



FTF

Accuracy		
PT100 class B DIN EN 60751		±0,3K
PT100 class B 1/3 DIN EN 60751		±0,1K
PT1000 class B DIN EN 60751		±0,3K
PT1000 class B 1/3 DIN EN 60751		±0,1K
NI 1000 class B DIN EN 43760		±0,4K
NI 1000 class B 1/2 DIN EN 43760		±0,2K

Technical Data

Measuring range	-35...+250 °C -35...+180 °C for Ni1000 and LgNi
Response times	t _{0,5} = 2,8sec t _{0,9} = 10sec for water at a flow rate of 2m/s
Test Current	cirka 1mA
Isolation resistance	>100Mohm @ 20°C(500Vdc)
Connection	2-wire screened cable screw terminals 0,14 to 2,5mm ² 4-wire connection as option
Humidity	max 95% RH non-condensing
Process connection	screwed pocket with 1/2" pipe thread
Protective tube	stainless steel, wrench size 27mm Dia 6mm, reduced to dia 4mm
Length of neck	25mm
Protection Class	IP65
Housing	Plastic, polyamide 30% glass-globereinforced with quick-locking screws . Colour pure white (similar RAL9010)
Max.pressure	S/S immersion sleeve 6bar
Cable union	M16, including strain relief
Dimension	72x64x39,4mm.gland

Features

- Different types sensing element
- No immersion pocket
- 4-wire as option
- Suitable for Domestic Water and other Liquids
- Different length of probes
- For use in very fast-response controlled systems
- Polarity independent

Application

Very quickly responding screw-in resistance sensor with neck tube and a once reduced protective pocket.

Very short response time, particularly applicable for very quick temperature changes and/or control operations e.g hot water systems

Function

The sensing elements change their resistance value with respect to temperature:

PT100, PT1000, NI1000 - increasing resistance by increasing temperature.
LgNi

Design Features

The sensing element is fitted into a 100mm long stainless steel probe.

To reduce the sensor response time, the end of the probe is tapered.

Ordering Codes

FTFPT100/100 Inu, IVT, Satt, Siox, ABB, Honeywell

FTFPT1000/100 Unitron, Johnson, IVT, Bastec
Exomatic, Honeywell, Serck, Diana,
KTC,Regin, Bastec, YIT

FTFNI1000/100 Sauter

FTFLGNI/100 Siemens Landis & Staefa
QAA 23, QAD 21

Options: 4-wire
+/-0,1K, or 0,2K sensing element

Tube length in mm :150 or 250

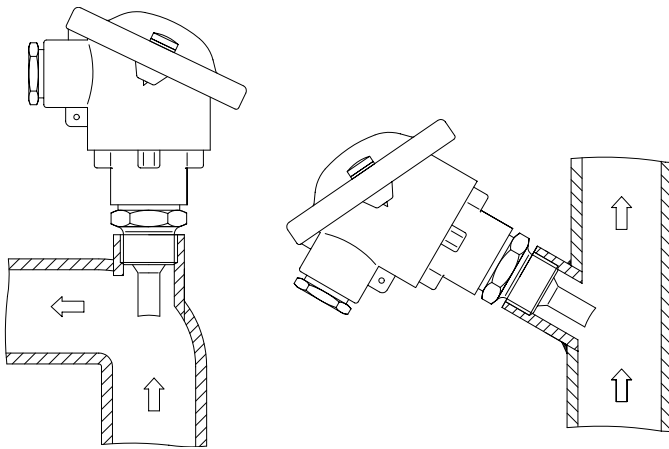


Mounting and Installation

The FTF should be mounted so that the immersion probe is approximately in the middle of the pipe (where the medium is ideally mixed, but at a minimum depth of 27mm).

Orientation is unimportant, and there is no need for an immersion pocket.

In restricted spaces, the sensor may also be mounted in a pipe bend, with the probe against the direction of the flow.



Installation and Connection Details

All connections to DDC controllers, data recorders etc. should be made using screened cable.

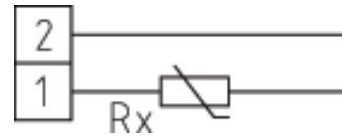
Normally, the screen should be earthed at one end only (usually the controller end) to avoid earth hum loops which can create noise.

Low voltage signal and supply cables should be routed separately from high voltage or mains cabling.

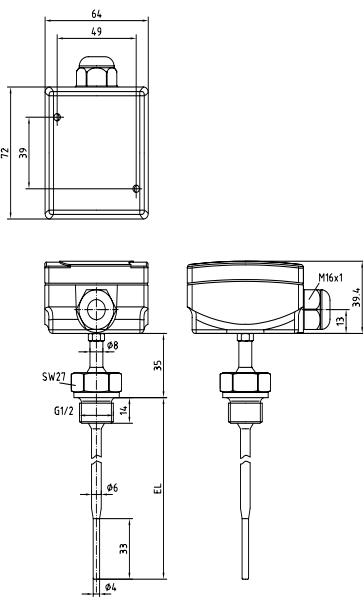
Separate conduit or cable trays should be used.

Where possible, the controller's earth should be connected to a FUNCTIONAL EARTH, rather than the mains safety earth.

This will provide better immunity to high frequency noise. Most modern buildings have a separate earth for this purpose



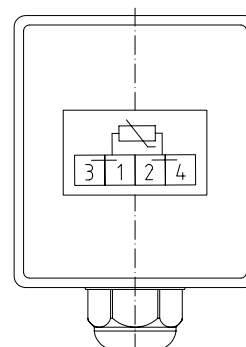
Dimensions



4 wire connection

The principle of both 3 and 4 wire connection is to provide a constant current flow through the element and measure the volt drop as close to the element as possible.

4 wire connection eliminates the error from both of the original installation wires



NL = 100, 150, 250mm (probes)