# Signet 5700 pH/ORP Monitor



### Member of the ProPoint® Family of Monitors



Analog and Digital Display

# **Description**

The Signet 5700 pH/ORP Monitor is a versatile and intelligent instrument that recognizes the type of sensor connected, either pH or ORP, then automatically sets itself for the corresponding display and functionality. Also, during EasyCal 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 ±10%, regulated, AC or DC, and can be used with many Signet pH/ORP electrodes and preamplifiers, or with electrodes from other manufacturers by using the 2721 Preamplifier. Several useful accessories are available, including the optional splashproof rear cover kit.

# System Overview

In-Line Sensor Installation	Submersible Sensor Installation	WetTap Sensor Installation
Panel Mount Signet 5700 Instrument	Panel Mount Signet 5700 Instrument	Panel Mount Signet 5700 Instrument
Signet compatible pH/ORP Electrode with Preamplifier 2724-2726, 2764-2767, 2774-2777, 2760 (each sold separately)	Pipe extension or conduit with 3/4 in. NPT or ISO 7/1-R 3/4 threads	Signet Wet-Tap Electrode 2756, 2757 with Preamplifier 2760 (each sold separately)
GF Fittings* (sold separately)	Signet compatible pH/ORP Electrode with Preamplifier 2724-2726, 2764-2767, 2774-2777, 2760 (each sold separately)	Signet 3719 WetTap (sold separately)  GF PP Clamp-On Saddles for 3719 Wet-Tap or GF Tees and Fittings (sold separately) see model 3719 for more info

<sup>\*</sup>See Fittings Section for more information.

### **Features**

- Displays pH/temp/mV or ORP/mV
- EasyCal simplifies routine calibration
- Simple push-button operation
- Intuitive software design
- Scaleable 4 to 20 mA output internally powered (active)
- Two programmable relays
- Dual proportional control capability
- Non-volatile memory
- Versatile low voltage power requirement

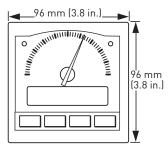
# **Applications**

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

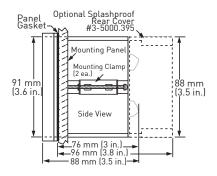




### **Dimensions**



**Front View** 



Side View

### **Specifications**

#### General

Operating Range:

pH: 0 to 14 pH, optically isolated

• Temp: -25 °C to 120 °C

(-13 °F to 248 °F)

• ORP: -2,000 to +2,000 mV,

optically isolated

Accuracy: ± 0.2% of scale

Display

• Analog:

Reversible dial: 0 to 14 pH or ±1000 mV

Digital:
Backlit LCD, 2x16 alphanumeric

character

#### **Materials**

• Enclosure: ABS Plastic

Keypad: Silicone Rubber

Panel and case gasket: Neoprene

Window: Hard-coated polycarbonate

#### **Electrical**

Power Requirements:

12 to 24 VAC or DC ±10%, regulated recommended, 50 to 60 Hz, 10W max.

Current Output:

• 4 to 20 mA, non-isolated, active, internally powered

### Electrical (continued)

 Loop Impedance: 350 Ω max. @ 12V 950 Ω max. @ 24V

• Accuracy: ± 0.1%

Alarm Contacts:
• Two SPDT relays:

• 5A @ 30 VDC

• 5A @ 125 VAC

• 3A @ 250 VAC max.

 High/low/pulse programmable with adjustable hysteresis

 Dual proportional control capability, maximum pulse rate 300 pulses/min.

#### **Environmental**

Operating Temperature:

-10 °C to 55 °C (14 °F to 131 °F)

Relative Humidity:

0 to 95%, non-condensing Enclosure: NEMA 4X/IP65 front

Shipping Weight 0.82 kg 1.81 lb

### Standards and Approvals

CE, UL, CUL

 Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management

### Model 5700 Ordering Information

- 1) Panel cutout should be 92 x 92mm (3.62 x 3.62 in.)
- Reversible dials with standard ranges for pH and ORP are included with the instrument
- An optional splashproof rear cover can be ordered separately if needed.
- 4) Protective overlays are available for the front panel.
- 5) Order RC filter kits to protect relays from voltage spikes.
- 6) To mount the unit onto a wall, use the heavy duty wall mount bracket.

Please refer to Wiring, Installation, and Accessories sections for more information.

# **Ordering Information**

Mfr. Part No.	Code	Description
3-5700	198 825 003	pH/ORP Monitor

# **Accessories and Replacement Parts**

Mfr. Part No.	Code	Description	
Mounting			
3-5000.395	198 840 227	Splashproof rear cover kit	
3-5000.399	198 840 224	5 x 5 inch adapter plate to retrofit older Signet installations	
3-5000.598	198 840 225	Surface mount bracket (panel mount only)	
3-8050.392	159 000 640	1/4 DIN retrofit adapter	
3-0000.596	159 000 641	Heavy duty wall mount bracket (panel mount only)	
Liquid Tight Connectors			
3-9000.392	159 000 368	Liquid tight connector kit for rear cover	
		(3 connectors)	
3-9000.392-1	159 000 839	Liquid tight connector kit, NPT (1 connector)	
3-9000.392-2	159 000 841	Liquid tight connector kit, PG 13.5 (1 connector)	
Other			
3-5000.390	159 000 323	Installation kit	
3-5000.397	159 000 326	5000 series window kit	
3-5000.525-1	198 840 226	Bezel, 5000 series	
3-0700.390	198 864 403	pH buffer kit (1 each 4, 7, 10 pH buffer in powder	
		form, makes 50 ml of each)	
3-5000.398	159 000 646	Protective overlay kit (10 pcs)	
3-8050.396	159 000 617	RC filter kit (for relay use), 2 per kit	

#### Rev A (3/09)