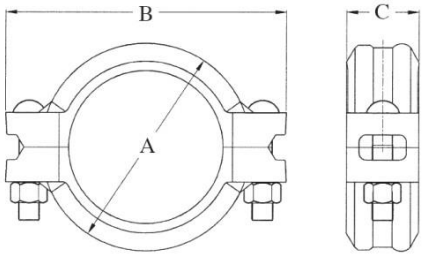
MODEL SS-8X STAINLESS STEEL HEAVY DUTY FLEXIBLE COUPLING

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 304 or 316 bolts, washers and Silicon Bronze nuts to help prevent galling during repetitive use.

SS-8X couplings should always be installed so that the coupling bolt pads make metal to metal contact.



10 YEAR LIMITED WARRANTY

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

Model SS-8X Stainless Steel Heavy Duty Flexible Coupling

Nominal Size	Pipe O.D.	Max. Working Pressure (CWP)*	Max. End Load	Axial Displacement †	Dimensions A	Dimensions B	Dimensions C	Deflection Degree †	Bolt Size		Weight
in *mm*	In *mm*	PSI *Bar*	Lbs *kN*	in *mm*	in *mm*	in *mm*	in *mm*	(°)	No.	in	Lbs *Kgs*
¾ *20*	1.050 *26.7*	750 *52*	1212 *5.39*	0 - 0.06 *0 - 1.6*	2.20 *56.0*	3.75 *95.0*	1.81 *46.0*	3 ° - 23’	2	⅜x 2⅛	1.5 *0.7*
1 *25*	1.315 *33.4*	750 *52*	1900 *8.45*	0 - 0.06 *0 - 1.6*	2.45 *63.0*	3.91 *99.0*	1.81 *46.0*	2 ° -45’	2	⅜x 2⅛	1.8 *0.8*
1¼ *32*	1.660 *42.2*	750 *52*	3028 *13.47*	0 - 0.06 *0 - 1.6*	2.82 *72.0*	4.37 *111.0*	1.81 *46.0*	2 ° -10’	2	⅜x 2⅛	2.0 *0.9*
1½ *40*	1.900 *48.3*	750 *52*	3967 *17.65*	0 - 0.06 *0 - 1.6*	3.06 *78.0*	4.82 *123.0*	1.81 *46.0*	1 ° -54’	2	⅜x 2⅛	2.2 *1.0*
2 *50*	2.375 *60.3*	750 *52*	6199 *27.58*	0 - 0.06 *0 - 1.6*	3.46 *88.0*	5.28 *134.0*	1.85 *47.0*	1 ° -31’	2	⅜x 2⅛	2.6 *1.2*
2½ *65*	2.875 *73.0*	750 *52*	9084 *40.41*	0 - 0.06 *0 - 1.6*	6.02 *153.0*	4.06 *103.0*	1.85 *47.0*	1 ° -15’	2	⅜x 2⅛	2.9 *1.3*
3 *80*	3.500 *88.9*	750 *52*	13463 *59.89*	0 - 0.06 *0 - 1.6*	4.71 *120.0*	6.74 *171.0*	1.85 *47.0*	1 ° -02’	2	½ x 3	4.0 *1.8*
4 *100*	4.500 *114.3*	750 *52*	22255 *99.00*	0 - 0.13 *0 - 3.2*	5.98 *152.0*	7.90 *201.0*	2.03 *52.0*	1 ° -36’	2	½ x 3	5.3 *2.4*
5 *125*	5.563 *141.3*	750 *52*	24293 *108.07*	0 - 0.13 *0 - 3.2*	7.13 *181.0*	9.80 *249.0*	2.09 *53.0*	1 ° -18’	2	⅝ x 3½	7.7 *3.5*
6 *150*	6.625 *168.3*	300 *20*	34454 *153.27*	0 - 0.13 *0 - 3.2*	8.19 *208.0*	10.85 *276.0*	2.09 *53.0*	1 ° -05’	2	⅝ x 3½	8.8 *4.0*
8 *200*	8.625 *219.1*	300 *20*	58397 *259.77*	0 - 0.13 *0 - 3.2*	10.53 *267.0*	13.43 *341.0*	2.44 *62.0*	0 ° -50’	2	¾ x 4¾	15.0 *6.8*
200 JIS	8.516 *216.3*	300 *20*	56930 *253.25*	0 - 0.13 *0 - 3.2*	10.39 *264.0*	13.31 *338.0*	2.44 *62.0*	0 ° -51’	2	¾ x 4¾	14.3 *6.5*

* The working pressure shown is based on cut-grooved Sch. 40S or 80S pipe. For other pipe schedules and roll-grooved pipe, see the below table on page 2.
† 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.

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-8X Heavy Duty Flexible Coupling				
Nom. Size	**Cut-Grooved**	**Roll-Grooved**		
in / mm	Sch. 40S	Sch. 40S	Sch. 10S	Sch. 5S
1 *25*	750 *52*	750 *52*	500 *35*	325 *22*
1 *25*	750 *52*	750 *52*	500 *35*	325 *22*
1¼ *32*	750 *52*	750 *52*	500 *35*	325 *22*
1½ *40*	750 *52*	750 *52*	500 *35*	325 *22*
2 *50*	750 *52*	750 *52*	500 *35*	325 *22*
2½ *65*	750 *52*	750 *52*	500 *35*	325 *22*
3 *80*	750 *52*	750 *52*	500 *35*	325 *22*
4 *100*	750 *52*	750 *52*	400 *28*	250 *17*
5 *125*	750 *52*	300 *20*	200 *14*	125 *9*
6 *150*	300 *20*	300 *20*	200 *14*	125 *9*
8 *200*	300 *20*	300 *20*	125 *9*	125 *9*

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

MATERIAL SPECIFICATIONS

• Housing:

Super duplex 2507 (CE3MN) to ASTM A890 Grade 5A

- ☐ Duplex 2205 (CD3MN) to ASTM Grade 4A
- ☐ Austenic 254SMO (CK3MCuN) to A743
- ☐ Type 304 Stainless steel to ASTM A351 CF8 or A743 Gr. CF8
- ☐ Type 316 to ASTM A743 CF8M
- ☐ Type 316L to ASTM A743 CF3M

• Rubber Gasket:

Grade E-pw EPDM (Color code: Double Green stripe) certified 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 or chloramines, 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.

- ☐ **Grade "E" EPDM** (Color code: Green stripe) Good for cold & hot water up to +200°F (+93°C). Also good for services for water with acid, water with chlorine or chloramines, 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 +200°F (+93°C)*.
  *EPDM seat for water services are not recommended for steam services unless valves or components are accessible for frequent replacement.

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- ☐ (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:

Type 304 or 316 stainless steel track bolts to ASTM A193 B-8M, Molybdenum disulfide (MoS_2) coated

• Nuts:

Silicon bronze heavy duty nuts to ASTM B98 C65100

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.
- ***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.