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## 1.0 PRODUCT DESCRIPTION

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### Description by Component

**Style AB6 Bracket:** Optimized for cold storage applications

### Dry Sprinkler

#### • Available Models:

- V3301 and V3302 (K5.6/S.I.8.1) – please refer to [publication 40.68](#)
- V3303 and V3304 (K8.0/S.I.11.5) – please refer to [publication 40.69](#)
- V3605 and V3606 (K5.6/S.I.8.1) – please refer to [publication 40.60](#)
- V3607 and V3608 (K8.0/S.I.11.5) – please refer to [publication 40.61](#)
- V3609 and V3610 (K5.6/S.I.8.1) – please refer to [publication 40.64](#)
- V4001 and V4002 (K11.2/S.I.16.1) – please refer to [publication 40.66](#)

#### • 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)

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### 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

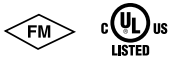
### Connections

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

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## 2.0 CERTIFICATION/LISTINGS

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## 3.0 SPECIFICATIONS – MATERIAL

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### 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)

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#### 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 (½"/15 mm or ¾"/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 [publication I-100](#) Victaulic Field Installation Handbook for gasket lubrication instructions.

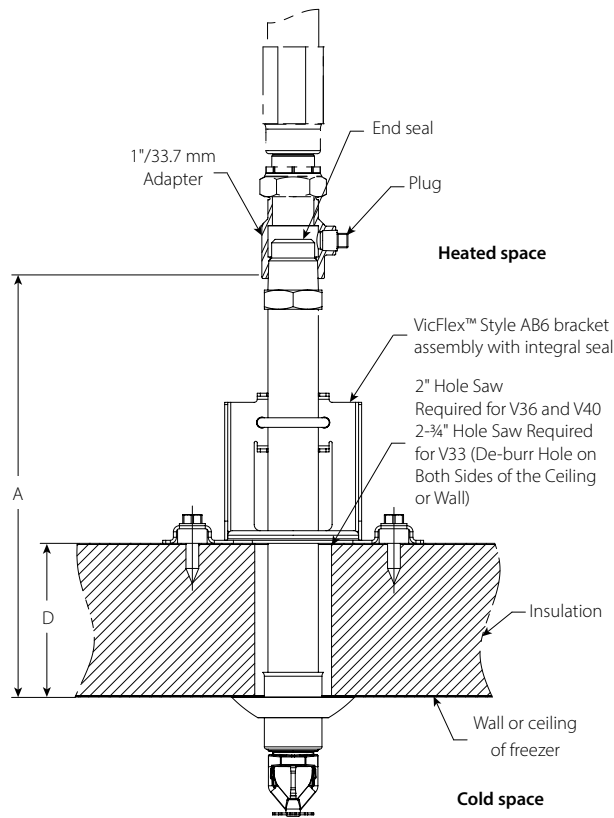
Note: Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets are not compatible. Reference should always be made to [publication 05.01](#) Victaulic Gasket Selection Guide for specific gasket service guidelines and for a listing of services 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



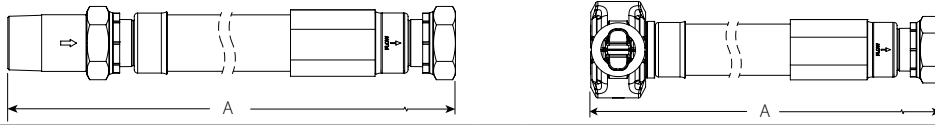
| Temperature Maintained at 40°F/4.4°C Minimum              |                                       |                  |
|---|---------------------------------------|------------------|
| Ambient Temperature Exposed to Discharge End of Sprinkler | "D" Freezer Ceiling or Wall Thickness | "A" Order Length |
| 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 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       |

| 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       |

## 4.1 DIMENSIONS

### Product Details and Optional Components



| Hose      | Dimension |      |
|-----------|-----------|------|
| Model     | A         |      |
|           | inches    | mm   |
| AH2-48    | 42.3      | 1073 |
| AH2-CC-48 | 41.5      | 1054 |

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.

**5.0 PERFORMANCE**

**Friction Loss Data**



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

| Model               | EQL<br>feet<br>meters | Max Bends |
|---------------------|-----------------------|-----------|
| AH2-48<br>AH2-CC-48 | 24.0<br>7.3           | 3         |
| AH2-48<br>AH2-CC-48 | 37.0<br>11.3          | 8         |

**Friction Loss Data**



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

| Model               | Sprinkler K-factor | EQL<br>feet<br>meters | Max Bends |
|---------------------|--------------------|-----------------------|-----------|
| AH2-48<br>AH2-CC-48 | K5.6               | 23.4<br>7.1           | 3         |
| AH2-48<br>AH2-CC-48 | K8                 | 35.5<br>10.8          | 3         |

## 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.

## 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 |    | Weight<br>lb<br>kgs |
|---------------|-----------------|-------------------------------|----|---------------------|
|               |                 | inches                        | mm |                     |
| 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™ Style AB6 Assembly - Cold storage installation manual](#)

[I-40: Firelock™ Automatic Sprinklers Installation Manual](#)

[40.60: Firelock™ Models V3606/V3605 Submittal](#)

[40.61: Firelock™ Models V3608/V3607 Submittal](#)

[40.64: Firelock™ Models V3610/V3609 Submittal](#)

[40.66: Firelock™ Models V4001, V4002 Submittal](#)



7.0 REFERENCE MATERIALS (CONTINUED)

VicFlex™ Style AB6 Bracket

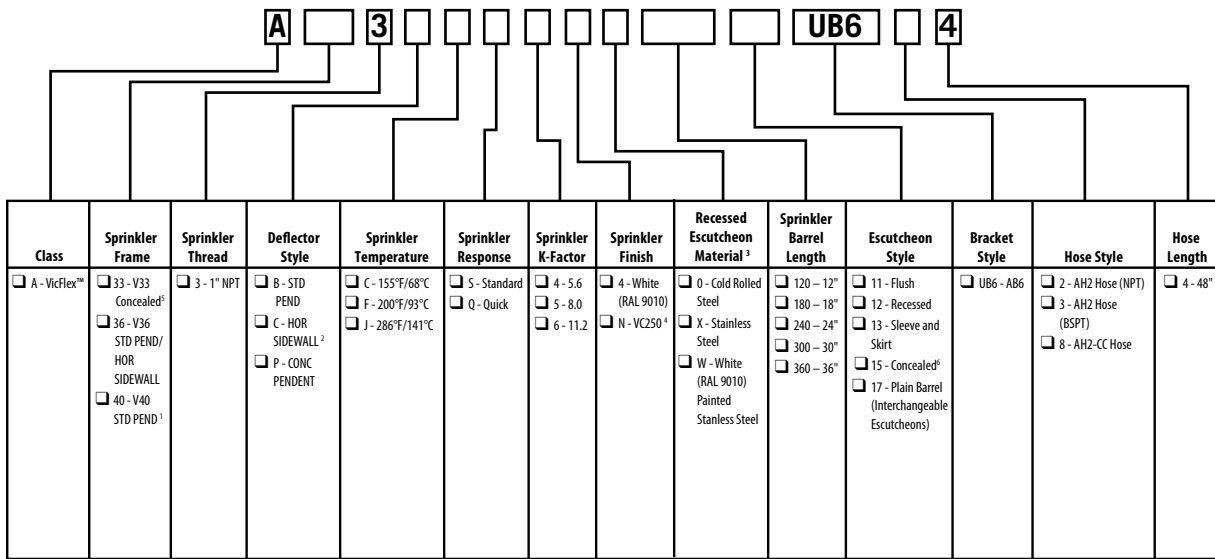
Bill To:

|                |                      |
|----------------|----------------------|
| Company Name   |                      |
| Address        |                      |
|                |                      |
| State/Province | Zip Code/Postal Code |
| Phone No.      | Email                |
| Fax No.        |                      |

Ship To:

|                |                      |
|----------------|----------------------|
| Order No.      | Date                 |
| Company Name   |                      |
| Address        |                      |
|                |                      |
| State/Province | Zip Code/Postal Code |
| Tag            |                      |
|                |                      |

Quantity (as specified below):  If units of different size, type or other option are required, please attach additional form(s) with their specification(s) separately.



<sup>1</sup> V40 Sprinkler Frame available only as Standard Pendent with K11.2.  
<sup>2</sup> Horizontal Sidewall not available with interchangeable escutcheons.  
<sup>3</sup> Escutcheon finish will be the same as sprinkler finish.  
<sup>4</sup> UL and FM approved corrosion resistant coating, and VdS and LPCB recognized and approved alternate coating. Appears chrome in color.  
<sup>5</sup> V33 Sprinkler Frame only available with Sprinkler Finish 4 - White (RAL9010) and recessed escutcheon material 0-Cold rolled Steel.  
<sup>6</sup> V33 Sprinkler Frame can only be combined with the 15 - Concealed escutcheon style.

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 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.

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