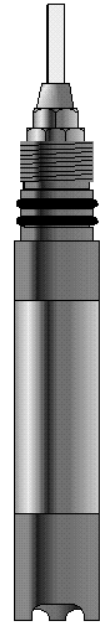


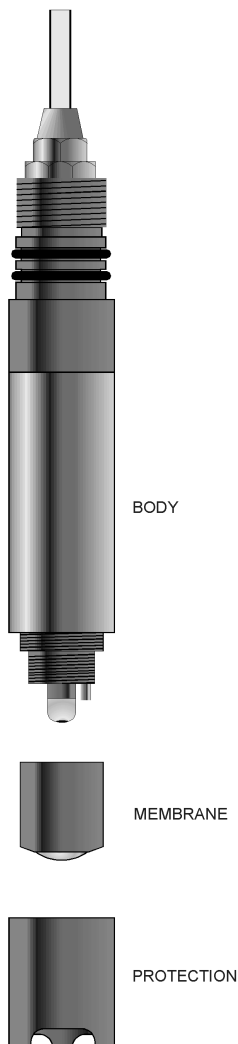
Oxygen measuring cell for industrial applications

Group of cells for the measure of Oxygen designed for industrial applications, PVDF/AISI 316 SS body. Series 332G cells are membrane polarographic sensors including two electrodes immersed into an electrolyte solution and separated from the sample by a PTFE membrane permeable to gaseous oxygen. These cells have a sturdy design for industrial applications, can be used in difficult installations and have small maintenance requirements. Typical applications are in composters for organic wastes.



Advantages

- Small dimensions, sturdy execution
- Polarographic membrane cell
- Integral temperature sensor
- Measuring range: 0 to 100% O₂ in air
- Operating temperature up to 100 °C
- Pressure relieve system for membrane protection
- Very little maintenance requirements



Operating principle and realization

Series 332G cells are classic Clark cells, with platinum working electrode and silver counter electrode. These cells have PVDF body, Ø 32mm L.140mm. The three electrodes are installed in the lower tip, immersed in the electrolyte solution and separated from the sample by a PTFE membrane permeable to oxygen gas. A special pressure compensating system allows the cell operation at high temperatures without breaking or deforming the membrane. The cell includes a temperature sensor for measure thermo compensation and temperature indication. The cells are available with multipolar shielded integral cable 5,10 or 15 m length.

Series 332G cells are available with the options listed in the Order Code Breakdown.

Installation, Maintenance and Calibration

Mod.332G cell has to be installed in a position that is representative of the process oxygen concentration, having a good sample mixing. Calibration of 332G oxygen measuring cell and connected electronic can be performed leaving the cell in air. In this type of cell no zero calibration is required because of its good stability. Zero point can always be checked just immersing the cell in a sodium bisulphite solution (approx.1 g/L).

The only required maintenance is the check of the calibration to be performed once every one or two months, after cleaning the membrane.

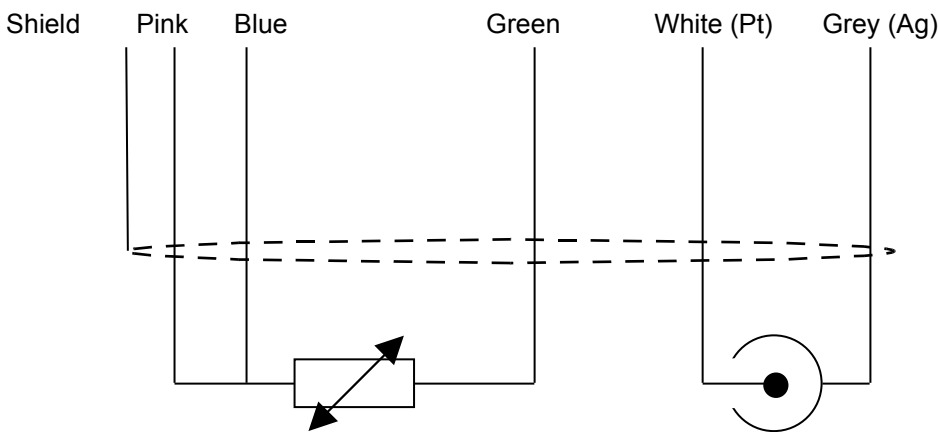
332G1E3xB

Technical Specifications

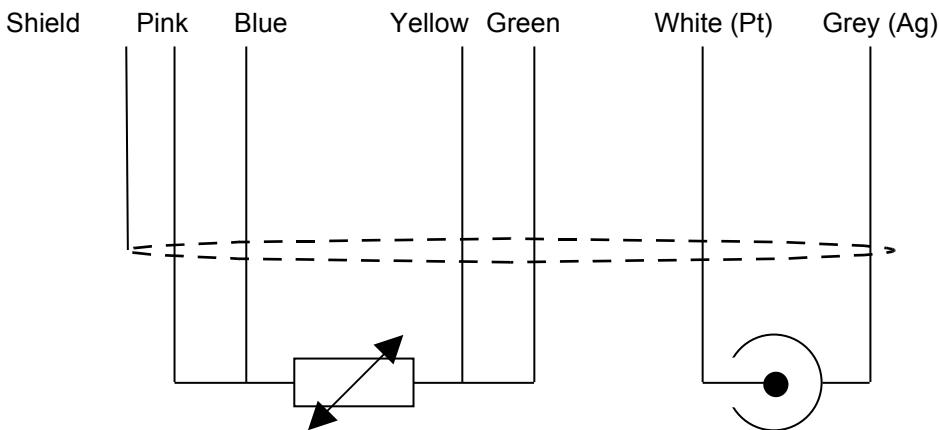
Cell body:.....PVDF + AISI 316
Electrodes:.....Pt working electrode, Ag counter electrode
Membrane:.....PTFE membrane, permeable to O₂ gas. Thickness: 75 μm
Measuring range:.....0÷100 % O₂ in air
Accuracy:.....0.25 % f.s.
Response time:.....20" to reach 90 % of full value
Operating temperature limits:.....5÷100 °C
Operating pressure limits:.....max. 10 bar
Minimum sample flow rate under the membrane:.....0,5 cm/sec
Dimensions : Ø 32mm, length. 140 mm
Connection for immersion pipe:.....3/4" M
Cable:.....integral multipolar shields cable, 5 m, 10 m or 15 m
Weight:.....400 g w/o cable

Wirings Cable color code rev.B

Wiring diagram, DO cell, 3 wires Pt100



Wiring diagram, DO cell, 4 wires Pt100



332G1E3xB

Order code breakdown

	332	G	x	x	x	x	x	x
Cells for the measure of oxygen	332							
Type of cell Cell for industrial applications (332/I)		G						
Temperature compensation Reserved Sensor Pt100 Special execution			0 1 9					
Body material Reserved PVDF+AISI316 Special execution				A E Z				
PTFE Membrane thickness Reserved 75 µm PTFE membrane Special execution					0 3 9			
Cable and connector Reserved Integral shielded cable, 3 m Integral shielded cable, 5 m Integral shielded cable, 10 m Integral shielded cable, 15 m Special execution						Y B C D E Z		
Connector on instrument side No connector 5 poles metal connector CN/BIO-M3 6 poles plastic connector CN/BIO-M2 Souriou connector Special execution							0 5 6 7 9	
Cable color code revision (factory selected code) Revision B CV/345								B

Optional accessories

Electrolyte solution

Electrolyte solution for 332I, 100ml bottle.....Mod.E/332

Maintenance Kit for 332G, including

3 PVDF cartridges with PTFE membrane, 75 µm + 100 ml electrolyte bottle..... Mod.332IM75-PVDF

Powder for zero point check

Sodium sulphite, powder, for zero point control, 10 g powder bag.....Mod.T/332

