

GSV-2AS -5+5/250/2



Highlights

- Tare function via control cable
- RS232, RS422 or CAN/CANOpen
- analogue output $\pm 5V$
- optionally 4...20mA output signal
- 24 Bit, to 200.000 Digits display resolution
- extensive software support
- two threshold generator
- trigger input



Description

The GSV-2 is regarded as the "classic" among the industrial measurement amplifiers for sensors with strain gauges. Maximum EMC protection according to degree of sharpness 4 (EN61000-4-2, 61000-4-4, EN50082-2) and beyond. IP66 housing and compactness are appreciated worldwide. Optionally, the GSV is equipped with a display, plug-in connectors or a zero-setting switch and amplifying switching over relay contacts.

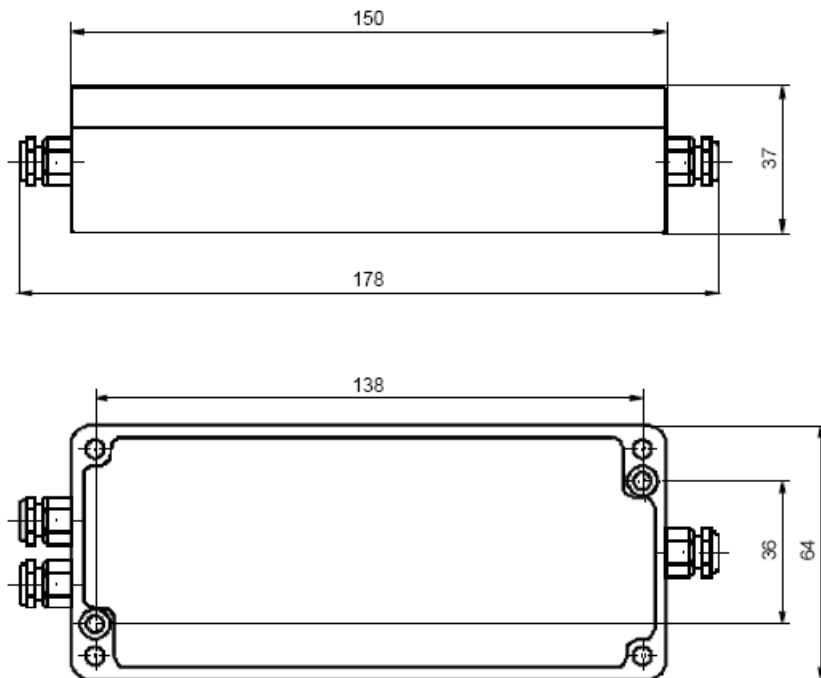
The measuring amplifier GSV-2 is used in process monitoring and weighing technology. Up to 2000 measured values per second can be transmitted via the RS232 serial interface. It has excellent digital filters. No filtering or averaging of the transferred measured values is necessary. An analog output (0 ... 10V, or $\pm 5V$ or 4 ... 20mA) is also available. The analog output can be set to 0 via a digital control input. The adjustment range is 200% of the measuring range.

The measurement rate and the outstanding software support are particularly noteworthy for a low-cost 24-bit measuring amplifier. The comprehensive software package ME GSV Control is included in the scope of supply. The setting of the measuring amplifier or the measuring rate, switching thresholds or display is made either via control signals or via the software ME GSV Control. For software developers Windows DLL is available for the integration of the functions.

There are various functions available, like automatic zero-point correction and noise suppression.

The GSV-2 also has an analogue output. This analog output is characterized by fully analog signal processing. Therefore, the output signal is not scalable depending on the sensor signal. A zero setting function for the analog output is available. Only two variants can be set: 2mV/V at the input corresponds to 5V at the analog output, or 3.5 mV/V at the input corresponds to 5V at the analog output. Alternatively, devices with 10V analog output are also available (order option). The low-pass filter of the analog output adapts in 3 steps depending on the set data frequency: 2.5Hz, or 260Hz, or 1.7 kHz.

Dimensions



Technical Data

Input analog

Number of analog inputs	1
Input sensitivity-steps	2.0 3.5 mV7V
Input resistance strain-gauge-full-bridge	87 ... 5000 Ohm
Input voltage f	0 ... 10 V
Input resistance-voltage	56 kOhm

Output analog

Number of analog outputs	1
Voltage output f	-5 ... 5 V
Output resistance - voltage	47 Ohm

Measuring frequency

Data frequency f	0 ... 1000 Hz
Limit frequency (analog)	1700 Hz

Supply

Supply voltage f	10 ... 29 V
Current consumption f	100 ... 120 mA
Strain gauge bridge supply	5 2.5 V

Interface

Type of the interface	rs232 rs422
Quantity of the interface	2

Zero adjustment

Type	software Regulation digital
Tolerance	0.01 %
Time period	1 ms
Debouncing time	4 ms
Trigger level f	3.4 ... 29 V
Trigger edge	Level

Filter

Order	2
Algorithm	bessel

Temperature

Rated temperature range f	-10 ... 65 °C
Operating temperature range f	-40 ... 85 °C
Environmental protection	IP66

Basis Data



Housing	Aluminium
Connection	screw terminal
Number of channels	1-Kanal

Precision

Accuracy class	0,05%
Relative linearity error	0.02 %FS
Temperature effect on the zero point	0.2 %FS/10°C
Temperature effect on the measuring sensitivity	0.1 %RD/10°C
Resolution	24 Bit