

Victaulic® Installation-Ready™ Rigid Coupling

Style HP-170



2 – 6"/DN50 – DN150

1.0 PRODUCT DESCRIPTION

Available Size

- 2 – 6"/DN50 – DN150

Pipe Material

- Carbon steel
- For exceptions reference section 6.0 Notifications

Maximum Working Pressure

- Accommodates pressures ranging from full vacuum (29.9 in Hg/760 mm Hg) up to 1500 psi/10342 kPa

Operating Temperature

- -20°F to +180°F/-29°C to +82°C

Function

- Joins carbon steel pipe prepared with the Victaulic Original Groove System (OGS) or Victaulic EndSeal (ES) groove specifications
- Provides a rigid pipe joint designed to restrict axial and angular movement

Pipe Preparation

- Cut or roll grooved in accordance with [publication 25.01](#): Victaulic Standard Groove Specifications
- Cut or roll grooved in accordance with [publication 25.02](#): Victaulic EndSeal™ Groove Specifications

Codes and Requirements

- Hanger support spacing corresponds to ASME B31.1 Power Piping Code and ASME B31.9 Building Services Piping Code

2.0 CERTIFICATION/LISTINGS

Product designed and manufactured under the Victaulic Quality Management System, as certified by LPCB in accordance with ISO-9001:2015.

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.



3.0 SPECIFICATIONS - MATERIAL

Housing: Ductile iron conforming to ASTM A536, Grade 65-45-12. Ductile iron conforming to ASTM A395, Grade 65-45-15, is available upon special request.

Housing Coating:

Orange coating.

Gasket¹:

Grade "HMT" Nitrile

Nitrile (Orange and Yellow 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 with hot water services over +150°F/+66°C or for hot dry air over +140°F/+60°C.

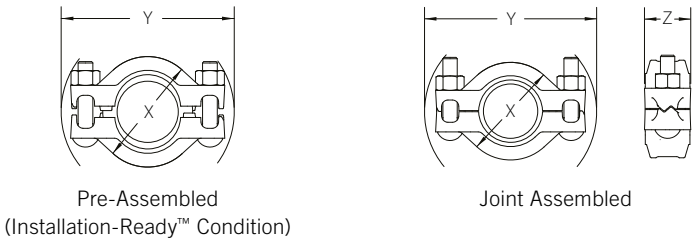
¹ Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets are not compatible. Reference should always be made to the latest [Victaulic Seal Selection Guide](#) for specific gasket service guidelines and for a listing of services which are not compatible.

Bolts/Nuts: (specify choice²)

Standard: Carbon steel oval neck track bolts meeting the mechanical property requirements of ASTM A449 (imperial) and ISO 898-1 Class 9.8 (M10-M16) Class 8.8 (M20 and greater). Carbon steel hex nuts meeting the mechanical property requirements of ASTM A563 Grade B (imperial - heavy hex nuts) and ASTM A563M Class 9 (metric - hex nuts). Track bolts and hex nuts are zinc electroplated per ASTM B633 Fe/Zn5, finish Type III (imperial) or Type II (metric).

4.0 DIMENSIONS

Style HP-170 Installation-Ready™ Rigid Coupling



Size		Pipe End Separation ²	Bolt/Nut		Dimensions					Weight
Nominal inches DN	Actual Outside Diameter inches mm	Allowable inches mm	Qty.	mm	Pre-Assembled (IR Condition)		Joint Assembled			Approx. (Each) lb kg
					X inches mm	Y inches mm	X inches mm	Y inches mm	Z inches mm	
2 DN50	2.375 60.3	0.19 4.8	2	5/8 x 3 1/4 M16 x 83	4.25 108	6.88 175	3.75 95	6.88 175	2.00 51	4.4 2.0
2 1/2	2.875 73.0	0.19 4.8	2	5/8 x 3 1/4 M16 x 83	4.75 121	7.38 187	4.38 111	7.50 191	2.13 54	5.0 2.3
3 DN80	3.500 88.9	0.19 4.8	2	5/8 x 4 M16 x 102	5.63 143	8.25 210	5.13 130	8.50 216	2.13 54	6.8 3.1
4 DN100	4.500 114.3	0.25 6.4	2	3/4 x 4 5/8 M20 x 117	7.13 181	10.13 257	6.38 162	10.25 260	2.25 57	9.6 4.4
6 DN150	6.625 168.3	0.25 6.4	2	7/8 x 6 M22 x 152	9.75 248	13.25 337	9.00 229	13.13 333	2.38 60	19.0 8.6

² Style HP-170 rigid couplings are considered rigid connections and will not accommodate expansion/contraction or angular movement of the piping system. Contact Victaulic for torsional resistance information. For field installation only. Style HP-170 couplings when sufficiently pressurized will allow pipe ends to separate to maximum value shown.

5.0 PERFORMANCE

Style HP-170 Installation-Ready™ Rigid Coupling

ANSI Standard


Size	Actual Outside Diameter	Wall Thickness	Schedule 40	
			Performance	
			Maximum Working Pressure ¹	Maximum Permissible End Load ¹
inches DN	inches mm	inches mm	psi kPa	lbs N
2 DN50	2.375 60.3	0.154 3.9	1500 10342	6640 29560
2 ½	2.875 73.0	0.203 5.2	1500 10342	9730 43316
3 DN80	3.500 88.9	0.216 5.5	1500 10342	14400 64196
4 DN100	4.500 114.3	0.237 6.0	1500 10342	23800 106118
6 DN150	6.625 168.3	0.280 7.1	1500 10342	51500 230006







¹ Working Pressure and End Load are total, from all internal and external loads, based on standard weight (ANSI) steel pipe, “OGS” or “ES” cut or roll grooved in accordance with Victaulic specifications.

NOTES

- WARNING: FOR ONE-TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1 ½ times the figures shown.
- Victaulic® Original Groove System (OGS) ductile iron fittings may be used with HP-170 couplings up to the maximum working pressure of the fittings (1000psi 2 – 6"/DN50 – DN150).


6.0 NOTIFICATIONS

 **WARNING**



- Read and understand all instructions before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Always confirm that any equipment, branch lines, or sections of piping that may have been isolated for/during testing or due to valve closures/positioning are identified, depressurized, and drained immediately prior to working with an end cap.
- Wear safety glasses, hardhat, and foot protection.

Failure to follow these instructions could result in death or serious personal injury and property damage.

 **WARNING**

- When assembling Style HP-170 Couplings onto end caps, take additional time to inspect and verify that the end cap is seated fully against the center leg of the gasket. Always read and follow the installation instructions provided with the product; these instructions can be downloaded at Victaulic.com.
- Use only Victaulic End Caps containing the “QV” or “EZ QV” marking on the inside face.
- Always read and follow the I-ENDCAP, Victaulic End Cap Installation Safety Instructions, which can be downloaded at Victaulic.com.
- Victaulic recommends the use of Victaulic fittings with Style HP-170 Couplings.

Failure to follow these instructions could result in death or serious personal injury and property damage.

NOTICE

- Victaulic does not recommend the use of any furnace butt-welded pipe with sizes NPS 2”/DN50 and smaller Victaulic gasketed joint products. This includes, but is not limited to, ASTM A53 Type F pipe.

7.0 REFERENCE MATERIALS

[05.01: Victaulic Seal Selection Guide](#)

[06.15: Victaulic Pressure Ratings and End Loads for Victaulic Couplings on Steel Pipe](#)

[07.01: Victaulic Grooved End Fittings](#)

[07.03: Victaulic EndSeal™ Extra Strong Fittings](#)

[25.01: Victaulic Standard Groove Specifications](#)

[26.01: Victaulic Design Data](#)

[29.01: Victaulic Terms and Conditions of Sale](#)

[I-100: Victaulic Field Installation Handbook](#)

[I-HP-170: Victaulic Installation Instructions – Style HP-170 Installation-Ready™ Rigid Coupling](#)

[I-ENDCAP: Victaulic End Cap Installation Safety Instructions](#)

[I-IMPACT: Victaulic Impact Tool Usage Guidelines](#)

User Responsibility for Product Selection and Suitability

Each user bears final responsibility for making a determination as to the suitability of Victaulic products for a particular end-use application, in accordance with industry standards and project specifications, as well as Victaulic performance, maintenance, safety, and warning instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, installation guide, or this disclaimer.

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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.

Installation

Reference should always be made to the Victaulic installation handbook or installation instructions of the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

Warranty

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

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