

## SERIES GL-QR/ECLH

# EXTENDED COVERAGE, QUICK RESPONSE, LIGHT HAZARD PENDENT AND RECESSED PENDENT SPRINKLER

### K-FACTOR: 5.6

### GENERAL DESCRIPTION

Globe Series GL-QR/ECLH sprinklers are Listed Quick Response sprinklers which utilize a 3mm frangible glass bulb as the thermosensitive operating element. These sprinklers are available in pendent and recessed pendent orientations. They are Listed and Approved as Extended Coverage sprinklers for Light Hazard Occupancies for a maximum coverage area of 400 ft.<sup>2</sup> 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 with a K-factor of 5.6 (80,6), a 1/2" npt and various temperatures and finishes as shown. Recessed escutcheon provides a total of 3/4" vertical adjustment.



PENDENT



RECESSED PENDENT

### 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.

### FINISHES AND ACCESSORIES

#### Finishes

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

#### Escutcheons

- Brass • Chrome • White Polyester • Black Polyester
- Stainless Steel

#### Wrenches

- Standard • Recess • 1/2" NPT

### TECHNICAL DATA

#### SIN

- GL5614

#### Approvals

- cULus

#### Maximum Working Pressure

- 175 psi (12 bar)

#### Minimum Operating Pressure

- See TABLES A & B

#### Minimum Spacing

- 8 ft. (2.4 m)

#### Temperature Rating

- See TABLES A & B

#### Materials of Construction

- Frame - bronze • Deflector - brass • Screw - brass
- Bulb seat - copper
- Spring - nickel alloy • Seal - teflon
- Bulb - glass with alcohol based solution, 3mm
- Escutcheon Assembly - steel

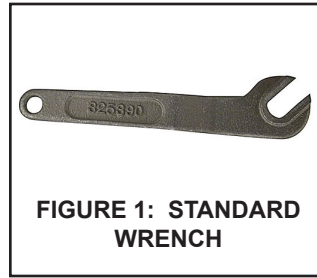
#### Note:

Users should refer to Globe's web site ([www.globesprinkler.com](http://www.globesprinkler.com)) to assure that the most recent technical literature is being utilized.

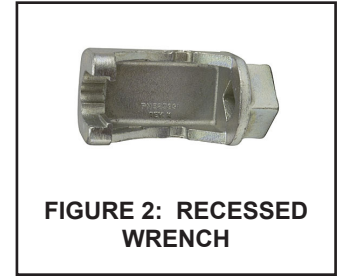
# INSTALLATION

**Caution:**

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 threads.

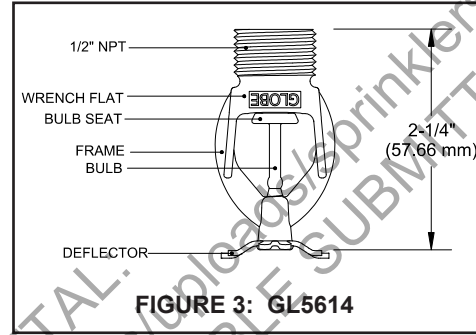


**FIGURE 1: STANDARD WRENCH**



**FIGURE 2: RECESSED WRENCH**

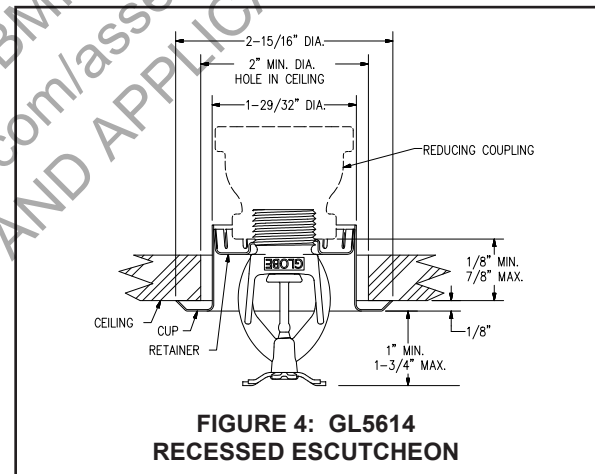
- Step1.** Sprinklers must be properly oriented.
- Step2.** With pipe thread sealant applied to the pipe threads, hand tighten the sprinkler into the sprinkler fitting. *Note: Do not grasp the sprinkler by the deflector.*
- Step3.** Wrench-tighten the sprinkler using only the appropriate wrench. Wrenches are only to be applied to the sprinkler wrench flats or wrench hex as applicable. *Note: Do not apply wrench to frame arms.*



**For Recessed Pendent Sprinkler Installation**

The series GL-QR/ECLH Recessed Pendent Sprinkler must be installed in accordance with the following instructions:

- Step1.** After installing the 1/2" npt recessed retainer ring over the sprinkler threads and with pipe thread sealant applied to the pipe threads, hand-tighten the sprinkler into the sprinkler fitting.
- Step2.** Tighten the sprinkler into the sprinkler fitting using only the appropriate Recessed Sprinkler Wrench (Ref. Figure 2).
- Step3.** After the ceiling has been installed, slide the outer recessed cup over the Series GL-QR/ECLH Recessed Pendent Sprinkler and push the cup over the retainer ring until its flange comes in contact with the ceiling.
- Step4.** Be sure to remove glass bulb protector prior to putting system in service.



**TABLE A: PENDENT HYDRAULIC DESIGN AREA \***

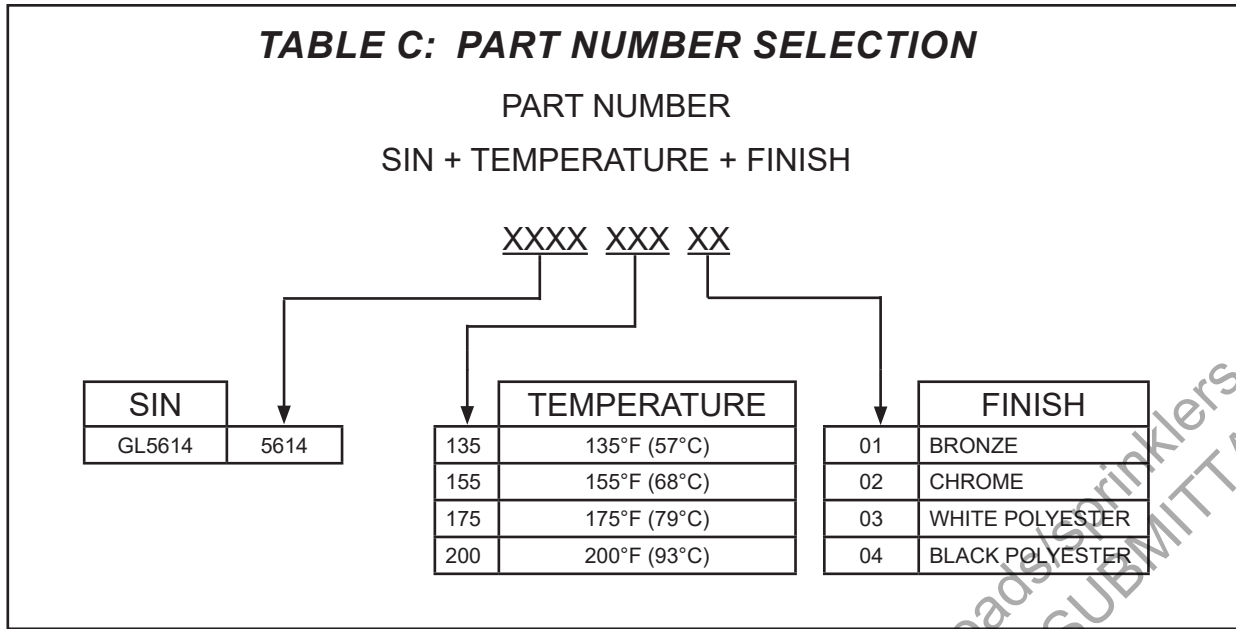
SIN K-Factor	SPACING ft. (m)	MINIMUM FLOW gpm (lpm)	MINIMUM PRESSURE psi (bar)	TEMPERATURE RATING
GL5614	16 x 16 (4.9 x 4.9)	26 (98)	21.5 (1.48)	135°F, 155°F, 175°F, 200°F (57°C, 68°C, 79°C, 93°C)
	18 x 18 (5.5 x 5.5)	33 (125)	34.7 (2.39)	135°F, 155°F, 175°F, 200°F (57°C, 68°C, 79°C, 93°C)
K5.6	20 x 20 (6.1 x 6.1)	40 (151)	51 (3.52)	135°F (57°C)

\* Pendent sprinkler refers to "non-recessed" applications. For Recessed Listings, see appropriate criteria in Table B below.

**TABLE B: RECESSED PENDENT HYDRAULIC DESIGN AREA**

SIN K-factor	ESCUTCHEON	TEMPERATURE RATING	SPACING ft. (m)	MINIMUM FLOW gpm (lpm)	MINIMUM PRESSURE psi (bar)
GL5614 K5.6	3/4" RECESSED ADJUSTMENT	135°F, 155°F, 175°F, 200°F (57°C, 68°C, 79°C, 93°C)	16 x 16 (4.9 x 4.9)	26 (98)	21.5 (1.48)
			18 x 18 (5.5 x 5.5)	33 (125)	34.7 (2.39)
		135°F (57°C)	20 x 20 (6.1 x 6.1)	40 (151)	51 (3.52)

**TABLE C: PART NUMBER SELECTION**



**NOTE: All combinations may not be available.  
Refer to Listing/Approval Tables for available listed combinations.**

**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 Globe’s web site ([www.globesprinkler.com](http://www.globesprinkler.com)).

Always obtain permission from the proper authorities to shut down the affected fire protection system and notify all personnel who may be affected by this action before closing a fire protection system main control valve for maintenance work on the system that it controls.

Sprinklers should only be cleaned by means of gently dusting with a feather duster; otherwise, non-operation in the event of a fire or inadvertent operation may result.

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

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

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

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

Absence of an escutcheon, 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**

**SPECIFY:**

- **SPRINKLER**
  - Quantity • SIN • Temperature Rating • Finish
  - Part Number (See TABLE C)
- **ESCUTCHEON**
  - Quantity • Finish • Part Number (See TABLE D)
- **WRENCH**
  - Quantity • Part Number
  - 1/2" NPT Standard . . . . . 325390
  - 1/2" NPT Recess . . . . . 325391
- **PROTECTIVE CAPS**
  - Quantity • Part Number
  - Cap. . . . . 327109-CAP

**TABLE D: ESCUTCHEONS**

3/4" ADJUSTABLE FRICTION FIT RECESSED ESCUTCHEON	
FINISH	1/2" NPT
Chrome	325422
Brass	325424
White Polyester	325426-W
Black Polyester	325426-B
Stainless Steel	326140

**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).

