



PH SENSOR WITH CABLE AND PLUG-IN CARD

## SENSOR MODULES FOR PH AND ORP MEASUREMENT

### WALLACE & TIERNAN® ANALYZERS/CONTROLLERS

The Wallace & Tiernan® sensor measuring module for pH value and ORP consist of a plug-in sensor card for MFC and SFC systems and a single junction electrode. The pH sensor card is designed for connection to pH electrodes compatible with DIN 19263. The ORP sensor card is designed for connection to ORP electrodes compatible with DIN 38404.

#### Typical applications

- Industrial and municipal water treatment
  - Measurements in a wide variety of processes, in electroplating shops, for final inspection and testing, and in neutralization plants
  - Potable and well water, pool water, boiler feed water, process water
  - Mildly contaminated waste water

#### Features








The Wallace & Tiernan electrodes are single junction, combination electrodes with a ceramic diaphragm and a silver-silver chloride wire with 3.0 mol KCl gel. This does away with the need to refill the sensor with electrolyte. The pH electrodes are mounted in a standard flow cell module. The sensor cards are supplied with a 0.9 m (3.0 ft.) screened coaxial cable. Extension cables up to 50 m (164 ft.) are available as optional accessories. Utilizing “plug and play” technology allows the SFC or MFC controller to automatically recognize the sensor card and provide the correct display information. An analog output (0/4 to 20 mA) is available, along with user configurable alarm contacts.

#### Benefits

- Accurate, reproducible measurement resistant to interference
- Long service life thanks to a large reference solution reservoir
- Combination with all measurements of MFC and SFC series
- Simple to calibrate using standard buffer solutions

## TECHNICAL DATA

Measuring principle	single junction electrode with a silver-silver chloride wire
Measuring range	pH: 0 to pH 12/ORP: -1000 to +1000 mV
Electrolyte	3 mol KCl gel, 4 salt reservoir ring Linearity < 0.1 % FS/max. 0.2 %/10 K
Working temperature	up to +50 °C (192 °F)
Conductivity measuring water	200 µS/cm to 200 mS/cm
Operating pressure	max. 6 bar (87 psi)
Installation length	120 mm (4.7 ")

Flow module	View	Slots, non-pressurized	Slots, pressurized	Technical data
DEPOLOX® 5 flow-through adapter with integrated, open sensor for oxidation and disinfection chemicals and compatible with additional measurements of the MFC/SFC series		 2 x PG 13.5, e.g. for pH measurement	 2 x PG 13.5, e.g. for pH measurement 1.5 bar (22 psi) back pressure	Sample water flow: Controlled to 33 l/h (0.15 US gpm) with max. 4 bar (58 psi) inlet pressure* Integrated multi-sensor with flow monitor and compatible with temperature sensor max. sample water temperature: +50 °C (122 °F)
VariaSens™ flow-through adapter in combination with membrane sensors and additional measurements of the MFC/SFC series		 2 x PG 13.5, e.g. for pH measurement	 2 x PG 13.5, e.g. for pH measurement 1.5 bar (22 psi) back pressure	Sample water flow: Controlled to 33 l/h (0.15 US gpm) with max. 4 bar (58 psi) inlet pressure* Integrated multi-sensor with flow monitor and compatible with temperature sensor max. sample water temperature: +50 °C (122 °F)
Angle seat adapter			1 slot for pH measurement, 6 bar (87 psi) back pressure	Sample water feed line in bypass or directly in process water flow possible max. sample water temperature: +50 °C (122 °F)

\*: SAMPLE WATER PRESSURES OF UP TO 40 BAR (580 PSI) CAN BE ADAPTED WITH SPECIAL EQUIPMENT.

● MEMBRANE SENSOR; ● PH/ORP SENSOR; ● SENSOR FOR FLUORIDE OR CONDUCTIVITY



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