

HFTM

Cable temperature sensors - active



Summary

The HFTM temperature sensors are active cable sensors. They provide output signal 0...10V or 4...20 mA DC.

Applications

- HVAC systems – pipe or air duct temperature measuring
- media temperature monitoring and logging

Functions

The sensor uses a Pt1000 sensing element (EN 60751, Class B), the signal of which is processed, converted to voltage or current and available at the screw terminals. Other temperature ranges are optional (see table). Do not exceed maximum environment temperature!

The sensors are intended for operating in an outdoor or industry environment. They do not need any servicing or maintenance and can be mounted in any position. For mounting in pipe is used immersion sleeve. In air duct is used mounting flange (KRD-04).

Technical data

Power	24 V AC/DC \pm 10 % for output 0-10 V 15–36 V DC for output 4...20 mA (depending on working resistance)
Measuring ranges	multi-range switching via DIP switch see below
Load	-U: min. 5 k Ω -I: max. 500 Ω (at 24V; $R=(U-14 V)/0.02 A$)
Environment temperature (measuring transducer) Protection class	-30...70 °C IP65 according to EN 60529, humidity-tight optional IP68, water-tight
Terminals	screw terminals for wires 0,14 – 1,5 mm ²
Cable	1.5 m, silicone up to 150 °C (optional teflon up to 250 °C or glass fibre with steel wire mesh up to 350 °C)

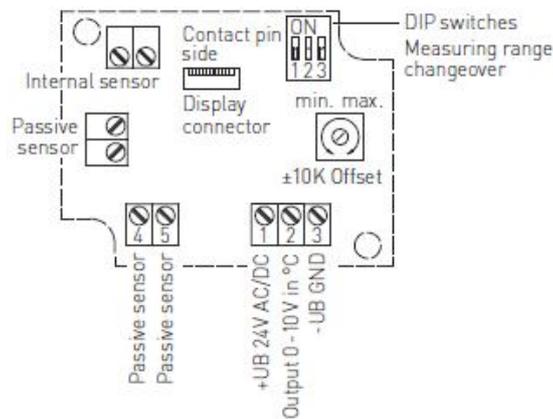
Protection tube	stainless steel, 1.4571, V4A Ø=6 mm, nominal length NL=50 mm
Cable gland	M16 x 1.5; inner diameter 10,4 mm with strain relief
Cover	polyamide, 30% glass-globe-reinforced
Humidity	< 95 % r. H., non-precipitating air
Accessories	optional single-line display with illumination, 36x15 mm
Dimensions	see below

Sensor types

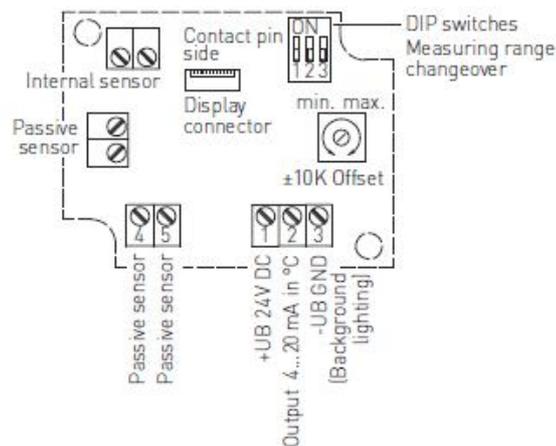
Type	Output
HFTM1-U	0...10 V
HFTM1-I	4...20 mA
HFTM2-U-DISPLAY	0...10 V
HFTM2-I-DISPLAY	4...20 mA

Terminals

HFTM-U



HFTM-I



Measuring ranges (adjustable)	DIP 1	DIP 2	DIP 3
-20°C...150°C	ON	ON	ON
-50°C...50°C	OFF	ON	ON
-20°C...80°C	ON	OFF	ON
-30°C...60°C	OFF	OFF	ON
0°C...40°C	ON	ON	OFF
0°C...50°C	OFF	ON	OFF
0°C...100°C	ON	OFF	OFF
0°C...150°C	OFF	OFF	OFF

Dimensions

