



TECHNICAL DATA

Sprinkler PI-2 Series

Installation Guide

1 of 4

Automatic Sprinkler PI-2 Series (Glass bulb type)



PI 221



PI 220



PI 211



PI 210

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



General Description

Paradise Industry Standard and Quick response sprinklers are thermo sensitive glass bulb sprinklers available in different finishes and temperature ratings to meet design requirements. These sprinklers are 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.

Sprinkler Identification Numbers

- PI210 :**
Standard response, Upright, 5.6K, 1/2"(N)PT
- PI211 :**
Quick response, Upright, 5.6K, 1/2"(N)PT
- PI220 :**
Standard response,Pendent,5.6K, 1/2"(N)PT
- PI221 :**
Quick response, Pendent, 5.6K, 1/2"(N)PT

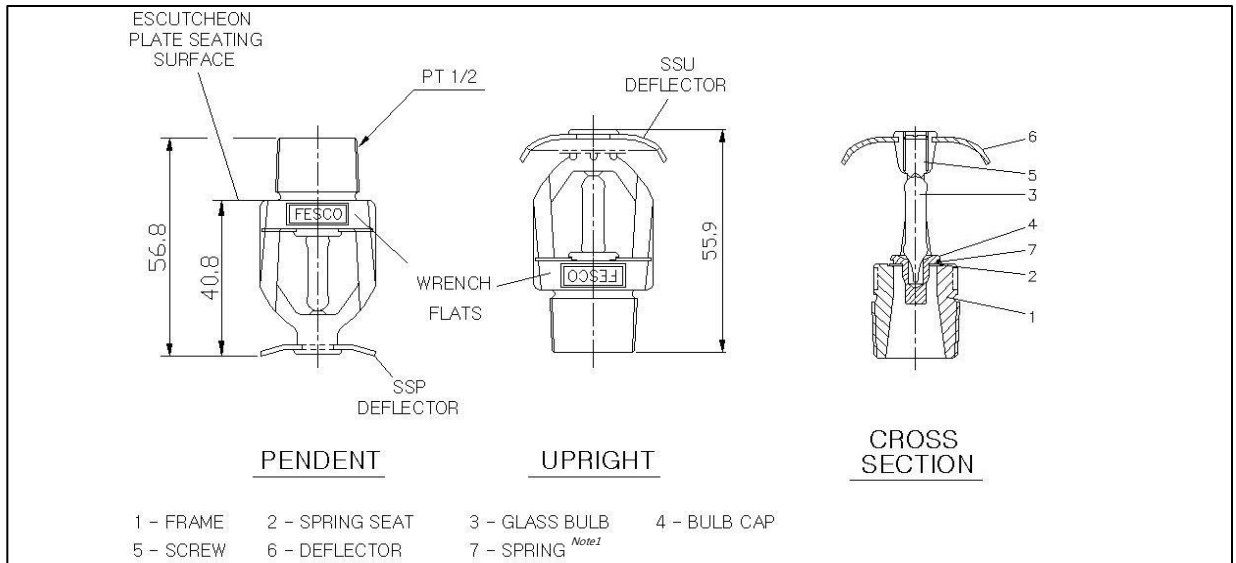
Technical Data

- Minimum Operating Pressure :**
7 psi (0.5 bar)
- Maximum Working Pressure :**
175 psi (12 bar)
- Discharge Coefficient :**
K = 5.6 GPM/psi^{1/2} (80.7 LPM/bar^{1/2})
- Temperature Rating:**
135 / 155 / 200 F (57 / 68 / 93 °C)
- Leakage Test at Factory:**
30 Kg_f/cm² (0.3Mpa, 29.4bar, 426.7 psi)

Material

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

Design Criteria



Note. 1. The spring is applied only PI210/PI220/PI221

SIN No	Spray Pattern	Response	Thread Size		Nominal K Factor	Sprinkler Height	Approval
			(N)PT	BSP			
PI 210	Upright	SR	½"	15mm	K 5.6 (US)	55.9mm	cUL _{US} , FM ^{Note 1}
PI 211	Upright	QR	½"	15mm	K 5.6 (US)	55.9mm	cUL _{US} , FM
PI 220	Pendent	SR	½"	15mm	K 5.6 (US)	56.8mm	cUL _{US} , FM ^{Note 1}
PI 221	Pendent	QR	½"	15mm	K 5.6 (US)	56.8mm	cUL _{US} , FM ^{Note 1}

Note. 1. The products of UL Listed and FM Approved are not same. Please Contact us to confirm when purchasing.

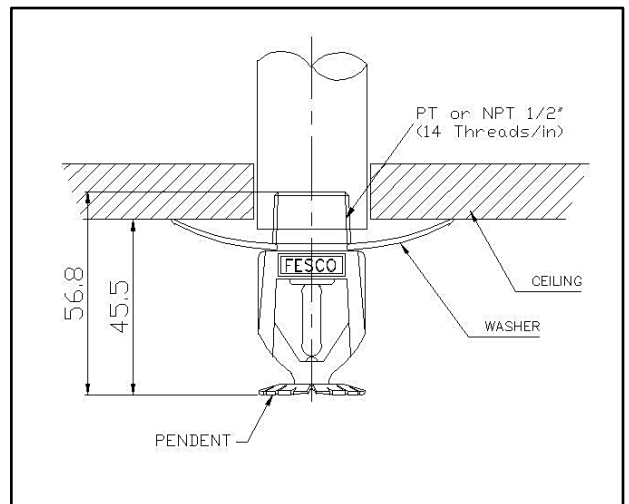
Installation

The Paradise Industry 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

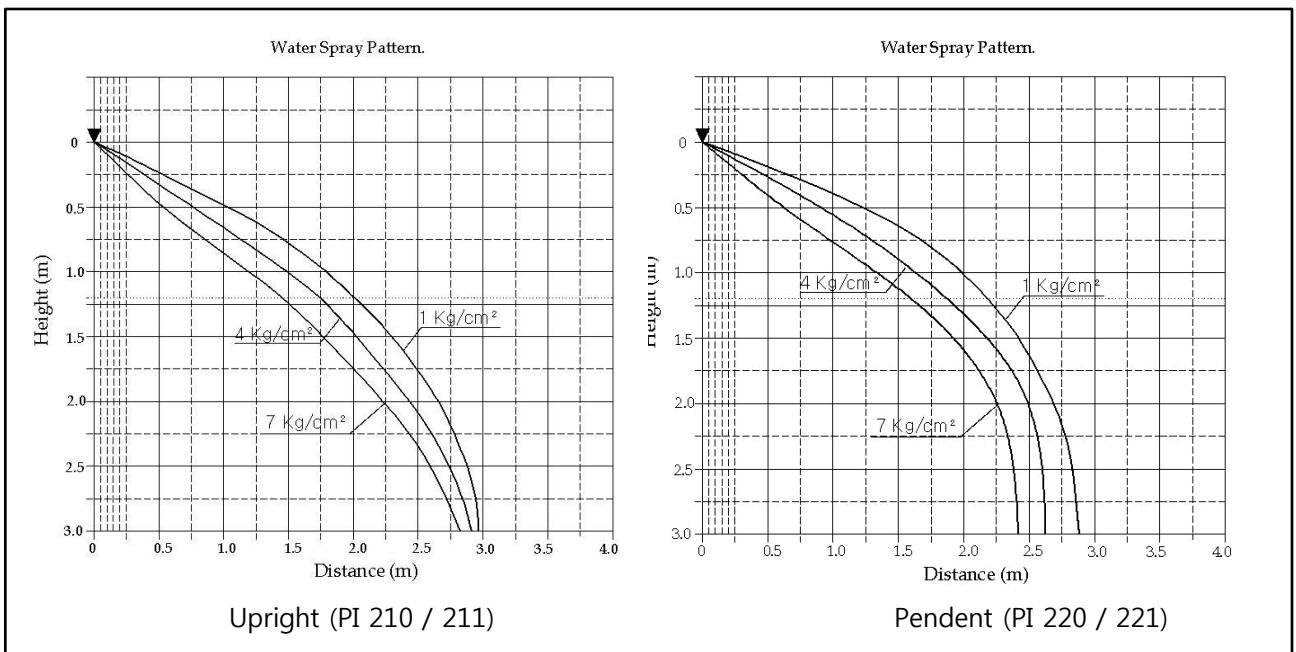
When the rated temperature is reached, the fluid which is contained in the glass bulb expands sufficiently to shatter the glass bulb, releasing the bulb cap and spring seat assembly. Water flowing through the sprinkler orifice and strikes the deflector forming a intended spray pattern to extinguish or control the fire.

Inspections, Tests 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.

Spray Pattern



THIS PAGE INTENTIONALLY LEFT BLANK



Seoul Office

- Address : 683-116 Hannam-dong, Yongsan-gu, Seoul, 140-210, Korea
- TEL : 02) 795-2300 (Representative Number)
- Sales Division : 02) 3780-8720
- Installation Division : 02) 3780-8734
- Trade Division : 02) 3780-8760
- FAX : 02) 797-0910

Head office & Factory

- Address : 65-2 Chuneui-dong, Wonmi-gu, Bucheon-si, Gyeonggi-do, Korea
- TEL : 032) 675-2287 ~ 8 (Representative Number)
- A/S : 032) 683-3600
- FAX : 032) 675-6297

Seosan Plant

- Address : 1169 Suseok-dong, Seosan-si, Chung-cheongnam-do, Korea
- TEL : 041) 664-5400 (Representative Number)
- FAX : 041) 664-6151