

Chang Der

Fire Protection

Glass bulb



Standard Spray Pattern



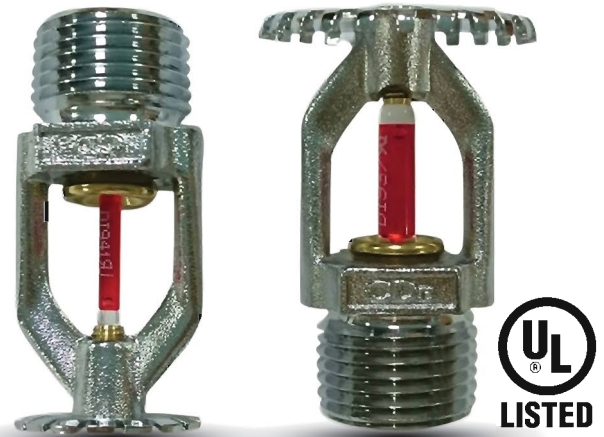
K-factor 5.6 (80)



Standard & Quick Response



UL listed ,
in File EX 5134



Automatic Sprinkler CD2511 Series

Description

The Chang Der's "CD" brand model B, 1/2 inch orifice, standard and quick response (ref ISO 6182-1). The pendent and upright Sprinkler are automatic sprinkler of the thermo-sensitive frangible bulb type, is intended for use in fire sprinkler systems, designed in accordance with the standard installation (NFPA 13), the pendent and upright sprinkler are all produce a hemi-spherical water distribution pattern below the deflector, it is most stable against the change of atmospheric temperature and is well matched to accommodate any architecture.

The CD model B sprinkler id number(SIN) CD2511 SSP and CD2512 SSU utilize a 5mm diameter frangible bulb made by Day-Impex in U.K, SIN CD2521 SSP and CD2522 SSU adopted a 3mm bulb made by Day-Impex.

The 1/2 inch orifice CD brand standard and quick response, pendent and upright spray are rated for use at a maximum service pressure of 12.3kg/cm² (175psi), and are available in the temperature of 68 °C (155 °F red), 79°C (175°F) the flow rate Q in LPM (GPM) are determined by the following formula $Q=K \sqrt{P}$

In which, the nominal discharge coefficient K equals metric system 80 (British system 5.6) and P equals the residual flowing pressure in kgf/cm² (psi) listing standards permit the actual value of K to vary from 76.4 to 83.6 (5.3 to 5.8), however, for hydraulic calculations the k-factor of 80(5.6) is to be applied.

Material

Frame: forged Dezincification resistant(DZR) brass

Deflector: phosphor bronze strip CNS C5191 (equivalent to ASTM C51900)

Glass Bulb: with glycerin solution nominal 5 mm in standard response (DI937) and 3mm in quick response (DI941) made from Day-Impex, in UK.

Bulb retainer(Seat): DZR brass.

Water seal Spring: Beryllium nickel with Teflon coated

Set screw: brass rod, CNS 3604 (equivalent to ASTM C36000)

Technical & Environmental Specification

| | |
|---------------------------------|---|
| Minimum operation pressure..... | 7 psi (0.5 bar) |
| Maximum working pressure..... | 175psi(12 bar) |
| Discharge coefficient..... | K=5.6GPM/at 1/2psi (80.7 LPM at 1/2 bar) |
| Temperature rating..... | 155/175°F (68/79°C) |
| Leakage Test At Factory..... | 30kgf/cm2 (0.3Mpa,29.4bar,426.7psi) |

Installation

The CD brand automatic sprinkler 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 type sprinkler if the glass bulb is cracked or there is a loss of fluid from the bulb, and with the sprinkler held horizontal, a small air bubble should be present. The sprinkler joint should be obtained with maximum torque of 28.5 Nm (21 ft-lbs).

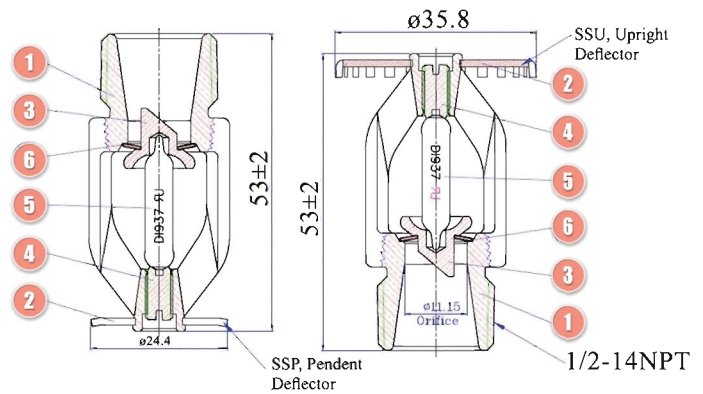
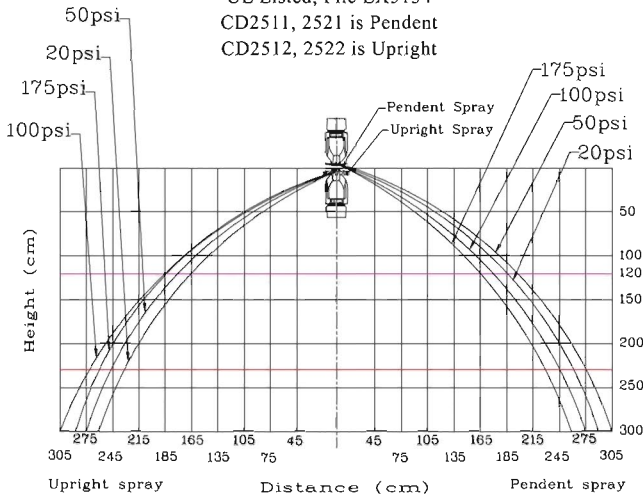


CD2511 Series

CHANG DER

Water Spray Pattern

UL Listed, File EX5134
CD2511, 2521 is Pendent
CD2512, 2522 is Upright



Parts:

- | | |
|----------------------|-------------------------------------|
| 1. Frame | DZR brass C48600 |
| 2. Deflector | Phos bronze C51900 |
| 3. Bulb retainer | DZR brass C48600 |
| 4. Set screw | Brass rod C36000 |
| 5. Glass bulb | Bulb contains sensitive liquid |
| 6. Water seal spring | Beryllium nickle with teflon coated |

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