Oxygen Analyzer

ZOA 100

Main characteristics

- Gaseous diffusion zirconium oxide cell with no reference gas
- Maintenance free
- Expected life time : 5 years
- Auto diagnostic function
- Low cost
- No influence of pressure



The oxygen analyzer model ZOA 100 uses a gaseous diffusion micro zirconium oxide cell.
This technique allows a continuous or intermittent use with a reduced maintenance.
The several versions of ZOA 100 are designed to fit the most severe applications.
The unit is also designed to be used as oxygen detector.
The analyzer is available in different standard versions :

- Panel mounting control unit with remote sensor
- Control unit in polycarbonate wall mounting box with internal or remote sensor
- Control unit and sensor in painted steel wall mounting box with built-in gas sampling system
- Control unit and sensor in portable wallet with pressure regulator and pump

Main applications

- Control of pure gas generators (N_2, O_2, Ar)
- Safety and health, lack or excess oxygen
- Control of atmospheres in glove boxes, gas blending

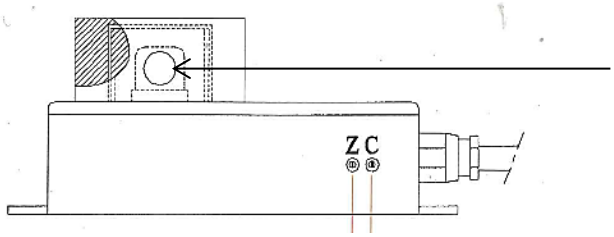
Technical characteristics

Measurement principle	Zirconium oxide sensor with gaseous diffusion
Accuracy	Depending on version : Low range : ± 0.05% vol. High range : better than ± 0.2% vol.
Response time	T90 = 20 s
Sensor operating temperature	From -10 to +50°C
Sensor operating pressure	No influence of pressure (0 – 3 bars)
Display	LED
Output signal	4 – 20 mA and 2 alarms
Power supply	115/230 VAC – 50/60Hz, 24 VDC or VAC – 10W Rechargeable battery for portable unit
Dimensions (L * H * P)	Housing : 178 * 95 * 74 mm Sensor : 140 * 64 * 58 mm
Weight	4 kg

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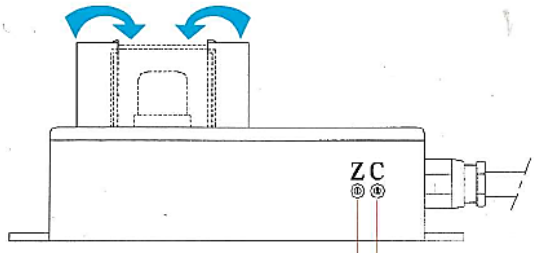
Difference between the 2 sensor types

- Flow chamber sensor : (ref. ARC00564+)



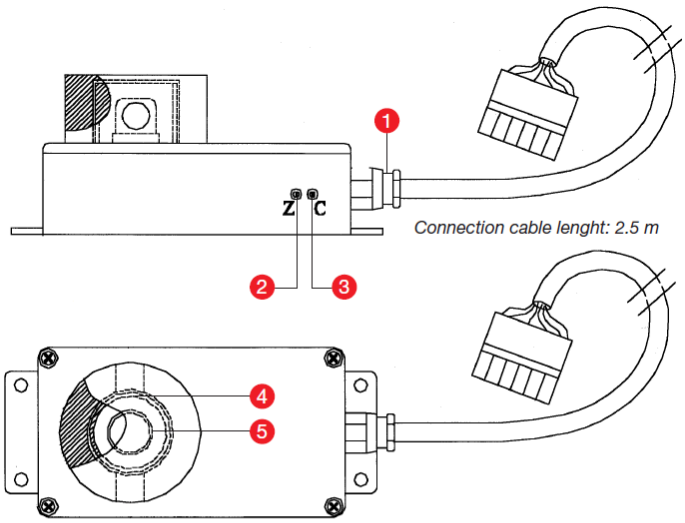
The gas to analyze passes through this pipe.

- Diffusion sensor : (ref. ARC00541+)



The gas to analyze is picked up by diffusion through a metal gate.

Connections



1. *Sensor/electronic unit cable*
2. *Zero potentiometer*
3. *Span potentiometer*
4. *Sensor*
5. *Filter*

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ZOA 100 codification

Device	
ZOA 100	ARCZOA100

Control unit mounting	
Panel	E
Wall mounting in polycarbonate housing	M
Wall mounting in metal painted housing (provide battery to avoid power loss)	S
Portable	P
Wall mounting with package (pump, flow meter, fan, etc.)	F
Wall mounting in stainless steel housing	G

Sensor mounting		
Remote		D
Integrated	Only for M, S or P type	I

Sensor type	
Flow chamber	C
Diffusion screen	N
Without sensor	E

Release	
V450CCS : provide ranges 0-1% / 0-2.5% / 0-5% / 0-25% / 0-50%	1
V495 : provide range 0-95%	2
V4 : old version, only to replace V4 instruments	3

Voltage	
230 VAC	-
110 VAC	A
12/24 VDC ou VAC	B

Spare parts	
V450CCS, flow chamber sensor	ARC00564+
V450CCS, diffusion screen sensor	ARC00541+
V4, flow chamber sensor (only to replace V4 instruments)	ARC00531+
V4, diffusion screen sensor (only to replace V4 instruments)	ARC00532+
V495, flow chamber sensor	ARC00533+

*spacers option for cable retention on request

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