

DOL 104 Humidity Sensor



Climate sensor for measuring relative humidity.

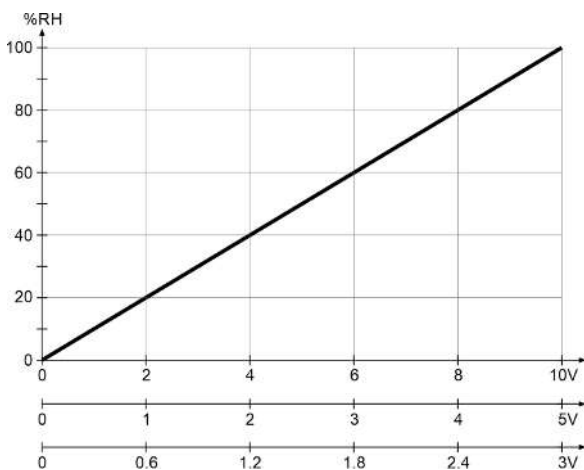
DOL 104 is a high-precision sensor for measuring relative humidity. It is intended for application in livestock houses but is also well suited for a number of industrial applications.

The sensor features one analogue output with very low output resistances 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

Measurement 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 ₆₃	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 ²
Max. cable length		100 m 0.75 mm ² 200 m 1.50 mm ²
Temperature, operation and storage	°C	-40 to -60
Protection class	IP	67
Measurement, shipment	mm	275 × 200 × 20
Shipment weight ex. connector	g	150