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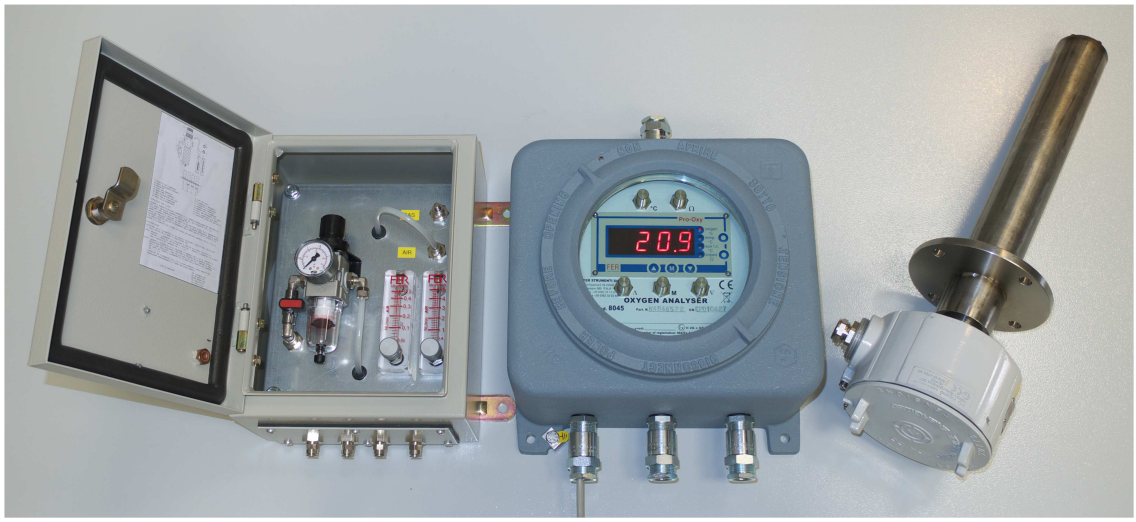
Zirconia based oxygen analyzer
For low temperature 0-600 °C
With transmitter in hazardous area
MOD. OXYL



- Excellent stability
- High response time
- No calibration needed
- Absolute safety
- Direct process insertion
- Approved for zone 1G/D
- Attractive price

This analyzer is an excellent solution for oxygen measuring in stack. It ensures a very fast response time and an accurate measurement. The accurate compensation of the output of the zirconia cell to the temperature of the process eliminates any Zero and Span drift. Specific tests carried out on purpose demonstrated a stability within 0,1% O_2 during twelve months.

The very competitive price is compatible with the high performance due to the simple construction of the analyzer.

The equipment is composed of the probe (three different lengths available), the field transmitter with barriers in Eex-d housing and the flow-meter box. Protection degree is Ex II 2G c IIC T4 and Ex II 2D IP66 T 135 °C.

- **The probe mod. 5175** is constituted by a zirconia stabilized cell which is warmed by an electric armored heater; inside the probe a K type thermocouple is installed. It operates the control of the zirconium oxide cell temperature and the continuous and automatic compensation of the cell signal to the temperature. The gas analyzer has no moving parts; the flue gas comes in contact with the electrode on the end of the probe by diffusion. The probe is connected to the process by a 4 "ANSI 150 RF flange or other. The probe is equipped with an internal filter and can be equipped with a ceramic filter for particularly dusty atmospheres. It must be installed in safe area.

- The microprocessor based field **transmitter mod. 8045** is housed in an Ex-d enclosure with glass window for display reading. Inside the enclosure a double channel barrier is housed. Magnetic switches can be operated without opening the housing by using a magnet through the glass window. They enable to manage all functions of the electronic unit.

- The **flow-meters box mod. 60** receives instrument air and gas from gas cylinder and drives reference air and test air and gas to the probe.

Technical Specifications

- Measuring range: 0,0001 ÷ 25% O_2 in volume
- Precision: ±0.5% of the theoretical value or 0.1% O_2 (whichever is the greater)
- Stability: within 1%
- Response time (90%): zirconia cell < 1", the whole system < 15"
- Storage temperature: probe -40°C/+80°C
- Working temperature:
    - Probe: room temperature ÷ 600° C for the part in the process
    - Head of the probe < 135° C
    - Converter and barrier: -20° ÷ +50° C
- Analog output: 4÷20 mA 500 ohm or 0÷10 V 10 mA linear on one of the following fields: 0÷1999 ppm; 0÷5%; 0÷10%; 0÷25%
- Interfaces: RTU Mod-bus protocols on RS485, HART protocol optional
- Alarms: (potential free contacts) high and low O_2, fault (fail safe) service and calibration in progress. For all contacts 24 V, 1 A max
- In case of fault the analogical outputs are forced to 2 mA or 0 V
- Dumper: time constant adjustable between 0 and 900 sec
- Power supply: 115V and 230 V ±10%, 50/60 Hz 200 VA max
- EMC: according to EN 50081 and EN 50082
- Electric safety: according to EN 61010 – 1
- Protection: Ex II 2G c IIC T4 and Ex II 2D IP66 T 135 °C
- Conformity certificate according to ATEX and CEI EN 60079-0,-11,14/ CEI EN 13463-1,-5 / CEI EN 61241-0, -1, -14, 17
- Relative humidity < 90% non condensing
- Probe dimensions: immersion length= 350, 500, 1000 mm; diameter: 60.5 mm
- Transmitter dimensions mm. 305x330 h.200.
- flow-meters box: mm. 230x300 h. 170
- Instrumentation air pressure: 2-12 bar
- Compression fittings for tubing: mm. 6x4 or ¼" NPT-F
- Electrical connections: mm. 20x1.5 or ½"" NPT-F

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