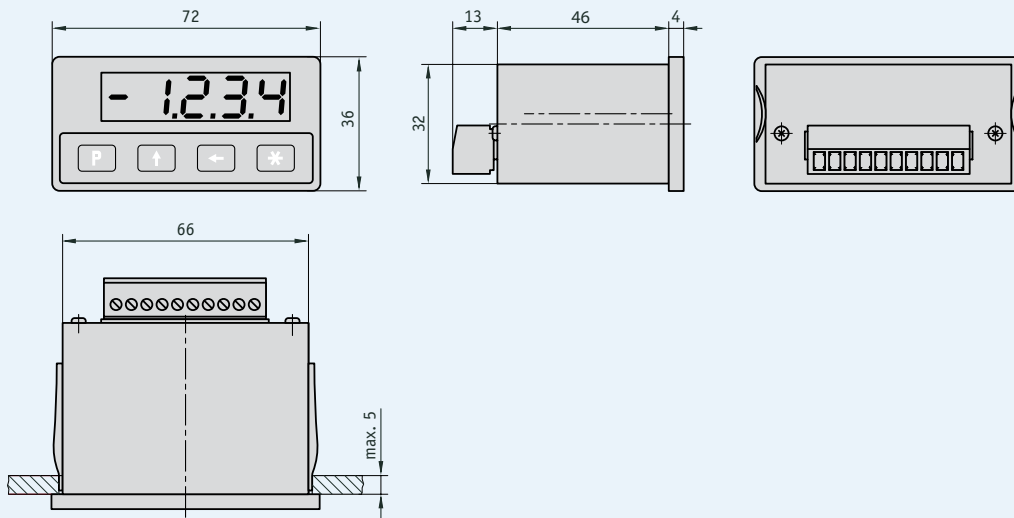


### Profile

- LED display (1 line of 4 digits)
- Voltage, current and resistor inputs for length and angle measurement
- Free programming via front keyboard
- Non-volatile parameter storage (EEPROM)
- 2 switching outputs (limit-dependent, programmable)
- Compact design



### Mechanical data

Feature	Technical data	Additional information
Operating temperature	0 ... 50 °C	
Storage temperature	-20 ... 80 °C	
Temperature drift	<1 %	
Humidity	max. 95 % rF	
Condensation	inadmissible	
Protection category	IP40 for whole device IP60 front with switchboard mounting	DIN 40050
Connection	10-pin connector strip	
Keyboard	membrane keys with pressure point	
Housing	plastic	switchboard cutout 68 x 33 mm, DIN 43700
Weight	approx. 0.2 kg	

## Electrical data

Feature	Technical data	Additional information
Operating voltage	10 ... 30 V DC	
Current consumption	~80 mA	with 24 V, without encoder
Switching outputs	≤30 V/100 mA	
Display	4-digit, LED, red (7-segment)	
Display range	-9 999 ... +9 999	
Signal inputs	0 ... 10 V DC 0 ... 20 mA or 4 ... 20 mA 0 ... 10 kΩ	voltage current resistance
Resolution	max. 10 bit	
Accuracy	max. 0.1 %	
Interference protection class	EN61000-6-2, EN6100-6-4	

## Pin assignment

Resistance measurement	Voltage measurement	Current measurement	PIN
N.C.	N.C.	I+ (0 ... 20 mA, 4 ... 20 mA)	1
Potentiometer E (ultimate position)	N.C.	N.C.	2
Potentiometer S (wiper)	N.C.	N.C.	3
N.C.	U+ (0 ... 10 V)	N.C.	4
N.C.	N.C.	I- (0 ... 20 mA, 4 ... 20 mA)	5
Potentiometer A (initial position)	U-	N.C.	6
Switching output O (upper limit)	switching output O (upper limit)	switching output O (upper limit)	7
Switching output U (lower limit)	switching output U (lower limit)	switching output U (lower limit)	8
+ Ub operating voltage	+ Ub operating voltage	+ Ub operating voltage	9
0 V GND	0 V GND	0 V GND	10

## Order

### Order code

**MA50**

2.4

**Scope of delivery:** MA50, User information, Mating connectors

### Additional information:

General information and areas of application

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