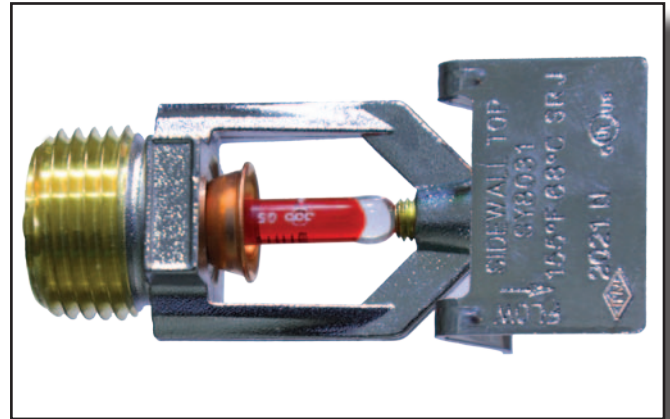


Model SY8031

Standard Coverage, Standard Response Horizontal Sidewall Sprinkler, K-factor 5.6 (80 metric)

Description:

Sentry Sprinklers Model SY8031 is an Automatic and or Open Standard Response Horizontal Sidewall Sprinkler head that utilizes a frangible thermo-sensitive glass bulb to operate the sprinkler. The sprinkler is designed for installation along a wall, the side of a beam, or just beneath a smooth ceiling. The sprinkler is available in various finishes and temperatures. Sprinkler Model SY8031 is listed and approved for standard coverage for Light and Ordinary hazards. Model SY8031 is a 5.6 K-Factor (80 metric) intended for use in fire sprinkler systems designed in accordance with the standard installation rules recognized by the applicable listings or approved agency. The Horizontal Sidewall Sprinkler produces a quarter-spherical water discharge that is predominately directed downward and outward from the deflector. Part of the spray is also directed towards the back wall.

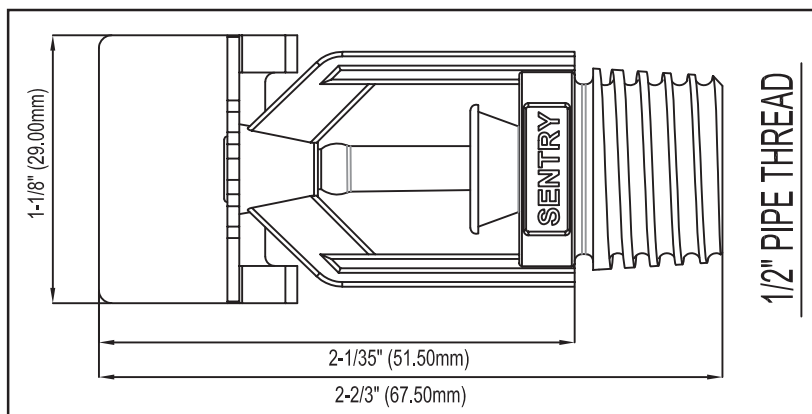


Model SY8031



Technical Data:

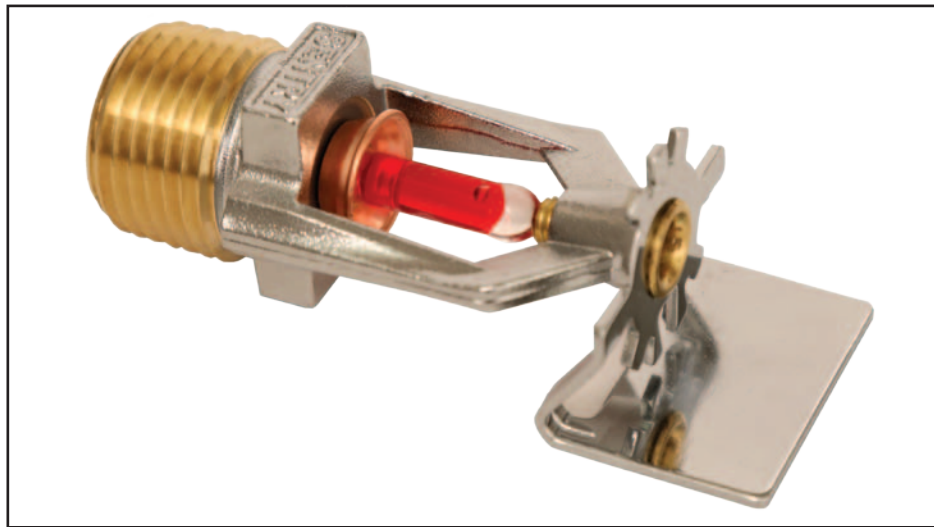
| | |
|-----------------------------|---|
| Minimum Operating Pressure: | 7 psi (0.5 bar) |
| Maximum working Pressure: | 175 PSI (12 bar) |
| Factory Test: | 100% @ 500 psi (34.5 bar) Hydrostatically |
| Nominal K-Factor: | 5.6 (80 metric) |
| Thread Size: | 1/2" NPT |
| Bulb size: | 5mm |



Operation:

Upon fire initiation within a protected hazard, the temperature inside the hazard rises causing the liquid inside the Thermo-Sensitive bulb to expand. The liquid expansion causes the glass bulb to break, releasing the bulb seat assembly. The water discharges through the sprinkler orifice striking the deflector producing a uniform distribution pattern within the hazard area.

| <u>Approval</u> | <u>Material Standard</u> | |
|-----------------|--------------------------|---|
| UL | Frame: | Brass |
| FM | Deflector: | Bronze |
| | Screw | Brass |
| | Bulb: | Glass with Glycerin Solution, 5mm nominal |
| | Spring: | Stainless Steel |
| | Seal: | Teflon Tape |



Coverage:

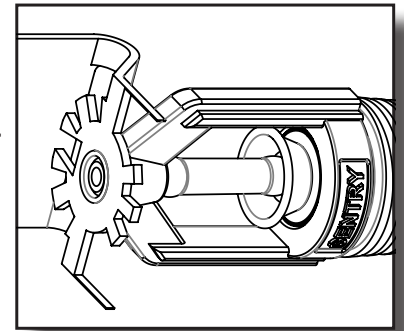
For coverage area and placement of the sprinkler refer to NFPA 13 standard.

Guarantee:

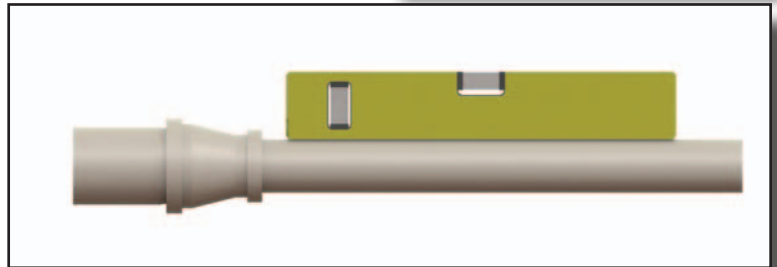
Sentry Sprinklers shall replace any of its products if found to be defective in materials or workmanship for a period of one year from order date. The guarantee does not cover wear and tear or improper installation.

Installation:

All sprinkler heads must be inspected prior to installation. If a sprinkler is damaged, the bulb is cracked, the bulb has loss of liquid and or lost its protective strap, do not install the sprinkler and contact Sentry Sprinklers for replacement. With the sprinkler held in the horizontal orientation, a small air bubble should be present inside the glass bulb.



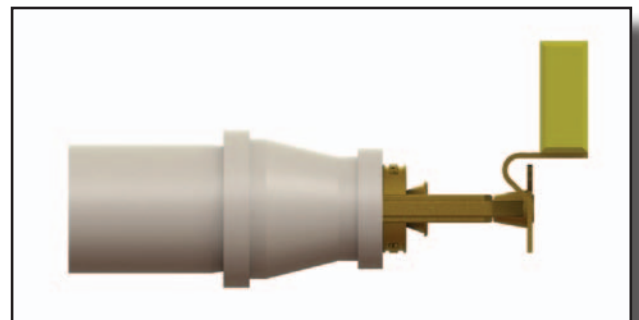
The Horizontal Sidewall Sprinkler must be installed with the centerline of the waterway horizontal and perpendicular to a back wall surface. It is recommended that a lightweight spirit level be used to level the sprinkler fitting prior to installing the sprinkler. Using a square ensure the perpendicularity of the waterway centerline to the mounting surface.



Note:

Locate with deflectors 4" to 12" (101mm to 305mm) below ceiling. Align horizontal sidewall sprinklers with top of deflectors parallel to the ceiling or roof.

Use Sentry Sprinklers recommended wrench to install the sprinkler. Slide the sprinkler wrench around the sprinkler frame arms and press the wrench down to engage sprinkler wrench flats. Rotate the wrench clockwise to tighten the sprinkler head. The frame arms must be parallel to the pipe. Never tighten the sprinkler from sprinkler arms. Any torque applied to the frame arms will dislodge the bulb seating assembly causing the sprinkler to leak.



Do not remove the sprinkler strap until the sprinkler system is under commissioning for operation.

For additional details, refer to NFPA and UL for installation guidelines.

Care and Maintenance:

The owner is responsible for maintaining their fire protection system and devices in proper operating condition. Refer to NFPA 25 for inspection, testing and maintenance requirements. It is recommended that an automatic sprinkler system be inspected quarterly by qualified inspection personnel.

Model SY8031

Standard Coverage, Standard Response Horizontal Sidewall Sprinkler, K-factor 5.6 (80 metric)

Sprinklers must not be painted, coated or otherwise altered after leaving the factory. Sprinklers that have been exposed to corrosive products of combustion, but have not operated, should be replaced.

Note:

Absence of an escutcheon, which is used to cover a clearance hole, may delay sprinkler operation time in a fire situation.

| HORIZONTAL SIDEWALL SPRINKLERS | | | | |
|---------------------------------|---------------------|---------------------|---------------------|---------------------|
| SIN + TEMPERATURE + FINISH CODE | | | | |
| PART | SY8031135* | SY8031155* | SY8031175* | SY8031200* |
| K-FACTOR | 5.6 (80 METRIC) | 5.6 (80 metric) | 5.6 (80 metric) | 5.6 (80 metric) |
| ORIENTATION | HORIZONTAL SIDEWALL | HORIZONTAL SIDEWALL | HORIZONTAL SIDEWALL | HORIZONTAL SIDEWALL |
| RESPONSE | STANDARD | STANDARD | STANDARD | STANDARD |
| TEMPERATURE | 135° F (57° C) | 155° F (68° C) | 175° F (79° C) | 200° F (93° C) |
| BULB COLOR | ORANGE | RED | YELLOW | GREEN |
| TEMP. CLASSIFICATION | ORDINARY | ORDINARY | INTERMEDIATE | INTERMEDIATE |
| HAZARD TYPE | LIGHT/ORDINARY | LIGHT/ORDINARY | LIGHT/ORDINARY | LIGHT/ORDINARY |
| APPROVAL | UL/FM | UL/FM | UL/FM | UL/FM |
| THREADS | 1/2" NPT | 1/2" NPT | 1/2" NPT | 1/2" NPT |

* FINISH CODE: 1 FOR BRASS, 2 FOR CHROME, 3 FOR WHITE

