

Victaulic® FireLock™ Rigid Coupling

Style 005H



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 contact Victaulic.
- For exceptions reference [Section 6.0 Notifications](#)

2.0 CERTIFICATIONS/LISTINGS



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.

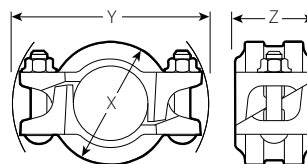
NOTE

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

Bolts/Nuts: Carbon steel oval neck track bolts meeting the mechanical property requirements of (imperial) ASTM A449 or (metric) ISO 898-1 Class 9.8 (M10-M16) or Class 8.8 (M20 and greater). Carbon steel hex nuts meeting the mechanical property requirements of (imperial hex nuts) ASTM A563 Grade B or (metric hex nuts) ISO 898-2 Class 10 (M12-M16) or Class 8 (M20 and greater). Track bolts and hex nuts are zinc electroplated per ASTM B633 Fe/Zn5, finish (imperial) Type III or (metric) Type II.

4.0 DIMENSIONS

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Size		Pipe End Separation ¹	Bolt/Nut ²		Dimensions			Weight
Nominal inches DN	Actual Outside Diameter inches mm	Allowable inches mm	Quantity	Imperial Size inches	X inches mm	Y inches mm	Z inches mm	Approx (Each) lbs kg
1 ¼ DN32	1.660 42.4	0.05 1.3	2	¾ × 2 ¼	2.75 70	4.50 114	1.88 48	1.2 0.5
1 ½ DN40	1.900 48.3	0.05 1.3	2	¾ × 2 ¼	3.00 76	4.75 120	1.88 48	1.2 0.5
2 DN50	2.375 60.3	0.07 1.8	2	¾ × 2 ½	3.50 88	5.25 134	1.88 48	1.6 0.7
2 ½	2.875 73.0	0.07 1.8	2	¾ × 2 ½	4.00 102	5.75 146	1.88 48	1.9 .09
DN65	3.000 76.1	0.07 1.8	2	¾ × 2 ½	4.13 104	5.75 146	1.88 48	1.9 0.9
3 DN80	3.500 88.9	0.07 1.8	2	¾ × 2 ½	4.63 118	6.13 156	1.88 48	2.1 1.0
4 DN100	4.500 114.3	0.16 4.1	2	¾ × 2 ½	5.75 146	7.25 184	2.13 54	3.1 1.4
	4.250 108.0	0.16 4.1	2	¾ × 2 ½	5.63 143	7.25 184	2.13 54	3.1 1.4
	5.250 133.0	0.16 4.1	2	½ × 2 ¾	6.63 168	9.00 229	2.13 54	4.5 2.0
DN125	5.500 139.7	0.16 4.1	2	½ × 2 ¾	6.88 174	9.00 228	2.13 54	4.8 2.2
5	5.563 141.3	0.16 4.1	2	½ × 3	6.88 174	9.00 228	2.13 54	4.5 2.0
	6.250 159.0	0.16 4.1	2	½ × 2 ¾	7.63 194	10.00 254	2.13 54	5.5 2.5
	6.500 165.1	0.16 4.1	2	½ × 3	8.15 208	10.00 254	2.13 54	5.5 2.5
6 DN150	6.625 168.3	0.16 4.1	2	½ × 3	8.00 204	10.00 254	2.13 54	5.0 2.3
8 DN200	8.625 219.1	0.19 4.8	2	⅝ × 4 ¼	10.50 266	13.14 334	2.63 66	11.3 5.1

¹ The allowable pipe end 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.

² 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.

5.0 PERFORMANCE

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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.

Size		Maximum Working Pressure ^{3 4}	Maximum End Load ³
Nominal inches DN	Actual Outside Diameter inches mm		
1 ¼ DN32	1.660 42.4	350 2413	755 3358
1 ½ DN40	1.900 48.3	350 2413	990 4404
2 DN50	2.375 60.3	350 2413	1550 6894
2 ½	2.875 73.0	350 2413	2270 10,098
DN65	3.000 76.1	350 2413	2475 11,010
3 DN80	3.500 88.9	350 2413	3365 14,968
4 DN100	4.500 114.3	350 2413	5565 24,754
	4.250 108.0	300 2068	4255 18,928
	5.250 133.0	300 2068	6495 28,892
DN125	5.500 139.7	300 2068	7125 31,694
5	5.563 141.3	300 2068	7290 32,428
	6.250 159.0	300 2068	9200 40,924
	6.500 165.1	300 2068	9955 44,282
6 DN150	6.625 168.3	300 2068	10,340 45,994
8 DN200	8.625 219.1	300 2068	17,525 77,956

³ 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.

⁴ Style 005H couplings are VdS and LPCB Approved to 16 bar/235 psi.

NOTE

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

5.1 PERFORMANCE

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The information below reflects the latest listing and approval data at the time of publication. Listings and approvals may change. Contact Victaulic for the most current information and performance on other pipe.

Size		cULus		FM	
Nominal	Actual Outside Diameter	Schedule 10	Schedule 40	Schedule 10	Schedule 40
inches mm	inches mm	psi kPa bar	psi kPa bar	psi kPa bar	psi kPa bar
1 ¼ – 3	1.660 – 3.500 42.4 – 88.9	350 2413 24	350 2413 24	350 2415 24	350 2415 24
4	4.500 114.3	350 2413 24	350 2413 24	300 2070 24	300 2070 24
5 – 8	5.563 – 8.625 141.3 – 219.1	300 2068 21	300 2068 21	300 2070 21	300 2070 21
76.1	3.000 76.1	350 2413 24	350 2413 24	350 2415 24	350 2415 24

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) 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

- If using coated pipe, always reference the installation instructions for pipe preparation requirements.

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 determining the suitability of Victaulic products for their end-use application, in accordance with industry standards, project specifications, and Victaulic's published performance, maintenance, and safety data, as well as all warnings and installation 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, warranty, installation instructions, or this disclaimer.

Installation

Always refer to and follow the [Victaulic Installation Handbook](#) or installation instructions for 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 [victaulic.com](#).

Warranty

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

Intellectual Property Rights

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Note

All products bearing a Victaulic trademark are manufactured by Victaulic or to Victaulic specifications. All products are to be installed only in accordance with the applicable Victaulic installation instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.