

Series

SML • SMH



- Robust linear encoder for position measurement
- Gap clearance up to 2.0 mm
- IP67 protection
- Resolution up to 0.1 mm



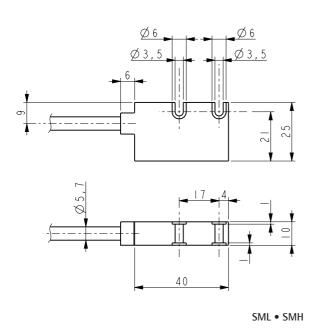
SML • SMH

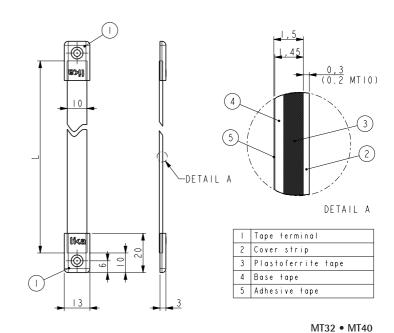
ENVIRONMENTAL SPECIFICATIONS		
Shock:	250 g, 6 ms acc. to CEI EN 60068-2-27	
Vibrations:	10 g, 5-2000 Hz acc. to CEI EN 60068-2-6	
Protection:	IP67	
Operating temperature range:	-25°C ÷ +85°C (-13°F +185°F)	
Storage temperature range:	-40°C ÷ +100°C (-40°F +212°F)	

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 ÷ 2,0 mm		
Travel speed (mechanical):	max 16 m/s		
Measurement length:	Tape length -5 mm each side		

ELECTRICAL SPECIFICATIONS		
Resolution:	0,1 / 0,25 / 0,5 / 1 mm	
Sensor accuracy:	±25 μm max.	
Repeat accuracy:	±1 increment	
Output circuits:	Line Driver, Push-Pull	
Counting frequency:	500 kHz max.	
Output signals:	ABO /ABO	
Power supply:	$+5$ Vdc $\pm5$ %, $+10$ Vdc $\div$ $+30$ Vdc	
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			
MT32:	Magnetic tape for SML		
MT40:	Magnetic tape for SMH		
KIT PS1-1,0:	Protection profile (10 pcs)		
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.		
FC-M12F8-LK-M8-10:	cordset 10 meters with M12 conn.		





### Order code - Sensor

SML         -         XX         -         X         -         XXXX         -           SMH         ③         ①         ⑤         ①         ①         ①	XXX @	-	XX ©	/Sxxx f
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#### ② OUTPUT CIRCUITS

 $\mathbf{Y} = \mathsf{Push}\text{-}\mathsf{Pull} \; (\mathsf{AB})$ 

YC = Push-Pull (AB, /AB)

L = Line Driver (AB, /AB)

### **(b)** POWER SUPPLY

 $1 = +5 \text{Vdc} \pm 5\%$  (L output circuit)

 $2 = +10 \text{Vdc} \div +30 \text{Vdc}$  (Y and YC output circuit)

# © RESOLUTION

1000 = 1 mm (SMH)

**500** = 0,5 mm (SMH)

**250** = 0,25 mm (SMH)

100 = 0,1 mm (SML, SMH)

### **(d)** INDEX

N = without

I = every 3,2 mm (SML) every 4,0 mm (SMH)

#### **©** 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

## ① CUSTOM VERSION

## Order code - Magnetic tape

MT32 MT40	-	XX (a)	-	XXX (b)	-	X ©	/Sxxx (d)
		$\cup$					

(a) LENGTH 1 = 1,0 m 2 = 2,0 m 4 = 4,0 m	10 = 10,0 m 20 = 20,0 m 30 = 30,0 m	ⓑ ACCURACY CLASS $100 = \pm 85 \ \mu\text{m/m}$	© COVER STRIP  0 = not supplied  1 = supplied
	·		(1) CUSTOM VERSION