



VisiFerm RS485-ECS 120 H3

Specification Sheet (Part/REF # 10118255-1131)



VisiFerm RS485-ECS is an advanced optical dissolved oxygen sensor for biotechnology, biopharmaceutical, and food and beverage industries, offering full measurement functionality, self-diagnostics, and simplified maintenance.

Product Specifications

Process Connection	PG13,5
Sensor Family	VisiFerm RS485
Wetted Parts	Stainless Steel 1.4435 EPDM (Ethylene propylene elastomer) VMQ (Silicone elastomer) See compliance details in Material Specification document
Electrical Connector	VP8
Parameter	DO (Optical)
Sensor Output	Arc: Modbus, 4-20 mA (only via Arc Wi 2G Adapter), ECS

Measuring Range	4 ppb to 25 ppm (in liquid) 100 ppm to 600'000 ppm (in gas) 0.01 - 62.85 %-vol or 0.05 to 300 %-sat 0.1 to 625 mbar (pO2) At 25°C and 1013 mbar total gas pressure
Electrolyte	None
Accuracy at 25 °C	1 ± 0.05 %-vol; 21 ± 0.2 %-vol; 50 ± 0.5 %-vol
Drift at Room Temperature	< 1 % per week
Oxygen Consumption	None
Temperature Sensor	NTC 22 kOhm
Configurable Values	Dissolved oxygen (DO): mbar, %-sat, %-vol, µg/l ppb, mg/l ppm, ppm gas; Temperature: °C, °F, K
Surface Quality of Steel	Ra < 0.4 µm (N5)
Analog Interface	ECS
Digital Interface	RS485 Modbus (max. 32 addresses)
Baud Rate	4800, 9600, 19200, 38400, 57600, 115200 Bd
Operating Voltage	10 to 27 VDC max. 1.5 W
Serial Number	Yes
Certificate	Yes
ATEX Approval	No
IECEX Approval	No
Diameter	12 mm
Autoclavable	Yes
Steam Sterilizable	Yes, max. Temperature 140 °C
CIP	Yes

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	IP68
Required Flow	None
Compliance details	See Material Specification document
a-length	120 mm
Sensor Cap	ODO Cap H3
Response Time	t98% < 30 s at 25 °C

Specifications are subject to change without notice

<https://www.hamiltoncompany.com/sensors/dissolved-oxygen-sensors/visiferm/visiferm-rs485-ecs?part-number=10118255-1131>

Spec. Version B



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