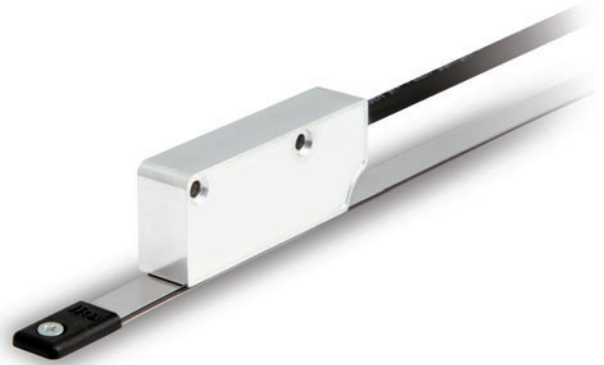




- BiSS & SSI interface
- Resolution up to 1 μm
- Additional incremental output for speed feedback
- Error bit output
- Measuring length up to 8,1 m
- Large mounting tolerances
- Unaffected by dust, debris or liquids with IP67



SMA2

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 M8 2,0 m or M12 8 pin inline plug
Gap between sensor/tape:	0,1 ÷ 0,6 mm
Travel speed (mechanical):	10 m/s max.
Measurement length:	8165 mm max. Measurement length = tape length - 55 mm

ELECTRICAL SPECIFICATIONS

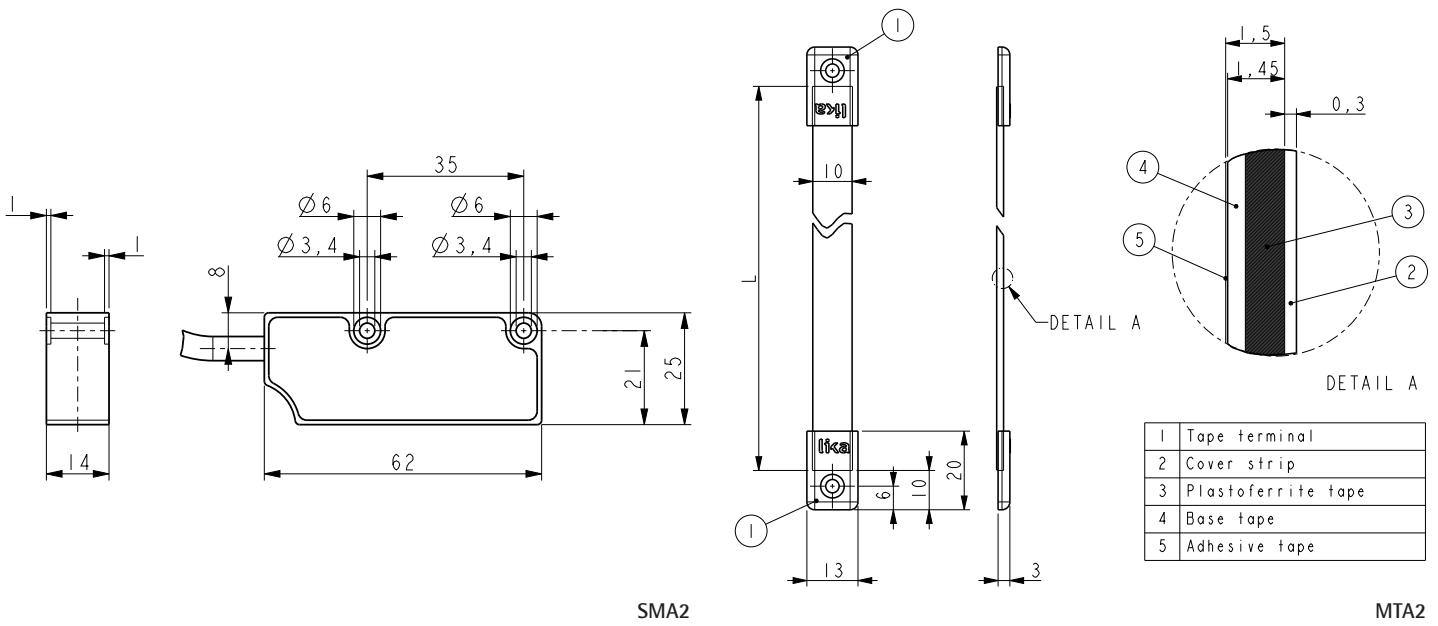
Resolution:	50, 10, 5, 2, 1 μm
Sensor accuracy:	$\pm 2 \mu\text{m}$ max.
Repeat accuracy:	± 1 increment
Output circuits:	absolute: SSI, BiSS-C incremental: NPN o.c. (AB)
Position refresh (absolute):	33 μs
Counting frequency (incremental):	see table 1
Power supply:	+5Vdc $\pm 5\%$
Power consumption:	1 W max.
Protection:	against short-circuit
EMC:	acc. to EN 61000-6-2 level 3

ACCESSORIES

MTA2:	Magnetic tape
E-M12F8:	M12 8 pin mating connector
EC-M12F8-LK-M8-5:	cordset with 5 m cable
EC-M12F8-LK-M8-10:	cordset with 10 m cable
KIT LKM-1440:	Set of tape terminals (10 pcs)

Resolution code	Max. travel speed (m/s) (*)	Max. counting frequency of AB (kHz)
50	7	73
10	7	350
5	7	580
2	2.8	580
1	1.4	580

(*) min. edge distance = 0,25 μs (4MHz). Double speed possible with reduced sensor accuracy ($\pm 4 \mu\text{m}$)



Order code - Sensor

SMA2	-	XXX a	-	XX b	-	XXX c	/Sxxx d
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a OUTPUT CIRCUIT

GG1 = SSI, Gray MSB aligned, +5Vdc ±5%
 G11 = SSI, Gray MSB aligned + AB incremental, +5Vdc ±5%
 BG1 = SSI, Binary MSB aligned, +5Vdc ±5%
 SC1 = BiSS-C interface + AB incremental, +5Vdc ±5%

b RESOLUTION

50 = 50 µm
 10 = 10 µm
 5 = 5 µm
 2 = 2 µm
 1 = 1 µm

c CONNECTIONS

L2 = cable output 2 m
 Lx = cable output x m
 M0,5 = 0,5 m cable + M12 8 pin inline plug
 M2 = 2 m cable + M12 8 pin inline plug

d CUSTOM VERSION

Order code - Magnetic tape

MTA2	-	XX a	-	XX b	-	X c	/Sxxx d
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a TAPE LENGTH

1 = 1 m
 2 = 2 m
 3 = 3 m
 4 = 4 m
 5 = 5 m
 6 = 6 m
 7 = 7 m
 8,2 = 8,2 m

b ACCURACY CLASS

40 = ±40 µm

c COVER STRIP

0 = not supplied
 1 = supplied

d CUSTOM VERSION