

Flameproof-enclosure Photoelectric smoke detector

Flameproof-enclosure: Exd II B T6/Exd II B+H₂ T6

WORLD-FIRST



FLS-02E
FLS-02E-H₂
(Hydrogen Flameproof)

Principle of Operation

This detector is a sensor of the smoke using the scattered light, detecting the scattering of the light reflected by the smoke. There are light emitter (Infrared LED) and the detector (photo-diode) inside, the former emits the light through the lens, and the latter detects the light scattered by smoke to detect the smoke in the hazardous area.

The detector is installed in a location such as a semiconductor manufacturing equipment.

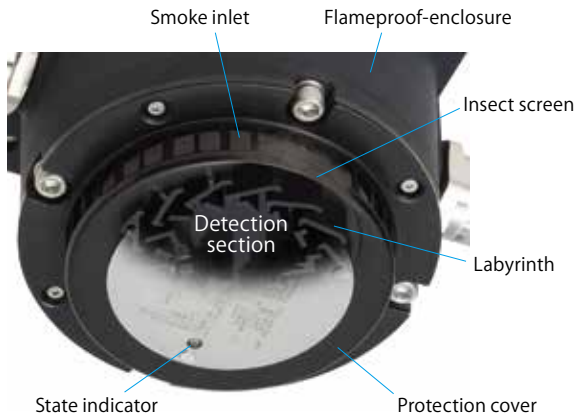


Backup power supply for livestock battery chamber

Features

- Since the structure is pressure-resistant, Flameproof, it can be fitted in a hazardous area.
- It also tolerates the hydrogen explosion.

The structure of the detection unit



Application Example

It can be installed in the Class1, Division1, Groups B, C and D hazardous areas.



Gas filling chamber

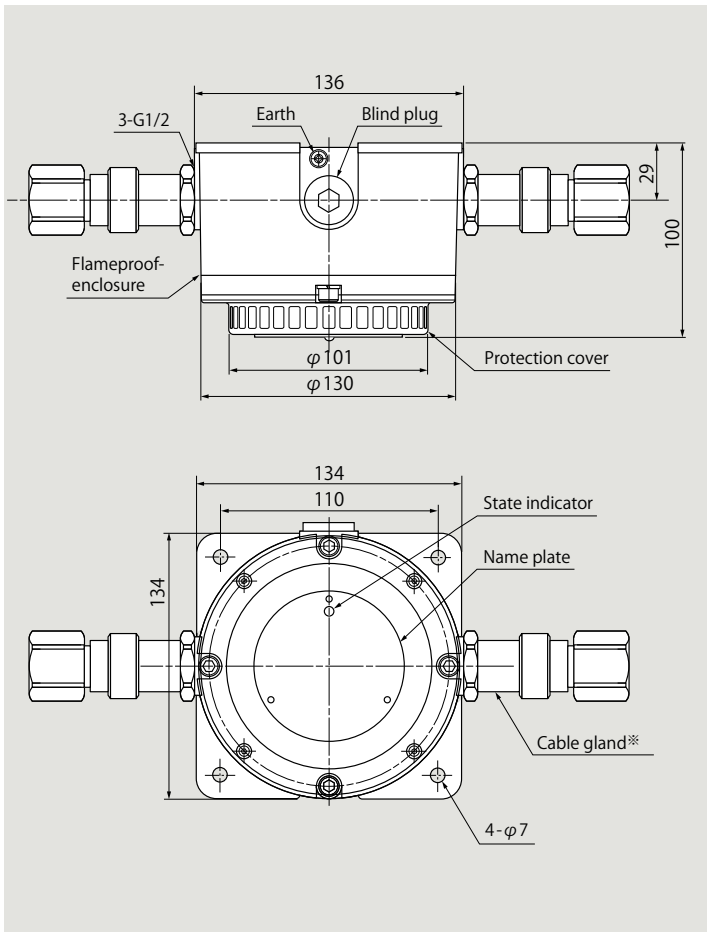


Livestock battery chamber



Chemical plant

FLS-02E(-H2) Dimensions



Specifications

| | | | | |
|------------------------------|--------------------------------|---|---|-----|
| Electronic Specifications | Rating | 24VDC 60mA | | |
| | Supervisory current | 60 μ A @24VDC | | |
| | State indicator | Red LED | Normal | Off |
| | | | Alarm | On |
| Mechanical Specifications | External dimension | 134 × 134 × 100mm | | |
| | Material | Aluminum alloy (ADC12) | | |
| | Color | Black | | |
| | Mass | Approx. 3kg (Cable gland ※ included) | | |
| Environmental Specifications | Range of operating temperature | -10 ~ 50°C | | |
| | Range of operating humidity | 30 ~ 85% RH | | |
| Model Approvals | Detector | Classification | Photoelectric smoke detector | |
| | | Model | Category II (Nominal 24 VDC, Max 60mA) Non-alarm-verification type Non-waterproof type Non-acid proof type Non-alkali proof type Resettable type Scattered light type | |
| | | Certificate No. | 感第 28 ~ 16 号 | |
| | Flame-proof-enclosure | Hazardous area | Class 1, Division1, Groups B, C and D | |
| | | Classification | Exd II B T6 | |
| | | Certificate No. | TC21255 | |
| | Classification | Exd II B+H2 T6 | | |
| | Certificate No. | TC21233 | | |

※ Cable gland is sold separately.

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 The contents of this document are current as of June 2017.

TE-620A 2017-06-30 K1 OYK