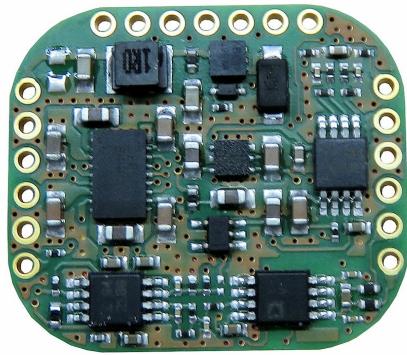


## GSV-5 010/10k/2



### Highlights

- Miniature measuring amplifier with 6-wire technology
- High frequency range from 250 Hz to 10 kHz
- The new modell instead of old GSV-1L
- Tariere function via control line
- purely analog measuring distance for the best possible signal-to-noise ratio
- Improved long-term stability and temperature drift by avoiding mechanical balancing components
- Noise Amplitude <150 nV/V Pk-Pk bei 10 Hz Bandwidth
- Noise Amplitude < 1 µV/V Pk-Pk bei 2.5kHz Bandwith

## Description

The miniature measuring amplifier GSV-5 measures only 23mm x 20mm x 6mm and can therefore be perfectly integrated into sensors. Solder pads are provided for wiring, it can be easily integrated into larger pcbs with optionally available pin strips.

Due to a high cut-off frequency up to 10 kHz, it is suitable for detecting static and dynamic signals from sensors with strain gauges. The purely analog measuring distance guarantees the best possible signal-to-noise ratio.

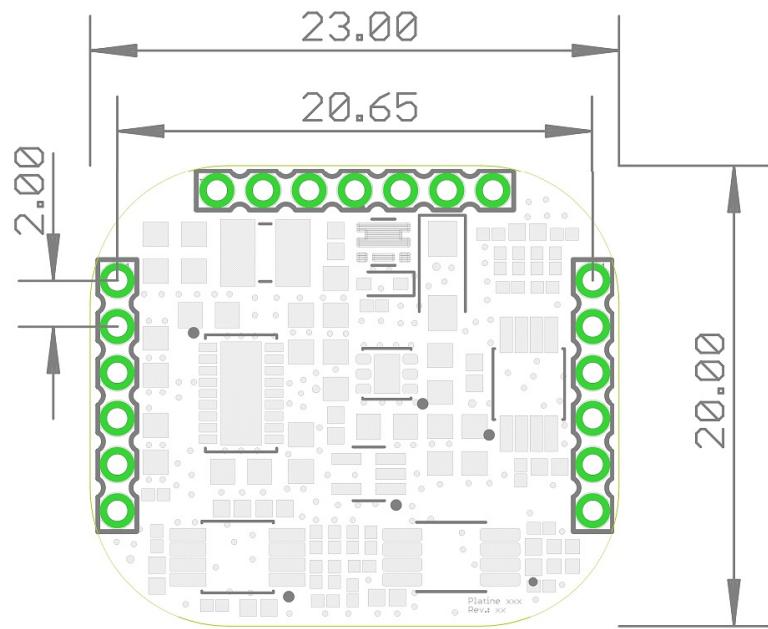
Variants with voltage output -10V to +10V and -5V to +5V are available. These are suitable for tensile-compressive measurement or for measuring torque turning right and left.

The input sensitivity in the standard version of GSV-5 is 2 mV/V. Other input sensitivity levels (0.5mV/V, 1mV/V, 2mV/V and 4mV/V) are factory-adjustable on request.

The automatic zero setting function stores the setting in non-volatile memory even in case of voltage underbilling.

In addition, we offer calibration of measuring electronics and system calibration in conjunction with a sensor.

## Dimensions



## Technical Data

### Input analog

Input sensitivity-steps	2.0 mV/V
-------------------------	----------

### Output analog

Number of analog outputs	1
Voltage output f	-10 ... 10 V
Output resistance - voltage output	47 Ohm

### Measuring frequency

Limit frequency (analog)	10 kHz
--------------------------	--------

### Supply

Supply voltage f	10 ... 28 V
Strain gauge bridge supply	5 V

### Interface

Type of the interface	Analog
-----------------------	--------

### Zero adjustment

Tolerance	1 mV
Time period	50 ms
Debouncing time	2 s
Trigger level f	3 ... 24 V
Trigger edge	falling

### Environmental data

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

### Basic Data

Dimensions	23 x 20 x 6 mm
Housing	PCB
Connection	Solder connection
Number of channels	1-Kanal

### Precision data

Accuracy class	0,1%
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

## Mounting for Pin configuration



X 1		X 2	
1	VDD: Power supply 12-24V	1	UF+: positive sensor line
2	GND : Mass	2	US+: positive bridge supply
3	Tara: Zero balance to 5V output sp.	3	US-: negative bridge supply
4	F-UA: external sensor line TARA	4	UF-: negative sensor line
5	GND : Mass	5	UD+: positive bridge signal
6	Uout: Analog output	6	UD-: negative bridge signal

TARE range of +/- 100% input sensitivity.

A short (<2s) high level >3V (max. 24V) at the tare input sets the analog output to 0 or 5V, depending on the variant.

## Order options

Type	Description
GSV-5 010-5/250/2	Output 0...10 V, zero adjustment: 5V, 250 Hz, input $\pm 2$ mV/V
GSV-5 010-5/2k5/2	Output 0...10 V, zero adjustment: 5V, 2.5 kHz, input $\pm 2$ mV/V
GSV-5 010-5/10k/2	Output 0...10 V, zero adjustment: 5V, 10 kHz, input $\pm 2$ mV/V
GSV-5 010/250/2	Output -10...10 V, zero adjustment: 0V, 250 Hz, input $\pm 2$ mV/V
GSV-5 010/2k5/2	Output -10...10 V, zero adjustment: 0V, 2.5 kHz, input $\pm 2$ mV/V
GSV-5 010/10k/2	Output -10...10 V, zero adjustment: 0V, 10 kHz, input $\pm 2$ mV/V