

# 사용 설명서

온도전송기  
일반형KC-8200, 방폭형LG200

(주)골든룰



(주)골든룰

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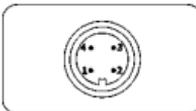


## Electrical connection

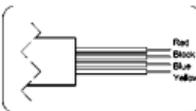
DIN43650



Aviation plug(M12\*1 - 4 pins)



Cable outlets



Terminal bed

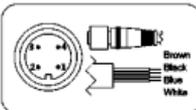


Module terminals-four terminals

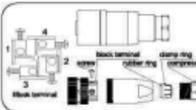


## Electrical connection accessories

Aviation plug (with cable)



Aviation plug (without cable)

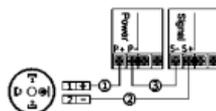


At the electrical connection of hygienic pressure transmitter usually is aviation plug. The wiring method is "two wires" as above electrical connection table shows.

z1>Please note! If there are any updates, please refer to the label for specific signal outline type. For signal outline type of temperature sensor please refer to the label.

## Signal connection

4-20mA two wires (DIN43650)



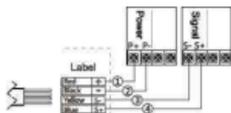
- Connect the positive power supply (P+) to the positive power supply (P+) of temperature transmitter (terminals 1);
- Connect the negative power supply (P-) of temperature transmitter (terminals 2) to the positive signal module (S+);
- Connect the negative signal module (S-) to the negative power supply (P-).

### Three wires current/voltage signal (DIN43650)



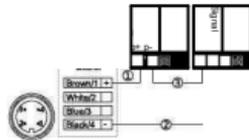
- Connect the positive power supply (P+) to the positive power supply (P+) of temperature transmitter (terminals 1);
- Connect the negative power supply (P-) of temperature transmitter (terminals 2) to the negative power supply (P-), and connect the negative signal module (S-) to negative power supply (P-);
- Connect the positive signal module (S+) of temperature transmitter (terminals 3) to the positive signal module (S+).

### Four wires, current/voltage signal (cable)



- Connect the positive power supply (P+) to the positive power supply (P+) of temperature transmitter (red wire);
- Connect the negative power supply (P-) of temperature transmitter (black wire) to the negative power supply (P-);
- Connect the negative signal module (S-) of temperature transmitter (Yellow wire) to the negative signal module (S-);
- Connect the positive signal module (S+) of temperature transmitter (blue wire) to the positive signal module (S+).

### 4-20mA two wires (aviation plug with cable)



- Connect the positive power supply (P+) to the positive power supply (P+) of temperature transmitter (terminals 1/brown wire);
- Connect the negative power supply (P-) of temperature transmitter (terminals 2/back wire) to the positive signal module (S+);
- Connect the negative signal module (S-) to the negative power supply (P-).

## Power supply

Independent linear direct-current power supply is suggested to be adopted for the power supply of temperature transmitter, over large resistive load will result in a large pressure drop, so it requires to calculate the all-in resistance of signal cable, display meter and other record and display equipment, to ensure the voltage provided to the temperature transmitter accord with normal operating requirements.

- Standard current signal output: 12-30VDC,
- 1-5VDC voltage output: 12-30VDC.

## Grounding

- Using cable with shielded twisted-pair signal has the best effect. To avoid ground loop, shielded layer adopts single-end grounded.
- Transient resistance built-in module is effective only in the case of good grounding. Metal shell and internal grounding terminals are used to the nearest grounded directly

## Cable protection system

### Standard protection system



In order to avoid the liquid flowing along with the cable to flow into the terminal box or result in waterproof joint effusion, an U-shaped ring needs to be configured between pull box and temperature transmitter as the picture

and please ensure the U-shaped bottom is under the temperature transmitter. Considering the maintenance and replacement, enough cable length needs to be reserved.

### Flexible explosion-proof tube protection system



Using flame proof temperature transmitter in dangerous situations, please use metal flexible explosionproof tube to connect the signal cable into pull box and lead to the safety zone.

### Maintenance

Requires no maintenance

### External cleaning

Please notice the following when cleaning:

- Use washing agent which will not damage to the instruments surface and seal ring.

### Transportation / storage

- Do not store at outside
- Keep dry and dust-free
- Do not expose to the corrosive medium
- Avoid solar radiation
- Avoid mechanical shock and vibration
- Storage temperature: -40~100°C
- Maximum relative humidity: 95%

### EMC statement

- EMC equipment instructions 2014/30/EU.
- CE mark suggests the instruments are in line with EU standards
- Users need to ensure the whole equipment conform to all the applicable standards.

### Retransport

- Keep clean of the temperature transmitter. Stay away from any dangerous medium!
- Please adopt proper package to avoid damage in transportation.

### Exception handling

- Measurement signal is abnormal which should judge the process pressure is abnormal, measuring system error or influence of installation environment or abnormal in the pressure transmitter, then analyze the reason and take corresponding measures.
- No signal output, process pressure changes but no measurement corresponding change, or change does not correspond, it may be an abnormal pressure transmitter, it needs to check the power supply voltage, wiring, power consumption and load resistance whether they meet normal operating requirements. Also need to check if there is leaks and pressure impulse line blockage, shut-off valve not turned on, etc.
- Signal output error is too big or it exceeds the normal range, need to check the power supply voltage, power consumption and load resistance whether they meet normal operating requirements, the measuring range setting, if adjustment is correct. Also need to check if there is leaks and pressure impulse line blockage, shut-off valve not turned on, rapid temperature fluctuations, etc.

### Depot repair

Please finish the following steps before the depot repair: ■  
Removal of all the residues which would be harmful to human health, such as inflammable, poisonous, cancerogenic and radioactive substances.

A Warning! Do not return the instruments if can not ensure the dangerous residues are removed, eg: the dangerous residues permeate into cracks or spread to the plastic.

### Discard disposal

- The instrument is not restrained of WEEE instruction 2002/96/EG and laws of relevant countries.
- Please pass the instrument to specialized recycling companies other than local recycling points.

질량유량계 & 기타유량계 & 계측기  
전문 제조기업

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