



Digital Strain Gauge Meter

PSD-02A

Digital strain gauge meter PSD-02A is digital indicator designed for Pureron pressure sensor PC-302, 501 and 601 series. It is small size and lightweight 3-3/4 digit (3999) display equipped with two contact high-low limit comparative output as standard. Isolated circuit design between power and signal enables high noise resistance in case of multiple indicator drive with one power supply.

- Ultra small (24mm x 48mm) and lightweight (80g). Comparison setting by two contact high-low limit available
- High brightness 8mm height LED (red)
- Full display capability such as 3,000psi with 3-3/4 digit display
- Floating input isolated from power supply (DC 24V)
- High accuracy output detection by combination with Pureron pressure sensor PC-302/501/601 series

Specification

General Specification

Adaptation Sensor	Strain gauge type various transducers
Sensor Applied Voltage	DC2.5V \pm 1% 25mA or less
Zero Adjustment Range	\pm 4.0 mV/V (front face)
Span Adjustment Range	Input range of 10 mV/V to 160 mV/V can be displayed in full scale (3000) by rear face multi rotation trimmer (rear face)
Accuracy	0.1% FS \pm 1 digit display 3001 or more is the output specification
Reference Voltage for Calibration	10 mV/V (terminal of upper connector is switched)
Display	LED (light-emitting diode) number element, height of character 8mm (red)
Display Range	0 to \pm 3999
Sampling Speed	2.5 times/second
Decimal Point	Can be set at arbitrary position by display part stud pin
Zero Point Drift	0.02% FS / $^{\circ}$ C or less
Gain Drift	0.02% rdg / $^{\circ}$ C or less
External Hold	Negative signal or contact signal of 0V (short)
Operation Method	Double integral technique
Noise Rejection Ratio	NMR40dB, TYP (50/60Hz)
Operating Temperature & Humidity	0 to 50 $^{\circ}$ C / 35 to 85% RH (no dew condensation)
Power Supply	DC19 to 29V, between power supply and COM, isolation
Power Consumption	Approximately 1W
External Dimensions	48mm (W) x 24mm (H) x 87mm (D)
Weight	Approximately 80g
Accessory	Higher and lower connectors
Withstanding Voltage	Between power supply terminal and COM DC500V, one minute
Insulation Resistance	Between power supply terminal and COM DC500V, 100M Ω or more

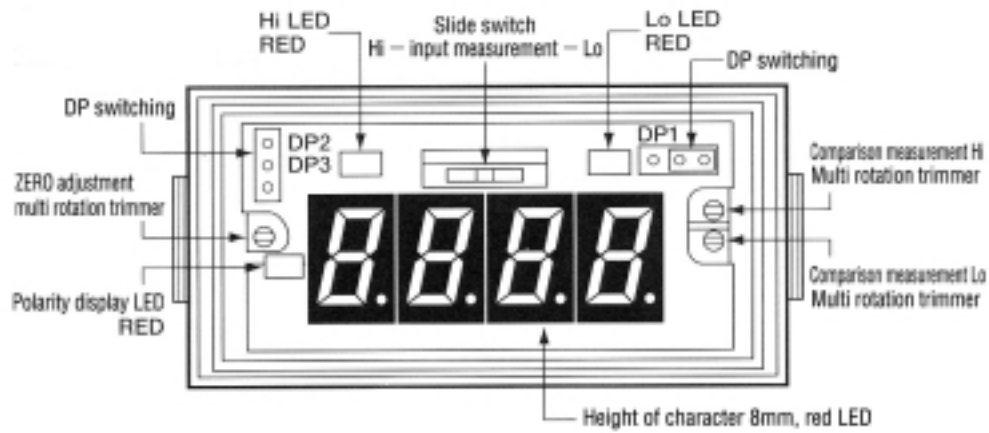
Analog Output

Output Voltage	1mV/digit (3V max)
Accuracy	0.5% FS (23 $^{\circ}$ C \pm 5 $^{\circ}$ C)
Load Resistance	5k Ω or more

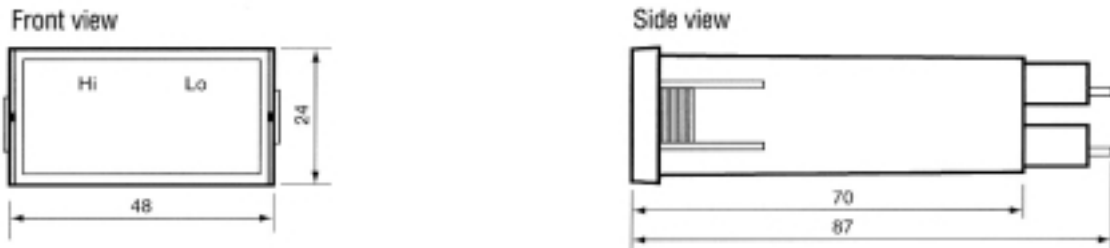
Higher and Lower Limit Two-Stage Comparison (Analog Comparison)

Comparison Setting Range	-1000 to 1500 for both of higher and lower limits, 0 to +3000 (internal switching)
Setting Method	Switched by slide switch on front face. Set by multi rotation trimmer potentention meter
Comparison Output	Relay output for both of Hi and Lo a contact, b contact, COM contact load capability / DC24V 1A AC120V 0.5A
Comparison Operation Condition	At Hi or Lo, red LED lights up
Comparison Condition	Hi: display value \geq higher limit setting value, Lo: display value \leq lower limit setting value Setting error \pm 3 digit

Front Face



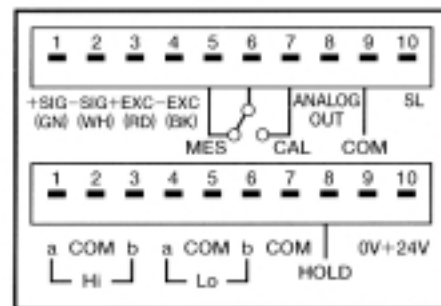
Dimensional Outline Drawings



Panel Cut Dimensions



Terminal Connection Diagram



How to Order

PSD - 02A - 1

Display Unit

- 1 : psi
- 2 : kgf/cm²
- 3 : bar
- 4 : torr
- 5 : atm
- 6 : KPa
- 7 : MPa

※Specification is subject to change without notice.