

## Analog Load-Cell Transmitter TRW



- ◆ Low cost and small size
- ◆ 10 V excitation voltage
- ◆ 1 mV/V minimum input range
- ◆ Minimum 120 Ω load cell resistance
- ◆ 3-wire current or voltage output
- ◆ High protection class – IP67

With its IP67 cast aluminum enclosure, the TRW analog load-cell transmitter has been specially designed to be used in harsh industrial environments. This model can power a single 120...350 Ω load cell with 10 V bridge excitation voltage. TRW accepts 1, 2, or 3 mV/V input signal and generates a standard linear output signal that can be safely sent over long distances to remote indicators, data loggers, or controllers. ZERO and SPAN adjustments can be performed by the means of built-in potentiometers. TRW is low-priced and can withstand considerable electromagnetic disturbances. It can be a preferable low-cost solution for general-purpose process weighting as well as tension measurement applications.

### Technical specifications

#### Input

|                                  |                           |
|----------------------------------|---------------------------|
| <b>Input type</b>                | single load cell          |
| <b>Input impedance</b>           | 10 GΩ                     |
| <b>Load cell resistance</b>      | 120...350 Ω               |
| <b>Input sensitivity</b>         | 1, 2, or 3 mV/V           |
| <b>Bridge excitation voltage</b> | 10 VDC ± 0.05%            |
| <b>Full-scale input range</b>    | 10, 20, or 30 mV          |
| <b>ZERO and SPAN adjustment</b>  | min. ± 10%                |
| <b>Analog filter</b>             | low-pass, fixed (≈ 10 Hz) |

#### Output

|                                 |                       |                  |
|---------------------------------|-----------------------|------------------|
| <b>Output signal</b>            | 4(0)...20 mA          | 0...10 V         |
| <b>Minimum output load</b>      | -                     | 1 MΩ             |
| <b>Maximum output load</b>      | 750 Ω at 24V/20 mA    | -                |
| <b>Output-error signal (NC)</b> | open collector, 20 mA | open drain, 2 mA |
| <b>Over-scale limit</b>         | 24...44 mA            | max. 42 ± 6 mA   |

#### Accuracy

|                          |                          |
|--------------------------|--------------------------|
| <b>Measurement error</b> | 0.15% from span          |
| <b>Temperature drift</b> | 0.01% from span for 1 °C |

#### Power supply

|                              |                  |
|------------------------------|------------------|
| <b>Supply voltage</b>        | 15...35 VDC      |
| <b>Admissible variations</b> | 10% p-p at 50 Hz |

#### Operating conditions

|                              |             |
|------------------------------|-------------|
| <b>Operating temperature</b> | -20...60 °C |
| <b>Operating humidity</b>    | 0...95 %RH  |

#### Design and materials

|                         |                               |
|-------------------------|-------------------------------|
| <b>Case material</b>    | aluminum                      |
| <b>Mounting</b>         | free <sup>(1)</sup>           |
| <b>Wiring</b>           | screw terminals, 2 PG7 glands |
| <b>Dimensions</b>       | 82x77x57 mm (w/o glands)      |
| <b>Weight</b>           | max. 210 g                    |
| <b>Protection class</b> | IP67                          |

<sup>(1)</sup> Radial, axial, and DIN-rail mounting accessories can be ordered separately (see 'Accessories').

### Ordering code TRW - G6.G11

| Code | Feature or option | Code values  |
|------|-------------------|--|
| G6   | Input             | OL1 - 1 mV/V, OL2 - 2 mV/V, OL3 - 3 mV/V                         |
| G11  | Output signal     | E - 0...20 mA, F - 4...20 mA, K - 0...10 V, Z - other (specify!) |