

FCX-MP1000-Extern-FH-030-A-CH

Sauerstoffmodul

mit einem Zirkonoxysensor

Oxygen module

with a Zirconia Sensor



Der Sauerstoffsensor FCX-ULL (0...1000 ppm) ist mit einer Elektronik verheiratet, um eine genaue Steuerung und Präzises Auswertung des Signals zu bekommen. Der FCX Sensor ist ein Durchflussgehäuse montiert und mit einem Kabel verbunden

Merkmale

- 0 ...1000 ppm
- Kein Referenzgas nötig
- Lebensdauer > 1 Jahr im Luft
- Keine Nachkalibrierung nötig
- Ausgezeichnete Langzeitstabilität
- Kleine Leistungsaufnahme
- Analog: 4...20mA linear
- RoHS/Reach konform
- Hergestellt in der Schweiz

Anwendungen

- Schutzatmosphäre/Prozessindustrie
- Additive Fertigung
- Stickstoff und Argon-Generatoren
- Prozessindustrie
- Lebensmittelindustrie
- Gaswarnanlagen
- Medizinische Geräte
- Laborgeräte
- Vakuumgeräte

The oxygen sensor FCX-ULL is electronically controlled via a state-of-the-art control board for the accurate concentration measurements of oxygen. The sensor is mounted in a flow housing and connected with the control board via a cable.

Features

- 0 ...1000 ppm
- No reference gas is needed
- Lifetime > 1 year in air
- No calibration needed
- Excellent longtime stability
- Low power consumption
- Analog: 4...20mA linear
- RoHS/Reach conform
- Made in Switzerland

Applications

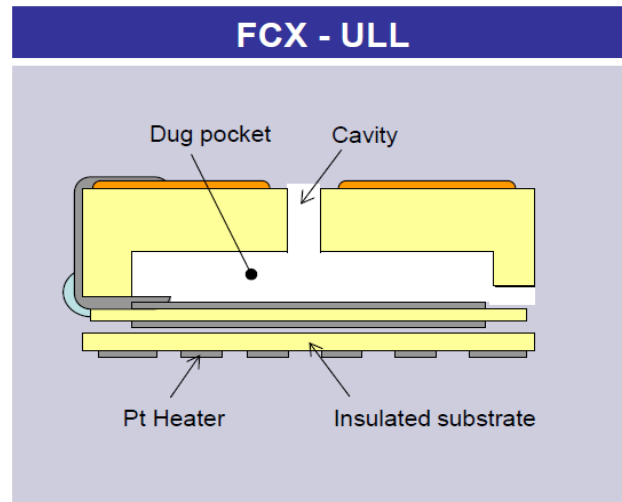
- Controlled atmosphere/Processing industry
- Additive manufacturing
- Nitrogen and Argon generators
- Process Industrie
- Food industry
- Gas security systems
- Medical units
- Laboratory equipment
- Vacuum equipment

Funktionsprinzip des Sensors

Zirkonoxid Sensor nach dem Strombegrenzungsprinzip

Principle of functionality for the sensor

Limiting current type of a Zirconia oxygen sensor



Spezifikationen

Messbereich	0..1000 ppm O ₂
Genauigkeit	±50 ppm O ₂ (single point), < ±10 ppm O ₂ (continuous)
Ansprechzeit (Diffusion)	< 30 seconds (T ₉₀)
Ansprechzeit (Durchfluss)	< 8 seconds (T ₉₀)
Betriebstemperatur	-10°C...+50°C
Feuchte	0...85 %RH, non-condensing
Aufwärmzeit	3 min
Speisespannung	11.5-28 VDC
Leistungsaufnahme	< 2W
Ausgangssignal	4...20 mA linear
Sensorebensdauer	1 year in free air and with sensor voltage applied; > 10M ppm-hours
Durchflussrate	0,1...3 slm/min
Abmessungen	75 x 40 mm (PCB)
Gewicht	100g

Specifications

Measurement range	0..1000 ppm O ₂
Accuracy	±50 ppm O ₂ (single point), < ±10 ppm O ₂ (continuous)
Response time (diffusion)	< 30 seconds (T ₉₀)
Response time (flow)	< 8 seconds (T ₉₀)
Operating temperature	-10°C...+50°C
Humidity	0...85 %RH, non-condensing
Warm-up time	3 min
Supply voltage	11.5-28 VDC
Power consumption	< 2W
Output signal	4...20 mA linear
Sensor lifetime	1 year in free air and with sensor voltage applied; > 10M ppm-hours
Flow rate	0,1...3 slm/min
Dimensions	75 x 40 mm (PCB)
Weight	100g

Die Angaben dieses Datenblattes enthalten die Spezifikationen der Produkte, nicht die Zusicherung von Eigenschaften. Technische Änderungen die dem Fortschritt dienen bleiben vorbehalten

The declarations on this data sheet area according to the specifications of the products, not an assurance of their quality. We reserve the right to make technical modifications in order to improve the product.

FCX-M product code																		
FCX-					-					-			-		-		-	CH
Electronics																		
	linear output, analog or digital	M	C															
	logarithmic output, analog	M	L															
	linear output < 10.000 ppm, analog	M	P															
	linear output, digital	M	L	D														
Measurement range																		
	ppm/vol%																	
	0...1000 ppmO ₂					1	0	0	0									
	0...10000 ppmO ₂					10	0	0	0									
	0...1 %VolO ₂							0	1									
	0...5 %VolO ₂							0	5									
	0...25 %VolO ₂							2	5									
	0...95 %VolO ₂							9	5									
	customer specific				ex.			9	6									
Gas flow type																		
	forced flow diffusion													FLOW DIFF				
	external connected - sensor mounted on PCB, standard cable													EXT- STD				
	external connected - special flow housing, standard cable													EXT- FH				
	external connected - KF vacuum flange, HT cable													EXT- KF				
	external connected - high temperature < 200°C, HT cable													EXT- HT200				
	external connected - IP65 protection, high temperature < 200°C, HT cable													EXT- LEMO				
	external connected - high temperature < 300°C, special HT cable													EXT- HT300				
	external connected - M27 x 2 mm thread high temperature < 200°C, special HT cable													EXT- THD				
	customer specific													EXT- CUST				
Cable length																		
	standard 30 cm																	030
	standard 100 cm																	100
	standard 200 cm																	200
	standard 400 cm																	400
	standard 600 cm																	500
	customer specific																	CUST
Output signal																		
	4...20mA/2-wire																	A
	0-10VDC/2-wire																	V
	RS232 (only MC-type)																	RS232
	RS485 (only MC-type)																	RS485
	Serial, logic level 3.3 V (MLD-type)																	RTX
	customer specific																	CUST

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