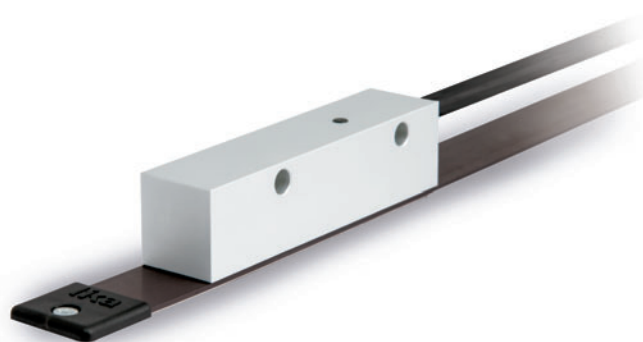




- Compact absolute linear encoder
- BiSS-B, BiSS-C or SSI interface
- Additional 1Vpp incremental output (sin/cos)
- Resolution programmable up to 5 μm
- Diagnostic LED for clearance/gap error
- Unaffected by dust, debris or liquids



SMA1

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:	IP67
Operating temperature range:	-25°C +85°C (-13°F +185°F)
Storage temperature range:	-40°C +100°C (-40°F +212°F)

MECHANICAL SPECIFICATIONS

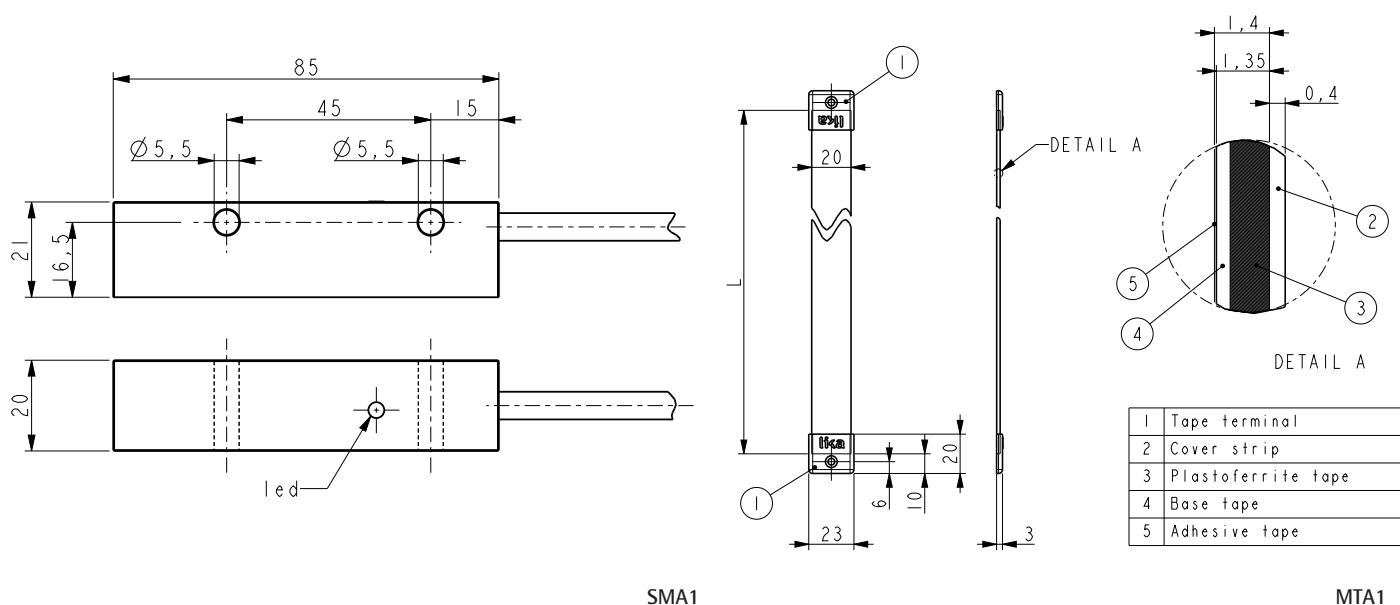
Dimensions:	see drawing
Housing material:	anticorodal, UNI EN AW-6082
Electrical connection:	Lika Hi-flex cable T12 2,0 m
Gap between sensor/tape:	0,1 ÷ 0,3 mm
Travel speed (mechanical):	5 m/s max.
Measurement length:	5,03 m max.
Measurement length = tape length - 85 mm	

ELECTRICAL SPECIFICATIONS

Resolution:	absolute: 5 μm incremental: sin/cos 1000 μm
Sensor accuracy:	$\pm 20 \mu\text{m}$ max.
Repeat accuracy:	± 1 increment
Output circuits:	absolute: BiSS-B, BiSS-C, SSI incremental: sin/cos 1Vpp (AB)
Position refresh (absolute):	170 μs
Counting frequency (incremental):	8 kHz
Power supply:	+5Vdc $\pm 5\%$, +10Vdc $\div$ +30Vdc
Power consumption:	1,5 W max.
Protection:	against inversion of polarity and short-circuit
EMC:	acc. to EN 61000-6-2 level 3

ACCESSORIES

MTA1:	Magnetic tape
KIT LKM-1439:	Set of tape terminals (10 pcs)



Order code – Sensor

SMA1	-	XXX a	-	X b	-	XX c	/Sxxx d
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a OUTPUT CIRCUIT

SC1 = BiSS-C + AB sin/cos, +5Vdc ±5%
 SC2 = BiSS-C + AB sin/cos, +10Vdc +30Vdc
 SB1 = BiSS-B + AB sin/cos, +5Vdc ±5%
 SB2 = BiSS-B + AB sin/cos, +10Vdc +30Vdc
 GA2 = SSI LSB aligned, Gray, +10Vdc +30Vdc

b RESOLUTION

5 = 0,005 mm

c CONNECTIONS

L2 = cable output 2 m
 L5 = cable output 5 m
 Lx = cable output x m

d CUSTOM VERSION

Order code – Magnetic tape

MTA1	-	XX a	-	XX b	-	X c	/Sxxx d
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a TAPE LENGTH

0,1 = 0,1 m 1 = 1 m
 0,2 = 0,2 m 1,5 = 1,5 m
 ... = = ...
 0,5 = 0,5 m 5,1 = 5,1 m

b ACCURACY CLASS

50 = ±35 µm

c COVER STRIP

0 = not supplied

d CUSTOM VERSION