SIEMENS

FT-TP/100
FT-TP/400

Immersion temperature sensor

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
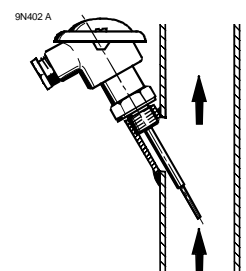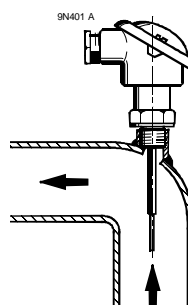
Technical design

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.
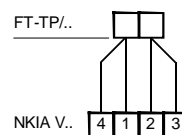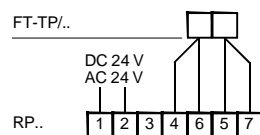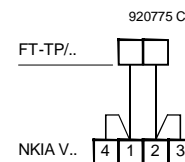
Technical data

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 standard	IP54 to IEC529
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
Conformity	Meets the requirements for CE marking

Connection diagrams

Four-wire connections

Two-wire connections

920775 C

FT-TP/..

DC 24 V
AC 24 V

RP.. | 1 | 2 | 3 | 4 | 6 | 5 | 7 |

FT-TP/..

NKIA V.. | 4 | 1 | 2 | 3 |

FT-TP/..

NKIA V.. | 4 | 1 | 2 | 3 |

Dimensions

All dimensions in mm

30   ~ 50   9M427 C

85

PG16

SW27

16

G1/2

External thread G½ to ISO228/1

ø 27

ø 6

100/400

30

ø 5