

# Geared potentiometer GP04

Robust rotary encoder for absolute position sensing, optionally with solid or hollow shaft, potentiometer or current output.



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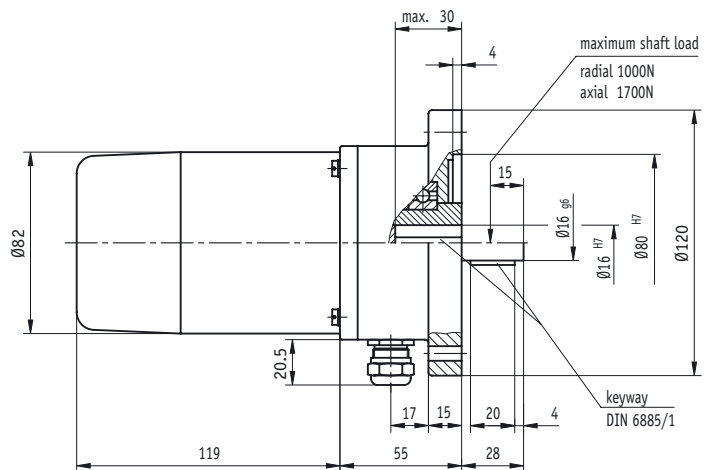
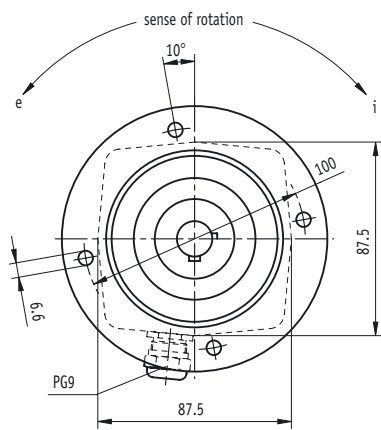
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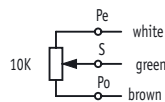


**Features:**

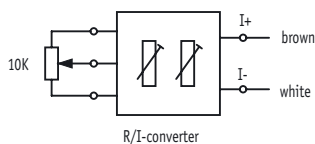
- solid / blind-hole hollow shaft max. 20 mm
- adaptation to various measurement distances thanks to the broad range of available gear ratios
- very robust design
- integrated slip clutch for potentiometer protection
- optional current interface 4... 20 mA
- optional IP65 type of protection for critical environmental conditions



without transducer



transducer MWI



Subject to technical alternation • 11/2002

# Geared potentiometer GP04

Feature	Order text	Technical data	Additional information
Gear ratio		0.2... 256	
Rotational speed		max. 500 min <sup>-1</sup>	depending on gear ratio
Supply voltage		24 V DC ± 20 %	transducer MWI (at ≤ 500 Ohm)
Working temperature		- 20 °C... + 80 °C	
Condensation		not permitted	
Service life - shaft movements		1 x 10 <sup>6</sup> (2 x 10 <sup>6</sup> )	
Test mark/interference prot. class		CE	3 acc. to IEC 801
Type of protection		IP52, IP65	acc. to DIN VDE 0470
Housing		aluminium	
Shaft		Nirosta stainless steel	

### Potentiometer electrical values

Resistance tolerance		± 5 %	
Linearity tolerance		± 0.25 %	
Load rating		1 W at 70 °C (potentiometer type 01,02)	2 W at 70 °C (potentiometer type 03)
Range of rotation		340° ± 5°	1 filament (mechanically straight through)
		3600° + 10°	10 filaments
Standard terminal resistor		0.5 % or 1 Ohm	(the higher value applies)

### Ordering data

Gear ratio	...	<b>A</b>	max. 256	others on request
Drive shaft	<b>H/16</b>	<b>B</b>	hollow shaft ø 16 mm	<b>standard</b>
	<b>V/16</b>		solid shaft ø 16 mm	<b>standard</b>
	H/20		hollow shaft ø 20 mm	
	V/10		solid shaft ø 10 mm	
	V/11		solid shaft ø 11 mm	
	V/12		solid shaft ø 12 mm	
	V/20		solid shaft ø 20 mm	
Potentiometer type	01	<b>C</b>	1 filament	
	02		10 filaments/ wire	
	03		10 filaments	
Resistance kOhm	1	<b>D</b>	1 kOhm	
	2		2 kOhm	
	5		5 kOhm	
	10		10 kOhm	
Transducer	<b>OMW</b>	<b>E</b>	without	<b>standard</b>
	<b>MMW</b>		with	current interface 4... 20mA
Sense of rotation	i	<b>F</b>	see drawing	only with transducer
	e		see drawing	only with transducer
Type of protection	<b>IP52</b>	<b>G</b>		<b>standard</b>
	IP65			

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Your ordering data: GP04 -  -  -  -  -  -  -