



SG-IP-3L-24-420-2P

Single channel strain gauge amplifier (3-wire) for parallel operating of 2 transducers with normalized signal

- Supply voltage 22 ... 26 VDC (no galvanic isolation)
- Analogue output 4 ... 20 mA
- EMC-aluminium-diecast enclosure (IP65)
- Dimension (B x H x D) 100 x 60 x 100 mm



The described single-channel strain gauge measuring amplifier (3-wire technology) allows the supply and signal evaluation of up to two transducer with normalized sensitivity and a strain gauge full bridge greater 300 ohms. For further evaluation a standard analogue output of 4 ... 20 mA is available. The input and the output are not galvanic isolated. The measuring amplifier is built-in in a robust EMC diecast aluminum enclosure (IP65), which is suited for the application in rough and industrial surroundings. The amplification can be adapted by an internal precision resistance.

The potentiometer Z (Zero) and G (Gain), which are accessible after removing the enclosure lid, allow a correction of the calibration.

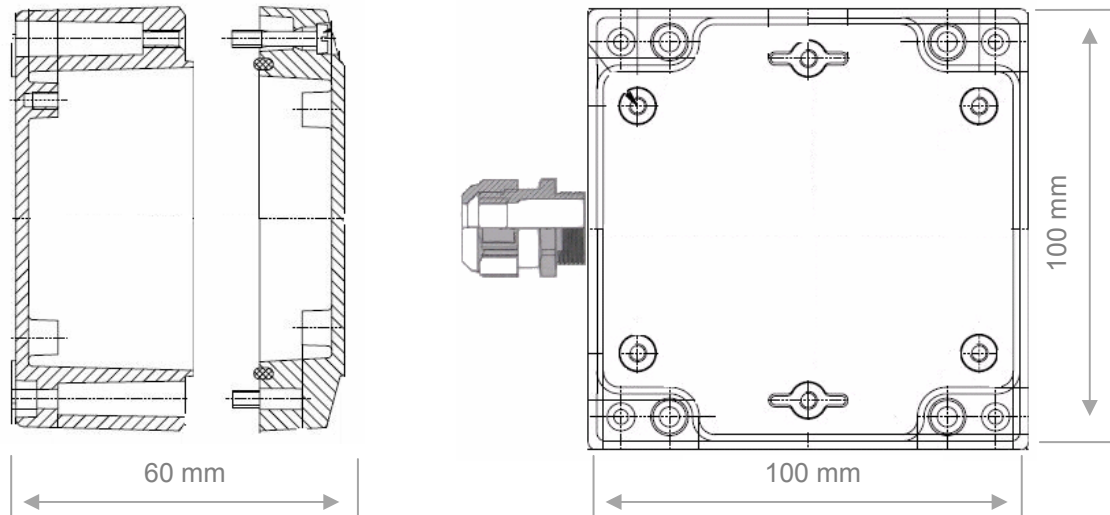
Technical data:

Number of measuring channels:	1 (full bridge resistance > 300 Ω)	
Supply voltage:	22 ... 26 VDC	
Power consumption:	max. 4 W	
Strain gauge excitation supply:	10 VDC	
Analogue output:	4 ... 20 mA	max. 500 Ω
Limit frequency (-3 dB):	1 kHz	
Input resistance:	>3 MΩ	
Max. input sensitivity:	100 mV/V at 10 VDC excitation supply	
Non-linearity:	±0.05 % FSO	
Electrical connection:	EMC-cable gland on internal terminal block	
Enclosure:	EMC-aluminium diecast enclosure (IP65)	
Dimension (B x H x D):	100 x 60 x 100 mm	
Weight:	525 g	
Temperature, storage:	-20 °C ... +60 °C	
Temperature, operating:	0 °C ... +50 °C	

Order Description:

SG-IP-3L-24-420-2P	Single-Channel SG-Amplifier in 3-wire technology for parallel operating of two strain gauge transducers with normalized sensitivity, no galvanic input/output isolation
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Enclosure Dimension



Terminal Wiring

Electrical connections are made via cable gland on terminal block located in the inside of the enclosure. The terminal numbering is to be found on the board. The maximum cable cross section amounts 2.5 mm². The EMC-installation information is to be followed.

Notice: The amplifier may be pursued only with closed lid.

Clamp	Description	Clamp	Description
1	Supply Voltage	6A/6B	+SG-Excitation Transducer
2	Supply Ground / Analogue Ground	7A/7B	-SG-Excitation Transducer
3	Analogue Output (3-wire Technology)	8A/8B	Screen/Enclosure
4A/4B	+SG-Signal Transducer		
5A/5B	-SG-Signal Transducer		

Supply Ground and Analogue Ground aren't galvanically isolated.

Alignment/Calibration:

If requested, a pre-setting of the measuring system or a factory calibration certificate with traceable references can be carried out for an extra charge.

Customized Requirements

Technical modification according customized requirement are possible on request. Moreover, we deliver Customized special solutions for a lot of measuring tasks in the section pressure-, force-, distance - and tilt-measuring using our offered measuring transducer. Do not hesitate to contact us.

Our policy is to improve specification of our products continuously, so technical and production details can be changed without any notice.

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