

VisiTrace mA 120 L1

Specification Sheet (Part/REF # 10068709-1111)



The VisiTrace optical oxygen sensor is specifically designed for low level dissolved oxygen down to ppb levels.

Product Specifications

Sensor Family	VisiTrace mA
Parameter	DO (Optical)
Sensor Output	4 to 20 mA / HART
a-length	120 mm
Electrical Connector	M12
Measurement Principle	Oxygen dependent luminescence quenching, temperature compensation
Measuring Range	0 to 2 ppm (0 to 50 mbar)
Accuracy at 25 °C	± 0.5 ppb or 2 % whichever is greater
Drift at Room Temperature	< 1 % per week @ 100 ppb
Sensor Cap	ODO Cap L1
Electrolyte	None
Oxygen Consumption	None
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)
4 to 20 mA Current Range	3.5 to 22 mA
Analog Interface 1	Two wire sink 4 to 20 mA for DO, programmable
4 to 20 mA Accuracy	< 0.3 % + 0.05 mA
Transmitting Power	Max. 4 dBm
Digital Interface	Bluetooth 5.0 HART Version 7.0
Operating Voltage	18 to 30 VDC
Serial Number	Yes
Response Time	t90% < 20 s in gas; < 90 s in water
Certificate	Yes, with measured current in oxygen

ATEX Approval	II 1 G Ex ia IIC T3/T4/T5/T6 Ga; II 1 D Ex ia IIIC T135°C Da
IECEx Approval	II 1 G Ex ia IIC T3/T4/T5/T6 Ga; II 1 D Ex ia IIIC T135°C Da
Autoclavable	Yes
CIP	Yes
Steam Sterilizable	Yes, max. Temperature 140 °C
Operating Temperature Range	-10 to 140 °C; the sensor provides no DO reading above 85 °C
Pressure Range bar g	-1 to 12 bar
Protection Rating	IP 68
Required Flow	None

Specifications are subject to change without notice

Spec. Version D

<https://www.hamiltoncompany.com/sensors/10068709-1111>