



Immersion temperature sensor

for HVAC systems

FT-TP/100
FT-TP/400

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

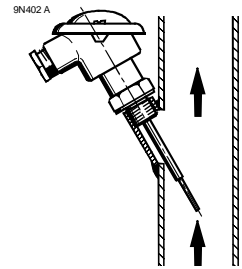
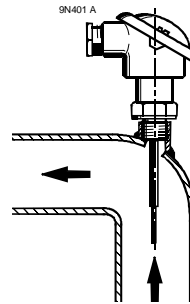
The Pt100 temperature sensor is fitted with a platinum measuring element with a positive temperature coefficient (PTC). The measured-signal/temperature relationship is linear. See data sheet 1714 for technical information on the Pt100 sensor element.

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 device is considered electrical and electronic equipment for disposal in terms of the applicable European Directive and may not be disposed of as domestic garbage.

- Dispose of the device via the channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

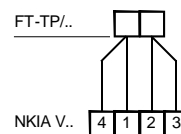
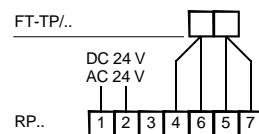
Technical data

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
EU conformity (CE)	A5W00040799 *)
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

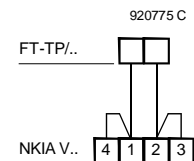
*) The documents can be downloaded from <http://siemens.com/bt/download>.

Connection diagrams

Four-wire connections

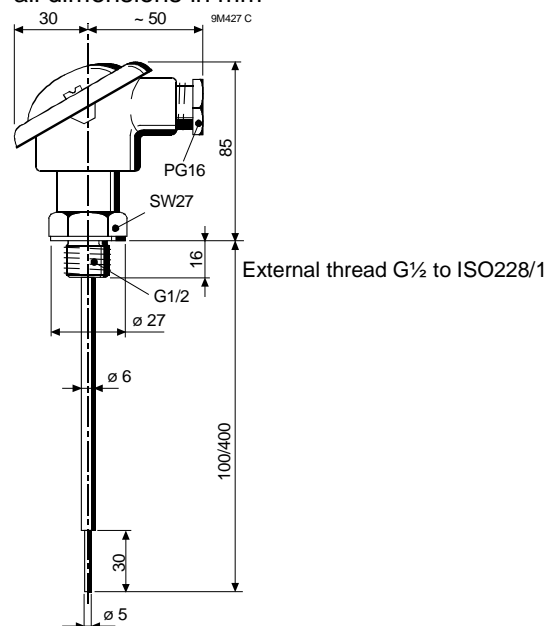


Two-wire connections



Dimensions

all dimensions in mm



Published by:
Siemens Switzerland Ltd.
Building Technologies Division
International Headquarters
Gubelstrasse 22
6301 Zug
Switzerland
Tel. +41 58-724 24 24
www.siemens.com/buildingtechnologies

© Siemens Switzerland Ltd 2001
Delivery and technical specifications subject to change