

DOL 104 Sensor

Climate sensor for measuring relative humidity.



PRODUCT DESCRIPTION

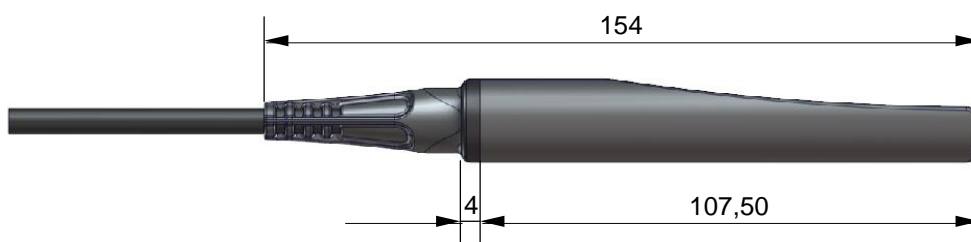
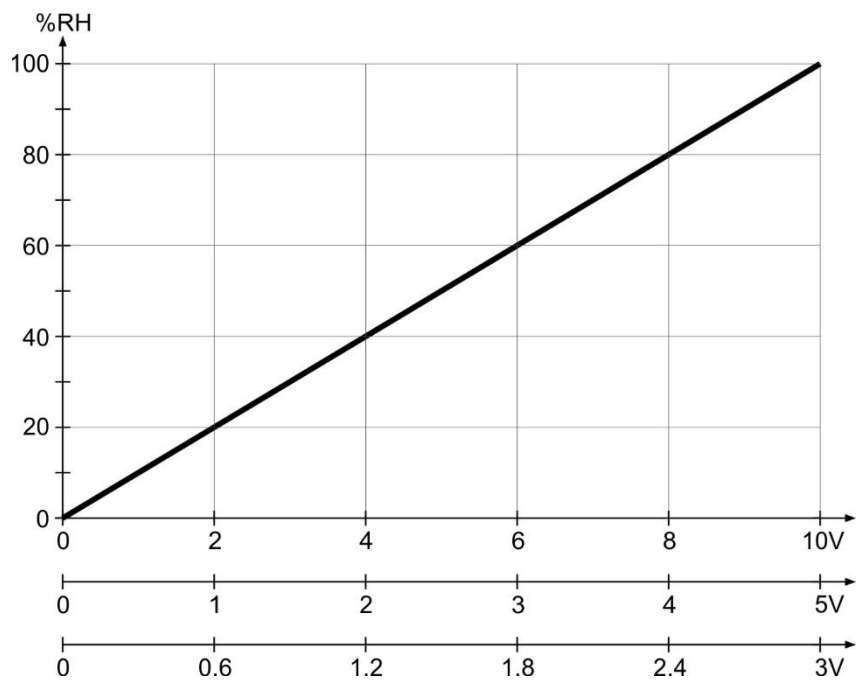
DOL 104 is a high-precision sensor for measuring relative humidity. It is intended for application in livestock houses but is also well suited for a number of industrial applications.

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 Teflon filter enables application in livestock houses with constantly high humidity. The sensor is supplied with a cable. The cable can be supplied with a specially adapted specification area upon agreement.

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

FUNCTIONAL GRAPH



Dimensions (mm)

PRODUCT SURVEY



140263	DOL 104 HUMIDITY SENSOR 0-10V
140274	DOL 104 HUMIDITY SENSOR 0-5V
140275	DOL 104 HUMIDITY SENSOR 0-3V



140298	DOL 114 PROTECTIVE CAP 5 PCS.
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380101	BRACKET FOR DOL 14/15/114/16/104
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TECHNICAL DATA

Measuring range	0 – 100 % RH	
Accuracy 1	0-10 V	± 2% RH (40–85 %) ± 3% RH (10-95 %) at 0-40 °C
	0-5 V	± 3% RH (40–85 %) ± 4% RH (10-95 %) at 0-40 °C
	0-3 V	± 3% RH (40–85 %) ± 4% RH (10-95 %) at 0-40 °C
Output signal	0-10 V	0.1 V / % RH
	0-5 V	0.05 V / % RH
	0-3 V	0.03 V / % RH
Time constant T₆₃	20 s at 0.5 m/s air velocity	
Supply Voltage	11 – 30 V DC	
Supply Current	12 mA no load	
	35 mA max. load	
Load	> 500 Ω - < 10 MΩ	
Recommended load	≥ 100 kΩ	
Output current	20 mA (current limited)	
Output impedance	< 1 Ω	
Temperature, operation and storage	- 40 °C – 60 °C	
IP classification	IP 67	
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
Shipment weight ex. connector	150 g	
Measure, shipment	275 x 200 x 20 mm	

DOL 114 Sensor 4-20 mA

Climate sensor for measuring relative humidity and temperature



PRODUCT DESCRIPTION

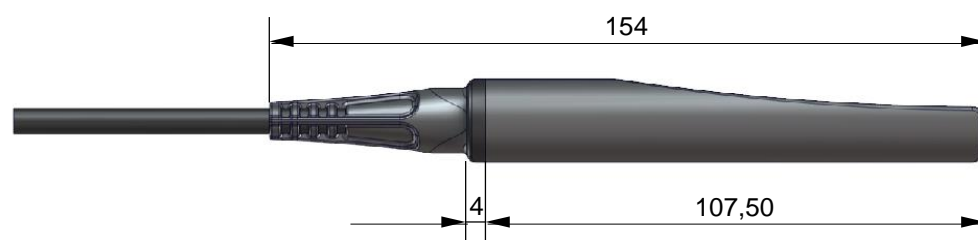
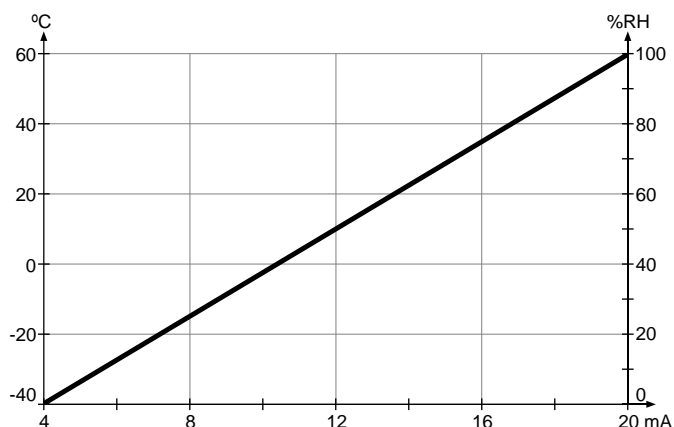
DOL 114 is a high-precision sensor for measuring relative humidity and temperature. It is intended for application in livestock houses but is also well suited for a number of industrial applications.

The sensor features two 4 to 20 mA analogue outputs with very low output resistances and full protection against short circuits and wiring failures.

The special sensor element and the built-in Teflon filter enables application in livestock houses with constantly high humidity. The sensor can be supplied with built-in connector or cable according to requirement.

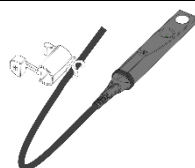
Sensor is microprocessor-controlled and has a two-colour light emitting diode (LED) to communicate the operation status and the error diagnostic. Sensor can be supplied with blinded LED for applications where this is needed.

FUNCTIONAL GRAPH



Dimensions (mm)

PRODUCT SURVEY



140262 DOL 114 HUMIDITY SENSOR 4-20 mA



140298 DOL 114 PROTECTIVE CAP 5 PCS.



380101 ASSEMBLY CLIP

TECHNICAL DATA

	Humidity measurement	Temperature measurement
Measuring range	0 – 100% RH	- 40 °C – 60 °C
Accuracy 1	± 2% RH (40–85 %) ± 3% RH (10-95 %) at 0-40 °C	+10 °C – 40 °C: ± 0.5 °C - 30 °C – 60 °C: ± 1.5 °C
Output signal	0.16 mA/% RH	0,16 mA/°C; 0°C at 10.4 mA
Time constant T₆₃	20 s at 0.5 m/s air velocity	6 min. at 0.5 m/s air velocity
	Common	
Supply Voltage	11 – 30 V DC	
Supply Current	55 mA	
Load	490 – 1 kΩ at 24 V DC supply voltage	
Recommended load	500 Ω	
Output current	20 mA per output (current limited)	
Output impedance	< 1Ω	
Temperature, operation and storage	- 40 °C – 60 °C	
IP classification	IP 67	
Cable	2 m. 4 x 22AWG / 0.34 mm ²	
Max. cable length/	100 m at 0,75 mm ²	200 m at 1,50 mm ²
Shipment weight ex. connector	150 g	
Measure, shipment	275 x 200 x 20 mm	