

## XH-1000 EXTRA HEAVY RIGID COUPLING



The Shurjoint Model XH-1000 is an extra heavy rigid coupling designed for high pressure services up to 1000 psi (70 Bar), supplied with a standard C-shaped gasket and heavy duty bolts and nuts. The coupling is painted in orange color. The Model XH-1000 can be installed on standard roll-grooved or standard cut-grooved pipes. The bolt pads are allowed up to 2mm gap when properly installed. The Model XH-1000 can be also used with stainless steel pipe. Please refer to below table for recommended bolt torque.





Sizes 2" through 4" require a bolt torque of 60 – 70 Lbs-Ft (80 – 95 Nm). Normally you can see some gaps between the bolt pads. Bolt pad gaps should be

equal on both sides of the coupling



Sizes 6" through 12" are designed to make a metalto-metal contact when properly installed.

Bolt	Size	Proper Torque Range				
(mm)	(in)	(Nm)	(lbs-ft)			
M10	3/8"	40-50	30-40			
M12	1/2"	120-150	90-110			
M16	5/8"	140-180	100-130			
M20	3/4"	200-270	150-200			
M22	7/8"	240-300	180-220			
M24	1"	270-340	200-250			

## material specification

Housing:

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

Surface Finish:

Orange paint.

Options: Hot dip galvanized

Rubber Gasket:

**Grade "T" Nitrile** C-shaped standard gasket (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 (+66oC).

Temperature range:  $-20^{\circ}$ F to  $+180^{\circ}$ F ( $-29^{\circ}$ C to  $+82^{\circ}$ C). Do not use for HOT WATER above  $+150^{\circ}$ F ( $+66^{\circ}$ C) or HOT DRY AIR above  $+140^{\circ}$ F ( $+60^{\circ}$ C).

Other options: Grade "E-pw" - EPDM

Grade "E" - EPDM

Grade "O" - Fluoroelastomer.

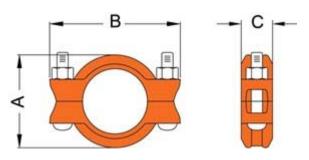
Grade "L" - Silicone.

For additional details contact Shurjoint.

• 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 heavyduty hexagonal nuts to ASTM A563.





Model XH-1000 Heavy Duty Flexible Coupling												
Normal Pipe Size O.D.	1		Max. End Load	Axial Displace	Dimensions		Bolt		Weight			
	(CWP)*	(CWP)	ment†	А	В	С	No.	Size				
in	in	psi	lbf	in	in	in	in		in	lbs		
mm	mm	bar	kN	mm	mm	mm	mm		mm	kg		
2	2.375	1000	4420	0 ~ 0.14	3.50	5.71	1.92	2	5/8 × 2 <sup>3</sup> / <sub>4</sub>	3.4		
50	60.3	69	19.98	0 ~ 3.6	90	145	49			1.6		
21/2	2.875	1000	6480	0 ~ 0.14	4.02	6.61	1.92	2	5/8 x 2 <sup>3</sup> / <sub>4</sub>	3.8		
65	73.0	69	29.28	0 ~ 3.6	102	168	49			1.7		
3	3.500	1000	9610	0 ~ 0.14	4.86	7.40	1.92	2	5/8 × 2 <sup>3</sup> / <sub>4</sub>	4.8		
80	88.9	69	43.43	0 ~ 3.6	123	188	49			2.2		
4	4.500	1000	15890	0 ~ 0.25	6.09	8.74	2.10	2	$\frac{3}{4} \times 4^{3}/4$	8.4		
100	114.3	69	71.79	0 ~ 6.4	155	222	53			3.8		
6	6.625	1000	34450	0 ~ 0.25	8.58	11.61	2.25	2	% × 5½	17.6		
150	168.3	69	155.65	0 ~ 6.4	218	295	57			8.0		
8	8.625	800	46710	0 ~ 0.25	10.83	14.33	2.75	2	1 x 5½	24.0		
200	219.1	55	207.26	0 ~ 6.4	275	364	70			10.9		
10	10.750	800	72570	0 ~ 0.25	13.15	16.70	2.95	2	1 x 5½	31.2		
250	273.0	55	321.78	0 ~ 6.4	334	424	75			14.2		
12	12.750	800	102080	0 ~ 0.25	15.35	18.90	2.95	2	1 x 5½	36.7		
300	323.9	55	452.95	0 ~ 6.4	390	480	75			16.7		

<sup>\*</sup> Working Pressure is based on roll grooved standard wall carbon steel pipe. Stated pressure ratings have been developed with a safety factor. Please see Shurjoint's 2017 online installation instructions for most recently updated instructions. Proper installation is important to proper performance.

Pressure ratings for use on cut grooved pipe, thin wall carbon steel pipe, and on stainless steel pipe can be found on Shurjoint publication <u>B-33</u>.

## 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.



<sup>†</sup> Allowable Axial Displacement 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 3/4" - 3/2"; 25% for 4" and larger to compensate for jobsite conditions.