

VicFlex™ Stainless Steel Sprinkler Fittings

Series AQD Braided Flexible Hose Assemblies for Metal Ducts



1.0 PRODUCT DESCRIPTION

VicFlex Stainless Steel Sprinkler Fittings are designed to facilitate sprinkler installation for metal duct system applications.

System Options

- Braided Flexible Stainless Steel Hose (Series AH2-CC) in lengths: Series AQD: 48"/1220 mm
- Series AQD applicable for round and square duct types.

Maximum Working Pressure

- 200 psi/1375 kPa

Connections

- To branch line (inlet) via 1"/25 mm Grooved IGS or 1"/25 mm NPT/BSPT Male Thread
- To sprinkler head (outlet) via ½"/15 mm or ¾"/20 mm NPT/BSPT Female Thread

Base mount

- Flat
- Round

Minimum Bend Radius

- 7"/178 mm

Maximum Number of Bends per Flexible Drop

- Three

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



2.0 CERTIFICATION/LISTINGS



3.0 SPECIFICATIONS – MATERIAL

Series AQD Metal Duct Bracket Assembly:

Reducer and Nipple: Carbon Steel, Zinc Plated

Base Mount: Stainless Steel

Sleeve: Polyethylene or Cellophane

Coupling Assembly: Refer to Victaulic [Publication 10.64](#)

Coupling Gasket: EPDM (standard), Silicone (optional)

O-Ring: FKM (Fluoroelastomer)

Series AH2-CC

Flexible Hose: 300-Series Stainless Steel

Collar/Weld Fitting: 300-Series Stainless Steel

Gasket Seal: Victaulic EPDM

Isolation Ring: Nylon

Coupling Retainer Ring: Polyethylene

Nut and Nipple: Carbon Steel, Zinc Plated

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.

Coupling Housing Coating:

- Orange Enamel (North America, Asia Pacific)
- Red Enamel (Europe)
- Hot Dipped Galvanized

Gasket¹:

Grade “E” EPDM (Type A) *Vic-Plus* Pre-lubricated Gasket

EPDM (Violet Color Code). Applicable for wet and dry (oil-free air) fire protection systems only. Listed/Approved for continuous use in wet and dry systems. Listed/Approved for dry systems at -40°F/-40°C and above.

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.

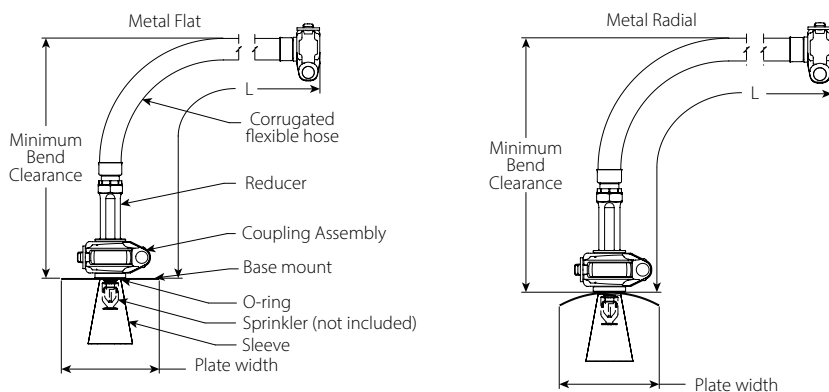
NOTE

- Reference should always be made to [Publication I-100](#) Victaulic Field Installation Handbook for gasket lubrication instructions.

Bolts/Nut: Zinc Electroplated Carbon Steel, trackhead meeting the physical and chemical requirements of ASTM A 449 and physical requirements of ASTM A 183.

Linkage: CrMo Alloy Steel Zinc Electroplated per ASTM B633 Zn/Fe 5, Type III Finish

4.0 DIMENSIONS



Assembly			Dimensions			Approx. Weight (Each)
Hose Length inches mm	Duct Type		L inches mm	Plate Width inches mm	Allowable Minimum Bend Clearance inches mm	Water Filled lb kg
	Round Duct Diameter ² inches mm	Square Duct				
48 1220	8-12 200-300	Flat Plate	46.8 1189	6.0 152	14.9 378	7.4 3.4
	13-16 325-400					
	17-22 425-550					
	23+ 585+					

² For ducts larger than 22"/550 mm in diameter, use the Flat Plate.

5.0 PERFORMANCE – FRICTION LOSS DATA



Series AQD

Hose	FM		
AH2-CC Length inches mm	Bend Radius inches mm	Maximum Number of 90° Bends	Equivalent Length of 1"/33.7 mm Schedule 40 Pipe feet meters
48 1220	7 177.8	3	23.4 7.1

FM NOTES

- The Series AH2-CC hose has been tested and Approved by FM Global for use in wet, dry and preaction systems per NFPA 13, 13R, and 13D and FM data sheets 2-0, 2-5, and 2-8. FM 1637 standard for safety include, but are not limited to, pressure cycling, corrosion resistance, flow characteristics, vibration resistance, leakage, mechanical and hydrostatic strength.
- EXAMPLE: A 48-inch hose installed with two 30° bends and two 90° bends is permitted and considered equivalent to the data in the table shown above. In this example, the total number of degrees is 240°, which is less than the allowable 270°.

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 local and national fire protection 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 internal and external 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.
- It is the responsibility of the owner of a building or their authorized agent to provide the sprinkler system installer with any knowledge that the water supply might be contaminated with or conducive to the development of microbiologically influenced corrosion (MIC), including as required by NFPA 13. Failure to identify adverse water quality issues may affect the *VicFlex* product and void the manufacturer's warranty.

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.

Victaulic® VicFlex™ Braided Hoses may be painted/coated or caulked around, including fire barrier sealant, provided that the substance is compatible with stainless steel and zinc-plated carbon steel or ductile iron. Care shall be taken to ensure that the sprinkler and associated components do not come into contact with paint/coatings and caulking.

Victaulic® VicFlex™ Braided Hoses that penetrate through non-fire rated gypsum wall (drywall) will function as designed, provided the components are installed in accordance with the respective installation instructions referenced in this document.

7.0 REFERENCE MATERIALS

I-VicFlex: 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

No statement concerning the use of any material, product, service, or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Victaulic or any of its affiliates, or as a recommendation for the use of such material, product, service, or design in the infringement of any patent or other intellectual property right. The terms "Patented" or "Patent Pending" refer to design or utility patents or patent applications for articles and/or methods of use in the United States and/or other countries. Victaulic and all other Victaulic marks are the trademarks or registered trademarks of Victaulic Company, and/or its affiliated entities, in the U.S. and/or other countries.

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.