



**QUICK RESPONSE  
AUTOMATIC SPRINKLERS  
GL SERIES  
DRY TYPE  
VERTICAL SIDEWALL  
UPRIGHT & PENDENT**

**DESCRIPTION AND OPERATION**

The Globe Quick Response GL Series Dry Type Vertical Sidewall 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 Vertical 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. While the Quick Response Sprinkler provides an aesthetically pleasing appearance, 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.

**TECHNICAL DATA**

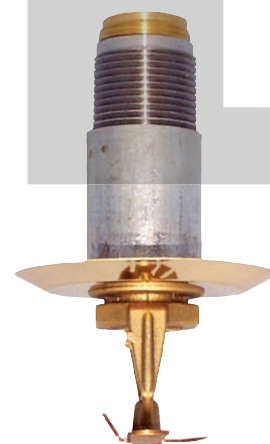
- See reverse side for Approvals and Specifications.
- Temperature Ratings - 135°F (57°C), 155°F (68°C), 175°F (79°C) 200°F (93°C), 286°F (141°C).
- Water Working Pressure Rating - 175 psi (12 Bars).
- Factory tested hydrostatically to 500 psi (34 Bars).
- Maximum low temperature glass bulb rating is -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 • 3/4" NPT or 1" NPT
- Bulb - glass with alcohol based solution, 3mm • Orifice insert - brass
- 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  
DRY UPRIGHT  
SIDEWALL**



**QUICK RESPONSE  
DRY PENDENT  
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**SPECIFICATIONS**

NOMINAL "K" FACTOR		THREAD SIZE	LENGTH <sup>1</sup>	FINISHES
5.6	(80 metric)	3/4" or 1" NPT	Variable to 48"	Factory Bronze Satin Chrome <sup>2</sup> Bright Chrome White Polyester <sup>3</sup> Black Polyester <sup>3</sup> Lead Coated <sup>2</sup>
8.1	(116 metric)	1" NPT		

NOTE: METRIC CONVERSIONS ARE APPROXIMATE.

<sup>1</sup>cULus LISTED FOR UP TO A 48" "A" DIMENSION.

<sup>2</sup>FINISHES AVAILABLE ON SPECIAL ORDER.

<sup>3</sup>C-U.L. LISTED CORROSION RESISTANT - POLYESTER MUST BE SPECIFIED ON ORDER.

**APPROVALS**

STYLE	SIN MODEL	K FACTOR	THREAD SIZE	155°F 68°C	175°F 79°C	200°F 93°C	286°F 141°C	*cULus	NYC - DOB MEA 101-92-E
VERTICAL SIDEWALL	GL5643	5.6	1" NPT	X	X	X	X	X	X
	GL5644	5.6	3/4" NPT	X	X	X	X	X	X
	GL8143	8.1	1" NPT	X	X	X	X	X	X

\* 3/4" NPT x 5.6K ORIFICE AND 1" NPT x 8.1K ORIFICE cULus LISTED FOR ORDINARY HAZARD.

PENDENT VERTICAL SIDEWALL cULus LISTED FOR 6' MIN. SPACING.

UPRIGHT VERTICAL SIDEWALL cULus LISTED FOR 9' MIN. SPACING.

**IMPORTANT INSTALLATION DATA**

Globe GL Series Dry Vertical 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 end fitting. 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 installation data.

**ORDERING INFORMATION**

SPECIFY

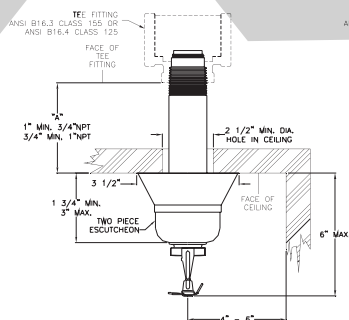
- Quantity • Model Number • Style
- Orifice • Temperature • Finishes desired
- Quantity - Wrenches - P/N 333010
- Escutcheons desired
- "A" Dimension - Distance from face of fitting to the finished ceiling line regardless of escutcheon used;
- "B" Dimension - Distance from face of fitting to the top of the deflector.

**GLOBE® PRODUCT WARRANTY**

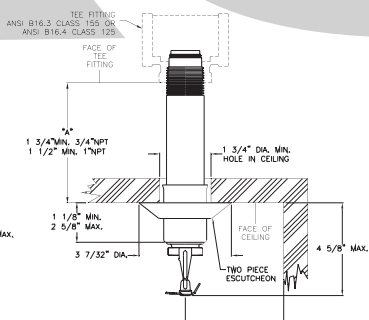
Globe agrees to repair or replace any of its own manufactured products found to be defective in material or workmanship for a period of one year from date of shipment.

For specific details of our warranty please refer to Price

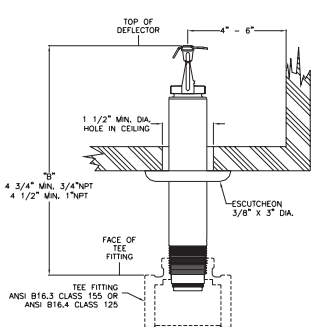
**CROSS SECTIONS**



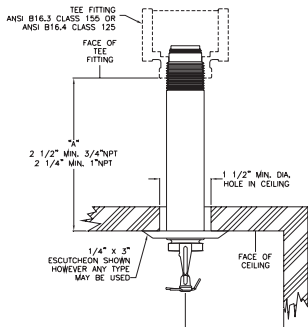
EXTENDED PENDENT



SLEEVE & SKIRT  
PENDENT



UPRIGHT



PENDENT