

# Linear Measuring Technology

**Draw wire mechanics  
with absolute encoder**

**Draw wire encoder A41**

**Measuring length max. 2 m  
Traverse speed max. 1 m/s**



The draw wire mechanics A41 with absolute encoder excels with its compact construction.

These draw wire mechanics can be equipped with multiturn encoders of the F366x series. The maximum measuring length is 2 metres.



## Compact and simple

- Measuring length up to 2000 mm
- For applications with low traverse speeds
- Easy mounting

## Order code with encoder

**D5.55 02 . XX XX . XXXX**  
Type      a      b      c      d      e

**a** Measuring range  
02 = 2000 mm

**b** Encoder used  
F3 = Sendix absolute F3663, SSI  
F8 = Sendix absolute F3668, CANopen

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

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

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

### Standard resolutions for draw wire with absolute encoder Sendix F3663 or F3668 CANopen, drum circumference 100 mm

| Absolute encoder    | F3663         | F3668 CANopen                           |
|---------------------|---------------|-----------------------------------------|
| Pulses / revolution | 4096 / 12 bit | 4096, programmable via the bus / 12 bit |
| Pulses / mm         | 41            | 41                                      |
| Resolution (mm)     | ~ 0.02        | ~ 0.02                                  |

### Recommended standard devices

| Order No.<br>draw wire encoder | Mounted encoder                  | Interface | Power<br>supply | Type of connection   | Resolution / Protocol           |
|--------------------------------|----------------------------------|-----------|-----------------|----------------------|---------------------------------|
| <b>D5.5502.F321.G222</b>       | Sendix F3663 (8.F3663.4121.G222) | SSI       | 10...30 V DC    | cable tangential 1 m | 4096 steps/rev. / SSI Gray code |
| <b>D5.5502.F821.2122</b>       | Sendix F3668 (8.F3668.4121.2122) | CANopen   | 10...30 V DC    | cable tangential 1 m | CANopen Encoderprofil V3.2      |

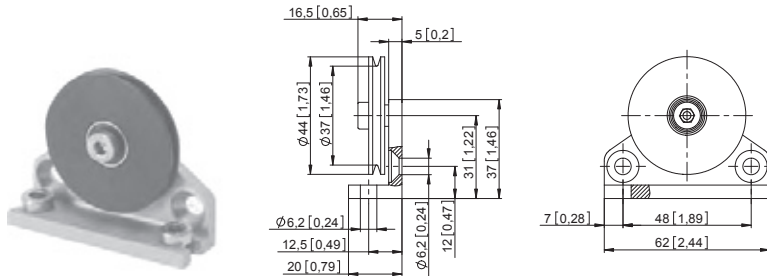
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## Guide pulley for draw wire encoder

Order No.

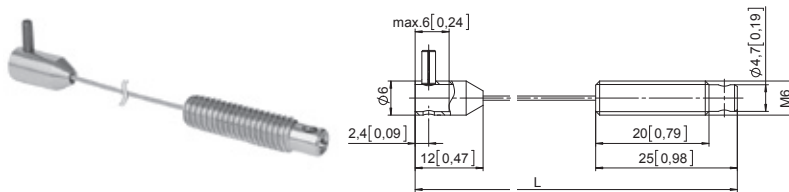


Order code for the set:

- Guide pulley (anodised aluminium)
- 2 x countersunk screws  
for lateral fixing
- 2 x hexagonal screws  
for fixing on a flat surface

8.0000.7000.0045

### Extension cable



Steel wire 2 m [6.56']  
Steel wire 5 m [16.40']  
Steel wire 10 m [32.81']  
Paraleine 2 m [6.56']

**8.0000.7000.0033**

8.0000.7000.0034

**8.0000.7000.0035**

**8.0000.7000.0032**

## Technical data

### Mechanical characteristics (draw wire mechanics)

|                            |                                           |                           |
|----------------------------|-------------------------------------------|---------------------------|
| <b>Measuring range</b>     | up to 2000 mm                             |                           |
| <b>Traversing speed</b>    | max. 1000 mm/s                            |                           |
| <b>Working temperature</b> | -10°C ... +80°C [+14°F ... +176°F]        |                           |
| <b>Weight</b>              | ca. 200 g [7.06 oz]                       |                           |
| <b>Required force</b>      | ≥ 2 N (on wire)                           |                           |
| <b>Linearity</b>           | ± 0.35 %<br>for the whole measuring range |                           |
| <b>Repetition accuracy</b> | ± 0.15 mm per direction of travel         |                           |
| <b>Material</b>            | housing                                   | zinc die cast             |
|                            | wire                                      | stainless steel ø 0.45 mm |

### Electrical characteristics (encoder)

The electrical characteristics can be found in the data sheets of the encoders.

## Dimensions

Dimensions in mm [inch]

