

#### **Electrical connection**

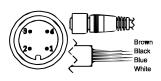
#### Module terminals-four terminals



| Label | Two<br>wires | Three<br>wires | Four<br>wires | Modbus-<br>RTU/RS485 |
|-------|--------------|----------------|---------------|----------------------|
| +     | Power+       | Power+         | Power+        | Power+               |
| -     | Power-       | Power-         | Power-        | Power-               |
| Α     |              | Signal+        | Signal+       | A+                   |
| В     |              |                | Signal-       | B-                   |

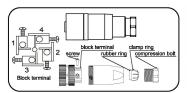
#### Electrical connection accessories

## Aviation plug (with cable)



| Label   | Two<br>wires | Three<br>wires | Four<br>wires | Modbus-<br>RTU/RS485 |
|---------|--------------|----------------|---------------|----------------------|
| 1/Brown | Power+       | Power+         | Power+        | Power+               |
| 2/White |              |                | Signal-       | В-                   |
| 3/Blue  | Kye-z        |                | Signal+       | A+                   |
| 4/Black | Power-       | Power-         | Power-        | Power-               |

## Aviation plug( without cable)



| Lable | Two<br>wires | Three<br>wires |         | Modbus-<br>TRU/RS485 |
|-------|--------------|----------------|---------|----------------------|
| 1     | Power+       | Power+         | Power+  | Power+               |
| 2     |              |                | Signal- | В-                   |
| 3     | Key-z        | Signal+        | Signal+ | A+                   |
| 4     | Power-       | Power-         | Power-  | Power-               |

⚠ The electrical connection of hygienic pressure transmitter is aviation plug in general. Please refer to "two wires" in the wiring lists.

Key-z is modified zero pressure terminal, suitable for electrical connections DIN43650(D), aviation plug(H)

! Please refer to the label for specific signal outline type.

## Flexible explosion-proof tube protection system



⚠ Using flame proof pressure transmitter in dangerous situations, need to use metal flexible explosion-proof tube to connect the signal cable into pull box and lead to the safety zone.

# Intrinsic safety type

 $\triangle$  When choose intrinsic safety pressure transmitter, as the power, signal connection grounding and transient solutions are different provided by the intrinsic safety and isolated safety barrier suppliers, so connect the signal line should be paid attention to.

## Field adjustment

 $\begin{tabular}{ll} $\bigwedge$ $ Adjustment needs caution. not all types of pressure transmitters adjustment function.$ 



#### Zero point adjustment

- Please make an adjustment after installation because the mounting position will affect zero setting.
- The vessel is absolutely empty (No pressure or medium on the measuring diaphragm, the vessel connect to the atmospheric air)
- Power connection please refer to "Keys operation manual-keyboard shortcuts-PV=0"
- Please set PV=0 after three weeks of installation to ensure the best accuracy
- Set PV=0 each year.

for products without buttons, please use key-z terminal to make zero point adjustment("3" pins/ "blue" wire). After power connection, please connect Key-z/ outlet cable with negative power terminal/ outplet cable, and disconnect after 5 seconds

Zero point adjustment is only avaible for gauge pressure transmitters and differential pressure transmitters

## Full span adjustment

- Fill the vessel with medium (fill to the required level)
- The static pressure value should be within the minimum and the maximum pressure range.
- Power connection please refer to "Keys operation manual-keyboard shortcuts-full span adjustment"

#### **Factory resets**

■ Please refer to "Keys operation manual-keyboard shortcuts-factory resets"

⚠ For products without buttons, please use key-z terminal("3" pin/ "blue" wire) to make factory resets. Before power connection, please connect Key-z/ outlet cable with negative power terminal/ outplet cable, and disconnect after powering 10 seconds

#### Maintenance

Requires no maintenance

## External cleaning

Please notice the following when cleaning:

- Use washing agent which will not damage to the instruments
- Prevent the process diaphragm from mechanical damage, eg: the mechanical damage caused by sharp objects.
- Mechanical cleaning of metal diaphragm(technical and teference) is prohibited.
- Do not point the nozzles to the diaphragm directly when doing internal cleaning by pressure washer.

#### 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: -40~85°C
- Maximum relative humidity:95%



#### Retransport

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

#### **Exception handing**

- 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.

## Filling fluid leakage determination

■ In the state of no pressure, the output is normal. If add pressure continuously, no significant change in output. Also no damage to the circuit board. Under the condition that there are no pressure plugging or leakage, it can be concluded that the filling liquid has leaked.

## 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, cancerigenic and radioactive substances.
- 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.