# GA SERIES / MODEL GA8118

Standard Coverage / Basic Sprinkler
Quick Response / Upright Sprinkler
K-Factor 5.6(80)

## Product description

The model GA8118 sprinkler is a decorative standard coverage, upright sprinkler

The GA8118 sprinkler is quick response with a 3mm 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

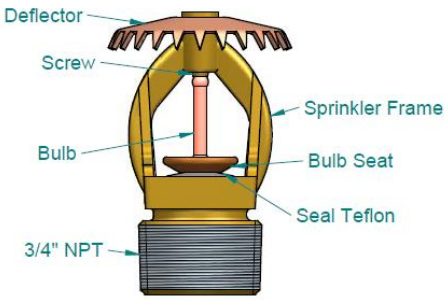
Listed by cULus
Approved by FM Approvals
CE Marking

## Technical data

| | |
|---|---|
| **Model** | GA8118 |
| **Certifications** | UL/FM/CE |
| **Position** | Upright |
| **K Factor** | 8.0 (115) |
| **Thread diameter** | 3/4" NPT |
| **Response** | Quick (Bulb 3 mm) |
| **Maximum working pressure** | 175 psi (12 bar) |
| **Sprinkler temperature** | 135ºF (57ºC)<br>155ºF (68ºC)<br>175ºF (79ºC)<br>200ºF (93ºC)<br>286ºF (141ºC) |
| **Materials** | Frame: Brass<br>Deflector: Bronze<br>Screw: Brass<br>Bulb seat: Brass<br>Seal Teflon: Teflon<br>Bulb: Glass, 3mm size<br>Cover plate: Brass |
| **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** |
| Quick response | GA8118 | 135 (57) | 12 (175) | 8,0 (115) | 3/4" | UL/FM/CE |
| | | 155 (68) | 12 (175) | 8,0 (115) | 3/4" | UL/FM/CE |
| | | 175 (79) | 12 (175) | 8,0 (115) | 3/4" | UL/FM/CE |
| | | 200 (93) | 12 (175) | 8,0 (115) | 3/4" | UL/FM/CE |
| | | 286 (141) | 12 (175) | 8,0 (115) | 3/4" | UL/FM/CE |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## Installation

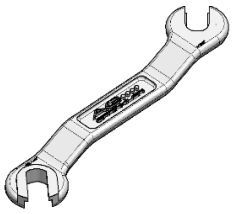
Model GA8118 sprinklers are designed to be installed as specified in this section. They must be installed using the model AB wrench.

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 GA8118 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 ¾" (R3/4) 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.



*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

GA8118 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 |

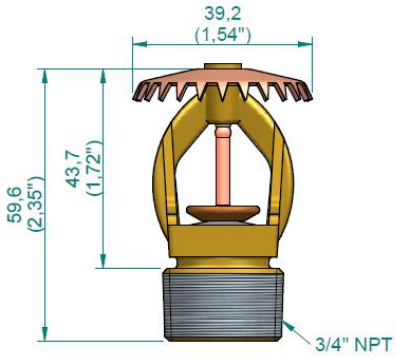
## Applicable Regulations

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 | GA8118 |

| | | | |
|---|---|---|---|
| Y | 1 | 57ºC | 135ºF |
| | 2 | 68ºC | 155ºF |
| | 4 | 79ºC | 175ºF |
| | 5 | 93ºC | 200ºF |
| | 7 | 141 ºC | 286ºF |

| | | |
|---|---|---|
| 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** | |




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