

Submersible DO Sensor Optical or Clark Cell Electrode



O²O Optical



Clark Cell

■ **DUO Concept – your choice!**

O²O Optical or **Clark Cell** fit into the same O2X sensor!
Both with temperature compensation.

Clark Cell – Teflon Membrane minimized fouling. The cell has an absolute zero which is an advantage in the measurement at low oxygen levels. The 0 never needs a calibration.

Optical – O²O uses new Phase Shift Technology which improves stability and has quicker response.

■ **Long Life**

Clark Cell 18-24 months dependent on DO concentration

Optical 2-3 years for luminophore & 5-10 years for electrode

■ **Low Maintenance**

- Automatic built-in flush nozzle cleaning system
- Cleaning with compressed air or water
- Field replaceable electrodes

■ **Easy to Install**

- Telescopic rod mounts to handrail
- Slide rail or Chain mounting also available

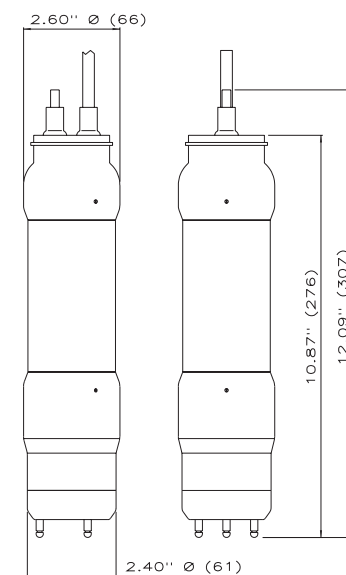
Dissolved Oxygen Sensor O2X for continuous measurement of dissolved oxygen in SBR systems, aeration basins, aerobic digesters and final effluent with temperature output at no additional cost. The O2X is essential in saving energy associated with running blowers in aeration basins. The measurement of dissolved oxygen also assists in controlling nitrification/denitrification and leads to better process control. The oxygen electrode provides stable and reliable readings.

New O₂O optical DO electrode with Phase Shift Technology offers improved stability of DO readings and quicker response time. New cap coating is not damaged by UV light like current optical electrode designs. Cleaning of electrode with automatic cleaning feature using compressed air or water at 30 psig alleviates the need for frequent manual cleaning. No moving parts offers accurate measurement and very little maintenance.

Technical specifications

Material	316SS (2343)	The sensor is manufactured in 316 stainless steel which resists corrosion. Body and head are designed for highest self-cleaning effect.
Cable/Connection	10 M w/ M12	10 m (33') long Hytrel cable w/ M12 digital connector. Highly resistant to aggressive liquid.
Mounting	In liquid	Immersion in liquid up to 1 bar (34')
Mounting types	Telescoping rod Chain w/ L rod Slide Rail	2-5 m (6'-15') telescoping rod including sensor SS Chain for digesters and SBR where liquid levels change For sampling tanks, 0.5m (19") slide rail standard but up to 2m (78") lengths
Mounting bracket	Spring loaded	316SS Spring loaded mounting bracket – heavy duty design
Rating	IP 68 (Nema 6P)	
Weight	2.1 kg (4.6 lbs)	
Process Temp	0–50°C (32-133°F)	
Interface	RS 485	Between BB2 box and O2X sensor

Measuring Principles	O ₂ O Optical	Clark Cell
Technology	Newest Phase Shift technique Luminophore with durable layer	Active gold/silver (cathode/ anode) w/ Teflon membrane, 0.025 mm
Measuring range	0-20 mg/l	0-20 mg/l
Accuracy	+/- 0,1 mg/l O ₂ < 5 mg/l +/- 0,2 mg/l O ₂ > 5 mg/l	+/- 1% of full scale
Life	2-3 years for luminophore & 5-10 years for electrode	18-24 months dependent on DO concentratoin
Cleaning – Built-in	2 bar (30 psig) air or water w/ 8 mm (5/16") black UV flush hose x 10 m (33') long	2 bar (30 psig) air or 3 bar (45 psig) water w/ 8 mm (5/16") UV flush hose x 10 m (33') long
Calibration	At installation then not necessary	Every 6 – 9 months
Options	Protective coating for abrasive applications	Protective plate



O2X



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