



OxyGold G Arc 225

Specification Sheet (Part/REF # 243111)

OxyGold G Arc polarographic DO sensors have Arc intelligent sensor technology along with parts-per-billion trace oxygen measurement.

Product Specifications

Sensor Family	OxyGold G
Parameter	DO (Electrochemical)
Sensor Output	Arc: Modbus, 4 to 20 mA
a-length	225 mm
Electrical Connector	VP8
Measurement Principle	Electrochemical reduction of oxygen
Measuring Range	1 ppb to 40 ppm (DO) or 0.02 to 1000 mbar (pO ₂)
Accuracy at 25 °C	± 2 %
Drift at Room Temperature	< 1 % per week
Sensor Cap	Delivered with Optiflow
Electrolyte	Oxylyte G
Oxygen Consumption	Ca. 100 ng/h in air at 25 °C
Temperature Sensor	NTC 22 kOhm
Configurable Values	DO: mbar; %-sat; %-vol; µg/l; mg/l; ppb/ppm (gas); ppb/ppm (dissolved oxygen); Temperature: °C, °F, K
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
Analog Interface 1	4 to 20 mA for DO, programmable
Analog Interface 2	4 to 20 mA for Temp., programmable
Analog Interface 1 and 2	Galvanically not isolated; pulse width modulation 3.5 kHz
Baud Rate	4800, 9600, 19200, 38400, 57600,115200 Bd
Polarization Voltage and Time	-670 ± 50 mV, ≥ 2 hours
Operating Voltage	7 to 30 VDC max. 150 mW
Serial Number	Yes
Response Time t90%	30 to 60 s at 25 °C, from air to nitrogen
Certificate	Yes, with parameter settings and materials used
ATEX Approval	No
Autoclavable	Yes
CIP	Yes
Steam Sterilizable	Yes

Operating Temperature Range	Analog interface: 0 to 110 °C; Digital interface: 0 to 130 °C
Pressure Range bar g	0 to 12 bar
Max. CO₂ Partial Pressure	0.01 bar
Required Flow	≥ 0.1 m/s
Automatic Polarization	Yes, max. 2 hours stabilisation time

Specifications are subject to change without notice

Spec. Version B

<https://www.hamiltoncompany.com/process-analytics/sensors/243111>