipe O.D.**	**C-E**	**weight**	**C-E**	**weight**	**C-E**	**weight**	**C-E**	**weight**	**C-E**	**weight**	**C-E**	**weight**
2"	2.375"	10.0"	5.5 lbs	7.50"	4.3 lbs	6.50"	3.7 lbs	5.75"	3.4 lbs	5.25"	3.2 lbs	4.50"	2.8 lbs
50	(60.3 mm)	(254 mm)	(2.5 Kgs)	(191 mm)	(2.0 Kgs)	(165 mm)	(1.7 Kgs)	(146 mm)	(1.5 Kgs)	(133 mm)	(1.5 Kgs)	(114 mm)	(1.3 Kgs)
2½"	2.875"	11.5"	9.9 lbs	8.25"	7.7 lbs	7.25"	6.7 lbs	6.00"	5.8 lbs	5.50"	5.3 lbs	4.75"	4.6 lbs
65	(73.0 mm)	(292 mm)	(4.5 Kgs)	(210 mm)	(3.5 Kgs)	(184 mm)	(3.0 Kgs)	(152 mm)	(2.6 Kgs)	(140 mm)	(2.4 Kgs)	(121 mm)	(2.1 Kgs)
3"	3.500"	13.0"	14.6 lbs	9.25"	11.0 lbs	7.75"	10.1 lbs	6.50"	8.0 lbs	5.75"	7.3 lbs	5.00"	6.2 lbs
80	(88.9 mm)	(330 mm)	(6.6 Kgs)	(235 mm)	(5.0 Kgs)	(197 mm)	(4.6 Kgs)	(165 mm)	(3.6 Kgs)	(146 mm)	(3.3 Kgs)	(127 mm)	(2.8 Kgs)
3½"	4.000"	14.5"	18.6 lbs	10.00"	14.4 lbs	8.50"	12.0 lbs	6.75"	10.2 lbs	6.00"	9.2 lbs	5.00"	7.6 lbs
90	(101.6 mm)	(368 mm)	(8.4 Kgs)	(254 mm)	(6.5 Kgs)	(216 mm)	(5.6 Kgs)	(171 mm)	(4.6 Kgs)	(152 mm)	(4.2 Kgs)	(127 mm)	(3.4 Kgs)
4"	4.500"	16.0"	22.4 lbs	11.00"	18.5 lbs	9.00"	14.7 lbs	7.25"	12.8 lbs	6.50"	11.4 lbs	5.25"	9.3 lbs
100	(114.3 mm)	(406 mm)	(10.2 Kgs)	(279 mm)	(8.4 Kgs)	(229 mm)	(7.0 Kgs)	(184 mm)	(5.8 Kgs)	(165 mm)	(5.2 Kgs)	(133 mm)	(4.2 Kgs)
5"	5.563"	20.0"	40.5 lbs	13.75"	31.3 lbs	11.25"	26.9 lbs	9.00"	21.8 lbs	8.00"	19.4 lbs	6.50"	15.8 lbs
125	(141.3 mm)	(508 mm)	(18.4 Kgs)	(349 mm)	(14.2 Kgs)	(286 mm)	(12.2 Kgs)	(229 mm)	(9.9 Kgs)	(203 mm)	(8.8 Kgs)	(165 mm)	(7.2 Kgs)
6"	6.625"	24.0"	60.7 lbs	16.50"	48.8 lbs	13.50"	39.7 lbs	10.75"	33.9 lbs	9.50"	30.1 lbs	7.75"	24.6 lbs
150	(168.3 mm)	(610 mm)	(27.5 Kgs)	(419 mm)	(22.1 Kgs)	(343 mm)	(18.0 Kgs)	(273 mm)	(15.4 Kgs)	(241 mm)	(13.7 Kgs)	(197 mm)	(11.2 Kgs)
8"	8.625"	32.0"	132.3 lbs	22.00"	97.9 lbs	18.00"	86.0 lbs	14.50"	68.0 lbs	12.75"	60.5 lbs	10.50"	49.3 lbs
200	(219.1 mm)	(813 mm)	(60.0 Kgs)	(559 mm)	(44.4 Kgs)	(457 mm)	(39.0 Kgs)	(368 mm)	(30.8 Kgs)	(324 mm)	(27.4 Kgs)	(267 mm)	(22.4 Kgs)
10"	10.750"	40.0"	211.6 lbs	27.25"	173.4 lbs	22.50"	136.7 lbs	18.00"	120.5 lbs	16.00"	107.2 lbs	13.00"	87.3 lbs
250	(273.0 mm)	(1016 mm)	(96.0 Kgs)	(692 mm)	(78.7 Kgs)	(572 mm)	(62.0 Kgs)	(457 mm)	(54.7 Kgs)	(406 mm)	(48.6 Kgs)	(330 mm)	(39.6 Kgs)
12"	12.750"	48.0"	319.7 lbs	32.75"	254.8 lbs	27.00"	205.0 lbs	21.75"	177.0 lbs	19.25"	157.5 lbs	15.50"	128.3 lbs
300	(323.9 mm)	(1219 mm)	(145.0 Kgs)	(832 mm)	(115.6 Kgs)	(686 mm)	(93.0 Kgs)	(552 mm)	(80.3 Kgs)	(489 mm)	(71.4 Kgs)	(394 mm)	(58.2 Kgs)
14"	14.000"	54.0"	390.2 lbs	38.25"	327.3 lbs	31.50"	227.3 lbs	25.25"	227.3 lbs	22.50"	202.3 lbs	18.25"	164.8 lbs
350	(355.6 mm)	(1372 mm)	(177.0 Kgs)	(972 mm)	(148.5 Kgs)	(800 mm)	(103.1 Kgs)	(641 mm)	(103.1 Kgs)	(572 mm)	(91.8 Kgs)	(464 mm)	(74.8 Kgs)
16"	16.000"	60.0"	546.8 lbs	43.75"	429.0 lbs	36.00"	350.5 lbs	29.00"	297.9 lbs	25.25"	265.2 lbs	20.75"	216.0 lbs
400	(406.4 mm)	(1524 mm)	(248.0 Kgs)	(1111 mm)	(194.6 Kgs)	(914 mm)	(159.0 Kgs)	(737 mm)	(135.1 Kgs)	(648 mm)	(120.3 Kgs)	(527 mm)	(98 Kgs)
18"	18.000"	66.0"	639.2 lbs	49.25"	544.4 lbs	40.25"	461.3 lbs	32.50"	378.1 lbs	28.75"	336.5 lbs	23.35"	274.1 lbs
450	(457.2 mm)	(1676 mm)	(290.6 Kgs)	(1251 mm)	(246.9 Kgs)	(1029 mm)	(209.2 Kgs)	(826 mm)	(171.5 Kgs)	(730 mm)	(152.6 Kgs)	(593 mm)	(124.3 Kgs)
20"	20.000"	72.0"	778.6 lbs	54.75"	673.5 lbs	45.00"	568.8 lbs	36.00"	467.8 lbs	32.00"	416.3 lbs	26.00"	339.2 lbs
500	(508.0 mm)	(1829 mm)	(353.15 Kgs)	(1391 mm)	(305.5 Kgs)	(1143 mm)	(258.0 Kgs)	(914 mm)	(212.2 Kgs)	(813 mm)	(188.8 Kgs)	(660 mm)	(153.9 Kgs)
24"	24.000"	84.0"	1442.5 lbs	65.50"	1297.5 lbs	53.75"	1099.6 lbs	43.25"	903.5 lbs	38.25"	804.5 lbs	31.00"	655.1 lbs
600	(609.6 mm)	(2134 mm)	(654.3 Kgs)	(1664 mm)	(588.5 Kgs)	(1365 mm)	(498.8 Kgs)	(1099 mm)	(409.8 Kgs)	(972 mm)	(364.9 Kgs)	(787 mm)	(297.2 Kgs)
28"	28.000"	95.0"	1897.5 lbs	70.00"	1714.5 lbs	62.00"	1486.6 lbs	47.00"	1150.7 lbs	45.00"	1109.3 lbs	35.00"	868.6 lbs
700	(711.2 mm)	(2413 mm)	(860.7 Kgs)	(1778 mm)	(777.7 Kgs)	(1575 mm)	(674.3 Kgs)	(1194 mm)	(522.0 Kgs)	(1143 mm)	(503.2 Kgs)	(889 mm)	(394.0 Kgs)

* For 24" & 28": Made by XS (12.7 mm) carbon steel pipe to ASTM A53.

L90-5D 90°
L60-5D 60°
L45-5D 45°
L30-5D 30°
L22-5D 22 ½°
L11-5D 11 ¼°

dimensions

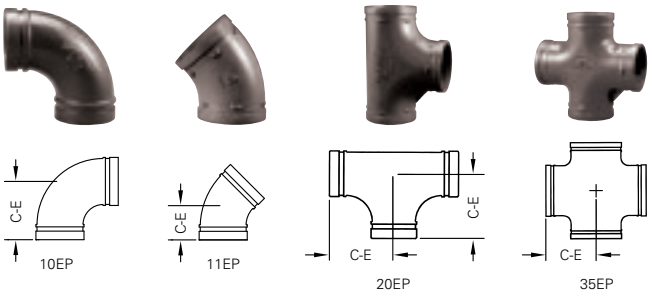
		L90-5D 90° elbow		L60-5D 60° elbow		L45-5D 45° elbow		L30-5D 30° elbow		L22-5D 22 ½° elbow		L11-5D 11 ¼° elbow	
nom. size	**pipe O.D.**	**C-E**	**weight**	**C-E**	**weight**	**C-E**	**weight**	**C-E**	**weight**	**C-E**	**weight**	**C-E**	**weight**
2" 50	2.375" (60.3 mm)	14.00" (356 mm)	7.2 lbs (3.3 Kgs)	9.75" (248 mm)	5.6 lbs (2.5 Kgs)	8.25" (210 mm)	4.8 lbs (2.2 Kgs)	6.75" (171 mm)	4.0 lbs (1.8 Kgs)	6.00" (152 mm)	3.6 lbs (1.6 Kgs)	5.00" (127 mm)	3.0 lbs (1.4 Kgs)
2½" 65	2.875" (73.0 mm)	16.50" (419 mm)	13.3 lbs (6.1 Kgs)	11.25" (286 mm)	10.2 lbs (4.6 Kgs)	9.25" (235 mm)	8.6 lbs (3.9 Kgs)	7.50" (191 mm)	7.0 lbs (3.2 Kgs)	6.50" (165 mm)	6.2 lbs (2.8 Kgs)	5.25" (133 mm)	5.0 lbs (2.3 Kgs)
3" 80	3.500" (88.9 mm)	19.00" (483 mm)	19.9 lbs (9.0 Kgs)	12.75" (324 mm)	15.0 lbs (6.8 Kgs)	10.25" (260 mm)	12.5 lbs (5.7 Kgs)	8.00" (203 mm)	10.0 lbs (4.5 Kgs)	7.00" (178 mm)	8.8 lbs (4.0 Kgs)	5.50" (140 mm)	6.9 lbs (3.1 Kgs)
3½" 90	4.000" (101.6 mm)	21.50" (546 mm)	26.9 lbs (12.2 Kgs)	12.25" (311 mm)	20.0 lbs (9.1 Kgs)	11.25" (286 mm)	16.5 lbs (7.5 Kgs)	8.75" (222 mm)	13.0 lbs (5.9 Kgs)	7.50" (191 mm)	11.3 lbs (5.1 Kgs)	5.75" (146 mm)	8.7 lbs (3.9 Kgs)
4" 100	4.500" (114.3 mm)	24.00" (610 mm)	35.4 lbs (16.1 Kgs)	15.50" (394 mm)	26.0 lbs (11.8 Kgs)	12.50" (318 mm)	21.3 lbs (9.7 Kgs)	9.50" (241 mm)	16.6 lbs (7.5 Kgs)	8.00" (203 mm)	14.3 lbs (6.5 Kgs)	6.00" (152 mm)	10.7 lbs (4.9 Kgs)
5" 125	5.563" (141.3 mm)	30.00" (762 mm)	59.9 lbs (27.2 Kgs)	19.50" (495 mm)	44.1 lbs (20.0 Kgs)	15.50" (394 mm)	36.1 lbs (16.4 Kgs)	11.75" (298 mm)	28.1 lbs (12.7 Kgs)	10.00" (254 mm)	24.1 lbs (10.9 Kgs)	7.50" (191 mm)	18.2 lbs (8.3 Kgs)
6" 150	6.625" (168.3 mm)	36.00" (914 mm)	93.3 lbs (42.4 Kgs)	23.25" (591 mm)	68.6 lbs (31.1 Kgs)	18.50" (470 mm)	56.2 lbs (25.5 Kgs)	14.00" (356 mm)	43.8 lbs (19.9 Kgs)	12.00" (305 mm)	37.6 lbs (17.1 Kgs)	9.00" (229 mm)	28.3 lbs (12.8 Kgs)
8" 200	8.625" (219.1 mm)	48.00" (1219 mm)	187.4 lbs (85.2 Kgs)	31.00" (787 mm)	137.7 lbs (62.5 Kgs)	24.50" (622 mm)	112.8 lbs (51.2 Kgs)	18.75" (476 mm)	87.9 lbs (39.9 Kgs)	16.00" (406 mm)	75.4 lbs 34.2 Kgs)	12.00" (305 mm)	56.8 lbs (25.8 Kgs)
10" 250	10.750" (273.1 mm)	60.00" (1524 mm)	332.0 lbs (150.9 Kgs)	39.00" (991 mm)	244.1 lbs (110.7 Kgs)	30.75" (781 mm)	199.9 lbs (90.7 Kgs)	23.50" (597 mm)	155.8 lbs (70.7 Kgs)	20.00" (508 mm)	133.7 lbs 60.6 Kgs)	15.00" (381 mm)	100.6 lbs (45.6 Kgs)
12" 300	12.750" (323.9 mm)	72.00" (1829 mm)	488.0 lbs (221.8 Kgs)	46.75" (1187 mm)	358.6 lbs (162.7 Kgs)	37.00" (940 mm)	293.7 lbs (133.2 Kgs)	28.00" (711 mm)	228.9 lbs (103.8 Kgs)	24.00" (610 mm)	196.4 lbs (89.1 Kgs)	18.00" (457 mm)	147.8 lbs (67.0 Kgs)
14" 350	14.000" (355.6 mm)	82.00" (2083 mm)	608.5 lbs (276.6 Kgs)	54.50" (1384 mm)	460.7 lbs (209 Kgs)	43.00" (1092 mm)	377.3 lbs (171.1 Kgs)	32.75" (832 mm)	294.0 lbs (133.4 Kgs)	28.00" (711 mm)	252.3 lbs (114.4 Kgs)	21.00" (533 mm)	189.8 lbs (86.1 Kgs)
16" 400	16.000" (406.4 mm)	92.00" (2337 mm)	779.7 lbs (354.4 Kgs)	62.25" (1581 mm)	603.8 lbs (273.9 Kgs)	49.25" (1251 mm)	494.5 lbs (224.3 Kgs)	37.50" (953 mm)	385.3 lbs (174.8 Kgs)	32.00" (813 mm)	330.7 lbs (150 Kgs)	24.00" (610 mm)	248.8 lbs (112.9 Kgs)
18" 450	18.000" (457.2 mm)	102.00" (2591 mm)	971.4 lbs (441.5 Kgs)	70.00" (1778 mm)	766.2 lbs (347.5 Kgs)	55.25" (1403 mm)	627.6 lbs (284.7 Kgs)	42.25" (1073 mm)	489.0 lbs (221.8 Kgs)	36.00" (914 mm)	419.7 lbs (190.4 Kgs)	27.00" (686 mm)	315.7 lbs (143.2 Kgs)
20" 500	20.000" (508.0 mm)	112.00" (2845 mm)	1184.9 lbs (538.6 Kgs)	77.75" (1975 mm)	947.9 lbs (430.0 Kgs)	61.50" (1562 mm)	776.4 lbs (352.2 Kgs)	46.75" (1187 mm)	605.0 lbs (274.4 Kgs)	40.00" (1016 mm)	519.2 lbs (235.5 Kgs)	30.00" (762 mm)	390.6 lbs (177.2 Kgs)
24" 600	24.000" (609.6 mm)	132.00" (3353 mm)	1674.9 lbs (761.3 Kgs)	93.25" (2369 mm)	1369.3 lbs (621.1 Kgs)	73.75" (1873 mm)	1121.6 lbs (508.7 Kgs)	56.25" (1429 mm)	873.9 lbs (396.4 Kgs)	48.00" (1219 mm)	750.1 lbs (340.2 Kgs)	35.75" (908 mm)	564.3 lbs (256.0 Kgs)

L90-6D 90°
L60-6D 60°
L45-6D 45°
L30-6D 30°
L22-6D 22 ½°
L11-6D 11 ¼°

dimensions

		L90-6D 90° elbow		L60-6D 60° elbow		L45-6D 45° elbow		L30-6D 30° elbow		L22-6D 22 ½° elbow		L11-6D 11 ¼° elbow	
nom. size	**pipe O.D.**	**C-E**	**weight**	**C-E**	**weight**	**C-E**	**weight**	**C-E**	**weight**	**C-E**	**weight**	**C-E**	**weight**
2" 50	2.375" (60.3 mm)	16.00" (406 mm)	8.2 lbs (3.7 Kgs)	11.00" (279 mm)	6.3 lbs (2.9 Kgs)	9.00" (229 mm)	5.3 lbs (2.4 Kgs)	7.25" (184 mm)	4.3 lbs (2.0 Kgs)	6.50" (165 mm)	3.9 lbs (1.8 Kgs)	5.25" (133 mm)	3.2 lbs (1.5 Kgs)
2½" 65	2.875" (73.0 mm)	19.00" (483 mm)	15.2 lbs (6.9 Kgs)	12.75" (324 mm)	11.4 lbs (5.2 Kgs)	10.25" (260 mm)	9.5 lbs (4.3 Kgs)	8.00" (203 mm)	7.7 lbs (3.5 Kgs)	7.00" (178 mm)	6.7 lbs (3.0 Kgs)	5.50" (140 mm)	5.3 lbs (2.4 Kgs)
3" 80	3.500" (88.9 mm)	22.00" (559 mm)	22.9 lbs (10.4 Kgs)	14.50" (368 mm)	17.0 lbs (7.7 Kgs)	11.50" (292 mm)	14 lbs (6.4 Kgs)	8.75" (222 mm)	11.0 lbs (5.0 Kgs)	7.50" (191 mm)	9.5 lbs (4.3 Kgs)	5.75" (146 mm)	7.3 lbs (3.3 Kgs)
3½" 90	4.000" (101.6 mm)	25.00" (635 mm)	31.1 lbs (14.1 Kgs)	16.25" (413 mm)	22.8 lbs (10.3 Kgs)	12.75" (324 mm)	18.6 lbs (8.4 Kgs)	9.75" (248 mm)	14.4 lbs (6.5 Kgs)	8.25" (210 mm)	12.3 lbs (5.6 Kgs)	6.00" (152 mm)	9.2 lbs (4.2 Kgs)
4" 100	4.500" (114.3 mm)	28.00" (711 mm)	41.0 lbs (18.6 Kgs)	18.00" (457 mm)	29.8 lbs (13.5 Kgs)	14.00" (356 mm)	24.1 lbs (10.9 Kgs)	10.50" (267 mm)	18.5 lbs (8.4 Kgs)	8.75" (222 mm)	15.7 lbs (7.1 Kgs)	6.50" (165 mm)	11.4 lbs (5.2 Kgs)
5" 125	5.563" (141.3 mm)	35.00" (889 mm)	69.5 lbs (31.6 Kgs)	22.25" (565 mm)	50.5 lbs (22.9 Kgs)	17.50" (445 mm)	40.9 lbs (18.6 Kgs)	13.00" (330 mm)	31.3 lbs (14.2 Kgs)	11.00" (279 mm)	26.5 lbs (12.0 Kgs)	8.00" (203 mm)	19.4 lbs (8.8 Kgs)
6" 150	6.625" (168.3 mm)	42.00" (1067 mm)	108.2 lbs (49.2 Kgs)	26.75" (679 mm)	78.6 lbs (35.7 Kgs)	21.00" (533 mm)	63.7 lbs (28.9 Kgs)	15.75" (400 mm)	48.8 lbs (22.1 Kgs)	13.25" (337 mm)	41.3 lbs (18.7 Kgs)	9.50" (241 mm)	30.1 lbs (13.7 Kgs)
8" 200	8.625" (219.1 mm)	56.00" (1422 mm)	217.2 lbs (98.7 Kgs)	35.75" (908 mm)	157.7 lbs (71.5 Kgs)	28.00" (711 mm)	127.8 lbs (58.0 Kgs)	21.00" (533 mm)	97.9 lbs (44.4 Kgs)	17.50" (445 mm)	82.9 lbs (37.6 Kgs)	12.75" (324 mm)	60.5 lbs (27.4 Kgs)
10" 250	10.750" (273.1 mm)	70.00" (1778 mm)	384.9 lbs (174.9 Kgs)	44.75" (1137 mm)	279.4 lbs (126.7 Kgs)	35.00" (889 mm)	226.4 lbs (102.7 Kgs)	26.00" (660 mm)	173.4 lbs (78.7 Kgs)	22.00" (559 mm)	146.9 lbs (66.6 Kgs)	16.00" (406 mm)	107.2 lbs (48.6 Kgs)
12" 300	12.750" (323.9 mm)	84.00" (2134 mm)	565.8 lbs (257.2 Kgs)	53.50" (1359 mm)	410.5 lbs (186.2 Kgs)	41.75" (1060 mm)	332.7 lbs (150.9 Kgs)	31.25" (794 mm)	254.8 lbs (115.6 Kgs)	26.25" (667 mm)	215.9 lbs (97.9 Kgs)	19.00" (483 mm)	157.5 lbs (71.4 Kgs)
14" 350	14.000" (355.6 mm)	96.00" (2438 mm)	708.4 lbs (322.0 Kgs)	62.50" (1588 mm)	527.3 lbs (239.2 Kgs)	48.75" (1238 mm)	427.3 lbs (193.8 Kgs)	36.50" (927 mm)	327.3 lbs (148.5 Kgs)	30.75" (781 mm)	277.3 lbs (125.8 Kgs)	22.25" (565 mm)	202.3 lbs (91.8 Kgs)
16" 400	16.000" (406.4 mm)	108.00" (2743 mm)	910.6 lbs (413.9 Kgs)	71.50" (1816 mm)	691.1 lbs (313.5 Kgs)	55.75" (1416 mm)	560.1 lbs (254.1 Kgs)	41.75" (1060 mm)	429.0 lbs (194.6 Kgs)	35.25" (895 mm)	363.5 lbs (164.9 Kgs)	25.50" (648 mm)	265.2 lbs (120.3 Kgs)
18" 450	18.000" (457.2 mm)	120.00" (3048 mm)	1137.4 lbs (517.0 Kgs)	80.50" (2045 mm)	877.1 lbs (397.8 Kgs)	62.75" (1594 mm)	710.7 lbs (322.4 Kgs)	47.00" (1194 mm)	544.4 lbs (246.9 Kgs)	39.50" (1003 mm)	461.3 lbs (209.2 Kgs)	28.75" (730 mm)	336.5 lbs (152.6 Kgs)
20" 500	20.000" (508.0 mm)	132.00" (3353 mm)	1390.4 lbs (632.0 Kgs)	89.25" (2267 mm)	1085.1 lbs (492.2 Kgs)	69.75" (1772 mm)	879.3 lbs (398.8 Kgs)	52.25" (1327 mm)	673.5 lbs (305.5 Kgs)	44.00" (1118 mm)	570.7 lbs (258.9 Kgs)	31.75" (806 mm)	416.3 lbs (188.8 Kgs)
24" 600	24.000" (609.6 mm)	156.00" (3962 mm)	1972.1 lbs (896.4 Kgs)	107.25" (2724 mm)	1567.5 lbs (711 Kgs)	83.75" (2127 mm)	1270.3 lbs (576.2 Kgs)	62.50" (1588 mm)	973.0 lbs (441.3 Kgs)	52.34" (1329 mm)	824.4 lbs (373.9 Kgs)	38.25" (972 mm)	601.4 lbs (272.8 Kgs)

10EP 90° EP elbow
11EP 45° EP elbow
20EP EP tee
35EP EP cross



Shurjoint offers a variety of fittings with extra heavy (Sch. 80) wall thickness and "EP" cut grooves available for use with XH-70EP couplings. These fittings must be used with XH-70EP couplings in high pressure systems where the system pressure exceeds the published ratings for XH-1000 or Model 7707 couplings.

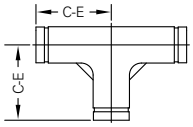
dimensions

		#10EP 90° elbows		#11EP 45° elbows		#20EP tee		#35EP cross	
nom. size	**pipe O.D.**	**C-E**	**weight**	**C-E**	**weight**	**C-E**	**weight**	**C-E**	**weight**
2" 50	2.375" (60.3 mm)	3.25" (83 mm)	2.5 lbs (1.1 Kgs)	2.00" (51 mm)	1.8 lbs (0.8 Kgs)	3.25" (83 mm)	4.2 lbs (1.9 Kgs)	3.25" (83 mm)	3.9 lbs (1.8 Kgs)
2½" 65	2.875" (73.0 mm)	3.75" (95 mm)	5.0 lbs (2.3 Kgs)	2.25" * (57 mm)	2.9 lbs (1.3 Kgs)	3.75" * (95 mm)	7.9 lbs (3.6 Kgs)	3.75" * (95 mm)	6.6 lbs (3.0 Kgs)
3" 80	3.500" (88.9 mm)	4.25" (108 mm)	6.0 lbs (2.7 Kgs)	2.50" * (64 mm)	4.3 lbs (1.9 Kgs)	4.25" * (108 mm)	16.0 lbs (7.3 Kgs)	4.25" * (108 mm)	14.2 lbs (6.4 Kgs)
4" 100	4.500" (114.3 mm)	5.00" (127 mm)	10.3 lbs (4.7 Kgs)	3.00" * (76 mm)	8.5 lbs (3.9 Kgs)	5.00" * (127 mm)	23.5 lbs (10.7 Kgs)	5.00" * (127 mm)	15.8 lbs (7.2 Kgs)
6" 150	6.625" (168.3 mm)	6.50" (165 mm)	27.2 lbs (12.3 Kgs)	3.50" * (89 mm)	16.5 lbs (7.5 Kgs)	6.50" * (165 mm)	27.0 lbs (12.2 Kgs)	6.50" * (165 mm)	46.0 lbs (20.9 Kgs)

*Non-standard/stock items may require longer lead time.

22EP header tee





22EP

The Shurjoint Model 22EP Header Tees are specifically designed for use in oilfield production headers where the top (test) line is 2" (50 mm) and the bottom production line is 3" (80 mm) or 4" (100 mm).

dimensions

fitting size mated C to E		#22EP header tee	
nom. size	**pipe O.D.**	**C-E**	**weight**
2 to 3" 50 to 80	2.375" (60.3 mm)	4.25" (108 mm)	3.4 lbs (1.5 Kgs)
2 to 4" 50 to 100	2.875" (73.0 mm)	5.00" (127 mm)	4.1 lbs (1.9 Kgs)





section 3

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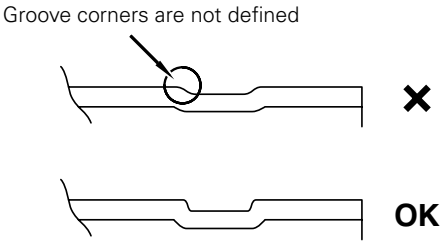
pressure performance data 139

stainless steel series



caution: If the same roll-set that has been used for carbon steel pipe is used on stainless steel pipe, rust or scale may be transferred to the stainless steel pipe during processing of the groove. Thus we recommend the use of a separate roll set specifically for use with stainless steel pipe. Also use caution to keep roll grooved stainless steel pipe dry prior to installation.

Shurjoint offers a full range of stainless steel grooved mechanical couplings in CF8 (304) and CF8M (316) for general service applications and in specialty alloys for applications including reverse osmosis and desalination systems. Grooved fittings are available in sizes from 1" (25 mm) to 24" (600 mm) produced in a combination of investment castings and wrought stainless.



pressure ratings of stainless steel couplings

The design pressure rating of Shurjoint stainless steel grooved couplings follows Class 150 and is based on roll grooved Sch. 10S pipe. Pressure ratings will vary depending on the type of pipe used and grooves processed. See page 101 Performance Data Sheet for pressure ratings (CWP) when used with other pipe schedules and cut-grooved pipe.

Shurjoint ductile iron couplings can be used in conjunction with stainless steel pipe, depending on the application, as the flow media does not come in direct contact with coupling housings but rather only the gasket. See page 47 for performance data.

Stainless steel pipe in general is more difficult to groove than carbon steel pipe, as it is more difficult to achieve defined groove corners on stainless pipe. Grooves that are not defined and have too much of a radius could result in joint failure. Care must be taken to process grooves as defined as possible. For this reason, roll-groove machine manufacturers offer a variety of roll sets depending on the pipe material and wall thickness being grooved. Always select the correct roll set for the pipe being grooved.

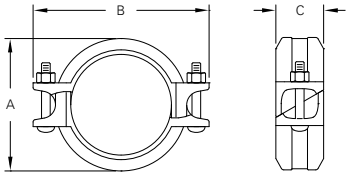
stainless steel casting specifications

grade (UNS)	CF8 J92600	CF8M J92900	CK3MCuN J93254	2A, CE8MN J93345	4A, CD3MN J92205	5A, CE3MN J93404
composition, % (max. except where range is given)						
carbon	0.08	0.08	0.025	0.08	0.03	0.03
manganese	1.50	1.50	1.20	1.00	1.50	1.50
silicon	2.00	1.50	1.00	1.50	1.00	1.00
sulfur	0.040	0.040	0.010	0.040	0.020	0.040
phosphorus	0.040	0.040	0.045	0.040	0.040	0.040
chromium	18.0-21.0	18.0-21.0	19.5-20.5	22.5-25.5	21.0-23.5	24.0-26.0
nickel	8.0-11.0	9.0-12.0	17.5-19.5	8.0-11.0	4.5-6.5	6.0-8.0
molybdenum	0.50	2.0-3.0	6.0-7.0	3.0-4.5	2.5-3.5	4.0-5.0
nitrogen			0.18-0.24	0.10-0.30	0.10-0.30	0.10-0.30
copper			0.50-1.00		1.00	
tensile requirements, min.						
tensile strength, ksi (MPa)	70 (485)	70 (485)	80 (550)	95 (655)	90 (620)	100 (690)
yield strength, ksi (MPa)	30 (205)	30 (205)	38 (260)	65 (450)	60 (415)	75 (515)
elongation, %	35	30	35	25	25	18
ASTM standards	A351/ A743/A744	A351/A743/A744	A351/A743/A744	A890/A351	A890	A890
wrought equivalent grade	304	316	254SMO*	45D*	2205	SAF 2507*

* 254SMO is a registered trademark of AvestaPolarit AB, 45D is a registered trademark of ESCO Corporation and SAF 2507 is a registered trademark of AB Sandvik Steel.

SS-5 stainless steel rigid coupling
angle-pad design





The Shurjoint Model SS-5 is available with a standard “C” shaped or *GapSeal* gasket in a variety of grades to meet your specific service requirements.

The Shurjoint Model SS-5 is an angle-pad design stainless steel coupling for use with Sch. 5S, Sch. 10S or Sch. 40S stainless steel pipe where a rigid connection is desired. 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. With the removal of only one bolt you can make a fast and easy "swing-over" installation. The SS-5 couplings are comprised of two identical CF8 (304) or CF8M (316) housing segments, EPDM gaskets and stainless steel track bolts and heavy duty nuts.

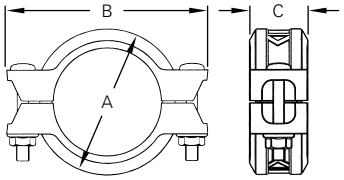
dimensions

nom size.	pipe O.D.	max. working pressure (CWP)**	max. end load (CWP)	axial displacement †	dimensions			bolt		weight
					A	B	C	no.	size	
1¼” 32	1.660” (42.2 mm)	600 psi (42 bar)	1298 lbs (5.77 kN)	0 - 0.05” (0 - 1.2 mm)	2.60” (66 mm)	4.00” (102 mm)	1.81” (46 mm)	2	⅜ x 2⅛”	1.4 lbs (0.6 Kgs)
1½” 40	1.900” (48.3 mm)	600 psi (42 bar)	1700 lbs (7.56 kN)	0 - 0.05” (0 - 1.2 mm)	2.83” (72 mm)	4.29” (109 mm)	1.81” (46 mm)	2	⅜ x 2⅛”	1.5 lbs (0.7 Kgs)
2” 50	2.375” (60.3 mm)	600 psi (42 bar)	2657 lbs (11.82 kN)	0 - 0.07” (0 - 1.7 mm)	3.35” (85 mm)	4.61” (117 mm)	1.85” (47 mm)	2	⅜ x 2¾”	1.7 lbs (0.8 Kgs)
2½” 65	2.875” (73.0 mm)	600 psi (42 bar)	3893 lbs (17.32 kN)	0 - 0.07” (0 - 1.7 mm)	3.86” (98 mm)	5.20” (132 mm)	1.85” (47 mm)	2	⅜ x 2¾”	2.1 lbs (0.9 Kgs)
3” 80	3.500” (88.9 mm)	600 psi (42 bar)	5770 lbs (25.67 kN)	0 - 0.07” (0 - 1.7 mm)	4.45” (113 mm)	5.83” (148 mm)	1.88” (48 mm)	2	⅜ x 2¾”	2.6 lbs (1.2 Kgs)
4” 100	4.500” (114.3 mm)	600 psi (42 bar)	9538 lbs (42.43 kN)	0 - 0.16” (0 - 4.1 mm)	5.75” (146 mm)	7.17” (182 mm)	2.09” (53 mm)	2	⅜ x 2¾”	4.1 lbs (1.9 Kgs)
5” 125	5.563” (141.3 mm)	600 psi (42 bar)	14576 lbs (64.84 kN)	0 - 0.16” (0 - 4.1 mm)	6.89” (175 mm)	9.02” (229 mm)	2.09” (53 mm)	2	½ x 3”	5.7 lbs (2.6 Kgs)
6” 150	6.625” (168.3 mm)	600 psi (42 bar)	20672 lbs (91.96 kN)	0 - 0.16” (0 - 4.1 mm)	8.00” (203 mm)	9.80” (249 mm)	2.13” (54 mm)	2	½ x 3”	6.8 lbs (3.1 Kgs)
8” 200	8.625” (219.1 mm)	600 psi (42 bar)	35038 lbs (155.86 kN)	0 - 0.19” (0 - 4.8 mm)	10.40” (264 mm)	12.99” (330 mm)	2.52” (64 mm)	2	⅝ x 4¾”	13.4 lbs (6.1 Kgs)

**The working pressure shown is based on roll-grooved Sch. 40S pipe. For other pipe schedules and cut-grooved pipe, see page 101.
† 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.

SS-7 stainless steel rigid coupling





note: SS-7 couplings should always be installed so that the coupling bolt pads make metal to metal contact.

caution: The tongue and groove style rigid coupling may allow for rotation when installed on deeper than specified grooves.

The Model SS-7 is a tongue and groove rigid coupling designed for a variety of moderate service pressure applications. The SS-7 is supplied standard in CF8 (304) and CF8M (316) with 304 and 316 bolts and nuts.

dimensions

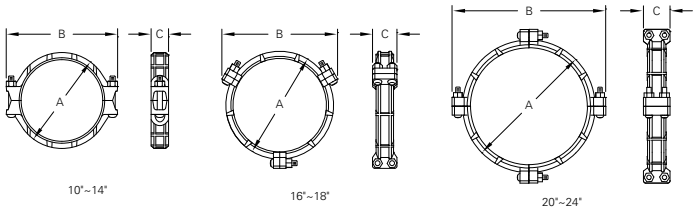
nom size.	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)	axial displacement †	dimensions A	dimensions B	dimensions C	bolt size	weight
1¼" 32	1.660" (42.2 mm)	600 psi (42 bar)	1298 lbs (5.77 kN)	0-0.06" (0-1.6 mm)	2.68" (68 mm)	4.13" (105 mm)	1.75" (45 mm)	⅜ x 2⅛"	1.5 lbs (0.7 Kgs)
1½" 40	1.900" (48.3 mm)	600 psi (42 bar)	1700 lbs (7.56 kN)	0-0.06" (0-1.6 mm)	2.91" (74 mm)	4.25" (108 mm)	1.81" (46 mm)	⅜ x 2⅛"	1.8 lbs (0.8 Kgs)
2" 50	2.375" (60.3 mm)	600 psi (42 bar)	2657 lbs (11.82 kN)	0-0.06" (0-1.6 mm)	3.39" (86 mm)	4.92" (125 mm)	1.81" (46 mm)	⅜ x 2⅛"	2.0 lbs (0.9 Kgs)
2½" 65	2.875" (73.0 mm)	600 psi (42 bar)	3893 lbs (17.32 kN)	0-0.06" (0-1.6 mm)	3.94" (100 mm)	5.43" (138 mm)	1.81" (46 mm)	⅜ x 2⅛"	1.8 lbs (0.8 Kgs)
76.1 mm	3.000" (76.1 mm)	600 psi (42 bar)	4239 lbs (18.86 kN)	0-0.06" (0-1.6 mm)	3.94" (100 mm)	5.63" (143 mm)	1.81" (46 mm)	⅜ x 2⅛"	2.2 lbs (1.0 Kgs)
3" 80	3.500" (88.9 mm)	600 psi (42 bar)	5770 lbs (25.67 kN)	0-0.06" (0-1.6 mm)	4.41" (112 mm)	6.30" (160 mm)	1.81" (46 mm)	⅜ x 2⅛"	2.6 lbs (1.2 Kgs)
4" 100	4.500" (114.3 mm)	600 psi (42 bar)	9538 lbs (42.43 kN)	0-0.13" (0-3.2 mm)	5.63" (143 mm)	8.15" (207 mm)	2.00" (51 mm)	½ x 3"	4.6 lbs (2.1 Kgs)
139.7 mm	5.500" (139.7 mm)	600 psi (42 bar)	14248 lbs (63.38 kN)	0-0.13" (0-3.2 mm)	6.77" (172 mm)	9.09" (231 mm)	2.00" (51 mm)	½ x 3"	6.2 lbs (2.8 Kgs)
5" 125	5.563" (141.3 mm)	600 psi (42 bar)	14576 lbs (64.84 kN)	0-0.13" (0-3.2 mm)	6.73" (171 mm)	9.29" (236 mm)	2.00" (51 mm)	½ x 3"	5.9 lbs (2.7 Kgs)
165.1 mm	6.500" (165.1 mm)	600 psi (42 bar)	19900 lbs (88.52 kN)	0-0.13" (0-3.2 mm)	7.68" (195 mm)	10.04" (255 mm)	2.09" (53 mm)	½ x 3"	6.8 lbs (3.1 Kgs)
6" 150	6.625" (168.3 mm)	600 psi (42 bar)	20672 lbs (91.96 kN)	0-0.13" (0-3.2 mm)	7.91" (201 mm)	10.08" (256 mm)	2.00" (51 mm)	½ x 3"	6.8 lbs (3.1 Kgs)
8" 200	8.625" (219.1 mm)	600 psi (42 bar)	35038 lbs (155.86 kN)	0-0.13" (0-3.2 mm)	10.39" (264 mm)	13.11" (333 mm)	2.44" (62 mm)	⅝ x 3½"	14.1 lbs (6.4 Kgs)
200 JIS	8.516" (216.3 mm)	600 psi (42 bar)	34158 lbs (151.95 kN)	0-0.13" (0-3.2 mm)	10.12" (257 mm)	13.62" (346 mm)	2.44" (62 mm)	¾ x 4¾"	13.2 lbs (6.0 Kgs)

* The working pressure shown is based on roll-grooved Sch. 40S pipe. For other pipe schedules, see page 101.

† 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.

SS-7X stainless steel rigid coupling





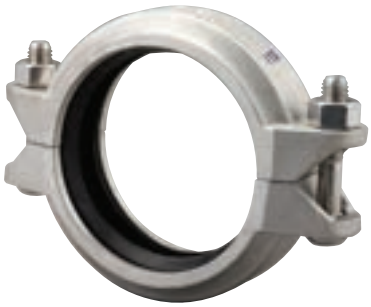
The Model SS-7X is a tongue and groove rigid coupling designed to provide a rigid joint for stainless steel pipe in sizes 10" through 24". The SS-7X is supplied standard in CF8 (304) and CF8M (316) with 304 and 316 bolts and nuts. The bolts must be fastened to the required torque for proper installation.

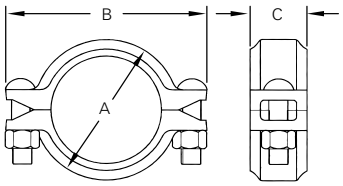
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)	axial displacement †	dimensions A	dimensions B	dimensions C	bolt no.	bolt size	bolt torque	weight
10" 250	10.750" (273.0 mm)	600 psi (42 bar)	54430 lbs (239.87 kN)	0-0.13" (0-3.2 mm)	12.52" (318 mm)	15.98" (406 mm)	2.56" (65 mm)	2	⅞ x 6½"	105 - 175 lbs-ft (145 - 235 Nm)	23.1 lbs (10.5 Kgs)
12" 300	12.750" (323.9 mm)	600 psi (42 bar)	76567 lbs (337.66 kN)	0-0.13" (0-3.2 mm)	14.72" (374 mm)	17.78" (452 mm)	2.56" (65 mm)	2	⅞ x 6½"	105 - 175 lbs-ft (145 - 235 Nm)	23.3 lbs (11.5 kgs)
250 JIS	10.528" (267.4 mm)	600 psi (42 bar)	52205 lbs (230.13 kN)	0-0.13" (0-3.2 mm)	12.44" (316 mm)	16.73" (425 mm)	2.52" (64 mm)	2	⅞ x 6½"	105 - 175 lbs-ft (145 - 235 Nm)	18.7 lbs (8.5 Kgs)
300 JIS	12.539" (318.5 mm)	600 psi (42 bar)	74054 lbs (326.49 kN)	0-0.13" (0-3.2 mm)	14.57" (370 mm)	18.31" (465 mm)	2.52" (64 mm)	2	⅞ x 6½"	105 - 175 lbs-ft (145 - 235 Nm)	21.6 lbs (9.8 Kgs)
14" 350	14.000" (355.6 mm)	400 psi (28 bar)	61544 lbs (277.94 kN)	0-0.13" (0-3.2 mm)	15.63" (397 mm)	19.69" (500 mm)	2.95" (75 mm)	2	⅞ x 6½"	105 - 175 lbs-ft (145 - 235 Nm)	33.0 lbs (15.0 Kgs)
16" 400	16.000" (406.4 mm)	400 (28 bar)	80384 lbs (363.02 kN)	0-0.13" (0-3.2 mm)	18.15" (461 mm)	21.10" (536 mm)	2.95" (75 mm)	6	⅝ x 3½"	50 - 75 lbs-ft (68 - 100 Nm)	42.7 lbs (19.4 Kgs)
18" 450	18.000" (457.2 mm)	350 psi (24 bar)	89019 lbs (393.82 kN)	0-0.13" (0-3.2 mm)	20.24" (514 mm)	23.11" (587 mm)	2.95" (75 mm)	6	⅝ x 3½"	50 - 75 lbs-ft (68 - 100 Nm)	55.0 lbs (25.0 Kgs)
20" 500	20.000" (508.0 mm)	350 psi (24 bar)	109900 lbs (486.19 kN)	0-0.13" (0-3.2 mm)	22.48" (571 mm)	26.34" (669 mm)	3.11" (79 mm)	8	⅝ x 3½"	65 - 150 lbs-ft (85 - 200 Nm)	72.8 lbs (33.1 Kgs)
22" 550	22.000" (558.8 mm)	300 psi (20 bar)	113982 lbs (490.24 kN)	0-0.13" (0-3.2 mm)	24.49" (622 mm)	28.35" (720 mm)	3.11" (79 mm)	8	¾ x 4¾"	65 - 150 lbs-ft (85 - 200 Nm)	72.6 lbs (33.0 Kgs)
24" 600	24.000" (609.6 mm)	300 psi (20 bar)	135648 lbs (583.43 kN)	0-0.13" (0-3.2 mm)	26.47" (673 mm)	30.35" (771 mm)	3.11" (79 mm)	8	¾ x 4¾"	65 - 150 lbs-ft (85 - 200 Nm)	76.3 lbs (34.7 Kgs)

* The working pressure shown is based on roll-grooved Sch. 40S pipe. For other pipe schedules, see page 101.
† 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.

SS-8 stainless steel flexible coupling





The Model SS-8 is a flexible coupling designed for a variety of general service and specialty applications. The SS-8 is supplied standard in CF8 (304) and CF8M (316) with 304 or 316 bolts and nuts. SS-8 couplings should always be installed so that the coupling bolt pads make metal to metal contact.

dimensions

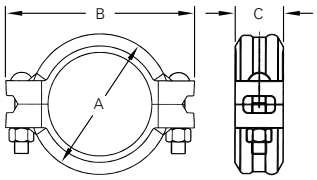
nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)	axial displacement †	dimensions A	dimensions B	dimensions C	deflection degree †	bolt size	weight
1" 25	1.315" (33.4 mm)	500 psi (35 bar)	679 lbs (3.02 kN)	0 - 0.06" (0 - 1.6 mm)	2.19" (55.7 mm)	3.45" (87.5 mm)	1.73" (44.0 mm)	2° - 45'	5/16 x 1½"	1.1 lbs (0.5 Kgs)
1¼" 32	1.660" (42.2 mm)	500 psi (35 bar)	1082 lbs (4.81 kN)	0 - 0.06" (0 - 1.6 mm)	2.54" (64.6 mm)	3.85" (97.8 mm)	1.73" (44.0 mm)	2° - 10'	5/16 x 1½"	1.1 lbs (0.5 Kgs)
1½" 40	1.900" (48.3 mm)	500 psi (35 bar)	1417 lbs (6.30 kN)	0 - 0.06" (0 - 1.6 mm)	2.79" (70.8 mm)	4.14" (105.1 mm)	1.73" (44.0 mm)	1° - 54'	5/16 x 1½"	1.1 lbs (0.5 Kgs)
2" 50	2.375" (60.3 mm)	500 psi (35 bar)	2214 lbs (9.85 kN)	0 - 0.06" (0 - 1.6 mm)	3.28" (83.0 mm)	4.88" (124.0 mm)	1.73" (44.0 mm)	1° - 31'	⅜ x 2⅛"	1.5 lbs (0.7 Kgs)
2½" 65	2.875" (73.0 mm)	500 psi (35 bar)	3244 lbs (14.43 kN)	0 - 0.06" (0 - 1.6 mm)	3.79" (96.2 mm)	5.51" (139.9 mm)	1.73" (44.0 mm)	1° - 15'	⅜ x 2⅛"	1.8 lbs (0.8 Kgs)
76.1 mm	3.000" (76.1 mm)	500 psi (35 bar)	3533 lbs (15.71 kN)	0 - 0.06" (0 - 1.6 mm)	3.91" (99.0 mm)	5.71" (145.0 mm)	1.73" (44.0 mm)	1° - 12'	⅜ x 2⅛"	1.8 lbs (0.8 Kgs)
3" 80	3.500" (88.9 mm)	500 psi (35 bar)	4808 lbs (21.39 kN)	0 - 0.06" (0 - 1.6 mm)	4.39" (111.0 mm)	6.18" (157.0 mm)	1.73" (44.0 mm)	1° - 02'	⅜ x 2⅛"	2.2 lbs (1.0 Kgs)
4" 100	4.500" (114.3 mm)	425 psi (29 bar)	5166 lbs (22.98 kN)	0 - 0.13" (0 - 3.2 mm)	5.62" (143.0 mm)	7.87" (200.0 mm)	1.97" (50.0 mm)	1° - 36'	½ x 3"	3.7 lbs (1.7 Kgs)
139.7 mm	5.500" (139.7 mm)	425 psi (29 bar)	4749 lbs (21.13 kN)	0 - 0.13" (0 - 3.2 mm)	6.73" (171.0 mm)	9.09" (231.0 mm)	1.97" (50.0 mm)	1° - 18'	½ x 3"	4.8 lbs (2.2 Kgs)
5" 125	5.563" (141.3 mm)	425 psi (29 bar)	4859 lbs (21.61 kN)	0 - 0.13" (0 - 3.2 mm)	6.72" (170.8 mm)	8.90" (226.1 mm)	1.97" (50.0 mm)	1° - 18'	½ x 3"	4.8 lbs (2.2 Kgs)
165.1 mm	6.500" (165.1 mm)	425 psi (29 bar)	6633 lbs (29.51 kN)	0 - 0.13" (0 - 3.2 mm)	7.67" (194.0 mm)	9.96" (253.0 mm)	2.09" (53.0 mm)	1° - 07'	½ x 3"	5.9 lbs (2.7 Kgs)
6" 150	6.625" (168.3 mm)	425 psi (29 bar)	6891 lbs (30.65 kN)	0 - 0.13" (0 - 3.2 mm)	7.80" (198.0 mm)	9.96" (253.1 mm)	2.09" (53.0 mm)	1° - 05'	½ x 3"	6.4 lbs (2.9 Kgs)
8" 200	8.625" (219.1 mm)	300 psi (20 bar)	11386 lbs (50.65 kN)	0 - 0.13" (0 - 3.2 mm)	10.04" (255.0 mm)	13.27" (337.0 mm)	2.44" (62.0 mm)	0° - 50'	¾ x 4¾"	14.1 lbs (6.4 Kgs)
200 JIS	8.516" (216.3 mm)	300 psi (20 bar)	11679 lbs (51.95 kN)	0 - 0.13" (0 - 3.2 mm)	10.00" (251.0 mm)	13.62" (346.0 mm)	2.40" (60.0 mm)	0° - 51'	⅝ x 3½"	11.3 lbs (5.1 Kgs)

* The working pressure shown is based on roll-grooved Sch. 40S pipe. For other pipe schedules and cut-grooved pipe, see page 102.

† 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.

SS-8X stainless steel heavy duty flexible coupling





The SS-8X is also available in CF8M (316) with 316 bolts and nuts. Contact Shurjoint for details.

* 254SMO is a registered trademark of AvestaPolarit AB.

The Model SS-8X is designed for high pressure applications including reverse osmosis and desalination systems. The SS-8X is available in stainless steel 304, stainless steel 316, Duplex CD3MN (2205), Super Duplex CE8MN, CE3MN (2507) and 6-Moly stainless steel CK3MCuN (254SMO*). The SS-8X features 316 bolts, washers and Silicon Bronze nuts to help prevent galling during repetitive use.

dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)	axial displacement †	dimensions A	dimensions B	dimensions C	deflection degree †	bolt no.	bolt size	weight
¾" 20	1.050" (26.7 mm)	750 psi (52 bar)	1212 lbs (5.39 kN)	0 - 0.06" (0 - 1.6 mm)	2.20" (56.0 mm)	3.75" (95.0 mm)	1.81" (46.0 mm)	3° - 23'	2	⅜ x 2⅛"	1.5 lbs (0.7 Kgs)
1" 25	1.315" (33.4 mm)	750 psi (52 bar)	1900 lbs (8.45 kN)	0 - 0.06" (0 - 1.6 mm)	2.45" (63.0 mm)	3.91" (99.0 mm)	1.81" (46.0 mm)	2° -45'	2	⅜ x 2⅛"	1.8 lbs (0.8 Kgs)
1¼" 32	1.660" (42.2 mm)	750 psi (52 bar)	3028 lbs (13.47 kN)	0 - 0.06" (0 - 1.6 mm)	2.82" (72.0 mm)	4.37" (111.0 mm)	1.81" (46.0 mm)	2° -10'	2	⅜ x 2⅛"	2.0 lbs (0.9 Kgs)
1½" 40	1.900" (48.3 mm)	750 psi (52 bar)	3967 lbs (17.65 kN)	0 - 0.06" (0 - 1.6 mm)	3.06" (78.0 mm)	4.82" (123.0 mm)	1.81" (46.0 mm)	1° -54'	2	⅜ x 2⅛"	2.2 lbs (1.0 Kgs)
2" 50	2.375" (60.3 mm)	750 psi (52 bar)	6199 lbs (27.58 kN)	0 - 0.06" (0 - 1.6 mm)	3.46" (88.0 mm)	5.28" (134.0 mm)	1.85" (47.0 mm)	1° -31'	2	⅜ x 2⅛"	2.6 lbs (1.2 Kgs)
2½" 65	2.875" (73.0 mm)	750 psi (52 bar)	9084 lbs (40.41 kN)	0 - 0.06" (0 - 1.6 mm)	4.06" (103.0 mm)	6.02" (153.0 mm)	1.85" (47.0 mm)	1° -15'	2	⅜ x 2⅛"	2.9 lbs (1.3 Kgs)
3" 80	3.500" (88.9 mm)	750 psi (52 bar)	13463 lbs (59.89 kN)	0 - 0.06" (0 - 1.6 mm)	4.71" (120.0 mm)	6.74" (171.0 mm)	1.85" (47.0 mm)	1° -02'	2	½ x 3"	4.0 lbs (1.8 Kgs)
4" 100	4.500" (114.3 mm)	750 psi (52 bar)	22255 lbs (99.00 kN)	0 - 0.13" (0 - 3.2 mm)	5.98" (152.0 mm)	7.90" (201.0 mm)	2.03" (52.0 mm)	1° -36'	2	½ x 3"	5.3 lbs (2.4 Kgs)
5" 125	5.563" (141.3 mm)	750 psi (52 bar)	24293 lbs (108.07 kN)	0 - 0.13" (0 - 3.2 mm)	7.13" (181.0 mm)	9.80" (249.0 mm)	2.09" (53.0 mm)	1° -18'	2	⅝ x 3½"	7.7 lbs (3.5 Kgs)
6" 150	6.625" (168.3 mm)	500 psi (35 bar)	34454 lbs (153.27 kN)	0 - 0.13" (0 - 3.2 mm)	8.19" (208.0 mm)	10.85" (276.0 mm)	2.09" (53.0 mm)	1° -05'	2	⅝ x 3½"	8.8 lbs (4.0 Kgs)
8" 200	8.625" (219.1 mm)	425 psi (29 bar)	58397 lbs (259.77 kN)	0 - 0.13" (0 - 3.2 mm)	10.53" (267.0 mm)	13.43" (341.0 mm)	2.44" (62.0 mm)	0° -50'	2	¾ x 4¾"	15.0 lbs (6.8 Kgs)
200 JIS	8.516" (216.3 mm)	425 psi (29 bar)	56930 lbs (253.25 kN)	0 - 0.13" (0 - 3.2 mm)	10.39" (264.0 mm)	13.31" (338.0 mm)	2.44" (62.0 mm)	0° -51'	2	¾ x 4¾"	14.3 lbs (6.5 Kgs)

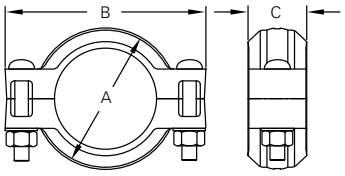
Working pressure ratings are based upon generally accepted pressure piping design standards and testing in accordance with ASME Section VIII Division 1 pressure vessel test methods.

* The working pressure shown is based on cut-grooved Sch. 40S or 80S pipe. For other pipe schedules and roll-grooved pipe, see page 102.

† Axial Displacement and deflection figures are for roll grooved standard weight stainless 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.

SS-1200 stainless steel high pressure flexible coupling





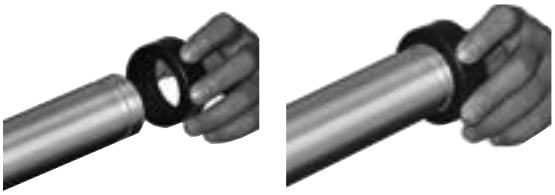
The SS-1200 features 316 bolts, washers and Silicon Bronze nuts to help prevent galling during repetitive use.
* 254SMO is a registered trademark of AvestaPolarit AB.

The Model SS-1200 is designed for high pressure applications including reverse osmosis, desalination and other specialty systems. The SS-1200 is available in strong and anti-corrosive alloys of Duplex CD3MN (2205), Super Duplex CE8MN, CE3MN (2507) and 6-Moly stainless steel CK3MCuN (254SMO*).

Shurjoint Fast-fit™ gasket

the Shurjoint Fast-fit™ gasket has been designed and engineered for easier and faster installations. The pipe-end friendly design eliminates struggling to stretch the gasket over the pipe ends and the Fast-fit™ gasket also features Shurjoint's Gap-Seal technology, which seals the gap between the pipe ends and eliminates stagnant water pockets within the gasket cavity. The Fast-fit™ gasket is UL classified in accordance with NSF/ANSI 61 and NSF/ANSI 372 for potable water (Cold Water +86°F / 30°C and Hot Water +180°F / +82°C).

note: Always use the factory supplied Shurjoint Fast-fit™ gasket. Performance standards do not support the use of a standard gasket in the SS-1200 coupling.



caution: Always use the Shurjoint Fast-fit™ gasket. Do not use a standard gasket with the SS-1200 coupling.

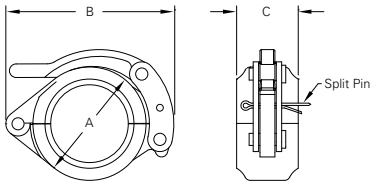
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)	axial displacement †	dimensions A	dimensions B	dimensions C	deflection degree †	bolt no.	bolt size	weight
1" 25	1.315" (33.4 mm)	1200 psi (83 bar)	1630 lbs (7.25 kN)	0 - 0.06" (0 - 1.6 mm)	2.36" (60 mm)	3.90" (99 mm)	1.81" (46 mm)	2° - 45'	2	⅜ x 2⅛"	1.21 lbs (0.55 Kgs)
1¼" 32	1.660" (42.2 mm)	1200 psi (83 bar)	2595 lbs (11.55 kN)	0 - 0.06" (0 - 1.6 mm)	2.76" (70 mm)	4.17" (106 mm)	1.81" (46 mm)	2° - 10'	2	⅜ x 2⅛"	1.39 lbs (0.63 Kgs)
1½" 40	1.900" (48.3 mm)	1200 psi (83 bar)	3400 lbs (15.13 kN)	0 - 0.06" (0 - 1.6 mm)	2.99" (76 mm)	4.45" (113 mm)	1.81" (46 mm)	1° - 54'	2	⅜ x 2⅛"	1.54 lbs (0.70 Kgs)
2" 50	2.375" (60.3 mm)	1200 psi (83 bar)	5315 lbs (23.64 kN)	0 - 0.06" (0 - 1.6 mm)	3.50" (89 mm)	5.31" (135 mm)	1.85" (47 mm)	1° - 31'	2	½ x 3"	2.29 lbs (1.04 Kgs)
76.1 mm	3.000" (76.1 mm)	1200 psi (83 bar)	8470 lbs (38.19 kN)	0 - 0.06" (0 - 1.6 mm)	4.01" (102 mm)	6.04" (153 mm)	1.91" (49 mm)	1° - 15'	2	½ x 3"	3.04 lbs (1.38 Kgs)
3" 80	3.500" (88.9 mm)	1200 psi (83 bar)	11540 lbs (51.33 kN)	0 - 0.06" (0 - 1.6 mm)	4.69" (119 mm)	6.61" (168 mm)	1.85" (49 mm)	1° - 02'	2	½ x 3"	3.41 lbs (1.55 Kgs)
4" 100	4.500" (114.3 mm)	1200 psi (83 bar)	19075 lbs (84.86 kN)	0 - 0.13" (0 - 3.2 mm)	5.79" (147 mm)	7.80" (198 mm)	2.03" (52 mm)	1° - 36'	2	½ x 3"	4.69 lbs (2.13 Kgs)
6" 150	6.625" (168.3 mm)	1200 psi (83 bar)	41346 lbs (183.92 kN)	0 - 0.13" (0 - 3.2 mm)	7.95" (202 mm)	10.71" (272 mm)	2.05" (52 mm)	1° - 05'	2	⅝ x 3½"	7.82 lbs (3.55 Kgs)
8" 200	8.625" (219.1 mm)	1200 psi (83 bar)	68316 lbs (30388 kN)	0 - 0.13" (0 - 3.2 mm)	10.23" (260 mm)	14.13" (359 mm)	2.44" (62 mm)	0° - 50'	2	⅞ x 5⅛"	15.55 lbs (7.06 Kgs)

Working pressure ratings are based upon generally accepted pressure piping design standards and testing in accordance with ASME Section VIII Division 1 pressure vessel test methods.
** The working pressure shown is based on cut-grooved Sch. 40S or 80S pipe only. Burst test pressures are minimum 2 times the maximum working pressures.
† 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.

SS-28 stainless steel hinged lever coupling





standard gasket: Grade “E” EPDM or Grade “T” Nitrile.
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.

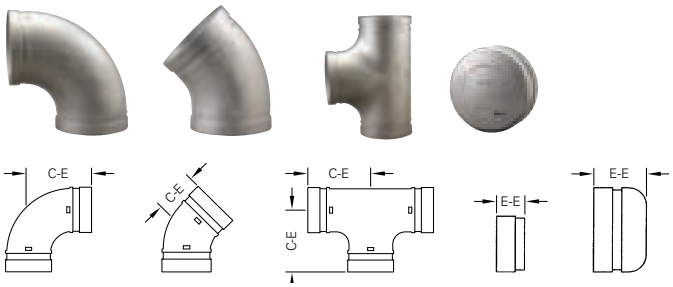
The Model SS-28 Hinged Grooved Coupling is designed for quick connect and disconnect services. The housing segments are hinged with a lever handle for easy assembly. Use of the split pin can prevent the accidental opening of the coupling. The Model SS-28 can be used in a wide variety of applications with standard roll- or cut- grooved pipe. Housings 1½”- 4” (40 mm - 100 mm) feature a smooth outer surface, housings 5”- 12” (125 mm - 300 mm) feature a cross-ribbed design for added strength. Available standard in CF8 (304) or CF8M (316).

dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)	axial displacement †	dimensions			deflection degree †	weight
					A	B	C		
1½” * 40	1.900” (48.3 mm)	300 psi (20 bar)	1700 lbs (7.56 kN)	0 – 0.06” (0 – 1.6 mm)	2.95” (75 mm)	4.65” (118 mm)	1.85” (47 mm)	3º - 48′	2.2 lbs (1.0 Kgs)
2” 50	2.375” (60.3 mm)	300 psi (20 bar)	2657 lbs (11.82 kN)	0 – 0.06” (0 – 1.6 mm)	3.39” (86 mm)	4.76” (121 mm)	1.89” (48 mm)	3º - 31′	2.4 lbs (1.1 Kgs)
3” 80	3.500” (88.9 mm)	300 psi (20 bar)	5770 lbs (25.67 kN)	0 – 0.06” (0 – 1.6 mm)	4.69” (119 mm)	6.42” (163 mm)	1.89” (48 mm)	2º - 24′	4.0 lbs (1.8 Kgs)
4” 100	4.500” (114.3 mm)	300 psi (20 bar)	9538 lbs (42.43 kN)	0 – 0.13” (0 – 3.2 mm)	6.50” (165 mm)	8.07” (205 mm)	2.05” (52 mm)	3º - 12′	5.9 lbs (2.7 Kgs)
5” 125	5.563” (141.3 mm)	200 psi (14 bar)	9717 lbs (43.23 kN)	0 – 0.13” (0 – 3.2 mm)	7.44” (189 mm)	9.96” (253 mm)	2.05” (52 mm)	2º - 36′	10.8 lbs (4.9 Kgs)
6” 150	6.625” (168.3 mm)	200 psi (14 bar)	13782 lbs (61.31 kN)	0 – 0.13” (0 – 3.2 mm)	8.50” (216 mm)	11.06” (281 mm)	2.05” (52 mm)	2º - 10′	12.8 lbs (5.8 Kgs)

** The working pressure shown is based on roll-grooved Sch. 40S pipe. For other pipe schedules and cut-grooved pipe, see page 102.
† 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.
* Non-standard/stock items may require longer lead time.

SS-10 90° elbow
SS-11 45° elbow
SS-20 tee
SS-60 cap



All cast fittings feature full flow characteristics and are designed to the same C - E dimensions of standard ductile iron grooved fittings.
* 254SMO is a registered trademark of AvestaPolarit AB.

The Shurjoint Model SS-10, SS-11, SS-20 and SS-60 stainless steel grooved fittings are investment cast in sizes 1" - 12". These fittings are supplied in ASTM A351 or A743 austenitic grades CF8 (304) and CF8M (316). Materials are in compliance with NSF/ANSI 372 for potable water service applications. In addition fittings are also available on request in CF3M (316L), 316Ti, 2205 Duplex, 2507 Super Duplex and ASTM CK-3MCuN (UNS J93245) the cast equivalent to 254SMO* to meet your specific service requirements.

dimensions

nom. size	pipe O.D.	SS-10 90° elbow		SS-11 45° elbow		SS-20 tee		SS-60 cap	
		C-E	weight	C-E	weight	C-E	weight	E-E	weight
1" 25	1.315" (33.4 mm)	2.25" (57 mm)	0.7 lbs (0.3 Kgs)	1.75" (45 mm)	0.4 lbs (0.2 Kgs)	2.25" (57 mm)	0.9 lbs (0.4 Kgs)	0.94" (24 mm)	0.2 lbs (0.1 Kgs)
1¼" 32	1.660" (42.2 mm)	2.75" (70 mm)	0.9 lbs (0.4 Kgs)	1.75" (45 mm)	0.7 lbs (0.3 Kgs)	2.75" (70 mm)	1.5 lbs (0.7 Kgs)	0.94" (24 mm)	0.2 lbs (0.1 Kgs)
1½" 40	1.900" (48.3 mm)	2.75" (70 mm)	0.9 lbs (0.4 Kgs)	1.75" (45 mm)	0.9 lbs (0.4 Kgs)	2.75" (70 mm)	1.8 lbs (0.8 Kgs)	0.94" (24 mm)	0.4 lbs (0.2 Kgs)
2" 50	2.375" (60.3 mm)	3.25" (83 mm)	1.3 lbs (0.6 Kgs)	2.00" (51 mm)	1.1 lbs (0.5 Kgs)	3.25" (83 mm)	2.4 lbs (1.1 Kgs)	0.94" (24 mm)	0.4 lbs (0.2 Kgs)
2½" 65	2.875" (73.0 mm)	3.75" (95 mm)	3.1 lbs (1.4 Kgs)	2.10" (54 mm)	2.2 lbs (1.0 Kgs)	3.75" (95 mm)	5.5 lbs (2.5 Kgs)	1.75" (45 mm)	0.9 lbs (0.4 Kgs)
76.1 mm	3.000" (76.1 mm)	3.75" (95 mm)	3.5 lbs (1.6 Kgs)	2.25" (57 mm)	2.2 lbs (1.0 Kgs)	3.75" (95 mm)	5.5 lbs (2.5 Kgs)	1.75" (45 mm)	0.9 lbs (0.4 Kgs)
3" 80	3.500" (88.9 mm)	4.25" (108 mm)	2.9 lbs (1.3 Kgs)	2.50" (64 mm)	2.2 lbs (1.0 Kgs)	4.25" (108 mm)	4.6 lbs (2.1 Kgs)	2.00" (51 mm)	1.5 lbs (0.7 Kgs)
4" 100	4.500" (114.3 mm)	5.00" (127 mm)	4.8 lbs (2.2 Kgs)	3.00" (76 mm)	3.5 lbs (1.6 Kgs)	5.00" (127 mm)	7.5 lbs (3.4 Kgs)	2.00" (51 mm)	2.0 lbs (0.9 Kgs)
139.7 mm	5.500" (139.7 mm)	5.50" (140 mm)	8.6 lbs (3.9 Kgs)	3.25" (83 mm)	6.2 lbs (2.8 Kgs)	5.50" (140 mm)	12.3 lbs (5.6 Kgs)	2.38" (60 mm)	3.5 lbs (1.6 Kgs)
5" 125	5.563" (141.3 mm)	5.50" (140 mm)	8.6 lbs (3.9 Kgs)	3.25" (83 mm)	6.4 lbs (2.9 Kgs)	5.50" (140 mm)	12.8 lbs (5.8 Kgs)	2.38" (60 mm)	3.3 lbs (1.5 Kgs)
165.1 mm	6.500" (165.1 mm)	6.50" (165 mm)	13.6 lbs (6.2 Kgs)	3.50 (89 mm)	9.0 lbs (4.1 Kgs)	6.50" (165 mm)	19.8 lbs (9.0 Kgs)	3.00" (76 mm)	5.7 lbs (2.6 Kgs)
6" 150	6.625" (168.3 mm)	6.50" (165 mm)	14.3 lbs (6.5 Kgs)	3.50 (89 mm)	9.2 lbs (4.2 Kgs)	6.50" (165 mm)	21.3 lbs (9.7 Kgs)	3.00" (76 mm)	5.3 lbs (2.4 Kgs)
8" 200	8.625" (219.1 mm)	7.75" (197 mm)	23.5 lbs (10.7 Kgs)	4.25 (108 mm)	15.6 lbs (7.1 Kgs)	7.75" (197 mm)	41.4 lbs (18.8 Kgs)	3.50" (90 mm)	11.4 lbs (5.2 Kgs)

graph continues on to next page

nom. size	pipe O.D.	SS-10 90° elbow C-E	SS-10 90° elbow weight	SS-11 45° elbow C-E	SS-11 45° elbow weight	SS-20 tee C-E	SS-20 tee weight	SS-60 cap E-E	SS-60 cap weight
10"	10.750"	---	---	6.25"	37.0 lbs	---	---	5.00"	22.4 lbs
250	(273.0 mm)	---	---	(159 mm)	(16.8 Kgs)	---	---	(127 mm)	(10.2 Kgs)
12"	12.750"	---	---	---	---	---	---	6.00"	32.3 lbs
300	(323.9 mm)	---	---	---	---	---	---	(154 mm)	(14.7 Kgs)
200 JIS	8.516"	7.75"	24.6 lbs	4.25"	15.6 lbs	7.75"	30.4 lbs	3.50"	9.2 lbs
	(216.3 mm)	(197 mm)	(11.2 Kgs)	(108 mm)	(7.1 Kgs)	(197 mm)	(13.8 Kgs)	(90 mm)	(4.2 Kgs)
250 JIS	10.528"	---	---	6.25"	37.0 lbs	---	---	5.00"	19.6 lbs
	(267.4 mm)	---	---	(159 mm)	(16.8 Kgs)	---	---	(127 mm)	(8.9 Kgs)
300 JIS	12.539"	---	---	---	---	---	---	6.00"	29.7 lbs
	(318.5 mm)	---	---	---	---	---	---	(154 mm)	(13.5 Kgs)

SS-21 reducing tee
SS-50 concentric reducer



The Shurjoint Model SS-21 and SS-50 stainless steel fittings are investment cast in sizes to 8" and sand cast or wrought in sizes 10" - 24".

Materials are in compliance with NSF/ANSI 372 for potable water service applications.

dimensions

		SS-21 reducing tee			SS-50 concentric reducer				SS-21 reducing tee			SS-50 concentric reducer	
nom. size	**pipe O.D.**	**C-E**	**C-B**	**weight**	**E-E**	**weight**	**nom. size**	**pipe O.D.**	**C-E**	**C-B**	**weight**	**E-E**	**weight**
1¼ x 1" 32 x 25	1.660 x 1.315" (42.2 x 33.4 mm)	2.76" (70 mm)	2.76" (70 mm)	1.2 lbs (0.6 Kgs)	2.50" (64 mm)	0.5 lbs (0.2 Kgs)	139.7 mm x 100	5.500 x 4.500" (139.7 x 114.3 mm)	5.50" (140 mm)	5.50" (140 mm)	11.2 lbs (5.1 Kgs)	3.50" (89 mm)	3.5 lbs (1.6 Kgs)
1½ x 1" 40 x 25	1.900 x 1.315" (48.3 x 33.4 mm)	2.76" (70 mm)	2.76" (70 mm)	1.3 lbs (0.6 Kgs)	2.50" (64 mm)	0.6 lbs (0.3 Kgs)	5 x 4" 125 x 100	5.563 x 4.500" (141.3 x 114.3 mm)	5.50" (140 mm)	5.50" (140 mm)	11.2 lbs (5.1 Kgs)	3.50" (89 mm)	3.5 lbs (1.6 Kgs)
1½ x 1¼" 40 x 32	1.900 x 1.660" (48.3 x 42.2 mm)	2.76" (70 mm)	2.76" (70 mm)	1.3 lbs (0.6 Kgs)	2.50" (64 mm)	0.7 lbs (0.3 Kgs)	165.1 mm x 80	6.500 x 3.500" (165.1 x 88.9 mm)	5.91" (150 mm)	5.91" (150 mm)	15.6 lbs (7.1 Kgs)	4.00" (102 mm)	5.1 lbs (2.3 Kgs)
2 x 1" 50 x 25	2.375 x 1.315" (60.3 x 33.4 mm)	2.76" (70 mm)	2.76" (70 mm)	1.5 lbs (0.7 Kgs)	2.50" (64 mm)	0.8 lbs (0.3 Kgs)	165.1 mm x 100	6.500 x 4.500" (165.1 x 114.3 mm)	6.50" (165 mm)	6.50" (165 mm)	19.4 lbs (8.8 Kgs)	4.00" (102 mm)	5.1 lbs (2.3 Kgs)
2 x 1¼" 50 x 32	2.375 x 1.660" (60.3 x 42.2 mm)	2.76" (70 mm)	2.76" (70 mm)	1.8 lbs (0.8 Kgs)	2.50" (64 mm)	0.7 lbs (0.7 Kgs)	165.1 mm x 139.7 mm	6.500 x 5.500" (165.1 x 139.7 mm)	6.50" (165 mm)	6.50" (165 mm)	19.4 lbs (8.8 Kgs)	4.00" (102 mm)	5.7 lbs (2.6 Kgs)
2 x 1½" 50 x 40	2.375 x 1.900" (60.3 x 48.3 mm)	2.76" (70 mm)	2.76" (70 mm)	1.8 lbs (0.8 Kgs)	2.50" (64 mm)	0.7 lbs (0.3 Kgs)	6 x 3" 150 x 80	6.625 x 3.500" (168.3 x 88.9 mm)	5.91" (150 mm)	5.91" (150 mm)	15.6 lbs (7.1 Kgs)	4.00" (102 mm)	5.1 lbs (2.3 Kgs)
2½ x 1" 65 x 25	2.875 x 1.315" (73.0 x 33.4 mm)	3.74" (95 mm)	3.74" (95 mm)	2.0 lbs (0.9 Kgs)	2.50" (64 mm)	0.9 lbs (0.4 Kgs)	6 x 4" 150 x 100	6.625 x 4.500" (168.3 x 114.3 mm)	6.50" (165 mm)	6.50" (165 mm)	19.4 lbs (8.8 Kgs)	4.00" (102 mm)	5.1 lbs (2.3 Kgs)
2½ x 1¼" 65 x 32	2.875 x 1.660" (73.0 x 42.2 mm)	3.74" (95 mm)	3.74" (95 mm)	2.0 lbs (0.9 Kgs)	2.50" (64 mm)	1.1 lbs (0.5 Kgs)	6 x 5" 150 x 125	6.625 x 5.563" (168.3 x 141.3 mm)	6.50" (165 mm)	6.50" (165 mm)	19.4 lbs (8.8 Kgs)	4.00" (102 mm)	5.7 lbs (2.6 Kgs)
2½ x 1½" 65 x 40	2.875 x 1.900" (73.0 x 48.3 mm)	3.74" (95 mm)	3.74" (95 mm)	2.0 lbs (0.9 Kgs)	2.50" (64 mm)	1.2 lbs (0.5 Kgs)	8 x 4" 200 x 100	8.625 x 4.500" (219.1 x 114.3 mm)	7.76" (197 mm)	7.76" (197 mm)	35.4 lbs (16.1 Kgs)	5.00" (127 mm)	9.5 lbs (4.3 Kgs)
2½ x 2" 65 x 50	2.875 x 2.375" (73.0 x 60.3 mm)	3.00" (76 mm)	3.00" (76 mm)	4.1 lbs (1.9 Kgs)	2.50" (64 mm)	1.1 lbs (0.5 Kgs)	8 x 5" 200 x 125	8.625 x 5.563" (219.1x 141.3 mm)	7.76" (197 mm)	7.76" (197 mm)	35.5 lbs (16.3 Kgs)	5.00" (127 mm)	11.9 lbs (5.4 Kgs)
76.1 mm x 25	3.000 x 1.315" (76.1 x 33.4 mm)	3.74" (95 mm)	3.74" (95 mm)	2.0 lbs (0.9 Kgs)	2.50" (64 mm)	0.9 lbs (0.4 Kgs)	8 x 6" 200 x 150	8.625 x 6.625" (219.1 x 168.3 mm)	7.76" (197 mm)	7.76" (197 mm)	54.1 lbs (24.6 Kgs)	5.00" (127 mm)	9.5 lbs (4.3 Kgs)
76.1 mm x 32	3.000 x 1.660" (76.1 x 42.2 mm)	3.74" (95 mm)	3.74" (95 mm)	2.0 lbs (0.9 Kgs)	2.50" (64 mm)	1.1 lbs (0.5 Kgs)	10 x 6" 250 x 150	10.750 x 6.625" (273.0 x 168.3 mm)	9.02" (229 mm)	9.02" (229 mm)	59.2 lbs (26.9 Kgs)	6.00" (152 mm)	18.3 lbs (8.3 Kgs)
76.1 mm x 40	3.000 x 1.900" (76.1 x 48.3 mm)	3.74" (95 mm)	3.74" (95 mm)	2.0 lbs (0.9 Kgs)	2.50" (64 mm)	1.2 lbs (0.5 Kgs)	10 x 8" 250 x 200	10.750 x 8.625" (273.0 x 219.1 mm)	9.02" (229 mm)	9.02" (229 mm)	60.1 lbs (27.3 Kgs)	6.00" (152 mm)	19.1 lbs (8.7 Kgs)
76.1 mm x 50	3.000 x 2.375" (76.1 x 60.3 mm)	3.00" (76 mm)	3.00" (76 mm)	3.3 lbs (1.5 Kgs)	2.50" (64 mm)	1.1 lbs (0.5 Kgs)	12 x 8" 300 x 200	12.750 x 8.625" (323.9 x 219.1 mm)	10.00" (254 mm)	10.00" (254 mm)	56.1 lbs (25.5 Kgs)	7.00" (178 mm)	49.5 lbs (22.0 Kgs)
3 x 1¼" 80 x 32	3.500 x 1.660" (88.9 x 42.2 mm)	4.25" (108 mm)	4.25" (108 mm)	3.3 lbs (1.5 Kgs)	2.50" (64 mm)	1.1 lbs (0.5 Kgs)	12 x 10" 300 x 250	12.750 x 10.750" (323.9 x 273.0 mm)	10.00" (254 mm)	10.00" (254 mm)	57.2 lbs (26.0 Kgs)	7.00" (178 mm)	23.1 lbs (11.3 Kgs)

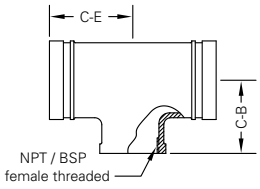
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		SS-21 reducing tee			SS-50 concentric reducer				SS-21 reducing tee			SS-50 concentric reducer	
nom. size	**pipe O.D.**	**C-E**	**C-B**	**weight**	**E-E**	**weight**	**nom. size**	**pipe O.D.**	**C-E**	**C-B**	**weight**	**E-E**	**weight**
3 x 1½" 80 x 40	3.500 x 1.900" (88.9 x 48.3 mm)	4.25" (108 mm)	4.25" (108 mm)	2.9 lbs (1.3 Kgs)	2.50" (64 mm)	1.5 lbs (0.6 Kgs)	200 JIS x 100	8.516 x 4.500" (216.3 x 114.3 mm)	7.76" (197 mm)	7.76" (197 mm)	35.4 lbs (16.1 Kgs)	5.00" (127 mm)	9.5 lbs (4.3 Kgs)
3 x 2" 80 x 50	3.500 x 2.375" (88.9 x 60.3 mm)	4.25" (108 mm)	4.25" (108 mm)	4.6 lbs (2.1 Kgs)	2.50" (64 mm)	1.3 lbs (0.6 Kgs)	200 JIS x 139.7 mm	8.516 x 5.500" (216.3 x 139.7 mm)	7.76" (197 mm)	7.76" (197 mm)	28.6 lbs (13.0 Kgs)	5.00" (127 mm)	11.9 lbs (5.4 Kgs)
3 x 2½" 80 x 65	3.500 x 2.875" (88.9 x 73.0 mm)	3.74" (95 mm)	3.27" (83 mm)	6.0 lbs (2.7 Kgs)	3.50" (89 mm)	2.2 lbs (1.0 Kgs)	200 JIS x 165.1 mm	8.516 x 6.500" (216.3 x 165.1 mm)	7.76" (197 mm)	7.76" (197 mm)	54.1 lbs (24.6 Kgs)	5.00" (127 mm)	9.5 lbs (4.3 Kgs)
80 x 76.1 mm	3.500 x 3.000" (88.9 x 76.1 mm)	3.74" (95 mm)	3.27" (83 mm)	4.6 lbs (2.1 Kgs)	3.50" (89 mm)	2.2 lbs (1.0 Kgs)	250 JIS x 165.1 mm	10.528 x 6.500" (267.4 x 165.1 mm)	9.02" (229 mm)	9.02" (229 mm)	59.2 lbs (26.9 Kgs)	6.00" (152 mm)	18.3 lbs (8.3 Kgs)
4 x 2" 100 x 50	4.500 x 2.375" (114.3 x 60.3 mm)	5.00" (127 mm)	5.00" (127 mm)	7.3 lbs (3.3 Kgs)	3.00" (76 mm)	2.2 lbs (1.0 Kgs)	250 JIS x 200 JIS	10.528 x 8.516" (267.4 x 216.3 mm)	9.02" (229 mm)	9.02" (229 mm)	60.1 lbs (27.3 Kgs)	6.00" (152 mm)	19.1 lbs (8.7 Kgs)
4 x 2½" 100 x 65	4.500 x 2.875" (114.3 x 73.0 mm)	4.49" (114 mm)	3.86" (98 mm)	8.8 lbs (4.0 Kgs)	4.00" (102 mm)	3.1 lbs (1.4 Kgs)	300 JIS x 200 JIS	12.539 x 8.516" (318.5 x 216.3 mm)	10.00" (254 mm)	10.00" (254 mm)	56.1 lbs (25.5 Kgs)	7.00" (178 mm)	49.5 lbs (22.0 Kgs)
100 x 76.1 mm	4.500 x 3.000" (114.3 x 76.1 mm)	4.49" (114 mm)	3.86" (98 mm)	9.0 lbs (4.1 Kgs)	4.00" (102 mm)	3.1 lbs (1.4 Kgs)	300 JIS x 250 JIS	12.539 x 10.528" (318.5 x 267.4 mm)	10.00" (254 mm)	10.00" (254 mm)	57.2 lbs (26.0 Kgs)	7.00" (178 mm)	23.1 lbs (11.3 Kgs)
4 x 3" 100 x 80	4.500 x 3.500" (114.3 x 88.9 mm)	4.49" (114 mm)	3.86" (98 mm)	7.0 lbs (3.2 Kgs)	3.00" (76 mm)	2.0 lbs (0.9 Kgs)							

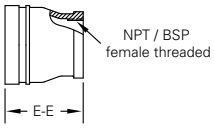
SS-21F reducing tee (GR x GR x FT)
SS-50F concentric reducer (GR x FT)







SS-21F



SS-50F

The Shurjoint Model SS-21F and SS-50F stainless steel fittings are investment cast in sizes from 2½" to 4".

Materials are in compliance with NSF/ANSI 372 for potable water service applications.

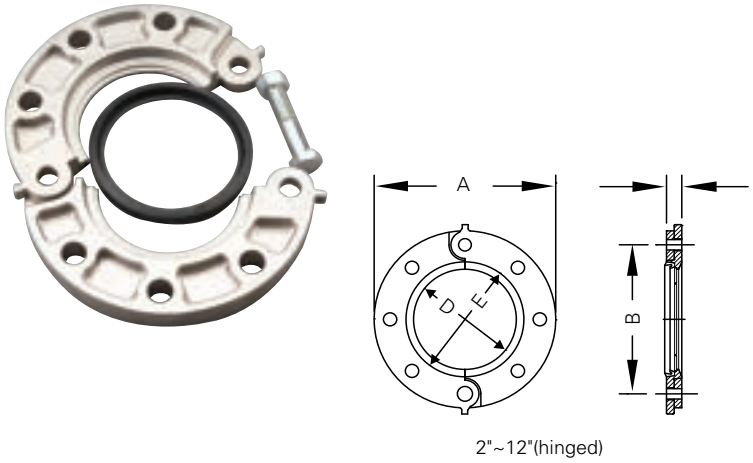
dimensions

		SS-21F reducing tee			SS-50F concentric reducer	
nom. size	**pipe O.D.**	**C-E**	**C-B**	**weight**	**E-E**	**weight**
65 x 40F	73.0/76.1 x 48.3 mm	76 mm	76 mm	0.83 Kgs	---	---
65 x 50F	73.0/76.1 x 60.3 mm	---	---	---	89 mm	0.95 Kgs
80 x 50F	88.9 x 60.3 mm	95 mm	83 mm	2.10 Kgs	89 mm	0.92 Kgs
100 x 50F	114.3 x 60.3 mm	114 mm	98 mm	3.20 Kgs	102 mm	1.76 Kgs

* FT: NPT female threaded or BSP female threaded.

SS-41 flange adapter

ANSI class 125/150



2"~12"(hinged)

The Model SS-8 is a flexible coupling designed for a variety of general service and specialty applications. The SS-8 is supplied standard in CF8 (304) and CF8M (316) with 304 or 316 bolts and nuts. SS-8 couplings should always be installed so that the coupling bolt pads make metal to metal contact.

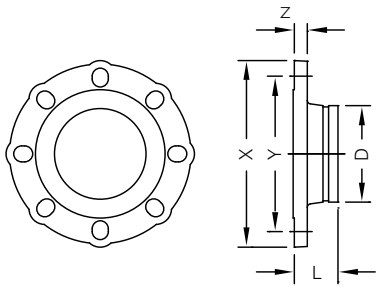
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load (CWP)	dimensions			sealing surface		bolt		weight Kgs
				A	B	C	D	E	no.	size	
2" 50	2.375" (60.3 mm)	300 psi (20 bar)	1330 lbs (5.71 kN)	6.00" (152 mm)	4.75" (121 mm)	0.75" (19 mm)	2.28" (58 mm)	3.07" (78 mm)	4	⅝ x 3"	4.6 lbs (2.1 Kgs)
2½" 65	2.875" (73.0 mm)	300 psi (20 bar)	1950 lbs (8.37 kN)	7.00" (178 mm)	5.50" (140 mm)	0.87" (22 mm)	2.72" (69 mm)	3.54" (90 mm)	4	⅝ x 3"	6.0 lbs (2.7 Kgs)
3" 80	3.500" (88.9 mm)	300 psi (20 bar)	2880 lbs (12.41 kN)	7.52" (191 mm)	6.00" (152 mm)	0.94" (24 mm)	3.35" (85 mm)	4.17" (106 mm)	4	⅝ x 3"	6.8 lbs (3.1 Kgs)
4" 100	4.500" (114.3 mm)	300 psi (20 bar)	4770 lbs (20.51 kN)	9.00" (229 mm)	7.50" (191 mm)	0.94" (24 mm)	4.33" (110 mm)	5.20" (132 mm)	8	⅝ x 3"	9.9 lbs (4.5 Kgs)
6" 150	6.625" (168.3 mm)	300 psi (20 bar)	10340 lbs (44.47 kN)	11.00" (279 mm)	9.50" (241 mm)	1.00" (25 mm)	6.46" (164 mm)	7.32" (186 mm)	8	¾ x 3½"	12.9 lbs (5.8 Kgs)
8" 200	8.625" (219.1 mm)	300 psi (20 bar)	17520 lbs (75.37 kN)	13.50" (343 mm)	11.75" (298 mm)	1.14" (29 mm)	8.46" (215 mm)	9.29" (236 mm)	8	¾ x 3½"	20.2 lbs (9.2 Kgs)

* The working pressure shown is based on roll-grooved Sch. 40S pipe.

SS-80 stainless steel universal flange adapter





The Model SS-80 Universal Flange Adapter provides for a rigid transition between a grooved piping system and a flanged piping system or component. The SS-80 can mate to ANSI 125/150, PN 10/16, BS-10E or JIS 10K, and is available standard in CF8 (304) or CF8M (316).

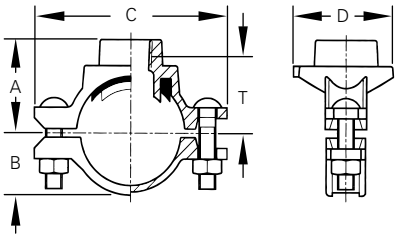
dimensions

				Y: flange drilling					bolt				
nom. size	**pipe O.D.**	**L**	**X**	**ANSI 125 / 150**	**PN 10**	**PN 16**	**JIS 10K**	**Z**	**ANSI 125 / 150**	**PN 10**	**PN 16**	**JIS 10K**	**weight**
2"	2.375"	2.50"	6.50"	4.75"	4.92"	4.92"	4.72"	0.63"	⅝	M16	M16	M16	4.4 lbs
50	(60.3 mm)	(64 mm)	(165 mm)	(121 mm)	(125 mm)	(125 mm)	(120 mm)	(16 mm)	4	4	4	4	(2.0 Kgs)
2½" *	2.875"	3.00"	7.28"	5.50"	5.70"	5.70"	5.50"	0.63"	⅝	---	---	---	6.4 lbs
65	(73.0 mm)	(76 mm)	(185 mm)	(140 mm)	(145 mm)	(145 mm)	(140 mm)	(16 mm)	4	---	---	---	(2.9 Kgs)
76.1 mm	3.000"	3.00"	7.28"	5.50"	5.70"	5.70"	5.50"	0.63"	---	M16	M16	M16	6.6 lbs
	(76.1 mm)	(76 mm)	(185 mm)	(140 mm)	(145 mm)	(145 mm)	(140 mm)	(16 mm)	---	4	4	4	(3.0 Kgs)
3"	3.500"	2.95"	7.78"	6.00"	6.30"	6.30"	5.90"	0.63"	⅝	M16	M16	M16	7.5 lbs
80	(88.9 mm)	(75 mm)	(200 mm)	(152 mm)	(160 mm)	(160 mm)	(150 mm)	(16 mm)	8	8	8	8	(3.4 Kgs)
4"	4.500"	2.95"	8.86"	7.50"	7.09"	7.09"	6.89"	0.63"	⅝	M16	M16	M16	8.6 lbs
100	(114.3 mm)	(75 mm)	(225 mm)	(191 mm)	(180 mm)	(180 mm)	(175 mm)	(16 mm)	8	8	8	8	(3.9 Kgs)
5"	5.563"	2.95"	10.00"	8.50"	8.27"	8.27"	8.27"	0.87"	⅝	---	---	---	14.7 lbs
125	(141.3 mm)	(75 mm)	(254 mm)	(216 mm)	(210 mm)	(210 mm)	(210 mm)	(22 mm)	8	---	---	---	(6.7 Kgs)
6"	6.625"	2.95"	10.71"	9.50"	9.45"	9.45"	9.45"	0.63"	¾	---	---	---	15.2 lbs
150	(168.3 mm)	(75 mm)	(272 mm)	(241 mm)	(240 mm)	(240 mm)	(240 mm)	(16 mm)	8	---	---	---	(6.9 Kgs)
8"	8.625"	4.00"	13.50"	11.75"	11.61"	11.61"	---	0.87"	¾	M20	M20	---	31.9 lbs
200	(219.1 mm)	(102 mm)	(343 mm)	(298 mm)	(295 mm)	(295 mm)	---	(22 mm)	8	8	16	---	(14.5 Kgs)
200 JIS	8.516"	4.00"	13.50"	11.75"	11.61"	11.61"	11.42"	0.87"	---	---	---	M20	30.8 lbs
	(216.3 mm)	(102 mm)	(343 mm)	(298 mm)	(295 mm)	(295 mm)	(290 mm)	(22 mm)	---	---	---	12	(14.0 Kgs)
10"	10.750"	3.94"	16.00"	14.25"	13.77"	14.00"	14.00"	1.18"	⅞	M20	M24	M20	49.6 lbs
250	(273.0 mm)	(100 mm)	(406 mm)	(362 mm)	(350 mm)	(355 mm)	(355 mm)	(30 mm)	12	12	12	12	(22.5 Kgs)
12"	12.750"	4.45"	19.00"	17.00"	15.75"	16.14"	---	1.26"	⅞	M20	M24	---	65.9 lbs
300	(323.9 mm)	(113 mm)	(483 mm)	(432 mm)	(400 mm)	(410 mm)	---	(32 mm)	12	12	12	---	(29.9 Kgs)

contact Shurjoint for other sizes.

SS-723 stainless steel mechanical tee





The Shurjoint Model SS-723 stainless steel mechanical tee is the ideal fitting for branch or direct outlet connections to sprinkler heads, drop nipples and or gauges on stainless steel pipe. No need for welding, simply cut or drill a hole at the desired location, position the housing so that the locating collar fits within the hole and secure with the bolts and nuts.

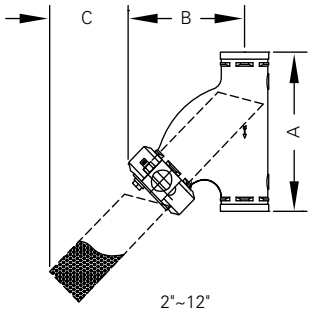
dimensions

nom. size run x branch	max. working pressure (CWP)*	hole Dia. ₸ +0.063, -0 / +1.6, -0	dimensions A	B	C	D	T‡	bolt size	weight
1¼ x ½" 32 x 15	300 psi (20 bar)	1.18" (30 mm)	1.60" (41 mm)	1.02" (26 mm)	3.44" (87 mm)	1.93" (49 mm)	1.06" (27 mm)	5/16 x 1½"	0.7 lbs (0.3 Kgs)
1¼ x ¾" 32 x 20	300 psi (20 bar)	1.18" (30 mm)	1.70" (44 mm)	1.02" (26 mm)	3.44" (87 mm)	1.93" (49 mm)	1.14" (29 mm)	5/16 x 1½"	0.7 lbs (0.3 Kgs)
1¼ x 1" 32 x 25	300 psi (20 bar)	1.18" (30 mm)	2.00" (51 mm)	1.02" (26 mm)	3.44" (87 mm)	1.93" (49 mm)	1.34" (34 mm)	5/16 x 1½"	0.9 lbs (0.4 Kgs)
1½ x ½" 40 x 15	300 psi (20 bar)	1.18" (30 mm)	1.70" (44 mm)	1.13" (29 mm)	3.54" (90 mm)	1.93" (49 mm)	1.18" (30 mm)	5/16 x 1½"	0.7 lbs (0.3 Kgs)
1½ x ¾" 40 x 20	300 psi (20 bar)	1.18" (30 mm)	1.81" (46 mm)	1.13" (29 mm)	3.54" (90 mm)	1.93" (49 mm)	1.22" (31 mm)	5/16 x 1½"	0.7 lbs (0.3 Kgs)
1½ x 1" 40 x 25	300 psi (20 bar)	1.18" (30 mm)	2.09" (53 mm)	1.13" (29 mm)	3.54" (90 mm)	1.93" (49 mm)	1.42" (36 mm)	5/16 x 1½"	0.9 lbs (0.4 Kgs)
2 x ½" 50 x 15	300 psi (20 bar)	1.18" (30 mm)	2.00" (51 mm)	1.42" (36 mm)	4.28" (109 mm)	2.00" (51 mm)	1.46" (37 mm)	5/16 x 1½"	1.1 lbs (0.5 Kgs)
2 x ¾" 50 x 20	300 psi (20 bar)	1.18" (30 mm)	2.09" (53 mm)	1.42" (36 mm)	4.28" (109 mm)	2.00" (51 mm)	1.50" (38 mm)	3/8 x 2⅛"	1.1 lbs (0.5 Kgs)
2 x 1" 50 x 25	300 psi (20 bar)	1.18" (30 mm)	2.37" (60 mm)	1.42" (36 mm)	4.28" (109 mm)	2.00" (51 mm)	1.69" (43 mm)	3/8 x 2⅛"	1.1 lbs (0.6 Kgs)
3 x 1½" 80 x 40	300 psi (20 bar)	1.18" (30 mm)	3.50" (89 mm)	2.13" (54 mm)	6.22" (158 mm)	3.43" (87 mm)	2.76" (70 mm)	3/8 x 2⅛"	4.2 lbs (1.9 Kgs)

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

SS-726 stainless steel y-strainer





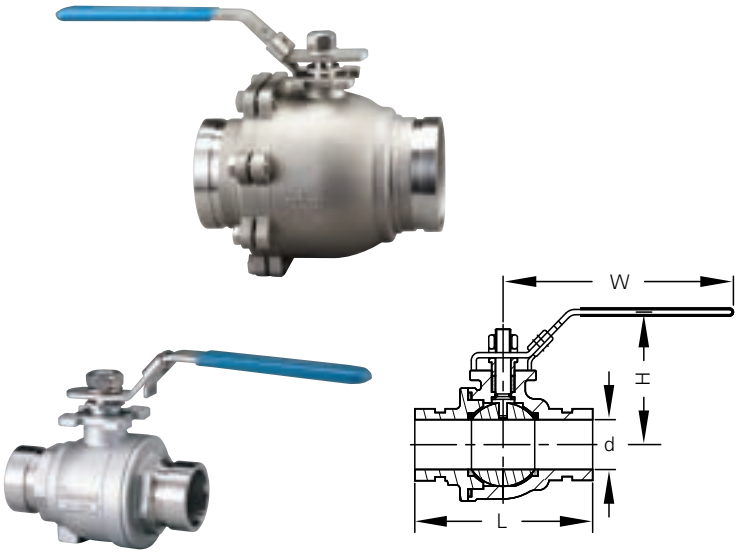
The Model SS-726 Stainless Steel Grooved-end Y-Strainers are designed to strain debris and foreign matter from piping systems and thus provide inexpensive protection for costly pumps, meters and other components. Cleaning and maintenance of the screen can be accomplished easily by removing the coupling. The Model SS-726 Stainless Steel Y-Strainer is suitable for vertical or horizontal installations.

dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions			drain plug size	weight
			A	B	C		
2½" 65	2.875" (73.0 mm)	300 psi (20 bar)	10.75" (273 mm)	7.83" (199 mm)	4.80" (122 mm)	½" 15	16.7 lbs (7.6 Kgs)
3" 80	3.500" (88.9 mm)	300 psi (20 bar)	11.75" (299 mm)	8.70" (221 mm)	5.08" (129 mm)	½" 15	18.9 lbs (8.6 Kgs)
4" 100	4.500" (114.3 mm)	300 psi (20 bar)	14.25" (362 mm)	10.59" (269 mm)	6.61" (168 mm)	1" 25	21.1 lbs (9.6 Kgs)
6" 150	6.625" (168.3 mm)	300 psi (20 bar)	18.50" (470 mm)	14.05" (357 mm)	8.62" (219 mm)	1" 25	85.8 lbs (39.0 Kgs)

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

SJ-600L ball valve



The Model SJ-600L is a two-piece, full-port stainless steel ball valve rated at 600 psi (42 Bar) and is available in CF8M (316). The SJ-600L features a floating ball for lower torque and is supplied with a lever handle as well as ISO mounting holes to accommodate a full range of gear or power actuators.

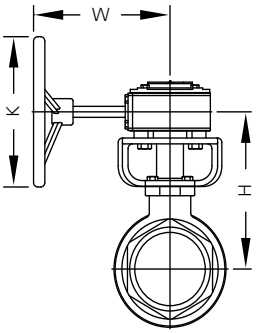
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	operating torque ‡	dimensions				weight
				L	H	W	d	
1½" 40	1.900" (48.3 mm)	600 psi (42 bar)	265 lbs-in. (30 Nm)	5.50" (140 mm)	3.70" (94 mm)	7.60" (193 mm)	1.50" (38 mm)	6.6 lbs (3.0 Kgs)
2" 50	2.375" (60.3 mm)	600 psi (42 bar)	354 lbs-in. (40 Nm)	6.15" (156 mm)	4.13" (105 mm)	7.60" (193 mm)	1.97" (50 mm)	8.8 lbs (4.0 Kgs)
2½" 65	2.875" (73.0 mm)	600 psi (42 bar)	442 lbs-in. (50 Nm)	7.09" (180 mm)	4.33" (110 mm)	9.84" (250 mm)	2.56" (65 mm)	15.4 lbs (7.0 Kgs)
3" 80	3.500" (88.9 mm)	600 psi (42 bar)	619 lbs-in. (70 Nm)	8.42" (214 mm)	6.00" (152 mm)	9.84" (250 mm)	3.07" (78 mm)	20.7 lbs (9.4 Kgs)
4" 100	4.500" (114.3 mm)	600 psi (42 bar)	973 lbs-in. (110 Nm)	9.45" (240 mm)	6.57" (167 mm)	11.42" (290 mm)	3.94" (100 mm)	55.0 lbs (25.0 Kgs)

* Working pressure is for connection with cut- or roll-grooved schedule Sch. 40S pipe.
‡ For the first opening or closing of the valve when the valve is not continuously operated, an additional torque of 2.0 – 2.5 times the listed operating torque is normally required.
^ The weight includes the lever handle.

SJ-600W ball valve





The Model SJ-600W is supplied with a worm gear operator. The standard gear operator is supplied with a bracket and extension sleeve. Sizes available are 2″ (50 mm) through 4″ (100 mm).

dimensions

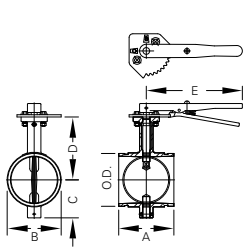
		dimensions			
nom size.	**pipe O.D.**	**K**	**H**	**W**	**weight**
2″ 50	2.375″ (60.3 mm)	5.98″ (152 mm)	5.38″ (137 mm)	8.00″ (203 mm)	17.82 lbs (8.10 Kgs)
2½″ 65	2.875″ (73.0 mm)	5.98″ (152 mm)	5.68″ (145 mm)	8.00″ (203 mm)	24.42 lbs (11.10 Kgs)
3″ 80	3.500″ (88.9 mm)	5.98″ (152 mm)	7.16″ (182 mm)	8.00″ (203 mm)	29.70 lbs (13.50 Kgs)
4″ 100	4.500″ (114.3 mm)	5.98″ (152 mm)	8.00″ (203 mm)	8.00″ (203 mm)	63.80 lbs (29.0 Kgs)

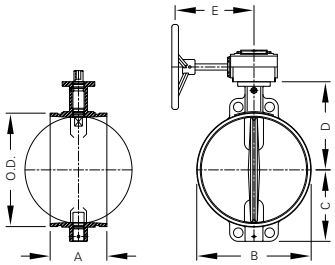
* The weight includes the worm gear operator.

SJ-400 butterfly valve









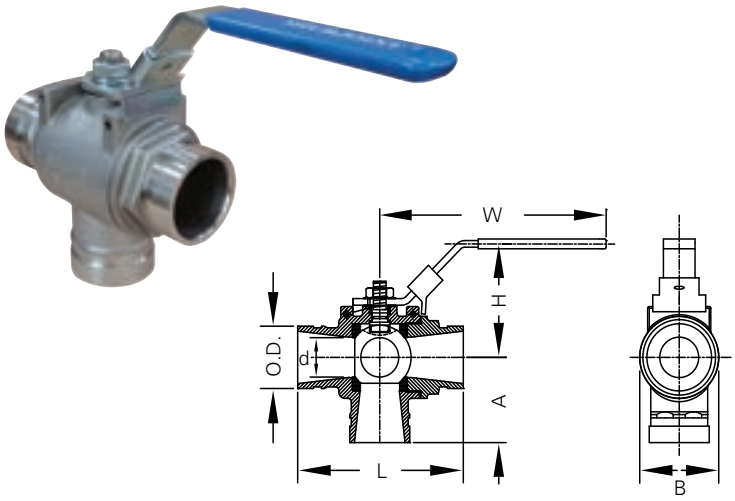
The Shurjoint Model SJ-400 Butterfly Valve is a grooved end stainless steel butterfly valve, supplied with a 10 position lever handle (SJ-400L) or worm gear operator can be supplied as an option (SJ-400W). The body is available in CF8M (316) to ASTM A743 with integral neck and ISO 5211 mounting pad. It features a dual seal disc encapsulated with Gr. E-pw EPDM for cold and hot water services. The end-to-end dimensions conform to MSS SP-67.

dimensions

nom. size	pipe O.D	max. working pressure (CWP)*	dimensions					operating torque	weight‡
			A	B	C	D	E		
2” 50	2.375” (60.3 mm)	300 psi (20 bar)	3.19” (81 mm)	2.520” (64 mm)	2.480” (63 mm)	4.17” (106 mm)	7.56” (192 mm)	78 lbs-in. (8.80 Nm)	5.0 lbs (2.3 Kgs)
2½” 65	2.875” (73.0 mm)	300 psi (20 bar)	3.81” (97 mm)	3.150” (80 mm)	2.677” (68 mm)	4.28” (111 mm)	7.56” (192 mm)	84 lbs-in. (9.50 Nm)	7.0 lbs (3.2 Kgs)
76.1 mm	3.000” (76.1 mm)	300 psi (20 bar)	3.81” (97 mm)	3.150” (80 mm)	2.677” (68 mm)	4.28” (111 mm)	7.56” (192 mm)	84 lbs-in. (9.50 Nm)	7.0 lbs (3.2 Kgs)
3” 80	3.500” (88.9 mm)	300 psi (20 bar)	3.81” (97 mm)	3.622” (92 mm)	2.992” (76 mm)	4.97” (126 mm)	7.56” (192 mm)	95 lbs-in. (10.7 Nm)	6.6 lbs (3.5 Kgs)
4” 100	4.500” (114.3 mm)	300 psi (20 bar)	4.56” (116 mm)	4.646” (118 mm)	3.504” (89 mm)	5.33” (135 mm)	9.92” (252 mm)	200 lbs-in. (22.6 Nm)	11.0 lbs 5.0 Kgs)
139.7 mm	5.500” (139.7 mm)	300 psi (20 bar)	5.81” (148 mm)	5.708” (145 mm)	4.015” (102 mm)	6.61” (168 mm)	9.92” (252 mm)	265 lbs-in. (29.9 Nm)	15.9 lbs 7.2 Kgs)
5” 125	5.563” (141.3 mm)	300 psi (20 bar)	5.81” (148 mm)	5.708” (145 mm)	4.015” (102 mm)	6.61” (168 mm)	9.92” (252 mm)	265 lbs-in. (29.9 Nm)	16.1 lbs 7.3 Kgs)
165.1 mm	3.000” (165.1 mm)	300 psi (20 bar)	5.81” (148 mm)	6.772” (172 mm)	4.488” (114 mm)	7.25” (184 mm)	9.92” (252 mm)	310 lbs-in. (34.9 Nm)	20.2 lbs (9.2 Kgs)
6” 150	6.625” (168.3 mm)	300 psi (20 bar)	5.81” (148 mm)	6.772” (172 mm)	4.488” (114 mm)	7.25” (184 mm)	9.92” (252 mm)	310 lbs-in. (34.9 Nm)	20.2 lbs (9.2 Kgs)
200 JIS*	8.516” (216.3 mm)	300 psi (20 bar)	5.24” (133 mm)	8.740” (222 mm)	5.512” (140 mm)	8.20” (208 mm)	13.46” (342 mm)	400 lbs-in. (45.1 Nm)	26.8 lbs (12.2 Kgs)
8” 200	8.625” (219.1 mm)	300 psi (20 bar)	5.24” (133 mm)	8.740” (222 mm)	5.512” (140 mm)	8.20” (208 mm)	13.46” (342 mm)	400 lbs-in. (45.1 Nm)	26.8 lbs (12.2 Kgs)
10” 250	10.75” (273 mm)	150 psi (10 bar)	6.3” (160 mm)	11.181” (284 mm)	7.32” (186 mm)	9.25” (235 mm)	14.02” (356 mm)	1500 lbs-in. (170 Nm)	62.3 lbs (28.3 Kgs)
12” 300	12.75” (323.9 mm)	150 psi (10 bar)	6.56” (166 mm)	13.150” (334 mm)	6.39” (213 mm)	10.24” (260 mm)	14.02” (356 mm)	2000 lbs-in. (226 Nm)	88.1 lbs (40 Kgs)

‡ The weight includes the lever handle.
* Non-standard/stock items may require longer lead time.
** Working pressure is based on connection with roll- or cut-grooved standard wall stainless steel pipe.

SJ-630 three port ball valve



The Shurjoint Model SJ-630 is a grooved-end three-port ball valve designed to divert media from bottom inlet to either of the two outlets ports. The valve port is a regular port size and the stem features a blowout proof design to MSS SP-72 and API Standard 608. The valve body and trim materials are in compliance with NACE MR-01-75 requirements.

dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions						weight
			L	H	W	d	A	B	
2"	2.375"	600 psi	6.55"	4.32"	8.96"	1.50"	3.25"	3.13"	7.89 lbs
50	(60.3 mm)	(42 bar)	(167 mm)	(110 mm)	(228 mm)	(38 mm)	(83 mm)	(79 mm)	(3.58 Kgs)

* Working pressure is based on connection with roll- or cut-grooved Sch. 40S stainless steel pipe.

pressure performance data

stainless steel couplings on stainless steel pipe

The following tables show maximum cold working pressures (CWP) of Shurjoint stainless steel couplings used on stainless steel pipes. In general it is more difficult to achieve defined groove corners on stainless steel pipe than on carbon steel pipe. Always select the correct roll set for the pipe being grooved and process grooves as defined as possible. Contact your roll-groove tool manufacturer for recommendations.

model SS-7X rigid coupling

	cut-grooved	roll-grooved		
nom. size	sch. 40S	sch. 40S	sch. 10S	sch. 5S
10″ 250	600 psi (42 bar)	600 psi (42 bar)	300 psi (20 bar)	200 psi (14 bar)
12″ 300	600 psi (42 bar)	600 psi (42 bar)	300 psi (20 bar)	200 psi (14 bar)
14″ 350	400 psi (28 bar)	400 psi (28 bar)	300 psi (20 bar)	200 psi (14 bar)
16″ 400	400 psi (28 bar)	400 psi (28 bar)	300 psi (20 bar)	200 psi (14 bar)
18″ 450	350 psi (24 bar)	350 psi (24 bar)	300 psi (20 bar)	200 psi (14 bar)
20″ 500	350 psi (24 bar)	350 psi (24 bar)	300 psi (20 bar)	200 psi (14 bar)
22″ 550	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)
24″ 600	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)

model SS-7 rigid coupling

	cut-grooved	roll-grooved		
nom. size	sch. 40S	sch. 40S	sch. 10S	sch. 5S
1¼″ 32	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	200 psi (14 bar)
1½″ 40	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	200 psi (14 bar)
2″ 50	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	200 psi (14 bar)
2½″ 65	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	200 psi (14 bar)
3″ 80	600 psi (42 bar)	600 psi (42 bar)	500 psi (35 bar)	200 psi (14 bar)
4″ 100	600 psi (42 bar)	600 psi (42 bar)	400 psi (28 bar)	200 psi (14 bar)
5″ 125	600 psi (42 bar)	600 psi (42 bar)	350 psi (24 bar)	200 psi (14 bar)
6″ 150	600 psi (42 bar)	600 psi (42 bar)	300 psi (20 bar)	200 psi (14 bar)
8″ 200	600 psi (42 bar)	600 psi (42 bar)	300 psi (20 bar)	200 psi (14 bar)

model SS-5 rigid coupling

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

model SS-8 flexible coupling

	cut-grooved	roll-grooved		
nom. size	sch. 40S	sch. 40S	sch. 10S	sch. 5S
1″ 25	500 psi (35 bar)	500 psi (35 bar)	425 psi (29 bar)	225 psi (16 bar)
1¼″ 32	500 psi (35 bar)	500 psi (35 bar)	425 psi (29 bar)	225 psi (16 bar)
1½″ 40	500 psi (35 bar)	500 psi (35 bar)	425 psi (29 bar)	225 psi (16 bar)
2″ 50	500 psi (35 bar)	500 psi (35 bar)	425 psi (29 bar)	225 psi (16 bar)
2½″ 65	500 psi (35 bar)	500 psi (35 bar)	425 psi (29 bar)	225 psi (16 bar)
3″ 80	500 psi (35 bar)	500 psi (35 bar)	425 psi (29 bar)	225 psi (16 bar)
4″ 100	425 psi (29 bar)	425 psi (29 bar)	400 psi (28 bar)	200 (14 bar)
5″ 125	425 psi (29 bar)	425 psi (29 bar)	400 psi (28 bar)	125 (9 bar)
6″ 150	425 psi (29 bar)	425 psi (29 bar)	350 psi (24 bar)	125 (9 bar)
8″ 200	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)	125 (9 bar)

model SS-8X flexible coupling

	cut-grooved	roll-grooved		
nom. size	sch. 40S	sch. 40S	sch. 10S	sch. 5S
¾″ 20	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	200 psi (14 bar)
1″ 25	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	200 psi (14 bar)
1¼″ 32	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	200 psi (14 bar)
1½″ 40	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	200 psi (14 bar)
2″ 50	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	200 psi (14 bar)
2½″ 65	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	200 psi (14 bar)
3″ 80	750 psi (52 bar)	750 psi (52 bar)	500 psi (35 bar)	200 psi (14 bar)
4″ 100	750 psi (52 bar)	750 psi (52 bar)	400 psi (28 bar)	200 psi (14 bar)
5″ 125	750 psi (52 bar)	750 psi (52 bar)	400 psi (28 bar)	200 psi (14 bar)
6″ 150	500 psi (35 bar)	500 psi (35 bar)	400 psi (28 bar)	200 psi (14 bar)
8″ 200	425 psi (29 bar)	425 psi (29 bar)	300 psi (20 bar)	200 psi (14 bar)

model SS-28 hinged lever coupling

	cut-grooved	roll-grooved		
nom. size	sch. 40S	sch. 40S	sch. 10S	sch. 5S
1½″ 40	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)
2″ 50	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)
2½″ 65	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)
3″ 80	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)
4″ 100	300 psi (20 bar)	300 psi (20 bar)	300 psi (20 bar)	200 psi (14 bar)
5″ 125	200 psi (14 bar)	200 psi (14 bar)	200 psi (14 bar)	125 psi (9 bar)
6″ 150	200 psi (14 bar)	200 psi (14 bar)	200 psi (14 bar)	125 psi (9 bar)

model SS-1200 hinge high pressure flexible coupling

	cut-grooved	
nom. size	sch. 80S	sch. 40S
¾″ 20	1200 psi (83 bar)	1200 psi (83 bar)
1″ 25	1200 psi (83 bar)	1200 psi (83 bar)
1¼″ 32	1200 psi (83 bar)	1200 psi (83 bar)
1½″ 40	1200 psi (83 bar)	1200 psi (83 bar)
2″ 50	1200 psi (83 bar)	1200 psi (83 bar)
2½″ 65	1200 psi (83 bar)	1200 psi (83 bar)
3″ 80	1200 psi (83 bar)	1200 psi (83 bar)
4″ 100	1200 psi (83 bar)	1200 psi (83 bar)
6″ 150	1200 psi (83 bar)	1200 psi (83 bar)
8″ 200	1200 psi (83 bar)	1200 psi (83 bar)

notes





section 4

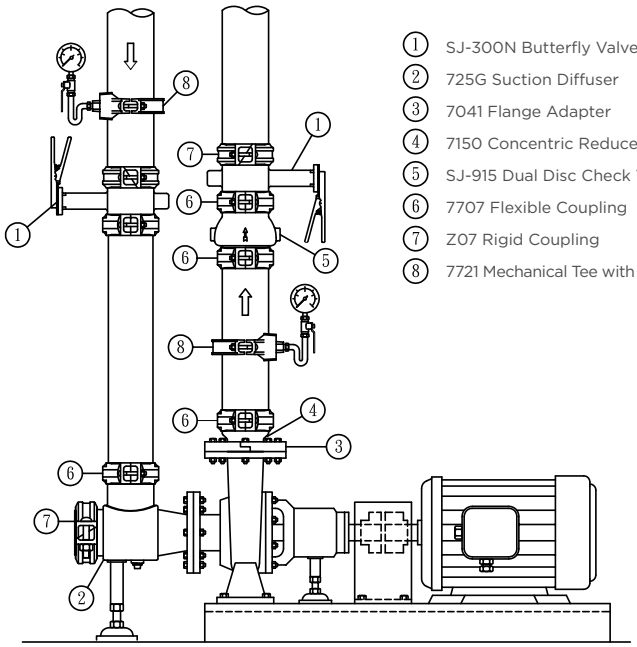
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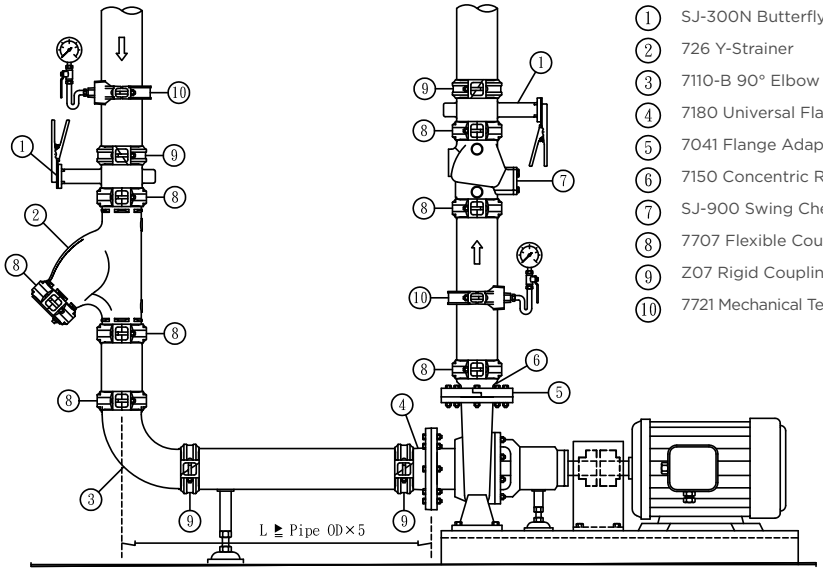
valves and flow control components

Shurjoint offers a wide range of grooved-end butterfly valves, ball valves, check valves, suction diffusers, strainers and expansion joints. Grooved-end valves and components can be installed 3 – 4 times faster than comparable flange components. With the removal of just a few bolts one can easily access the system for cleaning, maintenance, changes and or system expansion.



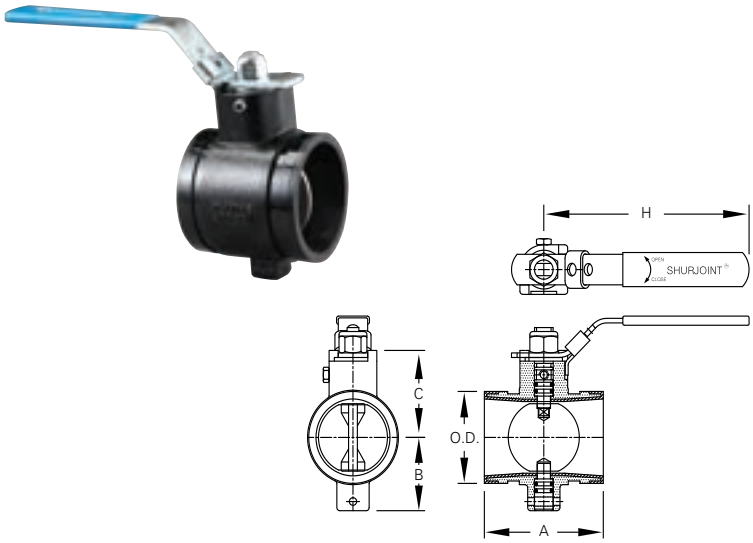


1. SJ-300N Butterfly Valve
2. 725G Suction Diffuser
3. 7041 Flange Adapter
4. 7150 Concentric Reducer
5. SJ-915 Dual Disc Check Valve
6. 7707 Flexible Coupling
7. Z07 Rigid Coupling
8. 7721 Mechanical Tee with Pressure Gage



1. SJ-300N Butterfly Valve
2. 726 Y-Strainer
3. 7110-B 90° Elbow with Base Support
4. 7180 Universal Flange Adapter
5. 7041 Flange Adapter
6. 7150 Concentric Reducer
7. SJ-900 Swing Check Valve
8. 7707 Flexible Coupling
9. Z07 Rigid Coupling
10. 7721 Mechanical Tee with Pressure Gage

SJ-200 low-profile butterfly valve



The Shurjoint Model SJ-200 Butterfly Valve is a low profile, grooved-end butterfly valve designed for oil & gas, mining and other service applications. The working pressure is rated up to 232 psi / 1600 kPa and service temperatures are rated to +180°F / +82°C (Nitrile body liner). The Model SJ-200 features a fully rubber lined body with 316 stainless steel disc. The end to end dimensions conform to MSS SP-67. The lever handle is equipped with a tamper resistant locking device.

*Not recommended for steam

dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions				weight
			A	B	C	H	
2" 50	2.375" (60.3 mm)	232 psi (16 bar)	3.19" (81 mm)	1.89" (48 mm)	2.25" (57 mm)	5.51" (140 mm)	2.0 lbs (0.9 kgs)
2½" 65	2.875" (73.0 mm)	232 psi (16 bar)	3.82" (97 mm)	2.13" (54 mm)	2.65" (67 mm)	7.48" (190 mm)	3.3 lbs (1.5 kgs)
3" 80	3.500" (88.9 mm)	232 psi (16 bar)	3.82" (97 mm)	2.44" (62 mm)	2.94" (75 mm)	7.48" (190 mm)	4.2 lbs (1.9 kgs)
4" 100	4.500" (114.3 mm)	232 psi (16 bar)	4.57" (116 mm)	3.00" (76 mm)	4.19" (106.3 mm)	10.79" (274 mm)	8.6 lbs (3.9 kgs)
6" 150	6.625" (168.3 mm)	232 psi (16 bar)	5.83" (148 mm)	4.09" (104 mm)	5.45" (138.5 mm)	10.79" (274 mm)	22.2 lbs (10.1 kgs)
8" 200	8.625" (219.1 mm)	232 psi (16 bar)	5.25" (133 mm)	5.50" (140 mm)	6.45" (163.9 mm)	10.79" (274 mm)	27.9 lbs (11.3 kgs)

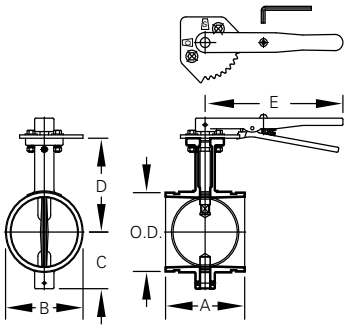
* Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.

SJ-300N-L butterfly valve





dual-seal



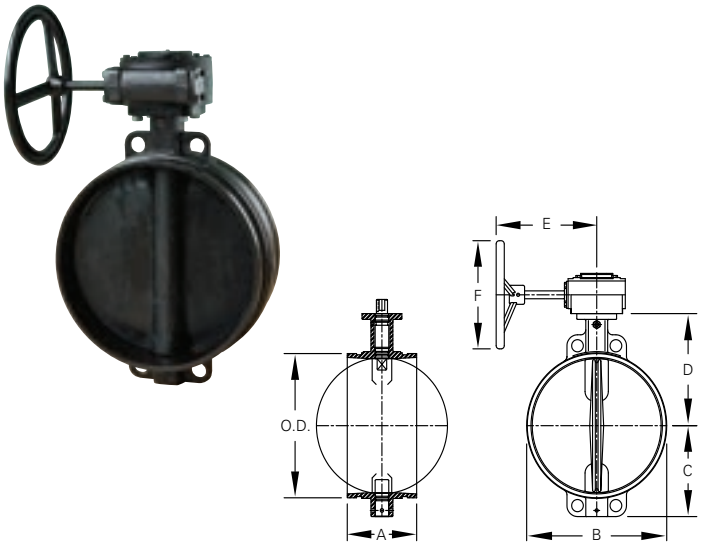
The Shurjoint Model SJ-300N Butterfly Valve is a grooved-end shut-off valve equipped with a 10 position lever handle (SJ-300N-L) or worm gear operator (SJ-300N-W). The valve consists of an epoxy coated ductile iron body and EPDM or Nitrile (NBR) rubber encapsulated dual-seal disc. The Model SJ-300N is rated up to + 200° F (+93°C) for general service use and is UL classified in accordance with NSF/ANSI 61 and NSF/ANSI 372 for potable water services up to temperature + 180° F (+82°C) with "E-pw" encapsulated disc. The end-to-end dimensions conform to MSS SP-67.

dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions A	B	C	D	E	operating torque	weight
2" 50	2.375" (60.3 mm)	300 psi (20 bar)	3.19" (81 mm)	2.52" (64 mm)	2.48" (63 mm)	4.17" (106 mm)	7.56" (192 mm)	80 lbs-in. (9 Nm)	6.8 lbs (3.1 Kgs)
2½" 65	2.875" (73.0 mm)	300 psi (20 bar)	3.82" (97 mm)	3.11" (79 mm)	2.68" (68 mm)	4.37" (111 mm)	7.56" (192 mm)	120 lbs-in. (14 Nm)	8.2 lbs (3.7 Kgs)
76.1 mm	3.000" (76.1 mm)	300 psi (20 bar)	3.82" (97 mm)	3.11" (79 mm)	2.68" (68 mm)	4.37" (111 mm)	7.56" (192 mm)	120 lbs-in. (14 Nm)	8.4 lbs (3.8 Kgs)
3" 80	3.500" (88.9 mm)	300 psi (20 bar)	3.82" (97 mm)	3.62" (92 mm)	2.99" (76 mm)	4.96" (126 mm)	7.56" (192 mm)	160 lbs-in. (18 Nm)	9.0 lbs (4.1 Kgs)
4" 100	4.500" (114.3 mm)	300 psi (20 bar)	4.57" (116 mm)	4.65" (118 mm)	3.50" (89 mm)	5.32" (135 mm)	10.24" (260 mm)	450 lbs-in. (51 Nm)	11.4 lbs (5.2 Kgs)
139.7 mm	5.500" (139.7 mm)	300 psi (20 bar)	5.83" (148 mm)	5.71" (145 mm)	4.02" (102 mm)	6.61" (168 mm)	10.24" (260 mm)	700 lbs-in. (79 Nm)	16.9 lbs (7.7 Kgs)
5" 125	5.563" (141.3 mm)	300 psi (20 bar)	5.83" (148 mm)	5.71" (145 mm)	4.02" (102 mm)	6.61" (168 mm)	10.24" (260 mm)	700 lbs-in. (79 Nm)	16.9 lbs (7.7 Kgs)
165.1 mm	6.500" (165.1 mm)	300 psi (20 bar)	5.83" (148 mm)	6.77" (172 mm)	4.49" (114 mm)	7.24" (184 mm)	10.24" (260 mm)	900 lbs-in. (102 Nm)	20.2 lbs (9.2 Kgs)
6" 150	6.625" (168.3 mm)	300 psi (20 bar)	5.83" (148 mm)	6.77" (172 mm)	4.49" (114 mm)	7.24" (184 mm)	10.24" (260 mm)	900 lbs-in. (102 Nm)	20.2 lbs (9.2 Kgs)
200 JIS	8.516" (216.3 mm)	300 psi (20 bar)	5.24" (133 mm)	8.74" (222 mm)	5.51" (140 mm)	8.19" (208 mm)	10.24" (260 mm)	1200 lbs-in. (136 Nm)	26.8 lbs (12.2 Kgs)
8" 200	8.625" (219.1 mm)	300 psi (20 bar)	5.24" (133 mm)	8.74" (222 mm)	5.51" (140 mm)	8.19" (208 mm)	10.24" (260 mm)	1200"/lbs (136 Nm)	26.8 lbs (12.2 Kgs)
10" 250	10.750" (273.0 mm)	300 psi (20 bar)	6.25" (159 mm)	10.86" (276 mm)	6.69" (170 mm)	9.25" (235 mm)	14.02" (356 mm)	1800 lbs-in. (204 Nm)	48.4 lbs (22.0 Kgs)
12" 300	12.750" (323.9 mm)	300 psi (20 bar)	6.53" (165 mm)	12.87" (327 mm)	8.07" (205 mm)	10.24" (260 mm)	14.02" (356 mm)	2500 lbs-in. (282 Nm)	73.7 lbs (33.5 Kgs)

* Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.
‡ The weight includes the lever handle.
Notes: The torque values are based on liquid applications. For dry or non-lubricating applications add a 25% service factor to the above values.

SJ-300N-W butterfly valve



The Model SJ-300N can be equipped with a worm gear operator. The ISO 5211 mounting pad allows for the mounting of power actuators.

dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions A	B	C	D	E	F	weight
2" 50	2.375" (60.3 mm)	300 psi (20 bar)	3.19" (81 mm)	2.52" (64 mm)	2.48" (63 mm)	4.17" (106 mm)	6.00" (152 mm)	6.00" (152 mm)	13.6 lbs (6.2 Kgs)
2½" 65	2.875" (73.0 mm)	300 psi (20 bar)	3.82" (97 mm)	3.11" (79 mm)	2.68" (68 mm)	4.37" (111 mm)	6.00" (152 mm)	6.00" (152 mm)	14.3 lbs (6.5 Kgs)
76.1 mm	3.000" (76.1 mm)	300 psi (20 bar)	3.82" (97 mm)	3.11" (79 mm)	2.68" (68 mm)	4.37" (111 mm)	6.00" (152 mm)	6.00" (152 mm)	14.3 lbs (6.5 Kgs)
3" 80	3.500" (88.9 mm)	300 psi (20 bar)	3.82" (97 mm)	3.62" (92 mm)	2.99" (76 mm)	4.96" (126 mm)	6.00" (152 mm)	6.00" (152 mm)	16.0 lbs (7.3 Kgs)
4" 100	4.500" (114.3 mm)	300 psi (20 bar)	4.57" (116 mm)	4.65" (118 mm)	3.50" (89 mm)	5.32" (135 mm)	6.00" (152 mm)	6.00" (152 mm)	19.1 lbs (8.7 Kgs)
139.7 mm	5.500" (139.7 mm)	300 psi (20 bar)	5.83" (148 mm)	5.71" (145 mm)	4.02" (102 mm)	6.61" (168 mm)	6.00" (152 mm)	6.00" (152 mm)	21.8 lbs (9.9 Kgs)
5" 125	5.563" (141.3 mm)	300 psi (20 bar)	5.83" (148 mm)	5.71" (145 mm)	4.02" (102 mm)	6.61" (168 mm)	6.00" (152 mm)	6.00" (152 mm)	21.8 lbs (9.9 Kgs)
165.1 mm	6.500" (165.1 mm)	300 psi (20 bar)	5.83" (148 mm)	6.77" (172 mm)	4.49" (114 mm)	7.24" (184 mm)	6.00" (152 mm)	6.00" (152 mm)	25.0 lbs (11.4 Kgs)
6" 150	6.625" (168.3 mm)	300 psi (20 bar)	5.83" (148 mm)	6.77" (172 mm)	4.49" (114 mm)	7.24" (184 mm)	6.00" (152 mm)	6.00" (152 mm)	25.3 lbs (11.5 Kgs)
200 JIS	8.516" (216.3 mm)	300 psi (20 bar)	5.24" (133 mm)	8.74" (222 mm)	5.51" (140 mm)	8.19" (208 mm)	6.00" (152 mm)	6.00" (152 mm)	31.9 lbs (14.5 Kgs)
8" 200	8.625" (219.1 mm)	300 psi (20 bar)	5.24" (133 mm)	8.74" (222 mm)	5.51" (140 mm)	8.19" (208 mm)	6.00" (152 mm)	6.00" (152 mm)	32.0 lbs (14.5 Kgs)
10" 250	10.750" (273.0 mm)	300 psi (20 bar)	6.25" (159 mm)	10.86" (276 mm)	6.69" (170 mm)	9.25" (235 mm)	8.00" (203 mm)	8.00" (203 mm)	59.4 lbs (27.0 Kgs)
12" 300	12.750" (323.9 mm)	300 psi (20 bar)	6.53" (165 mm)	12.87" (327 mm)	8.07" (205 mm)	10.24" (260 mm)	8.00" (203 mm)	8.00" (203 mm)	73.7 lbs (33.5 Kgs)
14" 350	14.000" (355.6 mm)	300 psi (20 bar)	7.00" (178 mm)	14.37" (365 mm)	8.82" (224 mm)	10.86" (276 mm)	9.50" (242 mm)	12.00" (306 mm)	130.0 lbs (59.0 Kgs)
16" 400	16.000" (406.4 mm)	300 psi (20 bar)	7.00" (178 mm)	16.38" (416 mm)	9.76" (248 mm)	11.89" (302 mm)	9.50" (242 mm)	12.00" (306 mm)	147.4 lbs (67.0 Kgs)

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions						weight
			A	B	C	D	E	F	
18” 450	18.000” (457.2 mm)	300 psi (20 bar)	8.00” (203 mm)	18.50” (470 mm)	11.14” (283 mm)	13.78” (350 mm)	9.50” (242 mm)	12.00” (306 mm)	189.2 lbs (86.0 Kgs)
20” 500	20.000” (508.0 mm)	300 psi (20 bar)	8.50” (216 mm)	20.75” (527 mm)	12.36” (314 mm)	15.08” (383 mm)	11.50” (290 mm)	16.00” (412 mm)	292.6 lbs (133.0 Kgs)
22” 550	22.000” (559.0 mm)	300 psi (20 bar)	9.25” (235 mm)	22.75” (578 mm)	13.48” (343 mm)	16.81” (427 mm)	11.50” (290 mm)	16.00” (412 mm)	324.1 lbs (147.0 Kgs)
24” 600	24.000” (609.6 mm)	300 psi (20 bar)	10.00” (254 mm)	24.76” (629 mm)	14.49” (368 mm)	17.83” (453 mm)	11.50” (290 mm)	16.00” (412 mm)	352.0 lbs (160.0 Kgs)

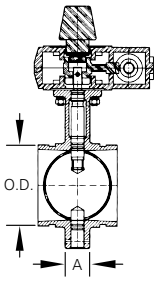
* Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.
‡ The weight includes the worm gear operator.

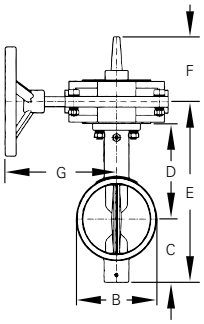
SJ-300F butterfly valve





dual-seal





The Shurjoint Model SJ-300F Butterfly Valve is a grooved-end shut-off valve equipped with a weatherproof worm gear operator and supervisory switch and wiring. The Model SJ-300F is cULus listed and FM approved for 300 psi (20 Bar, 2.0 MPa) WWP (water working pressure) service for indoor and outdoor use. Flow characteristics satisfy UL Specification 1091 and FM Approval Standard 1112. When the Model SJ-300F Butterfly Valve is used in a fire protection piping, installation shall conform to NFPA 13 and NFPA 72. The valve consists of an epoxy powder coated ductile iron body and EPDM rubber encapsulated dual-seal disc.

dimensions

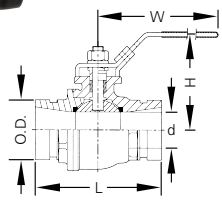
nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions A	B	C	D	E	F	G	weight
2" 50	2.375" (60.3 mm)	300 psi (20 bar)	3.19" (81 mm)	2.56" (65 mm)	2.48" (63 mm)	4.17" (106 mm)	7.87" (200 mm)	3.62" (92 mm)	6.42" (163 mm)	16.70 lbs (7.60 Kgs)
2½" 65	2.875" (73.0 mm)	300 psi (20 bar)	3.81" (97 mm)	3.15" (80 mm)	2.68" (68 mm)	4.37" (111 mm)	8.27" (210 mm)	3.62" (92 mm)	6.42" (163 mm)	18.26 lbs (8.30 Kgs)
76.1 mm	3.000" (76.1 mm)	300 psi (20 bar)	3.81" (97 mm)	3.15" (80 mm)	2.68" (68 mm)	4.37" (111 mm)	8.27" (210 mm)	3.62" (92 mm)	6.42" (163 mm)	18.41 lbs (8.37 Kgs)
3" 80	3.500" (88.9 mm)	300 psi (20 bar)	3.81" (97 mm)	3.62" (92 mm)	3.00" (76 mm)	4.96" (126 mm)	9.17" (233 mm)	3.62" (92 mm)	6.42" (163 mm)	18.92 lbs (8.60 Kgs)
4" 100	4.500" (114.3 mm)	300 psi (20 bar)	4.56" (116 mm)	4.65" (118 mm)	3.50" (89 mm)	5.31" (135 mm)	10.04" (255 mm)	3.62" (92 mm)	6.42" (163 mm)	21.78 lbs (9.90 Kgs)
139.7 mm	5.500" (139.7 mm)	300 psi (20 bar)	5.81" (148 mm)	5.71" (145 mm)	4.00" (102 mm)	6.61" (168 mm)	11.85" (301 mm)	3.62" (92 mm)	6.42" (163 mm)	27.08 lbs (12.31 Kgs)
5" 125	5.500" (141.3 mm)	300 psi (20 bar)	5.81" (148 mm)	5.71" (145 mm)	4.00" (102 mm)	6.61" (168 mm)	11.85" (301 mm)	3.62" (92 mm)	6.42" (163 mm)	26.84 lbs (12.20 Kgs)
165.1 mm	6.500" (165.1 mm)	300 psi (20 bar)	5.81" (148 mm)	6.77" (172 mm)	4.50" (114 mm)	7.25" (184 mm)	12.95" (329 mm)	3.62" (92 mm)	6.42" (163 mm)	30.38 lbs (13.81 Kgs)
6" 150	6.625" (168.3 mm)	300 psi (20 bar)	5.81" (148 mm)	6.77" (172 mm)	4.50" (114 mm)	7.25" (184 mm)	12.95" (329 mm)	3.62" (92 mm)	6.42" (163 mm)	30.14 lbs (13.70 Kgs)
8" 200	8.625" (219.1 mm)	300 psi (20 bar)	5.24" (133 mm)	8.74" (222 mm)	5.51" (140 mm)	8.19" (208 mm)	14.92" (379 mm)	3.62" (92 mm)	6.42" (163 mm)	38.72 lbs (17.60 Kgs)
200 JIS	8.516" (216.3 mm)	300 psi (20 bar)	5.24" (133 mm)	8.74" (222 mm)	5.51" (140 mm)	8.19" (208 mm)	14.92" (379 mm)	3.62" (92 mm)	6.42" (163 mm)	38.72 lbs (17.60 Kgs)

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions							weight
			A	B	C	D	E	F	G	
10”	10.750”	300 psi	6.25”	10.87”	6.69”	9.25”	17.17”	3.62”	6.42”	59.27 lbs
250	(273.0 mm)	(20 bar)	(159 mm)	(276 mm)	(170 mm)	(235 mm)	(436 mm)	(92 mm)	(163 mm)	(26.88 Kgs)
12”	12.750”	300 psi	6.50”	12.87”	8.07”	10.24”	19.53”	3.62”	6.42”	74.97 lbs
300	(323.9 mm)	(20 bar)	(165 mm)	(327 mm)	(205 mm)	(260 mm)	(496 mm)	(92 mm)	(163 mm)	(34.00 Kgs)

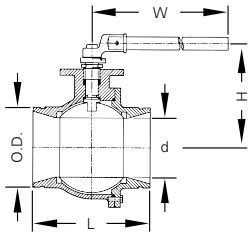
(1) End to end dimensions conforms to MSS SP-67.
(2) The weight includes the worm gear operator.
* Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.
ǂ For Fire Protection pressure rating, listing, and approval information, please refer to Data Sheet B-42 or visit SHURJOINT website, www.shurjoint.com for details or contact your SHURJOINT Representative.

SJ-500L ball valve





1½" - 3"



4" - 6"

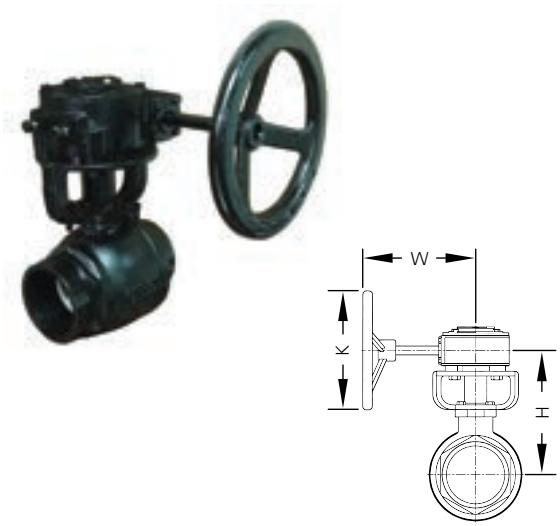
The Shurjoint Model SJ-500L is a ductile iron, grooved-end, two-piece, regular port ball valve designed and tested in conformance with MSS SP-110 and SP-72. The lever handle is equipped with tamper resistant locking holes. The SJ-500L is comprised of a ductile iron body and end cap, virgin TFE seats and chrome-plated carbon steel trim. Also available with stainless steel trim as an option.

dimensions

nom size.	pipe O.D.	max. working pressure (CWP)*	operating torque ‡	dimensions				weight
				L	H	W	d	
1½" 40	1.900" (48.3 mm)	1000 psi (69 bar)	62 lbs-in. (7 Nm)	5.12" (130 mm)	3.39" (86 mm)	7.00" (178 mm)	1.25" (32 mm)	3.9 lbs (1.8 Kgs)
2" 50	2.375" (60.3 mm)	1000 psi (69 bar)	150 lbs-in. (17 Nm)	5.50" (140 mm)	3.75" (95 mm)	7.00" (178 mm)	1.50" (38 mm)	6.4 lbs (2.9 Kgs)
2½" 65	2.875" (73.0 mm)	1000 psi (69 bar)	186 lbs-in. (21 Nm)	6.25" (159 mm)	5.20" (132 mm)	10.43" (265 mm)	2.00" (50 mm)	9.7 lbs (4.4 Kgs)
76.1 mm	3.000" (76.1 mm)	1000 psi (69 bar)	186 lbs-in. (21 Nm)	6.25" (159 mm)	5.20" (132 mm)	10.43" (265 mm)	2.00" (50 mm)	9.7 lbs (4.4 Kgs)
3" 80	3.500" (88.9 mm)	1000 psi (69 bar)	248 lbs-in. (28 Nm)	6.56" (167 mm)	5.63" (143 mm)	10.43" (265 mm)	2.50" (63 mm)	17.2 lbs (7.8 Kgs)
4" 100	4.500" (114.3 mm)	800 psi (56 bar)	398 lbs-in. (45 Nm)	9.45" (240 mm)	5.31" (135 mm)	14.37" (365 mm)	3.50" (90 mm)	34.5 lbs (15.7 Kgs)
165.1 mm	6.500" (165.1 mm)	800 psi (56 bar)	531 lbs-in. (60 Nm)	10.15" (258 mm)	8.70" (221 mm)	23.60" (600 mm)	4.92" (125 mm)	90.2 lbs (41.1 Kgs)
6" 150	6.625" (168.3 mm)	800 psi (56 bar)	531 lbs-in. (60 Nm)	10.15" (258 mm)	8.70" (221 mm)	23.60" (600 mm)	4.92" (125 mm)	90.2 lbs (41.1 Kgs)

* Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.
‡ For the first opening or closing of the valve when the valve is not continuously operated, an additional torque of 2.0 – 2.5 times the listed operating torque is normally required.

SJ-500W ball valve with gear operator



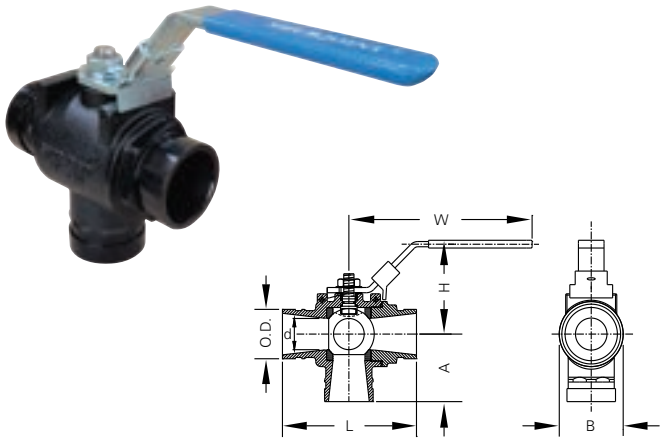
The Model SJ-500W can be equipped with a worm gear operator. The standard gear operator is supplied with a bracket and extension sleeve. The ISO 5211 mounting pad allows for the mounting of power actuators.

dimensions

nom size.	pipe O.D.	max. working pressure (CWP)*	dimensions K	dimensions H	dimensions W	weight
2" 50	2.375" (60.3 mm)	1000 psi (69 bar)	5.98" (152 mm)	5.38" (137 mm)	5.98" (152 mm)	18 lbs (8 Kgs)
2½" 65	2.875" (73.0 mm)	1000 psi (69 bar)	5.98" (152 mm)	5.68" (145 mm)	5.98" (152 mm)	22 lbs (10 Kgs)
76.1 mm	3.000" (76.1 mm)	1000 psi (69 bar)	5.98" (152 mm)	5.68" (145 mm)	5.98" (152 mm)	22 lbs (10 Kgs)
3" 80	3.500" (88.9 mm)	1000 psi (69 bar)	5.98" (152 mm)	7.16" (182 mm)	8.00" (203 mm)	31 lbs (14 Kgs)
4" 100	4.500" (114.3 mm)	800 psi (56 bar)	5.98" (152 mm)	8.00" (203 mm)	8.00" (203 mm)	73 lbs (33 Kgs)
165.1 mm	6.500" (165.1 mm)	800 psi (56 bar)	12.00" (305 mm)	10.89" (277 mm)	9.53" (242 mm)	123 lbs (56 Kgs)
6" 150	6.625" (168.3 mm)	800 psi (56 bar)	12.00" (305 mm)	10.89" (277 mm)	9.53" (242 mm)	123 lbs (56 Kgs)

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

SJ-530 three port ball valve



The Shurjoint Model SJ-530 is a grooved-end three-port ball valve designed to divert media from bottom inlet to either of the two outlets ports. The valve port is a regular port size and the stem features a blowout proof design to MSS SP-72 and API Standard 608. The valve body and trim materials are in compliance with NACE MR-01-75 requirements.

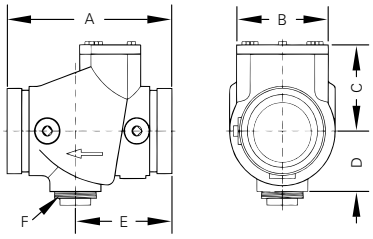
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	operating torque ǂ	dimensions						weight
				L	H	W	d	A	B	
2"	2.375"	600 psi	150 lbs-in.	6.55"	4.32"	8.96"	1.50"	3.25"	3.13"	7.89 lbs
50	(60.3 mm)	(42 bar)	(17 Nm)	(167 mm)	(110 mm)	(228 mm)	(38 mm)	(83 mm)	(79 mm)	(3.58 Kgs)

* Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.
ǂ For the first opening or closing of the valve when the valve is not continuously operated, an additional torque of 2.0 - 2.5 times the listed operating torque is normally required.

SJ-900 swing check valve





The Shurjoint Model SJ-900 Swing Check Valve is a grooved-end check valve featuringa spring-loaded wide-open clapper and a non-stick leak tight EPDM rubber seal. With a rated working pressure of 300 psi (20 Bar), the valve can be installed in the horizontal or vertical position (upward flow only). Valves are tested to API 598.

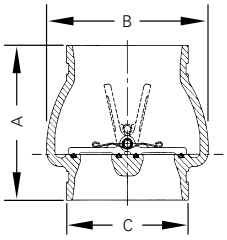
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions						weight
			A	B	C	D	E	F	
2½" 65	2.875" (73.0 mm)	300 psi (20 bar)	7.48" (190 mm)	4.50" (114 mm)	3.75" (95 mm)	2.50" (64 mm)	4.00" (102 mm)	1¼" NPT	11.0 lbs (5.0 Kgs)
76.1 mm	3.000" (76.1 mm)	300 psi (20 bar)	7.48" (190 mm)	4.50" (114 mm)	3.75" (95 mm)	2.50" (64 mm)	4.00" (102 mm)	1¼" BSP	10.8 lbs (4.9 Kgs)
3" 80	3.500" (88.9 mm)	300 psi (20 bar)	7.00" (178 mm)	4.50" (114 mm)	3.75" (95 mm)	2.50" (64 mm)	4.00" (102 mm)	1¼" NPT	10.8 lbs (4.9 Kgs)
4" 100	4.500" (114.3 mm)	300 psi (20 bar)	8.50" (216 mm)	5.75" (146 mm)	4.60" (117 mm)	3.15" (80 mm)	5.00" (127 mm)	2" NPT	18.3 lbs (8.3 Kgs)
139.7 mm	5.500" (139.7 mm)	300 psi (20 bar)	13.00" (330 mm)	8.58" (218 mm)	7.00" (178 mm)	4.50" (114 mm)	7.64" (194 mm)	2" BSP	51.7 lbs (23.5 Kgs)
5" 125	5.563" (141.3 mm)	300 psi (20 bar)	13.00" (330 mm)	8.58" (218 mm)	7.00" (178 mm)	4.50" (114 mm)	7.64" (194 mm)	2" NPT	51.7 lbs (23.5 Kgs)
165.1 mm	6.500" (165.1 mm)	300 psi (20 bar)	12.00" (305 mm)	8.25" (210 mm)	7.00" (178 mm)	4.50" (114 mm)	7.00" (178 mm)	2" BSP	51.7 lbs (23.5 Kgs)
6" 150	6.625" (168.3 mm)	300 psi (20 bar)	12.00" (305 mm)	8.25" (210 mm)	7.05" (178 mm)	4.50" (114 mm)	7.00" (178 mm)	2" NPT	51.7 lbs (23.5 Kgs)
8" 200	8.625" (219.1 mm)	300 psi (20 bar)	14.37" (365 mm)	10.47" (266 mm)	8.54" (217 mm)	5.50" (140 mm)	10.00" (254 mm)	2" NPT	99.7 lbs (45.3 Kgs)
10" 250	10.750" (273.0 mm)	300 psi (20 bar)	20.00" (508 mm)	14.37" (365 mm)	10.75" (273 mm)	7.25" (184 mm)	10.00" (254 mm)	2" NPT	217.8 lbs (99.0 Kgs)
12" 300	12.750" (323.9 mm)	300 psi (20 bar)	24.00" (610 mm)	15.51" (394 mm)	12.87" (327 mm)	8.54" (217 mm)	12.00" (305 mm)	2" NPT	342.3 lbs (155.6 Kgs)
200 JIS	8.516" (216.3 mm)	300 psi (20 bar)	14.37" (365 mm)	10.47" (266 mm)	8.54" (217 mm)	5.50" (140 mm)	10.00" (254 mm)	2" BSP	99.7 lbs (45.3 Kgs)
250 JIS	10.528" (267.4 mm)	300 psi (20 bar)	20.00" (508 mm)	14.37" (365 mm)	10.75" (273 mm)	7.25" (184 mm)	10.00" (254 mm)	2" BSP	216.7 lbs (98.5 Kgs)
300 JIS	12.539" (318.5 mm)	300 psi (20 bar)	24.00" (610 mm)	15.51" (394 mm)	12.87" (327 mm)	8.54" (217 mm)	12.00" (305 mm)	2" BSP	342.3 lbs (155.6 Kgs)

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

SJ-915 dual disc check valve





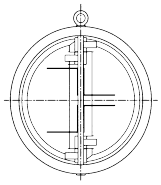
The Shurjoint Model SJ-915 is a grooved-end dual-plate (or double-door) check valve designed to provide positive and silent protection against backflow in piping systems. The valve features a ductile iron body with an EPDM or Nitrile (NBR) resilient seat molded to the body and type 304 stainless steel discs loaded with type 313 stainless steel springs.

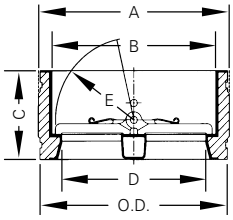
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions A	B	C	weight
2½" 65	2.875" (73.0 mm)	300 psi (20 bar)	4.92" (125 mm)	4.33" (110 mm)	2.87" (73 mm)	5.0 lbs (2.3 Kgs)
3" 80	3.500" (88.9 mm)	300 psi (20 bar)	5.31" (135 mm)	4.92" (125 mm)	3.50" (89 mm)	5.5 lbs (2.5 Kgs)
4" 100	4.500" (114.3 mm)	300 psi (20 bar)	5.39" (137 mm)	5.98" (152 mm)	4.50" (114 mm)	8.4 lbs (3.8 Kgs)
6" 150	6.625" (168.3 mm)	300 psi (20 bar)	6.00" (152 mm)	8.03" (204 mm)	6.62" (168 mm)	18.6 lbs (7.6 Kgs)
8" 200	8.625" (219.1 mm)	300 psi (20 bar)	6.73" (171 mm)	10.08" (256 mm)	8.62" (219 mm)	27.3 lbs (12.4 Kgs)
10" 250	10.750" (273.0 mm)	300 psi (20 bar)	7.80" (198 mm)	12.09" (307 mm)	10.75" (273 mm)	45.5 lbs (20.7 Kgs)
12" 300	12.750" (323.9 mm)	300 psi (20 bar)	8.19" (208 mm)	14.25" (362 mm)	12.75" (324 mm)	62.2 lbs (28.3 Kgs)

* Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.
ǂ Dimensions are subject to change.







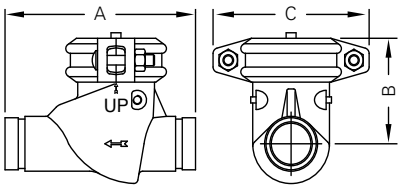
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions					weight
			A	B	C	D	E	
14" 350	14.000" (355.6 mm)	300 psi (20 bar)	14.49" (368 mm)	12.96" (329 mm)	7.13" (181 mm)	11.14" (283 mm)	6.06" (154 mm)	101 lbs (46 Kgs)
16" 400	16.000" (406.4 mm)	300 psi (20 bar)	16.14" (410 mm)	14.13" (359 mm)	7.24" (184 mm)	12.20" (310 mm)	6.81" (173 mm)	119 lbs (54 Kgs)
18" 450	18.000" (457.2 mm)	300 psi (20 bar)	18.15" (461 mm)	16.42" (417 mm)	7.83" (199 mm)	14.33" (364 mm)	8.00" (203 mm)	169 lbs (77 Kgs)
20" 500	20.000" (508.0 mm)	300 psi (20 bar)	20.04" (509 mm)	18.11" (460 mm)	8.46" (215 mm)	16.06" (408 mm)	8.80" (226 mm)	211 lbs (96 Kgs)
24" 600	24.000" (609.6 mm)	300 psi (20 bar)	24.00" (610 mm)	22.13" (562 mm)	9.65" (245 mm)	18.00" (457 mm)	9.80" (249 mm)	288 lbs (131 Kgs)

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

SJ-930 horizontal swing check valve





* SJ-930 in size 4" is equipped with Shurjoint #7771 5" Rigid Coupling.

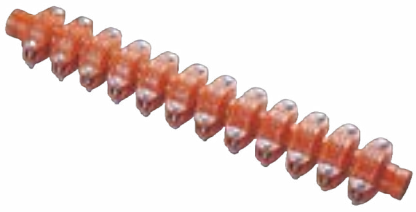
The Shurjoint Model SJ-930 horizontal swing check valves are supplied with grooved ends and are designed for general services including mining and oilfield applications. The SJ-930 features a bonnet cap which is drilled, tapped (½" NPT), and plugged and secured using a Shurjoint XH-70EP* coupling. The 316 stainless steel clapper is supplied standard encapsulated with Nitrile. As an option we offer Fluoroelastomer or Teflon encapsulations to meet your service requirements.

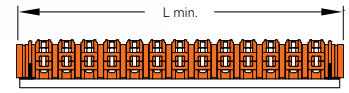
dimensions

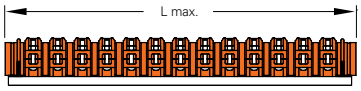
nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions A	B	C	weight
2" 50	2.375" (60.3 mm)	1000 psi (69 bar)	9.00" (229 mm)	4.88" (124 mm)	5.90" (150 mm)	14.5 lbs (6.6 Kgs)
2½" 65	2.875" (73.0 mm)	1000 psi (69 bar)	9.25" (235 mm)	5.50" (140 mm)	7.00" (178 mm)	22.9 lbs (10.4 Kgs)
3" 80	3.500" (88.9 mm)	600 psi (42 bar)	10.75" (273 mm)	5.75" (146 mm)	7.40" (188 mm)	26.8 lbs (12.2 Kgs)
4" 100	4.500" (114.3 mm)	600 psi (42 bar)	12.00" (305 mm)	7.63" (194 mm)	8.74" (222 mm)	38.1 lbs (17.3 Kgs)
6" 150	6.625" (168.1 mm)	600 psi (42 bar)	16.25" (413 mm)	9.15" (232.5 mm)	14.32" (363.8 mm)	103.5 lbs (46.9 Kgs)

* Pressure ratings are based on cut-grooved sch. 40 or thicker pipe connected with Shurjoint XH-70EP extra heavy rigid couplings.

651 expansion joint







The Model 651 Expansion Joint is a combination of couplings and specially machined pipe nipples that are joined in a series to accommodate the expansion and contraction of a piping system. Standard units are comprised of either Model 7705 or Model 7707 flexible couplings and cut grooved Sch. 40 pipe nipples. Customized units are also available. The components are epoxy coated (RAL3000 red) for ease of use and longer life. The Model 651 is designed only for use on straight pipe runs and require independent supports and or guides to prevent deflection.

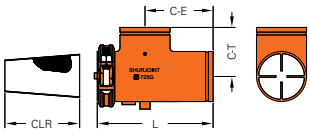
dimensions

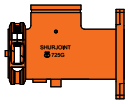
nom. size	pipe O.D.	couplings (standard units †)	max. working pressure (CWP)*	max. movements	L - (ref.) § min. (compressed)	L - (ref.) § max. (expanded)	weight
1½" 40	1.900" (48.3 mm)	7705 or 7707 (10)	350 psi (24 bar)	2.91" (74 mm)	28.25" (718 mm)	31.18" (792 mm)	24.2 lbs (11.0 Kgs)
2" 50	2.375" (60.3 mm)	7705 or 7707 (10)	350 psi (24 bar)	3.11" (79 mm)	28.25" (718 mm)	31.18" (792 mm)	27.0 lbs (12.2 Kgs)
2½" 65	2.875" (73.0 mm)	7705 or 7707 (10)	350 psi (24 bar)	3.11" (79 mm)	28.25" (718 mm)	31.38" (797 mm)	36.0 lbs (16.3 Kgs)
76.1 mm	3.000" (76.1 mm)	7705 or 7707 (10)	350 psi (24 bar)	3.11" (79 mm)	28.25" (718 mm)	31.38" (797 mm)	36.0 lbs (16.3 Kgs)
3" 80	3.500" (88.9 mm)	7705 or 7707 (10)	350 psi (24 bar)	3.11" (79 mm)	28.25" (718 mm)	31.38" (797 mm)	46.0 lbs (20.9 Kgs)
4" 100	4.500" (114.3 mm)	7705 or 7707 (7)	350 psi (24 bar)	2.09" (53 mm)	26.50" (673 mm)	28.58" (726 mm)	36.5 lbs (16.6 Kgs)
133.0 mm	5.250" (133.0 mm)	7705 or 7707 (7)	350 psi (24 bar)	2.09" (53 mm)	26.50" (673 mm)	28.58" (726 mm)	72.0 lbs (32.7 Kgs)
165.1 mm	6.500" (165.1 mm)	7705 or 7707 (7)	350 psi (24 bar)	2.09" (53 mm)	26.50" (673 mm)	28.35" (720 mm)	58.1 lbs (26.4 Kgs)
6" 150	6.625" (168.3 mm)	7705 or 7707 (7)	350 psi (24 bar)	2.09" (53 mm)	26.26" (667 mm)	28.35" (720 mm)	91.1 lbs (41.4 Kgs)
8" 200	8.625" (219.1 mm)	7705 or 7707 (7)	350 psi (24 bar)	1.93" (49 mm)	28.50" (724 mm)	30.43" (773 mm)	159.7 lbs (72.6 Kgs)
10" 250	10.750" (273.0 mm)	7705 or 7707 (7)	350 psi (24 bar)	1.93" (49 mm)	33.03" (839 mm)	36.46" (926 mm)	257.2 lbs (116.9 Kgs)
12" 300	12.750" (323.9 mm)	7705 or 7707 (7)	350 psi (24 bar)	1.93" (49 mm)	33.31" (846 mm)	36.46" (926 mm)	373.0 lbs (169.3 Kgs)

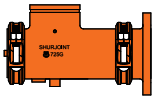
* Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.
† For Performance Data refer to Data Sheet C-01 for Model 7705 and Data Sheet C-02 for Model 7707.
Note: Available with greater or less movement by adding or eliminating couplings and nipple units.
§ L – (ref.) Length dimensions may vary slightly due to tolerances.
^651 expansion joints should be installed onto pipes using Shurjoint Z07 or 7771 couplings
* Brackets included on a limited basis.

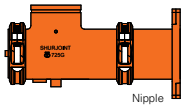
725G suction diffuser

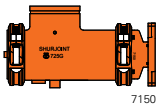





7041


7180


Nipple 7041


7041
7150

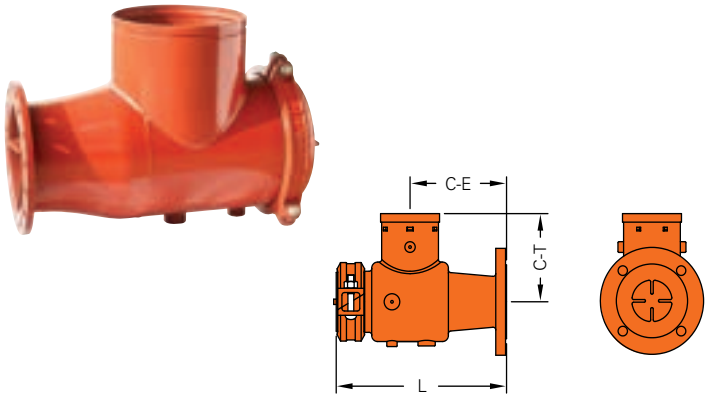
The Shurjoint Model 725G Suction Diffuser features a space saving design, ductile iron body and integral vanes that effectively reduce turbulence and provide optimum flow conditions at the inlet side of the pump. The suction diffuser's inlet is supplied with a grooved end to AWWA C606-04. The 725G can be connected directly to grooved end pump or to a flanged end pump if used in combination with a Model 7041 Flange Adapter or a Model 7180 Universal Flange Adapter. The Model 725G is supplied with a 304 stainless steel running strainer and a disposable fine mesh screen to protect the pump during start-up operation.

dimensions

nom. size		max. working pressure (CWP)*	dimensions				drain	weight
system side	pump side		L	C-E	CLR	C-T		
2” 50	2” 50	300 psi (20 bar)	8.82” (224 mm)	5.00” (127 mm)	5.79” (147 mm)	3.75” (95 mm)	½”	7.9 lbs (3.6 Kgs)
2½” 65	2½” 65	300 psi (20 bar)	8.82” (224 mm)	5.00” (127 mm)	5.79” (147 mm)	3.75” (95 mm)	½”	8.8 lbs (4.0 Kgs)
3” 80	3” 80	300 psi (20 bar)	10.43” (265 mm)	6.30” (160 mm)	6.93” (176 mm)	5.51” (140 mm)	1”	13.0 lbs (5.9 Kgs)
4” 100	4” 100	300 psi (20 bar)	12.28” (312 mm)	7.36” (187 mm)	8.58” (218 mm)	5.00” (127 mm)	1”	20.9 lbs (9.4 Kgs)
5” 125	5” 125	300 psi (20 bar)	13.86” (352 mm)	10.24” (260 mm)	9.76” (248 mm)	9.02” (229 mm)	1”	38.9 lbs (17.7 Kgs)
6” 150	6” 150	300 psi (20 bar)	15.16” (385 mm)	9.02” (229 mm)	10.43” (265 mm)	6.50” (165 mm)	1”	43.3 lbs (19.7 Kgs)
8” 200	8” 200	300 psi (20 bar)	18.27” (464 mm)	10.24” (260 mm)	9.76” (248 mm)	9.02” (229 mm)	1¼”	75.5 lbs (34.3 Kgs)
10” 250	10” 250	300 psi (20 bar)	22.11” (562 mm)	12.40” (315 mm)	16.14” (410 mm)	9.02” (229 mm)	1¼”	123.2 lbs (56.0 Kgs)
12” 300	12” 300	300 psi (20 bar)	26.30” (668 mm)	15.43” (392 mm)	19.29” (490 mm)	10.00” (254 mm)	1¼”	168.1 lbs (76.4 Kgs)

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

725F suction diffuser - fabricated



725F

The Shurjoint Model 725F Suction Diffusers in sizes 14” to 24” (350 mm to 600 mm) are fabricated from carbon steel pipe materials. Flange drilling is available to ANSI Class 150, PN 10/16, BS 10 Table E or JIS 10K.

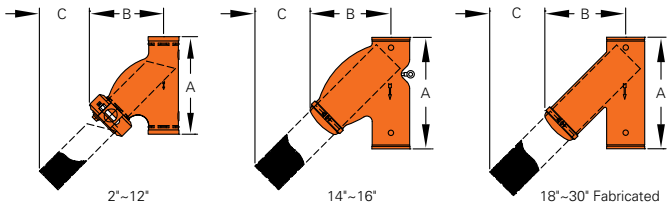
dimensions

nom. size		max. working pressure (CWP)*	dimensions					
suction side	pump side		L	C-E	C-T	drain	flange drilling ‡	weight
	10” 250	300 psi (20 bar)	35.00” (889 mm)	24.00” (610 mm)	14.00” (356 mm)			420 lbs (191 Kgs)
14” 350	12” 300	300 psi (20 bar)	35.00” (889 mm)	24.00” (610 mm)	14.00” (356 mm)	1½” NPT		444 lbs (202 Kgs)
	14” 350	300 psi (20 bar)	38.00” (965 mm)	26.00” (660 mm)	16.00” (406 mm)			532 lbs (242 Kgs)
	12” 300	300 psi (20 bar)	38.00” (965 mm)	26.00” (660 mm)	16.50” (419 mm)			510 lbs (232 Kgs)
16” 400	14” 350	300 psi (20 bar)	38.00” (965 mm)	26.00” (660 mm)	16.50” (419 mm)	2” NPT		532 lbs (242 Kgs)
	16” 400	300 psi (20 bar)	42.00” (1067 mm)	28.50” (724 mm)	17.50” (445 mm)			686 lbs (312 Kgs)
	14” 350	300 psi (20 bar)	42.00” (1067 mm)	28.50” (724 mm)	17.50” (445 mm)		ANSI class 150 PN 10/16 BS10 table E JIS 10K	673 lbs (306 Kgs)
18” 450	16” 400	300 psi (20 bar)	42.00” (1067 mm)	28.50” (724 mm)	17.50” (445 mm)	2” NPT		686 lbs (312 Kgs)
	18” 450	300 psi (20 bar)	50.00” (1270 mm)	35.00” (889 mm)	20.00” (508 mm)			893 lbs (406 Kgs)
	16” 400	300 psi (20 bar)	42.00” (1067 mm)	35.00” (889 mm)	20.00” (508 mm)			862 lbs (392 Kgs)
20” 500	18” 450	300 psi (20 bar)	42.00” (1067 mm)	35.00” (889 mm)	20.00” (508 mm)	2” NPT		893 lbs (406 Kgs)
	20” 500	300 psi (20 bar)	53.00” (1346 mm)	36.50” (927 mm)	23.50” (597 mm)			1195 lbs (543 Kgs)
	18” 450	300 psi (20 bar)	54.00” (1372 mm)	37.00” (940 mm)	20.50” (521 mm)			1217 lbs (553 Kgs)
24” 600	20” 500	300 psi (20 bar)	54.00” (1372 mm)	35.00” (889 mm)	20.50” (521 mm)	2” NPT		1256 lbs (571 Kgs)
	22” 550	300 psi (20 bar)	63.00” (1600 mm)	43.50” (1105 mm)	23.88” (606 mm)			1494 lbs (679 Kgs)

* Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.
‡ When ordering, specify the desired flange drilling.

726 y-strainer





The Shurjoint Model 726 Grooved-end Y-Strainers are designed to strain foreign matter and debris from piping systems and provide inexpensive protection for costly pumps, meters and other pipeline components. The Model 726 features a low pressure drop, fast installation, easy maintenance and is suitable for either vertical or horizontal installation. Standard Screen: 1/16" (1.6 mm) perforated for 2" – 3" sizes and 1/8" (3.2 mm) perforated for 4" – 16". Other customized screen perforations are also available upon request.

dimensions

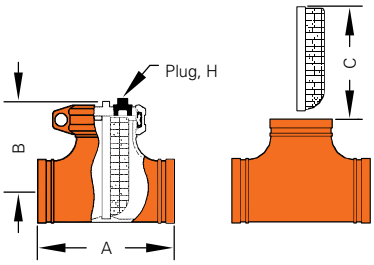
nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions			drain plug size	weight
			A	B	C		
2" 50	2.375" (60.3 mm)	300 psi (20 bar)	9.75" (248 mm)	7.13" (181 mm)	4.56" (116 mm)	½" 15	9.3 lbs (4.2 Kgs)
2½" 65	2.875" (73.0 mm)	300 psi (20 bar)	10.75" (273 mm)	7.83" (199 mm)	4.80" (122 mm)	½" 15	13.2 lbs (6.0 Kgs)
76.1 mm	3.000" (76.1 mm)	300 psi (20 bar)	10.75" (273 mm)	7.83" (199 mm)	4.80" (122 mm)	½" 15	13.2 lbs (6.0 Kgs)
3" 80	3.500" (88.9 mm)	300 psi (20 bar)	11.75" (299 mm)	8.70" (221 mm)	5.08" (129 mm)	1" 25	16.2 lbs (7.6 Kgs)
4" 100	4.500" (114.3 mm)	300 psi (20 bar)	14.25" (362 mm)	10.59" (269 mm)	6.61" (168 mm)	1" 25	26.4 lbs (12.0 Kgs)
139.7 mm	5.500" (139.7 mm)	300 psi (20 bar)	16.50" (419 mm)	13.00" (330 mm)	10.16" (258 mm)	1" 25	48.4 lbs (22.0 Kgs)
5" 125	5.563" (141.3 mm)	300 psi (20 bar)	16.50" (419 mm)	13.00" (330 mm)	10.16" (258 mm)	1" 25	48.4 lbs (22.0 Kgs)
6" 150	6.625" (168.3 mm)	300 psi (20 bar)	18.50" (470 mm)	14.05" (357 mm)	8.62" (219 mm)	1" 25	65.4 lbs (29.7 Kgs)
165.1 mm	6.500" (165.1 mm)	300 psi (20 bar)	18.50" (470 mm)	14.05" (357 mm)	8.62" (219 mm)	1" 25	65.0 lbs (29.5 Kgs)
8" 200	8.625" (219.1 mm)	232 psi (16 bar)	24.00" (610 mm)	17.87" (454 mm)	11.18" (284 mm)	1½" 40	121.0 lbs (55.0 Kgs)
10" 250	10.750" (273.0 mm)	175 psi (12 bar)	27.00" (686 mm)	20.55" (522 mm)	12.60" (320 mm)	1½" 40	182.6 lbs (83.0 Kgs)
12" 300	12.750" (323.9 mm)	175 psi (12 bar)	30.00" (762 mm)	24.00" (609 mm)	14.40" (366 mm)	1½" 40	277.2 lbs (126.0 Kgs)
200 JIS	8.516" (216.3 mm)	232 psi (16 bar)	24.00" (610 mm)	17.87" (454 mm)	11.18" (284 mm)	1½" 40	121.0 lbs (55.0 Kgs)

nom size.	pipe O.D.	max. working pressure (CWP)*	dimensions			drain plug size	weight
			A	B	C		
250 JIS	10.528" (267.4 mm)	175 psi (12 bar)	27.00" (686 mm)	20.55" (522 mm)	12.60" (320 mm)	1½" 40	182.6 lbs (83.0 Kgs)
300 JIS	12.539" (318.5 mm)	175 psi (12 bar)	30.00" (762 mm)	24.00" (609 mm)	14.40" (366 mm)	1½" 40	277.2 lbs (126.0 Kgs)
14" 350	14.000" (355.6 mm)	175 psi (12 bar)	40.00" (1016 mm)	29.92" (760 mm)	18.90" (480 mm)	1¼" 32	418.0 lbs (190.0 Kgs)
16" 400	16.000" (406.4 mm)	175 psi (12 bar)	42.00" (1067 mm)	30.60" (777 mm)	19.00" (483 mm)	1¼" 32	495.0 lbs (225.0 Kgs)

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

728 t-strainer





caution: The T-strainer shall be cleaned periodically or before the differential pressure reaches 10 psi.
standard screen: Mesh 12 for sizes 2" – 3" and mesh 6 for sizes 4" – 14"

The Shurjoint Model 728 Grooved-end T-Strainers are designed to strain foreign matter and debris from piping systems and provide inexpensive protection for costly pumps, meters and other pipeline components. The Model 728 features a low pressure drop, fast installation, easy maintenance and is suitable for either vertical or horizontal installation. The Model 728 installs with two Shurjoint couplings, and is rated up to 750 psi (52 Bar) depending upon the installed coupling's pressure rating and size.

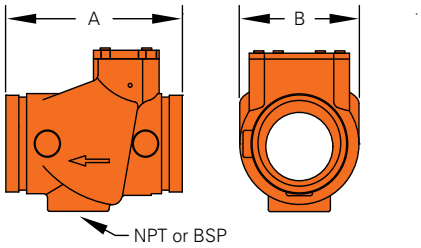
dimensions

nom size.	pipe O.D.	max. working pressure (CWP)*	dimensions A	B	C	H (drain plug)	weight
2" 50	2.375" (60.3 mm)	750 psi (52 bar)	6.54" (166 mm)	4.72" (120 mm)	4.92" (125 mm)	½" 15	6.6 lbs (3.0 Kgs)
2½" 65	2.875" (73.0 mm)	750 psi (52 bar)	7.50" (191 mm)	5.19" (132 mm)	5.59" (142 mm)	½" 15	8.8 lbs (4.0 Kgs)
3" 80	3.500" (88.9 mm)	750 psi (52 bar)	8.50" (216 mm)	5.74" (146 mm)	6.45" (164 mm)	½" 15	13.2 lbs (6.0 Kgs)
4" 100	4.500" (114.3 mm)	750 psi (52 bar)	10.00" (254 mm)	6.49" (165 mm)	7.48" (190 mm)	1" 25	17.7 lbs (8.0 Kgs)
5" ** 125	5.563" (141.3 mm)	750 psi (52 bar)	11.00" (279 mm)	7.48" (190 mm)	8.58" (218 mm)	1" 25	28.6 lbs (13.0 Kgs)
6" 150	6.625" (168.3 mm)	700 psi (48 bar)	13.00" (330 mm)	8.34" (212 mm)	10.23" (260 mm)	1" 25	44.0 lbs (20.0 Kgs)
8" 200	8.625" (219.1 mm)	600 psi (42 bar)	15.50" (394 mm)	9.96" (253 mm)	12.60" (320 mm)	1½" 40	77.0 lbs (35.0 Kgs)
10" 250	10.750" (273.0 mm)	500 psi (35 bar)	18.00" (457 mm)	11.18" (284 mm)	14.96" (380 mm)	1½" 40	114.6 lbs (52.0 Kgs)
12" 300	12.750" (323.9 mm)	400 psi (28 bar)	20.00" (508 mm)	12.16" (309 mm)	16.92" (430 mm)	1½" 40	160.3 lbs (72.7 Kgs)
14" 350	14.000" (355.6 mm)	250 psi (17 bar)	22.00" (559 mm)	17.75" (451 mm)	21.25" (540 mm)	1½" 40	186.3 lbs (84.5 Kgs)

* 1) Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.
2) Working pressure is maximum based on Shurjoint Model Z07 access coupling and will be governed by couplings used for installation and related system components. Maximum differential pressure from inlet to outlet must not exceed 10 psi (0.69 Bar).
3) Working pressure is dependent upon the Shurjoint coupling used to join Model 728 to the piping system.
** Non-standard/stock items may require longer lead time.

RCV riser check valve





The Shurjoint Model RCV is a grooved-end ductile iron body check valve, designed for use in the risers of wet type fire protection systems. The single clapper design features dual springs for non-slamming operation and the streamlined body provides for low friction loss. The valve can be installed in the vertical or horizontal position. Valves are tested to UL 312.

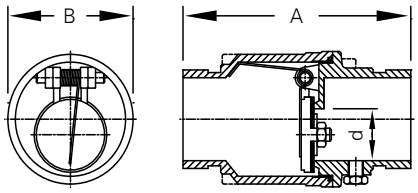
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions A	dimensions B	drain (NPT or BSP)	weight
2½" 65	2.875" (73.0 mm)	300 psi (20 bar)	7.48" (190 mm)	4.50" (114 mm)	1¼"	10.96 lbs (4.98 Kgs)
76.1 mm	3.000" (76.1 mm)	300 psi (20 bar)	7.48" (190 mm)	4.50" (114 mm)	1¼"	11.29 lbs (5.13 Kgs)
3" 80	3.500" (88.9 mm)	300 psi (20 bar)	7.00" (178 mm)	4.50" (114 mm)	1¼"	10.98 lbs (4.99 Kgs)
4" 100	4.500" (114.3 mm)	300 psi (20 bar)	8.50" (216 mm)	5.75" (146 mm)	2"	18.68 lbs (8.49 Kgs)
139.7 mm	5.500" (139.7 mm)	300 psi (20 bar)	13.00" (330 mm)	8.25" (210 mm)	2"	51.35 lbs (23.34 Kgs)
5" 125	5.563" (141.3 mm)	300 psi (20 bar)	13.00" (330 mm)	8.25" (210 mm)	2"	52.36 lbs (23.80 Kgs)
165.1 mm	6.500" (165.1 mm)	300 psi (20 bar)	12.00" (305 mm)	8.25" (210 mm)	2"	50.23 lbs (22.83 Kgs)
6" 150	6.625" (168.3 mm)	300 psi (20 bar)	12.00" (305 mm)	8.25" (210 mm)	2"	50.82 lbs (23.10 Kgs)

* Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.
‡ For Fire Protection pressure rating, listing, and approval information, please refer to Data Sheet B-42 or visit Shurjoint website, www.shurjoint.com for details or contact your Shurjoint representative.

BH-22C brass swing check valve
grooved-end, spring loaded clapper





The Shurjoint Model BH-22C swing check valve is designed for grooved inlet and outlet connections, featuring a brass body with spring-loaded clapper with rubber seat, rated 250 psi (17 bar) working water pressure and suitable for installation in the horizontal or vertical position (upward flow only). The valve body, end piece and clapper are made of brass castings per ASTM A-584 copper alloy C85700.

dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions A	B	D	weight
2" 50	2.375" (60.3 mm)	250 psi (17 bar)	5.70" (145 mm)	3.25" (83 mm)	1.38" (35 mm)	3.5 lbs (1.6 Kgs)
2½" 65	2.875" (73.0 mm)	250 psi (17 bar)	6.50" (165 mm)	4.21" (107 mm)	1.88" (48 mm)	6.8 lbs (3.1 Kgs)
3" 80	3.500" (88.9 mm)	250 psi (17 bar)	7.64" (194 mm)	4.88" (124 mm)	2.44" (62 mm)	9.9 lbs (4.5 Kgs)
4" 100	4.500" (114.3 mm)	250 psi (17 bar)	7.95" (202 mm)	5.59" (142 mm)	3.31" (84 mm)	11.9 lbs (5.4 Kgs)

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





section 5

threaded fittings 168

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814 / 815 tee 170
816 / 817 cross & coupling 171
818 / 819 / 820 / 825 coupling, cap & extension piece 172
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841 companion flange 174

threaded fittings

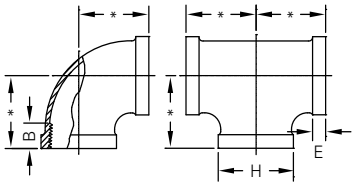


Shurjoint offers a complete range of ductile iron Class 300 threaded fittings in sizes from ½" to 2½" (15 mm to 65 mm). Shurjoint ductile iron threaded fittings are 100% air tested underwater to ensure leak-free performance. The Shurjoint ductile iron fitting series is UL listed and FM approved, making them the right choice for fire protection and other general application services.

Ductile Iron Class 300 threaded fittings are designed to the same basic dimensions as that of Class 150 malleable iron fittings. Though due to the superior strength characteristics, ductile iron fittings carry a much higher pressure rating. Laboratory tests confirm Shurjoint ductile iron fittings have passed hydrostatic test pressures exceeding 6,000 psi (414 Bar), which is equal to four times the 1,500 psi (103 Bar) as specified by ANSI B16.3 for 1¼" – 2" (32 mm – 50 mm) sizes.

general dimensions

These dimensions apply to all standard fittings, both straight and reducing. For center-to-face dimensions(*), see fitting tables.



pipe size	H band O.D.	E band width	B thread length (mm)
½" 15	1.02" (26 mm)	0.25" (6 mm)	0.43" (11 mm)
¾" 20	1.46" (37 mm)	0.27" (7 mm)	0.5" (13 mm)
1" 25	1.77" (45 mm)	0.3" (8 mm)	0.58" (15 mm)
1¼" 32	2.15" (55 mm)	0.34" (9 mm)	0.67" (17 mm)
1½" 40	2.43" (62 mm)	0.37" (9 mm)	0.7" (18 mm)
2" 50	2.96" (75 mm)	0.42" (11 mm)	0.75" (19 mm)
2½" 65	3.59" (91 mm)	0.48" (12 mm)	0.92" (23 mm)

pressure-temperature rating

ANSI B16.3 & B16.14

nom. rating	working pressure (W.O.G) @150°F / @65°C	working pressure saturated steam
class 300	½" – 1" : 2000 psi / 140 Bar 1¼" – 2" : 1500 psi / 105 Bar 2½": 1000 psi / 70 Bar	300 psi (20 Bar)

*Proof test pressure: 1.5 times the working pressure, non-shock cold water.

pressure-temperature rating

unions, brass to iron seat (ANSI B16.39)

nom. rating	working pressure (W.O.G) @150°F / @65°C	working pressure saturated steam
class 300	600 psi / 42 bar	300 psi (20 Bar)

*Proof test pressure: 1.5 times the working pressure, non-shock cold water.
*Max. Temperature: 450°F (ASME Boiler Code)

pressure-temperature rating

companion flanges (ANSI B16.42)

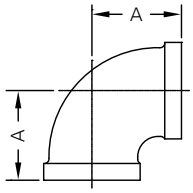
nom. rating	working pressure (W.O.G) @150°F / @65°C	working pressure saturated steam
class 150	250 psi / 17 bar	150 psi (10 Bar)

*Proof test pressure: 1.5 times the working pressure, non-shock cold water.

material: Ductile iron ASTM A536 Gr. 65-45-12
dimensions: ANSI B16.3 Class 150 except bushings and plugs (B16.14), unions (B16.39) and companion flanges (B16.42) Please note wall thickness dimensions are subordinate to Shurjoint UL and FM pressure rating listings and approvals.
threads: ANSI B1.20.1 NPT or ISO 7 (BSPT)
finish: Black or hot-dip galv

811 90° elbow

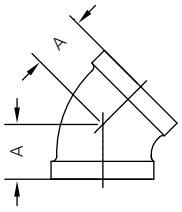




size	pipe O.D.	A	weight	box Q'ty
½″ 15	0.840″ (21.3 mm)	1.12″ (28 mm)	0.25 lbs (0.1 kgs)	240 pcs
¾″ 20	1.050″ (26.7 mm)	1.31″ (33 mm)	0.35 lbs (0.2 kgs)	120pcs
1″ 25	1.315″ (33.4 mm)	1.50″ (38 mm)	0.57 lbs (0.3 kgs)	70 pcs
1¼″ 32	1.660″ (42.2 mm)	1.75″ (44 mm)	0.97 lbs (0.4 kgs)	40 pcs
1½″ 40	1.900″ (48.3 mm)	1.94″ (49 mm)	1.17 lbs (0.5 kgs)	30 pcs
2″ 50	2.375″ (60.3 mm)	2.25″ (57 mm)	1.83 lbs (0.8 kgs)	20 pcs
2½″ 65	2.875″ (73.0 mm)	2.70″ (69 mm)	3.34 lbs (1.5 kgs)	10 pcs

813 45° elbow

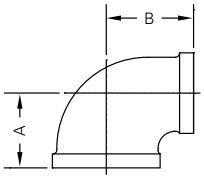




size	pipe O.D.	A	weight	box Q'ty
½″ 15	0.840″ (21.3 mm)	0.88″ (22 mm)	0.22 lbs (0.1 kgs)	250 pcs
¾″ 20	1.050″ (26.7 mm)	0.98″ (25 mm)	0.33 lbs (0.2 kgs)	150 pcs
1″ 25	1.315″ (33.4 mm)	1.12″ (28 mm)	0.55 lbs (0.3 kgs)	90 pcs
1¼″ 32	1.660″ (42.2 mm)	1.29″ (33 mm)	0.84 lbs (0.4 kgs)	50 pcs
1½″ 40	1.900″ (48.3 mm)	1.43″ (36 mm)	0.92 lbs (0.5 kgs)	35 pcs
2″ 50	2.375″ (60.3 mm)	1.68″ (43 mm)	1.63 lbs (0.7 kgs)	18 pcs
2½″ 65	2.875″ (73.0 mm)	1.95″ (50 mm)	2.42 lbs (1.1 kgs)	12 pcs

812 reducing 90° elbow

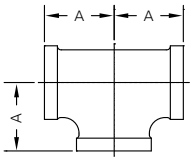




size	pipe O.D.	A	B	weight	box Q'ty
¾ x ½″ 20 x 15	1.050 x 0.840″ (26.7 x 21.3 mm)	1.20″ (30 mm)	1.22″ (31 mm)	0.35 lbs (0.2 kgs)	160 pcs
1 x ½″ 25 x 15	1.315 x 0.840″ (33.4 x 21.3 mm)	1.26″ (32 mm)	1.36″ (35 mm)	0.46 lbs (0.2 kgs)	110 pcs
1 x ¾″ 25 x 20	1.315 x 1.050″ (33.4 x 26.7 mm)	1.18″ (30 mm)	1.45″ (37 mm)	0.57 lbs (0.3 kgs)	90 pcs
1¼ x ½″ 32 x 15	1.660 x 0.840″ (42.2 x 21.3 mm)	1.34″ (34 mm)	1.53″ (39 mm)	0.64 lbs (0.3 kgs)	75 pcs
1¼ x ¾″ 32 x 20	1.660 x 1.050″ (42.2 x 26.7 mm)	1.45″ (37 mm)	1.62″ (41 mm)	0.68 lbs (0.3 kgs)	60 pcs
1¼ x 1″ 32 x 25	1.660 x 1.315″ (42.2 x 33.4 mm)	1.58″ (40 mm)	1.67″ (42 mm)	0.81 lbs (0.4 kgs)	55 pcs
1½ x ½″ 40 x 15	1.900 x 0.840″ (48.3 x 21.3 mm)	1.41″ (36 mm)	1.66″ (42 mm)	0.84 lbs (0.4 kgs)	45 pcs
1½ x ¾″ 40 x 20	1.900 x 1.050″ (48.3 x 26.7 mm)	1.52″ (39 mm)	1.75″ (44 mm)	0.90 lbs (0.4 kgs)	45 pcs
1½ x 1″ 40 x 25	1.900 x 1.315″ (48.3 x 33.4 mm)	1.65″ (42 mm)	1.80″ (46 mm)	0.95 lbs (0.4 kgs)	40 pcs
1½ x 1¼″ 40 x 32	1.900 x 1.660″ (48.3 x 42.2 mm)	1.82″ (46 mm)	1.88″ (48 mm)	1.10 lbs (0.5 kgs)	35 pcs
2 x ¾″ 50 x 20	2.375 x 1.050″ (60.3 x 26.7 mm)	1.60″ (41 mm)	1.97″ (50 mm)	1.19 lbs (0.5 kgs)	30 pcs
2 x 1″ 50 x 25	2.375 x 1.315″ (60.3 x 33.4 mm)	1.73″ (44 mm)	2.02″ (51 mm)	1.47 lbs (0.7 kgs)	25 pcs
2 x 1½″ 50 x 40	2.375 x 1.900″ (60.3 x 48.3 mm)	2.02″ (51 mm)	2.16″ (55 mm)	1.61 lbs (0.7 kgs)	20 pcs
2½ x 2″ 65 x 50	2.875 x 2.375″ (73.0 x 60.3 mm)	2.39″ (61 mm)	2.60″ (66 mm)	2.93 lbs (1.3 kgs)	15 pcs

814 tee

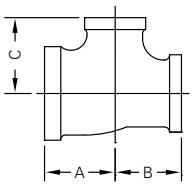




size	pipe O.D.	A	weight	box Q'ty
½″ 15	0.840″ (21.3 mm)	1.12″ (28 mm)	0.31 lbs (0.1 kgs)	150 pcs
¾″ 20	1.050″ (26.7 mm)	1.31″ (33 mm)	0.48 lbs (0.2 kgs)	90 pcs
1″ 25	1.315″ (33.4 mm)	1.50″ (38 mm)	0.81 lbs (0.3 kgs)	60 pcs
1¼″ 32	1.660″ (42.2 mm)	1.75″ (44 mm)	1.28 lbs (0.4 kgs)	35 pcs
1½″ 40	1.900″ (48.3 mm)	1.94″ (49 mm)	1.72 lbs (0.5 kgs)	24 pcs
2″ 50	2.375″ (60.3 mm)	2.25″ (57 mm)	2.57 lbs (0.8 kgs)	12 pcs
2½″ 65	2.875″ (73.0 mm)	2.70″ (69 mm)	4.44 lbs (1.5 kgs)	8 pcs

815 reducing tee



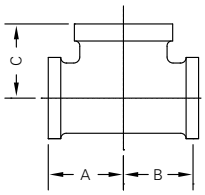


size			A	B	C	weight	box Q'ty
¾″ 20	¾″ 20	½″ 15	1.20″ (30 mm)	1.20″ (30 mm)	1.22″ (31 mm)	0.46 lbs (0.2 kgs)	95 pcs
1″ 25	½″ 15	1″ 25	1.50″ (38 mm)	1.36″ (35 mm)	1.50″ (38 mm)	0.71 lbs (0.3 kgs)	55 pcs
	¾″ 20	½″ 15	1.26″ (32 mm)	1.20″ (30 mm)	1.36″ (35 mm)	0.59 lbs (0.3 kgs)	80 pcs
		¾″ 20	1.37″ (35 mm)	1.31″ (33 mm)	1.45″ (37 mm)	0.66 lbs (0.3 kgs)	65 pcs
		1″ 25	1.50″ (38 mm)	1.45″ (37 mm)	1.50″ (38 mm)	0.77 lbs (0.3 kgs)	55 pcs
	1″ 25	½″ 15	1.26″ (32 mm)	1.26″ (32 mm)	1.36″ (35 mm)	0.64 lbs (0.3 kgs)	65 pcs
		¾″ 20	1.37″ (35 mm)	1.37″ (35 mm)	1.45″ (37 mm)	0.75 lbs (0.3 kgs)	60 pcs
1¼″ 32	1″ 25	½″ 15	1.34″ (34 mm)	1.26″ (32 mm)	1.53″ (39 mm)	0.79 lbs (0.4 kgs)	50 pcs
		¾″ 20	1.45″ (37 mm)	1.37″ (35 mm)	1.62″ (41 mm)	0.88 lbs (0.4 kgs)	50 pcs
		1″ 25	1.58″ (40 mm)	1.50″ (38 mm)	1.67″ (42 mm)	1.01 lbs (0.2 kgs)	45 pcs
		1¼″ 32	1.75″ (44 mm)	1.67″ (42 mm)	1.75″ (44 mm)	1.25 lbs (0.6 kgs)	40 pcs
1¼″ 32	1¼″ 32	½″ 15	1.34″ (34 mm)	1.34″ (34 mm)	1.53″ (39 mm)	0.84 lbs (0.4 kgs)	45 pcs
		¾″ 20	1.45″ (37 mm)	1.45″ (37 mm)	1.62″ (41 mm)	0.99 lbs (0.4 kgs)	45 pcs
		1″ 25	1.58″ (40 mm)	1.58″ (40 mm)	1.67″ (42 mm)	1.12 lbs (0.5 kgs)	40 pcs
1½″ 40	1½″ 25	1.44″ 15	1.31″ (37 mm)	1.69″ (33 mm)	0.92″ 43 mm)	1.25 lbs (0.6 kgs)	40 pcs
		¾″ 20	1.50″ (38 mm)	1.37″ (35 mm)	1.75″ (44 mm)	1.01 lbs (0.5 kgs)	40 pcs
		1″ 25	1.65″ (42 mm)	1.50″ (38 mm)	1.80″ (46 mm)	1.19 lbs (0.5 kgs)	30 pcs
		1¼″ * 32	1.82″ (46 mm)	1.67″ (42 mm)	1.88″ (48 mm)	1.54 lbs (0.7 kgs)	30 pcs
		1½″ 40	1.94″ (49 mm)	1.80″ (46 mm)	1.94″ (49 mm)	1.54 lbs (0.7 kgs)	30 pcs
	1¼″ 32	½″ 15	1.41″ (36 mm)	1.34″ (34 mm)	1.66″ (42 mm)	1.08 lbs (0.5 kgs)	40 pcs
		¾″ 20	1.52″ (39 mm)	1.45″ (37 mm)	1.75″ (44 mm)	1.14 lbs (0.5 kgs)	40 pcs
		1″ 25	1.65″ (42 mm)	1.58″ (40 mm)	1.80″ (46 mm)	1.39 lbs 0.6 mm)	30 pcs
	1½″ 40	½″ 15	1.41″ (36 mm)	1.41″ (36 mm)	1.66″ (42 mm)	1.10 lbs 0.5 kgs)	35 pcs
		¾″ 20	1.52″ (39 mm)	1.52″ (39 mm)	1.75″ (44 mm)	1.17 lbs (0.5 kgs)	35 pcs
		1″ 25	1.65″ (42 mm)	1.65″ (42 mm)	1.80″ (46 mm)	1.36 lbs (0.6 kgs)	30 pcs
		1¼″ 32	1.82″ (46 mm)	1.82″ (46 mm)	1.88″ (48 mm)	1.56 lbs (0.7 kgs)	30 pcs
2″ 50	1″ 25	2″ 50	2.25″ (57 mm)	2.02″ (51 mm)	2.25″ (57 mm)	2.13 lbs (1.0 kgs)	15 pcs
	1¼″ 32	2″ 50	2.25″ (57 mm)	2.10″ (53 mm)	2.25″ (57 mm)	2.22 lbs (1.0 kgs)	15 pcs
	1½″ 40	½″ 15	1.49″ (38 mm)	1.41″ (36 mm)	1.88″ (48 mm)	1.52 lbs (0.7 kgs)	30 pcs
		¾″ 20	1.60″ (41 mm)	1.52″ (39 mm)	1.97″ (50 mm)	1.47 lbs (0.7 kgs)	25 pcs
		1″ 25	1.73″ (44 mm)	1.65″ (42 mm)	2.02″ (51 mm)	1.63 lbs (0.7 kgs)	20 pcs
		1½″ 40	2.02″ (51 mm)	1.94″ (49 mm)	2.16″ (55 mm)	2.09 lbs (0.9 kgs)	20 pcs
		2″ 50	2.25″ (57 mm)	2.16″ (55 mm)	2.25″ (57 mm)	2.33 lbs (1.1 kgs)	15 pcs
	2″ 50	½″ 15	1.49″ (38 mm)	1.49″ (38 mm)	1.88″ (48 mm)	1.56 lbs (0.7 kgs)	20 pcs
		¾″ 20	1.60″ (41 mm)	1.60″ (41 mm)	1.97″ (50 mm)	1.61 lbs (0.7 kgs)	20 pcs
		1″ 25	1.73″ (44 mm)	1.73″ (44 mm)	2.02″ (51 mm)	1.80 lbs (0.8 kgs)	20 pcs
		1¼″ 32	1.90″ (48 mm)	1.90″ (48 mm)	2.10″ (53 mm)	2.09 lbs (0.9 kgs)	20 pcs
		1½″ 40	2.02″ (51 mm)	2.02″ (51 mm)	2.16″ (55 mm)	2.24 lbs (1.0 kgs)	15 pcs
2½″ 65	2″ 50	¾″ 20	1.74″ (44 mm)	1.60″ (41 mm)	2.32″ (59 mm)	2.35 lbs (1.1 kgs)	15 pcs

*Non-standard/stock items may require longer lead time.

815 bullhead tee

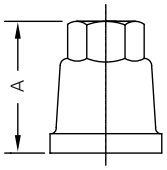




size			A	B	C	weight	box Q'ty
¾″ 20	¾″ 20	1″ 25	1.45″ (37 mm)	1.45″ (37 mm)	1.37″ (35 mm)	0.66 lbs (0.3 kgs)	65 pcs
1″ 25	1″ 25	1¼″ 32	1.67″ (42 mm)	1.67″ (42 mm)	1.58″ (40 mm)	0.97 lbs (0.4 kgs)	45 pcs
		1½″ 40	1.81″ (46 mm)	1.81″ (46 mm)	1.65″ (42 mm)	1.15 lbs (0.5 kgs)	35 pcs
1¼″ 32	1″ 25	1½″ 40	1.88″ (48 mm)	1.81″ (46 mm)	1.82″ (46 mm)	1.43 lbs (0.6 kgs)	30 pcs
	1¼″ 32	1½″ 40	1.88″ (48 mm)	1.88″ (48 mm)	1.82″ (46 mm)	1.52 lbs (0.7 kgs)	30 pcs
		2″ 50	2.10″ (53 mm)	2.10″ (53 mm)	1.90″ (48 mm)	1.80 lbs (0.8 kgs)	24 pcs
1½″ 40	1¼″ 32	2″ 50	2.16″ (55 mm)	2.10″ (53 mm)	2.02″ (51 mm)	1.94 lbs (0.9 kgs)	20 pcs
	1½″ 40	2″ 50	2.16″ (55 mm)	2.16″ (55 mm)	2.02″ (51 mm)	2.00 lbs (0.9 kgs)	20 pcs
2″ 50	2″ 50	2½″ 65	2.60″ (66 mm)	2.60″ (66 mm)	2.39″ (61 mm)	3.61 lbs (1.6 kgs)	10 pcs

816 reducing coupling

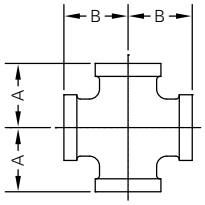




size	pipe O.D.	A	wrench size	weight	box Q'ty
¾ x ½″ 20 x 15	1.050 x 0.840″ (26.7 x 21.3 mm)	1.63″ (41 mm)	1¼″ (32 mm)	0.37 lbs (0.2 Kgs)	150 pcs
1 x ½″ 25 x 15	1.315 x 0.840″ (33.4 x 21.3 mm)	1.69″ (43 mm)	1¼″ (32 mm)	0.37 lbs (0.2 Kgs)	140 pcs
1 x ¾″ 25 x 20	1.315 x 1.050″ (33.4 x 26.7 mm)	1.37″ (35 mm)	1½″ (38 mm)	0.48 lbs (0.2 Kgs)	120 pcs
1¼ x ¾″ 32 x 20	1.660 x 1.050″ (42.2 x 26.7 mm)	2.06″ (52 mm)	1½″ (38 mm)	0.59 lbs (0.3 Kgs)	80 pcs
1¼ x 1″ 32 x 25	1.660 x 1.315″ (42.2 x 33.4 mm)	2.06″ (52 mm)	- -	0.66 lbs (0.3 Kgs)	60 pcs
1½ x 1″ 40 x 25	1.900 x 1.315″ (48.3 x 33.4 mm)	2.31″ (59 mm)	- -	0.84 lbs (0.4 Kgs)	50 pcs
1½ x 1¼″ 40 x 32	1.900 x 1.660″ (48.3 x 42.2 mm)	2.31″ (59 mm)	- -	0.92 lbs (0.4 Kgs)	45 pcs
2 x 1″ 50 x 25	2.375 x 1.315″ (60.3 x 33.4 mm)	2.81″ (71 mm)	- -	1.23 lbs (0.6 Kgs)	35 pcs
2 x 1¼″ 50 x 32	2.375 x 1.660″ (60.3 x 42.2 mm)	2.81″ (71 mm)	- -	1.28 lbs (0.6 Kgs)	30 pcs
2 x 1½″ 50 x 40	2.375 x 1.900″ (60.3 x 48.3 mm)	2.81″ (71 mm)	- -	1.66 lbs (0.8 Kgs)	30 pcs
2½ x 2″ 65 x 50	2.875 x 2.375″ (73.0 x 60.3 mm)	3.25″ (83 mm)	- -	2.24 lbs (1.0 Kgs)	18 pcs

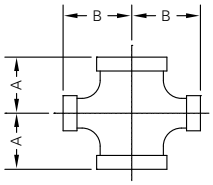
817 cross / reducing cross





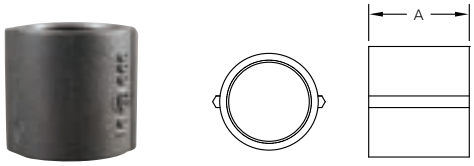
size	pipe O.D.	A	B	weight	box Q'ty
½″ 15	0.840″ (21.3 mm)	1.12″ (28 mm)	1.12″ (28 mm)	0.48 lbs (0.2 kgs)	90 pcs
¾″ 20	1.050″ (26.7 mm)	1.31″ (33 mm)	1.31″ (33 mm)	0.77 lbs (0.3 kgs)	60 pcs
1″ 25	1.315″ (33.4 mm)	1.50″ (38 mm)	1.50″ (38 mm)	0.95 lbs (0.4 kgs)	45 pcs
1¼″ 32	1.660″ (42.2 mm)	1.75″ (44 mm)	1.75″ (44 mm)	1.43 lbs (0.6 kgs)	25 pcs
1½″ 40	1.900″ (48.3 mm)	1.94″ (49 mm)	1.94″ (49 mm)	1.87 lbs (0.8 kgs)	20 pcs
2″ 50	2.375″ (60.3 mm)	2.25″ (57 mm)	2.25″ (57 mm)	2.86 lbs (1.3 kgs)	10 pcs





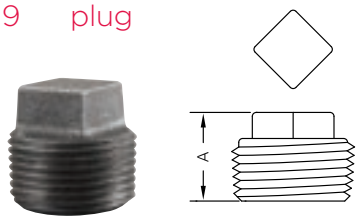
size	A	B	weight	box Q'ty
1¼ x 1¼ x 1 x 1″ 32 x 32 x 25 x 25	1.58″ (40 mm)	1.67″ (42 mm)	1.25 lbs (0.6 Kgs)	30 pcs
1½ x 1½ x 1 x 1″ 40 x 40 x 25 x 25	1.65″ (42 mm)	1.80″ (46 mm)	1.47 lbs (0.7 Kgs)	24 pcs
2 x 2 x 1 x 1″ 50 x 50 x 25 x 25	1.73″ (44 mm)	2.02″ (51 mm)	1.94 lbs (0.9 Kgs)	16 pcs

818 straight coupling



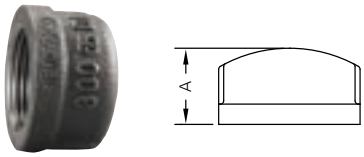
size	pipe O.D.	A	wrench size	weight	box Q'ty
½″ 15	0.840″ (21.3 mm)	1.38″ (35 mm)	1⅛″ (29 mm)	0.18 lbs (0.1 kgs)	360 pcs
¾″ 20	1.050″ (26.7 mm)	1.61″ (41 mm)	1⅜″ (35 mm)	0.26 lbs (0.2 kgs)	200 pcs
1″ 25	1.315″ (33.4 mm)	1.77″ (45 mm)	1¹¹⁄₁₆″ (43 mm)	0.42 lbs (0.2 kgs)	110 pcs
1¼″ 32	1.660″ (42.2 mm)	2.00″ (51 mm)	2″ (51 mm)	0.57 lbs (0.3 kgs)	75 pcs
1½″ 40	1.900″ (48.3 mm)	2.20″ (56 mm)	2¼″ (57 mm)	0.77 lbs (0.3 kgs)	60 pcs
2″ 50	2.375″ (60.3 mm)	2.60″ (66 mm)	2¾″ (70 mm)	1.17 lbs (0.5 kgs)	30 pcs
2½″ 65	2.875″ (73.0 mm)	3.00″ (76 mm)	3⅜″ (86 mm)	2.11 lbs (1.0 kgs)	18 pcs

819 plug



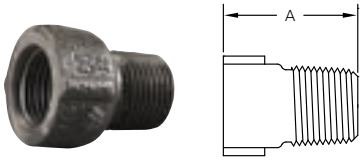
size	pipe O.D.	A	weight	box Q'ty
½″ 15	0.840″ (21.3 mm)	0.93″ (24 mm)	0.09 lbs (0.0 kgs)	500 pcs
¾″ 20	1.050″ (26.7 mm)	1.13″ (29 mm)	0.18 lbs (0.1 kgs)	300 pcs
1″ 25	1.315″ (33.4 mm)	1.25″ (32 mm)	0.25 lbs (0.1 kgs)	200 pcs
1¼″ 32	1.660″ (42.2 mm)	1.36″ (35 mm)	0.42 lbs (0.2 kgs)	110 pcs
1½″ 40	1.900″ (48.3 mm)	1.45″ (37 mm)	0.59 lbs (0.3 kgs)	80 pcs
2″ 50	2.375″ (60.3 mm)	1.50″ (38 mm)	0.95 lbs (0.4 kgs)	45 pcs

820 cap



size	pipe O.D.	A	weight	box Q'ty
½″ 15	0.840″ (21.3 mm)	0.89″ (23 mm)	0.14 lbs (0.1 Kgs)	500 pcs
¾″ 20	1.050″ (26.7 mm)	1.00″ (25 mm)	0.20 lbs (0.1 Kgs)	300 pcs
1″ 25	1.315″ (33.4 mm)	1.18″ (30 mm)	0.33 lbs (0.1 Kgs)	180 pcs
1¼″ 32	1.660″ (42.2 mm)	1.32″ (34 mm)	0.46 lbs (0.2 Kgs)	110 pcs
1½″ 40	1.900″ (48.3 mm)	1.38″ (35 mm)	0.57 lbs (0.3 Kgs)	80 pcs
2″ 50	2.375″ (60.3 mm)	1.48″ (38 mm)	0.88 lbs (0.4 Kgs)	45 pcs
2½″ 65	2.875″ (73.0 mm)	1.77″ (45 mm)	1.54 lbs (0.7 Kgs)	25 pcs

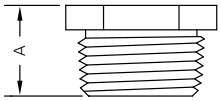
825 extension piece



size	pipe O.D.	A	weight	box Q'ty
½ x 1½L 15 x 40L	0.840 x 1.900″ (21.3 x 48.3 mm)	1.50″ (38 mm)	0.18 lbs (0.1 kgs)	300 pcs
½ x 2L 15 x 50L	1.900 x 2.375″ (21.3 x 60.3 mm)	2.00″ (51 mm)	0.22 lbs (0.1 kgs)	250 pcs
¾ x 1½L 20 x 40L	1.050 x 1.900″ (26.7 x 48.3 mm)	1.50″ (38 mm)	0.22 lbs (0.1 kgs)	250 pcs
¾ x 2L 20 x 50L	1.050 x 2.375″ (26.7 x 60.3 mm)	2.00″ (51 mm)	0.26 lbs (0.1 kgs)	200 pcs

827 hex bushing

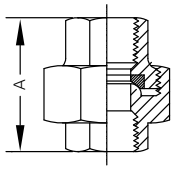




size	pipe O.D.	A	weight	box Q'ty
1 x ½" 25 x 15	1.315 x 0.840" (33.4 x 21.3 mm)	1.06" (27 mm)	0.20 lbs (0.1 kgs)	280 pcs
1 x ¾" 25 x 20	1.315 x 1.050" (33.4 x 26.7 mm)	1.06" (27 mm)	0.18 lbs (0.1 kgs)	280 pcs
1¼ x 1" 32 x 25	1.660 x 1.315" (42.2 x 33.4 mm)	1.18" (30 mm)	0.29 lbs (0.1 kgs)	150 pcs
1½ x 1" 40 x 25	1.900 x 1.315" (48.3 x 21.3 mm)	1.26" (32 mm)	0.53 lbs (0.2 kgs)	100 pcs
1½ x 1¼" 40 x 32	1.900 x 1.660" (48.3 x 42.2 mm)	1.26" (32 mm)	0.37 lbs (0.2 kgs)	100 pcs
2 x 1" 50 x 25	2.375 x 1.315" (60.3 x 33.4 mm)	1.34" (34 mm)	0.75 lbs (0.3 kgs)	80 pcs
2 x 1¼" 50 x 32	2.375 x 1.660" (60.3 x 42.2 mm)	1.34" (34 mm)	0.75 lbs (0.3 kgs)	80 pcs
2 x 1½" 50 x 40	2.375 x 1.900" (60.3 x 48.3 mm)	1.34" (34 mm)	0.64 lbs (0.3 kgs)	80 pcs

830 brass seat union

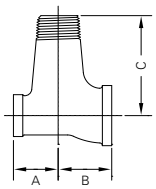




size	pipe O.D.	A	weight	box Q'ty
½" 15	0.840" (21.3 mm)	1.81" (46 mm)	0.46 lbs (0.2 kgs)	110 pcs
¾" 20	1.050" (26.7 mm)	1.99" (51 mm)	0.64 lbs (0.3 kgs)	80 pcs
1" 25	1.315" (33.4 mm)	2.17" (55 mm)	1.01 lbs (0.5 kgs)	50 pcs
1¼" 32	1.660" (42.2 mm)	2.52" (64 mm)	1.45 lbs (0.7 kgs)	35 pcs
1½" 40	1.900" (48.3 mm)	2.64" (67 mm)	1.85 lbs (0.8 kgs)	25 pcs
2" 50	2.375" (60.3 mm)	3.15" (80 mm)	2.86 lbs (1.3 kgs)	18 pcs

832 long street tee

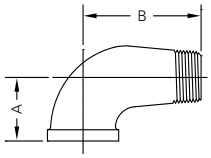




size	A	B	C	weight	box Q'ty
1 x ½ x 1M" 25 x 15 x 25M	1.50" (38 mm)	1.40" (36 mm)	3.00" (76 mm)	0.91 lbs (0.4 Kgs)	50 pcs
1 x 1 x 1M" 25 x 25 x 25M	1.50" (38 mm)	1.50" (38 mm)	3.00" (76 mm)	1.03 lbs (0.5 Kgs)	45 pcs

831 long street 90° elbow

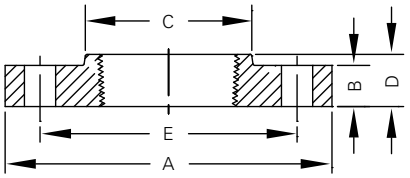




size	pipe O.D.	A	B	weight	box Q'ty
1 x ½M" 25 x 15M	1.315 x 0.840" (33.4 x 21.3 mm)	1.50" (38 mm)	3.00" (76 mm)	0.66 lbs (0.3 kgs)	80 pcs
1 x 1M" 25 x 25M	1.315 x 1.315" (33.4 x 33.4 mm)	1.50" (38 mm)	3.00" (76 mm)	0.81 lbs (0.4 kgs)	60 pcs

841 companion flange





The Model 841 is a traditional companion flange used for transition from a flanged to a threaded piping system.

dimensions

nom. pipe size	pipe O.D.	diameter of flange "A"	thickness of flange "B"	diameter of hub "C"	length of hub "D"	bolt circle diameter "E"	bolt no.	bolt size	weight
1" 25	1.315" (33.4 mm)	4.25" (108 mm)	0.56" (14 mm)	1.94" (49 mm)	0.69" (18 mm)	3.12" (79 mm)	4	½ x 2.25" ---	1.54 lbs (0.7 kgs)
1¼" 32	1.660" (42.2 mm)	4.62" (117 mm)	0.62" (16 mm)	2.31" (59 mm)	0.81" (21 mm)	3.50" (89 mm)	4	½ x 2.50" ---	1.94 lbs (0.9 kgs)
1½" 40	1.900" (48.3 mm)	5.00" (127 mm)	0.69" (18 mm)	2.56" (65 mm)	0.88" (22 mm)	3.88" (99 mm)	4	½ x 2.50" ---	2.29 lbs (1.0 kgs)
2" 50	2.375" (60.3 mm)	6.00" (152 mm)	0.75" (19 mm)	3.06" (78 mm)	1.00" (25 mm)	4.75" (121 mm)	4	⅝ x 2.75" ---	4.18 lbs (1.9 kgs)
2½" 65	2.875" (73.0 mm)	7.00" (178 mm)	0.88" (22 mm)	3.56" (90 mm)	1.12" (28 mm)	5.50" (140 mm)	4	⅝ x 3.00" ---	5.83 lbs (2.6 kgs)
3" 80	3.500" (88.9 mm)	7.50" (191 mm)	0.94" (24 mm)	4.25" (108 mm)	1.19" (30 mm)	6.00" (152 mm)	4	⅝ x 3.25" ---	6.60 lbs (3.0 kgs)
4" 100	4.500" (114.3 mm)	9.00" (229 mm)	0.94" (24 mm)	5.31" (135 mm)	1.31" (33 mm)	7.50" (191 mm)	4	⅝ x 3.25" ---	11.75 lbs (5.3 kgs)
6" 150	6.625" (168.3 mm)	11.00" (279 mm)	1.00" (25 mm)	7.56" (192 mm)	1.56" (40 mm)	9.50" (241 mm)	4	¾ x 3.50" ---	16.50 lbs (7.5 kgs)
8" 200	8.625" (219.1 mm)	13.50" (343 mm)	1.12" (28 mm)	9.69" (246 mm)	1.75" (44 mm)	11.75" (298 mm)	4	¾ x 3.75" ---	25.98 lbs (11.8 kgs)

notes





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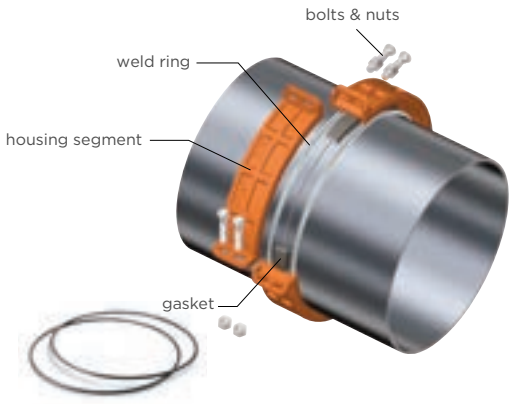
79 wildcat coupling 197

ring joint, shouldered & plain end couplings

Shurjoint ring joint, shouldered and plain end couplings are non-grooved mechanical pipe joining components and excellent alternatives where pipe is difficult to groove or when grooving is not the preferred method. The processing of a roll groove on pipe becomes more difficult as the pipe O.D. and or wall thickness increases. Roll grooving pipe larger than 14" (350 mm) requires proper tools and equipment. Pipe having a wall thickness greater than 0.375" (9.5 mm) may not be practical to roll groove.

Ring Joint Coupling

The Shurjoint ring joint coupling provides a much more secure joint than a comparable roll-grooved system, simply because the contact area of the rings is much greater than that of the roll-groove profile. In addition, the welded rings are able to withstand 2 - 3 times the shearing forces of roll grooves. High pressure couplings up to 3770 psi (260 Bar) are available.

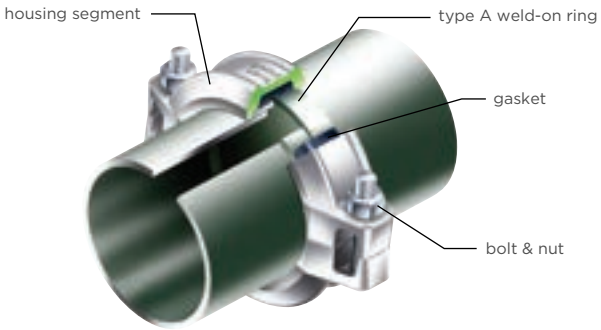


factory supplied weld rings

#R-88 ring joint coupling

shouldered coupling

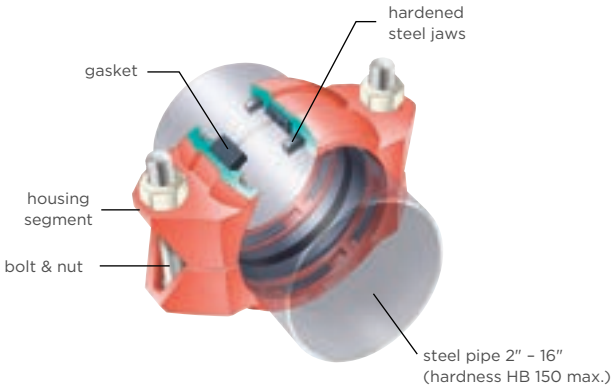
The Shurjoint shouldered piping system is a classic and versatile pipe joining method which utilizes Type A weld-on rings. Shurjoint shouldered couplings are widely used in irrigation, dewatering on construction sites, and other installations.



#S35 shouldered coupling

plain-end coupling

The Shurjoint plain-end coupling securely grips the pipe with its built-in case hardened jaws incorporated within heavy duty housing segments and heavy duty bolts and nuts. The Shurjoint Model 79 Wildcat coupling is designed to join plain-end or beveled-end carbon steel pipe without roll-grooving, welding or threading. The Model 79 plain-end coupling can be used for mining, process piping, manifold piping, and oil field services.



#79 plain-end coupling

R-88 ring joint coupling



typical applications

- water & waste water treatment plants
- mining & tunnel boring
- pulp & paper
- hydroelectric plants
- co-gen electric plants
- food & beverage
- compressed air
- HVAC

The Shurjoint Model R-88 Ring Joint Coupling is supplied with a pair of factory supplied weld rings. For installation weld a factory-supplied weld ring on each pipe end to be connected, next mount the rubber gasket over the pipe ends, place coupling segments over the gasket and fasten the bolts and nuts.

The Shurjoint R-88 Ring Joint Coupling is considered a shoulder coupling with the factory supplied weld rings serving as the joint shoulders. The R-88's performance standards meet and or exceed the requirements of ASTM F1476 and AWWA C606. The factory supplied weld rings offer a much more economical and convenient alternative to traditional shoulder rings, such as Type A, B, C, D, E, and G rings.

The R-88 Coupling can also be used on stainless steel pipe with optional weld rings available in compatible stainless steel grades. Check with Shurjoint for details and availability.

max. internal service pressures of carbon steel pipe

ASTM A53 Gr.B

When designing a piping system you must select pipe with the appropriate wall thickness to correspond with the intended working pressure of the system. The table lists design working pressure by the pipe wall schedule, XS, STD and LW, of representative ASTM A53 Gr. B carbon steel pipe calculated in accordance with the formula stipulated in ASME B31.1 Power Piping 104.1.

$$P = \frac{2SE\,(tm - A)}{Do - 2y\,(tm - A)}$$

where:

P = Maximum internal service pressure (psi)
SE = Allowable stress (psi)
(ASTM A53 Gr. B = 15,000 psi)
tm = Minimum pipe wall thickness (inch)
(87.5% of nominal wall thickness)
Do = Outside diameter of pipe (inch)
y = A coefficient (For ferritic steels 600°F or below = 0.4)
A = Additional thickness (inch) (A = 0)

max. internal service pressures of carbon steel pipe

ASTM A53 Gr.B

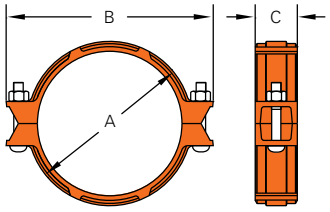
nom. size (in/DN)	XS (0.5")	STD (0.375")	LW (0.25" / 0.312"^)
8 / 200	1586	1006	777
10 / 250	1262	913	621
12 / 300	1058	788	522
14 / 350	962	717	475
16 / 400	839	625	415
18 / 450	744	555	368
20 / 500	668	499	331
24 / 600	555	415	275
26 / 650	512	382	318
28 / 700	475	355	295
30 / 750	443	331	275
32 / 800	415	310	258
36 / 900	368	275	229
38 / 950	349	261	217
40 / 1000	331	248	206
42 / 1050	315	236	187
44 / 1100	301	225	-
48 / 1200	275	206	-
52 / 1300	254	190	-
54 / 1350	245	183	-
56 / 1400	236	177	-
60 / 1500	220	165	-
66 / 1650	200	150	-
68 / 1700	194	145	-
72 / 1800	183	137	-
84 / 2100	157	118	-
96 / 2400	137	103	-

Except *8": 0.322", ^ 8" - 24": 0.25", 26" - 42": 0.312"

R-88 ring joint coupling
8” - 12”



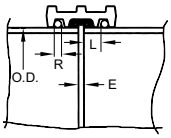
R-88
8” - 12”



8”~ 12”



Ring Clamp



The Shurjoint Model R-88 Ring Joint Coupling is an ideal pipe joining method when pipe is difficult to groove or when grooving is not the preferred joining method. Available in sizes 8″ to 96″ the R-88 offers ease of use and excellent performance.

dimensions
R88 (8” - 12”)

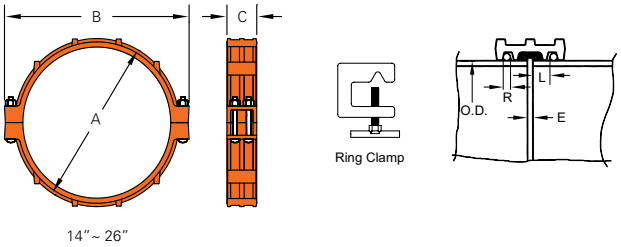
		rings both sides fully welded**			angular movement / deflection		dimensions			bolts					
nom. size	pipe o.d.	max working pressure (cwp)*	max end load (cwp)*	axial displacement[1] E	per coupling	per pipe	A	B	C	no.	size	sealing surface L	ring size R	no. of clamps	weight
8” 200	8.625” (219.1 mm)	400 psi (28.0 bar)	23350 lbs (105.51 kN)	0-0.340” (0-8.7 mm)	2.14	0.45”/ft (37 mm/m)	10.08” (256 mm)	13.00” (330 mm)	3.11” (79 mm)	2	¾ x 4¾” (M20x120 mm)	0.91” (23 mm)	¼” (6.0 mm)	3	16.8 lbs (7.6 Kgs)
10” 250	10.750” (273.0 mm)	400 psi (28.0 bar)	36280 lbs (163.81 kN)	0-0.340” (0-8.7 mm)	1.95	0.41”/ft (34 mm/m)	12.29” (312 mm)	15.20” (386 mm)	3.25” (83 mm)	2	¾ x 4¾” (M20x120 mm)	0.91” (23 mm)	¼” (6.0 mm)	3	22.2 lbs (10.1 Kgs)
12” 300	12.750” (323.9 mm)	400 psi (28.0 bar)	51040 lbs (230.59 kN)	0-0.190” (0-4.8 mm)	0.82	0.17”/ft (14 mm/m)	14.72” (374 mm)	17.90” (455 mm)	3.39” (86 mm)	2	⅞ x 6½” ---	1.02” (26 mm)	5/16” (8.0 mm)	3	30.8 lbs (14.0 Kgs)
200 JIS	8.516” (216.3 mm)	400 psi (28.0 bar)	22770 lbs (102.83 kN)	0-0.340” (0-8.7 mm)	1.50	0.31”/ft (26 mm/m)	9.96” (253 mm)	12.87” (327 mm)	3.11” (79 mm)	2	--- (M20x120 mm)	0.91” (23 mm)	¼” (6.0 mm)	3	17.6 lbs (8.0 Kgs)
250 JIS	10.528” (267.4 mm)	400 psi (28.0 bar)	34800 lbs (157.16 kN)	0-0.340” (0-8.7 mm)	1.50	0.31”/ft (26 mm/m)	12.05” (306 mm)	14.96” (380 mm)	3.25” (83 mm)	2	--- (M20x120 mm)	0.91” (23 mm)	¼” (6.0 mm)	3	22.0 lbs (10.0 Kgs)
300 JIS	12.539” (318.5 mm)	400 psi (28.0 bar)	49360 lbs (222.97 kN)	0-0.190” (0-4.8 mm)	1.50	0.31”/ft (26 mm/m)	14.53” (369 mm)	17.72” (450 mm)	3.39” (86 mm)	2	--- (M20x120 mm)	1.02” (26 mm)	5/16” (8.0 mm)	3	32.6 lbs (14.8 Kgs)

1) Dimensions are subject to change without notice. Other sizes are available on request.
* Working Pressure is based on rings both sides fully welded standard wall carbon steel pipe.
# Working Pressure and End Load are the total from all internal and external loads based on the applicable pipe wall thickness.
† Allowable Axial Displacement and Angular Movement (Deflection) figures shown are the maximum nominal range of movement at each R-88 coupling joint when rings are welded in the standard position. For design and installation purposes these figures should be reduced by 25%.
‡ The number of ring clamps listed is the minimum required to correctly position the weld ring around the circumference of the pipe end.

R-88N ring joint coupling
14” - 26”



R-88N
14” - 26”



14”~ 26”

The Shurjoint Model R-88N is a two segment Ring Joint Coupling. Available in sizes 14" to 26" (350 mm to 650 mm). The two-segment style offers an easier and faster installation.

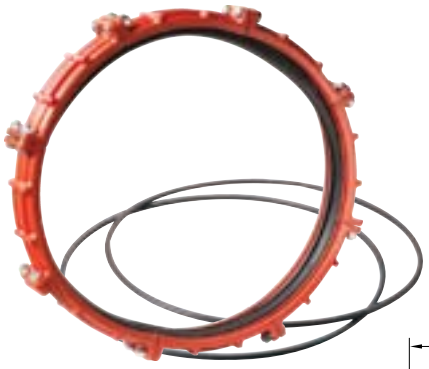
dimensions

R88N (14” - 26”)

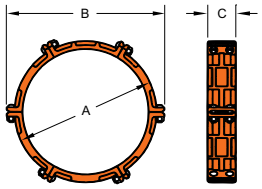
nom. size	pipe o.d.	rings both sides fully welded** max working pressure (cwp)*	rings both sides fully welded** max end load (cwp)*	axial displacement[1] E	angular movement / deflection per coupling (°)	angular movement / deflection per pipe	dimensions A	dimensions B	dimensions C	bolts no.	bolts size	sealing surface L	ring size R	no. of clamps	weight
14” 350	14.000” (355.6 mm)	400 psi (28.0 bar)	61540 lbs (277.94 kN)	0-0.250” (0-6.4 mm)	1.20°	0.25”/ft (21 m/mm)	15.93” (405 mm)	19.40” (493 mm)	3.65” (93 mm)	2	⅞ x 5½” ---	1.02” (26 mm)	5/16” (8.0 mm)	4	31.5 lbs (14.3 Kgs)
16” 400	16.000” (406.4 mm)	400 psi (28.0 bar)	80380 lbs (363.02 kN)	0-0.250” (0-6.4 mm)	0.90°	0.19”/ft (16 m/mm)	17.92” (455 mm)	21.52” (547 mm)	3.65” (93 mm)	2	⅞ x 5½” ---	1.02” (26 mm)	5/16” (8.0 mm)	4	35.0 lbs (15.9 Kgs)
18” 450	18.000” (457.2 mm)	400 psi (28.0 bar)	101730 lbs (459.45 kN)	0-0.375” (0-9.5 mm)	1.20°	0.25”/ft (21 m/mm)	20.37” (517 mm)	24.17” (614 mm)	4.23” (107 mm)	2	1 x 5½” ---	1.18” (30 mm)	5/16” (8.0 mm)	4	59.9 lbs (27.2 Kgs)
20” 500	20.000” (508.0 mm)	400 psi (28.0 bar)	125600 lbs (567.22 kN)	0-0.375” (0-9.5 mm)	1.08°	0.23”/ft (19 m/mm)	22.46” (570 mm)	25.99” (660 mm)	4.23” (107 mm)	2	1 x 5½” ---	1.18” (30 mm)	⅜” (9.5 mm)	4	69.5 lbs (31.6 Kgs)
24” 600	24.000” (609.6 mm)	400 psi (28.0 bar)	180860 lbs (816.80 kN)	0-0.375” (0-9.5 mm)	0.80°	0.17”/ft (14 m/mm)	27.17” (690 mm)	30.00” (762 mm)	4.84” (123 mm)	4	⅞ x 6½” ---	1.18” (30 mm)	½” (12.7 mm)	4	101.9 lbs (46.3 Kgs)
26” 650	26.000” (660.4 mm)	300 psi (20.0 bar)	159190 lbs (684.72 kN)	0-0.500” (0-12.7 mm)	1.06°	0.22”/ft (18 m/mm)	29.58” (751 mm)	32.78” (832 mm)	6.69” (170 mm)	4	1 x 10” ---	1.97” (50 mm)	½” (12.7 mm)	4	173.5 lbs (78.7 Kgs)

1) Dimensions are subject to change without notice. Other sizes are available on request.
* Working Pressure is based on rings both sides fully welded standard wall carbon steel pipe.
# Working Pressure and End Load are the total from all internal and external loads based on the applicable pipe wall thickness.
† Allowable Axial Displacement and Angular Movement (Deflection) figures shown are the maximum nominal range of movement at each R-88 coupling joint when rings are welded in the standard position. For design and installation purposes these figures should be reduced by 25%.
‡ The number of ring clamps listed is the minimum required to correctly position the weld ring around the circumference of the pipe end.

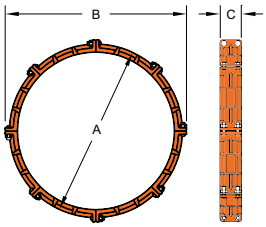
R-88 ring joint coupling
28” - 96”



R-88
28” - 96”



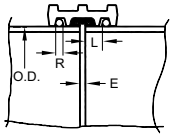
28” - 38”



40” - 96”



Ring Clamp



The Shurjoint Model R-88 Ring Joint Coupling is available in sizes 28″ to 96″ (700 mm to 2400 mm). The larger diameter couplings are comprised of 4 to 8 housing segments depending on the size and feature two bolts at each joint segment to ensure a positive connection.

dimensions

R88 (28” - 42”)

nom. size	pipe o.d.	rings both sides fully welded** max working pressure (cwp)*	rings both sides fully welded** max end load (cwp)*	axial displacement[1] E	angular movement / deflection per coupling (°)	angular movement / deflection per pipe	dimensions A	dimensions B	dimensions C	bolts no.	bolts size	sealing surface L	ring size R	no. of clamps	weight
28” 700	28.0” (711.2 mm)	300 psi (20.0 bar)	184630 lbf (794.11 kN)	0-0.500” (0-12.7 mm)	0.90°	0.19”/ft (16 mm/m)	31.75” (806 mm)	35.47” (901 mm)	6.69” (170 mm)	12	⅞ x 4”	2.00” (50 mm)	½” (12.7 mm)	4	222.2 lbs (101 kg)
30” 750	30.0” (762.0 mm)	300 psi (20.0 bar)	211950 lbf (911.61 kN)	0-0.500” (0-12.7 mm)	0.86°	0.18”/ft (15 mm/m)	33.75” (857 mm)	37.6” (955 mm)	6.69” (170 mm)	12	1 x 3½”	2.00” (50 mm)	½” (12.7 mm)	4	218.9 lbs (99.5 kg)
32” 800	32.0” (812.8 mm)	300 psi (20.0 bar)	241150 lbf (1037.21 kN)	0-0.500” (0-12.7 mm)	0.84°	0.18”/ft (15 mm/m)	35.75” (908 mm)	39.45” (1002 mm)	6.69” (170 mm)	12	1 x 3½”	2.00” (50 mm)	½” (12.7 mm)	4	225.4 lbs (102.2 kg)
34”** 850	34.0” (863.4 mm)	300 psi (20.0 bar)	272230 lbf (1170.37 kN)	0-0.500” (0-12.7 mm)	0.84°	0.18”/ft (15 mm/m)	37.75” (959 mm)	41.5” (1054 mm)	7.87” (200 mm)	12	1 x 3½”	2.00” (50 mm)	½” (12.7 mm)	4	253 lbs (115 kg)
36” 900	36.0” (914.4 mm)	300 psi (20.0 bar)	305200 lbf (1312.72 kN)	0-0.500” (0-12.7 mm)	0.76°	0.16”/ft (13 mm/m)	39.75” (1010 mm)	43.5” (1103 mm)	7.87” (200 mm)	12	1 x 3½”	2.00” (50 mm)	½” (12.7 mm)	4	246 lbs (111.6 kg)
38”** 950	38.0” (965.2 mm)	232 psi (16.0 bar)	262980 lbf (1170.10 kN)	0-0.500” (0-12.7 mm)	0.76°	0.16”/ft (13 mm/m)	41.75” (1060 mm)	45.5” (1156 mm)	7.87” (200 mm)	12	1 x 3½”	2.00” (50 mm)	½” (12.7 mm)	4	275 lbs (125 kg)
40” 1000	40.0” (1016.0 mm)	232 psi (16.0 bar)	291390 lbf (1296.51 kN)	0-0.625” (0-15.9 mm)	0.80°	0.17”/ft (14 mm/m)	44.69” (1135 mm)	48.39” (1229 mm)	7.87” (200 mm)	16	1 x 3½”	2.37” (60 mm)	⅝” (15.9 mm)	6	310.2 lbs (141 kg)
42” 1050	42.0” (1066.8 mm)	232” (16.0 bar)	321250 lbf (1429.41 kN)	0-0.625” (0-15.9 mm)	0.86°	0.18”/ft (15 mm/m)	46.7” (1186 mm)	50.71 (1288 mm)	7.87” (200 mm)	16	1 x 3½	2.37” (60 mm)	⅝” (15.9 mm)	6	326.9 lbs (148.6 kg)

dimensions

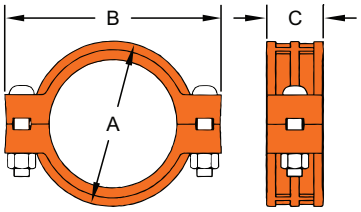
R88 (44” - 96”)

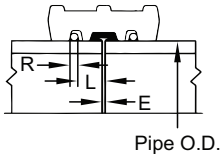
		rings both sides fully welded**			angular movement / deflection		dimensions			bolts					
nom. size	pipe o.d.	max working pressure (cwp)*	max end load (cwp)*	axial displacement[1] E	per coup.	per pipe	A	B	C	no.	size	sealing surface L	ring size R	no. of clamps	weight
44”** 1100	44.0” (1117.6 mm)	232 psi (16.0 bar)	352580 lbs (1568.78 kN)	0-0.625” (0-15.9 mm)	0.80°	0.17”/ft (14 mm/m)	48.66” (1236 mm)	52.64” (1337 mm)	7.87” (200 mm)	16	1¼ x 5”	2.37” (60 mm)	⅝” (15.9 mm)	6	343.2 lbs (156 Kg)
48” 1200	48.0” (1219.2 mm)	232 psi (16.0 bar)	419600 lbs (1866.98 kN)	0-0.625” (0-15.9 mm)	0.70°	0.15”/ft (12 mm/m)	52.68” (1338 mm)	55.91” (1420 mm)	7.87” (200 mm)	16	1 x 3½”	2.37” (60 mm)	⅝” (15.9 mm)	6	466.7 lbs (211.8 Kg)
52”** 1300	52.0” (1320.8 mm)	175 psi (12.0 bar)	371460 lbs (1643.33 kN)	0-0.625” (0-15.9 mm)	---	--- ---	61.25” (1555 mm)	60.67” (1541 mm)	7.87” (200 mm)	16	1¼ x 5”	2.37” (60 mm)	⅝” (15.9 mm)	6	453.2 lbs (206 Kg)
54”** 1350	54.0” (1371.6 mm)	175 psi (12.0 bar)	400580 lbs (1772.17 kN)	0-0.625” (0-15.9 mm)	---	--- ---	63.25” (1607 mm)	62.52” (1588 mm)	7.87” (200 mm)	16	1¼ x 5”	2.37” (60 mm)	⅝” (15.9 mm)	6	472.1 lbs (214.6 Kg)
56”** 1400	56.0” (1422.4 mm)	175 psi (12.0 bar)	430800 lbs (1905.87 kN)	0-0.625” (0-15.9 mm)	---	--- ---	65.38” (1660 mm)	64.69” (1643 mm)	7.87” (200 mm)	16	1¼ x 5”	2.37” (60 mm)	⅝” (15.9 mm)	6	488.2 lbs (222 Kg)
60”** 1500	60.0” (1524.0 mm)	175 psi (12.0 bar)	494550 lbs (2187.87 kN)	0-0.625” (0-15.9 mm)	---	--- ---	69.38” (1762 mm)	68.82” (1748 mm)	7.87” (200 mm)	16	1¼ x 5”	2.37” (60 mm)	⅝” (15.9 mm)	6	537.2 lbs (244.2 Kg)
66”** 1650	66.0” (1676.4 mm)	175 psi (12.0 bar)	598709 lbs (2663.19 kN)	0-0.750” (0-19.1 mm)	---	--- ---	76.00” (1932 mm)	75.75” (1924 mm)	8” (216 mm)	16	1¼ x 5”	2.37” (60 mm)	¾” (19.1 mm)	8	612.5 lbs (278.4 Kg)
68” 1700	68.0” (1727.2 mm)	175 psi (12.0 bar)	635544 lbs (2827.04 kN)	0-0.750” (0-19.1 mm)	---	--- ---	78.50” (1994 mm)	78.03” (1982 mm)	8” (216 mm)	16	1¼ x 5”	2.37” (60 mm)	¾” (19.1 mm)	8	785.4 lbs (357 Kg)
72” 1800	72.0” (1828.8 mm)	175 psi (12.0 bar)	712513 lbs (3169.41 kN)	0-0.750” (0-19.1 mm)	---	--- ---	82.50” (2095 mm)	82.28” (2090 mm)	8” (216 mm)	16	1½ x 6⅞”	2.37” (60 mm)	¾” (19.1 mm)	8	737.7 lbs (335.3 Kg)
84”** 2100	84.0” (2133.6 mm)	100 psi (7.0 bar)	553890 lbs (2501.46 kN)	0-0.750” (0-19.1 mm)	---	--- ---	94.75” (2406 mm)	93.81” (2383 mm)	8” (216 mm)	16	1¼ x 5”	2.37” (60 mm)	¾” (19.1 mm)	8	780.3 lbs (354.7 Kg)
96”** 2400	96.0” (2438.4 mm)	100 psi (7.0 bar)	723450 lbs (3267.21 kN)	0-0.750” (0-19.1 mm)	---	--- ---	106.75” (2711 mm)	106.54” (2706 mm)	8” (216 mm)	16	1¼ x 5”	2.37” (60 mm)	¾” (19.1 mm)	8	823.2 lbs (374.2 Kg)

Dimensions are subject to change without notice. Other sizes are available on request.
* Working Pressure is based on rings both sides fully welded standard wall carbon steel pipe.
# Working Pressure and End Load are the total from all internal and external loads based on the applicable pipe wall thickness.
† Allowable Axial Displacement and Angular Movement (Deflection) figures shown are the maximum nominal range of movement at each R-88 coupling joint when rings are welded in the standard position. For design and installation purposes these figures should be reduced by 25%.
‡ The number of ring clamps listed is the minimum required to correctly position the weld ring around the circumference of the pipe end.
** Non-standard/stock items may require longer lead time.

RH-1000 ring joint coupling
1000 psi







The Shurjoint Model RH-1000 coupling is a high pressure ring joint coupling for use with Sch. 40, Sch. 80 and heavier wall carbon steel pipelines. The coupling is comprised of two ductile iron heavy-wall housings, rubber gasket (EPDM or Nitrile) and two heat-treated track bolts and nuts and provides a fully restrained joint with maximum working pressure up to 1,000 psi (70 Bar) depending on the pipe used.

Two steel weld rings will be factory supplied with a coupling. Steel rings shall be always fully welded at both sides.

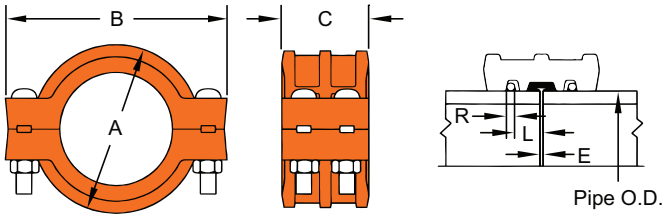
dimensions

				dimensions			bolts / nuts[1]			pipe-end preparation			
nom. size	pipe o.d.	max working pressure (cwp)*	max end load (cwp)	A	B	C	no.	size	deflection	R	l	E max	weight
8" 200	8.625" (219.1 mm)	1000 psi (69 bar)	58390 lbs (263.79 kN)	11.10" (282 mm)	14.65" (372 mm)	3.86" (98 mm)	2	1" x 5½"	0° – 18′	0.472-0.500" (12.0-12.7 mm)	1" 25	0.13" (3.2 mm)	39.8" (18.1 mm)
10" 250	10.750" (273.0 mm)	1000 psi (69 bar)	90710 lbs (409.54 kN)	13.32" (340 mm)	16.93" (430 mm)	4.25" (108 mm)	2	1" x 6½"	0° – 38′	0.472-0.500" (12.0-12.7 mm)	1" 25	0.13" (3.2 mm)	57.2" (26.0 mm)
12" 300	12.750" (323.9 mm)	1000 psi (69 bar)	127610 lbs (576.49 kN)	16.33" (415 mm)	20.07" (510 mm)	4.17" (106 mm)	2	1" x 6½"	0° – 32′	0.472-0.500" (12.0-12.7 mm)	1" 25	0.13" (3.2 mm)	72.6" (33.0 mm)

*Working pressure is based on standard wall carbon steel pipe.
1 Bolts & nuts are UNC threaded.

RX-3000 ring joint coupling
3000 psi





The Shurjoint Model RX-3000 coupling is a high pressure ring joint coupling for use with Sch. 80, 120 or heavier wall carbon steel pipelines. The coupling is comprised of two ductile iron heavy-wall housings, rubber gasket (EPDM or Nitrile) and two or four heat-treated track bolts and nuts which provide a fully restrained joint with maximum working pressure up to 3,000 psi (210 Bar) depending on the pipe used.

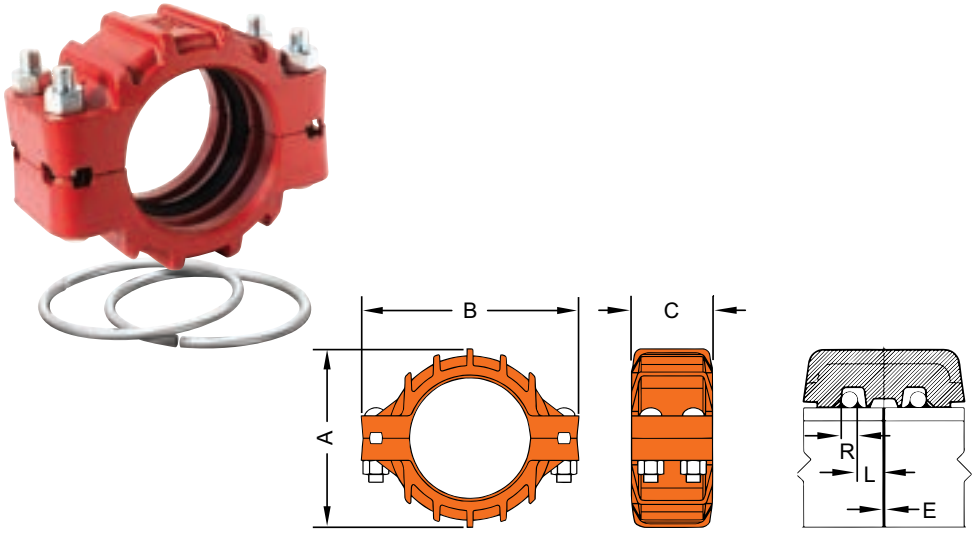
Two steel weld rings will be factory supplied with a coupling. Steel rings shall be always fully welded at both sides.

dimensions

nom. size	pipe o.d.	max working pressure (cwp)*	max end load (cwp)	dimensions A	dimensions B	dimensions C	bolts / nuts[1] no.	bolts / nuts[1] size	pipe-end preparation R	pipe-end preparation L	pipe-end preparation E	weight
8" 200	8.625" (219.1 mm)	3000 psi (207 bar)	175180 lbs (791.36 kN)	11.81" (300 mm)	15.51" (394 mm)	5.83" (148 mm)	2	1⅛ x 5⅛"	0.472-0.500" (12.0-12.7 mm)	1.22" (31 mm)	⅛" (3 mm)	78.92 lbs (35.87 kg)
10" 250	10.748" (273.0 mm)	3000 psi (207 bar)	272040 lbs (1228.61 kN)	14.96" (380 mm)	18.93" (481 mm)	5.98" (152 mm)	4	1¼ x 6½"	0.625-0.629" (15.9-16.0 mm)	1.22" (31 mm)	⅛" (3 mm)	116.36 lbs (52.78 kg)
12" 300	12.752" (323.9 mm)	3000 psi (207 bar)	382950 lbs (1729.46 kN)	18.5" (470 mm)	22.48" (572 mm)	6.81" (173 mm)	4	1½ x 6¼"	0.625-0.629" (15.9-16.0 mm)	1.22" (31 mm)	⅛" (3 mm)	212.27 lbs (96.24 kg)

*Working pressure is based on API 5L X65 line pipe.
1 Bolts & nuts are UNC threaded.

RX-3770 ring joint coupling
3770 psi



The Shurjoint Model RX-3770 Ring Joint Coupling is designed to provide a fully restrained joint for use with extra-strong carbon steel pipe including API 5L Grade X65 line pipe. The coupling is comprised of two ductile iron heavy-wall housing segments, rubber gasket (EPDM) and four heat-treated track bolts and nuts. Two steel weld rings are factory supplied with a coupling. Steel rings shall always be fully welded on both sides.

dimensions

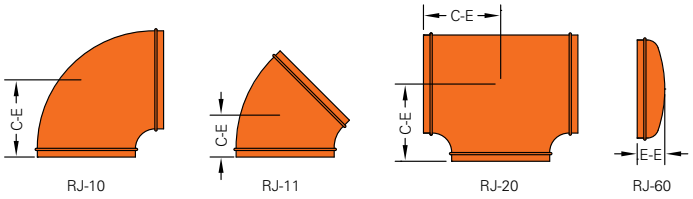
				dimensions			bolts / nuts[1]		pipe-end preparation			
nom. size	pipe o.d.	max working pressure (cwp)*	max end load (cwp)	A	B	C	no.	size	R	L	E	weight
6" 150	6.625" (168.3 mm)	3770 psi (260 bar)	129890 lbs (578.11 kN)	10.24" (260 mm)	12.64" (321 mm)	5.87" (149 mm)	4	⅞ x 6½"	0.472" (12 mm)	1.22" (31 mm)	0.20" (5 mm)	61.2 lbs (27.7 Kgs)
8" 200	8.625" (219.1 mm)	3770 psi (260 bar)	220150 lbs (979.78 kN)	12.95" (329 mm)	16.30" (414 mm)	6.89" (175 mm)	4	1¼ x 6½	0.625" (16 mm)	1.50" (38 mm)	0.20" (5 mm)	110.0 lbs (49.9 Kgs)
10" 250	10.750" (273.0 mm)	3770 psi (260 bar)	342000 lbs (1521.14 kN)	15.90" (404 mm)	19.84" (504 mm)	7.72" (196 mm)	4	1½ x 6⅞"	0.750" (19 mm)	1.50" (38 mm)	0.20" (5 mm)	174.5 lbs (79.2 Kgs)
12" 300	12.750" (323.9 mm)	3770 psi (260 bar)	481090 lbs (2141.24 kN)	19.00" (482 mm)	23.10" (587 mm)	8.63" (219 mm)	4	1½ x 6⅞"	0.875" (22 mm)	1.50" (38 mm)	0.24" (6 mm)	247.1 lbs (112.3 Kgs)

*Working pressure is based on API 5L X65 line pipe.
1 Bolts & nuts are UNC threaded.

RJ-10 90° elbow
RJ-11 45° elbow
RJ-20 tee
RJ-60 cap







full range offerings

- 8" - 16" (200 mm – 400 mm) Models RJ-10, RJ-11 & RJ-60 and Model RJ-20 are available in cast ductile iron to ASTM A536 Gr. 65-45-12.
- Larger sizes are made of carbon steel standard weight pipe, ASTM A53 Gr. B or equivalent, or fabricated from wrought carbon steel of the equivalent properties.
- Other configurations are also available upon request. Contact Shurjoint for details.

Shurjoint offers a full range of ring joint fittings for use with Model R-88 ring joint couplings.

dimensions

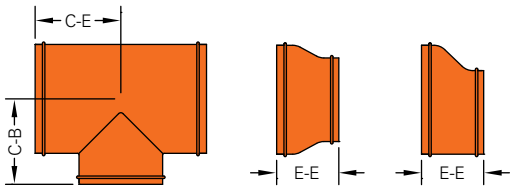
		RJ-10 90° elbow		RJ-11 45° elbow		RJ-20 tee		RJ-60 cap	
nom. size	pipe O.D.	C - E	weight	C - E	weight	C -E	weight	E - E	weight
8" 200	8.625" (219.1 mm)	7.75" (197 mm)	28.6 lbs (13.0 Kgs)	4.25" (108 mm)	20.9 lbs (9.5 Kgs)	7.75" (197 mm)	46.2 lbs (21.0 Kgs)	3.00" (76 mm)	12.1 lbs (5.5 Kgs)
10" 250	10.750" (273.0 mm)	9.00" (229 mm)	55.0 lbs (25.0 Kgs)	4.75" (121 mm)	39.6 lbs (18.0 Kgs)	9.00" (229 mm)	72.6 lbs (33.0 Kgs)	3.00" (76 mm)	13.2 lbs (6.0 Kgs)
12" 300	12.750" (323.9 mm)	10.00" (254 mm)	77.0 lbs (35.0 Kgs)	5.25" (133 mm)	50.6 lbs (23.0 Kgs)	10.00" (254 mm)	103.4 lbs (47.0 Kgs)	3.00" (76 mm)	17.6 lbs (8.0 Kgs)
200 JIS	8.516" (216.3 mm)	7.75" (197 mm)	28.6 lbs (13.0 Kgs)	4.25" (108 mm)	20.9 lbs (9.5 Kgs)	7.75" (197 mm)	46.2 lbs (21.0 Kgs)	3.00" (76 mm)	12.1 lbs (5.5 Kgs)
250 JIS	10.528" (267.4 mm)	9.00" (229 mm)	55.0 lbs (25.0 Kgs)	4.75" (121 mm)	39.6 lbs (18.0 Kgs)	9.00" (229 mm)	72.6 lbs (33.0 Kgs)	3.00" (76 mm)	13.2 lbs (6.0 Kgs)
300 JIS	12.539" (318.5 mm)	10.00" (254 mm)	77.0 lbs (35.0 Kgs)	5.25" (133 mm)	50.6 lbs (23.0 Kgs)	10.00" (254 mm)	103.4 lbs (47.0 Kgs)	3.00" (76 mm)	17.6 lbs (8.0 Kgs)
14" 350	14.000" (355.6 mm)	21.00" (533 mm)	81.4 lbs (37.0 Kgs)	6.00" (152 mm)	52.8 lbs (24.0 Kgs)	11.00" (280 mm)	118.8 lbs (54.0 Kgs)	4.00" (102 mm)	26.4 lbs (12.0 Kgs)
16" 400	16.000" (406.4 mm)	24.00" (610 mm)	99.0 lbs (45.0 Kgs)	7.25" (184 mm)	101.2 lbs (46.0 Kgs)	12.00" (305 mm)	154.0 lbs (70.0 Kgs)	4.00" (102 mm)	33.0 lbs (15.0 Kgs)
18" 450	18.000" (457.2 mm)	27.00" (686 mm)	209.0 lbs (95.0 Kgs)	11.25" (286 mm)	105.6 lbs (48.0 Kgs)	13.50" (343 mm)	268.0 lbs (122.0 Kgs)	5.00" (127 mm)	46.2 lbs (21.0 Kgs)
20" 500	20.000" (508.0 mm)	30.00" (762 mm)	203.6 lbs (138.0 Kgs)	12.50" (318 mm)	110.0 lbs (50.0 Kgs)	17.25" (438 mm)	337.0 lbs (153.0 Kgs)	6.00" (152 mm)	57.2 lbs (26.0 Kgs)
24" 600	24.000" (609.6 mm)	36.00" (914 mm)	485.0 lbs (220.0 Kgs)	15.00" (381 mm)	176.0 lbs (80.0 Kgs)	17.00" (432 mm)	466.0 lbs (212.0 Kgs)	6.00" (152 mm)	77.0 lbs (35.0 Kgs)
26" 650	26.000" (660.4 mm)	39.00" (991 mm)	521.0 lbs (237.0 Kgs)	16.00" (406 mm)	262.0 lbs (119.0 Kgs)	22.50" (572 mm)	766.0 lbs (348.0 Kgs)	10.50" (267 mm)	110.0 lbs (50.0 Kgs)
28" 700	28.000" (711.2 mm)	42.00" (1067 mm)	605.0 lbs (275.0 Kgs)	17.25" (438 mm)	304.0 lbs (138.0 Kgs)	23.50" (597 mm)	862.0 lbs (392.0 Kgs)	10.50" (267 mm)	123.0 lbs (56.0 Kgs)
30" 750	30.000" (76.20 mm)	45.00" (1143 mm)	695.0 lbs (316.0 Kgs)	18.50" (480 mm)	304.0 lbs (138.0 Kgs)	25.00" (635 mm)	992.0 lbs (451.0 Kgs)	10.50" (267 mm)	136.0 lbs (62.0 Kgs)
32" 800	32.000" (812.8 mm)	48.00" (1219 mm)	792.0 lbs (360.0 Kgs)	19.75" (502 mm)	396.0 lbs (180.0 Kgs)	26.50" (673 mm)	1135.0 lbs (516.0 Kgs)	10.50" (267 mm)	248.6 lbs (113.0 Kgs)

graph continued on next page

		RJ-10 90° elbow		RJ-11 45° elbow		RJ-20 tee		RJ-60 cap	
nom. size	**pipe O.D.**	**C - E**	**weight**	**C - E**	**weight**	**C -E**	**weight**	**E - E**	**weight**
34” 850	34.000” (863.4 mm)	51.00” (1295 mm)	895.0 lbs (407.0 Kgs)	21.00” (533 mm)	449.0 lbs (204.0 Kgs)	28.00” (711 mm)	1285.0 lbs (584.0 Kgs)	10.50” (267 mm)	165.0 lbs (75.0 Kgs)
36” 900	36.000” (914.4 mm)	54.00” (1372 mm)	1005.0 lbs (457.0 Kgs)	22.25” (565 mm)	504.0 lbs (229.0 Kgs)	30.00” (762 mm)	1445.0 lbs (657.0 Kgs)	10.50” (267 mm)	334.4 lbs (152.0 Kgs)
40” 1000	40.000” (1016.0 mm)	60.00” (1524 mm)	1241.0 lbs (564.0 Kgs)	24.88” (632 mm)	620.0 lbs (282.0 Kgs)	33.00” (838 mm)	1790.0 lbs (814.0 Kgs)	12.00” (305 mm)	224.0 lbs (102.0 Kgs)
42” 1050	42.000” (1066.8 mm)	63.00” (1600 mm)	1368.0 lbs (622.0 Kgs)	26.00” (660 mm)	684.0 lbs (311.0 Kgs)	35.00” (889 mm)	1841.0 lbs (837.0 Kgs)	12.00” (305 mm)	242.0 lbs (110.0 Kgs)
44” 1100	44.000” (1117.6 mm)	66.00” (1676 mm)	1503.0 lbs (683.0 Kgs)	27.39” (696 mm)	752.0 lbs (342.0 Kgs)	36.00” (914 mm)	2075.0 lbs (943.0 Kgs)	13.50” (343 mm)	277.0 lbs (126.0 Kgs)
48” 1200	48.000” (1219.2 mm)	72.00” (1829 mm)	1790.0 lbs (814.0 Kgs)	29.88” (759 mm)	895.0 lbs (407.0 Kgs)	40.00” (1016 mm)	2488.0 lbs (1131.0 Kgs)	13.50” (343 mm)	315.0 lbs (143.0 Kgs)

• C-E of RJ-10 and RJ-11 18” and larger sizes and E-E of RJ-60 26” and larger sizes conform to ANSI B16.9. All other sizes are to manufacturer's standard.

RJ-21 reducing tee
RJ-50 concentric reducer
RJ-51 eccentric reducer



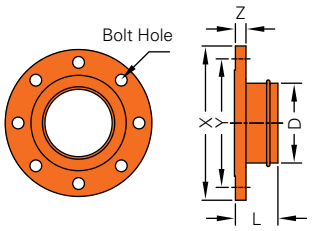
RJ-21 RJ-50 RJ-51

dimensions

		RJ-21 reducing tee			RJ-50 conc. reducer		RJ-51 ecc. reducer	
nom. size	**pipe O.D.**	**C - E**	**C-B**	**weight**	**E - E**	**weight**	**E - E**	**weight**
14 x 12” 350 x 300	14.000 x 12.750” (355.6 x 323.9 mm)	11.00” (279 mm)	10.62” (270 mm)	145.0 lbs (66.0 Kgs)	8.00” (203 mm*)	51.0 lbs (23.0 Kgs)	13.00” (330 mm)	51.0 lbs (23.0 Kgs)
16 x12” 400 x 300	16.000 x 12.750” (406.4 x 323.9 mm)	12.00” (305 mm)	11.62” (295 mm)	172.0 lbs (78.0 Kgs)	9.00” * (229 mm)	64.0 lbs (29.0 Kgs)	9.00” * (229 mm)	64.0 lbs (29.0 Kgs)
16 x 14” 400 x 350	16.000 x 14.000” (406.4 x 355.6 mm)	12.00” (305 mm)	12.00” (305 mm)	176.0 lbs (80.0 Kgs)	9.00” * (229 mm)	64.0 lbs (29.0 Kgs)	9.00” * (229 mm)	64.0 lbs (29.0 Kgs)
18 x 12” 450 x 300	18.000 x 12.750” (457.2 x 323.9 mm)	13.50” (343 mm)	12.62” (321 mm)	246.0 lbs (112.0 Kgs)	9.50” * (241 mm)	72.6 lbs (33.0 Kgs)	15.00” (381 mm)	78.0 lbs (35.0 Kgs)
18 x 14” 450 x 350	18.000 x 14.000” (457.2 x 355.6 mm)	13.50” (343 mm)	13.00” (330 mm)	253.0 lbs (115.0 Kgs)	15.00” (381 mm)	79.0 lbs (36.0 Kgs)	15.00” (381 mm)	79.0 lbs (36.0 Kgs)
18 x 16” 450 x 400	18.000 x 16.000” (457.2 x 406.4 mm)	13.50” (343 mm)	13.00” (330 mm)	264.0 lbs (120.0 Kgs)	15.00” (381 mm)	79.0 lbs (36.0 Kgs)	15.00” (381 mm)	79.0 lbs (36.0 Kgs)
20 x 12” 500 x 300	20.000 x 12.750” (508.0 x 323.9 mm)	15.00” (381 mm)	13.62” (346 mm)	297.0 lbs (135.0 Kgs)	10.00” * (254 mm)	95.0 lbs (43.0 Kgs)	20.00” (508 mm)	95.0 lbs (43.0 Kgs)
20 x 14” 500 x 350	20.000 x 14.000” (508.0 x 355.6 mm)	15.00” (381 mm)	14.00” (356 mm)	304.0 lbs (138.0 Kgs)	20.00” (508 mm)	99.0 lbs (45.0 Kgs)	20.00” (508 mm)	99.0 lbs (45.0 Kgs)
20 x 16” 500 x 400	20.000 x 16.000” (508.0 x 406.4 mm)	15.00” (381 mm)	14.00” (356 mm)	317.0 lbs (144.0 Kgs)	20.00” (508 mm)	101.0 lbs (46.0 Kgs)	20.00” (508 mm)	101.0 lbs (46.0 Kgs)
20 x 18” 500 x 450	20.000 x 18.000” (508.0 x 457.2 mm)	15.00” (381 mm)	14.50” (368 mm)	328.0 lbs (149.0 Kgs)	20.00” (508 mm)	128.0 lbs (58.0 Kgs)	20.00” (508 mm)	128.0 lbs (58.0 Kgs)
24 x 12” 600 x 300	24.000 x 12.750” (609.6 x 323.9 mm)	17.00” (432 mm)	15.62” (397 mm)	396.0 lbs (180.0 Kgs)	12.00” * (305 mm)	154.0 lbs (70.0 Kgs)	20.00” (508 mm)	154.0 lbs (70.0 kgs)
24 x 14” 600 x 350	24.000 x 14.000” (609.6 x 355.6 mm)	17.00” (432 mm)	16.00” (406 mm)	407.0 lbs (185.0 Kgs)	20.00” (508 mm)	154.0 lbs (70.0 Kgs)	20.00” (508 mm)	154.0 lbs (70.0 kgs)
24 x 16” 600 x 400	24.000 x 16.000” (609.6 x 406.4 mm)	17.00” (432 mm)	16.00” (406 mm)	418.0 lbs (190.0 Kgs)	12.00” * (305 mm)	154.0 lbs (70.0 Kgs)	20.00” (508 mm)	154.0 lbs (70.0 kgs)
24 x 18” 600 x 450	24.000 x 18.000” (609.6 x 457.2 mm)	17.00” (432 mm)	16.50” (419 mm)	433.0 lbs (197.0 Kgs)	20.00” (508 mm)	154.0 lbs (70.0 Kgs)	20.00” (508 mm)	154.0 lbs (70.0 kgs)
24 x 20” 600 x 500	24.000 x 20.000” (609.6 x 508.0 mm)	17.00” (432 mm)	17.00” (432 mm)	444.0 lbs (202.0 Kgs)	20.00” (508 mm)	156.0 lbs (71.0 Kgs)	20.00” (508 mm)	156.0 lbs (71.0 Kgs)

C-E: Mfr's standard. E-E marked (*): Mfr's standard (made of ductile iron). All other E-E: ANSI B16.9.

RJ-70 flange adapter
ANSI class 125/150



RJ-70

dimensions

		RJ-70 flange adapter							
						bolt hole			
nom. size	pipe O.D. D	X	Y	Z	bolt size	diameter	no.	L	weight
8" 200	8.625" (219.1 mm)	13.500" (343.0 mm)	11.750" (298.0 mm)	1.125" (29.0 mm)	¾"	⅞"	8	6" (152 mm)	44.9 lbs (20.4 Kgs)
10" 250	10.750" (273.0 mm)	16.000" (406.4 mm)	14.250" (362.0 mm)	1.180" (30.0 mm)	⅞"	1"	12	8" (203 mm)	67.1 lbs (30.5 Kgs)
12" 300	12.750" (323.9 mm)	19.000" (483.0 mm)	17.000" (432.0 mm)	1.250" (32.0 mm)	⅞"	1"	12	8" (203 mm)	98.1 lbs (44.6 Kgs)
14" 350	14.000" (355.6 mm)	21.000" (533.0 mm)	18.750" (476.25 mm)	1.377" (35.0 mm)	1"	1⅛"	12	8" (203 mm)	118.8 lbs (54.0 Kgs)
16" 400	16.000" (406.4 mm)	23.500" (597.0 mm)	21.250" (539.75 mm)	1.456" (37.0 mm)	1"	1⅛"	16	8" (203 mm)	147.0 lbs (66.8 Kgs)
18" 450	18.000" (457.2 mm)	25.000" (635.0 mm)	22.751" (577.9 mm)	1.059" (26.9 mm)	1⅛"	1¼"	16	8" (203 mm)	143.0 lbs (65.0 Kgs)
20" 500	20.000" (508.0 mm)	27.519" (699.0 mm)	25.000" (635.0 mm)	1.692" (43.0 mm)	1⅛"	1¼"	20	8" (203 mm)	169.4 lbs (77.0 Kgs)
24" 600	24.000" (609.6 mm)	32.031" (813.6 mm)	29.500" (749.3 mm)	1.889" (48.0 mm)	1¼"	1⅜"	20	8" (203 mm)	286.9 lbs (130.4 Kgs)

L: Mfr's standard.

pressure performance data

The following tables show maximum cold working pressures (CWP) of Shurjoint R-88 couplings based on rings both sides fully welded and corresponding working pressure for applicable steel pipe.

		max. working pressure / max. end load rings both sides fully welded					
nom. size	**pipe O.D.**	**XS (.500")**		**STD (.375")**		**LW (.312")**	
8" 200	8.625" (219.1 mm)	600 psi (42 bar)	35040 lbs (150.74 kN)	400 psi (28 bar)	23359 lbs (105.51 kN)	400 psi (28 bar)	23359 lbs (105.51 kN)
10" 250	10.750" (273.0 mm)	600 psi (42 bar)	54430 lbs (234.02 kN)	400 psi (28 bar)	36287 lbs (163.81 kN)	400 psi (28 bar)	36287 lbs (163.81 kN)
12" 300	12.750" (323.9 mm)	600 psi (42 bar)	76567 lbs (329.42 kN)	400 psi (28 bar)	51045 lbs (230.59 kN)	400 psi (28 bar)	51045 lbs (230.59 kN)
200 JIS	8.516" (216.3 mm)	600 psi (42 bar)	34215 lbs (150.58 kN)	400 psi (28 bar)	22772 lbs (102.83 kN)	400 psi (28 bar)	22772 lbs (102.83 kN)
250 JIS	10.528" (267.4 mm)	600 psi (42 bar)	52205 lbs (224.52 kN)	400 psi (28 bar)	34803 lbs (157.16 kN)	400 psi (28 bar)	34803 lbs (157.16 kN)
300 JIS	12.539" (318.5 mm)	600 psi (42 bar)	74054 lbs (318.53 kN)	400 psi (28 bar)	49369 lbs (222.97 kN)	400 psi (28 bar)	49369 lbs (222.97 kN)
14" 350 (R-88N)	14.000" (355.6 mm)	600 psi (42 bar)	92316 lbs (397.06 kN)	400 psi (28 bar)	61544 lbs (277.94 kN)	350 psi (24 bar)	53851 lbs (238.23 kN)
16" 400 (R-88N)	16.000" (406.4 mm)	500 psi (35 bar)	100480 lbs (453.78 kN)	400 psi (28 bar)	80384 lbs (363.02 kN)	350 psi (24 bar)	70336 lbs (311.16 kN)
18" 450 (R-88N)	18.000" (457.2 mm)	500 psi (35 bar)	12170 lbs (574.31 kN)	400 psi (28 bar)	101736 lbs (459.45 kN)	350 psi (24 bar)	89019 lbs (393.82 kN)
20" 500(R-88N)	20.000" (508.0 mm)	500 psi (35 bar)	157000 lbs (709.03 kN)	400 psi (28 bar)	125600 lbs (567.22 kN)	300 psi (20 bar)	94200 lbs (405.16 kN)
24" 600 (R-88N)	24.000" (609.6 mm)	500 psi (35 bar)	226080 lbs (1021.00 kN)	400 psi (28 bar)	180864 lbs (816.80 kN)	250 psi (17 bar)	113040 lbs (495.92 kN)
26" 650 (R-88N)	26.000" (660.4 mm)	400 psi (28 bar)	212264 lbs (958.61 kN)	300 psi (20 bar)	159198 lbs (584.72 kN)	250 psi (17 bar)	132665 lbs (582.01 kN)
28" 700	28.000" (711.2 mm)	400 psi (28 bar)	246176 lbs (1111.76 kN)	300 psi (20 bar)	184632 lbs (794.11 kN)	250 psi (17 bar)	153860 lbs (675.00 kN)
30" 750	30.000" (762.0 mm)	400 psi (28 bar)	282600 lbs (1276.26 kN)	300 psi (20 bar)	211950 lbs (911.61 kN)	250 psi (17 bar)	176625 lbs (774.87 kN)
32" 800	32.000" (812.8 mm)	400 psi (28 bar)	321536 lbs (1452.10 kN)	300 psi (20 bar)	241152 lbs (1037.21 kN)	250 psi (17 bar)	200960 lbs (881.63 kN)
34" 850	34.000" (863.4 mm)	350 psi (24 bar)	317611 lbs (1404.45 kN)	300 psi (20 bar)	272238 lbs (1170.37 kN)	200 psi (14 bar)	181492 lbs (819.26 kN)
36" 900	36.000" (914.4 mm)	350 psi (24 bar)	356076 lbs (1575.26 kN)	300 psi (20 bar)	305208 lbs (1312.72 kN)	200 psi (14 bar)	203472 lbs (918.90 kN)
38" 950	38.000" (965.2 mm)	300 psi (20 bar)	340062 lbs (1462.63 kN)	232 psi (16 bar)	262981 lbs (1170.10 kN)	175 psi (12 bar)	198370 lbs (877.58 kN)
40" 1000	40.000" (1016.0 mm)	300 psi (20 bar)	376800 lbs (1620.64 kN)	232 psi (16 bar)	291392 lbs (1296.51 kN)	175 psi (12 bar)	219800 lbs (972.39 kN)
42" 1050	42.000" (1066.8 mm)	300 psi (20 bar)	415422 lbs (1786.76 kN)	232 psi (16 bar)	321260 lbs (1429.41 kN)	175 psi (12 bar)	242330 lbs (1072.05 kN)
44" 1100	44.000" (1117.6 mm)	300 psi (20 bar)	455928 lbs (1960.98 kN)	232 psi (16 bar)	352584 lbs (1568.78 kN)	175 psi (12 bar)	265958 lbs (1176.59 kN)
48" 1200	48.000" (1219.2 mm)	300 psi (20 bar)	542592 lbs (2333.72 kN)	232 psi (16 bar)	419604 lbs (1866.98 kN)	--- ---	--- ---
52" 1300	52.000" (1320.8 mm)	232 psi (16 bar)	492452 lbs (2191.11 kN)	175 psi (12 bar)	371462 lbs (1643.33 kN)	--- ---	--- ---
54" 1350	54.000" (1371.6 mm)	232 psi (16 bar)	531062 lbs (2362.90 kN)	175 psi (12 bar)	400586 lbs (1772.17 kN)	--- ---	--- ---
56" 1400	56.000" (1422.4 mm)	232 psi (16 bar)	571128 lbs (2541.17 kN)	175 psi (12 bar)	430808 lbs (1905.87 kN)	--- ---	--- ---

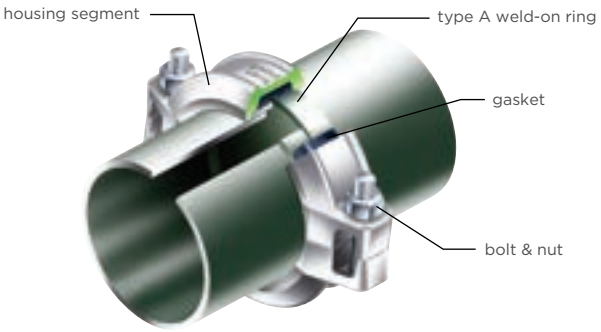
graph continued on next page

		max. working pressure / max. end load rings both sides fully weilded					
nom. size	**pipe O.D.**	**XS (.500")**		**STD (.375")**		**LW (.312")**	
60" 1500	60.000" (1524.0 mm)	232 psi (16 bar)	656532 lbs (2917.16 kN)	175 psi (12 bar)	494550 lbs (2187.87 kN)	--- ---	--- ---
66" 1650	66.000" (1676.4 mm)	175 psi (12 bar)	598406 lbs (2647.32 kN)	125 psi (9 bar)	427433 lbs (1897.24 kN)	--- ---	--- ---
68" 1700	68.000" (1727.2 mm)	175 psi (12 bar)	635222 lbs (2810.19 kN)	125 psi (9 bar)	453730 lbs (2013.97 kN)	--- ---	--- ---
72" 1800	72.000" (1828.8 mm)	150 psi (10 bar)	610416 lbs (2625.44 kN)	125 psi (9 bar)	508680 lbs (2257.88 kN)	--- ---	--- ---
84" 2100	84.000" (2133.6 mm)	125 psi (9 bar)	692370 lbs (3073.22 kN)	100 psi (7 bar)	553896 lbs (2501.46 kN)	--- ---	--- ---
96" 2400	96.000" (2438.4 mm)	125 psi (9 bar)	904320 lbs (4014.01 kN)	100 psi (7 bar)	723456 lbs (3267.21 kN)	--- ---	--- ---

Shurjoint shouldered piping system

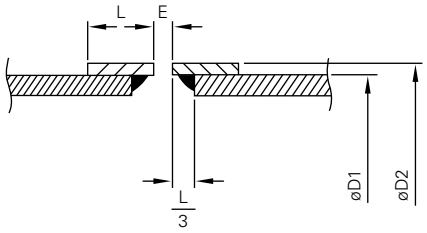
The Shurjoint shouldered piping system is a classic and versatile piping method used for a wide range of applications including irrigation, dewatering on construction sites, and other installations, etc. The shouldered system features full flow characteristics, provides speed and ease of installation, and proven reliability. The system provides for limited expansion and contraction and accommodates some linear and angular movement. Each joint is a union.

The Shurjoint shouldered piping system utilizes Type A weld-on rings, manufactured from mild steel or material compatible to pipe end used.



shoulder dimensions (type A weld-on rings)

The Shurjoint shouldered piping system utilizes Type A weld-on rings, manufactured from mild steel or material compatible to pipe end used. Type A rings are suitable for services up to maximum 600 psi (40 Bar) for sizes up to 4″ (100 mm) and 400 psi (28 Bar) for 5″ (125 mm) through 8″ (200 mm).

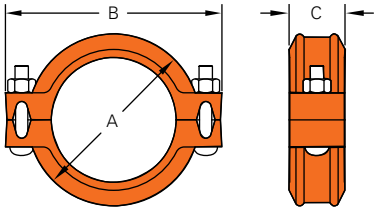


nom. size	pipe O.D. ϕ D1	shoulder dia. ϕ D2	shoulder length L	nom. gap E
2″ 50	2.375″ (60.3 mm)	2.618″ (66.5 mm)	0.625″ (16.0 mm)	0.125″ (3.2 mm)
3″ 80	3.500″ (88.9 mm)	3.819″ (97.0 mm)	0.625″ (16.0 mm)	0.125″ (3.2 mm)
4″ 100	4.500″ (114.3 mm)	4.803″ (122.0 mm)	0.688″ (17.5 mm)	0.125″ (3.2 mm)
165.1 mm	6.500″ (165.1 mm)	6.870″ (174.5 mm)	0.625″ (16.0 mm)	0.125″ (3.2 mm)
6″ 150	6.625″ (168.3 mm)	7.007″ (178.0 mm)	0.625″ (16.0 mm)	0.125″ (3.2 mm)
8″ 200	8.625″ (219.1 mm)	9.134″ (232.0 mm)	0.813″ (20.6 mm)	0.125″ (3.2 mm)
10″ 250	10.750″ (273.0 mm)	11.260″ (286.0 mm)	0.813″ (20.6 mm)	0.125″ (3.2 mm)
12″ 300	12.750″ (323.9 mm)	13.248″ (336.5 mm)	0.813″ (20.6 mm)	0.125″ (3.2 mm)

Note: The exterior surface and the edge of the shouldered pipe ends must be free from any indentations, projections or other harmful surface defects such as weld splatters, any lumps of galvanizing, rust, dirt and score marks. Shouldered rings must be contacted or near tight to the pipe. The “stand off length* ” must be accurately consistent in the circumference.
(*:The distance between the edge of the Shouldered ring and the pipe end (⅓ the shoulder length ‘L’).

S35 shouldered flexible coupling





The Shurjoint Model S35 coupling is a flexible type shouldered coupling for general applications for use on Type A shouldered pipe ends. The housing segments are made of ductile iron to ASTM A536 Gr. 65-45-12 and or A395 Gr. 65-45-15 and are normally supplied in hot-dip galvanized. The standard rubber gasket is Grade T Nitrile.

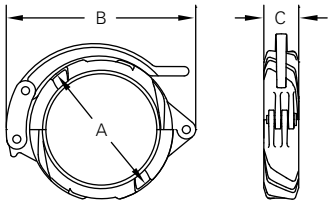
dimensions

nom. size	pipe o.d.	max working pressure (cwp)*	dimensions A	dimensions B	dimensions C	allowable pipe end seperation	(°) deflection	bolt size	weight
2" 50	2.375" (60.3 mm)	600 psi (40 bar)	3.90" (99.0 mm)	5.47" (139.0 mm)	1.81" (46.0 mm)	0.13" (3.2 mm)	2° 43′	⅜" x 2⅛"	2.4 lbs (1.1 Kgs)
3" 80	3.500" (88.9 mm)	600 psi (40 bar)	5.08" (129.0 mm)	6.61" (168.0 mm)	1.81" (46.0 mm)	0.13" (3.2 mm)	1° 53′	½" x 3"	3.3 lbs (1.5 Kgs)
4" 100	4.500" (114.3 mm)	600 psi (40 bar)	6.26" (159.0 mm)	7.87" (200.0 mm)	1.97" (50.0 mm)	0.13" (3.2 mm)	1° 29′	½" x 3"	4.9 lbs (2.2 Kgs)
165.1 mm	6.500" (165.1 mm)	600 psi (40 bar)	8.39" (213.0 mm)	10.50" (267.0 mm)	1.97" (50.0 mm)	0.13" (3.2 mm)	1° 2′	⅝" x 3½"	7.7 lbs (3.5 Kgs)
6" 150	6.625" (168.3 mm)	600 psi (40 bar)	8.62" (219.0 mm)	11.00" (279.0 mm)	1.97" (50.0 mm)	0.13" (3.2 mm)	1° 1′	⅝" x 3½"	8.4 lbs (3.8 Kgs)
8" 200	8.625" (219.1 mm)	600 psi (40 bar)	10.75" (273.0 mm)	13.19" (335.0 mm)	2.36" (60.0 mm)	0.13" (3.2 mm)	0° 47′	¾" x 4¾"	13.0 lbs (5.9 Kgs)
10" 250	10.750" (273.0 mm)	300 psi (20 bar)	13.20" (335.4 mm)	15.62" (396.8 mm)	2.56" (65.0 mm)	0.13" (3.2 mm)	0° 47′	¾" x 4¾"	19.8 lbs (9.0 Kgs)
12" 300	12.750" * (323.9mm)	300 psi (20 bar)	15.19" (385.8mm)	17.72" (450.1mm)	2.56" (65.0mm)	0.13" (3.2 mm)	0° 47′	¾" x 4¾"	22.9 lbs (10.4 Kgs)

* Non-standard/stock items may require longer lead time.

SD-28A shouldered toggle coupling





The Shurjoint Model SD-28A coupling is designed to connect shouldered-end pipe with Type A rings for services where frequent assembly and disassembly is desired or required. The housing segments are hinged with a lever handle for easy installation. The use of a split pin prevents accidental opening of the couplings. The housing segments are made of ductile iron to ASTM A536 Gr. 65-45-12 and or A395 Gr. 65-45-15 and are normally supplied in hot-dip galvanized. The standard rubber gasket is Grade T Nitrile.

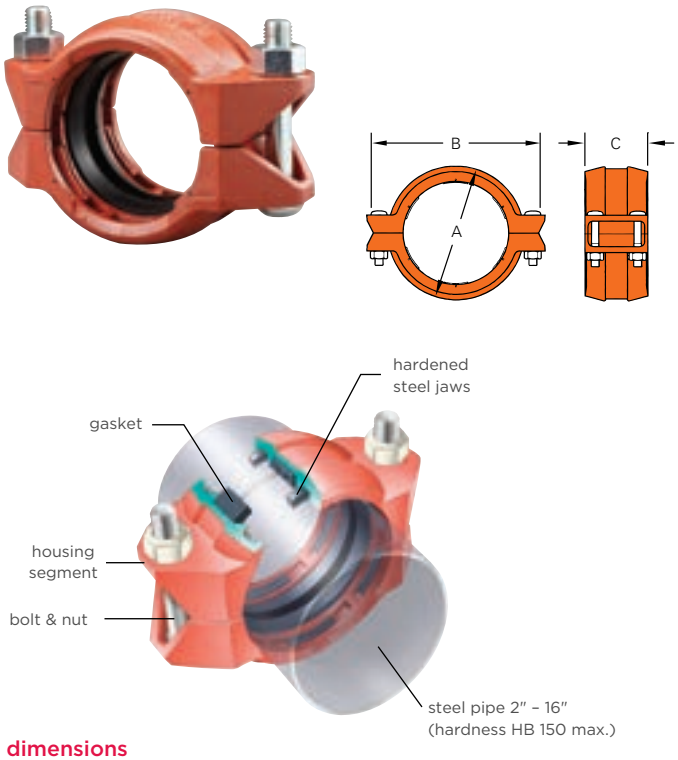
dimensions

nom. size	pipe o.d.	max working pressure (cwp)*	dimensions A	B	C	allowable pipe end seperation	deflection	weight
2" * 50	2.375" (60.3 mm)	400 psi (28 bar)	39.32" (86.5 mm)	4.43" (112.5 mm)	1.93" (49 mm)	0.125" (3.2 mm)	2°-43'	2.8 lbs (1.3 Kgs)
3" * 80	3.500" (88.9 mm)	400 psi (28 bar)	4.96" (126.0 mm)	6.46" (164.0 mm)	1.93" (49 mm)	0.125" (3.2 mm)	1°-53'	4.4 lbs (2.0 Kgs)
4" 100	4.500" (114.3 mm)	400 psi (28 bar)	6.30" (160.0 mm)	8.43" (214.0 mm)	2.05" (52 mm)	0.125" (3.2 mm)	1°-29'	6.6 lbs (3.0 Kgs)
6" * 150	6.500" (165.1 mm)	400 psi (28 bar)	8.43" (214.0 mm)	11.14" (283.0 mm)	2.05" (52 mm)	0.125" (3.2 mm)	1°-2'	6.5 lbs (4.3 Kgs)
6" 150	6.625" (168.3 mm)	400 psi (28 bar)	8.54" (217.0 mm)	11.10" (282.0 mm)	2.05" (52 mm)	0.125" (3.2 mm)	1°-1'	9.9 lbs (4.5 Kgs)
8" * 200	8.625" (219.1 mm)	400 psi (28 bar)	10.95" (278.0 mm)	14.17" (360.0 mm)	2.36" (60 mm)	0.125" (3.2 mm)	0°-47'	18.3 lbs (8.3 Kgs)

* Non-standard/stock items may require longer lead time.
** Working pressure is based on standard wall carbon steel pipe.

plain-end piping system for steel pipe

79 wildcat coupling



79 wildcat coupling

The Shurjoint Model 79 Wildcat Coupling is designed to mechanically join plain-end or beveled end carbon steel pipe. The Wildcat couplings can be used for a variety of applications including mining, process piping, manifold piping and oilfield services. The Wildcat couplings feature case-hardened jaws* within the housings and large diameter heat treated track bolts that when tightened securely grip the pipe surface. As with grooved couplings, a C-shaped rubber gasket effectively seals the pipe ends (* For sizes larger than 14" (350 mm) , jaws are made of 17-4PH stainless steel.)

The Model 79 coupling is recommended for use on carbon steel pipe with a hardness less than HB150, not recommended for stainless steel, plastic, HDPE, cast iron or other brittle pipe.
Gaskets are available either in Grade E EPDM for water services of -29°F to + 230°F (-34°C to + 110°C) or Grade T Nitrile for oil services -20°F to +180°F (-29°C to +82°C).

caution: bolts and nuts must always be tightened to the required torque

dimensions

nom. size	pipe o.d.	max working pressure	max end load	required bolt torque	bolt		dimensions			weight
					no.	size	A	B	C	
1" 25	1.315" (33.4 mm)	750 psi (52 bar)	1020 lbs (4.55 kN)	150 lbs-ft (200 Nm)	2	½ x 2⅜"	2.60" (66 mm)	4.37" (111 mm)	3.05" (78 mm)	3.3 lbs (1.5 Kgs)
1½" 40	1.900" (48.3 mm)	750 psi (52 bar)	2130 lbs (9.52 kN)	150 lbs-ft (200 Nm)	2	½ x 2⅜"	3.15" (80 mm)	5.08" (129 mm)	3.05" (78 mm)	3.9 lbs (1.8 Kgs)
2" 50	2.375" (60.3 mm)	750 psi (52 bar)	3320 lbs (14.84 kN)	150 lbs-ft (200 Nm)	2	⅝ x 3½"	3.75" (95 mm)	5.94" (151 mm)	3.54" (90 mm)	7.0 lbs (3.2 Kgs)
2½" 65	2.875" (73.0 mm)	600 psi (42 bar)	3890 lbs (17.57 kN)	150 lbs-ft (200 Nm)	2	⅝ x 3½"	4.25" (108 mm)	6.46" (164 mm)	3.54" (90 mm)	7.3 lbs (3.3 Kgs)
3" 80	3.500" (88.9 mm)	600 psi (42 bar)	5770 lbs (26.06 kN)	200 lbs-ft (270 Nm)	2	¾ x 4¾"	5.00" (127 mm)	7.48" (190 mm)	3.54" (90 mm)	11.0 lbs (5.0 Kgs)
4" 100	4.500" (114.3 mm)	450 psi (31 bar)	7150 lbs (32.82 kN)	200 lbs-ft (270 Nm)	2	¾ x 4¾"	6.14" (154 mm)	8.78" (223 mm)	4.00" (102 mm)	14.3 lbs (6.5 Kgs)
5" 125	5.563" (141.3 mm)	300 psi (20 bar)	7290 lbs (32.91 kN)	250 lbs-ft (340 Nm)	2	⅞ x 6½"	7.36" (187 mm)	10.31" (262 mm)	4.38" (111 mm)	24.2 lbs (11.0 Kgs)
6" 150	6.625" (168.3 mm)	300 psi (20 bar)	10340 lbs (46.69 kN)	250 lbs-ft (340 Nm)	2	⅞ x 6½"	8.50" (216 mm)	11.50" (292 mm)	4.38" (111 mm)	28.6 lbs (13.0 Kgs)
8" 200	8.625" (219.1 mm)	250 psi (17 bar)	14600 lbs (64.06 kN)	200 lbs-ft (270 Nm)	4	¾ x 4¾"	10.88" (276 mm)	14.02" (356 mm)	5.00" (127 mm)	41.8 lbs (19.0 Kgs)
10" 250	10.750" (273.0 mm)	250 psi (17 bar)	22680 lbs (99.46 kN)	300 lbs-ft (400 Nm)	4	⅞ x 6½"	12.60" (320 mm)	16.14" (410 mm)	5.00" (127 mm)	52.8 lbs (24.0 Kgs)
12" 300	12.750" (323.9 mm)	250 psi (17 bar)	31900 lbs (140.00 kN)	350 lbs-ft (470 Nm)	4	1 x 6½"	14.60" (371 mm)	18.54" (471 mm)	5.00" (127 mm)	63.1 lbs (28.7 Kgs)
14" 350	14.000" (355.6 mm)	200 psi (14 bar)	30770 lbs (138.97 kN)	350 lbs-ft (470 Nm)	4	1 x 6½"	16.70" (424 mm)	20.00" (508 mm)	5.28" (134 mm)	93.5 lbs (42.5 Kgs)
16" 400	16.000" (406.4 mm)	150 psi (10 bar)	30140 lbs (129.65 kN)	350 lbs-ft (470 Nm)	4	1 x 6½"	18.70" (475 mm)	22.00" (559 mm)	5.28" (134 mm)	95.7 lbs (43.5 Kgs)

* Working pressure is for plain-end standard wall steel pipe with hardness less than HB150.





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HDPE series



Shurjoint offers a series HDPE couplings and adapters for joining HDPE pipe. The use of HDPE (high density polyethylene) pipe continues to grow in popularity as its benefits over traditional materials are realized in a variety of service applications. The benefits of an HDPE pipe system include a longer service life, increased flexibility, reduced weight, increased resistance to corrosion, chemicals, and fatigue, as well as superior flow characteristics. HDPE is now commonly used in service applications including municipal water and waste water, water distribution and transport, mining, slurry and many other general and industrial applications.

Shurjoint HDPE couplings provide a fast and easy way to mechanically join HDPE pipe. A series of sharply machined teeth securely grip the pipe as the bolts are tightened, resulting in a leak-free joint. The Shurjoint joining method eliminates the need for costly heat fusion equipment. The highly restrained joint allows long lengths of pipe to be pulled from one area to another. With the removal of a few bolts one can easily access the system for cleaning, maintenance, changes and or system expansion.

Shurjoint HDPE couplings are designed to join IPS HDPE pipe, DR32.5 to 7.3, conforming to ASTM D2513, D3350 and/or ANSI/AWWA C901, and ISO HDPE pipe, SDR 9 to 26, conforming to ISO 4427-1/2.

As the ductile iron coupling is much stronger than HDPE pipe itself, pressure ratings of HDPE couplings are determined by the pressure rating of HDPE pipe used. Pressure ratings of HDPE pipe vary depending on DR or SDR (standard dimension ratio) and design stress of the material.

pressure ratings (psi) - IPS size

pipe dimension ratio (DR)	PE4710 PE100	PE3608 PE3408
DR 7.3	317	265
DR 9	250	200
DR 11	200	160
DR 13.5	160	130
DR 17	125	100
DR 21	100	80
DR 26	80	65
DR 32.5	63	50

design stress: PE4710 1000 psi, PE3608 & 3408 800 psi

DR (Pipe Dimension Ratio) $DR = \frac{D}{t}$

where:
D = pipe outside diameter, in
t = pipe minimum wall thickness, in

pressure ratings (bar) - ISO size

pipe dimension ratio (DR)	PE100	PE80
SDR 9	20	16
SDR 11	16	10
SDR 17	10	6.3
SDR 26	6.3	4

design stress: PE100 8.0 MPa, PE80 5.0 MPa

SDR (standard pipe dimension ratio) $SDR = \frac{D}{t}$

where:
D = pipe outside diameter, mm
t = pipe minimum wall thickness, mm

installation instructions

1. marking: Use a marker and measuring tape to place “Gasket Centering Marks” and “Coupling Centering Marks” on each pipe end per the installation instructions.



2. install gasket: Place a gasket over the pipe ends and center the gasket in between the first set gasket centering marks. The pipe ends should always be butted against each other.



3. mount housings: Place the housings over the gasket, ensure the gasket stays centered between the first set marks made on the pipe ends and the housings are properly centered between the second set coupling center marks. Also make sure that housing tongue and groove (T&G) mate correctly.

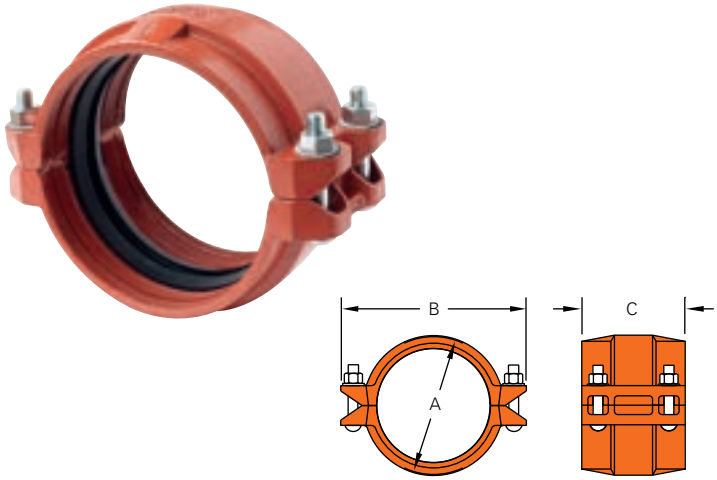


4. tighten nuts: Tighten nuts alternately and equally until the bolt pads meet and make metal-to-metal contact. Repeated alternate tightening will reduce tightening torque considerably. Tighten nuts by another one quarter to one half turn to make sure the bolts and nuts are snug and secure.



caution: refer to the Shurjoint installation instruction manual for complete instructions. Shurjoint HDPE couplings are not intended for use on PVC, PP or other materials. Do not use standard soap based lubricant on HDPE pipe. Shurjoint recommends the use of a silicone based lubricant with the HDPE series. In order to avoid injuries from the sharp machined teeth, wear gloves when handling.

H305 HDPE coupling



The Shurjoint Model H305 HDPE Couplings feature four bolt housings and a series of sharply machined teeth which securely grip the pipe as the bolts and nuts are tightened. The result is a leak-tight joint that is as strong as or stronger than the pipe itself. The H305 also features a contoured housing with integral ramps along the outside diameter to help the coupling slide over most obstacles during the relocation of pipe runs.

dimensions

H305 IPS size

		dimensions			bolt		
nom. size	pipe O.D.	A	B	C	no.	size	weight
2" 50	2.375" (60.3 mm)	3.39" (86 mm)	5.24" (133 mm)	4.57" (116 mm)	4	½ x 2⅜"	5.7 lbs (2.6 Kgs)
3" 80	3.500" (88.9 mm)	4.61" (117 mm)	6.50" (165 mm)	4.57" (116 mm)	4	½ x 3"	7.9 lbs (3.6 Kgs)
4" 100	4.500" (114.3 mm)	5.75" (146 mm)	7.95" (202 mm)	5.75" (146 mm)	4	½ x 3"	11.4 lbs (5.2 Kgs)
5" 125	5.563" (141.3 mm)	6.66" (169 mm)	8.25" (210 mm)	4.63" (118 mm)	4	½ x 3"	9.9 lbs (4.5 Kgs)
6" 150	6.625" (168.3 mm)	7.87" (200 mm)	10.75" (273 mm)	5.87" (149 mm)	4	⅝ x 3½"	18.0 lbs (8.2 Kgs)
8" 200	8.625" (219.1 mm)	10.39" (264 mm)	13.11" (333 mm)	6.02" (153 mm)	4	⅝ x 3½"	28.4 lbs (12.9 Kgs)
10" 250	10.750" (273.0 mm)	12.52" (318 mm)	15.71" (399 mm)	6.50" (165 mm)	4	¾ x 4¾"	43.6 lbs (19.8 Kgs)
12" 300	12.750" (323.9 mm)	14.37" (365 mm)	17.80" (452 mm)	7.09" (180 mm)	4	¾ x 4¾"	56.1 lbs (25.5 Kgs)
14" 350	14.000" (355.6 mm)	16.26" (413 mm)	19.25" (489 mm)	10.08" (256 mm)	4	1 x 4½"	90.6 lbs (41.2 Kgs)
16" 400	16.000" (406.4 mm)	18.39" (467 mm)	21.30" (541 mm)	10.08" (256 mm)	4	1 x 4½"	97.2 lbs (44.2 Kgs)
18" 450	18.000" (457.2 mm)	20.28" (515 mm)	23.43" (595 mm)	10.08" (256 mm)	4	1 x 4½"	111.1 lbs (50.5 Kgs)
20" 500	20.000" (508.0 mm)	22.36" (568 mm)	25.63" (651 mm)	10.08" (256 mm)	4	1 x 4½"	136.0 lbs (61.8 Kgs)

* Shurjoint recommends the use of a silicone based lubricant for the HDPE series.

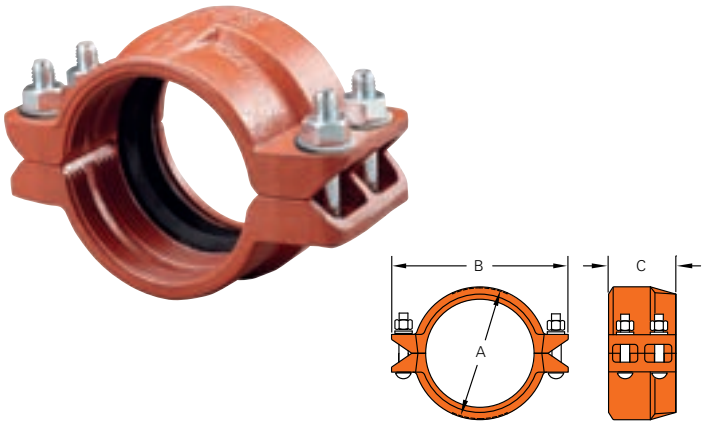
dimensions

H305 ISO size

pipe O.D.		dimensions			bolt		
min.	max.	A	B	C	no.	size	weight
50 mm	50.5 mm	72 mm	115 mm	105 mm	4	M10 x 55 mm	1.5 Kgs
63 mm	63.6 mm	85 mm	128 mm	105 mm	4	M10 x 55 mm	1.9 Kgs
75 mm	75.7 mm	97 mm	140 mm	105 mm	4	M10 x 55 mm	2.4 Kgs
90 mm	90.9 mm	113 mm	169 mm	105 mm	4	M12 x 75 mm	3.3 Kgs
110 mm	111.0 mm	139 mm	181 mm	112 mm	4	M12 x 75 mm	4.1 Kgs
140 mm	141.3 mm	169 mm	210 mm	118 mm	4	M12 x 75 mm	4.5 Kgs
160 mm	161.5 mm	190 mm	232 mm	118 mm	4	M12 x 97 mm	5.6 Kgs
180 mm	181.7 mm	211 mm	253 mm	118 mm	4	M12 x 97 mm	7.5 Kgs
200 mm	201.8 mm	236 mm	305 mm	127 mm	4	M16 x 90 mm	9.4 Kgs
225 mm	226.4 mm	261 mm	330 mm	127 mm	4	M16 x 90 mm	11.3 Kgs
250 mm	252.3 mm	289 mm	351 mm	134 mm	4	M16 x 110 mm	12.7 Kgs
280 mm	281.7 mm	319 mm	406 mm	134 mm	4	M20 x 120 mm	18.4 Kgs
315 mm	317.9 mm	354 mm	438 mm	134 mm	4	M20 x 120 mm	16.7 Kgs
355 mm	357.2 mm	412 mm	489 mm	256 mm	4	M24 x 110 mm	41.2 Kgs
400 mm	402.4 mm	462 mm	540 mm	256 mm	4	M24 x 110 mm	44.2 Kgs
450 mm	452.7 mm	515 mm	595 mm	256 mm	4	M24 x 110 mm	57.7 Kgs

* Shurjoint recommends the use of a silicone based lubricant for the HDPE series.

H307 HDPE transition coupling



The Shurjoint Model H307 transition coupling provides for a fast, easy and direct transition from HDPE pipe and or fittings to grooved end steel pipe (IPS).

dimensions

H307 IPS size

		dimensions			bolt		
nom. size	pipe O.D.	A	B	C	no.	size	weight
2” 50	2.375” (60.3 mm)	3.39” (86 mm)	5.79” (147 mm)	3.11” (79 mm)	4	½ x 2⅜”	4.4 lbs (2.0 Kgs)
3” 80	3.500” (88.9 mm)	4.49” (114 mm)	6.89” (175 mm)	3.11” (79 mm)	4	½ x 3”	5.9 lbs (2.7 Kgs)
4” 100	4.500” (114.3 mm)	5.75” (146 mm)	8.23” (209 mm)	3.74” (95 mm)	4	½ x 3”	8.4 lbs (3.8 Kgs)
6” 150	6.625” (168.3 mm)	8.00” (203 mm)	11.02” (280 mm)	3.74” (95 mm)	4	⅝ x 3½”	12.5 lbs (5.7 Kgs)
8” 200	8.625” (219.1 mm)	10.51” (267 mm)	13.46” (342 mm)	4.25” (108 mm)	4	⅝ x 3½”	21.3 lbs (9.7 Kgs)
10” 250	10.750” (273.0 mm)	12.64” (321 mm)	16.69” (424 mm)	5.00” (127 mm)	4	¾ x 4¾”	35.2 lbs (16.0 Kgs)
12” 300	12.750” (323.9 mm)	14.76” (375 mm)	19.02” (483 mm)	5.00” (127 mm)	4	¾ x 4¾”	43.1 lbs (19.6 Kgs)

* Shurjoint recommends the use of a silicone based lubricant for use with the HDPE series.

dimensions

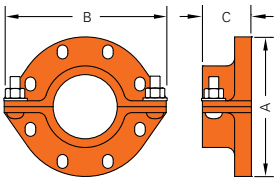
H307 IOS size

pipe O.D.		dimensions			bolt		
HDPE	ips	A	B	C	no.	size	weight
63.0 mm	60.3 mm	86 mm	146 mm	73 mm	4	M10 x 55 mm	1.5 Kgs
75.0 mm	73.0 mm	97 mm	159 mm	73 mm	4	M10 x 55 mm	1.9 Kgs
90.0 mm	88.9 mm	114 mm	178 mm	73 mm	4	M12 x 75 mm	2.3 Kgs
110.0 mm	114.3 mm	144 mm	203 mm	76 mm	4	M12 x 75 mm	2.8 Kgs
160.0 mm	165.1 mm	194 mm	254 mm	76 mm	4	M12 x 97 mm	6.2 Kgs
160.0 mm	168.3 mm	198 mm	257 mm	76 mm	4	M12 x 97 mm	6.2 Kgs
200.0 mm	219.1 mm	256 mm	321 mm	85 mm	4	M16 x 90 mm	6.4 Kgs
250.0 mm	273.0 mm	321 mm	394 mm	97 mm	4	M20 x 120 mm	11.9 Kgs
315.0 mm	323.9 mm	375 mm	451 mm	97 mm	4	M20 x 120 mm	12.7 Kgs

* Shurjoint recommends the use of a silicone based lubricant for the HDPE series.

H312 HDPE flange adapter
ANSI class 125/150





The Shurjoint Model H312 HDPE flange adapter provides for the direct transition from HDPE pipe and or fittings to ANSI Class 125 or 150 flanged components.

dimensions

H312 IPS size / ANSI class 125/150

		dimensions			draw bolt / nut		flange bolt nut*		
nom. size	pipe O.D.	A	B	C	no.	size	no.	size	weight
3” 80	3.500” (88.9 mm)	7.75” (197 mm)	8.86” (225 mm)	3.10” (79 mm)	2	⅝ x 2⅛”	4	⅝”	10.6 lbs (4.8 Kgs)
4” 100	4.500” (114.3 mm)	9.00” (229 mm)	10.25” (260 mm)	3.10” (79 mm)	2	⅝ x 2⅛”	8	⅝”	15.0 lbs (6.8 Kgs)
6” 150	6.625” (168.3 mm)	11.00” (279 mm)	12.25” (311 mm)	3.75” (95 mm)	2	⅝ x 2⅛”	8	¾”	21.5 lbs (9.8 Kgs)
8” 200	8.625” (219.1 mm)	13.50” (343 mm)	14.75” (375 mm)	3.42” (87 mm)	2	¾ x 2⅜”	8	¾”	28.8 lbs (13.1 Kgs)
10” 250	10.750” (273.0 mm)	16.00” (406 mm)	21.00” (533 mm)	4.25” (108 mm)	4	¾ x 2⅜”	12	⅞”	42.9 lbs (19.5 Kgs)
12” 300	12.750” (323.9 mm)	19.02” (483 mm)	24.00” (610 mm)	4.25” (108 mm)	4	¾ x 2⅜”	12	⅞”	51.5 lbs (23.4 Kgs)

* Shurjoint recommends the use of a silicone based lubricant for use with the HDPE series.
* Flange bolts and nuts are to be supplied by installer.

dimensions

H312 ISO size / PN 10 / 16

pipe O.D.		dimensions			draw bolt / nut		flange bolt nut*		
HDPE	steel	A	B	C	no.	size	no.	size	weight
63 mm	60.3 mm	165 mm	197 mm	79 mm	2	M16 x 54 mm	4	M16 mm	4.3 Kgs
90 mm	88.9 mm	200 mm	241 mm	79 mm	2	M16 x 54 mm	8	M16 mm	4.8 Kgs
110 mm	114.3 mm	220 mm	260 mm	79 mm	2	M16 x 54 mm	8	M16 mm	6.8 Kgs
160 mm	165.1 mm	285 mm	330 mm	82 mm	2	M20 x 60 mm	8	M20 mm	9.8 Kgs
200 mm	219.1 mm	340 mm	400 mm	108 mm	2	M20 x 60 mm	12 (PN 16)	M20 mm	13.1 Kgs
250 mm	273.0 mm	405 mm	533 mm	108 mm	4	M24 x 100 mm	12	M24 mm	19.5 Kgs
315 mm	323.9 mm	460 mm	587 mm	108 mm	4	M24 x 100 mm	12	M24 mm	28.5 Kgs

* Shurjoint recommends the use of a silicone based lubricant for use with the HDPE series.
* Flange bolts and nuts are to be supplied by installer.





section 8

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grooved couplings, fittings & components for copper tubing

The Shurjoint copper series is the most complete line of grooved components available for installation on copper tubing (CTS) in sizes 2" - 6" (50 mm - 150 mm) Shurjoint grooved mechanical components provide a fast, easy, economical and durable joining method of copper tubing without the use of heat or solder.

Grooved-end fittings are produced from wrought copper and or bronze castings. Wrought copper conforms to ASTM B75 UNC C12200 (99.9% copper). Bronze castings are produced from lead-free alloys C83470 and or C89836 bismuth copper alloy per ASTM B584. Materials are in compliance with NSF/ANSI 61 and NSF/ANSI 372 for potable water service applications.

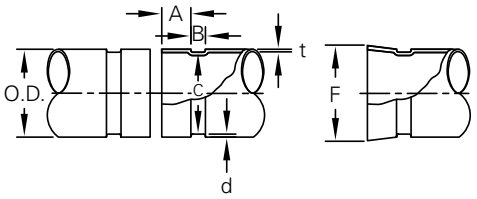
copper tubing - dimension & pressure ratings

ASTM B88 & B306

			t thickness		P max. pressure	
nom. size	type	D pipe O.D.	in	mm	psi	bar
2" 50	K	2.125" (54 mm)	0.083"	2.11 mm	484 psi	33 bar
	L		0.070"	1.78 mm	406 psi	28 bar
	M		0.058"	1.47 mm	335 psi	23 bar
	DWV		0.042"	1.07 mm	241 psi	17 bar
2½" 65	K	2.625" (66.7 mm)	0.095"	2.41 mm	4473 psi	1 bar
	L		0.080"	2.03 mm	375 psi	26 bar
	M		0.065"	1.65 mm	303 psi	21 bar
	DWV		N/A	N/A	N/A	N/A
3" 80	K	3.125" (79.4 mm)	0.109"	2.77 mm	431 psi	30 bar
	L		0.090"	2.29 mm	354 psi	24 bar
	M		0.072"	1.83 mm	282 psi	19 bar
	DWV		0.045"	1.14 mm	175 psi	12 bar
4" 100	K	4.125" (104.8 mm)	0.134"	3.40 mm	400 psi	28 bar
	L		0.110"	2.79 mm	327 psi	23 bar
	M		0.095"	2.41 mm	282 psi	19 bar
	DWV		0.058"	1.47 mm	171 psi	12 bar
5" 125	K	5.125" (130.2 mm)	0.160"	4.06 mm	384 psi	26 bar
	L		0.123"	3.12 mm	294 psi	20 bar
	M		0.109"	2.77 mm	260 psi	18 bar
	DWV		0.072"	1.83 mm	171 psi	12 bar
6 150	K	6.125" (155.6 mm)	0.192"	4.88 mm	386 psi	27 bar
	L		0.140"	3.56 mm	279 psi	19 bar
	M		0.122"	3.10 mm	243 psi	17 bar
	DWV		0.083"	2.11 mm	164 psi	11 bar

notes:
1. Design stress: 6000 psi (41.4 MPa)
2. Pressures are based on water at 73.4°F (23°C).

standard roll groove for U.S. standard copper tubing



pipe O.D.

Maximum allowable tolerances from square cut ends is 0.03″ for 2″ thru 3″; 0.045″ for 4″ thru 6″; and 0.060″ for sizes 8”.

gasket seating surface

The gasket seating surface shall be free from deep scores, marks, or ridges that would prevent a positive seal.

groove width

Groove width is to be measured between vertical flanks of the groove side walls.

groove diameter

The “C” diameters are average values. The groove must be of uniform depth around the entire pipe circumference.

groove depth

The “d” is for reference use only. The groove dimension shall be determined by the groove diameter “C”.

minimum wall thickness

The DWV pipe (ASTM B-306) is minimum wall thickness that may be roll grooved.

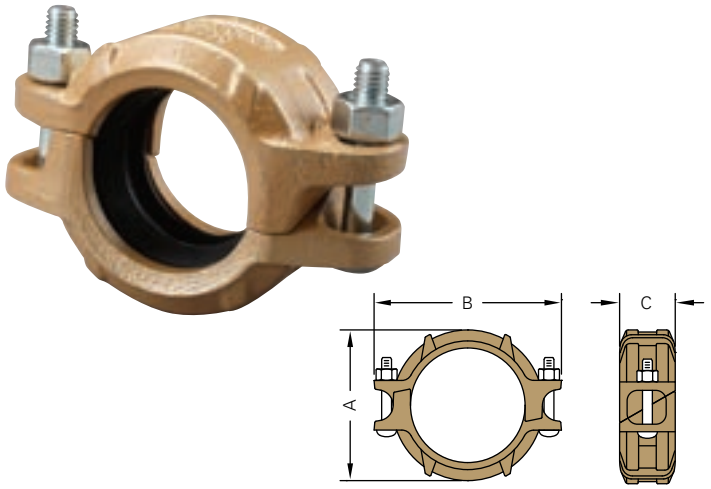
flare diameter

The pipe end that may flare when the groove is rolled shall be within this limit when measured at the extreme end of the pipe.

nom. size	pipe O.D. basic size	A gasket seat ±0.03 / ±0.79	B groove width ±0.03 / ±0.79	C groove dia. +0/-0.02 / +0/-0.51	d groove depth (def.)	t min. allowed wall thick.	F max. allowed flare dia.
2” 50	2.125” (54.0 mm)	0.610” (15.5 mm)	0.300” (7.6 mm)	2.029” (51.5 mm)	0.048” (1.2 mm)	0.064” (1.6 mm)	2.220” (56.4 mm)
2½” 65	2.625” (66.7 mm)	0.610” (15.5 mm)	0.300” (7.6 mm)	2.525” (64.1 mm)	0.050” (1.3 mm)	0.065” (1.7 mm)	2.720” (69.1 mm)
3” 80	3.125” (79.4 mm)	0.610” (15.5 mm)	0.300” (7.6 mm)	3.025” (76.8 mm)	0.050” (1.3 mm)	DWV	3.220” (81.8 mm)
4” 100	4.125” (104.8 mm)	0.610” (15.5 mm)	0.300” (7.6 mm)	4.019” (102.1 mm)	0.053” (1.4 mm)	DWV	4.220” (107.2 mm)
5” 125	5.125” (130.2 mm)	0.610” (15.5 mm)	0.300” (7.6 mm)	4.999” (127.0 mm)	0.053” (1.4 mm)	DWV	5.220” (132.6 mm)
6” 150	6.125” (155.6 mm)	0.610” (15.5 mm)	0.300” (7.6 mm)	5.999” (152.3 mm)	0.063” (1.6 mm)	DWV	6.220” (158.0 mm)

caution: as copper tubing is thinner than carbon steel pipe, always use a roll set specifically designed for use on copper tubing

C305 rigid coupling for copper tubing (CTS)



The Model C305 features angle bolt pad design for a rigid joint and easy swing-over installation. The C305 couplings are comprised of epoxy coated ductile iron housings and EPDM GapSeal gaskets and are rated up to 300 psi (20 Bar), depending on the type and size of copper tubing used.

dimensions

type K,L,M (ASTM B-88) & type DWV (ASTM B306)

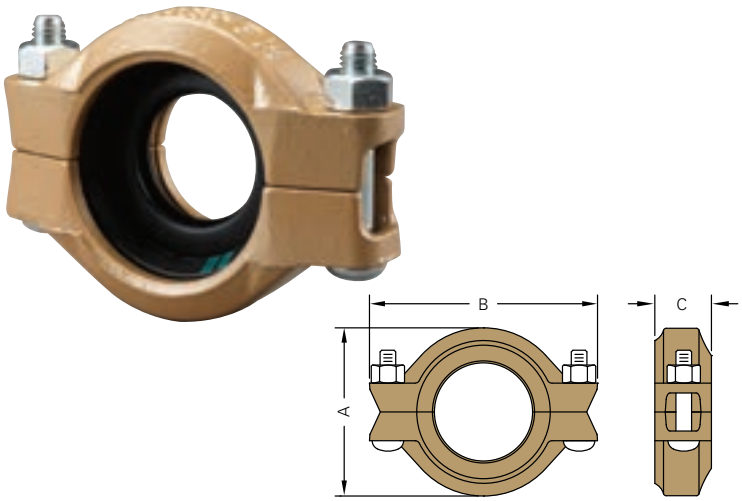
nom. size	pipe O.D.	max working pressure (CWP)*	max. end load (CWP)	pipe end seperation	dimensions A	dimensions B	dimensions C	bolt size	weight
2" 50	2.125" (54.0 mm)	300 psi (20 bar)	1060" (4.58 mm)	0.06" (1.5 mm)	3.17" (81 mm)	4.63" (118 mm)	1.89" (48 mm)	⅜ x 2⅛"	1.8 lbs (0.8 Kgs)
2½" 65	2.625" (66.7 mm)	300 psi (20 bar)	1620" (6.98 mm)	0.06" (1.5 mm)	3.66" (93 mm)	5.28" (134 mm)	1.89" (48 mm)	⅜ x 2⅛"	2.0 lbs (0.9 Kgs)
3" 80	3.125" (79.4 mm)	300 psi (20 bar)	2290" (9.90 mm)	0.06" (1.5 mm)	4.21" (107 mm)	6.06" (154 mm)	1.89" (48 mm)	½ x 3"	2.8 lbs (1.3 Kgs)
4" 100	4.125" (104.8 mm)	300 psi (20 bar)	4000" (17.24 mm)	0.06" (1.5 mm)	5.20" (132 mm)	7.28" (185 mm)	1.89" (48 mm)	½ x 3"	3.5 lbs (1.6 Kgs)
5" 125	5.125" (130.2 mm)	300 psi (20 bar)	6180" (26.61 mm)	0.06" (1.5 mm)	6.26" (159 mm)	8.66" (220 mm)	1.89" (48 mm)	⅝ x 3½"	4.6 lbs (2.2 Kgs)
6" 150	6.125" (155.6 mm)	300 psi (20 bar)	8830" (38.01 mm)	0.06" (1.5 mm)	7.24" (184 mm)	9.76" (248 mm)	1.89" (48 mm)	⅝ x 3½"	5.5 lbs (2.5 Kgs)

* Working pressure is for connection with roll-grooved Type K copper tubing.
Notes / Options: Couplings with rubber gaskets are likely to function as an insulator. Where electrical continuity is required, the Shurjoint Model 96 Continuity Clip will restore electrical continuity to the system. The continuity clip satisfies IEE Wiring Regulations.

BS EN 1057

nom. size	pipe O.D.	pipe end seperation	dimensions A	dimensions B	dimensions C	bolt size	weight
50 mm	54.0 mm	1.5 mm	81 mm	118 mm	48 mm	M10 x 55 mm	0.8 Kgs
65 mm	66.7 mm	1.5 mm	93 mm	134 mm	48 mm	M10 x 55 mm	0.9 Kgs
80 mm	76.1 mm	1.5 mm	104 mm	136 mm	48 mm	M10 x 55 mm	1.3 Kgs
100 mm	108.0 mm	3.2 mm	138 mm	176 mm	48 mm	M12 x 75 mm	1.6 Kgs
125 mm	133.0 mm	3.2 mm	165 mm	220 mm	48 mm	M16 x 90 mm	2.2 Kgs
150 mm	159.0 mm	3.2 mm	190 mm	248 mm	48 mm	M16 x 90 mm	2.5 Kgs

C306 reducing coupling for copper tubing (CTS)



The Model C306 Reducing Coupling allows direct reduction on a piping run and eliminates the need for a concentric reducer and couplings. The epoxy coated ductile iron coupling housings help eliminate galvanic local cell and stray current problems. The specially designed rubber gasket prevents the smaller pipe from telescoping into the larger pipe during vertical installation.

dimensions

nom. size	pipe O.D.	max working pressure (CWP)*	max. end load (CWP)	pipe end seperation	deflection		dimensions			bolt size	weight
					deg. per coupling	pipe	A	B	C		
2½ x 2" 65 x 50	2.625 x 2.215" (66.7 x 54.0 mm)	300 psi (20 bar)	1622 lbs (6.98 kN)	0.06" (1.6 mm)	1° - 22′	0.29"/ft (24.0 mm/m)	3.70" (94 mm)	5.55" (141 mm)	1.77" (45 mm)	½ x 3"	2.9 lbs (1.3 Kgs)
3 x 2" 80 x 50	3.125 x 2.125" (79.4 x 54.0 mm)	300 psi (20 bar)	2300 lbs (9.89 kN)	0.06" (1.6 mm)	1° - 09′	0.24"/ft (20.0 mm.m)	4.21" (107 mm)	5.98" (152 mm)	1.77" (45 mm)	½ x 3"	3.3 lbs (1.5 Kgs)
3 x 2½" 80 x 65	3.125 x 2.625" (79.4 x 66.7 mm)	300 psi (20 bar)	2300 lbs (9.89 kN)	0.06" (1.6 mm)	1° - 09′	0.24"/ft (20.0 mm.m)	4.21" (107 mm)	5.98" (152 mm)	1.77" (45 mm)	½ x 3"	3.0 lbs (1.4 Kgs)
4 x 2½" 100 x 65	4.125 x 2.625" (104.8 x 66.7 mm)	300 psi (20 bar)	4007 lbs 17.23 kN)	0.06" (1.6 mm)	0° - 53′	0.18"/ft (15.0 mm/m)	5.20" (132 mm)	7.20" (183 mm)	1.77" (45 mm)	½ x 3"	4.2 lbs (1.9 Kgs)
4 x 3" 100 x 80	4.125 x 3.125" (104.8 x 79.4 mm)	300 psi (20 bar)	4007 lbs (17.23 kN)	0.06" (1.6 mm)	0° - 53′	0.18"/ft (15.0 mm/m)	5.20" (132 mm)	7.20" (183 mm)	1.77" (45 mm)	½ x 3"	4.0 lbs (1.8 Kgs)
5 x 4" 125 x 100	5.125 x 4.125" (130.2 x 104.8 mm)	300 psi (20 bar)	6186 lbs (26.60 kN)	0.06" (1.6 mm)	0° - 42′	0.15"/ft (12.0 mm/m)	6.30" (160 mm)	8.82" (224 mm)	1.77" (45 mm)	⅝ x 3½"	5.5 lbs (2.5 Kgs)
6 x 4" 150 x 100	6.125 x 4.125" (155.6 x 104.8 mm)	300 psi (20 bar)	8835 lbs (37.99 kN)	0.06" (1.6 mm)	0° - 36′	0.13"/ft (10.3 mm/m)	7.28" (185 mm)	9.88" (251 mm)	1.77" (45 mm)	⅝ x 3½"	7.3 lbs (3.3 Kgs)

* Working pressure is for connection with roll-grooved Type K copper tubing.
Notes / Options: Couplings with rubber gaskets are likely to function as an insulator. Where electrical continuity is required, the Shurjoint Model 96 Continuity Clip will restore electrical continuity to the system. The continuity clip satisfies IEE Wiring Regulations.

96 continuity clip



Couplings with rubber gaskets are likely to function as an insulator. Where electrical continuity is required, the Shurjoint continuity clip will restore electrical continuity to the system. The electrical continuity clip satisfies IEE Wiring Regulations. Material: Copper or Brass plate.

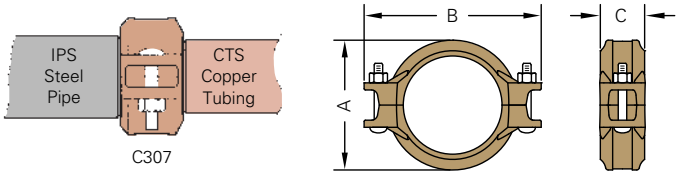
Note: The pipe surface where continuity clips come in contact must be conductive. If the surface is painted, the paint should be removed to expose bare metal.

dimensions

model	coupling size	carton Q'ty/pcs
96-1	1" - 3"	600
96-2	4" - 6"	600
96-3	8" - 12"	600

C307 transition coupling (IPS x CTS)





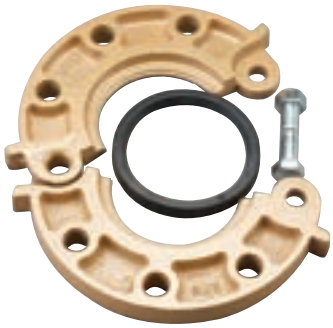
The Model C307 Transition Coupling provides for a direct connection and transition between grooved end IPS steel pipe, fittings or valves and grooved end CTS copper tubing. The rubber gasket isolates the fluid from coupling housings and the epoxy coated housings help eliminate galvanic local cell and stray current problems. The C307 is rated to 300 psi (20 Bar).

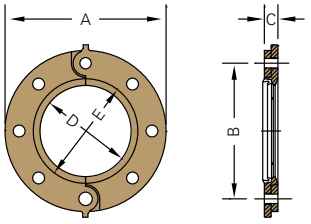
dimensions

nom. size	pipe O.D. ips x cts	max. working pressure (CWP)*	axial displacement	dimensions A	dimensions B	dimensions C	bolt size	weight
2" 50	2.375 x 2.125" (60.3 x 54.0 mm)	300 psi (20 bar)	0 - 0.06" (0 - 1.6 mm)	3.31" (84 mm)	5.00" (127 mm)	1.81" (46 mm)	½ x 2⅛"	2.0 lbs (0.9 Kgs)
2½" 65	2.875 x 2.625" (73.0 x 66.7 mm)	300 psi (20 bar)	0 - 0.06" (0 - 1.6 mm)	3.90" (99 mm)	5.59" (142 mm)	1.81" (46 mm)	⅜ x 2⅛"	2.2 lbs (1.0 Kgs)
3" 80	3.500 x 3.125" (88.9 x 79.4 mm)	300 psi (20 bar)	0 - 0.06" (0 - 1.6 mm)	4.57" (116 mm)	6.38" (162 mm)	1.81" (46 mm)	½ x 3"	3.0 lbs (1.4 Kgs)
4" 100	4.500 x 4.125" (114.3 x 104.8 mm)	300 psi (20 bar)	0 - 0.06" (0 - 1.6 mm)	5.71" (145 mm)	6.69" (170 mm)	1.85" (47 mm)	½ x 3"	4.2 lbs (1.9 Kgs)
6" 150	6.625 x 6.125" (168.3 x 155.6 mm)	300 psi (20 bar)	0 - 0.06" (0 - 1.6 mm)	8.03" (204 mm)	10.59" (269 mm)	1.97" (50 mm)	⅝ x 3½"	7.3 lbs (3.3 Kgs)

* Working pressure is for connection with roll-grooved Type K copper tubing.
Notes / Options: Couplings with rubber gaskets are likely to function as an insulator. Where electrical continuity is required, the Shurjoint Model 96 Continuity Clip will restore electrical continuity to the system. The continuity clip satisfies IEE Wiring Regulations.

C341 flange adapter for copper tubing (CTS)





2"~12"(hinged)

The Shurjoint Model C341 Flange Adapter allows for the direct connection of grooved-end copper tubing with ANSI Class 125/150 (steel) or ASME B16.24 (copper) Class 150 flanged components without the need for heat or solder. The pressure responsive gasket seals on the outside diameter of the copper tubing and isolates the flange segments from the internal fluid.

dimensions

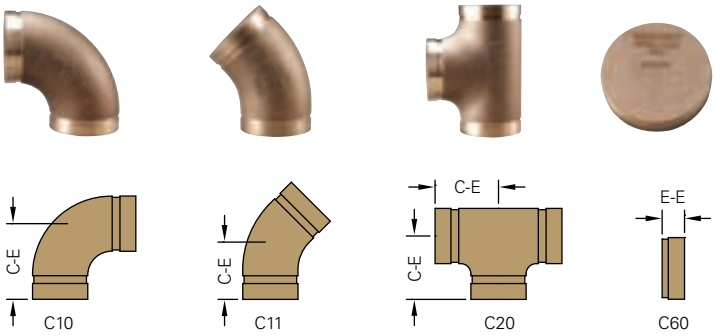
nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions					bolt		weight
			A	B	C	D	E	no.	size	
2" 50	2.125" (54.0 mm)	300 psi (20 bar)	6.00" (152 mm)	4.75" (121 mm)	0.75" (19 mm)	2.13" (54 mm)	3.20" (81 mm)	4	⅝ x 3"	4.6 lbs (2.1 Kgs)
2½" 65	2.625" (66.7 mm)	300 psi (20 bar)	7.00" (178 mm)	5.50" (140 mm)	0.87" (22 mm)	2.63" (67 mm)	3.91" (99 mm)	4	⅝ x 3"	6.6 lbs (3.0 Kgs)
3" 80	3.125" (79.4 mm)	300 psi (20 bar)	7.50" (190 mm)	6.00" (152 mm)	0.94" (24 mm)	3.13" (80 mm)	4.53" (115 mm)	4	⅝ x 3"	7.7 lbs (3.5 Kgs)
4" 100	4.125" (104.8 mm)	300 psi (20 bar)	9.00" (229 mm)	7.50" (191 mm)	0.94" (24 mm)	4.13" (105 mm)	5.53" (140 mm)	4	⅝ x 3"	9.5 lbs (4.3 Kgs)
5" 125	5.125" (130.2 mm)	300 psi (20 bar)	10.00" (254 mm)	8.50" (216 mm)	0.94" (24 mm)	5.13" (130 mm)	6.71" (170 mm)	8	¾ x 3½"	12.8 lbs (5.8 Kgs)
6" 150	6.125" (155.6 mm)	300 psi (20 bar)	11.00" (279 mm)	9.50" (241 mm)	1.00" (25 mm)	6.13" (156 mm)	7.79" (198 mm)	8	¾ x 3½"	13.6 lbs (6.2 Kgs)

* Working Pressure is for connection with roll-grooved Type K copper tubing
** Please note that 2", 2½", and 3" Model C341 Flanges cannot be used for making direct connections to Model SJ-C300 Butterfly Valves due to bolt pad interference with the valve.

grooved fittings for copper tubing

Shurjoint Grooved-end fittings are produced from bronze castings. Bronze castings are produced from lead-free alloys C83470 or C89836 bismuth alloy per ASTM B584. Materials are in compliance with NSF/ANSI 61 and NSF/ANSI 372 for potable water service applications. Shurjoint fittings are designed for use with Shurjoint CTS couplings, components and ASTM B88 roll grooved copper tubing type K, L, M and ASTM B-306 DWV.

C10 90° elbow
C11 45° elbow
C20 tee
C60 cap



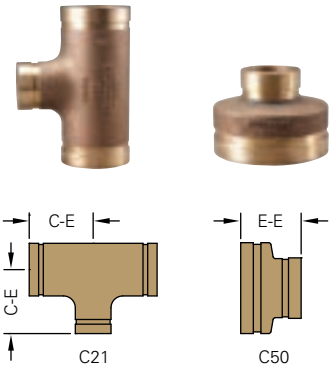
The Shurjoint Model C341 Flange Adapter allows for the direct connection of grooved-end copper tubing with ANSI Class 125/150 (steel) or ASME B16.24 (copper) Class 150 flanged components without the need for heat or solder. The pressure responsive gasket seals on the outside diameter of the copper tubing and isolates the flange segments from the internal fluid.

dimensions

		C10 90° elbow		C11 45° elbow		C20 tee		C60 cap	
nom. size	pipe O.D.	C-E	weight	C-E	weight	C-E	weight	E-E	weight
2"	2.125"	2.91"	1.5 lbs	2.19"	1.7 lbs	2.44"	1.8 lbs	0.96"	0.6 lbs
50	(54.0 mm)	(74 mm)	(0.7 Kgs)	(56 mm)	(0.8 Kgs)	(62 mm)	(0.8 Kgs)	(24 mm)	(0.3 Kgs)
2½"	2.625"	3.31"	2.0 lbs	2.31"	2.1 lbs	3.20"	2.9 lbs	0.96"	0.9 lbs
65	(66.7 mm)	(84 mm)	(0.9 Kgs)	(59 mm)	(1.0 Kgs)	(81 mm)	(1.3 Kgs)	(24 mm)	(0.4 Kgs)
3"	3.125"	3.81"	2.6 lbs	2.59"	3.2 lbs	3.50"	3.7 lbs	0.96"	1.2 lbs
80	(79.4 mm)	(97 mm)	(1.2 Kgs)	(66 mm)	(1.4 Kgs)	(89 mm)	(1.7 Kgs)	(24 mm)	(0.6 Kgs)
4"	4.125"	4.75"	5.5 lbs	3.35"	5.5 lbs	4.25"	7.3 lbs	0.96"	2.1 lbs
100	(104.8 mm)	(121 mm)	(2.5 Kgs)	(85 mm)	(2.5 Kgs)	(108 mm)	(3.3 Kgs)	(24 mm)	(1.0 Kgs)
5"	5.125"	5.94"	11.5 lbs	3.25"	7.9 lbs	5.94"	17.2 lbs	0.96"	3.5 lbs
125	(130.2 mm)	(151 mm)	(5.2 Kgs)	(83 mm)	(3.6 Kgs)	(151 mm)	(7.8 Kgs)	(24 mm)	(1.6 Kgs)
6"	6.125"	6.94"	16.5 lbs	3.63"	10.2 lbs	6.94"	26.2 lbs	0.96"	4.4 lbs
150	(155.6 mm)	(176 mm)	(7.5 Kgs)	(92 mm)	(4.6 Kgs)	(176 mm)	(11.9 Kgs)	(24 mm)	(2.0 Kgs)

* Working Pressure is for connection with roll-grooved Type K copper tubing
** Please note that 2", 2½", and 3" Model C341 Flanges cannot be used for making direct connections to Model SJ-C300 Butterfly Valves due to bolt pad interference with the valve.

C21 reducing tee
C50 concentric reducer

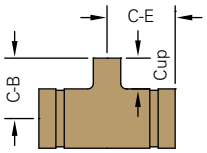


dimensions

		C21 reducing tee		C50 concentric reducer	
nom. size	pipe O.D.	C-E	weight	E-E	weight
2½ x 2" 65 x 50	2.625 x 2.125" (66.7 x 54.0 mm)	3.20" (81 mm)	3.6 lbs (1.6 Kgs)	2.50" (64 mm)	1.2 lbs (0.6 Kgs)
3 x 2" 80 x 50	3.125 x 2.125" (79.4 x 54.0 mm)	3.50" (89 mm)	4.8 lbs (2.2 Kgs)	2.50" (64 mm)	1.5 lbs (0.7 Kgs)
3 x 2½" 80 x 65	3.125 x 2.625" (79.4 x 66.7 mm)	3.50" (89 mm)	4.8 lbs (2.2 Kgs)	2.50" (64 mm)	1.5 lbs (0.7 Kgs)
4 x 2" 100 x 50	4.125 x 2.125" (104.8 x 54.0 mm)	4.25" (108 mm)	7.7 lbs (3.5 Kgs)	3.00" (76 mm)	2.5 lbs (1.2 Kgs)
4 x 2½" 100 x 65	4.125 x 2.625" (104.8 x 66.7 mm)	4.25" (108 mm)	7.9 lbs (3.6 Kgs)	3.00" (76 mm)	2.6 lbs (1.2 Kgs)
4 x 3" 100 x 80	4.125 x 3.125" (104.8 x 79.4 mm)	4.25" (108 mm)	8.1 lbs (3.7 Kgs)	3.00" (76 mm)	2.5 lbs (1.1 Kgs)
5 x 3" 125 x 80	5.125 x 3.125" (130.2 x 79.4 mm)	5.94" (151 mm)	16.7 lbs (7.6 Kgs)	3.50" (89 mm)	4.4 lbs (2.0 Kgs)
5 x 4" 125 x 100	5.125 x 4.125" (130.2 x 104.8 mm)	5.94" (151 mm)	17.2 lbs (7.8 Kgs)	3.50" (89 mm)	4.4 lbs (2.0 Kgs)
6 x 2½" 150 x 65	6.125 x 2.625" (155.6 x 66.7 mm)	6.94" (176 mm)	22.9 lbs (10.4 Kgs)	4.00" (102 mm)	6.0 lbs (2.7 Kgs)
6 x 3" 150 x 80	6.125 x 3.125" (155.6 x 79.4 mm)	6.94" (176 mm)	23.5 lbs (10.7 Kgs)	4.00" (102 mm)	6.0 lbs (2.7 Kgs)
6 x 4" 150 x 100	6.125 x 4.125" (155.6 x 104.8 mm)	6.94" (176 mm)	23.5 lbs (10.7 Kgs)	4.00" (102 mm)	5.8 lbs (2.7 Kgs)
6 x 5" 150 x 125	6.125 x 5.125" (155.6 x 130.2 mm)	6.94" (176 mm)	26.2 lbs (11.9 Kgs)	4.00" (102 mm)	5.9 lbs (2.7 Kgs)

C26 reducing tee
(GR x GR x CUP) - (CAST)





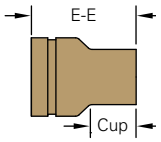
C26

dimensions

	C26 red. tee (gr x gr x cup)			
nom. size	C-E	C-B	cup	weight
2 x 2 x ¾" 50 x 50 x 20	2.20" (56 mm)	1.97" (50 mm)	0.75" (19 mm)	1.6 lbs (0.7 Kgs)
2 x 2 x 1" 50 x 50 x 25	2.33" (59 mm)	2.2" (56 mm)	0.91" (23 mm)	1.6 lbs (0.7 Kgs)
2 x 2 x 1¼" 50 x 50 x 32	2.48" (63 mm)	2.36" (60 mm)	0.97" (25 mm)	1.7 lbs (0.8 Kgs)
2 x 2 x 1½" 50 x 50 x 40	2.56" (65 mm)	2.28" (58 mm)	1.09" (28 mm)	2.0 lbs (0.9 Kgs)
2½ x 2½ x ¾" 65 x 65 x 20	2.25" (57 mm)	2.25" (57 mm)	0.75" (19 mm)	1.9 lbs (0.9 Kgs)
2½ x 2½ x 1" 65 x 65 x 25	2.40" (61 mm)	2.41" (61 mm)	0.91" (23 mm)	2.2 lbs (1.0 Kgs)
2½ x 2½ x 1¼" 65 x 65 x 32	2.52" (64 mm)	2.55" (65 mm)	0.97" (25 mm)	2.3 lbs (1.1 Kgs)
2½ x 2½ x 1½" 65 x 65 x 40	2.70" (69 mm)	2.67" (68 mm)	1.09" (28 mm)	2.6 lbs (1.2 Kgs)
2½ x 2½ x 2" 65 x 65 x 50	2.95" (75 mm)	2.84" (72 mm)	1.34" (34 mm)	3.0 lbs (1.4 Kgs)
3 x 3 x ¾" 80 x 80 x 20	2.44" (62 mm)	2.50" (64 mm)	0.75" (19 mm)	2.9 lbs (1.3 Kgs)
3 x 3 x 1" 80 x 80 x 25	2.55" (65 mm)	2.80" (71 mm)	0.91" (23 mm)	2.9 lbs (1.3 Kgs)
3 x 3 x 1¼" 80 x 80 x 32	2.63" (67 mm)	2.87" (73 mm)	0.97" (25 mm)	3.1 lbs (1.4 Kgs)
3 x 3 x 1½" 80 x 80 x 40	2.85" (72 mm)	2.99" (76 mm)	1.09" (28 mm)	3.3 lbs (1.5 Kgs)
3 x 3 x 2" 80 x 80 x 50	3.11" (79 mm)	3.09" (78 mm)	1.34" (34 mm)	3.7 lbs (1.7 Kgs)
4 x 4 x ¾" 100 x 100 x 20	3.00" (76 mm)	2.95" (75 mm)	0.75" (19 mm)	4.8 lbs (2.2 Kgs)
4 x 4 x 1" 100 x 100 x 25	3.10" (79 mm)	3.23" (82 mm)	0.91" (23 mm)	5.1 lbs (2.3 Kgs)
4 x 4 x 1¼" 100 x 100 x 32	3.25" (83 mm)	3.46" (88 mm)	0.97" (25 mm)	5.5 lbs (2.5 Kgs)
4 x 4 x 1½" 100 x 100 x 40	3.35" (85 mm)	3.66" (93 mm)	1.09" (28 mm)	5.6 lbs (2.5 Kgs)
4 x 4 x 2" 100 x 100 x 50	3.62" (92 mm)	3.59" (91 mm)	1.34" (34 mm)	5.9 lbs (2.7 Kgs)

C52 concentric reducer
(GR x CUP) - (CAST)





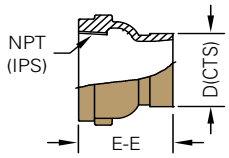
C52

dimensions

	C52 conc. reducer (gr x cup)		
nom. size	E-E	cup	weight
2 x ¾"	---	---	---
50 x 20	---	---	---
2 x 1"	2.70"	0.91"	0.7 lbs
50 x 25	(69 mm)	(23 mm)	(0.3 Kgs)
2 x 1¼"	3.00"	0.97"	0.8 lbs
50 x 32	(76 mm)	(25 mm)	(0.4 Kgs)
2 x 1½"	2.94"	1.09"	0.8 lbs
50 x 40	(75 mm)	(28 mm)	(0.4 Kgs)
2½ x ¾"	---	---	---
65 x 20	---	---	---
2½ x 1"	3.19"	0.91"	1.2 lbs
65 x 25	(81 mm)	(23 mm)	(0.5 Kgs)
2½ x 1¼"	3.19"	0.97"	1.2 lbs
65 x 32	(81 mm)	(25 mm)	(0.5 Kgs)
2½ x 1½"	3.19"	1.09"	1.2 lbs
65 x 40	(81 mm)	(28 mm)	(0.5 Kgs)
2½ x 2"	3.19"	1.34"	1.2 lbs
65 x 50	(81 mm)	(34 mm)	(0.5 Kgs)
3 x ¾"	---	---	---
80 x 20	---	---	---
3 x 1"	---	---	---
80 x 25	---	---	---
3 x 1¼"	---	---	---
80 x 32	---	---	---
3 x 1½"	3.68"	1.09"	1.7 lbs
80 x 40	(93 mm)	(28 mm)	(0.8 Kgs)
3 x 2"	3.94"	1.34"	1.9 lbs
80 x 50	(100 mm)	(34 mm)	(0.9 Kgs)
4 x ¾"	---	---	---
100 x 20	---	---	---
4 x 1"	---	---	---
100 x 25	---	---	---
4 x 1¼"	---	---	---
100 x 32	---	---	---
4 x 1½"	---	---	---
100 x 40	---	---	---
4 x 2"	4.56"	1.34"	3.2 lbs
100 x 50	(116 mm)	(34 mm)	(1.4 Kgs)

C55 transition adapter
(IPS x CTS)





C55

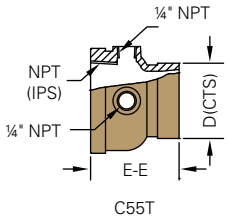
The Shurjoint Model C55 Transition Adapter provides a direct transition between male threaded-end steel pipe (IPS) and grooved-end copper tubing. The C55 is UL classified to NSF/ANSI 61 and NSF/ANSI 372 for use in potable water systems.

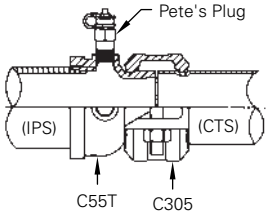
dimensions

nom. size IPS (NPT) x CTS (GRV)	actual pipe O.D.		E-E	weight
	steel pipe (IPS) O.D.	copper tubing (CTS) D		
1½ x 2" 40 x 50	1.900" (48.3 mm)	2.125" (54.0 mm)	2.50" (63 mm)	1.3 lbs (0.6 Kgs)
2 x 2" 50 x 50	2.375" (60.3 mm)	2.125" (54.0 mm)	2.50" (63 mm)	1.4 lbs (0.7 Kgs)
2½ x 2½" 65 x 65	2.875" (73.0 mm)	2.625" (66.7 mm)	2.75" (70 mm)	2.4 lbs (1.1 Kgs)
3 x 3" 80 x 80	3.500" (88.9 mm)	3.125" (79.4 mm)	3.00" (76 mm)	3.3 lbs (1.5 Kgs)

C55T transition adapter
(IPS/FT x CTS/GR with ¼" taps)







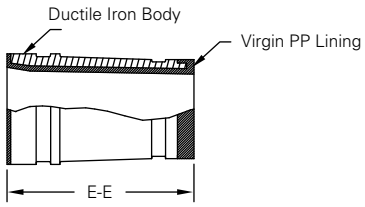
Allows for the installation of gauges or Pete's Plugs for measuring temperature and or pressure.

dimensions

nom. size IPS (NPT) x CTS (GRV)	steel pipe (IPS) O.D.	copper tubing (CTS) D	copper tubing (CTS) E-E	weight
1½ x 2" 40 x 50	1.900" (48.3 mm)	2.125" (54.0 mm)	2.50" (63 mm)	1.1 lbs (0.5 Kgs)
2 x 2" 50 x 50	2.375" (60.3 mm)	2.125" (54.0 mm)	2.50" (63 mm)	1.3 lbs (0.6 Kgs)
2½ x 2½" 65 x 65	2.875" (73.0 mm)	2.625" (66.7 mm)	2.75" (70 mm)	2.0 lbs (0.9 Kgs)

DE30-GG dielectric transition fitting
(IPS x CTS)



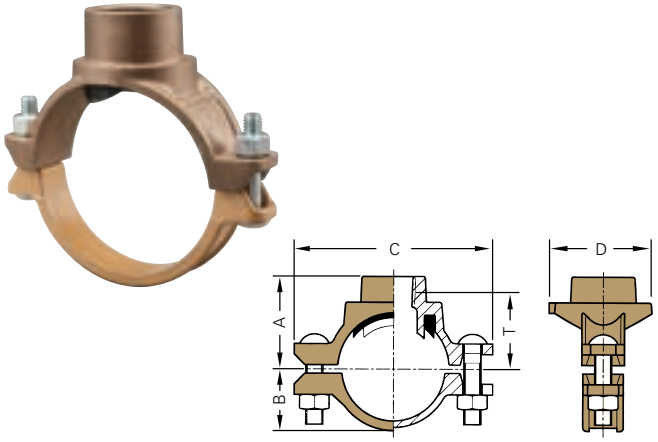


The Model DE30-GG Dielectric Transition Fitting provides a direct transition between grooved-end steel pipe (IPS) and grooved-end copper tubing (CTS). The internal PP lining effectively eliminates galvanic local cell and stray current problems.

dimensions

nom. size	actual pipe O.D. steel pipe	actual pipe O.D. copper tubing	E-E	weight
2" 50	2.375" (60.3 mm)	2.125" (54.0 mm)	4.00" (102 mm)	1.3 lbs (0.6 Kgs)
2½" 65	2.875" (73.0 mm)	2.625" (66.7 mm)	4.00" (102 mm)	1.9 lbs (0.9 Kgs)
3" 80	3.500" (88.9 mm)	3.125" (79.4 mm)	4.00" (102 mm)	2.9 lbs (1.3 Kgs)
4" 100	4.500" (114.3 mm)	4.125" (104.8 mm)	4.00" (102 mm)	3.3 lbs (1.5 Kgs)
5" 125	5.563" (141.3 mm)	5.125" (130.2 mm)	4.00" (102 mm)	5.2 lbs (2.4 Kgs)
6" 150	6.625" (168.3 mm)	6.125" (155.6 mm)	4.00" (102 mm)	6.9 lbs (3.1 Kgs)
8" 200	8.625" (219.1 mm)	8.125" (206.4 mm)	4.00" (102 mm)	9.4 lbs (4.3 Kgs)

C723 bronze mechanical tee for copper tubing (CTS)



note: Use a torque wrench and tighten the nuts to an approximate torque value of 5 Lbs-Ft ~ 9 Lbs-Ft (7 Nm ~ 12 Nm). Excess torque may cause joint failure.

The Shurjoint Model C723 provides a fast, easy and reliable branch connection from copper tubing (CTS). The fitting consists of a bronze upper housing, ductile iron lower housing, o-ring and carbon steel track bolts and nuts. The fitting is available with a female threaded outlet, NPT or BSPT.

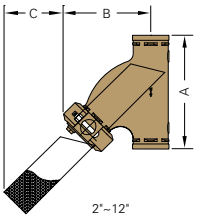
dimensions

nom. CTS x NPT	max working pressure (CWP)*	hole dia. +0.063, -0 / +1.6, -0	dimensions A	B	C	D	T	bolt size	weight
2½ x ½" 65 x 15	200 psi (14 bar)	1.18" (30 mm)	2.56" (65 mm)	1.61" (41 mm)	4.65" (118 mm)	1.89" (48 mm)	2.09" (53 mm)	⅜ x 2⅛"	1.5 lbs (0.7 Kgs)
2½ x ¾" 65 x 20	200 psi (14 bar)	1.18" (30 mm)	2.56" (65 mm)	1.61" (41 mm)	4.65" (118 mm)	2.01" (51 mm)	2.05" (52 mm)	⅜ x 2⅛"	1.5 lbs (0.7 Kgs)
2½x 1" 65 x 25	200 psi (14 bar)	1.18" (30 mm)	2.56" (65 mm)	1.61" (41 mm)	4.65" (118 mm)	1.89" (48 mm)	1.93" (49 mm)	⅜ x 2⅛"	1.5 lbs (0.7 Kgs)
2½ x 1¼" 65 x 32	200 psi (14 bar)	1.77" (45 mm)	2.68" (68 mm)	1.61" (41 mm)	4.65" (118 mm)	2.64" (67 mm)	2.15" (55 mm)	⅜ x 2⅛"	2.2 lbs (1.0 Kgs)
3 x ¾" 80 x 20	200 psi (14 bar)	1.18" (30 mm)	2.80" (71 mm)	1.89" (48 mm)	5.16" (131 mm)	2.01" (51 mm)	2.28" (58 mm)	⅜ x 2⅛"	1.5 lbs (0.7 Kgs)
3 x 1" 80 x 25	200 psi (14 bar)	1.18" (30 mm)	2.80" (71 mm)	1.89" (48 mm)	5.16" (131 mm)	1.89" (48 mm)	2.20" (56 mm)	⅜ x 2⅛"	1.8 lbs (0.8 Kgs)
3 x 1¼" 80 x 32	200 psi (14 bar)	1.77" (45 mm)	2.95" (75 mm)	1.89" (48 mm)	5.16" (131 mm)	2.64" (67 mm)	2.59" (66 mm)	⅜ x 2⅛"	2.2 lbs (1.0 Kgs)
4 x ¾" 100 x 20	200 psi (14 bar)	1.18" (30 mm)	3.35" (85 mm)	2.36" (60 mm)	6.22" (158 mm)	2.01" (51 mm)	2.80" (71 mm)	⅜ x 2⅛"	1.8 lbs (0.8 Kgs)
4 x 1" 100 x 25	200 psi (14 bar)	1.18" (30 mm)	3.35" (85 mm)	2.36" (60 mm)	6.22" (158 mm)	1.89" (48 mm)	3.11" (79 mm)	⅜ x 2⅛"	1.8 lbs (0.8 Kgs)
4 x 1¼" 100 x 32	200 psi (14 bar)	1.77" (45 mm)	3.35" (85 mm)	2.36" (60 mm)	6.22" (158 mm)	2.64" (67 mm)	3.11" (79 mm)	⅜ x 2⅛"	1.9 lbs (0.9 Kgs)

* Working pressure is for connection with Type K copper tubing.
**T: Center of run to engaged pipe end (approx.).

C726 y-strainer for copper tubing (CTS)





The Shurjoint Model C726 Y-Strainer can be installed quickly and easily with two mechanical couplings and the straight flow through design provides for lower pressure drop.

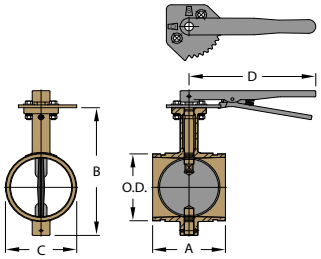
dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions A	dimensions B	dimensions C	drain plug size	weight
2" 50	2.125" (54.0 mm)	300 psi (20 bar)	8.75" (222 mm)	6.38" (162 mm)	3.18" (81 mm)	½" 15	8.8 lbs (4.0 Kgs)
2½" 65	2.625" (66.7 mm)	300 psi (20 bar)	9.75" (248 mm)	6.97" (177 mm)	4.72" (120 mm)	½" 15	11.3 lbs (5.1 Kgs)
3" 80	3.125" (79.4 mm)	300 psi (20 bar)	10.63" (270 mm)	7.71" (196 mm)	4.50" (114 mm)	½" 15	15.0 lbs (6.8 Kgs)
4" 100	4.125" (104.8 mm)	300 psi (20 bar)	13.00" (330 mm)	9.60" (244 mm)	6.00" (152 mm)	1" 25	27.5 lbs (12.5 Kgs)
6" 150	6.125" (155.6 mm)	300 psi (20 bar)	17.00" (432 mm)	12.91" (328 mm)	8.00" (203 mm)	1" 25	59.3 lbs (26.9 Kgs)

* Working pressure is for connection with roll-grooved Type K copper tubing.

SJ-C300 butterfly valve for copper tubing (CTS)





The Shurjoint Model SJ-C300 is a lever handle bronze body butterfly valve designed for use with grooved copper tubing (CTS), fittings and couplings. The lead-free bronze body material is lead free copper alloy C83470 or C89836 bismuth lead free alloy, and is UL classified in accordance with NSF/ANSI 61 and NSF/ANSI 372.

dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions A	B	C	D	weight
2" 50	2.125" (54 mm)	300 psi (20 bar)	3.19" (81 mm)	5.31" (135 mm)	2.45" (57 mm)	10.0" (254 mm)	5.9 lbs (2.7 Kgs)
2½" 65	2.625" (66.7 mm)	300 psi (20 bar)	3.78" (96 mm)	5.87" (149 mm)	2.87" (73 mm)	10.0" (254 mm)	7.3 lbs (3.3 Kgs)
3" 80	3.125" (79.4 mm)	300 psi (20 bar)	3.78" (96 mm)	6.42" (163 mm)	3.27" (83 mm)	10.0" (254 mm)	7.7 lbs (3.5 Kgs)
4" 100	4.125" (104.8 mm)	300 psi (20 bar)	4.65" (118 mm)	8.19" (208 mm)	4.29" (109 mm)	10.0" (254 mm)	11.0 lbs (5.0 Kgs)
5" 125	5.125" (130.2 mm)	300 psi (20 bar)	5.28" (134 mm)	9.80" (249 mm)	5.36" (136 mm)	10.0" (254 mm)	16.9 lbs (7.7 Kgs)
6" 150	6.125" (155.6 mm)	300 psi (20 bar)	5.28" (134 mm)	10.79" (274 mm)	6.42" (163 mm)	10.0" (254 mm)	16.9 lbs (7.7 Kgs)

*Working pressure is for connection with roll-grooved Type K copper tubing.
** Please note that 2", 2½", and 3" Model C341 Flanges cannot be used for making direct connections to Model SJ-C300 Butterfly Valves due to bolt pad interference with the valve.

notes





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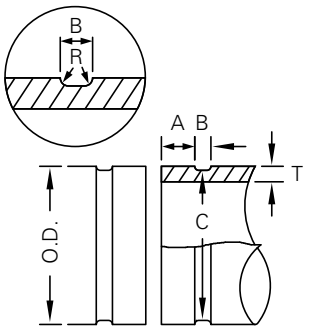
AWWA ductile iron series



Shurjoint offers a variety of grooved mechanical couplings and fittings for AWWA ductile iron pipe in sizes 3” to 12”. The Shurjoint coupling features a two-piece housing and GapSeal gasket for a leak-tight seal. Ductile iron pipe shall be cut-grooved to AWWA C606 Table 2 and Table 3 - Radius Cut Groove Specifications.

Rubber gaskets are specially compounded to seal on ductile iron surfaces and are available in three grades to meet your service requirement needs. See page 231 for details.

radius cut grooved dimensions - ductile iron pipe



gasket seating surface (A):

The same coupling can be used either as a rigid joint or a flexible joint depending on the groove. Gasket seat "A Rigid" is for rigid joints and Gasket seat "A Flex." for flexible joints.

The gasket seating surface shall be free from deep scores, marks, or ridges that could prevent a positive seal.

groove diameter (C):

The "C" diameters are average values. The groove must be of uniform depth around the entire pipe circumference.

radius (R):

The groove must be cut with a radius 'R' at the corners of the groove to reduce stress concentration.

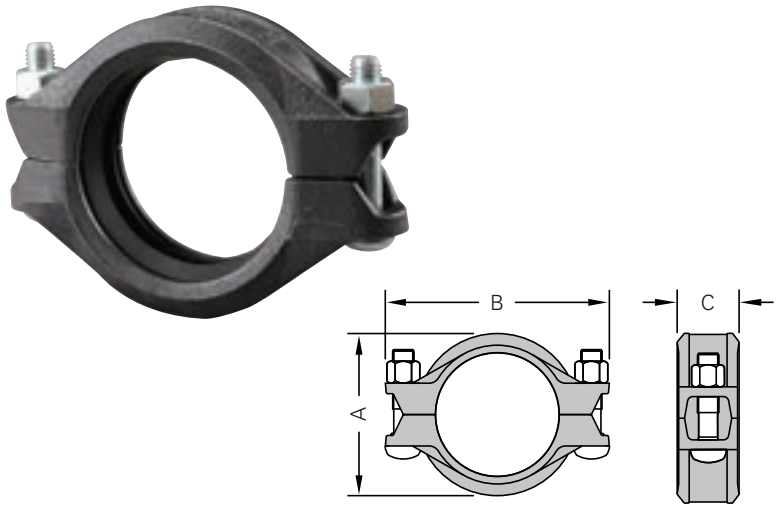
minimum wall thickness (T):

"T" is the minimum allowable wall thickness that may be cut-grooved; tolerances are to conform to ANSI/AWWA C151/A21.51.

AWWA ductile iron pipe

	pipe O.D.			gasket seat A			groove dia. C			
		tolerance		rigid +0/-0.02 +0/-0.51	flex. +0.016/-0.047 +0.41/-1.19	groove width B +0.031/-0.016 +0.79/-0.41		tol. +0 +0	radius R	min. allowed wall thickness T
nom. size	basic	+	-				basic			
3" 80	3.96" (100.6 mm)	+0.045" (+1.14 mm)	-0.045" (-1.14 mm)	0.840" (21.34 mm)	0.750" (19.05 mm)	0.375" (9.53 mm)	3.723" (94.56 mm)	-0.020" (-0.51 mm)	0.120" (3.05 mm)	0.31" (7.9 mm)
4" 100	4.80" (121.9 mm)	+0.06" (+1.52 mm)	-0.06" (-1.52 mm)	0.840" (21.34 mm)	0.750" (19.05 mm)	0.375" (9.53 mm)	4.563" (115.90 mm)	-0.020" (-0.51 mm)	0.120" (3.05 mm)	0.32 (8.1 mm)
6" 150	6.90" (175.3 mm)	+0.06" (+1.52 mm)	-0.06" (-1.52 mm)	0.840" (21.34 mm)	0.750" (19.05 mm)	0.375" (9.53 mm)	6.656" (169.06 mm)	-0.020" (-0.51 mm)	0.120" (3.05 mm)	0.34 (8.6 mm)
8" 200	9.05" (229.9 mm)	+0.06" (+1.52 mm)	-0.06" (-1.52 mm)	0.950" (24.13 mm)	0.875" (22.23 mm)	0.500" (12.70 mm)	8.781" (223.04 mm)	-0.025" (-0.64 mm)	0.145" (3.68 mm)	0.36 (9.1 mm)
10" 250	11.10" (281.9 mm)	+0.06" (+1.52 mm)	-0.06" (-1.52 mm)	1.015" (25.78 mm)	0.938" (23.83 mm)	0.500" (12.70 mm)	10.813" (274.65 mm)	-0.025" (-0.64 mm)	0.145" (3.68 mm)	0.38 (9.7 mm)
12" 300	13.20" (335.3 mm)	+0.06" (+1.52 mm)	-0.06" (-1.52 mm)	1.015" (25.78 mm)	0.938" (23.83 mm)	0.500" (12.70 mm)	12.906" (327.81 mm)	-0.030" (-0.76 mm)	0.145" (3.68 mm)	0.40 (10.2 mm)

A505 coupling



Shurjoint Model A505 Couplings are designed for connecting grooved ductile iron pipe and fittings of ANSI/AWWA C151/A21.51, Class 53 or higher dimensions. The same coupling can be used either as a flexible coupling or a rigid coupling depending on the type of groove processed. The Model A505 Coupling is recommended for service up to 500 psi (35 Bar) depending on the size. The GapSeal gasket fits flush over the pipe ends and prevents fluids from entering into the gasket cavity.

dimensions

AWWA D.I pipe					bolt		dimensions			
nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load	axial displacement	no.	size	A	B	C	weight
3" 80	3.96" (100.6 mm)	500 psi (35 bar)	6200 lbs (27.59 kN)	0-0.09" (0-2.4 mm)	2	½ x 3"	5.33" (136 mm)	7.36" (187 mm)	2.40" (61 mm)	5.5 lbs (2.5 Kgs)
4" 100	4.80" (121.9 mm)	500 psi (35 bar)	9000 lbs (40.50 kN)	0-0.09" (0-2.4 mm)	2	⅝ x 3½"	6.96" (157 mm)	8.33" (212 mm)	2.32" (59 mm)	7.3 lbs (3.3 Kgs)
6" 150	6.90" (175.3 mm)	400 psi (28 bar)	14950 lbs (66.26 kN)	0-0.09" (0-2.4 mm)	2	⅝ x 3½"	9.37" (211 mm)	10.75" (273 mm)	2.44" (62 mm)	9.7 lbs (4.4 Kgs)
8" 200	9.05" (229.9 mm)	400 psi (28 bar)	25600 lbs (113.92 kN)	0-0.16" (0-4.0 mm)	2	¾ x 4¾"	12.07" (272 mm)	13.94" (354 mm)	2.64" (67 mm)	18.7 lbs (8.5 Kgs)
10" 250	11.10" (281.9 mm)	350 psi (24 bar)	33850 lbs (150.63 kN)	0-0.16" (0-4.0 mm)	2	¾ x 4¾"	14.50" (326 mm)	16.06" (408 mm)	2.95" (75 mm)	24.2 lbs (11.0 Kgs)
12" 300	13.20" (335.3 mm)	350 psi (24 bar)	47900 lbs (211.50 kN)	0-0.16" (0-4.0 mm)	2	⅞ x 6½"	16.89" (380 mm)	18.19" (462 mm)	2.95" (75 mm)	30.8 lbs (14.0 Kgs)

* Pressure ratings listed are based on radius cut-grooved Thickness Class 53 or higher pipe.
† Only when connected on flexible radius groove.

special gaskets for AWWA ductile iron pipe

grade	temp. range	compound	color code	general service recommendations
S	-20°F to +180°F (-29°C + 82°C)	nitrile	 red stripe	Specially formulated to seal on ductile iron pipe iron surfaces. Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range; except hot dry air over +140°F (60°C) and water over +150°F (65°C) Not Recommended for Hot Water Services.
M	-20°F to +200°F (-29°C + 93°C)	halogenated butyl	 brown stripe	Specially formulated to seal on ductile iron pipe surfaces. Recommended for water service plus a variety of dilute acids, oil-free air and other chemical services within the specified temperature range. The compound is UL classified per NSF/ANSI 61 and NSF/ANSI 372 for potable water applications. Not Recommended for Hot Water Services.
L	-30°F to +350°F (-34°C + 177°C)	silicone	 red gasket	Recommended for dry heat, air without hydrocarbons to 350°F (177°C) and certain chemical services.

A507 transition coupling



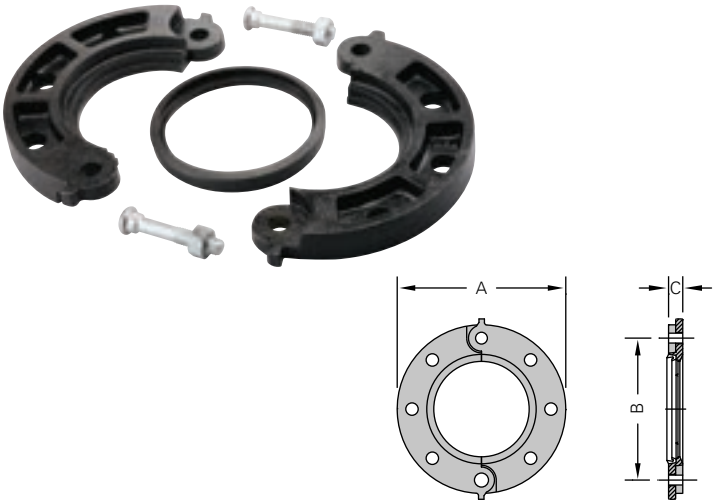
The Shurjoint Model A507 Transition Coupling provides for a direct connection between grooved end IPS steel pipe and grooved end AWWA ductile iron pipe, fittings and or valves. The A507 will accommodate roll or cut grooved IPS steel pipe and rigid or flexible AWWA ductile iron cut grooves.

dimensions

nom. size	pipe O.D. IPS steel	pipe O.D. AWWA ductile iron	max. working pressure (CWP)*	max. end load	axil displacement	bolt size	dimensions A	dimensions B	dimensions C	weight
3" 80	3.500" (88.9 mm)	3.96" (100.6 mm)	500 psi (35 bar)	4810 lbs (21.41 kN)	0.03" (1 mm)	½ x 2¾"	5.31" (135 mm)	7.28" (185 mm)	2.13" (54 mm)	4.8 lbs (2.2 Kgs)
4" 100	4.500" (114.3 mm)	4.80" (121.9 mm)	500 psi (35 bar)	7950 lbs (35.38 kN)	0.03" (1 mm)	⅝ x 3½"	6.22" (158 mm)	8.54" (217 mm)	2.19" (56 mm)	6.4 lbs (2.9 Kgs)
6" 150	6.625" (168.3 mm)	6.90" (175.3 mm)	400 psi (28 bar)	13780 lbs (61.32 kN)	0.03" (1 mm)	⅝ x 3½"	8.23" (209 mm)	10.75" (273 mm)	2.19" (56 mm)	8.6 lbs (3.9 Kgs)
8" 200	8.625" (219.1 mm)	9.05" (229.9 mm)	400 psi (28 bar)	23370 lbs (103.99 kN)	0.03" (1 mm)	¾ x 4¾"	10.79" (274 mm)	13.66" (347 mm)	2.52" (64 mm)	16.7 lbs (7.6 Kgs)
10" 250	10.750" (273.0 mm)	11.10" (281.9 mm)	350 psi (24 bar)	33850 lbs (155.96 kN)	0.03" (1 mm)	⅞ x 6½"	13.03" (331 mm)	16.10" (409 mm)	2.76" (70 mm)	24.9 lbs (11.3 Kgs)
12" 300	12.750" (323.9 mm)	13.20" (335.3 mm)	350 psi (24 bar)	47870 lbs (220.64 kN)	0.03" (1 mm)	⅞ x 6½"	15.00" (381 mm)	18.35" (466 mm)	2.76" (70 mm)	28.6 lbs (13.0 Kgs)

* Pressure ratings listed are based on radius cut-grooved Thickness Class 53 or higher pipe

A512 flange adapter



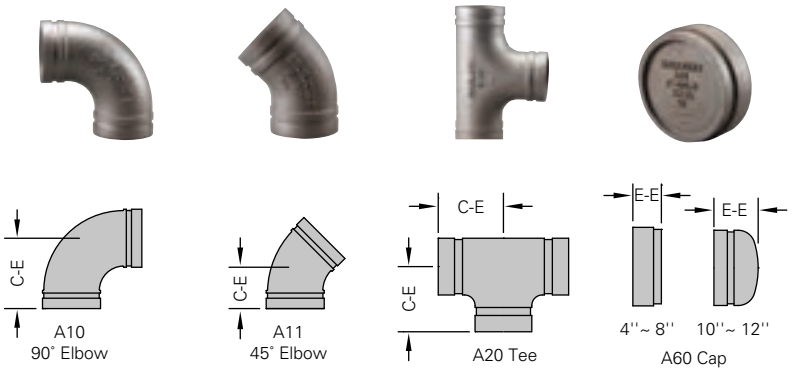
The Shurjoint Model A512 Flange Adapter provides for the direct connection between AWWA ductile iron radius pipe grooves and flanged components. The two part flange features integral closure tabs to aid in assembly. Note: As with other flange adapters the A512 requires a sufficient smooth flat mating area for proper sealing, please refer to the A512 cut sheet or contact Shurjoint for details.

dimensions

AWWA D.I pipe				bolt		dimensions			
nom. size	pipe O.D.	max. working pressure (CWP)*	max. end load	no.	size	A	B	C	weight
3" 80	3.96" (100.6 mm)	250 psi (17 bar)	3100 lbs (13.80 kN)	4	⅝ x 3"	7.50" (190 mm)	6.00" (152 mm)	1.10" (28 mm)	8.6 lbs (3.9 Kgs)
4" 100	4.80" (121.9 mm)	250 psi (17 bar)	4500 lbs (20.03 kN)	8	⅝ x 3"	9.00" (229 mm)	7.50" (191 mm)	1.10" (28 mm)	9.9 lbs (4.5 Kgs)
6" 150	6.90" (175.3 mm)	250 psi (17 bar)	9300 lbs (41.39 kN)	8	¾ x 3½"	11.00" (279 mm)	9.49" (241 mm)	1.10" (28 mm)	12.0 lbs (5.4 Kgs)
8" 200	9.05" (229.9 mm)	250 psi (17 bar)	16000 lbs (71.20 kN)	8	¾ x 3½"	13.50" (343 mm)	11.75" (298 mm)	1.22" (31 mm)	18.9 lbs (8.6 Kgs)
10" 250	11.10" (281.9 mm)	250 psi (17 bar)	23700 lbs (105.47 kN)	12	⅞ x 4"	16.00" (406 mm)	14.25" (362 mm)	1.26" (32 mm)	25.3 lbs (11.5 Kgs)
12" 300	13.20" (335.3mm)	250 psi (17 bar)	34000 lbs (151.30 kN)	12	⅞ x 4"	19.00" (483mm)	17.00" (432mm)	1.26" (32 mm)	34.4 lbs (15.6Kgs)

* Pressure ratings listed are based on radius cut-grooved Thickness Class 53 or higher pipe.
** Flange drilling to ANSI B16.1 Class 125.

A10 90° elbow
A11 45° elbow
A20 tee
A60 cap



Shurjoint AWWA grooved end fittings are supplied with rigid radius grooves as per ANSI / AWWA C606. The fittings also conform to ANSI A21.10 / AWWA C110 for center to end (C to E) dimensions and AWWA C153 or ANSI A21.10 / AWWA C110 for wall thickness. Pressure ratings are 500 psi (35 Bar). Fittings are supplied painted black. Other surface finish options including 'non-coated' and thermoplastic coating are available on request.

dimensions

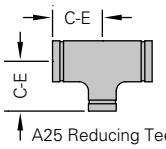
AWWA D.I pipe		A10 90° elbow		A10 45° elbow		A20 tee		A60 cap	
nom. size	pipe O.D.	C - E	weight	C - E	weight	C - E	weight	E -E	weight
3" 80	3.96" (100.6 mm)	5.50" (140 mm)	9.2 lbs (4.2 Kgs)	3.00" (76 mm)	5.8 lbs (2.6 Kgs)	5.50" (140 mm)	13.4 lbs (6.1 Kgs)	1.22" (31 mm)	2.6 lbs (1.2 Kgs)
4" 100	4.80" (121.9 mm)	6.50" (165 mm)	12.3 lbs (5.6 Kgs)	4.00" (102 mm)	9.2 lbs (4.2 Kgs)	6.50" (165 mm)	18.5 lbs (8.4 Kgs)	1.22" (31 mm)	3.5 lbs (1.6 Kgs)
6" 150	6.90" (175.3 mm)	8.00" (203 mm)	23.5 lbs (10.7 Kgs)	5.00" (127 mm)	17.6 lbs (8.0 Kgs)	8.00" (203 mm)	35.0 lbs (15.9 Kgs)	1.22" (31 mm)	6.8 lbs (3.1 Kgs)
8" 200	9.05" (229.9 mm)	9.00" (229 mm)	41.6 lbs (18.9 Kgs)	5.50" (140 mm)	33.0 lbs (15.0 Kgs)	9.00" (229 mm)	60.3 lbs (27.4 Kgs)	1.46" (37 mm)	13.0 lbs (5.9 Kgs)
10" 250	11.10" (281.9 mm)	11.00" (279 mm)	64.9 lbs (29.5 Kgs)	6.50" (165 mm)	44.9 lbs (20.4 Kgs)	11.00" (279 mm)	110.5 lbs (45.7 Kgs)	2.99" (76 mm)	22.0 lbs (10.0 Kgs)
12" 300	13.20" (335.3 mm)	12.00" (305 mm)	94.2 lbs (42.8 Kgs)	7.50" (191 mm)	72.0 lbs (32.7 Kgs)	12.00" (305 mm)	136.0 lbs (61.7 Kgs)	2.99" (76 mm)	24.6 lbs (11.2 Kgs)

A25 reducing tee
A50 concentric reducer
A10R reducing elbow

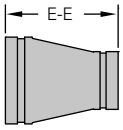




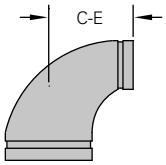




A25 Reducing Tee



A50 Conc. Reducer



A10R Reducing Elbow

Shurjoint AWWA grooved end fittings are supplied with rigid radius grooves as per ANSI / AWWA C606. The fittings also conform to ANSI A21.10 / AWWA C110 for center to end (C to E) dimensions and AWWA C153 or ANSI A21.10 / AWWA C110 for wall thickness. Pressure ratings are 500 psi (35 Bar). Fittings are supplied painted black. Other surface finish options including 'non-coated' and thermoplastic coating are available on request.

dimensions

AWWA D.I pipe		A25 reducing tee		A50 concentric reducer		A10R 90° reducing elbow	
nom. size	O.D.	C - E	weight	E - E	weight	C - E	weight
4 x 3" 100 x 80	4.80 x 3.96" (121.9 x 100.6 mm)	6.50" (165 mm)	18.8 lbs (8.5 Kgs)	7.00" (178 mm)	7.7 lbs (3.5 Kgs)	6.50" (165 mm)	12.1 lbs (5.5 Kgs)
6 x 4" 150 x 100	6.90 x 4.80" (175.3 x 121.9 mm)	8.00" (203 mm)	33.3 lbs (15.2 Kgs)	9.00" (229 mm)	14.3 lbs (6.5 Kgs)	8.00" (203 mm)	25.1 lbs (11.4 Kgs)
8 x 4" 200 x 100	6.90 x 4.80" (175.3 x 121.9 mm)	9.00" (229 mm)	51.2 lbs (23.3 Kgs)	11.00" (279 mm)	24.0 lbs (10.9 Kgs)	9.00" (229 mm)	43.5 lbs (19.8 Kgs)
8 x 6" 200 x 150	9.05 x 6.90" (229.9 x 175.3 mm)	9.00" (229 mm)	57.2 lbs (26.0 Kgs)	11.00" (279 mm)	24.0 lbs (12.6 Kgs)	9.00" (229 mm)	41.8 lbs (19.0 Kgs)
10 x 4" 250 x 100	11.10 x 4.80" (281.9 x 121.9 mm)	11.00" * (279 mm)	120.0 lbs (54.4 Kgs)	12.00" * (305 mm)	42.0 lbs (19.1 Kgs)	- -	- -
10 x 6" 250 x 150	11.10 x 4.80" (281.9 x 121.9 mm)	11.00" * (279 mm)	128.0 lbs (58.1 Kgs)	12.00" (305 mm)	46.0 lbs (20.9 Kgs)	11.00" (279 mm)	77.0 lbs (34.9 Kgs)
10 x 8" 250 x 200	11.10 x 4.80" (281.9 x 121.9 Kgs)	11.00" * (279 mm)	130.0 lbs (59.0 Kgs)	12.00" (305 mm)	50.0 lbs (22.7 Kgs)	11.00" (279 mm)	88.0 lbs (39.9 Kgs)
12 x 4" 300 x 100	13.20 x 4.80" (335.3 x 121.9 mm)	12.00" * (305 mm)	112.0 lbs (50.8 Kgs)	14.00" * (356 mm)	60.0 lbs (27.2 Kgs)	- -	- -
12 x 6" 300 x 150	13.20 x 4.80" (335.3 x 121.9 mm)	12.00" * (305 mm)	180.0 lbs (81.7 Kgs)	14.00" * (356 mm)	70.0 lbs (31.8 Kgs)	12.00" * (305 mm)	110.0 lbs (49.9 Kgs)
12 x 8" 300 x 200	13.20 x 4.80" (335.3 x 121.9 mm)	12.00" * (305 mm)	186.0 lbs (84.4 Kgs)	14.00" * (356 mm)	74.0 lbs (33.6 Kgs)	12.00" * (305 mm)	126.0 lbs (57.2 Kgs)
12 x 10" 300 x 250	13.20 x 4.80" (335.3 x 121.9 mm)	12.00" * (305 mm)	192.0 lbs (87.1 Kgs)	14.00" (356 mm)	84.0 lbs (38.1 Kgs)	12.00" * (305 mm)	150.0 lbs (68.0 Kgs)

* Non-standard/stock items may require longer lead time.





section 10

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roll grooving dimensions for IPS, BS, AS, ISO, JIS & KS pipe 244

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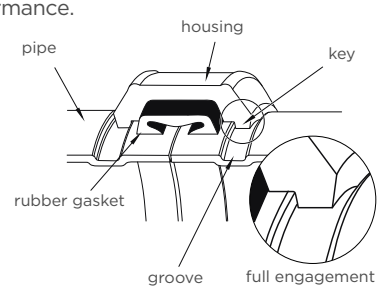
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pipe end preparation

how to process roll-grooves

Shurjoint grooved piping systems require the processing of a roll or cut groove to the pipe ends being connected. The engagement of the housing keys in the grooves is integral in providing a secure and leak-tight joint. It is essential that the grooves are properly processed for optimum joint performance.

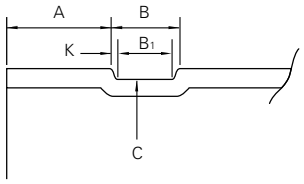


nominal pipe size

Shurjoint couplings and fittings are identified by the nominal IPS pipe size in inches or nominal diameter of pipe (DN) in millimeters. Always check the actual O.D. of the pipe and fittings to be connected, as in some markets it is customary to refer to different O.D. pipes with the same nominal size.

roll groove profile

Roll grooves should be as defined as possible. To achieve optimum joint performance the “K” dimension should be as small as possible. When processing a roll groove the machine operator should manage the feed pressure of the upper roll set so as to achieve the best possible groove profile.

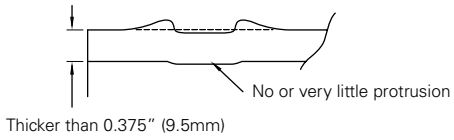


applicable pipe wall thickness

Roll grooves are generally applicable to .375”/9.5 mm thick or thinner wall carbon steel pipe, stainless steel pipe, copper tube and aluminum pipe depending on the type of roll-grooving machine and roll set being used. Different wall thicknesses and sizes require the use of different roll sets. Contact the roll groove machine manufacturer for additional information.

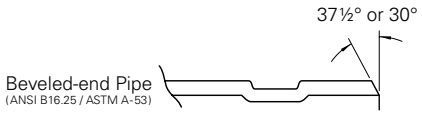
Heavy wall pipe

When you attempt to roll-groove pipe thicker than .375”/9.5mm, the metal may deform and heap up on both sides of the groove rather than radially deforming and protruding on the inside of the pipe. The extra heaped metal could lead to joint failure. In such a case, you should grind off any such extra metal to achieve a flat and smooth sealing surface. A proper rust preventative coating must be applied on the ground surface. Shurjoint strongly recommends the processing of cut-grooves on heavy or thick wall pipe.



plain end pipe and beveled end pipe

While plain-end pipe is preferred, the use of beveled end pipe is acceptable providing that the wall thickness is .375”/9.5 mm or thinner and the bevel is 37½ ±2½° or 30° as specified in ANSI B16.25 and ASTM A-53 respectively.



ERW pipe

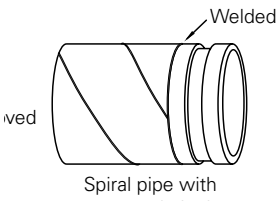
ERW pipe is one of the most popular types of pipe used today. Depending on the individual pipe and manufacturer, welding beads may remain on the surface (inside and outside) of the pipe. Always remove harmful weld beads near the pipe ends as they can cause rattling of the roll grooving machine resulting in inaccurate grooves.

galvanized pipe

Galvanized pipe is acceptable as long as the gasket seating surface is smooth and free from scale and imperfections that could affect gasket sealing. Whenever you remove welding beads or projections from the sealing surface of galvanized pipe, use caution so as to not over-grind the surface. After grinding, always apply a proper rust-prevention coating to this area.

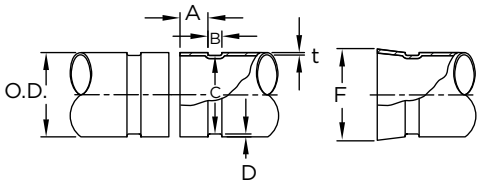
spiral welded pipe

Spiral welded pipe may be used as long as the weld beads are removed from the gasket seating surface. It is also acceptable and recommended to weld a grooved end nipple to the pipe end as shown below. Whenever you remove weld beads or projections from the gasket seating surface, use caution so as to not over-grind the surface. After grinding, always apply a proper rust-prevention coating to this area.



roll grooving dimensions

ANSI B36.10, BS 1387 (M) & AS-1074 (M) pipe



Basic roll groove dimensions conform to ANSI/AWWA C606-06 Table 5 with slightly adjusted tolerances to incorporate international standards including CSA B242, ISO/FDIS 6182-12, VdS 2100-6en and JPF MP-006.

dimensions

	pipe O.D.								
nom. size	basic	tolerance		A ±0.030 ±0.76	B ±0.030 ±0.76	C +0.000 +0.00	min. wall t	d groove depth d (ref.)	F max. allowed flare diameter
¾" 20	1.050" (26.7 mm)	+0.010" (+0.25 mm)	-0.010" (-0.25 mm)	0.625" (15.88 mm)	0.281" (7.14 mm)	0.938-0.015" (23.83-0.38 mm)	0.065" (1.65 mm)	0.056" (1.42 mm)	1.15" (29.21 mm)
1" 25	1.315 (33.4 mm)	+0.013" (+0.33 mm)	-0.013" -0.33 mm)	0.625" (15.88 mm)	0.281" (7.14 mm)	1.190-0.015" (30.23-0.38 mm)	0.065" (1.65 mm)	0.063" (1.60 mm)	1.43" (36.30 mm)
1¼" 32	1.660 (42.2 mm)	+0.016" (+0.41 mm)	-0.016" -0.41 mm)	0.625" (15.88 mm)	0.281" (7.14 mm)	1.535-0.015" (38.99-0.38 mm)	0.065" (1.65 mm)	0.063" (1.60 mm)	1.77" (44.96 mm)
1½" 40	1.900" (48.3 mm)	+0.019" (+0.48 mm)	-0.019" -0.48 mm)	0.625" (15.88 mm)	0.281" (7.14 mm)	1.775-0.015" (45.09-0.38 mm)	0.065" (1.65 mm)	0.063" (1.60 mm)	2.01" (51.05 mm)
2" 50	2.375" (60.3 mm)	+0.024" (+0.61 mm)	-0.024" (-0.61 mm)	0.625" (15.88 mm)	0.344" (8.74 mm)	2.250-0.015" (57.15-0.38 mm)	0.065" (1.65 mm)	0.063" (1.60 mm)	2.48" (62.99 mm)
2½" 65	2.875" (73.0 mm)	+0.029" (+0.74 mm)	-0.029" (-0.74 mm)	0.625" (15.88 mm)	0.344" (8.74 mm)	2.720-0.018" (69.09-0.46 mm)	0.083" (2.11 mm)	0.078" (1.98 mm)	2.98" (75.69 mm)
76.1 mm	3.000" (76.1 mm)	+0.030" (+0.76 mm)	-0.030" (-0.76 mm)	0.625" (15.88 mm)	0.344" (8.74 mm)	2.844-0.018" (72.24-0.46 mm)	0.090" (2.30 mm)	0.075" (1.93 mm)	3.10" (78.74 mm)
3" 80	3.500" (88.9 mm)	+0.035" (+0.89 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.344" (8.74 mm)	3.344-0.018" (84.94-0.46 mm)	0.083" (2.11 mm)	0.078" (1.98 mm)	3.60" (91.44 mm)
101.6 mm	4.000" (101.6 mm)	+0.040" (+1.02 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.344" (8.74 mm)	3.834-0.020" (97.38-0.51 mm)	0.083" (2.11 mm)	0.083" (2.11 mm)	4.10" (104.10 mm)
108.0 mm	4.250" (108.0 mm)	+0.042" (+1.07 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.344" (8.74 mm)	4.084-0.020" (103.73-0.51 mm)	0.083" (2.11 mm)	0.083" (2.11 mm)	4.35" (110.49 mm)
4" 100	4.500" (114.3 mm)	+0.040" (+1.02 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.344" (8.74 mm)	4.334-0.020" (110.08-0.51 mm)	0.083" (2.11 mm)	0.083" (2.11 mm)	4.60" (116.84 mm)
133.0 mm	5.250" (133.0 mm)	+0.051" (+1.32 mm)	-0.031" -0.79 mm)	0.625" (15.88 mm)	0.344" (8.74 mm)	5.084-0.020" (129.13-0.51 mm)	0.109" (2.77 mm)	0.083" (2.11 mm)	5.35" (135.89 mm)
139.7 mm	5.500" (139.7 mm)	+0.050" (+1.40 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.344" (8.74 mm)	5.333-0.020" (135.46-0.51 mm)	0.109" (2.77 mm)	0.083" (2.11 mm)	5.60" (142.24 mm)
5" * 125	5.563" (141.3 mm)	+0.056" (+1.42 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.344" (8.74 mm)	5.395-0.022" (137.03-0.56 mm)	0.109" (2.77 mm)	0.083" (2.11 mm)	5.66" (143.76 mm)
159.0 mm	6.250" (159.0 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.344" (8.74 mm)	6.084-0.030" (154.53-0.76 mm)	0.109" (2.77 mm)	0.083" (2.11 mm)	6.35" (161.29 mm)
165.1 mm	6.500" (165.1 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.344" (8.74 mm)	6.334-0.022" (160.88-0.56 mm)	0.109" (2.77 mm)	0.085" (2.16 mm)	6.60" (167.64 mm)
6" 150	6.625" (168.3 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.344" (8.74 mm)	6.455-0.022" (163.96-0.56 mm)	0.109" (2.77 mm)	0.085" (2.16 mm)	6.73" (170.94 mm)
216.3 mm	8.516" (216.3 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.750" (19.05 mm)	0.469" (11.91 mm)	8.331-0.025" (211.61-0.64 mm)	0.109" (2.77 mm)	0.092" (2.34 mm)	8.69" (220.73 mm)
8" 200	8.625" (219.1 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.750" (19.05 mm)	0.469" (11.91 mm)	8.441-0.025" (214.40-0.64 mm)	0.109" (2.77 mm)	0.092" (2.34 mm)	8.80" (223.52 mm)
10" 250	10.750" (273.0 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.750" (19.05 mm)	0.469" (11.91 mm)	10.562-0.027" (268.27-0.69 mm)	0.134" (3.40 mm)	0.094" (2.39 mm)	10.92" (277.37 mm)
12" 300	12.750" (323.9 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.750" (19.05 mm)	0.469" (11.91 mm)	12.531-0.030" (318.29-0.76 mm)	0.156" (3.96 mm)	0.109" (2.77 mm)	12.92" (328.17 mm)
14" 350	14.000" (355.6 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.938" (23.83 mm)	0.469" (11.91 mm)	13.781-0.030" (350.04-0.76 mm)	0.156" (3.96 mm)	0.109" (2.77 mm)	14.10" (358.14 mm)
16" 400	16.000" (406.4 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.938" (23.83 mm)	0.469" (11.91 mm)	15.781-0.030" (400.84-0.76 mm)	0.165" (4.19 mm)	0.109" (2.77 mm)	16.10" (408.94 mm)
18" 450	18.000" (457.2 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	1.000" (25.40 mm)	0.469" (11.91 mm)	17.781-0.030" (451.64-0.76 mm)	0.165" (4.19 mm)	0.109" (2.77 mm)	18.16" (461.26 mm)
20" 500	20.000" (508.0 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	1.000" (25.40 mm)	0.469" (11.91 mm)	19.781-0.030" (502.44-0.76 mm)	0.188" (4.78 mm)	0.109" (2.77 mm)	20.16" (512.06 mm)

continued on next page

	pipe O.D.								
nom. size	basic	tolerance		A ±0.030 ±0.76	B ±0.030 ±0.76	C +0.000 +0.00	min. wall t	d groove depth d (ref.)	F max. allowed flare diameter
22" 550	22.000" (558.8 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	1.000" (25.40 mm)	0.469" (11.91 mm)	21.656-0.030" (550.06-0.76 mm)	0.188" (4.78 mm)	0.172" (4.37 mm)	22.20" (563.88 mm)
24" 600	24.000" (609.6 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	1.000" (25.40 mm)	0.500" (12.70 mm)	23.656-0.030" (600.86-0.76 mm)	0.218" (5.54 mm)	0.172" (4.37 mm)	24.20" (614.68 mm)

1. Pipe O.D.: Maximum allowable tolerances from square cut ends is 0.03" for sizes up to 3½"; 0.045" for 4" thru 6"; and 0.060" for sizes 8" and above.
2. The gasket seating surface "A" shall be free from deep scores, marks, or ridges that would prevent a positive seal.
3. The "C" dimensions are average values. The groove must be of uniform depth around the entire circumference. Use a Shurjoint groove gage or rule to check the groove diameter.
4. The "t" is the minimum allowable wall thickness that may be roll-grooved.
5. The "d" is for reference use only. The groove depth shall be determined by the groove diameter "C".
6. Flare Diameter: The pipe end that may flare when the groove is rolled shall be within this limit when measured at the extreme end of the pipe.

roll grooving dimensions per ISO/FDIS 6182-12

table 1: for ISO 4200:1991 plain-end steel tubes, welded and seamless
(superseding BS1387 and DIN 2440 & DIN 2448)

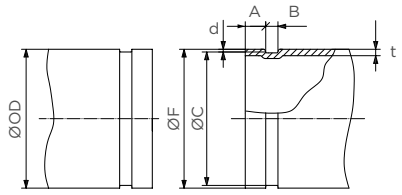


Figure 1 - Roll grooved-end dimensional reference points for Table 1

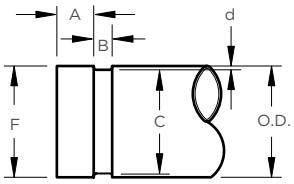
dimensions (mm)

pipe or tube			dimensional specifications						
	outside diameter (O.D.)				grooved diameter C				
nom. size	actual size	tolerance	gasket seat A ±0.76	gasket width B ±0.76	actual size	tolerance	groove depth d	wall thickness t min. allowed	flare F max. diameter
25	33,7	+0,44 / -0,52	15,88	7,14	30,23	0 / -0,38	1,70	1,8	34,5
32	42,4	+0,50 / -0,60	15,88	7,14	38,99	0 / -0,38	1,70	1,8	43,3
40	48,3	+0,44 / -0,52	15,88	7,14	45,09	0 / -0,38	1,60	1,8	49,4
50	60,3	±0,61	15,88	8,74	57,15	0 / -0,38	1,60	1,8	62,2
65	73,0	±0,74	15,88	8,74	69,09	0 / -0,46	1,98	2,3	75,2
65	76,1	±0,76	15,88	8,74	72,26	0 / -0,46	1,93	2,3	77,7
80	88,9	+0,89 / -0,79	15,88	8,74	84,94	0 / -0,46	1,98	2,3	91,6
90	101,6	+1,02 / -0,79	15,88	8,74	97,38	0 / -0,51	2,11	2,3	103,4
100	108,0	+1,07 / -0,79	15,88	8,74	103,73	0 / -0,51	2,11	2,3	109,7
100	114,3	+1,14 / -0,79	15,88	8,74	110,08	0 / -0,51	2,11	2,3	116,2
125	133,9	+1,32 / -0,79	15,88	8,74	129,13	0 / -0,51	1,93	2,9	134,9
125	139,7	+1,40 / -0,79	15,88	8,74	135,48	0 / -0,56	2,11	2,9	141,7
125	141,3	+1,42 / -0,79	15,88	8,74	137,03	0 / -0,56	2,13	2,9	143,5
150	159,0	+1,60 / -0,79	15,88	8,74	154,50	0 / -0,56	2,20	2,9	161,0
150	165,1	+1,60 / -0,79	15,88	8,74	160,90	0 / -0,56	2,16	2,9	167,1
150	168,3	+1,60 / -0,79	15,88	8,74	163,96	0 / -0,56	2,16	2,9	170,7
200	219,1	+1,60 / -0,79	19,05	11,91	214,40	0 / -0,64	2,34	2,9	221,5
250	277,4	+1,60 / -0,79	19,05	11,91	268,28	0 / -0,69	2,39	3,6	275,4
300	328,2	+1,60 / -0,79	19,05	11,91	318,29	0 / -0,76	2,77	4,0	326,2

1. Pipe O.D.: Maximum allowable tolerances from square cut ends is 0.03" for sizes up to 3½"; 0.045" for 4" thru 6"; and 0.060" for sizes 8" and above.
2. The gasket seating surface "A" shall be free from deep scores, marks, or ridges that would prevent a positive seal.
3. The "C" dimensions are average values. The groove must be of uniform depth around the entire circumference. Use a Shurjoint groove gage or rule to check the groove diameter.
4. The "t" is the minimum allowable wall thickness that may be roll-grooved.
5. The "d" is for reference use only. The groove depth shall be determined by the groove diameter "C".
6. Flare Diameter: The pipe end that may flare when the groove is rolled shall be within this limit when measured at the extreme end of the pipe.

roll grooving dimensions

KS D3507 & JIS G3452 carbon steel pipe



dimensions

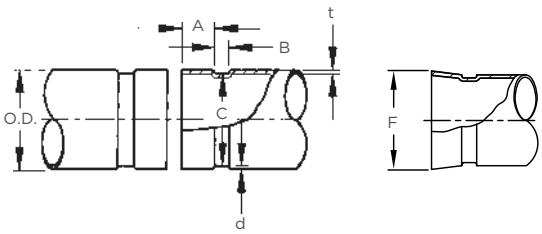
nom. size					groove diameter C			
A (mm)	B (in)	pipe O.D. (mm)	gasket seat A +0.76* (mm)	gasket width B +0.76* (mm)	basic (mm)	tolerance +0.00* (mm)	groove depth d (ref.) (mm)	max. allowed flare diameter F (mm)
25A	1	34.0	16.0	7.1	30.4	-0.38	1.80	35.5
32A	1¼	42.7	16.0	7.1	39.1	-0.38	1.80	44.2
40A	1½	48.6	16.0	7.1	45.0	-0.38	1.80	50.1
50A	2	60.5	16.0	8.7	56.9	-0.38	1.80	62.0
65A	2½	76.3	16.0	8.7	72.2	-0.46	2.05	77.8
80A	3	89.1	16.0	8.7	84.9	-0.46	2.10	90.6
100A	4	114.3	16.0	8.7	110.1	-0.51	2.10	116.8
125A	5	139.8	16.0	8.7	135.5	-0.56	2.15	142.3
150A	6	165.2	16.0	8.7	160.8	-0.56	2.20	167.7
200A	8	216.3	19.0	11.9	211.6	-0.64	2.35	219.8
250A	10	267.4	19.0	11.9	262.6	-0.69	2.40	270.9
300A	12	318.5	19.0	11.9	312.9	-0.76	2.80	322.0

* The tolerance for the JIS & KS pipe has a little difference.

1. Pipe O.D.: Maximum allowable tolerances from square cut ends is 0.03" for sizes up to 3½"; 0.045" for 4" thru 6"; and 0.060" for sizes 8" and above.
2. The gasket seating surface "A" shall be free from deep scores, marks, or ridges that would prevent a positive seal.
3. The "C" dimensions are average values. The groove must be of uniform depth around the entire circumference. Use a Shurjoint groove gage or rule to check the groove diameter.
4. The "t" is the minimum allowable wall thickness that may be roll-grooved.
5. The "d" is for reference use only. The groove depth shall be determined by the groove diameter "C".
6. Flare Diameter: The pipe end that may flare when the groove is rolled shall be within this limit when measured at the extreme end of the pipe.

roll grooving dimensions

large diamter IPS pipe ANSI B36.10

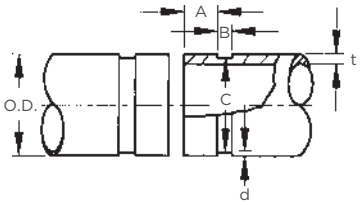


dimensions

nom. size	pipe O.D. basic	pipe O.D. tolerance		A ±0.030 ±0.80	B ±0.030 ±0.76	C - 0, -0.063 +0., -1.6	d groove depth(ref.)	t min. wall	F max. allowed flare diameter
26" 650	26.0" (660.4 mm)	+0.093" (+2.36 mm)	-0.031" (-0.79 mm)	1.75" (44.5 mm)	0.625" (15.9 mm)	25.5" (647.7 mm)	0.25" (6.4 mm)	0.25" (6.4 mm)	26.2" (665.5 mm)
28" 700	28.0" (711.2 mm)	+0.093" (+2.36 mm)	-0.031" (-0.79 mm)	1.75" (44.5 mm)	0.625" (15.9 mm)	27.5" (698.5 mm)	0.25" (6.4 mm)	0.25" (6.4 mm)	28.2" (716.3 mm)
30" 750	30.0" (762.0 mm)	+0.093" (+2.36 mm)	-0.031" (-0.79 mm)	1.75" (44.5 mm)	0.625" (15.9 mm)	29.5" (749.3 mm)	0.25" (6.4 mm)	0.25" (6.4 mm)	30.2" (767.1 mm)
32" 800	32.0" (812.8 mm)	+0.093" (+2.36 mm)	-0.031" (-0.79 mm)	1.75" (44.5 mm)	0.625" (15.9 mm)	31.5" (800.1 mm)	0.25" (6.4 mm)	0.25" (6.4 mm)	32.2" (817.9 mm)
36" 900	36.0" (914.4 mm)	+0.093" (+2.36 mm)	-0.031" (-0.79 mm)	1.75" (44.5 mm)	0.625" (15.9 mm)	35.5" (901.7 mm)	0.25" (6.4 mm)	0.25" (6.4 mm)	36.2" (919.5 mm)
40" 1000	40.0" (1016.0 mm)	+0.093" (+2.36 mm)	-0.031" (-0.79 mm)	2.00" (50.8 mm)	0.625" (15.9 mm)	39.5" (1003.3 mm)	0.25" (6.4 mm)	0.25" (6.4 mm)	40.4" (1026.2 mm)
42" 1050	42.0" (1066.8 mm)	+0.093" (+2.36 mm)	-0.031" (-0.79 mm)	2.00" (50.8 mm)	0.625" (15.9 mm)	41.5" (1054.1 mm)	0.25" (6.4 mm)	0.25" (6.4 mm)	42.2" (1071.9 mm)

1. Square cut: Max. allowable tolerances from square cut are 0.060" (1.6 mm).
2. The gasket seating surface "A" shall be free from deep scores, marks, or ridges that would prevent a positive seal.
3. The "C" dimensions are average values. The groove must be of uniform depth around the entire circumference. Use a Shurjoint groove or rule to check the groove diameter.
4. The "t" is the minimum allowable wall thickness that may be roll-grooved.
5. The "d" is for reference use only. The groove depth shall be determined by the groove diameter "C".
6. Flare Diameter: The pipe end that may flare when the groove is rolled shall be within this limit when measured at the extreme end of the pipe.

cut grooving dimensions for IPS, BS, AS, ISO, JIS, KS pipe



dimensions

nom. size	pipe O.D. basic	pipe O.D. tolerance		A ±0.031 ±0.79	B ±0.031 ±0.79	C +0.000 +0.00	min. wall t	groove depth d (ref.)
¾" 20	1.050" (26.7 mm)	+0.010" (+0.25 mm)	-0.010" (-0.25 mm)	0.625" (15.88 mm)	0.313" (7.95 mm)	0.938-0.015" (23.83-0.38 mm)	0.113" (2.87 mm)	0.056" (1.42 mm)
1" 25	1.315" (33.4 mm)	+0.013" (+0.33 mm)	-0.013" (-0.33 mm)	0.625" (15.88 mm)	0.313" (7.95 mm)	1.190-0.015" (30.23-0.38 mm)	0.133" (3.38 mm)	0.063" (1.60 mm)
1¼" 32	1.660" (42.2 mm)	+0.016" (+0.41 mm)	-0.016" (-0.41 mm)	0.625" (15.88 mm)	0.313" (7.95 mm)	1.535-0.015" (38.99-0.38 mm)	0.140" (3.56 mm)	0.063" (1.60 mm)
1½" 40	1.900" (48.3 mm)	+0.019" (+0.48 mm)	-0.019" (-0.48 mm)	0.625" (15.88 mm)	0.313" (7.95 mm)	1.775-0.015" (45.09-0.38 mm)	0.145" (3.68 mm)	0.063" (1.60 mm)
2" 50	2.375" (60.3 mm)	+0.024" (+0.61 mm)	-0.024" (-0.61 mm)	0.625" (15.88 mm)	0.313" (7.95 mm)	2.250-0.015" (57.15-0.38 mm)	0.154" (3.91 mm)	0.063" (1.60 mm)
2½" 65	2.875" (73.0 mm)	+0.029" (+0.74 mm)	-0.029" (-0.74 mm)	0.625" (15.88 mm)	0.313" (7.95 mm)	2.720-0.018" (69.09-0.46 mm)	0.188" (4.78 mm)	0.078" (1.98 mm)
76.1 mm	3.000" (76.1 mm)	+0.030" (+0.76 mm)	-0.030" (-0.76 mm)	0.625" (15.88 mm)	0.313" (7.95 mm)	2.845-0.018" (72.26-0.46 mm)	0.188" (4.78 mm)	0.078" (1.98 mm)
3" 80	3.500" (88.9 mm)	+0.035" (+0.89 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.313" (7.95 mm)	3.344-0.018" (84.94-0.46 mm)	0.188" (4.78 mm)	0.078" (1.98 mm)
101.6 mm	4.000" (101.6 mm)	+0.040" (+1.02 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.313" (7.95 mm)	3.834-0.020" (97.38-0.51 mm)	0.188" (4.78 mm)	0.078" (1.98 mm)
108.0 mm	4.250" (108.0 mm)	+0.043" (+1.04 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.375" (9.53 mm)	4.084-0.020" (103.73-0.51 mm)	0.203" (5.16 mm)	0.083" (2.11 mm)
4" 100	4.500" (114.3 mm)	+0.045" (+1.14 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.375" (9.53 mm)	4.334-0.020" (110.08-0.51 mm)	0.203" (5.16 mm)	0.083" (2.11 mm)
133.0 mm	5.250" (133.0 mm)	+0.053" (+1.70 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.375" (9.53 mm)	5.084-0.020" (129.13-0.51 mm)	0.203" (5.16 mm)	0.076" (1.93 mm)
139.7 mm	5.500" (139.7 mm)	+0.056" (+1.42 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.375" (9.53 mm)	5.334-0.020" (135.48-0.51 mm)	0.203" (5.16 mm)	0.083" (2.11 mm)
5" 125	5.563" (141.3 mm)	+0.056" (+1.42 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.375" (9.53 mm)	5.395-0.022" (137.03-0.56 mm)	0.203" (5.16 mm)	0.083" (2.11 mm)
159.0 mm	6.250" (159.0 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.375" (9.53 mm)	6.080-0.030" (154.43-0.76 mm)	0.219" (5.56 mm)	0.087" (2.20 mm)
165.1 mm	6.500" (165.1 mm)	+0.065" (+1.57 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.375" (9.53 mm)	6.335-0.022" (160.90-0.56 mm)	0.203" (5.16 mm)	0.085" (2.16 mm)
6" 150	6.625" (168.3 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.625" (15.88 mm)	0.375" (9.53 mm)	6.455-0.022" (163.96-0.56 mm)	0.219" (5.56 mm)	0.085" (2.16 mm)
8" 200	8.625" (219.1 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.750" (19.05 mm)	0.438" (11.13 mm)	8.441-0.025" (214.40-0.64 mm)	0.238" (6.05 mm)	0.092" (2.34 mm)
10" 250	10.750" (273.0 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.750" (19.05 mm)	0.500" (12.70 mm)	10.562-0.027" (268.27-0.69 mm)	0.250" (6.35 mm)	0.094" (2.39 mm)
12" 300	12.750" (323.9 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.750" (19.05 mm)	0.500" (12.70 mm)	12.531-0.030" (318.29-0.76 mm)	0.279" (7.09 mm)	0.109" (2.77 mm)
200 JIS	8.516" (216.3 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.750" (19.05 mm)	0.438" (11.13 mm)	8.331-0.025" (211.60-0.64 mm)	0.238" (6.05 mm)	0.092" (2.34 mm)
250 JIS	10.528" (267.4 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.750" (19.05 mm)	0.500" (12.70 mm)	10.339-0.027" (262.60-0.69 mm)	0.250" (6.35 mm)	0.094" (2.39 mm)
300 JIS	12.539" (318.5 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.750" (19.05 mm)	0.500" (12.70 mm)	12.319-0.030" (312.90-0.76 mm)	0.279" (7.09 mm)	0.109" (2.77 mm)

continued on the next page

nom. size	pipe O.D. basic	pipe O.D. tolerance		A ±0.031 ±0.79	B ±0.031 ±0.79	C +0.000 +0.00	min. wall t	d groove depth d (ref.)
14" 350	14.000" (355.6 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.938" (23.83 mm)	0.500" (12.70 mm)	13.781-0.030" (350.04-0.76 mm)	0.281" (7.14 mm)	0.109" (2.77 mm)
16" 400	16.000" (406.4 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	0.938" (23.83 mm)	0.500" (12.70 mm)	15.781-0.030" (400.84-0.76 mm)	0.312" (7.92 mm)	0.109" (2.77 mm)
18" 450	18.000" (457.2 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	1.000" (25.40 mm)	0.500" (12.70 mm)	17.781-0.030" (451.64-0.76 mm)	0.312" (7.92 mm)	0.109" (2.77 mm)
20" 500	20.000" (508.0 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	1.000" (25.40 mm)	0.500" (12.70 mm)	19.781-0.030" (502.44-0.76 mm)	0.312" (7.92 mm)	0.109" (2.77 mm)
22" 550	22.000" (558.8 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	1.000" (25.40 mm)	0.563" (14.30 mm)	21.656-0.030" (550.06-0.76 mm)	0.375" (9.53 mm)	0.172" (4.37 mm)
24" 600	24.000" (609.6 mm)	+0.063" (+1.60 mm)	-0.031" (-0.79 mm)	1.000" (25.40 mm)	0.563" (14.30 mm)	23.656-0.030" (600.86-0.76 mm)	0.375" (9.53 mm)	0.172" (4.37 mm)

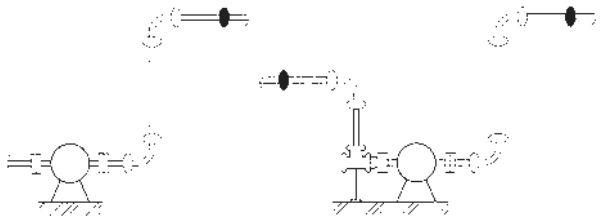
1. Pipe OD: Maximum allowable tolerances from square of ends is 0.03" for sizes up to 3½"; 0.045" for 4" thru 6", and 0.060" for sizes 8" and above.
2. Gasket Seating Surface: The gasket seating surface shall be free from deep scores, marks, or ridges that would prevent a positive seal.
3. Groove Width: Groove width is to be measured between vertical flanks of the groove side walls.
4. Groove Diameter: The "C" diameters are average values. The groove must be of uniform depth around the entire pipe circumference.
5. Minimum Wall Thickness: The "t" is the minimum allowable wall thickness that may be cut-grooved.
6. Groove Depth: The "d" is for reference use only. The groove dimension shall be determined by the groove diameter "C".

typical applications - flexible coupling

general systems

1. absorption of vibration and noise

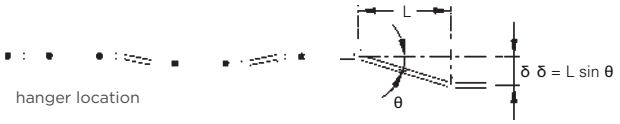
When a pump operates with frequent starts and stops, the piping system is affected by the noise and vibration of the equipment. The entire system may develop a large sway, referred to as sympathetic vibration, as a result of the frequent cycling. Shurjoint flexible couplings will help reduce such vibration and noise. The system should always be properly designed with steel angle sway braces to protect the system from large sways.



rigid coupling flexible coupling

2. adjustment of misalignment

When a straight run has need for a slight adjustment of alignment on the jobsite as shown in the diagram, you can accomplish this with the use of two flexible couplings. The following table shows the deflection value (θ) of the Shurjoint 7705 flexible couplings.

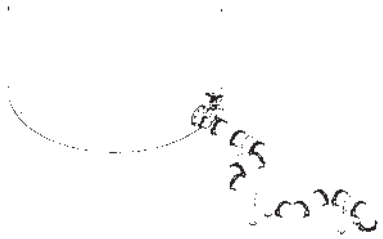


amount of deflection

		distance between couplings (L) mm				
nom. size	deflection angle (θ)	600	1200	1500	2000	3000
2" / 50	3° 02'	32	64	79	106	159
2½" / 65	2° 30'	26	52	65	87	131
3" / 80	2° 04'	22	43	54	72	108
4" / 100	3° 12'	34	67	84	112	168
5" / 125	2° 36'	27	54	68	91	136
6" / 150	1° 10'	12	24	31	41	61
8" / 200	1° 40'	17	35	44	58	87
10" / 250	1° 20'	14	28	35	47	70
12" / 300	1° 08'	12	24	30	40	59

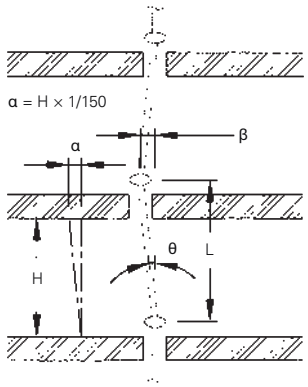
3. absorption of distortion

With the use of an assembly as shown below, ground sinking or movement around a tank or reservoir can be effectively absorbed, avoiding damage to the tank, reservoir and or the piping system.



4. absorption of inter-floor deflection

Risers of high-rise flexible structure buildings are subjected to lateral sways (inter-floor deflection) when an earthquake occurs. If we assume the inter-floor deflection is 1/150 and the floor height (H) as 4 meters, the estimated inter-floor deflection (α) will be;



α = H x 1/150 = 4000 x 1/150 = 27 mm

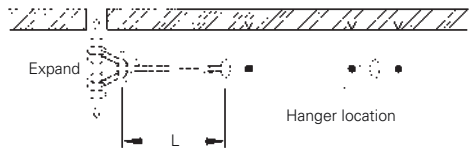
If we use a 200 mm (8") 7707 coupling for each floor, the maximum deflection (β) that each coupling can accommodate will be;

β = L x tan θ = 4000 x 0.02915 = 4.56" = 116 mm (θ = 1.67°)

The example shows a flexible coupling would be sufficient to absorb this scale of seismic sways.

5. absorption of misalignment

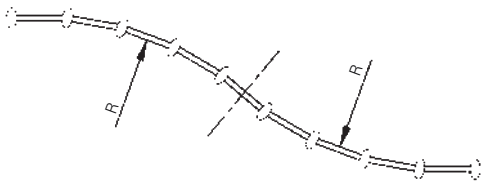
As shown in the diagram, each branch connection to the free riser will be subjected to serious shearing forces as pressure thrusts or thermal movement increases. By using two flexible couplings, you can solve this problem.



6. curved layout

With Shurjoint flexible couplings you can design a slowly curved layout for a system along a curved tunnel, winding road or curved building. 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.

$$R = \frac{L}{(2 \times \sin \theta/2)}$$ (where: R is radius of curvature, L is pipe length, and θ is max. allowed deflection of a coupling)



example: When using model 7705 100 mm (4") couplings for the layout as shown in the diagram, the max. allowed deflection (θ) of the coupling is 3.4°, and the pipe length (L) is 5.5 meters, the radius of curvature (R) will be 92.7 meters.

7. Absorption of Thermal Stress

Thermal stress is caused by changes in temperature, resulting in either expansion or contraction. With the use of Shurjoint flexible couplings you can design your system to accommodate such movement without the need for costly expansion joints. The thermal expansion or contraction (μ) is determined by the length of pipe (L) and temperature difference (ΔT).

$$\mu = \alpha \times L \times \Delta T$$

thermal expansion (metric)

temp. difference ΔT (°C)	pipe length L (meters)					
	1	5.5*	10	20	30	40
	thermal expansion (millimeters)					
1	0.012	0.07	0.12	0.24	0.36	0.48
5	0.06	0.33	0.6	1.2	1.8	2.4
10	0.12	0.66	1.2	2.4	3.6	4.8
20	0.24	1.3	2.4	4.8	7.2	9.6
30	0.36	2	3.6	7.2	11	15
40	0.48	2.6	4.8	9.6	14	20
50	0.6	3.3	6	12	18	24
60	0.72	4	7.2	14	22	29
70	0.84	4.6	8.4	17	25	34
80	0.96	5.3	9.6	19	29	39

* 5.5 meters is the standard length of commercial carbon steel pipe.

As the linear expansion coefficient for steel (α) is 1.2 x 10^{-5}, you can use the table above to determine the thermal expansion.

example:

- Pipe size: 100 mm (4")
- Max. pipe end separation (E) : 3.2 mm
- Pipe length (L) : 5500 mm
- Temperature difference (ΔT) : 40° C (+5° C to +45° C)
- α= 1.2 x 10^{-5} / ° C

$\mu = \alpha \times L \times \Delta T = 1.2 \times 10^{-5}$ / ° C x 5500 mm x 40° C = 2.64 mm

The thermal expansion of a 5.5 meter standard length of pipe (μ) is within the allowance (= max. pipe end separation) of a flexible coupling. In other words, if you use a coupling for each pipe length of 5.5 meters, the coupling will accommodate the thermal expansion or contraction expected to take place for a 40° C temperature change. When you calculate the necessary number of couplings (N) for an anchored system, you should place a clearance of N x E x ½ as a safety factor.

Whether it is thermal expansion, contraction, or a combination thereof, the system requires suitable anchor installations with properly space alignment guides and weight support devices. Where and when larger thermal movement is anticipated, you should use supplementary expansion joint(s).

For installers who use the imperial units of measure, the following table will be more convenient.

thermal expansion (imperial)

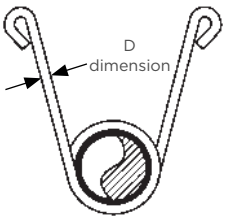
temp. (°F)	pipe length L (feet)			
	20	40	60	100
	thermal expansion between 70°F and indicated temperature (inch)			
0	-0.10	-0.20	-0.29	-0.49
25	-0.06	-0.13	-0.19	-0.32
50	-0.03	-0.06	-0.08	-0.14
70	0	0	0	0
100	0.05	0.09	0.14	0.23
125	0.08	0.17	0.25	0.42
150	0.12	0.24	0.37	0.61
175	0.16	0.32	0.48	0.80
200	0.20	0.40	0.59	0.99
225	0.24	0.43	0.73	1.21

* Coefficient of thermal expansion of steel pipe = 6.33 in/in, °F x 10^{-6}

anchoring, hanging and supports

Shurjoint grooved couplings are designed to hold axial thrusts 4–5 times their rated working pressure, though the strength against bending movements is less than that of steel pipe. The joint may be damaged when a bending movement greater than the allowed deflection occurs. System designers should provide anchors (main and intermediate) and pipe guides with proper spacing to protect the system from unexpected large bending movements. These illustrations are examples only, and are not intended to be used for all installations as conditions and requirements vary from job to job. Reliance on general data or information contained herein shall be at the user's sole risk and without obligation to Shurjoint.

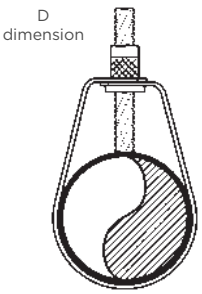
Hangers shall be designed to support five times the weight of water-filled pipe plus 250 lb (115 kgs) at each point of pipe support (NFPA 13 9.1.1.1.). The following illustrations are examples of acceptable hanger types and sizes per NFPA 13.



wraparound u-hook

u-hook sizes

pipe size	D Dimension
- 2"	5/16" (7.9 mm)
2 ½ - 6"	3/8" (9.5 mm)
8"	½" (12.7 mm)



adjustable swivel ring - rod tight to pipe

rod size

pipe size	D Dimension
- 4"	3/8" (9.5 mm)
2 - 8"	½" (12.7 mm)
10 - 12"	5/8" (15.9 mm)



eye rod size

pipe size	D Dimension
- 4"	3/8" (9.5 mm)
5 - 6"	½" (12.7 mm)
10 - 12"	¾" (15.1 mm)

hangers for straight runs

For straight runs, you can use both flexible and rigid couplings. When rigid couplings are used, the same hanger spacing as other piping methods can be applied. You can refer to the hanger spacing standards of ANSI B31.1 Power Piping Code, B31.9 Building Services Piping Code, NFPA 13 Sprinkler Systems, or Mechanical Equipment Construction Guide (Japan). See the table below.

thermal expansion (imperial)

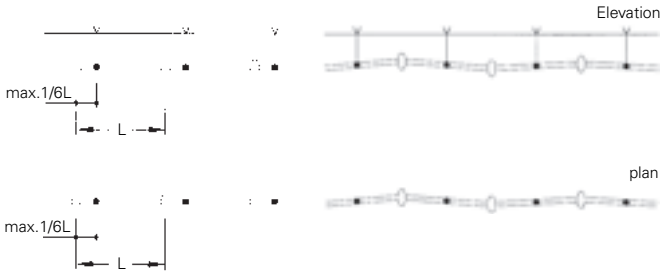
suggested max. span between supports (steel pipe)

	water service (feet / meters)				gas or air service (feet / meters)		
nom. pipe size	1	2	3	4	1	2	3
1 / 25	7 / 2.1	9 / 2.7	12 / 3.7	6.6 / 2.0	9 / 2.7	10 / 3.0	12 / 3.7
1¼ / 32	7 / 2.1	11 / 3.4	12 / 3.7	6.6 / 2.0	9 / 2.7	12 / 3.7	12 / 3.7
1½ / 40	7 / 2.1	12 / 3.7	15 / 4.6	6.6 / 2.0	9 / 2.7	13 / 4.0	15 / 4.6
2 / 50	10 / 3.0	13 / 4.0	15 / 4.6	6.6 / 2.0	13 / 4.0	15 / 4.6	15 / 4.6
2½ / 65	11 / 3.4	15 / 4.6	15 / 4.6	6.6 / 2.0	14 / 4.3	17 / 5.2	15 / 4.6
3 / 80	12 / 3.7	16 / 4.9	15 / 4.6	6.6 / 2.0	15 / 4.6	19 / 5.8	15 / 4.6
4 / 100	14 / 4.3	18 / 5.5	15 / 4.6	6.6 / 2.0	17 / 5.2	21 / 6.4	15 / 4.6
5 / 125	16 / 4.9	20 / 6.1	15 / 4.6	6.6 / 2.0	20 / 6.1	24 / 7.3	15 / 4.6
6 / 150	17 / 5.2	21 / 6.4	15 / 4.6	10 / 3.0	21 / 6.4	26 / 7.9	15 / 4.6
8 / 200	19 / 5.8	23 / 7.0	15 / 4.6	10 / 3.0	24 / 7.3	29 / 8.8	15 / 4.6
10 / 250	19 / 5.8	27 / 7.5	15 / 4.6	10 / 3.0	24 / 7.3	33 / 10.1	15 / 4.6
12 / 300	23 / 7.0	26 / 7.9	15 / 4.6	10 / 3.0	30 / 9.1	36 / 10.1	15 / 4.6
14 / 350	23 / 7.0	26 / 7.9	15 / 4.6		30 / 9.1	37 / 11.3	15 / 4.6
16 / 400	27 / 8.2	26 / 7.9	15 / 4.6		35 / 10.7	40 / 12.2	15 / 4.6
18 / 450	27 / 8.2	27 / 8.2	15 / 4.6		35 / 10.7	43 / 13.1	15 / 4.6
20 / 500	30 / 9.1	27 / 8.2	15 / 4.6		35 / 10.7	46 / 14.0	15 / 4.6
22 / 600	30 / 9.8	26 / 7.9	15 / 4.6		35 / 10.7	50 / 15.2	15 / 4.6

1) ANSI B31.1 Power Piping Code
2) ANSI B31.9 Building Services Piping Code
3) NFPA 13 Sprinkler systems
4) Ministry of Land & Transportation of Japan: Mechanical Equipment Construction Guide

hanger locations on straight runs where flexible couplings are used

When flexible couplings are used on straight runs, location of hangers shall be designed as close to each coupling as possible, or within a distance of less than 1/6 the span.

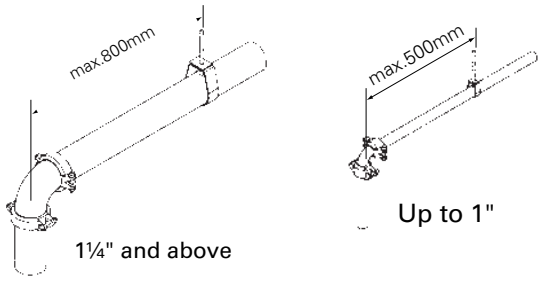


Correct hanger location

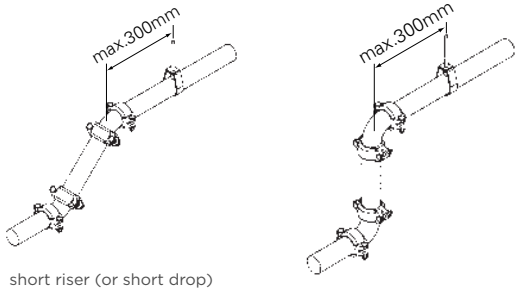
Wrong hanger location

hanger locations on curved pipe runs and branch lines

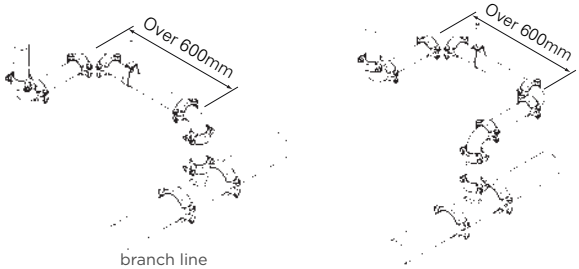
Additional hangers or supports shall be provided where runs are curved, connected to a branch line or on short risers or drops.



curved pipe runs



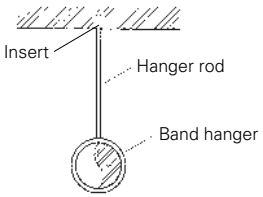
short riser (or short drop)



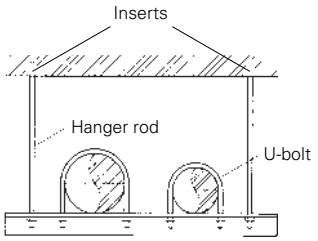
branch line

typical designs of hangers and sway braces for pipe runs

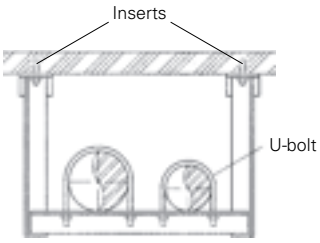
Pipe runs shall be adequately suspended by rod hangers or steel angles that are directly attached to the building structure to restrict the movement of the piping. Hangers and their components shall be ferrous. The maximum distance between hangers shall not exceed that specified in the table of previous page.



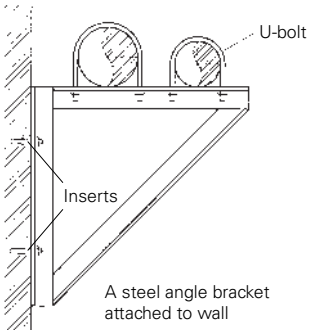
A rod hanger for a single pipe run



A trapeze hanger for multiple pipe runs



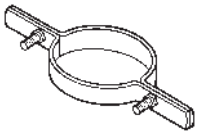
A trapeze hanger suspended from ceiling

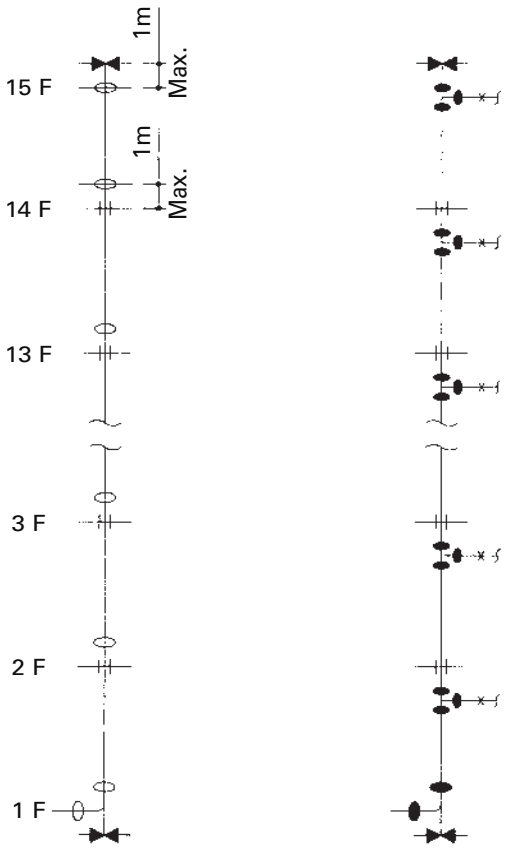


A steel angle bracket attached to wall

supports for risers

In multi-story buildings, risers shall be fixed (or anchored) at the lowest level and at the top of the riser and shall be supported by riser clamps or U-bolts at each floor level to prevent the risers from swaying. If risers are braced by the penetration floors, the number of riser clamps or U-bolts may be reduced to one at each three stories. For risers, either flexible or rigid couplings can be used as long as proper anchoring and support is provided.

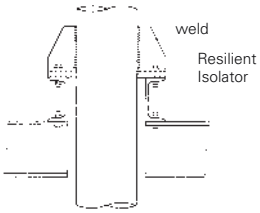




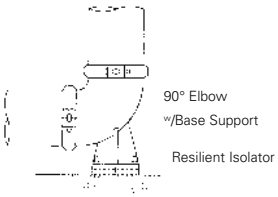
Flexible Coupling
Rigid Coupling
Anchor
Sway brace

- Anchors should be sufficient to hold the weight of water-filled pipe and pressure thrusts.
- Pipe guides (sway braces) should be such as to brace lateral movement of the system.

Anchors for risers ( )



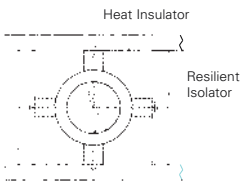
Anchor ( )



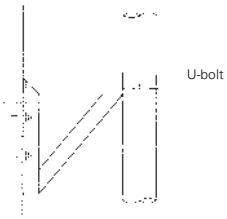
Sway braces for risers ( )



Sway brace ( )



Sway brace ( )



gasket selection guide

Over the past 50 years great advances have been made in synthetic elastomer technologies, allowing us to offer a full range of gasket materials for a wide variety of piping applications. Shurjoint utilizes the finest materials available in our gaskets which are engineered and designed to meet and exceed industry standards such as ASTM D2000, AWWA C606, NSF61, IAPMO, etc. Our continual research, development and testing all serve to advance this field and to develop new and superior solutions for our changing industry. Selecting the proper gasket for the intended service application requires careful consideration of many factors to assure maximum gasket life. Those factors include temperature, fluid media and concentration, and continuity of service. The gaskets color coding helps to identify the gasket grade and compound.



gasket grade index

compound	grade	color code	general service recommendations	maximum temp. range
EPDM	E	Green Stripe	Good for cold & hot water up to +230°F (+110°C). Also good for services for water with acid, water with chlorine, deionized water, seawater and waste water, dilute acids, oil-free air and many chemicals.Not recommended for petroleum oils, mineral oils, solvents and aromatic hydrocarbons.	-30°F (-34°C) to +230°F (+110°C)
EPDM	EHM	Green and Red Stripes	Good for cold & hot water up to +250°F (+121°C). Also good for services for water with acid, water with chlorine, deionized water, seawater and waste water, dilute acids, oil-free air and many chemicals. The Grade "EHM" gasket is only available on Shurjoint Quick Install Couplings. Not recommended for petroleum oils, mineral oils, solvents and aromatic hydrocarbons.	-30°F (-34°C) to +250°F (+121°C)
Nitrile	T	Orange Stripe	Good for petroleum oils, mineral oils, vegetable oils, non-aromatic hydrocarbons, many acids and water ≤+150°F (+65°C).	-20°F (-29°C) to +180°F (+82°C)
EPDM	E-pw	Double Green Stripe	Specially compounded for cold +86°F (+30°C) and hot +180°F (+82°C) potable water services. The compound is UL classified per NSF/ANSI 61 & NSF/ANSI 372.	-30°F (-34°C) to +230°F (+110°C)
EPDM	Lube-E (E-A)	Violet Stripe	UL approved pre-lubricated gasket designed specifically only for the fire protection industry.	Ambient
White Nitrile	A	White Gasket	Good for oily and greasy food products and processing, as well as pharmaceutical and cosmetics manufacturing. Compounded from FDA approved ingredients (CFR Title 21 Part 177.2600).	+20°F (-7°C) to +180°F (+82°C)
Silicone	L	Red Gasket	Good for dry, hot air without hydrocarbons and some high temperature chemical services.	-30°F (-34°C) to +350°F (+177°C)
Neoprene	V	Yellow Stripe	Good for hot lubricating oils and certain chemicals.	-30°F (-34°C) to +180°F (+82°C)
Fluoroelastomer	O	Blue Stripe	Good for many oxidizing acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, organic liquids and air with hydrocarbons to +300°F (+149°C).	+20°F (-7°C) to +300°F (+149°C)
Epichloro-hydrin	M2	White Stripe	Good for aromatic fuels at low temperatures and also for ambient temperature water.	-40°F (-40°C) to +160°F (+71°C)

special gaskets for AWWA ductile iron pipe

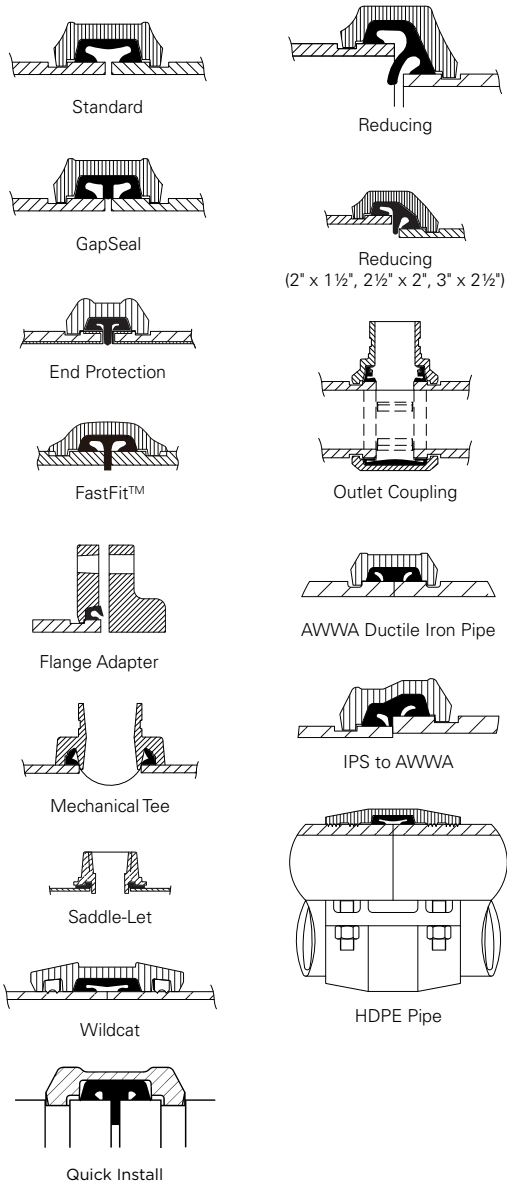
compound	grade	color code	general service recommendations	maximum temp. range
Nitrile	S	Red Stripe	Specially compounded for use with AWWA ductile iron pipe and used for petroleum products, mineral oils, vegetable oils and air with oil vapors.	-20°F (-29°C) to +180°F (+82°C)
Haloganated Butyl	M	Brown Stripe	Good for water services, mild dilute acids, oil-free air and many chemicals. The compound is UL classified per NSF/ANSI 61 & NSF/ANSI 372.(AWWA ductile iron pipe use)	-20°F (-29°C) to +200°F (+93°C)

note: Service conditions, which include, but are not limited to; service fluids, concentrations, combination of fluids, temperature exposure, constant temperature cycling, and incompatible fluids can reduce service life and performance. As such, gaskets are considered a wear part and should be replaced as service conditions demand.

caution: EPDM gaskets for water services are not recommended for steam services. Shurjoint EHC silicone lubricant should not be used on Silicone Compound gaskets.
Compatibility of all elastomer's in a given system should be aligned in regard to service conditions, temperature, and media. Failure to select the proper gasket and compound may result in joint leakage or failure resulting in personal injury and/or property damage. Gaskets should never be exposed to temperatures outside their ratings. Recommended services do not necessarily imply compatibility. Suitability of gasket grade and coupling design must be verified by a competent person familiar with individual system designs and specifications.

Proper gasket selection is essential for the optimum performance of Shurjoint grooved couplings, flange adapters and mechanical tees.

1. gasket styles: Shurjoint grooved couplings utilize several different gasket styles, standard, GapSeal, EP (End Protection) and FF (Fast Fit). GapSeal gaskets are compatible with standard gaskets and they are interchangeable with each other. Other special styles are not compatible with standard or GapSeal gaskets. Always use the correct gasket style for the coupling model you selected.



2. vacuum service: Shurjoint standard gaskets are designed to seal well under vacuum conditions up to 10 inHg/254 mmHg which may occur when a system is drained. For continuous services greater than 10 inHg/254 mmHg, the use of GapSeal gaskets or EP (End Protection) gaskets in combination with rigid style couplings is recommended. Contact Shurjoint for specific recommendations.

3. dry pipe and freezer services: Shurjoint recommends the use of GapSeal Grade "E" gaskets for dry pipe fire protection systems and freezer applications. The GapSeal gasket closes off the gap between the pipes or gasket cavity. This will prevent any remaining liquid from entering the cavities and freezing when the temperature drops. Rigid couplings are preferred for dry pipe, freezer and vacuum applications. Reducing couplings are not recommended for these applications.

note: For gaskets in service temperatures above 150°F (65°C), or below 33°F (0.5°C) the use of Shurjoint EHC silicone lube is required and has demonstrated increased gasket performance and longevity in testing.

4. NSF/ANSI 61 standard: NSF/ANSI 61 classified gaskets are good for potable water services. The classification categories are 'cold' which is limited to +86°F (+30°C) (or maximum ambient distribution temperatures of unheated water) maximum and 'hot' which is limited to +180°F (+82°C) (or scalding temperatures of hot domestic water).

5. NSF/ANSI 372 standard: Maximum Lead Content (formerly Annex G): Product complies with NSF/ANSI 372 and conforms with lead content requirements for "lead free" plumbing as defined by California, Vermont, Maryland and Louisiana State laws and the U. S. Safe Drinking Water Act in effect as of Jan. 4, 2014.

6. lubricant: Shurjoint Lubricant is recommended for proper gasket installation to prevent the gasket from being pinched. Apply a thin coat to the gasket exterior, gasket lips and/or housing interiors. Shurjoint's new quick install couplings do not require an external gasket lubricant on initial installation. Lubrication is required on the sealing lips and internal areas. Shurjoint Lubricant is available in one pound (450 grams) and one quart (2 pounds or 900 grams) containers. Certified to NSF/ANSI 61.



general gasket service recommendations

The following are general service recommendations only and the information provided is based on the best information available from various resources including elastomer manufacturers, leading rubber molders, industry publications and our own laboratory testing and field experience. The information contained herein shall be considered for evaluation purposes and not as a guarantee. When and wherever possible, gasket materials should be tested with simulated service conditions to determine suitability for the intended service application. Unless otherwise noted, the recommendations are based on ambient temperatures. These recommendations do not apply to rubber lined products or rubber sealed valves. If more than one gasket grade is listed the preferred grade is listed first for general services. For chemicals not listed, a combination of chemicals listed or not, service temperatures not listed or borderline services, contact a Shurjoint Engineering Representative for a recommendation.

note: NR = Not Recommended

chemical services

chemical composition	gasket grade
Acetaldehyde	E
Acetamide	T
Acetic Acid up to 10% 100°C (38°C)	E/L
Acetic Acid up to 10 50% 100°C (38°C)	L
Acetic Acid, Glacial 100°C (38°C)	L
Acetic Anhydride	E
Acetone	E
Acetonitrile	E/T
Acetophenone	E
Acetylene	E/T
Acrylic Resin	V
Acrylonitrile	NR
Adipic Acid	T
Air, oil free	E
Air with vapored oil	T
Alkalis	E
Allyl Alcohol to 96%	E
Allyl Chloride	NR
Alum Sulfuric Acid	O
Alums	E/T
Aluminum Chloride	E/T
Aluminum Fluoride	E/T/O
Aluminum Hydroxide	E/O
Aluminum Nitrate	E/T/V
Aluminum Oxychloride	T
Aluminum Phosphate	E
Aluminum Salts	E/T
Aluminum Sulfate	E/T
Alums	E/T
Ammonia Anhydrous (Pure Ammonia)	NR

chemical composition	gasket grade
Ammonia Gas, Cold	E
Ammonia, Aqua, 10-25%	E
Ammonia, Liquid	E
Ammonium Alum	V
Ammonium Bifluoride	T
Ammonium Carbonate	E
Ammonium Chloride	E/T
Ammonium Fluoride	E
Ammonium Hydroxide	E
Ammonium Metaphosphate	E
Ammonium Nitrate	E/T
Ammonium Nitrite	E
Ammonium Persulfate, to 10%	E
Ammonium Phosphate	T
Ammonium Sulfamate	T
Ammonium Sulfate	E/T
Ammonium Sulfide	E
Ammonium Thiocyanate	E
Amyl Acetate	E
Amyl Alcohol	E
Amyl Borate	V
Amyl Chloride	NR
Amyl Chloronaphthalene	T
Anderol	O
Aniline	E
Aniline Dyes	E
Aniline Hydrochloride	E
Aniline Oil	E
Animal Fats	A
Anthraquinone	NR

chemical composition	gasket grade
Anthraquinone Sulfonic Acid	NR
Antimony Chloride	E
Antimony Trichloride	E
Argon Gas	E/O
Aroclor(S)	O
Arsenic Acid, to 75%	E/T/O
Arylsulfonic Acid	NR
ASTM #1, 2 & 3 Oil	T
Barium Carbonate	E
Barium Chloride	E/T
Barium Hydroxide	E/T
Barium Nitrate	V
Barium Sulfide	T
Beer	A
Beet Sugar liquors	A
Benzaldehyde	E
Benzene	O
Benzine (see Petroleum Ether)	O
Benzoic Acid	E
Benzol	O
Benzyl Alcohol	E
Benzyl Benzoate	E
Benzyl Chloride	E
Black Sulfate Liquor	T
Blast Furnace Gas	T
Bleach,12% Active Cl2	E
Borax Solutions	E
Bordeaux Mixture	E
Boric Acid	E/T
Bromine	O
Bromine Water	V
Butane Gas	T
Bromotoluene	NR
Butanol (see Butyl Alcohol)	E/T
Butter	A
Butyl Acetate Ricinoleate	E/T
Butyl Alcohol	E/T
Butyl “Cellosolve Adipate”	E/T
Butyl Phenol	E
Butyl Stearate	T/O
Butylene	T/O
Butylene Glycol	E
Butyne Diol	NR
Calcium Acetate	T
Calcium Bisulphite	T/O
Calcium Carbonate	E/T
Calcium Chlorate	E/T
Calcium Chloride	E/T
Calcium Hydroxide (Lime)	E/T
Calcium Hypochlorite	E
Calcium Hypochloride	E
Calcium Nitrate	E/T/V
Calcium Sulfate	E/T
Calcium Sulfide	E/T

chemical composition	gasket grade
Caliche Liquors	T
Cane Sugar Liquors	A
Carbitol	E/T
Carbonic Acid, Phenol	O
Carbon Bisulphide	O
Carbon Dioxide, Dry	E/T
Carbon Dioxide, Wet	E/T
Carbon Disulphide	O
Carbon Monoxide	E
Carbon Tetrachloride	O
Carbonic Acid, Dry	O
Caster Oil	T/A
Caustic Potash	E/T
Cellosolve	E/V
Cellosolve Acetate	E
Cellosolve (Alcohol Ether)	E
Cellulose Acetate	E
Cellulube 220 (Tri-Aryl-Phosphate)	E
Cellulube Hydraulic Fluids	E
China Wood Oil, Tung Oil	T
Chloric Acid to 20%	E
Chlorine, Dry	O
Chlorine, Water 4000 PPM (max.)	E
Chlorinated Paraffin (Chlorocosane)	T
Chloroacetic Acid	E
Chloroacetone	E
Chlorobenzene	O
Chloralhydrate	NR
Chlorobromomethane	NR
Chloroform	O
Chlorosulphonic Acid	NR
Chrome Alum	E/T
Chromic Acid, to 10%	O
Chromic Acid, to 25%	O
Chrome Plating Solutions	O
Citric Acid, Saturated	E
Citric Acid	E/T
Coconut Oil	A
Cod Liver Oil	A
Coke Oven Gas	T/O
Copper Carbonate	E/T
Copper Chloride	E/T
Copper Cyanide	E/T
Copper Fluoride	E
Copper Nitrate	E/T
Copper Sulfate	E/T
Corn Oil	A
Cotton Seed Oil	A
Creosol, Cresylic Acid	O
Creosote, Coal Tar	T/O
Creosote, Wood	T/O
Cupric Fluoride	E/T
Cupric Sulfate	E/T

chemical composition	gasket grade
Cyclohexane (Alicyclic Hydrocarbon)	O
Cyclohexanol	V/O
Cyclohexanone	E
Deionized Water	E
Dextrim	T
Diacetone Alcohol	V
Dibutyl Phthalate	E
Dichloro Difloro Methane	T
Dicyclohexylamine	T
Diesel Oil	T
Diethyl Ether	T
Diethyl Sebacate	E
Diethylamine	T
Diethylene Glycol	E/T
Digester Gas	T
Dimethylamine	T
Dioctyl Phthalate	E
Dioxane	E
Dipentene (Terpene-Hydrocarbon)	T
Dipropylene Glycol	T
Dowtherm A	O
Dowtherm E	O
Dowtherm SR-1	T/E
Ethane	E
Ethanolamine	E
Ethers	NR
Ethyl Acetoacetate	E
Ethyl Acrylate	L
Ethyl Alcohol (Ethanol)	E
Ethyl Cellulose	E
Ethyl “Cellusolve”	E
Ethyl Chloride	E/T
Ethyl Ether	T
Ethyl Oxalate	E
Ethyl Silicate	T
Ethylene Chlorohydrin	E
Ethylene Diamine	E/T
Ethylene Dichloride (Dichloroethane)	O
Ethylene Glycol	E/T
Ethylene Oxide	NR
Fatty Acid	A
Ferric Chloride, to 35%	E/T/O
Ferric Chloride, Saturated	E
Ferrous Nitrate	V
Ferric Hydroxide	E
Ferric Sulfate	T
Fish Oils (Solubles)	A
Fire Fighting Foam Concentrate	E/O
Fluboric Acid	E/T
Fluorine Gas, Wet	NR
Fluorosilicic Acid, to 30%	V
Fly Ash	E

chemical composition	gasket grade
FM200 HFC-227ea	E
Foam	E
Fog Oil	T
Formaldehyde	E/T
Formamide	E/T
Formic Acid, to 25%	E
Freon 11, 130°F (54°C)	T
Freon 12, 130°F (54°C)	T
Freon 113 130°F (54°C)	T
Freon 114,130°F (54°C)	T
Freon F-12	T
Freon 123	NR
Freon 134a,176° (80°C)	E/T
Freon F-21	NR
Freon 22, 130°F (54°C)	V
Fructose	E/T
Fuel Oil	T
Fumaric Acid	E
Furan	NR
Furfuryl Alcohol	E
Gallic Acid	NR
Gasoline, Refined	T
Gasoline, Refined, Unleaded	O
Gelatin	A
Glucose	A
Glue	E/T
Glycerin	E/T
Glycerol	E/T
Glycol	E/T
Glycolic Acid	E
Grease	T/V/O
Green Sulfate Liquor	T
Halon 1301	E
Heptane	T
Hexaldehyde	E
Hexane	T
Hexanol	V/T
Hexanol Tertiary	T
Hexyl Alcohol	V/T
Hexylene Glycol	T
Hydrobromic Acid, to 40%	E
Hydrochloric Acid, to 36%, 75°F (24°C)	E
Hydrochloric Acid, to 36%, 158°F (70°C)	O
Hydrocyanic Acid	E
Hydrofluoric Acid, to 75%, 75°F (24°C)	O
Hydrofluosilicic Acid	E
Hydrocyanic Acid, to 10%	E
Hydrofluoric Acid, to 30%	V/O
Hydrofluosilicic Acid, to 50%	T
Hydrogen Phosphide	NR
Hydrogen Gas, Cold	E/T
Hydrogen Gas, Hot	E

chemical composition	gasket grade
Hydrogen Peroxide, to 50%	L
Hydrogen Peroxide, to 90%	O
Hydrogen Sulfide	E
Hydroquinone	T/O
Hydroxylamine Sulfate	E
Hypochlorous Acid, Dilute	E
Isododecane	V
Isobutyl Alcohol	E
Iso Octane, 100°F (38°C)	T
Isopropyl Acetate	E
Isopropyl Ether	T
JP-3	T
JP-4	T/O
JP-5	T/O
JP-6, 7, 8	T
Kerosene	T
Ketones	E
Lactic Acid	A
Lard Oil	V
Latex (1% Styrene & Buta-diene)	O
Lauric Acid	T
Lauryl Chloride	NR
Lavender Oil	T
Lead Acetate	T
Lead Chloride	E
Lead Sulfamate	V
Lead Sulfate	T
Lime and H2O	E/T
Lime Sulfur	O
Linoleic Acid	O
Lithium Bromide	T
Lithium Bromide (Brine)	T/O
Linseed Oil	A
Lithium Chloride	T/O
Lubricating Oil, Refined	T
Lubricating Oil, Sour	T
Lubricating Oil, to 150°F (66°C)	T
Lubricating Oil, 150°F (66°C) to 180°F (82°C)"	V/T
Magnesium Chloride	E/T
Magnesium Hydroxide	E/T
Magnesium Nitrate	E/T
Magnesium Sulfate	E/V
Maleic Acid, Saturate	E/T
Maleic Acid, Saturate	T
Malic Acid	T
Mercuric Chloride	E/T
Mercuric Cyanide	E/T
Mercurous Nitrate	E/T
Mercury	E/T
Methane	T
Methyl Acetate	V
Methyl Alcohol, Methanol	E/T
Methyl Cellosolve (Ether)	V

chemical composition	gasket grade
Methyl Chloride	O
Methyl Ethyl Ketone	NR
Methyl Isobutyl Carbinol	E
Methylene Chloride	O
Methylene Chlorobromide	NR
Methylene Dichloride 100°F (38°C)	O
MIL-L7808	O
MIL-05606	O
MIL-08515	O
Milk	A
Mineral Oils	T
Naphta	O
Naohtalene	NR
Naptha, 160°F (71°C)	O
Napthenic Acid	T
Neatsfoot Oil	T
Nevoil	E
Nickel Acetate to 10%, 100°F (38°C)	V
Nickel mmonium Sulfate	V
Nickel Chloride	E/T
Nickel Nitrate	V
Nickel Plating Solution 125°F (52°C) - Max."	E/T
Nickel Sulfate	E/T
Nitric Acid to 10%, 75°F (24°C) - Max.	E
Nitric Acid, 10-50%, 75°F (24°C) - Max.	O
Nitric Acid, 50-86%, 75°F (24°C)	O
Nitric Acid, Red Fuming	O
Nitrocellulose	V
Nitrogen	E
Nitromethane	E
Nitrous Oxide	E
NOVEC 1230 FK-5-1-12	E
Octyl Alcohol VOgisogiric Acid, to 75%, 150°F (66°C)"	O
Oil, Crude Sour	T
Oil, Motor	T
Oleic Acid	T
Oilve Oil	T/A
Oronite 8200 Silicate Ester Fluid	O
Orthodichlorobenzene	O
OS-45 Silicate Ester Fluid	O
OS-45-1	O
Oxalic Acid	E
Oxygen, Cold	E
Ozone (100 ppm)	E
Palm Oil	T/A
Peanut Oil	A
Palmitic Acid	T
Pentane	T
Perchloric Acid	NR

chemical composition	gasket grade
Pentane	T
Perchloric Acid	NR
Perchloroethylene	O
Petroleum Ether (see Benzene)	O
Petroleum Oils	T
Phenol (Carbolic Acid)	O
Phenylhydrazine	E
Phenylhydrazine Hydrochloride	E
Phosphate Ester	E
Phosphoric Acid, to 50%	E
Phosphoric Acid, to 75% and 70°F	E/T
Phosphoric Acid, to 85%, 150°F (66°C) - Max.	O
Phosphate Ester	E
Photographic Solutions	T
Phthalic Anhydride	E
Picric Acid	V
Plating Solutions, (gold, brass cadmium, copper, lead, silver, tin, zinc)"	V
Polybutene	T
Polyvinyl Acetate, Solid (In Liquid State is 50% solution of Methanol or 60% solution of H2O)	E
Potash	E
Potassium Alum	E/T
Potassium Aluminum Sulfate	E/T
Potassium Bicarbonate	E/T
Potassium Bichromate	E/T
Potassium Borate	E
Potassium Bromate	E
Potassium Bromide	E/T
Potassium Carbonate	E/T
Potassium Chlorate	E
Potassium Chloride	E/T
Potassium Chromate	T
Potassium Cyanide	E/T
Potassium Dichromate	E
Potassium Ferricyanide	E
Potassium Ferrocyanide	E
Potassium Fluoride	E
Potassium Hydroxide	T
Potassium Iodide	V
Potassium Nitrate	E/T
Potassium Perborate	E
Potassium Perchlorate	T
Potassium Permanganate, Saturated to 10%	E
Potassium Permaganate Saturate 10-25%	E
Potassium Iodide	V
Potassium Nitrate	E/T
Potassium Perborate	E
Potassium Perborate	E
Potassium Perchlorate	T

chemical composition	gasket grade
Potassium Permanganate, Saturated to 10%	E
Potassium Permaganate Saturate 10-25%	E
Potassium Persulfate	T
Potassium Silicate	E/T/V
Potassium Sulfate	E/T
Prestone	T
Propane Gas	T
Propanol	E/T
Propargyl Alcohol	E
Propyl Alcohol	E/T
Propylene Dichloride	L
Propylene Glycol	E
Pydraul F-9 and F-150	NR
Pyranol 1467	T
Pyranol 1476	T
Pyroguard "C"	T
Pyroguard "D"	T
Pyroguard 55	E
Pyrrole	E
Ref. Fuel (70 ISO Octane, 30 Toluene)	T
Rapeseed Oil	A
Rosin Oil	T/V
Salicylic Acid	E
Secondary Butyl Alcohol	T
Sewage	E/T
Silver Nitrate	E
Silver Sulfate	E
Skydrol, 200°F (93°C) - Max.	L
Skydrol 500 Phosphate Ester	E
Soap Solutions	E/T
Soda Ash, Sodium Carbonate	E/T
Sodium Acetate	E
Sodium Alum	T
Sodium Benzoate	E/T
Sodium Bicarbonate	E/T
Sodium Bisulfate	E/T
Sodium Bisulfite (Black Liquor)	E/T
Sodium Bromide	E/T
Sodium Carbonate	E/T
Sodium Chlorate	E
Sodium Chloride	E/T
Sodium Cyanide	E/T
Sodium Dichromate, to 20%	E/T
Sodium Ferricyanide	E/T
Sodium Ferrocyanide	E/T
Sodium Fluoride	E/T
Sodium Hydroxide, to 15%	E
Sodium Hydro Sulfide	T
Sodium Hydroxide to 50%	E
Sodium Hypochlorite, to 20%	E
Sodium Metaphosphate	T

chemical composition	gasket grade
Sodium Nitrate	E
Sodium Nitrite	E/T
Sodium Perborate	E
Sodium Peroxide	E
Sodium Phosphate	T
Sodium Phosphate, Dibasic	T
Sodium Phosphate, Monobasic	T
Sodium Phosphate, Tribasic	T
Sodium Silicate	T
Sodium Sulfate	E/T
Sodium Sulfide	E/T
Sodium Sulfite Solution, to 20%	T
Sodium Thiosulfate, "Hypo"	T
Sohovis 47	T
Sohovis 78	T
Solvasol #1	T
Solvasol #2	T
Solvasol #3	T
Solvasol #73	T
Solvasol #74	NR
Soybean Oil	A
Spindle Oil	T
Stannic Chloride	T
Stannous Chloride, to 15%	T
Starch	E/T
Steam	NR
Stearic Acid	T
Stoddard Solvent	T
Styrene	O
Sulfonic Acid	E
Sulphite Acid Liquor	E
Sucrose Solutions	A
Sulfur	E/V
Sulfur Chloride	O
Sulfur Dioxide, Dry	E
Sulfur Dioxide, Wet	E
Sulfur Trioxide, Dry	O
Sulfuric Acid, to 25%, 150°F (66°C)	E
Sulfuric Acid, 25-50%, 200°F (93°C)	O
Sulfuric Acid, 50-95%, 150°F (66°C)	O
Sulfuric Acid, Fuming	O
Sulfuric Acid, Oleum	O
Sulfurous Acid	O
Tall Oil	T
Tannic Acid, all conc. Tanning Liquors (50g. alum. solution, 50g.	V
dichromate solution)	T
Tartaric Acid	E
Tertiary Butyl Alcohol	E/T
Tetrabutyl Titanate	E
Tetrachloroethylene	O
Thionyl Chloride	T

chemical composition	gasket grade
Terpineol	V
Tertiary Butyl Alcohol	E/T/V
Tetrachloroethylene	O
Tetrahydrofuran	NR
Tetralin	NR
Thiopene	NR
Titanium Tetrachloride	O
Toluene, to 30%	T
Transmission Fluid, Type A	O
Triacetin	T
Trichloroethane	O
Trichloroethylene	O
Trichloroethylene, to 200°F (93°C)	O
Tricresyl Phosphate	E
Triethanolamine	E/T
Trisodium Phosphate	E
Tung Oil	T
Turbo Oil #15 Diester Lubricant	O
Turpentine	T
Urea	T/E
Vegetable Oils	T/A
Vinyl Acetate	E
Vinegar	A
Vinyl Chloride	O
Vi-Pex	T
Water, to 150°F (66°C)	E/T/M/S
Water, to 200°F (93°C)	E/M
Water, to 230°F (110°C)	E
Water, to 250°F (121°C)	EH
Water, Acid Mine	E/T
Water, Bromine	O
Water, Chlorinated, to 3500 ppm	E
Water, Chlorine	E
Water, Deionized	E/M
Water, Potable	E-pw
Water, Seawater	E
Water, Waste	E/T/M/S
Whiskey	A
White Liquor	E
Wood Oil	T
Xylene	O
Zinc Chloride, to 50%	E
Zinc Nitrate	E
Zinc Sulfate	E/T

caution: gaskets should never be exposed to temperatures outside their ratings. EPDM gaskets for water services are not compatible for steam services. Failure to select the proper gasket and compound may result in joint leakage or failure resulting in personal injury and/or property damage. Shurjoint warrants its gaskets against defects and workmanship. Shurjoint expressly disclaims all other warranties, either expressed or implied, including the warranties of merchantability and fitness for a particular purpose. Additionally, Shurjoint does not warranty gaskets for use under any specific applications or service conditions. For more details and support, please contact Shurjoint.

fire protection services

The Shurjoint fire protection series numbers over 600 individual components, including grooved couplings, fittings, flanges, mechanical tees, valves, welding outlets, threaded fittings and more. Applicable products are listed and or approved by various domestic and international approval bodies including UL, FM, VdS, LPCB and others.

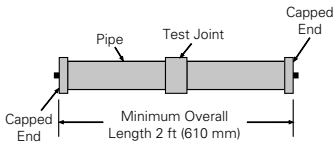
hydrostatic tests

Approved products are rated in cold water pressure (CWP) tested with a 3 to 5 times test pressure depending on the approval body and pipe size. The minimum working pressure (CWP) shall be 175 psi (12.3 Bar) in accordance with NFPA 13. Approval testing of a coupling is conducted on all different pipe schedules as enrolled and approved working pressures (CWP) are assigned to each individual combination of the coupling and test pipe. Refer to the Approved Pressure Ratings by UL and FM

hydrostatic test pressures (= multiple of CWP)

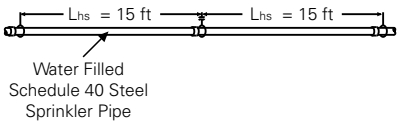
nom. size	UL	FM	Vds	LPCB
Up to 6" / 150	X5	X4	X4	X4
8" – 12" / 200-300	X4	X4	X4	X4
14" and above	X3	X4	NA	NA

contact Shurjoint for other approvals.



bending moment tests

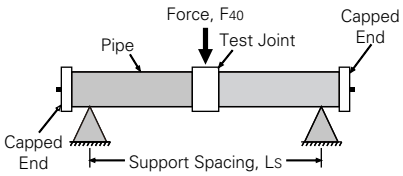
The required bending moment per UL and FM is calculated based on twice the weight of water filled pipe over twice the maximum distance between pipe supports as specified in NFPA 13.



See the table below for the bending moments per UL and FM on Sch. 40 pipe. This bending moment is twice that required by ASTM F1476.

required bending moment by UL & FM

	UL		FM	
nom. size (in)	moment nm	moment lbs-ft	moment nm	moment lbs-ft
1½	1098	810	1100	810
2	1559	1150	1560	1150
2½	2400	1770	2400	1770
3	3289	2426	3290	2425
4	4942	3645	4975	3670
5	7102	5238	7105	5240
6	9606	7085	9615	7090
8	15326	11304	15335	11310
10	22757	16785	22790	16805
12	31116	22950	31145	22970
14	37217	27450		
16	48597	35843		



In addition to the hydrostatic and bending moment tests, couplings must meet other requirements including gasket performance tests.

flexible coupling

NFPA 13 defines a flexible coupling as "a listed coupling or fitting that allows axial displacement, rotation, and at least 1 degree of angular movement of the pipe without inducing harm on the pipe. For pipe diameters of 8 in. and larger, the angular movement shall be permitted to be less than 1 degree but not less than 0.5 degrees." (NFPA 13 - 2007 3.5.4)

For sprinkler systems, NFPA 13 specifies the use of flexible couplings to protect the system against damage from earthquakes and lists some specific examples of how and where they should be used. Designers and installers should design their fire protection systems in compliance with this standard. See Typical Applications – Flexible Couplings on Page 191.

minimum pipe schedules

Standard cut and roll grooving connections have limitations of minimum pipe schedules. Special care is required for thin wall pipe. Factory Mutual Research Group (FM) outlines the minimum pipe schedules to be used for cut and roll grooving in their FM Class 1920 standard as follows:

nom. pipe size (in)	grooving method	minimum pipe schedule
6 or smaller	out	scheduled 40
8 or larger	out	scheduled 30
2 or smaller	rolled	scheduled 5
6 or smaller	rolled	scheduled 10. thinwall, light wall
8 or larger	rolled	0.188 in (4.8 mm) wall

(FM Class 1920 -2007, Table 3.2.2)

approved pressure ratings by UL & FM

1. Approved grooved couplings and fittings are good for use in both wet and dry sprinkler systems.
2. Typical applications of flexible couplings (models 7705, 7706 & 7707) are in sprinkler risers, in feed mains passing through walls from one building area to another, in locations subject to earthquakes, in the discharge line from aboveground pump suction tanks, in new connections to existing feed mains and in air or water fire service lines subject to excessive vibration or difficult alignment.
3. Approved grooved couplings are limited to use with rolled or cut-groove ended pipe, valves and fittings at a minimum rated working pressure of 175 psi (1205 kPa) and are suitable for aboveground service.
4. Grooves should be processed according to ANSI/AWWA C606 (latest edition) Grooved and Shouldered Joints.
5. Installation must be made according to the manufacturer's instructions and requirements.
6. Approved grooved couplings may be used in underground service subject to the installation restrictions placed upon the pipe and to the coupling manufacturer's recommendations and requirements.
7. Approved grooved couplings have been evaluated for a maximum ambient temperature of 225°F (107°C), suitable for normal warehouse protection.
8. Threaded size of sprinkler piping is limited to 1 inch (25 mm) nominal.
9. Threaded connections can be made to approved threadable thinwall pipe or to Schedule 40 pipe.

Source: FM Approval Guide

- For pressure ratings for special pipes, DIN and JIS pipe sizes, and large diameter sizes 14" – 24", contact Shurjoint for details.
- Models K-9 and 7771 rigid couplings are also available. For pressure ratings, contact Shurjoint for details.

couplings and flange adapters

sch. 40 & STD wall pipe

		7750		K-9		7707		7771		Z05		Z07		7041		7043		7706		
size (in)	wall (in)	UL	FM	UL	FM	UL	FM	UL	FM	UL	FM	UL	FM	UL	FM	UL	FM	size (in)	UL	FM
¾	0.113	-	-	-	-	500	-	-	-	-	-	-	-	-	-	-	-	2 x 1½	300	300
1	0.133	300	300	-	-	500	-	-	-	-	-	-	500	-	-	-	-	2½ x 2	300	300
1¼	0.140	300	300	300	300	500	-	-	-	350	350	500	500	-	-	-	-	3 x 2	300	300
1½	0.145	300	300	300	300	-	500	-	500	350	350	500	500	-	-	-	-	3 x 2½	300	300
2	0.154	300	300	300	300	500	500	300	300	350	350	500	500	175	300	300	300	4 x 2	300	300
2½	0.203	300	300	300	300	500	500	300	300	350	350	500	500	175	300	300	300	4 x 2½	300	300
3	0.216	300	300	300	300	500	500	300	300	350	350	500	500	175	300	300	300	4 x 3	300	300
4	0.237	300	300	300	300	500	500	300	300	350	350	500	500	175	300	300	300	6 x 3	300	300
5	0.258	300	300	300	300	500	500	300	300	350	350	400	400	175	300	300	300	6 x 4	300	300
6	0.280	300	300	300	300	500	500	300	300	350	350	400	400	175	300	300	300	8 x 6	300	300
8	0.322	300	300	300	300	500	500	300	300	350	350	400	400	175	300	300	300	-	-	-
10	0.375	175^	250	-	-	300	500	175	200	-	-	350	350	175	175	300	300	-	-	-
12	0.375	175*	250	-	-	300	300	175	300	-	-	350	350	175*.	175	300	300	-	-	-

^0.188" wall, *0.330 wall

unit: psi

		7705H	
size (in)	wall (in)	UL	FM
8	0.322	450	450

sch. 10 & BS 1387 medium pipe

		7750		K-9		7707		7771		Z05		Z07		7041		7043		7706		
size (in)	wall (in)	UL	FM	UL	FM	UL	FM	UL	FM	UL	FM	UL	FM	UL	FM	UL	FM	size (in)	UL	FM
¾	0.083	-	-	-	-	500	-	-	-	-	-	-	-	-	-	-	-	2 x 1½	300	300
1	0.109	300	300	-	-	500	-	-	-	-	-	-	500	-	-	-	-	2½ x 2	300	300
1¼	0.109	300	300	300	300	500	-	-	-	350	350	500	500	-	-	-	-	76.1 x 2	300	300
1½	1.109	300	300	300	300	-	-	-	500	350	350	500	500	-	-	-	-	3 x 2	300	300
2	0.110	300	300	300	300	450	450	300	300	350	350	500	500	175	300	300	300	3 x 2½	300	300
2½	0.120	300	300	300	300	450	450	300	300	350	350	500	500	175	300	300	300	3 x 76.1	300	300
76.1	0.142	300	300	300	-	500	500	-	300	300	-	-	-	175	-	-	-	4 x 2	300	300
3	0.120	300	300	300	300	450	450	300	300	350	350	500	500	175	300	300	300	4 x 2½	300	300
4	0.120	300	300	300	300	450	450	300	300	350	350	500	500	175	300	300	300	4 x 76.1	300	300
5	0.134	300	300	300	300	450	450	300	300	350	350	400	400	175	300	300	300	4 x 3	300	300
139.7	0.197	300	300	300	-	500	500	-	300	-	-	-	-	175	-	-	-	6 x 3	300	300
6	0.134	300	300	300	300	450	450	300	300	350	350	400	400	175	300	300	300	165.1 x 3	-	300
165.1	0.197	300	300	300	-	500	500	-	300	-	-	-	-	175	-	-	-	6 x 4	300	300
8	0.188	300	300	300	300	450	450	300	300	350	350	400	400	175	300	300	300	165.1 x 4	300	300
10	0.188	175	175	-	-	300	450	175	200	NA	NA	350	350	175	175	300	300	8 x 6	300	300
12	0.250	175*	175	-	-	300	300	175	300	NA	NA	350	350	175*	175	300	300	8 x 165.1	-	300

*0.330 wall

unit: psi

		7705H	
size (in)	wall (in)	UL	FM
8	0.188	450	450

approved pressure ratings by UL & FM

outlet coupling and mechanical tees

unit: psi

model	size (in) (run x branch)	sch. 40/STD		sch. 10	
		UL	FM	UL	FM
C-7 Outlet Coupling, Threaded	1½ x ½, ¾ & 1	300	300	300	300
	2 x ½, ¾ & 1	300	300	300	300
	2½ x ½, ¾ & 1	300	300	300	300
	3 x ¾ & 1	300	300	300	300
	4 x ¾ & 1	300	300	300	300
	6 x 1 & 1½	300	300	300	300
C-7 Outlet Coupling, Grooved	2 x 1	300	300	300	300
	2½ x 1¼ & 1½	300	300	300	300
	3 x 1 & 1½	300	300	300	300
	4 x 1½ & 2	300	300	300	300
	6 x 1½ & 2	300	300	300	300
M21 Mechanical Tee, Threaded (NPT or BSPT)	2 x ½, ¾, 1, 1¼ & 1½	300	300	300	300
	2½ x ½, ¾, 1, 1¼ & 1½	300	300	300	300
	76.1 x ½, ¾, 1, 1¼ & 1½	300	300	300	300
	3 x ½, ¾, 1, 1¼, 1½ & 2	300	300	300	300
	4 x ½, ¾, 1, 1¼, 1½, 2 & 2½	300	300	300	300
	4 x 76.1	300	300	300	300
	4 x 3	175	175	175	175
	5 x 2 & 2½	300	300	-	300
	5 x 3	300	-	-	-
	139.7 x 2, 76.1 & 3	300	300	300	300
	6 x 1¼, 1½, 2 & 2½	300	300	300	300
	6 x 3 & 4	175	175	175	175
	165.1 x 1¼, 1½ , 2 & 76.1	300	300	300	300
	165.1 x 3 & 4	175	175	175	175
M22 Mechanical Tee, Grooved	2 x 1, 1¼ & 1½	300	300	300	300
	2½ x 1, 1¼ & 1½	300	300	300	300
	76.1 x 1, 1¼ & 1½	300	300	300	300
	3 x 1, 1¼, 1½ & 2	300	300	300	300
	4 x 1, 1¼, 1½, 2 & 2½	300	300	300	300
	4 x 76.1	300	300	300	300
	5 x 2 & 2½	300	300	300	300
	4 x 3	175	175	175	175
	139.7 x 76.1	300	300	300	300
	6 x 1¼, 1½, 2 & 2½	300	300	300	300
	6 x 3 & 4	175	175	175	175
	165.1 x 1¼, 1½, 2 & 76.1	300	300	300	300
	165.1 x 3 & 4	175	175	175	175
7721 Threaded (NPT or BSPT)	4 x 3	300	300	300	300
	8 x 2, 2½, 3 & 4	300	300	300	300
	8 x 76.1	300	300	300	300
7722 Grooved	4 x 3	300	300	300	300
	8 x 2, 2½, 3 & 4	300	300	300	300
	8 x 76.1	300	300	300	300
723 Threaded (NPT or BSPT)	1¼ x ½ x ¾ & 1	300	300	300	300
	1½ x ½ x ¾ & 1	300	300	300	300
	2 x ½ x ¾ & 1	300	300	300	300
	2½ x ½ x ¾ & 1	300	300	300	300

mm size pipe per EN 10255

grooved-end fittings

unit: psi

model	size range	UL	FM
901 S/R 90 elbow	2" thru 8"	300	300
903 S/R Tee	2" thru 8"	300	300
	76.1, 165.1	300	-
7110 90 ebow	1" thru 8"	300	500
	10", 12"	300	300
	14" thru 18"	300	175
	24"	-	175
7111 45 elbow	1"	-	500
	1¼" thru 8"	300	500
	10", 12"	300	300
	14" thru 18"	300	175
	20"	250	250
	24"	250	175
7110DR Drain elbow	2" thru 6"	300	300
7110LR 1.5D elbow	2" thru 8"	300	300
7112 22½ elbow	1¼"	-	300
	1½"	500	300
	2" thru 8"	300	300
7113 11¼ elbow	1¼" thru 1½"	-	300
	2" thru 8"	300	300
7120 tee	1¼" thru 8"	300	500
	10" thru 14"	300	300
	18"	300	-
7121 Reducing Tee	2"x1½" thru 8"x6"	300	300
	12"x10"	300	-
7125 Bullhead Tee	2"x2½" thru 4"x6"	300	300
	5"x8" thru 6"x8"	300	-
7127 Standpipe Tee	4"x2½"	300	300
	6x2½"	300	-
7130 Lateral	2" thru 8"	300	300
7135 Cross	2" thru 6"	300	300
	8"	300	-
7150 Conc. Reducer	2"x1½" thru 14"x12"	300	300
	16"x8" thru 18"x16"	300	-
7150F Socket Adapter	1½"x1" thru 4"x2½"	300	300
	5"x1½" thru 6"x4"	300	-
7150M Red. Nipple	1½"x1" thru 6"x4"	300	300
7160T Transition Fitting	2"x1" thru 6"x2"	300	300
7151 Ecc. Reducer	2½"x2" thru 8"x6"	300	300
	10"x8" thru 14"x12"	-	300
7160 End Cap	1¼" thru 12"	300	300
7160H End Cap	10" thru 12"	300	300
	14" thru 18"	300	175
	20" thru 24"*	250	175
7170 Flange Adapter	2-1/2" thru 6"	175	175
7180 Flange Adapter	2" thru 8"	300	300
7181 Red. Flange	3"x2" thru 6"x4"	-	300
55 Nipple Adapter	1½" thru 2"	300	300
	1¼"x½" thru 2½"x1"	300	300
850 Sprinkler Hub	2"x2"x1" thru 2½"x2½"x1"	300	300
851 Sprinkler Hub	2"x1½"x1" thru 2½"x2x1"	300	300
853 Sprinkler Hub	1½"x1" thru 2½"x1"	300	300

* 20" only for UL

valves & components

unit: psi

model	size range	UL	FM
RCV Riser Check Valve	2½" thru 6"	300	300
726 Y-Straine	2" thru 6"	300	-
	8" thru 12"	175	-
SJ-300F Butterfly Valve	2½" thru 6"	300	300
	8"	300	-

stainless steel series

sch. 40S & 10s pipe

unit: psi

		SS-7		SS-8		SS-41		SS-723		
size (in)	sch. 10S wall (in)	UL	FM	UL	FM	UL	FM	size (in)	UL	FM
1	0.109	300	300	300	300	-	-	1¼ x ½	300	300
1¼	0.109	300	300	300	300	-	-	1¼ x ¾	300	300
1½	0.109	300	300	300	300	-	-	1¼ x 1	300	300
2	0.109	300	300	300	300	175	300	1½ x ½	300	300
2½	0.120	300	300	300	300	175	300	1½ x ¾	300	300
3	0.120	300	300	300	300	175	300	1½ x 1	300	300
4	0.120	300	300	300	300	175	300	2 x ½	300	300
5	0.134	300	300	300	300	-	-	2 x ¾	300	300
6	0.134	300	300	250	300	175	300	2 x 1	300	300
8	0.134	300	300	-	300	-	-			

unit: psi

model	size range	UL	FM
SS-10 90 Elbow	1" thru 8"	300	300
SS-11 45 Elbow	1" thru 8"	300	300
SS-20 Tee	1" thru 6"	300	300
SS-21 Tee	3"x2½" thru 4"x2½"	300	300
SS-21F Tee	3"x2", 4"x2"	300	300
SS-50 Conc. Reducer	3"x2½" thru 4"x2½"	300	300
SS-50F Conc. Reducer	2½"x2" thru 4"x2"	300	300
SS-60 Cap	1" thru 8"	300	300
SS-80 Flange Adapter	2" thru 8"	300	300

copper tubing series

type K & type L copper tubing

			C341	
size (in)	type K wall (in)	type L wall (in)	UL	FM
2	0.083	0.070	200	-
2½	0.095	0.080	200	-
3	0.109	0.090	200	-
4	0.134	0.110	200	-
5	0.160	0.123	200	-
6	0.192	0.140	200	-

unit: psi

model	size range	UL	FM
C10 90 Elbow	2" through 4"	175	200
C11 45 Elbow	2" through 4"	175	200
C20 Tee	2" through 6"	175	200
C21 Reducing Tee	2½"x2" thrru 6"x5"	200	-
C26 Reducing Tee	2"x¾" thru 4"x½"	200	-
C50 Conc. Reducer	2½"x2" thru 6"x5"	200	-
C52 Conc. Reducer	2"x1" thru 4"x2"	200	-
C60 Cap	2" thru 4"	200	200

listed pressure ratings by IAPMO

he following tables show Shurjoint Couplings used on carbon steel, stainless steel pipe, and copper tubing; listed by IAPMO in accordance with CSA B242.

model Z05 rigid coupling

nom. size	pipe O.D.	pressure ratings	min. wall roll (mm) / cut (mm)
1¼" 32	1.660" (42.2 mm)	350 psi 24 bar	1.7 / 3.6
1½" 40	1.900" (48.3 mm)	350 psi 24 bar	1.7 / 3.7
2" 50	2.375" (60.3 mm)	350 psi 24 bar	1.7 / 3.9
2½" 65	2.875" (73.0 mm)	350 psi 24 bar	2.1 / 4.8
3" 80	3.500" (88.9 mm)	350 psi 24 bar	2.1 / 4.8
4" 100	4.500" (114.3 mm)	350 psi 24 bar	2.1 / 5.2
5" 125	5.563" (141.3 mm)	350 psi 24 bar	2.1 / 5.2
6" 150	6.625" (168.3 mm)	350 psi 24 bar	2.8 / 5.6
8" 200	8.625" (219.1 mm)	350 psi 24 bar	2.8 / 6.1

model Z07 rigid coupling

nom. size	pipe O.D.	pressure ratings	min. wall roll (mm) / cut (mm)
1¼" 32	1.660" (42.2 mm)	500 psi 35 bar	1.7 / 3.6
1½" 40	1.900" (48.3 mm)	500 psi 35 bar	1.7 / 3.7
2" 50	2.375" (60.3 mm)	500 psi 35 bar	1.7 / 3.9
2½" 65	2.875" (73.0 mm)	500 psi 35 bar	2.1 / 4.8
3" 80	3.500" (88.9 mm)	500 psi 35 bar	2.1 / 4.8
4" 100	4.500" (114.3 mm)	500 psi 35 bar	2.1 / 5.2
5" 125	5.563" (141.3 mm)	400 psi 28 bar	2.1 / 5.2
6" 150	6.625" (168.3 mm)	400 psi 28 bar	2.8 / 5.6
8" 200	8.625" (219.1 mm)	400 psi 28 bar	2.8 / 6.1
10" (250 mm)	10.750" (273.0 mm)	350 psi 24 bar	3.4 / 6.4
12" (300 mm)	12.750" (323.9 mm)	350 psi 24 bar	4.0 / 7.1

model 7705 flexible coupling

nom. size	pipe O.D.	pressure ratings	min. wall roll (mm) / cut (mm)
1¼" 32	1.660" (42.2 mm)	320 psi 20 bar	1.7 / 3.6
1½" 40	1.900" (48.3 mm)	320 psi 20 bar	1.7 / 3.7
2" 50	2.375" (60.3 mm)	320 psi 20 bar	1.7 / 3.9
2½" 65	2.875" (73.0 mm)	320 psi 20 bar	2.1 / 4.8
3" 80	3.500" (88.9 mm)	320 psi 20 bar	2.1 / 4.8
4" 100	4.500" (114.3 mm)	320 psi 20 bar	2.1 / 5.2
5" 125	5.563" (141.3 mm)	320 psi 20 bar	2.1 / 5.2
6" 150	6.625" (168.3 mm)	320 psi 20 bar	2.8 / 5.6
8" 200	8.625" (219.1 mm)	320 psi 20 bar	2.8 / 6.1
10" 250	10.750" (273.0 mm)	175 psi 12 bar	3.4 / 6.4
12" 300	12.750" (323.9 mm)	175 psi 12 bar	4.0 / 7.1

model 7707 flexible coupling

nom. size	pipe O.D.	pressure ratings	min. wall roll (mm) / cut (mm)
1¼" 32	1.660" (42.2 mm)	500 psi 35 bar	1.7 / 3.6
1½" 40	1.900" (48.3 mm)	500 psi 35 bar	1.7 / 3.7
2" 50	2.375" (60.3 mm)	450 psi 31 bar	1.7 / 3.9
2½" 65	2.875" (73.0 mm)	450 psi 31 bar	2.1 / 4.8
3" 80	3.500" (88.9 mm)	450 psi 31 bar	2.1 / 4.8
4" 100	4.500" (114.3 mm)	450 psi 31 bar	2.1 / 5.2
5" 125	5.563" (141.3 mm)	450 psi 31 bar	2.1 / 5.2
6" 150	6.625" (168.3 mm)	450 psi 31 bar	2.8 / 5.6
8" 200	8.625" (219.1 mm)	450 psi 31 bar	2.8 / 6.1
10" 250	10.750" (273.0 mm)	450 psi 31 bar	3.4 / 6.4
12" 300	12.750" (323.9 mm)	320 psi 20 bar	4.0 / 7.1

model 7706 reducing coupling

nom. size	pipe O.D.	pressure ratings	min. wall roll (mm) / cut (mm)
2½" x 2" 65 x 50	2.875"x2.375" (73.0 mm x 60.3 mm)	300 psi 20 bar	2.1x1.7 / 4.8x3.9
3" x 2" 80 x 50	3.500"x2.375" (88.9 mm x 60.3 mm)	300 psi 20 bar	2.1x1.7 / 4.8x3.9
3" x 2½" 80 x 65	3.500"x2.875" (88.9 mm x73.0 mm)	300 psi 20 bar	2.1x2.1 / 4.8x4.8
4" x 2½" 100 x 65	4.500"x2.875" (114.3 mm x73.0 mm)	300 psi 20 bar	2.1x2.1 / 5.2x4.8
4" x 3" 100 x 80	4.500"x3.500" (114.3 mm x 88.9 mm)	300 psi 20 bar	2.1x2.1 / 5.2x4.8
5" x 4" 125 x 100	5.563"x4.500" (141.3 mm x 114.3 mm)	300 psi 20 bar	2.8x2.1 / 5.2x5.2
6" x 4" 150 x 100	6.625"x4.500" (168.3 mm x 114.3 mm)	300 psi 20 bar	2.8x2.1 / 5.6x5.2
8" 200 x 150	8.625"x6.625" (219.1 mm x 168.3 mm)	300 psi 20 bar	2.8x2.8 / 6.1x5.6

model C305 rigid coupling

nom. size	pipe O.D.	pressure ratings	min. wall roll (mm)
2" 50	2.175" (54.0 mm)	300 psi 20 bar	1.1
2½" 65	2.625" (66.7 mm)	300 psi 20 bar	1.1
3" 80	3.125" (79.4 mm)	300 psi 20 bar	1.1
4" 100	4.125" (104.8 mm)	300 psi 20 bar	1.5
5" 125	5.125" (130.2 mm)	300 psi 20 bar	1.8
6" 150	6.125" (155.6 mm)	300 psi 20 bar	2.1

model SS-5 rigid coupling

nom. size	pipe O.D.	pressure ratings	min. wall roll (mm) / cut (mm)
1¼" 32	1.660" (42.2 mm)	300 psi 20 bar	1.7 / 3.6
1½" 40	1.900" (48.3 mm)	300 psi 20 bar	1.7 / 3.7
2" 50	2.375" (60.3 mm)	300 psi 20 bar	1.7 / 3.9
2½" 65	2.875" (73.0 mm)	300 psi 20 bar	2.1 / 4.8
3" 80	3.500" (88.9 mm)	300 psi 20 bar	2.1 / 4.8
4" 100	4.500" (114.3 mm)	300 psi 20 bar	2.1 / 5.2
5" 125	5.563" (141.3 mm)	300 psi 20 bar	2.1 / 5.2
6" 150	6.625" (168.3 mm)	300 psi 20 bar	2.8 / 5.6
8" 200	8.625" (219.1 mm)	300 psi 20 bar	2.8 / 6.1

model C306 reducing coupling

nom. size	pipe O.D.	pressure ratings	min. wall roll (mm x mm)
2½" x 2" 65 x 50	2.675"x2.215" (66.7 mm x 54.0 mm)	300 psi 20 bar	1.1x1.1
3" x 2" 80 x 50	3.125"x2.125" (79.4 mm x 54.0 mm)	300 psi 20 bar	1.1x1.1
3" x 2½" 80 x 65	3.125"x2.625" (79.4 mm x 66.7 mm)	300 psi 20 bar	1.1x1.1
4" x 2½" 100 x 65	4.125"x2.625" (104.8 mm x 66.7 mm)	300 psi 20 bar	1.5x1.1
4" x 3" 100 x 80	4.125"x3.125" (104.8 mm x 79.4 mm)	300 psi 20 bar	1.5x1.1
5" x 4" 125 x 100	5.125"x4.125" (130.2 mm x 104.8 mm)	200 psi 14 bar	1.8x1.5
6" x 4" 150 x 100	6.125"x4.125" (155.6 mm x 104.8 mm)	200 psi 14 bar	2.1x1.5

model SS-7 rigid coupling

nom. size	pipe O.D.	pressure ratings	min. wall roll (mm) / cut (mm)
1¼" 32	1.660" (42.2 mm)	300 psi 20 bar	1.7 / 3.6
1½" 40	1.900" (48.3 mm)	300 psi 20 bar	1.7 / 3.7
2" 50	2.375" (60.3 mm)	300 psi 20 bar	1.7 / 3.9
2½" 65	2.875" (73.0 mm)	300 psi 20 bar	2.1 / 4.8
3" 80	3.500" (88.9 mm)	300 psi 20 bar	2.1 / 4.8
4" 100	4.500" (114.3 mm)	300 psi 20 bar	2.1 / 5.2
5" 125	5.563" (141.3 mm)	300 psi 20 bar	2.1 / 5.2
6" 150	6.625" (168.3 mm)	300 psi 20 bar	2.8 / 5.6
8" 200	8.625" (219.1 mm)	300 psi 20 bar	2.8 / 6.1

model C307 transition

nom. size	pipe O.D.	pressure ratings	min. wall roll (mm)
2" 50	2.375" x 2.125" (60.3 mm x 54.0 mm)	300 psi 20 bar	1.1
2½" 65	2.875" x 2.625" (73.0 mm x 66.7 mm)	300 psi 20 bar	1.1
3" 80	3.500" x 3.125" (88.9 mm x 79.4 mm)	300 psi 20 bar	1.1
4" 100	4.500" x 4.125" (114.3 mm x 104.8)	300 psi 20 bar	1.5

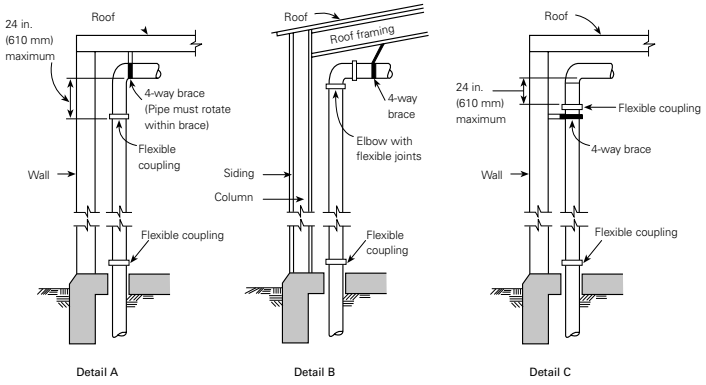
note: minimum wall thickness listed corresponds to Table1 of ASME B36.10M Roll/Cut groove for carbon steel & stainless steel pipe end or Table 1 of ASTM B306 for copper tubing.

typical applications - flexible couplings

sprinkler systems (NFPA 13)

he following illustrations are part of NFPA 13 – 2013 Annex A Explanatory Material. These are for informational purposes only and not a mandatory requirement. For specific requirements for any other areas of sprinkler systems, refer to the latest version of NFPA 13.

1. flexible couplings for main risers and branch line riser



Note to Detail A: The four-way brace should be attached above the upper flexible coupling re quired for the riser and preferably to the roof structure if suitable. The brace should not be attached directly to a plywood or metal deck.

FIGURE A.9.3.2(a) Riser Details.

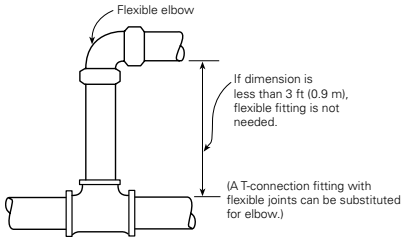
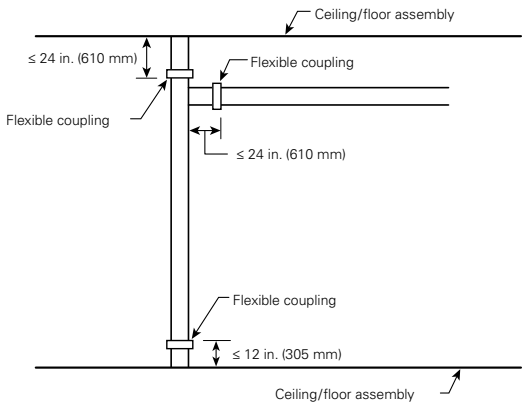


FIGURE A.9.3.2(b) Detail at Short Riser.

2. flexible couplings on horizontal portion of tie-in



FIGUREA.9.3.2.3(2) Flexible Coupling on Horizontal Portionof Tie-In.

3. flexible coupling on main riser and branch line riser

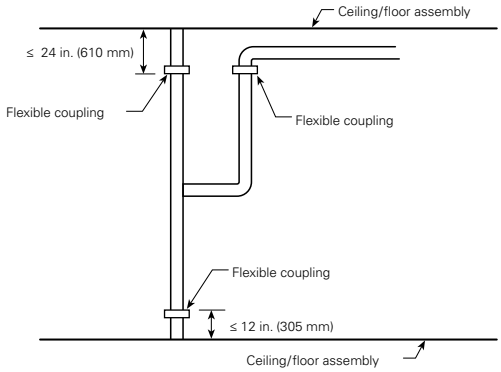
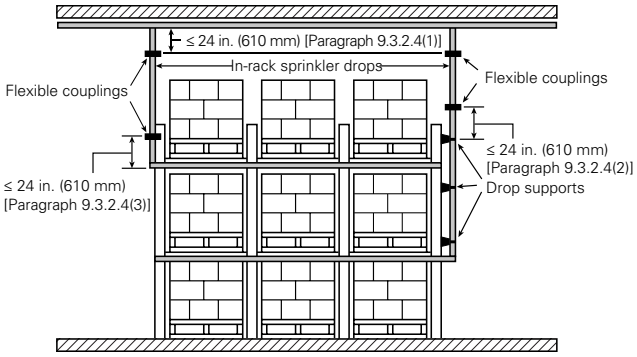


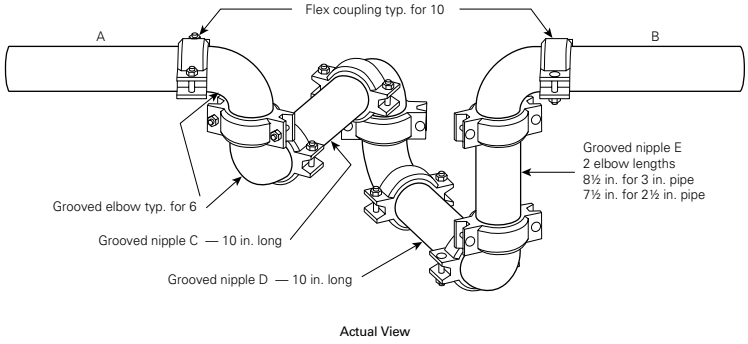
FIGURE A.9.3.2.3(2)(b) Flexible Coupling on Main Riser and Branch Line Riser.

4. seismic seperation assembly



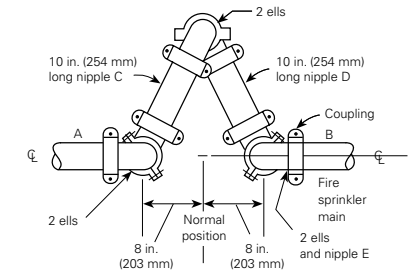
FIGUREA.9.3.2.4FlexibleCouplingsforDrops.

5. seismic seperation assembly

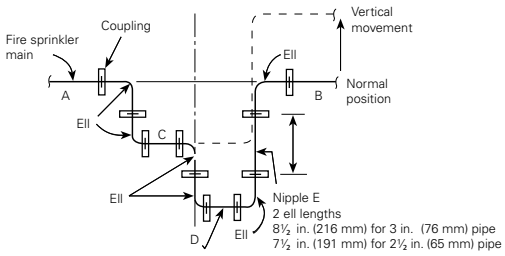


Actual View

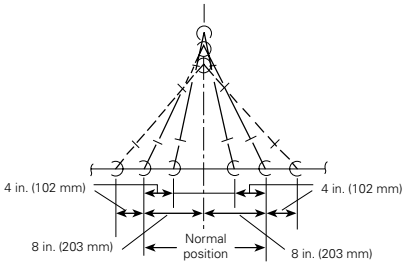
continuation of seismic seperation assembly



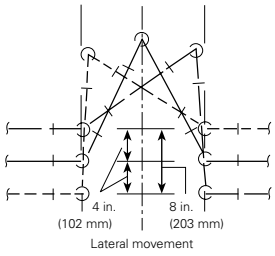
Plan



Elevation

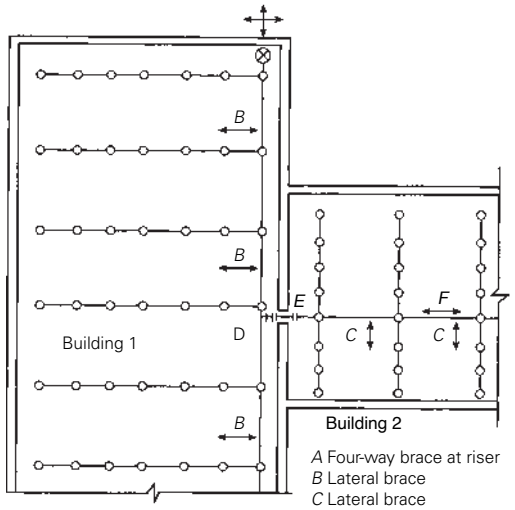


Longitudinal movement



Horizontal Views

6. earthquake protection for sprinkler piping



A Four-way brace at riser
B Lateral brace
C Lateral brace
D Short drop [Figure A.9.3.2(b)]
E Couplings at wall penetration
F Longitudinal brace

FIGURE A.9.3.5.9 (a)

7. typical location of bracing on a looped system

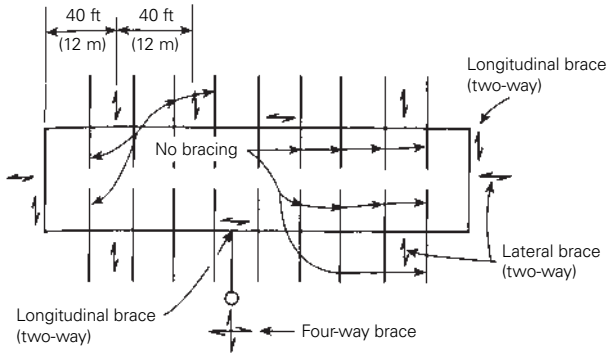


FIGURE A.9.3.5.6 (d)
Typical Location of Bracing on a Looped System.

Systems having more flexible couplings than required above shall be provided with additional sway bracing. A lateral brace shall be provided within 24" (600 mm) of every other coupling unless pipes are supported by rods less than 6" (152 mm) long from the ceiling or by U-type hooks underside of the structural element. (NFPA 13 – 2013 9.3.2. & 9.3.5.)

notes

notes

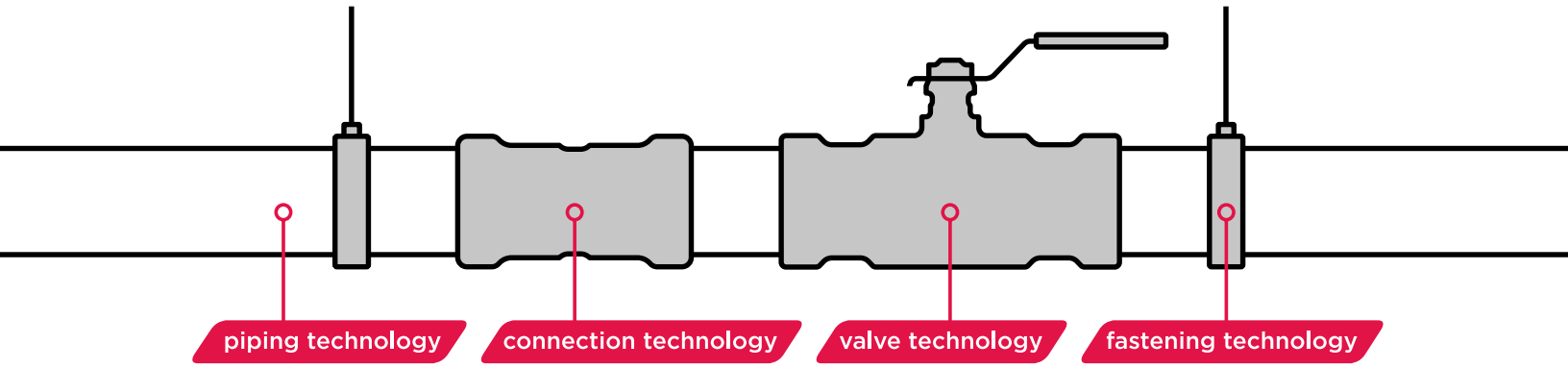
notes

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