



Safety for Industrial Process

■ Before assembly, check

The cleanliness and integrity of the sensor feed through (holes in walls, depth, edges).

The compatibility of the hole dimensions.

The type and compatibility of threads.

The distances needed for cable connections.

The thermal shock resistance capacity depending on the sheath type (as appropriate, use progressive insertion of the sensor).

■ During assembly

Ensure :

The insertion depth is suitable.

That there are no defective fastenings causing vibrations.

That there is no mechanical stress applied to the protective sheaths.

That no thermal shock has occurred.

That the electrical connection is suitable for the connection unit.

Check :

The correct closure of the connection unit covers.

That the connection cables are in good condition.

■ On the electrical connection, inspect

Inspect :

The polarities.

The cable gland compatibility.

The earthing if necessary.

The earth insulation (in the majority of cases).

The correct tightening of the terminals.

The matching of cables to each other using appropriate accessories.

■ Maintenance

In operation and during stoppages, check:

The level of wear of the protective sheaths (to be changed before damage to the internal element).

The mechanical aspects of the cables and cable glands.

The electrical connections.

The insulation resistances.

■ Handling – storage

Avoid mechanical chocks notable on rods with ceramic sheaths.

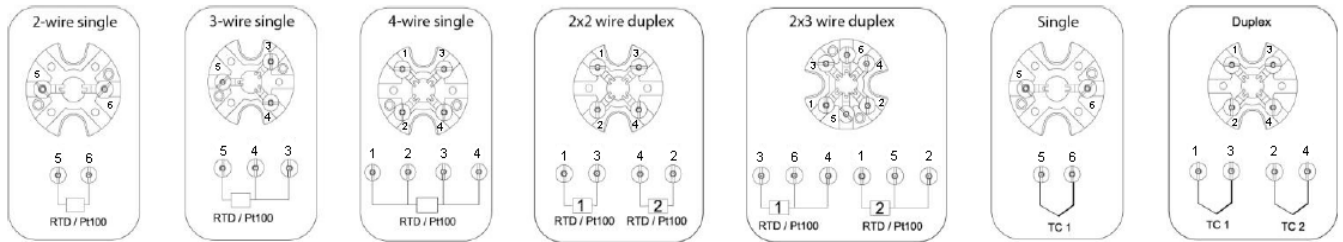
Avoid storage in damp environment.

Avoid fouling of the contact.

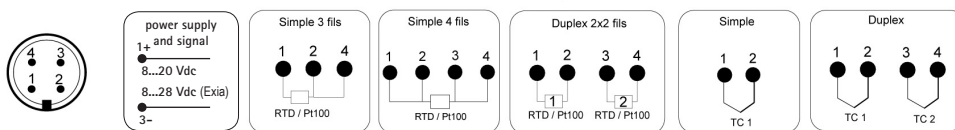
COMMISSIONING AND CONNECTING THE PROBES

■ Type of connection

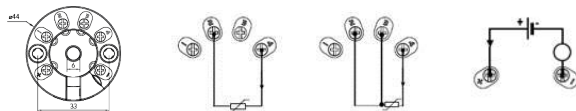
Connection on ceramic terminal block



Connection plug M12



Connection to converter



■ Assembly information

Damage to components such as the terminal head, cable gland, or threading of connectors or seals, eliminates the initial characteristics of the sensor, such as IP.
The temperature sensor (thermocouple, resistance sensor) must be placed in the best possible contact with the fluid to be measured.

The connection cables must be securely connected to the terminals.

When installing a thermocouple, observe the polarity of the couple.

For resistance sensors, allow for the appropriate type of connection according to how the 2, 3, or 4-wire element is mounted.

Ensure that the single or double 2, 3, 4, 6, or 8-wire measuring elements are mounted.

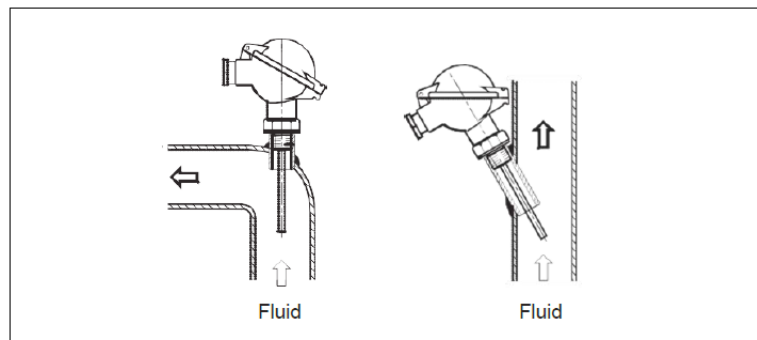
When installing in immersion sleeves, check that the temperature probe remains slightly mobile and that it touches the bottom of the immersion sleeve.

The cross-section of connecting cables must be chosen according to the cable gland located on the terminal box.

After connecting the cables to the terminal, close the terminal heads using the appropriate tool, and check that the cover seal is correctly positioned to establish a perfect seal.

■ Installation

In case of insufficient immersion depth, a measurement error can be caused by heat dissipation due to the process fitting and the pipe wall.



Recommended immersion depth :

For liquids, 8 to 10 times the sleeve diameter

For gases, 10 to 15 times the sleeve diameter

For thin pipes, oblique mounting or mounting in an elbow is recommended. The submerged part of the sensor must be oriented in the opposite direction from the fluid flow.