FLUSH MOUNT PROBES





MINIMUM SIZE, MAXIMUM PERFORMANCE.

WITH INTEGRATED AIRCHIP3000 TECHNOLOGY.

COMPACT, DISCRETE HUMIDITY MEASUREMENT.

- Measures relative humidity and temperature
- Calculates dew/frost point
- Perfectly suited for discrete wall mounting in clean rooms, museums and libraries (up to 9 mm wall thickness)
- High precision and repeatability
- Unmatched long-term stability <1 %RH / year
- Digital interface for measurement processing and for HW4 calibration





TECHNICAL INFORMATION

Versions

The flush-mount probe is available with three different filters.

- HC2-IS25: Steel-sinter filter
- HC2-IT25: Teflon filter
- HC2-IP25: Polyethylene filter

The filters differ in material, response time and pore size, and are selected on the basis of the environmental conditions.

Steel-sinter filter (25 µm) *

Used for low humidity; not suitable for high-humidity applications; quick response, good protection from abrasive particles.

Teflon filter (5 µm) *

Good protection from fine dust particles and salt (maritime environment); slight delay in measurement.

Polyethylene filter (25 μ m) *

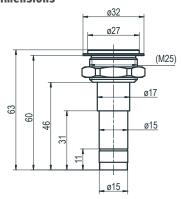
Good response time and good protection from fine dust particles; no absorption of water.

Typical accessories

AC3001 PC connection cable E2-02A Extension cable, 2 m, black

HW4-E-Vx HW4 software

Physical dimensions





Electrical connections

- 1: V+: 3.2...5 VDC
- 2: GND (power supply, UART)
- 3: RXD (UART)
- 4: TXD (UART)
- 5: Output signal, humidity
- 6: Output signal, temperature
- 7: AGND (GND for measurement signal)

HC2-IS25 / HC2-IT25 / HC2-IP25 Humidity sensor ROTRONIC HYGROMER® WA-1 Pt100 1/3 Class B Temperature sensor Accuracy at 23 °C ±5 K 1.5 %RH / 0.2 K. adjusted at 23 °C and 10, 35, 80 %RH Measurement resolution AirChip3000 <0.02 %RH / 0.01 K Long-term stability, humidity sensor <1 %RH / year Response time τ63 HC2-IS25: <20 s HC2-IT25: <25 s HC2-IP25: <20 s Initialization time <3 s (typical) Measurement range -40...85 °C / 0...99 %RH Range of application, electronics -40...85 °C / 0...99 %RH 0...1 V = 0...100 %RH (factory setting) Analog output signal 0...1 V = -40...60 °C (factory setting)Power supply 3.2...5 VDC Current consumption <4 mA @ 3.3 VDC (typical) <7.5 mA @ 5 VDC (typical) Firmware update Via HW4 software Filter element HC2-IS25: Steel-sinter, 25 µm * HC2-IT25: Teflon, 5 µm * HC2-IP25: Polyethylene, 25 µm * Permitted wind-speed 40 m/s (with filter) Adjustment via software 1 point, multipoint, dew point (%RH / °C), with service cable Psychrometric calculations Dew point / Frost point Interface **UART** Data processing via HW4 Graphics, statistics, analysis, etc. Housing material / weight Polycarbonate, stainless steel DIN 1.4301/50 g 32 x 63 mm (without protective cap) Dimensions Maximum wall thickness 9 mm Thread M25 x 1.5 CE / EMC compatibility CE conformant 2007/108/EC FDA- / GAMP conformity 21 CFR Part 11 / GAMP 5

Would you like more information? You will find a complete, up-to-date overview on our Internet page at www.rotronic.com

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^{*} Size of pores