

## Smart encoders & actuators

To  
all Business partners

k. attn. Purchasing Manager  
Technical Manager  
Obsolescence Manager

Carrè, 25.10.2024

Our ref.: NPC24006 C82 series Notification of product change

**Subject: Notification of Change to:**

### C82 encoder series

Dear Customer,

In the process of continuous improvement to the quality, reliability and competitiveness of our products it is necessary to make occasional updates or changes to one of our products.

Details thereof are given in this letter and/or attachment. We would be happy to answer any queries you might have.

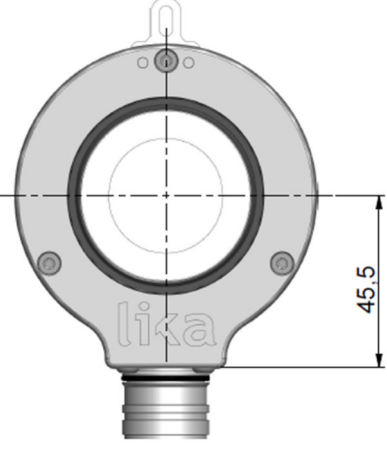
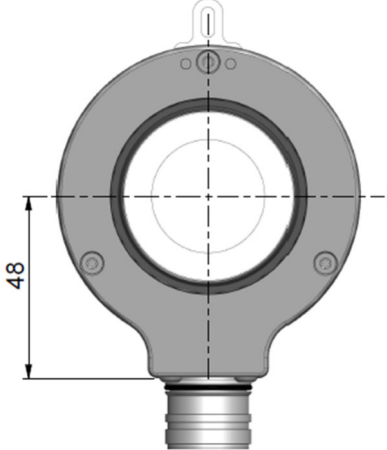
#### Change Category

<input checked="" type="checkbox"/> Minor Change	<input type="checkbox"/> Major Change
<input type="checkbox"/> End of Life / Product obsolete	<input type="checkbox"/> Datasheet specification Change
<input checked="" type="checkbox"/> Design Change	<input type="checkbox"/> Ordering code Change
<input type="checkbox"/> Material / Component Change	<input type="checkbox"/> Process / Manufacturing Site Change

#### Description of Change

The design of the housing is slightly changed in order to improve the fixing of the cable/connector and increase its pull-force.

The new housing design and dimension are shown in the following table.

Description	Before	Now
<p>Increased dimension of the housing on the connector/cable side. → from 45.5 to 48mm</p>		

### Customer Impact

<input type="checkbox"/> Customer should verify this document.	<input checked="" type="checkbox"/> Customer should verify impacts on mechanical or electrical interface
<input type="checkbox"/> Sampling, testing & approval is	<input checked="" type="checkbox"/> No direct alternative available. Please contact your sales

The change will be effective from November 2024  
Last order for the old version will be possible until December 2024

You are welcome to address your sales engineer for technical issues, and certainly our sales assistants for any ordering issue.

Best Regards  
**LIKA ELECTRONIC Srl**  
Sales & Marketing team

- Encoder for elevator motors
- Precise optical sensing
- Operating temperature up to -40°C +100°C
- Resolution up to 8192 PPR
- Hollow shaft from Ø 30 to Ø 44 mm
- Other fixing plates available on request



C82

### 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:	IP54
Operating temperature range:	-25°C +85°C (-13°F +185°F)
Storage temperature range:	-25°C +85°C (-13°F +185°F) (98% R.H. without condensation)
Options:	<ul style="list-style-type: none"> <li>• Operating temperature range: -40°C +100°C (-40°F +212°F)</li> <li>• IP65 Protection (2000 rpm max, torque 2 Ncm)</li> </ul>

### MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft hollow:	Ø 30, 32, 34, 35, 38, 40, 42, 44 mm
Reducing sleeves, BR2-xx from Ø 30 mm to:	Ø 15, 5/8" (15,875), 16, 17, 18, 19, 20, 22, 23, 24, 1" (25,4), 28 mm
Shaft loading:	axial: 100 N max. radial: 200 N max.
Shaft rotational speed:	max. 2000 rpm@70°C (158°F)/IP54, 3000 rpm@100°C (212°F)/IP54 max. 1500 rpm@70°C (158°F)/IP65, 2000 rpm@100°C (212°F)/IP65
Starting torque at 20°C:	4 ÷ 12 Ncm (typical)
Misalignment:	± 0,3 mm radial ± 0,2 mm axial
Bearings life:	400 x 10 <sup>6</sup> rev. min. (10 <sup>9</sup> rev. min. with 20 N shaft loading max.)
Electrical connections:	M23 12 pin plug or cable output 1 m (3.3 ft)
Weight:	~ 0,3 g (10,6 oz)
Option:	• additional cable

### ELECTRICAL SPECIFICATIONS

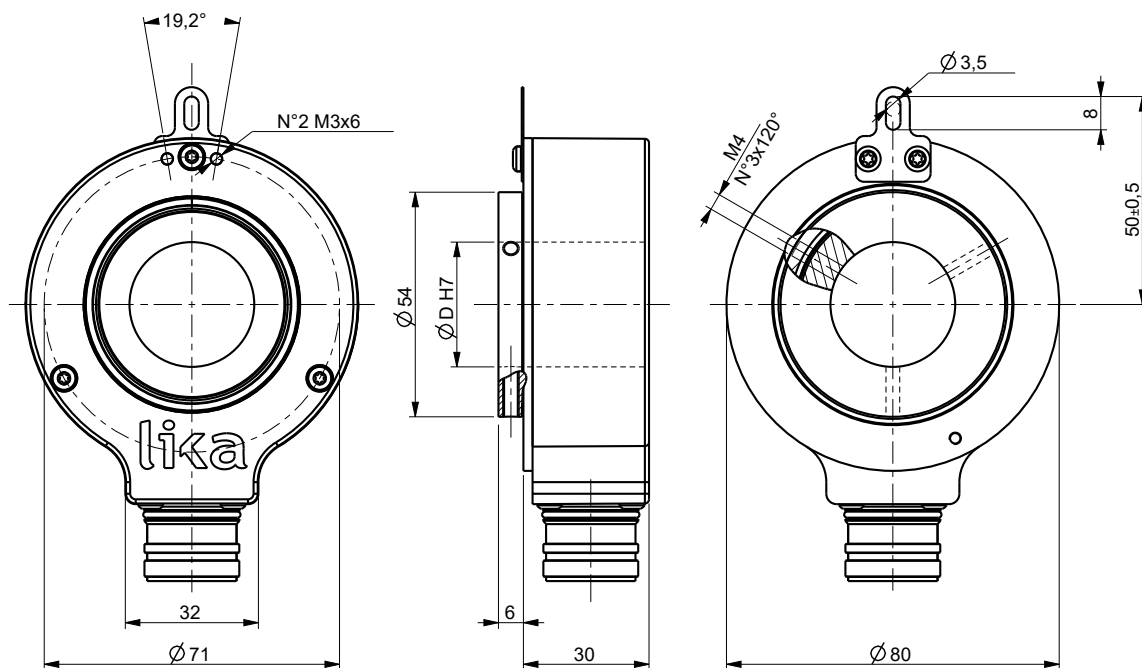
Resolution (PPR):	300-400-500-1024-2048-2500-4096-8192
Counting frequency:	300 kHz max.
Output circuits:	Push-Pull, Line Driver, Universal circuit
Power supply:	+5V ±5%, +10V +30V, +5V +30V
Consumption:	70 mA (typical)
Output current (each channel):	40 mA max.
Protection:	against inversion of polarity and short-circuit
EMC:	electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4

### MATERIALS

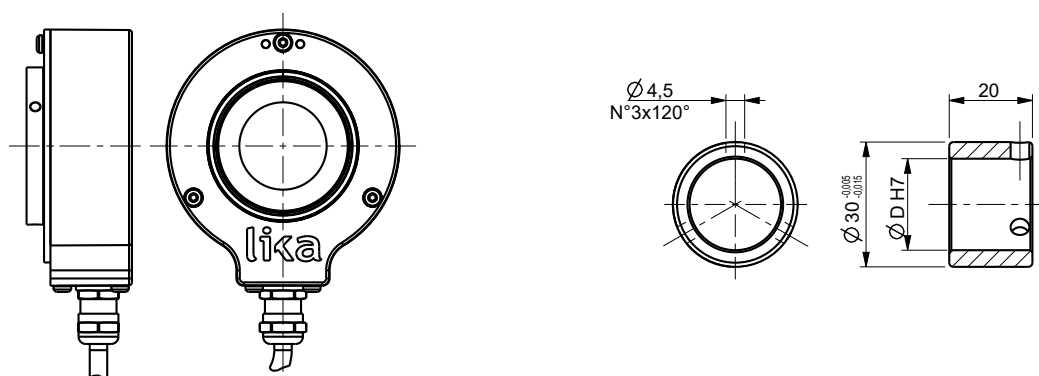
Flange:	anticorodal, UNI EN AW-6082
Housing:	die cast alluminium, UNI EN AC-46100
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic, UNI EN 4305

### ACCESSORIES

EC-C12F-LK-I8-050:	Cordset 5m with M23 connector
EC-C12F-LK-I8-100:	Cordset 10m with M23 connector
EPFL121:	M23 12 pin mating connector
BR2-xx:	reducing sleeves



C82



BR2-xx

Order code

C82	-	XX	-	XXXXX	-	XXX	-	XX	-	X	X	-	X	XXXX	/Sxxx
		(a)		(b)		(c)		(d)		(e)	(f)		(g)	(h)	(i)

<p><b>(a) OUTPUT CIRCUITS / POWER SUPPLY</b>                  Y2 = Push Pull, +10V± +30V                  L1 = Line Driver (RS422), +5V±5%                  H4 = PP/LD universal circuit, +5V± +30V                  L2 = Line Driver (RS422), +10V± +30V</p> <p><b>(b) RESOLUTION (PPR)</b>                  See electrical specifications</p> <p><b>(c) OUTPUT SIGNALS / CONNECTIONS</b>                  BNF = AB, cable output                  ZNF = ABO, cable output                  BCU = AB /AB, cable output                  ZCU = ABO /ABO, cable output                  BCZ = AB /AB, M23 12 pin plug                  ZCZ = ABO /ABO, M23 12 pin plug</p>	<p><b>(d) SHAFT DIAMETER</b>                  30 = 30 mm                  32 = 32 mm                  34 = 34 mm                  35 = 35 mm                  38 = 38 mm                  40 = 40 mm                  42 = 42 mm                  44 = 44 mm (43,97)</p>	<p><b>(e) PROTECTION</b>                  V = IP54 (standard)                  P = IP65</p> <p><b>(f) OPERATING TEMP.</b>                  T = -25°C +85°C (-13°F +185°F)                  K = -40°C +100°C (-40°F +212°F)</p> <p><b>(g) CONNECTION POSITION</b>                  R = radial</p>	<p><b>(h) CABLE LENGTH</b>                  L010 = cable output 1 m                  L020 = cable output 2 m                  L070 = cable output 7 m                  Lxx0 = cable output x m (max. 10 m)                  Cxxx = x dm cable with DSub 9 pin inline plug</p>
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(i) CUSTOM VERSION

Document release	Date	Description
1.1	10.01.2025	New technical drawing
1.0	October 2023	New order code