

# Reliable®

## Model G4 and G4FR “Sealing” Concealed Automatic Sprinklers

### The Concealer®

**A Concealed Sprinkler with a ½" (13mm) or 1½" (38mm) ½Adjustment and a Dust Tight Seal**

#### Features

1. Cover Plate with a Gasket Seal assembly for dust free environments.
2. A Total adjustment of ½" (13mm) provided by economical standard inlet version.
3. A Total adjustment of 1½" (38mm) provided by adjustable inlet versions.
4. Adjustable inlet version available with either 1" NPT male or female threads eliminating costing reducing couplings.
5. Available in chrome plated or white painted finish.
6. Ordinary and intermediate temperature rating.
7. Multiple orifices for design flexibility.
8. The cover plate does not require clips or springs.

#### Approvals & Listings

1. Underwriters Laboratories, Inc. (UL)
2. Underwriters Laboratories of Canada (ULC)
3. NYC MEA 258-93-E

**Note:** Approvals are for light and ordinary hazard, except for small orifice sprinkler which are limited to light hazard occupancies. The cup and skirt are fabricated from plated steel and are intended for interior non-corrosive applications

**US. Patent No. 4,880,063.**



#### Applications

Models G4 and G4FR “Sealing” Concealer provide fire protection in dust free environments while offering an attractive appearance and ½" (13mm) adjustment for easy installation. The adjustable 1" NPT inlet versions have 1½" (38mm) of total adjustment and also eliminate the need for a reducing coupling. The small diameter gasketed cover plate



assembly is easily and positively attached and blends into the ceiling, concealing the most dependable fire protection available, an automatic sprinkler system.

The Models G4 and G4FR “Sealing” Concealer utilize a gasketed cover plate assembly designed solely for use in dust free environments such as a clean room. These sprinklers are available in different orifice sizes allowing the designer to optimize system performance, thereby achieving a most efficient installation.

The Concealer® can eliminate the need for precise cutting of drop nipples. The gasketed cover plate assembly can be adjusted without tools to fit accurately on the ceiling. The fire protection system need not be shut down to adjust or remove the gasketed cover plate assembly.

The Models G4 and G4FR “Sealing” Concealer are standard response sprinklers. The G4FR does offer faster thermal response for those applications where this is desired.

#### Product Description

Models G4 and G4FR “Sealing” Concealer use proven fusible elements in a standard style sprinkler frame with a drop-down deflector. This assembly is recessed into the ceiling and concealed by a flat gasketed cover plate. This threaded engagement provides ½" (13mm) of cover adjustment to the threaded cup. The flat cover plate is attached to the skirt using the same ordinary temperature classification solder that is used in sprinklers. This results in ordinary temperature rated cover plates concealing either ordinary temperature sprinklers or intermediate temperature sprinklers which can be installed in 150°F environments. When the ceiling temperature rises, the solder holding the flat cover plate fuses, the cover plate released, thus exposing the sprinkler inside the cup to the rising ambient temperature.

The subsequent fusing of the solder element in the sprinkler opens the waterway and causes the deflector to drop into position to distribute the discharging water. Any secure engagement between the gasket cover plate and cup will

assure that the drop-down deflector is properly located below the ceiling.

### Installation

Do not install The Concealer® in ceilings which have positive pressure in the space above.

- Cut a 2 5/8" (67mm) diameter hole in the ceiling, and install the non-adjustable inlet sprinkler with the Model G4 Wrench. The wrench has drive tangs which insert into cup slots. When installing a sprinkler, the wrench is first positioned into the sprinkler/cup assembly until the wrench tangs engage drive slots in the top of the cup (there are two sets of mating drive slots in the cup). The sprinkler is then tightened into the pipe fitting. When inserting or removing the wrench from the sprinkler/cup assembly, care should be taken to prevent damage to the sprinkler. **DO NOT WRENCH ON ANY OTHER PART OF THE SPRINKLER/CUP ASSEMBLY.** Install the cover plate assembly by turning it clockwise until tight against ceiling.

The adjustable inlet versions are similar to The Concealer® described above except that an additional 1" adjustment is provided by means of a telescoping inlet section that threads in or out of a stationary coupling reducer [either 1" (25mm) male or female] as shown in Figures 2 or 3. These sprinklers must be installed before the ceiling is in place by wrenching on only the coupling reducer hex flats. After the ceiling has

been installed the telescoping inlet section is to be adjusted with the G4 Wrench. Install the cover plate assembly by turning it clockwise until tight against the ceiling.

- If required to reassemble the gasket to the cover plate, do not glue the gasket into place or allow the gasket to overlap both the cover plate and flange of the skirt.
- The gasket and cover plate of the Model G4 and G4FR "Sealing" sprinklers are not to be interchanged with other models of concealed sprinklers.
- Paint or any other coating over the factory finish on cover plates will void all approvals and warranties.

### Ordering Information

1. Sprinkler Model
2. Temperature Rating
3. Nominal Orifice
4. Inlet Type
5. Gasketed Cover Plate Assembly Finish

### Push-on/Thread-off Cover Plate Finish

- White Paint
  - Chrome Plated
- Other Finishes available upon request.

### Gasket Color

- White only



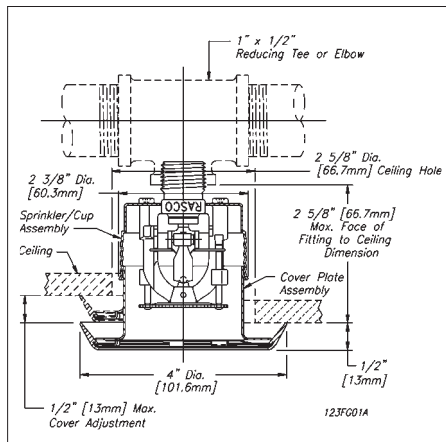
Model G4 Wrench

### Standard Temperatures

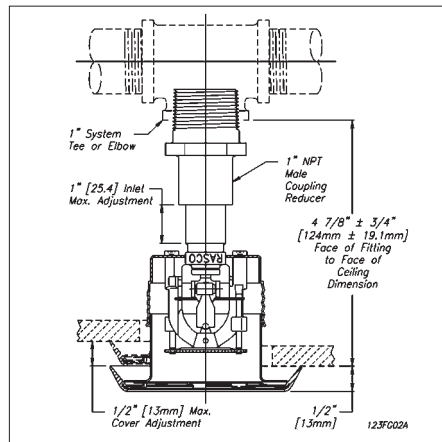
Model	Classification	Sprinkler	Cover Plate	Max. Ceiling Temp.
G4	Ordinary	135°F/57°C	135°F/57°C	100°F/38°C
G4, G4FR	Ordinary	165°F/74°C	135°F/57°C	100°F/38°C
G4	Intermediate	212°F/100°C	165°F/74°C	150°F/66°C

### Technical Installation Data

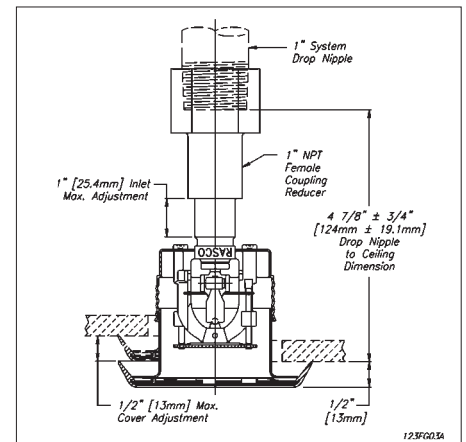
Model	Sprinkler Inlet	Total Adjustment	Nominal Orifice	Nominal K Factor		Thread	Sprinkler Identification Number (SIN)	
				US	Metric		G4	G4FR
G4 and G4FR	Non-Adjustment	1/2" (13mm)	1/2" (15mm)	5.6	80	1/2" NPT (R1/2)	R2115	R2215
	Non-Adjustment	1/2" (13mm)	7/16" (11mm)	4.2	60	1/2" NPT (R1/2)	R2113	R2213
	Non-Adjustment	1/2" (13mm)	3/8" (10mm)	2.8	40	1/2" NPT (R1/2)	R2111	R2211
	Adjustment	1 1/2" (38mm)	1/2" (15mm)	5.6	80	1" NPT Male or Female	R2118	R2218
	Adjustment	1 1/2" (38mm)	7/16" (11mm)	4.2	60	1" NPT Male or Female	R2113	R2213
	Adjustment	1 1/2" (38mm)	3/8" (10mm)	2.8	40	1" NPT Male or Female	R2112	R2212



1/2" NPT (R1/2) Non Adjustable Inlet  
\* Figure 1



1" NPT Male - Adjustable Inlet



1" NPT Female - Adjustable Inlet  
\* Figure 3

\*Illustration shows Model G4; use the same dimensional configuration for the Model G4FR

The equipment presented in this bulletin is to be installed in accordance with the latest pertinent Standards of the National Fire Protection Associations, Factory Mutual Research Corporation, or other similar organizations and also with the provisions of governmental codes or ordinances whenever applicable. Products manufactured and distributed by Reliable have been protecting life and property for over 80 years, and are installed and serviced by the most highly qualified an reputable sprinkler contractors located throughout the United States, Canada and foreign countries

Manufactured by



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