

Fixed Gas Detector

TC100N FIXED GAS DETECTOR

TC100N is a fixed gas detector installed in a place where potential gas hazard exists to measure oxygen, toxic gas and combustible gas. With ATEX approval, It is suitable for explosive environment use. It communicates with the control panel through 4-20mA analog output or RS485 digital signal.

FEATURES

- ATEX approved
- 4-20mA analog or RS485 digital output
- 2 relay output for 4-20mA type
- Sensor module design, easy for replacement

APPLICATION

Steelworks, Petrochemical plants, Shipyards, Water treatment plants, Mines, Power plants, Food industry etc.

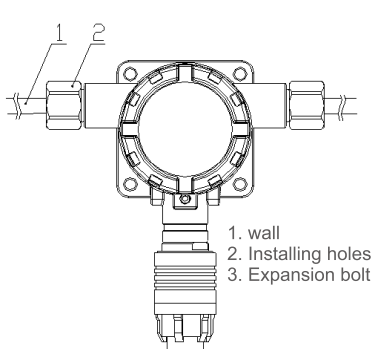
INSTALLATION METHODS

Note: Fix the detector with sensor head downwards. According to the installation place, fix the detector onto the wall or gas pipes.

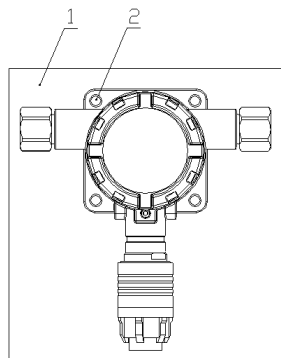
Method 1: Wall mounted: According to the device dimension, choose a suitable wall. First fix devices on the wall by 4pcs of M6×60 bolts.

Method 2: Screw Butt joint Connection: If there is pipe screw of G1/2 on the spot, the user can butt joint the device to the pipe screws and then screw tightly the device.

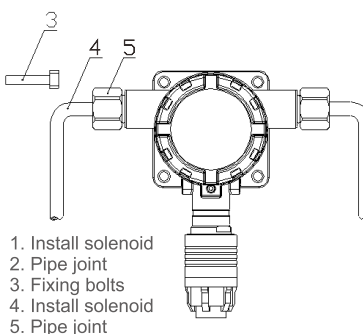
Method 3: Pipe Installation: If there is 1" to 2" (diameter) pipe, the user can use 2 U-type bolts to fix the hanging plate on the pipe, then fix the detector onto the plate. Or, the user first fix the detector onto the plate and then fix the plate on the pipe.



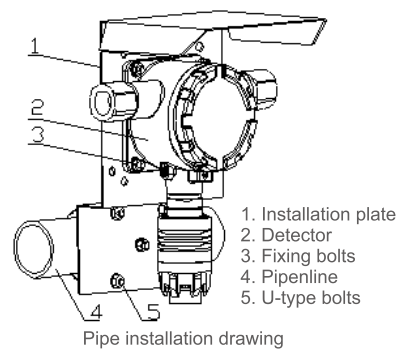
Connection for screw butt type
Method 1



Wall mounting type



Connection for screw butt type.2
Method 2



Pipe installation drawing
Method 3

SPECIFICATIONS

| | | | | | | |
|---------------------|---|----------|----------|-------------|----------------------|---|
| Measuring gas | O2 | CO | H2S | Combustible | Mounting type | Wall mounted |
| Measuring range | 0-25%VOL | 0-500ppm | 0-100ppm | 0-100%LEL | Working temperature | Toxic gas: -20℃ ~ +50℃ Combustible: -40℃ ~ +70℃ |
| Resolution | 0.1%VOL | 1ppm | 1ppm | 1%LEL | Working humidity | ≤95%RH (no condensation) |
| Sensor type | Electrochemical | | | Catalytic | Operation voltage | DC24V±25% |
| Sensor life | 1 year | 2 years | 2 years | 2 years | Consumption | <2W |
| Measuring type | Diffuse naturally | | | | Ingress Protection | IP65 |
| Response time | Toxic gas and O2: T ₉₀ ≤60s; Combustible: T ₉₀ ≤30s | | | | Housing material | Chamber: Aluminum alloy; Sensor cover: Stainless steel |
| Signal output | 4-20mA / RS485 | | | | | |
| Alarm output signal | 2 programmable relays for 4~20mA type | | | | Dimension and weight | 196mm*186mm*68.5mm, about 1.2kg |
| Conduit connection | G1/2" | | | | Approval | Ex II 2G Ex db IIC T6 Gb |
| Cable / distance | 4-20mA type: 1.5 MM ² , 3 wire, shielded,1000m (maximum) ; RS485 type: 1.5 MM ² , 4 wire, shielded, 1000m (maximum) | | | | | |

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