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 meters.

RoHS Analog output SSI IBiSS INTERFACE CANopen SAE J1939

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	X	X	.	XXXX
Type	a		b	c	d		e

a *Measuring range*
02 = 2000 mm

b *Encoder used*
M3 = Sendix M3663, absolute, SSI
F3 = Sendix F3663, absolute, SSI
M8 = Sendix M3668, absolute, CANopen / SAE J1939
F8 = Sendix F3668, absolute, CANopen

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

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.M834.3222	Sendix M3668 (8.M3668.4134.3222)	SAE J1939	10 ... 30 V DC	radial M12 connector	SAE J1939	-
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	X	X	.	XXXX
Type	a		b	c	d		e

a *Measuring range*
02 = 2000 mm

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

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

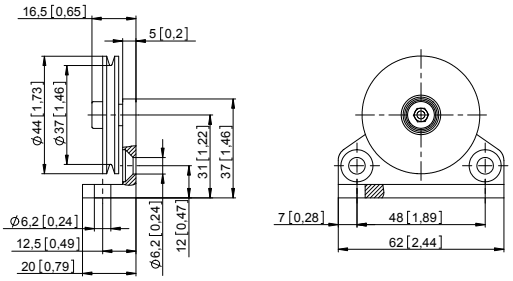
Order no. draw-wire encoder	Mounted encoder	Interface	Power supply	Type of connection	Resolution / Protocol	Option
D5.5502.M134.3512	Sendix M3661 (8.M3661.4134.3512)	Analog, 4 ... 20 mA	10 ... 30 V DC	radial M12 connector	12 Bit / 4 ... 20 mA	scalable with limit switch function [2]
D5.5502.M144.4512	Sendix M3661 (8.M3661.4144.4512)	Analog, 0 ... 10 V	15 ... 30 V DC	radial M12 connector	12 Bit / 0 ... 10 V	scalable with limit switch function [2]
D5.5502.M134.3612	Sendix M3661 (8.M3661.4134.3612)	Analog, 4 ... 20 mA	10 ... 30 V DC	radial M12 connector	12 Bit / 4 ... 20 mA	scalable without limit switch function [2]
D5.5502.M144.4612	Sendix M3661 (8.M3661.4144.4612)	Analog, 0 ... 10 V	15 ... 30 V DC	radial M12 connector	12 Bit / 0 ... 10 V	scalable without limit switch function [2]

Accessories for draw-wire encoder

Dimensions in mm [inch]

Order no.

Guide pulley

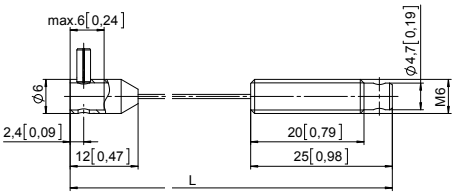


Technical data:
- mounting bracket (anodized alum.)
- guide pulley (plastic POM)
- ball bearing (type 696-2R5)

Scope of delivery:
- 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']	**8.0000.7000.0033**
Steel wire 5 m [16.40']	**8.0000.7000.0034**
Steel wire 10 m [32.81']	**8.0000.7000.0035**
Paraleine 2 m [6.56']	**8.0000.7000.0032**

Connection technology for analog sensor

Order no.

Cordset, pre-assembled	M12 female connector with coupling nut, 5-pin 2 m [6.56'] PVC cable	**05.00.6081.2211.002M**
Connector, self-assembly (straight)	M12 female connector with coupling nut, housing metal, 5-pin	**8.0000.5116.0000**
	M12 female connector with coupling nut, housing metal/plastic, 5-pin	**05.B-8151-0/9**
Connector, self-assembly (straight)	M12 female connector with coupling nut, housing plastic, 5-pin	**05.B-8251-0/9**

Additional connectors can be found in the connection technology section or in the connection technology area of our website at: www.kuebler.com/connection_technology..

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

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Traverse speed max. 1 m/s

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 wire	zinc die-cast stainless steel ø 0.45 mm

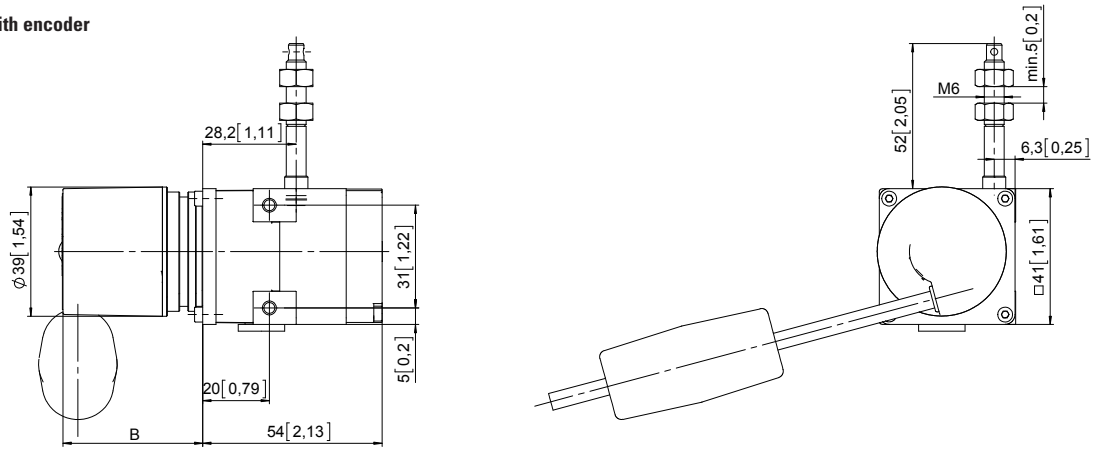
Electrical characteristics (encoder)

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

Dimensions

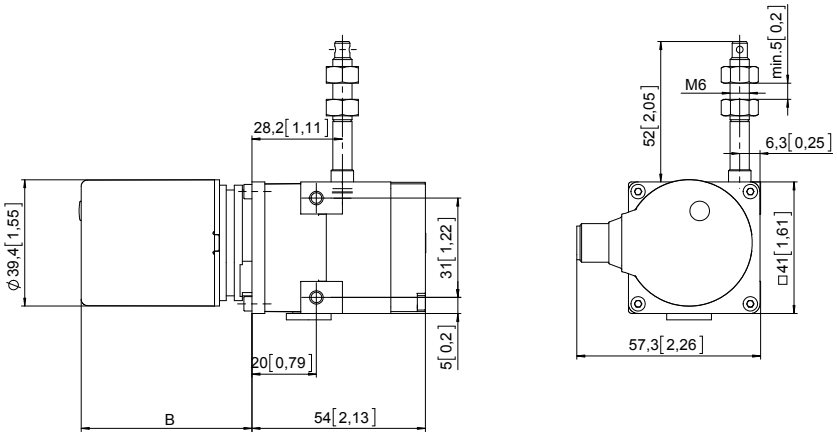
Dimensions in mm [inch]

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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