

# STRAIN GAUGE METER

## ASG-156A

### \*BCD, ANALOG Option



### ■ Features

- Built-in Microcomputer
- Peak Hold, Digital Zero, Tracking Zero
- HI and LO setpoints
- Bright LED, 10mm (Red)
- Excitation supply 5VDC, 10VDC
- Analog Peak Hold
- BCD output
- Direct connect strain gauge sensor

### ■ Output

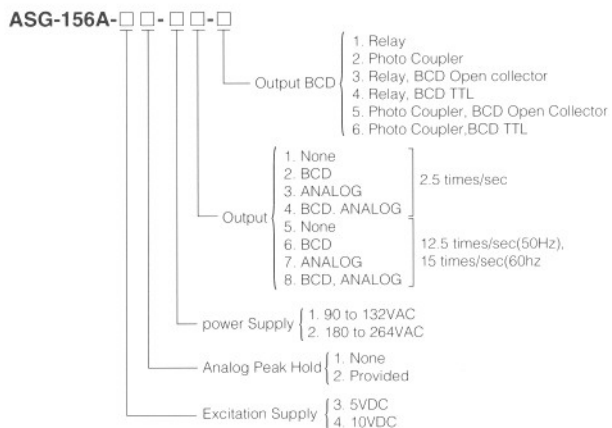
- BCD data output (Isolated input (-SIG))
- At Open collector (NPN)
  - Measured Data: Negative logic Transistor "ON" at logic 1
  - Polarity Signal: Transistor "ON" at minus input
  - Over Signal: Transistor "ON" at overflow input
  - Printing Command Signal: Transistor "ON" during a period for approx 1mS at every measurement completion
  - Transistor Output Capacity: Applied voltage, 30V max. Current 10mA max Saturated output voltage less than 1.2V at 10mA

- At TTL
  - Fun out 2, Tri-state parallel BCD, positive logic

- Analog Output
  - Voltage: 0 to 5V
  - Accuracy: 0.5% FS (23°C±5°C)
  - Resolution: 1mV/digit
  - Resistive Load: More than 5KΩ

- Analog Peak Hold
  - Operating speed: DC~1ms
  - Accuracy: 0.5% FS
  - External Control: P/F terminal

### ■ Ordering Code



### ■ Specifications

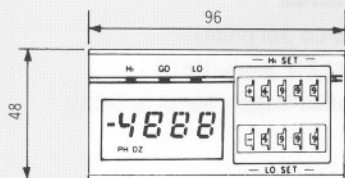
- Measuring Section
  - Accuracy: 0.1%FS ±1 digit (23°C±5°C)
  - Conversion Rate: 2.5 times/sec, 12.5times/sec(50Hz) or 15times/sec(60Hz)
  - Display: LED, 10mm (Red)
  - Max. Display: 0 to ±4999
  - Polarity: A "-" is display automatically
  - Overrange Indication: When input exceeds the maximum display, flashing just before overflow number
  - Decimal Point: Settable to any digit position (By DIP switch on the display board)
  - Zero Display: Leading zero suppression
  - Monitor Display: Peak hold, Digital zero
  - Sensor: Strain gauge sensor 350 Ω
  - Excitation Supply: 5VDC±5% less than 60mA, 10VDC±5% less than 30mA
  - Zero Adjustment: ±0.3mV/V
  - Gain Adjustment: 1mV/V to 3mV/V (to the fullscale 4999)
  - Calibration Value: 1mV/V (By CAL switch on the display board)
  - Frequency Coefficient: Approx. 2Hz (-3dB)
  - Temperature Coefficient: Zero; ±0.02% FS/°C, Gain; ±0.02% rdg/°C
- External Control: Hold; COM terminal and HOLD terminal shorted or 0V, Start; 0V to +5V pulse (20mS to 45mS) or contact signal

- Comparator Section
  - Control System: Microcomputer
  - Setting Range: -9999 to +9999 with polarity
  - Comparative Condition: HI setpoint < Indication → HI, HI setpoint ≥ Indication ≥ LO setpoint → GO, Indication < LO setpoint → LO
  - Hysteresis: No hysteresis (Option; 10digits)
  - Relay Contact Capacity: 250VAC 0.1A resistive load, 120VAC 0.5A resistive load, 28VDC 1A resistive load
  - Photo Coupler Capacity: Sink current Max. 20mA (less than 30V), Saturation voltage=less than 1.2V at 20mA

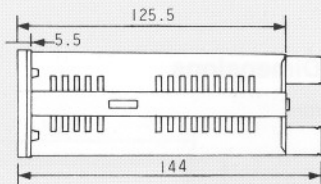
- Common Section
  - Operating Temperature: 0 to 50 °C, 35 to 85% RH
  - Power Supply: 90 to 132VAC, 180 to 264VAC
  - Power Consumption: 5VA (at 100V)
  - Dimensions: 48(H) X 96(W) X 144(D) mm DIN size
  - Weight: Approx. 450g (unit only)
  - Dielectric Strength: Input(-SIG) and earth, COM, 500VDC, Power supply and input, earth, COM, case, relay output, 1500VAC/1min
  - Insulation Resistance: 500VDC more than 100M ohms at the above terminals
  - Accessories: Screw terminal (10P) 2pcs, Instruction Manual

## ■ Dimensions

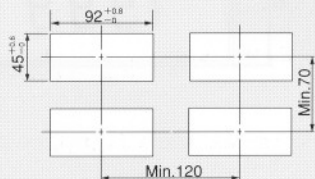
Front



Side



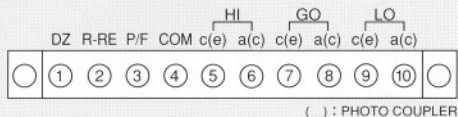
Panel Cutout



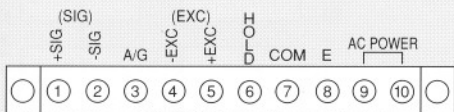
Panel thickness 0.8 to 5.0mm

## ■ Connection Diagram

Upper

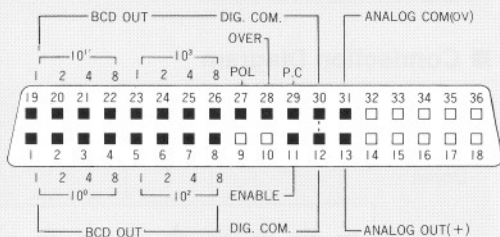


Lower



(57-30360)

Option



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