

D135 ENKODER LINKOWY

Przetwornik ciągnowy / mechanizm linkowy z enkoderem

SERIE D8.4D1

- Max. zakres pomiarowy: 40 m
- Zakres temperatur: -20° do +85°C
- Aluminiowa obudowa 135 x 135 mm
- Prędkość przemieszczenia max. 10 m/s
- Łatwa instalacja



OPIS PRODUKTU

Enkodery linkowe używa się w aplikacjach, gdzie istnieje potrzeba pomiaru ruchu liniowego. Wystarczy zamocować linkę aktywatora na ruchomej części, a linka i mechanizm spowodują ruch obrotowy enkodera. Stałe napięcie linki jest wymuszone wewnętrzną sprężyną zwijającą. Obudowa enkodera zbudowana jest z anodowanego aluminium pokrytego tytanem. Enkoder linkowy składa się z bębna obracającego się na łożyskach, połączonego z mechanizmem zwijającym.

Wszystkie modele dostępne są z zabudowanymi enkoderami z wyjściem inkrementalnym, analogowym, rezystancyjnym, natomiast modele B80, C120 i D135 dodatkowo z enkoderami z wyjściem absolutnym lub sieciowym. Zakres pomiarowy enkoderów linkowych wynosi od 25 cm do 40 m, w zależności od modelu.

Enkodery te charakteryzują się:

- wysoką żywotnością około 2 milionów kompletnych cykli
- bardzo wysoką odpornością na wibracje
- szerokim zakresem temperatury pracy
- dużą szybkością
- dużym przyspieszeniem

W celu określenia numeru katalogowego proszę o zapoznanie się z poniższymi informacjami.

Order code with encoder (incremental, absolute)	D8.4D1	. XXXX	. XX XX	. XXXX	Standard variants are represented bold underlined>
	Type	a	b c d	e	

a *Measuring range*

0800 = 8 000 mm
 1000 = 10 000 mm
 1200 = 12 000 mm
 1500 = 15 000 mm
 2000 = 20 000 mm
 2500 = 25 000 mm
 3000 = 30 000 mm
 3500 = 35 000 mm
 4000 = 40 000 mm
 4250 = 42 500 mm

b *Encoder used*

00 = **Sendix 5000, incremental**
M3 = **Sendix M5863, absolute**
 F3 = Sendix F5863, absolute
 63 = Sendix 5863, absolute
M8 = **Sendix M5868, absolute**
 F8 = Sendix F5868 absolute
 68 = Sendix 5868, absolute

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
- Cable diameter 1 mm
- 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 %)

Standard resolutions for draw wire with incremental encoder Sendix 5000

Drum circumference [mm]	333.33	333.33	333.33
Pulses / revolution [ppr]	1000	2000	4000
Pulses / mm	3	6	12
Resolution [mm]	0.33	0.17	0.08

Standard resolutions for draw wire with absolute encoder Sendix M5863 (12 bit ST) or M5868 (12 bit ST, programmable via bus)

Drum circumference [mm]	333.33
Pulses / revolution [ppr]	4096
Pulses / mm	12.3
Resolution [mm]	0.08

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

D8.4D1 . XXXX . M1XX . XXXX
Type **a** **b** **c** **d** **e**

Standard variants are represented **bold underlined**

a *Measuring range*
0800 = 8 000 mm
1000 = 10 000 mm
1200 = 12 000 mm
1500 = 15 000 mm
2000 = 20 000 mm
2500 = 25 000 mm
3000 = 30 000 mm
3500 = 35 000 mm
4000 = 40 000 mm
4250 = 42 500 mm

b *Encoder used*
M1 = Sendix M5861, absolute ¹⁾

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
- Cable diameter 1 mm
- Eyelet or M4 wire fastening instead of wire clip
- Modified cable and/or connector orientation
- Modified cable outlet direction
- Sensor protection level IP67

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

Order no. draw wire encoder	Mounted encoder	Interface	Power supply	Type of connection	Resolution / Protocol	Option
D8.xD1.xxxx.M134.3512	Sendix M5861 (8.M5861.3534.3512)	Analog, 4 ... 20 mA	10 ... 30 V DC	radial M12 connector	12 Bit / 4 ... 20 mA	scalable with limit switch function ²⁾
D8.xD1.xxxx.M144.4512	Sendix M5861 (8.M5861.3544.4512)	Analog, 0 ... 10 V	15 ... 30 V DC	radial M12 connector	12 Bit / 0 ... 10 V	scalable with limit switch function ²⁾
D8.xD1.xxxx.M134.3612	Sendix M5861 (8.M5861.3534.3612)	Analog, 4 ... 20 mA	10 ... 30 V DC	radial M12 connector	12 Bit / 4 ... 20 mA	scalable without limit switch function ²⁾
D8.xD1.xxxx.M144.4612	Sendix M5861 (8.M5861.3544.4612)	Analog, 0 ... 10 V	15 ... 30 V DC	radial M12 connector	12 Bit / 0 ... 10 V	scalable without limit switch function ²⁾

Order code with analog sensor (scaled to measuring range)

D8.3D1 . XXXX . XXX X . 0000
Type **a** **b** **c** **0000**

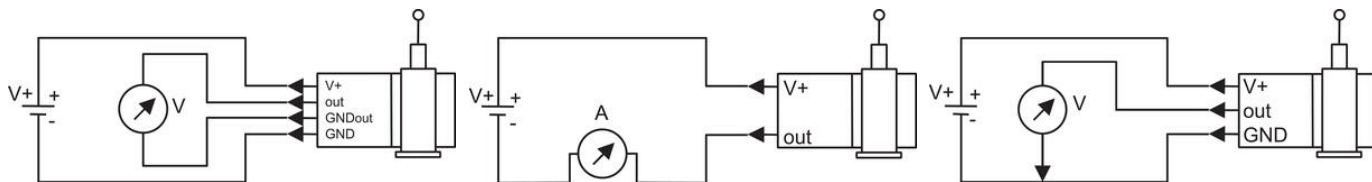
a *Measuring range*
0800 = 8 000 mm
1000 = 10 000 mm
1500 = 15 000 mm
2000 = 20 000 mm
2500 = 25 000 mm
3000 = 30 000 mm
3500 = 35 000 mm
4000 = 40 000 mm

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

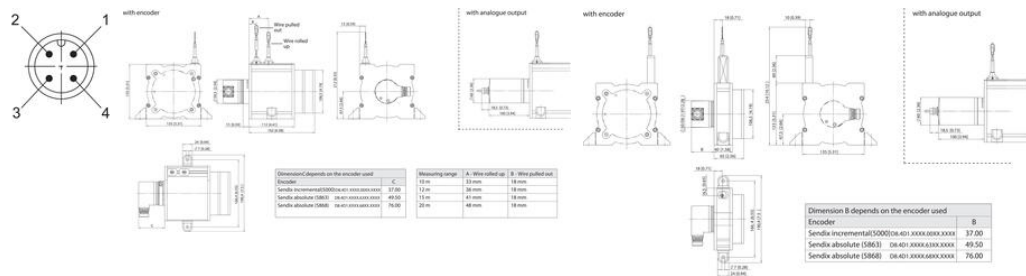
c *Type of connection*
1 = axial cable, 2 m [6.56'] PVC
3 = axial M12 connector, 4-pin

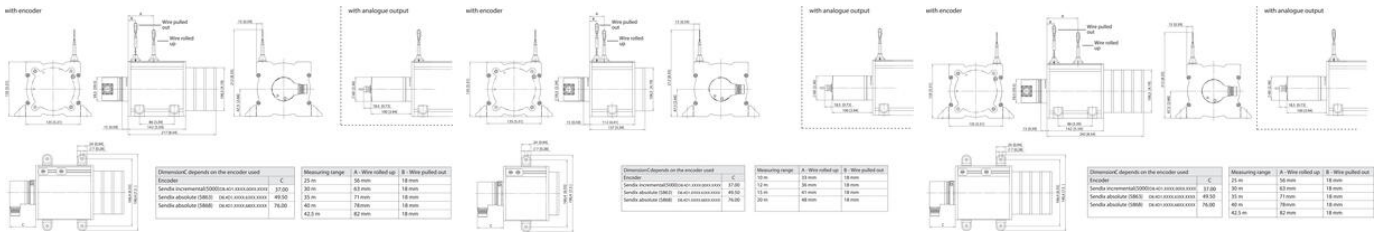
Optional on request

- Other measuring ranges
- Cable diameter 1 mm
- 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 kOhm	V+	Slider	GND	n. c.





Dimension C depends on the encoder used	
Encoder	C
Sendix incremental (S500) (0x-011-XXXX-XXXX-XXXX)	37.00
Sendix absolute (S563) (0x-011-XXXX-XXXX-XXXX)	49.50
Sendix absolute (S566) (0x-011-XXXX-XXXX-XXXX)	76.00

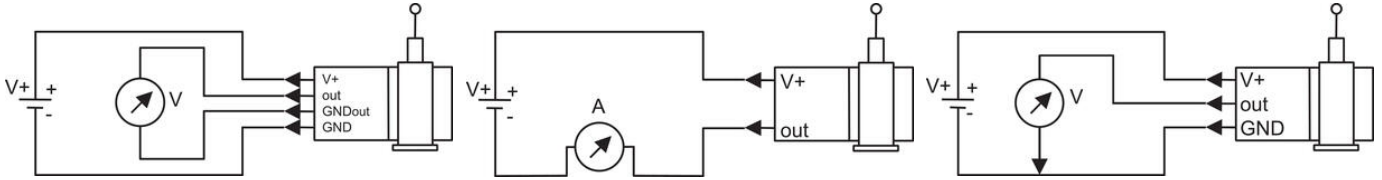
Measuring range		
A: Wire rolled up	B: Wire pulled out	
10 mm	18 mm	
20 mm	18 mm	
30 mm	18 mm	
40 mm	18 mm	
62.5 mm	18 mm	

Dimension A depends on the encoder used	
Encoder	A
Sendix incremental (S500) (0x-011-XXXX-XXXX-XXXX)	37.00
Sendix absolute (S563) (0x-011-XXXX-XXXX-XXXX)	49.50
Sendix absolute (S566) (0x-011-XXXX-XXXX-XXXX)	76.00

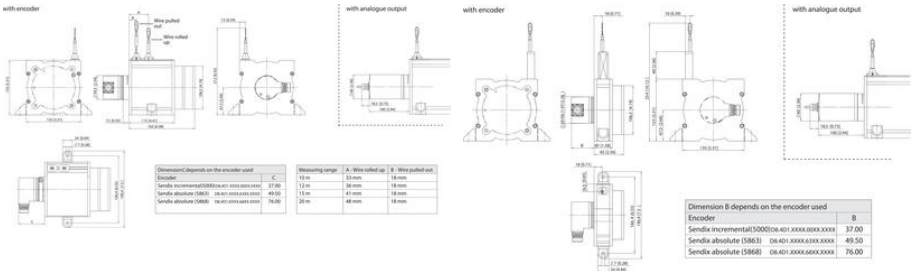
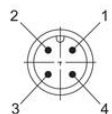
Measuring range		
A: Wire rolled up	B: Wire pulled out	
10 mm	18 mm	
20 mm	18 mm	
30 mm	18 mm	
40 mm	18 mm	
62.5 mm	18 mm	

Dimension B depends on the encoder used	
Encoder	B
Sendix incremental (S500) (0x-011-XXXX-XXXX-XXXX)	37.00
Sendix absolute (S563) (0x-011-XXXX-XXXX-XXXX)	49.50
Sendix absolute (S566) (0x-011-XXXX-XXXX-XXXX)	76.00

Measuring range		
A: Wire rolled up	B: Wire pulled out	
25 mm	18 mm	
30 mm	18 mm	
35 mm	18 mm	
40 mm	18 mm	
42.5 mm	18 mm	



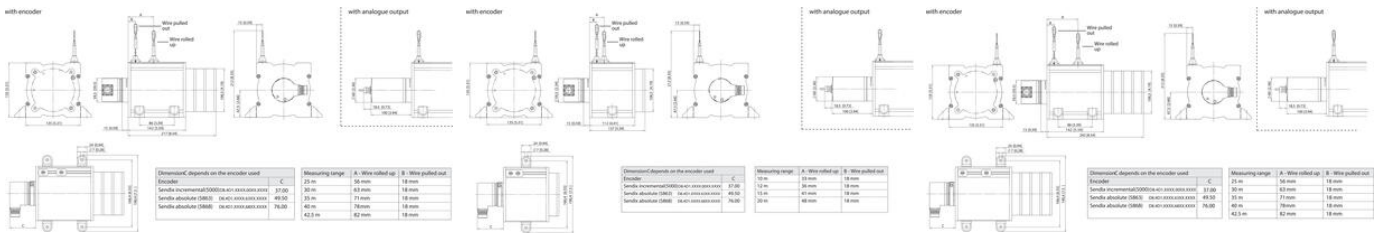
Pin	1	2	3	4
Cable colour	brown	white	blue	black
0...10V	V+	Signal	GND	GND Sig.
4...20 mA	V+	n. c.	Signal	n. c.
1kOhm	V+	Slider	GND	n. c.



Dimension C depends on the encoder used	
Encoder	C
Sendix incremental (S500) (0x-011-XXXX-XXXX-XXXX)	37.00
Sendix absolute (S563) (0x-011-XXXX-XXXX-XXXX)	49.50
Sendix absolute (S566) (0x-011-XXXX-XXXX-XXXX)	76.00

Measuring range		
A: Wire rolled up	B: Wire pulled out	
10 mm	18 mm	
20 mm	18 mm	
30 mm	18 mm	
40 mm	18 mm	
62.5 mm	18 mm	

Dimension B depends on the encoder used	
Encoder	B
Sendix incremental (S500) (0x-011-XXXX-XXXX-XXXX)	37.00
Sendix absolute (S563) (0x-011-XXXX-XXXX-XXXX)	49.50
Sendix absolute (S566) (0x-011-XXXX-XXXX-XXXX)	76.00



Dimension C depends on the encoder used	
Encoder	C
Sendix incremental (S500) (0x-011-XXXX-XXXX-XXXX)	37.00
Sendix absolute (S563) (0x-011-XXXX-XXXX-XXXX)	49.50
Sendix absolute (S566) (0x-011-XXXX-XXXX-XXXX)	76.00

Measuring range		
A: Wire rolled up	B: Wire pulled out	
10 mm	18 mm	
20 mm	18 mm	
30 mm	18 mm	
40 mm	18 mm	
62.5 mm	18 mm	

Dimension A depends on the encoder used	
Encoder	A
Sendix incremental (S500) (0x-011-XXXX-XXXX-XXXX)	37.00
Sendix absolute (S563) (0x-011-XXXX-XXXX-XXXX)	49.50
Sendix absolute (S566) (0x-011-XXXX-XXXX-XXXX)	76.00

Measuring range		
A: Wire rolled up	B: Wire pulled out	
10 mm	18 mm	
20 mm	18 mm	
30 mm	18 mm	
40 mm	18 mm	
62.5 mm	18 mm	

Dimension B depends on the encoder used	
Encoder	B
Sendix incremental (S500) (0x-011-XXXX-XXXX-XXXX)	37.00
Sendix absolute (S563) (0x-011-XXXX-XXXX-XXXX)	49.50
Sendix absolute (S566) (0x-011-XXXX-XXXX-XXXX)	76.00

Measuring range		
A: Wire rolled up	B: Wire pulled out	
25 mm	18 mm	
30 mm	18 mm	
35 mm	18 mm	
40 mm	18 mm	
42.5 mm	18 mm	