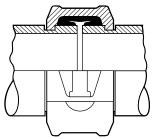
# Victaulic® Rigid Coupling Style HP-70







2 - 16"/50 - 400 mm sizes

Exaggerated for clarity

#### Approvals/Listings







See Victaulic publication 10.01 for details

See Victaulic publication 02.06 for portable water approvals if applicable.

### **Product Description**

Style HP-70 is designed with a heavy housing for high pressure service. The housing key is wider than standard and the coupling housing is designed to clamp the bottom of the groove, thus providing an essentially rigid joint. To achieve this rigidity it is necessary to torque the nuts on sizes  $2-4^{\prime\prime}/50-100$  mm to 60-80 ft. lbs./80 -110 Nm. The nuts on the 14 and 16"/350 and 400 mm sizes are torqued to 600 and 700 ft. lbs./810 and 950 Nm, respectively. All other sizes must be bolted securely metal-to-metal.

HP-70 will not allow linear or angular movement and is useful for valve connections and other points where rigidity is required. The coupling is provided with plated bolts and nuts and standard C-cross section gasket.

## **WARNING**

 Victaulic RX roll sets must be used when grooving light-wall/thin-wall stainless steel pipe for use with Victaulic Couplings.

Failure to use Victaulic RX roll sets when grooving light-wall/thin-wall stainless steel pipe may cause joint failure, resulting in serious personal injury and/or property damage.

#### NOTICE

 Victaulic RX grooving rolls must be ordered separately. They are identified by a silver color and the designation RX on the front of the roll sets.

#### Job/Owner

System No.	
Location	
Contractor	
Submitted By	
Date	

#### **Engineer**

Spec Section	
Paragraph	
Approved	
Date	



#### **Material Specifications**

#### Housing:

Ductile iron conforming to ASTM A-536, Grade 65-45-12. Ductile iron conforming to ASTM A-395, Grade 65-45-15, is available upon special request.

#### Housing Coating: (specify choice)

Standard: Orange enamel.

Optional: Hot dipped galvanized

#### Gasket: (specify choice1)

#### Grade "E" EPDM

EPDM (Green stripe color code). Temperature range –30°F to +230°F/–34°C to +110°C. May be specified for cold and hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. UL Classified in accordance with ANSI/NSF 61 for cold +73°F/+23°C and hot +180°F/+82°C potable water service and ANSI/NSF 372. NOT COMPATIBLE FOR PETROLEUM SERVICES.

#### Grade "T" Nitrile

Nitrile (Orange stripe color code). Temperature range -20°F to +180°F/-29°C to +82°C. May be specified for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not compatible for hot water services over +150°F/+66°C or for hot dry air over +140°F/+60°C.

1 Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets are not compatible. Reference should always be made to the latest <u>Victaulic Gasket Selection Guide</u> for specific gasket service guidelines and for a listing of services which are not compatible.

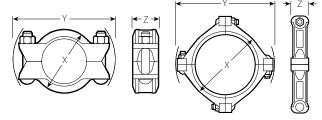
## **Bolts/Nuts:**

Heat-treated plated carbon steel, trackhead meeting the physical and chemical requirements of ASTM A-449 and physical requirements of ASTM A-183



#### **Dimensions**

#### Style HP-70



2 - 12" sizes

14 & 16" sizes

	Actual	Maximum		Allow.		Dimensions			Approx.
Nominal Size	Outside Diameter	Working Pressure <sup>2</sup>	Maximum End Load <sup>2</sup>	Pipe End Separation <sup>2</sup>	Bolt/Nut <sup>2</sup> <sup>3</sup>	X	Υ	Z	Weight Each
inches	inches	psi	lbs.	inches	(No.) size inches	inches	inches	inches	lbs.
mm	mm	kPa	N	mm		mm	mm	mm	kg
2	2.375	1000	4430	0.14	2- 5/8 x 23/4	3.50	6.68	2.00	3.2
50	60.3	6900	19715	3.6		89	168	51	1.5
2½	2.875	1000	6490	0.14	2-5% x 3½	4.13	7.13	2.00	4.0
65	73.0	6900	28881	3.6		105	181	51	1.8
3	3.500	1000	9620	0.14	2- 5/8 x 31/2	4.75	7.75	2.00	4.4
80	88.9	6900	42810	3.6		121	197	51	2.0
4	4.500	1000	15900	0.25	2- <sup>3</sup> / <sub>4</sub> x 4 <sup>1</sup> / <sub>4</sub>	6.00	9.63	2.13	7.5
100	114.3	6900	70755	6.4		152	245	54	3.4
6	6.625	1000	34470	0.25	2− % x 5½	8.63	12.68	2.50	16.0
150	168.3	6900	153390	6.4		219	321	64	7.3
8	8.625	800	46740	0.25	2– 1 x 5½	11.00	15.00	2.75	26.1
200	219.1	5500	207995	6.4		279	381	70	11.8
10	10.750	800	72640	0.25	2- 1 x 6½	13.50	17.25	3.00	32.8
250	273.0	5500	323250	6.4		343	438	76	14.9
12	12.750	800	102000	0.25	2- 1 x 6½	15.63	19.13	3.13	46.0
300	323.9	5500	453900	6.4		397	486	80	20.9
14 <sup>4</sup>	14.000	600	92360	0.25	2- 1¼ x 4½	16.75	22.00	3.88	64.0
350	323.9	4100	410800	6.4		425	559	99	29.0
16 <sup>4</sup>	16.000	600	120600	0.25	2- 1¼ x 4½	18.75	24.13	3.88	72.0
400	406.4	4100	536400	6.4		476	613	99	32.7

<sup>2</sup> Working Pressure and End Load are total, from all internal and external loads, based on standard weight (ANSI) steel pipe, standard roll or cut grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

#### **General Notes**

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.

WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1½ times the figures shown.

For field installation only. HP-70 couplings when sufficiently pressurized, will allow pipe ends to separate to maximum point shown before joint acts in a fully restrained manner.

#### Installation

Reference should always be made to the I-100 Victaulic Field Installation Handbook for the product you are installing. Handbooks are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

Refer to the Warranty section of the current Price List or contact Victaulic for details.

Note
This product shall be manufactured by Victaulic or to Victaulic specifications. All products to 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.

#### Trademarks

Victaulic® is a registered trademark of Victaulic Company.



<sup>3</sup> Number of bolts required equals number of housing segments.

<sup>4</sup> These sizes are not UL Listed or FM Approved. These sizes are not intended for use on Advanced Groove System (AGS) roll groove pipe.