

# OxyFerm FDA 160

Specification Sheet (Part/REF # 237455)



OxyFerm sensors provide a traditional nanoamp (nA) current output with multiple options for electrical connectors and mounting connections.

## Product Specifications

<b>Sensor Family</b>	OxyFerm FDA
<b>Parameter</b>	DO (Electrochemical)
<b>Sensor Output</b>	Traditional: nA
<b>a-length</b>	160 mm
<b>Electrical Connector</b>	T82/D4
<b>Measurement Principle</b>	Electrochemical reduction of oxygen
<b>Measuring Range</b>	10 ppb to 40 ppm (DO) or 0.2 to 1000 mbar (pO <sub>2</sub> )
<b>Drift at Room Temperature</b>	< 1 % per week
<b>Membrane Cap</b>	Optiflow FDA
<b>Electrolyte</b>	Oxylyte
<b>Oxygen Consumption</b>	Ca. 20 ng/h in air at 25 °C
<b>Temperature Sensor</b>	NTC 22 kOhm
<b>Current in Air at 25 °C</b>	40 - 80 nA
<b>Diameter</b>	12 mm
<b>Process Connection</b>	PG13,5
<b>Wetted Parts</b>	Stainless Steel 1.4435 EPDM (Ethylene propylene elastomer) Silicone - FDA 21 CFR 177.2600 VMQ (Silicone elastomer) See compliance details in Material Specification document
<b>Surface Quality of Steel</b>	Ra < 0.4 µm (N5)
<b>Electrode system</b>	Silver platinum combination
<b>Polarization Voltage and Time</b>	-670 ± 50 mV, ≥ 2 hours
<b>Serial Number</b>	Yes
<b>Response Time t90%</b>	< 60 s at 25 °C
<b>Certificate</b>	Material and Performance Test Certificate
<b>ATEX Approval</b>	II 1/2 G Ex ia IIC T4/T5/T6 Ga/Gb; II 1/2 D ia IIIC T x °C Da/Db
<b>IECEX Approval</b>	II 1/2 G Ex ia IIC T4/T5/T6 Ga/Gb; II 1/2 D ia IIIC T x °C Da/Db
<b>Autoclavable</b>	Yes
<b>CIP</b>	Yes
<b>Steam Sterilizable</b>	Yes
<b>Operating Temperature Range</b>	0 to 130 °C

**Pressure Range bar g** 0 to 4 bar

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**Max. CO<sub>2</sub> Partial Pressure** 0.01 bar

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**Required Flow**  $\geq 0.03$  m/s

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Specifications are subject to change without notice

**Spec. Version B**

<https://www.hamiltoncompany.com/process-analytics/sensors/237455>