

# Reliable®

## Model SWC Extended Coverage Concealed Horizontal Sidewall Sprinkler

### Features

- Extended coverage quick-response sprinkler
- 300 psi (20.7 bar) rated
- Utilizes EC-9 horizontal sidewall deflector
- Convenient push-on/thread-off cover plate
- Cover plate available in a wide variety of finishes

### Product Description

The Reliable Model SWC is a 300 psi (20.7 bar) rated quick-response extended coverage concealed horizontal sidewall sprinkler utilizing a sensitive 3.0 mm glass bulb thermal element for use in light hazard occupancies.

The Model SWC is specifically listed with and may only be installed with the listed Reliable SWC cover plate. Refer to the technical information on page two for specific listings and refer to Figure 1 for dimensional information.

Table A below provides a summary of the key data and approvals for the Model SWC. Please see page 4 for minimum flow and pressure requirements for various coverage areas.

Additional K-factor 8.0 (115) extended coverage quick response sprinklers can be found on Technical Bulletin 148 and 159.

**Important!** Reliable fire sprinklers must be handled, stored, and installed in accordance with the guidelines in Caution Sheet 310 and this bulletin. Failure to follow these instructions may result in unintended operation or nonoperation of the fire protection system.



Model SWC

### Model SWC Sprinkler Summary

Table A

Sprinkler Model	K-Factor gpm/psi <sup>1/2</sup> (lpm/bar <sup>1/2</sup> )	Orientation	Listings & Approvals	Max. Working Pressure psi (bar)	Sprinkler Identification Number (SIN)
SWC	8.0 (115)	Concealed Horizontal Sidewall	cULus	300 (20.7)	R5962

**Note:** Do not install the Model SWC sprinkler in locations where there is positive pressure in the cavity behind the sprinkler relative to the pressure in the protected space.

**Technical Specifications**

**Style:** Concealed Horizontal Sidewall  
**Threads:** 3/4" NPT or ISO 7-R3/4  
**Nominal K-Factor:** 8.0 (115)  
**Max. Working Pressure:** 300 psi (20.7 bar)

**Sensitivity**

Quick response

**Temperature Ratings<sup>(1)</sup>**

135°F (57°C)  
 155°F (68°C)

**Material Specifications**

**Thermal Sensor:** 3 mm Glass Bulb  
**Sprinkler Frame:** Brass Alloy  
**Cap:** Bronze Alloy  
**Sealing Washer:** Nickel with PTFE  
**Load Screw:** Copper Alloy  
**Deflector:** Brass Alloy

**Cover Plate<sup>(2)</sup>**  
 Model SWC

**Sprinkler Wrenches**  
 Model W4

**Listings and Approvals**  
 cULus for light hazard

**Sprinkler Finishes**

(See Table C)

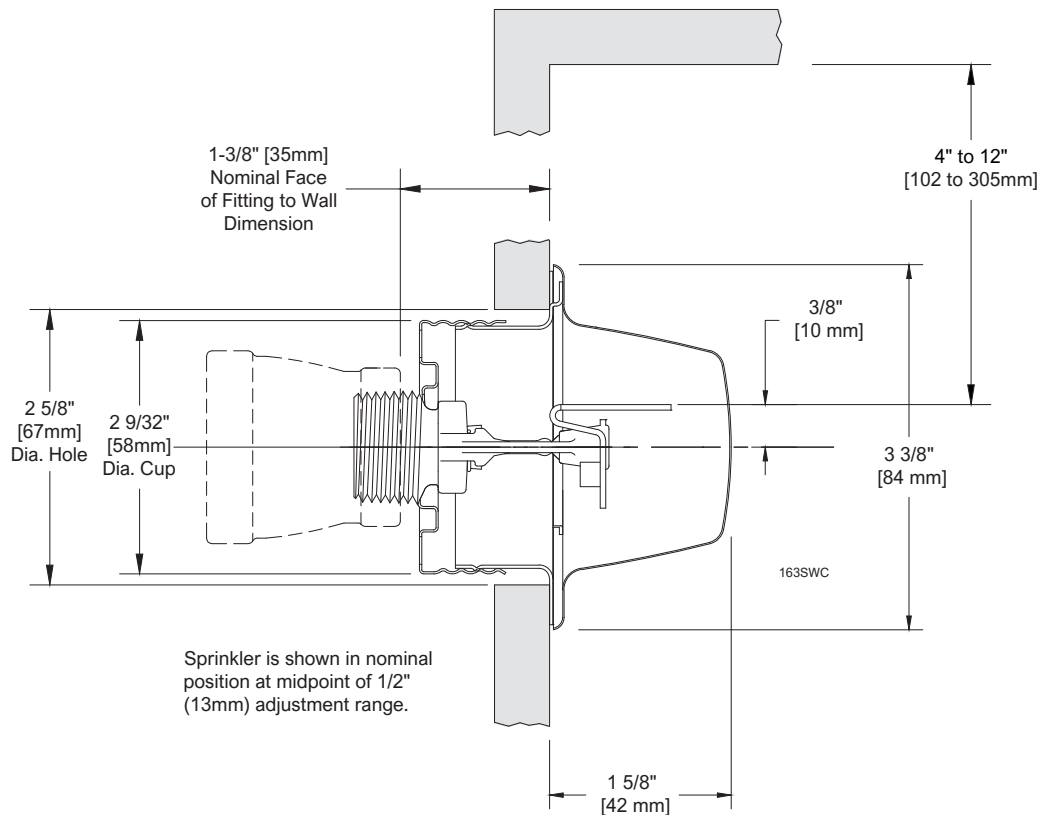


**Notes:**

1. Temperature rating approval may vary depending on coverage area selected. See Table B.
2. Cover plate is rated for 135°F (57°C) and intended for use in areas where the ambient temperature does not exceed 100°F (38°C).

**Model SWC Sprinkler Components and Dimensions**

**Figure 1**



**Note:** Please refer to Table B (page 3) for minimum flow and pressure requirements.

**SWC Extended Coverage Horizontal Sidewall Required Minimum Flow and Pressure**

**Table B**

Coverage Area ft x ft (m x m)	Deflector Distance Inches (mm)	Temperature Rating	Flow gpm (L/min)	Pressure psi (bar)
14 x 26 (4.3 x 7.9)	4 – 6 (100 – 150)	135°F (57°C)	39 (147.6)	23.8 (1.6)
14 x 26 (4.3 x 7.9)	6 – 12 (150 – 300)	135°F (57°C) 155°F (68°C)	46 (174.1)	33.1 (2.3)
16 x 14 (4.9 x 4.3)	4 – 12 (100 – 300)	135°F (57°C) 155°F (68°C)	29 (109.8)	13.1 (0.9)
16 x 16 (4.9 x 4.9)	4 – 12 (100 – 300)	135°F (57°C) 155°F (68°C)	29 (109.8)	13.1 (0.9)
16 x 18 (4.9 x 5.5)	4 – 12 (100 – 300)	135°F (57°C) 155°F (68°C)	29 (109.8)	13.1 (0.9)
16 x 20 (4.9 x 6.0)	4 – 12 (100 – 300)	135°F (57°C)	37 (140.1)	21.4 (1.5)
16 x 22 (4.9 x 6.7)	4 – 12 (100 – 300)	135°F (57°C)	37 (140.1)	21.4 (1.5)
18 x 18 (5.5 x 5.5)	4 – 12 (100 – 300)	135°F (57°C) 155°F (68°C)	33 (124.9)	17.0 (1.2)
18 x 22 (5.5 x 6.7)	4 – 12 (100 – 300)	155°F (68°C)	40 (151.4)	25.0 (1.7)

**Finishes<sup>(1)</sup>**

**Table C**

Standard Finishes		Special Application Finishes	
Sprinkler	SWC Cover Plate	Sprinkler	SWC Cover Plate
Bronze <sup>(2)</sup>	Chrome Plated	None <sup>(2)</sup>	Euro White
	White Paint		Off White
			Black
			Custom Color
			Satin Chrome
			Bright Brass

**Notes:**

1. Paint or any other coating applied over the factory finish will void all approvals and warranties.
2. The Model SWC consists of a bronze sprinkler mounted in galvanized steel cup with a finished cover plate.

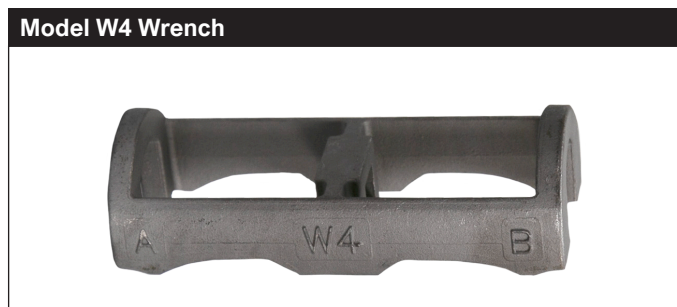
## Installation

Reliable Model SWC sprinklers must be installed in accordance with NFPA13 and the requirements of all applicable authorities having jurisdiction. The sprinkler must be installed with the Reliable sprinkler installation wrench identified in this bulletin. Any other wrench may damage the sprinkler. The Model W4 wrench has two sets of jaws. Use the smallest set of jaws that fit on the wrench flats of the sprinkler.

A leak free 3/4" (R3/4) sprinkler joint can be obtained with a torque of 14 - 20 lb-ft (19 - 27 N-m) after applying a thread sealant to the male threads of the sprinkler. Do not tighten sprinklers over the maximum recommended installation torque. Exceeding the maximum recommended installation torque may cause leakage or impairment of the sprinkler.

**Note:** Do not install the Model SWC sprinkler in locations where there is positive pressure in the cavity behind the sprinkler relative to the pressure in the protected space.

Glass bulb sprinklers have orange bulb protectors or protective caps to minimize bulb damage during shipping, handling an installation. Reliable sprinkler installation wrenches are designed to install sprinklers with bulb protectors in place. Remove the bulb protector at the time when the sprinkler system is placed in service for fire protection. Removal of the bulb protector before this time may leave the bulb vulnerable to damage. Remove bulb protectors by undoing the clasp by hand. Do not use tools to remove bulb protectors.



## Maintenance

Reliable Model SWC sprinklers should be inspected and the sprinkler system maintained in accordance with NFPA 25, as well as the requirements of any Authorities Having Jurisdiction.

Prior to installation, sprinklers should remain in the original cartons and packaging until used. This will minimize the potential for damage to sprinklers that could cause improper operation or non-operation.

Do not clean sprinklers with soap and water, ammonia liquid or any other cleaning fluids. Remove dust by gentle vacuuming without touching the sprinkler.

Replace any sprinkler which has been painted (other than factory applied). A stock of spare sprinklers should be maintained to allow quick replacement of damaged or operated sprinklers. Failure to properly maintain sprinklers may result in inadvertent operation or non-operation during a fire event.

## Guarantee

For the guarantee, terms, and conditions, visit [www.reliablesprinkler.com](http://www.reliablesprinkler.com).

## Ordering Information

Specify the following when ordering:

### Model

- SWC Extended Coverage Horizontal Sidewall Sprinkler

### Temperature Rating

- 135°F (57°C)
- 155°F (68°C)

### Sprinkler Finish

- Bronze

### Pendent Cover Plate

- SWC (Conical, 135°F [57°C] only)

### Cover Plate Finish

- See Table C

### Sprinkler Wrench

- Model W4