

- Encoder for elevator motors
- Precise optical sensing
- Operating temperature up to $-40^{\circ}\text{C} + 100^{\circ}\text{C}$
- Resolution up to 8192 PPR
- Hollow shaft from $\varnothing 30$ to $\varnothing 44$ 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:	$-25^{\circ}\text{C} + 85^{\circ}\text{C}$ ($-13^{\circ}\text{F} + 185^{\circ}\text{F}$)
Storage temperature range:	$-25^{\circ}\text{C} + 85^{\circ}\text{C}$ ($-13^{\circ}\text{F} + 185^{\circ}\text{F}$) (98% R.H. without condensation)
Options:	<ul style="list-style-type: none"> • Operating temperature range: $-40^{\circ}\text{C} + 100^{\circ}\text{C}$ ($-40^{\circ}\text{F} + 212^{\circ}\text{F}$) • IP65 Protection (2000 rpm max, torque 2 Ncm)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft hollow:	$\varnothing 30, 32, 34, 35, 38, 40, 42, 44$ mm
Reducing sleeves, BR2-xx from $\varnothing 30$ mm to:	$\varnothing 15, 5/8'$ (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 :	$4 \div 12$ Ncm (typical)
Misalignment:	$\pm 0,3$ mm radial $\pm 0,2$ mm axial
Bearings life:	400×10^6 rev. min. (10^9 rev. min. with 20 N shaft loading max.)
Electrical connections:	M23 12 pin plug or cable output 1 m (3.3 ft)
Weight:	$\sim 0,3$ 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:	$+5\text{V} \pm 5\%$, $+10\text{V} + 30\text{V}$, $+5\text{V} + 30\text{V}$
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

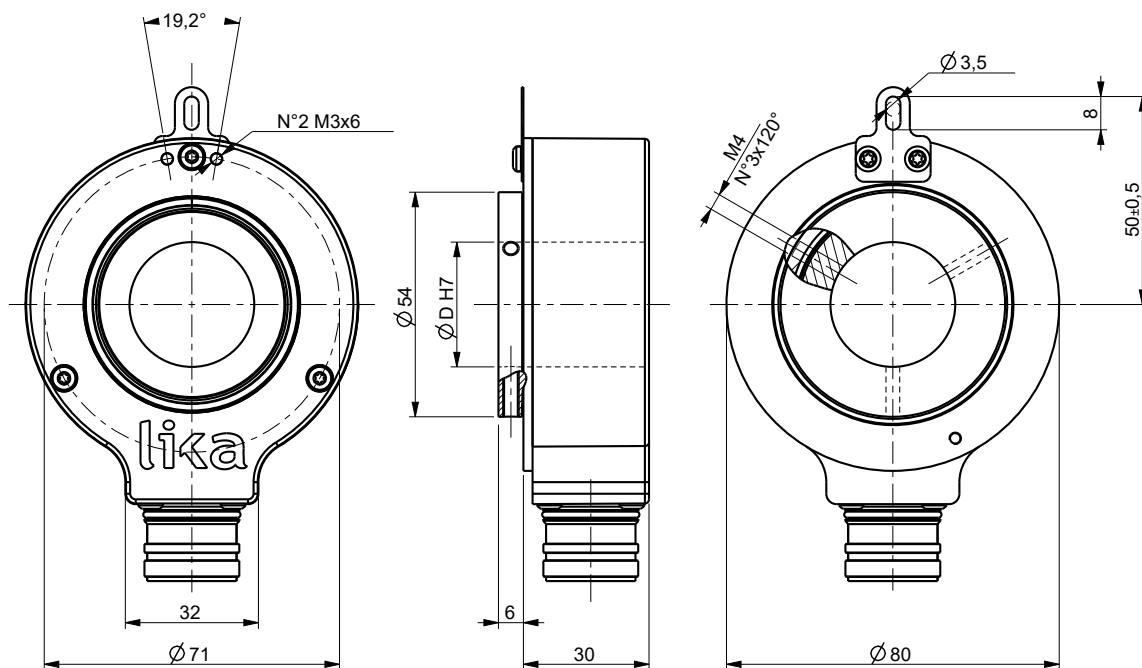
MATERIALS

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

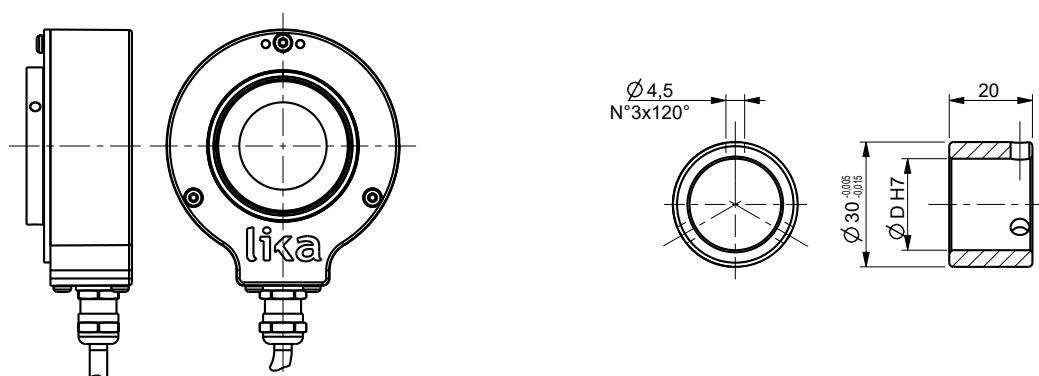


ACCESSORIES

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>(a) OUTPUT CIRCUITS / POWER SUPPLY 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) RESOLUTION (PPR) See electrical specifications</p> <p>(c) OUTPUT SIGNALS / CONNECTIONS 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>(d) SHAFT DIAMETER 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>(e) PROTECTION V = IP54 (standard) P = IP65</p> <p>(f) OPERATING TEMP. T = -25°C +85°C (-13°F +185°F) K = -40°C +100°C (-40°F +212°F)</p> <p>(g) CONNECTION POSITION R = radial</p>	<p>(h) CABLE LENGTH 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