# Victaulic® VicFlex<sup>™</sup> Sprinkler Fittings Style AB6 Bracket





#### 1.0 PRODUCT DESCRIPTION

#### **Description by Component**

Style AB6 Bracket: Optimized for cold storage applications

#### **Dry Sprinkler**

#### **Available Models**

- Series FL-QR/DRY please refer to <u>publication 45.01</u>
- Series FL-QR/DRY/SW please refer to <u>publication 45.02</u>
- Series FL-QR/DRY/C please refer to publication 45.03
- Series FL-QR/DRY/ST please refer to publication 45.04
- Series FL-SR/DRY please refer to publication 45.51
- Series FL-SR/DRY/SW please refer to publication 45.52
- Series FL-SR/DRY/C please refer to publication 45.53
- Series FL-SR/DRY/ST please refer to publication 45.54

#### **Available Styles**

• Pendent, Horizontal Sidewall

#### **Available Escutcheons**

· Recessed, Sleeve and Skirt, Flush, Concealed

## **Maximum Working Temperature**

- Standard: 150°F/65°C (EPDM/Neoprene foam)
- (Optional) High: 225°F/107°C (Silicone closed-cell foam)

#### **Maximum Working Pressure**

• 175 psi/1375 kPa/12 bar

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



#### 1.0 PRODUCT DESCRIPTION (CONTINUED)

#### Hose

- Series AH2 Braided Hose (1"/25mm Nominal ID): 48"/1220 mm. Note: nominal length includes adapter nipple and 5.75"/140 mm straight reducer.
- Series AH2-CC Braided Hose (1"/25mm Nominal ID): 48"/1220 mm. Note: nominal length includes captured coupling and 5.75"/140 mm straight reducer.
- . Minimum Bend Radius of Flexible Hose:
  - 7"/178 mm (FM Approval)
  - 2"/51 mm (cULus Listed)
- Maximum Number of Bends per Flexible Hose: See friction loss charts in section 5.0 Performance

#### **Connections**

• To branch line (inlet) via 1"/25 mm NPT/BSPT male thread or 1"/25 mm IGS™ Groove refer to publication 25.14.

#### 2.0 CERTIFICATION/LISTINGS





#### 3.0 SPECIFICATIONS - MATERIAL

#### Style AB6 Bracket Assembly:

Bracket: Carbon Steel, Zinc-Plated
U-bolt: Carbon Steel, Zinc-Plated
Hex Nut: Carbon Steel, Zinc-Plated
Adapter: Carbon Steel, Zinc Plated
Plug: Carbon Steel, Zinc Plated

### Seal (specify choice):

EPDM/Neoprene (150°F/65°C)

Silicone closed cell foam (225°F/107°C)

**Washer**: Carbon Steel, Zinc-Plated **Screw**: Carbon Steel, Zinc-Plated

# Dry Sprinkler:

Please refer to respective submittal publications in section 1.0 Product Description for dry sprinkler material specifications.

#### Series AH2 Braided Flexible Hose:

Flexible Hose: 300-series Stainless Steel
Collar/Weld Fitting: 300-series Stainless Steel

Gasket Seal: Victaulic EPDM

**Isolation Ring: Nylon** 

Nut and Nipple: Carbon Steel, Zinc Plated



#### 3.0 SPECIFICATIONS – MATERIAL (CONTINUED)

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

Reducer (1/2"/15 mm or 3/4"/20 mm): 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.

## 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.

Note: Reference should always be made to <u>publication I-100</u> Victaulic Field Installation Handbook for gasket lubrication instructions.

Note: 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 <u>publication 05.01</u> Victaulic Gasket Selection Guide for specific gasket service guidelines and for a listing of services which are not compatible.

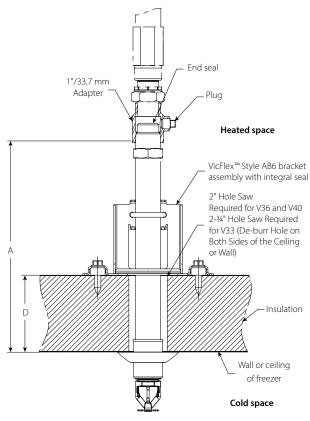
**Bolts/Nut:** Zinc electroplated carbon steel, trackhead meeting the physical and chemical requirements of ASTM A 449 and physical requirements of ASTM A 183.

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



# 4.0 DIMENSIONS

Sprinkler Barrel Length Selection



Temperature Maintained at 40°F/4.4°C Minimum								
Ambient Temperature Exposed to Discharge End of Sprinkler	"D" Freezer Ceiling or Wall Thickness	"A" Order Length						
Down to 20°F	3 – 6"/76 – 152 mm	12"/305 mm						
Down to -6.7°C	7 – 12"/178 – 305 mm	18"/457 mm						
19°F to 0°F	3 – 6"/76 – 152 mm	18"/457 mm						
-7.2°C to -17.8°C	7 – 12"/178 – 305 mm	24"/610 mm						
-1°F to -20°F	3 – 6"/76 – 152 mm	24"/610 mm						
-18.3°C to -28.9°C	7 – 12"/178 – 305 mm	30"/762 mm						
-21°F to -30°F	3 – 6"/76 – 152 mm	24"/610 mm						
-29.4°C to -34.4°C	7 – 12"/178 – 305 mm	30"/762 mm						
-31°F to -40°F	3 – 6"/76 – 152 mm	24"/610 mm						
-35.0°C to -40.0°C	7 – 12"/178 – 305 mm	30"/762 mm						

Temperature maintained at 60°F/15.6°C							
Ambient Temperature Exposed to Discharge End of Sprinkler	"D" Freezer Ceiling or Wall Thickness	"A" Order Length					
Down to 20°F	3 – 6"/76 – 152mm	12"/305 mm					
Down to -6.7°C	7 – 12"/178 – 305mm	18"/457 mm					
19°F to 0°F	3 – 6"/76 – 152mm	12"/305 mm					
-7.2°C to -17.8°C	7 – 12"/178 – 305mm	18"/457 mm					
-1°F to -20°F	3 – 6"/76 – 152mm	12"/305 mm					
-18.3°C to -28.9°C	7 – 12"/178 – 305mm	18"/457 mm					
-21°F to -30°F	3 – 6"/76 – 152mm	12"/305 mm					
-29.4°C to -34.4°C	7 – 12"/178 – 305mm	18"/457 mm					
-31°F to -40°F	3 – 6"/76 – 152mm	12"/305 mm					
-35.0°C to -40.0°C	7 – 12"/178 – 305mm	18"/457 mm					

Temperature maintained at 50°F/10°C								
Ambient Temperature Exposed to Discharge End of Sprinkler	"D" Freezer Ceiling or Wall Thickness	"A" Order Length						
Down to 20°F	3 – 6"/76 – 152mm	12"/305 mm						
Down to -6.7°C	7 – 12"/178 – 305mm	18"/457 mm						
19°F to 0°F	3 – 6"/76 – 152mm	12"/305 mm						
-7.2°C to -17.8°C	7 – 12"/178 – 305mm	18"/457 mm						
-1°F to -20°F	3 – 6"/76 – 152mm	18"/457 mm						
-18.3°C to -28.9°C	7 – 12"/178 – 305mm	18"/457 mm						
-21°F to -30°F	3 – 6"/76 – 152mm	18"/457 mm						
-29.4°C to -34.4°C	7 – 12"/178 – 305mm	24"/610 mm						
-31°F to -40°F	3 – 6"/76 – 152mm	18"/457 mm						
-35.0°C to -40.0°C	7 – 12"/178 – 305mm	24"/610 mm						

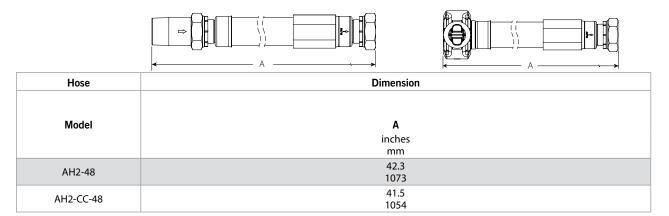


10.90 2870 Rev N Updated 02/2023 © 2023 Victaulic Company. All rights reserved.

<u>victaulic.com</u> 4

#### 4.1 DIMENSIONS

# **Product Details and Optional Components**



Note: Please reference section 5.0 Performance for complete list of Style AB6 Bracket listing and approval information with Series AH2-CC and Series AH2 lengths.



victaulic.com 5

# 5.0 PERFORMANCE

# **Friction Loss Data**



# CUL USTED Series AH2 and AH2-CC Braided Hose for use with Style AB6 VicFlex Bracket Assembly

Model	<b>EQL</b> feet meters	Max Bends
AH2-48	24.0	3
AH2-CC-48	7.3	3
AH2-48	37.0	O
AH2-CC-48	11.3	0

#### **Friction Loss Data**



# Series AH2 and AH2-CC Braided Hose for use with Style AB6 VicFlex Bracket Assembly

		EQL	
		feet	
Model	Sprinkler K-factor	meters	Max Bends
AH2-48	K5.6	23.4	2
AH2-CC-48	٥.٤٨	7.1	3
AH2-48	K8	35.5	3
AH2-CC-48	NO NO	10.8	3



victaulic.com 6

#### 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.

# **WARNING**

- It is the responsibility of the system designer to verify suitability of Type 304/304L stainless steel flexible hose for use with the intended fluid media.
- The effect of chemical composition, pH level, operating temperature, chloride level, oxygen level, and flow rate
  on Type 304/304L stainless steel flexible hose must be evaluated by the material specifier to confirm system
  life will be acceptable for the intended service.

Failure to follow these instructions could cause product failure, resulting in serious personal injury and/or property damage.

Victaulic VicFlex Series AH2 and AH2-CC Flexible Sprinkler Fittings may be painted provided the paint is compatible with stainless steel and zinc-plated carbon steel or ductile iron. Care should be taken to ensure the sprinkler and any associated concealed coverplate are not painted.

Victaulic VicFlex Series AH2 and AH2-CC penetrating 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.



<u>victaulic.com</u> 7

# 7.0 REFERENCE MATERIALS

# **Assembly Weights**

The values in the table below are the total weight in pounds/kilograms for a Model V33, V36, or V40 Dry Sprinkler, a Series AH2-CC Flexible Hose (water-filled), and a Style AB6 Bracket Assembly.

Hose Model	Sprinkler Model	Sprinkler Barrel Order Length inches mm	<b>Weight</b> Ib kgs
AH2-48-AB6	V33/V36	12	9.1
AH2-CC-48-AB6		305	4.1
AH2-48-AB6	V40	12	8.7
AH2-CC-48-AB6		305	3.9
AH2-48-AB6	V33/V36	18	10.1
AH2-CC-48-AB6		457	4.6
AH2-48-AB6	V40	18	9.6
AH2-CC-48-AB6		457	4.4
AH2-48-AB6	V33/V36	24	11.1
AH2-CC-48-AB6		610	5.0
AH2-48-AB6	V40	24	10.5
AH2-CC-48-AB6		610	4.8
AH2-48-AB6	V33/V36	30	11.1
AH2-CC-48-AB6		762	5.0
AH2-48-AB6	V40	30	10.4
AH2-CC-48-AB6		762	4.7

I-VICFLEX-AB6: Vicflex<sup>™</sup> Style AB6 Assembly - Cold storage installation manual

I-40: Firelock™ Automatic Sprinklers Installation Manual

Series FL-QR/DRY - please refer to publication 45.01

Series FL-QR/DRY/SW - please refer to publication 45.02

Series FL-QR/DRY/C - please refer to publication 45.03

Series FL-QR/DRY/ST - please refer to publication 45.04

Series FL-SR/DRY - please refer to publication 45.51

Series FL-SR/DRY/SW - please refer to publication 45.52

<u>Series FL-SR/DRY/C - please refer to publication 45.53</u> <u>Series FL-SR/DRY/ST - please refer to publication 45.54</u>



#### REFERENCE MATERIALS (CONTINUED) 7.0

#### VicFlex<sup>™</sup> Style AB6 Bracket



# VICFLEX™ STYLE AB6 ASSEMBLY DRY SPRINKLER ORDER FORM

SHIP TO:

Name:	Date of Order:
Address:	Purchase Order:
	Ship Via:
City:	Tag:
State/Prov.:	Signature*:
Zip/Postal Code:	* I agree to purchase the dry sprinklers specified on this form, which are NON-RETURNABLE & NOT CANCELLABLE.

PART CODE CONFIGURATOR: Configure the part code with options from chart below. DO NOT circle pipe order lengths. Input appropriate length and quantity for each in the chart below. Please attach additional forms if extra ordering space is needed. Separate forms must be completed for each configuration ordered.

Α		3									UB6		4
Class	Style	Connection	Deflector	Temperature	Response	K-Factor	Sprinkler Finish	Escutcheon Finish	Sprinkler Barrel Length	Escutcheon Style	Bracket Style	Hose Style	Hose Length
<b>A</b> = VicFlex <sup>™</sup>	33 = V33¹ (Concealed) 36 = V36 (Std. Pendent/ Horizontal Sidewall) 40 = V40² (Std. Pendent)	3 = 1" NPT	B = Std. Pendent C = Horizontal Sidewall <sup>3</sup> P = Concealed	C = 155°F/68°C F = 200°F/93°C J = 286°F/141°C	Q = Quick S = Standard	4 = 5.6K 5 = 8.0K 6 = 11.2K	2 = Chrome 4 = White (RAL 9010) B = Black N = VC-2504	0 = Painted Cold Rolled Steel, Finish Matches Sprinkler Finish X = Stainless Steel W = White (RAL 9010) Painted Stainless Steel	120 = 12" 180 = 18" 240 = 24" 300 = 30"	11 = Flush 12 = Recessed 13 = Sleeve & Skirt 15 = Concealed 17 = Interchangeable Escutcheons 5	<b>UB6</b> = AB6	2 = AH2 (NPT) 3 = AH2 (BSPT) 8 = AH2-CC (Captured Coupling)	<b>4</b> = 48°

V33 Sprinkler only available with Escutcheon Finish O (Painted Cold Rolled Steel, Finish Matches Sprinkler Finish), and Escutcheon Style 15 (Concealed).
 V40 Sprinkler only available with Deflector B (Standard Pendent), K-Factor 6 (K11.2), and Sprinkler Finish 4 (White RAL 9010) and N (VC-250).

Total Sprinklers with specs identical to part code configuration above



Send completed order form to pickvic@victaulic.com

SF-DRYSPRINKLERS 17227 REV D 01/2022 © 2022 VICTAULIC COMPANY. ALL RIGHTS RESERVED.

#### 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.

#### Intellectual Property Rights

No statement contained herein concerning a possible or suggested use of any material, product, service, or design is intended, or should be constructed, to grant any license under any patent or other intellectual property right of Victaulic or any of its subsidaries or affiliates covering such use or design, 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

#### 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.

Reference should always be made to I-VICFLEX-AB1-AB2-AB10. I-VICFLEX-AB4. I-VICFLEX-AB7, or I-VICFLEX-AB8 for the product you are installing. Handbooks are included with each shipment of Victaulic products for 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.

#### **Trademarks**

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.

10.90 2870 Rev N Updated 02/2023 © 2023 Victaulic Company. All rights reserved.



Vot-250 coating is only available with interchangeable escutcheons. UL and FM approved corrosion resistant coating, and VdS and LPCB recognized and approved alternate coating. Applications of the coating is only available with stainless steel escutcheons. UL and FM approved corrosion resistant coating, and VdS and LPCB recognized and approved alternate coating. Appears chrome in color. Not available with concealed sprinklers.
 Only available with pendent sprinklers; Sleeve and Skirt, Recessed and Flush escutcheons included with a plain barrel sprinkler.