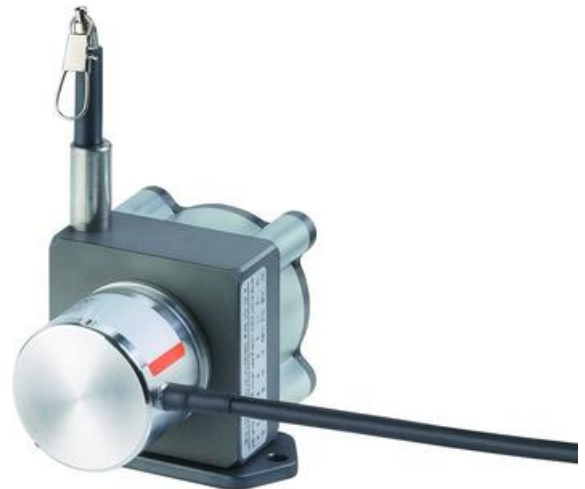


## A50 ENKODER LINKOWY

Przetwornik ciągnowy / mechanizm linkowy z enkoderem

SERIE D8.3A1

- Max. zakres pomiarowy: 1,25 m
- Zakres temperatur: -20° do +85 °C
- Aluminiowa obudowa 50 x 50 mm
- Prędkość przemieszczenia max. 10m/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

#### Dane techniczne

|                                         |                |
|-----------------------------------------|----------------|
| Model                                   | A50            |
| Zakres pomiarowy                        | 0,25 - 1,25 m  |
| Prędkość max. (m/s)                     | 10             |
| Przyspieszenie max. (m/s <sup>2</sup> ) | 100            |
| Wymiary obudowy (mm)                    | 50x50          |
| Montaż                                  | 2 śruby        |
| Liniowość                               | 0,05%          |
| Temperatura pracy, max.                 | -20°C do +85°C |

### KOD ZAMÓWIENIA

D8.6A1. XXXX. XX X X .XXXX

XXXX - zakres pomiarowy  
0025 - 250mm  
0050 - 500mm  
0125 - 1250mm  
Inne zakresy na zapytanie.

XX - użyty enkoder  
36 - enkoder 3610

X - wyjście  
4 - Push-pull z sygnałami zanegowanymi, napięcie zasilania 8 - 30 V DC

X - typ połączenia  
1 - kabel w osi (2m PVC)  
2 - kabel z boku (2m PVC)

XXXX - rozdzielczość  
np. 0500 - 500 imp/obr

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

| Order code with encoder<br>(incremental, absolute)                           |                                                                                                                                                                                                                              | D8.6A1 . XXXX . XX XX . XXXX |      |                                                                                                                                          |                                                        |                                                            | Standard variants are represented <b><u>bold underlined</u></b>                                                                                                                                                                                                       |
|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                              |                                                                                                                                                                                                                              | Type                         | a    | b                                                                                                                                        | c                                                      | d                                                          |                                                                                                                                                                                                                                                                       |
| <b>a</b> Measuring range<br>0025 = 250 mm<br>0050 = 500 mm<br>0125 = 1250 mm | <b>b</b> Encoder used<br>36 = Sendix 3610, incremental<br><b>M3 = Sendix M3663, absolute, SSI</b><br>F3 = Sendix F3663, absolute, SSI<br><b>M8 = Sendix M3668, absolute, CANopen</b><br>F8 = Sendix F3668, absolute, CANopen |                              |      |                                                                                                                                          | <b>c</b> Output circuit<br>depends on the encoder used | <b>d</b> Type of connection<br>depends on the encoder used | <b>e</b> Resolution / Protocol / Options<br>depends on the encoder used                                                                                                                                                                                               |
|                                                                              |                                                                                                                                                                                                                              |                              |      |                                                                                                                                          |                                                        |                                                            | <b>Optional on request</b><br>- Other measuring ranges<br>- Eyelet or M4 wire fastening instead of wire clip<br>- Modified cable and/or connector orientation<br>- Modified cable outlet direction<br>- Sensor protection level IP67<br>- Improved linearity (0.02 %) |
| Standard resolutions for draw wire with incremental encoder Sendix 3610      |                                                                                                                                                                                                                              |                              |      | Standard resolutions for draw wire with absolute encoder Sendix F3663/M3663 (12 bit ST) or F3668/M3668 (12 bit ST, programmable via bus) |                                                        |                                                            |                                                                                                                                                                                                                                                                       |
| 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<br>(analog, scalable with limit switch function)                 |                                                                           | D8.6A1 . XXXX . M1 XX . XXXX |                |                    |                                                        |                                                            | Standard variants are represented <b><u>bold underlined</u></b>                                                                                                                                                                                                       |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|------------------------------|----------------|--------------------|--------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                          |                                                                           | Type                         | a              | b                  | c                                                      | d                                                          |                                                                                                                                                                                                                                                                       |
| <b>a</b> Measuring range<br>0025 = 250 mm<br>0050 = 500 mm<br>0125 = 1250 mm             | <b>b</b> Encoder used<br><b>M1 = Sendix M3661, absolute <sup>1)</sup></b> |                              |                |                    | <b>c</b> Output circuit<br>depends on the encoder used | <b>d</b> Type of connection<br>depends on the encoder used | <b>e</b> Resolution / Protocol / Options<br>depends on the encoder used                                                                                                                                                                                               |
|                                                                                          |                                                                           |                              |                |                    |                                                        |                                                            | <b>Optional on request</b><br>- Other measuring ranges<br>- Eyelet or M4 wire fastening instead of wire clip<br>- Modified cable and/or connector orientation<br>- Modified cable outlet direction<br>- Sensor protection level IP67<br>- Improved linearity (0.02 %) |
| Recommended standard variants (with analog encoder, scalable with limit switch function) |                                                                           |                              |                |                    |                                                        |                                                            |                                                                                                                                                                                                                                                                       |
| Order no.<br>draw wire encoder                                                           | Mounted encoder                                                           | Interface                    | Power supply   | Type of connection | Resolution / Protocol                                  | Option                                                     |                                                                                                                                                                                                                                                                       |
| D8.6A1.xxxx.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.xxxx.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.xxxx.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>2)</sup>          |                                                                                                                                                                                                                                                                       |
| D8.6A1.xxxx.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>2)</sup>          |                                                                                                                                                                                                                                                                       |

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

D8.3A1 . XXXX . XXX X . 0000

## a Measuring range

0025 = 250 mm  
0050 = 500 mm  
0125 = 1250 mm

## b Analog sensor output / power supply

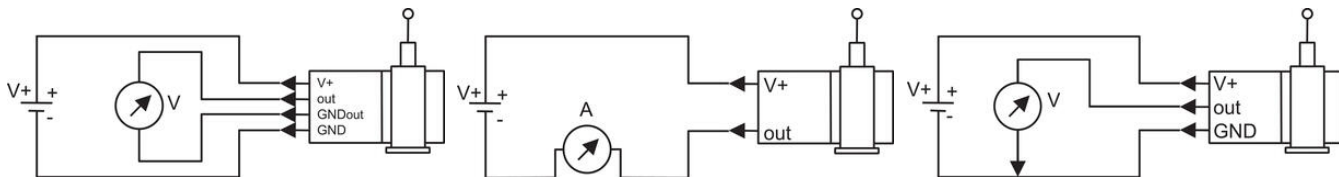
A11 = 4 ... 20 mA / 12 ... 30 V DC  
A22 = 0 ... 10 V / 12 ... 30 V DC  
A33 = potentiometer 1 kΩ / max. 30 V DC

## c Type of connection

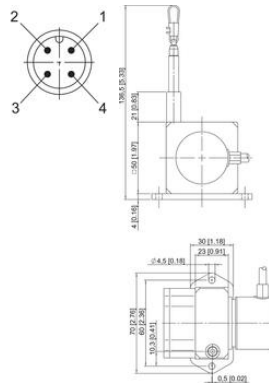
1 = axial cable, 2 m PVC  
3 = axial M12 connector, 4-pin

## 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

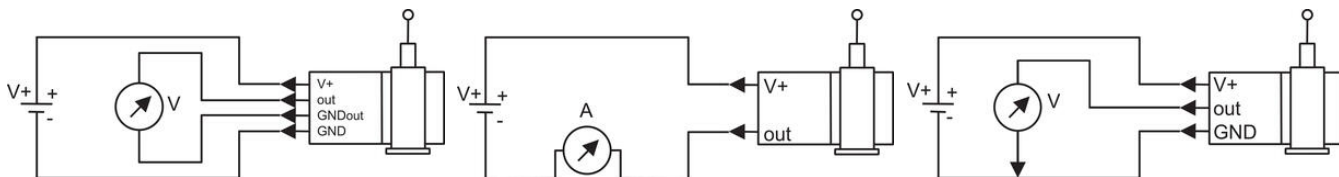


| Pin          | 1     | 2      | 3      | 4        |
|--------------|-------|--------|--------|----------|
| Cable colour | brown | white  | blue   | black    |
| 0 ... 10V    | V+    | Signal | GND    | GND Sig. |
| 4 ... 20 mA  | V+    | n.c.   | Signal | n.c.     |
| 1 kΩhm       | V+    | Slider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

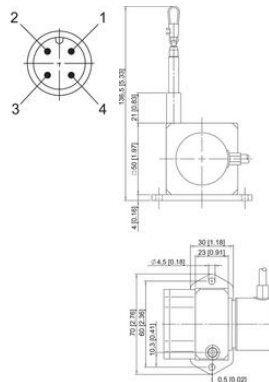


| Encoder type | Measuring length [mm] | B [mm] |
|--------------|-----------------------|--------|
| Incremental  | 250 ... 1250          | 43     |
| Absolute     | 250 ... 1250          | 53.7   |

| 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<br>0 ... 10 V | 250                   | 26.5 | 78.5 | 21.3 |
|                           | 500                   | 26.5 | 78.5 | 21.3 |
|                           | 1250                  | 33.5 | 78.5 | 10.3 |



| 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<br>0 ... 10 V | 250                   | 26.5 | 78.5 | 21.3 |
|                           | 500                   | 26.5 | 78.5 | 21.3 |
|                           | 1250                  | 33.5 | 78.5 | 10.3 |