



### **Features**

- Glass bulb
- Standard Spary Pattern
- K-factor 5.6
- Quick & Standard Response

## **Technical & Environmental Specification**

Minimum Operating Pressure	7 psi (0.5 bar)
Maximum Working Pressure	175 psi (12 bar)
Discharge Coefficient	K = 5.6 GPM/psi½ (80.7 LPM/bar½)
Temperature Rating	135°F/155°F/175°F/200°F/286°F (57°C/68°C/79°C/93°C/141°C)
Leakage Test at Factory	30Kgf/cm <sup>2</sup> (0.3Mpa, 29.4bar, 426.7 psi)

### Description

The LIFECO Standard and Quick response sprinklers are thermo sensitive glass bulbsprinklers available in different finishes and temperature ratings to meet design requirements. These sprinklers are sidewall standard spray pattern to meet approval agencies requirement. Especially, the Nickel-Chrome plated sprinklers are decorative and attractive, so it is well matched to customer interior decoration. In addition, Nickel-Chrome plating might be utilized to extend the life of copper alloy sprinkler, although it has passed the standard corrosion test.

#### **Materials**

Frame Forging	Brass AS1568 Alloy486			
Deflector	Copper C2200			
Carina Coot	Ni-Be alloy, coated on both sides			
Spring Seat	with Teflon Tape			
Bulb	Glass			
Bulb Cap	Phosphor Bronze C5191			
Screw Brass	Brass C3604			
Spring Brass	Brass C3604			

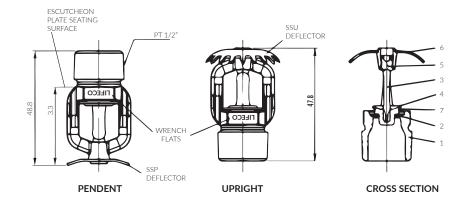
#### Installation

The LIFECO 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 FM's Loss Prevention Data Sheets)

# 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)

# **Design Criteria**



1 - Frame 2 - Spring Seat 3 - Glass Bulb 4 - Bulb Cap 5 - Screw 6 - Deflector 7 - Spring



## **Sprinkler Temperature Ratings & Finishes**

Sprinkler Temperature Classification	Sprinkler Nominal Temperature Rating1	Maximum Ambient Ceiling Temperature2	Bulb Color	
Ordinary	135°F (57°C)	100°F (38°C)	Orange	
Ordinary	155°F (68°C)	100°F (38°C)	Red	
Intermediate	175°F (79°C)	150°F (65°C)	Yellow	
Intermediate	200°F (93°C)	150°F (65°C)	Green	
High	286°F (141°C)	225°F (107°C)	Blue	
Sprinkler	Finishes · Brass Nickel-Chrome Whi	te Polyester, Black Teflon Coating		

### **Footnotes**

- 1. The sprinkler temperature rating is stamped on the deflector.
- 2. Based on NFPA-13. Other limits may apply, depending on fire loading, sprinkler location, and other requirements of the Authority

Having Jurisdiction. Refer to specific installation standards.

## **Sectional Detail**

SIN	Response	Thread Size		Nominal K-Factor		Overall Length		Listings and Approvals
SIIV	Type	PT	NPT	U.S.	Metric	Inches	mm	UL/FM
LF310	SR	1/2"	1/2"	5.6	80.7	1.84	47.8	A1, B1, C1, D1, E1
LF311	QR	1/2"	1/2"	5.6	80.7	1.84	47.8	A1, B1, C1, D1, E1
LF320	SR	1/2"	1/2"	5.6	80.7	1.88	48.8	A1, B1, C1, D1, E1
LF321	QR	1/2"	1/2"	5.6	80.7	1.88	48.8	A1, B1, C1, D1, E1

### **Approved Temperature Ratings**

A - 135°F (57°C)

B - 155°F (68°C)

C - 175°F (79°C)

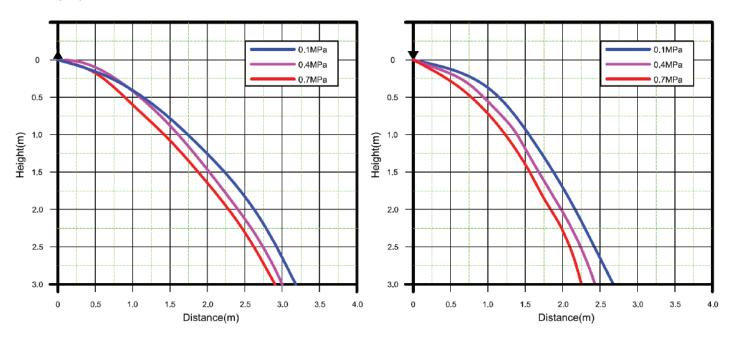
D - 200°F (93°C)

E - 286°F (141°C)

# **Approved Finishes**

1- Brass, Nickel-Chrome, White Polyester, and Black Teflon coating

# Water Spray Pattern



Upright LF310 / LF311

Pendent LF320 / LF321