

# Humidity probes

## SUR 2

Sensor that provides a current or voltage signal based on the relative humidity measured in the environment.

- Power supply: 9 ÷ 30 V DC or 12 ÷ 24 V AC
- Fixed differential:  $\Delta 1.3\text{ }^{\circ}\text{C}$  ( $\pm 0.2\text{ }^{\circ}\text{C}$ )
- Degree of protection: IP 30
- Sensor type: capacitive
- Selectable output signal:  
Voltage 0 ÷ 1 V  
Current 4 ÷ 20 mA
- Dimensions: 80x127x30 mm



Code	Model	Description
VN873600	SUR 2	Humidity probe



## GENERAL CHARACTERISTICS

Sensor type:		capacitive
Power supply:	DC	9 ÷ 30 V $\pm 10\%$
	AC	12 ÷ 24 V - 10%, +15%
Operative range:	R.H.	10 ÷ 90% (0 ÷ 50 °C) non condensing
Signal at output:	R.H.	reference range 0 ÷ 100%, independ. from the measurement range
	Voltage	10 mV/% R.H. (Rmin. load = 1 k $\Omega$ )
	Current	4 ÷ 20 mA (Rmax. load = 100 $\Omega$ )
		4 mA = 0% R.H.; 20 mA = 100% U.R.
Precision	R.H.	range 10 ÷ 90%
		$\pm 3\%$ at 25 °C, $\pm 6\%$ in the range 0 ÷ 50 °C
		Temporary variations within $\pm 12\%$ R.H. and $\pm 2\text{ }^{\circ}\text{C}$ are possible in the presence of electromagnetic fields of 10 V/m
Absorption:		
Voltage output (typical absorption with 10 k $\Omega$ load)		10 mA with power supply 12 V DC
		8 mA with power supply 24 V DC
Current output		35 mA with power supply 12 V DC
		24 mA with power supply 24 V DC
		50 mA with power supply 12 V AC
		24 mA with power supply 24 V AC
Degree of protection:	IP	30
Terminal block:		with screws for cables max. 1.5 mm <sup>2</sup> – min. 0.2 mm <sup>2</sup>
Storage conditions:	°C	-20 ÷ 70, 90% R.H. non condensing
Operating conditions:	°C	-10 ÷ 70 or 0 ÷ 50, 90% R.H. non condensing