





## **Features**

LIFECO Standard and Quick Response Concealed Pendent Sprinkler LF820 and LF821 are thermosensitive glass-bulb spray sprinklers with the cover plate. The sprinkler is preassembled 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.

\*White Cover plate comes with White RAL9016 by Default, and other colour is available upon request

### Installation



## Features

- Fusible Alloy Type
- Standard Spray Pattern
- K-factor 5.6
- Quick & Standard Response
- Option for White cover available

#### Installation

Minimum Operating	7 psi (0.5 bar)			
Pressure	•			
Maximum Working	175 psi (12 bar)			
Pressure				
Discharge Coefficient	K = 5.6 GPM/psi½ (80.7			
	LPM/bar½)			
Temperature Rating	155 / 200 °F (68 / 93 °C)			
Sprinkler	Cover Assembly: 135 / 165 °F			
	(57 / 74°C)			
	(Air) 30 Kgf/cm² (0.3Mpa,			
Leakage Test at Factory	29.4bar, 426.7 psi)			
	Forged Brass AS1568 Alloy486			
Materials Frame	Deflector: Copper C2680S			
	Spring Seat: Ni-Be alloy, coated			
	on both sides			
	Glass Bulb Cap: Phosphor Bronze			
	C5191			

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)

#### 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 heatsensitive 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.

In line with our policy of continuous product improvement LIFECO reserves the right to modify specifications without prior notice



# **Design Criteria**



SIN	Spray Pattern	Response	Thread Size		Nominal K	Vertical	A march (al
			NPT.	BSP	Factor	Adjustment	Approval
LF820	Pendent	SR	5.6	15mm		10mm	UL
LF821	Pendent	QR	5.6	15mm		10mm	UL

# Water Spray Pattern

