

Signet 4630 Chlorine Analyzer System



Features

- Reagent free measuring
- Complete panel system allows for quick and easy installation
- Built-in flow regulator maintains constant flow and pressure to the sensors regardless of inlet pressure
- Pre-wired panel includes a 120 VAC power plug, two 4 to 20 mA outputs and two mechanical dry contact relays
- Optional automatic pH and temperature compensation
- Optional weatherproof exterior panel enclosure for outdoor mounting applications

Description

The Signet 4630 Chlorine Analyzer System is an integrated, all-in-one system designed to measure free chlorine in applications with stable pH, temperature and chlorine levels. The System allows quick setup and easy installation.

The unique integrated clear flow cell combines sensors, flow regulator, filter and rotameter in one compact unit. An integrated flow regulator with removable filter accepts inlet pressures of 1 to 10 bar (15 to 150 psi), while maintaining constant flow and minimal pressure to the sensors.

Water flows vertically into sensor tip eliminates bubble entrapment. The flow cell is designed to maintain a minimum amount of water to ensure sensors stay submerged, even when the system and flow is turned off.

The Signet 4630 Chlorine Analyzer System is supplied with pre-wired electronics, a 120 VAC power plug, two 4 to 20 mA outputs and two dry contact mechanical relays. The flow cell accommodates two sensors; one chlorine and an optional pH sensor.

The optional pH sensor is used to accurately calculate free chlorine in applications that have unstable pH values. In applications where the pH is stable, the pH sensor is not required and the pH value is manually entered into the transmitter to calculate the chlorine levels.

Additional features include a bright backlit LCD display, and an optional weatherproof exterior panel for outdoor mounting applications.

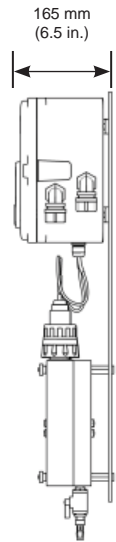
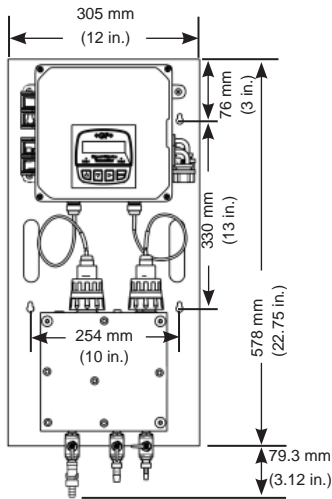
Applications

Residual Chlorine Monitoring:

- Water Distribution
- Ground Water
- Surface Water
- HVAC Applications (cooling water)
- Boiler Feed Water
- Gray Water
- Dechlorination
- Food and Beverage
- RO Membrane Protection
- Swimming Pools
- Aquariums
- Water Parks

Dimensions

3-4630



Specifications

General

Compatible Electrode:
 Signet 3-2630-2 Free Chlorine Electrode
 Signet 3-2724-00 Flat pH Electrode

Materials

- Panel: ABS
- Flow Cell: Acrylic
- Wiring Enclosure: Polycarbonate

Wetted Materials

- Flow Cell, Spacer Rings: Acrylic
- Flow Regulator Housing: Polycarbonate
- Strainer, E-clip, Regulator Spring, Float: Stainless Steel
- Valves, Vent: Polypropylene
- Flow Cell O-rings, Diaphragm: EPDM, FKM
- Chlorine Electrode: PVC, PVDF, FPM
- pH electrode: PPS, Glass, UHMW PE, FPM
- Sealing Tape on Valves, Plug and Vent: PTFE
- Plug: Polyethylene

Max. Temperature/Pressure Rating

System Inlet Pressure Rating:
 1 to 10.3 bar (15 to 150 psi)
 Pressure Regulator:
 < 0.69 bar (10 psi) variation over all
 ranges of flow and pressure

Max. Temperature/Pressure Rating (cont.)

Flow Tolerance:
 ± 15% or rated specification above
 Flow Rate Limits:
 30.24 to 45.36 LPH (8 to 12 US gal/h)
 Storage Temperature:
 0 °C to 65 °C (32 °F to 149 °F)
 Operating Temperature:
 0 °C to 45 °C (32 °F to 113 °F)

Electrical

AC Input - Standard Configuration:
 100 to 240 VAC nominal
 50 to 60Hz, 0.17 A at 100 VAC
 DC Input - Optional Configuration: (with AC
 power cable removed)
 12 to 24 VDC ±10% regulated,
 250 mA max.

Environmental

Relative Humidity: 0 to 95%
 Maximum Altitude: 2000 m (6,562 ft)
 Enclosure: NEMA 4X (with output wire
 glands sealed)

Shipping Weight 10 kg 22 lb

Standards and Approvals

- CE
- Manufactured under ISO 9001 for Quality
- China RoHS
- UL Pending

Ordering information

Mfr. Part No.	Code	Description
3-4630-20	159 001 691	Chlorine panel, transmitter, free chlorine sensor (0 to 5 ppm) with electronics (no pH sensor)
3-4630-21	159 001 692	Chlorine panel, transmitter, free chlorine sensor (0 to 5 ppm) with sensor electronics, pH sensor with electronics

Accessories and Replacement Parts

Mfr. Part No.	Code	Description
3-2630-2	159 001 662	Free Chlorine sensor, 0 to 5 ppm (mg/l)
3-2724-00	159 001 545	pH sensor, flat glass, PT1000 temp element, 3/4 in. MNPT
3-2650-7	159 001 670	Chlorine - Inline Amperometric Electronics, Digital (S ³ L), 4.6 m (15 ft) cable
3-2750-7	159 001 671	pH - Inline Electronics, Digital (S ³ L), 4.6 m (15 ft) cable
3-8630-3P	159 001 673	Panel mount chlorine and pH transmitter
3-4630.390	159 001 688	Rebuild kit, O-rings, boots, screws, 1 filter screen
3-4630.391	159 001 689	Pressure regulator with 1 spare filter screen
3-4630.392	159 001 690	Acrylic flow cell complete with all components and connections
7300-7524	159 000 687	24 VDC Power Supply 7.5 W, 300 mA
3-2630.391	159 001 674	Free Chlorine electrolyte, 30 ml
3-2630.392	159 001 675	Free Chlorine replacement membrane (1)
3-2630.396	159 001 676	Free Chlorine replacement kit - (2) electrolyte and (2) membranes
3-0700.390	198 864 403	pH Buffer Kit (1 each 4, 7, 10 pH buffer in powder form, makes 50 ml of each)
3822-7004	159 001 581	pH 4.01 buffer solution, 1 pint (473 ml) bottle
3822-7007	159 001 582	pH 7.00 buffer solution, 1 pint (473 ml) bottle
3822-7010	159 001 583	pH 10.00 buffer solution, 1 pint (473 ml) bottle
3-2700.395	159 001 605	Calibration kit: included 3 polypropylene cups, box used as cup stand, 1 pint pH 4.01, 1 pint pH 7.00