MICROMAC NITRITE

ON LINE ANALYZER FOR NITRITE MONITORING IN WATER

MICROMAC NITRITE is a microprocessor controlled On Line analyzer specifically designed for automatic nitrite 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 LFA * hydraulics allows easy maintenance and long terms reliable operations.

LFA: Loop Flow Analysis patent pending

✓ 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)

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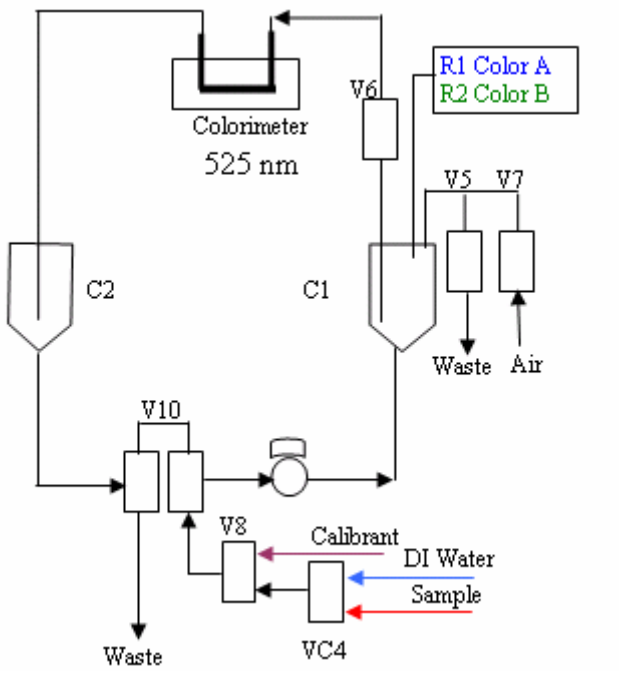
NO2 measuring principle and hydraulic diagram

The sample after proper filtration is pumped inside the LFA reactor, where the analyzer measures and stores the sample blank. The microprocessor starts the reagents addition sequence, adding reagents, to form the red pink colored complex. Depending on the matrix and range, Nitrite reaction may be done with one or two reagents. After a proper mixing time necessary for the colorimetric reaction development, the analyzer stops the reaction product inside the flow cell, where the absorbance at 525 nm is measured. The sample concentration is calculated against the calibration factor stored in the analyzer.



Technical Specifications

MEASURING PRINCIPLE: Colorimetric, NED/SAAN method
COLORIMETER: dual beam, silicon detector
MEASUREMENT TYPE: cyclic
MEASURING INTERVAL: programmable
MEASURING TIME: from 5 to 8 minutes depending on the range
MEASURING RANGE: 0-0.2/0.7/2/5/10/20/100/200 ppm N-NO2 other ranges available on request
DETECTION LIMIT: typically better 2% of the full scale, calculated as for EPA p. 136 appendix B
REPEATABILITY: better than 2%
OUTPUT SIGNAL: 4-20 mA
INPUT SIGNALS: n. 1 Analysis, n. 1 calibration; digital contacts
ALARMS: n. 1 High Limit, n. 1 General, n. 1 Calibration; potential free contacts
SAMPLE AND WASTE DELIVERY: pressure free;
REAGENTS REPLACEMENT: 3/4 weeks depending on the operating temperature
SAMPLE TEMPERATURE: 10 °C - 30 °C;
PROTECTION: IP55
HARDWARE: PC104 industrial standard, Integrated keyboard and graphics display, RS232 option
POWER SUPPLY: 12 V DC external power supply from local power to 12 V DC included
WEIGHT: 33 Kg without reagents; **DIMENSION**: 800x450x300 mm(hxwxd)

Subject to change without notice

SYSTEA S.p.A.

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