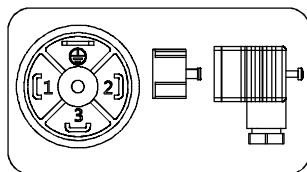


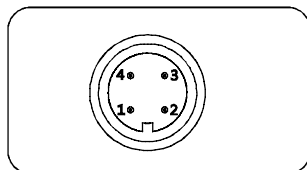
Electrical connection

DIN43650



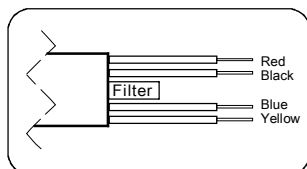
Label	Two wires	Three wires	Four wires	Modbus-RTU/RS485
1	Power+	Power+	Power+	Power+
2	Power-	Power-	Power-	Power-
3	Key-z	Signal+	Signal+	A+
			Signal-	B-

Aviation plug.(M12*1-4pin)



Label	Two wires	Three wires	Four wires	Modbus-RTU/RS485
1	Power+	Power+	Power+	Power+
2			Signal-	B-
3	Key-z	Signal+	Signal+	A+
4	Power-	Power-	Power-	Power-

Cable outlet

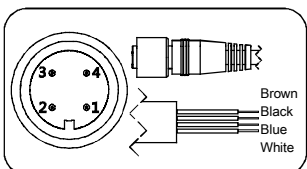


Label	Two wires	Three wires	Four wires	Modbus-RTU/RS485
Red	Power+	Power+	Power+	Power+
Black	Power-	Power-	Power-	Power-
Blue		Signal+	Signal+	A+
Yellow			Signal-	B-

⚠ The reference pressure is the current atmospheric pressure for gauge pressure transmitter. Please be careful to avoid the filter dropping off and keep it dry.

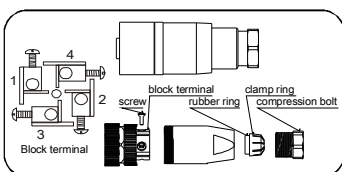
Electrical connection accessories

Aviation plug (with cable)



Label	Two wires	Three wires	Four wires	Modbus-RTU/RS485
1/Brown	Power+	Power+	Power+	Power+
2/White			Signal-	B-
3/Blue	Key-z	Signal+	Power-	A+
4/Black	Power-	Power-	Power-	Power-

Electrical connection accessories



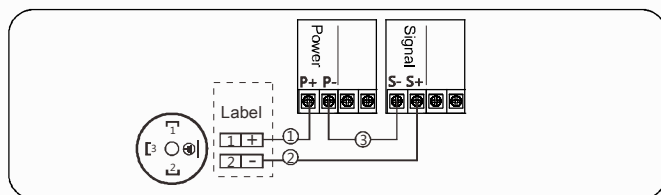
Label	Two wires	Three wires	Four wires	Modbus-RTU/RS485
1	Power+	Power+	Power+	Power+
2			Signal-	B-
3	Key-z	Signal+	Signal+	A+
4	Power-	Power-	Power-	Power-

⚠ Key-z for correcting zero pressure, suitable for DIN43650 connector(D)aviation plug(H) products

⚠ Please note that specific circumstances refer to signal outline way on product label

Signal connection

4-20mA two wire (DIN43650)



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

Power supply

Independent linear direct-current power supply is suggest to be adopted for the power supply of pressure 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 pressure transmitter accord with normal operating requirements.

- Standard current signal output: 12-30VDC,
- HART current signal output: 16.5-55VDC,
- Intrinsic safety current signal output: 12-30VDC,
- Modbus-RTU/RS485 output: 5VDC/9-30VDC,
- 0.5~4.5VDC voltage output: 5VDC/6-15VDC.

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 only effect 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 pressure transmitter as the picture shows, and please ensure the U-shaped bottom is under the pressure transmitter.

Considering the maintenance and replacement, enough cable length needs to be reserved.

Flexible explosion-proof tube protection system



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

Intrinsic safety type

- ⚠ The signal connection of intrinsic safety instruments needs to refer to isolated safety barrier factory instructions.

Field adjustment

It is convenient for range adjustment with HART protocol software. For detailed operation, please refer to the instructions of display meter.

⚠ Please make adjustment with caution. Not all types of pressure transmitters have 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 connect Key-z ("3"pin/blue wire) terminal/ its lead wire with power negative terminal/ its lead wire, and disconnect after 5 seconds.
- Please set PV=0 after three weeks of installation to ensure the best accuracy
- Set PV=0 each year.

⚠ Zero point adjustment is only available for gauge pressure transmitter

Factory resets

- Restore the factory settings with Key-z terminal ("3"pin/ blue wire). Connect Key-z terminal/ its lead wire to power negative terminal/ its leadwire before power-on and disconnect after 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%

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, cancerigenic and radioactive substances.
- ▲ 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.