

The Model V36 Series Dry Type Pendent and Recessed Pendent Sprinklers have been redesigned utilizing stainless steel internal components. The V36 Dry Sprinkler is used in special applications such as freezing environments and conditions where sediment or foreign materials might accumulate in ordinary drop nipples.

The Model V3606 and V3605 Intermediate Level Pendent sprinklers incorporate a water shield plate to prevent water from higher level sprinklers from interfering with normal operation. These intermediate level sprinklers are designed for use in intermediate levels of rack storage or other open grate storage arrangements, where they may be exposed to upper level or ceiling level sprinklers.

Available in either standard or quick response versions, the Model V36 Dry Type Pendent Sprinkler utilizes a frangible glass bulb. At the bulb's rated temperature, the sprinkler opens releasing the bulb seat assembly, causing the inner tube assembly to move, allowing the spring assembly to pivot along-side the inner tube. At this time, water flows through the sprinkler and is distributed by the deflector, in an approved discharge pattern.

The heart of the Model V36 sprinkler's proven actuating assembly is a hermetically sealed frangible glass bulb that contains a precisely measured amount of fluid. When heat is absorbed, the liquid within the bulb expands increasing the internal pressure. At the prescribed temperature the internal pressure within the bulb exceeds the strength of the glass causing the glass to shatter. This results in water discharge which is distributed in an approved pattern.

COVERAGE:

For coverage area and sprinkler placement, refer to NFPA 13 standards.

# JOB OWNER

Location

System No. \_\_\_\_

CONTRACTOR Submitted By \_\_\_\_\_

ENGINEER	
Spec Sect	_ Para
Approved	
Date	

#### www.victaulic.com

VICTAULIC IS A REGISTERED TRADEMARK OF VICTAULIC COMPANY. © 2009 VICTAULIC COMPANY. ALL RIGHTS RESERVED.

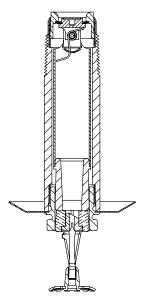
Date

# ictaulic

40.60\_1



# **TECHNICAL SPECIFICATIONS:**



Exaggerated for clarity

Models: V3606 and V3605

Style: Pendent, Recessed Pendent or Intermediate Level Pendent Nominal Orifice Size: 1/2"/13 mm Orifice Insert: Stainless steel per UNS S30300 K-Factor: 5.6 Imp./8.1 S.I.^ Nominal Thread Size: 1" NPT/33.7 mm Max. Working Pressure: 175 psi/1200 kPa Factory Hydrostatic Test:

100% @ 500 psi/3450 kPa Min. Operating Pressure: 7 psi/48 kPa Temperature Rating: See chart on page 2

# MATERIAL SPECIFICATIONS

Deflector: Brass per UNS C22000 or Stainless Steel per UNS S30400 Bulb: Glass with glycerin solution.

**Bulb Nominal Diameter:** 

- Standard: 5.0mm

Quick Response: 3.0 mm Split Spacer: Stainless steel per UNS S30300 Load Screw: Brass per UNS C36000

Pip Cap: Stainless steel per UNS S30300 Spring Seal Assembly: Teflon\* coated Beryllium nickel alloy and stainless steel per UNS \$30300

Frame: Die cast brass

Outer Tube: Galvanized steel pipe

Inner Tube: Stainless steel per UNS S30400 Escutcheon/Plate: 1010 - 1018 mild steel and stainless steel

Torsion Spring: SST Wire

### ACCESSORIES

Installation Wrench: Model V36 Open End and Recessed Wrenches fit all V36 Series frames. Sprinkler Finishes:

# Plain brass

- Chrome plated
- White painted † <sup>Δ</sup>
- Flat black painted †  $^{\rm \Delta}$
- Custom painted †  $^{\Delta}$
- Wax ∆

Proprietary Nickel Teflon\* Coated △ For cabinets and other accessories refer to separate sheet.

- ^ For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.0.
- Teflon is a registered trademark of Dupont Co.
- Not available on the Intermediate Level Style t
- Pendent. Models V3606/V3605 are UL Listed for cor-
- rosion resistance in all configurations NOTE: Weather resistant escutcheon available
- upon request.



# V36, K5.6

Dry Type Standard Spray Pendent, Intermediate Level Pendent & Recessed Pendent

# **V3605 STANDARD RESPONSE V3606 QUICK RESPONSE**

FLUSH SLEEVE AND SKIRT PLAIN BARREL INTERMEDIATE





# APPROVALS/LISTINGS

Model	Orifice Size	Nominal K-Factor	Response	Deflector Type	Approved Temperature Ratings °F/°C ‡ * †		
	Inches mm	Imperial S.I.^	Standard or Quick		UL	C-UL	FM*
V3606	1⁄2 13	5.6 8.1	Quick	Pendent	135, 155, 200, 286 57, 68, 93, 141	135, 155, 200, 286 57, 68, 93, 141	135, 155, 200, 286 57, 68, 93, 141
V3606	1⁄2 13	5.6 8.1	Quick	Recessed Pendent	135, 155, 200, 286 57, 68, 93, 141	135, 155, 200, 286 57, 68, 93, 141	135, 155, 200 57, 68, 93
V3605	1⁄2 13	5.6 8.1	Standard	Pendent	135, 155, 200, 286 57, 68, 93, 141	135, 155, 200, 286 57, 68, 93, 141	135, 155, 200, 286 57, 68, 93, 141
V3605	1½ 13	5.6 8.1	Standard	Recessed Pendent	135, 155, 200, 286 57, 68, 93, 141	135, 155, 200, 286 57, 68, 93, 141	135, 155, 200 57, 68, 93

‡ Listings and approval as of printing.

^ For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.

\*Listed for all hazards.

† Approved for V3605 and V3606 dry sprinklers up to 48" length.

# RATINGS

All glass bulbs are rated for temperatures from -67°F/-55°C to those shown in table below.

	Temperati		
Sprinkler Temperature Classification	Nominal Temperature Rating	Maximum Ambient Temperature Allowed	Glass Bulb Color
Ordinary	135 57	100 38	Orange
Ordinary	155 68	100 38	Red
Intermediate	200 93	150 65	Green
Intermediate	286 141	225 107	Blue





## ORDERING INFORMATION

Please specify the following when ordering:

Sprinkler Model Number	
Style	
Temperature Rating	
K-Factor	
Thread Size	
Quantity	
Sprinkler Finish	
Escutcheon Finish	
Wrench Model Number	

# **AVAILABLE WRENCHES**

Model V36 Open End and Recessed Wrenches fit all V36 Series frames.





WARNING

**REV\_H** 





# **WARNING**

- Always read and understand installation, care, and maintenance ٠ instructions, supplied with each box of sprinklers, before proceeding with installation of any sprinklers.
- Always wear safety glasses and foot protection.
- Depressurize and drain the piping system before attempting to • install, remove, or adjust any Victaulic piping products.
- Installation rules, especially those governing obstruction, must be strictly followed.
- · Painting, plating, or any re-coating of sprinklers (other than that supplied by Victaulic) is not allowed.

Failure to follow these instructions could result in serious personal injury and/or property damage.

The owner is responsible for maintaining the fire protection system and devices in proper operating condition. For minimum maintenance and inspection requirements, refer to the current National Fire Protection Association pamphlet that describes care and maintenance of sprinkler systems. In addition, the authority having jurisdiction may have additional maintenance, testing, and inspection requirements that must be followed.

If you need additional copies of this publication, or if you have any questions about the safe installation of this product, contact Victaulic World Headquarters: P.O. Box 31, Easton, Pennsylvania 18044-0031 USA, Telephone: 001-610-559-3300.

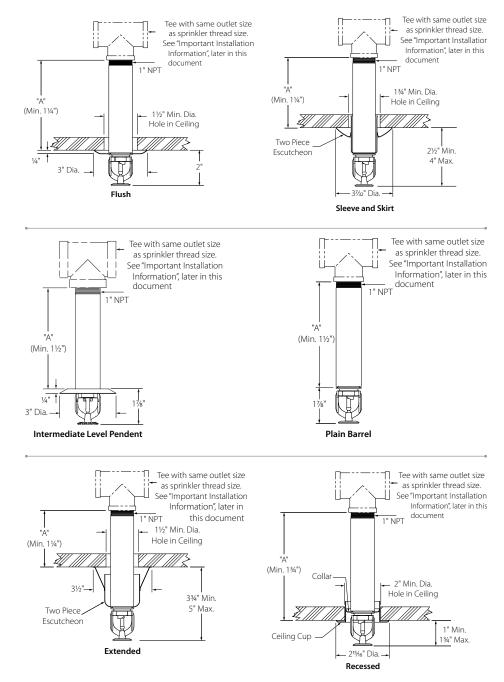


# ictaulic 40.60 5



#### DIMENSIONS

**NOTE:** The "A" dimension of a dry sprinkler, which extends into a freezer from a wet piping system, must take into account the wall or ceiling thickness of the freezer. See IMPORTANT INSTALLATION INFORMATION later in this document.



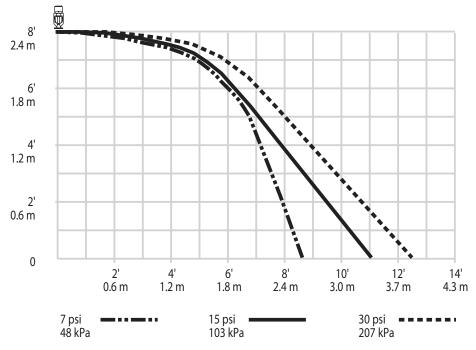


# www.victaulic.com Victaulic is a registered trademark of victaulic company. © 2009 Victaulic company. All rights reserved. 40.60\_6



#### **DISTRIBUTION PATTERNS**

#### MODELS V3606, V3605 PENDENT, RECESSED PENDENT & INTERMEDIATE LEVEL PENDENT DISTRIBUTION PATTERNS – TRAJECTORY



# NOTES:

- 1 Data shown is approximate and can vary due to differences in installation.
- 2 These graphs illustrate approximate trajectories, floor-wetting, and wall-wetting patterns for these specific Victaulic FireLock automatic sprinklers. They are provided as information for guidance in avoiding obstructions to sprinklers and should not be used as minimum sprinkler spacing rules for installation. Refer to the appropriate NFPA National Fire Code and the Authority Having Jurisdiction for specific information regarding obstructions, spacing limitations and area of coverage requirements. Failure to follow these guidelines could adversely affect the performance of the sprinkler and will void all Listings, Approvals and Warranties.
- 3 All patterns are symmetrical to the centerline of the waterway.

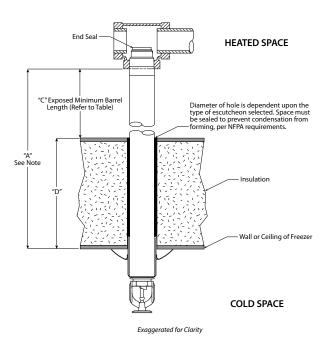




#### IMPORTANT INSTALLATION INFORMATION

#### For detailed installation instructions, see publication I-40.

- No. 1 Victaulic Model V36 Series Dry sprinklers should be installed in accordance with NFPA 13. These sprinklers are to be installed using a pipe wrench applied to the outer tube. When this is not possible, the proper sprinkler wrench may be used with extreme care for lengths up to approximately 18". Excessive force may distort the frame thus destroying the unit.
- No. 2 Dry sprinklers MUST be installed only into the outlet of a cast or malleable iron tee.
- No. 3 DO NOT install dry sprinklers into any couplings or threaded elbows. In addition, DO NOT install dry sprinklers into any fitting that interferes with thread penetration. NOTE: The end seal of the dry sprinkler MUST NOT bottom out in the fitting.



TYPICAL SLEEVE AND SKIRT CONFIGURATION FOR EXAMPLE ONLY

**NOTE:** The "A" dimension of a dry sprinkler, which extends into a freezer from a wet piping system, must take into account the wall or ceiling thickness of the freezer. The minimum length of the dry sprinkler should not be less than the lengths specified in the following table, plus the thickness of the freezer's wall or ceiling ("A" = "C" + "D").

Refer to the drawing for a representation of the "A" dimension. **DO NOT** attempt to modify dry sprinklers, since they are manufactured to this specific "A" dimension.

The following table is used when the ambient temperature is maintained between 40° F/4° C and 60° F/16°C around the wet piping system.

# EXPOSED BARREL AMBIENT TEMPERATURE (°F/°C)

Ambient Temperature	Exposed Minimum Barrel Length inches/mm			
Exposed to Discharge End of Sprinkler °F/°C	40°F/4°C	50°F/10°C	60°F/16°C	
40	0	0	0	
4	0	0	0	
30	0	0	0	
-1	0	0	0	
20	4	0	0	
-7	102	0	0	
10	8	1	0	
-12	203	25	0	
0	12	3	0	
-18	305	76	0	
-10	14	4	1	
-23	356	102	25	
-20	14	6	3	
-29	356	152	76	
-30	16	8	4	
-34	406	203	102	
-40	18	8	4	
-40	457	203	102	
-50	20	10	6	
-46	508	254	152	
-60	20	10	6	
-51	508	254	152	

NOTE: Exposed minimum barrel lengths are inclusive up to 30-mph/48-kph wind velocities





#### WARRANTY

NOTE

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

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.

**US & WORLD HEADQUARTERS** 

P.O. Box 31 Easton, PA 18044-0031 USA

4901 Kesslersville Road Easton, PA 18040 USA

1-800-PICK-VIC (1-800-742-5842) 1-610-559-3300 1-610-250-8817 (fax) pickvic@victaulic.com

www.victaulic.com

CANADA 905-884-7444 905-884-9774 (fax) viccanada@victaulic.com

# EUROPE

32-9-381-15-00 32-9-380-44-38 (fax) viceuro@victaulic.be

# UNITED KINGDOM

44 (0) 1438310690 44 (0) 1438310699 (fax) viceuro@victaulic.be

CENTRAL AND SOUTH AMERICA 1-610-559-3300 1-610-559-3608 (fax) vical@victaulic.com

#### ASIA PACIFIC

86-21-54253300 86-21-54253671 (fax) vicap@victaulic.com

# MIDDLE EAST

971-4-883-88-70 971-4-883-88-60 (fax)

#### **UPDATED 11/2009** 40.60 3123 REV H

VICTAULIC IS A REGISTERED TRADEMARK OF VICTAULIC COMPANY. © 2009 VICTAULIC COMPANY. ALL RIGHTS RESERVED.

