

Linear measuring technology

Draw wire mechanics with absolute encoder	Draw wire encoder A41	Measuring length max. 2 m Traverse speed max. 1 m/s
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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 meters.



Analog output



Compact and simple

- Measuring length up to 2000 mm.
- Scalable analog output with limit switch function.
- For applications with low traverse speeds.
- Easy mounting.
- Robust design.

Order code with encoder (absolute)

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

Standard variants are represented **bold underlined**

- | | | | |
|---|---|---|--|
| <p>a <i>Measuring range</i>
02 = 2000 mm</p> | <p>b <i>Encoder used</i>
M3 = Sendix M3663, absolute, SSI
F3 = Sendix F3663, absolute, SSI
M8 = Sendix M3668, absolute, CANopen
F8 = Sendix F3668, absolute, CANopen</p> | <p>c <i>Output circuit</i>
depends on the encoder used</p> | <p>e <i>Resolution / Protocol / Options</i>
depends on the encoder used</p> |
| | | <p>d <i>Type of connection</i>
depends on the encoder used</p> | |

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]	100
Pulses / revolution [ppr]	4096
Pulses / mm	41
Resolution [mm]	0.02

Recommended standard variants (with absolute encoder)

Order no. draw wire encoder	Mounted encoder	Interface	Power supply	Type of connection	Resolution / Protocol	Option
D5.5502.M324.G222	Sendix M3663 (8.M3663.4124.G222)	SSI	10 ... 30 V DC	radial M12 connector	4096 ppr / SSI-Gray-Code	-
D5.5502.M824.2122	Sendix M3668 (8.M3668.4124.2122)	CANopen	10 ... 30 V DC	radial M12 connector	CANopen encoder profile DS406 V4.0	-
D5.5502.F321.G222	Sendix F3663 (8.F3663.4121.G222)	SSI	10 ... 30 V DC	tangential cable, 1 m	4096 ppr / SSI-Gray-Code	-
D5.5502.F821.2122	Sendix F3668 (8.F3668.4121.2122)	CANopen	10 ... 30 V DC	tangential cable, 1 m	CANopen encoder profile DS406 V3.2	-

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**Draw wire mechanics
with absolute encoder**

Draw wire encoder A41

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

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

D5.55 | **02** | **M1** | **XX** | **XXXX**
Type | a | b | c | d | e

Standard variants are represented
bold underlined

a *Measuring range*
02 = 2000 mm

b *Encoder used*
M1 = Sendix M3661, absolute, analog

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

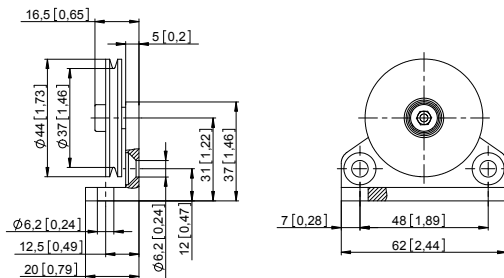
Recommended standard variants (with encoder analog, scalable with limit switch function)

Order no. draw wire encoder	Mounted encoder	Interface	Power supply	Type of connection	Resolution / Protocol	Option
D5.5502.M134.3312	Sendix M3661 (8.M3661.4134.3312)	Analog, 4 ... 20 mA	10 ... 30 V DC	radial M12 connector	12 Bit / 4 ... 20 mA	scalable with limit switch function ¹⁾
D5.5502.M144.4312	Sendix M3661 (8.M3661.4144.4312)	Analog, 0 ... 10 V	15 ... 30 V DC	radial M12 connector	12 Bit / 0 ... 10 V	scalable with limit switch function ¹⁾
D5.5502.M134.3412	Sendix M3661 (8.M3661.4134.3412)	Analog, 4 ... 20 mA	10 ... 30 V DC	radial M12 connector	12 Bit / 4 ... 20 mA	scalable without limit switch function ¹⁾
D5.5502.M144.4412	Sendix M3661 (8.M3661.4144.4412)	Analog, 0 ... 10 V	15 ... 30 V DC	radial M12 connector	12 Bit / 0 ... 10 V	scalable without limit switch function ¹⁾

Guide pulley for draw wire encoder

Order no.

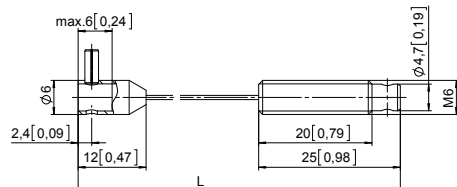
Guide pulley



Order code for the set:
- Guide pulley (anodized aluminum)
- 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)

Measuring range	up to 2000 mm
Traversing speed	max. 1000 mm/s
Working temperature	-10°C ... +80°C [+14°F ... +176°F]
Weight	approx. 200 g [7.06 oz]
Required force	≥ 2 N (on wire)
Linearity	±0.35 % for the whole measuring range
Repetition accuracy	±0.15 mm per direction of travel
Material	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.

¹⁾ Delivery condition: unscaled.
Description for scaling and limit switch function see data sheet M3661.

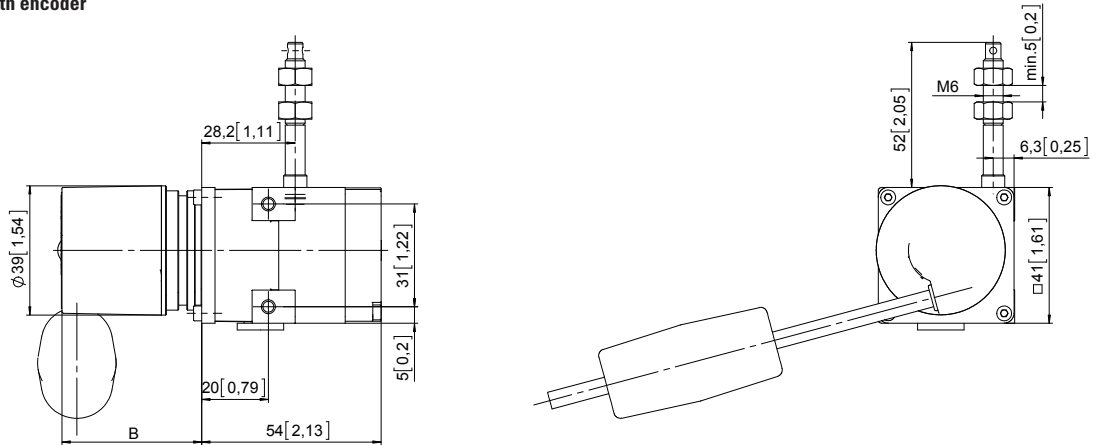
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Dimensions

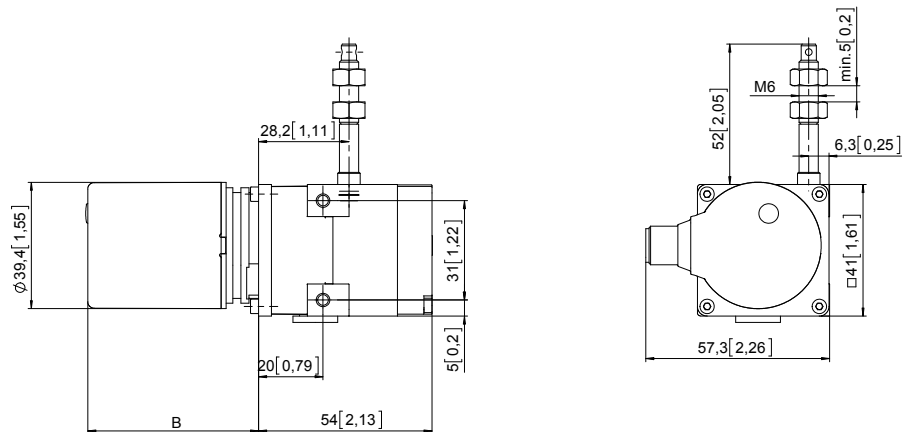
Dimensions in mm [inch]

Draw wire mechanics with encoder (tangential cable)



Dimension B depends on the encoder used	
Encoder	B
Sendix absolute (M366x) D5.5502.Mxxx.xxxx	50.25 [1.98]
Sendix absolute (F366x) D5.5502.Fxxx.xxxx	39.70 [1.56]

Draw wire mechanics with encoder (M12 connector)



Dimension B depends on the encoder used	
Encoder	B
Sendix absolute (F3663, SSI) D5.5502.Fxxx.xxxx	42,20 [1.66]
Sendix absolute (F3668, CANopen) D5.5502.Fxxx.xxxx	42,20 [1.66]
Sendix absolute (M3661, analog) D5.5502.Mxxx.xxxx	53,25 [2.10]

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