

# DOL 104 Humidity Sensor



Climate sensor for measuring relative humidity.

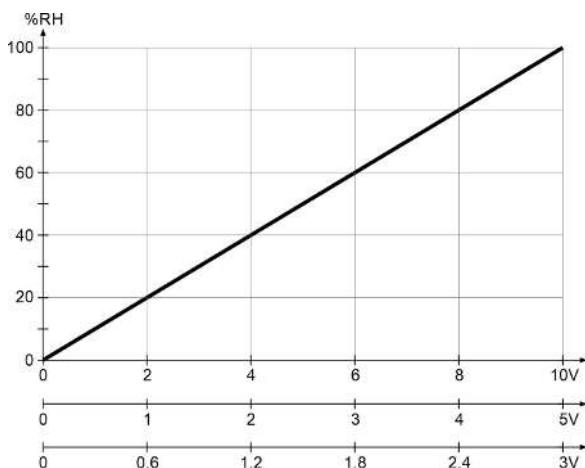
DOL 104 is a high-precision sensor for measuring relative humidity. It is intended for use in livestock houses but is also well suited for a number of industrial applications.

The sensor has an analogue output with a very low output resistance and full protection against short-circuits and wiring failures.

The special sensor element and the built-in filter enable application in livestock houses with constantly high humidity. The sensor comes with a cable. The cable can be supplied with a specially adapted specification area upon agreement.

The sensor is microprocessor-controlled and has a two-color light emitting diode (LED) to communicate the operation status and the error diagnostic.

## Functional graph



## Dimensions (mm)



## Product survey



**140263 DOL 104 humidity sensor 0-10 V**

**140274 DOL 104 humidity sensor 0-5 V**

**140275 DOL 104 humidity sensor 0-3 V**

The DOL 104 comes with a protective cap.



**140298 DOL 114 protective cap (5 pcs).**

Kit including extra protection caps. Used for DOL 114 and DOL 104.

In connection with cleaning and disinfection of the livestock house, the sensor must be protected by a protection cap.



**380101 Bracket for DOL 16/104/114**

Mounting brackets are used if the sensor is to be mounted in an accurate position.

## Technical data

Measuring range	% RH	0 - 100
Accuracy	% RH	0-10 V $\pm 2\%$ RH (40–85 %) $\pm 3\%$ RH (10-95 %) at 0-40 °C 0-5 V $\pm 3\%$ RH (40–85 %) $\pm 4\%$ RH (10-95 %) at 0-40 °C 0-3 V $\pm 3\%$ RH (40–85 %) $\pm 4\%$ RH (10-95 %) at 0-40 °C
Output signal	V	0-10 V 0.1 V / % RH 0-5 V 0.05 V / % RH 0-3 V 0.03 V / % RH
Time constant	T <sub>63</sub>	20 s at 0.5 m/s air speed
Supply voltage	V DC	11 – 30
Current	mA	12 mA no load 35 mA max. load
Load	Ω	> 500 Ω - < 10 MΩ
Recommended load	kΩ	≥ 100
Output current	mA	20 (current limited)
Output impedance	Ω	< 1
Cable		2 m 3 x 22 AWG / 0.34 mm <sup>2</sup>
Max. cable length		100 m 0.75 mm <sup>2</sup> 200 m 1.50 mm <sup>2</sup>
Temperature, operation and storage	°C	-40 to +60
Protection class	IP	67
Measurement, shipment	mm	275 × 200 × 20
Shipment weight ex. connector	g	150