



# QUICK RESPONSE AUTOMATIC SPRINKLERS GL SERIES DRY TYPE HORIZONTAL SIDEWALL

## DESCRIPTION AND OPERATION

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

The Globe Quick Response GL Series Dry Type Horizontal Sidewall 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 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.



**SURFACE MOUNT**



**SLEEVE & SKIRT**



**RECESSED**



**EXTENDED**

## 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 - nickel alloy • Seal - teflon
- Retainer - brass • Pin - stainless steel
- Torsion Spring - stainless steel • Orifice Insert - brass
- Bulb - glass with alcohol based solution, 3mm size
- 3/4"NPT or 1"NPT • Outer Tube - galvanized steel pipe
- Inner Tube - stainless steel

## •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 HORIZONTAL SIDEWALL

## SPECIFICATIONS

| SIN MODEL | NOMINAL "K" FACTOR | THREAD SIZE | LENGTH                                      | FINISHES   |
|-----------|--------------------|-------------|---|--|
| GL5641    | 5.6 (80 metric)    | 1"NPT       | cULus Variable to 48"<br>FM Variable to 36" | Factory Bronze<br>Chrome<br>White Polyester <sup>2</sup><br>Black Polyester <sup>1,2</sup> |
| GL5642    | 5.6 (80 metric)    | 3/4"NPT     |   |  |
| GL8141    | 8.0 (115 metric)   | 1"NPT       |   |  |

NOTE: METRIC CONVERSIONS ARE APPROXIMATE.

<sup>1</sup>FINISHES AVAILABLE ON SPECIAL ORDER.

<sup>2</sup>cULus LISTED CORROSION RESISTANT WHEN SPECIFIED ON ORDER.

## APPROVALS

| STYLE                        | SIN MODEL | HAZARD <sup>1</sup> | 135°F (57°C) | 155°F (68°C) | 175°F (79°C) | 200°F (93°C) | 286°F (141°C) | *FM | cULus | DEFLECTOR TO CEILING DISTANCE<br>Inches (mm) | MIN. DISTANCE BETWEEN SPRINKLERS<br>Feet (Meters) |
|------------------------------|-----------|---------------------|--------------|--------------|--------------|--------------|---------------|-----|-------|--|---|
| Horizontal Sidewall          | GL5641    | LH                  | X            | X            | X            | X            | X             | X   | X     | 4 (102)<br>to<br>12 (305)                    | 6 (1.8)   |
| Recessed Horizontal Sidewall | GL5642    | LH                  | X            | X            | X            | X            | ---           | X   |       |  |   |
| Horizontal Sidewall          | GL8141    | LH/OH               | X            | X            | X            | X            | ---           | X   |       |  |   |

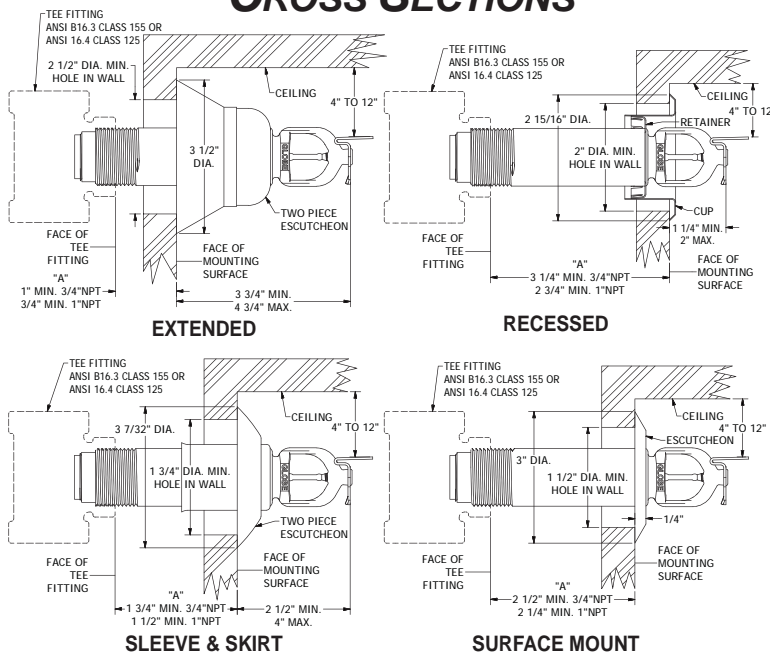
<sup>1</sup>SPRINKLERS SHALL BE LIMITED AS PER THE REQUIREMENTS OF NFPA13 AND ANY OTHER RELATED DOCUMENTS.

\*HORIZONTAL SIDEWALL STYLE - FM APPROVED 155°F (68°C), 200°F (93°C), AND 286°F (141°C)

\*RECESSED HORIZONTAL SIDEWALL STYLE - FM APPROVED 155°F (68°C) AND 200°F (93°C)

LH: LIGHT HAZARD; OH: ORDINARY HAZARD

## CROSS SECTIONS



## 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 - Wrenches - P/N 333010
- Quantity Recessed Wrenches - P/N 337014
- Quantity - Protective Caps - P/N 327109-cap (Friction Fit Recessed)
- Escutcheons Desired
- "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).