

# GB-LO 17/32

Quick Response Extended Coverage (16'x24')  
(4.9m x 7.3m)

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Horizontal Sidewall

Glass Bulb Automatic Sprinkler

Manufactured by: Central Sprinkler Company  
451 North Cannon Avenue, Lansdale, Pennsylvania 19446



## Product Description

The Model GB-LO 17/32 Horizontal Sidewall Automatic Sprinklers allow extended coverage spacing while avoiding high pressure requirements. The operating mechanism consists of a liquid-filled 3 mm or 5 mm diameter frangible glass bulb. The result of these design features is a small, attractive sprinkler that provides extended areas of coverage with reasonable pressure requirements.

The Model GB-LO 17/32 Horizontal Sidewall Automatic Sprinklers are intended for installation in accordance with current NFPA 13 and their Extended Coverage and Quick Response Extended Coverage Listing\* parameters. They are ideally suited for use in churches, clubs, schools, hospitals, offices, hotels, restaurants, auditoriums and similar occupancies. They are available in one orifice size, two temperature ratings, two bulb sizes, and three standard finishes; chrome plated, brass plated and white painted.

**Operation:** The glass bulb capsule operating mechanism contains a heat sensitive liquid that expands upon application of heat. At the rated temperature, the frangible capsule ruptures, thereby releasing the orifice seal. The sprinkler then discharges water in a pre-designed spray pattern to control or extinguish the fire.

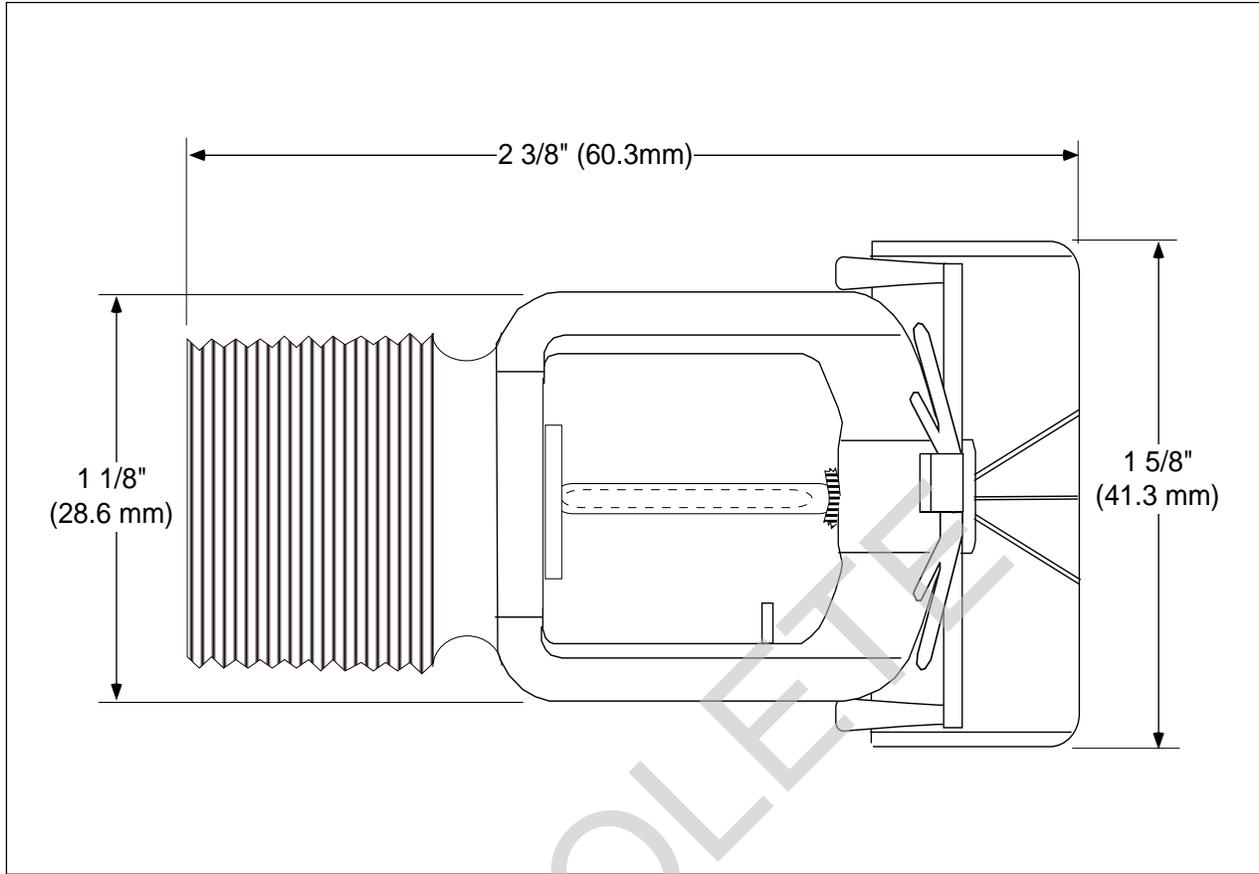
## Technical Data

Model: GB-LO 17/32  
 Style: Horizontal Sidewall  
 Escutcheon: Model 65 or equivalent  
 Orifice Size: 17/32" (13.5 mm)  
 K Factor: 7.8 (112.5 metric)  
 Thread Size: 3/4" (20 mm) N.P.T.  
 Temperature Rating & Bulb Color:  
 135°F/57°C Orange  
 155°F/68°C Red  
 Approvals: UL, ULC, MEA (466-92-E)  
 Maximum Working Pressure:  
 175 psi (12.1 bar)  
 Factory Hydro Test: 100% at  
 500 psi (34.5 bar)  
 Standard Finishes: chrome plated,  
 brass plated and  
 white painted  
 Corrosin Resistant Coatings:  
 White or Black Painted  
 Highest Allowable Ambient  
 Temperature: 100°F/38°C  
 Length: 2 3/8" (60.3 mm)  
 Width: 1 5/8" (41.3 mm)  
 Across Frame Arms: 1 1/8" (28.6 mm)  
 Across Deflector: 1 5/8" (41.3 mm)  
 Weight: 3.1 oz. (87 grams)

17/32" (13.5mm)  
 Orifice  
 Horizontal  
 Sidewall  
 Automatic  
 Sprinkler

\*For specific listing requirements see the appropriate information contained in this brochure.

**Figure 1**  
**GB-LO 17/32"**



**Universal Wrench**  
**(Part #1123)**





# Design Data



# Installation

## Design Requirements - Extended Coverage Applications

155° 5mm Bulb

Coverage Area Width      Throw	Minimum Flow GPM(Lpm)	Minimum Pressure PSI(bar)	Distance Below Ceiling	Temperature Rating (°F/°C)
16' (or less) x 18' (or less) (4.9 m)      (5.5 m)	30 (113.7)	14.8 (1.0)	4" - 6" (101.6-152.4 mm)	155°F/68°C

The Model GB-LO 17/32 Horizontal Sidewall Sprinklers are U.L. Listed for Extended Coverage applications in light hazard occupancies only.

## Design Requirements - Extended Coverage Applications

155° 3mm Bulb

Coverage Area Width      Throw	Minimum Flow GPM(Lpm)	Minimum Pressure PSI(bar)	Distance Below Ceiling	Temperature Rating (°F/°C)
16' (or less) x 18' (or less) (4.9 m)      (5.5 m)	30 (113.7)	14.8 (1.0)	4" - 6" (101.6-152.4 mm)	155°F/68°C
16' x 20' (4.9 m)      (6.1 m)	34 (128.9)	19.0 (1.3)	4" - 6" (101.6-152.4 mm)	155°F/68°C
16' x 22' (4.9 m)      (6.7 m)	37 (140.2)	22.5 (1.6)	4" - 6" (101.6-152.4 mm)	155°F/68°C
16' x 24' (4.9 m)      (7.3 m)	41 (155.4)	27.6 (1.9)	4" - 6" (101.6-152.4 mm)	155°F/68°C

The Model GB-LO 17/32 Horizontal Sidewall Sprinklers are U.L. Listed for Extended Coverage applications in light hazard occupancies only.

The Central Model GB-LO 17/32 Horizontal Sidewall Sprinkler must be installed according to current NFPA 13 Standards. Deviations from these requirements and standards or any alteration to the sprinkler itself will void any warranty made by Central Sprinkler Company. In addition, installation must also meet local government provisions, codes and standards as applicable.

The system piping must be properly sized to ensure the minimum required flow rate at the sprinkler. Check for the proper model, style, orifice size and temperature rating prior to installation. Install sprinklers after the piping is in place to avoid mechanical damage, replace any damaged units. Wet pipe systems must be protected from freezing; refer to the Central Bulletins on the Model H-1 Dry Horizontal Sidewall Sprinklers for use in dry pipe sprinkler installations.

Upon completion of the installation, the system must be tested per recognized standards.

In the event of a thread leak, remove the unit, apply new pipe joint compound or tape and reinstall.

## Installation Sequence

**Step 1.** The unit must be installed in the horizontal position.

**Step 2.** Use only a non-hardening pipe joint compound or Teflon\* tape. Apply only to the male threads.

**Step 3.** Hand tighten the sprinkler into the fitting. Use the appropriate Central sprinkler wrench to tighten the unit into the fitting. A leak-tight joint requires only 7-14 ft-lbs. (9.5 to 19.0 Nm) of torque; a tangential force of 14-28 lbs. (62.3 to 124.5 N) delivered through a 6" (150 mm) handle will deliver adequate torque. Torque levels over 21 ft-lbs. (28.6 Nm) may distort the orifice seal, resulting in leakage.

\*Teflon is a trademark of the DuPont Corp.

## Design Requirements - Quick Response Extended Coverage Applications

135° 3mm Bulb

Coverage Area Width      Throw	Minimum Flow GPM(Lpm)	Minimum Pressure PSI(bar)	Distance Below Ceiling	Temperature Rating (°F/°C)
16' (or less) x 18' (or less) (4.9 m)      (5.5 m)	30 (113.7)	14.8 (1.0)	4" - 6" (101.6-152.4 mm)	135°F/57°C
16' x 20' (4.9 m)      (6.1 m)	34 (128.9)	19.0 (1.3)	4" - 6" (101.6-152.4 mm)	135°F/57°C
16' x 22' (4.9 m)      (6.7 m)	37 (140.2)	22.5 (1.6)	4" - 6" (101.6-152.4 mm)	135°F/57°C
16' x 24' (4.9 m)      (7.3 m)	41 (155.4)	27.6 (1.9)	4" - 6" (101.6-152.4 mm)	135°F/57°C

The Model GB-LO 17/32 Horizontal Sidewall Sprinklers are U.L. Listed for Quick Response Extended Coverage applications in light hazard occupancies only.

**CAUTION: Do not wrench or turn the deflector, as this action may damage the sprinkler and cause it to leak under pressure.**

Special care must be taken when installing sprinklers with a CPVC system. Sprinklers must be installed after the CPVC manufacturer's recommended setting time for the primer and cement to ensure that neither accumulate within the sprinkler.

Special care must be taken when installing with a copper system. Sprinklers must be installed only after the inside of the sprinkler nipple and associated fittings have been wire brushed to remove any flux. Residual flux can cause corrosion and in extreme cases can impair proper sprinkler operation.



## Care & Maintenance

Sprinklers must be handled carefully. They should not be transported or stored where ambient temperatures may exceed 100°F/ 38°C. For best results, store them in a dry, cool location in the original shipping package.

Do not install sprinklers that have been dropped or visibly damaged. Sprinklers should never be painted, coated, plated or altered in any other way from manufactured condition or they may not function properly. Any sprinklers altered in such manner must be replaced.

The owner is responsible for the proper operating condition of all fire protection devices and accessories. The NFPA Standard 25 entitled, "Inspection, Testing and Maintenance of Water-Based Fire Protection Systems", contains guidelines and minimum maintenance requirements. Furthermore, the local *Authority Having Jurisdiction* may have additional regulations and requirements for maintenance, testing, and inspection that must be obeyed.

It is recommended that sprinkler systems be inspected regularly by a qualified inspection service. Length of time between such inspections can vary due to accessibility, ambient atmosphere, water supply and site activity.

Do not attempt to re-assemble or otherwise reuse a sprinkler that has operated. Replace any sprinkler exhibiting corrosion or damage. Always use new sprinklers of the same type and temperature rating as replacements.

Because the discharge pattern is critical to protection of life and property, nothing should be hung or attached to the sprinkler unit that would disrupt the pattern. Such obstructions must be removed. In the event that construction has altered the original configuration, additional sprinklers should be installed to maintain the protection level.

Do not attempt to replace sprinklers without first removing the fire protection system from service. Be certain to secure permission from all Authorities Having Jurisdiction, and notify all personnel who may be affected during system shutdown. A fire watch during maintenance periods is a recommended precaution.

To remove the system from service mode, first refer to the system operating guide and valve instructions. Drain water and relieve pressure in the pipes. Remove the existing unit and install the replacement, using only the special sprinkler wrench. Be certain to match model, style, orifice, and temperature rating.

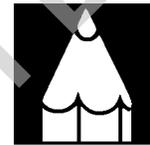


### Central Sprinkler Company

451 N. Cannon Avenue, Lansdale, PA 19446  
Phone (215) 362-0700  
FAX (215) 362-5385

A fire protection system that has been shut off after an activation should be returned to service immediately. Inspect the entire system for damage and replace or repair as necessary. Sprinklers that did not operate, but were subjected to corrosive elements of combustion or excessive temperatures should be inspected and replaced if needed. The *Authority Having Jurisdiction* will detail minimum replacement requirements and regulations.

**Guarantee:** Central Sprinkler Co. will repair and/or replace any products found to be defective in material or workmanship within a period of one year from the date of shipment. Please refer to the current Price List for further details of the warranty.



## Ordering Information

**Ordering Information:** When placing an order, indicate the full product name. Please specify the quantity, model, style, orifice size, temperature rating, type of finish and sprinkler wrench.

**Availability and Service:** Central sprinklers, valves, accessories, and other products are available throughout the U.S. and Canada; and internationally through a network of Central Sprinkler distribution centers. You may write directly to Central Sprinkler Company or call (215) 362-0700 for the distributor nearest you.

### Conversion Table:

1 inch = 25.400 mm
1 foot = 0.3048 m
1 pound = 0.4536 kg
1 foot pound = 1.36 Nm
1 psi = 6.895 kpa = 0.0689 bar = 0.0703 kg/cm <sup>2</sup>
1 U.S. gallon = 3.785 dm <sup>3</sup> = 3.785 liters

Conversions are approximate.