GA SERIES / MODEL GA3361

Extended Coverage / Light Hazard / Decorative Sprinkler
Quick Response / Concealed Pendent Sprinkler / K11.2 (160)
GA3361 Rev. R01 Technical data sheet

Product description

The concealed sprinkler model GA3361 is a pendent sprinkler with extended coverage, decorative, due to the flat cover that adapts very easily to all types of flat surfaces.

The GA3361 sprinkler is quick response with a 3mm bulb.

The product consist 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 ceiling and is concealed by the flat cover. Only the flat cover with the requested finish will be seen.

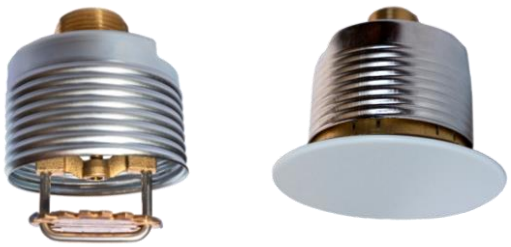
The bulb contains a quantity of a special liquid hermetically sealed inside a glass capsule, so that when the liquid expands, the bubble disappears and later, at the right temperature, the bulb breaks, letting the water outlet free to discharge

Technical data

Model	GA3361
Approvals	UL
Position	Pendent
K Factor	11.2 (160)
Thread size	3/4” NPT
Response	Quick (Bulb 3 mm size)
Maximum Working Pressure	175 psi (12 bar)
Sprinkler Temperature	135ºF (57ºC) 155ºF (68ºC) 175ºF (79ºC)
Materials	Frame: Brass Deflector: Brass Screw: Brass Bulb Seat: Brass Seal Teflon: Nickel alloy + Teflon Bulb: Glass, 3 mm size Drop pin: Stainless Steel Cover: Brass Crown for cover sprinklers: Plated Steel
Finish (Sprinkler)	Bronze
Cover	CGARO304 -WHITE (RAL9003) -57ºC CGARO305 -WHITE (RAL9003) -68ºC (1.)

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

Listings and Approvals



Listed by Underwriters Laboratories, Inc.

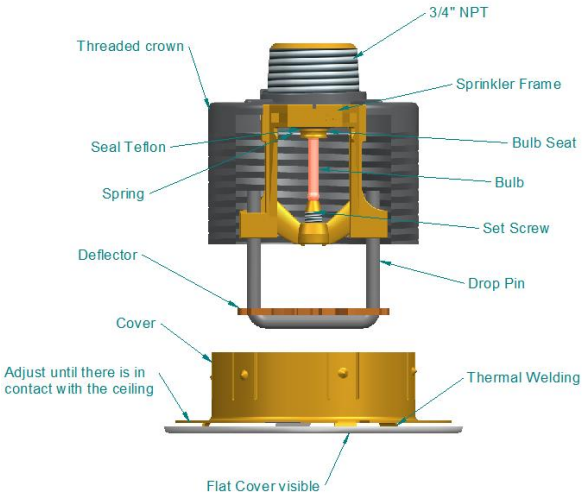
Operation

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 slides 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.



Approvals chart

CONCEALED PENDENT SPRINKLER EXTENDED COVERAGE LIGHT HAZARD							
Maximum Coverage Area, ft (m)	**Minimum Flow Rate, gpm (lpm)**	**Minimum Required Pressure, bar (psi)**	**Sprinkler Temperature ºF (ºC)**	**Cover Temperature ºF (ºC)**	**Nominal K Factor gpm/psi^1/2 (lpm/bar^1/2)**	**Thread Size, NPT**	**Approvals**
16x16 (4,9x4,9)	30 (114)	0,5 (7,2)	135 (57)	135 (57)	11.2 (160)	3/4”	UL
			155 (68)	135 (57)	11.2 (160)	3/4”	UL
			175 (79)	155 (68)	11.2 (160)	3/4”	UL
18x18 (5,5x5,5)	33 (125)	0,6 (8,7)	135 (57)	135 (57)	11.2 (160)	3/4”	UL
			155 (68)	135 (57)	11.2 (160)	3/4”	UL
			175 (79)	155 (68)	11.2 (160)	3/4”	UL
20x20 (6,1x6,1)	40 (151)	0,9 (13)	135 (57)	135 (57)	11.2 (160)	3/4”	UL
			155 (68)	135 (57)	11.2 (160)	3/4”	UL
			175 (79)	155 (68)	11.2 (160)	3/4”	UL

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Installation

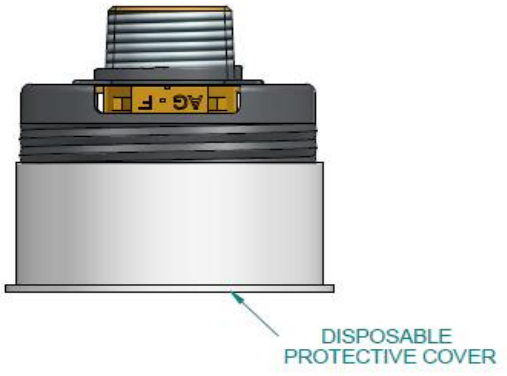
Model GA3361 sprinklers are designed to be installed as specified in NFPA 13. They must also be installed using the Model CO-1.M sprinkler wrench.

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

The steps to follow to install the GA3361 sprinklers will be explained below:

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 cover assembly. Remove the protective cover 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 cover and go directly to step 3.



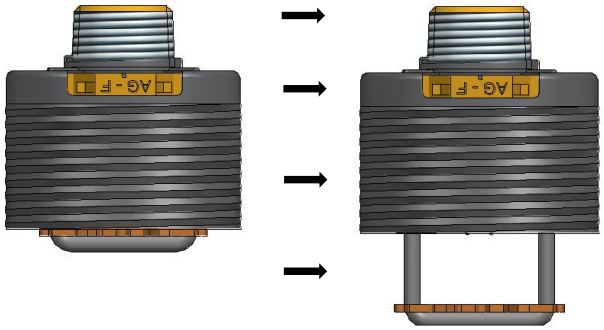
3. Once prepared, proceed to screw the sprinkler with a ¾" NPT thread using the C0-1.M Sprinkler wrench, as shown below. A 3/4 "NPT (R 3/4) NPT tight fitting can be obtained on the sprinkler with a torque of 8 to 18 ft-lb (10.8 - 24.4 Nm). Do not tighten sprinklers beyond the maximum recommended torque, as it can cause leaks or deterioration of the sprinklers.



CO-1.M Sprinkler Wrench

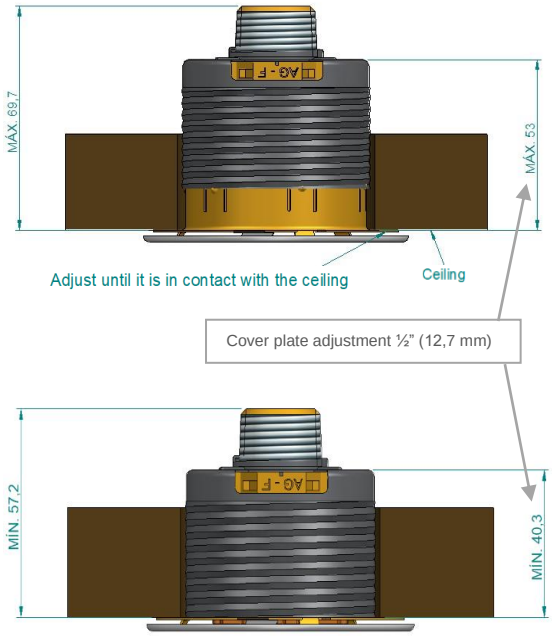
Note: it is important to hold the sprinkler by the body when handling it to prevent damage (do not use force on the deflector, pins, etc.).

4. Once the sprinkler is positioned, check that the deflector moves 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.

Note: It is not allowed to install with positive pressure above the ceiling.

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Maintenance

GA3361 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

Temperature ratings

Classification	Sprinkler Temperature		Maximum Ceiling Temp.		Bulb Color
	ºF	ºC	ºF	ºC	
Ordinary	135	57	100	38	Orange
Ordinary	155	68	120	49	Red
Intermediate	175	79	150	66	Yellow

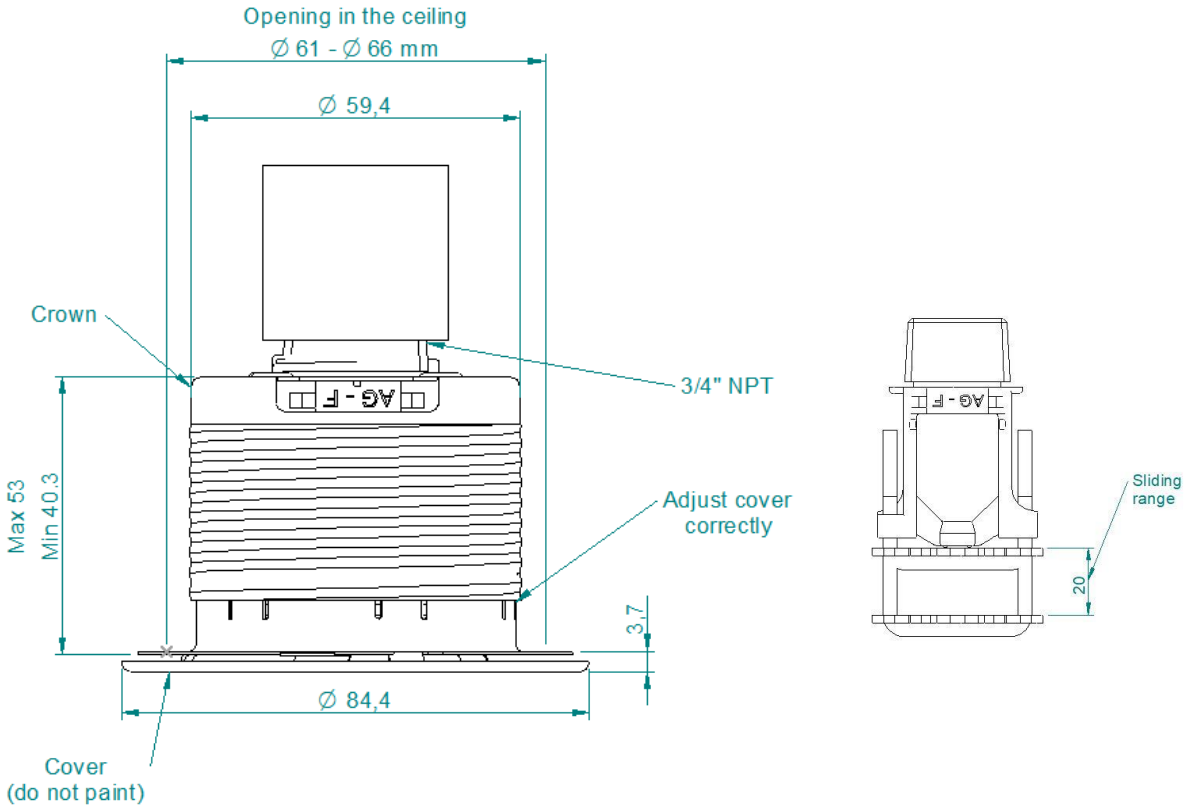
Applicable Regulations

GA Series sprinkler 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 (SPRINKLER)	GAXXXX Y Z

DESCRIPTION	CODE
Concealed pendent	GA3361

Y	1	57ºC	135ºF
	2	68ºC	155ºF
	3	79ºC	175ºF

Z	1	BRONZE

P/N (COVER)	CGARO X 0 Y

DESCRIPTION	CODE
Flat cover	CGARO

X	3	WHITE (RAL9003)

0	

Y	4	57ºC	135ºF
	5	68ºC	155ºF

ACCESSORIES	M

ACCESSORIES	M
Sprinkler wrench model CO-1.M	35300049
Flat threaded coverplate 57ºC white UL/FM/CE	35300094
Flexible connector 700 mm 1”-3/4” / Unbraided UL	A006069
Flexible connector 1000 mm 1”-3/4” / Unbraided UL	A006068
Flexible connector 1200 mm 1”-3/4” / Unbraided UL	A007472
Flexible connector 1500 mm 1”-3/4” / Unbraided UL	A007471
Flexible connector 1800 mm 1”-3/4” / Unbraided UL	35300021
Flexible connector 700 mm 1”-3/4” / Braided UL/FM	A006276
Flexible connector 1000 mm 1”-3/4” / Braided UL/FM	A006247
Flexible connector 1200 mm 1”-3/4” / Braided UL/FM	35300018
Flexible connector 1500 mm 1”-3/4” / Braided UL/FM	35300019
Flexible connector 1800 mm 1”-3/4” / Braided UL/FM	35300022
Short side bracket for flexible connector mocel SBA105	10200249
Long side bracket for flexible connector model SBA105	A001327
Galvanized bar 0,7m for flexible connector	A001325
Galvanized bar 1,27m for flexible connector	A001343
Elbow for flexible connector 90º (57,5-110 mm) ½”	A001344
Central oval support for flexible connector	10200250
Cabinet for sprinklers 1” (6 units)	A002290
Cabinet for sprinklers 1/2” & 3/4” (12 units)	A002289

Specify:

Quantity	
Model number	
Type	
Orifice	
Temperature	
Finishes (Sprinkler)	
Finishes (Cover)	
Accessories	

The equipment presented in this bulletin is to be installed in accordance with the latest published Standard of the National Fire Protection Association, Factory Mutual Research Corporation, or other similar organizations and also with the provisions of governmental codes or ordinances whenever applicable.
This documentation is not contractual. AG Fire Sprinkler reserves the right to any kind of change without notice.

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