



SERIES GL-QR/ECLH/DCSW

EXTENDED COVERAGE, QUICK RESPONSE, LIGHT HAZARD DOMED CONCEALED HORIZONTAL SPRINKLERS

K-FACTOR: 5.6, 8.0

GENERAL DESCRIPTION

The Globe Series GL-QR/ECLH/DCSW Domed Concealed Extended Coverage Horizontal Sidewall Quick Response sprinkler is Listed for use in Light Hazard Occupancies. These sprinklers utilize a 3mm glass bulb operating element. These sprinklers are designed for placement along a wall or soffit. They are Listed and Approved as Extended 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 K-factors of 5.6 (80,6) or 8.0 (115,2). The Domed Cover Plate extends 1" from the wall/soffit surface. They have been Listed for coverages ranging from 16 ft. and 18 ft. widths and up to 24 ft. throws (away from wall surface). See appropriate Table within data sheet for specific flow and pressure criteria for various spacings. They have also been investigated and Listed for deflector distances below the ceiling of up to 12" (304,8mm). The Domed cover plate allows for 1/2" (12,7mm) of total adjustment. The GL5613 has 1/2" npt threads and the GL8113 and GL8114 have 3/4" npt threads.

OPERATION

The soldered cover plate drops off the retainer assembly when exposed to heat, as from a fire, that has reached the plate's Listed temperature rating, exposing the sprinkler above. As heat encompasses the glass bulb operating element of the sprinkler, 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 seal assembly and discharge of water from the sprinkler.

FINISHES AND ACCESSORIES

Sprinkler Finish

- Factory Bronze

Dome Cover Plates

- Chrome • White Painted • Black Painted • Custom

Caution:

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.

Wrenches

- 1/2" NPT Recessed/Concealed
- 3/4" NPT Recessed/Concealed



TECHNICAL DATA

SIN

- GL5613, GL8113, GL8114

Approvals

- cULus - Light Hazard

Maximum Working Pressure

- 175 psi (12 bar)

Minimum Operating Pressure

- See TABLE A

Minimum Spacing

- 8 ft. (2.4 m)

Temperature Rating

- See TABLE A

Materials of Construction

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

Note:

Users should refer to Globe's web site (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, 20 ft.-lb. (26.8 Nm) torque for 3/4 inch NPT threads.

- Step1.** Sprinklers must be checked for proper orientation (i.e. confirm deflector is oriented at the top of the assembly).
- 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.*

COVER PLATE INSTALLATION

- Step1.** Remove any protective caps or guards from the sprinkler if they are in place.
- Step2.** When removing the cover plate from the shipping container, handle with care so as not to damage the plate or soldered tabs.
- Step3.** Align the cover plate assembly with the sprinkler cup assembly and gently push with palm of hand using even pressure until the flange of the support shell makes contact with the face of the wall or soffit surface.
- Note: Should cover plate not engage properly, do not attempt to modify the unit. It may be necessary to recut the sprinkler nipple or reposition the sprinkler fitting such that the cover plate attaches sufficiently onto the sprinkler without other modification.*

COVER PLATE REMOVAL

The cover plate is removed by gently unthreading. Avoid unnecessary force or pull with these cover plate assemblies as damage to the cover plate could occur.

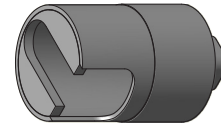


FIGURE 1: RECESSED WRENCH
P/N 329678 1/2" NPT
329679 3/4" NPT

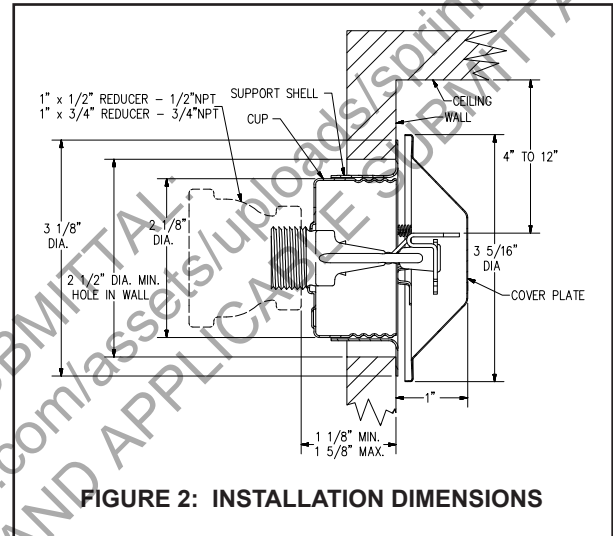


FIGURE 2: INSTALLATION DIMENSIONS

TABLE A: HYDRAULIC DESIGN AREA

SIN K-FACTOR	DEFLECTOR DISTANCE BELOW CEILING in. (mm)	MAX. SPACING ft. (m)	MIN. FLOW gpm (lpm)	MIN. PRESSURE psi (bar)	SPRINKER TEMPERATURE RATING	COVER PLATE TEMPERATURE RATING	
GL5613 K5.6	4 (101.6) to 6 (152.4)	16 x 18 (4.9 x 5.5)	29 (110)	26.8 (1.85)	135°F, 155°F (57°C, 68°C)	135°F (57°C)	
					175°F (79°C)	155°F (68°C)	
	6 (152.4) to 12 (304.8)	16 x 20 (4.9 x 6.1)	32 (121)	32.7 (2.25)	135°F (57°C)	135°F (57°C)	
					175°F (79°C)	155°F (68°C)	
		16 x 18 (4.9 x 5.5)	32 (121)	32.7 (2.25)	135°F, 155°F (57°C, 68°C)	135°F (57°C)	
					175°F (79°C)	155°F (68°C)	
GL8113 K8.0	4 (101.6) to 12 (304.8)	16 x 16 (4.9 x 4.9)	26 (98)	10.6 (.73)	135°F, 155°F (57°C, 68°C,)	135°F (57°C)	
					175°F (79°C)	155°F (68°C)	
	4 (101.6) to 6 (152.4)	16 x 18 (4.9 x 5.5)	29 (110)	13.1 (.90)	16.0 (1.10)	135°F (57°C)	
					175°F (79°C)	155°F (68°C)	
	6 (152.4) to 12 (304.8)	16 x 20 (4.9 x 6.1)	32 (121)	16.0 (1.10)	135°F (57°C)	135°F (57°C)	
					175°F (79°C)	155°F (68°C)	
		16 x 18 (4.9 x 5.5)	32 (121)	16.0 (1.10)	135°F, 155°F (57°C, 68°C,)	135°F (57°C)	
					175°F (79°C)	155°F (68°C)	
	GL8114 K8.0	4 (101.6) to 6 (152.4)	16 x 22 (4.9 x 6.7)	36 (136)	20.3 (1.40)	135°F (57°C)	135°F (57°C)
			16 x 24 (4.9 x 7.3)	39 (148)	23.8 (1.64)		
		4 (101.6) to 12 (304.8)	18 x 20 (5.5 x 6.1)	36 (136)	20.3 (1.40)		
18 x 22 (5.5 x 6.7)			40 (151)	25.0 (1.72)			

DISCONTINUED SUBMITTAL
 REFERENCE <https://www.victaulic.com/assets/submittals>
 FOR OUR CURRENT OFFERING AND APPLICABLE SUBMITTALS

TABLE B: DOMED COVER PLATE PART NUMBERS

DOMED COVER PLATE SIZE	WHITE 135°F (57°C)	CHROME 135°F (57°C)	WHITE 155°F (68°C)	CHROME 155°F (68°C)	BLACK 135°F (57°C)	BLACK 155°F (68°C)	CUSTOM 135°F (57°C)	CUSTOM 155°F (68°C)
3-1/4" DIA.	329491	329489	329497	329495	329491-B	329497-B	329492	329498

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).

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

GL5613 SPRINKLERS	PART NUMBER
135°F (57°C)	561313501
155°F (68°C)	561315501
175°F (79°C)	561317501

GL8113 SPRINKLERS	PART NUMBER
135°F (57°C)	811313501
155°F (68°C)	811315501
175°F (79°C)	811317501

GL8114 SPRINKLERS	PART NUMBER
135°F (57°C)	811413501

COVER PLATES

SEE TABLE B

- WRENCH
 - Quantity • Part Number
- 1/2" NPT 329678
- 3/4" NPT 329679
- PROTECTIVE CAP
 - Quantity • Part Number 327119

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).

