Signet 4630 Chlorine Analyzer System





The Signet 4630 Chlorine Analyzer System is an integrated all-in-one system designed to measure free chlorine. The 3-4630-21 chlorine panel with the optional pH sensor is used to accurately calculate free chlorine in applications that have varying pH values (±0.20 pH units).

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. (-20 version).

The unique integrated clear flow cell combines sensors, flow regulator, filter and variable area flow indicator in one compact unit. An integrated flow regulator with removable filter accepts inlet pressures of 1 to 8 bar (15 to 120 psi), while maintaining constant flow and minimal pressure to the sensors.

Water flows vertically into sensor tip eliminating 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 allows quick setup and easy installation and is supplied with a 100-240 VAC power supply, two 4 to 20 mA outputs and two dry contact mechanical relays. The flow cell accommodates two sensor: one chlorine and an optional pH sensor.

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 100/240 VAC power supply, two 4 to 20 mA outputs and two mechanical relays
- · Optional automatic pH compensation







Applications

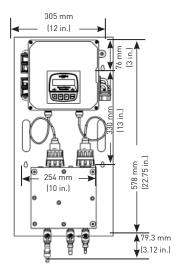
Residual Chlorine Monitoring:

- Water Distribution
- Ground Water
- Surface Water
- HVAC Applications (cooling water)
- Gray Water Dechlorination
- Food and Beverage
- R0 Membrane Protection
- Swimming Pools
- Aquariums
- Water Parks

Specifications

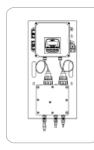
General				
Compatible Electrode	Signet 3-2630-2 Free Chlorine Electrode, 0 to 5 ppm (mg/l)			
	Signet 3-2724-00 Flat pH Electrode, 0 to 14 pH			
Materials				
Panel	Black Acrylic			
Flow Cell	Acrylic			
Wiring Enclosure	Polycarbonate			
Wetted Materials				
Flow Cell, Spacer Rings	Acrylic			
Flow Regulator 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 8 bar	15 to 120 psi		
Pressure Regulator	< 0.69 bar (10 psi) variation over all ranges of flow and pressure			
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 60 Hz, 0.17 A at 100 VAC			
DC Input - Optional Configuration	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, UL, CUL			
	China RoHS			
	Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management			

Dimensions





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, ¾ in. MNPT
3-2650-7	159 001 670	Chlorine - Inline Amperometric Electronics, Digital (S³L), 4.6 m (15 ft) cable
3-2750-7	159 001 671	pH - Inline Electronics, Digital (S³L), 4.6 m (15 ft) cable
3-8630-3P	159 001 673	Panel mount chlorine and pH transmitter
3-3610-1	159 001 683	Flow Cell, Clear PVC 1/2" Tee
3-3610-2	159 001 684	Flow Cell, Clear PVC 1/2" Tee, Barb Conn
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
3-2630.391	159 001 674	Electrolyte kit, 30 ml bottle with syringe and needle
3-2630.392	159 001 675	Replacement membrane (1)
3-2630.396	159 001 676	Electrolyte replacement kit - 30 ml electrolyte bottles (2), needles (2) and membranes (2) with syringe
7300-0024	159 001 693	24 VDC Power Supply
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: 3 polypropylene cups, box used as cup stand,1 pint pH 4.01, 1 pint pH 7.00