

IMAX



The series IMAX is a pseudo-absolute magnetic length measuring system. Pseudo-absolute means, that the absolute code is recognized through a one-time movement after power up. At this point the IMAX measures really absolute. So it's possible to have a measuring length up to 1000 meter with an absolute encoder resp. sensor of only 50 mm length.

The device includes a non volatile position memory to store the absolute position before power down.

Thanks to high protection class of IMAX is also suitable for demanding measurements under extreme conditions (dust, oil, grease, vibration or shock).

Features:

- Resolution 1 mm
- Repeat accuracy +/- 1 mm
- Measuring length up to 1000 m
- CANopen interface
- Actual position memory
- Robust housing (IP67)

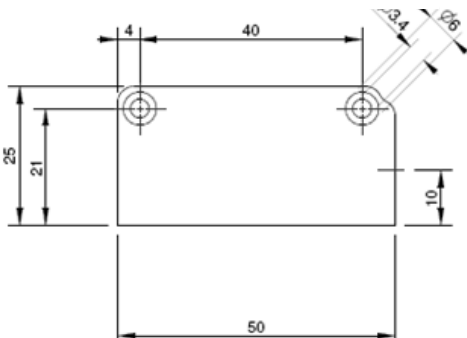
Technical specifications:

Mechanical data	
Measuring principle	absolute
Repeat accuracy	+/- 1 Increment
System accuracy in μm at 20 °C	+/- (1250 + 20 x L) L= measuring length in meter)
Sensor distance to magnetic tape	1.8 mm
Ground pole width	4 mm
Sensor housing material	ABS plastic
Housing dimensions	L x H x W = 50 x 25 x 12 mm
Required magnetic tape	AB20-80-20-1-R-D-17-BK100
Max. measuring length	1000 m
Contact Termination	open cable ends (standard)
Weight	100 g (without cable)
Environmental conditions	
Operation temperature	-10... +70 °C (-25... +85 °C) on request
Storage temperature	-25... +85 °C
Protection class	IP67 (option V)
Electronical data	
Power supply	10... 30 VDC +/- 10 %
Ripple	< 5 %
Consumption	max. 150 mA
Interface	CANopen
Resolution	1 mm
Max. drive speed	2 m/s
Sensor cable	Cable length max. 30 m (depending on Bit rate)

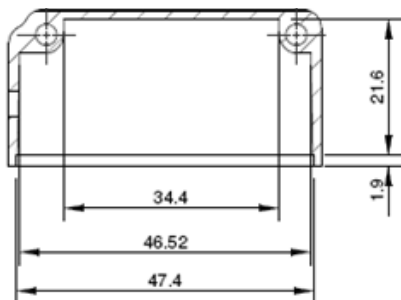
Dimensions:

Housing:

Front:



Rear:



Order reference:

For orders please use the following order code:

IMAX - $\overline{\text{A}} \overline{\text{A}} - \overline{\text{B}} \overline{\text{B}} \overline{\text{B}} - \overline{\text{C}} \overline{\text{C}} \overline{\text{C}} \overline{\text{C}} - \overline{\text{D}} \overline{\text{D}} \overline{\text{D}} \overline{\text{D}}$

A Version

00 ELGO Standard

Signal cable length (in XX.X meter)

B 030 3.0 m - standard cable length
(other length on request)

C Resolution

1000 1000 μm or 1 mm

D Interface

CA00 Standard CANopen encoder profile
(others on request)

Example:

IMAX - 00 - 030 - 1000 - CA00
A A - B B B - C C C C - D D D D

IMAX (ELGO Standard) with 3,0 standard length, a resolution of 1000 μm or 1 mm and CANopen interface.

Your order:

IMAX - $\overline{\text{A}} \overline{\text{A}} - \overline{\text{B}} \overline{\text{B}} \overline{\text{B}} - \overline{\text{C}} \overline{\text{C}} \overline{\text{C}} \overline{\text{C}} - \overline{\text{D}} \overline{\text{D}} \overline{\text{D}} \overline{\text{D}}$

Accessories:

AB20-80-20-1-R-D-17-BK100 Magnetic tape for IMAX
Order No. 731000275

Magnetic tape
end cap 10 mm - set

2 end caps (10 mm) and 2 x M3 screws; additional fixation in the radial and linear area, as well as a protection of the magnetic tape ends
Order No. 731031002

Magnetic tape
end cap 10 mm

1 end cap (10 mm)
Order No. 731031000

