



- Guided incremental encoder
- No mechanical alignment necessary
- Easy installation
- One side fixing of profile
- Unaffected by dust, debris or liquids
- Resolution up to 5 µm



SMIG • MTIG

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:	IP65
Operating temperature range:	-25°C ÷ +85°C (-13°F +185°F)
Storage temperature range:	-40°C ÷ +100°C (-40°F +212°F)
Option:	Protection IP67 (sealed circuits)

MECHANICAL SPECIFICATIONS

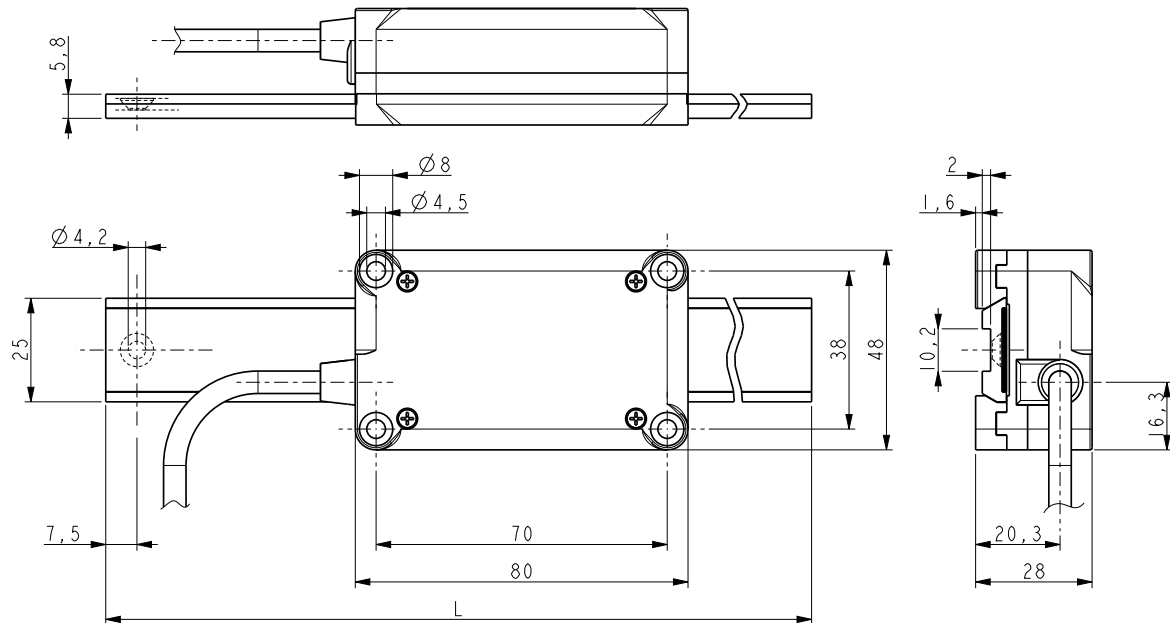
Dimensions:	see drawing
Material:	Sensor: Nylon 6FC 30%, Profile: aluminium
Electrical connections:	Lika Hi-flex cable M8 2,0 m or M12 8 pin inline plug
Travel speed (mechanical):	0,5 m/s typ., 1 m/s max.
Measurement length:	Profile length -80 mm

ELECTRICAL SPECIFICATIONS

Resolution:	0,05 / 0,025 / 0,01 / 0,005 mm
System accuracy (SMIG + MTIG):	±50 µm max.
Repeat accuracy:	±1 increment
Output circuits:	Line Driver, Push-Pull
Output signals:	AB0 /AB0
Counting frequency:	500 kHz
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

MTIG-0500:	Magnetic profile
E-M12F8:	M12 8 pin mating connector
EC-M12F8-LK-M8-050:	cordset 5 meters with M12 conn.
EC-M12F8-LK-M8-100:	cordset 10 meters with M12 conn.



SMIG • MTIG

Order code - Sensor

SMIG	-	XXX Ⓐ	-	XXXX Ⓑ	-	X Ⓒ	-	XXXX Ⓓ	/Sxxx Ⓔ
------	---	----------	---	-----------	---	--------	---	-----------	------------

<p>Ⓐ OUTPUT CIRCUITS & POWER SUPPLY</p> <p>YC2 = Push-Pull (AB, /AB), +10Vdc ÷ +30Vdc L1 = Line Driver (AB, /AB), +5Vdc ±5%</p>	<p>Ⓑ RESOLUTION</p> <p>0050 = 0,05 mm 0025 = 0,025 mm 0010 = 0,01 mm 0005 = 0,005 mm</p> <p>Ⓒ INDEX</p> <p>N = without I = every 5 mm</p>	<p>Ⓓ CABLE TYPE & LENGTH</p> <p>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>Ⓔ CUSTOM VERSION</p>
---	---	---

Order code - Magnetic profile

MTIG	-	XXXX Ⓐ	-	XX Ⓑ	-	XXXXXX Ⓒ	-	X Ⓓ	-	X Ⓔ	-	X Ⓕ	-	XXX Ⓖ	/Sxxx Ⓗ
------	---	-----------	---	---------	---	-------------	---	--------	---	--------	---	--------	---	----------	------------

<p>Ⓐ CODING</p> <p>0500 = 5 mm pole pitch</p> <p>Ⓑ WIDTH</p> <p>20 = 20 mm</p>	<p>Ⓒ PROFILE LENGTH</p> <p>000195 = 195 mm (ML = 105 mm) 000220 = 220 mm (ML = 140 mm) 000240 = 240 mm (ML = 160 mm) 000300 = 300 mm (ML = 220 mm) 000370 = 370 mm (ML = 290 mm) 000650 = 650 mm (ML = 570 mm)</p>	<p>Ⓓ BIADHESIVE</p> <p>N = not supplied</p> <p>Ⓔ COVER STRIP</p> <p>C = supplied</p> <p>Ⓖ ACCURACY CLASS</p> <p>050 = ± 50µm (SMIG+MTIG)</p> <p>Ⓗ CUSTOM VERSION</p>
--	--	--

Document release	Date	Description
1.0	December 2023	New order code