

Victaulic® Carbon Steel Anchor Outlet Fitting

No. A191



102.91



1.0 PRODUCT DESCRIPTION

Available Sizes

- 4 – 12”/DN100 – DN300

Pipe Material

- Carbon steel

Maximum Working Pressure

- Accommodates pressures ranging from full vacuum (29.9 in Hg/760 mm Hg) up to 500 psi/3447 kPa/34 bar

Operating Temperature

- Dependent on gasket selection from section 3.0

Function

- For use on carbon steel NPS riser piping
- Integrates an anchor to direct pipe movement
- Provides branch line connection

Pipe Preparation

- Exclusively for use with pipe and Victaulic products which feature the Victaulic Original Groove System (OGS) groove profile (see section 7.0 Reference Materials)

2.0 CERTIFICATION/LISTINGS

Product designed and manufactured under Victaulic’s Quality Management System, as certified by LPCB in accordance with ISO 9001:2018.

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

| | | | |
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| System No. | | Location | |
| Submitted By | | Date | |

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| Spec Section | | Paragraph | |
| Approved | | Date | |



3.0 SPECIFICATIONS – MATERIAL

Anchor: Carbon steel, standard weight, conforming to ASTM A53, Type E, Grade B.

Housing: Ductile iron conforming to ASTM A536, Grade 65-45-12.

Housing Coating: Orange enamel.

Gasket: (specify choice¹)

Grade “EHP” EPDM

EHP (Red and Green stripes color code). Temperature range -30°F to +250°F/-34°C to +121°C. May be specified for hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. 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, and 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.

Grade “O” Fluoroelastomer

Fluoroelastomer (Blue stripe color code). Temperature range +20°F to +300°F/-7°C to +149°C. May be specified for many oxidizing acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, organic liquids and air with hydrocarbons. NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES OR STEAM SERVICES.

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.

Coupling Bolts/Nuts: (specify choice²)

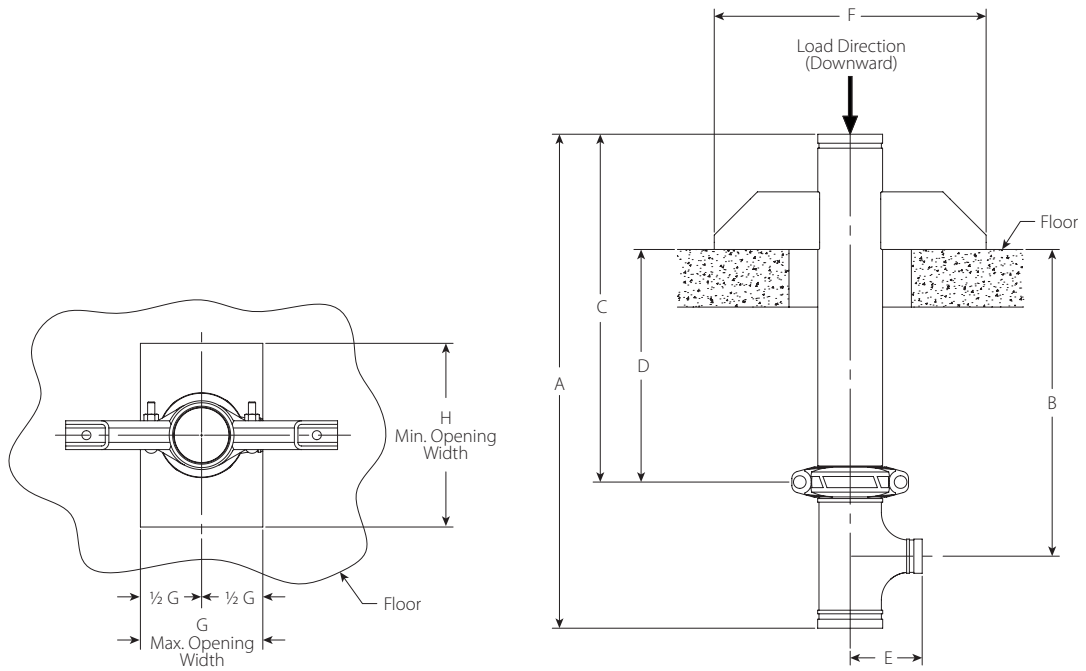
Standard: Carbon steel oval neck track bolts meeting the mechanical property requirements of ASTM A449 (imperial) and ISO 898-1 Class 9.8 (M10-M16) Class 8.8 (M20 and greater). Carbon steel hex nuts meeting the mechanical property requirements of ASTM A563 Grade B (imperial - heavy hex nuts) and ASTM 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).

Optional: Stainless steel oval neck track bolts meeting the mechanical property requirements of ASTM F593, Group 2 (316 stainless steel), condition CW. Stainless steel heavy nuts meeting the mechanical property requirements of ASTM F594, Group 2 (316 stainless steel), condition CW. Bolts and nuts include galling reducing coating.²

² Optional bolts/nuts are available in imperial size only.

4.0 DIMENSIONS

No. A191 Carbon Steel Anchor Outlet Fitting



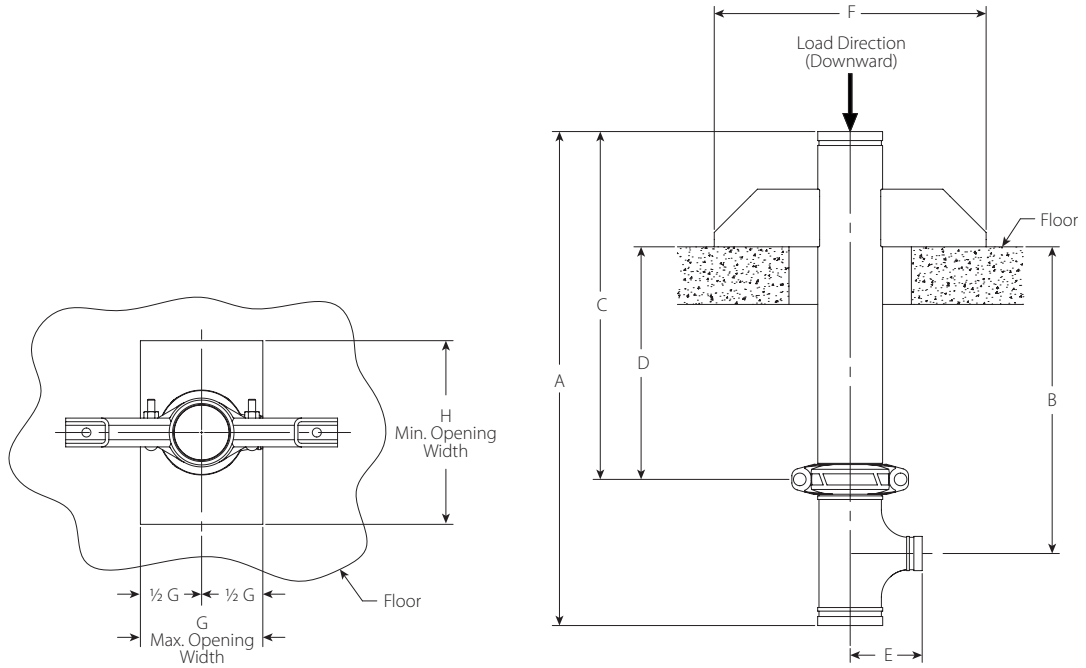
| Size | | Dimensions | | | | | | | | | | Weight | |
|-------------------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---|--|-------------------------------|-------|--------|-------|
| Nominal inches DN | Actual Outside Diameter inches mm | A inches mm | B inches mm | C inches mm | D inches mm | E inches mm | F inches mm | G Maximum Opening Width ^{3,4} inches mm | H Minimum Opening Width inches mm | Approx. (Each) lb kg | | | |
| 4 DN100 | x 2 DN50 2 1/2 | 4.500 114.3 | x | 2.375 | 34.13 | 21.13 | 24.00 | 16.00 | 5.00 | 16.00 | 8.50 | 12.75 | 46.9 |
| | | | | 60.3 | 867 | 537 | 610 | 406 | 127 | 406 | 216 | 324 | 21.3 |
| | | 2.875 | 34.13 | 21.13 | 24.00 | 16.00 | 5.00 | 16.00 | 8.50 | 12.75 | 47.1 | | |
| | | | | | | | | | | | | 73.0 | 867 |
| 3 DN80 | x | 3.500 | x | 34.13 | 867 | 537 | 610 | 406 | 127 | 406 | 8.50 | 12.75 | 47.3 |
| | | | | 88.9 | 867 | 537 | 610 | 406 | 127 | 406 | 216 | 324 | 21.5 |
| 5 | x 2 DN50 2 1/2 | 5.563 141.3 | x | 2.375 | 35.13 | 21.63 | 24.00 | 16.00 | 5.50 | 18.00 | 10.00 | 15.00 | 59.7 |
| | | | | 60.3 | 892 | 549 | 610 | 406 | 140 | 457 | 254 | 381 | 27.1 |
| | | 2.875 | 35.13 | 21.63 | 24.00 | 16.00 | 5.50 | 18.00 | 10.00 | 15.00 | 60.4 | | |
| | | | | | | | | | | | | 73.0 | 892 |
| 3 DN80 | x | 3.500 | x | 35.13 | 892 | 549 | 610 | 406 | 140 | 457 | 10.00 | 15.00 | 61.8 |
| | | | | 88.9 | 892 | 549 | 610 | 406 | 140 | 457 | 254 | 381 | 28.0 |
| 4 DN100 | x | 4.500 | x | 35.13 | 892 | 549 | 610 | 406 | 140 | 457 | 10.00 | 15.00 | 61.9 |
| | | | | 114.3 | 892 | 549 | 610 | 406 | 140 | 457 | 254 | 381 | 28.1 |
| 6 DN150 | x 2 DN50 2 1/2 | 6.625 168.3 | x | 2.375 | 41.13 | 22.63 | 28.00 | 16.00 | 6.50 | 21.00 | 10.63 | 16.00 | 96.0 |
| | | | | 60.3 | 1045 | 575 | 711 | 406 | 165 | 533 | 270 | 406 | 43.5 |
| | | 2.875 | 41.13 | 22.63 | 28.00 | 16.00 | 6.50 | 21.00 | 10.63 | 16.00 | 95.8 | | |
| | | | | | | | | | | | | 73.0 | 1045 |
| 3 DN80 | x | 3.500 | x | 41.13 | 1045 | 575 | 711 | 406 | 165 | 533 | 10.63 | 16.00 | 100.9 |
| | | | | 88.9 | 1045 | 575 | 711 | 406 | 165 | 533 | 270 | 406 | 45.8 |
| 4 DN100 | x | 4.500 | x | 41.13 | 1045 | 575 | 711 | 406 | 165 | 533 | 10.63 | 16.00 | 99.4 |
| | | | | 114.3 | 1045 | 575 | 711 | 406 | 165 | 533 | 270 | 406 | 45.1 |

³ A rectangular sleeve opening, rather than a circular sleeve opening, is required to facilitate the installation and positioning of the No. A191 anchor outlet fitting.

⁴ Anchor arms to be oriented parallel to "G" axis as shown.

4.0 DIMENSIONS (CONTINUED)

No. A191 Carbon Steel Anchor Outlet Fitting



| Size | | Dimensions | | | | | | | | | | Weight |
|-------------------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---|--|-------------------------------|--------------|----------------|
| Nominal inches DN | Actual Outside Diameter inches mm | A inches mm | B inches mm | C inches mm | D inches mm | E inches mm | F inches mm | G Maximum Opening Width ^{3,4} inches mm | H Minimum Opening Width inches mm | Approx. (Each) lb kg | | |
| 8 DN200 | x 2 DN50 | 8.625 219.1 | 2.375 60.3 | 43.63 1108 | 23.88 606 | 28.00 711 | 16.00 406 | 7.75 197 | 23.00 584 | 12.63 321 | 19.00 483 | 136.6 62.0 |
| | | 2 1/2 | 2.875 73.0 | 43.75 1111 | 24.00 610 | 28.00 711 | 16.00 406 | 7.75 197 | 23.00 584 | 12.63 321 | 19.00 483 | 142.1 64.5 |
| | 3 DN80 | x | 3.500 88.9 | 43.75 1111 | 24.00 610 | 28.00 711 | 16.00 406 | 7.75 197 | 23.00 584 | 12.63 321 | 19.00 483 | 136.7 62.0 |
| | | | 4 DN100 | 4.500 114.3 | 43.75 1111 | 24.00 610 | 28.00 711 | 16.00 406 | 7.75 197 | 23.00 584 | 12.63 321 | 19.00 483 |
| | 6 DN150 | x | 6.625 168.3 | 43.75 1111 | 24.00 610 | 28.00 711 | 16.00 406 | 7.75 197 | 23.00 584 | 12.63 321 | 19.00 483 | 145.4 66.0 |
| | | | 10 DN250 | 10.750 273.0 | 2.375 60.3 | 48.25 1226 | 25.25 641 | 30.00 762 | 16.00 406 | 9.00 229 | 27.00 686 | 14.75 375 |
| 10 DN250 | x 2 DN50 | 10.750 273.0 | 2.375 60.3 | 48.25 1226 | 25.25 641 | 30.00 762 | 16.00 406 | 9.00 229 | 27.00 686 | 14.75 375 | 22.13 562 | 218.7 99.2 |
| | | | 2 1/2 | 2.875 73.0 | 48.25 1226 | 25.25 641 | 30.00 762 | 16.00 406 | 9.00 229 | 27.00 686 | 14.75 375 | 22.13 562 |
| | 3 DN80 | x | 3.500 88.9 | 48.25 1226 | 25.25 641 | 30.00 762 | 16.00 406 | 9.00 229 | 27.00 686 | 14.75 375 | 22.13 562 | 216.7 98.3 |
| | | | 4 DN100 | 4.500 114.3 | 48.25 1226 | 25.25 641 | 30.00 762 | 16.00 406 | 9.00 229 | 27.00 686 | 14.75 375 | 22.13 562 |
| | 6 DN150 | x | 6.625 168.3 | 48.25 1226 | 25.25 641 | 30.00 762 | 16.00 406 | 9.00 229 | 27.00 686 | 14.75 375 | 22.13 562 | 215.7 97.8 |
| | | | 12 DN300 | 12.750 323.9 | 2.375 60.3 | 50.25 1276 | 26.25 667 | 30.00 762 | 16.00 406 | 10.00 254 | 31.00 787 | 16.75 425 |
| 12 DN300 | x 2 DN50 | 12.750 323.9 | 2.375 60.3 | 50.25 1276 | 26.25 667 | 30.00 762 | 16.00 406 | 10.00 254 | 31.00 787 | 16.75 425 | 25.13 638 | 268.0 121.6 |
| | | | 2 1/2 | 2.875 73.0 | 50.25 1276 | 26.25 667 | 30.00 762 | 16.00 406 | 10.00 254 | 31.00 787 | 16.75 425 | 25.13 638 |
| | 3 DN80 | x | 3.500 88.9 | 50.25 1276 | 26.25 667 | 30.00 762 | 16.00 406 | 10.00 254 | 31.00 787 | 16.75 425 | 25.13 638 | 270.0 122.5 |
| | | | 4 DN100 | 4.500 114.3 | 50.25 1276 | 26.25 667 | 30.00 762 | 16.00 406 | 10.00 254 | 31.00 787 | 16.75 425 | 25.13 638 |
| | 6 DN150 | x | 6.625 168.3 | 50.25 1276 | 26.25 667 | 30.00 762 | 16.00 406 | 10.00 254 | 31.00 787 | 16.75 425 | 25.13 638 | 263.0 119.3 |

³ A rectangular sleeve opening, rather than a circular sleeve opening, is required to facilitate the installation and positioning of the No. A191 anchor outlet fitting.
⁴ Anchor arms to be oriented parallel to "G" axis as shown.

5.0 COMPONENT PERFORMANCE

| Size | | Maximum Working Pressure | Maximum Anchor Load ^{5-7,9} Downward | Maximum Anchor Load ⁵⁻⁹ Upward |
|-------------------------|---|--------------------------|--|--|
| Nominal inches DN | Actual Outside Diameter inches mm | | | |
| 4 DN100 | 4.500 114.3 | 500 3445 | 10000 44400 | 2000 8896 |
| 5 | 5.563 141.3 | 500 3445 | 15000 66700 | 3000 13345 |
| 6 DN150 | 6.625 168.3 | 500 3445 | 20000 88900 | 4000 17793 |
| 8 DN200 | 8.625 219.1 | 500 3445 | 30000 133400 | 6000 26689 |
| 10 DN250 | 10.750 273.0 | 500 3445 | 35000 155600 | 7000 31138 |
| 12 DN300 | 12.750 323.9 | 500 3445 | 40000 177900 | 8000 35586 |







- ⁵ Engineer of Record and/or structural engineer are responsible to verify that the attachment method and supporting structure are structurally adequate to withstand the above noted Maximum Anchor Loads. For bolted applications, all reaction forces on the bolts shall be accounted for, including, but not limited to, tensile loads that result from downward loading as a result of bracket reacting with the structure, and tensile loads resulting from upward loading.
- ⁶ Anchor is only designed for loading in the axial directions of the pipe, vertically upwards or downwards. Any lateral loading must be negated by the owner/engineer by the use of guides or other methods to ensure only vertical, axial loading is transmitted to the anchor.
- ⁷ For applications with maximum anchor loads greater than listed above, please contact Victaulic.
- ⁸ Acceptable methods of attachment include bolting or welding of the brackets to the structure. Chosen method is the responsibility of others.
- ⁹ Maximum Anchor Load shall be the lesser of the value shown and the published Maximum End Load for the coupling selected to join the Anchor to the adjoining piping system.

5.1 COMPONENT PERFORMANCE

For the frictional resistance of Victaulic fittings as equivalent feet of straight pipe, please reference [publication 07.01](#): Victaulic Grooved End Fittings.

6.0 NOTIFICATIONS

⚠ WARNING



- Read and understand all instructions before attempting to install, remove, adjust, or maintain any Victaulic piping 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.

7.0 REFERENCE MATERIALS

- [05.01: Victaulic Seal Selection Guide](#)
- [06.15: Victaulic Pressure Ratings and End Loads for Victaulic Couplings on Steel Pipe](#)
- [06.23: Victaulic QuickVic™ Rigid Coupling Style 107N](#)
- [07.01: Victaulic Grooved End Fittings](#)
- [07.70: Victaulic Carbon Steel Riser Anchor No. A10](#)
- [26.01: Victaulic Design Data](#)
- [26.04: Victaulic Couplings Vibration Attenuation Characteristics](#)
- [29.01: Victaulic Terms and Conditions/Warranty](#)
- [I-A10/A10S: Victaulic Installation Instructions Nos. A10 and A10S Riser Anchors](#)
- [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 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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