



STANDARD RESPONSE AUTOMATIC SPRINKLERS GL SERIES DRY TYPE CONCEALED PENDENT

DESCRIPTION AND OPERATION

The Globe Series GL-SR/DRY/C Concealed Pendent 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. It offers the ultimate in low profile, aesthetically pleasing appearance. All that is seen at the ceiling is a 3 5/16" diameter ceiling plate color finished to match the specifier's exact requirements. The Series GL-SR/DRY/C Concealed Sprinkler may be virtually invisible as it does not interrupt the "smooth flow" of the ceiling. Globe's Dry Concealed Sprinkler utilizes its frangible 5mm glass bulb type sprinkler which is located above the ceiling and concealed from view by the ceiling plate. The plate is soldered to the sprinkler special upper support assembly in three places. Upon the application of sufficient heat, the plate falls to the floor exposing the pendent spray sprinkler. 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.

A special spring is attached to the pendent deflector that serves to provide a constant tension against the ceiling plate. This feature virtually ensures freedom from environmental vibration problems.

The heart of Globe's Series GL-SR sprinkler proven actuation 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) Sprinkler, 135°F (57°C) Cover Plate
 - 155°F (68°C) Sprinkler; 135°F (57°C) Cover Plate
 - 155°F (68°C) Sprinkler; 155°F (68°C) Cover Plate
 - 175°F (79°C) Sprinkler; 155°F (68°C) Cover Plate
 - 200°F (93°C) Sprinkler; 155°F (68°C) Cover Plate
- 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 glycerin solution, 5mm size • Inner Tube - stainless steel
- 3/4" or 1"NPT Outer Tube - galvanized steel pipe
- Cover Plate - brass • Upper Escutcheon Assembly - plated steel



**SERIES GL-SR/DRY/C
FLAT PLATE DRY
CONCEALED PENDENT**

NOTE: Globe's wrench P/N 337014 must be used to install this sprinkler.

• **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

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SPECIFICATIONS

SIN	NOMINAL "K" FACTOR	THREAD SIZE	LENGTH	FLAT COVER PLATE FINISHES***
GL5681	5.6 (80 metric)	1"NPT	cULus Variable to 48" FM Variable to 36"	Chrome White Painted Other Painted Finishes ^{1,2}
GL5682	5.6 (80 metric)	3/4"NPT		
GL8181	8.0 (115 metric)	1"NPT		

NOTE: METRIC CONVERSIONS ARE APPROXIMATE.

¹FINISHES AVAILABLE ON SPECIAL ORDER.

²FOR PAINTED PLATES OTHER THAN WHITE, CONTACT GLOBE FOR ORDERING SPECIFICATIONS.

***FACTORY PAINTED COVER PLATES MUST NOT BE REPAINTED. NON-FACTORY APPLIED PAINT MAY ADVERSELY DELAY OR PREVENT SPRINKLER OPERATION IN THE EVENT OF A FIRE.

APPROVALS

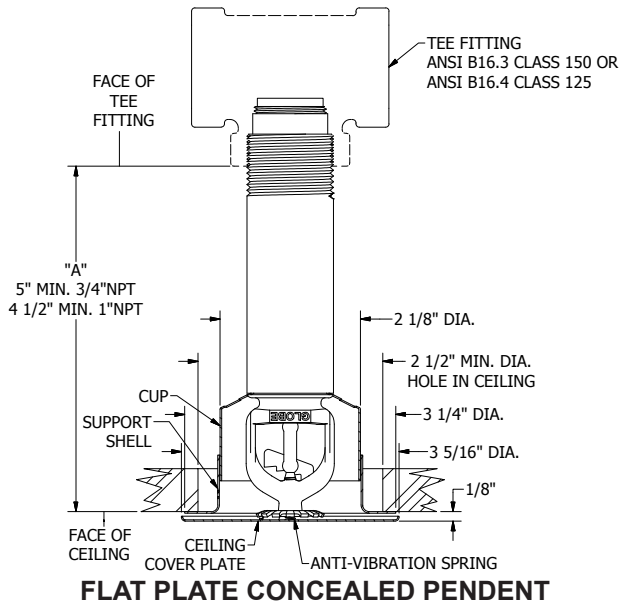
STYLE	SIN	HAZARD ¹	135°F (57°C) Cover Plate		155°F (68°C) Cover Plate			cULus	FM	NYC-DOB MEA101-92-E	MIN. DISTANCE BETWEEN SPRINKLERS Feet (Meters)
			**135°F (57°C) Sprinkler	155°F (68°C) Sprinkler	**155°F (68°C) Sprinkler	**175°F (79°C) Sprinkler	200°F (93°C) Sprinkler				
Concealed Pendent	GL5681	ALL	X	X	X	X	X	X	X	X	6 (1.8)
	GL5682	ALL	X	X	X	X	X	X	---	X	
	GL8181	ALL	X	X	X	X	X	X	---	X	

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

ALL: ALL HAZARDS

**NO FM APPROVALS

CROSS SECTION



IMPORTANT INSTALLATION DATA

Globe GL Series Dry Concealed 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 • SIN • Style
- Orifice • Temperature • Finishes desired
- Quantity - Wrenches - P/N 337014
- Quantity - Protective Caps - P/N 327119

"A" Dimension - Distance from face of fitting to the finished ceiling.

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).

FLAT COVER PLATE SIZE	135°F (57°C) PART #	155°F (68°C) PART #
3 5/16" DIA.		
WHITE	325437	325442
CHROME	325435	325440

