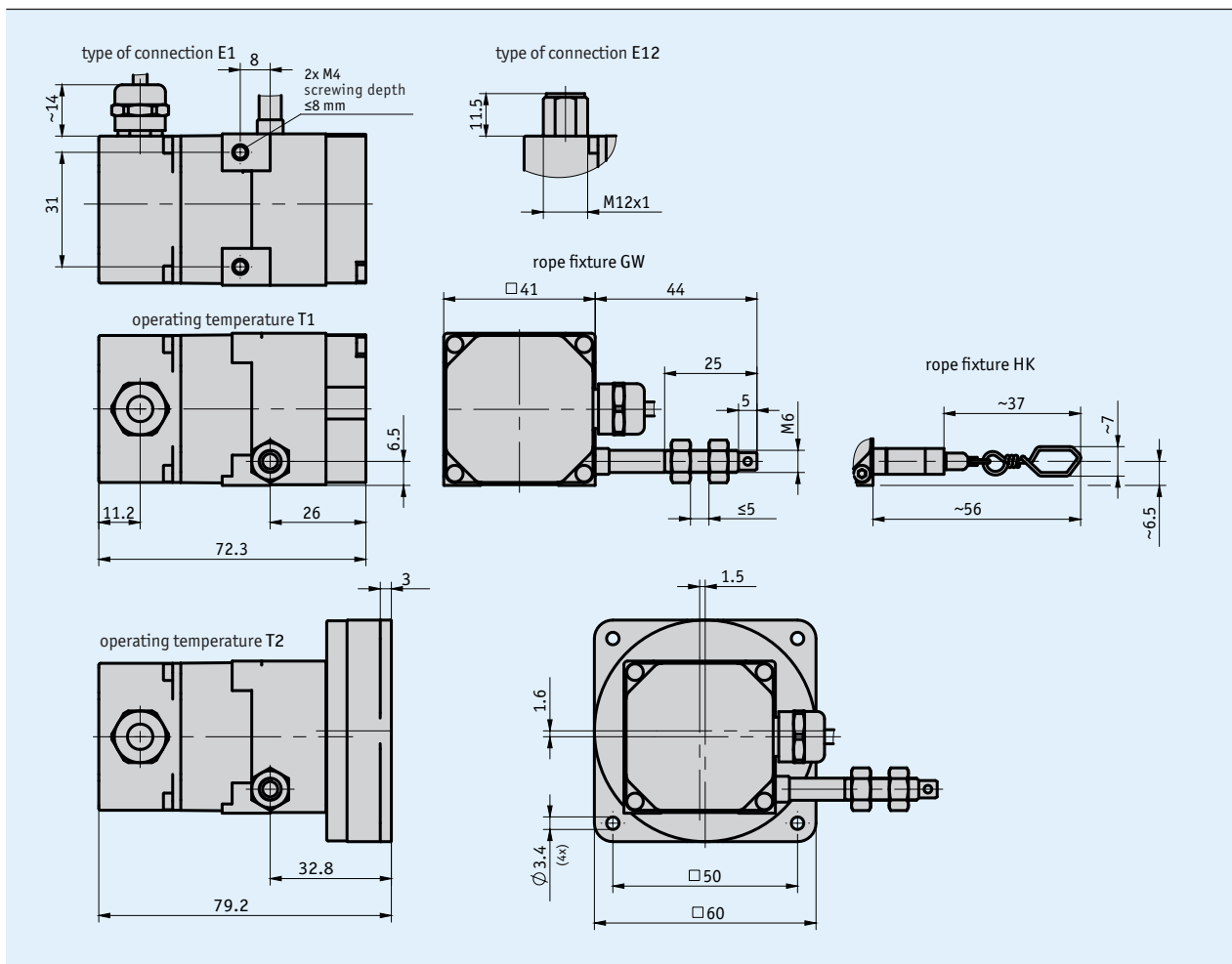
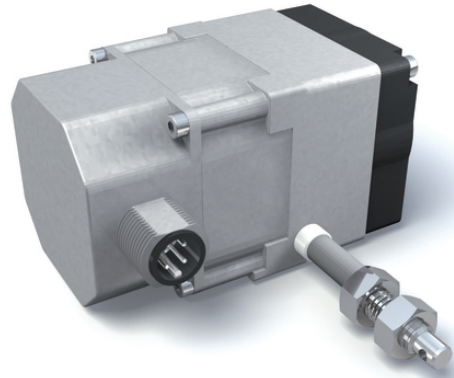


## Profile

- 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



## Mechanical data

Feature	Technical data	Additional information
Housing	zinc die-cast	
Wire design	steel wire (stainless steel) $\varnothing 0.45$ mm	plastic coated
Extension force	$\geq 2$ N	T1 operating temperature
	$\geq 11$ N	T2 working temperature
Measured distance/ rope drum revolution	100 mm	
Absolute accuracy	$\pm 0.35$ %	relating to measuring length (mm)
Cable length	$\leq 30$ m	4/20mA, MWIHP, MWIHP/R encoder type
	$\leq 20$ m	P10; 0/10V; 0,5/4,5V encoder type
Weight	$\sim 0.32$ kg	

## Electrical data

### Encoder potentiometer

Feature	Technical data	Additional information
Power rating	2 W at 70 °C	
Resistance	10 k $\Omega$	
Resistance tolerance	$\pm 5$ %	
Linearity tolerance	$\pm 0.25$ %	

### Transducer, power output

Feature	Technical data	Additional information
Operating voltage	10 ... 30 V DC	between I+ and I-, at $\leq 500 \Omega$ load
Output current	4 ... 20 mA	(4/20mA; MWIHP)

### Transducer, voltage output

Feature	Technical data	Additional information
Operating voltage	15 ... 28 V DC	at 3 mA without load (0/10V)
	8 ... 28 V DC	at 3 mA without load (0,5/4,5V)
Output voltage	0 ... 10 V DC	$I_{Load} \leq 10$ mA
	0.5 ... 4.5 V DC	$I_{Last} \leq 10$ mA (0,5/4,5V)
Resistance	2 ... 10 k $\Omega$	against GND
Load	$\leq 15$ mA	

## System data

Feature	Technical data	Additional information
Repeat accuracy	$\pm 0.15$ mm	
Travel speed	$\leq 1$ m/s	

## Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	-10 ... 80 °C	T1
	-40 ... 80 °C	T2
Protection category	IP65 (encoder part)	EN 600529

## Pin assignment

### ■ Potentiometric outputs P10

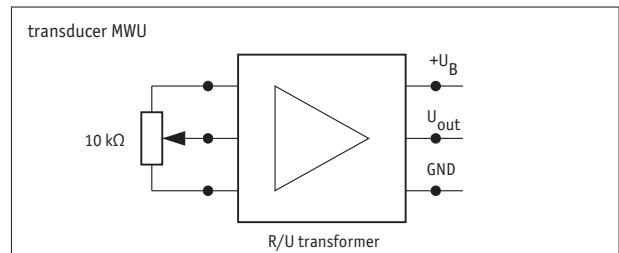
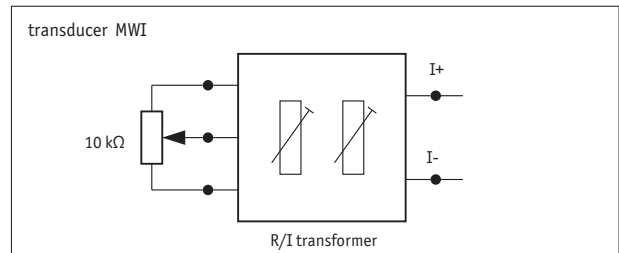
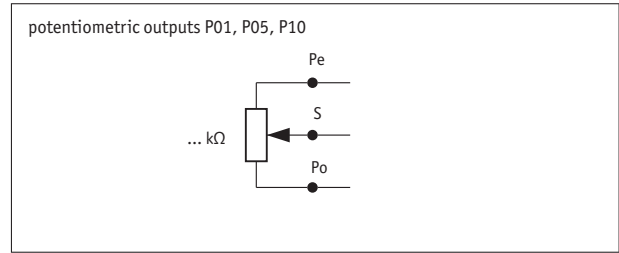
Signal	E1	E12
Po	brown	1
Pe	white	2
S	green	3
nc		4

### ■ MWI transducer

Signal	E1	E12
I+	brown	1
I-	white	2
nc		3
nc		4

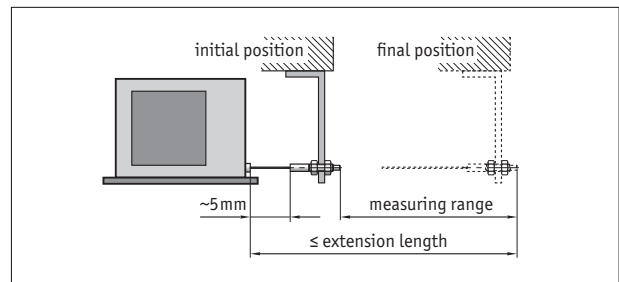
### ■ MWU transducer

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



## 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	... <b>A</b>	1250, 1500, 1750, 2000 in mm	
Rope fixture	<b>GW</b>	wire suspension with thread	
	<b>HK</b>	wire suspension with hook	
Encoder type	<b>P10</b>	potentiometer with 10 kΩ	
	<b>0.5/4.5V</b>	measuring transducer 0.5 ... 4.5 V	
	<b>0/10V</b>	measuring transducer 0 ... 10 V	
	<b>4/20mA</b>	measuring transducer 4 ... 20 mA	
		others on request	
Type of connection	<b>E1</b>	open cable ends	
	<b>E12</b>	connector	
Cable length	... <b>E</b>	1 ... 20.0 m, in steps of 1 m	with P10 or MWU encoder types
	... <b>E</b>	1 ... 30.0 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 key

SG20 -  -  -  -  -  -

A      B      C      D      E      F

**Scope of delivery:** SG20, Mounting instructions

#### Accessories:

Electronic display MA50

Guide roller UR

Wire extension piece SV

Mating Connector Overview

Mating connector, E12, 4-pole, socket

[www.siko-global.com](http://www.siko-global.com)

[www.siko-global.com](http://www.siko-global.com)

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Order key 83419