

Condensation-protected duct (including mounting flange)
 respectively on-wall humidity and temperature sensors for "high humidity",
 calibrateable, with active output

Series HYGRASGARD® KFTF - 35 / AFTF - 35 humidity sensors (heated humidity measuring system) are used for measuring the relative humidity (particularly in the high-humidity range) and temperature of ambient air and convert these measured values into standard signals of 0 - 10V.

These humidity sensors are to be operated in pollutant-free air. The sensor (sensor element) is warmed by a "heater" ca. 2K above ambient temperature, thus avoiding condensation building up at the sensor element even in the upper humidity range (high-humidity range). These sensors are designed for wall mounting or for duct installation.

TECHNICAL DATA:

Power supply: 24 V AC / DC

Current consumption: max. 100 mA when heating

Power consumption: < 3 VA / 24V DC; when heating

Sensors: **digital humidity sensor with integrated temperature sensor**,
 dew-proof, small hysteresis,
 high long-term stability ± 1% per year

Sensor protection: **metal sinter filter**, exchangeable

HUMIDITY:

Measuring range, humidity: ... 0 ... 100% r. H.

Operating range, humidity: ... 10 ... 99% r. H. (probe), 10 ... 95% r. H. (enclosure)

Deviation, humidity: ± 2% r. H. (40...60%) at +20 °C,
 otherwise ± 3% r. H.

Output, humidity: 0 -10 V

TEMPERATURE:

Measuring range,
 temperature: 0 ... +50 °C

Operating range, (optional: -20 ... +80 °C)

temperature: 0 ... +50 °C

Deviation, temperature: ± 0.5K at +20 °C

Output, temperature: 0 - 10V

Ambient temperature: storage -25 ... +60 °C,
 operation -5 ... +55 °C

Electrical connection: 3- or 4-wire connection (see connecting diagram),
 0.14 - 1.5 mm², via terminal screws on circuit board

Enclosure: plastic, material polyamide, 30% glass-globe-reinforced,
 with quick-locking screws (slotted / Phillips head combination),
 colour pure white (similar RAL 9010)

Dimensions: 108 x 70 x 73.5 mm (Thor II)

Cable gland: M 16 x 1.5, including strain relief, exchangeable,
 max. inner diameter 10.4 mm

Protective tube: **stainless steel**, Ø 16 mm,
KFTF - 35: nominal length NL = 210 mm
AFTF - 35: nominal length NL = 55 mm

Process connection: **KFTF - 35**: by mounting flange, plastic
 (included in the scope of delivery) (galvanised steel optional)
AFTF - 35: by screws

Protection class: III (according to EN 60 730)

Protection type: IP65 (according to EN 60 529)

Standards: CE conformity, electromagnetic compatibility
 according to EN 61 326 + A1 + A2,
 EMC directive 2004 / 108 / EC

Optional: **illuminated single line display**,
 cutout 36 x 15 mm (W x H),
 alternating to display actual temperature
 and actual humidity

KFTF - 35



AFTF - 35

Connecting diagram

KFTF - 35 - U
AFTF - 35 - U

- 1 GND
- 2 UB+ supply voltage 24V AC/DC
- 3 Not used (optional dew point)
- 4 Rel. humidity r.H. 0-10V
- 5 Temperature in °C 0-10V
- 6 GND

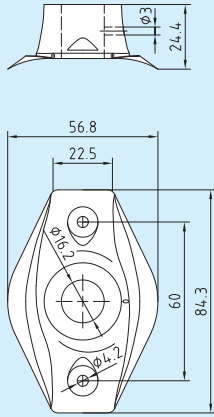


S+S REGELTECHNIK

HYGRASGARD® **KFTF-35**
HYGRASGARD® **AFTF-35**

Condensation-protected duct (including mounting flange) respectively on-wall humidity and temperature sensors for "high humidity", calibrateable, with active output

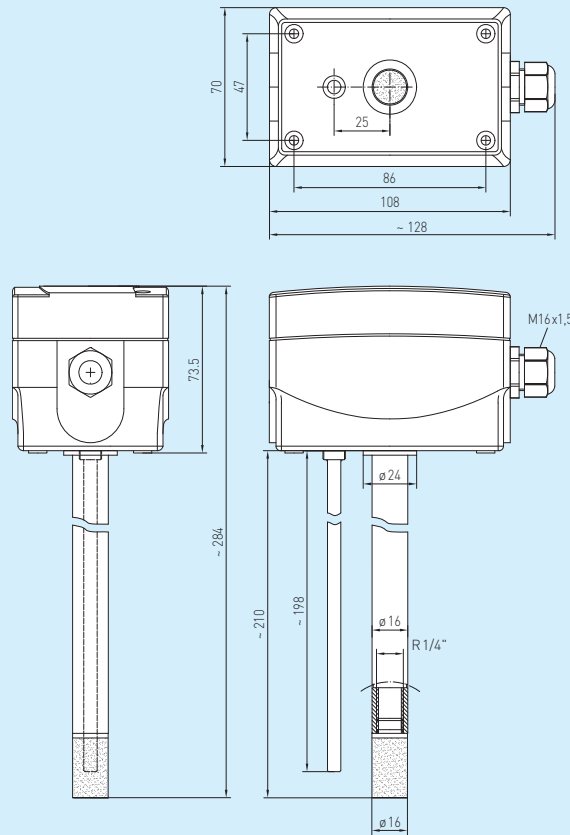
Dimensional drawing **MF-16-K**



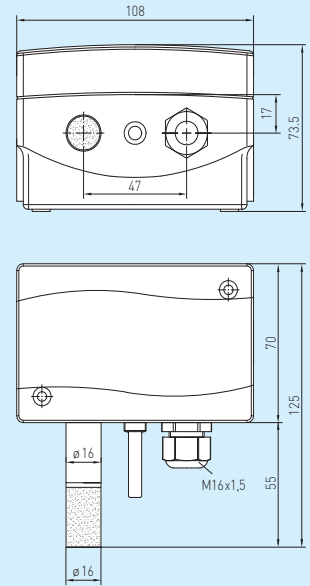
MF-16-K
Mounting flange,
plastic



Dimensional drawing **KFTF-35**



Dimensional drawing **AFTF-35**



AFTF-35
with display

HYGRASGARD® **KFTF-35**, including mounting flange
HYGRASGARD® **AFTF-35**

Type / WG1 Designation	Measuring Range / Readout		Output		Display	Item No.
	Humidity	Temperature	Humidity	Temperature		
KFTF-35-U						U-variant
KFTF-35-U	0...100% r.H.	0...+50 °C	0-10V	0-10V		1201-3141-1000-000
KFTF-35-U_DISPLAY	0...100% r.H.	0...+50 °C	0-10V	0-10V	■	1201-3141-1100-000
AFTF-35-U						U-variant
AFTF-35-U	0...100% r.H.	0...+50 °C	0-10V	0-10V		1201-1141-1000-000
AFTF-35-U_DISPLAY	0...100% r.H.	0...+50 °C	0-10V	0-10V	■	1201-1141-1100-000

Extra charge: Other non-standard ranges optional (Dew point temperature 0...+50 °C, Mixture ratio, absolute Humidity)