

# S35 SHOULDERED FLEXIBLE COUPLING



For pressure rating, listing, and approval information, refer to data sheetor visit SHURJOINT website <a href="https://www.shurjoint.com">www.shurjoint.com</a> for details or contact your SHURJOINT representatives.

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 are normally supplied in hot dip galvanized. The standard rubber gasket is Grade T Nitrile.



S35 couplings should always be installed so that the coupling bolt pads make metal to metal contact.

#### material specification

#### Housing:

Ductile Iron to ASTM A536 Gr. 65-45-12, min. tensile strength 65,000 psi (448 Mpa).

## Surface Finish:

Standard finish in Hot dip zinc galvanized.

- Painted Orange or RAL3000 red (Option).
- Epoxy Coatings in RAL3000 red or other colors. (Option).

## Rubber Gasket:

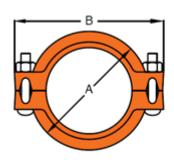
Grade "T" Nitrile (Color code: Orange stripe)
Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Also good for water services under +150°F (+66°C).

Temperature range: -20°F to +180°F (-29°C to +82°C). Do not use for HOT WATER above +150°oF (+66°C) or HOT DRY AIR above +140°F (+60°C).

#### Bolts & Nuts:

Heat treated carbon manganese steel track bolts to ASTM A449-83a (or A183 Gr. 2), minimum tensile strength 110,000 psi (758 MPa), Zinc electroplated, with heavy-duty hexagonal nuts to ASTM A563.







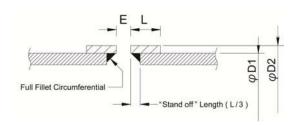
Model S35 Shouldered Flexible Coupling											
Normal Size	Pipe O.D.	Max. Working Pressure (CWP)*	Dimensions			Allowable Pipe	Deflection	Bolt Size	Weight		
			А	В	С	End Separation	Denection		***		
in	in	psi	in	in	in	in	(°)	in	lbs		
mm	mm	bar	mm	mm	mm	mm	(1)		kg		
2	2.375	600	3.90	5.47	1.81	0.13	2° 43′	<sup>3</sup> / <sub>8</sub> " × 2½" –	2.4		
50	60.3	40	99.0	139.0	46.0	3.2			1.1		
3	3.500	600	5.08	6.61	1.81	0.13	1° 53′	½" × 3"	3.3		
80	88.9	40	129.0	168.0	46.0	3.2			1.5		
4	4.500	600	6.26	7.87	1.97	0.13	1° 29′	½" × 3"	4.9		
100	114.3	40	159.0	200.0	50.0	3.2			2.2		
165.1	6.500	600	8.39	10.50	1.97	0.13	1° 2′	5/8" × 3½"	7.7		
	165.1	40	213.0	267.0	50.0	3.2			3.5		
6	6.625	600	8.62	11.00	1.97	0.13	1° 1′	5/8" × 3½"	8.4		
150	168.3	40	219.0	279.0	50.0	3.2			3.8		
8	8.625	600	10.75	13.19	2.36	0.13	0° 47′	<sup>3</sup> / <sub>4</sub> " × 4 <sup>3</sup> / <sub>4</sub> " =	13.0		
200	219.1	40	273.0	335.0	60.0	3.2			5.9		
10	10.750	300	13.20	15.62	2.56	0.13	00.47	<sup>3</sup> / <sub>4</sub> " × 4 <sup>3</sup> / <sub>4</sub> " —	19.8		
250	273.0	20	335.4	396.8	65.0	3.2	0° 47′		9.0		
12	12.750	300	15.19	17.72	2.56	0.13	0° 47′	<sup>3</sup> / <sub>4</sub> " × 4 <sup>3</sup> / <sub>4</sub> "	22.9		
300	323.9	20	385.8	450.1	65.0	3.2			10.4		

<sup>\*</sup>Working pressure is based on standard wall carbon steel pipe.

### 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.



Type A Weld-on Ring									
Nominal Size	Pipe OD ФD1	Shoulder Diameter ¢D2	Shoulder Length L	Nominal Gap E					
in	In	In	In	In					
mm	mm	mm	mm	mm					
2	2.375	2.618	0.625	0.125					
50	60.3	66.5	16.0	3.2					
3	3.500	3.819	0.625	0.125					
80	88.9	97.0	16.0	3.2					
4	4.500	4.803	0.688	0.125					
100	114.3	122.0	17.5	3.2					
165.1	6.500	6.870	0.688	0.125					
105.1	165.1	174.5	17.5	3.2					
6	6.625	7.007	0.688	0.125					
150	168.3	178.0	17.5	3.2					
8	8.625	9.134	0.813	0.125					
200	219.1	232.0	20.6	3.2					
10	10.750	11.260	0.813	0.125					
250	273.0	286.0	20.6	3.2					
12	12.750	13.248	0.813	0.125					
300	323.9	336.5	20.6	3.2					

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 (1/3 the shoulder length 'L').

## General note

- 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).
- Listed and or Approved Pressures are pressure ratings for fire protection systems, tested and approved by various approval bodies. Please always refer to the latest approval data posted on the Shurjoint website.
- Field Joint Test: For one time only, the system may be tested hydrostatically at 1½ times the maximum working pressure listed (AWWA C606 5.2.3).
- · Warning: Piping systems must always be depressurized and drained before attempting disassembly and or removal of any components.
- The 10 Year Limited Warranty applies to manufacturing defects only and does not cover severe service/temperature applications or wear parts.
- Shurjoint reserves the right to change specifications, designs and or standard without notice and without incurring any obligations.

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