



INDUSTRIAL pH INSTRUMENTATION & ELECTRODES

Chemical Metering Systems Combine Controller and Pump in One Unit

PHP-192-PP
Starts at
\$1800



- ✓ Combines Controller and Pump in One Unit
- ✓ Proportional Control
- ✓ LCD Readout of Process pH or Setpoint
- ✓ Reverse Direction Control
- ✓ Control Bandwidth Manually Adjustable, 1 to 3 pH Units
- ✓ NEMA 4X (IP65) Enclosure
- ✓ Choice of PP, PTFE or 316 SS Liquid Ends

The PHP-190 Series of chemical metering systems are unique instruments that combine a pulse frequency controller with a diaphragm-type pump in one compact unit. In the control mode, deviations from setpoint are converted to pulses which vary the stroke rate of the metering pump. As the setpoint is approached, the pump feed slows down to minimize chemical loss and overshoot of the endpoint. Variation of the stroke rate is controlled by a front panel potentiometer or through process controlled operation by external electric or mechanical pacing or by closed loop control. The units are supplied with foot valve, injection valve, power cord, and a float level switch made of polypropylene with a 1.8 m (6') polyethylene-coated cable. Polypropylene (-PP) models include a 3 and 1.5 m (10 and 5') length of polyethylene tubing, and operators manual. For proper control, a holding tank with a minimum 10-minute residence time is required.

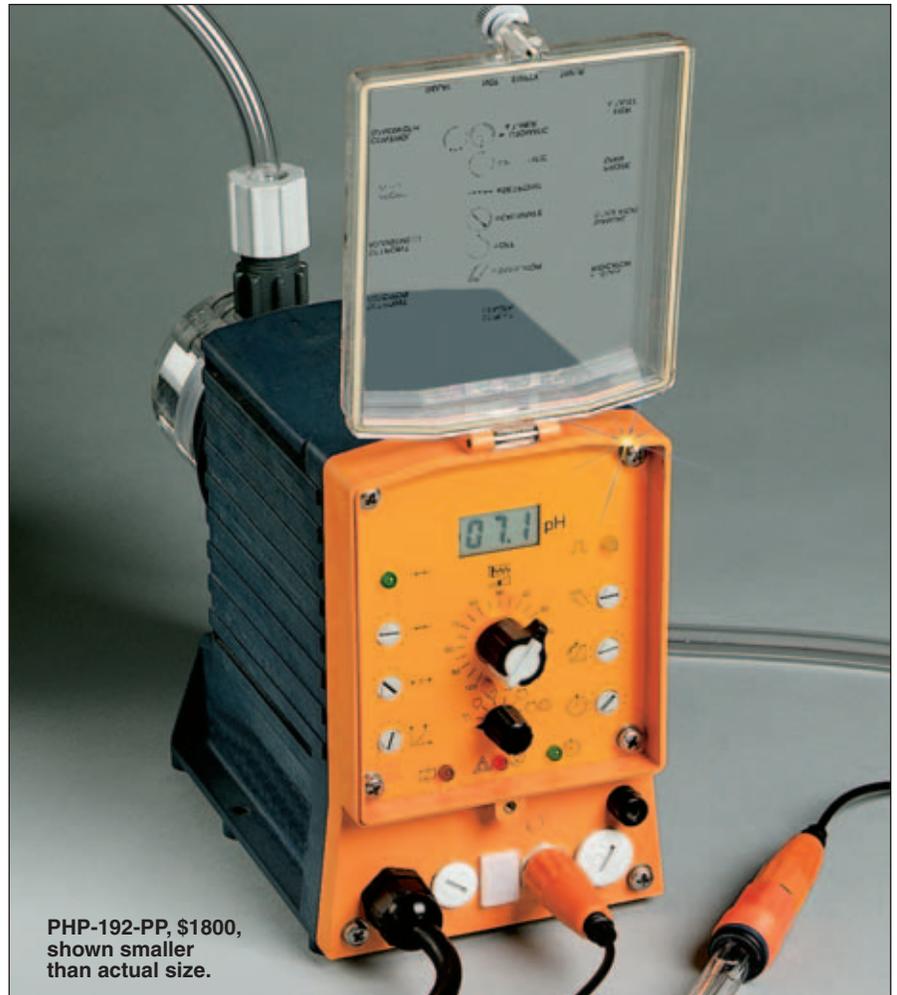
Specifications

Range: pH control 0 to 14 pH
Electrode Connector: BNC (includes SN6-to-BNC adaptor)
Input Impedance: >10¹² Ω
Zero Point Adjustment: ±3 pH
Slope Adjustment: 85 to 102%
Setpoint Adjustment: 0 to 100%
Display: 3-digit LCD
Control Bandwidth: 1 to 3 pH units, adjustable
Control Direction: Reversible
Linearity: Better than ±1% range
Reproducibility: Better than ±0.5% range
Operating Temperature: -10 to 45°C (14 to 113°F)
Power: 115 Vac
Wetted Parts:
 -PP: Polypropylene and EPDM
 -T: PTFE
 -S: 316 SS and PTFE

All versions have ceramic valve balls

Connections:

-S Models: ¼ FNPT
-T and -PP Models: ¼ x ¾" tubing for PHP-192, PHP-193 or PHP-194; ½ x ¾" tubing for PHP-195 or PHP-196



PHP-192-PP, \$1800, shown smaller than actual size.

Ship Weight [kg (lb)]:

PHP-192 thru 194: -S: 0.7 (1.6);
 -PP and -T: 0.3 (0.7)
PHP-195 and 196: -S: 1.5 (3.3);
 -PP: 0.3 (0.7); -T: 0.5 (1.1)

Recommended Reference Book:
 Corrosion Resistant Tables,
CM-0902, \$750.
 See Section Y
 For Additional Books



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)					
Model No.	Ratings at Max Back Pressure		Price		
	bar (psi)	l/h (USGPH)	PP	PTFE	316 SS
PHP-192-*	16 (232)	0.75 (0.20)	\$1800	\$2400	\$2750
PHP-193-*	12 (174)	1.29 (0.34)	1800	2400	2750
PHP-194-*	7 (101)	2.82 (0.75)	1850	2400	2750
PHP-195-*	3 (43.5)	6.48 (1.71)	1900	2500	3000
PHP-196-*	1.5 (22)	12.3 (3.25)	1900	2550	3050

* To order, specify "-PP" for polypropylene, "-T" for PTFE, or "-S" for 316 stainless steel. Comes complete with foot and injection valves, power cord and operator's manual.

For automatic temperature compensation add suffix "-ATC" to model number and consult sales department for pricing.

Ordering Examples: PHP-192-S, PHP-192 pump with 316 stainless steel liquid end, \$2750. PHP-193-PP, PHP-193 pump with polypropylene liquid end, \$1800.

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