

Optical Dissolved Oxygen System



Features & Benefits

Potence Controls Optical Dissolved Oxygen Sensors measure Dissolved Oxygen with great accuracy in Waste Water plants. They can connect to any existing measurement systems that accept a 4 - 20 mA Input. This feature reduces the loop cost drastically as you can use any off the shelf Indicator and configure to measure Dissolved Oxygen.

Optical technology is based on the proven method wherein Oxygen Concentration is determined by the Luminescent quenching of a dye embedded on the sensor surface. Unlike polarographic or galvanic sensor this Optical sensors does not require filling solutions nor a warm time. Connect it to the indicator and it is up and running within no time.

- Affordable as you do not have to rely on any specific controllers.
- 4 - 20mA output from sensors enables seamless connectivity to field transmitters or PLC/DCS
- No electrolyte solution to replenish
- Replaceable sensor cap.
- No calibration or replacement sensor cap for atleast 1 year in most Applications
- Saltwater compensation
- Sample flow not necessary for measurement accuracy.
- The sensor come with a close of PVC Body version.
- Sensor cable length upto 100 meters allow flexibility in the field.

Sensor Specifications (PCOD03 / PCOD04)

Wetted Material	: PVC Body or SS Body
Measurement Range	: 0 - 20ppm, 0 - 200% Saturation
Accuracy	: +/- 0.1ppm below 1ppm: +/- 0.2ppm above 1ppm +/- 1% reading
Resolution	: 0.1ppm
Response Time	: T90 < 40 Seconds
Salinity Compensation	: Provided
Input Power	: 24VDC
Output Signal	: 4 - 20mA
Sensor Cable	: 6 mtr. (Optional cable length available up to 100 meters)
Connections	: 1"NPT(M) front and back fittings
Op. Temp	: -5 to 50°C
Degree of Protection	: IP 68

Controller Specifications (PC500)

Display	: Seven Segment LED Display
Power Requirements	: 90 – 270 VAC; 50 / 60 Hz
Analog Output Signal	: 4 – 20 mA; Max. Load 600 Ω
Analog Output Function	: Retransmission
Relays	: 2 Nos. Electromechanical SPDT; 10A; 115/230 VAC
Relays Operational Mode	: Control
Enclosure	: ABS
Enclosure Rating	: IP54
Enclosure Dimension	: H x D x W (48 x 96 x 75mm)
Cut-Out	: 44 x 92 mm

General Arrangement



Ordering Information

Model Number:

- PCODO3 : Optical Dissolved Oxygen Sensor; SS Body; Direct 4 - 20mA Output;
Range: 0.00 to 20.00 mg/L or 0 - 20.00ppm; 6m cable.
(Works with PC500 Indicator/Any other PLC)
- PCODO4 : Optical Dissolved Oxygen Sensor; PVC Body; Direct 4 - 20mA Output
Range: 0 to 20.00 ppm; 6 Meter Cable. (Works with PC500 Indicator / Any other PLC)
- PC500 : Dissolved Oxygen Indicator; 110/230 VAC; 4 - 20mA Output; Relay

In the interest of improving and updating, PCPL reserves the right to alter specifications at any time.