

# XH-1000

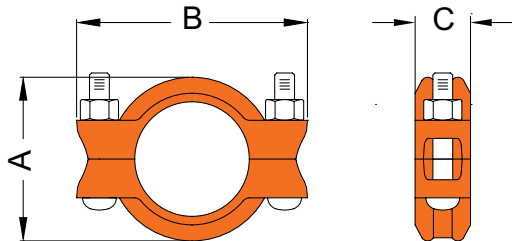
Extra Heavy Rigid Coupling



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

Sizes 2" through 4" require a bolt torque of 60 - 70 lb-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.

Job Name:	
Job Location:	
Engineer:	
Contractor:	
Tag:	
PO#:	
Rep:	
Wholesale Dist.:	



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.

## DIMENSIONS

NOMINAL SIZE	PIPE O.D.	MAX. WORKING PRESSURE (CWP)*	MAX. END LOAD (CWP)	AXIAL DISPLACEMENT †	DIMENSIONS			BOLT		WEIGHT
					A	B	C	NO.	SIZE	
in	in	PSI	lb	in	in	in	in			lb
mm	mm	Bar	kN	mm	mm	mm	mm		in	kg
2	2.375	1000	4430	0-0.14	3.50	5.71	1.92	2	5/8 x 2-3/4	3.4
50	60.3	69	19.7	0-3.6	90	145	49			1.6
2-1/2	2.875	1000	6492	0-0.14	4.02	6.61	1.92	2	5/8 x 2-3/4	3.8
65	73.0	69	28.9	0-3.6	102	168	49			1.7
3	3.500	1000	9621	0-0.14	4.86	7.40	1.92	2	5/8 x 2-3/4	4.8
80	88.9	69	42.8	0-3.6	123	188	49			2.2
4	4.500	1000	15904	0-0.25	6.09	8.74	2.10	2	3/4 x 4-3/4	8.4
100	114.3	69	70.7	0-6.4	155	222	53			3.8
6	6.625	1000	34472	0-0.25	8.58	11.61	2.25	2	7/8 x 5-1/8	17.6
150	168.3	69	153.3	0-6.4	218	295	57			8.0
8	8.625	800	46741	0-0.25	10.83	14.33	2.75	2	1 x 5-1/2	24.0
200	219.1	55	207.9	0-6.4	275	364	70			10.9
10	10.750	800	72610	0-0.25	13.15	16.70	2.95	2	1 x 5-1/2	31.2
250	273.0	55	323	0-6.4	334	424	70			14.2
12	12.750	800	10241	0-0.25	15.35	18.90	2.95	2	1 x 5-1/2	36.7
300	323.9	55	454.3	0-6.4	390	480	70			16.7

\* 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.

† 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 3/4" - 3-1/2"; 25% for 4" and larger to compensate for jobsite conditions.

## TORQUE VALUES

BOLT SIZE		PROPER TORQUE RANGE	
(MM)	(IN)	(NM)	(LB-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 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:

- Standard painted finishes in orange or RAL3000 red.
- Hot dip zinc galvanized (option).
- Green paint (option).

### RUBBER GASKET:

#### 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).**

#### (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 "O" - Fluoroelastomer

#### Grade "E" - EPDM

#### 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.

## 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.

### CARBON STEEL PIPE

NOM. SIZE	CUT-GROOVED		ROLL-GROOVED		
	XS	STD	STD	SCH. 10	SCH. 7
in	psi	psi	psi	psi	psi
mm	Bar	Bar	Bar	Bar	Bar
2	1000	1000	1000	750	NR
50	69	69	69	52	
2-1/2	1000	1000	1000	600	NR
65	69	69	69	42	
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	200	NR
300	55	55	55	14	

### STAINLESS STEEL PIPE

NOM. SIZE	CUT-GROOVED		ROLL-GROOVED		
	SCH. 80S	SCH. 40S	SCH. 40S	SCH. 10S	SCH. 5S
in	psi	psi	psi	psi	psi
mm	Bar	Bar	Bar	Bar	Bar
2	1000	1000	750	700	NR
50	69	69	52	48	
2-1/2	1000	1000	750	700	NR
65	69	69	52	48	
3	1000	1000	750	500	NR
80	69	69	52	35	
4	1000	1000	750	500	NR
100	69	69	52	34	
6	1000	1000	750	350	NR
150	69	69	52	24	
8	800	800	650	350	NR
200	55	55	45	24	
10	800	800	600	300	NR
250	55	55	41	20	
12	800	800	600	300	NR
300	55	55	41	20	

## 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).
- 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 1.5 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.