

# **MODEL SS-5 RIGID COUPLING**

- Angle-Pad Design -

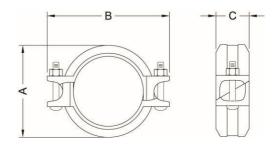
The *Shurjoint* Model SS-5 is an angle-pad design stainless steel coupling for use with Sch. 5S, Sch. 10S or Sch. 40S stainless steel pipe where a rigid connection is desired. The angle-pad design allows the coupling housings to slide along the bolt pads when tightened. The result is an offset clamping 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 "swingover" 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.





SS-5 couplings should always be installed so that the coupling bolt pads make metal to metal contact.

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.





Full warranty terms can be found on www.shurjoint.com

Nominal Size	Pipe 0.D.	Max. Working Pressure (CWP)*	Max End Load (CWP)	Axial Displacement†	- A	<u>Dimension</u> B	С	Size	Bolt	Weigh
in	in	PSI	Lbs	in	in	in	in	No.	in	Lbs
mm	mm	Bar	kN	mm	mm	mm	mm			Kgs
11/4	1.660	600	1298	0 ~ 0.05	2.60	4.00	1.81	2	3⁄8 x 21∕8	1.4
32	42.2	42	5.77	0 ~ 1.2	66	102	46			0.6
1½	1.900	600	1700	0 ~ 0.05	2.83	4.29	1.81	2	3/8 x 21/8	1.5
40	48.3	42	7.56	0 ~ 1.2	72	109	46			0.7
2	2.375	600	2657	0 ~ 0.07	3.35	4.61	1.85	2	3/8 X 23/4	1.7
50	60.3	42	11.82	0 ~ 1.7	85	117	47			0.8
21/2	2.875	600	3893	0 ~ 0.07	3.86	5.20	1.85	2	3/8 X 23/4	2.1
65	73.0	42	17.32	0 ~ 1.7	98	132	47			0.9
3	3.500	600	5770	0 ~ 0.07	4.45	5.83	1.88	2	3/8 x 23/4	2.6
80	88.9	42	25.67	0 ~ 1.7	113	148	48			1.2
4	4.500	600	9538	0 ~ 0.16	5.75	7.17	2.09	2	3/8 X 23/4	4.1
100	114.3	42	42.43	0 ~ 4.1	146	182	53			1.9
5	5.563	600	14576	0 ~ 0.16	6.89	9.02	2.09	2	½ x 3	5.7
125	141.3	42	64.84	0 ~ 4.1	175	229	53			2.6
6	6.625	600	20672	0 ~ 0.16	8.00	9.80	2.13	2	½ x 3	6.8
150	168.3	42	91.96	0 ~ 4.1	203	249	54			3.1
8	8.625	600	35038	0 ~ 0.19	10.40	12.99	2.52	2	5⁄8 x 43∕₄	13.4
200	219.1	42	155.86	0 ~ 4.8	264	330	64			6.1

<sup>\*</sup> The working pressure shown is based on roll-grooved Sch. 40S pipe. For other pipe schedules and cut-grooved pipe, see the below table. † 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.



# **Performance Data**

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.

Unit: psi/bar

Model SS-5 Rigid Coupling											
Nom. Size	<b>Cut-Grooved</b>	Roll-Grooved									
in / mm	Sch. 40S	Sch. 40S	Sch. 10S	Sch. 5S							
1¼	600	600	300	200							
32	42	42	20	14							
1½	600	600	300	200							
40	42	42	20	14							
2	600	600	300	200							
50	42	42	20	14							
2½	600	600	300	200							
65	42	42	20	14							
3	600	600	300	200							
80	42	42	20	14							
4	600	600	300	200							
100	42	42	20	14							
5	600	600	300	200							
125	42	42	20	14							
6	600	600	300	200							
150	42	42	20	14							
8	600	600	300	200							
200	42	42	20	14							

Proof test pressure: 1.5 times the listed working pressure. Burst pressure: 3 times the listed working pressure.

# **MATERIAL SPECIFICATIONS**

# Housing:

Type 304 Stainless steel to ASTM A351 CF8 or A743 Gr. CF8

- ☐ Type 316 to ASTM A743 CF8M
- ☐ Type 316L to ASTM A743 CF3M
- □ Type 316Ti to ASTM A240
- ☐ Super Duplex 2507 to ASTM A890 5A.
- □ Duplex 254SMO to ASTM A351 CK3McuN.

## Rubber Gaskets:

**Grade E-pw EPDM** (Color code: Double Green stripe) approved under NSF/ANSI 61 and NSF/ANSI 372 for potable water service to +180°F (+82°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, minerals oils, solvents and aromatic hydrocarbons.

Maximum Temperature Range: -30°F (-34°C) to +230°F (+110°C)\*.

\*EPDM seat for water services are not recommended for steam services unless valves or components are accessible for frequent replacement.

□ (Option) Grade "E" EPDM (Color code: 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, minerals oils,

#### solvents and aromatic hydrocarbons.

Maximum Temperature Range:  $-30^{\circ}F$  ( $-34^{\circ}C$ ) to  $+230^{\circ}F$  ( $+110^{\circ}C$ )\*.

\*EPDM seat for water services are not recommended for steam services unless valves or components are accessible for frequent replacement.

□ (Option) 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:  $-20^{\circ}F$  to  $+180^{\circ}F$  ( $-29^{\circ}C$  to  $+82^{\circ}C$ ). Do not use for HOT WATERabove  $+150^{\circ}F$  ( $+66^{\circ}C$ ) or HOT DRY AlRabove  $+140^{\circ}F$  ( $+60^{\circ}C$ )

Other options: Grade "O" Fluoroelastomer.
 Grade "L" Silicone.
 For additional details contact **Shurjoint**.

## · Bolts & Nuts:

Type 304 Stainless steel track bolts to A193 B-8 with heavy duty nuts to ASTM A194 B8, Molybdenum disulfide (MoS2) coated.

□ Type 316 Stainless steel track bolts to A193 B-8M with heavy duty nuts to ASTM B8M, Molybdenum disulfide (MoS₂) coated.





#### 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 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.