HAMILTON

CO_2NTROL RS485 160

Specification Sheet (Part/REF # 10087810-12)

Maintenance-free Solid-State Optical CO_2 Sensors

Product Specifications

Sensor Family	CO_2NTROL
Parameter	DCO_2
Sensor Output	Arc: Modbus
a-length	160 mm
Electrical Connector	VP8
Measurement Principle	Non-dispersive Infra-Red (NDIR) absorption of wavelength selective for CO_2; temperature compensation.
Measuring Range	5 - 1000 mbar or 0.5 - 100 % vol or 7.5 - 1500 mg/L in liquid phase at 101.3 kPa and 25°C
Accuracy at 25 °C	±5 mbar (5-100 mbar); ±5% (> 100 mbar)
Electrolyte	None
CO_2 Consumption	None
Temperature Sensor	NTC 22 kOhm
Configurable Values	CO_2: mbar, mmHg, hPa, %-vol, %-sat, µg/l ppb, mg/l ppm (dissolved CO) Temperature: K, °C, °F
Diameter	12 mm
Process Connection	PG13,5

Wetted Parts	Stainless Steel 1.4435 EPDM (Ethylene propylene elastomer) Silicone - FDA 21 CFR 177.2600 See compliance details in Material Specification document
Surface Quality of Steel	Ra < 0.4 µm (N5)
Digital Interface	RS485 Modbus (max. 31 addresses)
Baud Rate	4800, 9600, 19200, 38400, 57600,115200 bd
Operating Voltage	+10 to +27 VDC
Serial Number	Yes
Certificate	Yes, factory test with CO_2 certified gas
Hygienic Design Approval	EHEDG approved. EL Class I. (Test executed with Hamilton hygienic socket REF 242545)
ATEX Approval	No
IECEx Approval	No
Autoclavable	Yes
CIP	Yes
Steam Sterilizable	Yes, max. Temperature 140 °C
Operating Temperature Range	-10 to 140 °C; the sensor provides no CO_2 reading above 60 °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 A**

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