OZ80 Ozone Analyzer

Electro-Chemical Devices

Features

- **Panel Mounted System Plumb and Play Design**
- **Multiple O3 ranges**
- **Automatic Flow Control**
- **T80 Transmitter Capability**
- **pH measurement for added process information**

Benefits

- **Complete System, Easy Installation, Ready to Use**
- **0-2.00 ppm, 0-20.0 ppm**
- **Eliminates Pressure Regulators and Rotameters**
- **Dual Measurements, Single parameter or Dual parameter Displays, MODBUS RTU, Spray Cleaner (optional for fouling applications)**

Model OZ80
Ozone Analyzer

Description

The OZ80 is a panel mounted, ready to use Ozone (O3) analyzer. It is available in several ranges to suit its various applications, 0-2.00 ppm for disinfection processes and 0-20.00 ppm for oxidation and bleaching applications. Ozone is a colorless to pale blue gas that in low concentrations gives off an irratating acidic odor. It is a strong oxidizer, stronger than either chlorine or chlorine dioxide. Ozone reacts quickly and disintegrates into oxygen gas, without the formation of harmful byproducts common to most chlorine chemistries. It also increases the amount of oxygen in water.

Ozone is widely used in the drinking water and waste water industries. It can be used at several points in the processing of drinking water, as an oxidizer for removing metals from well water and organics, odors and color from surface water. It is also used as a disinfectant in cooling towers and municipal waste water treatment plants. Ozone is an effective bactericide that does not form any harmful Disinfection By Products (DBP) like many chlorine products do. It decomposes naturally into oxygen and water and does not form a residual that has to be removed from the treated water before it is released to the environment.

The OZ80 features a plug and play design that incorporates a constant head flow control device, a pH sensor, an ozone sensor and the T80 analyzer/transmitter conveniently mounted on a PVC panel. The large bore tubing and fittings rarely if ever get clogged. Simply connect the sample and drain lines, connect the power and outputs and it is ready to use. Calibration is accomplished by a grab sample comparison.

The T80 is 110-240 VAC or 24 VDC powered and allows either parameter to be graphically displayed with user defined Line, Bar or Guage style graphs. The standard configuration has (2) 4-20 mA outputs, (3) alarm relays and MODBUS RTU.

Amperometric Ozone sensors are flow sensitive, the minimum required flow by the sensor is 0.5 ft/sec, above this value the output is virtually flow independent. A “Constant head” Flow control Device (CFD) maintains the optimum flow past the sensor over a wide range of incoming sample flow rates. The minimum flow required for the CFD is 10 gal/hr and the maximum flow is 80 gal/hr with the sample going to drain at atmospheric pressure.

The Auto Clean option includes a solinoid actuated spray cleaner that uses either 30 psi process water or air. An easily adjusted timer controls the period and duration of the cleaning cycle.

OZ80 Ozone Analyzer

Specifications

Sensor and Flow Train

Sensor

Polarographic, Gold/Silver, micro-porous membrane, Digital communiucation

Measurement Range

Ozone: 0.005 to 2.00 ppm, 0.05 to 20.00 ppm

pH: 2 to 11 pH

Operating Temperature

0° C to 45° C (32° F to 113° F)

Automatic temperature compensation in ozone sensor

Min/Max Flow

38 L/hr to 300 L/hr (10 gal/hr to 80 gal/hr)

Wetted Materials

PVC, PP, PVDF, PTFE, Glass, 316 SS

Process Connections

Input ¼" barb fitting (¼"FNPT), Drain ¾" FNPT

Response Time

T90 in 8 minutes

Electrolyte Life

Up to 6 months

T80 Analyzer/Transmitter

Measurements

Ozone: 000.0 to 999.9 ppm

pH: 0 to 14 pH

Temperature: 0° C to 100° C (32° F to 212° F)

pH Compensation

none, measurement between 2-11 pH

Display

128 x 64 pixels (2.75" x 1.5") LCD, Black on Grey background, Blue on White background with LED backlight

Enclosure

IP65, weatherproof, ½ DIN, (L x W x D) 5.7" X 5.7" X 3.5"

Outputs

(1) 4-20 mA for H2O2, set to 0 - 2.00%

(1) 4-20 mA for pH (Optional) , set 0-14 pH

Alarm Relay Ratings

Three (3) SPDT, 1 form C, 250 VAC, 10 Amp

Input Power

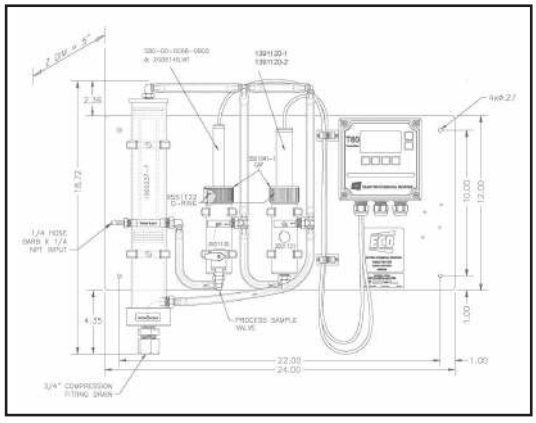
Code -1 24 VDC (18-36 VDC @ 250 mW minimum)

Code -2 100-240 VAC, 50/60 Hz, 4W, protected with 250V, 1A, Slow Blow fuse (Standard)

CE

Part No.	Model and Product Description
OZ80-01-2200	Ozone Analyzer (OZ80), complete, 0.005-2.00 ppm, 100-240 VAC, 2x4-20 mA, 3 Alarm Relays
OZ80-01-2210	Ozone Analyzer (OZ80), complete, 0.005-2.00 ppm, with spray cleaner, 100-240 VAC, 2x4-20 mA, 3 Alarm Relays
OZ80-11-2200	Ozone Analyzer (OZ80), complete, 0.05-20.00 ppm, 100-240 VAC, 2x4-20 mA, 3 Alarm Relays
OZ80-11-2210	Ozone Analyzer (OZ80), complete, 0.05-20.00 ppm, with spray cleaner, 100-240 VAC, 2x4-20 mA, 3 Alarm Relays

Part No.	Spare Parts and Accessories Description
1391116-2	Ozone Sensor, 0.005-2.00 ppm
1391116-1	Ozone Sensor, 0.05-20.00 ppm
1000268-1	Membrane Replacement Kit with electrolyte
S80-00-0C66-0B00	pH Sensor, 316L SS body with Flange, 4' cable
2005145.VIT	Replacement pH Cartridge
1000040-6	Photometric Ozone Test Kit, HCA1 test kit for Ozone
9260104	Reagent Test strips for Ozone HCA1 Tester, Qty. 100 strips
3501130	pH Flow Cell



Specifications subject to change without notice.

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CERTIFIED ISO9001 QUALITY SYSTEM