

GA SERIES / MODEL GA-8104

Extended Coverage / Light Hazard

Quick Response Sprinkler

Concealed Pendent



PRODUCT DESCRIPTION

Concealed sprinkler Model GA-8104 described in this data sheet are decorative sprinklers where a conical cover plate is placed which have the purpose to conceal the sprinkler.

It is the best solution than we have for spaces whose aesthetic is very important as hotels, offices, hospitals, etc. The assembly is recessed in the ceiling and hidden by the conical plate closure. Everything is going to appreciate is the conical cover plate with the requested finish. Using extended coverage sprinkler can reduce installation costs by requiring fewer sprinklers, less piping and less labor than commercial sprinklers.

Thermosensitive glass bulb 3 mm is used. They have a capacity to react 6 times faster than standard response sprinklers. The bulb contains a special liquid hermetically sealed in a glass capsule.

TECHNICAL DATA

Nominal "K" Factor	8,0 (115 metric)
Thread Size	3/4" NPT (R 3/4)
Temperatures	135°F (57°C) sprinkler, 135°F (57°C) cover plate 155°F (68°C) sprinkler, 135°F (57°C) cover plate 175°F (79°C) sprinkler, 155°F (68°C) cover plate 200°F (93°C) sprinkler, 155°F (68°C) cover plate
Maximum Working Pressure	175 psi (12 bar)
Materials	Frame: Brass Alloy Deflector: Cooper Alloy Screw: Brass Alloy Bulb Seat: Copper Alloy Sealing Spring: Nickel Alloy Bulb: Glass, 3 mm size Lodgment Spring: Stainless Steel Cup for Concealed Sprinklers: Steel
Reference	GA8104
Finish	Bronze

OPERATION

The conical cover plate is welded to the entire support in three places, after the application of sufficient heat, the cover plate falls down exposing the sprinkler. A special spring attached to the sprinkler deflector which serves to provide a constant tension against the flat cover plate, preventing problems of environmental vibration.

At normal temperatures, the glass bulb contains the fluid in both the liquid phase and the vapor phase. The vapor phase can be seen as a small bubble. As heat is applied, the liquid expands forcing the bubble smaller and smaller as the liquid pressure increases. Continued heating forces the liquid to push out against the bulb, causing to shatter, opening the waterway and allowing the deflector to distribute the discharging water.

INSTALLATION

Model GA-8104 sprinklers are quick response sprinklers intended for installation as specified in NFPA13. They must also be installed with the Model **CO2** Sprinkler Wrench specifically designed by AG Fire Sprinkler for use with these sprinklers.

A leak tight $\frac{3}{4}$ " NPT (R3/4) sprinkler joint can be obtained with a torque of 8-18ft-lbs (10.8-24.4N-m). Do not tighten sprinklers over maximum recommended torque. It may cause leakage or impairment of these sprinklers.

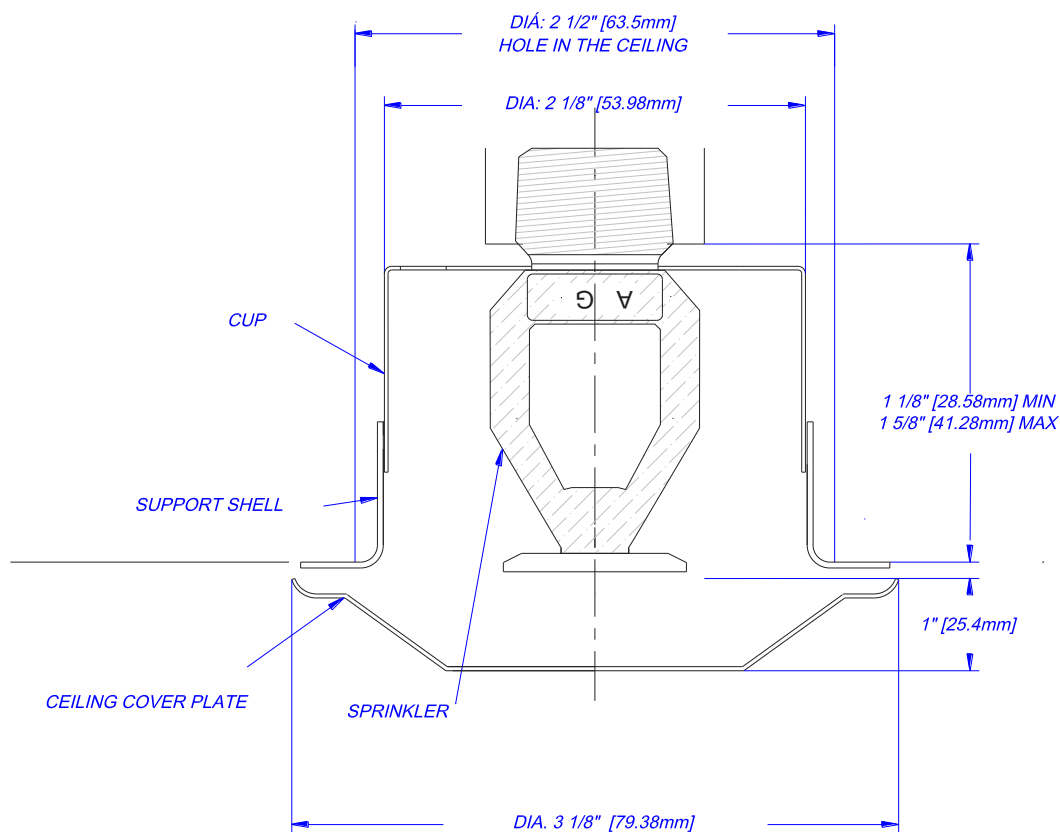
Note: Installation with a positive pressure above the housing is not permitted.

UL LISTING – LIGHT HAZARD

GA8104	Temperatures				Ceiling to deflector distance	Width of Coverage	Length of Coverage	Minimum pressure	Flow
	135°F (57°C)	155°F (68°C)	175°F (79°C)	200°F (93°C)					
Concealed Pendent	X	X	X	X	-	16ft (4.9m)	16ft (5.5m)	10.3psi (0.71bars)	26gpm (98l/min)
	X	X	X	X	-	18ft (5.5m)	18ft (5.5m)	15.6psi (1.08bars)	32gpm (121l/min)
	X				-	20ft (6.1m)	20ft (6.1m)	24.4psi (1.68bars)	40gpm (151l/min)

Minimum space between sprinklers 8' (2.4m)

DIMENSIONS



ORDERING INFORMATION

P/N	GAXXXX Y Z
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DESCRIPTION	CODE
Concealed pendent	GA8104

Y	1	57°C	135°F
	2	68°C	155°F
	4	79°C	175°F
	5	93°C	200°F

Z	1	BRASS
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Specify:

Quantity	
Model Number	
Type	
Orifice	
Thread Size	
Temperature	
Finishes	
Quantity - Wrenches	