Contact Temperature Sensor VFG54

Product overview

For measuring temperature on pipes and arched surface. Designed for locking on to control and display systems.
Contact temperature sensor VFG54 includes connection housing and clamp.

Types available

Type code	Type	Description
EXT-TN-1070835	VFG54 PT100	Contact temperature sensor, PT100
EXT-TN-1066609	VFG54 NTC10k	Contact temperature sensor, NTC10k
EXT-TN-1072570	VFG54 NTC10kPre	Contact temperature sensor, NTC10k Precon

Technical data

Standards	CE conformity	- 2004/108/EG Electromagnetic compatibility - 2001/95/EG Product safety
	EN conformity	- EN60730-1:2002 EMC - EN60730-1:2002 Product safety
General data	Sensor bushing	Brass
	Enclosure	Polyamide, colour white
	Protection	IP65 according to EN60529
Type Sensor	Measuring elements	Sensor according to customer's request
	Measuring range	Depending on sensor used
	Accuracy	Depending on sensor used and wire length
	Measuring current	Typical <1mA
	Connection	2 pole (two wire) 3 pole (three wire) 4 pole (four wire) Terminal screw max 1.5mm²
	Cable entry	Single entry, M16 for cable max. D=8mm
	Ambient temperature	Enclosure -35...+90°C
	Weight	80g

Security advice ⚠

The installation and assembly of electrical equipment may only be performed by a skilled electrician.
The modules must not be used with equipment that supports, directly or indirectly, human health or life or with applications that can result in danger for people or animals.

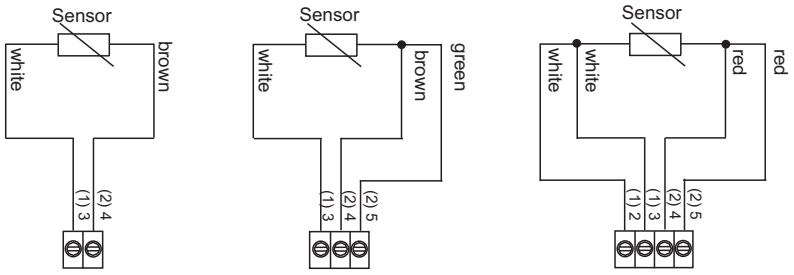
Mounting advice

Fixing by tightening strap. Use contact fluid for better heat transfer between sensor and measuring medium. To avoid permeation of condensate, mount sensor on top of the tube, if possible.

Electrical connection

The devices are constructed for the operation of protective low voltage (SELV). For the electrical connection, the technical data of the corresponding device is valid. With regard to passive sensors (e.g. PT100 etc.) in 2 wire conductor versions, the wire resistance of the supply wire has to be considered. It is likely that the same has to be compensated by the following electronics. Due to the self heating, the wire current affects the accuracy of the measurement. Therefore it should not exceed 1mA.
Sensing devices with transducers should in principle be operated in the middle of the measuring range to avoid deviations at the measuring end points. The ambient temperature of the transducer electronics should be kept constant.
The transducers must be operated at a constant supply voltage (±0.2V). When switching the supply voltage on/off, power surges must be avoided on site.
The adjustment of the measuring ranges is made by changing the bonding jumpers (see terminal connection diagram). The output value in the new measuring range is available after approximately 2 seconds.

Terminal connection plan



2 wire 3 wire 4 wire

⚠ Caution

With electronic sensors such as AD592, SMT160, LM235, DS1820 the following applies : brown = plus (+), white = minus (-), green = out

Dimensions (mm)