

VisiFerm mA 160 H3

Specification Sheet (Part/REF # 10070760-1211)



Less frequent calibration and longer lifetime. 2 wire 4-20mA / HART for GMP production environments. Explosive rated environments.

Product Specifications

Sensor Family	VisiFerm mA
a-length	160 mm
Electrical Connector	M12
Measurement Principle	Oxygen dependent luminescence quenching, temperature compensation
Measuring Range	4 ppb to 25 ppm (DO) 0 to 62.85 %-vol or 0 to 300 %-sat
Accuracy at 25 °C	1 ± 0.05 %-vol; 21 ± 0.2 %-vol; 50 ± 0.5 %-vol
Drift at Room Temperature	< 1 % per week
Sensor Cap	ODO Cap H3
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
Diameter	12 mm
Process Connection	PG13,5
Wetted Parts	Stainless Steel 1.4435 EPDM (Ethylene propylene elastomer) 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 % current value + 0.05 mA
Transmitting Power	Max. 4 dBm
Digital Interface	Bluetooth 5 HART Version 7.0
Operating Voltage	18 to 30 VDC
Serial Number	Yes
Response Time	t98% < 30 s at 25 °C
Certificate	Yes, with measured current in air
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	-20 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 E

<https://www.hamiltoncompany.com/process-analytics/sensors/10070760-1211>