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Type 132 Load Cell Amplifier

DESCRIPTION

The Type 132 Load Cell Amplifier's basic function is to amplify the signal from any load cell with full bridge connection. Amplifying this signal allows the user to use the data from the load cell in a more efficient and productive way. Reading its signal is difficult, but with an amplifier the job is made simpler, easier and more efficient.

FEATURES

The Type 132 Amplifier is designed to interface to a full bridge strain gauge based load cell or similar sensor. It can be calibrated to provide a 0-10VDC output for a fixed load range from the sensor. The new design is now RoHS compliant to required industry standards with enhanced features including:

- Bridge Resistance between 120 2,000ohms
- 4 wire connection to Load Cell
- 12V 24V power supply
- 20°C to 50°C operating Temperature
- Provides Bridge Excitation Voltage 8.0V
- Linearity 1:4000
- Bipolar Output is an optional configuration
- Bandwith 20Hz at 3dB

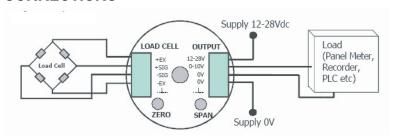
The amplifier is housed in an ABS enclosure allowing easy installation or mounting to a suitable surface with a single screw.

BRIEF SETUP SPECIFICATION TABLE

| SETUP VALUE | MIN | TYP | MAX | UNITS |
|--------------------------------|------|-----|------|-------|
| Bridge Resistance (12V supply) | 120 | 350 | 2000 | Ohms |
| Bridge Resistance (15V supply) | 150* | 350 | 2000 | Ohms |
| Bridge Resistance (18V supply) | 180* | 350 | 2000 | Ohms |
| Bridge Resistance (24V supply) | 350* | - | 2000 | Ohms |
| 0-10V Load impedance | 1K0 | - | - | Ohms |
| Supply current (Load Variable) | - | 30 | - | mA |
| | | | | |

^{*} To limit thermal dissipation, minimum bridge resistances are limit at higher voltages.

CONNECTIONS



Note: The 0V (supply) is internally connected to the 0V (signal)



SPECIFICATIONS

The Type 132 sensor amplifier is available in 4 ranges to suit most applications

| PRODUCT | FULL SCALE INPUT RANGE |
|--------------|------------------------|
| Type 132 (A) | 0.25mV/V - 0.85mV/V |
| Type 132 (B) | 0.65mV/V - 1.65mV/V |
| Type 132 (C) | 1.5mV/V - 2.5mV/V |
| Type 132 (D) | 2.25mV/V - 3.25mV/V |

Alternative Output Options and Custom Ranges can be provided

| OUIPUI TIPE | AMPLIFIER |
|-------------|--------------------------|
| 0 - 10VDC | Type 132 (standard) |
| 5 +/- 5VDC* | Type 132M (non-standard) |
| 4 - 20mA | Type 131 (standard) |
| 12 +/- 8mA* | Type 131M (non-standard) |

*This output also allows for Bipolar load ranges (custom specification)

SENSOR DIMENSIONS

