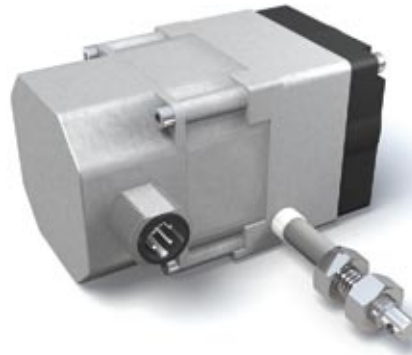
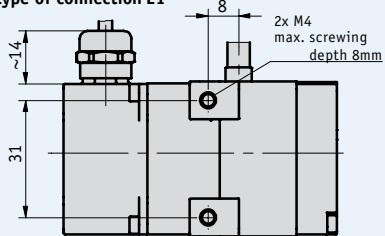


### Profile

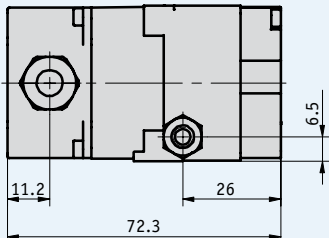
- Compact design
- Universally applicable thanks to standardized interfaces
- Easy mounting
- Measurement lengths up to max. 2000 mm
- Potentiometer, voltage or power output
- Robust zinc die-cast housing



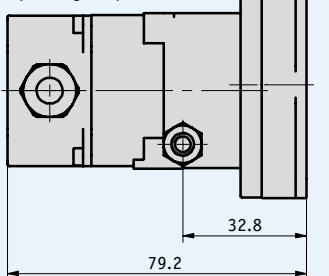
type of connection E1



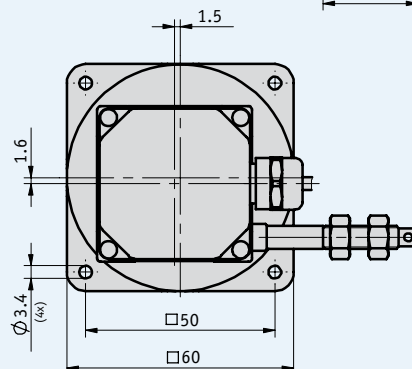
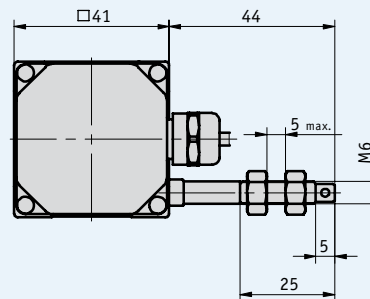
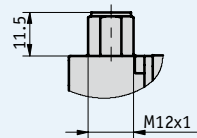
operating temperature T1



operating temperature T2



type of connection E12



### Mechanical data

Feature	Technical data	Additional information
Travel speed	max. 1 m/s	
Pull-out force required	min. 2 N min. 11 N	with temperature range T1 with temperature range T2
Drum circumference	100 mm	
Repeat accuracy	±0.15 mm	
Absolute accuracy	±0.35 %	
Operating temperature	-10 ... +80 °C -40 ... +80 °C	with T1 with T2
Wire design	stainless steel wire, Ø 0.45 mm	plastic-coated
Encoder portion protection categ.	IP65	
Weight	approx. 320 g	
Housing	zinc die-cast	

### Electrical data

#### ■ P10 encoder type, potentiometer



Feature	Technical data	Additional information
Value of resistance	10 kΩ	
Linearity of potentiometer	0.25 %	
Resistance tolerance	±5 %	
Power rating	1 W	
Pull-out length	0 mm : 0 Ω	
Cable length (connection)	max. 30 m	

Additional potentiometer values on request

#### ■ MWI encoder type, current source (transducer\*)



Feature	Technical data	Additional information
Output current	4 ... 20 mA	
Potentiometer	10 kΩ	
Operating voltage	15 ... 28 V DC	
Load resistance	<500 Ω	
Cable length (connection)	max. 30 m	

#### ■ MWU encoder type, voltage source 0 ... 10 V DC (transducer\*)



Feature	Technical data	Additional information
Output current	0 ... 10 V DC	
Recomm. load resistance	2 ... 10 kΩ to GND	
Max. load	15 mA	
Operating voltage	15 ... 28 V DC with 3 mA without load	
Cable length (connection)	max. 20 m	

\* **Transducers** allow optimum adaptation of output current or output voltage to the measurement range. The transducer is preset at delivery to provide an output signal of 4 ... 20 mA (MWI) or 0 ... 10 V DC (MWU) between the starting point and the end point of the measurement range.

## Pin assignment

### ■ Potentiometric outputs P10

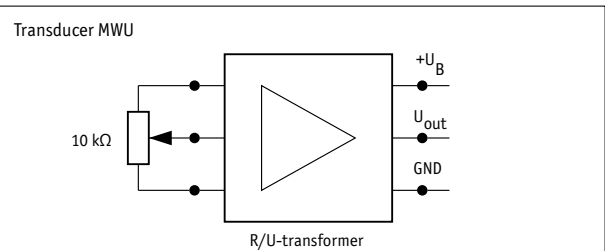
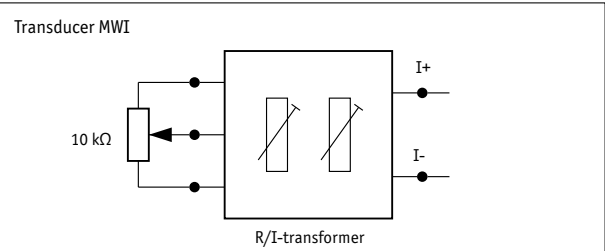
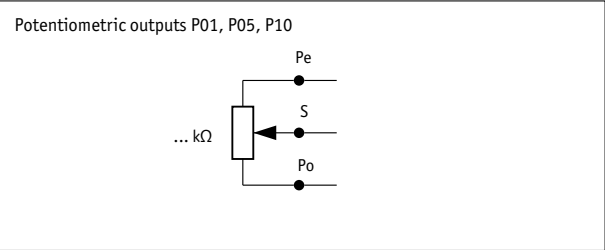
Signal	E1	E12
Po	brown	1
Pe	white	2
S	green	3
N.C.		4

### ■ MWI transducer

Signal	E1	E12
I+	brown	1
I-	white	2
N.C.		3
N.C.		4

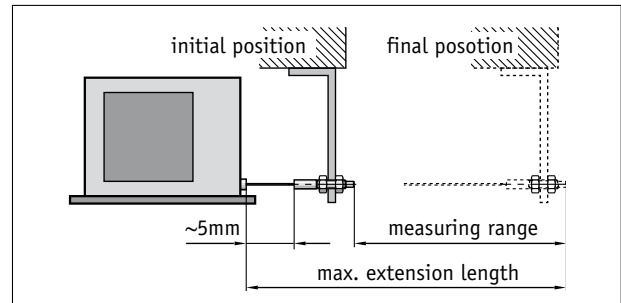
### ■ MWU transducer

Signal	E1	E12
+24 V DC	brown	1
GND	white	2
U <sub>out</sub>	green	3
N.C.		4



**Mounting note**

When you attach the wire, it should be pulled out straight in line with the wire outlet. **Recommendation:** A 5 mm wire extension is recommended before the measurement starting point. This prevents the wire snapping back to the stop on rewinding.



Symbolic representation

**Order**

■ **Order table**

Feature	Order data	Specifications	Additional information
Measurement range (mm)	... <b>A</b>	1250, 1500, 1750, 2000	
Encoder type	<b>P10</b>	potentiometer with 10 kΩ	
	<b>MWI</b>	transducer 4 ... 20 mA	
	<b>MWU</b>	transducer 0 ... 10 V	
Type of connection	<b>E1</b>	flying leads	
	<b>E12</b>	connector	
Cable length (m)	... <b>D</b>	1 ... 20 m in steps of 1 m	with P10 encoder type or MWU
	...	1 ... 30 m in steps of 1 m	with MWI encoder type
Operating temperature	<b>T1</b>	-10 ... +80 °C	
	<b>T2</b>	-40 ... +80 °C	

■ **Order code**



**Scope of delivery:** SG20, User information

**Accessories:**

Guide roller  
Electronic displays MA50 or MA10/4

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**Additional information:**

General information and areas of application

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