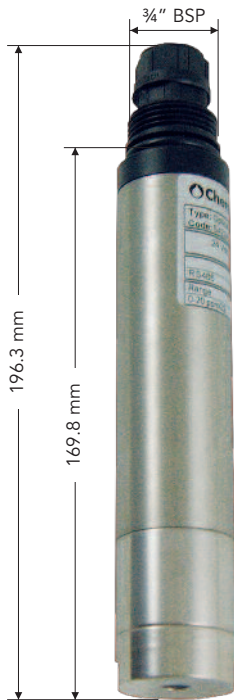


OPTICAL OXYGEN AND TEMPERATURE PROBE

General features



oxygen measuring sensor with integrated temperature probe. The measuring technique is based on the following optical principle: a diode emits a blue light towards a support on which a fluorescent substrate is applied. The substrate reacts by emitting initially a red light (luminescence), then returns to its initial state. The intensity of the produced red light and the return rate to the initial state are related to the present oxygen concentration. This innovative method allows reliable, accurate measurements with no drift over time, so that the system calibration is no longer necessary. No maintenance is required except for the replacement of the luminescent support about every two years. The system does not consume oxygen, therefore it is suitable for the most varied fields of application, including those in which the measuring liquid is almost stationary.

Applications

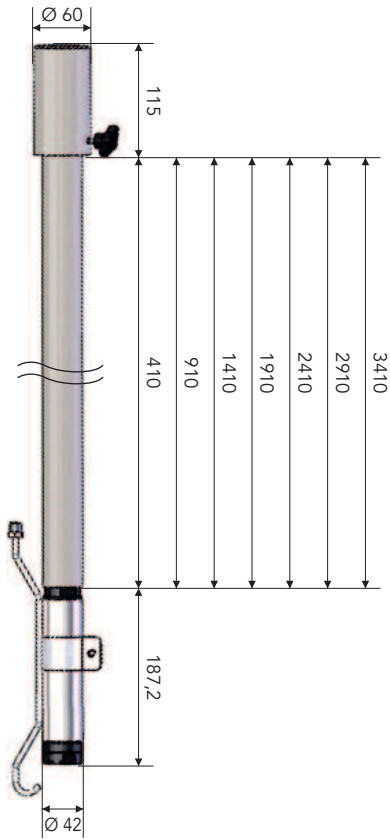
Surface waters, fish farms, drinking water, waste water, sea water

Available versions with PVC body

Technical specifications

| | |
|-----------------------|---|
| Measuring range | 0.00...20.00 mg/l |
| Measuring method | Optical measure by luminescence |
| Accuracy | ± 0,2 mg/l when < 5mg/L ± 0,3 mg/l when > 5mg/L |
| Response | T ₉₀ < 60s |
| Refresh time | < 1s |
| Temp. compensation | with internal NTC probe |
| Operating temperature | 0...50 °C |
| Maximum pressure | 5 bar |
| Body material | SS316 (PVC body optional) |
| Electrode material | Special optical glasses |
| O-Rings | NBR and Silicon |
| Mechanical protection | IP68 Sensor + cable |
| Power supply | 12...24Vdc |
| Power consumption | max. 2W |
| Cable | 10 m integral with the sensor |
| Signal interface | RS 485 Modbus RTU Protocol |

IMMERSION PROBEHOLDERS



Immersion probeholder for turbidity/suspended solids probes

Materials

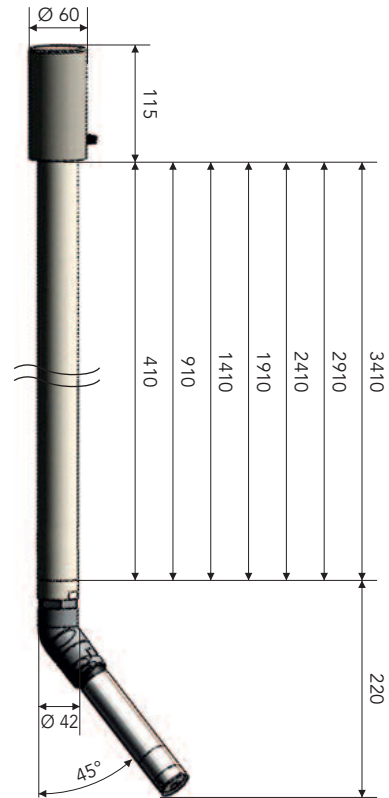
- Polipropilene (PP) Tube and cap
- Nylon fixing screw
- NBR o-Rings

Working Temperature

- max 80 °C

Available lengths

- See drawing



Immersion probeholder for Oxygen probe and redox digital/differential electrodes

Materials

- Polipropilene (PP) Tube and cap
- Nylon fixing screw
- PVC 45° Fitting
- NBR o-Rings

Working Temperature

- max 80 °C

Available lengths

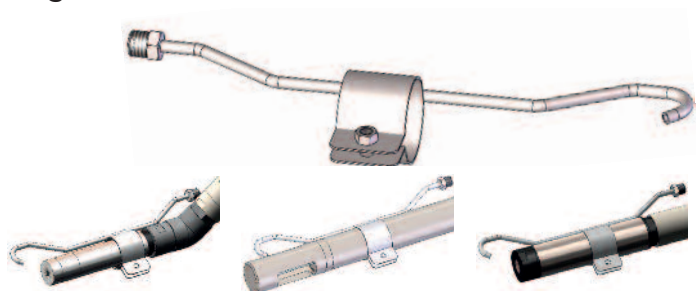
- See drawing

nozzle for immersion probes' cleaning

Materials

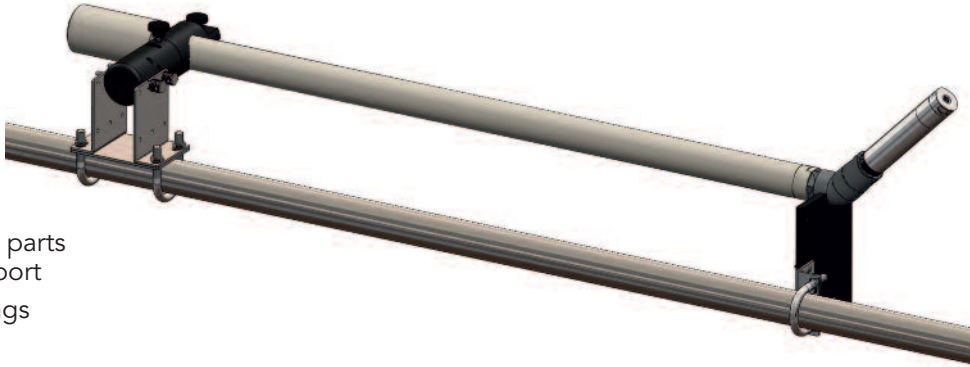
- SS316 tube
- SS316 nozzle
- SS316 fittings and nuts

The washing conduit is connected to the nozzle via the 1/4" BSP male threaded fitting. The system can be adapted to all immersion probes and probeholders.



INSERTION PROBEHOLDERS

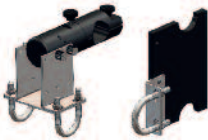
Articulated support for probeholders



Materiali

- Black PVC Articulated parts and probeholder support
- SS316 plates and fixings
- SS316 fixing screws

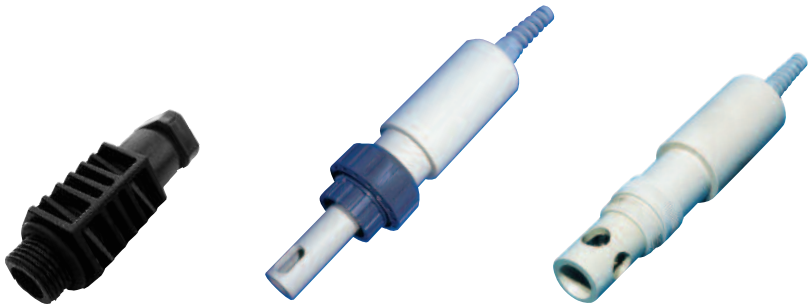
Suitable for chemitec Diameter 42 probeholder supporting, the articulated support is able to rotate and tilt around the X and Y axis, allowing a remarkable possibility of configurations.



Pressurized Probeholders

The pressurized Probe holders are used to insert the electrode directly into process pipe lines.

The Probe holder must be placed between two isolation valves to prevent lack of process liquid during maintenance operations.



Insertion probeholders

| | | | |
|---------------------|-------------------|------------|--------------------|
| Connection | 1/2" G.M. | 1"G.F. | 3/4" or 1"1/4 G.M. |
| Probe connection | PG 13.5 or Ø 12mm | PG 13.5 | PG 13.5 |
| Maximum Temperature | 60° C | 60 °C | 80 °C |
| Maximum Pressure | 7 bar | 16 bar | 16 bar |
| Materials | PVC | PP and PVC | PP |