

VisiFerm DO Arc 160 H0

Specification Sheet (Part/REF # 243666-121)



The VisiFerm DO Arc sensors are designed to meet the demanding needs of hygienic applications in the biotechnology, bio pharmaceutical, and food and beverage industry.

Product Specifications

Sensor Family	VisiFerm
Parameter	DO (Optical)
Sensor Output	Traditional: mA
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	4 to 20 mA for DO, programmable, galvanically not isolated; pulse width modulation 5 kHz
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 D

<https://www.hamiltoncompany.com/process-analytics/sensors/243666-121>