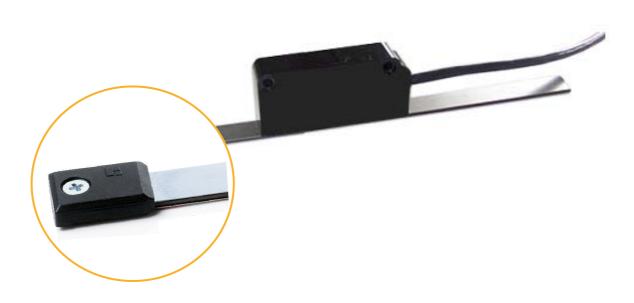


SMIX



Magnetic Length Measuring System

- 0,01 mm resolution
- Push Pull outputs for MIN/MAX limits

SMIX Magnetic Length Measuring System with 0,01 mm resolution

General: The series SMIX is a Magnetic Length Measuring System. The sensor technology and translator are both placed in housing. The magnetic tape is fixed to a plane base with the provided sticky tape. The SMIX can be installed up to a maximum distance of 2,0 mm.

Signal outputs: A, A', B, B', Z, Z' and two push—pull outputs for Min/Max limits.

Product features:

- Direct contactless measurement
- The distance between sensor and measuring tape can vary between 0,1 and 2,0 mm
- Measuring lengths up to 32 m
- High resolution of 0,01 mm
- Repeating accuracy +/- 0,01 mm
- Very robust against pollution



Pulse diagram

	MIN -	Positive counting direction	▶	MAX
Ch. A			M	\prod
Ch. B	\mathcal{M}	$oldsymbol{u}$	uu.	\mathbf{M}
Ch. Z		Π		
HOME				
END				

- -> Supply-Voltage: 24 V (10-30 V)
- -> Resolution: 10)m
- -> Channel A, /A, B, /B, Z, /Z: 24V-Push-Pull (HTL)
- -> Limit Switches: 24V-Push-Pull (HTL) Inverted Logic: active "Low"

Technical specifications:

Nominal voltage	10 30 VDC
Consuption	10 30 VDC: max. 150 mA
Signal level	5 V-TTL Line Driver / 10-30 V HTL
Resolution	0,01 mm
Repeating accuracy	+/- 1 Increment
Maximum Operation speed	4 m/s
Signal outputs	A, A', B, B', Z, Z' Push - Pull MIN/MAX
Max. Measuring length	Theoretically no limit
Distance sensor/tape	Max. 2,0 mm
System accuracy in µm at 20°C	+/- (25 + 20 x L) L= Measuring length in m)
Operation temperature	-10 +70 °C (-25 +85 °C) on request
Storage temperature	-25 +85 °C
Humidity	Non condensing, max. 80%
Protection class	IP67
Dimensions sensor	SMIX-Housing: 50 x 25 x 12 mm
Cable	
Length	Max. 30,0 m
Weight	Cores: 10 x 0,14 mm ²
Bend radius	Min. 60 mm

Order reference:

For orders please use the following order code:

A SN-Number

000 ELGO Standard001 First special version

- B Signal cable length (XX.X Meter)
- C Resolution

0010 0,01 mm

D Supply / Output level

00 10-30 VDC / 10-30 VDC

01 10-30 VDC / 5V-TTL line driver

11 5 VDC / 5V-TTL line driver

E End Limit / Logic

10 – 30 VDC / Logic not inverted (active at "HIGH")

01 10 – 30 VDC / Logic inverted (active at "LOW")

5 VDC / Logic not inverted (active at, HIGH")

5 VDC / Logic inverted (active at"LOW")

Example:

SMIX - <u>0 0 0</u> - <u>0 1 . 5</u> - <u>0 0 1 0</u> - <u>0 1</u> - <u>11</u> A A A - B B . B - C C C C - D D - EE

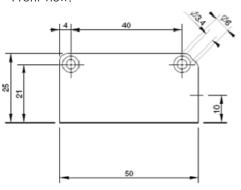
SMIX ELGO standard, with 1,5 meter signal cable length, a resolution about 0,01 mm, 10-30 VDC / 5 V-TTL line driver supply / output level, end limit 5VDC / Logic inverted.

Your order:

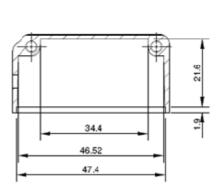
Dimensions:

Housing:

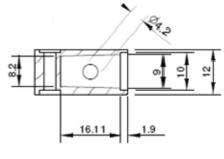
Front view:



Back view:



Side view:



Accessories:

MB20-50-10-2-R-SNXXX Magnetic tape for SMIX

Magnetic tape fixation pieces (10 mm) Additional fixation in the radial and linear area to

protect the tape ends

Doc.-Nr. 799000454 SMIX-E_18-11 Subject to modifications - © 2010 - ELGO Electronic GmbH & Co. KG

ELGO Electronic GmbH & Co. KG Measure - Control - Position
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