

## DIN Mounting Rail Strain Gauge Amplifier

**Type GM 40**

- For Switch Cabinet Assembly, Width only 23 mm
- Direct Connection to PLC
- 10...30 V DC Supply, Galvanically Separated
- Easy Operation
- Output for Voltage and Current



### DESCRIPTION:

The DIN Mounting Rail Amplifier GM 40 amplifies the signals of SG sensors to conforming to standards output signals.

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

A galvanically separated supply voltage range of 10...30 V and the analog outputs of 0...±5 / ±10 V resp. optional current output allow the direct signal processing with a PLC-Control.

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

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

Simulation of nominal signal possible by control-switch.

Interference signals and transient condition of the measured signal can be alleviated with the input filter.

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

### TECHNICAL DATA:

<b>Type</b>	<b>GM 40</b>
<b>Art. No.</b>	105702

#### Evaluation Side

Supply	Supply Voltage Ripple Current Consumption	10...30 V DC <10% 10 V 200 mA    24 V 120 mA
Signal Output Voltage	Output Signal U-Out Ripple Gain Drift Zero Point Drift Output Resistance Limit Frequency	0...±5 V / ±10 V ≤2 mA <20 mV <0.02%/10 K <0.02%/10 K 10 Ω 10 Hz...1 kHz -3 dB
Signal Output Current	Output Signal I-Out Ripple at 500 Ω Gain Drift Zero Point Drift Limit Frequency	4...20 mA at 0...500 Ω <20 mV <0.04%/10 K <0.04%/10 K 10 Hz...750 Hz -3 dB

#### Sensor Side

Excitation	Sensor Excitation TC Excitation Voltage	10 V 90 mA (Option 5 V 60 mA) 25 ppm/K
Signal Input	Sensor Sensitivity Input Resistance	0.3...3.5 mV/V 10 <sup>9</sup> Ω

#### Miscellaneous

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 111 x 76 mm
Level of Protection	IP 20
DIN Mounting Rail Range of Connectors	0.14...1.5 mm <sup>2</sup>
DIN Mounting Rail	DIN EN 50022

Options	Art. No.	Function
GM 40/I0	105703	Current Output 0...20 mA
GM 40/I4	105769	Current Output 4...20 mA
GM 40/I12	105704	Current Output 12±8 mA
GM 40/I10	105705	Current Output 10±10 mA
GM 40/S5	105706	Sensor Supply 5 V 60 mA
GM 40/NEUT	105707	Neutral Design
GM 40/NT	108541	Power Supply