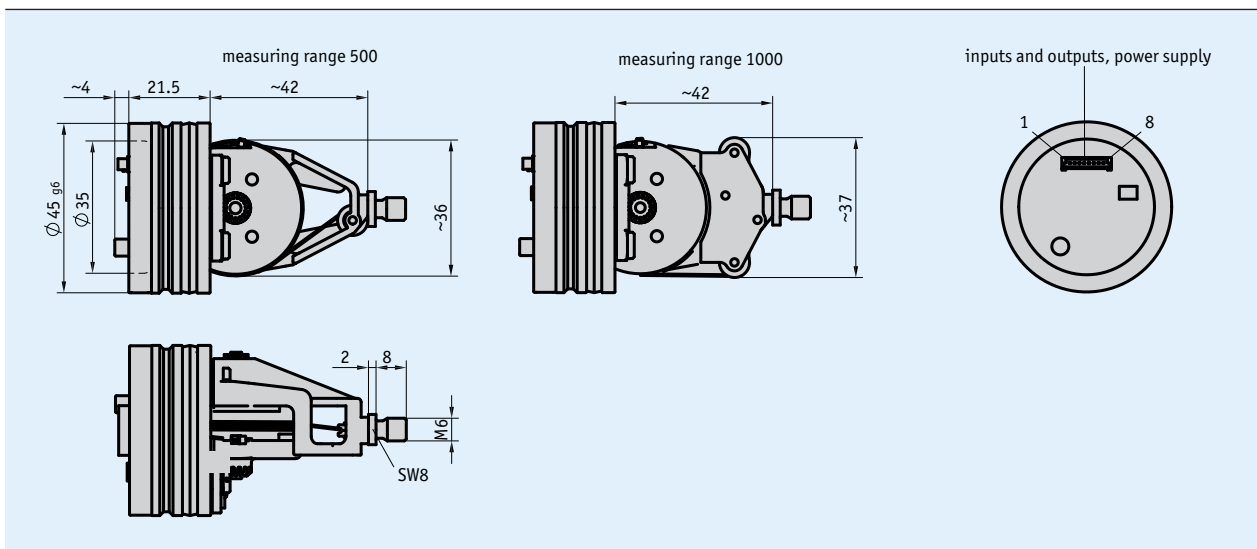


### Profile

- Measuring range 0 ... 1000 mm (39.37 Inch)
- Absolute measuring system
- CANopen interface, analog: Current and voltage
- Operating voltage 9 ... 32 VDC
- Pressure-resistant up to 300 bar, pressure peaks up to 500 bar
- High degree of flexibility, adjustable to all measuring lengths thanks to teach-in
- High electro-magnetic compatibility
- High shock and vibration resistance



### Mechanical data

Feature	Technical data	Additional information
Flange	aluminum	sealing ring (PUR)
Housing	synthetic	POM
Wire design	ø0.45 mm	steel rope (stainless)
Extension force	≥2 N	
Acceleration	≤10 m/s <sup>2</sup>	
Weight	~0.15 kg	

### Electrical data

#### ■ Analog interface

Feature	Technical data	Additional information
Operating voltage	9 ... 32 V DC	with output 0 ... 5 V, 0.5 ... 4.5 V, 0.25 ... 4.75 V, 1.0 ... 4.9 V, reverse polarity protected
	12 ... 32 V DC	with output 0 ... 10 V, reverse polarity protected
	12 ... 32 V DC	with output 0 ... 20 mA, 4 ... 20 mA, reverse polarity protected
Current consumption	<32 mA	without load
Power input	<0.5 W	without load
Digital inputs	2	limit inputs
Input signal level high	>8.4 V	
Input signal level low	<2.8 V	
Output voltage	0 ... 10 V	load current <10 mA
	0 ... 5 V	load current <10 mA
	0.5 ... 4.5 V	load current <10 mA
	0.25 ... 4.75 V	load current <10 mA
Output current	1 ... 4.9 V	load current <10 mA
	0 ... 20 mA	load ≤500 Ω
Linearity tolerance	4 ... 20 mA	load ≤500 Ω
	±0.25 %	1000 mm measurement length
	±0.5 %	500 mm measurement length
Settling time	<150 ms	
Type of connection	plug connection system	KV1H accessory

#### ■ CANopen interface

Feature	Technical data	Additional information
Operating voltage	10 ... 30 V DC	reverse polarity protected
Power input	<0.8 W	
Linearity tolerance	±0.25 %	1000 mm measurement length
	±0.5 %	500 mm measurement length
Interface	according to ISO 1189, not isolated	CANopen, CIA 406, CIA 301
Address	adjustable	per SDO or Layer Setting Service (LSS) (CAN)
Baud rate	≤1 MBit/s	
Cycle time	<1.5 ms	
Settling time	<150 ms	
Type of connection	plug connection system	KV1H accessory

### System data

Feature	Technical data	Additional information
Scanning	magnetic	
Resolution	12 Bit	analog output
Repeat accuracy	±0.15 mm	
Measuring range	500 mm	measuring range flexibly usable between 0...500 mm
	1000 mm	measuring range flexibly usable between 0...1000 mm
Travel speed	≤1 m/s	
Failure rate	235.6 year(s)	analog output, at 60 °C (MTBF) EN/IEC61709 (SN29500)
	253.3 year(s)	CANopen, at 60 °C (MTBF) EN/IEC61709 (SN29500)

### Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	-40 ... 105 °C	electronics
	-40 ... 85 °C	mechanics
Storage temperature	-40 ... 85 °C	
Relative humidity	100 %	condensation admissible in the mounted and plugged condition
Operating pressure	<300 bar	
Overload pressure	<500 bar	
EMC	EN 61326-1	immunity requirement of industry, class B emission limit
Protection category	IP69K	built in the cylinder (IP69K), with KV1H and suitable mating connector
Shock resistance	1000 m/s <sup>2</sup> , 11 ms	EN 60068-2-27
Vibration resistance	70 m/s <sup>2</sup> , 10 Hz ... 2 kHz	EN 60068-2-64

### Order

#### Ordering table

Feature	Ordering data	Specification	Additional information
Measuring range	... <b>A</b>	500, 1000 in mm	
Interface	0/5V <b>B</b>	0 ... 5 V	voltage output
	0/10V	0 ... 10 V	voltage output
	0.25/4.75V	0.25 ... 4.75 V	voltage output
	0.5/4.5V	0.5 ... 4.5 V	voltage output
	1.0/4.9V	1.0 ... 4.9 V	voltage output
	0/20mA	0 ... 20 mA	current output
	4/20mA	4 ... 20 mA	current output
	CAN	CANOpen	

#### Order key

SGH10 -    - GW6 -    - M1 - DS - SW

A
B

**Scope of delivery:** SGH10, Mounting instructions

**Accessories:**

Electronic display MA50

[www.siko-global.com](http://www.siko-global.com)

Cable extension KV1H

[www.siko-global.com](http://www.siko-global.com)

Installation aid ZB4004

[www.siko-global.com](http://www.siko-global.com)

Programming Tool ProTool SGH

[www.siko-global.com](http://www.siko-global.com)