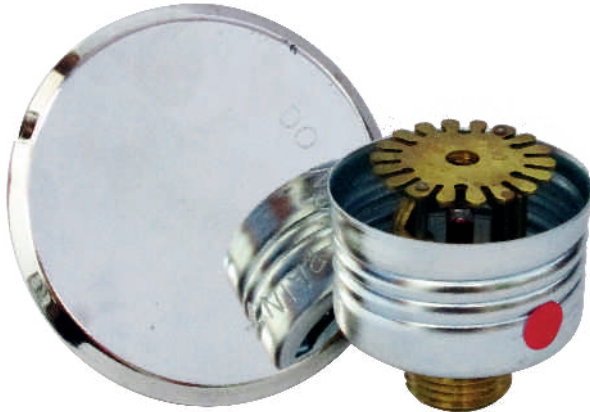


# TECHNICAL DATA SHEET

for use by Architects & Engineers

## Concealed Type

Model No: LF820 & LF821



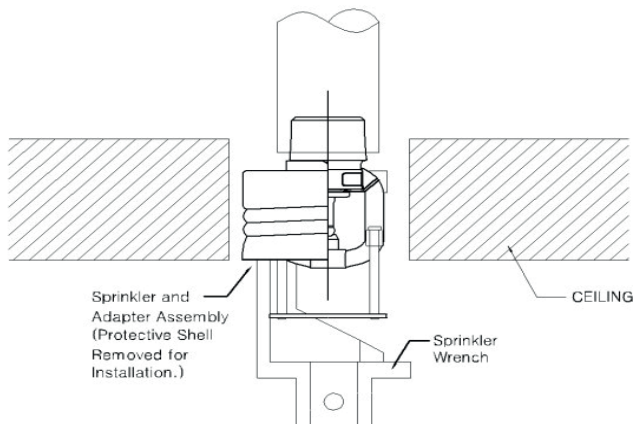
### Features

- Fusible Alloy Type
- Standard Spray Pattern
- K-factor 5.6
- Quick & Standard Response

### Description

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.

### 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. (E.g. 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).

### Technical & Environmental Specification

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)
Materials	Frame: Forged Brass ASI568 Alloy486 Deflector: Copper C2680S Spring Seat: Ni-Be alloy, coated on both sides Glass Bulb Cap: Phosphor Bronze C5191

### 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.

# TECHNICAL DATA SHEET

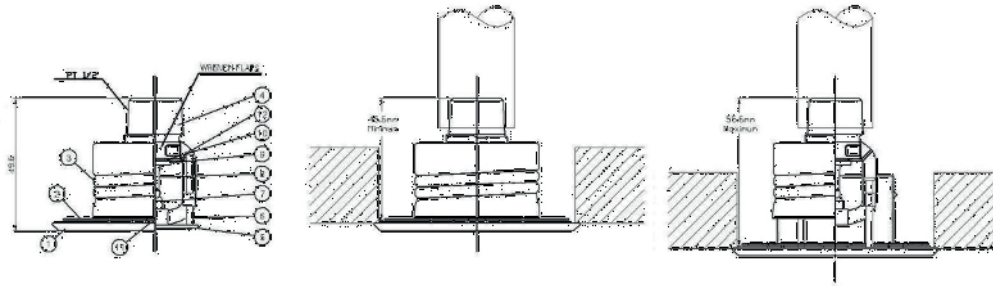
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## Flush Sprinklers

Model No: LLF721



### Design Criteria



CROSS SECT.(GH)

- 1-COVER PLATE 2-RETAINER 3-COVER ADAPTER 4-FRAME 5-DEFLECTOR 6-DEFLECTOR PIN  
 7-SCREW 8-GLASS BULB 9-BULB CAP 10-SPRING SEAT 11-PLATE SPRING 12-SPRING

SIN No	Spray Pattern	Response	Thread Size		Nominal K Factor	Vertical adjustment	Approval
			(N)PT	BSP			
LF 820	Pendent	SR	½"	15mm	K 5.6 (US)	10mm	UL
LF 821	Pendent	QR	½"	15mm	K 5.6 (US)	10mm	UL

### Spray Pattern

Water Spray Pattern

