

STANDAR COVERAGE

Basic Sprinkler Quick Response Sprinkler Recessed Pendent, Pendent & Upright



DESCRIPTION:

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	135°F (57°C) 155°F (68°C) 175°F (79°C) 200°F (93°C) 286°F (141°C)
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
Finish ⁽⁴⁾	Bronze Chrome Polyester

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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.

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.

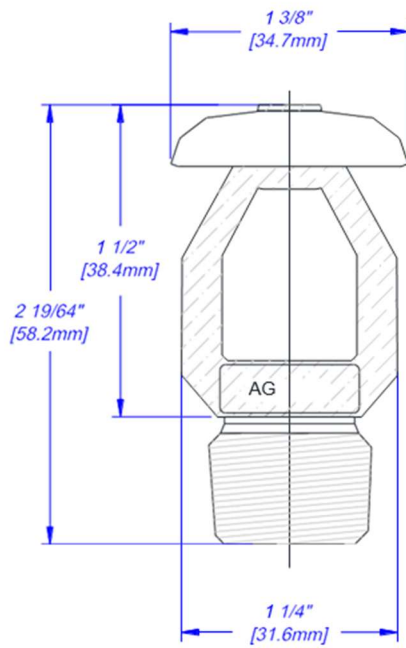
TEMPERATURE RATING:

Classification	Sprinkler Temperature		Max. Ambient Temperature		Bulb Color
	°F	°C	°F	°C	
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

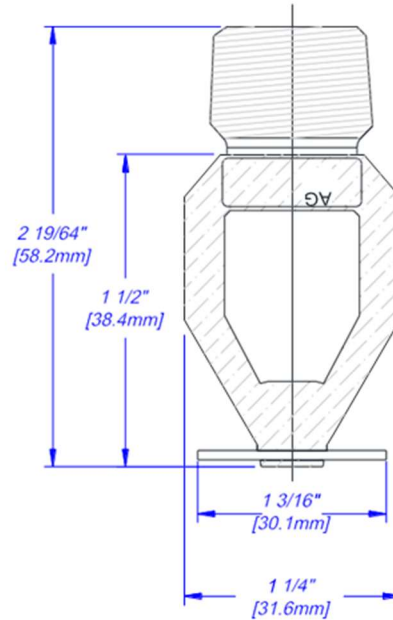
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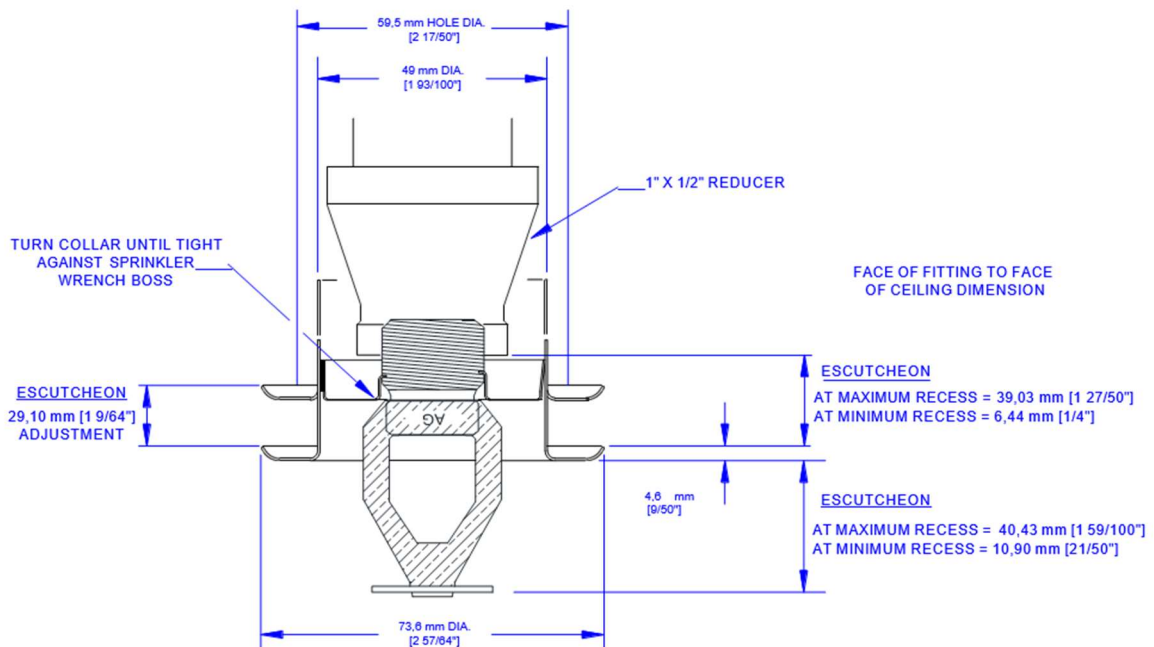
DIMENSIONS:



UPRIGHT



PENDENT



RECESSED PENDENT WITH ESCUTCHEON

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