

VisiFerm DO ECS 160 H0

Specification Sheet (Part/REF # 243666-221)



VisiFerm ECS is an optical sensor for existing polarographic sensor installations. It simulates a traditional nA, electrochemical output making it easy to install with existing bio-controllers and transmitters.

Product Specifications

Sensor Family	VisiFerm
Parameter	DO (Optical)
Sensor Output	Traditional: nA
a-length	160 mm
Electrical Connector	VP8
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 H0
Electrolyte	None
Oxygen Consumption	None
Temperature Sensor	NTC 22 kOhm
Configurable Values	DO: mbar; %-sat; %-vol; µg/l; mg/l; 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)
Analog Interface 1	ECS / 4 to 20 mA
Digital Interface	RS485 Modbus (max. 31 addresses)
Baud Rate	4800, 9600, 19200, 38400, 57600, 115200 Bd
Operating Voltage	7 to 30 VDC max. 1 W
Serial Number	Yes
Response Time	t98% < 30 s at 25 °C
Certificate	Yes, with parameter settings and materials used
ATEX Approval	No
IECEX Approval	No

Autoclavable	Yes, max. Temperature 130 °C
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
Required Flow	None

Specifications are subject to change without notice

Spec. Version E

<https://www.hamiltoncompany.com/process-analytics/sensors/243666-221>