Fire Safety

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CONCEALED — 8.0 K-factor Extra Large Orifice Concealed Pendent Sprinklers @uick & Standard Response, Standard Coverage

General Description

The GS Fire Safety Concealed Sprinkler 8.0 K-factor.

The GSC289 concealed sprinkler is divided into two types: quick response (3mm glass bulb) and special response (5mm glass bulb). This sprinkler features a flat concealed cover, making it aesthetically pleasing and the best choice for architecturally sensitive or decorative areas. It is used in automatic fire extinguishing systems and can adjust the cover height according to the ceiling height. Installation locations include hotels, offices, schools, and shops.

The concealed fire sprinkler consists of the sprinkler, installation seat, outer cover, and inner cover. The sprinkler and installation seat are installed on the pipeline and together with the outer cover. The outer and inner covers are connected by a fusible alloy. When a fire occurs, the temperature rises, and the fusible alloy reaches its melting point, causing the outer cover to automatically fall off. The glass bulb in the sprinkler breaks due to the temperature increase, thereby activating the sprinkler to spray water.

As an option, the CONCEALED pendent sprinklers may be fitted with a silicone air and dust seal as shown in Figure 4. The air and dust seal is intended for sensitive areas where it is desirable to stop air and dust travel through the cover plate from the area above the ceiling.

NOTICE

The GS CONCEALED Concealed Pendent Sprinklers described herein must be installed and maintained in compliance with this document and with the applicable standards of the National Fire Protection Association (NFPA), in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the perfor- mance of these devices.

The owner is responsible for maintaining their fire protection system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.

Sprinkler

GS
Fire Safety

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Technical Data

Maximum Working Pressure
175 psi (12,1 bar)

Test Pressure
30 psi (30,1 bar)

Discharge Coefficient
K = 11.2 GPM/psi½ (161,3 LPM/bar½)

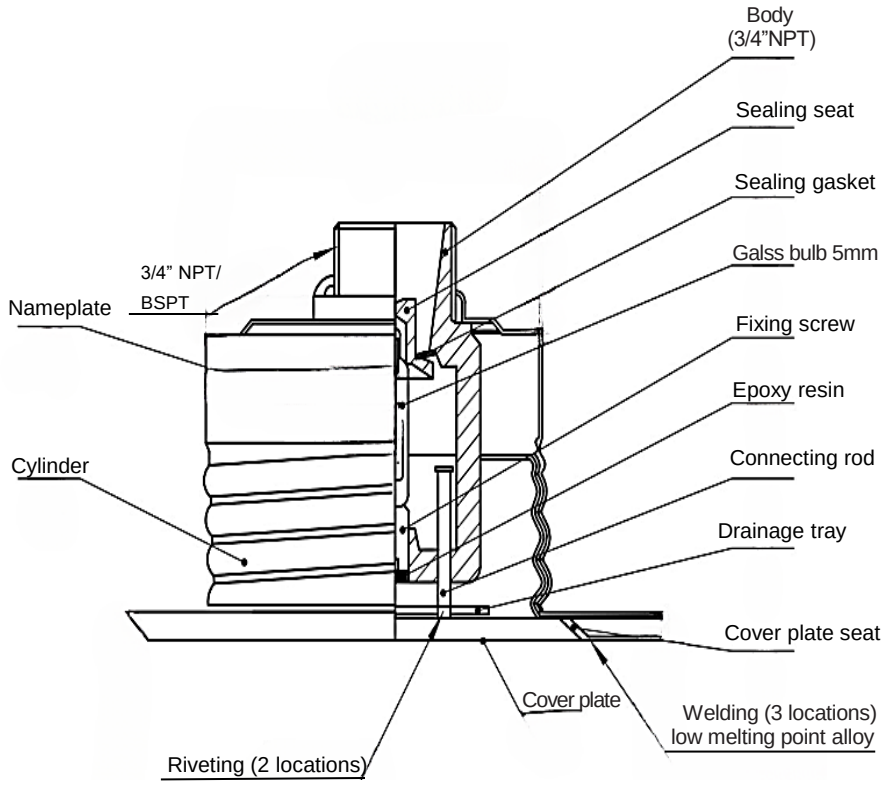
Temperature Ratings
155°F (68°C) Sprinkler; 165°F (74°C) Plate

Adjustment
3/4“ NPT or BSPT.

Finishes
Cover Plate: Refer to Ordering Proce- dure section

Physical Characteristics

1/ Body	Brass
2/ Sealing seat	Brass
3/ Glass bulb	JOB, Q5, 68°C
4/ Sealing gasket	Rubber
5/ Fixing screw	Bronze/Brass
6/ Epoxy resin	Epoxy
7/ Connecting rod	Plated Steel
8/ Drainage tray	Brass
9/ Cover plate seat	Brass
10/ Cover plate	Brass
11/ Cylinder	Carbon Steel
12/ Nameplate	Self-adhesive



THE CONCEALED (GSC289)
PENDENT SPRINKLER ASSEMBLY

Operation

When exposed to heat from a fire, the cover plate, soldered to the retainer at three points, falls away to expose the sprinkler assembly. At this point the deflector supported by the guide pins drops down to its operational position.

When the rated temperature of the solder link element is reached, the link element separates, allowing the sprin- kler to activate and flow water.

Installation

The GS Fire Safety Concealed , 8.0 K-factor, Extra Large Orifice Concealed Pendent Sprinklers must be installed in accor- dance with this section.

General Instructions
A 3/4 in. NPT sprinkler joint should be obtained with a minimum to maximum torque of 10 ft-lb to 20 ft-lb (13,4 N·m to 26,8 N·m). Higher levels of torque may distort the sprinkler inlet with conse- quent leakage or impairment of the sprinkler.