

# Dissolved Oxygen Sensors

## InPro® 6050 Dissolved Oxygen Sensors



The InPro 6050 dissolved oxygen sensor provides reliable continuous measurement of dissolved oxygen in water applications including biological treatment in wastewater. The InPro 6050 offers proven INGOLD sensor technology with an integrated thermistor in a rugged plastic sensor body providing optimum measurement accuracy at an affordable price. The Teflon/silicone membrane is reinforced by an integral stainless steel mesh, which provides durability and mechanical stability to ensure reliable, continuous on-line measurement.



### Specifications

#### Performance

Operating range:	30 ppb to Saturation
Accuracy:	$\leq \pm [1\% + 30 \text{ ppb}]$
Response time at 25 °C:	98 % of final value in < 90 s
Sensor signal in air 25 °C:	40 to 110 nA
Residual Signal in oxygen-free medium:	< 0.3 % of the signal in ambient air

#### Construction

Measuring Principle:	Polarographic Clark electrode
Cable connection:	VP
Connector design:	Straight
Sensor body:	PPS
Membrane material:	Teflon/Silicone/Teflon (reinforced with steel mesh)
O-ring material:	Viton, Silicone
Sensor diameter:	12 mm
Shaft length:	120 mm

#### Working Conditions

Temperature compensation:	Automatic
Measuring temperature range:	0 to 60 °C
Mechanical pressure resistance:	Maximum 2 bar (29 psi absolute)

#### Feature Overview:

- Rugged sensor designed for the wastewater industry
- Low maintenance
- Accurate measurement and quick response
- Long lasting and easy to maintain membranes
- Waterproof VP connector
- Teflon membrane protects the membrane against particle adhesion and chemical interference

## Ordering Information

### InPro 6050 D.O. Sensor (VP Connector)

Product	Length	Connector Style	Order Number
InPro 6050	120 mm	Straight VP	52 200 851

### InPro 6050 Consumables

Product	Order Number
Membrane body, single T-96	52 200 071
Membrane kit T-96 (4 membranes, 1 O-ring set, 25 ml of electrolyte)	52 200 024
Electrolyte filling solution (25 ml)	34 100 2016

### InPro 6050 Accessories

Product	Order Number
Sensor Polarization Module	52 200 892

### Sensor Cables (see also Cable section pg. 166)

Product	Order Number
VP Cable VP6-ST/ 1 m (3.3ft)	52 300 107
VP Cable VP6-ST/ 3 m (9.9 ft)	52 300 108
VP Cable VP6-ST/ 5 m (16.4 ft)	52 300 109
VP Cable VP6-ST/ 10 m (32.8 ft)	52 300 110
VP Cable VP6-ST/ 15 m (49.2 ft)	52 300 144
VP Cable VP6-ST/ 20 m (65.6 ft)	52 300 141
VP Cable VP6-ST/ 35 m (114.8 ft)	52 300 184

### InDip Series Immersion Housings

- Compatible with 120 mm length sensors
- For installation into open vessels and tanks

Immersion Housings	Order Number
InDip 508/CPVC/NPT	41 508 3001
InDip 508/PVDF/NPT	41 508 3002
InDip 510/SS/NPT	41 510 3001

### Suitable Housings

InFit 761 see pg. 144

InFit 762/763B see pg. 146

InTrac 787 see pg. 164

InDip see pg. 152

InFlow see pg. 150

## Did you know

The dissolved oxygen membrane used on the InPro 6050 is more durable and less prone to fouling than competitive products due to its advanced membrane design. This makes the InPro 6050 an excellent choice for dirty D.O. applications.