

# COMBINED SENSOR



for three parameters: Temperature - Humidity - Pressure



## The sensor (8095-N)...

is a combined measuring instrument for measuring relative humidity, air temperature and air pressure.

The sensor is characterised by a power-saving electronic. The membrane filter reliably protects the capacitive measuring element from air pollutants.

- ▶ combined measuring instrument for high-quality use
  - ▶ capacitive humidity measuring element
  - ▶ low maintenance
  - ▶ special resistance to air pollutants
  - ▶ signal output humidity: RS 422/ Talker · NMEA
  - ▶ for use in all climatic zones
- ▶ high-quality use in meteorology and on ships

## Professional Line

### (8095-N) THP Sensor

Id-No. 00.08095.001 000

#### **Temperature**

Measuring range:

-40...+70 °C

Resolution:

0.1 °C

Accuracy:

± 0.3 °C at (v > 2 m/s) • ± 0.4 °C (10 ... 40 °C) • ± 0.8 °C (-10 ... 70 °C)

#### **Relative humidity**

Measuring range:

0...100 % r. h.

Resolution:

0.1 % r. h.

Accuracy:

± 3 % (10...90 %) r. h. <sup>1)</sup> • ± 4 % (0...100 %) r. h.

Reaction time rel. humidity (at v = 1.5 m/s): 30 s <sup>2)</sup>

#### **Barometric pressure**

Measuring range:

500...1100 hPa

Resolution:

0.1 hPa

Accuracy:

± 2 hPa (-30...+70 °C) • ± 1 hPa (-10...+60 °C)

Supply voltage:

4.8...33 V DC

Current consumption <sup>3)</sup>:

4 mA at 24 V DC • 6 mA at 12 V DC • 11 mA at 4.8 V DC

M12 Plug connector (4-pole) • protection class IP65/IP68/IP69K (with plug inserted)

Aluminium especially-coated • IP 65 (housing) • IP 65 (filter)

Housing:

approx. 80 g • H 140 mm x Ø 20 mm

Weight/ Dimensions:

Serial RS 422/ Talker • Baudrate 4800 • 1 Hz • 8 N 1

Interface:

NMEA 0183 • WIMHU • WIMMB • WIMTA

<sup>1)</sup> Temperature influence of the shelter: < ± 0.1 % r.h. at +10...+40 °C

<sup>2)</sup> with filter membrane    <sup>3)</sup> at NMEA without terminating resistor