

Product Information

Humidity transmitter RF90

Dimensions / connection diagrams

Rod shape



Wall mounting



Duct mounting



- Capacity measurement for non aggressive gases
- Analogue outputs 4..20 mA or 0..10 V DC
- Good dynamic performance
- Resistance against dew formation
- Operating temperature -20..80 °C

Characteristics

Humidity-/temperature sensors of the series RF compact, versatile sensors in a rod-type design. They are available with a 1.5 m connecting cable without cable (or with a robust aluminum connecting head and terminal screws for measuring relative humidity, relative humidity and temperature or temperature in air and other non-aggressive gases. The advantages of the series RF are its improved dynamics, in particular at low air speeds and also its increased service life.

For extreme applications (near the sea, desert, mountains, areas with high air speed etc.) we recommend our stainless steel sinter filter

Technical data

Power supply

Supply voltage : 12..30 V DC
 Current output : 12..30 V DC
 Voltage output : 24 V DC ±10 %
 Operating temperature : -1,-3 : -30..+70 °C
 : -2 : -20..+80 °C

Ambient temperature : -40..+80 °C
 CE-conformity : EN 61326-2-3

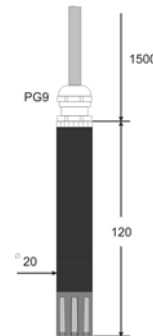
Output

Humidity : 4..20 mA or 0..10 V DC
 Measuring range : 0..100 % r.h.
 Measuring element : FE09/1
 Accuracy : ±2 % r.h.
 Temperature : 4..20 mA or 0..10 V DC
 Measuring range : -30..+70 °C
 Measuring element : Pt100 class B
 Accuracy : ±0.3 K
 Burden current : 500 Ω at 24 V DC
 Load voltage : ≥10 kΩ
 Measuring delay : 60 s at airspeed 1 m/s
 for humidity and temperature

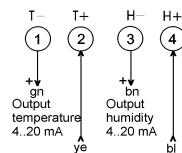
Protection class

Sensor : IP30 (standard with gauze filter)
 Case : IP54
 Terminal head : IP65
 Dew formation and splashes do not damage the sensor

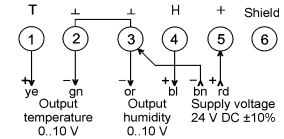
RF90-1-X



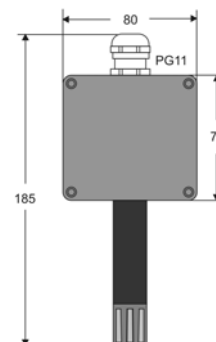
2-wire 4..20 mA



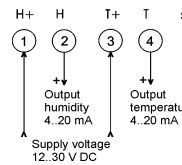
3-wire 0..10 V DC



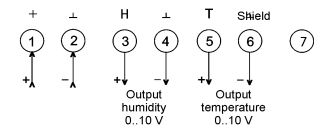
RF90-2-X



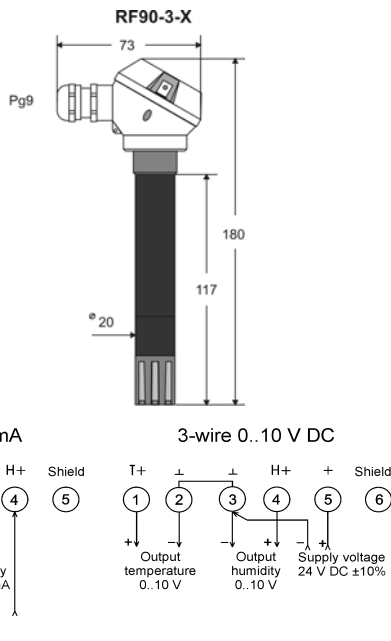
2-wire 4..20 mA



3-wire 0..10 V DC



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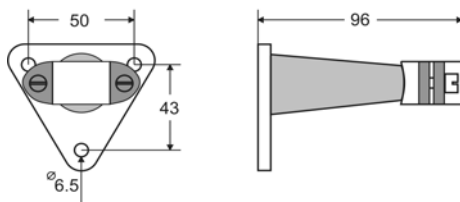
Ordering code

RF90 - 1. - 2.

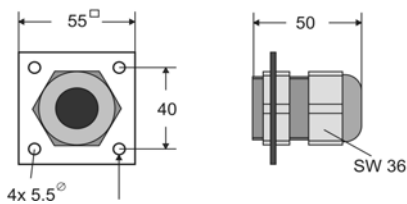
1. Model	
1	rod shape with 1.5 m connection cable
2	wall mounting
3	duct mounting
2. Output	
1	rel. humidity 0..10 V DC
2	rel. humidity 4..20 mA
3	rel. humidity & temperature 0..10 V DC
4	rel. humidity & temperature 4..20 mA
Accessories	
B90	attachment plate
W90	console for wall mounting
F90	protection filter sintered (for dust ambient)
FG90	protection filter Goretex (for outdoor using)

Accessories

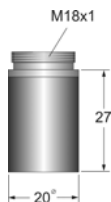
Console for wall mounting W90



Attachment plate B90



Protective basket F90
stainless steel sinter filter



Protective basket FG90
gauze filter

