Photometer

Accessories

MS08 H₂S / Sulphide Amperometry

Portable and laboratory measuring instrument



Multi-parameter system Adapt to micro-sensors $H_2S - H_2 - H_2O_2 - O_2 - O_3$

Applications

Monitoring and protection of wastewater networks

- \cdot Control of H_2S reagent injections
- Industrial process control
- Aquaculture tanks monitoring
- Control of winemaking processes

Advantages

- \cdot Measurement without sampling directly in the field
- \cdot No interference with turbidity
- Automatic temperature and pH compensation
- Portable / laboratory and continuous measurements
- Display module
- Data extraction to computer by USB

Measure dissolved H₂S concentrations

The determination of the concentrations of dissolved hydrogen sulphide and total dissolved sulphide is necessary for the control of injections of anti-H₂S reagent in the sanitation networks, the management of industrial processes, the monitoring of aquaculture ponds and processes. of winemaking. Due to its high chemical reactivity and the rapid transfer of concentrations between liquid samples and the gas phase, measurement of dissolved H₂S is difficult despite careful sampling.

Accurate and reliable in situ determination of concentrations is now possible with the MS08-H₂S. The integrated H₂S micro sensor is the biggest innovation of this system, it allows a fast measurement with a very high resolution. The multi-parameter MS08 system collects raw H₂S and temperature information to perform compensation calculations and display dissolved H₂S concentration in mg / L.

Thanks to the parallel measurement of the pH, the system is able to also calculate **the concentrations of total dissolved sulphide** in mg/L.

Online and portable measurement

The MS08- H_2 S is designed for portable measurements (approx. 12 hrs battery life) and can also be connected to the mains 220VAC for continuous measurements.



The dissolved H₂S passes through the gas permeable membrane. It diffuses to the working electrode where an electrochemical oxidation reaction operates. The current generated, proportional to the hydrogen sulphide concentration, is measured by the probe.

This current from 0 to 400 pico-amperes is converted and operated by the MS08 box, raw data are compensated using the temperature and pH measurement to get the precise value.

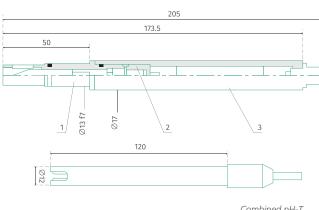


MS08 Probe-H2S-0521en-aquams

MS08 H₂S / Sulphide Amperometry

Technical specifications

Measurement principle		Amperometric measurement
Technology		Membrane micro-sensor with redox catalyst
Compensation temperature		Automatic Pt100, Pt1000
Electrical polarization		Automatic (< 20 min warm up time)
Measurement ranges	Type I	0,05 10 mg/l H,S
	Type II	0,5 50 mg/l H ₂ S
	Type III	0,01 3 mg/l H,S
	Type SL	0,003 1,5 mg/l H,S
	Type L	0 100 mg/l H,S
Response time		T 90% à 2 seconds
Measurement accuracy		2 % of the measured value
H ₂ S comsumption		Negligible
Vaterial		H,S probe - titanium / temperature-pH sensor - plastic
Dimensions (d x L)		H ₂ S probe - 17 mm x 205 mm / temperature-pH sensor - 12 mm x 120 mm
MS08 power supply		6 batteries Mignon / 220 VAC, charger supplied
visoo power suppry		o batteries migrion / 220 vAc, charger supplied
Interface	Digital	Data display on integrated screen - H2S / T° / residual current / pH / Total dissolved sulphide
		RS-232 / USB (option)
Acquisition of data		On computer, software not provided, free download type «HYPERTERMINAL»
Transmission / frequency		String ASCII / 2 seconds
Exploitation		Conversion by the software for access to Lotus 1-2-3 or Excel calculation software
H ₂ S micro sensor lifetime		6 months in portable use, 10 in continuous (depends on stress leads by pH variations)
		No interference in salt water up to 40 g/l of salt
Interferences on measurement		No interference in presence of: carbon dioxide (up to 25.38 vol.%), Methane (up to 5.78 vol.%), Hydrogen (up to 0.544 vol.%), Ammonia (up to at 1000 ppm (v)), carbon monoxide (up to 92
		ppm (v)), CS2 (up to 5 vol%), organic solvents (up to 20% vol.), acetic acid (up to at 1 mol / l), dimethyl sulfide
		ppm (v)), CS2 (up to 5 vol%), organic solvents (up to 20% vol.), acetic acid (up to at 1 mol / l),
Maintenance Temperature of the medium	/ sample	ppm (v)), CS2 (up to 5 vol%), organic solvents (up to 20% vol.), acetic acid (up to at 1 mol / l), dimethyl sulfide
Vlaintenance	/ sample	ppm (v)), CS2 (up to 5 vol%), organic solvents (up to 20% vol.), acetic acid (up to at 1 mol / l), dimethyl sulfide Distilled water cleaning of the measuring diaphragm after every use



Combined pH-T