

50 (W) x 84 (H) x 135.5 (D) mm Approx. 400 g

This plug-in signal converter can be employed in combination with most commercially available load cells. It supplies a bridge voltage to the load cell, and converts the detection signal into an optimum DC signal to be applied to a measurement control device. Since tare adjustment can be performed not only through the front panel of the unit, but also from an external potentiometer coupled to the unit, this converter is suited for a wide variety of applications, such as remote indication of weight, stress or pressure. The type LCS has its input and output isolated through the use of a photocoupler.

Features

- Tare adjustment can be performed externally.
- Equipped with a short-circuit protection circuit and current limiting circuit.
- Wide variable ranges for Zero and Span, and easy-to-perform fine adjustment.
- Input and output can be isolated from each other using the highly reliable photocoupler method.
- Plug-in design enables mounting on DIN rails using a one-touch process.

Model WVP - - -

| | | |
|-----|--------------|--------------------------------|
| LCD | Non-isolated | Response time 200 msec/(0-90%) |
| LCS | Isolated | Response time 25 msec/(0-90%) |

| Input Signal (Load Cell Output) | |
|--------------------------------------|---|
| Rated Output Voltage of Load Cell | |
| 1 | 1.0 mV/V |
| 2 | 1.25 mV/V |
| 3 | 1.5 mV/V |
| 4 | 2.0 mV/V |
| 5 | 3.0 mV/V |
| 6 | 20 mV/V |
| 9 | Other than the above (Please consult with us.) |

| Applied Voltage | |
|-----------------|---|
| Drive Capacity | |
| 1 | 5 VDC, 60 mA - A maximum of four load cells of 350 Ω each can be connected in parallel. - A maximum of two load cells of 120 Ω each can be connected in parallel. |
| 2 | 10 VDC, 60 mA - One load cell of 350 Ω can be connected. - No load cell of 120 Ω can be connected. |

| Power Supply | |
|--------------|------------------------------|
| 1 | AC 100 V \pm 10%, 50/60 Hz |
| 2 | AC 200 V \pm 10%, 50/60 Hz |
| 4 | AC 110 V \pm 10%, 50/60 Hz |
| 5 | AC 220 V \pm 10%, 50/60 Hz |

| Output Signal | | |
|---------------|--|---------------------------|
| | | Allowable Load Resistance |
| A | DC 4-20 mA | 750 Ω or less |
| B | DC 1-5 mA | 2 K Ω or less |
| C | DC 2-10 mA | 1 K Ω or less |
| D | DC 0-1 mA | 10 K Ω or less |
| E | DC 0-10 mA | 1 K Ω or less |
| F | DC 0-16 mA | 625 Ω or less |
| G | DC 0-20 mA | 500 Ω or less |
| H | DC 1-5 V | 2.5 K Ω or more |
| J | DC 0-10 mA | 10 K Ω or more |
| K | DC 0-100 mA | 100 K Ω or more |
| L | DC 0-1 V | 500 Ω or more |
| N | DC 0-5 V | 2.5 K Ω or more |
| P | DC 0-10 V | 5 K Ω or more |
| S | Other than the above (Please consult with us.): Voltage output 10 V or less Current output 20 mA or less | |

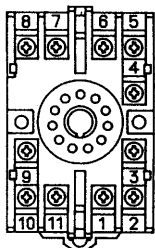
Specification

| | |
|--|--|
| Applicable load cell: | Bridge resistance 120 Ω to 350 Ω Rated output voltage 1 mV/V to 20 mV/V. Use the load cells in such a manner that the input signal to this unit will be 3 mV·fs or more. |
| Output signal: | DC voltage, DC current |
| Accuracy: | $\pm 0.1\% \cdot fs$ (at 23°C) |
| Allowable load resistance: | For voltage output, use the converter with a load current of 2 mA or less (1 μ A or less for an output below 1 V·fs). For current output, use the converter with a voltage drop of 10 V or less between output terminals. |
| Zero & span adjustment: | 0 -80%·fs each (equipped with a multi-turn trimmer) |
| Remote tare adjustment function: rated | Operated with a potentiometer (connectable across terminals 4 to 6; resistance 10 K Ω , optional) Variable width covered within zero-adjustment range |
| Operating temperature and humidity: | -5 to +55°C, 90% RH or less (without condensation) |
| Influence of ambient temperature: | $\pm 0.2\% \cdot fs/10^\circ C$ |
| Insulation resistance: | 100 M Ω or more with a 500 VDC megger between the input/output terminal and power supply terminal, and between the input and output terminals (isolated type) |
| Dielectric strength: | 2,000 VAC for 1 minute between the input and output terminals (isolated type), and between the input/output terminal and power supply terminal |
| Power consumption: | Approx. 4 VA (AC) |

Major Applications

- Weighing system for tanks, hoppers, conveyors, trucks, etc.
- Fixed amount delivery systems and mixing control systems for powder and particles.
- Tension control of cables and crane overturn-prevention units.

Explanation of Terminals



| No. | | Description |
|-----|-----|------------------------------------|
| 1 | + | Output signal |
| 2 | - | |
| 3 | + | Applied voltage source |
| 9 | - | |
| 10 | + | Input signal (load cell output) |
| 11 | - | |
| 4 | MAX | Remote tare adjustment |
| 5 | S | |
| 6 | MIN | |
| 7 | U | Power supply |
| 8 | V | |