

Dissolved Oxygen Sensors

InPro® 6800 25 mm Dissolved Oxygen Sensors

Biopharm Chemical Food & Bev.



The InPro 6800 dissolved oxygen sensor with 25 mm diameter body provides maximum accuracy and ultimate cleanability for small or large scale fermentors. The sensor is available with the state-of-the-art VP connector or T-82 connector in straight or angled versions. A durable 316L stainless steel construction allows for CIP, steam sterilization or autoclaving in place, and the high sensor finish virtually eliminates contamination of the process. INGOLD's Teflon/silicone membranes have been designed with an internal steel mesh that makes the membrane more rugged and dramatically increases membrane life.

Specifications

Performance

Operating range:	6 ppb to Saturation
Accuracy:	≤ ± [1 % +6 ppb]
Response time at 25 °C:	98% of final value in < 90s
Sensor signal in air 25 °C:	40 to 110 nA
Residual Signal in oxygen-free medium:	< 0.1% of the signal in ambient air
Maximum flow error:	≤ 5%

Construction

Measuring principle:	Polarographic Clark electrode
Cable connection:	VP or T-82
Connector design:	Straight or angled
Sensor body:	316L stainless steel
Membrane material:	Teflon/Silicone/Teflon (reinforced with steel mesh)
Surface roughness of wetted parts:	N5 (Ra= 16µin)
O-ring material:	Silicone (FDA and USP Class VI positive listed)
Sensor diameter:	25 mm

Working Conditions

Temperature compensation:	Automatic
Measuring temperature range:	0 to 80 °C
Environmental temperature range:	-5 to 140 °C (sterilizable and autoclavable)
Measuring pressure resistance:	0.2 to 6 bar (2.9 to 87 psi absolute)
Mechanical pressure resistance:	Maximum 12 bar (174 psi absolute)

Certificates

EHEDG, FDA/USP Class VI, 3.1B, Ra16,
ATEX (II 1/2 G EEx ia IIC T6/T5/T4),
FM (IS CL1, Div 1, GR ABCD)

USP
Class VI



Feature Overview

- Revolutionary "rapid rebuild system" allows for service in seconds
- Detection limit down to 6 ppb
- Accurate measurement and quick response
- Long lasting and easy to maintain membranes
- FDA positive listed materials of construction
- Hygienically polished surface finish of N5 (Ra= 16µin)
- EHEDG certified for cleanability and 3A compliant
- Wetted O-rings comply with FDA and USP Class VI standards
- Autoclavable and steam sterilizable

Other Highlights

- INGOLD 25 mm sensor design recognized as a standard in the industry
- Cap nut allows for easy interface to INGOLD ports
- Comes with either waterproof VP connector or T-82 connector
- Angled connector versions allow for easy removal from fermentor and reduces strain on cable
- Variety of sensor lengths available

Ordering Information

25 mm InPro 6800 D.O. Sensors (VP Connector)

Product	Length	Connector Style	Order Number
InPro 6800	80 mm	Straight VP	52 200 974
InPro 6800	100 mm		
for B. Braun Ports	EPDM o-rings	Straight VP	52 200 983
InPro 6800	160 mm	Straight VP	52 200 975
InPro 6800	260 mm	Straight VP	52 200 976
InPro 6800	360 mm	Straight VP	52 200 977
InPro 6800	80 mm	Angled VP	52 200 978
InPro 6800	160 mm	Angled VP	52 200 979
InPro 6800	260 mm	Angled VP	52 200 980
InPro 6800	360 mm	Angled VP	52 200 981
InPro 6800	100 mm		
for B. Braun Ports	EPDM o-rings	Angled VP	52 200 982

25 mm InPro 6800 D.O. Sensors (T-82 Connector)

InPro 6800	80 mm	Straight T-82	52 201 020
InPro 6800	160 mm	Straight T-82	52 201 021
InPro 6800	260 mm	Straight T-82	52 201 022
InPro 6800	80 mm	Angled T-82	52 201 023
InPro 6800	160 mm	Angled T-82	52 201 024
InPro 6800	260 mm	Angled T-82	52 201 025

InPro 6800 Consumables

Membrane body, single T-96	52 200 071
Membrane kit T-96 (4 membranes, 1 O-ring set, 25ml of electrolyte)	52 200 024
Membrane bodies (20 pieces), T-96	52 200 791
Electrolyte filling solution (25ml)	34 100 2016
InPro 6800 Replacement Anode/Cathode assembly	52 200 899

InPro 6800 Accessories

InPro 6800 Sensor Master Polarization Unit	52 200 892
Sensor Polarization Station (4) InPro 6800	53 710 001
Adapter T-82 cable to VP electrode connector	52 200 939
Adapter VP cable to T-82 electrode connector	52 200 940
Cap sleeve N-Type	52 200 037
Cap sleeve with protective cage P-Type	52 200 038

Sensor Cables (see also Cable section pg. 175)

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 w/ right angle, 3 m (9.9 ft)	53 600 070
VP Cable w/ right angle, 5 m (16.4 ft)	53 600 072
VP Cable w/ right angle, 10 m (32.8 ft)	53 600 073
T82 Cable 1 m (3.3 ft) Tinned End	32 248 7501
T82 Cable 3 m (9.9 ft) Tinned End	32 248 7503
T82 Cable 5 m (16.4 ft) Tinned End	32 248 7505
T82 Cable 10 m (32.8 ft) Tinned End	32 248 7510
T82 Cable 20 m (65.6 ft) Tinned End	32 248 7520

INGOLD 25 mm Port



For more information about Ports/Sockets see page 142.

InPro 6800 for B. Braun Ports



InPro 6800 Sensor Master

