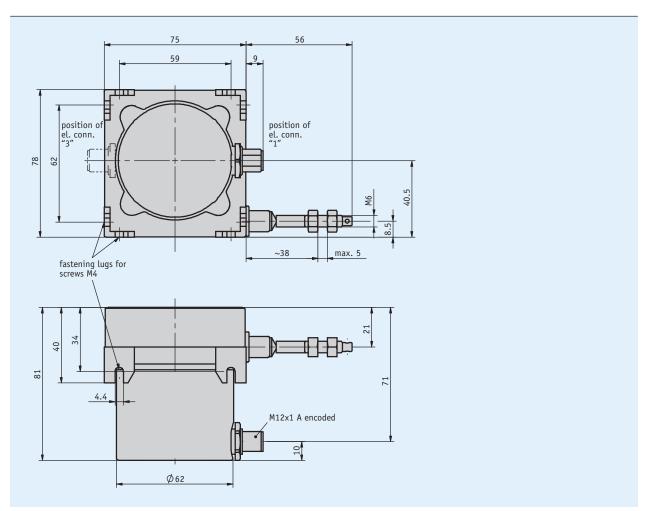
# robust design and redundant sensor system with 3000 mm measuring length

## **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		



## **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	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	

 $<sup>^{\</sup>star}$  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)	

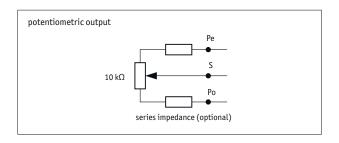
# **Ambient conditions**

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

# Pin assignment

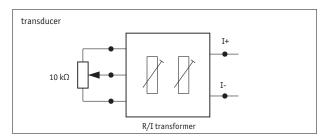
#### Potentiometer pin assignment

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

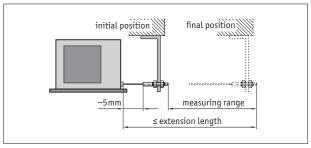
Signal	Pin	<b>Additional information</b>
I+	1	Transducer 1
I+	2	Transducer 2
nc	3	
I-	4	Transducer 2
nc	5	
I-	6	Transducer 1
nc	7	
nc	8	



## **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	
Wire design	S	stainless steel rope	
	SK	stainless steel rope, plastic-coated	
Encoder type	P10_P10	2x potentiometer 10 kΩ	
	20/4mA_20/4mA	2x transducers 204 mA	
	4/20mA_20/4mA	2x transducers 420 mA counter-rotating	
	4/20mA_4/20mA	2x transducers 420 mA	
Position of electrical connection	1	direction of wire outlet	
	3	opposite the wire outlet	
Series impedance	0	0Ω	only for P10_10 encoder type
	1k2	1.2 kΩ	only for P10_10 encoder type

# Order key

