

DOL 114 Sensor

Climate sensor for measuring relative humidity and temperature



PRODUCT DESCRIPTION

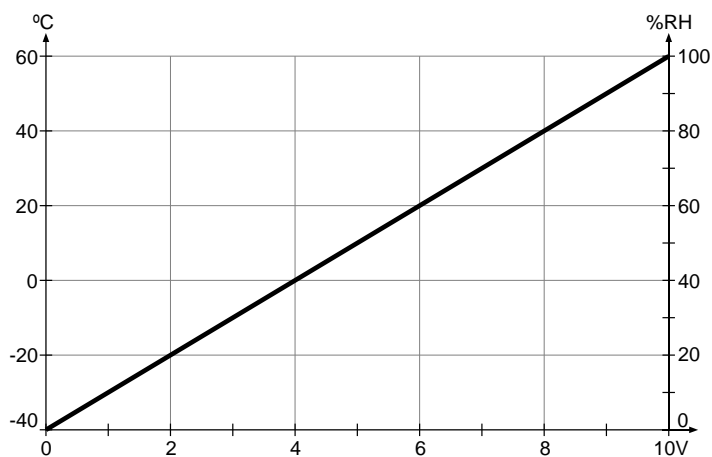
DOL 114 is a high-precision sensor for measuring relative humidity and temperature. It is intended for application in livestock houses but is also well suited for a number of industrial applications.

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

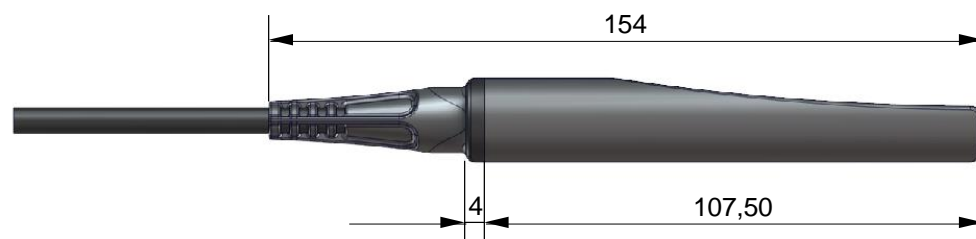
The special sensor element and the built-in Teflon filter enables application in livestock houses with constantly high humidity. The sensor can be supplied with built-in connector or cable, and with a specific adapted specification area - all according to your needs

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



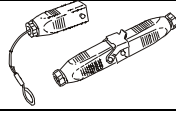





For other alternatives, see the product list.



Dimensions (mm)

PRODUCT SURVEY

	140252	DOL 114 HUMIDITY AND TEMPERATURE SENSOR 0-10V
	140255	DOL 114 HUMIDITY AND TEMPERATURE SENSOR 0-10V – LED OFF
	For turkey houses	
	140256	DOL 114 HUMIDITY AND TEMPERATURE SENSOR 0-5V
	140260	DOL 114 HUMIDITY AND TEMPERATURE SENSOR 0-60 °C 0-6V / 0-100 % RH 0-10V
	140282	DOL 114 HUMIDITY AND TEMPERATURE SENSOR 0.5 - 3V 0-60 °C / 17-100 % RH
	140254	DOL 114 HUMIDITY SENSOR 0-10V INCL. HIRSCHMANN PLUG
	140258	DOL 114 HUMIDITY AND TEMPERATURE 0-10 V MED M12 PLUG
	140292	PLUG SYSTEM DOL 14/DOL 114
	140298	DOL 114 PROTECTIVE CAP 5 PCS.
	CABLE 2M M12 PLUG INCL SEALING PLUG	
	380101	BRACKET FOR DOL 14/15/114/16

TECHNICAL DATA (140252, 140255, 140256, 140282)

		Humidity measurement	Temperature measurement
Measuring range		0 – 100% RH / 17 – 100 % RH*	- 40 °C – 60 °C / 0-60 °C*
Accuracy 1	0-10V	± 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
Accuracy 1	0-5V	± 3% RH (40–85 %) ± 4% RH (10-95 %) at 0-40 °C	+10 °C – 40 °C: ± 0.6 °C - 30 °C – 60 °C: ± 1.5 °C
Accuracy 1	*0.5 - 3V	± 3 %RH (40–85 %) ± 4 %RH (16.67-95 %) at 0-40 °C *	10 °C – 40 °C: ± 0.6 °C. 0 °C – 60 °C ± 1.5
Output signal	0-10V	0.1V/% RH	0.1V/°C; 0°C at 4V
	0-5V	0.05V/% RH	0.05V/°C; 0°C at 2V
	*0.5 - 3 V	0.03V/% RH	0.042 V°C
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 – 30V DC		
Supply Current 140252, 140252	12 mA no load / 55 mA max. load		
Supply Current 140256	12 mA no load / 35 mA max. load		
Load	> 500 Ω - < 10 MΩ		
Recommended load	≥ 100 kΩ		
Output current	20 mA per output (current limited)		
Output impedance	< 1Ω		
Temperature, operation and storage	- 40 °C – 60 °C		
IP classification	IP 67		
Cable	2m. 4 x 22AWG / 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 20mm		