

CDO - CDL - OXIDATION METER ONLINE BY FLOWING CELL

These cells arrays is special designed for oxidants analysis online by liquid stream steady through to flood cell in low measure range up to 10 ppm for version CDL or in high measure range version CDO. Reliable and long periods working without calibration or maintenance needs. High accuracy performances. CDO high range suitable for seawater.

Measured parameters:

Cl2 = Chlorine	PAA = Peracetic acid
ClO2 = Chlorine dioxide	Br2 = Bromo
O3 = Ozone	XX = other Oxidizing agents



Applications

- Cooling systems open cycle and closed-loop
- Swimming pools with sea water, swimming pools, hospitals, paper mills, etc..
- Water treatment plants, sewage treatment plants
- Industry food and beverage, cosmetics, fish farming, shellfish farming

DESCRIPTON

Three electrodes assembly: one measuring, second opposite electrode and third reference. The opposite electrode imposes a constant potential to the measuring electrode on which occurs the reduction of the oxidant in the analysis. Thus it measures the discharge current rate, proportional to the concentration of the oxidant in the sample. Setting the potential imposed to second opposite electrode is possible to match the different oxidants desired. This issue reduces the interference of any other oxidizing substances correlated in to the liquid sample. The cell is totally free from spurious phenomena (corrosion etc.). Infact the electrodes are made in precious metal to avoid noise effect, even in critical conditions such measures in sea water, sewage and measures on high concentrations. CDO cells have one chamber in PP that housing the three electrodes in combined version for the standard array for low concentration /L. Otherwise are separated for the high version /H.

Option available: temperature compensation °C; pH electrode only for low concentrations /L; selfcontrol of sample flow rate with alarm switch due to no stream. Cell protection by a cap top. Liquid streaming is holded steady to above 280 l/h. Cleaning and performance of the electrodes are always reliable at long time by the same sample flowing action. Cell mounting is allowable even in outflow or derivation as directly in line (pressure rating up to 2 bar).

TECHNICAL SPECIFICATIONS

Material body:	polypropylene
Working temperature:	5 ... 80 ° C
Storage temperature:	- 10 ... +60 ° C
Concentration Range:	0.00/2000 low ppb, ppm 0.00/10; high 10/2000 ppm
Accuracy:	+ / - 2% f.s.
Maximum distance cell to meter:	5 m, with coaxial cable included in the delivery
Process connection:	½ "
Sample flow rate (flow-through):	selfcontrolled by the cell for Q <280 l/h with overflow drain triggered
Sample flow rate without selfcontrol:	> = 60 l / h (over 60 l / h should be used the flow controller)
Working pressure:	max 2 bar
Maximum salt concentration:	low concentrations: 100 g/l of chlorides no limits in the version for measurements at high concentrations
Hardness for sample:	max 10 french degrees. Electrodes cleaning needed
Response time:	60sec upward (90% f.s.), 90sec downward (90% f.s.)
Dimensions, mounting:	W 190 x D 40 x H 160 mm, drilling hole d 5.5 mm center distance 170 mm



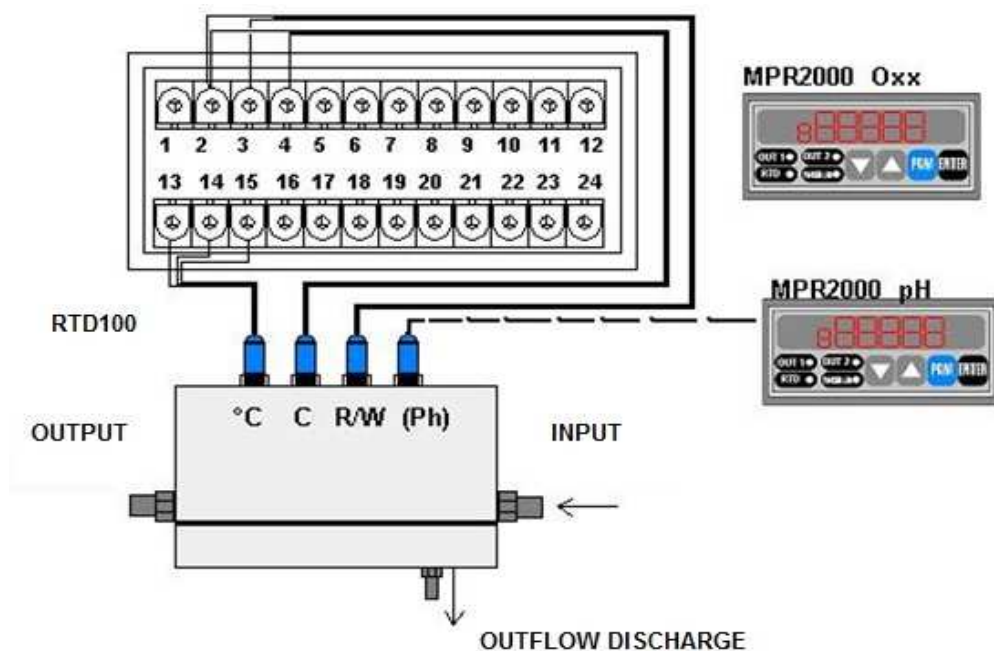
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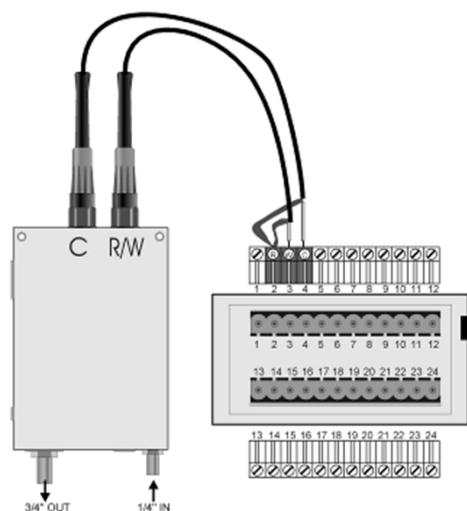
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ELECTRICAL CONNECTIONS CDO



Conditioning for the cells and related calibration is done leaving free flowing liquid process for at least 10 minutes. ZERO Calibration is carried out in the absence of chlorine or oxidizing species. On alternative, if this condition is not possible, it is advisable to filter the sample column of active carbon, in order to hold all the small amounts of chlorine (or other oxidant). Then press button calibration. Subsequently enter chlorine or other oxidizing extent. After stabilization of the reading, comparing the detected value with that of a colorimeter sample. Calibrating the slope by the calibration key.



CDL two electrodes for low concentrations 0-10 ppm



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