

## *SF801 Standard Response, Standard Coverage*

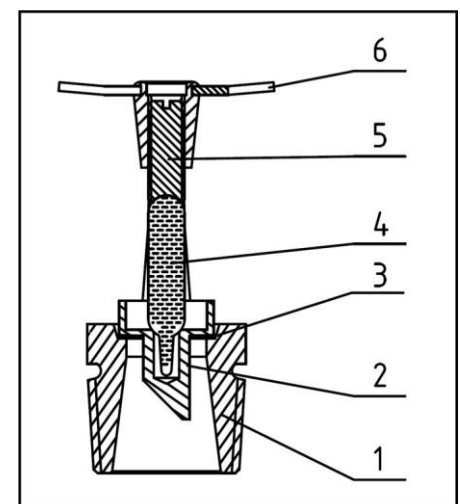
## *SF802 Quick Response, Standard Coverage*

### **General Description**

The SAFEX Pendent Fire Sprinklers, 5.6K-factor, Standard Response (SF801), Quick Response (SF802) are designed for use in light and ordinary hazards. The temperature response is standard response (5mm glass bulb) and quick response (3mm glass bulb). The sprinklers come with compact design, glass bulb type, available in several different finishes and temperature ratings. The pendent sprinklers are to be installed in the pendent position.

### **Components**

1. Frame: Bronze Forging UNS-C46500
2. Pip cap: Brass HPb59-1
3. Sealing Assembly: Teflon@ coated  
Stainless Steel Spring Washer
4. Glass Bulb: JOB G5 For SF801  
JOB F3 For SF802
5. Compression Screw: Bronze UNS-C3604
6. Deflector: Brass 1462



**TECHNICAL DATA**

Approvals: UL Listed  
 Minimum Operating Pressure: 7psi (0.5bar) Maximum  
 Working Pressure: 175psivxc (12 bar) Factory Tested  
 Hydrostatically to 500psi  
 (35 bar)  
 Thread Size: 1/2" NPT, 15mm BSPT, or can be provided on  
 special request  
 Nominal K-Factor: 5.6 U. S (80.6 Metric)  
 Also available in Brass and White colours.

**SPRINKLER FINISH**



**OPERATION**

The glass bulb contains a fluid which expands when exposed to heat. When the rated temperature is reached, the fluid expands sufficiently to shatter the glass bulb, allowing the sprinkler to activate and water to flow. Water flowing through the sprinkler orifice strikes the sprinkler deflector, forming a uniform spray pattern to extinguish or control the fire

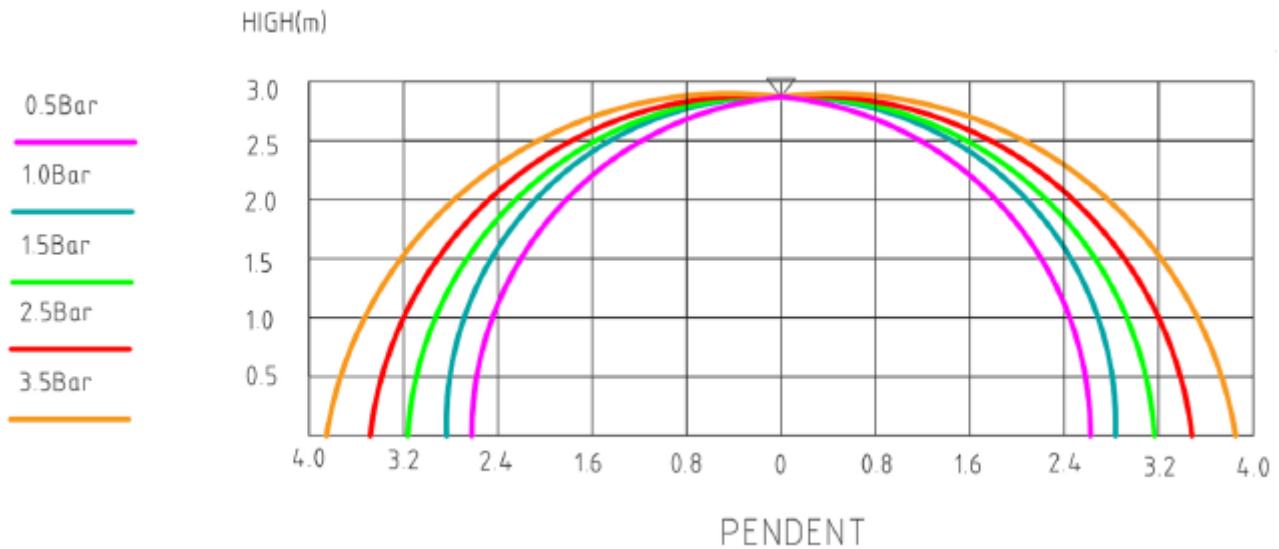
**TEMPERATURE RATING**

Temperature	Classification	Bulb Color
135°F/57°C	Ordinary	Orange
155°F/68°C	Ordinary	Red
175°F/79°C	Intermediate	Yellow
200°F/93°C	Intermediate	
286 °F/141° C	High	Blue

**DESIGN:**

The SAFEX sprinkler described herein must be installed and maintained in accordance with latest standards of the National Fire Protection Association (NFPA) or to the standard of any other authorities having jurisdiction. The owner is solely responsible for maintaining their fire protection system and devices in proper operating condition.

## DISTRIBUTION



## INSTALLATION

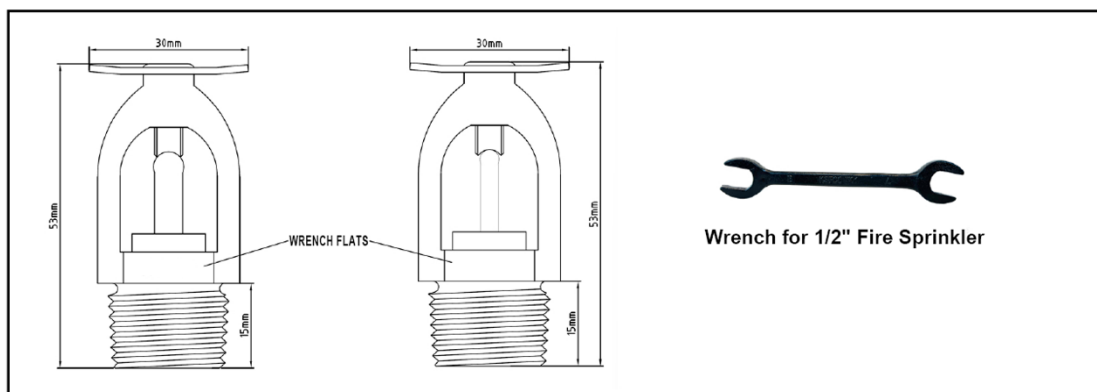
Refer to appropriate NFPA13 installation standards

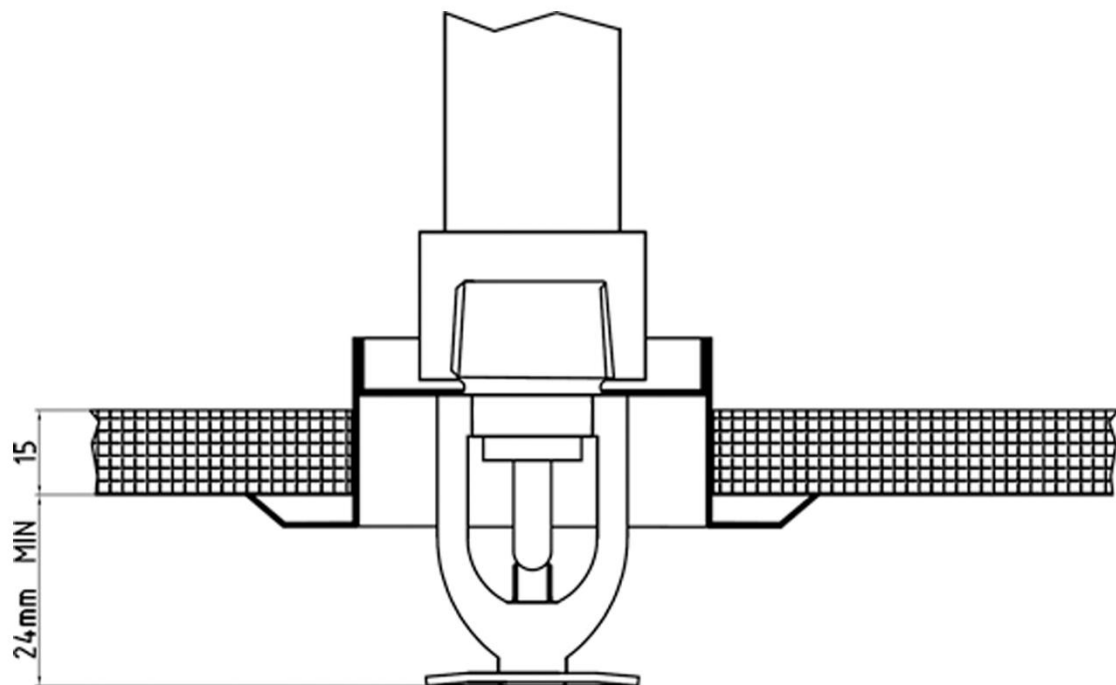
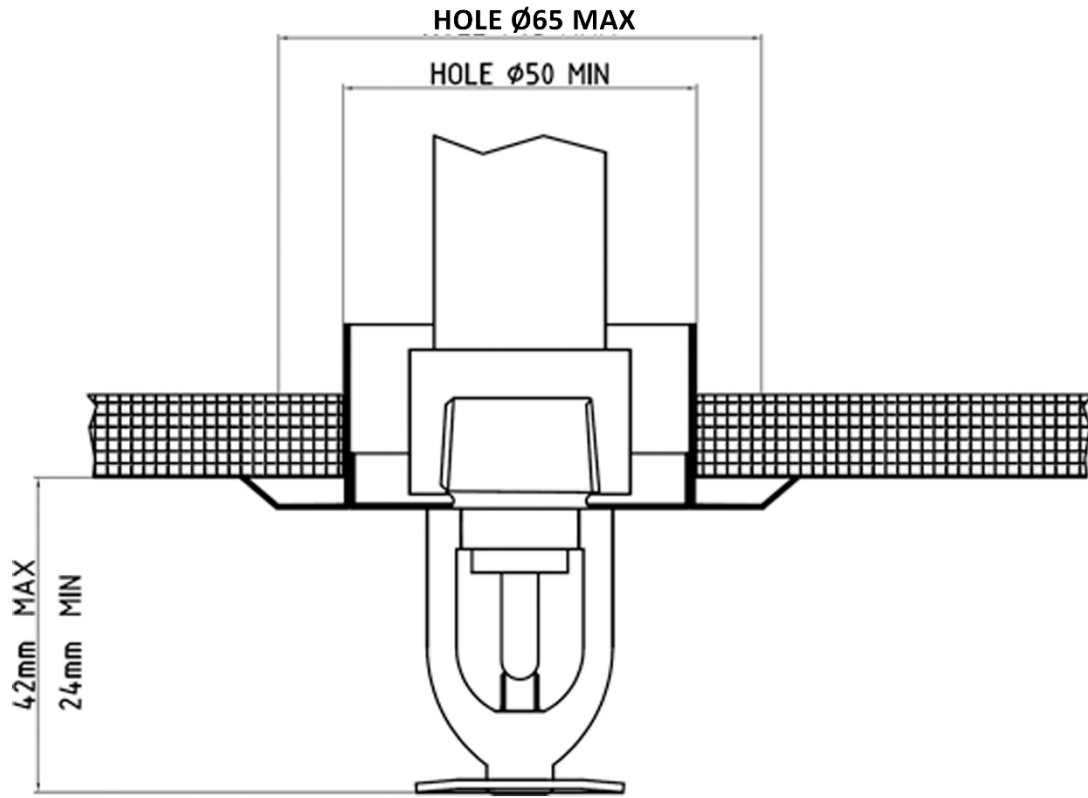
**Notes:** Do not install the sprinkler if the glass bulb is cracked or there is a loss of liquid from the bulb. A leak-tight 1/2 in. NPT sprinkler joint should be obtained by applying a minimum to maximum torque of 7 to 14 lb-ft (9.5 to 19.0 N•m). Higher levels of torque can distort the sprinkler Inlet with consequent leakage or impairment of the sprinkler. The SF801 /SF802 Pendent Sprinklers must be installed in accordance with the following instructions.

Step 1. Install Pendent Sprinklers in the Pendent position.

Step 2. With pipe-thread sealant applied to the pipe threads, hand-tighten the sprinkler into the sprinkler fitting.

Step 3. Tighten the sprinkler into the sprinkler fitting using only KS 1007 type Sprinkler Wrench. Apply the Sprinkler Wrench to the wrench flats. Torque sprinklers 7 to 14lb-ft (9.5 to 19.0 N.m)





## CARE AND MAINTENANCE

The SAFEX brand Pendent 5.6 K-factor Fire Sprinklers must be maintained and serviced in accordance with this section.

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

The owner must assure that the sprinklers are not used for hanging any objects and that the sprinklers are only cleaned by means of gently dusting with a feather duster; otherwise, non-operation in the event of a fire or inadvertent operation may result.

Sprinklers which are found to be leaking or exhibiting visible signs of corrosion must be replaced.

Automatic sprinklers must never be painted, plated, coated, or other-wise altered after leaving the factory. Modified sprinklers must be replaced.

Sprinklers that have been exposed to corrosive products of combustion, but have not operated, should be replaced if they cannot be completely cleaned by wiping the sprinkler with a cloth or by brushing it with a soft bristle brush.

Care must be exercised to avoid damage to the sprinklers before, during, and after installation. Sprinklers damaged by dropping, striking, wrench twist/slippage, or the like, must be replaced. Also, replace any sprinkler that has a cracked bulb or that has lost liquid from its bulb.

Thereafter, annual inspections per NFPA 25 are required; however, instead of inspecting from the floor level, a random sampling of close-up visual inspections should be made.

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of the National Fire Protection Association (e.g., NFPA 25), in addition to the standards of any other authorities having jurisdiction. Contact the installing contractor or product manufacturer with any questions.

## ***SF803 Standard Response, Standard Coverage***

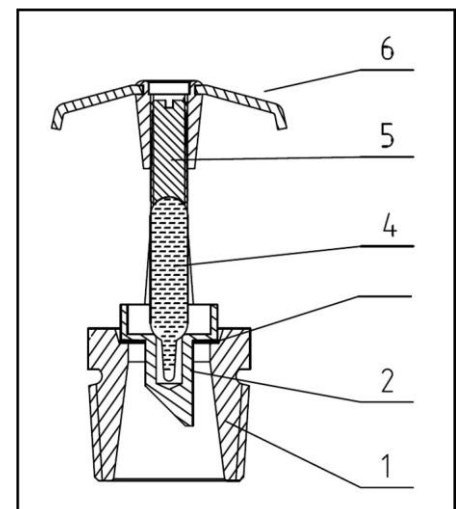
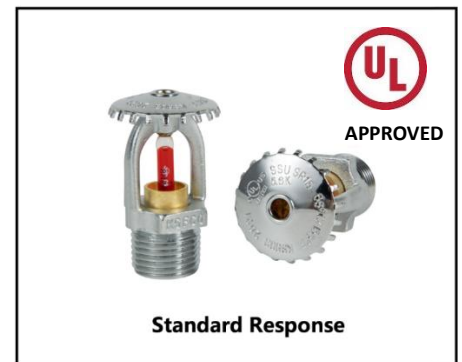
## ***SF804 Quick Response, Standard Coverage***

### ***General Description***

The SAFEX Upright Fire Sprinklers, 5.6Kfactor, Standard Response (SF803), Quick Response (SF804) are designed for use in light and ordinary hazards. The temperature response is standard response (5mm glass bulb) and quick response (3mm glass bulb). The sprinklers come with compact design, glass bulb type, available in several different finishes and temperature ratings. The upright sprinklers are to be installed in the upright position.

### **Components**

1. Frame: Bronze Forging UNS-C46500
2. Pip cap: Brass HPb59-1
3. Sealing Assembly: Teflon coated  
Stainless Steel Spring Washer
4. Glass Bulb: JOB G5 For SF803  
JOB F3 For SF804
5. Compression Screw: Bronze UNS-C3604
6. Deflector: Brass H62



**TECHNICAL DATA**

Approvals: UL Listed  
 Minimum Operating Pressure: 7psi (0.5bar)  
 Maximum Working Pressure: 175psivxc (12 bar)  
 Factory Tested Hydrostatically to 500psi (35 bar)  
 Thread Size: 1/2" NPT, 15mm BSPT, or can be provided on special request  
 Nominal K-Factor: 5.6 U. S (80.6 Metric)  
 Also available in Brass and White colour.

**SPRINKLER FINISH**



**OPERATION**

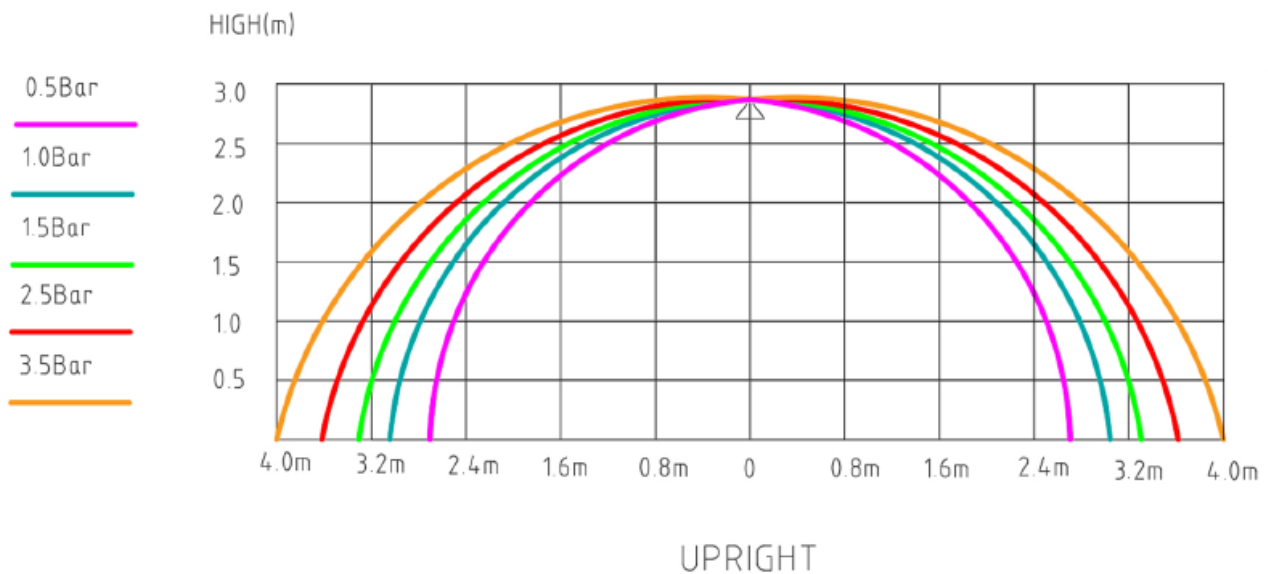
The glass bulb contains a fluid which expands when exposed to heat. When the rated temperature is reached, the fluid expands sufficiently to shatter the glass bulb, allowing the sprinkler to activate and water to flow. Water flowing through the sprinkler orifice strikes the sprinkler deflector, forming a uniform spray pattern to extinguish or control the fire.

**TEMPERATURE RATING**

Temperature	Classification	Bulb Color
135°F/57°C	Ordinary	Orange
155°F/68°C	Ordinary	Red
175°F/79°C	Intermediate	Yellow
200°F/93°C	Intermediate	
286 ° F/141° C	High	Blue

**DESIGN:**

The SAFEX sprinkler described herein must be installed and maintained in accordance with latest standards of the National Fire Protection Association (NFPA) or to the standard of any other authorities having jurisdiction. The owner is solely responsible for maintaining their fire protection system and devices in proper operating condition.



## INSTALLATION

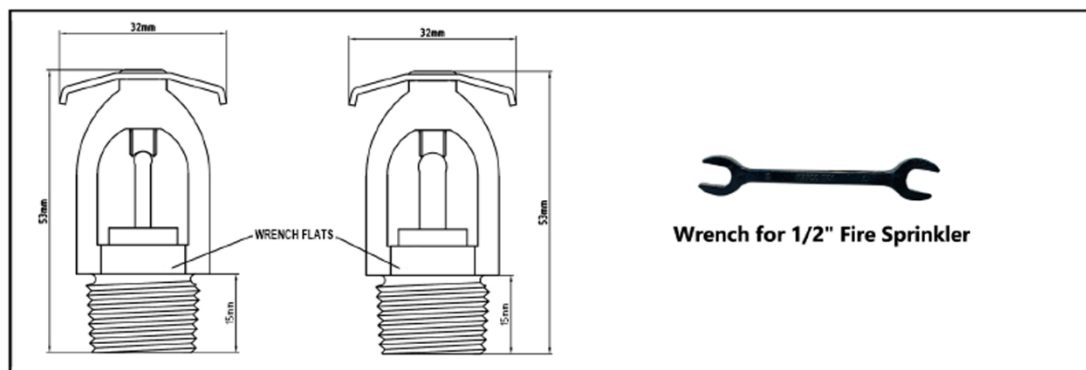
Refer to appropriate NFPA13 installation standards

**Notes:** Do not install the sprinkler if the glass bulb is cracked or there is a loss of liquid from the bulb. A leak-tight 1/2 in. NPT sprinkler joint should be obtained by applying a minimum to maximum torque of 7 to 14 lb-ft (9.5 to 19.0 N•m). Higher levels of torque can distort the sprinkler Inlet with consequent leakage or impairment of the sprinkler. The SF803 /SF804 Pendent Sprinklers must be installed in accordance with the following instructions.

Step 1. Install Pendent Sprinklers in the Pendent position.

Step 2. With pipe-thread sealant applied to the pipe threads, hand-tighten the sprinkler into the sprinkler fitting.

Step 3. Tighten the sprinkler into the sprinkler fitting using only KS 1007 type Sprinkler Wrench. Apply the Sprinkler Wrench to the wrench flats. Torque sprinklers 7 to 14 lb-ft (9.5 to 19.0 N.m)



## *CARE AND MAINTENANCE*

The SAFEX brand Pendent 5.6 K-factor Fire Sprinklers must be maintained and serviced in accordance with this section.

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

The owner must assure that the sprinklers are not used for hanging any objects and that the sprinklers are only cleaned by means of gently dusting with a feather duster; otherwise, non-operation in the event of a fire or inadvertent operation may result.

Sprinklers which are found to be leaking or exhibiting visible signs of corrosion must be replaced.

Automatic sprinklers must never be painted, plated, coated, or other-wise altered after leaving the factory. Modified sprinklers must be replaced.

Sprinklers that have been exposed to corrosive products of combustion, but have not operated, should be replaced if they cannot be completely cleaned by wiping the sprinkler with a cloth or by brushing it with a soft bristle brush.

Care must be exercised to avoid damage to the sprinklers before, during, and after installation. Sprinklers damaged by dropping, striking, wrench twist/slippage, or the like, must be replaced. Also, replace any sprinkler that has a cracked bulb or that has lost liquid from its bulb.

Thereafter, annual inspections per NFPA 25 are required; however, instead of inspecting from the floor level, a random sampling of close-up visual inspections should be made.

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of the National Fire Protection Association (e.g., NFPA 25), in addition to the standards of any other authorities having jurisdiction. Contact the installing contractor or product manufacturer with any questions.

## SF805 Standard Response, Standard Coverage

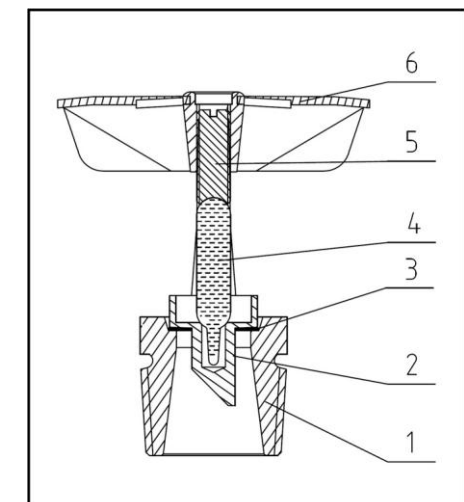
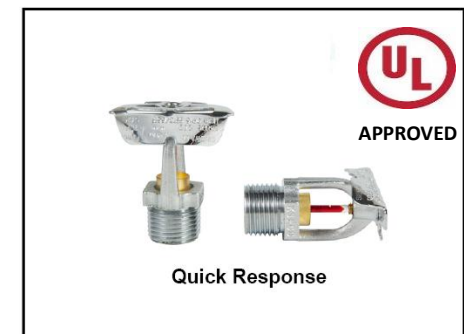
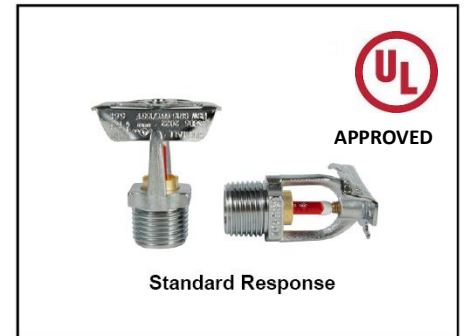
## SF806 Quick Response, Standard Coverage

### General Description

The SAFEX Horizontal Sidewall Fire Sprinklers, 5.6K-factor, Standard Response (SF805), Quick Response (SF806) are designed for use in light and ordinary hazards. The temperature response is standard response (5mm glass bulb) and quick response (3mm glass bulb). The sprinklers come with compact design, glass bulb type, available in several different finishes and temperature ratings. The Horizontal Sidewall sprinklers are to be installed in the Horizontal Sidewall position.

### Components

1. Frame: Bronze Forging UNS-C46500
2. Pip cap: Brass HPb59-1
3. Sealing Assembly: Teflon coated  
Stainless Steel Spring Washer
4. Glass Bulb: JOB G5 For SF805  
JOB F3 For SF806
5. Compression Screw: Bronze UNS-C3604
6. Deflector: Brass H62



## TECHNICAL DATA

Approvals: UL Listed

Minimum Operating Pressure: 7psi (0.5bar)

Maximum Working Pressure: 175psivxc (12 bar)

Factory Tested Hydrostatically to 500psi

(35 bar)

Thread Size: 1/2" NPT, 15mm BSPT, or can be provided on special request

Nominal K-Factor: 5.6 U. S (80.6 Metric)

Also available in Brass and White colour.

## SPRINKLER FINISH



## OPERATION

The glass bulb contains a fluid which expands when exposed to heat.

When the rated temperature is reached, the fluid expands sufficiently to shatter the glass bulb, allowing the sprinkler to activate and water to flow. Water flowing through the sprinkler orifice strikes the sprinkler deflector, forming a uniform spray pattern to extinguish or control the fire.

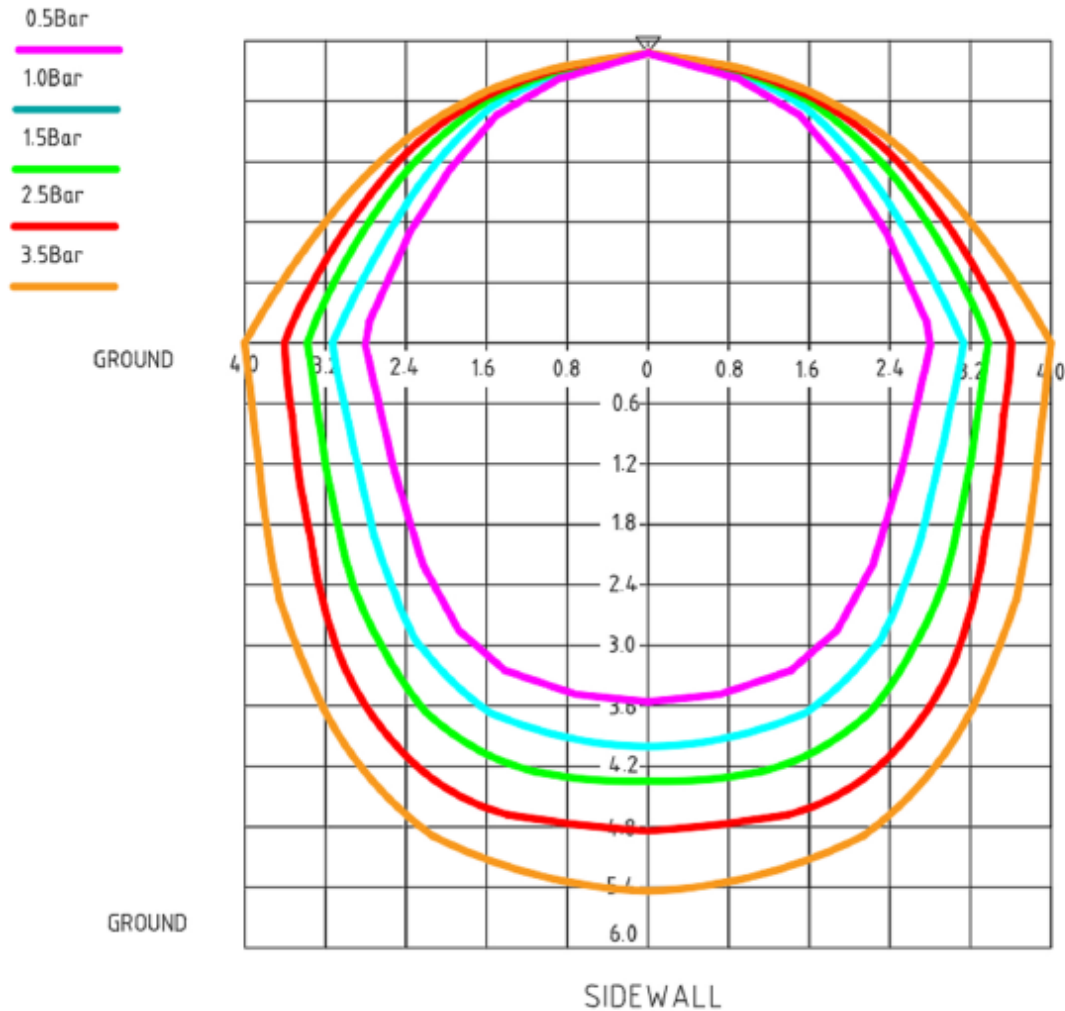
## TEMPERATURE RATING

Temperature	Classification	Bulb Color
135°F/57°C	Ordinary	Orange
155°F/68°C	Ordinary	Red
175°F/79°C	Intermediate	Yellow
200°F/93°C	Intermediate	
286 °F/141°C	High	Blue

## DESIGN:

The SAFEX sprinkler described herein must be installed and maintained in accordance with latest standards of the National Fire Protection Association (NFPA) or to the standard of any other authorities having jurisdiction. The owner is solely responsible for maintaining their fire protection system and devices in proper operating condition.

## DISTRIBUTION



## INSTALLATION

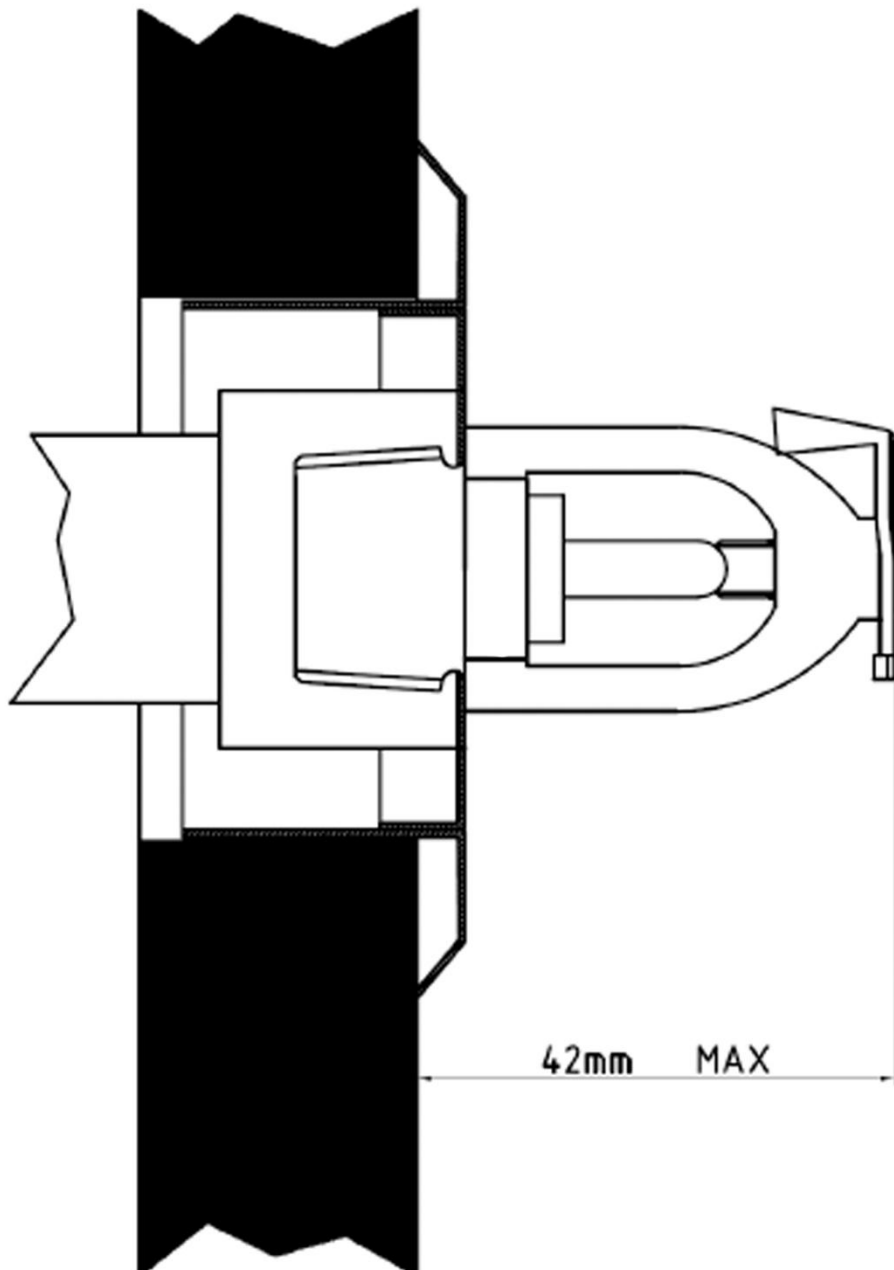
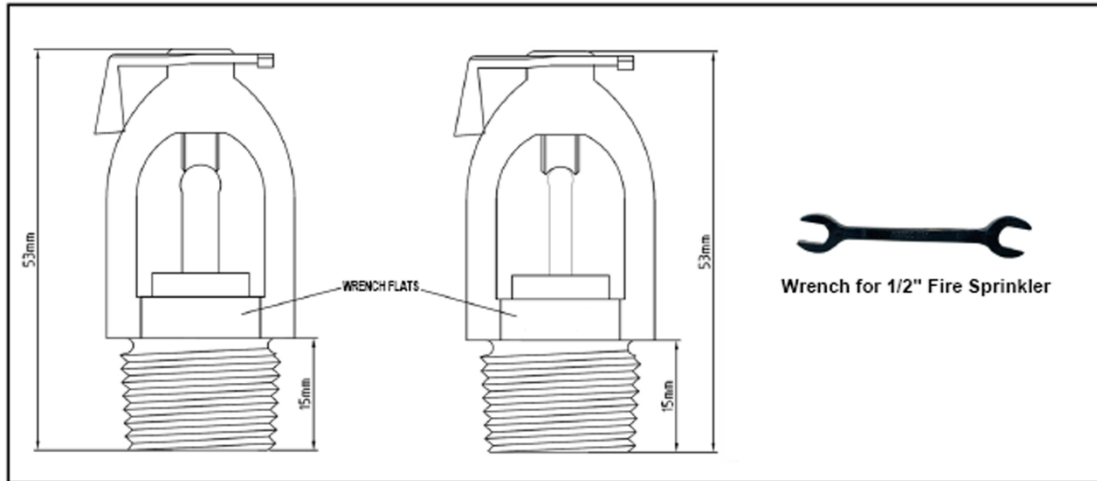
Refer to appropriate NFPA13 installation standards

**Notes:** Do not install the sprinkler if the glass bulb is cracked or there is a loss of liquid from the bulb. A leak-tight 1/2 in. NPT sprinkler joint should be obtained by applying a minimum to maximum torque of 7 to 14 lb-ft (9.5 to 19.0 N•m). Higher levels of torque can distort the sprinkler Inlet with consequent leakage or impairment of the sprinkler. The SF805 /SF806 Pendent Sprinklers must be installed in accordance with the following instructions.

Step 1. Install Pendent Sprinklers in the Pendent position.

Step 2. With pipe-thread sealant applied to the pipe threads, hand-tighten the sprinkler into the sprinkler fitting.

Step 3. Tighten the sprinkler into the sprinkler fitting using only KS 1007 type Sprinkler Wrench. Apply the Sprinkler Wrench to the wrench flats. Torque sprinklers 7 to 141b-ft (9.5 to 19.0 N.m)



## *CARE AND MAINTENANCE*

The SAFEX brand Pendent 5.6 K-factor Fire Sprinklers must be maintained and serviced in accordance with this section.

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

The owner must assure that the sprinklers are not used for hanging any objects and that the sprinklers are only cleaned by means of gently dusting with a feather duster; otherwise, non-operation in the event of a fire or inadvertent operation may result.

Sprinklers which are found to be leaking or exhibiting visible signs of corrosion must be replaced.

Automatic sprinklers must never be painted, plated, coated, or other-wise altered after leaving the factory. Modified sprinklers must be replaced.

Sprinklers that have been exposed to corrosive products of combustion, but have not operated, should be replaced if they cannot be completely cleaned by wiping the sprinkler with a cloth or by brushing it with a soft bristle brush.

Care must be exercised to avoid damage to the sprinklers before, during, and after installation. Sprinklers damaged by dropping, striking, wrench twist/slippage, or the like, must be replaced. Also, replace any sprinkler that has a cracked bulb or that has lost liquid from its bulb.

Thereafter, annual inspections per NFPA 25 are required; however, instead of inspecting from the floor level, a random sampling of close-up visual inspections should be made.

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of the National Fire Protection Association (e.g., NFPA 25), in addition to the standards of any other authorities having jurisdiction. Contact the installing contractor or product manufacturer with any questions.

### ***SR-SF820 Standard Response***

### ***QR-SF821 Quick Response***

#### ***General Description:***

The SAFEX Standard and Quick Response Concealed Pendant Sprinkler SR-SF820 and QR-SF821 are thermosensitive glass-bulb spray sprinklers with the cover plate. The sprinkler is pre-assembled with a threaded adapter for installation with a low profile cover assembly that provides up to 10mm of vertical adjustment.

The two-piece design allows installation and testing of the sprinkler prior to installation of the cover plate. The “thread-on” , “thread-off” design of the concealed cover plate assembly allows easy installation of the cover plate after the system has been tested and the ceiling finish has been applied. The cover assembly can be removed and reinstalled, allowing temporary removal of ceiling panels without taking the sprinkler system out of service or removing the sprinkler.

#### **Components:**

1. Frame: Bronze Forging AS1568
2. Deflector: Copper C2680S
3. Spring seat: Ni-Be alloy coated on both sides with Teflon tape
4. Bulb: Glass
5. Bulb cap: Phosphor bronze C5191
6. Screw: Brass C3604



## TECHNICAL DATA

Minimum Operating Pressure: 7 psi (0.5 bar)

Maximum Working Pressure: 175 psi (12 bar)

Discharge Coefficient:  $K = 5.6 \text{ GPM/psi}^{1/2}$  (80.7 LPM/bar<sup>1/2</sup>)

Temperature Rating:

Sprinkler: 155 / 200 °F (68 / 93 °C)

Cover Assembly: 135 / 165 °F (57 / 74°C)

Leakage Test at Factory (Air): 30 Kg/cm<sup>2</sup> (0.3Mpa, 29.4bar, 426.7 psi)

SIN No	Spray Pattern	Response	Thread Size		Nominal K Factor	Vertical adjustment
			(N)PT	BSP		
Standard response,	Pendent	SR	1/2"	15mm	K 5.6 (US)	10mm
Quick response,	Pendent	QR	1/2"	15mm	K 5.6 (US)	10mm

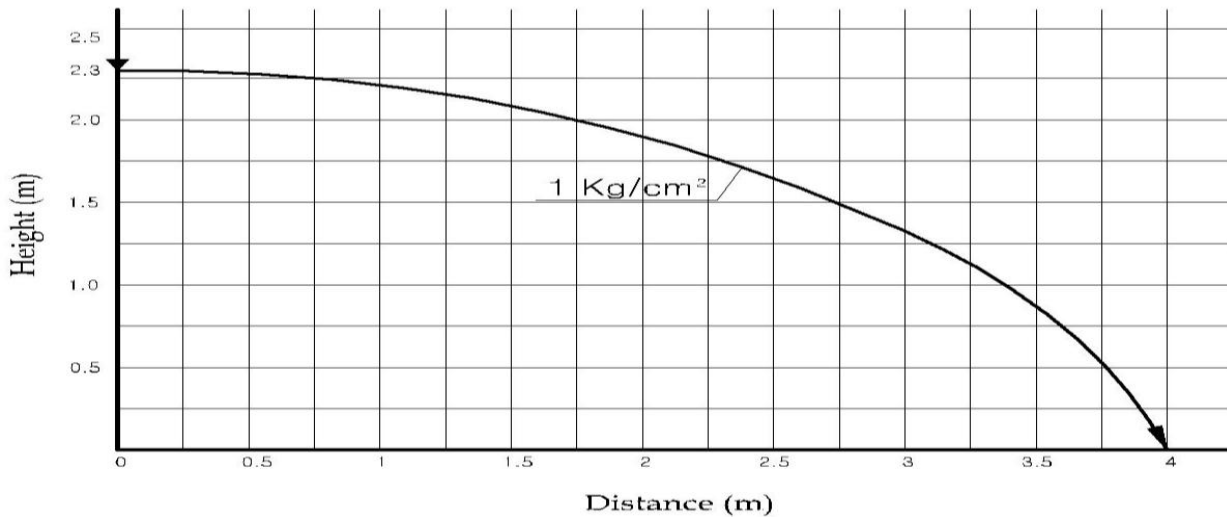
## OPERATION

During fire conditions, when the temperature around the sprinkler approaches its operating temperature, the cover plate detaches. Continued heating of the exposed sprinkler causes the heat-sensitive liquid in the glass bulb to expand and the bulb to shatter, releasing the bulb cap and sealing spring assembly. Water flowing through the sprinkler orifice strikes the sprinkler deflector, forming a uniform spray pattern to extinguish or control the fire.

## DESIGN

The SAFEX sprinkler described herein must be installed and maintained in accordance with latest standards of the National Fire Protection Association (NFPA) or to the standard of any other authorities having jurisdiction. The owner is solely responsible for maintaining their fire protection system and devices in proper operating condition.

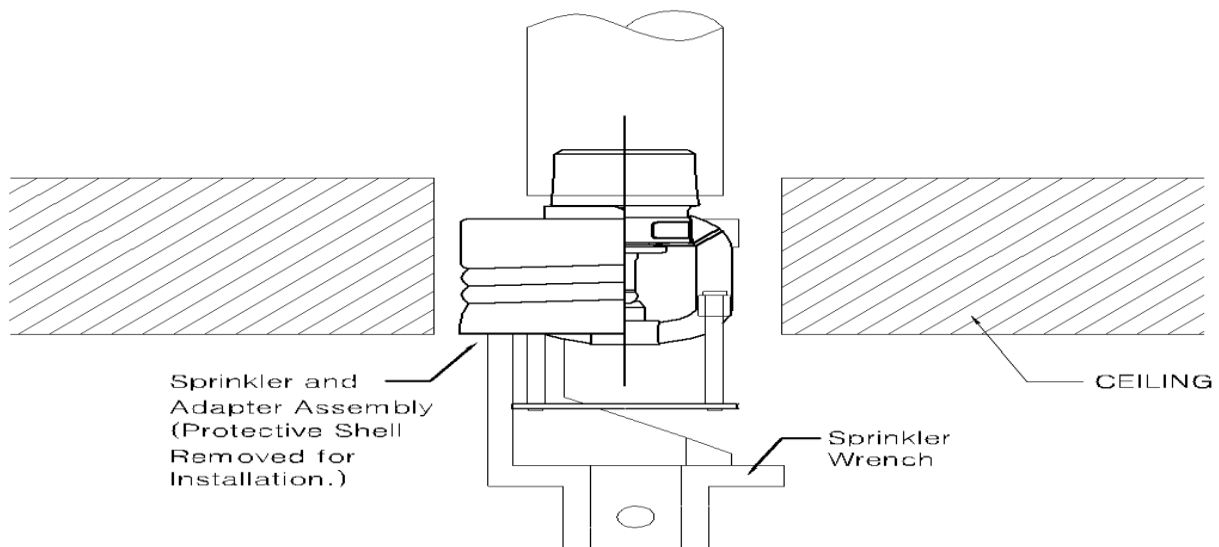
Water Spray Pattern.



## INSTALLATION

The "SAFEX" sprinklers are intended for fire protection systems designed in accordance with the standard installation rules of the applicable listings or approval agency. (eg., NFPA 13 or UL 199 Standard)

**Note:** Do not install any bulb type sprinkler if the bulb is cracked or there is a loss of fluid from the bulb. And with the sprinkler held horizontally, a small air bubble should be present. The sprinkler joint should be obtained with maximum torque of 28.5 Nm (21 ft-lbs)



## ***CARE AND MAINTENANCE***

Automatic Sprinklers must never be shipped or stored where their temperature will exceed 39°C and they must never be painted, plated, coated or otherwise altered after leaving factory. Modified sprinklers must be replaced. Sprinklers that have been exposed to corrosive products of combustion, but have not operated, should be replaced if they cannot be completely cleaned by wiping the sprinkler with a cloth or by brushing it with a soft bristle brush.

Care must be exercised to avoid damage to the sprinklers both before and after installation. Sprinklers damaged by dropping, striking, wrench twist/slippage, or the like, must be replaced. Also, replace any sprinkler that has a cracked bulb or that has lost liquid from its bulb.