

DX 310



Digital combined temperature and relative humidity probe



- Interchangeable
- Low power
- Centesimal temperature and humidity resolution
- Direct mount on meter possible (skipping cable)
- Fast and accurate
- Multi-point relative humidity adjustment
- Optional DAkkS/ACCREDIA certification available

DESCRIPTION

DX 310 is a digital combined temperature and relative humidity probe for the PRO D01 / PRO D05 handheld meters.

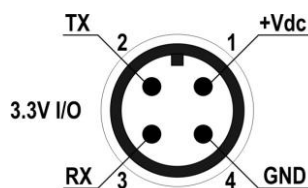
The probe supplies the following calculated quantities:

- Dew point
- Wet bulb temperature
- Absolute and specific humidity
- Mixing ratio
- Specific enthalpy
- Partial vapor pressure
- Frost point temperature
- Saturation vapor pressure above water and above ice

The probe is supplied factory-calibrated in multiple points for relative humidity, and it is ready to use. The probe can be optionally supplied with a DAkkS/ACCREDIA calibration certificate.

The calibration data are stored in the probe, allowing for interchangeability without the need for recalibration.

Equipped with 4-pin M12 connector.

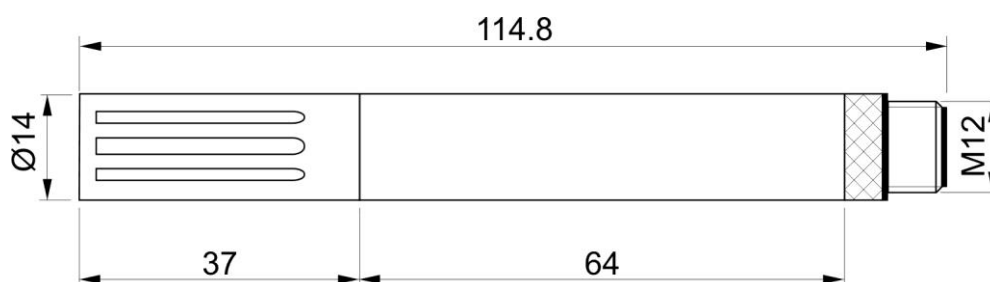


M12 DX 310 sensor pin out

The sensor can either be screwed directly onto the instrument (one-handed operation) or connected with a connection cable.

TECHNICAL SPECIFICATIONS

Sensor	RH	Capacitive, temperature compensated
	Temperature	Pt100
Measuring range	RH	0...100%
	Temperature	-40...+125 °C
Resolution	RH	0.01%
	Temperature	0.01 °C
Accuracy	RH	±1.2% (0...85%) / ±2% (85...100%) @ T=0...50 °C (1.5 + 1.5% of the measured value)% @ T=remaining range
	Temperature	± 0.1 °C ± 0.1% of the measured value
RH response time		10 s (10 → 80 %RH; air speed=2 m/s @ constant temperature)
Long-term drift	RH	±0.5 %RH/year
	Temperature	±0.03 °C/year
Adjustment support		Multipoint RH
Calculated quantities		Dew point Wet bulb temperature Absolute humidity Specific humidity Mixing ratio Specific enthalpy Partial vapor pressure Frost point temperature Saturation vapor pressure above water Saturation vapor pressure above ice
Storage temperature		-40...+80 °C
Output		UART (TTL 3.3V): DX-Sensor-Interface
Power consumption		<1 mA typ.
Connection		4-pole M12
Dimensions		Stem: Ø14 x 101 mm Overall: Ø14 x 114.8 mm
Weight		20 g approx.
Material		Stem and protector cap: PBT



ORDERING CODES

DX 310-00 Digital combined temperature and relative humidity probe in carton box, stem Ø14 x 101 mm.

Art no. 486793

DX 310-L01 Digital combined temperature and relative humidity probe in carton box, stem Ø14 x 101 mm, incl. 1 m PVC connection cable M12

Art no. 486910

SUITABLE INSTRUMENTS

PRO D01 1-channel handheld meter for digital probes. Supplied with 4 x AA alkaline batteries

Art no. 486134

PRO D05.2 2-channel handheld data logger for digital probes. Supplied with 4 NiMH rechargeable batteries, USB cable and software downloadable from Senseca website.

Art no. 486136

PRO D05.3 3-channel handheld data logger for digital probes. Supplied with 4 NiMH rechargeable batteries, USB cable and software downloadable from Senseca website.

Art no. 486137

PRO 921 Multifunctional handheld data logger for digital probes and 2 thermo couple probes Type K, Supplied with 4 x AA alkaline batteries

Art. No. 488743

PRO 925 Multifunctional handheld handheld meter for digital probes and 2 thermo couple probes Type K
Supplied with 4 x AA alkaline batteries, USB cable and software downloadable from Senseca website.

Art. Nr. 488744

ACCESSORIES

CABLE-M12-L01 Connection cable M12 5 pole, 1m

Art no. 487020



HD11 Saturated solution for checking relative humidity at 11% RH.

Art no. 487623

HD33 Saturated solution for checking relative humidity at 33% RH.

Art no. 487624

HD75 Saturated solution for checking relative humidity at 75% RH.

Art no. 487625



FILTER-P6 Filter cap DX 310/311, 10µm sintered stainless steel protection, -40...180 °C

Art no. 488611



FILTER-P7 Filter cap DX 310/311, 20µm PTFE protection, -40...150 °C

Art no. 488612



FILTER-P8 Filter cap DX 310/311 standard, PBT and 10µm stainless steel grid, -40...120 °C

Art no. 488610

