

# FireLock® Automatic Sprinklers Technical Data

## MODEL NUMBERS

Frame Style	Model No.	Description	Response	K Factor/S.I.	Submittal No.
<b>STANDARD COMMERCIAL</b>					
V27	V2703†	Standard Upright	Standard	5.6/8,1	40.10
V27	V2707†	Standard Pendent/Recessed Pendent	Standard	5.6/8,1	40.10
V27	V2704†	Standard Upright	Quick	5.6/8,1	40.10
V27	V2708†	Standard Pendent/Recessed Pendent	Quick	5.6/8,1	40.10
V27	V2709†	Standard Hor.Sidewall/Rec. Hor. Sidewall	Standard	5.6/8,1	40.11
V27	V2710†	Standard Hor.Sidewall/Rec. Hor. Sidewall	Quick	5.6/8,1	40.11
V34	V3401	Standard Upright	Standard	8.0/11,5	40.15
V34	V3405	Standard Pendent/Recessed Pendent	Standard	8.0/11,5	40.15
V34	V3402	Standard Upright	Quick	8.0/11,5	40.15
V34	V3406	Standard Pendent/Recessed Pendent	Quick	8.0/11,5	40.15
V34	V3409	Standard Hor.Sidewall/Rec. Hor. Sidewall	Standard	8.0/11,5	40.16
V34	V3410	Standard Hor.Sidewall/Rec. Hor. Sidewall	Quick	8.0/11,5	40.16
V27	V2725	Conventional	Standard	5.6/8,1	40.17
V27	V2726	Conventional	Quick	5.6/8,1	40.17
<b>SPECIFIC APPLICATION</b>					
V25	V2502	Specific Application Upright	Quick	4.2/6,1	40.09
<b>STORAGE</b>					
V34	V3407	Standard Pendent	Standard	11.2/16,1	40.20
V34	V3403	Standard Upright	Standard	11.2/16,1	40.20
V34	V3408	Standard Pendent	Quick	11.2/16,1	40.20
V34	V3404	Standard Upright	Quick	11.2/16,1	40.20
V27	V2723	Intermediate Level, Standard Pendent	Standard	5.6/8,1	40.22
V27	V2721	Intermediate Level, Standard Upright	Standard	5.6/8,1	40.22
V27	V2724	Intermediate Level, Standard Pendent	Quick	5.6/8,1	40.22
V27	V2722	Intermediate Level, Standard Upright	Quick	5.6/8,1	40.22
V34	V3419	Intermediate Level, Standard Pendent	Standard	8.0/11,5	40.23
V34	V3417	Intermediate Level, Standard Upright	Standard	8.0/11,5	40.23
V34	V3420	Intermediate Level, Standard Pendent	Quick	8.0/11,5	40.23
V34	V3418	Intermediate Level, Standard Upright	Quick	8.0/11,5	40.23
	K1	Pendent - ESFR		14.0/20,2	40.24
<b>EXTENDED COVERAGE</b>					
V34	V3411	Extended Coverage, Light Hazard (ECLH) Pendent/Recessed Pendent	Standard	11.2/16,2	40.30
V34	V3412	Extended Coverage, Light Hazard (ECLH) Pendent/Recessed Pendent	Quick	11.2/16,2	40.30
V34	V3413	Extended Coverage, Light Hazard (ECLH) Pendent/Recessed Pendent	Standard	14.0/20,2	40.31
V34	V3414	Extended Coverage, Light Hazard (ECLH) Pendent/Recessed Pendent	Quick	14.0/20,2	40.31
V34	V3415	Extended Coverage, Light Hazard (ECLH) Hor.Sidewall/Rec. Hor. Sidewall	Standard	8.0/11,5	40.33
V34	V3416	Extended Coverage, Light Hazard (ECLH) Hor.Sidewall/Rec. Hor. Sidewall	Quick	8.0/11,5	40.33
V34	V3421	Extended Coverage, Ordinary Hazard (EOH) Pendent/Recessed Pendent	Standard	14.0/20,2	40.34

Table continued on page 2.

See notes on page 2.

# 40.03

## SMALL ORIFICE

V27	V2705	Standard Pendant/Recessed Pendant	Standard	2.8/4,0	40.40
V27	V2701	Standard Upright	Standard	2.8/4,0	40.40
V27	V2706	Standard Pendant/Recessed Pendant	Quick	2.8/4,0	40.40
V27	V2702	Standard Upright	Quick	2.8/4,0	40.40

## RESIDENTIAL

V27	V2714	Residential Pendant/Recessed Pendant (Retrofit)	Quick	3.0/4,3	40.45
V27	V2716	Residential Pendant/Recessed Pendant (Retrofit)	Quick	3.5/5,1	40.45
V27	V2718	Residential Hor.Sidewall/Rec. Hor. Sidewall (Retrofit)	Quick	3.5/5,1	40.46
V27	V2738	Residential Hor.Sidewall/Rec. Hor. Sidewall	Quick	4.2/6,1	40.54
V29	V2902	Residential Pendant Flush	Quick	4.1/6,1	40.44
V27	V2730	Residential Pendant/Recessed Pendant	Quick	4.9/7,1	40.41
V27	V2732	Residential Pendant/Recessed Pendant	Quick	4.9/7,1	40.41
V27	V2734	Residential Concealed Pendant	Quick	4.9/7,1	40.42
V27	V2736	Residential Concealed Pendant	Quick	4.9/7,1	40.42

## DECORATIVE

V38	V3801	Standard Adjustable Concealed Pendant	Standard	5.6/8,1	40.50
V38	V3802	Standard Adjustable Concealed Pendant	Quick	5.6/8,1	40.50
V39	V3904	Extended Coverage, Light Hazard (ECLH) Adjustable Concealed Pendant	Quick	8.0/11,5	40.71

## DRY

V36	V3605	Standard Pendant/Recessed Pendant	Standard	5.6/8,1	40.60
V36	V3606	Standard Pendant/Recessed Pendant	Quick	5.6/8,1	40.60
V36	V3607	Standard Pendant/Recessed Pendant	Standard	8.0/11,5	40.61
V36	V3608	Standard Pendant/Recessed Pendant	Quick	8.0/11,5	40.61
V36	V3601	Standard Upright	Standard	5.6/8,1	40.62
V36	V3602	Standard Upright	Quick	5.6/8,1	40.62
V36	V3603	Standard Upright	Standard	8.0/11,5	40.63
V36	V3604	Standard Upright	Quick	8.0/11,5	40.63
V36	V3609	Standard Hor.Sidewall/Rec. Hor. Sidewall	Standard	5.6/8,1	40.64
V36	V3610	Standard Hor.Sidewall/Rec. Hor. Sidewall	Quick	5.6/8,1	40.64
V36	V3611	Standard Hor.Sidewall/Rec. Hor. Sidewall	Standard	8.0/11,5	40.65
V36	V3612	Standard Hor.Sidewall/Rec. Hor. Sidewall	Quick	8.0/11,5	40.65
V36	V3617	Standard Concealed Pendant	Standard	5.6/8,1	40.66
V36	V3618	Standard Concealed Pendant	Quick	5.6/8,1	40.66
V36	V3619	Standard Concealed Pendant	Standard	8.0/11,5	40.67
V36	V3620	Standard Concealed Pendant	Quick	8.0/11,5	40.67

## NOZZLES

V10	V1001	Window Sprinkler	Open	1.4/2,0	40.72
V10	V1003	Window Sprinkler	Open	2.0/2,9	40.72
V10	V1005	Window Sprinkler	Open	2.8/4,0	40.72
V10	V1007	Window Sprinkler	Open	4.2/5,9	40.72
V10	V1009	Window Sprinkler	Open	5.6/8,1	40.72
V10	V1011	Window Sprinkler	Open	8.0/11,5	40.72
V10	V1013	Window Sprinkler	Open	11.4/16,3	40.72
V26	V2601	Foam Nozzles	Open	2.8/4,0	40.73
V26	V2603	Foam Nozzles	Open	5.6/8,1	40.73

### ‡ NOTES:

- 1) The V indicates Victaulic as the manufacturer.
  - 2) The first two digits in the model number are the frame style.
  - 3) The last two digits in the model number are assigned sequentially and are unique to each combination of deflector style, orifice size and response.
  - 4) All odd model numbers are standard response.
  - 5) All even model numbers are quick or fast response.
  - 6) All recessed sprinklers use the same model number as the non-recessed version.
- \*See chart on page 3 to configure head of your choice.  
 † Also available with a high pressure rating.

# PRODUCT OPTIONS

EXAMPLE - PART NUMBER: **S 2 7 - 1 B C - S 1 1 0** DESCRIPTION: **Assembly V27, 1/2" NPT, Standard Pendent, 155F, Standard Response, K = 2.8, Plain Brass Finish**

**Modifications, Release, Revision, Multiple Parts, Sequential, etc.**

**Finish**

**K-Factor**

**Response**

**Temperature**

**Deflector Coverage & Style**

**Thread**

**Style or Component**

**Product Class**

**1 = Plain Brass**  
**2 = Chrome Steel†**  
**3 = White RAL 9010**  
**4 = White RAL 9009**  
**5 = Wax Lead**  
**6 = Lead**  
**7 = Wax/Lead**  
**8 = Proprietary Nickel Teflon\* Coating**  
**\_ = Custom†**  
**B = Black**

**1 = 2.8**  
**2 = 3.0**  
**3 = 3.5**  
**4 = 5.6**  
**5 = 8.0**  
**6 = 11.2**  
**7 = 14.0**  
**A = 4.2**  
**B = 4.1**  
**F = 2.0**  
**G = 1.4**  
**H = 4.9**  
**J = 4.3**

**Q = Quick Response**  
**R = Fast Response\***  
**S = Standard Response**  
**0 = N/A**  
**\*ESFR only**

**A = 135°F/57°C**  
**C = 155°F/68°C**  
**D = 165°F/74°C\***  
**E = 175°F/79°C**  
**F = 200°F/93°C**  
**J = 286°F/141°C**  
**K = 360°F/182°C**  
**M = Open**  
**N = 162°F/72°C**  
**\*Concealed Cover Only**

**1 = Window Sprinkler**  
**2 = Foam Nozzle**  
**3 = Spray Nozzle**  
**4 = Vds/CE Pendent**  
**5 = Specific Application**  
**A = Std. Upright**  
**B = Std. Pendent**  
**C = Std. Hor. Sidewall**  
**D = Std. Vert. Sidewall**  
**E = ECOH Upright**  
**F = ECOH Pendent**  
**G = ECLH Pendent**  
**H = ECLH Horz. Sidewall**  
**J = ECLH Concealed**  
**K = Res. Pendent**  
**L = Res. Horiz. Sidewall**  
**M = Res. Pendent Flush**  
**N = Res. Concealed**  
**P = Std. Concealed**  
**Q = Inter. Std. Upright\*\***  
**R = Inter. Std. Pendent\*\***  
**S = ESFR**  
**0 = N/A**  
**W = Conventional**

**10 = V10 Window Sprinklers**  
**25 = V25 Sprinklers**  
**26 = V26 Sprinklers**  
**27 = V27 Sprinklers**  
**29 = V29 Flush Sprinklers**  
**34 = V34 Sprinklers**  
**36 = V36 Dry Sprinklers**  
**38 = V38 Concealed Sprinklers**  
**39 = V39 Concealed Sprinklers**  
**K1 = K1 ESFR Pendent Sprinklers**  
**T \_ = Tools/Wrenches**  
**A \_ = Accessories**  
**E \_ = Escutcheon**  
**AS = Guards**  
**M = Misc.**

**L = Large†**  
**S = Small†**  
**C = Brass†**  
**X = Stainless Steel†**  
**J = Capped, Sm/Std**  
**K = Capped, Lg.**  
**0 = N/A**

**† Used only on residential sprinklers to designate room size**  
**‡ Material for weather resistant recessed escutcheons only.**  
**\* Teflon is a registered trademark of Dupont Co.**  
**† Customer must provide paint specification**  
**\* Sprinkler assembled with paint cap, inner escutcheon ring and teflon taped threads**

## PERFORMANCE DATA

Nominal Orifice Size † In./mm	K-Factor – Imp./S.I. <sup>A</sup>		Percent of Nominal K5.6 Discharge	Trade Name †	Nominal Thread Type Inches (NPT) mm (BSP)	Victaulic Model Numbers
	Nominal	Acceptable Range				
3/8 10	2.8 4.0	2.6 - 2.9 3.7 - 4.2	50	Small	1/2 15	V2701, V2702, V2705, V2706, V1005, V2601
7/16 12	3.0 4.3	±1%	54	Residential	1/2 15	V2714
7/16 12	3.5 5.0	±1%	63	Residential	1/2 15	V2716, V2718
7/16 12	4.2 6.1	4.0 - 4.4 5.8 - 6.3	75	Residential	1/2 15	V2702, V2720, V2802, V1007
7/16 12	4.9 7.1	±1%	88	Residential	1/2 15	V2720, V2902, V2730, V2732
1/2 13	5.6 8.1	5.3 - 5.8 7.6 - 8.4	100	Standard	1/2 15	V2703, V2704, V2707, V2708, V2709, V2710, V2721, V2722, V2723, V2724, V3801, V3802, V3605, V3606, V3601, V3602, V3609, V3610, V3617, V3618, V1009, V2603
1 1/32 14	8.0 11.5	7.4 - 8.2 10.7 - 11.8	140	Large	3/4 20	V3401, V3402, V3405, V3406, V3409, V3410, V3415, V3416, V3417, V3418, V3419, V3420, V3904, V3607, V3608, V3603, V3604, V3611, V3612, V3619, V3620, V1011
5/8 16	11.2 16.2	11.0 - 11.5 15.9 - 16.6	200	Extra Large	3/4 20	V3403, V3404, V3407, V3408, V3411, V3412
3/4 19	14.0 20.2	13.5 - 14.5 19.5 - 20.9	250	Very Extra Large or ESFR	3/4 20	V3413, V3414, AS1451

† NFPA, UL and FM Standards have eliminated these designations in favor of Nominal K-Factor.  
<sup>A</sup>K-Factor is the constant in the formula below.  
 NOTE: Other window sprinklers include V1001 K-factor = 1.4/2.0; V1003 K-factor = 2.0/2.9, V1013 K-factor = 11.4/16.3

**FLOW DATA**

K-Factor is the constant in the formula:

$$Q = K\sqrt{p} \text{ where } Q = \text{Flow in GPM, } p = \text{Pressure in psi}$$

For S.I. units:

$$Q_m = K_m\sqrt{P_m} \text{ where } Q = \text{Flow in } dm^3/min \text{ or } L/min, P_m = \text{Pressure in kPa}$$

For K when  $P_m = \text{Bar}$ , multiply K (S.I.)  $\times 10.0$

See individual submittals for distribution patterns.

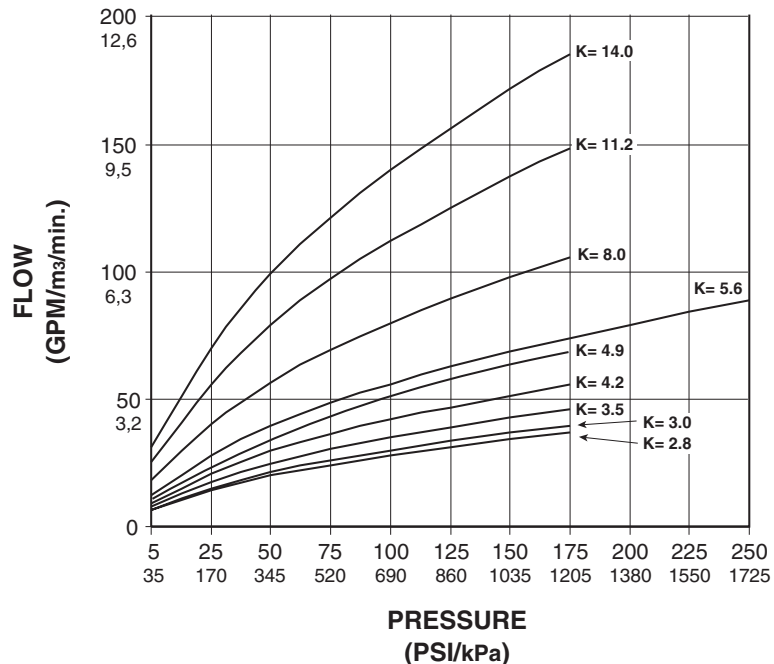
**AVAILABLE TEMPERATURE RATING**

Sprinkler Temperature Classification	Victaulic Part Identification	Temperature – °F/°C		Glass Bulb Color
		Nominal Temperature Rating	Maximum Ambient Temp. Allowed	
Ordinary	A	135 57	100 38	Orange
Ordinary	C	155 68	100 38	Red
Intermediate	E	175 79	150 65	Yellow
Intermediate	F	200 93	150 65	Green
High	J	286 141	225 107	Blue
Extra High ‡	K	360 182	300 149	Mauve
– ‡	M	Open	–	No Bulb

‡ Standard Response only.

Not all temperatures are available with all styles of sprinklers. Consult individual submittal sheet for specific information.

**K-FACTOR FLOW DATA**



This product shall be manufactured by Victaulic Company. 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.