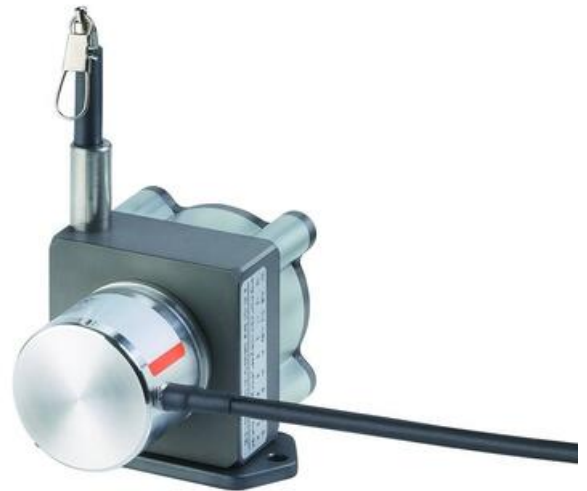


## KUEBLER - WIRE ENCODERS A50

### SERIE D8.6A1

- Max measuring length 1 250 mm
- -20 to +85 °C
- Titanium anodized aluminum housing
- Compact dimensions



#### Product description

The Kübler Miniature Wire Giver A50 is designed for simpler applications with lower speeds. The housing can be combined with digital and analogue encoder. Maximum wire length is 1250mm.

Please refer to the images below for ordering information.

Order code with encoder (incremental, absolute)		D8.6A1	.XXXX	.XXXX	.XXXX	Standard variants are represented <b><u>bold underlined&gt;</u></b>	
		Type	a	b	c	d	e
<b>a</b> Measuring range	<b>b</b> Encoder used					<b>c</b> Output circuit	<i>Optional on request</i>
0025 = 250 mm	36 = Sendix 3610, incremental					depends on the encoder used	- Other measuring ranges
0050 = 500 mm	<b>M3 = Sendix M3663, absolute, SSI</b>						- Eyelet or M4 wire fastening instead of wire clip
0125 = 1250 mm	F3 = Sendix F3663, absolute, SSI						- Modified cable and/or connector orientation
	<b>M8 = Sendix M3668, absolute, CANopen</b>						- Modified cable outlet direction
	F8 = Sendix F3668, absolute, CANopen						- Sensor protection level IP67
						<b>d</b> Type of connection	- Improved linearity (0.02 %)
						depends on the encoder used	
						<b>e</b> Resolution / Protocol / Options	
						depends on the encoder used	
<b>Standard resolutions for draw wire with incremental encoder Sendix 3610</b>				<b>Standard resolutions for draw wire with absolute encoder Sendix F3663/M3663 (12 bit ST) or F3668/M3668 (12 bit ST, programmable via bus)</b>			
Drum circumference [mm]	125	125	125	Drum circumference [mm]	125		
Pulses / revolution [ppr]	125	1250	2500	Pulses / revolution [ppr]	4096		
Pulses / mm	1	10	20	Pulses / mm	32.8		
Resolution [mm]	1	0.1	0.05	Resolution [mm]	0.03		

**Order code with encoder  
(analog, scalable with limit switch function)**

**D8.6A1** . **XXXX** . **M1XX** . **XXXX**  
 Type            **a**            **b** **c** **d**            **e**

Standard variants are represented **bold underlined**

**a Measuring range**  
 0025 = 250 mm  
 0050 = 500 mm  
 0125 = 1250 mm

**b Encoder used**  
**M1 = Sendix M3661, absolute <sup>1)</sup>**

**c Output circuit**  
 depends on the encoder used

**d Type of connection**  
 depends on the encoder used

**e Resolution / Protocol / Options**  
 depends on the encoder used

**Optional on request**

- Other measuring ranges
- Eyelet or M4 wire fastening instead of wire clip
- Modified cable and/or connector orientation
- Modified cable outlet direction
- Sensor protection level IP67
- Improved linearity (0.02 %)

**Recommended standard variants (with analog encoder, scalable with limit switch function)**

Order no. draw wire encoder	Mounted encoder	Interface	Power supply	Type of connection	Resolution / Protocol	Option
D8.6A1.0000.M134.3612	Sendix M3661 (8.M3661.4134.3612)	Analog, 4 ... 20 mA	10 ... 30 V DC	M12-Stecker radial	12 Bit / 4 ... 20 mA	scalable without limit switch function <sup>2)</sup>
D8.6A1.0000.M144.4612	Sendix M3661 (8.M3661.4144.4612)	Analog, 0 ... 10 V	15 ... 30 V DC	M12-Stecker radial	12 Bit / 0 ... 10 V	scalable without limit switch function <sup>2)</sup>
D8.6A1.0000.M134.3512	Sendix M3661 (8.M3661.4134.3512)	Analog, 4 ... 20 mA	10 ... 30 V DC	M12-Stecker radial	12 Bit / 4 ... 20 mA	scalable with limit switch function <sup>3)</sup>
D8.6A1.0000.M144.4512	Sendix M3661 (8.M3661.4144.4512)	Analog, 0 ... 10 V	15 ... 30 V DC	M12-Stecker radial	12 Bit / 0 ... 10 V	scalable with limit switch function <sup>3)</sup>

**Order code with analog sensor  
(scaled to measuring range)**

**D8.3A1** . **XXXX** . **XXX X** . **0000**  
 Type            **a**            **b** **c**

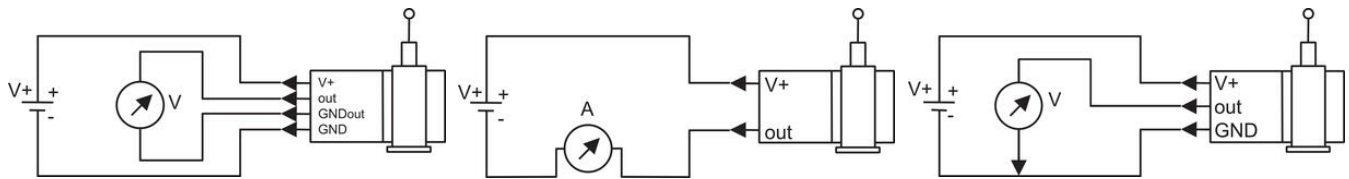
**a Measuring range**  
 0025 = 250 mm  
 0050 = 500 mm  
 0125 = 1250 mm

**b Analog sensor output / power supply**  
 A11 = 4 ... 20 mA / 12 ... 30 V DC  
 A22 = 0 ... 10 V / 12 ... 30 V DC  
 A33 = potentiometer 1 kΩ / max. 30 V DC

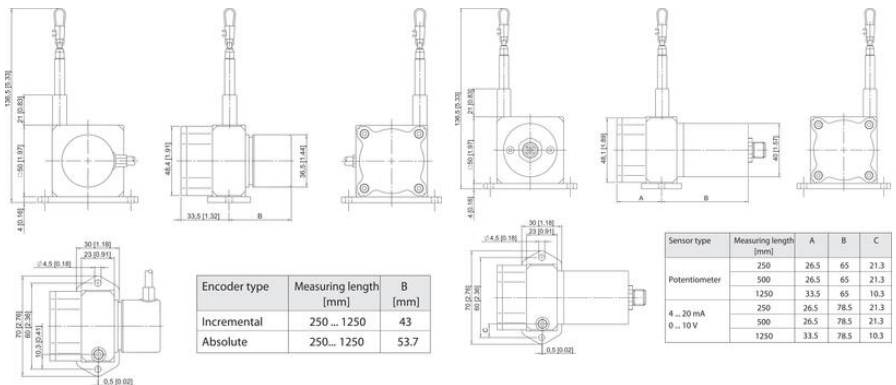
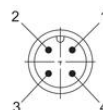
**c Type of connection**  
 1 = axial cable, 2 m PVC  
 3 = axial M12 connector, 4-pin

**Optional on request**

- Other measuring ranges
- Eyelet or M4 wire fastening instead of wire clip
- Modified cable and/or connector orientation
- Modified cable outlet direction
- Sensor protection level IP67
- Improved linearity (0.02 %)
- Increased temperature range -40°C ... +85°C and -20°C ... +120°C



Pin	1	2	3	4
Cable colour	brown	white	blue	black
0 ... 10V	V+	Signal	GND	GND Sig.
4 ... 20 mA	V+	n. c.	Signal	n. c.
1 kΩhm	V+	Slider	GND	n. c.



Encoder type	Measuring length [mm]	B [mm]
Incremental	250 ... 1250	43
Absolute	250... 1250	53.7

Sensor type	Measuring length [mm]	A	B	C
Potentiometer	250	26.5	65	21.3
	500	26.5	65	21.3
	1250	33.5	65	10.3
4 ... 20 mA 0 ... 10 V	250	26.5	78.5	21.3
	500	26.5	78.5	21.3
	1250	33.5	78.5	10.3