

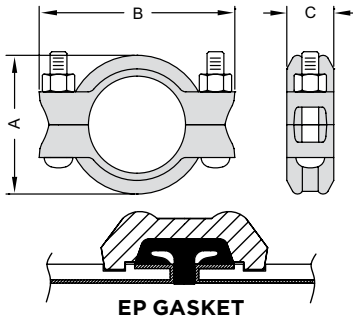
# XH-70EP

Extra Heavy Rigid Coupling with End Protection (EP) Gasket



Always fasten the bolts to the required torque.

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



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.
- 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.**

## 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	4420	0-0.14	3.50	5.71	1.92	2	5/8 x 2-3/4	3.4
50	60.3	69	19.98	0-3.6	90	145	49	2	5/8 x 2-3/4	1.6
2-1/2	2.875	1000	6480	0-0.14	4.02	6.61	1.92			3.8
65	73.0	69	29.28	0-3.6	102	168	49	2	5/8 x 2-3/4	1.7
3	3.500	1000	9610	0-0.14	4.86	7.40	1.92			4.8
80	88.9	69	43.43	0-3.6	123	188	49	2	5/8 x 2-3/4	2.2
4	4.500	1000	15890	0-0.25	6.09	8.74	2.10			8.4
100	114.3	69	71.79	0-6.4	155	222	53	2	3/4 x 4-3/4	3.8
6	6.625	1000	34450	0-0.25	8.58	11.61	2.25			17.6
150	168.3	69	155.65	0-6.4	218	295	57	2	7/8 x 5-1/8	8.0
8	8.625	800	46710	0-0.25	10.83	14.33	2.75			24.0
200	219.1	55	207.26	0-6.4	275	364	70	2	1 x 5-1/2	10.9
10	10.750	800	72570	0-0.25	13.15	16.70	2.95			31.2
250	273.0	55	321.78	0-6.4	334	424	70	2	1 x 5-1/2	14.2
12	12.750	800	102080	0-0.25	15.35	18.90	2.95			36.7
300	323.9	55	452.95	0-6.4	390	480	70	2	1 x 5-1/2	16.7

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

## 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:

- Black enamel.

### BOLTS & NUTS

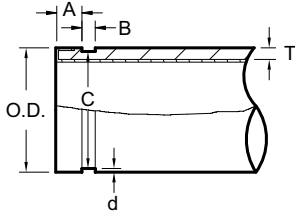
- Heat treated carbon manganese steel track bolts to ASTM A449-83a (or A183 Gr. 2), minimum tensile strength 110,000 psi (758 MPa), Zinc electroplated, with heavy-duty hexagonal nuts to ASTM A563.

### 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).**

## “EP” END PROTECTION CUT GROOVING DIMENSIONS FOR XH-70EP COUPLINGS



- EP cut-grooves are for plastic coated or cement lined pipe to be connected with Shurjoint XH-70EP couplings only. 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.

NOMINAL SIZE	PIPE O.D.			A		B		C		D GROOVE DEPTH (REF.)	T MIN. ALLOWED WALL THICKNESS
	BASIC	TOLERANCE		GASKET SEAT		GROOVE WIDTH		GROOVE DIA.			
		+	-	BASIC	TOL. ±	BASIC	TOL. +0.010 / +0.25	BASIC	TOL. +0 / +0		
in	in	in	in	in	in	in	in	in	in	in	in
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
2	2.375	+0.024	-0.024	0.562	±0.010	0.255	-0.005	2.250	-0.015	0.063	0.154
50	60.3	+0.61	-0.61	14.27	±0.25	6.48	-0.13	57.15	-0.38	1.60	3.91
2-1/2	2.875	+0.029	-0.029	0.562	±0.010	0.255	-0.005	2.720	-0.018	0.078	0.188
65	73.0	+0.74	-0.74	14.27	±0.25	6.48	-0.13	69.09	-0.46	1.98	4.78
3	3.500	+0.035	-0.031	0.562	±0.010	0.255	-0.005	3.344	-0.018	0.078	0.188
80	88.9	+0.89	-0.79	14.27	±0.25	6.48	-0.13	84.94	-0.46	1.98	4.78
4	4.500	+0.045	-0.031	0.605	±0.015	0.305	-0.005	4.334	-0.020	0.083	0.203
100	114.3	+1.14	-0.79	15.37	±0.38	7.75	-0.13	110.08	-0.51	2.11	5.16
6	6.625	+0.063	-0.031	0.605	±0.015	0.305	-0.005	6.455	-0.022	0.085	0.219
150	168.3	+1.60	-0.79	15.37	±0.38	7.75	-0.13	163.96	-0.56	2.16	5.56
8	8.625	+0.063	-0.031	0.714	±0.015	0.400	-0.010	8.441	-0.025	0.092	0.238
200	219.1	+1.60	-0.79	18.14	±0.38	10.16	-0.25	214.40	-0.64	2.34	6.05
10	10.750	+0.063	-0.031	0.714	±0.015	0.400	-0.010	10.562	-0.027	0.094	0.250
250	273.0	+1.60	-0.79	18.14	±0.38	10.16	-0.25	268.28	-0.69	2.39	6.35
12	12.750	+0.063	-0.031	0.714	±0.015	0.400	-0.010	12.531	-0.030	0.109	0.279
300	323.9	+1.60	-0.79	18.14	±0.38	10.16	-0.25	318.29	-0.76	2.77	7.09

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).
- 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.