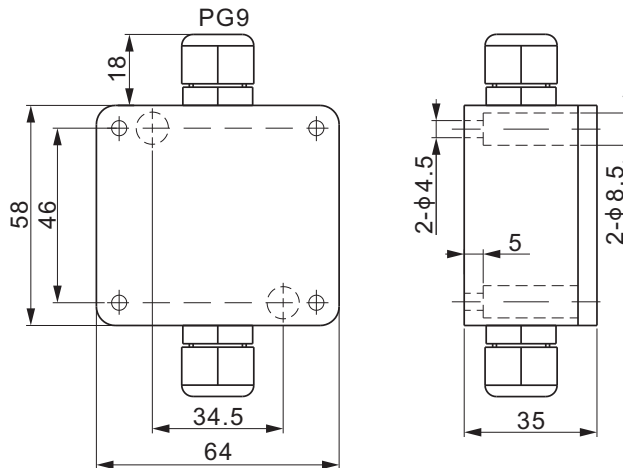


### 1. Special Features

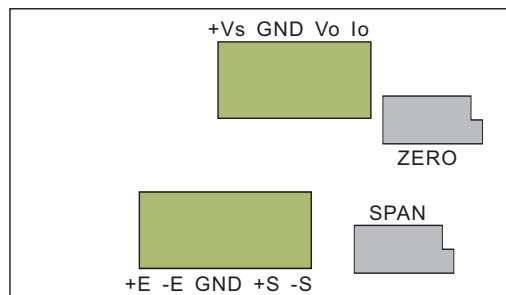
- Can drive up to 1 x350Ω load cell
- Can be connected directly to 1 load cell or connected to several load cells through a junction box



### 2. Dimensions (in mm; 1mm=0.03937 inches)



### 3. Component Layout



#### From Amplifier to 24V DC Power and 0~10V/4~20mA output signal:

Vo: Output Voltage Signal 0~10V  
 Io: Output Current Signal 4~20mA  
 Vs: Input 24V DC Power  
 GND: Ground

#### From Load Cell to Amplifier:

+S: +Output mV Signal  
 -S: -Output mV Signal  
 +E: +Excitation  
 -E: -Excitation

### 4. Technical Data

Type	A1A-22	
Load Cell Type	All strain gauge type	
Weight (G), approx.	kg/lb	0.17 / 0.37
Power Supply	V DC	24 ± 10%
Input Range	mV	0 - 30
Max. Power Voltage	DC	30V, 2.5A
Output Signal	V	0 - 10
	mA	4 - 20
Max. Output Current	mA	40
Max. Input Offset Voltage	μV	50
Max. Input Offset Drift	μV/°C	0.6
Min. Common-mode Rejection Ratio (G=10)	dB	100
Nominal Temperature Range	°C [°F]	-10...+40 [14...104]
Protection Class	IP66	
Enclosure Material	Aluminum casting	

## 5. Calibration Procedure

The calibration of A1A-22 consists of Zero Calibration and Span Calibration.

**Tools needed:** a) A small size slotted screw driver which is good for unit adjustment and a Phillips screwdriver which is good for fasten bolts.

### 5.1 Zero Calibration

Step1. Remove all load from the scalepan. If the scale require hooks or chains (tare weight), place the hooks or chains onto the scale for zero calibration.

Step2. Adjust **ZERO** variable resistor to an output of 0V or 4mA.

*(Note: Tare weight shall **not** exceed 30% of full load)*

### 5.2 Span Calibration

Step1. Load the full scale onto the scalepan.

Step2. Adjust **SPAN** variable resistor to an output of 10V or 20mA.

*(Note: It's recommended to repeat calibration three times.)*

## 6. Operation

- 6.1 Except the calibration period, always keep the enclosure cover on and ensure the seal is in its proper place when installing the cover.
- 6.2 Always keep the amplifier clean to avoid affecting the values of the ZERO and SPAN variable resistors.
- 6.3 For stable output reading, be sure use safe and reliable DC power supply.
- 6.4 When output reading changed, recalibrate the amplifier according to Section 5.

## 7. Troubleshooting

- 7.1 No output from the amplifier: Check all wire connections and the DC power supply.
- 7.2 Output signal abnormal: Recalibrate according to Section 5.
- 7.3 Problem do not be resolved: Contact the manufacturer.