AG SERIES / MODEL AG-81QR

Standard Coverage / Basic Sprinkler
Quick Response Sprinkler
Recessed Pendent, Pendent & Upright



Recessed Pendent



Pendent



Upright

PRODUCT DESCRITION

AG Fire Sprinkler Model AG-81QR, Pendent and Upright sprinklers described in this technical data sheet are quick response, standard coverage 3 mm glass bulb. These sprinklers are designed for use in commercial occupancies such as hotels, banks, shopping malls, and factories.

Thermosensitive glass bulb 3 mm is used. They have a capacity to react 6 times faster than standard response sprinklers. The bulb contains a special liquid hermetically sealed in a glass capsule.

TECHNICAL DATA

Nominal "K" Factor	8,0 (115)
Thread Size	3/4" NPT (R3/4)
Nominal Orifice diameter	17/32" (20 mm)
Temperatures	135ºF (57ºC) 155ºF (68ºC) 175ºF (79ºC) 200ºF (93ºC) 286ºF (141ºC)
Maximum/ Minimum Working Pressure	175 psi (12,1 bar) / 7 psi (0,48 bar)
Materials	Frame: Brass Deflector: CDA Alloy 260, 220 or 510 Load Screw / Pintle: CDA Alloy 360 or 544 Cup: CDA Alloy 651 or 693 Washer: Nickel Alloy 440 or 360, coated with PTFE Adhesive Tape Bulb: Glass, 3 mm
Reference	Upright: **AG8118** (1) (2) (3) Pendent and Recessed Pendent: **AG8106** (2) (3)
Finish (4)	Bronze Chrome Polyester

(1). cULus Listed corrosion resistant sprinkler when ordered with available polyester coating.
(2). Available with FM approved Polyester coating.
(3). cULus Listed Corrosion Resistant sprinkler when ordered with available Electroless Nickel PTFE plating.
(4). Other Finishes available under request.

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OPERATION

At normal temperatures, the glass bulb contains the fluid in both the liquid phase and the vapor phase. The vapor phase can be seen as a small bubble. As heat is applied, the liquid expands forcing the bubble smaller and smaller as the liquid pressure increases. Continued heating forces the liquid to push out against the bulb, causing to shatter, opening the waterway and allowing the deflector to distribute the discharging water.

INSTALLATION

Model AG-81QR sprinkler are quick response sprinklers intended for installation as specified in NFPA13. They must also be installed with the Model **AG1** Sprinkler Wrench for the pendent and upright models or **AG1** Sprinkler Wrench for the recessed sprinkler, specifically designed by AG Fire Sprinkler for use with these sprinklers.

A leak tight ½" NPT (R1/2) sprinkler joint can be obtained with a torque of 8-18ft-lbs (10.8-24.4N-m). Do not tighten sprinklers over maximum recommended torque. It may cause leakage or impairment of these sprinklers.

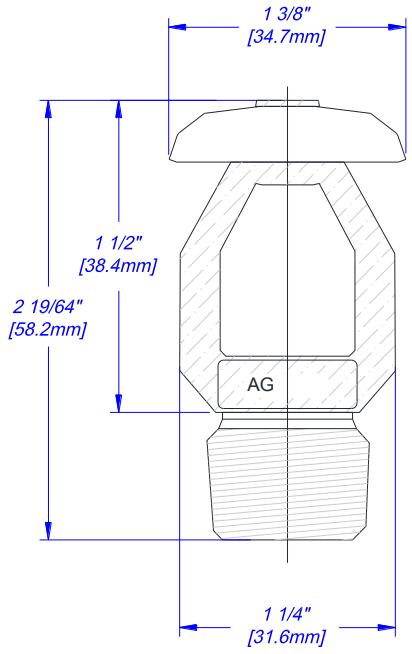
The sprinklers come with an orange protection, to avoid breakage during assembly. Remove this protection once installed and made sure that everything is correct. The AG Sprinkler Wrenches are designed to install sprinklers with the protection still.

TEMPERATURE RATINGS

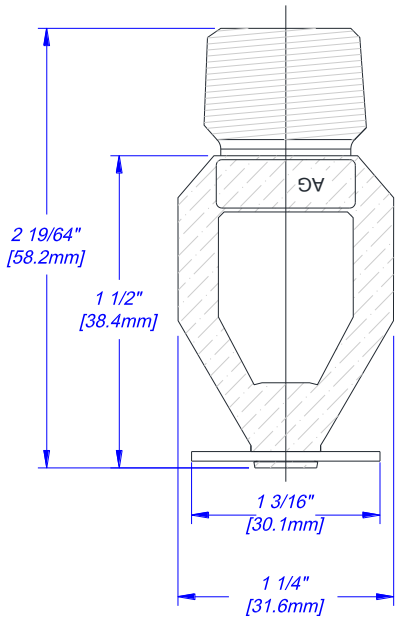
Classification	Sprinkler Temperature		Max. Ambient Temperature		Bulb Color
	ºF	ºC	ºF	ºC	
Ordinary	135	57	100	38	Orange
Ordinary	155	68	100	38	Red
Intermediate	175	79	150	66	Yellow
Intermediate	200	93	150	66	Green
Hight [1]	286	141	225	107	Blue

(1) Not available for recessed sprinklers.

DIMENSIONS

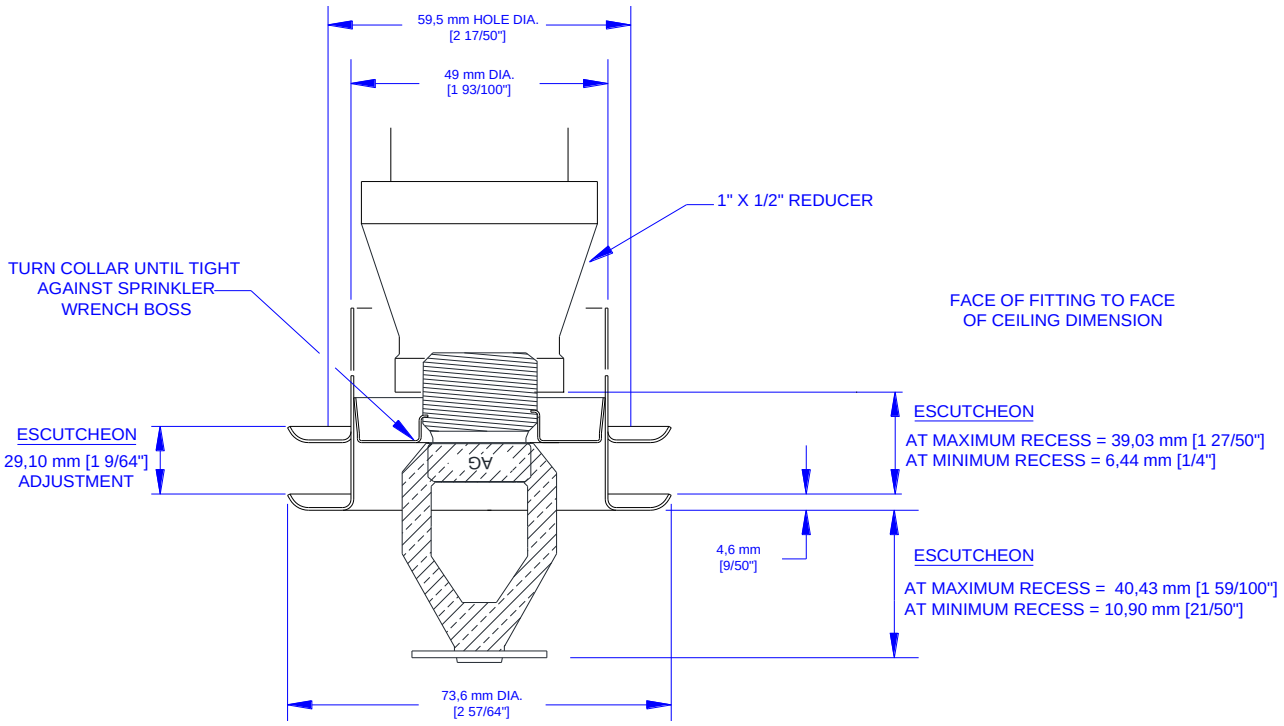


UPRIGHT



PENDENT

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RECESSED PENDENT WITH ESCUTCHEON

ORDERING INFORMATION

Specify:

Quantity	
Reference	
Type	
Thread size	
Orifice size	
Temperature	
Finish	
Amount of wrenches	

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AG FIRE SPRINKLER

AG Fire Sprinkler offers a wide selection of components. Then a list of products is presented by AG Fire Sprinkler, we can offer all these components, made with precision to protect people, anywhere, anytime.

- Sprinklers
  - Standard Coverage
  - Extended Coverage
  - Storage
  - Dry
  - Accessories
- System Valves
  - Wet
  - Dry
  - Preaction Equipment
  - Accessories
- Spray System Open Nozzles
  - High Velocity Nozzles
  - Medium Velocity Nozzles
  - Window Nozzles
  - Hydroshield Nozzles
  - Mushroom Type Nozzles
- Foam equipment
  - Tanks
  - Proportioners
  - Foam Discharge Equipment
  - Foam Concentrates
- Deluge equipment for Water Spray and Foam
  - Clapper Deluge Valves
  - Diaphragm Deluge Valves
- Monitors
  - Manual Monitors
  - Remote Monitors
  - Monitor Nozzles
  - Towers and Trolleys
- Valves
  - Butterfly Valves
  - Gate Valves
  - Check Valves
  - Pressure Control Valves
  - Test and Drain
  - Hose, Hydrant and Fire Connection Valves
  - Fire Department Connections

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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