

## TEMPERATURE SENSOR

### TER-616/TX

also used for ATEX classified areas (all zones)

Normally used for temperature control inside the silo or filter installed inside the higher room where air is clean.

It is complete of a sleeve which avoids the sensor to be directly in contact with the potentially explosive atmosphere. The sleeve thermal conductivity transfers temperature to the sensor.

It signals an overheating state caused by an ongoing or smoldering fire.

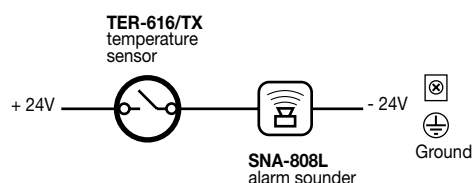
Its NO (normally open) contact will close when the temperature exceeds 80°C (176°F) and it will return back to open state when the temperature decreases to about 66°C (150°F).

It requires a power supply voltage of 24Vdc and it is used to control an optical and acoustical alarm signal.

## Specifications

- IP67 temperature sensor, brass, double thread (M22x1 sensor side, 3/4" NPT cable exit side), sensor rod diameter 19mm, length 83mm, wrench 27mm.
- Type of contact: N.O. Normally Open.
- It closes when the temperature exceeds 80°C (176°F) and opens when the temperature decreases to about 66°C (150°F).
- Contact rating 1A 24Vcc (max voltage 28Vdc).
- Electrical connections by two free leads, 300mm in length, inside an aluminium IP66 junction box, II 2GD Ex d IIC ATEX model, 2 cable entries 3/4" NPT with 3+3 terminals. Ground terminals are available both inside and outside the box.
- Brass thermal separation sleeve, internal thread M22x1, external thread 3/4" NPT, diameter 21mm, length 60 mm, wrench 27mm.
- Accessories: 1 elbow M-F 3/4"-3/4", 1 weld nut 3/4".
- Sensor working temperature -40 + 125°C (-40 + 257°F).
- Packaging mm 150x145x110.
- Gross weight kg 0,9.

## System connections



## Mounting instructions

Drill the wall of the silo or filter and insert the sleeve by fixing it with the weld nut or any other solution fit for purpose.

Assembly the temperature sensor to the junction box using the fixing accessories and put it inside the sleeve.

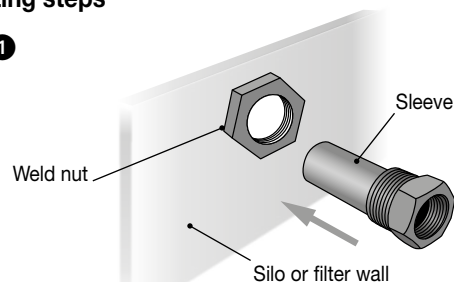
The installer must care about separation between internal and external area.

## Important notice

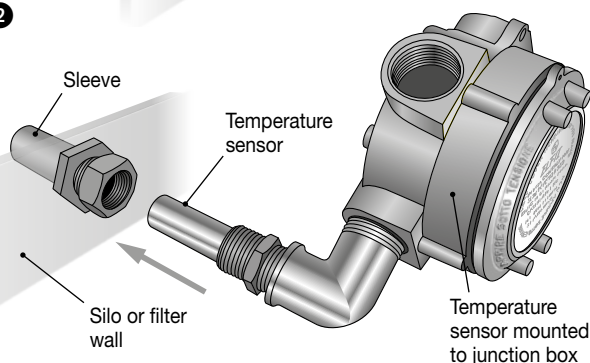
Make sure there is no risk of explosion during installation, in particular, drilling, welding, etc. must be made by assuring that don't cause any explosion risk.

### Mounting steps

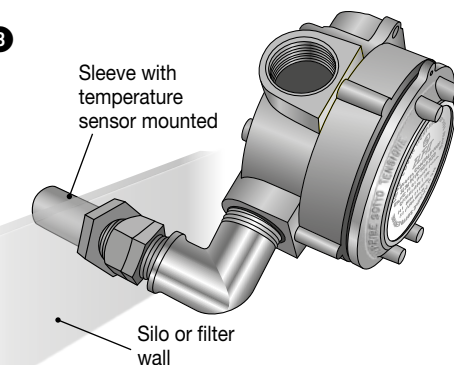
#### Step 1



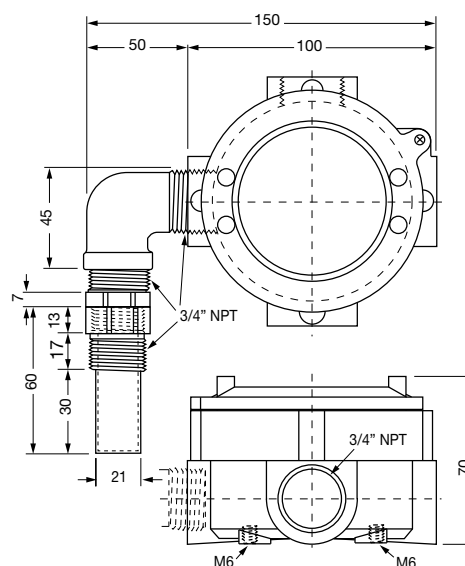
#### Step 2



#### Step 3



### Mechanical dimensions mm



The external base of the junction box has two M6 threaded holes for wall mounting for use in areas where the sleeve is not necessary.

## SILO TEMPERATURE ALARM SYSTEM SYS-F1...

### Electrical wiring

The silo temperature alarm system, in addition to the alarm panel PAN-701, comprises two temperature sensors, one sounder and one lamp (or one sounder beacon).

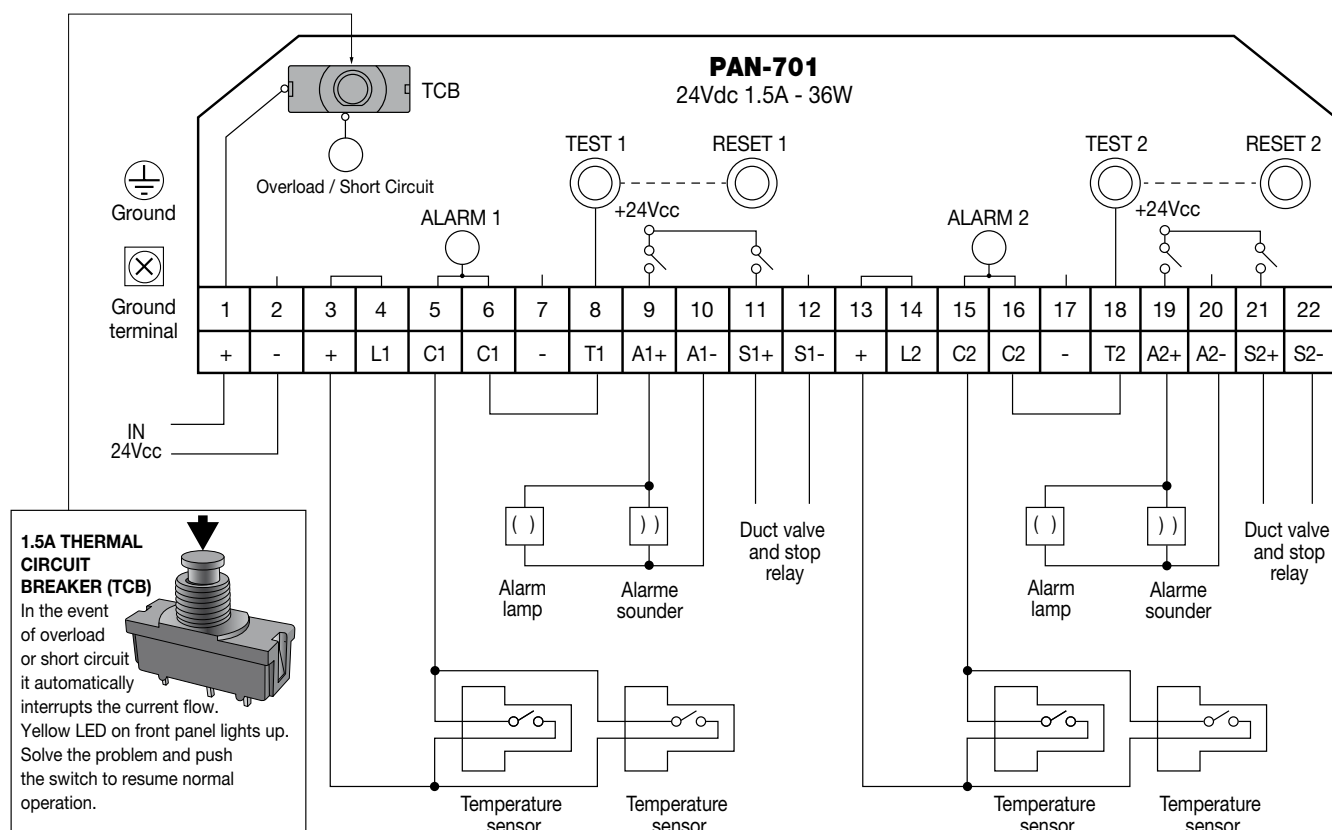
It is possible to connect up to two temperature alarm systems to the alarm panel PAN-701 (ALARM 1 and ALARM 2).

You can check separately the system operations by pressing the corresponding TEST pushbutton on the panel.

The test procedure simulates an alarm so that the ALARM LED light on the panel and the external alarms turn on and activates the STOP circuit on the "S" terminals.

Press the RESET pushbutton to return the system to normal operating conditions.

**Warning: the test procedure can check the alarm signals and the stop circuit but not the temperature sensors themselves.**



### System diagram

