

# DOL 114 4-20 mA

## Humidity and Temperature Sensor



DOL 114 is a high-precision humidity 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.

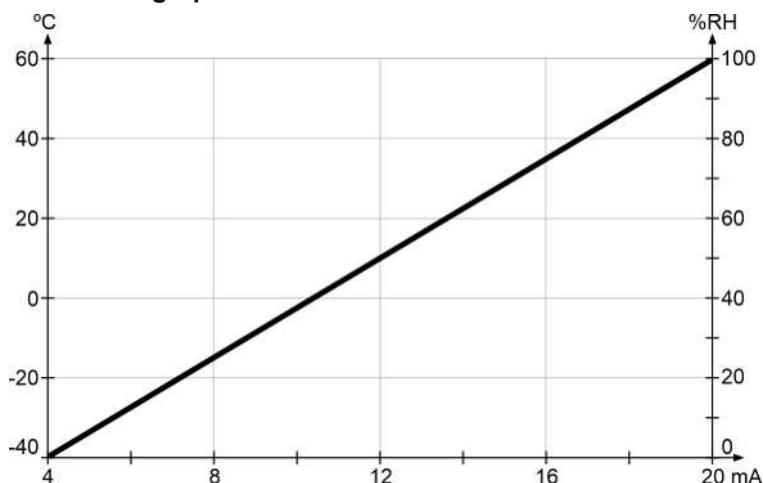
The sensor has two 4 to 20 mA outputs with a very low output resistance and full protection against short circuits and wiring failures.

The special sensor element and the built-in filter enable application in livestock houses with constantly high humidity. The sensor is available with built-in connector or cable according to requirement.

The sensor is microprocessor-controlled and has a two-color 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



## Product survey



### **140262 DOL 114 humidity and temperature sensor 4-20 mA**

The DOL 114 is a dual-purpose temperature and humidity sensor that can be used to regulate the livestock house relative air humidity and temperature.

The DOL 114 is a high-quality sensor which is especially useful under particularly harsh conditions and in areas of high air humidity.

The DOL 114 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

		Humidity measurement	Temperature measurement
<b>Specifications</b>			
Measuring range		0 - 100% RH	- 40 °C – +60 °C
Accuracy		± 2 % RH (40–85 %) ± 3 % RH (10-95 %) at 0-40 °C	± 0.5 °C (+10 – +40 °C) ± 1.5 °C (- 30 °C – +60 °C)
Output signal		0.16 mA/% RH	0.16 mA/°C; 0°C at 10.4 mA
Time constant T <sub>63</sub>		20 s at 0.5 m/s air speed	6 min. at 0.5 m/s air speed
<b>Common</b>			
<b>Electrical</b>			
Supply voltage	V DC	11 - 30	
Current	mA	55	
Load	kΩ	490 – 1 at 24 V DC supply voltage	
Recommended load	Ω	500	
Max. output current	mA	20	
<b>Mechanical</b>			
Cable dimensions	AWG	2 m 4 x 22 AWG / 0.34 mm <sup>2</sup>	
Max. Cable length at 0.75 mm <sup>2</sup>	m	500	
Max. Cable length at 1.50 mm <sup>2</sup>	m	500	
<b>Environment</b>			
Temperature, operation and storage	°C	- 40 °C – +60 °C	
Protection class	IP	67	
<b>Shipment</b>			
Packing dimensions H x W x D	mm	275 × 200 × 20	
Shipment weight ex. connector	g	150	

## Dimensions

Dimensions in mm.

