

CROSS SMART SENSOR

DG7-CD: Chlorine Dioxide analyzing Sensor

Digital technology for optimized measures



The **DG7-CD** is designed to monitor Chlorine Dioxide (ClO_2) in drinking water, rinse water, cooling water or other fresh water samples with its concentration between 0.05 to 10 ppm.

Since ClO_2 exists in gaseous state in solution and it does not dissolve like other chlorine compounds, it is therefore not affected by the pH of the solution. ClO_2 is approximately 10 times more soluble than chlorine in water; it is extremely volatile and can be easily purged from dilute aqueous solutions with minimal aeration.

The DG7-CD sensor usually works with a panel mounted acrylic flow cell installed with flow control device. Delta-Phase GDC can get the digital signal of the sensor and provide functions of displaying, data logging and control.

Features and Benefits

- Panel mounted system with flow control, simple installation;
- Plug and play design, easy setup and ready to use.
- Replace membrane and refill reagent only once a year
- Digital interface RS485 Modbus RTU
- Significantly reduced pH dependence.
- Fully compatible to 4 types of GDCs with complete support of displaying, data logging and control.

| SPECIFICATIONS | |
|-----------------------|---|
| Measuring system | Membrane-covered, amperometric 2-electrode system with integrated electronic |
| Range | (0.05 to 5.00/10.00)mg/l, ppm |
| Accuracy | 0.02mg/l (0.5~2) mg/l, ppm 0.1mg/l (2~5) mg/l, ppm 0.2mg/l (5~10) mg/l, ppm |
| Resolution | 0.01mg/l |
| Repeatability | ±1%FS |
| Temp. compensation | Automatically, by an integrated temperature sensor |
| pH Range | 1 to 11 pH |
| Sample flow rate | Approx. 30L/h |
| Run-in time | First start-up approx. 1 h |
| Operate Pressure | Max. 1.0 bar, no pressure impulses and/or vibrations |
| Operate Temp. | 41 °F to 113 °F (5 to 45°C) |
| Response Time | T90 approx. 15 s |
| Zero Point Adjustment | Not necessary |
| Slope Adjustment | At the device, by analytical determination |
| Interferences | Cl ₂ : is measured with factor 0.03 of its measurement value; O ₃ : is measured |
| Material | Semipermeable membrane, PVC-U |
| Power Supply | 24VDC by GDC |
| Spare Parts | Membrane cap: M20 Electrolyte: ECD4/W - ECD7/W |
| Dimensions | 1" O.D. and 8.66" Length (O.D. 25.4mm × 220 mm) |

ORDER CODE

| DG7-CD Chlorine Dioxide analyzing Sensor with panel and flow cell | | |
|---|------------------------|-------------------------------|
| | Measuring Range | |
| | -MA2 | 0.01 to 2.00 ppm |
| | -MA5 | 0.01 to 5.00 ppm |
| | -MA10 | 0.01 to 10.00ppm |
| | | -C10 10' (3 m) cable |
| | | -C20 20' (6 m) cable |
| | | -C30 30' (9 m) cable |
| | | Other length contact factory. |
| DG7-CD | -MA5 | -C30 |

TERMINALS

| | | |
|--|--|---|
| <p>GDC-01/02 Terminal Single or dual-channels</p>  | <p>GDC-04/06/08 Controller Multi-channels up to eight</p>  | <p>GDC-Ex Terminal Single channel Ex-proof</p>  |
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