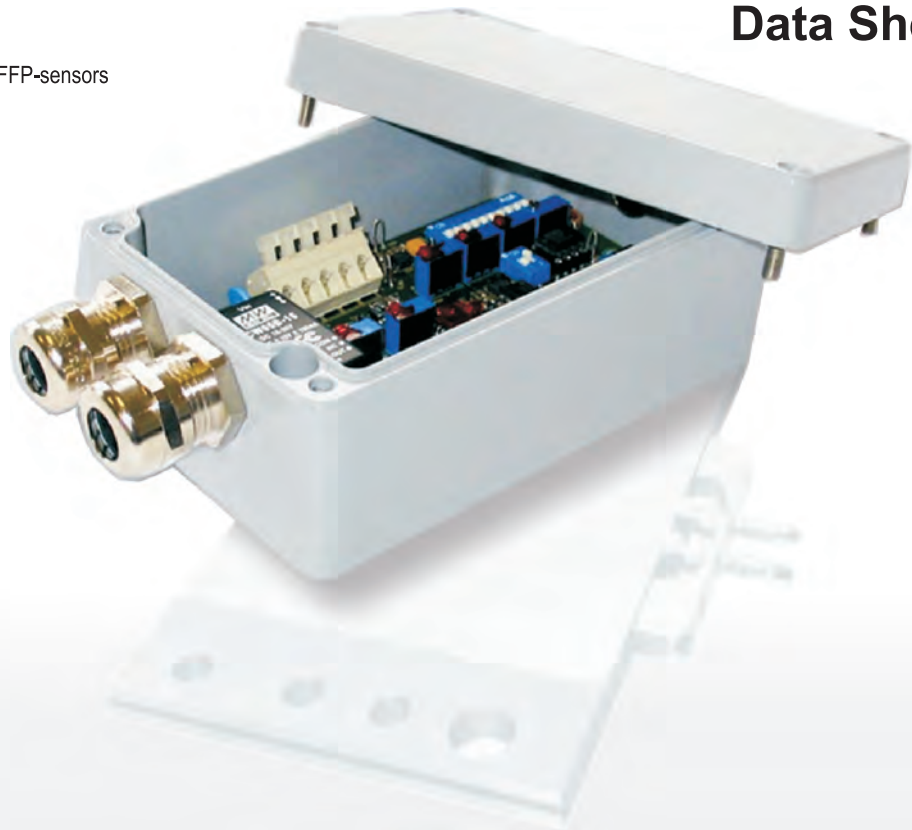


- > Force measuring amplifier for full bridges
- > Supply 24V DC, 150 mA
- > Amplifier settings switchable for FFR- and FFP-sensors
- > Degree of protection IP65
- > Balancing via external switching input



PA-03

Bridge amplifier

> General

The PA-03 is an amplifier which has been designed for connecting strain gauges in full bridge configuration (four-wire technology) and is pre-adjusted for both force sensor types. With PA-03 all sensors undergo balancing during the process.

> Setup of the PA-03

Setup of the PA-03 amplifier for cylindrical and plate sensors is easily performed via DIP-switch; for balancing a resistor network via DIP-switch and a trimmer are available. The onboard μ C can supply absolute or real values. The function is switched by DIP-switch 1.

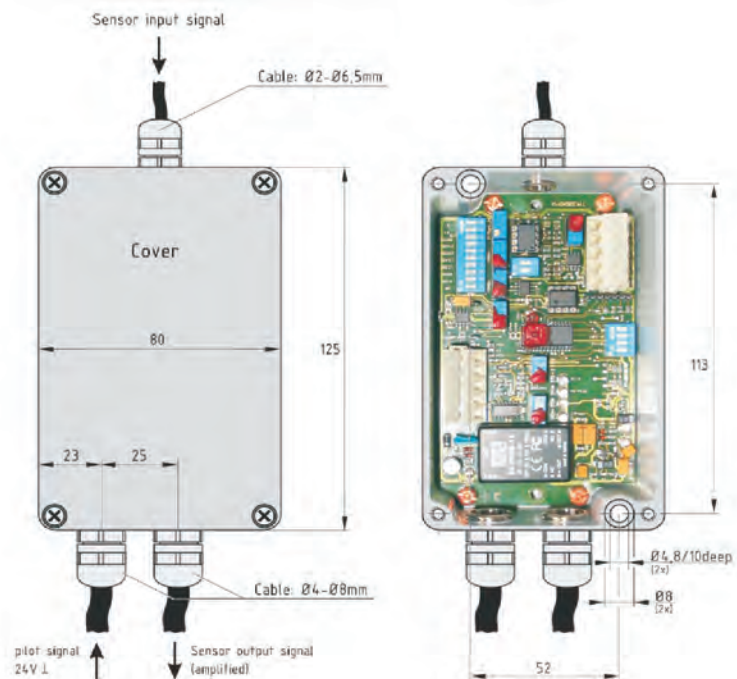
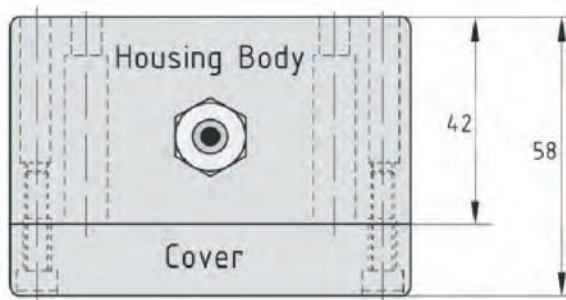
> Installation

The PA-03 amplifier has to be mounted next to the sensor and requires 24 V DC operating voltage.

PA-03

Bridge amplifier

Data Sheet



Technical Data

PA-03			
Marposs Code	O830Z712002	Supply measuring bridge	10 V / max. 60 mA
Weight	700 g	Bridge resistance	> 240 Ohm
Operating temperature	0 °C to +50 °C	Bridge sensitivity	1 to 20 mV/V
Connections	Spring terminal blocks	Input Protection	±40 V
Fastening	Screw fastening	Input Range	±10 V
Housing	Die-cast aluminum, gray	Input Basis Current	max. 5 mA
Degree of protection	IP65	CMR	> 120 dB
Max. amplification	1000, 4000 (DIP-switch)	Output voltage range	±10 V
Dimensions (width x depth x height)	1 25 mm x 80 mm x 58 mm	Output resistance	1 kOhm
Power supply	24 V DC (20 V DC to max. 28 V DC)	Frequency range	< 1 KHz
Analog output	±10 V DC	AD conversion	Sampling 12 Bit, 40 kHz, class 9 sliding averaging
Error 1000 x	±10 mV typical ==> typ. rel. error ± 0.1 % of final value	DA conversion	resolution 12 Bit, ± 10 V (~ 5mV steps), 40 kHz
	± 25 mV max. ==> max. rel. error ± 0.25 % of final value		
Error 4000 x	± 15 mV typical ==> typ. rel. error ± 0.15 % of final value		
	± 30 mV max. ==> max. rel. error ± 0.3 % of final value		

All provided information describe our products in a general form. It does not represent information on composition nor a guarantee within the meaning of §§ 434/443 of the German Civil Code, nor does it constitute grounds for liability.