



# **QUICK RESPONSE** **AUTOMATIC SPRINKLERS** **GL SERIES DRY TYPE** **RECESSED PENDENT TO MEET** **IBC-ASCE/SEI 7 CODES FOR** **SEISMIC AREAS C, D & E**

## **DESCRIPTION AND OPERATION**

The Globe Quick Response GL Series Dry Type Pendent Sprinkler is designed for use in special applications such as freezing environments and conditions where sediment or foreign materials might accumulate in ordinary drop nipples.

The Globe Quick Response GL Series Dry Type Pendent Sprinkler utilizes a 3mm frangible glass ampule as the thermosensitive element. This provides sprinkler operation approximately six times faster than ordinary sprinklers. At the ampule's rated temperature, the sprinkler opens releasing the bulb seat, causing the inner tube assembly to move, allowing the spring assembly to pivot alongside the inner tube. At this time, water flows through the sprinkler and is distributed by the deflector in an approved discharge pattern. It can be installed wherever standard spray sprinklers are specified but offers the additional feature of greatly increased safety to life. Quick Response Sprinklers should be used advisedly and under the direction of approving authorities having jurisdiction.

The heart of Globe's Model GL Series sprinkler proven actuating assembly is a hermetically sealed frangible glass ampule that contains a precisely measured amount of fluid. When heat is absorbed, the liquid within the bulb expands increasing the internal pressure. At the prescribed temperature the internal pressure within the ampule exceeds the strength of the glass causing the glass to shatter. This results in water discharge which is distributed in an approved pattern.

**The use of the 4 1/2" diameter recessed escutcheon allows for 1" of clearance around the sprinkler body, and meets the IBC-ASCE/SEI 7 requirements for use in seismic design categories C, D & E.**

The sprinkler and escutcheon are not factory assembled. Assembly is done at the time of installation.

## **TECHNICAL DATA**

- See reverse side for Approvals and Specifications.
- Temperature Ratings - 135°F (57°C), 155°F (68°C), 175°F (79°C)  
200°F (93°C), 286°F (141°C)
- Water Working Pressure Rating - 175 psi (12 Bars)
- Factory tested hydrostatically to 500 psi (34 Bars)
- Maximum low temperature glass bulb rating is -67°F (-55°C)
- Frame - bronze • Deflector - brass • Screw - brass
- Bulb seat - brass • Spring - Teflon coated nickel alloy
- Retainer - brass • Pin - stainless steel • Torsion Spring - stainless steel • Bulb - glass with alcohol based solution, 3mm
- Orifice insert - brass • 3/4" NPT or 1" NPT
- Outer tube - galvanized steel pipe • Inner tube - stainless steel



**QUICK RESPONSE**  
**RECESSED PENDENT**  
**WITH OPTIONAL 4 1/2" SEISMIC**  
**RECESSED ESCUTCHEON**

## **• SPRINKLER TEMPERATURE RATING/CLASSIFICATION and COLOR CODING**

| CLASSIFICATION | AVAILABLE SPRINKLER TEMPERATURES |           | BULB COLOR   | N.F.P.A. MAXIMUM CEILING TEMPERATURE |       |
|----------------|----------------------------------|-----------|--------------|--------------------------------------|-------|
| ORDINARY       | 135°F/155°F                      | 57°C/68°C | ORANGE/RED   | 100°F                                | 38°C  |
| INTERMEDIATE   | 175°F/200°F                      | 79°C/93°C | YELLOW/GREEN | 150°F                                | 66°C  |
| HIGH           | 286°F                            | 141°C     | BLUE         | 225°F                                | 107°C |

# QUICK RESPONSE AUTOMATIC SPRINKLERS GL SERIES DRY TYPE RECESSED PENDENT TO MEET IBC-SEI 7 CODES FOR SEISMIC AREAS C, D & E

## SPECIFICATIONS

| NOMINAL "K" FACTOR | THREAD SIZE    | LENGTH                | FINISHES                   |
|--------------------|----------------|-----------------------|----------------------------|
| 5.6 (80 metric)    | 3/4" or 1" NPT | cULus Variable to 48" | Chrome<br>White Polyester* |
| 8.1 (116 metric)   | 1" NPT         | FM Variable to 36"    |                            |

NOTE: METRIC CONVERSIONS ARE APPROXIMATE.

\*cULus LISTED CORROSION RESISTANT: POLYESTER MUST BE SPECIFIED ON ORDER.

## APPROVALS

| STYLE               | SIN MODEL | K FACTOR | THREAD SIZE | 135°F<br>57°C | 155°F<br>68°C | 175°F<br>79°C | 200°F<br>93°C | 286°F<br>141°C | * FM | cULus |
|---------------------|-----------|----------|-------------|---------------|---------------|---------------|---------------|----------------|------|-------|
| RECESSED<br>PENDENT | GL5635    | 5.6      | 1" NPT      | X             | X             | X             | X             | X              | X    | X     |
|                     | GL5636    | 5.6      | 3/4" NPT    | X             | X             | X             | X             | X              | -    | X     |
|                     | GL8135    | 8.1      | 1" NPT      | X             | X             | X             | X             | X              | -    | X     |

NOTE: LISTED FOR ALL HAZARDS

\*FM APPROVALS FOR 155°F AND 200°F ONLY.

## IMPORTANT INSTALLATION DATA

Globe GL Series Dry Pendent sprinklers should be installed in accordance with the requirements set forth in NFPA 13. These sprinklers are to be installed using a pipe wrench applied to the outer tube. When this is not possible, the proper sprinkler head wrench may be used with extreme care for lengths up to approximately 18". Excessive force may distort the frame thus destroying the unit.

When installed in a wet system extending into a freezing area see chart on Dry Caution Sheet for minimum exposed barrel length to prevent ice plugs. Please refer to our Dry Caution sheet for further important installation data.

## ORDERING INFORMATION

### SPECIFY

- Quantity • Model Number • Style • Orifice
- Temperature • Finishes desired
- Quantity - Recessed Wrenches - P/N 337014
- Quantity - Protective Caps - P/N 327109-CAP (Friction Fit Recessed)
- "A" Dimension - Distance from face of fitting to the finished ceiling line regardless of escutcheon used.

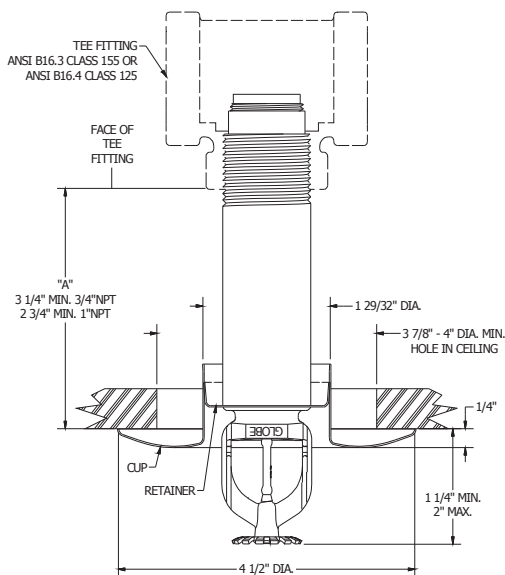
## GLOBE® PRODUCT WARRANTY

Globe agrees to repair or replace any of its own manufactured products found to be defective in material or workmanship for a period of one year from date of shipment.

For specific details of our warranty, please refer to Price List Terms and Conditions of Sale (Our Price List).

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## CROSS SECTION



PENDENT WITH OPTIONAL IBC  
SEISMIC RECESSED ESCUTCHEON

