

# Humidity Sensors Type 5232 and Type 5242

## Hygrostats Type 340 and Type 5325



### Application

Instruments for measuring and controlling relative and absolute humidity in ventilation and air-conditioning systems.



### Humidity sensors

Sensors for measuring relative humidity in the range of 0 to 100 %.

#### Versions

**Type 5232-5** · Duct humidity sensor with transmitter; output 0 to 20 mA and 0 to 10 V.

**Type 5242-5** · Room humidity sensor with transmitter; output 0 to 10 V.

### Hygrostats

Instruments for controlling and monitoring relative humidity in the range of 30 to 90 % in air ducts or closed rooms.

#### Versions

**Type 340** · Room hygrostat with one changeover switch

**Type 5325** · Duct hygrostat with one changeover switch

### Ordering text

Humidity Sensor Type ..., output 0 to 10 V/0 to 20 mA

Hygrostat Type ...

Optional accessories

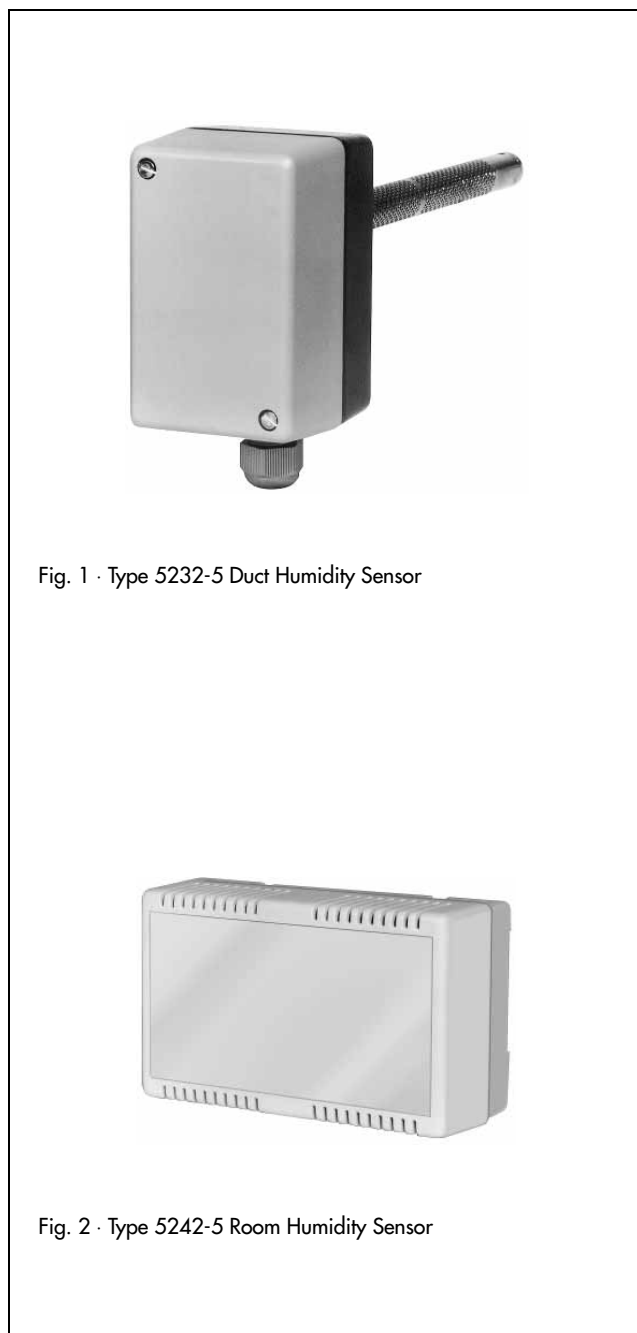


Fig. 1 · Type 5232-5 Duct Humidity Sensor

Fig. 2 · Type 5242-5 Room Humidity Sensor

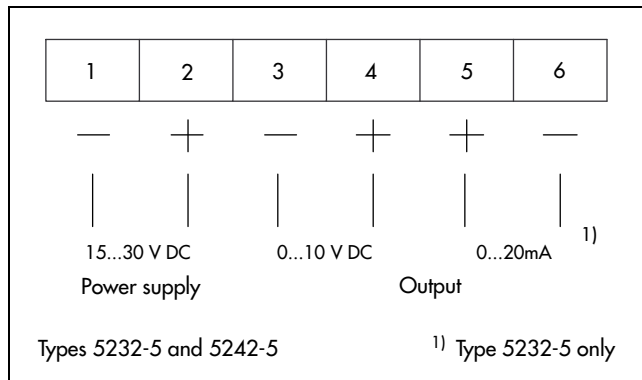
## Technical data

### Type 5232 and Type 5242 Humidity Sensors

Type	Duct humidity sensor <b>5232-5</b>	Room humidity sensor <b>5242-5</b>
Measuring range	0 to 100 % relative humidity	
Operating range	30 to 100 % relative humidity	
Measuring accuracy	> 40 % rh: $\pm 2.5$ % rh; < 40 % rh: $\pm 3.5$ % rh	
Output	0 to 20 mA/ 0 to 10 V	0 to 10 V
Supply voltage	15 to 30 V –	24 V –
Perm. ambient temperature	0 to 50 °C	
At the sensor tube	-20 to +80 °C	–
Perm. air velocity	8 m/s	–
Temperature coefficient	0.1 % rh/K related to 20 °C and 50 % rh	
<b>Materials</b>		
Measuring element	Plastics fabric strap	
Housing	Die-cast aluminium with polycarbonate cover	Impact-resistant plastics
Sensor tube	Brass, nickel-plated	–
Degree of protection	Housing IP 54	Sensor tube IP 20
Weight	approx. kg 0.7	0.3

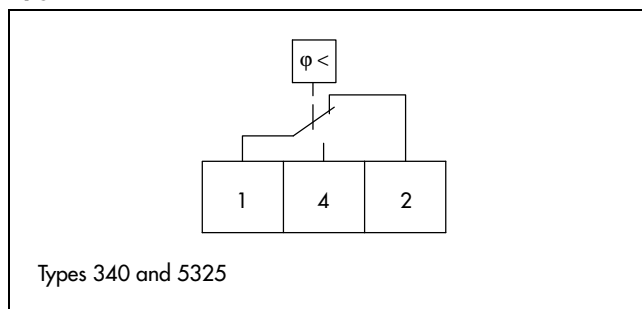
## Electrical connection

### Humidity sensors



The supply line ( $\geq 1 \text{ mm}^2$ ) between humidity sensor and power supply unit should not be longer than 100 m. The connecting wires ( $\geq 1 \text{ mm}^2$ ) between sensor and controller are to be installed separately from the control lines.

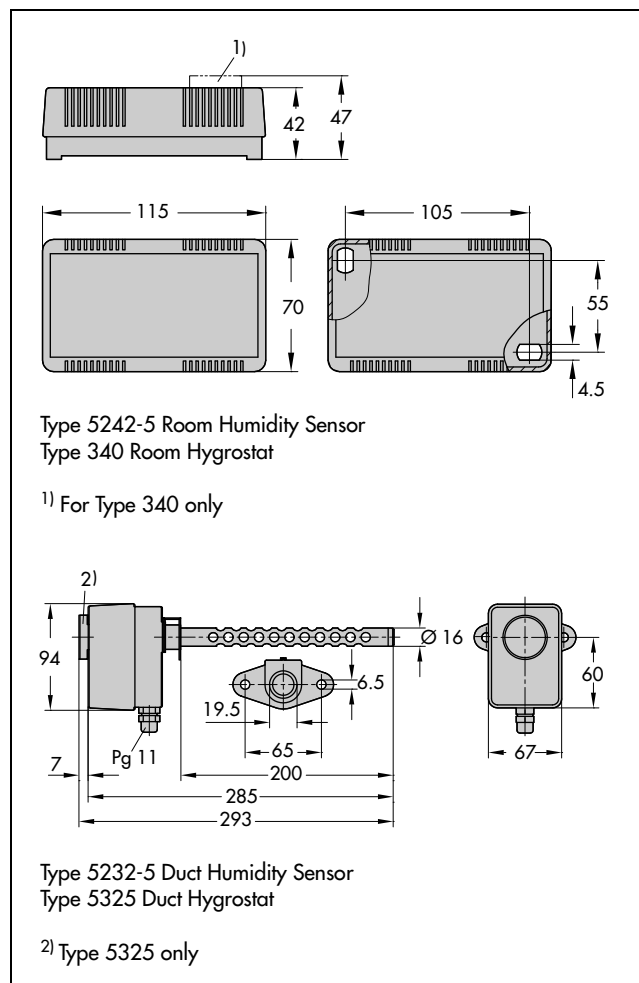
### Hygrostats



### Type 340 and Type 5325 Hygrostats

Type	Room hygrostat <b>340</b>	Duct hygrostat <b>5325</b>
Measuring range	30 to 90 % relative humidity	
Control precision	$\pm 3$ % relative humidity	
Switching capacity	For 250 V ~: 15 A, with $\cos \varphi = 0.7$ : 2 A in moist spaces max. 24 V = ~	
Switching hysteresis approx.	4 % rh	
Operating temperature range	0 to 60 °C	
Weight approx. kg	0.5	0.6

## Dimensions



Specifications subject to change without notice.

