

### 3-wire Relative Humidity Transmitters RHS

- ◆ **Very low cost**
- ◆ **Voltage output signal**
- ◆ **A temperature sensor may be built in optionally**
- ◆ **Fast mounting variant**

RHS series transmitters by COMECO measure **relative humidity** of air and non-aggressive gases at atmospheric pressure and transform it into standard **voltage output signal**. These transducers use polymer-folio or thin film sensors, whose capacitance varies proportionally to medium relative humidity. An additional platinum temperature sensor may be built in for measurement of both medium relative humidity and temperature. RHS transmitters are available in three modifications with different cases, mounting and wiring:

- cable electrical output
- terminals in a protective head type "B"
- DIN 5 pin connector

The first two variants provide **high environment protection** and the third one allows **fast mounting**. Due to their simple and straightforward design and their **low price** RHS transmitters are widely used in air conditioning and food industry.



RH

#### Technical specifications

##### Input

<b>RH sensor (folio type)</b>	10 to 90 %RH
<b>Pt100/500/1000 (w=1.385)</b>	0 to +60 °C (option)

##### Output

<b>Output type</b>	Voltage
<b>Output range</b>	0 to 1 VDC
<b>Linearity</b>	to measured value

##### Accuracy

<b>Measurement error for RH</b>	3.0 % from span
<b>Non-linearity</b>	within measurement error
<b>Temperature drift</b>	0.1 % from span for 1 °C
<b>Measurement error for T</b>	0.5 % from span

<sup>(1)</sup> Also free (hanging) mounting (without flange).

##### Power supply

<b>Voltage</b>	12 VDC
<b>Admissible variations</b>	1 Vp-p @ 50Hz

##### Operating conditions

<b>Medium temperature (for the sensor near the flange)</b>	0 to 50 °C
<b>Ambient temperature</b>	-10 to 40 °C

##### Design and materials

<b>Casing material</b>	Aluminum
<b>Mounting</b>	In hole <sup>(1)</sup>
<b>Other specifications</b>	See tables below

Model	A	B	C
<b>Specification</b>			
<b>Dimensions [mm] <sup>(2)</sup></b>	Ø20x170	230x75x60	Ø20x205
<b>Wiring</b>	PVC cable, length 1m <sup>(3)</sup>	Screw-type terminals inside "B" head	5-pin connector
<b>Weight (without cable)</b>	110 g	220 g	120 g
<b>Protection: (except sensor)</b>	IP 65	IP 56	IP 40
<b>Ambient humidity</b>	0 to 98 % RH	0 to 98 % RH	0 to 70 % RH

<sup>(2)</sup> Without cable and flange, but with connector and head.

<sup>(3)</sup> Other cable lengths are available on request.

#### Ordering code



**RHS\* - G12 - #1#2**

Code	Feature or option	Code values
<b>*</b>	Variant (Model)	<b>A</b> - with cable, <b>B</b> - with head, <b>C</b> - with connector
<b>G12</b>	Mounting	<b>X</b> - for free mounting (hanging), <b>A</b> - for mounting in hole (additional flange)
<b>#1</b>	Option - thin film sensor	<b>X</b> - none, <b>T</b> - thin film sensor
<b>#2</b>	Medium temperature sensor	<b>X</b> - none, <b>D</b> - Pt100, <b>F</b> - Pt500, <b>G</b> - Pt1000

