

DIGITAL PH AND ORP SENSORS



FEATURES

- Teflon® porous septum's liquid junction resists encrustations and chemical attack
- Reference electrode's double junction increases service life in applications containing sulphides (H₂S) and metals such as lead, mercury and silver
- New solid-state electrolyte allows a constant reference potential over time even during pressure and temperature variations
- Pt100 capillary temperature sensor is positioned behind sensitive membrane (pH or ORP) for accurate temperature measurement and compensation
- IP68 rated for protection of high-impedance electrodes from condensation

APPLICATIONS

- Drinking water
- Process water
- Wastewater
- Samples containing sulphides and metals such as mercury, lead and silver

TECHNICAL SPECIFICATION

Parameter	Measurement range	Measurement method
Measurement range	0...14 pH	-1500 mV...+1500 mV
Measurement method	Potentiostatic	
Accuracy	0.05 pH	± 5 mV
Repeatability	± 0.05 pH	± 1 mV
Response time	T ₉₀ < 60s	
Operating temperature	0...100°C in insertion / by-pass - 0...50°C in immersion	
Maximum operating pressure	11 bar	
Body material	Glass and PPS	
Measuring electrode	Hemispherical glass membrane	
Other materials	Teflon®	
Mechanical protection	IP68 sensor + cable	
Power supply	12...24Vdc	
Absorption	Max. 1W	
Cable	10 m integral with the sensor (others on request)	
Signal interface	Standard Modbus RTU protocol	

DIFFERENTIAL DIGITAL PH AND ORP SENSORS



FEATURES

- Extensive lifespan
- Ryton® body
- Reference electrode with salt bridge and KCL reserve guarantees high stability of reference signal
- Operates in varying environmental conditions
- The measurement and reference electrode are connected to a ground reference for excellent measurement accuracy even in extreme conditions
- Replaceable reference electrode

APPLICATIONS

- Heavy-duty processes
- Entry and exit from biological wastewater treatment
- Aggressive industrial applications

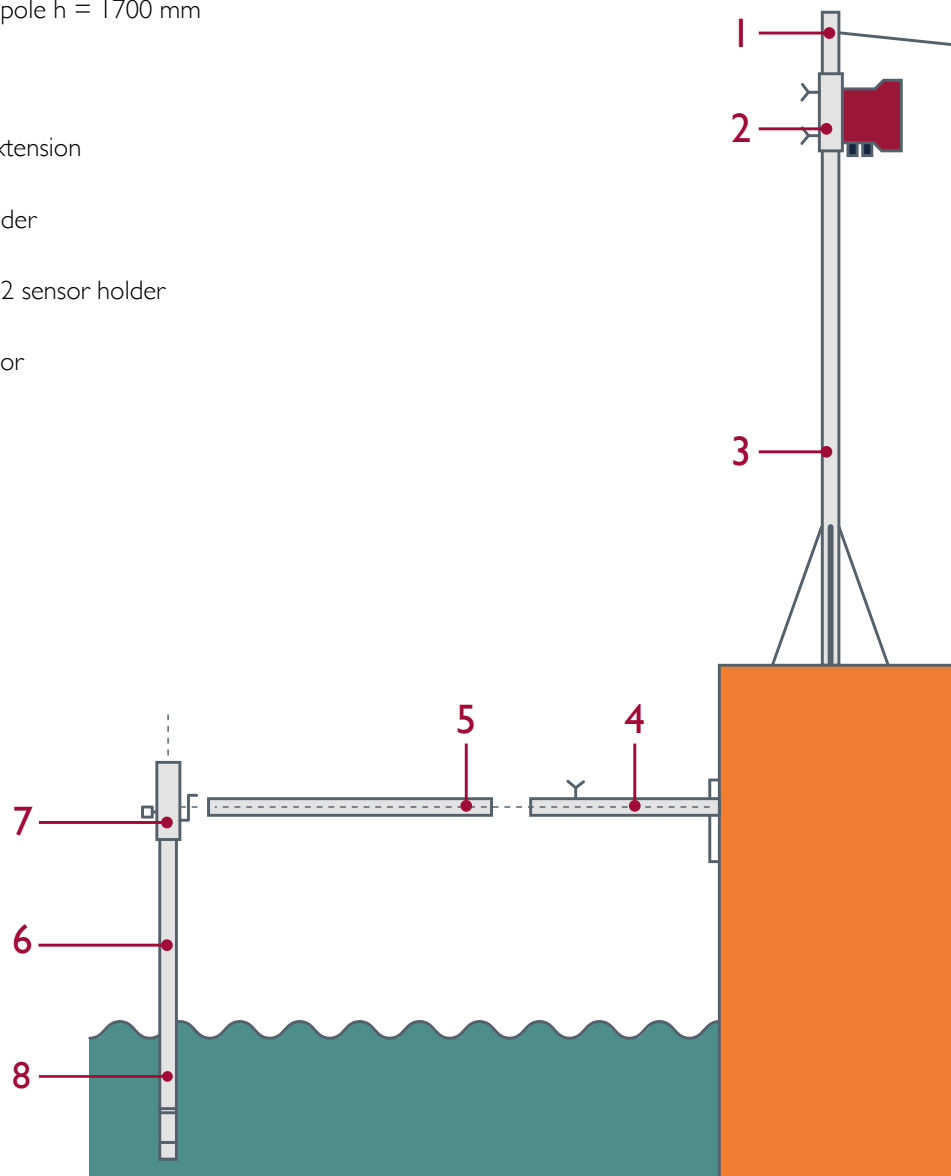
TECHNICAL SPECIFICATION

TECHNICAL SPECIFICATION		
Measuring range	0...14 pH	-1500...+1500 mV
Measurement methods	Potentiostatic differential	
Accuracy	± 0.01 pH	± 5 mV
Response time	T ₉₀ < 60s	
Operating temperature	Immersion: -5...70°C (21...158°F) Insertion: -5...95°C (21...203°F)	
Maximum operating pressure	6.9 bar (100 psig)	
Body material	Ryton®	
Measuring electrode	Hemispherical glass membrane	Platinum wire
Other materials	PVDF, ceramic junction, Viton® o-rings, titanium (ground ref)	
Mechanical protection	IP68 sensor + cable	
Power supply	12...24Vdc	
Absorption	Max. 1W	
Cable	PUR, integral with the sensor, 10m	
Signal interface	Standard Modbus RTU protocol	

INSTALLATION BRACKETS

DIAGRAM OF ACCESSORIES

- 1 Protection canopy
- 2 Measuring device
- 3 Floor slab with pole h = 600 mm
Floor slab with pole h = 1700 mm
- 4 Wall bracket
- 5 L = 700 mm extension
- 6 D42 sensor holder
- 7 Support for D42 sensor holder
- 8 Measuring Sensor



IMMERSION SENSOR HOLDERS



TECHNICAL SPECIFICATION

Material	Operating temperature
Polypropylene (PP) body Nylon fixing screw NBR O-Rings	max 80°C



TECHNICAL SPECIFICATION

Material	Operating Temperature	Immersion sensor holder
Polypropylene (PP) tube and cap Nylon fixing screw NBR O-Rings	max 80°C	For turbidity/suspended solids sensors

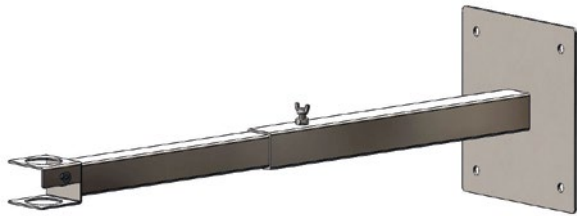


TECHNICAL SPECIFICATION

Material	Operating Temperature
Polypropylene (PP) tube and cap Nylon fixing screw PVC 45° fitting NBR O-Rings	max 80°C

SENSOR HOLDER SUPPORT

JOINTED & FIXED VERSION



BRACKET FOR SENSOR HOLDERS & ULTRASOUND SENSORS

- SS316 material
- Available with fixed or swivelling arm
- 800, 1400 mm or telescopic length
700...1200 mm arm
- U or L bracket for sensor holders/
ultrasound sensors



JOINTED SUPPORT

- Black PVC articulated parts and sensor
holder support
- SS316 plates and fixings
- SS316 fixing screws

STANDING POLE SUPPORT

- Standing pole for floor mounting or
poolside installation
- Designed for use with Ø 42 or 63mm
immersion sensor holder
- Allows for secure, strong mounting



BRACKET FOR INSERTION SENSOR FOR TURBIDITY/SS



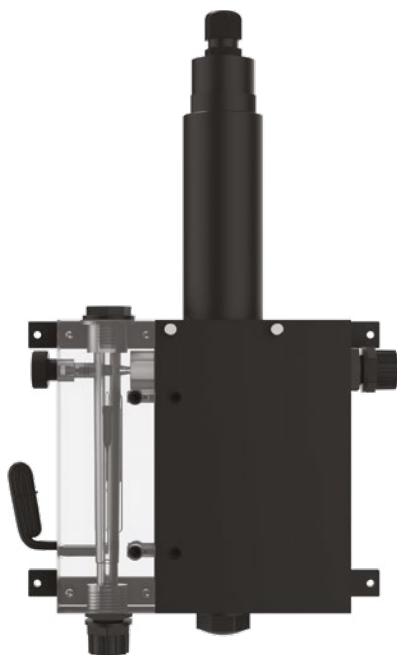
FEATURES

- Used for turbidity / suspended solids sensors
- Mounted onto pipes

TECHNICAL SPECIFICATION

Body material	SS316
Ball valve	DN 40 for extraction of the sensor without interruption of the process
Connection	Welded for mounting on pipe
Complete with	Safety sensor fixing brackets

BYPASS SENSOR HOLDER



FEATURES

- Modularity allows alternative sensors holders to be mounted
- No moving mechanical parts
- Easy emptying and cleaning

TECHNICAL SPECIFICATION

Materials	Black PVC and plexiglass body, aluminium plate, NBR seals
Operating Temperature	0...50°C
Maximum operating pressure	6 bar
Flow rate	min 60l/h - max 100l/h

BYPASS SENSOR HOLDER

A

Bypass sensor holder for three sensors
Ø 12mm

Pressure: up to 2 bar

Temperature: up to 50°C

Transparent vessel

pH range: 4,0...10 pH

Sensor types

pH and ORP (redox) 12 mm

pH and ORP (redox) 13.5 mm

Temperature: 12 or 13,5 mm

Conductivity: 12 or 13.5 mm

Oxygen: 13,5 mm



A I

Bypass sensor holder for three sensors
Ø 12mm

Pressure: up to 2 bar

Temperature: up to 50°C

Black vessel

pH range: 2,7...12 pH

Sensor types

pH and ORP (redox) 12 mm

pH and ORP (redox) 13.5 mm

Temperature: 12 or 13,5 mm

Conductivity :12 or 13.5 mm

Oxygen: 13,5 mm



B I

Bypass sensor holder for one sensor
Ø 35 or 42mm

Pressure: up to 2 bar

Temperature: up to 50°C

Black vessel

pH range: 2,7...12 pH

Sensor types

Turbidity 42 mm

Oxygen 35 mm



PROBE HOLDER FOR DIRECT INSERTION INTO PIPE



FEATURES

Insertion in-line probe holder with different materials and mechanical arrangements for a wide range of plant applications



TECHNICAL SPECIFICATION

Connection	Sensor connection	Maximum temperature	Maximum pressure	Materials
1/2" G.M	PG 13.5 or Ø 12 mm	60°C	6 bar	PVC
1"G.F	PG 13.5	60°C	16 bar	PP and PVC
3/4" or 1" 1/4 G.M	PG 13.5	80°C	16 bar	PP