



- Linear encoder with lateral tape detection
- Space saving installation on linear guides
- Resolution up to 0,0125 mm
- Lika hi-flex sensor cable
- Easy installation and alignment



SMP

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

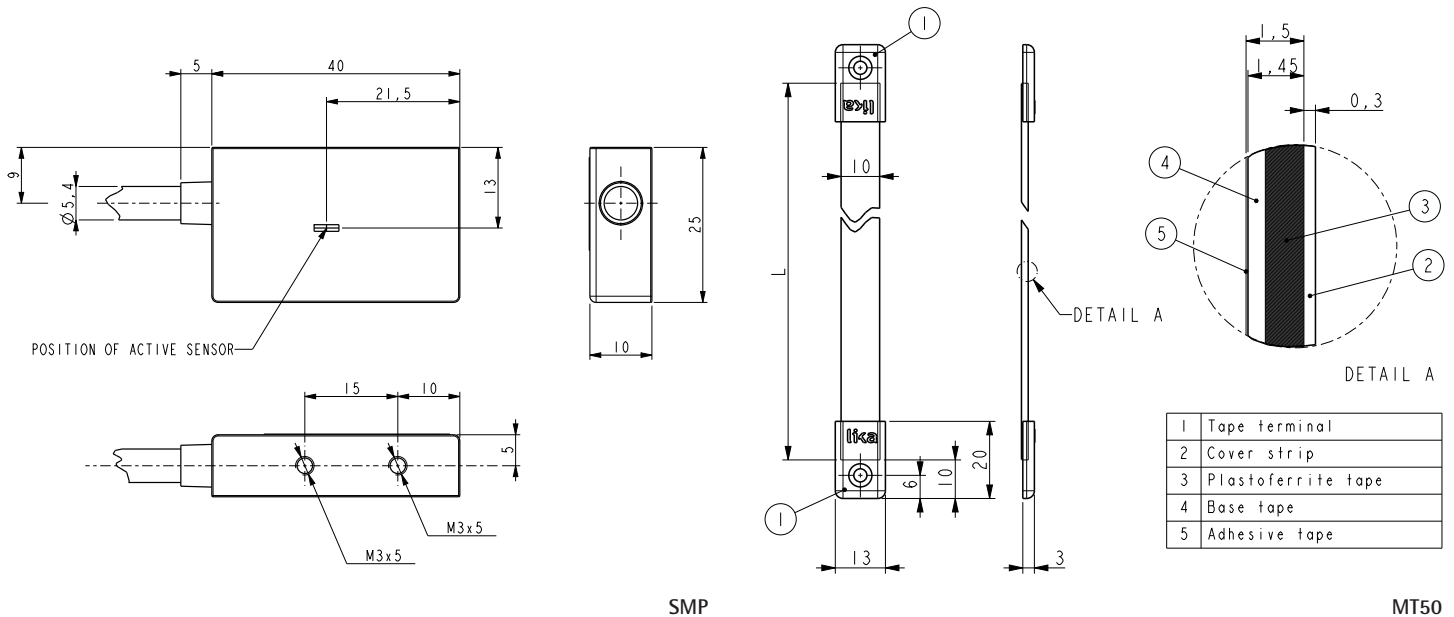
| | |
|--|--|
| Dimensions: | see drawing |
| Housing material: | die cast aluminium, UNI EN AC-46100 |
| Electrical connections: | Lika Hi-flex cable M8 2,0 m or M12 8 pin inline plug |
| Gap between sensor/tape (without cover strip): | 0,1 ÷ 2,0 mm |
| Travel speed (mechanical): | max 16 m/s |
| Measurement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

ELECTRICAL SPECIFICATIONS

| | |
|---------------------|---|
| Resolution: | 0,25 / 0,125 / 0,0625 / 0,05 / 0,025 / 0,0125 mm |
| Sensor accuracy: | ±15 µm max. |
| Repeat accuracy: | ±1 increment |
| Output circuits: | Line Driver, Push-Pull |
| Output signals: | AB /AB |
| Counting frequency: | 1000 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

| | |
|--------------------|----------------------------------|
| MT50: | Magnetic tape |
| 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. |



SMP

MT50

Order code - Sensor

| | | | | | | | | | | | | | |
|-----|---|-----------|---|----------|---|-------------|---|----------|---|-----------|---|----------|--------------|
| SMP | - | XX (a) | - | X (b) | - | XXXX (c) | - | X (d) | - | XX (e) | - | X (f) | /Sxxx (g) |
|-----|---|-----------|---|----------|---|-------------|---|----------|---|-----------|---|----------|--------------|

(a) OUTPUT CIRCUITS

Y = Push-Pull (AB)
 YC = Push-Pull (AB, /AB)
 L = Line Driver (AB, /AB)

(b) POWER SUPPLY

1 = +5Vdc ±5% (L output circuit)
 2 = +10Vdc ÷ +30Vdc (Y and YC output circuit)

(c) RESOLUTION

250 = 0,25 mm (250 µm)
 125 = 0,125 mm (125 µm)
 62/5 = 0,0625 mm (62,5 µm)
 50 = 0,05 mm (50 µm)
 25 = 0,025 mm (25 µm)
 12/5 = 0,0125 mm (12,5 µm)

(d) INDEX

N = without

(e) 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

(f) EDGE DISTANCE

A = 1 µs

(g) CUSTOM VERSION

Order code - Magnetic tape

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

(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

(b) ACCURACY CLASS

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

(c) COVER STRIP

0 = not supplied
 1 = supplied

(d) CUSTOM VERSION