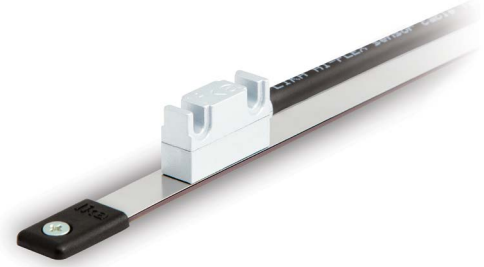




- Miniature encoder for linear motor and pick & place applications
- Real-time 1Vpp sine/cosine
- High performance output signals



SMSR • SMSR2 • SMSR5

## 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:	IP68
Operating temperature range:	-25°C ÷ +85°C (-13°F +185°F)
Storage temperature range:	-40°C ÷ +100°C (-40°F +212°F)

## MECHANICAL SPECIFICATIONS

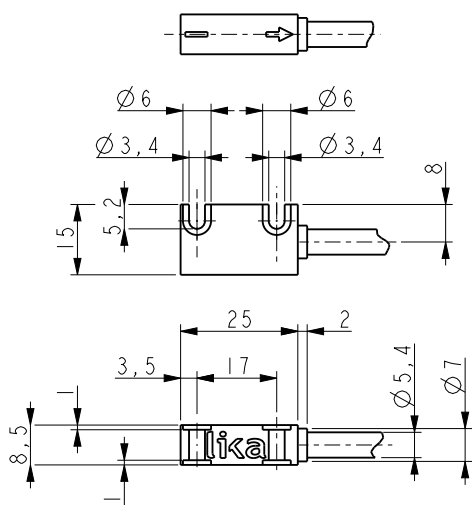
Dimensions:	see drawing
Housing material:	die cast aluminium, UNI EN AC-46100
Electrical connections:	Lika Hi-flex cable M8 2,0 m or M12 8 pin inline plug
Gap between sensor/tape (without cover strip):	SMSR: 0,1 ÷ 0,5 mm SMSR2: 0,1 ÷ 1,0 mm SMSR5: 0,1 ÷ 2,0 mm
Travel speed (mechanical):	max. 16 m/s
Measurement length:	Tape length -5 mm each side

## ELECTRICAL SPECIFICATIONS

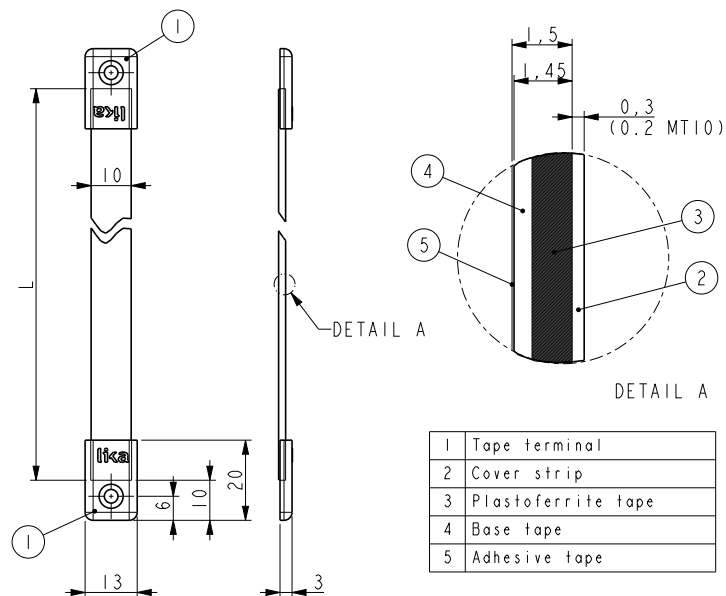
Resolution:	SMSR: 1000 µm SMSR2: 2000 µm SMSR5: 5000 µm
Sensor accuracy:	max. 1% of period length
Repeat accuracy:	±1 increment
Output circuits:	1Vpp
Output signals:	sine/cosine, ABO /ABO
Counting frequency:	SMSR: 18kHz SMSR2: 8 kHz SMSR5: 3,5 kHz
Power supply:	+5Vdc ±5%
Power consumption:	25 mA typ., 50 mA max.
Protection:	against short-circuit
EMC:	acc. to EN 61000-6-2 level 3

## ACCESSORIES

MT10:	Magnetic tape for SMSR
MT20:	Magnetic tape for SMSR2
MT50:	Magnetic tape for SMSR5
KIT LKM-1440:	Set of tape terminals (10 pcs)
E-M12F8:	M12 8 pin mating connector
EC-M12F8-LK-M8-5:	cordset 5 meters with M12 conn.
EC-M12F8-LK-M8-10:	cordset 10 meters with M12 conn.



SMSR



MT10

Order code - Sensor

SMSR	-	X	-	X	-	X	-	XXX	/Sxxx
SMSR2		Ⓐ		Ⓑ		Ⓒ		Ⓓ	Ⓔ
SMSR5									

Ⓐ OUTPUT CIRCUIT

V = 1 V<sub>pp</sub> sine/cosine

Ⓑ POWER SUPPLY

1 = +5Vdc ±5%

Ⓒ INDEX

N = without

K = every 1, 2 or 5 mm (1V<sub>pp</sub> level)

Ⓓ CONNECTIONS

L2 = cable output 2 m

Lx = cable output x m

M0,5 = 0,5 m cable + M12 inline plug

M2 = 2 m cable + M12 inline plug

Ⓔ CUSTOM VERSION

Order code - Magnetic tape

MT10	-	XXX	-	XXX	-	X	-	/Sxxx
MT20		Ⓐ		Ⓑ		Ⓒ		Ⓓ
MT50								

Ⓐ LENGTH

1 = 1,0 m      20 = 20,0 m  
 2 = 2,0 m      30 = 30,0 m  
 4 = 4,0 m      50 = 50,0 m  
 10 = 10,0 m    100 = 100,0 m

Ⓑ ACCURACY CLASS

100 = ±85 µm/m  
 50 = ±35 µm/m (up to 30 m)  
 10 = ±8 µm/m (up to 10 m)

Ⓒ COVER STRIP

0 = not supplied  
 1 = supplied

Ⓓ CUSTOM VERSION