

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

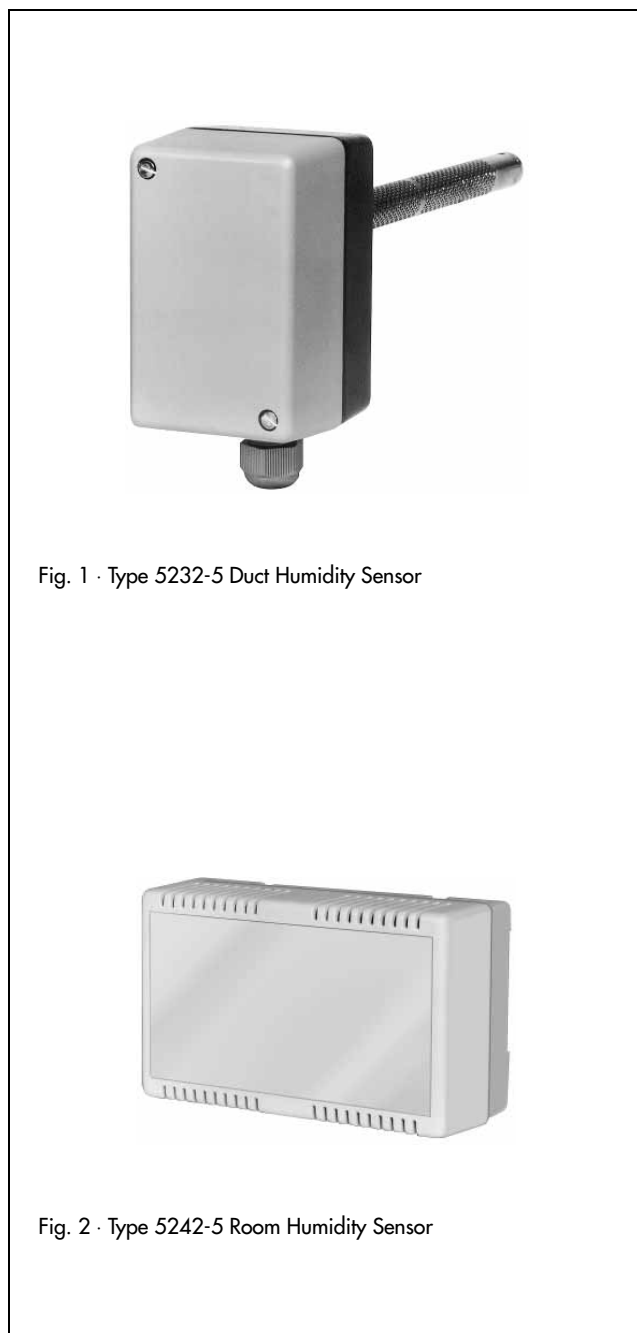


Fig. 1 · Type 5232-5 Duct Humidity Sensor

Fig. 2 · Type 5242-5 Room Humidity Sensor

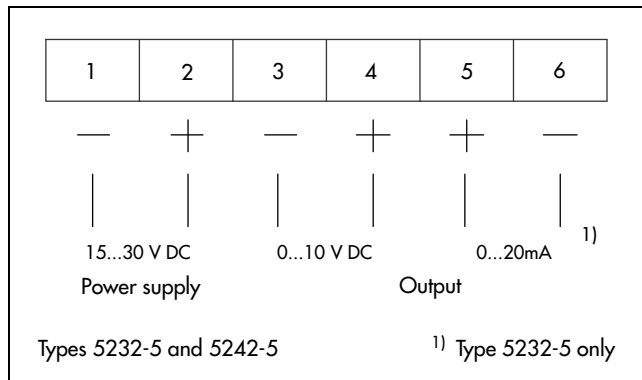
Technical data

Type 5232 and Type 5242 Humidity Sensors

Type	Duct humidity sensor 5232-5	Room humidity sensor 5242-5
Measuring range	0 to 100 % relative humidity	
Operating range	30 to 100 % relative humidity	
Measuring accuracy	> 40 % rh: ± 2.5 % rh; < 40 % rh: ± 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	
Materials		
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

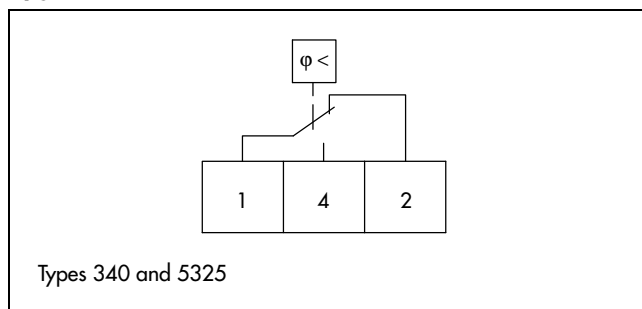
Electrical connection

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.

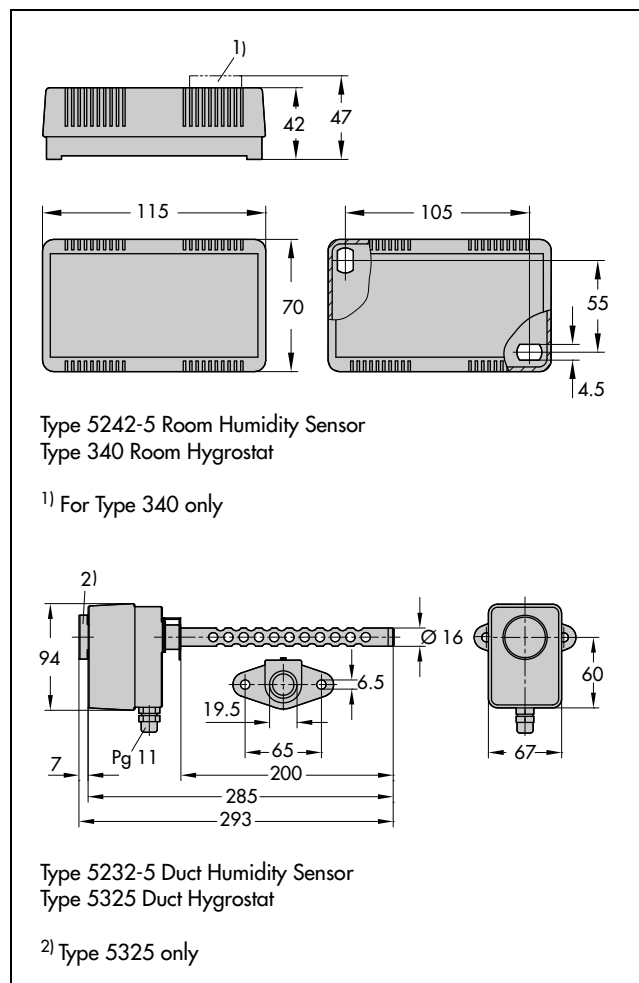
Hygrostats



Type 340 and Type 5325 Hygrostats

Type	Room hygrostat 340	Duct hygrostat 5325
Measuring range	30 to 90 % relative humidity	
Control precision	± 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.

