





# MODEL SS-7X STAINLESS STEEL RIGID COUPLING

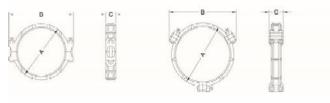
The Model SS-7X Stainless Steel Rigid Coupling is a tongue and groove rigid coupling designed to provide a rigid joint for stainless steel pipe in size 10" through 24". The SS-7X is supplied standard in CF8 (304) and CF8M (316) with 304 and 316 bolts and nuts. As an option this coupling can be supplied with small triangular teeth inside the key shoulder to prevent the pipe or component from rotating.



10"-14"

The bolts must be fastened to the required torque for proper installation.

16"-18"





20"-24"



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

WARRANTY

### Model SS-7X Stainless Steel Rigid Coupling

Nominal	Pipe	Max. Working Pressure	Max. End Load	Axial		Dimension	s	I	Bolt	Bolt	
Size	0.D.	(CWP)*	(CWP)	Displacement †	Α	В	C	No.	Size	Torque	Weight
in	in	PSI	Lbs	in	in	in	in	in	Lbs-Ft	Lbs	
mm	mm	Bar	kN	mm	mm	mm	mm			Nm	Kgs
10	10.750	600	54430	0-0.13	12.52	15.98	2.56	2	7∕8 x 6½	105 - 175	23.1
250	273.0	42	239.87	0-3.2	318	406	65			145 - 235	10.5
12	12.750	600	76567	0-0.13	14.72	17.78	2.56	2	7∕8 x 6½	105 - 175	23.3
300	323.9	42	337.66	0-3.2	374	452	65	2		145 - 235	11.5
250 JIS	10.528	600	52205	0-0.13	12.44	16.73	2.52	2	⅓ x 6½	105 - 175	18.7
200 010	267.4	42	230.13	0-3.2	316	425	64	2		145 - 235	8.5
300 JIS	12.539	600	74054	0-0.13	14.57	18.31	2.52	2	⅓ x 6½	105 - 175	21.6
200 212	318.5	42	326.49	0-3.2	370	465	64	2		145 - 235	9.8
14	14.000	400	61544	0-0.13	15.63	19.69	2.95	2	⅓ x 6½	105 - 175	33.0
350	355.6	28	277.94	0-3.2	397	500	75	2		145 - 235	15.0
16	16.000	400	80384	0-0.13	18.15	21.10	2.95	6	5∕8 x 3½	50 - 75	42.7
400	406.4	28	363.02	0-3.2	461	536	75	0		68 - 100	19.4
18	18.000	350	89019	0-0.13	20.24	23.11	2.95	6	5∕8 x 3½	50 - 75	55.0
450	457.2	24	393.82	0-3.2	514	587	75			68 - 100	25.0
20	20.000	350	109900	0-0.13	22.48	26.34	3.11	8	¾ x 4¾	65 - 150	72.8
500	508.0	24	486.19	0-3.2	571	669	79			85 - 200	33.1
22	22.000	300	113982	0-0.13	24.49	28.35	3.11	8	¾ x 4¾	65 - 150	72.6
550	558.8	20	490.24	0-3.2	622	720	79			85 - 200	33.0
24	24.000	300	135648	0-0.13	26.47	30.35	3.11	8	¾ x 4¾	65 - 150	76.3
600	609.6	20	583.43	0-3.2	673	771	79	0		85 - 200	34.7

\* The working pressure shown is based on roll-grooved Sch. 40S pipe. For other pipe schedules, see the below table on page 2.

† 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 <sup>3</sup>/<sub>4</sub>"/DN20 – 3<sup>1</sup>/<sub>2</sub>"/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/ba												
Model SS-7X Rigid Coupling												
Nom. Size	Cut-Grooved Roll-Grooved											
in / mm	Sch. 40S	Sch. 40S	Sch. 10S	Sch. 5S								
10	600	600	300	200								
250	42	42	20	14								
12	600	600	300	200								
300	42	42	20	14								
14	420	420	300	200								
350	28	28	20	14								
16	420	420	300	200								
400	28	28	20	14								
18	350	350	300	200								
450	24	24	20	14								
20	350	350	300	200								
500	24	24	20	14								
22	300	300	300	200								
550	20	20	20	14								
24	300	300	300	200								
600	20	20	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
- Duplex 2205 to ASTM A890 4A.
- □ Super Duplex 2507 to ASTM A890 5A.
- Duplex 254 SMO to ASTM A351 CK3McuN.

### • Rubber Gasket:

**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°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 "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°F (+66°C) or HOT DRY AIR above +140°F (+60°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 ( $MoS_2$ ) coated.

□ Type 316 Stainless steel track bolts to A193 B-8M with heavy duty nuts to ASTM B8M, Molybdenum disulfide (MoS<sub>2</sub>) 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 stainless steel pipe. For other pipe schedules or pipe materials, contact Shurjoint for additional information.
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- 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.

Shurjoint product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Shurjoint Technical Service. Shurjoint reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligations to make such changes and modifications on Shurjoint products previously subsequently sold.