

OxyFerm FDA 425

Specification Sheet (Part/REF # 237454)



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

Product Specifications

Sensor Family	OxyFerm FDA
Parameter	DO (Electrochemical)
Sensor Output	Traditional: nA
a-length	425 mm
Electrical Connector	T82/D4
Measurement Principle	Electrochemical reduction of oxygen
Measuring Range	10 ppb to 40 ppm (DO) or 0.2 to 1000 mbar (pO ₂)
Drift at Room Temperature	< 1 % per week
Membrane Cap	Optiflow FDA
Electrolyte	Oxylyte
Oxygen Consumption	Ca. 20 ng/h in air at 25 °C
Temperature Sensor	NTC 22 kOhm
Current in Air at 25 °C	40 - 80 nA
Diameter	12 mm
Process Connection	PG13,5
Wetted Parts	Stainless Steel 1.4435 EPDM (Ethylene propylene elastomer) Silicone - FDA 21 CFR 177.2600 VMQ (Silicone elastomer) See compliance details in Material Specification document
Surface Quality of Steel	Ra < 0.4 µm (N5)
Electrode system	Silver platinum combination
Polarization Voltage and Time	-670 ± 50 mV, ≥ 2 hours
Serial Number	Yes
Response Time t90%	< 60 s at 25 °C
Certificate	Material and Performance Test Certificate
ATEX Approval	II 1/2 G Ex ia IIC T4/T5/T6 Ga/Gb; II 1/2 D ia IIIC T x °C Da/Db
IECEX Approval	II 1/2 G Ex ia IIC T4/T5/T6 Ga/Gb; II 1/2 D ia IIIC T x °C Da/Db
Autoclavable	Yes
CIP	Yes
Steam Sterilizable	Yes
Operating Temperature Range	0 to 130 °C

Pressure Range bar g 0 to 4 bar

Max. CO₂ Partial Pressure 0.01 bar

Required Flow ≥ 0.03 m/s

Specifications are subject to change without notice

Spec. Version B

<https://www.hamiltoncompany.com/process-analytics/sensors/237454>