

- 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 kg (10,6 oz)
Option:	• additional cable

### ELECTRICAL SPECIFICATIONS

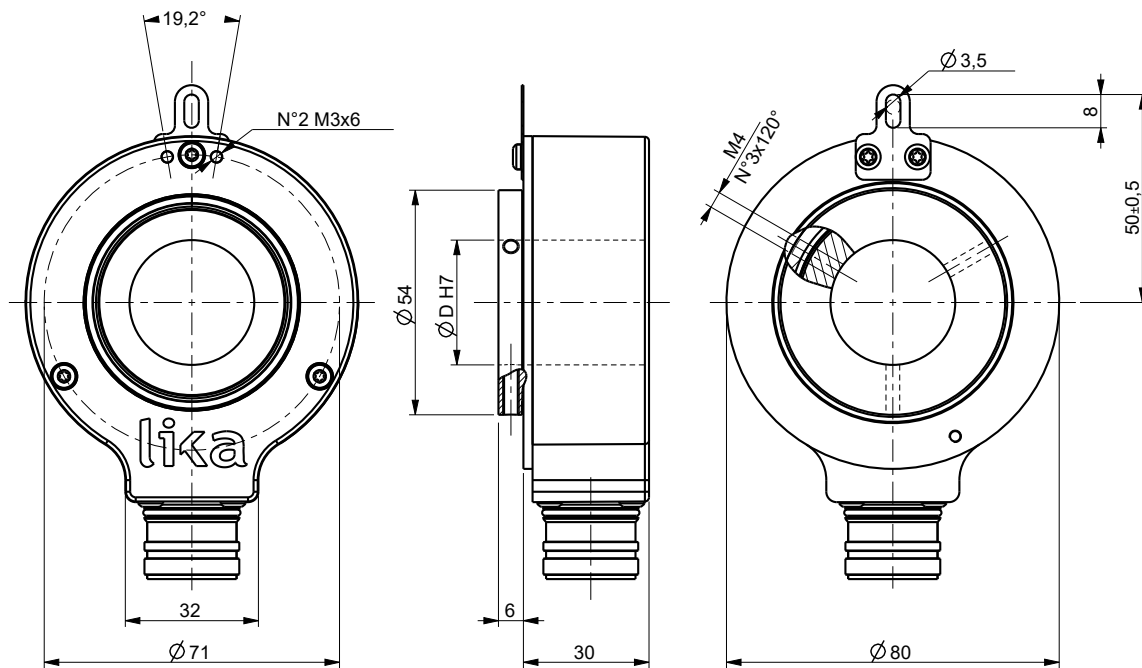
Resolutions (PPR):	1024-2048-2500-4096-8192
Counting frequency:	300 kHz max.
Output circuits:	Push-Pull, Line Driver, Universal circuit
Power supply:	+5V ±5%, +10V +30V, +5V +30V
Consumption:	70 mA (typical)
Output current (each channel):	40 mA max.
Protection:	against inversion of polarity and short-circuit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

### MATERIALS

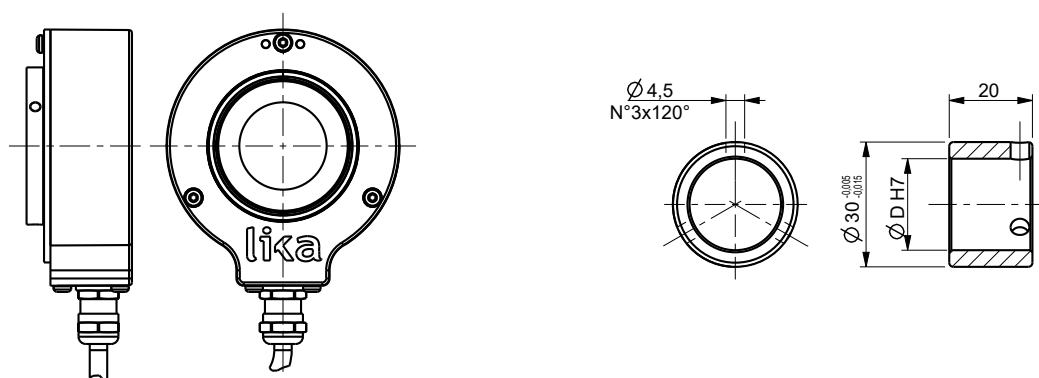
Flange:	anticorodal, UNI EN AW-6082
Housing:	die cast alluminium, UNI EN AC-46100
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic, UNI EN 4305

### 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                  Lxxx = 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
1.3	27.03.2026	Deleted 300 and 500 PPR (OL resolution)
1.2	24.03.2026	Deleted 400 PPR. Resolution splitted by UB and OL.
1.1	10.01.2025	New technical drawing
1.0	October 2023	New order code