

GA SERIES / MODELO GA1371

Extended Coverage / Decorative Sprinkler

Quick Response Sprinkler

Concealed Horizontal Sidewall Sprinkler



PRODUCT DESCRIPTION

The concealed sprinkler model GA1371 is a horizontal sidewall sprinkler with extended coverage, decorative, due to the flat cover that adapts very easily to all types of flat surfaces.

The GA1371 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 tells 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 wall 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

Nominal "K" Factor	5.6 (80)
Thread Size	1/2" NPT
Temperatures	155°F (68°C) sprinkler, 135°F (57°C) cover plate
Maximum Working Pressure	175psi (12 bar)
Materials	Frame: DZR Brass Deflector: Brass Screw: Brass Bulb Seat: Brass Seal Teflon: Nickel alloy + Teflon Bulb: Glass, 3 mm size Drop Pin: Stainless Steel Cover Plate: Brass Crown for cover Sprinklers: Plated Steel
Reference	GA1371
Cover	CGARO304 – WHITE (RAL9003 Matt) – 57°C (1.)

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

APPROVALS

The following are the successful design criteria approved for the GA1371 sprinkler.

CONCEALED HORIZONTAL SIDEWALL SPRINKLER EXTENDED COVERAGE LIGHT HAZARD								
Maximum Coverage Area, Width x Length, ft (m)	Flow Rate, gpm (lpm)	Minimum Required Pressure, bar (psi)	Distance Below Ceiling, in (m)	Sprinkler Temperature, °F (°C)	Cover Temperature, °F (°C)	Nominal "K" Factor, gpm/psi ^{1/2} (lpm/bar ^{1/2})	Thread Size, NPT	Approvals
16x16 (4,9x4,9)	31 (117)	2,1 (30,6)	4"-6" (0,1-0,15)	155 (68)	135 (57)	5.6 (80)	1/2"	UL
16x18 (4,9x5,5)	31 (117)	2,1 (30,6)	4"-6" (0,1-0,15)	155 (68)	135 (57)	5.6 (80)	1/2"	UL
16x20 (4,9x6,1)	34 (129)	2,6 (36,8)	4"-6" (0,1-0,15)	155 (68)	135 (57)	5.6 (80)	1/2"	UL

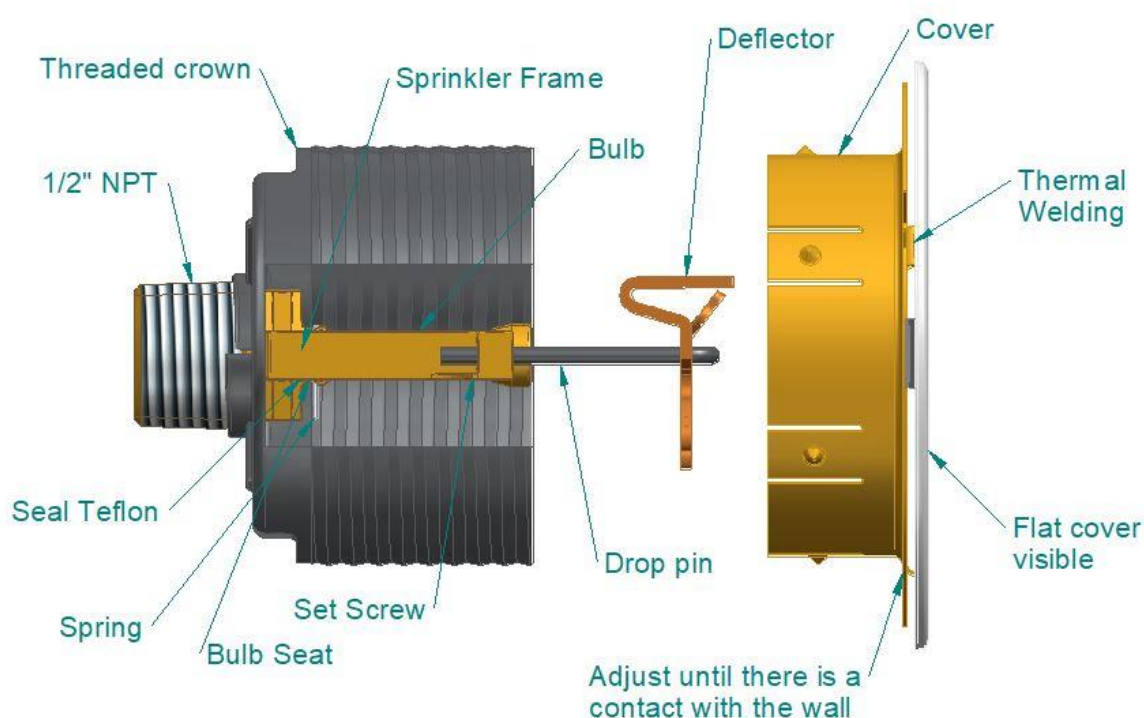
OPERATION

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.

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.

The sprinkler then slides its deflector thanks to the force exerted by the water pressure, remaining in working position.



INSTALLATION

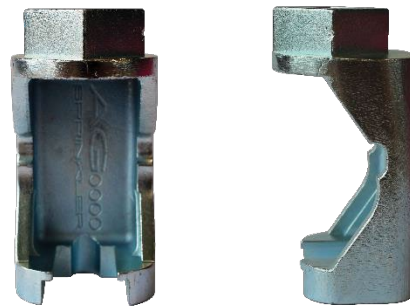
Model GA1371 sprinklers are designed to be installed as specified in this section. They must also be installed using the Model CO Sprinkler Wrench.

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.

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

3. Once prepared, proceed to screw the sprinkler with a 1/2" NPT thread using the CO Sprinkler wrench, as shown below. 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.

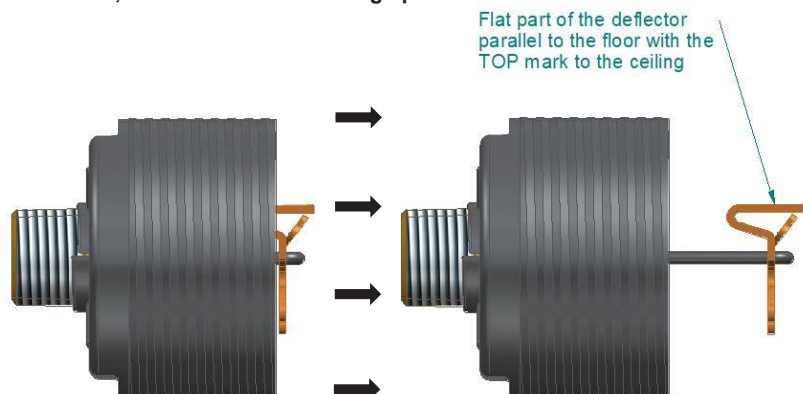


CO Sprinkler Wrench

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.).

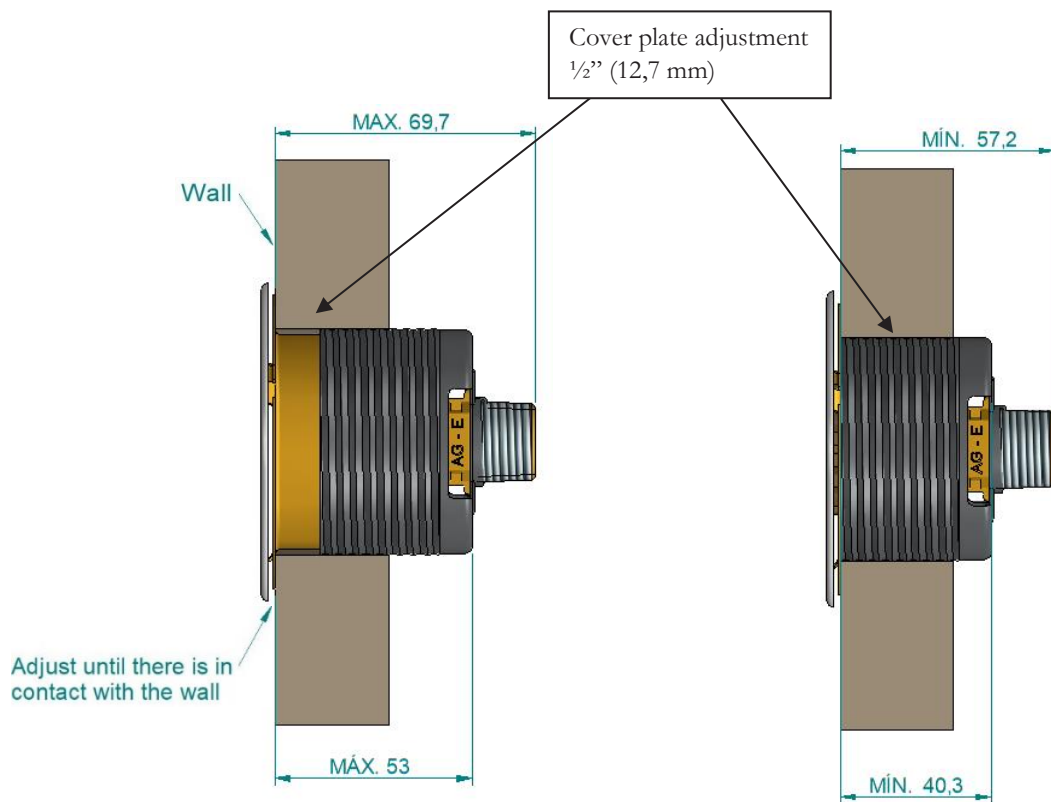
4. Once the sprinkler is positioned, check that the deflector moves in and out freely, without any interference.

Note: position the sprayer so that the flat part of the deflector is parallel to the floor, with the TOP mark facing up.



5. Once the sprinkler is connected to the supply pipe, proceed to adjust the cover. The cover is screwed until it touches the wall. 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 wall 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

GA1371 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.

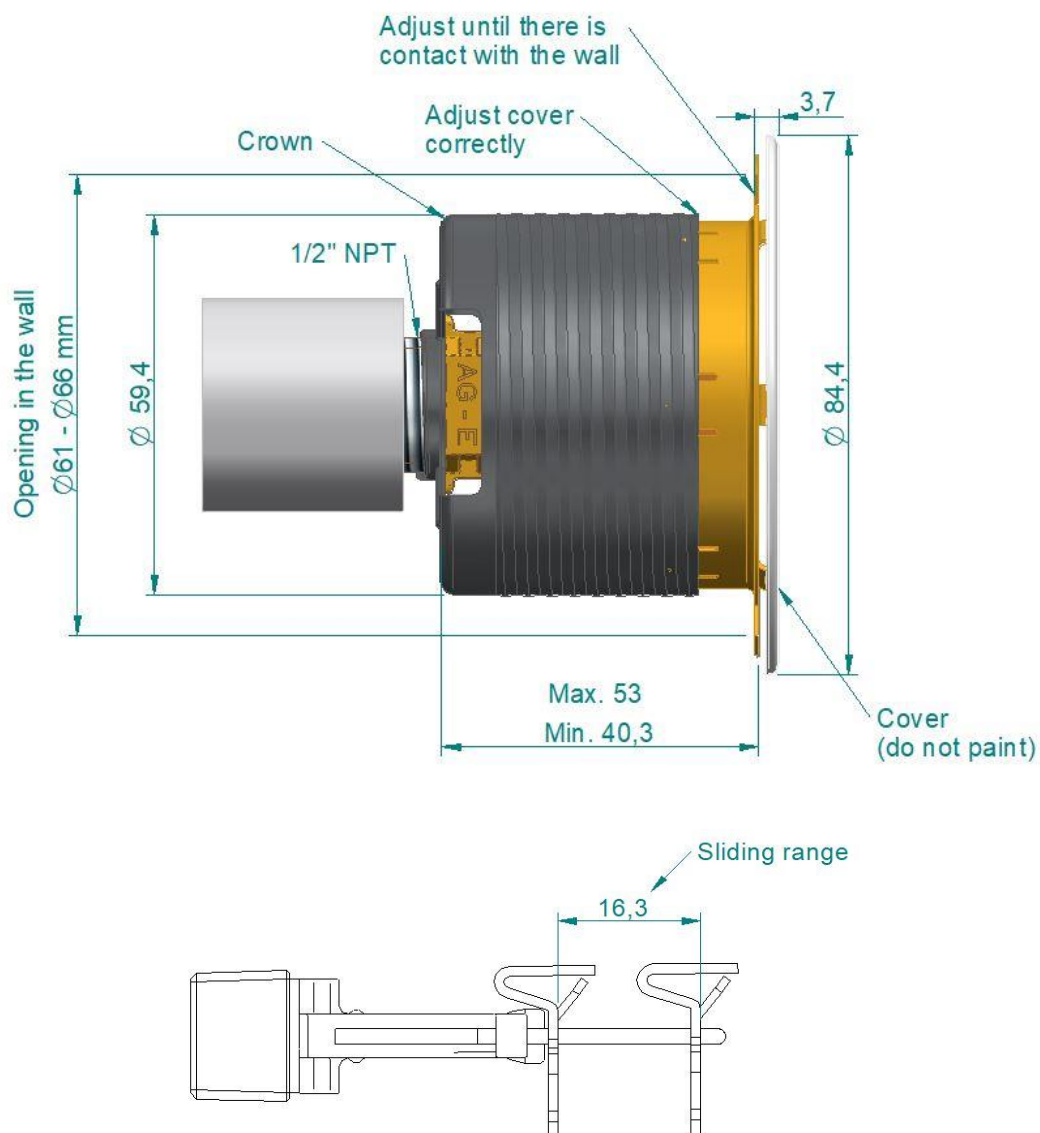
A stock of spare sprinklers should be maintained to allow rapid replacement of damaged or cracked sprinklers.

Prior to installation, sprinklers should be kept in the original packaging until use to minimize the damage to sprinklers.

TEMPERATURES RATING

Classification	Sprinkler Temperature		Maximum Ambient Temperature		Bulb Color
	°F	°C	°F	°C	
Ordinary	155	68	100	38	Red

DIMENSIONS



ORDERING INFORMATION

P/N (SPRINKLER)	GAXXXX Y Z
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DESCRIPTION	CODE	Y	2	68°C	155°F	Z	1	BRONZE
Concealed Sidewall	GA1371							

P/N (COVER)	CGARO X 0 Y
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DESCRIPTION	CODE	X	3	WHITE (RAL9003)	0	Y	4	57°C	135°F
Flat cover	CGARO								

Specify:

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