



**QUICK RESPONSE
AUTOMATIC SPRINKLERS
GL SERIES
DRY TYPE
UPRIGHT**

DESCRIPTION AND OPERATION

The Globe Quick Response GL Series Dry Type Upright Sprinkler is designed for use in special applications such as freezing environments. As an example, they may be efficiently used when connected to a wet type sprinkler system and extended into an unheated attic space.

The Globe Quick Response GL Series Dry Type Upright 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.



**QUICK RESPONSE
DRY UPRIGHT**

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

• 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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| NOMINAL "K" FACTOR | THREAD SIZE | LENGTH | FINISHES |
|--------------------|----------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 5.6 (80 metric) | 3/4" or 1" NPT | cULus Variable to 48" | Factory Bronze Satin Chrome ¹ Bright Chrome White Polyester Black Polyester Lead Coated ² |
| 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.

¹Finishes available on special order.

²Lead Coated is UL Approved only.

APPROVALS

| STYLE | SIN CODE | K FACTOR | THREAD SIZE | 135°F 57°C | 155°F 68°C | 175°F 79°C | 200°F 93°C | 286°F 141°C | * FM | cULus | NYC - DOB MEA 101-92-E |
|---------|----------|----------|-------------|---------------|---------------|---------------|---------------|----------------|------|-------|---------------------------|
| UPRIGHT | GL5639 | 5.6 | 1" NPT | X | X | X | X | X | X | X | X |
| | GL5640 | 5.6 | 3/4" NPT | X | X | X | X | X | - | X | X |
| | GL8139 | 8.1 | 1" NPT | X | X | X | X | X | - | X | X |

NOTE:

Listed for all Harzards

Dry Upright Sprinklers require a minimum operating pressure of 12psi

* Dry Upright - FM Approved 155°F, 200°F, and 286°F only.

IMPORTANT INSTALLATION DATA

Globe GL Series Dry Upright 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.

The GL Series Dry Sprinkler must not be installed in a short radius 90° elbow. When installing in other than an iron tee, the clearances between the end of the sprinkler and fitting should be checked.

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
- "B" Dimension - Distance from face of fitting to the top of the deflector.

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).

CROSS SECTION

