

GA SERIES / MODEL GA-81

Storage / In-Rack Sprinkler
Quick Response Sprinkler
Upright & Pendent



Upright



Pendent

PRODUCT DESCRIPTION

Intermediate Upright and Pendent sprinkler Model GA-81 described in this data sheet are sprinklers storage for use in Light or Ordinary Hazard.

Intermediate sprinklers are upright and pendent. Each sprinkler comes with an intermediate plate of water protection 3 15/64" (82 mm) in diameter. They can also come with a protective guard anti mechanical shocks.

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
Temperatures	135°F (57°C) 155°F (68°C) 175°F (79°C) 200°F (93°C) 286°F (141°C)
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, 3mm size
Reference	Pendent: GA8106 Upright: GA8120
Finish^(*)	Bronze Chrome Poliester

* Other Finishes available under request.

OPERATION

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-81 sprinklers are quick response sprinklers intended for installation as specified in NFPA13. They must also be installed with the Model **AB** Sprinkler Wrench specifically designed by AG Fire Sprinkler for use with these sprinklers.

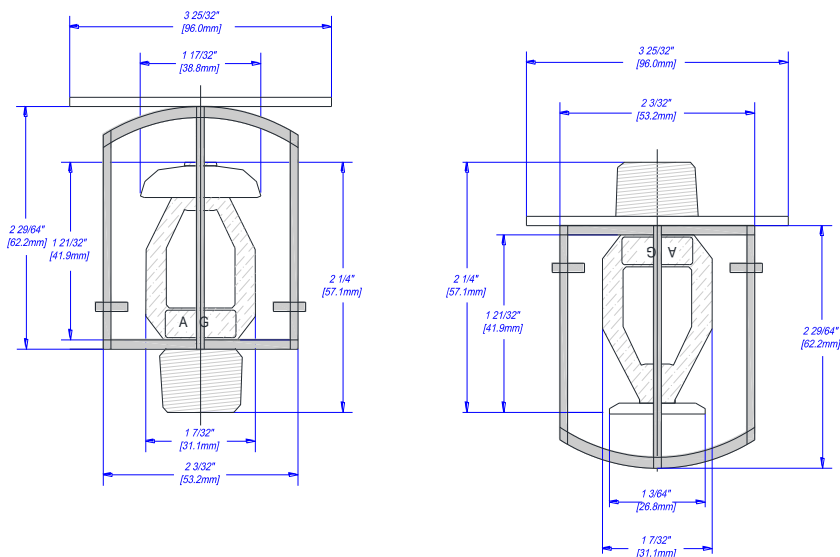
A leak tight 3/4" NPT (R3/4) sprinkler joint can be obtained with a torque of 8-18ft-lbs (10.8-24.4N-m). Do not tighten sprinklers over maximum recommended torque. It may cause leakage or impairment of these sprinklers.

The sprinklers come with an orange protection, to avoid breakage during assembly. Remove this protection once installed and made sure that everything is correct. The AG Sprinkler Wrenches are designed to install sprinklers with the protection still.

TEMPERATURE RATINGS

Classification	Sprinkler Temperature		Max. Ambient Temperature		Bulb Color
	°F	°C	°F	°C	
Ordinary	135	57	100	38	Orange
Ordinary	155	68	100	38	Red
Intermediate	175	79	150	66	Yellow
Intermediate	200	93	150	66	Green
High	286	141	225	107	Blue

DIMENSIONS



The Guard and the Intermediate plate are sold separately.

ORDERING INFORMATION

P/N	GAXXXX Y Z
------------	-------------------

DESCRIPTION	CODE
Pendant	GA1160
Upright	GA1167

Y	1	57°C	135°F
	2	68°C	155°F
	4	79°C	175°F
	5	93°C	200°F
	7	141°C	286°F

Z	1	Brass
	2	Chrome
	3	White Ral 9003

Specify:

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