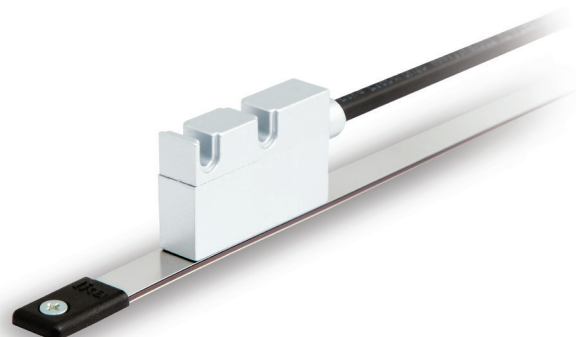




- Robust linear encoder for position measurement
- Large mounting tolerance with gap clearance up to 4.0 mm
- IP67 protection
- Resolution up to 0.01 mm
- Special resolutions possible



SMK

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

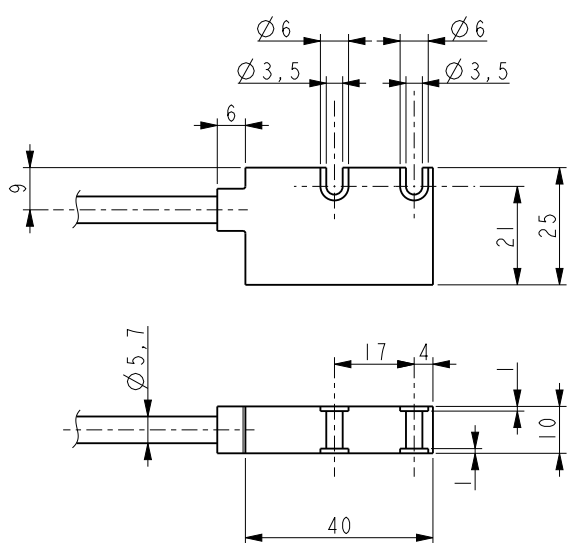
Dimensions:	see drawing
Housing material:	die cast aluminium, UNI EN AC-46100
Electrical connections:	Lika Hi-flex cable M8 2,0 m or M12 8 pin inline plug
Gap between sensor/tape (without cover strip):	0,1 ÷ 4,0 mm
Travel speed (mechanical):	max 2,5 m/s
Measurement length:	Tape length -5 mm each side

ELECTRICAL SPECIFICATIONS

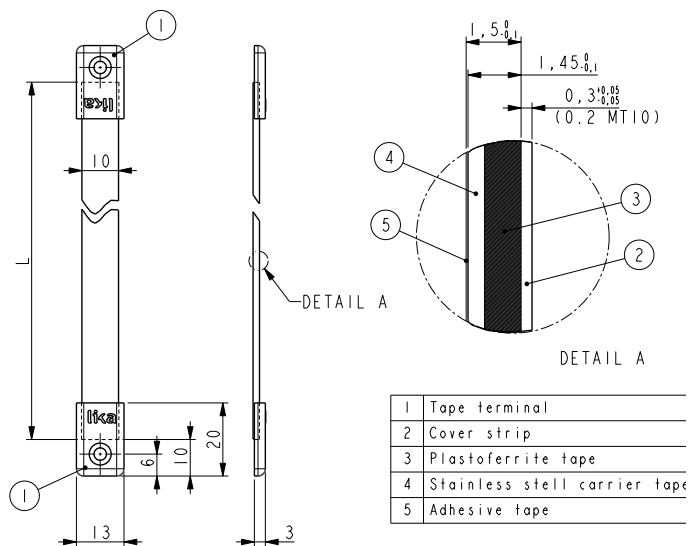
Resolution:	1 / 0,5 / 0,1 / 0,05 / 0,025 / 0,01 mm
Sensor accuracy:	±25 µm max.
Repeat accuracy:	±1 increment
Output circuits:	Line Driver, Push-Pull
Output signals:	ABO /ABO
Counting frequency:	20 kHz max.
Power supply:	+5Vdc ±5%, +10Vdc ÷ +30Vdc
Power consumption:	70 mA max.
Protection:	against inversion of polarity (except 5Vdc version) and short-circuit
EMC:	acc. to EN 61000-6-2 level 3

ACCESSORIES

MTI-0500:	Magnetic tape
KIT LKM-1440:	Set of tape terminals (10 pcs)
E-M12F8:	M12 8 pin mating connector
EC-M12F8-LK-M8-L050	cordset 5 meters with M12 conn.
EC-M12F8-LK-M8-L100:	cordset 10 meters with M12 conn.



SMK



MTI-0500-10

1	Tape terminal
2	Cover strip
3	Plastoferrite tape
4	Stainless steel carrier tape
5	Adhesive tape

Order code - Sensor

SMK	-	XXX a	-	XXXX b	-	X c	-	XXXX d	/Sxxx e
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<p>a) OUTPUT CIRCUITS & POWER SUPPLY Y2 = Push-Pull (AB), +10Vdc ÷ +30Vdc YC2 = Push-Pull (AB, /AB), +10Vdc ÷ +30Vdc L1 = Line Driver (AB, /AB), +5Vdc ±5% L2 = Line Driver (AB, /AB), +10Vdc ÷ +30Vdc</p>	<p>b) RESOLUTION 1000 = 1 mm 0500 = 0,5 mm 0100 = 0,1 mm 0050 = 0,05 mm 0025 = 0,025 mm 0010 = 0,01 mm</p>	<p>c) INDEX N = without I = every 5 mm</p> <p>d) CABLE TYPE & LENGTH L020 = cable output 2 m Lxx0 = cable out. x m (max. length 10m) M005 = 0,5 m cable + M12 inline plug M020 = 2 m cable + M12 inline plug</p>	<p>e) CUSTOM VERSION</p>
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Order code - Magnetic tape

MTI	-	XXXX a	-	XX b	-	XXXXXX c	-	X d	-	X e	-	X f	-	XXX g	/Sxxx h
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<p>a) CODING 0500 = 5 mm pole pitch (ex MT50)</p> <p>b) WIDTH 10 = 10 mm</p>	<p>c) LENGTH 001000 = 1 m 002000 = 2 m 004000 = 4 m 010000 = 10 m 020000 = 20 m 030000 = 30 m 050000 = 50 m 100000 = 100 m</p>	<p>d) BIADHESIVE B = supplied N = not supplied</p> <p>e) PRINTING P = standard S = custom</p>	<p>f) COVER STRIP C = supplied N = not supplied</p>	<p>g) ACCURACY CLASS 100 = ±85 µm/m</p>	<p>h) CUSTOM VERSION</p>
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Document release	Date	Description
1.1	20.11.2025	Added L2 output
1.0	January 2023	New order code