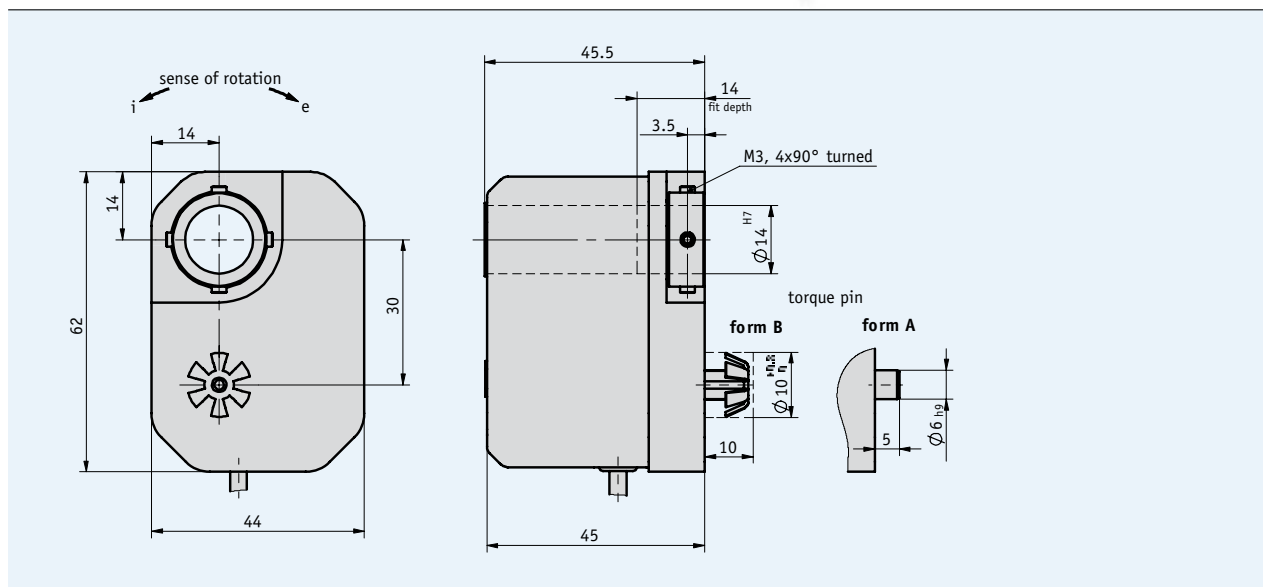


### Profile

- Through hollow shaft  $\varnothing$  14 mm
- Adaptation to various measurement paths owing to a wide range of gear ratios
- Compact, low-cost design
- Potentiometer or power output
- Easy mounting



### Mechanical data

Feature	Technical data	Additional information
Gear ratio	0.125 ... 128	
Speed	max. 500 rpm	depending on gear ratio
Operating temperature	0 ... +80 °C	
Condensation	inadmissible	
Service life of axial movement	1 x 10 <sup>6</sup> 2 x 10 <sup>6</sup>	with P01, P02 with P03
Protection category	IP52	according to DIN VDE 0470
Shaft	browned steel, $\varnothing$ 14 mm	
Housing	plastic	

### Electrical data

Feature	Technical data	Additional information
Interference protection class	3	according to IEC 801

### Analog outputs

Feature	Technical data	Voltage supply
Potentiometer output	0 ... 1 kΩ, 0 ... 5 kΩ, 0 ... 10 kΩ depending on the potentiometer type used	
Power output	4 ... 20 mA	24 V DC ±20 %, with load ≤ 500 Ω

### Potentiometer type

Feature	01	02	03/0.1
Design	hybrid	wire	hybrid
Resistance	1 kΩ, 5 kΩ, 10 kΩ	1 kΩ, 5 kΩ, 10 kΩ	1 kΩ, 5 kΩ, 10 kΩ
Resistance tolerance	±5 %	±5 %	±5 %
Linearity tolerance	±0.25 %	±0.25 %	±0.1 %
Load rating	1 W at 70 °C	1 W at 70 °C	2 W at 70 °C
Range of rotation	340° ±5° (mechanically straight-through)	3600° ±10°	3600° ±10°
Standard terminal resistor (the higher value is always valid)	0.5 % or 1 Ω	0.5 % or 1 Ω	0.5 % or 1 Ω

Note: Characters highlighted in orange color are order features.

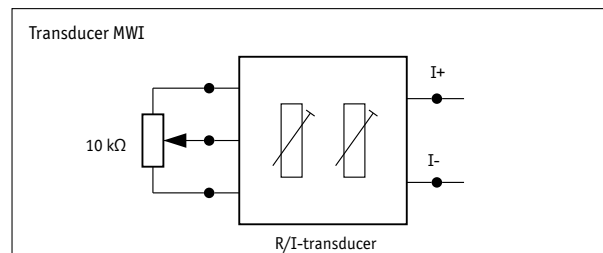
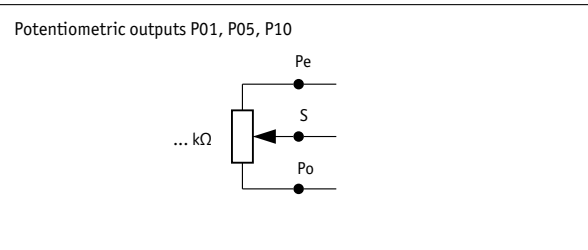
### Pin assignment

#### Potentiometric outputs P01, P05, P10

Signal	Cable color
Po	brown
Pe	white
S	green

#### Transducer MWI

Signal	Cable color
I+	brown
I-	white



### Order

■ **Ratio calculation** (order table, feature A)

$$\text{Formula: } i_1 = \frac{n \times 360^\circ}{\alpha}$$

n = number of revolutions on the driving shaft  
 α = potentiometer angle of rotation  
 340° with 1-coil potentiometer  
 3600° with 10-coil potentiometer  
 i1 = order feature for gear ratio

If the calculated ratio "i1" is the same as a value in the ordering table for the "ratio" feature, but this is not available, select the next highest ratio.

■ **Order table**

Feature	Order data	Specifications	Additional information
Gear ratio	... <b>A</b>	0.125, 0.2, 0.25, 0.333, 0.5, 1, 2, 3, 4, 5, 6, 7, 9, 10, 12, 15, 16, 20, 203.636, 24, 28, 30, 36, 36.571, 48, 55, 68, 80, 112, 128 others on request	
Torque support	<b>A</b> <b>B</b>	<b>B</b> form A, cylindric pin form B for tolerance compensation	
Potentiometer type	<b>01</b> <b>02</b> <b>03</b> <b>03/0,1</b>	<b>C</b> 1 coil, hybrid 10 coils, wire 10 coils, hybrid 10 coils, hybrid, linear tolerance 0.1	
Resistance	<b>P01</b> <b>P05</b> <b>P10</b>	<b>D</b> resistance 1 kΩ resistance 5 kΩ resistance 10 kΩ	
Transducer	<b>MWI</b> <b>0MW</b>	<b>E</b> transducer 4 ... 20 mA without	only with P10
Sense of rotation	<b>ODR</b> <b>e</b> <b>i</b>	<b>F</b> without indication of sense of rotation counter-clockwise ascending values clockwise ascending values	with P01, P05 or P10 with MWI with MWI
Cable length	... <b>G</b>	<b>G</b> 0.2 ... 15 m in steps of 0.1 m	

■ **Order code**



**Scope of delivery:** GP02, User information

➔ **Accessories:**

Electronic display MA50

Catalog 6 DisplayLine

**Additional information:**

General information and areas of application

Page 62 cont.