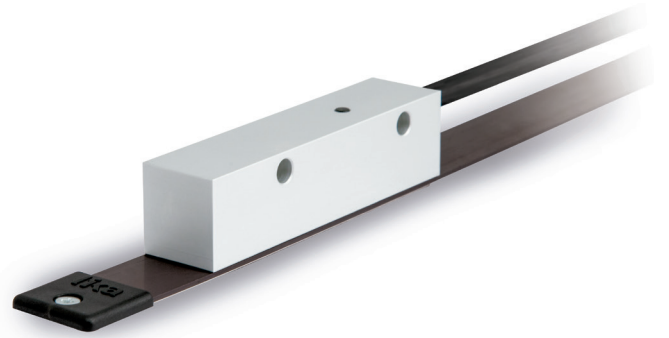




- Compact absolute linear encoder
- BiSS-B, BiSS-C or SSI interface
- Additional 1Vpp incremental output (sin/cos)
- Resolution programmable up to 5  $\mu\text{m}$
- Diagnostic LED for clearance/gap error
- Unaffected by dust, debris or liquids



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

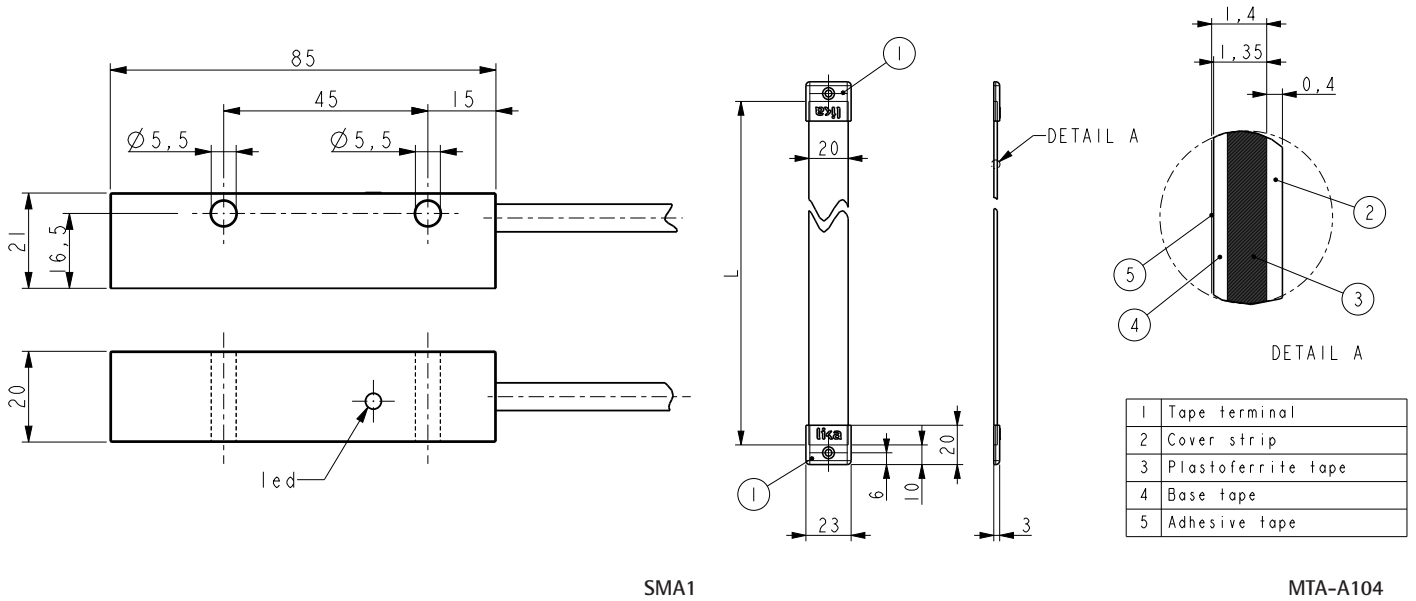
Dimensions:	see drawing
Housing material:	anticorrosive, UNI EN AW-6082
Electrical connection:	Lika Hi-flex cable T12 2,0 m
Gap between sensor/tape:	0,1 ÷ 0,3 mm
Travel speed (mechanical):	5 m/s max.
Measurement length:	5,03 m max. Measurement length = tape length - 85 mm

## ELECTRICAL SPECIFICATIONS

Resolution:	absolute: 5 $\mu\text{m}$ incremental: sin/cos 1000 $\mu\text{m}$
Sensor accuracy:	$\pm 20 \mu\text{m}$ max.
Repeat accuracy:	$\pm 1$ increment
Output circuits:	absolute: BiSS-B, BiSS-C, SSI incremental: sin/cos 1Vpp (AB)
Position refresh (absolute):	170 $\mu\text{s}$
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

MTA-A104:	Magnetic tape
KIT LKM-1439:	Set of tape terminals (10 pcs)



SMA1

MTA-A104

Order code - Sensor

SMA1	-	XXX a	-	XXXX b	-	XXXX c	/Sxxx d
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<p><b>a) OUTPUT CIRCUITS &amp; POWER SUPPLY</b>                  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 + AB sin/cos, Gray, +10Vdc +30Vdc</p>	<p><b>b) RESOLUTION</b>                  0005 = 0,005 mm</p>	<p><b>c) CABLE TYPE &amp; LENGTH</b>                  L020 = cable output 2 m                  L050 = cable output 5 m                  Lxx0 = cable out. x m (max. length 10m)</p>	<p><b>d) CUSTOM VERSION</b></p>
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Order code - Magnetic tape

MTA	-	XXXX a	-	XX b	-	XXXXXX c	-	X d	-	X e	-	X f	-	XXX g	/Sxxx h
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<p><b>a) CODING</b>                  A104 = SMA1 absolute coding (ex MTA1)</p>	<p><b>b) WIDTH</b>                  20 = 20 mm</p>	<p><b>c) LENGTH</b>                  000100 = 0,1 m                  000200 = 0,2 m                  ... = ...                  000500 = 0,5 m                  001000 = 1,0 m</p>	<p><b>d) BIADHESIVE</b>                  B = supplied                  N = not supplied</p>	<p><b>e) PRINTING</b>                  P = standard                  S = custom</p>	<p><b>f) COVER STRIP</b>                  N = not supplied</p>	<p><b>g) ACCURACY CLASS</b>                  050 = ±35 µm/m (up to 30 m)</p>	<p><b>h) CUSTOM VERSION</b></p>
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Document release	Date	Description
1.0	December 2023	New order code