Digital Strain Gauge Meter

PSD-01C

●High visuality and brightness two-color large LED (character height approximately 20mm)
●Easy setting by flexible operable jog lever

Specification

■Input Specification
●Process Signal Measurement

Range	Measurement Range	Display	Accuracy	Input Impedance	maximum Allowable Input
2V	±5V	Offset ±9999 Full scale 0 to ±9999	±(0.03% of rdg + 2digit)	Appoximately1MΩ	100V
2A	4 to 20mA		±(0.1% of rdg + 3digit)	Appoximately10Ω	50mA

※Sensor power supply: DC24V ±10% 25mA
※The accuracy is applied when the sampling speed is approximately 20 times/second or less.

■General Specification
●Measurement Part

Operation Method	ΔΣconversion method
Input Circuit	Single-Ended
Sampling Speed	Max. approximately 1,000 times/second
Noise Rejection Ratio	NMR 50dB or more (50/60Hz)
Display Range	9999
Display	Red/green 7 segment display (height of character: approximately 20mm)
Polarity Display	"—" is automatically displayed when the calculation result is minus
Over Range Warning	OVER or —OVER for input signal of display range or more
Decimal Point	Can be set at arbitrary position
Zero Display	Leading zero suppress
Operating Temperature & Humidity	0 to 50℃ / 35 to 85% RH (no dew condensation)
Storage Temperature & Humidity	—10 to 70℃/60% RH or less
Power Supply Voltage	AC power supply unit: AC 100 to 240V ± 10%
Power Consumption	Approximately 8VA at maximum load (AC power supply)
External Dimensions	96mm(W)×48mm (H)×97.5mm (D)
Weight	Approximately 450g
Withstanding Voltage (AC Power Supply)	Between power supply terminal / input terminal / each output terminal AC 1500V one minute
Withstanding Voltage (Common)	Between each terminal of case AC 1500V one minute
Insulation Resistance	Between terminals above DC 500V 100MΩor more
Accessory	Instruction manual

■Comparison Output Specification
●Common Specification

Range of Current and Voltage	Judgment Result
Measurement value ＞ higher limit judgment value	HI
Lower limit judgment value ≦ measurement value ≦ higher limit judgment value	GO
Lower limit judgment value ＞ measurement value	LO

Judgment Value setting Range	—9999 to 9999
Hysteresis	1 to 999 digits can be set for each judgment value
Comparison Condition	Depends on sampling speed

●Relay Contact Output

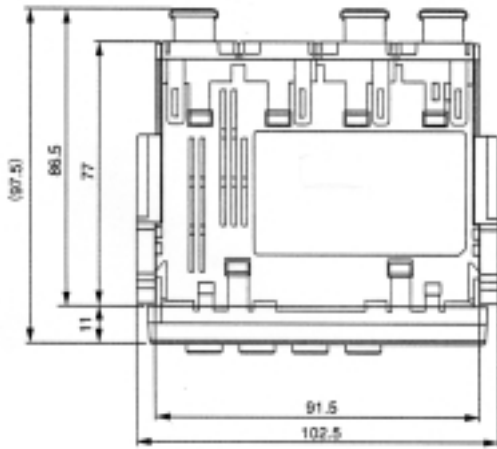|	
Quantity of Contact	Relay contact x3
Contact Rating	AC 250V 2A, DC 30V 2A (resistance load)

●External Control

|	
Start / Hold	Hold by S/H terminal, COM terminal, short circuit or same electric potential, start by release or 5V
Digital Zero	Digital zero function is turned ON by DZ terminal, COM terminal, short circuit or same electric potential
Peak Hold	Peak hold function is turned ON by PH terminal, COM terminal, short circuit or same electric potential
Relay Reset	Relay reset function is turned ON by R.RESET terminal, COM terminal, short circuit or same electric potential
Comparison Pattern Setting	8 patterns can be switched by COM terminal, control between P.SEL 0 and 2

●Analog Output (PWM)

		Type	Load resistance	Accuracy (23℃ ± 5℃, 35 to 85% RH)	Ripple
Output Specification		0 to 1V	10kΩ or more	± (0.5% of FS)	50mVp-p
		0 to 10V			
		1 to 5 V			
		4 to 20mA	550Ω or less		25mVp-p
Conversion Method	PWM conversion method				
Resolution	Equivalent to 13 bit				
Scaling	Digital scaling				
Response Speed	Approximately 0.5 second (10%→90%)				

Dimensional Outline Drawings

●Top View

●Rear Face View

Input unit
Comparison output unit
Analog output external control unit
Power supply unit
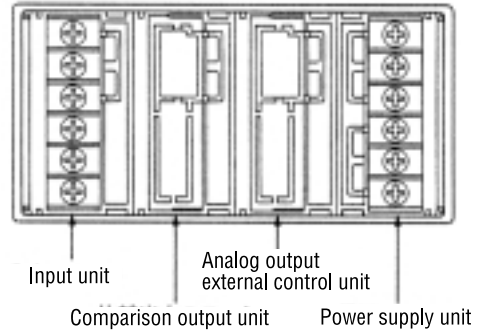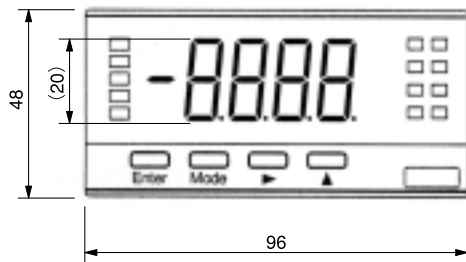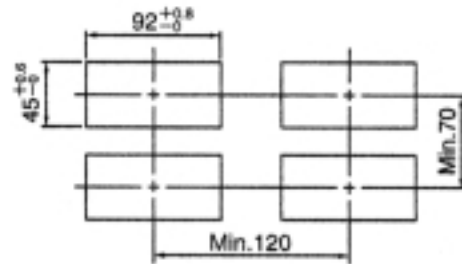
●Front Face

●Panel Cutting Hole

Thickness of panel board: 0.8 to 5.0mm

Connection Diagrams

●Input Unit

A IN HI
A IN LO
V IN HI
V IN LO
+EXC
−EXC
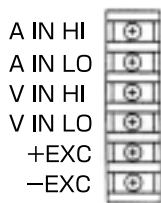
Load Cell output

●Power Supply Unit

NC
NC
NC
NC
AC POWER
AC POWER
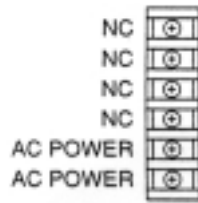
Alternative current

●Comparison Output Unit

HI a
HI c
GO a
GO c
LO a
LO c
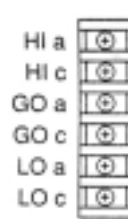
Relay contact output

●Analog Output / External Control Unit

Adapted crimping terminal
5.8 or less   5.8 or less

HOLD
PH
DZ
R.RESET
NC
NC
COM
V.OUT
I.OUT
AO.COM
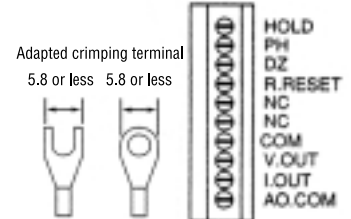
Analog output external control

How to Order

Process Signal Measurement
Display Unit

PSD - 01C - 2V - 1

2V : ±5V
2A : 4 to 20mA

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

※Specification is subject to change without notice.

Indicator