


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.



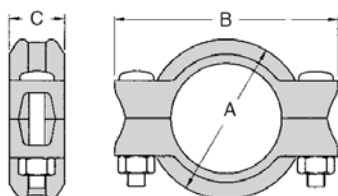
Pressure-Temperature Rating

Size	Nom. Rating	Working Pressure (XS, Sch.80, EP Cut-groove only)	Max. Service Temperature
2" – 4" 50 - 100	CWP	2500 psi @100°F 175 Bar @38°C	Nitrile: 180°F / 82°C
6" – 8" 150 - 200	CWP	2000 psi @100°F 140 Bar @38°C	
10" – 12" 250 - 300	CWP	1250 psi @100°F 88 Bar @38°C	

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

*Proof test pressure: 1.5 times the working pressure, non-shock cold water.

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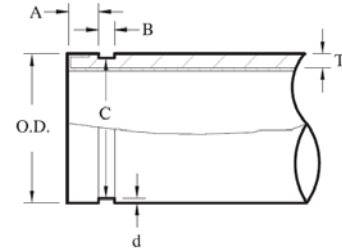


Model XH-70EP Extra Heavy Rigid Coupling with EP Gasket

Nominal Size	Pipe OD	Max. Working Pressure	Max. End Load	Dimensions			Bolt / Nut No.	Bolt / Nut Size	Bolt Torque	Weight
				A	B	C				
mm in	mm in	Bar PSI	kN Lbs	mm in	mm in	mm in	in	N-m Lbs - Ft	Kgs Lbs	
50 2	60.3 2.375	175 2500	50.0 11070	90 3.54	150 5.90	49 1.92	2	5/8 x 2 3/4	80 - 120 60 - 90	1.6 3.4
65 2 1/2	73.0 2.875	175 2500	73.2 16220	103 4.06	168 6.61	49 1.92	2	5/8 x 2 3/4	80 - 120 60 - 90	1.7 3.8
80 3	88.9 3.500	175 2500	108.6 24040	122 4.80	188 7.40	51 2.00	2	5/8 x 2 3/4	80 - 120 60 - 90	2.2 4.8
100 4	114.3 4.500	175 2500	179.5 39740	157 6.18	222 8.74	55 2.17	2	3/4 x 4 3/4	100 - 235 74 - 170	3.8 8.4
150 6	168.3 6.625	140 2000	311.3 68910	218 8.58	295 11.61	57 2.25	2	7/8 x 5 1/2	170 - 275 125 - 200	8.0 17.6
200 8	219.1 8.625	140 2000	527.6 116790	275 10.83	364 14.33	70 2.75	2	1 x 5 1/2	275 - 400 200 - 300	10.9 24.0
250 10	273.0 10.750	88 1250	514.8 113400	334 13.15	424 16.70	75 2.95	2	1 x 5 1/2	275 - 400 200 - 300	14.2 31.2
300 12	323.9 12.750	88 1250	724.7 159510	390 15.35	480 18.90	75 2.95	2	1 x 5 1/2	275 - 400 200 - 300	16.7 36.7

Pressure based on XS (Sch. 80) EP cut-groove pipes

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



Nom. Size	Pipe O. D.		Gasket Seat A Cut Groove		Gasket Width B Cut Groove			Groove dia. C.		Grv. Depth d (ref.)
	Basic	Tolerance	Basic	Tol. ±	Basic	Tol. +0.25/ +0.010	Basic	Tol. +0 / +0.		
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
in	in	in	in	in	in	in	in	in	in	
50	60.3	+0.61 -0.61	14.27	±0.25	6.48	-0.13	57.15	-0.38	1.60	
2	2.375	+0.024 -0.024	0.562	±0.010	0.255	-0.005	2.250	-0.015	0.063	
65	73.0	+0.74 -0.74	14.27	±0.25	6.48	-0.13	69.09	-0.46	1.98	
2½	2.875	+0.029 -0.029	0.562	±0.010	0.255	-0.005	2.720	-0.018	0.078	
80	88.9	+0.89 -0.79	14.27	±0.25	6.48	-0.13	84.94	-0.46	1.98	
3	3.500	+0.035 -0.031	0.562	±0.010	0.255	-0.005	3.344	-0.018	0.078	
100	114.3	+1.14 -0.79	15.37	±0.38	7.75	-0.13	110.08	-0.51	2.11	
4	4.500	+0.045 -0.031	0.605	±0.015	0.305	-0.005	4.334	-0.020	0.083	
150	168.3	+1.60 -0.79	15.37	±0.38	7.75	-0.13	163.96	-0.56	2.16	
6	6.625	+0.063 -0.031	0.605	±0.015	0.305	-0.005	6.455	-0.022	0.085	
200	219.1	+1.60 -0.79	18.14	±0.38	10.16	-0.25	214.40	-0.64	2.34	
8	8.625	+0.063 -0.031	0.714	±0.015	0.400	-0.010	8.441	-0.025	0.092	
250	273.0	+1.60 -0.79	18.14	±0.38	10.16	-0.25	268.28	-0.69	2.39	
10	10.750	+0.063 -0.031	0.714	±0.015	0.400	-0.010	10.562	-0.027	0.094	
300	323.9	+1.60 -0.79	18.14	±0.38	10.16	-0.25	318.29	-0.76	2.77	
12	12.750	+0.063 -0.031	0.714	±0.015	0.400	-0.010	12.531	-0.030	0.109	

- 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.
- Always use plain-end square cut pipe. Do not use beveled end pipe.
- Always use an EP gasket with a XH-70EP coupling. Do not use a standard gasket.
- The gasket seating area shall be free from deep scores, marks, or ridges that could prevent a positive seal.

MATERIAL SPECIFICATIONS

• Housing:

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

Also good for water services under +66°C (+150°F).

Temperature range: -29°C to +82°C (-20°F to +180°F).

Do not use for HOT WATER above +66°C (+150°F) or HOT DRY AIR above +60°C (+140°F)

• Surface Finish:

Black enamel.

• Bolts & Nuts:

Heat treated carbon manganese steel track bolts to ASTM A449-83a (or A183 Gr. 2), minimum tensile strength 758 MPa (110,000 psi), Zinc electroplated, with heavy-duty hexagonal nuts to ASTM A563.

• Rubber Gasket:

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.

General Notes:

- Pressure ratings listed are CWP (cold water pressure) or maximum working pressure within the service temperature range of the gasket used in the coupling. For additional information contact **Shurjoint**.
- Maximum working pressures and end loads listed are total of internal and external pressures and loads based on Sch. 40 steel pipe with roll grooves to ANSI/AWWA C606-07 specifications. For information on other pipe schedules contact **Shurjoint**.
- For one time field test only** the maximum joint working pressure may be increased 1½ times the figures shown.
- Warning:** Piping systems must always be depressurized and drained before attempting disassembly and or removal of any components.
- Shurjoint** reserves the right to change specifications, designs and or standard equipment without notice and without incurring any obligations.

Job Name:	System No.	Location:
Contractor:	Approved:	Date:
Engineer:	Approved:	Date:

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.