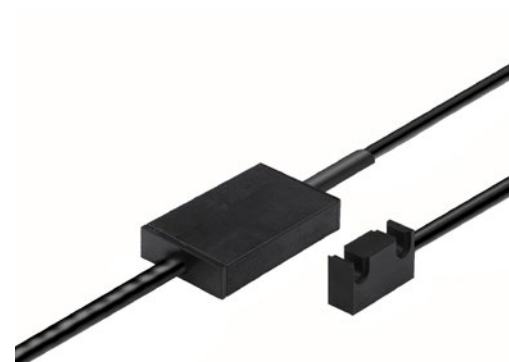


Series

SMB2 • SMB5



- Compact encoders with in-line external interpolator
- IP67 protection
- Resolution up to 5 µm



SMB2 • SMB5

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
Gap between sensor/tape (without cover strip):	SMB2: 0,1 ÷ 1,0 mm SMB5: 0,1 ÷ 2,0 mm
Travel speed (mechanical):	max 16 m/s
Measurement length:	Tape length -5 mm each side

ELECTRICAL SPECIFICATIONS

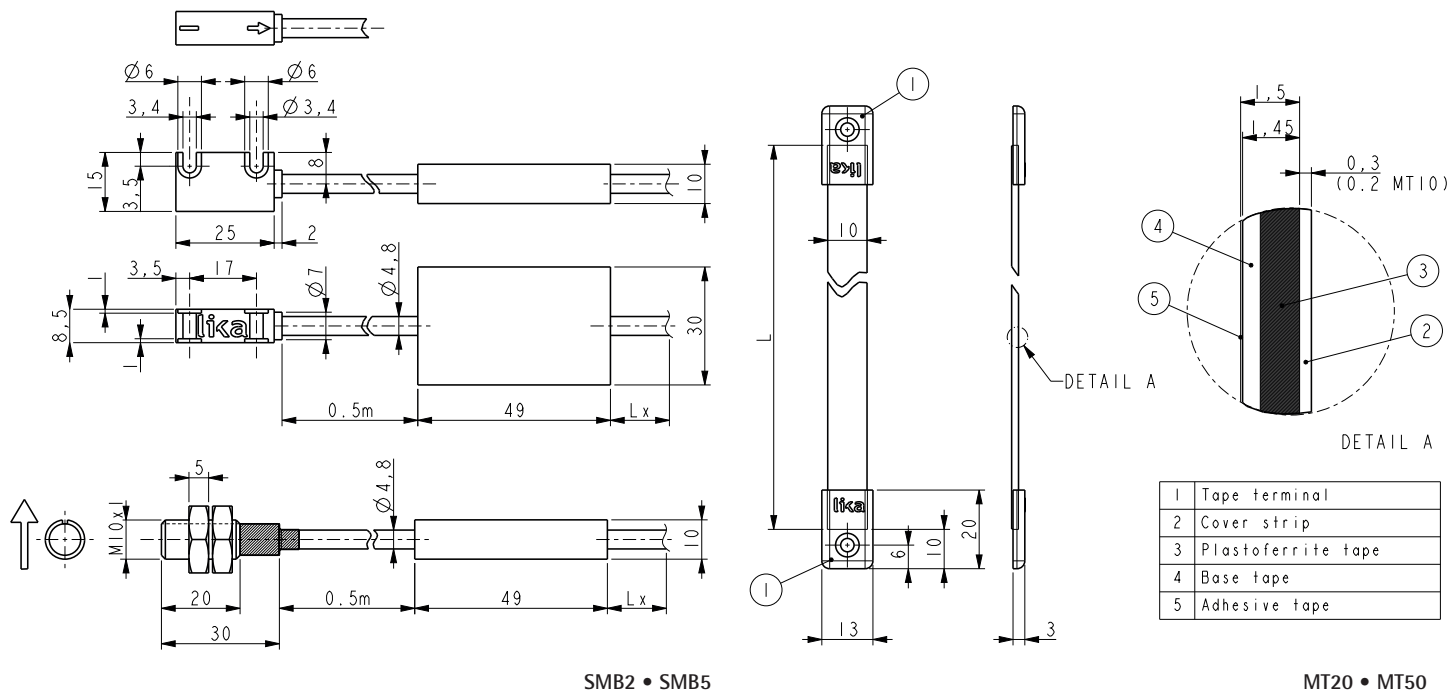
Resolution:	0,01 / 0,005 mm
Sensor accuracy:	±15 µm max.
Repeat accuracy:	±1 increment
Output circuits:	Line Driver, Push-Pull
Output signals:	AB0 /AB0
Counting frequency:	acc. to edge distance setting
Power supply:	+5Vdc ±5%, +10Vdc ÷ +30Vdc
Power consumption:	70 mA
Protection:	against inversion of polarity (except 5Vdc version) and short-circuit
EMC:	acc. to EN 61000-6-2 level 3

ACCESSORIES

MT20:	Magnetic tape for SMB2
MT50:	Magnetic tape for SMB5
KIT PS1-1,0:	Protection profile (10 pcs)
KIT LKM-1440:	Set of tape terminals (10 pcs)

Edge distance selection

Order code	Edge distance (µsec)	Max. counting frequency (kHz)	Resolution (µm) vs. max. possible speed (m/s)	
			5	10
H	0,3	3.333	11,67	23,34
J	0,5	2.000	7,00	14,00
A	1	1.000	3,50	7,00
B	2	500	1,67	3,34
C	4	250	0,88	1,75



SMB2 • SMB5

MT20 • MT50

Order code - Sensor

SMB2	-	X	-	XX	-	X	-	XX	-	XX	-	XX	-	X	/Sxxx
SMB5		(a)		(b)		(c)		(d)		(e)		(f)		(g)	(e)

<p>(a) SENSOR R = rectangular C = circular</p> <p>(b) OUTPUT CIRCUITS Y = Push-Pull (AB) YC = Push-Pull (AB, /AB) L = Line Driver (AB, /AB)</p>	<p>(c) POWER SUPPLY 1 = +5Vdc ±5% (L output circuit) 2 = +10Vdc ÷ +30Vdc (Y and YC output circuit)</p> <p>(d) RESOLUTION 10 = 0,01 mm 5 = 0,005 mm (only SMB5) (others on request)</p> <p>(e) CONNECTIONS 0,5 = cable length between sensor and converter 0,5 m (others on request)</p>	<p>(f) CONNECTIONS L2 = cable output 2 m L5 = cable output 5 m Lx = cable output x m</p> <p>(g) EDGE DISTANCE (see edge distance selection) H = 0,3 µs J = 0,5 µs A = 1 µs B = 2 µs (standard value) C = 4 µs</p>
(h) CUSTOM VERSION		

Order code - Magnetic tape

MT20	-	XXX	-	XXX	-	X	-	/Sxxx
MT50		(a)		(b)		(c)		(d)

<p>(a) 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</p>	<p>(b) ACCURACY CLASS 100 = ±85 µm/m 50 = ±35 µm/m (up to 30 m) 10 = ±8 µm/m (up to 10 m)</p>	<p>(c) COVER STRIP 0 = not supplied 1 = supplied</p>
(d) CUSTOM VERSION		