

GSV-6K



Description

The measurement amplifier GSV-6K includes a strain gauge input via a 5-pin M12 casing bushing and an analogue output via a 5-pin M12 housing connector.

The GSV-6K is used to convert the bridge signal from force, torque or strain sensors to an analogue output signal.

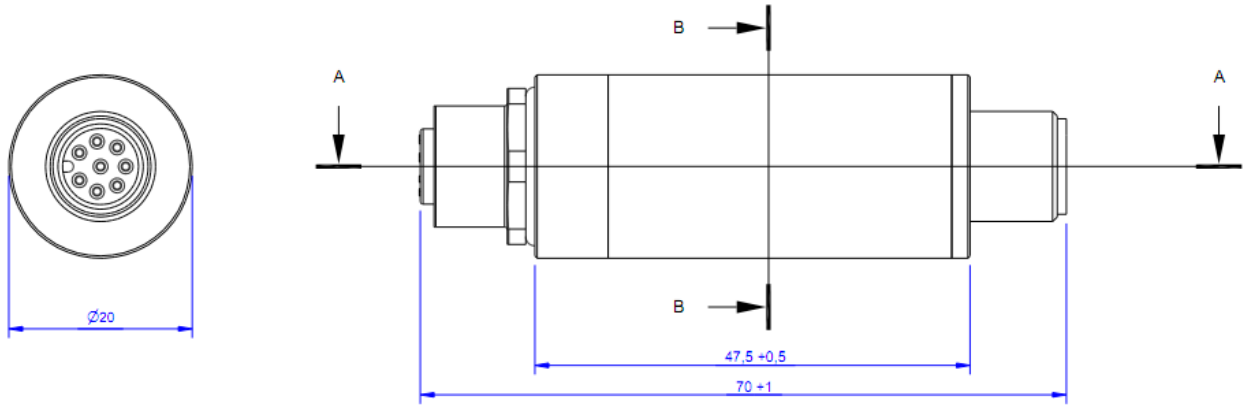
The electronic data sheet of the sensor can be read via a TEDS interface. The measurement amplifier scales the output signal to the end value of the set output signal using the TEDS interface.

The output signal can be set as a voltage output or current output.

The outputs 0...10V, $\pm 10V$, 0...5V, $\pm 5V$, 4...20mA, 0...20mA can be set using the "Tare" and "Scale" control cables.

Similarly, an offset or sampling frequency can also be set.

Dimensions



Technical Data

Basis Data

Connection	Connector
Number of channels	1-Kanal

Eingang analog

Number of analog inputs	6
Input sensitivity-stepsless f	0.1 ... 8 mV/V
Input resistance strain-gauge-full-/half-bridge	60 ... 20000 Ohm
Input voltage to	3 V

Precision

Accuracy class	0,1%
Temperature effect on the zero point	0.05 %FS/10°C
Temperature effect on the measuring sensitivity	0.01 %RD/10°C
Resolution	16 Bit

Supply

Supply voltage f	9 ... 29 V
Current consumption from	22 mA
Strain gauge bridge supply	3 V

Interface

Type of the interface	teds
Quantity of the interface	1

Temperature

Rated temperature range f	-10 ... 70 °C
Operating temperature range f	-25 ... 85 °C
Environmental protection	IP66

Measuring frequency

Data frequency f	10 ... 25000 Hz
Sampling frequency	50 kHz

Mounting

Functions

The unit is factory-configured to the desired output signal and with the desired functions. The configuration can be modified using the "Tare" and "Scale" control cables.

Terminal assignment

M12 plug connector with A-coding;

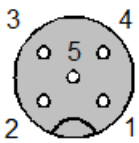


Figure 6: Contact configuration M12 socket

5-pin socket

Pin No.	Terminal assignment	ME (Type 1)	ME (Type 2)	Phoenix SAC-5P
1	+U _S Positive bridge excitation	brown	red	brown
2	-U _S Negative bridge excitation	white	black	white
3	+U _D Positive differential input	green	green	blue
4	-U _D Negative differential input	yellow	white	black
5	TEDS input	grey		grey

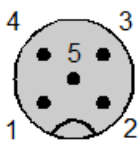





Figure 7: Contact configuration M12 plug

5-pin plug

Pin No.	Terminal assignment	ME (Type 1)	Phoenix SAC-5P
1	Voltage supply 12V / 24V DC	brown	brown
2	Analogue output 4...20mA / $\pm 10V$	white	white
3	Ground	green	blue
4	Tare (Control input for zero adjustment)	yellow	black
5	Scale (Control input for autoscale)	grey	grey

accessories

Description	Description
	Configuration GSV-6
	Connector xp/f/M12/x
Sensor-/actuator cable; 4 / 5 pin;	
	Connector xp/f/M12/x
Sensor-/actuator cable; 4 / 5 pin;	