

## GA SERIES / MODEL GA1361

Extended Coverage / Decorative Sprinkler  
Quick Response Sprinkler  
Concealed Pendent Sprinkler



### PRODUCT DESCRIPTION

The concealed sprinkler model GA1361 is a pendent sprinkler with extended coverage, decorative, due to the flat cover that adapts very easily to all types of flat surfaces.

The GA1361 sprinkler is quick response with a 3mm bulb.

The product consists of three parts, the sprinkler, a crown screwed to the sprinkler and the flat cover which, is made up of two parts joined by a thermal weld adjusted to the appropriate temperature, so that, when it detects the heat of a fire, the cover falls off, and let the sprinkler completely uncovered so that it can carry out the discharge.

It is the best solution in places where esthetic is important, such as, hotels, offices, hospitals... The installation is recessed in the ceiling and is concealed by the flat cover. Only the flat cover with the requested finish will be seen.

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

## TECHNICAL DATA

|                                 |                                                                                                                                                                                                                                        |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Nominal "K" Factor</b>       | 5.6 (80)                                                                                                                                                                                                                               |
| <b>Thread Size</b>              | 1/2" NPT                                                                                                                                                                                                                               |
| <b>Temperatures</b>             | 135°F (57°C) sprinkler, 135°F (57°C) cover plate.<br>155°F (68°C) sprinkler, 135°F (57°C) cover plate.                                                                                                                                 |
| <b>Maximum Working Pressure</b> | 175psi (12 bar)                                                                                                                                                                                                                        |
| <b>Materials</b>                | Frame: DZR Brass<br>Deflector: Brass<br>Screw: Brass<br>Bulb Seat: Brass<br>Seal Teflon: Nikel alloy + Teflon<br>Bulb: Glass, 3 mm size<br>Drop Pin: Stainless Steel<br>Cover Plate: Brass<br>Crown for cover Sprinklers: Plated Steel |
| <b>Reference</b>                | GA1361                                                                                                                                                                                                                                 |
| <b>Cover</b>                    | CGARO304 – WHITE (RAL9003) – 57°C (1.)                                                                                                                                                                                                 |

- For special finishes, consult the details in advance with the Technical Office.

## APPROVALS

The following are the approvals that the GA1361 sprinkler has successfully passed.

| CONCELAED EXTENDED COVERAGE SPRINKLER |           |                                |                   |                                 |                             |                                      |                                                                           |                   |           |
|---------------------------------------|-----------|--------------------------------|-------------------|---------------------------------|-----------------------------|--------------------------------------|---------------------------------------------------------------------------|-------------------|-----------|
| Type of Response                      | Reference | Maximum Coverage Area (ft / m) | Minimum Flow Rate | Sprinkler Temperature (°C / °F) | Cover Temperature (°C / °F) | Maximum Working Pressure (bar / psi) | Nominal "K" Factor [(gpm/psi <sup>1/2</sup> ) / (lpm/bar <sup>1/2</sup> ) | Thread Size (NPT) | Approvals |
| Quick Response                        | GA1361    | 16ft x 16ft / 4,9m x 4,9m      | 26 / 98           | 57 / 135                        | 57 / 135                    | 12 / 175                             | 5,6 / 80                                                                  | 1/2"              | UL        |
|                                       |           |                                |                   | 68 / 155                        | 57 / 135                    | 12 / 175                             | 5,6 / 80                                                                  | 1/2"              | UL        |
|                                       |           | 18ft x 18ft / 5,5m x 5,5m      | 33 / 125          | 57 / 135                        | 57 / 135                    | 12 / 175                             | 5,6 / 80                                                                  | 1/2"              | UL        |
|                                       |           |                                |                   | 68 / 155                        | 57 / 135                    | 12 / 175                             | 5,6 / 80                                                                  | 1/2"              | UL        |
|                                       |           | 20ft x 20ft / 6,1m x 6,1m      | 40 / 151          | 57 / 135                        | 57 / 135                    | 12 / 175                             | 5,6 / 80                                                                  | 1/2"              | UL        |
|                                       |           |                                |                   | 68 / 155                        | 57 / 135                    | 12 / 175                             | 5,6 / 80                                                                  | 1/2"              | UL        |

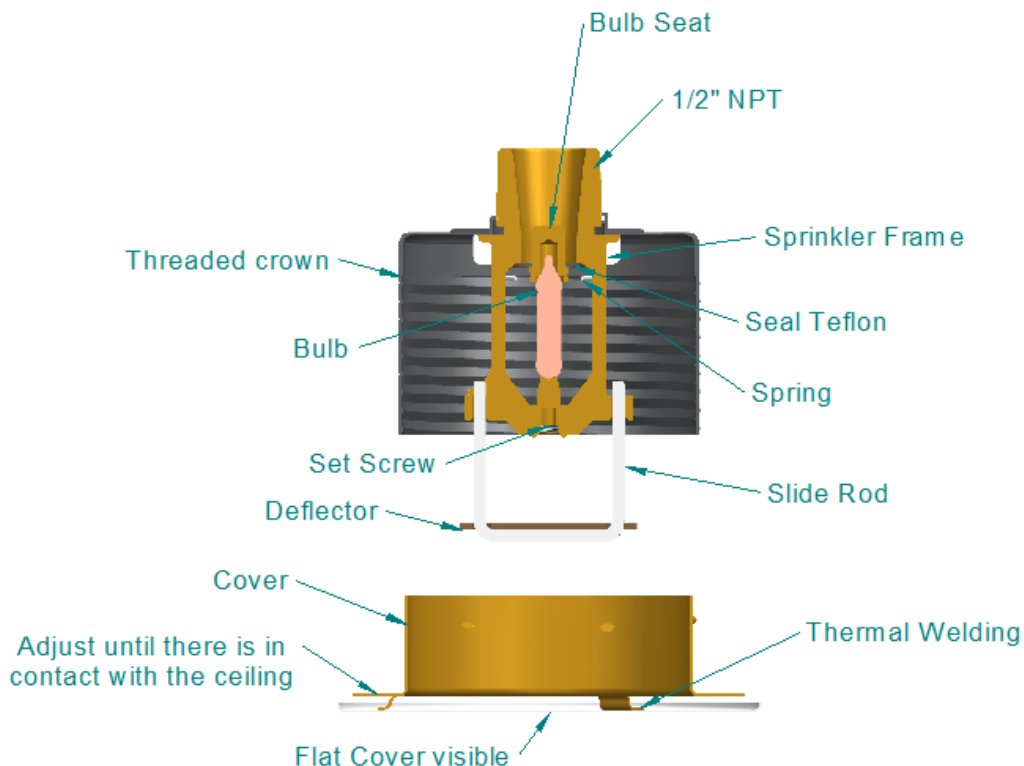
## OPERATION

When a fire occurs, the flat cover that conceal the sprinkler falls off, when it reaches a certain critical temperature, thanks to its tested and approved thermal bulb.

The sprinkler then slide its deflector thanks to the gravity force, remaining in working position.

As the glass bulb begins to heat up, a small bubble inside the bulb decreases. Finally, when the bulb reaches the nominal temperature, it breaks due to the pressure applied by the expansion of the liquid inside.

Thanks to the spring that pushes the bulb seat, it is ejected without suffering any type of hang - up, leaving the way for the flow of water free.



## INSTALLATION

Model GA1361 sprinklers are designed to be installed as specified in NFPA13. They must also be installed using the Model CO Sprinkler Wrench.

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

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

1. First of all, a circular hole with a diameter of between 61 and 66 mm must be prepared in the ceiling for correct installation, centered with the concealed pipe through which the water is to be supplied.
2. Hand threading the sprinkler - crown - protective cap assembly. Remove the protective cap once the sprinkler is installed.

**Note:** Take care that when threading the assembly the crown is not loosening in relation to the sprinkler. If this happens, remove the protective cap and go directly to step 3.

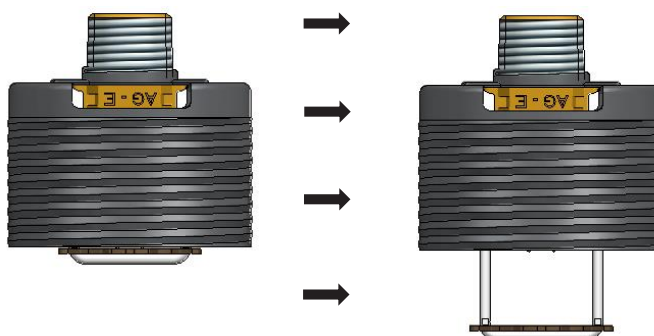


3. Once prepared, proceed to screw the sprinkler with a 1/2 "NPT thread using the wrench in the following picture. A 1/2 "NPT (R1 / 2) NPT tight fitting can be obtained on the sprinkler with a torque of 8 to 18 ft-lb (10.8 - 24.4 Nm). Do not tighten sprinklers beyond the maximum recommended torque, as it can cause leaks or deterioration of the sprinklers.



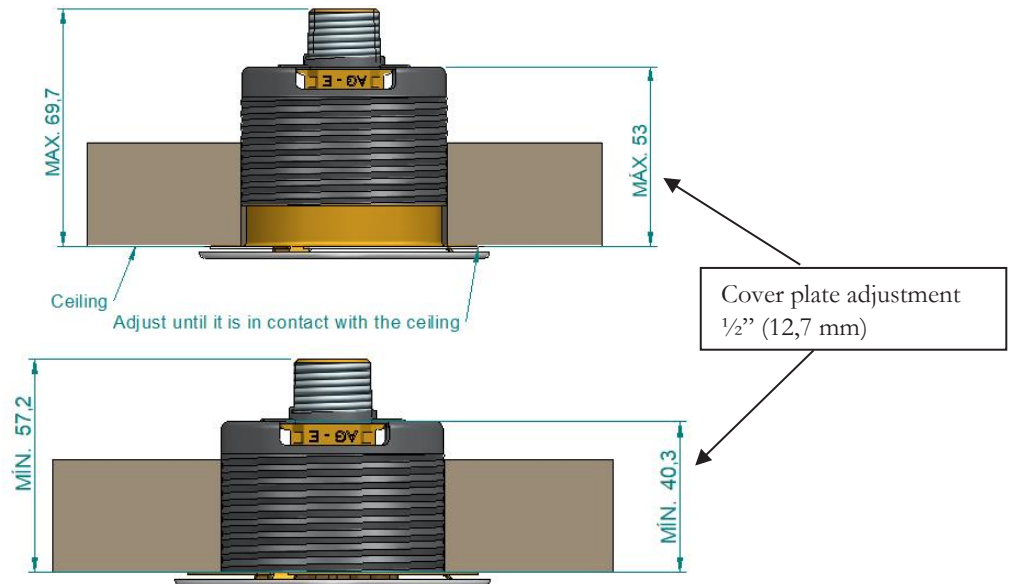
**Note:** it is important to hold the sprinkler by the body when handling it to prevent damage (do not use force on the deflector, pins, etc.).

4. Once the sprinkler is positioned, check that the deflector moves up and down freely, without any interference.



5. Once the sprinkler is connected to the supply pipe, proceed to adjust the cover. The cover is screwed until it touches the ceiling. The cover must be between the maximum and minimum dimensions when assembled, as shown in the image below.

**Note:** For proper operation of the sprinkler, the cover must be in contact with the ceiling and not exceed the maximum and minimum dimensions provided.



**Note:** If any of the sprinkler components are damaged or in bad condition, do not install, replace with another one.

## MAINTENANCE

GA1361 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, bending, twisting, slipping or similar should be replaced.

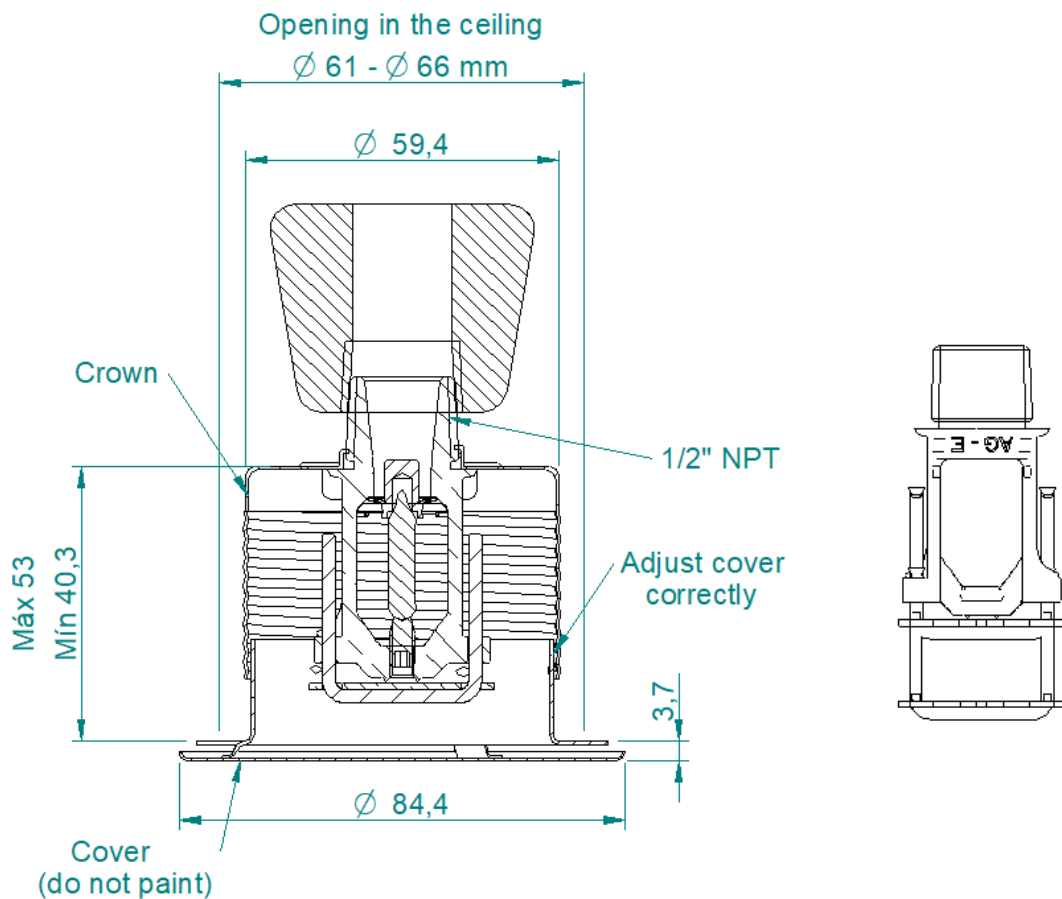
A stock of spare sprinklers should be maintained to allow rapid replacement of damaged or cracked sprinklers.

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 |
|----------------|-----------------------|----|-----------------------|----|------------|
|                | °F                    | °C | °F                    | °C |            |
| Ordinary       | 135                   | 57 | 100                   | 38 | Orange     |
| Ordinary       | 155                   | 68 | 100                   | 38 | Red        |

## DIMENSIONS



## ORDERING INFORMATION

|                        |                   |
|------------------------|-------------------|
| <b>P/N (SPRINKLER)</b> | <b>GAXXXX Y Z</b> |
|------------------------|-------------------|

| DESCRIPCION       | CODE   | Y | 1 | 57°C | 135°F | Z | 1 | BRONZE |
|-------------------|--------|---|---|------|-------|---|---|--------|
| Concealed pendent | GA1361 |   | 2 | 68°C | 155°F |   |   |        |

|                    |                    |
|--------------------|--------------------|
| <b>P/N (COVER)</b> | <b>CGARO X 0 Y</b> |
|--------------------|--------------------|

| DESCRIPTION | CODE | X | 3 | WHITE<br>(RAL9003) | 0 | Y | 4 | 57°C | 135°F |
|-------------|------|---|---|--------------------|---|---|---|------|-------|
|-------------|------|---|---|--------------------|---|---|---|------|-------|

Specify:

|                     |  |
|---------------------|--|
| Quantity            |  |
| Model number        |  |
| Type                |  |
| Orifice             |  |
| Type deflector      |  |
| Temperature         |  |
| Finishes            |  |
| Finish of the cover |  |