

Digitally Controlled Gauge Pressure Transducer

PH Series



PH

Three Switch-Selectable Ranges With Test Mode

FEATURES

- Micromachined silicon sensor design...improves overpressure capacity and reduces failures
- Electronic surge damping for high stability
- Pushbutton zero calibration...no trim pots to adjust, saves installation time
- Switch-selectable pressure ranges...fewer models to order and stock
- Pushbutton and remote zero adjustment...maintain accuracy and prevent callbacks with automatic zero calibration
- Microprocessor controlled signal conditioning (see graph)
- Noise rejection reduces fluctuating readings due to noise or turbulence
- Surge damping reduces false alarms by averaging fast peaks
- Output clamping protects controller input from overcurrent/over-voltage
- Test mode overrides the output to full scale...helps to diagnose wiring problems

DESCRIPTION

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 0-5V, 0-10VDC, or 4-20mA, ensures excellent systems compatibility. Jumper controlled surge damping is provided on all models to reduce false alarms.

SPECIFICATIONS



PRODUCT	
Input Power	Class 2; 12 to 30VDC/24VAC
Output	3-wire transmitter; user selectable 4-20mA (clipped and capped)/0-5V/0-10V*
Accuracy	±1% F.S. Combined linearity, hysteresis, and repeatability
Surge Damping	Electronic; 5-second averaging
Test Mode	Overrides output to full-scale (20mA, 5V, 10V)
PRESSURE RANGES	
0-100 psi	25/50/100 psig switch selectable
0-250 psi	62.5/125/250 psig switch selectable
0-500 psi	125/250/500 psig switch selectable
0-1000 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
Long Term Stability	±0.25% per year
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
SENSOR	
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 noncondensing
Fittings	1/4" NPT male thread, 17-4 PH stainless

*Minimum input voltage for 4-20mA operation:

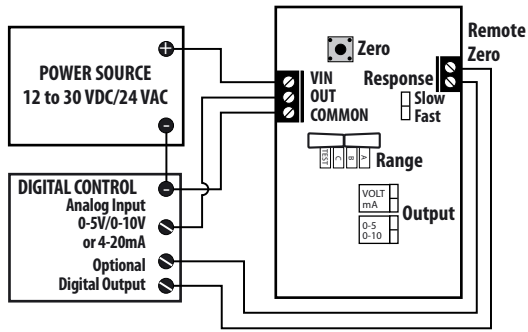
250 Ω loop (1-5V) = 12VDC

500 Ω loop (2-10V) = 15VDC

APPLICATIONS

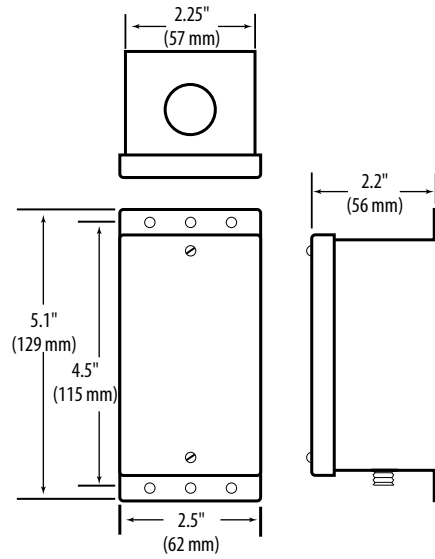
- Chilled and hot water pump monitoring
- HVAC and industrial gas monitoring
- Instrument air pressure
- Hydraulic oil pressure

WIRING DIAGRAM

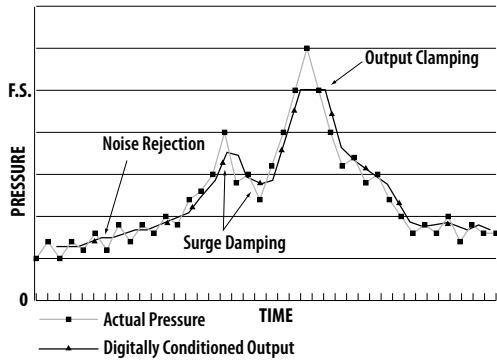


MODEL	RANGE		
	A	B	C
07	25	50	100
08	62.5	125	250
09	125	250	500
10	250	500	1000

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

ACCESSORIES

Snubbers, brass, 1/4" NPT (AA69)
 Snubbers, stainless steel, 1/4" NPT (AA70)
 Steam siphon (AA13)

