



**AUTOMATIC SPRINKLERS  
GL SERIES  
DRY TYPE  
CONCEALED PENDENT**

**DESCRIPTION AND OPERATION**

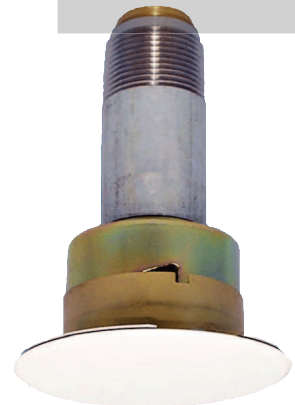
The Globe GL Series Dry Type Concealed Pendent Sprinkler is designed for use in special applications such as freezing environments and conditions where sediment or foreign materials might accumulate in ordinary drop nipples. It offers the ultimate in low profile, aesthetically pleasing appearance. All that is seen at the ceiling is a 3 5/16" diameter ceiling plate color finished to match the specifier's exact requirements. The GL Series Dry 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 GL Series 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 - teflon coated nickel alloy
- Retainer - brass • Pin - stainless steel • Torsion spring - stainless steel
- Bulb - glass with glycerin solution, 5mm • Orifice insert - brass
- 3/4" or 1" NPT • Outer tube - galvanized steel pipe
- Inner tube - stainless steel



WHITE  
DRY CONCEALED PENDENT

**• 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

**SPECIFICATIONS**

NOMINAL "K" FACTOR	THREAD SIZE	LENGTH	FINISHES
5.6 (80 metric)	3/4" or 1" NPT	cULus Variable to 48"	Bright Chrome White Painted <sup>1</sup> Satin Chrome
8.1 (116 metric)	1" NPT	FM Variable to 36"	<sup>1</sup> Bright Brass <sup>1</sup> Other Painted Finishes

NOTE: Metric conversions are approximate.

<sup>1</sup>Finishes available on special order.  
Painted plates other than white require customer to furnish paint.  
Contact Globe for paint specification.

**APPROVALS**

STYLE	SIN MODEL	K FACTOR	THREAD SIZE	135°F (57°C)	155°F (68°C)	155°F (68°C)	175°F (79°C)	200°F (93°C)	* FM	cULus	NYC-DOB MEA 101-92-E
				WITH PLATE 135°F (57°C)	WITH PLATE 135°F (57°C)	WITH PLATE 155°F (68°C)	WITH PLATE 155°F (68°C)	WITH PLATE 155°F (68°C)			
CONCEALED PENDENT	GL5681	5.6	1" NPT	X	X	X	X	X	X	X	X
	GL5682	5.6	3/4" NPT	X	X	X	X	X	-	X	X
	GL8181	8.1	1" NPT	X	X	X	X	X	-	X	X

NOTE: Listed for all hazards.

\*Concealed Pendent style FM Approvals 135° F Cover & 155° F Sprinkler;  
155° F Cover & 200° F Sprinkler

**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.

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

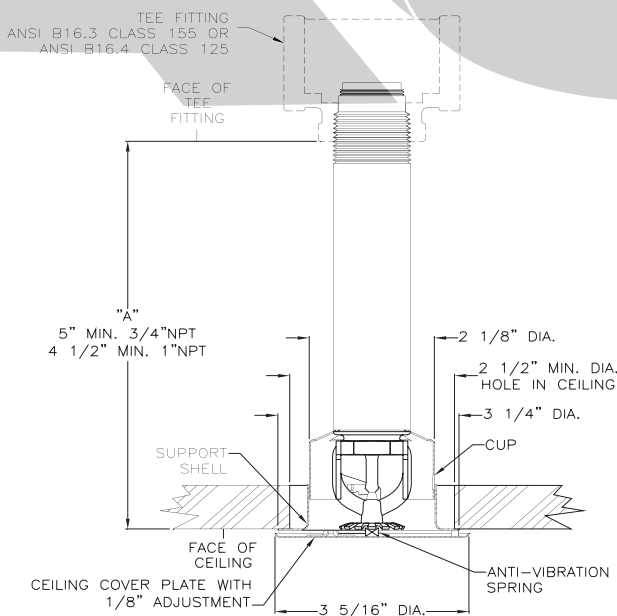
- Quantity • Model Number • Style
- Orifice • Temperature • Finishes desired
- Quantity - Concealed Wrenches - P/N 337014
- Quantity - Protective Caps - P/N 327119
- "A" Dimension - Distance from face of fitting to the finished ceiling line regardless of escutcheon used.

**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**



CONCEALED PENDENT