

- Guided measurement system
- Absolute sensing without referencing
- CANopen & SSI interface
- Resolution up to 5 μ m
- Measurement length from 115 to 570 mm
- Easy installation with 1 fixing point
- Non-linear movement possible
- Unaffected by dust, debris or liquids



SMAG

ENVIRONMENTAL SPECIFICATIONS

Shock:	250 g, 6 ms acc. to CEI EN 60068-2-27
Vibrations:	10 g, 5-2000 Hz acc. to CEI EN 60068-2-6
Protection:	IP65
Operating temperature range:	-25°C +85°C (-13°F +185°F)
Storage temperature range:	-40°C +100°C (-40°F +212°F)
Options:	Protection IP67 (sealed circuits)

MECHANICAL SPECIFICATIONS

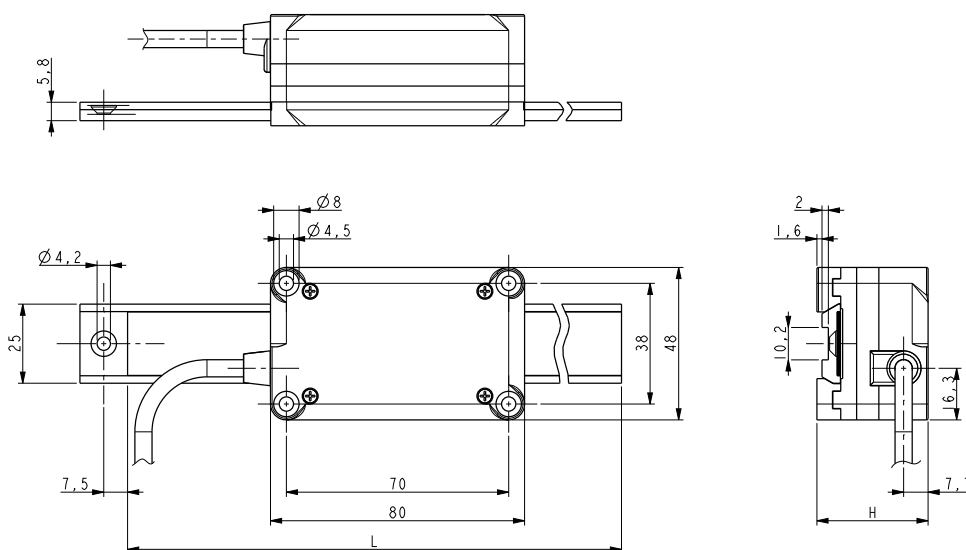
Dimensions:	see drawing
Housing material:	Sensor: Nylon 6FC 30%, Profile: aluminium
Electrical connection:	Lika Hi-flex cable M8 2,0 m or M12 8 pin inline plug
Travel speed (mechanical):	typ. 0,5 m/s - max. 1m/s
Measurement length:	Measurement length = profile length - 80 mm

ELECTRICAL SPECIFICATIONS

Resolution:	CANopen: 5 μ m (programmable) SSI: 100, 50, 10, 5 μ m
Sensor accuracy:	± 15 μ m max.
Repeat accuracy:	± 1 increment
Output circuits:	CANopen, SSI
Power supply:	+10Vdc $\div$ +30Vdc
Power consumption:	1 W max.
Protection:	against inversion of polarity and short-circuit
EMC:	acc. to EN 61000-6-2 level 3
Functions:	Zero setting, Counting direction

ACCESSORIES

MTAG-A302:	Magnetic profile
EM12F8:	M12 8 pin mating connector
EC-M12F8-LK-M8-050:	cordset 5 meters with M12 conn.
EC-M12F8-LK-M8-100:	cordset 10 meters with M12 conn.



Series	L	H
SMAG - CB2	see profile length	35 mm
SMAG - GA2	see profile length	28 mm

SMAG

Order code - CANopen version

SMAG	-	XXX (a)	-	XXXX (b)	-	XXXX (c)	/Sxxx (d)
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(a) OUTPUT CIRCUITS & POWER SUPPLY

CB2 = CANopen interface, +10Vdc +30Vdc

(b) RESOLUTION

0005 = 0,005 mm

(c) CABLE TYPE & LENGTH

L020 = cable output 2 m

L050 = cable output 5 m

Lxx0 = cable out. x m (max. length 10m)

(d) CUSTOM VERSION

Order code - SSI version

SMAG	-	XXX (a)	-	XXXX (b)	-	XXXX (c)	/Sxxx (d)
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(a) OUTPUT CIRCUITS & POWER SUPPLY

GA2 = Gray, SSI, LSB aligned, +10Vdc +30Vdc

(b) RESOLUTION

0100 = 0,1 mm

0050 = 0,05 mm

0010 = 0,01 mm

0005 = 0,005 mm

(c) CABLE TYPE & LENGTH

L020 = cable output 2 m

L050 = cable output 5 m

Lxx0 = cable out. x m (max. length 10m)

M005 = cable output 0,5 m with M12 8 pin conn.

M020 = cable output 2 m with M12 8 pin connector

(d) CUSTOM VERSION

Order code - Profile

MTAG	-	XXXX (a)	-	XX (b)	-	XXXXXX (c)	-	X (d)	-	X (e)	-	X (f)	-	XXX (g)	/Sxxx (h)
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(a) CODING

A301 = SMAG absolute coding (ex MTAG)

(b) WIDTH

20 = 20 mm

(c) PROFILE LENGTH

000195 = 195 mm (ML = 105 mm)

000220 = 220 mm (ML = 140 mm)

000240 = 240 mm (ML = 160 mm)

000300 = 300 mm (ML = 220 mm)

000370 = 370 mm (ML = 290 mm)

000650 = 650 mm (ML = 570 mm)

(d) BIADHESIVE

N = not supplied

(e) PRINTING

P = standard

(f) COVER STRIP

C = supplied

(g) ACCURACY CLASS

035 = $\pm 35 \mu\text{m}$

(h) CUSTOM VERSION

Document release	Date	Description
1.2	25.08.2026	MTAG codig update (A301)
1.1	December 2023	New order code
1.0	22.09.2022	Accuracy class