

## MODEL XH-70EP EXTRA HEAVY RIGID COUPLING

with End Protection (EP) Gasket

The **Shurjoint** Model XH-70EP coupling is an extra heavy rigid coupling for use with plastic coated pipe, cement-lined pipe or Sch. 40S or 80S stainless steel pipe. The coupling is capable of holding high pressure up to 2,500 psi (175 Bar) depending on pipe size when used in conjunction with machined EP cut-grooves and the applicable pipe. The coupling housings are painted black and supplied with an EP (End-Protection) gasket, which will permit a continuous connection of lined-surface of the pipe and also protect the pipe ends from corrosion. The standard EP gaskets are made of oil-resistant Nitrile compound.

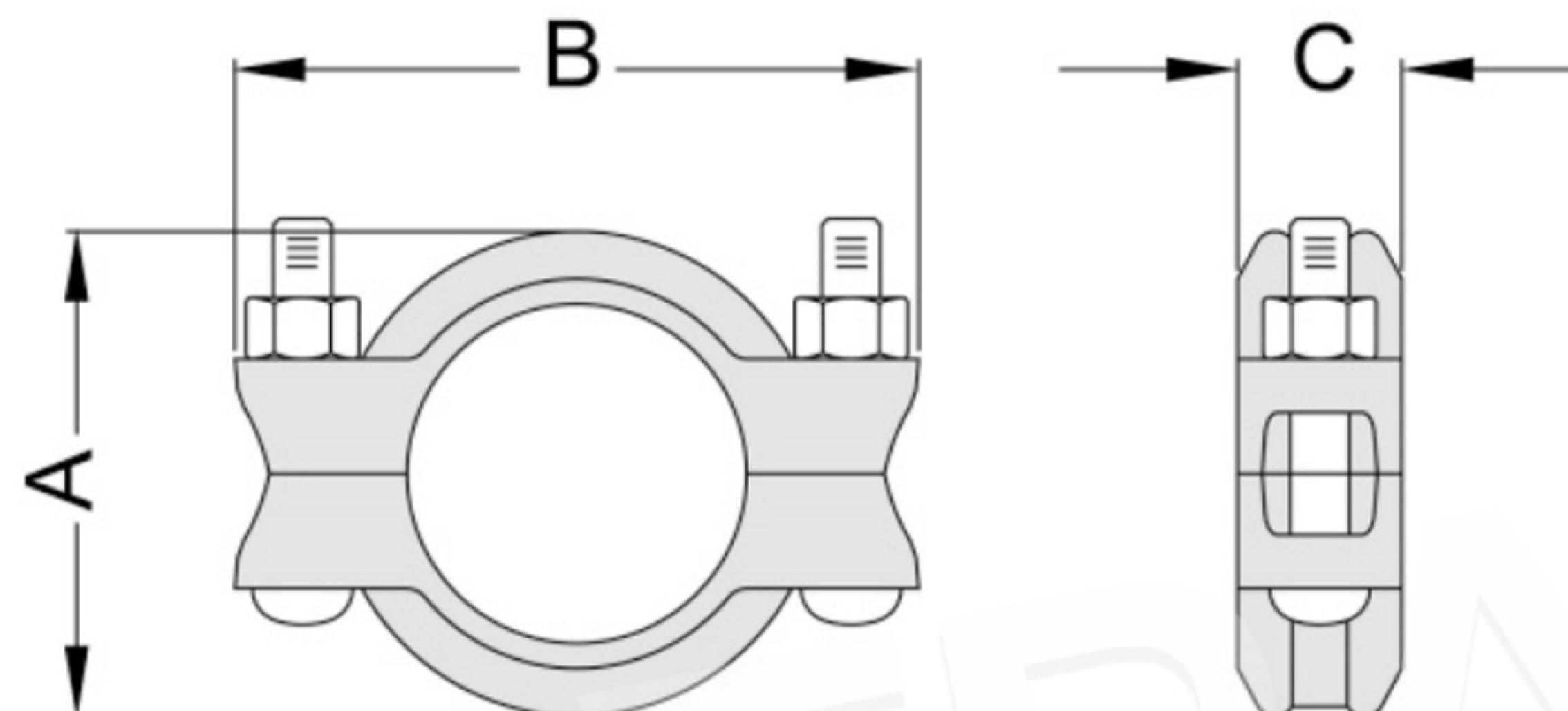
- XH-70EP couplings are not allowed to install on standard or commercial roll- or cut- grooved pipes. Pipe ends shall always be prepared with the **EP Cut-Grooves** which is shown in page 2.
- Always use the XH-70EP coupling with an **EP (End-Protection) gasket**. Do not use a C-shaped standard gasket with a XH-70EP coupling.



Always fasten the bolts to the required torque.



EP Gasket



Full warranty terms  
can be found on  
[www.shurjoint.com](http://www.shurjoint.com)

Model XH-70EP Extra Heavy Rigid Coupling with EP Gasket										
Nominal Size	Pipe O.D.	Max. Working Pressure (CWP)*	Max. End Load (CWP)	Dimensions			No.	Bolt Size	Bolt Torque	Weight
				A	B	C				
in	in	PSI	Lbs	in	in	in			Lbs-Ft	Lbs
mm	mm	Bar	kN	mm	mm	mm			Nm	Kgs
2	2.375	2500	11070	3.54	5.71	1.92	2	5/8 x 2 3/4	60 - 90	3.3
50	60.3	175	50.0	90	145	49			80 - 120	1.5
2 1/2	2.875	2500	16220	4.06	6.61	1.92	2	5/8 x 2 3/4	60 - 90	4.0
65	73.0	175	73.2	103	168	49			80 - 120	1.8
3	3.500	2500	24040	4.80	7.40	2.00	2	5/8 x 2 3/4	60 - 90	4.8
80	88.9	175	108.6	122	188	51			80 - 120	2.2
4	4.500	2500	39740	6.18	8.74	2.17	2	3/4 x 4 3/4	74 - 170	8.8
100	114.3	175	179.5	157	222	55			100 - 235	4.0
6	6.625	2000	68910	8.58	11.61	2.25	2	7/8 x 5 1/2	125 - 200	17.6
150	168.3	140	311.3	218	295	57			170 - 275	8.0
8	8.625	1500	116790	10.83	14.33	2.75	2	1 x 5 1/2	200 - 300	24.0
200	219.1	105	527.6	275	364	70			275 - 400	10.9
10	10.750	1250	113400	13.15	16.70	2.95	2	1 x 5 1/2	200 - 300	31.2
250	273.0	88	514.8	334	424	75			275 - 400	14.2
12	12.750	1250	159510	15.35	18.90	2.95	2	1 x 5 1/2	200 - 300	36.7
300	323.9	88	724.7	390	480	75			275 - 400	16.7

\* Working pressure is based on EP cut grooved XS, Sch. 80 pipe.

## MATERIAL SPECIFICATIONS

### • Housing:

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

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)**

### • Surface Finish:

Black enamel.

### • 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, 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)\*.

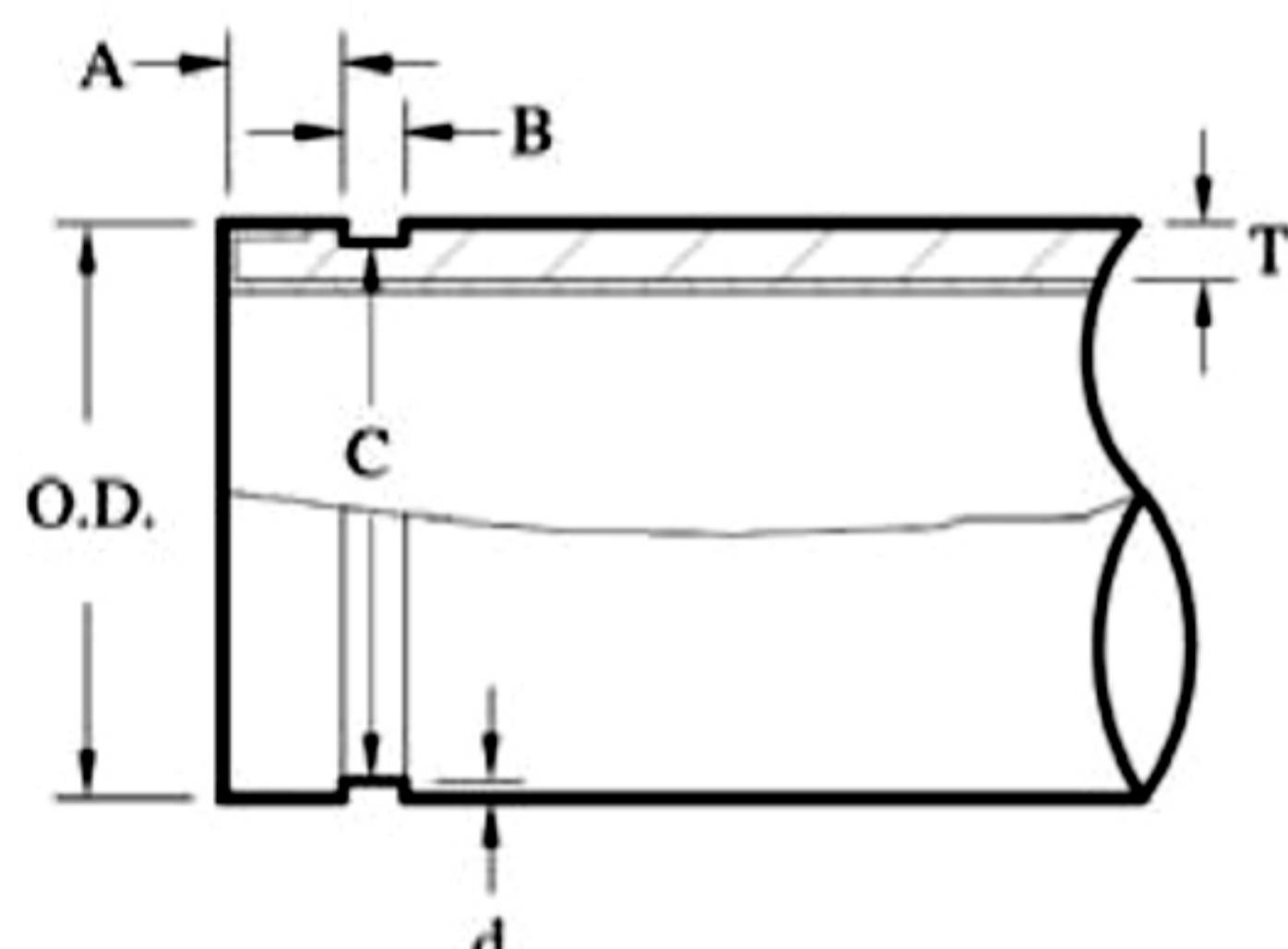
\*EPDM seat for water services are not recommended for steam services unless valves or components are accessible for frequent replacement.

**Grade "T" Nitrile "EP" gasket** (Color code: Orange stripe) Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range.

### • 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 ASTMA563

## “EP” End Protection Cut Grooving Dimensions for XH-70EP Couplings



Nom. Size	Pipe O. D.			Gasket Seat A Cut Groove		Groove Width B Cut Groove		Groove dia. C.		Grv. Depth d
	Basic	Tolerance		Basic	Tol. ±	Basic	Tol.+0.25/+0.010	Basic	Tol. +0 / +0.	(ref.)
		+	-							
2 in 50 mm	2.375 in 60.3 mm	+0.024	-0.024	0.562	±0.010	0.255	-0.005	2.250	-0.015	0.063
2½ in 65 mm	2.875 in 73.0 mm	+0.029	-0.029	0.562	±0.010	0.255	-0.005	2.720	-0.018	0.078
3 in 80 mm	3.500 in 88.9 mm	+0.035	-0.031	0.562	±0.010	0.255	-0.005	3.344	-0.018	0.078
4 in 100 mm	4.500 in 114.3 mm	+0.045	-0.031	0.605	±0.015	0.305	-0.005	4.334	-0.020	0.083
6 in 150 mm	6.625 in 168.3 mm	+0.063	-0.031	0.605	±0.015	0.305	-0.005	6.455	-0.022	0.085
8 in 200 mm	8.625 in 219.1 mm	+0.063	-0.031	0.714	±0.015	0.400	-0.010	8.441	-0.025	0.092
		+1.60	-0.79	18.14	±0.38	10.16	-0.25	214.40	-0.64	2.34

10 250	10.750 273.0	+0.063 +1.60	-0.031 -0.79	0.714 18.14	±0.015 ±0.38	0.400 10.16	-0.010 -0.25	10.562 268.28	-0.027 -0.69	0.094 2.39
12 300	12.750 323.9	+0.063 +1.60	-0.031 -0.79	0.714 18.14	±0.015 ±0.38	0.400 10.16	-0.010 -0.25	12.531 318.29	-0.030 -0.76	0.109 2.77

1. EP cut-grooves are for plastic coated or cement lined pipe to be connected with **Shurjoint XH-70EP** couplings only. Any coating applied to the gasket seat (A) and gasket width (B) should not exceed 0.25mm (0.010") thick. Do not roll groove pipe, which can damage the coating or lining and or create flared pipe ends.
2. Always use plain-end square cut pipe. Do not use beveled end pipe.
3. Always use an EP gasket with a XH-70EP coupling. Do not use a standard gasket.
4. The gasket seating area shall be free from deep scores, marks, or ridges that could prevent a positive seal.

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.

**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.