

Victaulic® FireLock™ Rigid Coupling

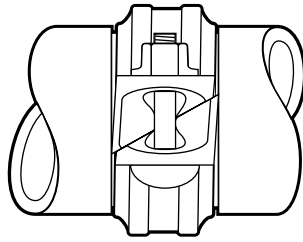
Style 005H



10.02



Patented



Exaggerated for clarity

1.0 PRODUCT DESCRIPTION

Available Sizes

- 1 ¼ – 8"/DN32 – DN200

Maximum Working Pressure

- Up to 350 psi/2413 kPa

Function

- Joins carbon steel pipe with grooved ends conforming to [publication 25.01](#)
- This product is designed for fire protection systems only

Pipe Material

- Schedule 10, Schedule 40 or specialty carbon steel pipe listed in Section 5. For use with alternative materials and wall thicknesses please contact Victaulic
- For exceptions reference section 6.0 Notifications

2.0 CERTIFICATION/LISTINGS



104-1a/02

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 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)

Orange coating.

Red coating (standard for EMEA-I and Asia Pacific).

Optional: Hot dipped galvanized.

Coupling Gasket (specify choice):

Grade “E” EPDM Type A Vic-Plus™ Gasket System¹

EPDM (Violet color code). FireLock products have been Listed by Underwriters Laboratories Inc. and Approved by Factory Mutual Research for wet and dry (oil free air) sprinkler services up to the rated working pressure using the Grade “E” Type A Vic-Plus™ Gasket System, requiring no field lubrication for most installation conditions.

Grade “L” silicone

Recommended for dry heat, air without hydrocarbons to +350°F and certain chemical service.

For dry services, Victaulic continues to recommend the use of Grade “E” Type A FlushSeal® Gasket. Contact Victaulic for details.

¹ Standard gasket and FlushSeal gasket approved for dry pipe systems to –40°F/–40°C. Based on “typical” pipe surface conditions, supplemental lubricant is recommended for services installed below 0°F/–18°C and for all dry pipe systems or systems to be subjected to air tests prior to being filled with water. Supplemental lubrication may also be required on pipe with raised or undercut weld seams or pipe that has voids and/or cracks at the weld seams. Victaulic continues to recommend the use of FlushSeal gaskets for dry services.

NOTE

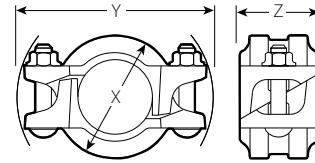
- Additional gasket styles are available. Contact Victaulic for details.

Bolts/Nuts: Carbon steel oval neck track bolt(s) 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) and ASTM A563M Class 9 (metric). Track bolts and hex nuts are zinc electroplated per ASTM B633 Fe/Zn 5, finish Type III (imperial) or Type II (metric).

4.0 DIMENSIONS

Style 005H

Rated for wet and dry sprinkler systems at 350 psi/2413 kPa for 1 ¼ – 4"/32 – 100 mm sizes and 300 psi /2068 kPa for 4 ¼ – 8"/108 – 200 mm sizes; Schedule 10 roll grooved or Schedule 40 cut or roll grooved steel pipe. Style 005H is rigid and does not accommodate expansion, contraction or angular deflection.



Style 005H

Size		Maximum Working Pressure ^{1 4}	Maximum End Load ¹	Allow. Pipe End Separation ²	Bolt/Nut ³	Dimensions			Approx. Weight Each
Nominal	Actual Outside Diameter					X	Y	Z	
inches	inches	psi	lbs	inches	No –size	inches	inches	inches	lbs
mm	mm	kPa	N	mm	inches	mm	mm	mm	kg
1 ¼	1.660	350	755	0.05	2 – ¾ × 2 ¼	2.75	4.50	1.88	1.2
32	42.4	2413	3370	1.2		70	114	48	0.5
1 ½	1.900	350	990	0.05	2 – ¾ × 2 ¼	3.00	4.75	1.88	1.2
40	48.3	2413	4415	1.2		76	121	48	0.5
2	2.375	350	1550	0.07	2 – ¾ × 2 ½	3.50	5.25	1.88	1.6
50	60.3	2413	6900	1.7		89	133	48	0.7
2 ½	2.875	350	2270	0.07	2 – ¾ × 2 ½	4.00	5.75	1.88	1.9
65	73.0	2413	10110	1.7		102	146	48	.09
76.1 mm	3.000	350	2475	0.07	2 – ¾ × 2 ½	4.13	5.75	1.88	1.9
	76.1	2413	11010	1.7		105	146	48	0.9
3	3.500	350	3365	0.07	2 – ¾ × 2 ½	4.63	6.13	1.88	2.1
80	88.9	2413	14985	1.7		118	156	48	1.0
4	4.500	350	5565	0.16	2 – ¾ × 2 ½	5.75	7.25	2.13	3.1
100	114.3	2413	24770	4.1		146	184	54	1.4
108.0 mm	4.250	300	4255	0.16	2 – ¾ × 2 ½	5.63	7.25	2.13	3.1
	108.0	2068	18940	4.1		143	184	54	1.4
5	5.563	300	7290	0.16	2 – ½ × 3	6.88	9.00	2.13	4.5
125	141.3	2068	32445	4.1		175	229	54	2.0
133.0 mm	5.250	300	6495	0.16	2 – ½ × 2 ¾	6.63	9.00	2.13	4.5
	133.0	2068	28900	4.1		168	229	54	2.0
139.7 mm	5.500	300	7125	0.16	2 – ½ × 2 ¾	6.88	9.00	2.13	4.8
	139.7	2068	31715	4.1		175	229	54	2.2
6	6.625	300	10340	0.16	2 – ½ × 3	8.00	10.00	2.13	5.0
150	168.3	2068	46020	4.1		203	254	53	2.3
159.0 mm	6.250	300	9200	0.16	2 – ½ × 2 ¾	7.63	10.00	2.13	5.5
	159.0	2068	40955	4.1		194	254	54	2.5
165.1 mm	6.500	300	9955	0.16	2 – ½ × 3	8.15	10.00	2.13	5.5
	165.1	2068	44295	4.1		207	254	54	2.5
8	8.625	300	17525	0.19	2 – ¾ × 4 ¼	10.50	13.14	2.63	11.3
200	219.1	2068	78000	4.8		267	334	67	5.1

¹ 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. WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1½ times the figures shown.

² The allowable pipe separation dimension shown is for system layout purposes only. Style 005H couplings are considered rigid connections and will not accommodate expansion or contraction of the piping system.

³ 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.

⁴ Style 005H couplings are VdS and LPC Approved to 16 Bar/235 psi.

5.0 PERFORMANCE

Style 005H

The information provided below is based on the latest listing and approval data at the time of publication. Listings/ Approvals are subject to change and/or additions by the approvals agencies.

Contact Victaulic for performance on other pipe and the latest listings and approvals.

Related Working Pressure					Related Working Pressure					Related Working Pressure				
psi					psi					psi				
Pipe Sch.	Size	UL	ULC	FM	Pipe Sch.	Size	UL	ULC	FM	Pipe Sch.	Size	UL	ULC	FM
	inches					inches					inches			
5	1¼ – 3	175	175	175	EL	1¼ – 2	300	N/A	N/A	MT	1¼ – 2	300	N/A	N/A
10, 40	1¼ – 3	350	350	350	ET	1¼ – 2	300	N/A	N/A	STF	1¼ – 4	N/A	N/A	300
	5 – 8	300	300	300	EZ	4 – 6	300 ⁶	N/A	300	Steady Thd.	1¼ – 2	N/A	N/A	300
BLT	1¼ – 2	300	300	N/A	FF	1¼ – 4	N/A	N/A	300	TF	3 – 8	N/A	N/A	300
DF	1¼ – 4	300	300	300	GAL -7	1¼ – 2	300	N/A	N/A	WLS	1¼ – 2	300	300	N/A
DT	1¼ – 2	300	300	N/A	MLT	1¼ – 2	300	N/A	N/A	XL	1¼ – 3	300	300	300
EF	1¼ – 4	175 ⁷	N/A	175	MF	1¼ – 4	300	N/A	300 ⁵					


⁵ FM approved for service in 1½ – 4" pipe.

⁶ UL Listed for service up to 4" pipe only.

⁷ UL Listed for service up to 3" only.

6.0 NOTIFICATIONS

⚠ WARNING



- Read and understand all instructions before attempting to install any Victaulic products.
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Wear safety glasses, hardhat, and foot protection.

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

- These products shall be used only in fire protection systems that are designed and installed in accordance with current, applicable National Fire Protection Association (NFPA 13, 13D, 13R, etc.) standards, or equivalent standards, and in accordance with applicable building and fire codes. These standards and codes contain important information regarding protection of systems from freezing temperatures, corrosion, mechanical damage, etc.
- The installer shall understand the use of this product and why it was specified for the particular application.
- The installer shall understand common industry safety standards and potential consequences of improper product installation.
- It is the system designer's responsibility to verify suitability of materials for use with the intended fluid media within the piping system and external environment.
- The material specifier shall evaluate the effect of chemical composition, pH level, operating temperature, chloride level, oxygen level, and flow rate on materials to confirm system life will be acceptable for the intended service.

Failure to follow installation requirements and local and national codes and standards could compromise system integrity or cause system failure, resulting in death or serious personal injury and property damage.

NOTICE

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

7.0 REFERENCE MATERIALS

- [10.01 Victaulic Products for Fire Protection Piping Systems – Regulatory Approval Reference Guide](#)
- [I-100 Victaulic Field Installation Handbook](#)

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, and the applicable building codes and related regulations 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 WeChat.

Warranty

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

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