



**Transmitter PFT22K  
as duct-mounting**



**Transmitter PFT22R  
as room sensor with 2 x 0...10 V output**



**Transmitter PFT22R  
as room sensor with 2 x 4...20 mA output**

- ❑ Measuring temperature and relative humidity with a „single-chip“-sensor
- ❑ Digital transmission from sensor to the evaluation electronics
- ❑ Operational use temperature -40...+120 °C
- ❑ Operational use humidity 0...100 %
- ❑ Analog outputs 0...10 V or 4...20 mA
- ❑ Sensor interchangeability without need for re-calibration

Humidity-/temperature transmitter in three different cases: for duct-mounting, as outdoor-sensor or room sensor. Output signals 0...10 V in 3-wire technology or 4...20 mA in 2-wire technology.

#### TECHNICAL SPECIFICATIONS:

Operating mode:	Measuring mode
Measured material:	Temperature and humidity
Sensor:	Single-chip sensor for humidity and temperature with digital signal transmission and calibration memory on the chip
Measuring unit:	Temperature in ° C; relative humidity in %
Output signal 1:	Temperature
Output signal 2:	Relative humidity

#### TEMPERATURE FEATURES:

Resolution:	14 bit
Response time:	Approx. 20 Sekunden
Reproducibility:	± 0,1 °C
Tolerance:	±0,5 °C at 25 °C; ±2 °C at -40 °C, ±3 °C at +120 °C; narrower tolerance possible
Measuring ranges:	-40...0...+120 °C; -30...0...+70 °C; 0...100 °C; 0...50 °C
Measuring range selection:	4 selectable measuring ranges via DIP switch
Characteristics:	Linear

#### HUMIDITY FEATURES:

Resolution:	12 bit
Response time:	Approx. 4 seconds (63 %-time, slightly moving air)
Reproducibility:	Typical < 1 % r.h. / year
Tolerance:	± 0,1 % r.h.
Measuring range:	0...100 % relative humidity
Characteristics:	Linear (digital linearization)

#### PHYSICALLY:

Dimensions:	See drawings
Connection head:	Plastic ABS
Electrical connection:	7 Connection terminals

#### Channel sensor

Sensor tube: stainless steel, 11 mm ø  
Protection class: IP 65 according to EN 60529  
Cable gland: M16 x 1.5

#### Outdoor sensor

Sensor tube: double-walled sensor tube with wall holder  
Protection class: IP 65 according to EN 60529  
Cable gland: M16x1.5

#### Room sensor

Plastic housing for mounting on a flush-mounted switch box or surface-mounted wall mounting

#### ELECTRONIC:

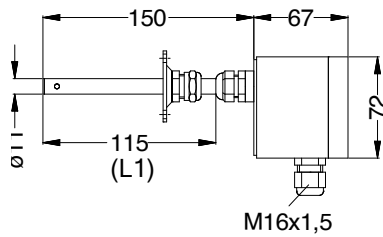
Power supply:	15 ... 30 Vdc or 24 Vac in three-wire circuit; 13 ... 30 Vdc in two-wire circuit
Output current:	2 x 0 ... 10 V in three-wire circuit; 2 x 4 ... 20 mA in two-wire circuit

#### CONFORMITY:

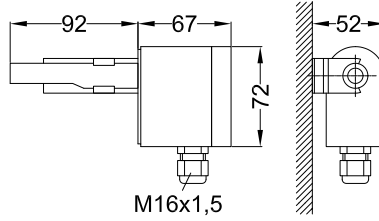
EMC:	EN 61000-6-2, EN 61000-6-3, CE-mark
RoHS:	according RoHS-directive 2011/65/EU

# HUMIDITY & TEMPERATURE TRANSMITTER PFT22

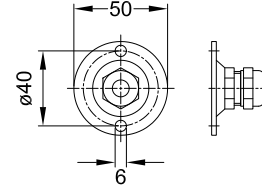
Dimensions (mm) PFT 22K



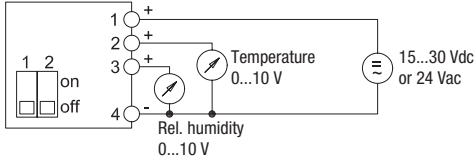
Dimensions (mm) PFT 22A



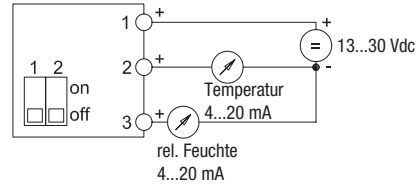
Mounting flange MF-M90



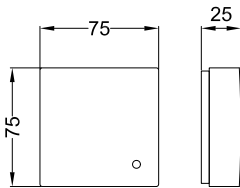
Connections - 2 x supply voltage



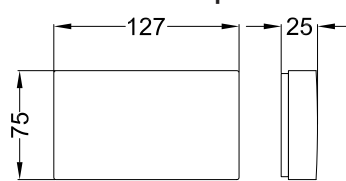
Connections - 2 x power output



Dimensions (mm) PFT 22R with 0...10 V output



Dimensions (mm) PFT 22R with 4...20 mA output



Selectable temperature measuring range

DIP-switch	Range
1off 2off	-40...0...+120 °C
1on 2off	-30...0...+ 70 °C
1off 2on	0...100 °C
1on 2on	0...50 °C

Item no.

## Humidity & temperature transmitter PFT22K as duct sensor

Measuring range humidity: 0...100 % relative humidity  
 Measuring range temperature: -40...0...+120 °C, -30...0...+70 °C, 0...100 °C, 0...50 °C selectable via DIP-switch **(Customer-specific presetting required!)**  
 Housing: plastic ABS light grey, protection class IP 65 according EN 60529, tube stainless steel  
 Accessories: mounting flange

### Output: 2 x 0...10 V, 3-wire technology

Supply voltage: 15...30 Vdc or 24 Vac

7290

### Output: 2 x 4...20 mA, 2-wire technology

Supply voltage: 13...30 Vdc

7291

## Humidity & temperature transmitter PFT22A as outdoor sensor

Measuring range humidity: 0...100 % RH  
 Measuring range temperature: -40...0...+120 °C, -30...0...+70 °C, 0...100 °C, 0...50 °C selectable via DIP-switch **(Customer-specific presetting required!)**  
 Housing: plastic ABS light grey, protection class IP 65 according EN 60529, tube stainless steel  
 Accessories: wall bracket

### Output: 2 x 0...10 V, 3-wire technology

Supply voltage: 15...30 Vdc or 24 Vac

7292

### Output: 2 x 4...20 mA, 2-wire technology

Supply voltage: 13...30 Vdc

7293

## Humidity & temperature transmitter PFT22R as room sensor

Measuring range humidity: 0...100 % RH  
 Measuring range temperature: -40...0...+120 °C, -30...0...+70 °C, 0...100 °C, 0...50 °C selectable via DIP-switch **(Customer-specific presetting required!)**

### Output: 2 x 0...10 V, 3-wire technology

Supply voltage: 15...30 Vdc or 24 Vac;

Housing: plastic 72 x 72 mm for wall mounting or mounting on a flush-mounting box

7294

### Output: 2 x 4...20 mA, 2-wire technology

Supply voltage: 13...30 Vdc

Housing: plastic 72 x 72 mm for wall mounting or mounting on a flush-mounting box

7295

## SURCHARGE

### Calibrated replacement sensor plugged, ready

72190

### Replacement sensor with a narrow tolerance

72191

### Extra charge for sensor with a narrow tolerance

72192

### Special length L1

**Customer-specific presetting required!**

72193