

GA SERIES / MODEL GA-8114

Extended Coverage / Light Hazard

Quick Response Sprinkler

Concealed Horizontal Sidewall



PRODUCT DESCRIPTION

Concealed sprinkler Model GA-8114 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 3mm 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
Temperatures	135°F (57°C) sprinkler, 135°F (57°C) cover plate
Maximum Working Pressure	175psi (12bar)
Materials	Frame: Brass Alloy Deflector: Cooper Alloy Screw: Brass Alloy Bulb Seat: Copper Alloy Sealing Spring: Nickel Alloy Bulb: Glass, 3 mm size Cup for Concealed Sprinklers: Steel
Reference	GA8114
Finish	Bronze

OPERATION

The flat cover plate is welded to the entire support in three places, after the application of sufficient heat, the flat 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 GA8114 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 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

GA8114	Temperatures	Ceiling to deflector distance	Width of Coverage	Length of Coverage	Minimum pressure	Flow
	135°F (57°C)					
Concealed Horizontal sidewall	X	4" to 6" (101.6mm to 152.4mm)	16ft (4.9m)	22ft (6.6m)	19.8psi (1.36bar)	36gpm (135l/min)
	X			24ft (7.2m)	23.2psi (1.59bar)	39gpm (147l/min)
	X	4" to 12" (101.6mm to 304.8mm)	18ft (5.4m)	20ft (6.1m)	19.8psi (1.36bar)	36gpm (135l/min)
	X			22ft (6.6m)	24.4psi (1.68bar)	40gpm (151l/min)

Minimum space between sprinklers 6ft (1,8 m)

DIMENSIONS



ORDERING INFORMATION

P/N	GAXXXX Y Z
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DESCRIPCION	CODE	Y	1	57°C	135°F	Z	1	BRASS
Concealed sidewall	GA8114							

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