

# SERIES GL-QR/10MM STANDARD COVERAGE, QUICK RESPONSE UPRIGHT, PENDENT & RECESSED PENDENT SPRINKLERS K-FACTOR: 60 METRIC

### **GENERAL DESCRIPTION**

Globe Series GL-QR sprinklers are Listed Quick Response sprinklers which utilize a 3mm frangible glass bulb as the thermosensitive operating element. These sprinklers are available in upright, pendent, and recessed pendent orientations. They are Listed and Approved as Standard Coverage sprinklers and are to be installed in accordance with the guidelines of the appropriate Installation Standard being mandated by the AHJ (i.e. NFPA 13). These sprinklers are available in various K-factors, temperatures and finishes as shown. Recessed escutcheons are available (See Approvals Tables for appropriate sprinkler/escutcheon combinations and Listings).

### **OPERATION**

Upon exposure to heat such as from a fire, the fluid in the bulb expands, compressing the air bubble within the bulb When the air bubble can no longer compress, the fluid expansion causes breakage of the glass bulb resulting in release of the water seat assembly, and discharge of water from the sprinkler.

### TECHNICAL DATA

### SIN

- Upright: GL4221
- Pendent, Recessed Pendent; GL42
- Approvals
- cULus
- See Approval Tables
- Maximum Working Pressure
- 175 psi (12 bar)
- Factory tested to 500 psi (34 bar)
- Minimum Operating Pressure
- 7 psi (48 kPa)
  Temperature Rating

### See Approval Tables

- Materials of Construction
- Frame bronze Deflector brass Screw brass
- · Lodgement Wire stainless steel · Bulb seat copper
- · Spring nickel alloy · Seal teflon
- · Bulb glass with alcohol based solution, 3mm
- Escutcheon Assembly carbon steel



RECESSED PENDENT

# ENISHES AND ACCESSORIES

• Factory Bronze • Chrome • White Polyester
 Black Polyester - special order

### Escutcheons

Brass • Chrome • White Polyester • Black Polyester
 Wrenches

Standard • Recess • 1/2" NPT

### NOTE:

Corrosion resistant coatings, where applicable, are utilized to extend the life of copper alloy sprinklers beyond that which would otherwise be expected when exposed to corrosive atmospheres. Although corrosion resistant coated sprinklers have passed the standard corrosion tests of the applicable approval agencies, the testing is not representative of all possible corrosive atmospheres. Consequently, it is recommended that the end user be consulted with respect to the suitability of these coatings for any given corrosive environment. The effects of ambient temperature, concentration of chemicals, humidity, and gas/chemical velocity, should be considered, as a minimum, along with the corrosive nature of the chemical to which the sprinklers will be exposed.

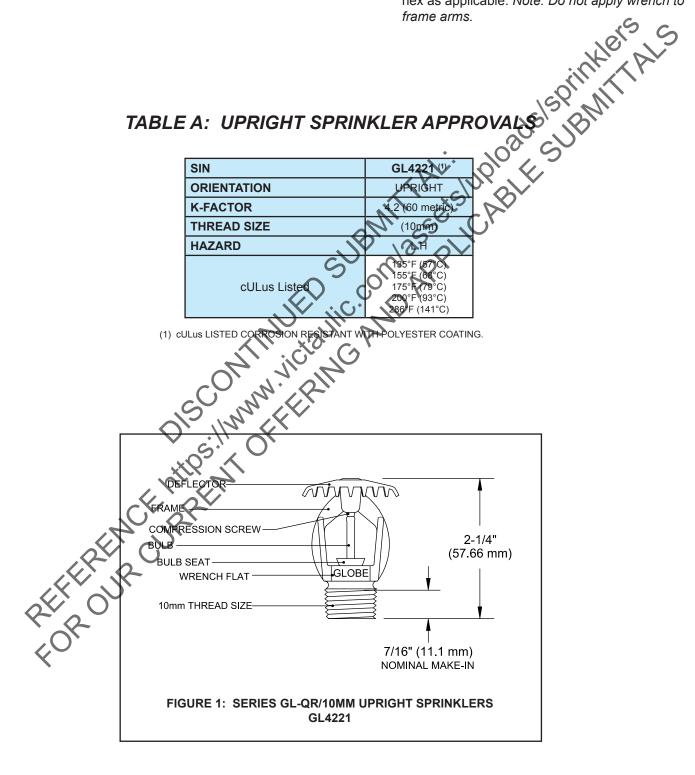
#### NOTE:

Users should refer to Globe's web site (www.globesprinkler.com) to ensure that the most recent technical literature is being utilized.

### NOTICE

Do not install any bulb-type sprinkler if the bulb is cracked or there is loss of liquid from the bulb. Sprinklers should be tightened enough to obtain a leak-tight joint when water pressure is applied and/or hydrostatic test is performed. Sprinklers should not be overtightened as this can result in distortion and subsequent leakage. It is recommended not to exceed 14 ft.-lb. (19.0 Nm) torque for 1/2 inch NPT sprinkler threads. **Step1.** Sprinklers must be properly oriented.

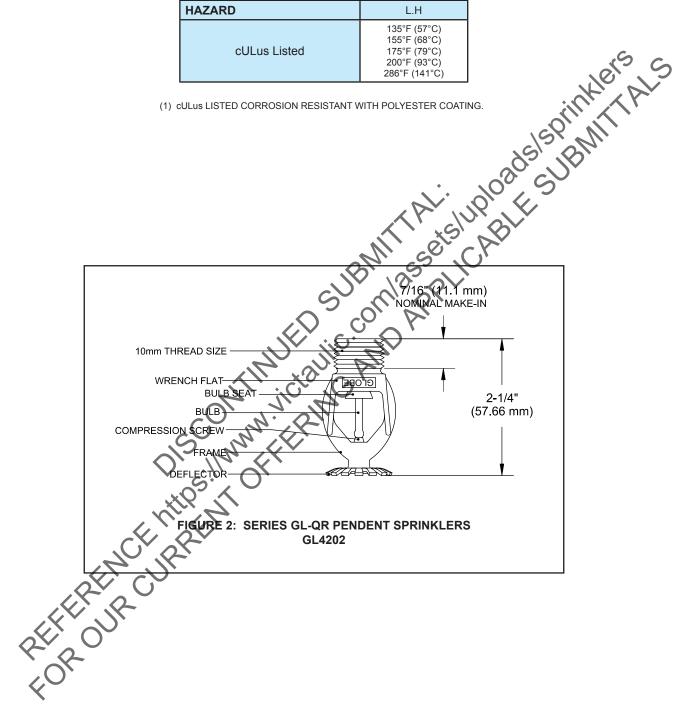
- **Step2.** With pipe thread sealant applied to the pipe threads, hand tighten the sprinkler into the sprinkler fitting. *Note: Do not grasp the sprinkler by the deflector.*
- **Step3.** Wrench-tighten the sprinkler using only the appropriate wrench. Wrenches are only to be applied to the sprinkler wrench flats or wrench hex as applicable. *Note: Do not apply wrench to frame arms.*



### TABLE B: PENDENT SPRINKLER APPROVALS

SIN	GL4202 <sup>(1)</sup>								
ORIENTATION	PENDENT								
K-FACTOR	4.2 (60 metric)								
THREAD SIZE	(10mm)								
HAZARD	L.H								
cULus Listed	135°F (57°C) 155°F (68°C) 175°F (79°C) 200°F (93°C) 286°F (141°C)								

<sup>(1)</sup> CULUS LISTED CORROSION RESISTANT WITH POLYESTER COATING.

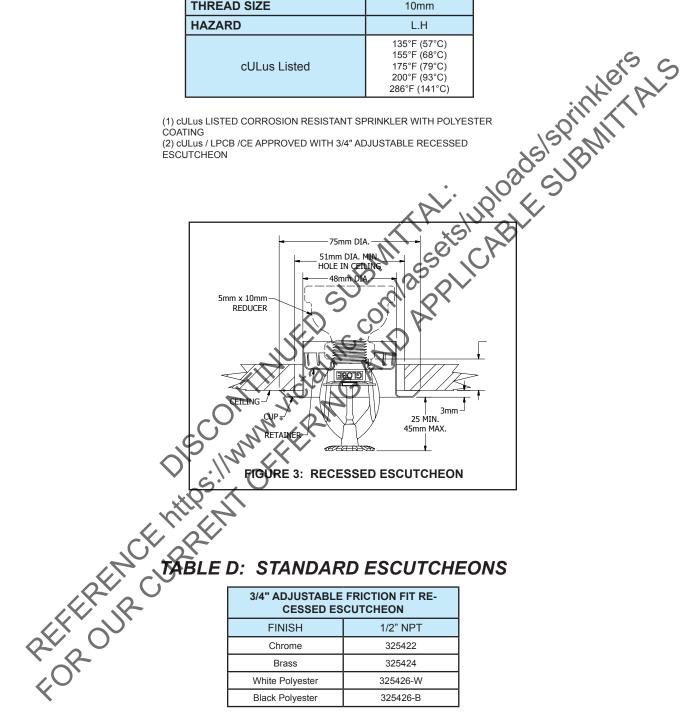


### TABLE C: RECESSED PENDENT SPRINKLER APPROVALS

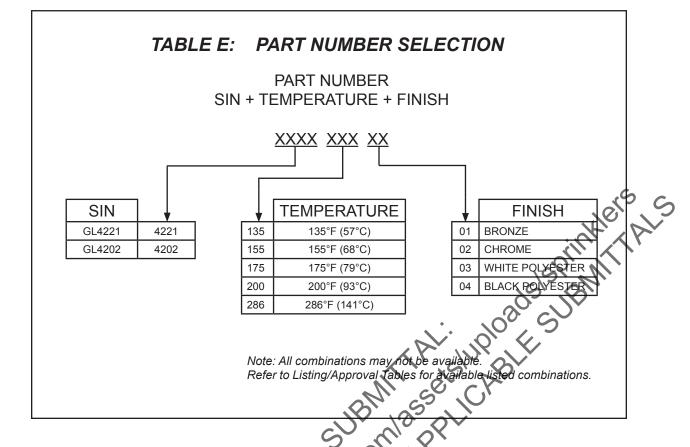
SIN	GL4202 <sup>(1) (2)</sup>							
ORIENTATION	RECESSED PEND.							
K-FACTOR	4.2 (60 metric)							
THREAD SIZE	10mm							
HAZARD	L.H							
cULus Listed	135°F (57°C) 155°F (68°C) 175°F (79°C) 200°F (93°C) 286°F (141°C)							

(1) CULUS LISTED CORROSION RESISTANT SPRINKLER WITH POLYESTER CÓATING

(2) cULus / LPCB /CE APPROVED WITH 3/4" ADJUSTABLE RECESSED ESCUTCHEON



3/4" ADJUSTABLE FRICTION FIT RE- CESSED ESCUTCHEON								
FINISH	1/2" NPT							
Chrome	325422							
Brass	325424							
White Polyester	325426-W							
Black Polyester	325426-B							



### CARE AND MAINTENANCE

Prior to installation, it is important to read and follow the "Sprinkler Caution" sheet (GFS-840) included within each box of sprinklers. This sheet is available on Clobe's web site (www.globesprinkler.com).

Store sprinklers in a cool, dry place. Exposure to extreme heat will damage the thermal sensing element, possibly resulting in premature activation. Avoid greet symight

Replace any sprinkler that shows any corrosion damage, or loss of liquid from the glass bulb.

Do not attempt to paint or alter the sponkler's coating in any manner after leaving the manufacturing plant.

Do not attach wiring, ropes, decorations or fixtures to a sprinkler.

Absence of an escutsheon, used to cover a ceiling hole, may delay sprinkler operation in a fire situation.

It is the owner's responsibility for inspection, testing and maintenance of the fire sprinkler system with all components and devices in accordance with the National Fire Protection Association Pamphlet 25 as well as any other requirements as set forth by the local Authority Having Jurisdiction (AHJ).

## ORDERING INFORMATION

SPRINKLER

• Quantity • SIN • Orientation • Orifice • NPT • Temperature Rating • Finish • Part Number (See TABLE E)

ESCUTCHEON

• Quantity • Finish • Part Number (See TABLE D)

• WRENCH

Quantity   Part Number								
1/2" NPT Standard								.325390
1/2" NPT Recess								.325391

### GLOBE® PRODUCT WARRANTY

Globe agrees to repair or replace any of its 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).

