

MODEL SS-7X STAINLESS STEEL RIGID COUPLING

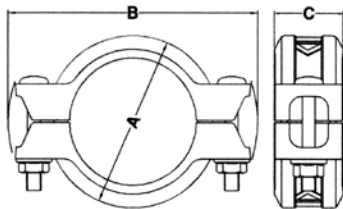
The Model SS-7X Stainless Steel Rigid Coupling is a tongue and groove rigid coupling designed to provide a rigid joint for stainless steel pipe in size 10" through 24". The SS-7X is supplied standard in CF8 (304) and CF8M (316) with 304 and 316 bolts and nuts. As an option this coupling can be supplied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



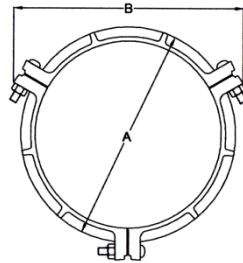
The bolts must be fastened to the required torque for proper installation.



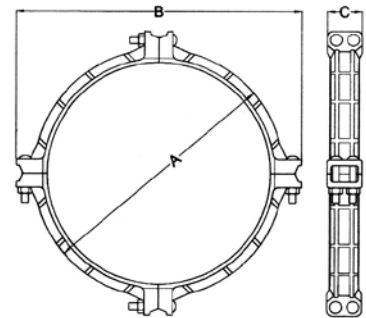
Full warranty terms can be found on www.shurjoint.com



10" ~ 14"



16" ~ 18"



20" ~ 24"

Model SS-7X Stainless Steel Rigid Coupling													
Nominal Size	Pipe OD	Max. Working Pressure (CWP)*	ASME/ANSI Pressure Class Rating ^A @100°F/@38°C	Max. End Load (CWP)	Axial Displacement †	Dimensions			Bolt No.	Bolt Size	Bolt Torque	Weight	
						A	B	C					
in	in	PSI	PSI	Lbs	in	in	in	in	in	Lbs-Ft	Lbs		
mm	mm	Bar	Nom. Class	kN	mm	mm	mm	mm	mm	Nm	Kgs		
10	10.750	600	300	54430	0-0.13	12.52	15.98	2.56	2	7/8 x 6 1/2	320 - 400	23.1	
250	273.0	41	150	239.87	0-3.2	318	406	65			434 - 542	10.5	
12	12.750	600	300	76567	0-0.13	14.72	17.78	2.56	2	7/8 x 6 1/2	320 - 400	23.3	
300	323.9	41	150	337.66	0-3.2	374	452	65			434 - 542	11.5	
250 JIS	10.528	600	300	52205	0-0.13	12.44	16.73	2.52	2	7/8 x 6 1/2	320 - 400	18.7	
	267.4	41	150	230.13	0-3.2	316	425	64			434 - 542	8.5	
300 JIS	12.539	600	300	74054	0-0.13	14.57	18.31	2.52	2	7/8 x 6 1/2	320 - 400	21.6	
	318.5	41	150	326.49	0-3.2	370	465	64			434 - 542	9.8	
14	14.000	400	300	61544	0-0.13	15.63	19.69	2.95	2	7/8 x 6 1/2	320 - 400	33.0	
350	355.6	28	150	277.94	0-3.2	397	500	75			434 - 542	15.0	
16	16.000	400	300	80384	0-0.13	18.15	21.10	2.95	6	5/8 x 3 1/2	360 - 520	42.7	
400	406.4	28	150	363.02	0-3.2	461	536	75			488 - 705	19.4	
18	18.000	350	300	89019	0-0.13	20.24	23.11	2.95	6	5/8 x 3 1/2	360 - 520	55.0	
450	457.2	24	150	393.82	0-3.2	514	587	75			488 - 705	25.0	

Model SS-7X Stainless Steel Rigid Coupling

Nominal Size	Pipe OD	Max. Working Pressure (CWP)*	ASME/ANSI Pressure Class Rating^ @100°F/38°C	Max. End Load (CWP)	Axial Displacement †	Dimensions			Bolt No.	Bolt Size	Bolt Torque	Weight
						A	B	C				
in mm	in mm	PSI Bar	PSI Nom. Class	Lbs kN	in mm	in mm	in mm	in mm	in	Lbs-Ft Nm	Lbs Kgs	
20 500	20.000 508.0	350 24	300 150	109900 486.19	0-0.13 0-3.2	22.48 571	26.34 669	3.11 79	8	¾ x 4¾	450 - 725 610 - 982	72.8 33.1
22 550	22.000 558.8	300 20	300 150	113982 490.24	0-0.13 0-3.2	24.49 622	28.35 720	3.11 79	8	¾ x 4¾	450 - 725 610 - 982	72.6 33.0
24 600	24.000 609.6	300 20	300 150	135648 583.43	0-0.13 0-3.2	26.47 673	30.35 771	3.11 79	8	¾ x 4¾	450 - 725 610 - 982	76.3 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.

^The ASME/ANSI pressure class rating is not the design or maximum pressure rating, rather is provided for those that are accustomed to specifying or using ASME/ANSI pressure class rated components such as flange, valves, etc.

† 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.

Model SS-7X Rigid Coupling			
Nom. Size	Roll-Grooved		
	Sch. 40S PSI / Bar	Sch. 10S PSI / Bar	Sch. 5S PSI / Bar
10 250	600 41	300 20	200 14
12 300	600 41	300 20	200 14
14 350	400 28	300 20	200 14
16 400	400 28	300 20	200 14
18 450	350 24	300 20	200 14
20 500	350 24	300 20	200 14
22 550	300 20	300 20	200 14
24 600	300 20	300 20	200 14

Proof test pressure: 1.5 times the listed working pressure.

Burst pressure: 2 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 254SMO to ASTM A351 CK3McuN.

• **Rubber Gaskets:**

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 gaskets for water services are not recommended for steam services unless couplings or components are accessible for frequent gasket 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 (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:

- **ASME/ANSI Pressure-Temperature Rating** is provided as an aid in selecting a proper coupling to incorporate with other piping components (valves, flanges, and etc.) that are used in the same system and carry the ASME/ANSI rating. Select a Class 150 coupling to incorporate with Class 150 valves and flanges.
- **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.
- **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.

Job Name:	System No.	Location:
Contractor:	Approved:	Date:
Engineer:	Approved:	Date:

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.