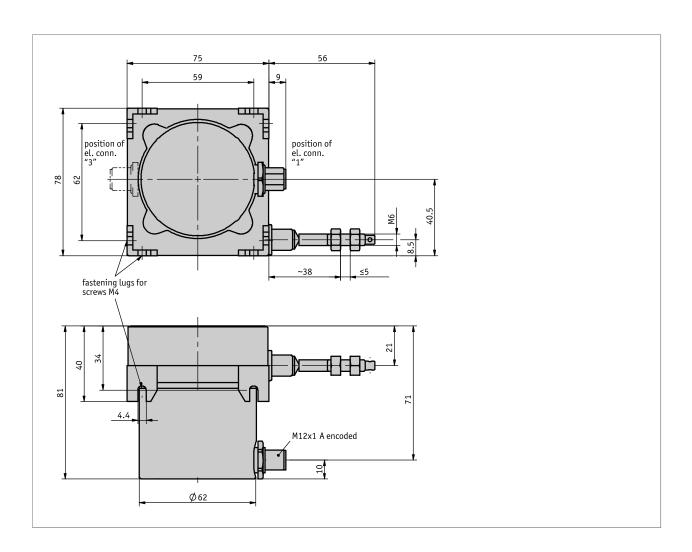
## robust design and redundant sensor system with 3000 mm measuring length

#### **Profile**

- Robust design
- Measuring lengths up to 3000 mm
- Analogue signal output in redundant design (2x 4...20 mA or potentiometer)
- Variable mounting options
- Lockable vent and water drain holes
- Very robust measuring rope (stainless steel)
- IP65 protection class
- M12 plug connection





### **Mechanical data**

Feature	Technical data	Additional information	
Housing	zinc die-cast, plastic		
Wire design	ø0.61 mm	rustproof stainless steel, plastic-coated	
	ø0.6 mm	rustproof stainless steel	
Extension force	≥9 N		
Absolute accuracy	±0.35 %	relating to measuring ranges (mm)	
Weight	~0.5 kg		

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### **Electrical data**

#### **■** Encoder potentiometer

Feature	Technical data	Additional information
Operating voltage	≤30 V DC	power loss on the potentiometer <1 W
Power rating	2 W at 70 °C	
resistance	10 kΩ	
Resistance tolerance	±5 %	
Standard terminal resistance	0.5 % or 1 Ω	the higher value always applies
Linearity tolerance	±0.25 %	
Type of connection	M12 plug connector (A-coded)	8-pole, 1x pin

### ■ Transducer, power output

Feature	Technical data	Additional information
Operating voltage	10 30 V DC	between I+ and I-, at ≤500 Ω load
Output current	4 20, (2x)	4/20mA 4/20mA
	20 4 mA, (2x)	20/4mA 20/4mA
	4 20 mA, 20 4 mA	4/20mA 20/4mA
Type of connection	M12 plug connector (A-coded)	8-pole, 1x pin

<sup>\*</sup> Transducers enable optimal adaptation of output current or output voltage to the measuring range. The measuring transformer is factory preset so that an output signal of 4  $\dots$  20 mA or 20  $\dots$  4 mA is available between the start and end points of the measuring range.

### System data

Feature	Technical data	Additional information
Repeat accuracy	±0.15 mm	per direction of approach
Travel speed	≤800 mm/s	
Failure rate	166.7 Year(s)	at 60 °C (MTBF)

### **Ambient conditions**

Feature	Technical data Additional information		
Ambient temperature	-40 80 °C		
Protection category	IP65 (for electronic unit)	5 (for electronic unit) EN 60529, certonally coated electronics	

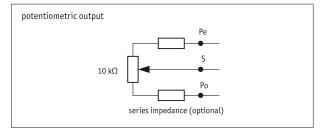


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### pin assignment

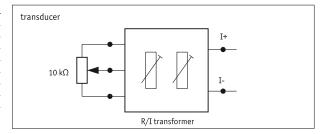
### ■ Potentiometer pin assignment

Signal	PIN	Additional information
Po	1	Potentiometer 1
Po	2	Potentiometer 2
S	3	Potentiometer 2
Pe	4	Potentiometer 2
nc	5	
Pe	6	Potentiometer 1
S	7	Potentiometer 1
nc	8	



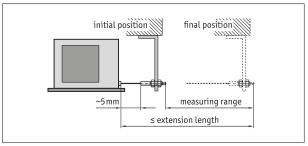
### ■ Connection assignment of transducer

Signal		Additional information
I+	1	Transducer 1
I+	2	Transducer 2
nc	3	
I-	4	Transducer 2
nc	5	
I-	6	Transducer 1
nc	7	
nc	8	



### Hint for mounting

When securing the wire it must be ensured that the wire is straight and vertical in relation to the wire outlet. **Recommendation:** Only select the starting position after an unwound length of approx. 5 mm. This prevents the wire hitting the end stop when it is rewound.



Symbolic representation

#### **Order**

### ■ Ordering table

Feature	Ordering data	Spezifikation	Additional information
Measuring range	Α	2000, 2500, 3000 in mm	
wire design	D S	stainless steel wire	
g	SK	steel wire, plastic coated	
and and and and	D10 D10	2	
encoder type	P10_P10	2x potentiometers 10 kΩ	
	20/4mA_	20/4mA 2x transducers 204 mA	
	4/20mA_	20/4mA 2x transducers 4 20 mA counter-rotating	
	4/20mA_4	4/20mA 2x transducers 4 20 mA	
position of electrical connection	1	direction of wire outlet	
	3	opposite the wire outlet	
series impedance	0	0 Ω	only for P10_10 encoder type

SIKO

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### **Draw-wire encoder SG32**

## robust design and redundant sensor system with 3000 mm measuring length

Feature Ordering data Spezifikation Additional information only for P10\_10 encoder type

■ Order key

SG32 - A B C D E

