

# HYGROFLEX3-SERIES



## SHORT INSTRUCTION MANUAL

### Digital transmitter for humidity & temperature: Wall Version

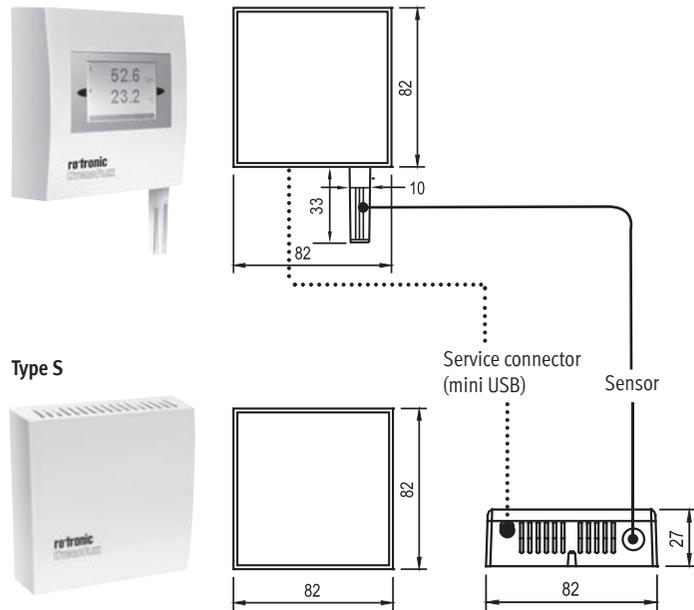
Congratulations on your purchase of the new state-of-the-art HygroFlex3-series transmitter. Please read these short instructions carefully before installing the device.

#### General description

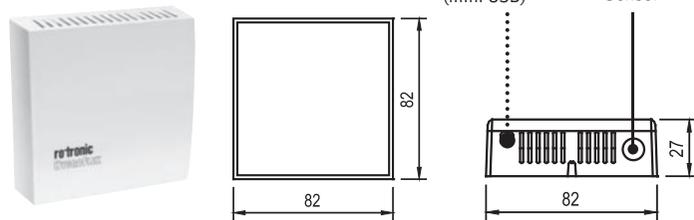
The HygroFlex3-series devices are universal transmitters for transmission of humidity and temperature measurements. These short instructions are limited to a description of the main functions and installation of the device. The detailed instruction manual can be found on the internet at: [www.rotronic.com](http://www.rotronic.com)

#### Dimensions / Connections

##### Type R



##### Type S



#### Mechanical installation



**Caution:** In order to get correct measurement values, the sensor must be installed in a way that the air flows around the sensor.

1. Remove the montage plate by drilling out the screws.
2. Mount the mounting plate to the wall by using 2 or 4 screws.

#### Electrical installation

##### Supply voltage / Technology

Type	Supply voltage V+	Output
<b>2- or 2x2-wire</b>		
HF320-	10...28 VDC: 10 V + (0.02 x load)	4...20 mA
<b>3 / 4-wire</b>		
HF331	18...40 VDC / 13...28 VAC	0...20 mA
HF332	18...40 VDC / 13...28 VAC	4...20 mA
HF333	6...40 VDC / 5...28 VAC	0...1 V
HF334	10...40 VDC / 8...28 VAC	0...5 V
HF335	18...40 VDC / 13...28 VAC	0...10 V



**Caution:** Wrong supply voltages and excessively high loading of the outputs can damage the transmitter.

##### Terminal configuration / Connection diagrams

The type is defined using the table «Supply voltage / Technology» to then use the following connection diagrams:

**2- or 2x2-wire / HF320**

Terminal	Schematics	Description
1	V+	Supply voltage +
2	T- OUT	Analogue temperature output +
3	V+	Supply voltage +
4	H- OUT	Analogue humidity or dew point output +
5 & 6	Not connected	

**3 / 4-wire circuit / HF33x**

Terminal	Schematics	Description
1	V+	Supply voltage +/Phase
2	GND	GND / Neutral
3	OUT1	Analogue humidity or dew point output +
4	OUT2	Analogue temperature output +
5 & 6	Not connected	

#### Programming

The basic settings of the devices are made in the factory according to your order. The transmitters are adjusted in the factory and therefore do not need to be checked and readjusted during installation. The devices can be started immediately after installation.

#### Display

In models with LC display the value can be read directly.



#### Measurement-End-Indicators

- ▲ Increasing value (End value is not reached yet)
- ▼ Decreasing value (End value is not reached yet)
- ◆ Constant value (End value is reached)

#### Scaling / Adjustment / Firmware update

The following settings can be made with the help of the HW4 software and either the service cable AC3006 or AC3009:

- new scaling of the outputs
- adjustment
- firmware update

You can find a detailed description in the manual that you can download from our web site at: [www.rotronic-humidity.com](http://www.rotronic-humidity.com)

#### Technical data (operation & measurement)

Humidity:	0...100 %rh
Temperature:	Type S: -40...60 °C, without display Type R: -10...60 °C, with display
Accuracy:	Type R: ± 1.0 %rh / Type S: ± 2 %rh, ± 0.3 K @ 23°C
Protection:	IP20
Outputs:	Current or voltage signals depending on order code, UART service interface

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