



OPTOD: OPTICAL DISSOLVED OXYGEN,

Optical technology for optimized measurements

Applications

- Urban wastewater treatment
- Industrial effluent treatment
- Surface water monitoring
- Drinking water

Optical technology

The OPTOD (Optical Dissolved Oxygen technology) is based on luminescent optical technology. The OPTOD sensor is approved by the ASTM International Method D888-05 and Norm ISO 17289.

Without calibration requirements and thanks to an ultra low power technology, the OPTOD sensor meets the demands of field works and short or long term campaigns.

Without oxygen consumption, this technology allows you an accurate measure in all situation and especially in very low oxygen concentrations

Mecanic

Compact, strong and light, the sensor allows a portable or in fixed/ permanent use.

Body in Stainless steel 316 L (passivation treatment) or in Titanium for applications in corrosive environment.

ADVANTAGES



- Optical Technology without calibration
- Digital Technology (Modbus RS-485 / SDI-12)
- No drift, Reduced maintenance
- Body in Stainless steel (316 L) or Titanium



Technical specifications measures	
Measure principle	Optical measure by luminescence
Measure ranges	0,00 to 20,00 mg/L • 0,00 to 20,00 ppm • 0-200%
Resolution	0,01
Accuracy	+/- 0,1mg/L • +/- 0,1 ppm • +/- 1 %
Response time	90% of the value in less than 60 seconds
Frequency of recommended measure	>5 s
Water move	No necessary move
Temperature compensation	Via NTC
Stocking temperature	-10°C to + 60°C
Signal interface	Modbus RS-485 and SDI-12
Sensor power-supply	5 to 12 volts
Consumption	Standby 25 µA Average RS485 (1 measure/ second) : 4,4 mA Average SDI12 (1 measure/ second) : 7,3 mA Current pulse : 100 mA
Technical specifications sensor	
Dimensions	Diameter : 25 mm ; length : 146 mm
Weight	Stainless steel version 450g (sensor + cable 3 m) Titanium version 300 g (sensor + cable 3 m)
Material	Stainless steel 316L, New : body in Titanium
Maximum pressure	5 bars
Connection	9 armoured connectors, polyurethane jacket, bare wires or waterproof Fisher connector
Protection	IP68

Accessory

Hydroclean : Anti-fouling system for numerical sensor Optod



References

Optod digital sensor Odeon Fisher plug 3m	PF-CAP-C-00140
Optod digital sensor Odeon Fisher plug 7m	PF-CAP-C-00141
Optod digital sensor Odeon Fisher plug 15m	PF-CAP-C-00163
Optod digital sensor 3m bare wires	PF-CAP-C-00160
Optod digital sensor 7m bare wires	PF-CAP-C-00168
Optod digital sensor 15m bare wires	PF-CAP-C-00164

Optod digital sensor Odeon titanium Fisher plug 3m	PF-CAP-C-00240
Optod digital sensor Odeon titanium Fisher plug 7m	PF-CAP-C-00241
Optod digital sensor Odeon titanium Fisher plug 15m	PF-CAP-C-00242
Optod titanium digital sensor 3m bare wires	PF-CAP-C-00243
Optod titanium digital sensor 7m bare wires	PF-CAP-C-00244
Optod titanium digital sensor 15m bare wires	PF-CAP-C-00245

