

MICROMAC ALDEHYDES

ON LINE ANALYZER FOR ALDEHYDES MONITORING IN WATER



MICROMAC ALDEHYDES is a microprocessor controlled On Line analyzer specifically designed for automatic aldehydes monitoring on several types of waters matrix.

✓ ROBUST AND RELIABLE

Designed for industrial and Environmental On Line applications ensures the highest level of robustness in the electronics, mechanics and hydraulics components. Complete separation between electronics and hydraulics plus a simple and robust hydraulics allows easy maintenance and long terms reliable operations.

✓ EASY TO INSTALL

The analyzer is delivered after a long and successful series of factory tests ready for installation and setup; it is provided with complete set of spares for start up. To start monitoring is enough to connect reagents, sample line, waste line and power supply.

✓ AUTOMATIC CALIBRATION

When the Calibration Time interval expires the analyzer performs a Calibration Cycle, storing and checking the new calibrant O. D. If new O.D. exceeds selected limits, an alarm contacts is closed.

✓ SAMPLE DILUTION

Sample can be analyzed as it is or after automatic dilution. Automatic dilution is factory adjusted for high range applications.

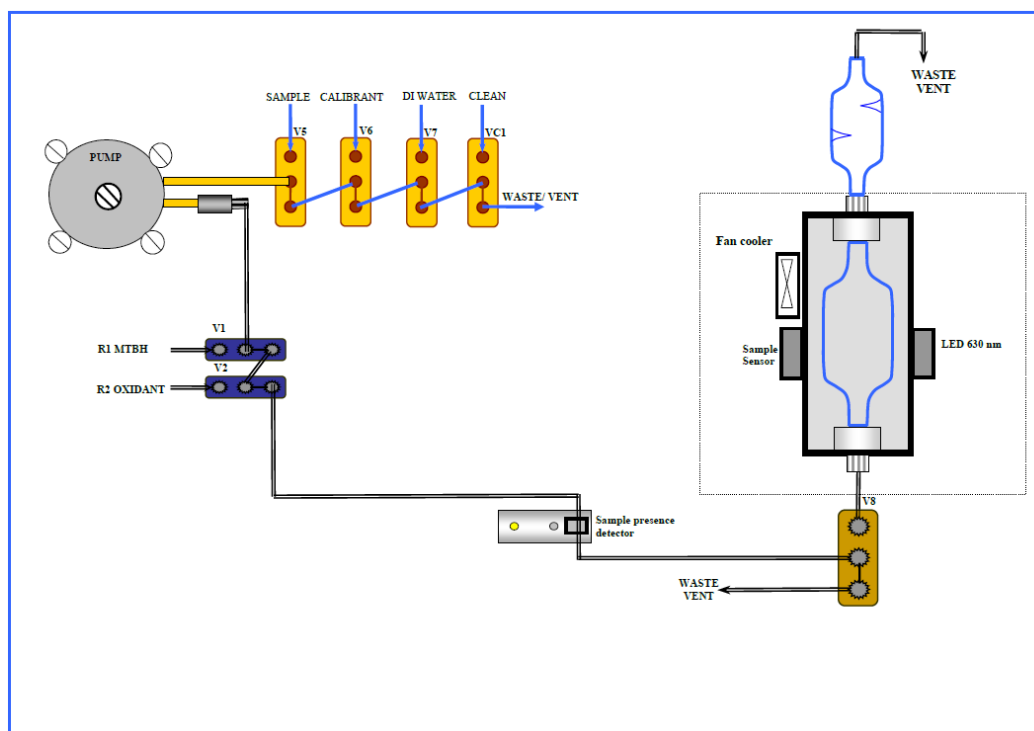
✓ MEASURING INTERVAL

User selectable; between two measurements the analyzer remains in stand by mode, without reagents consumption.

✓ FEATURES AND BENEFITS

- Fully automatic operation
- Long autonomy; low maintenance, low operating cost
- Low reagents consumption; short preparation time; low disposable costs
- Easy operation; plug in analyzer, no special training is required
- Electronics and hydraulics completely separated
- Serial interface for local o remote PC connection (option)

Aldehydes measuring principle and hydraulic diagram



This automated procedure is an adaptation of the Sawicki E, AC method for the measure of aldehydes in water. In this procedure, the sample is added as first MTBH then after a proper reaction time is added an Oxidant solution. The reaction forms a blue compound, whose absorbance is measured at a wavelength of 630 nm. The Aldehydes concentration is calculated against a calibration factor stored inside the analyser memory.

Technical Specifications

MEASURING PRINCIPLE: Colorimetric.
COLORIMETER: dual beam, silicon detector.
MEASUREMENT TYPE: cyclic; **MEASURING INTERVAL:** programmable.
MEASURING TIME: 15-25 minutes, depending on the range.
MEASURING RANGE: 0-1 mg/l up to 500 mg/L as HCHO other ranges available on request.
DETECTION LIMIT: better 5% of the full scale, as for EPA p. 136 appendix B; range 0-250ppm.
REPEATABILITY: better than 5%; SD% of 7 replicates at 50%; range 0-250ppm.
ACCURACY: 5%, average of 7 replicates at 50%; range 0-250ppm.
OUTPUT SIGNAL: 4-20 mA/RS232/Modbus RTU; **INPUT SIGNALS:** n. 1 Analysis, n. 1 calibration.
ALARMS: n. 1 High Limit, n. 1 General, n. 1 Calibration; potential free contacts.
SAMPLE AND WASTE DELIVERY: pressure free; **SAMPLE TEMPERATURE:** 10 °C - 40 °C.
REAGENTS STABILITY/REPLACEMENT: 1 to 3 weeks depending on the operating temperature.
PROTECTION: IP55; **HARDWARE:** PC104 industrial standard, Integrated keyboard and graphics display.
POWER SUPPLY: 12 V DC external power supply from local power to 12 V DC included.
WEIGHT: 33 Kg without reagents; **DIMENSION:** 800x420x280 mm(hxwx d).

Subject to change without notice



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