By a single cable, it is possible create a sensors network and interfacing them directly to a PLC or a PC equipped with a supervisory software (SCADA). The connection between the devices is realized with M12 connectors for rapid installation without errors and with degree of protection IP67. The stem realized with flexible compact mineral insulated cable (Ø6mm) it is available in different lengths and is ideal for critical mechanically applications ; in additions are available various types of process connection welded to the stem and also sinterized filters.

# EVO SER-UI
## TEMPERATURE AND HUMIDITY SENSOR WITH RS-485 SERIAL OUTPUT (MODBUS RTU) VERSION FOR DUCT

Measurements are in mm

57
40
27
48
16.5
L
Ø 16
Ø6

*Modbus*

Master unit

Modbus device network

1: Vdc
2: TxRx-
3: Gnd
4: TxRx+
5: Shield

**Output connections**
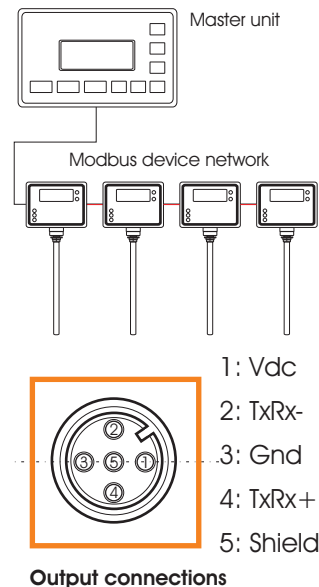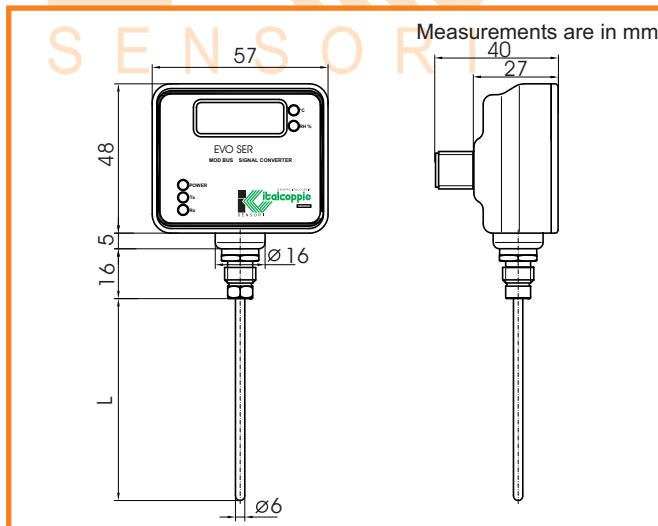
## TECHNICAL DATA

**Body:**
Thermoplastic material color gray

**Stem dimensions:**
Lenght: 100, 250,500 mm (other lenghts available on request)
Diameter: Ø6 mm

**Probe type:**
Compact mineral insulated AISI 316L s.s.

**Probe minimum bending radius::**
Three-times the diameter Ø (except the sensing tip wich lenght is about 40mm)

**Connectors:**
N° 2 M12-5 pole male in accordance to VDE0627

**Sensor:**
Digital sensor model SENSIRION STH75
Range: -40÷120°C for temperature and 0÷100% for relative humidity RH
Tmax. electronic: 65°C

**Filter:**
Standard: diameter 6mm, integrated to the stem
Optional: different types of sinterized filters diameter 15mm (unscrewable, for a simple cleaning)
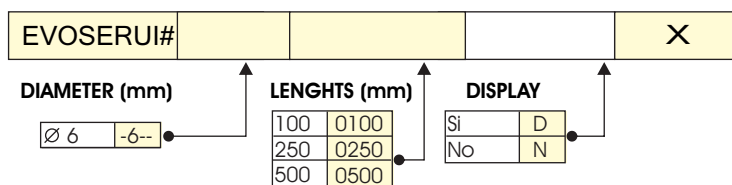
**Sensor break monitoring:**
Blink of the green led Power

**Output:**
RS485 serial interface (not isolated)
Communication protocol: Modbus RTU (max. baud rate 38.400bps)
Max. connection distance: 1.200 m. (*)
Max. number of devices on the network: 32
(*) The max distance is in according to power supply and type of cable used to connect the devices

**Power supply:**
12÷30Vdc (polarity protected)
Consumption: 0,25W without display, 0,5W with display

**Enviroments conditions:**
Temperature: -20÷65°C (for plastic body)
Relative humidity: 0÷100%
EMC: in accordance to IEC 61326

**Degree of protection:**
IP65 and IP67 in accordance to IEC 60529

**Accuracy:**
Take as reference the graph

**Response time:**
<30 sec. without filter

**Main parameters:**
Temperature °C
Humidity % RH
Max. and Min. temperature & Humidity peaks
Bias to adjust the measures
Watch dog serial communication and power-on

**Device programmation:**
Through the ki EVOSER SET or using an USB-RS485 converter and the software application EVOSER CONF

**Options:**
4 digits display, wall-mounting bracket, cable with integrated M12 connectors, different types of sinterized filters available.

**Note:**
Available also for ambient version (EVOSER-UC)

## CODE TO ORDER:

| EVOSERUI# | | | | X |
|-----------|---|---|---|---|

**DIAMETER (mm)**
| Ø 6 | -6-- |
|------|------|

**LENGHTS (mm)**
| 100 | 0100 |
| 250 | 0250 |
| 500 | 0500 |

**DISPLAY**
| Si | D |
| No | N |

Error ±°C
3
2
1
0
-40   0   40   80   120
**Temperature °C**

Error ± %
4
3
2
1
0
0 10 20 30 40 50 60 70 80 90 100
**Relative Humidity %**

Note: The shown executions can be produced upon request for a minimum quantity to be order. We reserve the right for technical modifications without prior notice.