Duct temperature sensor FK-TP/200

for HVAC Systems

Duct 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 FK-TP/200 duct temperature sensor can be used in air ducts for heating, ventilation and air conditioning plants. It can be used 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.

Ordering

When placing an order, please specify the quantity, product description and type code.

Example:
2 duct temperature sensors FK-TP/200

Equipment combinations

The FK-TP/200 duct temperature sensor can be used with all controllers which can process the measured value from a Pt100 sensor, especially controllers from the MULTIREG and INTEGRAL RS ranges.

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.

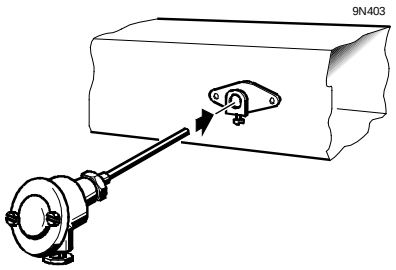
*) The documents can be downloaded from http://siemens.com/bt/download.

Mechanical design

The duct temperature sensor FK-TP/200 consists of a sensor probe with a connecting head and the inserted PT100 measuring element. The cable is connected via a PG16 cable gland.

Mounting notes

The duct sensor FK-TP/200 should be mounted in the middle of the air duct.
A mounting flange is supplied.
The PG16 screwed cable fitting should point downwards. (The cable must be connected downwards so that it leads away from the bottom.) The connecting cable must be long enough to allow mounting and dismounting of the connected sensor without loosening the cable connections.



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.

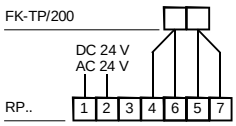
Technical data

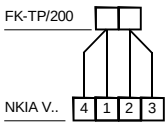
Measuring range	-70…+260 °C
Measuring element	Pt100 to IEC751, Class B
Response time (0.632-value)	< 100 s in air, moving at 1 m/s (to VDI/ VDE3522)
Suitable media	Air and mildly corrosive gases
Material	Cast aluminium
Probe	Stainless steel V4A (1.4571)
Flange	Yellow passivated steel plate, tinned
Electrical connection	2 screw terminals for max. 2.5 mm^2
Cable gland	PG 16
Temperature range	Max. temperature at connecting head 100 °C
EU conformity (CE)	A5W00040799 *)
Protection degree of housing	IP65 according to EN 60529
Protection class	III according to EN 60730-1
Weight (incl. packaging)	0.5 kg
Connecting head	Shape B to DIN43729
Sensor probe	Immersed length 200 mm
Probe diameter	6 mm
Wall thickness	Approx. 0.5 mm

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

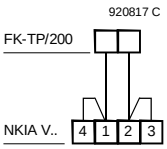
Connection diagrams

Four-wire connection



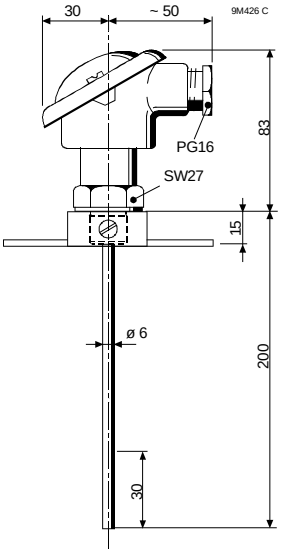


Two-wire connection

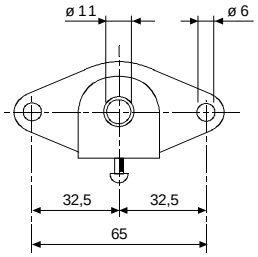


Dimensions

All dimensions in mm



Flange



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Siemens Switzerland Ltd
Smart Infrastructure
Global Headquarters
Theilerstrasse 1a
CH-6300 Zug
Tel. +41 58-724 24 24
www.siemens.com/buildingtechnologies

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