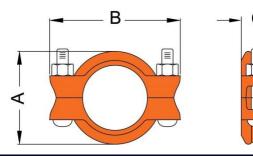


# **MODEL XH-1000 EXTRA HEAVY RIGID COUPLING**

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.



Bolt Size	9	Proper Torqu	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			





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

Model XH-1000 Extra Heavy Rigid Coupling										
Nominal		Max. Working Pressure	Max. End Load	Axial -	Dimensions			<u>!</u>		
Size	Pipe O.D.	(CWP)*	(CWP)	Displacement †	Α	В	С	No.	Size	Weight
in	in	PSI	Lbs	in	in	in	in		in	Lbs
mm	mm	Bar	kN	mm	mm	mm	mm			Kgs
<b>2</b> 50	2.375 60.3	1000 69	<b>4420</b> 19.98	0 ~ 0.14 0 ~ 3.6	3.50 90	5.71 145	1.92 <i>4</i> 9	2	5⁄8 x 2³⁄₄	3.4 1.6
<b>2½</b> 65	2.875 73.0	1000 69	6480 29.28	0 ~ 0.14 0 ~ 3.6	4.02 102	6.61 168	1.92 49	2	5/8 X 23/4	3.8 1.7
<b>3</b>	3.500 88.9	1000 69	9610 43.43	0 ~ 0.14 0 ~ 3.6	4.86 123	7.40 188	1.92 49	2	5/8 X 2 <sup>3</sup> / <sub>4</sub>	4.8
<b>4</b>	4.500 114.3	1000 69	15890 71.79	0 ~ 0.25 0 ~ 6.4	6.09 155	8.74 222	2.10 53	2	3/4 x 43/4	8.4 3.8
6 150	6.625 168.3	1000 69	34450 155.65	0 ~ 0.25 0 ~ 6.4	8.58 218	11.61 295	2.25 57	2	⅓ x 5½	17.6 8.0
<b>8</b> 200	8.625 219.1	800 55	<b>46710</b> 207.26	0 ~ 0.25 0 ~ 6.4	10.83 275	14.33 364	<b>2.75</b> 70	2	1 x 5½	<b>24.0</b> 10.9
10 250	10.750 273.0	800 55	<b>72570</b> 321.78	0 ~ 0.25 0 ~ 6.4	13.15 334	16.70 <i>4</i> 24	2.95 75	2	1 x 5½	31.2 14.2
<b>12</b> 300	<b>12.750</b> 323.9	<b>800</b> 55	102080 452.95	0 ~ 0.25 0 ~ 6.4	<b>15.35</b> 390	18.90 480	2.95 75	2	1 x 5½	<b>36.7</b> <i>16.7</i>

<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.

<sup>†</sup> 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  $\frac{3}{4}$ " -  $\frac{3}{4}$ "; 25% for 4" and larger to compensate for jobsite conditions.





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 metal-to-metal contact when properly installed.



## **Performance Data**

The following tables show the maximum working pressures (CWP) of **Shurjoint** Model XH-1000 Extra Heavy Rigid Coupling used on both carbon steel and stainless steel pipes. **Shurjoint** ductile iron couplings can be used in conjunction with stainless steel pipe in non-corrosive environment as the flow media does not come in direct contact with the coupling housings but rather only the gasket.

Model XH-1000 on Carbon Steel Pipe							
Nom. Size	Cut-G	rooved	Roll-Grooved				
in / mm	XS	STD	STD	Sch. 10	Sch. 7		
	PSI / Bar	PSI / Bar	PSI / Bar	PSI / Bar	PSI / Bar		
2	1000	1000	1000	750	NR		
50	69	69	69	52	IVIX		
21/2	1000	1000	1000	600	NR		
65	69	69	69	42	1414		
3	1000	1000	1000	600	NR		
80	69	69	69	42			
4	1000	1000	1000	600	NR		
100	69	69	69	42			
6	1000	1000	1000	450	NR		
150	69	69	69	31			
8	800	800	800	300	NR		
200	55	55	55	20			
10	800	800	800	300	NR		
250	55	55	55	20			
12	800	800	800	300	NR		
300	55	55	55	20			

Model XH-1000 on Stainless Steel Pipe							
Nom. Size	Cut-G	rooved	Roll-Grooved				
in / mm	Sch. 80S	Sch. 40S	Sch. 40S	Sch. 10S	Sch. 5S		
111 / //////	PSI / Bar	PSI / Bar	PSI / Bar	PSI / Bar	PSI / Bar		
2	1000	1000	750	700	NR		
50	69	69	52	48	1414		
21/2	1000	1000	750	700	NR		
65	69	69	52	48			
3	1000	1000	750	500	NR		
80	69	69	52	35	1417		
4	1000	1000	750	500	NR		
100	69	69	52	35	1417		
6	1000	1000	750	350	NR		
150	69	69	52	24	INIX		
8	800	800	650	350	NR		
200	55	55	45	24	INIX		
10	800	800	600	300	NR		
250	55	55	42	20	1417		
12	800	800	600	300	NR		
300	55	55	42	20	INIX		

## MATERIAL SPECIFICATIONS

## Housing:

Ductile Iron to ASTM A536, Gr. 65-45-12 and or ASTM A395, Gr. 65-45-15, min. tensile strength 65,000 psi (448 MPa).

#### Surface Finish:

Orange paint

☐ Options: Green paint
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  $+150^{\circ}F$  ( $+66^{\circ}C$ ).

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)

- Option: Gr. "E-pw" EPDM (Color code: Double Green Stripes), Good for cold +86°F (+30°C) and hot +180°F (+82°C) potable water services. EPDM is UL classified per NSF/ANSI 61 & NSF/ANSI 372.
- Other options: 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 heavy-duty hexagonal nuts to ASTM A563.

#### 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.