

PH SERIES

Three Switch-Selectable Ranges with Test Mode



The PH Series pressure transducers are designed for steam, air, gas, and liquid pressure measurement in all media compatible with 17-4PH N8 stainless steel. They utilize a microprocessor controlled sensor profiled for exceptional accuracy and reliability. All models feature three switch-selectable ranges and a “test mode” to verify wiring and panel input scaling. A pushbutton and digital input terminal is used to automatically zero the output, and the microprocessor guards against accidental zero adjustment during operation. The field-selectable output, offering options of 0 to 5 V, 0 to 10 Vdc, or 4 to 20 mA, ensures excellent systems compatibility. Jumper controlled surge damping is provided on all models to reduce false alarms.

SPECIFICATIONS

GENERAL	
Input Power	Class 2; 12 to 30 Vdc/24 Vac
Output	3-wire transmitter; user selectable 4 to 20 mA (clipped & capped)/0-5 V/0-10 V*
Surge Damping	Electronic; 5-second averaging
Test Mode	Overrides output to full-scale (20 mA, 5 V, 10 V)
Zero Adjust	Pushbutton auto-zero and digital input (2-pos terminal block)
Status Indication	Dual-color LED: Green = Normal, Red = Overpressure, Flashing Red = Fault
Housing Material	White powder-coated steel
PRESSURE RANGES	
0 to 100 psi	25/50/100 psig switch selectable
0 to 250 psi	62.5/125/250 psig switch selectable
0 to 500 psi	125/250/500 psig switch selectable
0 to 1000 psi	250/500/1000 psig switch selectable
OTHER SPECS	
Product Operating Environment	-10 to 55 °C (-4 to 130 °F); 0 to 90% RH non-condensing

Reduces failures

Micromachined silicon sensor design...improves overpressure capacity and reduces failures

High stability

Electronic surge damping for high stability

Zero calibration

Pushbutton zero calibration...no trim pots to adjust, saves installation time

Switch-selectable

Switch-selectable pressure ranges...fewer models to order and stock

Pushbutton

Pushbutton and remote zero adjustment...maintain accuracy and prevent callbacks with automatic zero calibration

Microprocessor

Microprocessor controlled signal conditioning (see graph)

APPLICATIONS

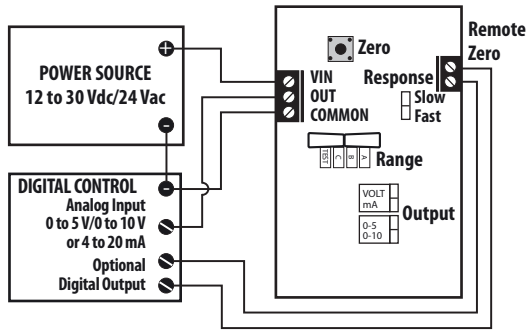
- Chilled and hot water pump monitoring
- HVAC and industrial gas monitoring
- Instrument air pressure
- Hydraulic oil pressure

SENSOR	
Accuracy	±1% F.S. Combined linearity, hysteresis, and repeatability
Long Term Stability	±0.25% per year
Media Compatibility	Media compatible with 17-4 PH stainless steel
Proof Pressure	Max. 2x F.S. range
Burst Pressure	Max. 5x F.S. range
Temp Compensated Range	0 to 50 °C (32 to 122 °F)
Media Temperature Limits	-20 to 85 °C (-4 to 185 °F); 0 to 90% RH non-condensing
Fittings	1/4" NPT male thread, 17-4 PH stainless
WARRANTY	
Limited Warranty	5 years

*Minimum input voltage for 4 to 20 mA operation:
250 Ω loop (1 to 5 V) = 12 Vdc
500 Ω loop (2 to 10 V) = 15 Vdc

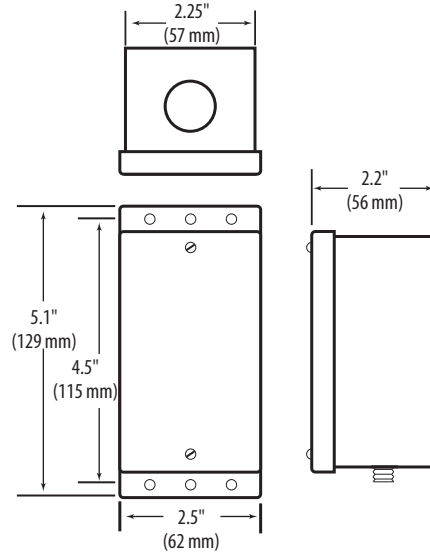


WIRING DIAGRAM

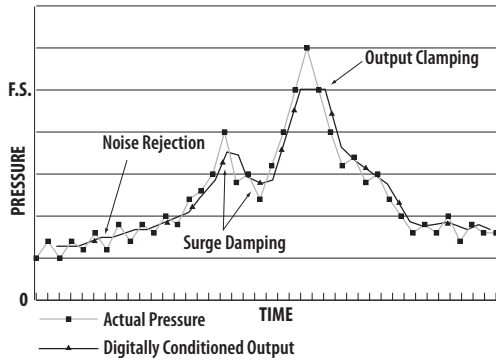


MODEL	RANGE		
	A	B	C
07	25	50	100
08	62.5	125	250
09	125	250	500
10	250	500	1000

DIMENSIONAL DRAWING



SIGNAL CONDITIONING DIAGRAM



ORDERING INFORMATION

NIST Range
 PH S
 N = NIST 07 = 0-100 psig = Standard
 X = None 08 = 0-250 psig
 09 = 0-500 psig
 10 = 0-1000 psig

Example:

PH X 07 S