

- IEC Ex & ATEX certified bearingless encoder
- IEC Ex certification Ex mc IIC T4 Gc, Zone 2, Gas group IIC
- ATEX certification II 3G Ex mc IIC T4 Gc
- Absolute and incremental position
- Ring dimensions on request
- IP68 protection



SMLAX

ENVIRONMENTAL SPECIFICATIONS

Operating temperature range:	-10°C +85°C (14°F +185°F)
Storage temperature range:	-25°C +85°C (-13°F +185°F)
Protection:	IP68

MECHANICAL SPECIFICATIONS

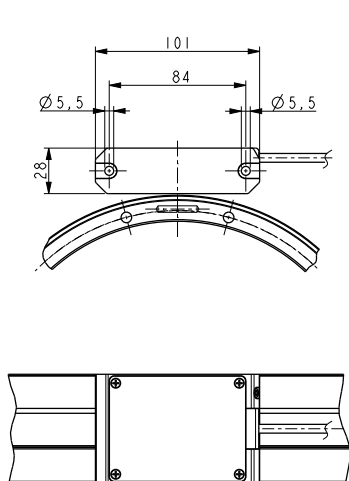
Dimensions:	see drawing
Hollow shaft diameter:	see MRA/SMLAX specifications
Gap sensor-ring:	1 ± 0,2 mm
Electrical connections:	Lika Hi-flex cable 1,0 m
Option:	• additional cable

ELECTRICAL SPECIFICATIONS

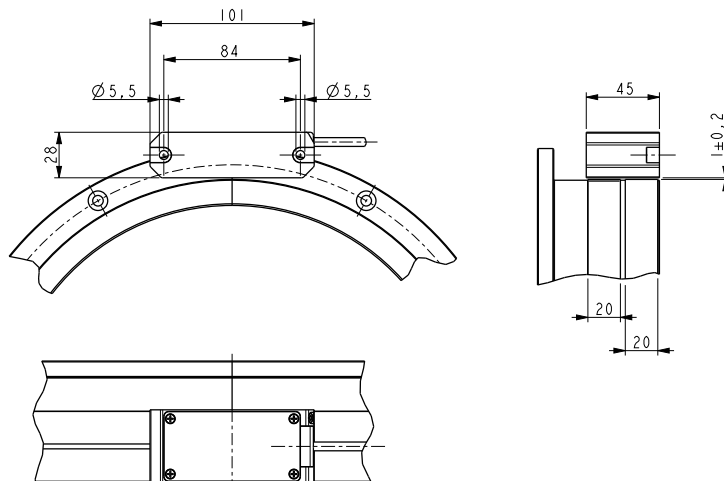
Resolution:	see specifications
Accuracy:	absolute: ± 0.4° max incremental: ± 0.09° max
Repeatability:	± 1 count
Output circuits:	Absolute: SSI, MSB aligned, clock rate 2MHz max. Incremental: Push-Pull, Line Driver, AB0 /AB0
Power supply:	+5Vdc ± 5%, +10Vdc ÷ +30Vdc
Power consumption:	1,6 W max.
Permitted supply short-circuit current:	10 A
Output current (each channel):	20 mA
Protection:	against inversion of polarity and short-circuit
EMC:	electro-magnetic immunity, EN 61000-4-2 EN 61000-4-4

MATERIALS

Sensor housing:	anticorodal, UNI EN AW-6082
Tape support:	metal
Tape:	plastoferrite



Type 1: SMLAX (absolute + incremental version)



Type 2: SMLAX (absolute or incremental version)

Order code - Type 1 Sensor (Absolute + incremental version)

SMLAX	-	XXX Ⓐ	-	XX Ⓑ	-	XXXX Ⓒ	/Sxxx Ⓓ
-------	---	----------	---	---------	---	-----------	------------

<p>Ⓐ OUTPUT CIRCUITS / SUPPLY VOLTAGE</p> <p>B01 = SSI, Binary + 1024 PPR Line Driver, +5V±5%</p> <p>B02 = SSI, Binary + 1024 PPR Line Driver, +10V +30V</p> <p>G01 = SSI, Gray + 1024 PPR Line Driver, +5V±5%</p> <p>G02 = SSI, Gray + 1024 PPR Line Driver, +10V +30V</p> <p>B52 = SSI, Binary + 1024 PPR Push Pull, +10V +30V</p> <p>G52 = SSI, Gray + 1024 PPR Push Pull, +10V +30V</p>	<p>Ⓑ RESOLUTION</p> <p>05 = 4096 cpr absolute</p> <p>06 = 8192 cpr absolute</p> <p>07 = 16384 cpr absolute</p>	<p>Ⓒ CONNECTIONS</p> <p>L010 = cable output 1 m</p> <p>Lxx0 = cable output x m</p>	<p>Ⓓ CUSTOM VERSION</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------	-------------------------

Order code - Type 2 Sensor (Absolute or incremental version)

SMLAX	-	XXX Ⓐ	-	XXXX Ⓑ	-	X Ⓒ	-	XXXX Ⓓ	/Sxxx Ⓕ
-------	---	----------	---	-----------	---	--------	---	-----------	------------

<p>Ⓐ OUTPUT CIRCUITS / POWER SUPPLY</p> <p>L1 = Line Driver (RS422), +5V±5%</p> <p>L2 = Line Driver (RS422), +10V +30V</p> <p>Y2 = Push-Pull ABO /ABO, +10V +30V</p> <p>BG1 = SSI binary coded, +5V±5%</p> <p>BG2 = SSI binary coded, +10V +30V</p> <p>GG1 = SSI gray coded, +5V±5%</p> <p>GG2 = SSI gray coded, +10V +30V</p>	<p>Ⓑ RESOLUTION</p> <p>see MRx/SMLAX specifications</p>	<p>Ⓒ INDEX</p> <p>R = unique reference signal (no output for BG, GG)</p>	<p>Ⓓ CONNECTIONS</p> <p>L010 = cable output 1 m</p> <p>Lxx0 = cable output x m</p>	<p>Ⓕ CUSTOM VERSION</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------	------------------------------------------------------------------------------	------------------------------------------------------------------------------------	-------------------------

Document release	Date	Description
1.1	November 2023	New order code
1.0	25.07.2019	First release