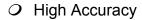
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LC\

Strain Gauge Sensor-Interface



- O Direct Connection to PLC
- Long Input Lead Possibility from
 LCV to Evaluation
- *O* Voltage or Current Output
- Integrable in large Sensors as Board
- *O* High Level of Protection IP67



DESCRIPTION

This sensor-interface was designed for the adaption between SG-Sensor and evaluation. The interference-prone SG-Signals are raised to standardized output levels at the sensor, directly. By this, the noise immunity and the accuracy of measurement is decisively increased.

The LCV is connected between the supply line of the sensor and signal acquisition (e.g. PLC). The robust tube-housing with a high level of protection also allows operation in rough environments. A screw clamp is sufficient for the fixation. A circuit board module can be integrated for large sensors.

The supply of 12...28 V DC is suitable for automotive and industrial applications. High flexibility is ensured by many analog output versions.

For very slow measurements; a 50 Hz- 3 dB filter can be pre-configured as an option.

An optional external control signal excitation allows to activate the control signal in the sensor (if available) with a control signal, externally. By this, the adjustment and the subsequent calibration can be checked at any time.

Scope of Delivery

If the LCV is ordered with a Lorenz-Sensor, it will be mounted and calibrated together exfactory.

If the LCV is ordered without a sensor, an uncalibrated assembly set (amplifier module, tube-housing, screw connection) is delivered. All output versions can be configured by solder jumpers. As an option, the amplifier module can be pre-calibrated to a value, determined by the customer. At initiation only the zero point must be adjusted.

TECHNICAL DATA

| Туре | LCV-U10 | LCV-U5 | LCV-I0 | LCV-I4 | LCV-I10 | LCV-I12 |
|--------|---------|--------|--------|--------|---------|---------|
| ArtNo. | 100430 | 100626 | 101177 | 100432 | 100956 | 101018 |
| Output | ±10V | ±5V | 020mA | 420mA | 10±10mA | 12±8mA |

| Evaluation | Side |
|------------|------|
| | |

| Evaluation Si Supply | Supply Voltage | 1228 V DC | |
|-------------------------|-----------------------|-------------------------------------|--|
| ouppiy | Ripple | <10% | |
| | Current Consumption | ≤70 mA | |
| Signal Output | Output Signal U-Out | ±5 V / ±10 V <2 mA | |
| 0 1 | Ripple | <10 mV | |
| | Gain Drift | <0.015%/10 K | |
| | Zero Point Drift | <0.015%/10 K | |
| | Linearity | <0.02% | |
| | Output Resistance | <1 Ω | |
| Signal Output | Output Signal I-Out | 020 mA at 0400 Ω | |
| | Ripple at 400 Ω | <10 mV | |
| | Gain Drift | <0.02%/10 K | |
| | Zero Point Drift | <0.02%/10 K | |
| | Linearity | <0.02% | |
| General | Cable Length LCV- | U5/U10 3 m (max.10 m) | |
| | Evaluation | I0/I4/I10/I12 3 m (max.100 m) | |
| Sensor Side | | | |
| Supply | Sensor Supply | 5 V ≤20 mA short-circuit resistance | |
| | TC Excitation Voltage | <25 ppm/K | |
| Signal Input | Sensor Sensitivity | 0.353.5 mV/V | |
| | Input Resistance | 10 ⁹ Ω | |
| General | Cable Length LCV- | 1 m (max. 3 m) | |
| | Sensor | | |
| Miscellaneou | S | | |
| Cut-Off Freque | ency | 1 kHz -3 dB | |
| Nominal Temp | erature Range | +10+50 °C | |
| | erature Range | 0+60 °C | |
| Storage Temp | erature Range | -10+70 °C | |
| Dimensions (Ø | | 25 x 115 mm (incl. screw joint) | |
| Level of Prote | rtion | IP67 | |

| ArtNo. | Options | Function |
|--------|--------------|---|
| 110564 | mV/V | mV/V adjusted sensitivity |
| 110651 | 5±5 V | Output signal 5±5 V |
| 103760 | LCV/KS | Control signal excitation external 528 V DC |
| 100563 | LCV/50Hz | Filter 50 Hz -3 dB |
| 110565 | LCV/R | Measuring range resistance |
| 108200 | 5 kHz -3 dB | Increased dynamics 5kHz -3 dB |
| 108533 | 10 kHz -3 dB | Increased dynamics 10kHz -3 dB |

Technical changes under reserve

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