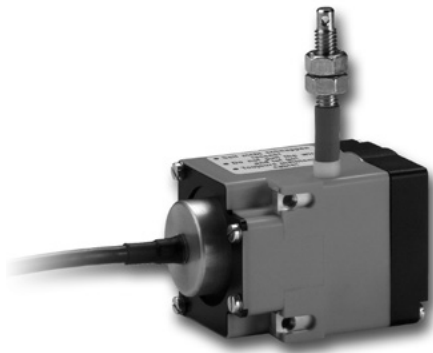


Linear measuring technology

Draw wire mechanics with incremental encoder	Draw wire encoder A40	Measuring length max. 2 m Traverse speed max. 0.8 m/s
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The draw wire system A40 with incremental encoder excels with its compact construction.



Compact and simple

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

Order code draw wire encoder	D5.2 <small>Type</small>	XXX <small>a</small>	. 24	XX <small>b</small>	. 1000		
a Steel wire, length		b Output circuit / power supply				<i>Stock types</i>	
501 = 1000 mm		21 = Push-pull with inverted signal / 5 ... 24 V DC				D5.2102.2421.1000	D5.2501.2421.1000
102 = 2000 mm		41 = Push-pull with inverted signal / 8 ... 30 V DC				D5.2102.2441.1000	D5.2501.2441.1000

Accessories for draw wire encoder	Dimensions in mm [inch]	Order no.
<p>Guide pulley</p>	<p>Technical data:</p> <ul style="list-style-type: none"> mounting bracket (anodized alum.) guide pulley (plastic POM) ball bearing (type 696-2R5) <p>Scope of delivery:</p> <ul style="list-style-type: none"> - 2 x countersunk screws for lateral fixing - 2 x hexagonal screws for fixing on a flat surface 	8.0000.7000.0045
<p>Extension cable</p>	<p>Steel wire 2 m [6.56']</p> <p>Steel wire 5 m [16.40']</p> <p>Steel wire 10 m [32.81']</p> <p>Paraleine 2 m [6.56']</p>	<p>8.0000.7000.0033</p> <p>8.0000.7000.0034</p> <p>8.0000.7000.0035</p> <p>8.0000.7000.0032</p>

Linear measuring technology

**Draw wire mechanics
with incremental encoder**

Draw wire encoder A40

**Measuring length max. 2 m
Traverse speed max. 0.8 m/s**

Technical data

Mechanical characteristics (draw wire mechanics)

Measuring range	up to 2000 mm
Absolute accuracy	±0.1 % for the whole measuring range
Repetition accuracy	±0.15 mm per direction of travel
Resolution (incremental)	0.1 mm standard encoder with 1000 ppr
Traversing speed	max. 800 mm/s
Required force	approx. 10 N (on wire)
Material	housing reinforced plastic wire stainless steel ø 0.45 mm
Weight	approx. 210 g [7.41 oz]

Electrical characteristics (encoder)

Output circuits	Push-pull	Push-pull
Power supply	5 ... 24 V DC	8 ... 30 V DC
Current consumption (no load)	max. 50 mA	max. 50 mA
Permissible load / channel	max. +/- 50 mA	max. +/- 50 mA
Pulse rate	max. 160 kHz	max. 160 kHz
Switching level	HIGH LOW	min. +V - 2.5 V max. 0.5 V
Rising edge time t_r	max. 1 µs	max. 1 µs
Falling edge time t_f	max. 1 µs	max. 1 µs
Short-circuit protected outputs	yes	yes
CE compliant acc. to	EMC guideline 2014/30/EU RoHS guideline 2011/65/EU	

Mechanical characteristics (encoder)

Protection acc. to EN 60529	IP54
Working temperature	-20°C ... +85°C [-4°F ... +185°F]
Shock resistance acc. to EN 60068-2-27	1000 m/s ² , 6 ms
Vibration resistance acc. to EN 60068-2-6	100 m/s ² , 55 ... 2000 Hz

Description of the incremental encoder (connected on load side)

- Compensation for temperature and ageing
- Short-circuit protected outputs
- Reverse polarity protected power supply input
- Push-pull output

Terminal assignment of the encoder

Signal	0 V	+V	A	\bar{A}	B	\bar{B}	0	$\bar{0}$
Cable color	WH	BN	GN	YE	GY	PK	BU	RD

Isolate unused outputs before initial start-up.

Dimensions

Dimensions in mm [inch]

1 2 x M4, max. screw-in depth 8 mm [0.32"]

