

+GF+ SIGNET 5700 ProPoint™ pH/ORP Monitor



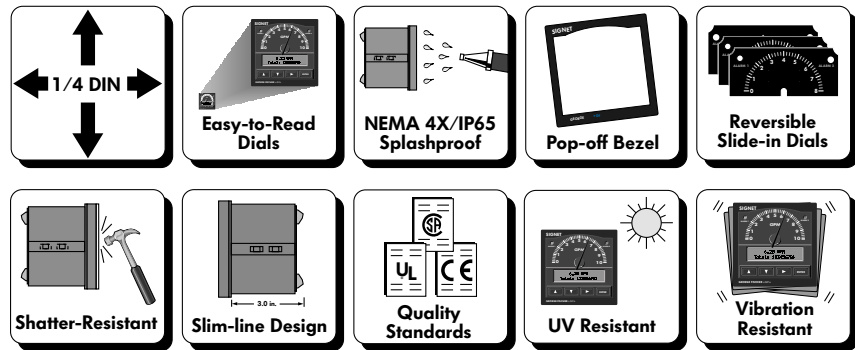
Description

The +GF+ SIGNET 5700 pH/ORP Monitor is a versatile and intelligent instrument that recognizes the type of sensor connected, either +GF+ SIGNET pH or ORP Electrode, then automatically sets itself for the corresponding display and functionality. Also, during Easy Cal operation, the monitor automatically recognizes standard buffers/test solutions thereby shortening and simplifying routine calibration procedures. Two programmable relays and one scaleable 4 to 20 mA output are included, and the

four-button keypad arrangement with intuitive software design is very user-friendly. The monitors require 12 to 24 Volts, AC or DC, and can be used with the +GF+ SIGNET 2720 Twist Lock pH/ORP Pre-amplifier and Electrode system, or with electrodes from other manufacturers by using the 2721 Pre-amplifier. Several useful accessories are available, including the optional Rear Cover Kit used to extend the NEMA 4X/IP65 integrity of the front panel to the entire enclosure.

Technical Features

Pro-Point Family Features



Features

- Simultaneous pH and Temperature Display
- Simultaneous ORP (calibrated) and Input (raw) mV Display
- Scaleable 4 to 20 mA Output
- Two Programmable Relays
- Dual Proportional Control Capability
- Temperature Compensation
- Automatic Sensor Recognition
- Easy-Cal Simplifies Routine Calibration
- Analog and Digital Display
- Backlit LCD
- Simple Push-button Operation
- Intuitive Software Design
- Non-volatile Memory
- Versatile Low Voltage Power Requirement

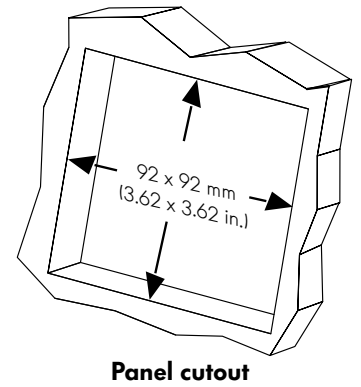
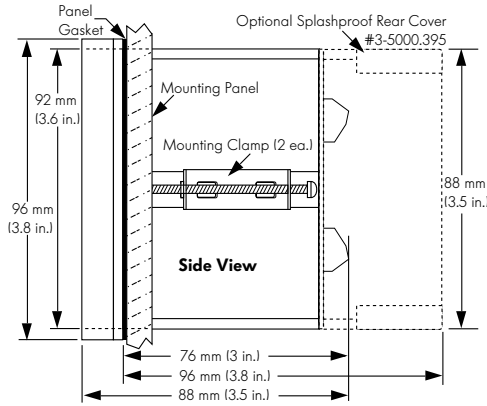
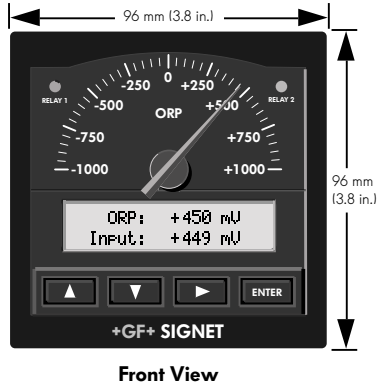
Application

- Water & Wastewater Treatment
- Neutralization
- Scrubber Control
- Effluent Monitoring
- Surface Finishing
- Heavy Metal Removal and Recovery
- Toxics Destruction
- Sanitization Systems
- Commercial Pools & Spas
- Aquatic Animal Life Support Systems
- Process Control

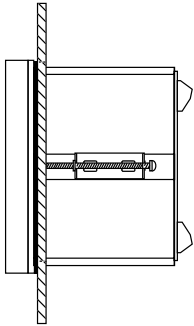
Options

| pH/ORP Monitor | pH & ORP Electrode Options / * Pre-Amps | | | | | | |
|----------------|-----------------------------------------|------|---------|------|------|---------|---------------|
| | *2720 Pre-amp | 2714 | 2714-HF | 2715 | 2716 | 2716-DI | *2721 Pre-amp |
| 5700 | ● | ● | ● | ● | ● | ● | ● |

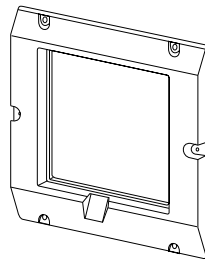
Dimensions



Installation

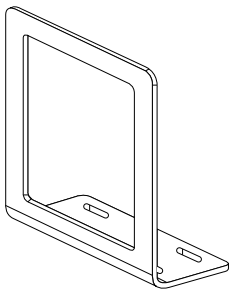


- Panel mount (standard)

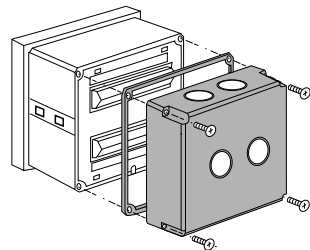


- Optional 5 x 5 inch adapter plate for SIGNET retrofit (3-5000.399)

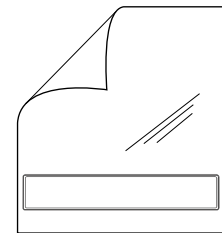
- The front panel provides NEMA 4X/IP65 splashproof protection
- Standard 1/4 DIN panel cutout
- 76mm (3 in.) mounting depth including rear terminals
- Optional splashproof rear cover kit with knockout ports for cable access.
- 96 mm (3.8 in.) mounting depth with optional splashproof rear cover installed
- Up to 121 m (400 ft.) max. cable length between preamplifier and instrument.



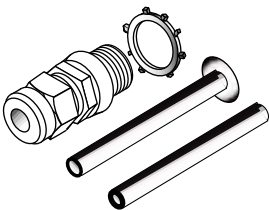
- Optional surface mounting bracket (3-5000.598)



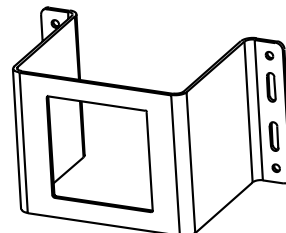
- Optional splashproof rear cover kit (3-5000.395)



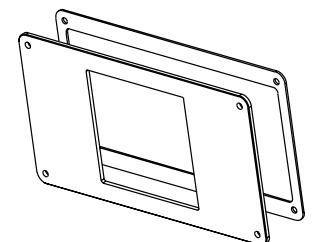
- Protective Overlay kit (10 pcs) (3-5000.398)



- Liquid Tight Connector Kit - 3 sets per kit (3-9000.392 - 3 sets per kit) (3-9000.392-1 - 1 set per kit)

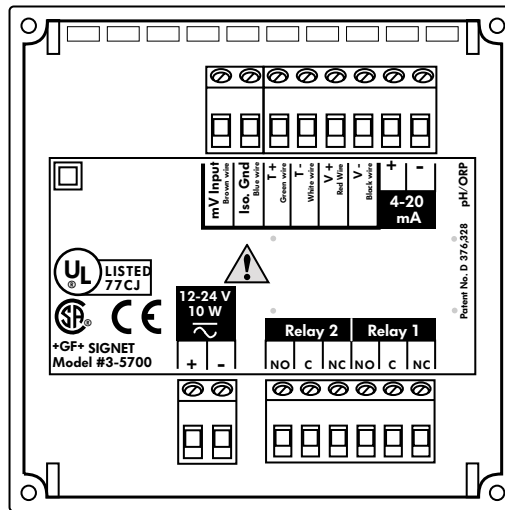


- Optional heavy duty wall mount bracket (3-0000.596)



- Optional 200 retrofit adapter (3-8050.392)

Rear Terminal View



Rear View

Technical Data

General

Operating Range:

- pH: 0 to 14, optically isolated
- Temp: -25 to 120°C (-13 to 248 °F)
- ORP: -2,000 to +2,000 mV, optically isolated

Power Requirements: 12 to 24 Volts, AC or DC, unregulated, 50 to 60 Hz, 10W max.

Display:

- Analog: Reversible dial: 0 to 14 pH or ± 1000 mV
- Digital: Backlit LCD, 2x16 alphanumeric character

Current Output:

- 4 to 20 mA, non-isolated, internally powered
- Loop impedance: 350 Ω max. @ 12V, 950 Ω max. @ 24V

Accuracy: $\pm 0.1\%$

Alarm Contacts:

- Two SPDT relays: 5A @ 30VDC, 5A @ 125VAC, or 3A @ 250VAC max.
- High/Low/Pulse programmable with adjustable hysteresis
- Dual Proportional Control Capability, MAX pulse rate 300 pulses/min.

Accuracy: $\pm 0.2\%$ of scale

Materials:

- Enclosure: ABS Plastic, NEMA 4X/IP65
- Keypad: Silicone Rubber
- Panel and case gasket: Neoprene
- Window: Hard-coated polycarbonate

Shipping Weight: 0.82 kg (1.81 lb.)

Environmental

Operating temperature:

- 10 to 55°C (14 to 131°F)

Relative humidity:

- 0 to 95%, non-condensing

Standards and Approvals

- CE, CSA, UL
- Immunity: EN50082-1
- Emissions: EN55011
- Safety: EN61010-1
- Manufactured under ISO 9001 and ISO 14001

Description

Mfr. Part No.

3-5700

Code

198 825 003

Description

+GF+ SIGNET 5700 pH/ORP Monitor
Reversible pH/ORP dial face included
[0 to 14 pH or -1000 to +1000 mV]

Accessories

Mfr. Part No.

3-5000.395

3-9000.392

3-9000.392-1

3-9000.392-2

3-5000.399

3-5000.598

3-8050.392

3-0000.596

3-5000.390

3-5000.397

3-5000.525-1

3-0700.390

3-5000.398

3-8050.396

Code

198 840 227

159 000 368

159 000 839

159 000 841

198 840 224

198 840 225

159 000 640

159 000 641

159 000 323

159 000 326

198 840 226

198 864 403

159 000 646

159 000 617

Description

Splashproof rear cover kit (NEMA 4X/IP65)

Liquid tight connector kit for rear cover (includes 3 connectors)

Liquid tight connector kit, NPT (1 piece)

Liquid tight connector kit, PG13.5 (1 piece)

5 x 5 inch adapter plate for +GF+ Signet retrofit

Surface mount bracket

Model 200 retrofit adapter

Heavy duty wall mount bracket

Installation kit

5000 series window kit

Bezel, 5000 series

pH Buffer kit

Protective Overlay kit (10 pcs)

RC Filter Kit (for relay use)

Engineering Specifications

- The pH monitor shall meet appropriate CSA, UL and CE standards, including EN50082-1 requirements for electromagnetic immunity, EN55011 requirements for electromagnetic emissions, and EN61010-1 for safety.
- The ORP monitor shall meet appropriate CSA, UL and CE standards, including EN50082-1 requirements for electromagnetic immunity, EN55011 requirements for electromagnetic emissions, and EN61010-1 for safety.
- The pH/ORP monitor shall be manufactured under ISO 9001 and ISO 14001 certified processes.
- The pH/ORP monitor front panel shall be sealed to NEMA 4X/IP65 requirements.
- The pH/ORP monitor shall automatically adjust to signal inputs from compatible pH sensors and preamplifiers.
- The pH monitor shall provide automatic temperature compensation from -10°C to +100°C.
- The pH/ORP monitor shall provide 500 VDC input circuit isolation.
- The pH/ORP monitor shall provide calibration capabilities including buffer recognition and automatic or manual calibration.
- The pH/ORP monitor shall be programmable with front panel keys for calibration, to set relay functions, and to select display functions.
- The pH monitor shall provide an analog indicator with a reversible dial face to display pH from 0 to 14. Analog display accuracy shall be $\pm 1\%$ of digital reading.
- The ORP monitor shall provide an analog indicator with a reversible dial face to display ORP from -1,000 to +1,000 mVs. Analog display accuracy shall be $\pm 1\%$ of digital reading.
- The pH/ORP monitor shall also provide a backlit 2-line x 16-character alphanumeric LCD display.
- The pH/ORP monitor shall provide a 4 to 20 mA non-isolated, internally powered two-wire current loop output.
- The pH/ORP monitor shall provide two SPDT relays.
- The pH/ORP monitor shall be compatible with the +GF+ SIGNET 2720 pH/ORP Preamplifier and Sensor system.
- The pH/ORP monitor shall be +GF+ SIGNET 5700 pH/ORP Monitor.