

Oxygen Transmitter

Microx ProSafe SIL2



- Wide range measurement capability - ppm to 23.5 %
- SIL2-certified*
- Two independent measurement channels - dual range
- Pre-calibrated smart sensors

Description

With current-limiting zirconia sensors, Microx ProSafe SIL2 delivers a long-life, reliable solution capable of an extended measurement range. This dual-channel transmitter features a SIL-capable alarm set-point for management of gas quality and personnel safety. Factory-calibration with data points stored in the smart oxygen sensors, streamline sensor replacement, saving time and simplifying your process.

A high-resolution sensor in the low measuring range ensures the highest accuracy in the process operating point with Microx ProSafe SIL2.



Specifications

Transmitter	
Electrical	
Output signal	4...20 mA (19...20 mA Error State) 19 mA = 23.5 %
Digital communications	RS485 per channel
O ₂ Safety Threshold	1, 1.5 or 2 %
Relay Contact Output	Controlled by factory-configured O ₂ safety threshold stored in smart sensor
Electrical Interface	8-pin M12 on sensor, extension cable from sensor plug to screw terminal on monitor
Power Supply	24 V DC ±2
Maximum power consumption	12 W or 0.5 A
Mechanical	
Ingress protection	IP40 (monitor), IP66 (sensor plug)
Housing material	PC (UL 94 V-0)
Mounting	DIN rail
Sensor cable length (supplied)	50 cm (19.6 in)
Extension cable length	Standard: 1 m (3.28 ft) Optional: 3 m (9.8 ft)
Compliance	
CE: According to EU directives 2006/42/EC (machinery), 2014/30/EC (EMC) and 2011/65/EU (RoHS)	
SIL2: According to EN IEC 62061; PLd: According to EN ISO 13849-1; EMC: According to EN 50270:	

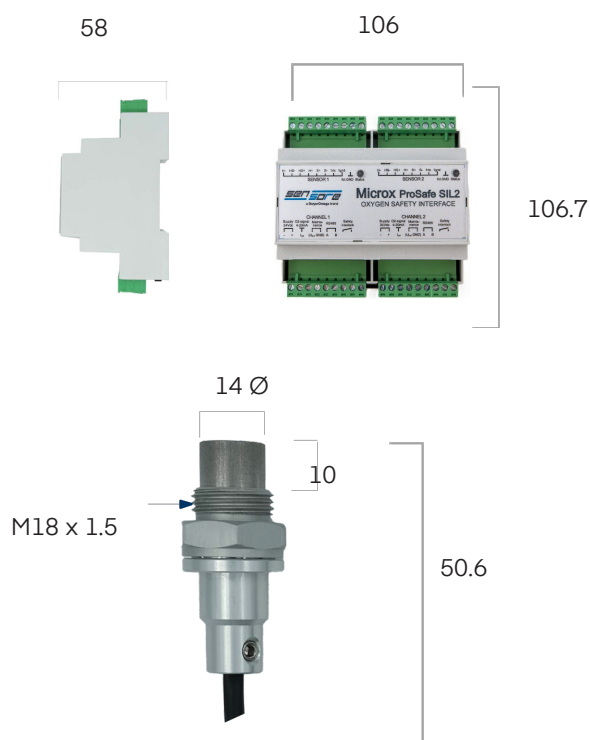
Sensor	Zirconia (ZR)	
	Channel 1	Channel 2
Measurement Range	0...23.5 %	0...2.35 %
Accuracy (at constant conditions)	1 % FS	1 % FS
Output Resolution (4...20 mA)	0.025 %	25 ppmV
Lower Detection Limit	1000 ppm _v	100 ppm _v
Maximum flow velocity	6 m/s (19.7 ft/s)	
Pressure Range	700...1300 mBarabs (10...19 psi)	
Maximum Safe Pressure	1.5 barg (21 psig)	
Response Time (T90)	< 10 seconds	
Operating Temperature Range (Sensor head)	+10...+100 °C (+50...+212 °F)	
Operating Temperature Range (Sensor plug)	+10...+75 °C (+50...+165 °F)	
Operating Temperature Range (Monitor)	+10...+50 °C (+50...+122 °F)	
Life Expectancy (application dependent)	Up to 5 years	
Humidity (with normal use)	0...90 %rh @ 40 °C (104 °F) non-condensing	
Process Connections	M18 x 1.5 male	
Shelf Life	Unlimited	
Calibration Interval	No calibration required. Calibration data stored in smart sensor.	

*See EC type examination by TUV AUSTRIA No. IN-AT-AS-MRL-20-00297A

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Ext Cable Length	O ₂ Safety Threshold
A (1 m)	A (1.0% O ₂)
B (3 m)	B (1.5% O ₂)
	C (2.0% O ₂)

Dimensions (mm)



Extension Cord

We adopt a continuous development program, which sometimes necessitates specification changes without notice.

For technical assistance or enquiries about other options, please contact us here: sensors@dwyeromega.com