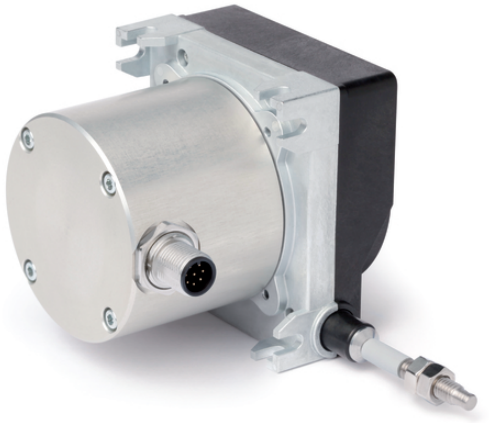
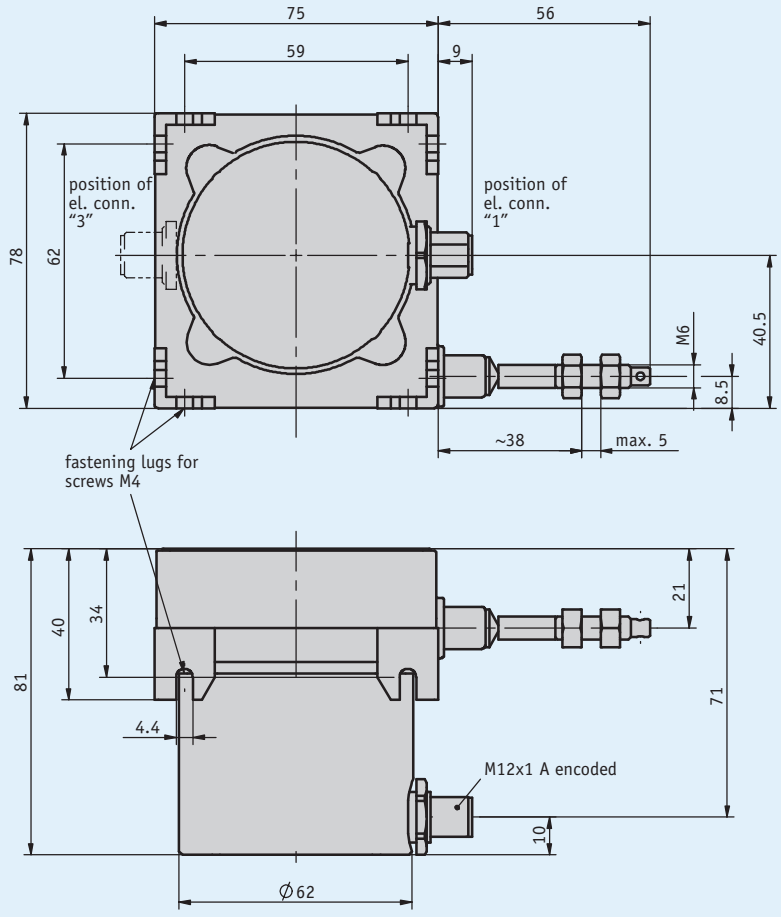
Wire-actuated encoder SG32
robust design and redundant sensor system with 3000 mm measuring length

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 category
- M12 plug connection





Mechanical data

Feature	Technical data	Additional information
Housing	zinc die-cast, plastic	
Wire design	ø0.87 mm	steel wire (stainless), plastic coated
Extension force	≥3 N	
Absolute accuracy	±0.35 %	relating to measuring ranges (mm)
Weight	~0.5 kg	

Electrical data

Encoder potentiometer

Feature	Technical data	Additional information
Operating voltage	≤30 V	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 applies in each case)
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	with load impedance ≤500 Ω voltage between I+ and I-
Output current	4 ... 20 mA (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

* Measurement transducers permit optimum adjustment of the output current and output voltage to the measuring range. The measurement transducer is pre-set at the works so that an output signal of 4 ... 20 mA or 20 ... 4 mA is available.

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)

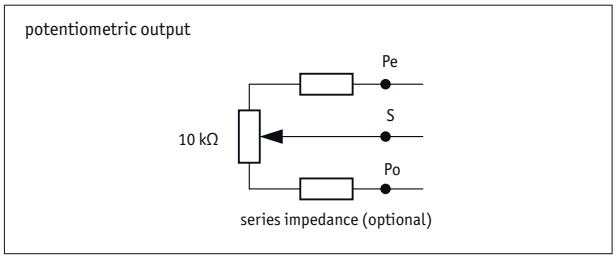
Ambient conditions

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

Pin assignment

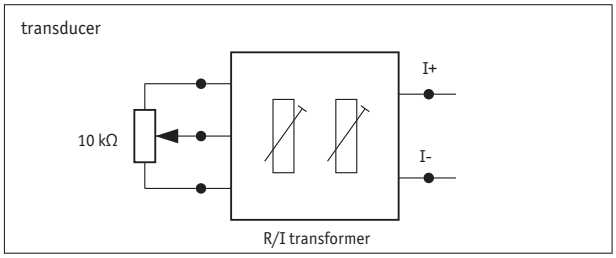
Potentiometer pin assignment

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	



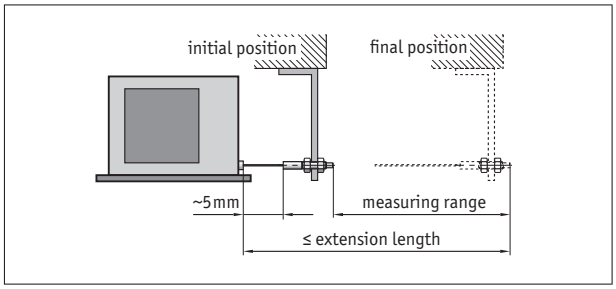
Transducer pin assignment

Signal	Pin	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 depiction

Order

Ordering table

Feature	Ordering data		Specification	Additional information
Measuring range	...	A	2000, 2500, 3000 in mm	
Encoder type	P10_P10	B	2x potentiometer 10 kΩ	
	20/4mA_20/4mA		2x transducers 20...4 mA	
	4/20mA_20/4mA		2x transducers 4...20 mA counter-rotating	
	4/20mA_4/20mA		2x transducers 4...20 mA	
Position of electrical connection	1	C	0 °	
	3		180 °	
Series impedance	0	D	0 Ω	only for P10_10 encoder type
	1k2		1.2 kΩ	only for P10_10 encoder type

Order key

SG32 - [A] - [B] - [C] - [D]

Scope of delivery: *SG32, Mounting instructions*

Accessories:

Electronic display MA50	*www.siko-global.com*
Guide roller UR	*www.siko-global.com*
Wire extension piece SV	*www.siko-global.com*
Mating Connector Overview	*www.siko-global.com*
Mating connector, 8-pole, socket	*Order key 83525*