

OxyFerm FDA



10 ppb to 40 ppm (DO) Measuring range Response time t98% < 60 s at 25 °C, from air to nitrogen 0 to 130 °C (Arc: analog 0 to 110 °C, Process temperature digital 0 to 130 °C) Pressure range 0 to 4 bar (relative to ambient) Autoclavable, CIP, SIP Hygienic aspects Electrolyte Oxylyte Surface Quality $R_a < 0.4 \mu m (N5)$ Current in air at 25°C 40 to 80 nA Material Stainless steel 1.4435 -670 mV Polarization voltage **EPDM** O-ring

For more specifications see www.hamiltoncompany.com

The OxyFerm FDA is an electrochemical oxygen sensor suited for applications with high demands for hygiene, e.g. in pharmaceutical industry, in biotechnology and in food & beverage production. It is available with 12 mm or 25 mm (XL) shaft diameter.

The sensor is equipped with an FDA-approved membrane for use in hygienic processes. It withstands steam sterilization, autoclavation and CIP cleanings.

Benefits

- ► Sanitary Feature: The silicone membrane seals without a gap to steel membrane body (no additional o-ring)
- ► Little drift, fast response, short polarization time
- ► Replacing the cathode is possible and very simple to perform.

Typical applications

Of

Ordering Information





Specifications





a-length	T82	VP 6	Arc	MS
120	237450	237540	243100	237713
160	237455	237541	243101	10069701
225	237452	237542	243102	237715
325	237453	237543	243103	10069700
425	237454	237544	243104	_
56	237175-OP	-	243140-OP	_
125	237170	_	-	-
262	237174	-	-	_
120	243289	-	-	-
	225 325 425 56 125	120 237450 160 237455 225 237452 325 237453 425 237454 56 237175-OP 125 237170	120 237450 237540 160 237455 237541 225 237452 237542 325 237453 237543 425 237454 237544 56 237175-OP - 125 237170 -	120 237450 237540 243100 160 237455 237541 243101 225 237452 237542 243102 325 237453 237543 243103 425 237454 237544 243104 56 237175-OP - 243140-OP 125 237170 - -

With the XL option, the o-ring position can be optimally matched to the weld-in socket from 22 to 55mm. Please state the OP you need when ordering.

Accessories



- Membrane Kit FDA Ref 237140
- Membrane Kit CIP Ref 237126
- Membrane Kit Ref 237123
- Oxylyte 30 mL Ref 237118
- Replacement Cathode OxyFerm Ref 237306
- Autoclavation Cap Oxyferm Ref 242000
- Polarization Module G Ref 237350
- Polarization Module T Ref 237370

Cables see page ▶ 112

Arc Accessories see page **▶** 116 **Housings** see page ▶ 127

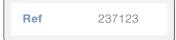


Oxygen Accessories



OxyFerm Membrane Kit

The OxyFerm Membrane Kit contains 3 membrane bodies, Oxylyte electrolyte, pipette, spare o-ring and a polishing strip.



Membrane Kit FDA

The Membrane Kit FDA is the kit for the OxyFerm FDA sensors and contains 3 FDA membrane bodies, Oxylyte electrolyte, pipette, spare o-ring and a polishing strip. The mambrane body of the FDA membrane has a special rounded design to prevent accumulation of gas bubbles.



Membrane Kit CIP

The Membrane Kit CIP contains 3 membrane bodies that are especially designed to withstand CIP cleanings. Oxylyte electrolyte, pipette, spare o-ring and a polishing strip.

Ref 237126

OxyGold Membrane Kit

The OxyGold Membrane Kit contains 3 membrane bodies with the rounded design, pipette and a spare o-ring. Electrolyte must be ordered separately to match the sensor (see page 111).

Ref 237135

Polarization Module

The Polarization Module is to prepare replacement sensors so that they can be used immediately for measurements without connection to a transmitter. It polarizes the oxygen sensors and saves polarization time at the transmitter.

Polarization Module T OxyFerm / OxyFerm FDA / OxyFerm XL	Ref 237370
Polarization Module G OxyFerm VP / OxyGold G	Ref 237350
Polarization Module B OxyGold B	Ref 237360

Replacement Cathode OxyFerm	Ref 237306
Replacement Cathode OxyGold G	Ref 237427
Replacement Cathode OxyGold B	Ref 237437

Autoclavation Cap

The Autoclavation Cap is used to protect the OxyFerm T82 connector from moisture during autoclavation. It is important to keep connections dry and clean to ensure reliable measurements.

Autoclavation Cap OxyFerm Ref 242000

Electrolytes and Solutions



Electrolyte

3 M KCI	100 mL	238036
3 M KCI	500 mL	238936
Skylyte-CL	100 mL	242080
Protelyte	100 mL	238038
3 M KCI-LR	500 mL	238939
Skylyte	500 mL	238937
Electrolytes for Oxygen Sensors		Ref
OxyGold Oxylyte G	30 mL	237139
OxyGold Oxylyte B	30 mL	237138
OxyFerm Oxylyte	30 mL	237118

Storage Solution

In order to to achieve long sensor life and faster electrode response times, it is recommended to store electrodes in our storage solution. It is an acid-buffered solution that ensures the regeneration of the electrode in addition to provide an optimized storage.

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Storage Solution	500 mL	Ref 238931



Cleaning Solution Set

Depending on the type of application, the pH glass or diaphragm can get contaminated through various ingredients of the measuring solution. This is indicated by a slow response of the electrode, or even incorrect readings. To overcome these problems, Hamilton has developed a cleaning solution set. The intention is to have an overall cleaning of the pH glass as well as the diaphragm. The set is comprised of Cleaning Solution A, Cleaning solution B and a storage solution. To clean the electrode put it into each solution for 15 – 30 minutes, and your electrode will be ready for new measurements again.

Cleaning Solution Set Ref 238290

