

SMART SENSOR

CSS 014 | DC 24 V



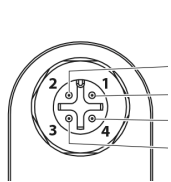
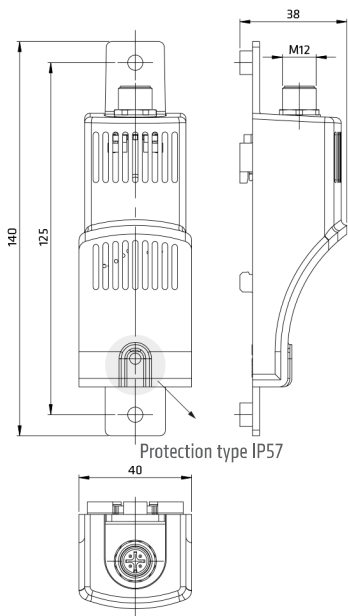
- > Analog/digital interface
- > Small size
- > Easy clip and/or screw fixing
- > Quick connection (M12 plug-in connector)
- > High accuracy
- > Large temperature and humidity range
- > Various application areas (IEC 61010-1/DIN EN 61010-1)

The compact Smart Sensor CSS 014 electronically records temperature and humidity and converts the measured data into a standardized analog 4-20 mA or a digital IO-Link signal. The converted value signals can be utilized or further processed by a control or monitoring unit, e.g. a PLC control. The Smart Sensor is suitable for installation inside and outside the enclosure, even in harsh environmental conditions as can be found in the wind power industry: in shielded outdoor areas and exposed to vibrations.

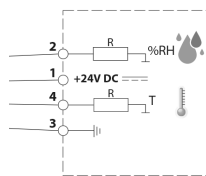


TECHNICAL DATA

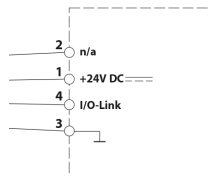
| | | |
|----------------------------------|--------------------------------------|---|
| Measuring signals | analog (4-20 mA) / digital (IO-Link) | temperature, humidity events, diagnosis, device data |
| Max. reaction time | | 3 min. |
| Load resistance (external) | | ≤ 500 Ω (4-20 mA only) |
| Connection | | M12 round plug connector, IEC 61076-2-101, 4-pin, A-coded, shielded |
| Electrical protection | | Reverse-polarity, short circuit, overvoltage protection |
| Mounting | | clip for 35 mm DIN rail, EN 60715 and screw fixing M5 |
| Casing | | plastic according to UL94 V-0, light grey |
| Dimensions | | 140 x 40 x 38 mm |
| Weight | | approx. 50 g |
| Fitting position | | vertical, connection on top |
| Storage temperature | | -40 to +85 °C (-40 to +185 °F) |
| Operating/Storage humidity | | max. 90 % RH (non-condensing) |
| Protection type/Protection class | | IP20 (sensor only IP57) / III (SELV) |
| Approvals | | VDE and UL File No. E500143 (acc. to IEC 61010-1/DIN EN 61010-1) |
| Note | | other measuring ranges on request |



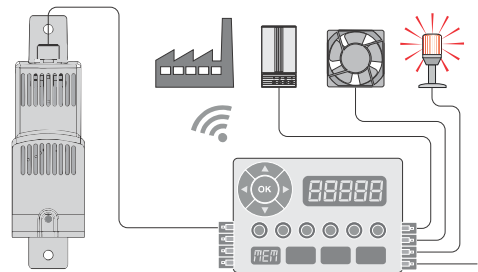
Pin assignment for 4-pin M12 round plug connector



analog 4-20 mA



IO-Link



Example of connection

| Art. No. | Interface | Operating voltage | Power consumption max. | Temperature measuring range | Humidity measuring range | Operating temperature |
|------------|--|----------------------|-------------------------|--|---------------------------------|--------------------------------|
| 01420.2-00 | 4-20 mA (analog) | DC 24 V (DC 12-30 V) | 1.8 W (typically 0.4 W) | -40 to +60 °C (-40 to +144 °F) ± 1 K | 0 to 100 % RH ± 4% ¹ | -40 to +70 °C (-40 to +158 °F) |
| 01411.2-00 | IO-Link (digital, specified acc. to version 1.1) | DC 24 V (DC 18-30 V) | 0.3 W | -40 to +80 °C (-40 to +176 °F) ± 0.3 K | 0 to 100% RH ± 3% ¹ | -40 to +80 °C (-40 to +176 °F) |

¹ Tolerance within 20 to 80 % RH (please request diagram for tolerances outside this range).