Model SY8172

Extended Coverage, Quick Response Horizontal Sidewall Sprinkler, K-Factor 5.6 (80 metric)

Description:

Sentry Sprinklers Model **SY8172** is an Automatic and or Open Extended Coverage, Quick Response, Horizontal Sidewall Sprinkler head that utilizes a frangible thermo-sensitive glass bulb to operate the sprinkler. The sprinkler is available in various finishes and temperatures. Sprinkler Model **SY8172** is listed and approved for standard coverage for Light hazards. Model **SY8172** is a 5.6 K-factor (80 metric) Sprinkler that is intended for use in fire sprinkler systems designed in accordance with the standard installation rules recognized by the applicable listings or approved agency. The Extended Coverage Horizontal Sidewall Sprinkler produces a quarter-spherical water discharge pattern that is predominately directed downward and outward from the deflector.

The UL listed recessed version of SY8172 is intended for use in areas with a finished wall. The Sprinkler uses Model SY8010 Two-Piece Escutcheon with a recessed adjustment up to ³/₄" (19 mm) from the flush wall.



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:	3 mm	

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.

Coverage:

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

Guarantee:

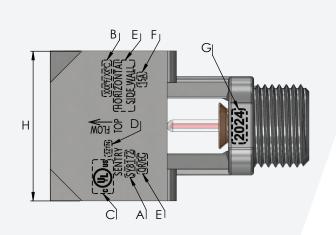
Sentry Sprinklers shall replace any of its products if found to be defective in materials or workmanship for a period of one year from order date. The guarantee does not cover wear and tear or improper installation.

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Marking and Dimension:

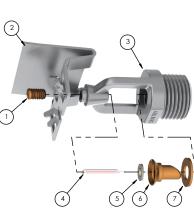




ITEM	DESCRIPTION	IDENTIFICATION	
А	Sprinkler Identification Number (SIN)	SY8172	
В	Sprinkler Temperature (XXX ° F / XXX ° C)	AS MARKED	
С	Approvals	AS MARKED	
D	Manufacturing Location	52TN	
E	Sprinkler Type	Quick Extended Coverage HSW	
F	Sprinkler Pipe Thread Size	1/2"	
G	Manufacturing Year	AS MARKED	
Н	Deflector Diameter	1 1/2" (38.06mm)	
	Sprinkler Frame Length	2 9/16" (65.69mm)	
J	Sprinkler Height	2 1/16" (51.69mm)	

Sprinkler Component:

ITEM	DESCRIPTION	MATERIAL	
1	Screw	Brass	
2	Deflector	Brass	
3	Sprinkler Frame	Brass	(
4	Bulb	3 MM Glass With Glycerin Solution	
5	Bulb Seat	Teflon	
6	Plug	Bronze	
7	Plug Seal	Teflon Tape	



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 Extended Coverage 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.

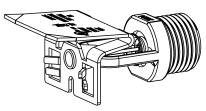
It is recommended that an automatic sprinkler system be inspected

quarterly by qualified inspection personnel.

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.

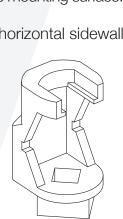


Sentry Sprinklers®

Installation:

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Horizontal Sidewall Sprinkler, K-Factor 5.6 (80 metric)



Model SY8172

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Extended Coverage Horizontal Sidewall Sprinkler						
SIN + TEMPERATURE + FINISH CODE						
Part	SY8172135*	SY8172155*	SY8172175*	SY8172200*		
K-factor	5.6 (80 Metric)	5.6 (80 Metric)	5.6 (80 Metric)	5.6 (80 Metric)		
Orientation	Horizontal	Horizontal	Horizontal	Horizontal		
Response	Quick	Quick	Quick	Quick		
Temperature	Temperature 135°F (57°C) 155°F (6		175° F (79° C)	200° F (93° C)		
Bulb Color Orange		Red	Yellow	Green		
Temp. Classification	Ordinary	Ordinary	Intermediate	Intermediate		
Hazard Type	Light	Light	Light	Light		
Approval	Approval UL UL		UL	UL		
Threads 1/2" NPT		1/2" NPT	1/2" NPT	1/2" NPT		
* Finish Code: 1 For Brass, 2 For Chrome, 3 For White						

Sprinkler Coverage:

Quick Response (QR)-Extended Coverage Sprinklers-Light Hazard						
SIN	Max Width (FT, M)	Max Length (FT, M)	Min Flow (GPM, L)	Min Pressure (PSI, BAR)	Deflector To Ceiling (INCH, MM)	Min Spacing (FT, M)
SY8172	16, 4.9	16, 4.9	26, 98	21.6, 1.48	4 to 12, 100 to 300	10, 3.1
SY8172	16, 4.9	18, 5.5	29, 110	26.8, 1.85	4 to 12, 100 to 300	10, 3.1
SY8172	16, 4.9	20, 6.1	32, 121	32.7, 2.25	4 to 12, 100 to 300	10, 3.1
SY8172	16, 4.9	22, 6.7	36, 136	41.3, 2.85	4 to 6, 100 to 150	10, 3.1
SY8172	16, 4.9	22, 6.7	42, 159	56.3, 3.88	6 to 12, 150 to 300	10, 3.1