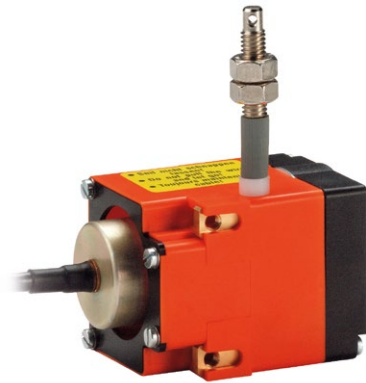


Linear measuring technology

Draw-wire encoder A40	Compact-Line	Measuring length max. 2 m
------------------------------	---------------------	----------------------------------



The draw wire system A40 with incremental encoder excels with its compact construction.



Wide temperature range	High protection level	Reverse polarity protection	Easy mounting	Compact design

Compact and simple

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

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

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 	8.0000.7000.0045¹⁾
Extension cable (further on request) 	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

1) Stock types

Linear measuring technology

Draw-wire encoder A40	Compact-Line	Measuring length max. 2 m
------------------------------	---------------------	----------------------------------

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
Speed max.	800 mm/s
Acceleration max.	43 m/s ²
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
Supply voltage	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 min. +V - 2.5 V LOW max. 0.5 V	min. +V - 3.0 V max. 2.5 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

Approvals	
CE compliant in accordance with	
EMC Directive	2014/30/EU
RoHS Directive	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 supply voltage input
- Push-pull output

Terminal assignment of the encoder

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

Isolate unused outputs before initial start-up.

Draw-wire encoder A40	Compact-Line	Measuring length max. 2 m
------------------------------	---------------------	----------------------------------

Dimensions

Dimensions in mm [inch]

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

