

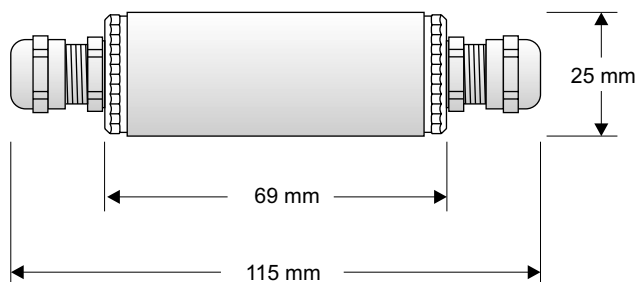
Measuring amplifier for strain gauge

Characteristics



- Input: strain gauge full bridge
- Input sensitivity 0,5...2,2 mV/V
- Independent of the sensor design
- Two analog output 0(4)...20 mA or 0...10 V
- Voltage supply 24 VDC +/-20%
- Zero drift < 0,2% / 10 K
- Gain drift < 0,1% / 10 K
- Simple mounting with pipe clip
- Degree of protection IP 67

Dimensions, connection



Cable towards sensor	Colour	Cable towards control	Colour
Supply +	brown	Supply +	brown
Supply -	white	Supply -	white
Signal +	green	Output +	green
Signal -	yellow	Output -	yellow

Technical data

Input

Voltage	2,5...15 mV
Resistance	10 ⁹ Ohm
Sensitivity	0,5 / 0,75 / 1,0 / 1,25 / 1,5 / 2,0 / 2,2 mV/V

Output

Current	0(4)...20 mA
Voltage	0...10 V
Nominal load	< 500 ohms
Supply sensor	5 V

Accuracy

Gain drift	< 0,1% / 10 K
Zero drift	< 0,2% / 10K

Power supply

Supply voltage	24 VDC +/-20%
Residual ripple	10%
Current consumption	< 60 mA

Ambient conditions

Nominal temperature range	10...40 °C
Working temperature range	0...60 °C
Storing temperature range	-10...70 °C

Mechanics

Case	aluminium tube shaped case
Dimensions	ø25 x 69 mm ø25 x 115 mm with cable entry
Mounting	with simple pipe clip
Colour	silver anodized
Degree of protection	IP 67
Weight	approx.. 200 g
Connection	PCB: soldered joints towards sensor: cable towards control: cable

Applications

The measuring amplifier is an interface adaption between sensor and control. The output of the measuring amplifier is a standard signal and can be processed with eg a SPS and at the same time the higher signal level avoids interferences.



Ordering code

L	D	X	X	X	X	X	X	-	X	X	X
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Input:	2,5...15 mV	0									
Input sensitivity:	0,50 mV/V		0								
	0,75 mV/V		1								
	1,00 mV/V		2								
	1,25 mV/V		3								
	1,50 mV/V		4								
	2,00 mV/V		5								
	2,20 mV/V		6								
Output:	0...20 mA					0					
	4...20 mA					1					
	0...10 V					2					
Cable length towards control:	1,0 m							0			
	1,5 m							1			
	2,5 m							2			
	2,5 m							3			
	3,0 m							4			
Cable length towards sensor:	1,0 m									0	
	1,5 m									1	
	2,0 m									2	
	2,5 m									3	
	3,0 m									4	
Customized type:	on request										0