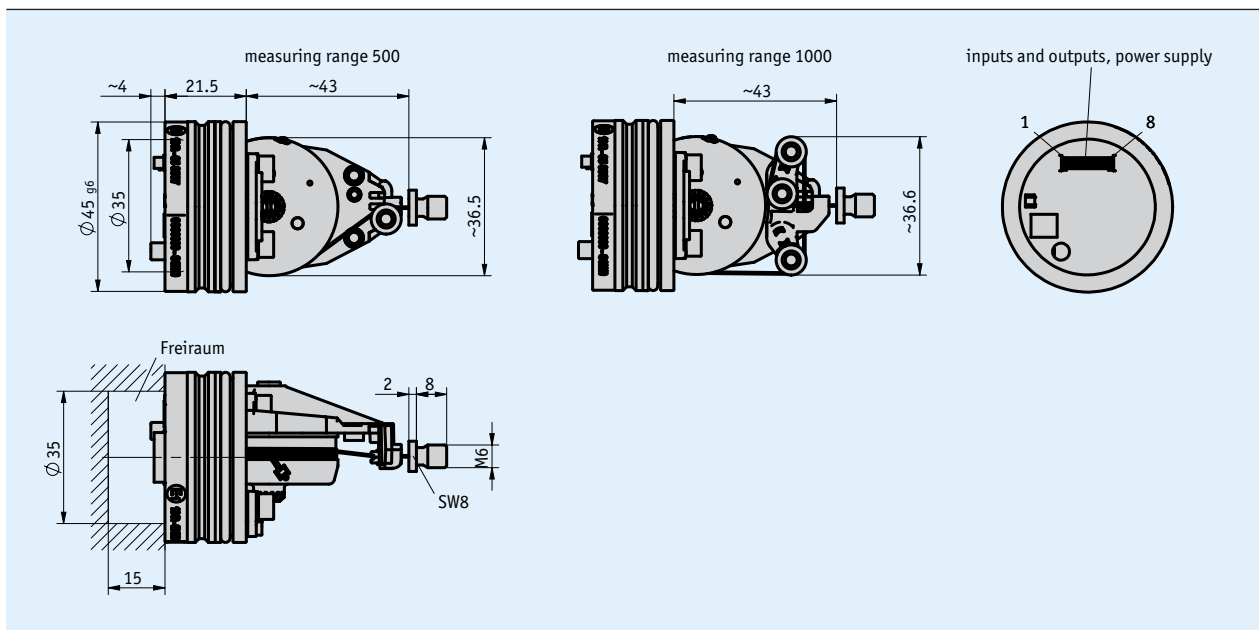


Profile

- Measuring range 0 ... 1000 mm (39.37 inches)
- Absolute measuring system
- CANopen interface, analog: Current and voltage
- Operating voltage 9 ... 32 VDC
- Pressure-resistant up to 350 bar, pressure peaks up to 450 bar
- High degree of flexibility, adjustable to all measuring lengths thanks to teach-in
- High electro-magnetic compatibility
- High shock and vibration resistance
- With PURE.MOBILE technology



Mechanical data

Feature	Technical data	Additional information
Flange	aluminum	sealing ring (HNBR)
Housing	synthetic	PA66
Wire design	ø0.45 mm	steel rope (stainless)
Extension force	≥2 N	
Acceleration	≤10 m/s ²	
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
Parameter storage	10 ⁵ cycles	also applies to calibration operations
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
	1 ... 4.9 V	load current <10 mA
Output current	0 ... 20 mA	load ≤500 Ω
	4 ... 20 mA	load ≤500 Ω
Linearity tolerance	±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	
Parameter storage	10 ⁵ cycles	also applies to calibration operations
Linearity tolerance	±0.25 %	1000 mm measurement length
	±0.5 %	500 mm measurement length
Interface	according to ISO 11898-1/2, not galvanically isolated	CANopen, CiA 301, CiA 305, CiA 406
Address	1 ... 127	Node ID, via SDO or Layer Setting Service (LSS)
Baud rate	≤1 MBit/s	
Cycle time	typical 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) according to SN29500
	253.3 year(s)	CANopen, at 60° C (MTBF) according to SN29500
Approval	E1 compliant	UN ECE R10 Approval number: E1*10R05/01*8507*00

Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	-40 ... 105 °C	electronics
	-30 ... 100 °C	Mechanics, optionally to 105° C
Storage temperature	-40 ... 85 °C	
Relative humidity	100 %	condensation admissible in the mounted and plugged condition
Operating pressure	<350 bar	P _n based on ISO19879
Overload pressure	<450 bar	P _{max} based on ISO 19879
Test pressure	650 bar	P _{static} based on ISO 19879
EMC	EN 61326-3.1	immunity requirement of industry, class B emission limit
	ISO 11452-1, -2, -3, -4, -5	Interference radiation ESA
	ISO 7637-1, -2	Transient pulses
	ISO 10605	Electrostatic discharge (ESD)
Protection category	IP69K	built in the cylinder (IP69K), with KV1H and suitable mating connector
Shock resistance	1000 m/s ² , 11 ms	EN 60068-2-27
Vibration resistance	70 m/s ² , 10 Hz ... 2 kHz	EN 60068-2-64

Order

Ordering information

One or more system components are required:

Cable extension KV1H

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Ordering table

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

Order key

SGH10 - A - GW6 - B - M1 - DS - SW

Scope of delivery: SGH10, Mounting instructions

Accessories:

Electronic display MA50
Installation tool ZB4004
Programming Tool ProTool SGH
Wire extension piece SVH
Socket wrench ZB4008
rope swivel ZB4009

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