



STANDARD RESPONSE AUTOMATIC SPRINKLERS GL SERIES INTERMEDIATE LEVEL UPRIGHT • PENDENT

DESCRIPTION AND OPERATION

The Globe GL Series Intermediate Level Sprinklers are primarily designed for use in rack storage sprinkler systems, where their thermosensitive elements must be shielded from the water spray of higher elevation sprinklers which could operate earlier during a fire. The Globe GL Series Sprinkler is a low profile yet durable design which utilizes a frangible glass ampule as the thermosensitive element.

The Globe Intermediate Level Sprinklers are available in either upright or pendent styles, with 5.6, 8.0*, 8.0, or 11.2 K-factor orifices, in several temperature ratings and with various finishes to meet customer requirements. The Upright style is factory fitted with a water shield having a 3 3/4" diameter. The water shield for the pendent may be either factory fitted or installed in the field (see shield part numbers below). Either style can be provided with sprinkler guards for use where mechanical injury might be expected. The Upright style may be provided with a one piece head guard and shield; when ordered as such (order as GL5661, GL8161, GL8164, or GL1167 with sprinkler guard part number 321406 (red) or 321407 (chrome)).

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 depending upon the deflector style used.



STANDARD RESPONSE
UPRIGHT



STANDARD RESPONSE
PENDENT

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 - copper • Spring - nickel alloy • Seal - teflon
- Bulb - glass with glycerin solution, 5mm size
- Shield - steel - 3 3/4" diameter

| SHIELD PART NUMBERS | |
|---------------------|---------|
| 1/2"NPT | 3/4"NPT |
| 325706 | 325707 |

• 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 |

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SPECIFICATIONS

| NOMINAL "K" FACTOR | THREAD SIZE | LENGTH | FINISHES |
|--------------------|----------------|-----------------|-----------------------------|
| 5.6 (80 metric) | 1/2"NPT (15mm) | 2 1/4" (5.7cm) | Factory Bronze ¹ |
| 8.0 (115 metric) | 1/2"NPT (15mm) | 2 1/4" (5.7cm) | |
| 8.0 (115 metric) | 3/4"NPT (20mm) | 2 7/16" (6.2cm) | |
| 11.2 (160 metric) | 3/4"NPT (20mm) | 2 7/16" (6.2cm) | |

NOTE: METRIC CONVERSIONS ARE APPROXIMATE.
¹OTHER FINISHES AVAILABLE ON SPECIAL ORDER.

APPROVALS

| STYLE | SIN MODEL <i>(previous SIN Model)</i> | "K" FACTOR | HAZARD ¹ | 135°F (57°C) | 155°F (68°C) | 175°F (79°C) | 200°F (93°C) | 286°F (141°C) | cULus | FM | SHIELD P/N |
|---------|--|------------|---------------------|-----------------|-----------------|-----------------|-----------------|------------------|-------|-----|------------|
| UPRIGHT | GL5663 | 5.6 | ALL | X | X | X | X | X | X | X | N/A |
| | GL8163 | 8.0* | | X | X | X | X | X | X | --- | |
| | GL8166 | 8.0 | | X | X | X | X | X | X | X | |
| | GL1168 | 11.2 | | --- | X | X | X | X | X | **X | |
| PENDENT | GL5651 (GL5672) | 5.6 | ALL | X | X | X | X | X | X | X | 325706 |
| | GL8151 (GL8172) | 8.0* | ALL | X | X | X | X | X | X | --- | 325706 |
| | GL8156 (GL8158) | 8.0 | ALL | X | X | X | X | X | X | X | 325707 |
| | GL1160 (GL1161) | 11.2 | ALL | --- | X | X | X | X | X | --- | 325707 |

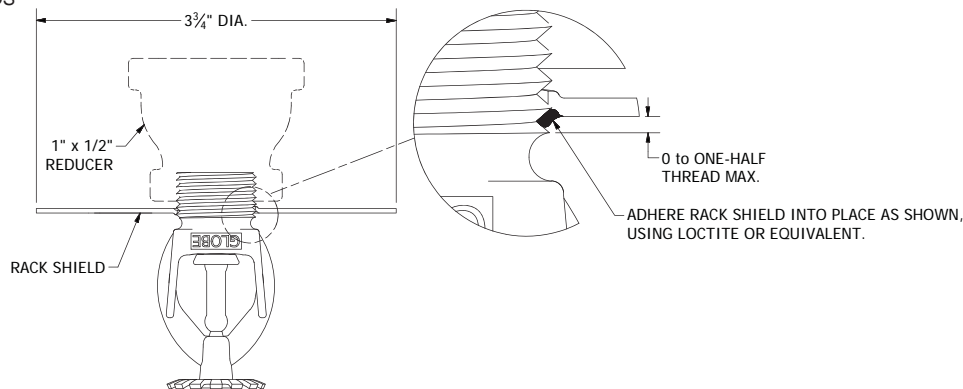
[§]THE WATER SHIELD FOR THE PENDENT MAY BE EITHER FACTORY FITTED OR INSTALLED IN THE FIELD, PLEASE SPECIFY ON ORDER.

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

**NO FM APPROVALS FOR 175°F (79°C)

*1/2"NPT; RETRO-FIT ONLY

ALL: ALL HAZARDS



NOTE: INSTALL RACK SHIELD ONTO SPRINKLER THREADS BEFORE SYSTEM INSTALL.

ORDERING INFORMATION

SPECIFY

- Quantity • Model Number • Style • Orifice
- Thread Size • Temperature • Finishes desired
- Quantity - Wrenches - P/N 325390 (1/2"); P/N 312366 (L.O.); P/N 333010 (E.L.O.)

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).

