SIEMENS

Immersion temperature sensor

FT-TP/100
FT-TP/400

for HVAC systems

Immersion temperature sensor for heating, ventilation and air conditioning systems
- **For use with controllers with Pt100 sensor inputs**
- **In conjunction with MULTIREG and INTEGRAL RS.**

Use

The FT-TP/... immersion temperature sensors can be used in pipe systems for HVAC systems. They are suitable for high accuracy temperature measurement over a wide range with controllers equipped with a Pt100 sensor input, e.g. controllers from the MULTIREG and INTEGRAL RS ranges.

Type summary

2 types are available, distinguished only by the length of the probe.

FT-TP/100   Immersion temperature sensor length 100 mm
FT-TP/400   Immersion temperature sensor length 400 mm

Ordering

When placing an order, please specify the quantity, product description and type code.
Example:
1 immersion temperature sensor FT-TP/400
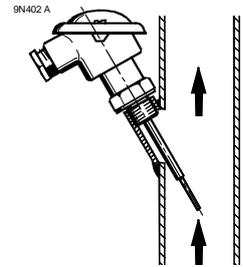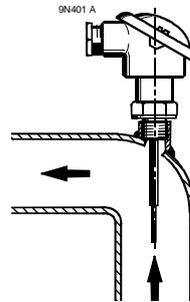
Technical design

The Pt100 temperature sensor is fitted with a platinium measuring element with a positive temperature coefficient (PTC). The measured-signal/temperature relationship is linear. See data sheet 1714 for technical information on the Pt100 sensor element.

The sensor FT-TP/... comprises a probe with a connecting head and the inserted Pt100 element. To improve the response time, the end of the sensor probe is narrowed. The cable is connected via a PG16 cable gland.

Mounting notes

Mounting instructions are enclosed with the sensor (Ref. 35224)

Where possible the immersion sensor should be mounted in a pipe bend with the sensor probe against the direction of flow. It should be located in a position where the medium is well mixed.

Disposal

The devices are considered electronics devices for disposal in terms of European Directive 2012/19/EU and may not be disposed of as domestic waste.
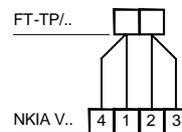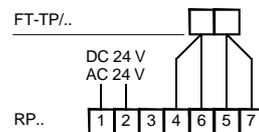
- Dispose of the device via the channels provided for this purpose.
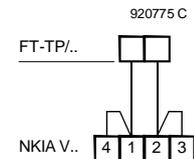- Comply with all local and currently applicable laws and regulations.

Technical data

Measuring range	– 100 ... + 450 °C
Measuring element	Pt100 to IEC751, Class B
Response time (0.632 value time)	to VDI/VDE 3522
in air moving at 1 m/s	<100 s
in water moving at 0.4 m/s	< 5 s
Nominal pressure	PN 40
Suitable media	Gas or liquid
Material	Cast aluminium
Probe	Stainless steel V4A (1.4571)
Electrical connection	2 screw terminals for max. 2.5 mm^2
Cable gland	PG16
Temperature range	Max. temperature at connecting head 100 °C
Protection degree of housing	IP54 according to EN 60529
Protection class	III according to EN 60730-1
Weight (incl. packaging)	FT-TP/100 = 0.47 kg / FT-TP/400 = 0.54 kg
Connecting head	Shape B to DIN 43729
Sensor probe	
Immersed length	FT-TP/100 = 100 mm / FT-TP/400 = 400 mm
Probe diameter	6 mm
Narrowed end	Length 30 mm, diameter 5 mm
Wall thickness	Approx. 0.5 mm
Screw thread	G1/2 to ISO228/1

Connection diagrams

Four-wire connections

Two-wire connections

Dimensions

all dimensions in mm

External thread G½ to ISO228/1

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Subject to change

Siemens
Building Technologies

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