

# Style HP-70ES EndSeal® Couplings

for Plastic Coated Pipe or for High Pressure Rigid Systems

## PRODUCT DESCRIPTION



The Victaulic® HP-70ES EndSeal® coupling incorporates a specially formulated and compounded oil-resistant nitrile gasket with a high modulus for resistance to extrusion. EndSeal gaskets have an integral central leg which positions between the pipe ends for use with plastic-coated or cement-lined pipe. The housings have a patented “come-along” design which aids in installation and draws the pipe ends securely into the central leg for a continuous lined-surface and lined-pipe end protection. The coupling permits higher pressure capabilities up to 2,500 psi (17235 kPa), depending upon size. HP-70ES housings are cast of ductile iron and supplied with plated, high tensile steel, track-head type bolts with nuts. HP-70ES housings in all sizes must be bolted securely to provide metal-to-metal contact at the bolt pads. A variety of high pressure fittings with EndSeal (ES) grooves are available for use with the HP-70ES couplings.

**HP-70ES couplings must always be used with pipe or fittings grooved to Victaulic “ES” dimensions. HP-70ES couplings cannot be used with Victaulic Series 700 butterfly valves.**



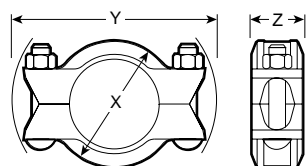
EndSeal on pipe



EndSeal with fittings

*Illustrations are exaggerated for clarity*

## DIMENSIONS



Pipe Size		Max. Work Press. PSI* kPa	Max. End Load Lbs.* N	Allow. Pipe End # Sep. In. mm	@ Bolt/Nut No. - Size Inches	Dimensions Inches/millimeters			Aprx. Weight Each Lbs. kg
Nominal Out. Dia. In./mm	Actual Out. Dia. In./mm					X	Y	Z	
2 50	2.375 60,3	2,500 17250	11,000 48950	0.19 4,8	2 - 5/8 X 2 3/4	3.44 87	6.51 165	1.88 48	3.2 1,5
2 1/2 65	2.875 73,0	2,500 17250	16,200 72090	0.19 4,8	2 - 5/8 X 3 1/2	4.00 102	7.10 180	1.88 48	4.0 1,8
3 80	3.500 88,9	2,500 17250	25,400 113030	0.19 4,8	2 - 5/8 X 3 1/2	4.69 119	7.74 197	1.88 48	4.6 2,1
4 100	4.500 114,3	2,500 17250	39,000 173550	0.19 4,8	2 - 3/4 X 4 1/4	5.94 151	9.54 242	2.13 54	8.2 3,7
6 150	6.625 168,3	2,000 13800	68,800 306160	0.27 6,7	2 - 7/8 X 5 1/2	8.50 216	12.61 320	2.38 60	16.4 7,4
8 200	8.625 219,1	1,500 10350	87,500 389375	0.27 6,7	2 - 1 X 5 1/2	10.94 278	14.97 380	2.75 70	26.0 11,8
10 250	10.750 273,0	1,250 8600	114,500 509525	0.28 7,1	2 - 1 X 6 1/2	13.43 341	17.22 437	2.88 73	37.2 16,9
12 300	12.750 323,9	1,250 8600	160,800 715560	0.28 7,1	2 - 1 X 6 1/2	15.56 395	19.06 484	3.00 76	42.0 19,1

See notes on page 2.

HP-70ES couplings must always be used with pipe or fittings grooved to Victaulic “ES” dimensions. HP-70ES couplings cannot be used with Victaulic Series 700 butterfly valves.

## MATERIAL SPECIFICATIONS

**Housing:** Ductile iron conforming to ASTM A-395, grade 65-45-15, and ASTM A-536, grade 65-45-12.

**Coating:** Black enamel

- **Optional:** Hot dipped galvanized and others

**Gasket\*:**

- **Grade “T” nitrile**

High modulus nitrile (special EndSeal design). Specially compounded with excellent oil resistance and a high modulus for resistance to extrusion. Temperature range: 20°F to +150° F (–29°C to +66°C). Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not recommended for hot water services over +150°F (+66°C) or for hot dry air over +140°F (+60°C). For maximum gasket life under pressure extremes, temperature should be limited to +110°F (+49°C).

\*Services listed are General Service Recommendations only. It should be noted that there are services for which these gaskets are not recommended. Reference should always be made to the latest Victaulic Gasket Selection Guide for specific gasket service recommendations and for a listing of services which are not recommended.

**Bolts/Nuts:** Electroplated, heat treated carbon steel, track-head type, conforming to physical properties of ASTM A-183, minimum tensile 110,000 psi (758340 kPa).

### NOTES

\* Working Pressure and End Load are total, from all internal and external loads, based on standard weight (ANSI) steel pipe, “**ES**” cut or roll grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1<sup>1/4</sup> times the figures shown.

# For field installation only. HP-70ES is essentially rigid and does not permit expansion and contraction.

HP-70ES couplings **must always** be used with pipe or fittings grooved to Victaulic “ES” dimensions. HP-70ES couplings cannot be used with Victaulic Series 700 butterfly valves.

@ Number of bolts required equals number of housing segments.

Metric thread size bolts are available (color coded gold) for all coupling sizes upon request. Contact Victaulic for details.

WARNING: Depressurize and drain the piping system before attempting to install, remove, or adjust any Victaulic piping products.

This product shall be manufactured by Victaulic Company. All products shall be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.