

Mounting rail strain gauge amplifier

Type GM 40

- For control cabinet in-built, width only 23mm
- Direct connection to PLC
- 10V...30V DC supply, galvanic separation
- Easy operation
- Voltage-, and current output



Function:

The mounting rail amplifier type GM 40 gains the output of the sensors to conforming standard output signals.

The narrow housing shape allows space-saving mounting near to the sensors in control cabinets on standardized mounting rails.

A galvanic separated supply voltage range of 10 to 30 V and the analog outputs of $0...±5/±10$ V resp. optional current output allow the direct signal processing with an PLC-control.

All control elements are obtainable on front side behind a detachable plexiglass panel.

The adaption of the sensitivity of the sensor takes place on sight by DIL-switch. Base load (tara) can be aligned.

Simulation of nominal signal possible with control-switch.

Interference signals and settling processes of the measured signal can be alleviated with the input filter.

The fine adjustment of the amplification and zero point as well as the filter is possible through potentiometer.

SPECIFICATIONS:

TYPE		E-GM 40
Art. no.		105702
Evaluation side		
Supply:	Power supply voltage Ripple Power consumption	10...30 V DC < 10 % 10V 150mA 24V 80mA
Signal output: Voltage	Output signal U-Out Ripple Gain drift Zero point drift Output resistance Limit frequency	$± 5V/±10V, ≤ 2mA$ <20mV < 0,02 % / 10 K < 0,02 % / 10 K 10 Ω 10Hz - 1 kHz -3dB
Signal output: Current	Output signal I-Out Ripple at 500R Gain drift Zero point drift Limit frequency	4...20mA an 0...500Ohm <20mV < 0,04 % / 10 K < 0,04 % / 10 K 10Hz...750Hz -3dB
Sensor side		
Supply:	Sensor supply TK supply voltage	10V 30mA (Option 5V 15mA) 25 ppm/ K
Signal input:	Sensor sensitivity Input resistance	0,3mV/V...3,5mV/V $10^9 \Omega$
Other		
Nominal temperature range		+10...40 °C
Service temperature range		0...60 °C
Storage temperature range		-10...70 °C
Dimension W x H x L		23 x 111x 76
Level of protection		IP 20
Clamping range of terminals		0,14 mm ² ...1,5mm ²
Clamping rail profile		DIN EN 50022
Options		
Type	Art. no.	Function
E-GM40/10	105703	Current output 0...20mA
E-GM40/14	105769	Current output 4...20mA
E-GM40/112	105704	Current output 12±8mA
E-GM40/110	105705	Current output 10±10mA
E-GM40/S5	105706	Sensor supply 5V 15mA
E-GM40/N	105707	Neutral design