

Geared Potentiometer GP09



SIKO GmbH

Address
 Weihermattenweg 2
 79256 Buchenbach

Telephone
 +49 7661 394-0

Fax
 +49 7661 394-388

eMail
 info@siko.de
Internet
 www.siko-global.com

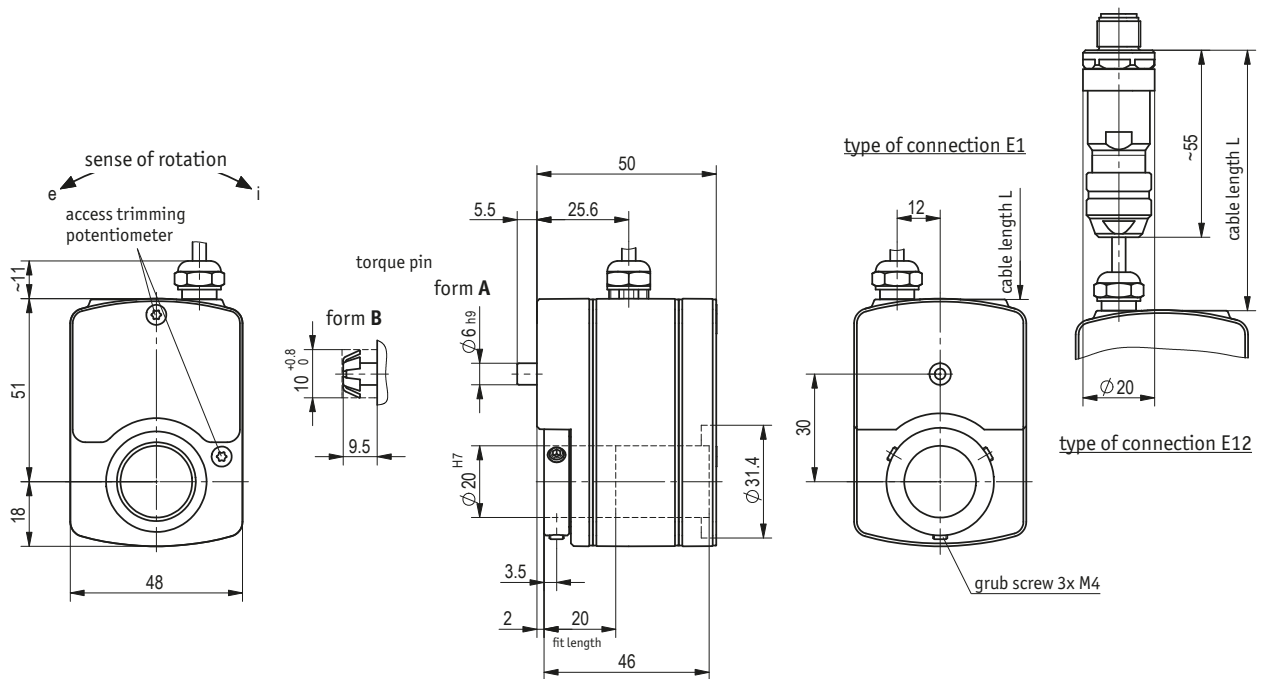
Features:

- Through-going hollow shaft max. 20 mm
- High flexibility with several gear ratios
- Compact dimensions
- With integral sliding clutch to protect the potentiometer
- 4 ... 20 mA output as an option
- Protection class IP68 with oil-filled version for critical applications as an option

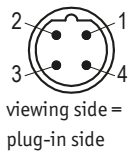
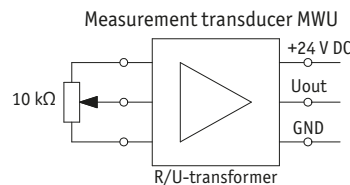
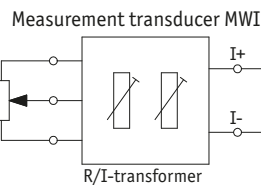
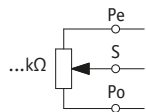
Feature	Order Text	Additional information
Gear ratio	max. 244 A	
Hollow shaft diam. (mm)	20 B	Standard
Torque support (form)	A C form A, cylindric pin B C form B for tolerance compensation	
Potentiometer type	01 D 1 coil 02 D 10 coils 03/0,1 D 10 coils lin. tol. ±0.1	
Analog output	MWI E with transducer 4 ... 20 mA MWU E with transducer 0 ... 10 V P01 E 0 ... 1 kΩ P05 E 0 ... 5 kΩ P10 E 0 ... 10 kΩ	Potentiometer's resistance Potentiometer's resistance Potentiometer's resistance
Counting direction	i F e F / F must not be specified	(only MWI or MWU) (only MWI or MWU) (only P01, P05 ...)
Connection type	E1 G E12 G for connector M12	
Cable length L (m)	1.0 H 0.5–20.0 m	Standard
Type of protection	IP52 I IP65 I IP68 I oil-filled version against condensation	Standard
Revolution max./min.	... K	(only IP68 with transducer)

Your ordering: GP09 - A - B - C - D - E - F - G - H - I - K

Geared Potentiometer GP09



without Measurement transducer



without Measurement transducer

Signal	Pe	S	Po	nc
E1 (cable colour)	white	green	brown	
E12 (connector pin)	1	2	3	4

Measurement transducer MWI

Signal	I-	nc	I+	nc
E1 (cable colour)	white		brown	
E12 (connector pin)	1	2	3	4

Measurement transducer MWU

Signal	GND	Uout	+24 V DC	nc
E1 (cable colour)	white	green	brown	
E12 (connector pin)	1	2	3	4

Technical data

Mechanical data:	
Shaft	stainless steel
Housing	zinc die-cast
Gear ratio	0.2 ... 244
Speed	≤500 rpm; depending on the transmission
Shaft load rating	≤400 N, radial ≤150 N, axial
Potentiometer service life	1 x 10 ⁶ revolution(s)
Electrical data:	
Supply:	
Operating voltage	24 V DC ±20 %, MWI, MWU
Encoder potentiometer:	
Power rating	1 W at 70 °C, potentiometer type 01 2 W at 70 °C, potentiometer types 02, 03/0.1
Resistance	1 kΩ 5 kΩ 10 kΩ
Resistance tolerance	±10 %, potentiometer type 01 ±5 %, potentiometer types 02, 03/0.1
Standard terminal resistance	0.5 % or 1 Ω, potentiometer type 01 (the higher value always applies) 0.2 % or 1 Ω, potentiometer types 02, 03/0.1 (the higher value always applies)
Linearity tolerance	±1 %, potentiometer type 01 ±0.25 %, potentiometer types 02 ±0.1 %, potentiometer types 03/0.1
Design	conductive plastic, potentiometer type 01 wire, potentiometer types 02, 03/0.1

Technical data

Transducer, power output:	
Output current	4 ... 20 mA, at ≤500 Ω load
Transducer, voltage output:	
Output voltage	0 ... 10 V
System data:	
Measuring range	340° ±5° (mechanical full-length), potentiometer type 01 3600° +10°, potentiometer types 02, 03/0.1
Ambient conditions:	
Ambient temperature	-20 ... 80 °C, without oil fill -10 ... 80 °C, with oil fill
Relative humidity	condensation inadmissible
EMC	EN 61000-6-2; interference resistance / immision EN 61000-6-4; emitted interference / emission
Protection category	IP52, IP65, IP68; EN 60529
Accessory	83526 Mating connector E12 4 pins; circular cableconnector; M12