HYDROGUARD HG-HighCl

Accurate control for High Chlorine Applications

Customized Multi-Parameter Systems

The **HYDROGUARD HG-HighCl** adapts to each sites unique needs by allowing any combination of measurements in a single system including: Free Cl (up to 200 ppm), pH, Temperature, Turbidity, Conductivity and Flow. A complete, flexible solution to fit your high-level chlorine application.

Applications

The perfect fit for your applications requiring chlorine monitoring and control:

- Fruit and Vegetable Washing
- Food Processing
- Clean-in-Place (CIP) Processes
- Paper Production
- Textiles
- And Many More Industrial Processes

Reduced Total Cost of Ownership

Save Time and eliminate the need for manual testing and control of chlorine levels.

- Ability to control 2 chlorine dosing systems simultaneously allowing for back-up systems to be automatically activated ensuring constant operation and safety.
- Able to accurately monitor chlorine levels with pH range from 6 to 8 and temperatures as low as 1°C
- Combine with our self-cleaning pre-filter for a worry-free system.

Proven Results

Based on HYDROGUARDs proven platform, the **HYDROGUARD HG-HighCl** with integrated pH and temperature compensation provides reliable measurement and control of high chlorine levels.

- **Free Chlorine up to 200 ppm!**
- **Accurate and Reliable Measurements**
- **Automatic Temperature and pH Compensation**
- **Multiple Parameters in a Single System**
- **Simple, User-friendly Menus and Functions**
- **Meets IP-65 (NEMA 4) Standards**

Your Water Quality Partner

HYDROGUARD HG-HighCl SPECIFICATIONS

MECHANICAL DATA	
Dimensions (controller) (W x H x D)	14" x 7" x 5" (340 x 220 x 120mm)
Cable entries	Pg 9 Cable Glands
Ingress protection	IP 65 (NEMA 4 equivalent)
Max. ambient temperature	15°F to 113°F (-10°C to 45°C)
Weight Approx.	11 lbs. (4.5kg)

ELECTRICAL CONNECTION	
Power supply	100-120VAC/1A 210-230VAC/0.5A; 50Hz/60Hz
Power consumption	Approx 60 VA
Power supply for RTC	3.6 V Lithium Battery

DATA SERIAL OUTPUT SIGNAL OUTPUT	
RS 485	Standard
4-20mA	Optional

RELAYS	
CL (Chlorine) set point 1	250VAC/DC 4A Max
CL (Chlorine) set point 2	250VAC/DC 4A Max
pH 1	250VAC/DC 4A Max
Turbidity control* 1	250VAC/DC 4A Max
General Alarm	250VAC/DC 4A Max
Temperature control	250VAC/DC 4A Max

DISPLAY
5.5” Large Graphic Monochrome Display
Character LCD with background light alarms and status

pH MEASUREMENT	
Measuring Range	0-14
Sensor	Ceramic diaphragm and gel filling
Input impedance	0.5 . $10^{12}\Omega$

Cl MEASUREMENTs	
Indicator	Free chlorine
Measurement Principle	Membrane covered, amperometric 2-electrode system with electronic inside
Measuring range	5 … 200 ppm
Max. operating pressure	15 psi (1bar)
Material	Semipermeable membrane, PVC-U
pH range	6-8
Flow rate	30…40l/h

TEMPERATURE MEASUREMENT	
Sensor	PT-100
Measuring range	32°F to 122°F (0°C to 50°C)

FLOW MONITORING	
Sensor	Rotary flow switch
Output signal	Dry Contact
Inlet Pressure	1 bar (15 psi)
Outlet Pressure Close Cell	0.9 bar (13 psi)

pH VALUE CONTROL	
Control function	P or PI, or On/Off
Characteristics	Normal / Inverted
Relay function	Pulse Length proportional controller Pulse Frequency proportional controller

CHLORINE CONTROL Relay #1	
Control function	PI, or On/Off
Proportional band	Yes
Relay function	Pulse Length proportional controller Pulse Frequency proportional controller

CHLORINE CONTROL Relay #2	
Control function	On/Off
Proportional band	No
Integral action time	No

CHLORINE CONTROL 4-20mA #2	
Control Function	Open loop

DATA LOGGER	
Memory	256K
Lines	1000
Recording interval	1-360 min
Event logger	Yes

SECURITY	
Operation Password	Yes
Technician Password	Yes

* Optional Feature