

Digitally Controlled Gauge Pressure Transducer

PH Series



PH

Three Switch-Selectable Ranges With Test Mode

FEATURES

- Micromachined silicon sensor design...improves overpressure capacity and prevents 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/overvoltage
- 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 17-4 PH 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 | 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:

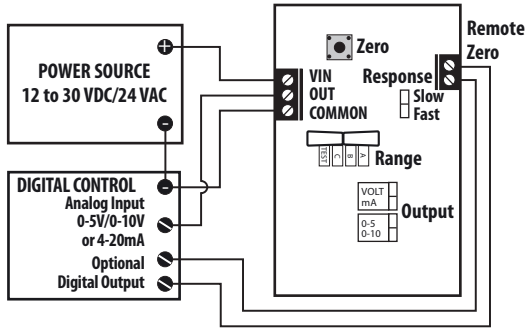
250 Ω loop (1-5V) = 12VDC

500 Ω loop (2-10V) = 15VDC

APPLICATIONS

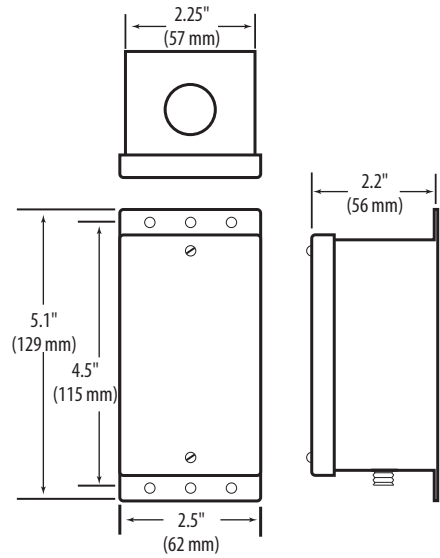
- Chilled and hot water pump monitoring
- HVAC and industrial gas monitoring
- Instrument air pressure
- Hydraulic oil pressure

WIRING DIAGRAM

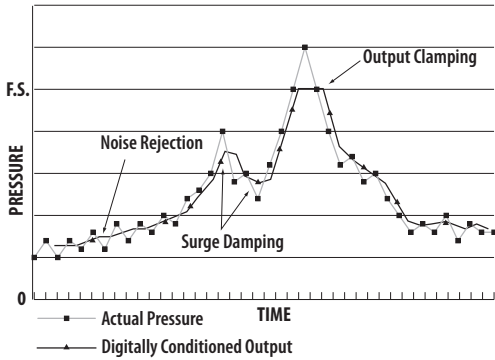


| MODEL | RANGE | | |
|-------|-------|-----|------|
| | A | B | C |
| 07 | 25 | 50 | 100 |
| 08 | 62.5 | 125 | 250 |
| 09 | 125 | 250 | 500 |
| 10 | 250 | 500 | 1000 |

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 (AA11), Steam Siphon (AA13)

