

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.

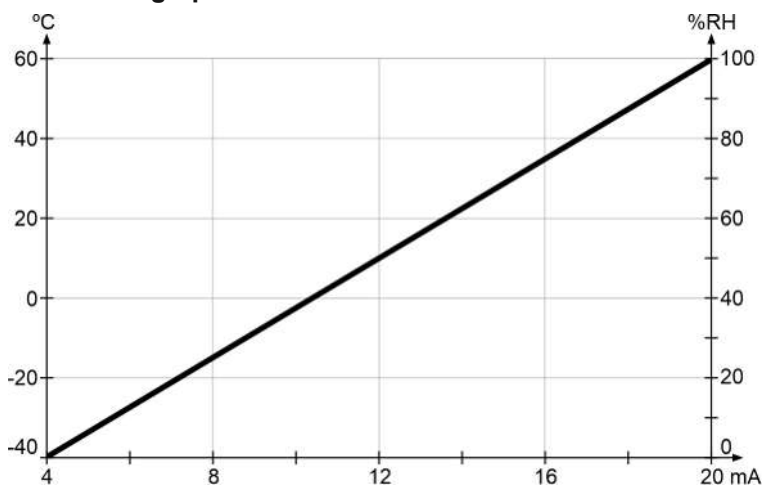
The sensor has two 4 to 20 mA outputs with a very low output resistance and full protection against short circuits and wiring failures.

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 |
|---|------|--|--|
| Specifications | | | |
| 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 ₆₃ | | 20 s at 0.5 m/s air speed | 6 min. at 0.5 m/s air speed |
| Common | | | |
| Electrical | | | |
| 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 | |
| Mechanical | | | |
| Cable dimensions | AWG | 2 m 4 x 22 AWG / 0.34 mm ² | |
| Max. Cable length at 0.75 mm ² | m | 500 | |
| Max. Cable length at 1.50 mm ² | m | 500 | |
| Environment | | | |
| Temperature, operation and storage | °C | - 40 °C – +60 °C | |
| Protection class | IP | 67 | |
| Shipment | | | |
| Packing dimensions H x W x D | mm | 275 × 200 × 20 | |
| Shipment weight ex. connector | g | 150 | |

Dimensions

Dimensions in mm.



