

Measuring amplifier GSV-5A6 SubD44HD/4-20/2.5kHz

Item number: 14376



Highlights

- 6-channels amplifier
- analog output: 12 mA \pm 8 mA
- Miniature aluminium housing 124 x 72 x 28 mm³
- Zero setting function (set and reset)
- Self-test function (shunt calibration)

The GSV-5A6 measuring amplifier is an amplifier with 6 independently configurable channels for strain gauge sensors, such as force sensors, torque sensors, acceleration sensors, or strain transducers.

Sensors are connected via a SubD44HD socket. Due to its compact dimensions and the SubD44HD socket, the measuring amplifier is ideal for connecting force/torque sensors and for mounting in close proximity to the sensor, e.g., on robot axis 3.

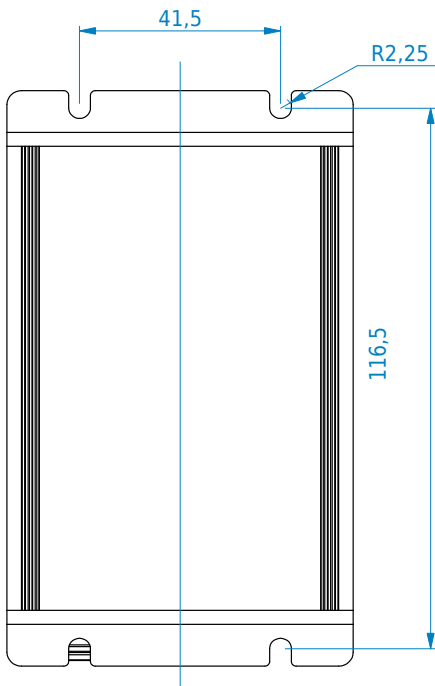
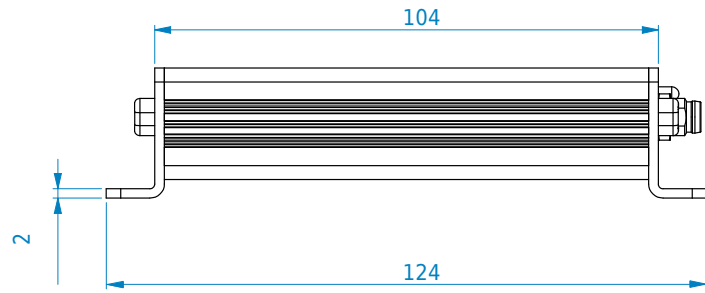
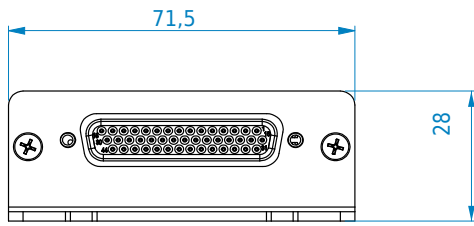
The output signals are connected to the SubD15 socket on the rear panel.

The 10 V DC...28 V DC power supply can be connected via the 4-pin M8 connector or the SubD15 socket on the rear panel. There are also two digital inputs with levels of 10...28 V for zeroing all output signals for shunt calibration.

The status after zeroing is permanently stored in an EEPROM of the measuring amplifier and remains intact even after a power interruption.

This measuring amplifier is suitable for connecting bridge sensors from 120 ohms to 5000 ohms or full-bridge strain gauges. Connection is possible using either a 4- or 6-wire connection. The sensor leads can be left open. The GSV-5A6 measuring amplifier is supplied with an 18 V power supply and cables suitable for the Sub-D sockets. The GSV-5A6 is operated and configured via a membrane keypad. The measuring range can be set in increments of 4.0, 2.0, 1.0, and 0.5 mV/V using the membrane keypad. Automatic zero signal adjustments can be triggered for the three channels. A self-test (shunt calibration) can be initiated. Locking is possible.

Technical Drawing



Technical Data

Basic Data		Unit
Dimensions	124 x 72 x 28	mm
Housing	Aluminium	
Connection	Plug connector	
Connection type	Sub-D44HD	
Number of channels	6-channel	
Interface	$\pm 10V, 4 \dots 20mA$	
Functions	Tara, Gain, Shunt, Lock	

Input analog		Unit
Number of analog inputs	6	
Input sensitivity-steps	2.0 1.0 0.5 4.0	mV/V

Output analog		Unit
Number of analog outputs	6	
Current output from	4	mA
Current output to	20	mA
Zero adjustment to	12	mA
Maximum load resistance - current output	200	Ohm

Accuracy data		Unit
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Measuring frequency		Unit
Limit frequency (analog)	2.5	kHz

Supply		Unit
Supply voltage from	10	V
Supply voltage to	28	V
Strain gauge bridge supply	5	V

Interface		Unit
Type of the interface	Analog	
Quantity of the interface	6	

Zero Adjustment		Unit
Type	Button Digital	
Tolerance	1	mV
Time period	160	ms
Debouncing time	2	s
Trigger level from	3	V
Trigger level to	24	V
Trigger edge	falling	

Environmental Data		Unit
Rated temperature range from	-10	°C
Rated temperature range to	65	°C
Operating temperature range from	-40	°C
Operating temperature range to	85	°C
Environmental protection	IP50	