

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



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## **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.

## 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



DRY UPRIGHT

SPRINKLER TEMPERATURE RATING/CLASSIFICATION and COLOR CODING

CLASSIFICATION	AVAILABLE S TEMPER		BULB COLOR	N.F.P.A. N CEILING TEN	MAXIMUM MPERATURE
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**

NOMINA	L "K" FACTOR	THREAD SIZE	LENGTH	FINISHES	
5.6	(80 metric)	3/4" or 1" NPT	cULus Variable to 48"	Factory Bronze Satin Chrome <sup>1</sup> Bright Chrome	
8.1	(116 metric)	1" NPT	FM Variable to 36"	White Polyester Black Polyester Lead Coated <sup>2</sup>	

NOTE:

<sup>1</sup>Finishes available on special order.

Metric conversions are approximate.

<sup>2</sup>Lead Coated is UL Approved only.

cULus listed corrosion resistant: Polyester must be specified on order.

## **APPROVALS**

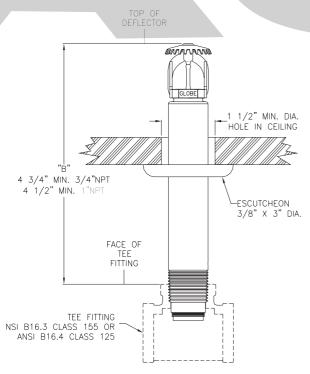
	STYLE	SIN CODE	K FACTOR	THREAD SIZE	135°F 57°C	155°F 68°C	175°F 79°C	200°F 93°C	286°F 141°C	* FM	cULus	NYC - DOB MEA 101-92-E
Γ		GL5639	5.6	1" NPT	X	X	Х	Х	Х	Х	Х	Х
	UPRIGHT	GL5640	5.6	3/4" NPT	Χ	X	X	X	Х	-	X	X
		GL8139	8.1	1" NPT	Χ	Х	X	Х	Х	-	Х	X

#### 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.

# **CROSS SECTION**



# 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).

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