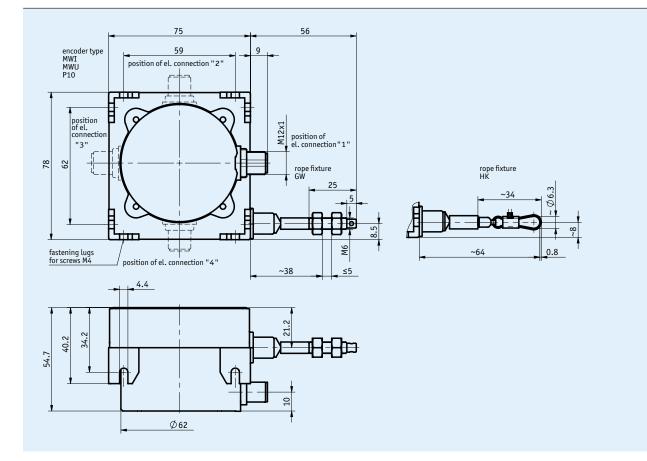
# Wire-actuated encoder SG30 robust design with a measurement length of 3000 mm

# Profile

- Compact, robust design
- Variable mounting options
- Measuring lengths up to 3000 mm
- Potentiometer, voltage or power output
- Housing made of zinc die-cast and plastic
- Lockable ventilation holes against condensation
- High tightness at the rope outlet
- M12 plug connection





### **Mechanical data**

Feature	Technical data	Additional information
Housing	zinc die-cast, plastic	
Wire design	steel wire (stainless steel) ø0.87 mm	plastic coated
Extension force	≥3 N	
Cable length	≤30 m	P10, MWI encoder types
	≤20 m	MWU encoder type
Weight	~0.5 kg	

# **Electrical data**

### **Encoder potentiometer**

Feature	Technical data	Additional information
Power rating	2 W at 70 °C	
Resistance	10 kΩ	
Resistance tolerance	±5 %	
Linearity tolerance	±0.25 %	
Type of connection	M12 plug connector (A-coded)	4-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 mA	
Type of connection	M12 plug connector (A-coded)	4-pole, 1x pin

### Transducer, voltage output

Feature	Technical data	Additional information
Operating voltage	15 28 V DC	at 3 mA without load
Output voltage	0 10 V DC	I <sub>Load</sub> ≤10 mA
Resistance	2 10 kΩ	against GND
Load	≤15 mA	
Type of connection	M12 plug connector (A-coded)	4-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 (MWI) or 0 ... 10 V DC (MWU) is available.

# System data

Feature	Technical data	Additional information
Repeat accuracy	±0.15 mm	per direction of approach
Measuring range	≤3000 mm	
Travel speed	≤800 mm/s	

### **Ambient conditions**

Feature	Technical data	Additional information
Ambient temperature	-40 80 °C	
Relative humidity		condensation inadmissible
Protection category	IP65 (encoder part)	EN 600529

# Pin assignment

### Potentiometric outputs P10

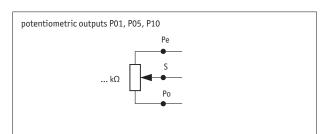
Signal	PIN
Ро	1
Pe	2
S	3
	4

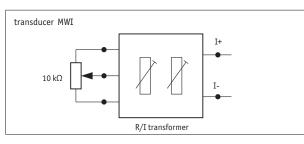
### MWI transducer

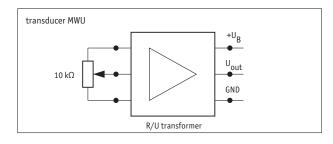
Signal	PIN
I+	1
I-	2
nc	3
nc	4

### MWU transducer

Signal +24 V DC	PIN
+24 V DC	1
GND	2
U <sub>out</sub>	3
nc	4

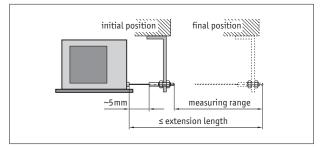






### Hint for mounting

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 representation

# **Order**

### • Ordering table

Feature	Ordering data	Specification	Additional information
Measuring range	A	2000, 2500, 3000 in mm	
Rope fixture	GW	wire suspension with thread	
	нк 🖻	wire suspension hook	
Encoder type	MWI 🥐	transducer, current	
	MWU 🕓	transducer, voltage	
	P10	potentiometer	
Position of electrical connection	1	0 °	
	2	90 °	
	3	180 °	
	4	270 °	

### • Order key



Scope of delivery: SG30

#### Accessories:

Electronic display MA50 Guide roller UR Wire extension piece SV Mating Connector Overview Mating connector, P10, MWI, MWU, 4-pole, socket Mating connector, P10, MWI, MWU, 4-pole, socket www.siko-global.com www.siko-global.com www.siko-global.com www.siko-global.com Order key 83419 Order key 83526