GA SERIES / MODEL GA8161

Standard Coverage / Basic Sprinkler
Standard Response / Upright Sprinkler
K-Factor 8.0(115)

Product description

The GA8161 Model sprinkler is a standard coverage pendent sprinkler that combines the durability of a basic sprinkler with the attractive low-profile design of a decorative sprinkler.

The GA8161 sprinkler is standard response with a 5 mm bulb.

The product is designed for use in commercial and industrial buildings.

The bulb contains a quantity of special liquid hermetically sealed inside a glass capsule, so that when the liquid expands, the bubble disappears and later at the appropriate temperature the bulb breaks letting the water outlet free to discharge.

Listings and Approvals



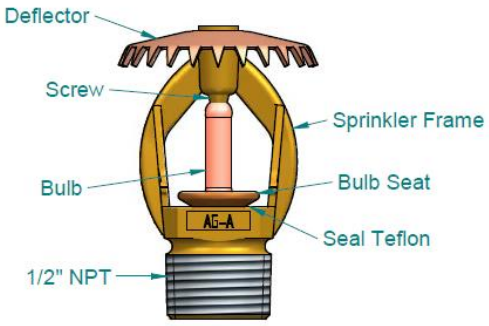
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Technical data

Model	GA8161
Certifications	UL
Position	Upright
K Factor	8.0 (115)
Thread diameter	½" NPT
Response	Standard (Bulb 5 mm)
Maximum working pressure	175 psi (12 bar)
Sprinkler temperature	135ºF (57ºC) 155ºF (68ºC) 175ºF (79ºC) 200ºF (93ºC) 286ºF (141ºC) 360ºF (182ºC)
Materials	Frame: Brass Deflector: Bronze Screw: Brass Bulb seat: Brass Seal Teflon: Teflon Bulb: Glass, 5mm size
Finish (Sprinkler)	Bronze, Chrome, White

Operation

Under normal conditions the glass bulb contains both liquid and a gas bubble. As the temperature increases the bubble decreases in size due to the internal pressure exerted by the liquid as it heats up. When the nominal temperature of the bulb is reached the liquid inside the bulb exerts the necessary pressure to break the bulb and release the water flow. Finally, it is the deflector that distributes the water flow in a specific pattern over the operating surface.



Approvals chart

STANDARD COVERAGE SPRINKLER						
Type of response	**Reference**	**Sprinkler Temperature ºF (ºC)**	**Maximum working pressure bar (psi)**	**Nominal K factor gpm/psi^1/2 (lpm/bar^1/2)**	**Thread size (NPT)**	**Approvals**
Standard response	GA8161	135 (57)	12 (175)	8.0 (115)	½"	UL
		155 (68)	12 (175)	8.0 (115)	½"	UL
		175 (79)	12 (175)	8.0 (115)	½"	UL
		200 (93)	12 (175)	8.0 (115)	½"	UL
		286 (141)	12 (175)	8.0 (115)	½"	UL
		360 (182)	12 (175)	8.0 (115)	½"	UL

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Installation

Model GA8161 sprinklers are designed to be installed as specified in this section. They must be installed using the model AB wrench.

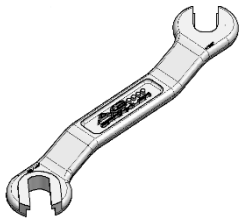
Do not install any sprinkler if the bulb is broken, leaking or in poor condition. With the sprinkler held horizontally the air bubble must be clearly visible.

If the sprinkler has any visual damage do not install it, replace it with another unit.

The following steps will explain how to install GA8161 sprinklers.

1. First of all, the sprinkler is removed from its packaging and a visual inspection is carried out to check that it has not suffered any deformation or that none of its parts are in a bad state.
2. Thread the sprinkler with or without escutcheon where it is to be finally positioned by applying a force of 8 to 18 ft-lb (10.8 – 24.4 Nm) to obtain a tight ½" (R1/2) NPT joint. Do not tighten the sprinklers above the maximum recommended torque, as this may cause leakage or damage to the sprinklers. The AB sprinkler spanner specially designed for this product is to be used.

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1. Sprinkler wrench without escutcheon

Note: It is important to hold the sprinkler by the body when handling to avoid damage to the sprinklers (do not use force on the deflector).

Maintenance

GA8161 Series sprinklers must be inspected and maintained in accordance with applicable standards according their approvals (refer to the appropriate data sheet). Do not clean the sprinklers with soap and water ammonia or other cleaning liquids that may be corrosive. Remove dust with a vacuum cleaner. If the room where the sprinklers Will be installed needs to be painted, paint it before installing them, if not possible, remove covers before painting. If any sprinkler or cover shows any Paint on it replace it immediately. Sprinklers that are leaking or show visible signs of corrosion should be replaced. Sprinklers damaged by dropping knocking vending twisting, slipping or similar should be replaced. A stock of spare sprinklers should be maintained to allow rapid replacement of damaged or cracked sprinklers. Prior to installation sprinklers should be kept in the original packaging until use to minimize the damage to sprinklers.

Temperatures ratings

Classification	Sprinkler temperature		Maximum Ceiling Temp.		Bulb color
	ºF	ºC	ºF	ºC	
Ordinary	135	57	100	38	Orange
Ordinary	155	68	120	49	Redo
Intermediate	175	79	150	66	Yellow
Intermediate	200	93	150	66	Green
High	286	141	225	107	Blue
Extra high	360	182	300	149	Purple

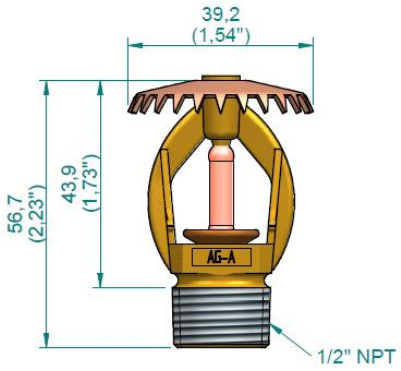
Applicable Regulations

GA Series sprinklers systems must be designed in accordance with the installation and maintenance criteria of NFPA, EN, FM Datasheets and other local and national regulations.

Warranty

For warranty conditions, please contact AG Fire Sprinkler.

Dimensions



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Transport and Storage

Original Packaging
Automatic sprinklers must be transported and stored exclusively in their original packaging in order to preserve their physical and factor condition.

Proper Handling
Any type of improper stacking or handling that could compromise the structural or functional integrity of the product must be avoided.

Environmental Conditions
Sprinklers must be kept in dry locations, protected from moisture, dust, corrosive agents, and extreme temperatures.
Failure to comply with these conditions may void the warranty and render the product unfit for use.

Pre-Installation Inspection
Before installation, each sprinkler must undergo a visual inspection to ensure there is no physical damage, corrosion, deformation, or other defects.

Removal of Protective Caps
Factory-installed protective caps must only be removed once civil Works are complete, and always before system activation.
⚠ Premature removal of protective caps may cause irreversible damage to the equipment.

Responsibilities and Requirements

Reading Instructions
The user must carefully read all instructions before installing any AG Fire Sprinkler product.

Product Verification
It is the user's responsibility to ensure that AG Fire Sprinkler products are suitable for their intended application, in accordance with industry standards and the technical information provided.
⚠ No document modifies the standard terms of sale or warranty conditions.

Installer Knowledge
The installer must understand how the product works and the reasons for its specific selection.

Safety Regulations
They must be familiar with relevant industry regulations and aware of the risk associated with incorrect installation.

Serious Consequences
Failure to comply with installation requirements and current regulations may compromise system performance, resulting in system failure, personal injury, loss of life, or significant property damage.

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Ordering information

P/N	GAXXXX Y Z

DESCRIPTION	CODE
Upright	GA8161

Y	1	57ºC	135ºF
	2	68ºC	155ºF
	4	79ºC	175ºF
	5	93ºC	200ºF
	7	141ºC	286ºF
	8	182ºC	360ºF

Z	1	BRONZE
	2	CHROME
	3	WHITE

ACCESSORIES	M

ACCESSORIES	M
Sprinkler wrench model AB	35300030
Cabinet for sprinklers 1/2” & 3/4” (12 units)	A002289

Please specify the following when ordering:

Quantity	
Model number	
Type	
Orifice	
Nominal temperature	
Finish of the sprinkler	
Accessories	

The equipment presented in this data sheet must be installed in accordance with the latest relevant standards of the National Fire Protection Association (NFPA), FM Global, LPCB, VdS or other similar organisations, as well as applicable governmental regulations.
This document is not binding. AG Fire Sprinkler reserves the right to make any changes to the document without prior notice.

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