

# ROTAPULS

Incremental encoder

series

C81



- Encoder for elevator motors
- Internal structure made of steel
- Resolution up to 4096 pulses/rev.



C81



[www.lika.biz](http://www.lika.biz)  
 • Data-sheet  
 • User manual

## ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms (acc. to MIL STD 202F)
Vibrations:	10 g, 5-2000 Hz (acc. to MIL STD 202F)
Operating temperature range:	-20°C +70°C (-4°F +158°F)
Storage temperature range:	-20°C +80°C (-4°F +176°F) (98% R.H.without condensation)
Protection:	IP54
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, 34, 35, 38, 40, 42, 44 mm
Shaft loading (axial and radial):	100 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)
Moment of inertia:	100 ÷ 450 gcm <sup>2</sup>
Misalignment:	± 0,3 mm radial ± 0,2 mm axial
Bearings life:	10 <sup>9</sup> rev. min.
Weight:	0,3 ÷ 0,6 kg (10,6-21,2 oz)

## ELECTRICAL SPECIFICATIONS

STD pulse rate (other PPR upon request):	12-100-300-400-500-1024-2000-2048-2500-4096
Power supply:	+5V±5%, +10V +30V,+5V +30V
Output circuits:	Push-Pull, Line Driver, PP/LD
Output current (per channel):	40 mA max.
Output frequency:	100 kHz max.
Input current:	70 mA max.
Protection:	against inversion of polarity and against short-circuit (except Line Driver version)
Optoelectronic life:	100.000 hrs min.
Option:	• Output freq. 200 kHz max.

## MATERIALS

Flange:	steel, UNI EN 4305
Housing:	non corroding, UNI EN AW-6082
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic - UNI EN 4305
Light source:	GaAl diodes

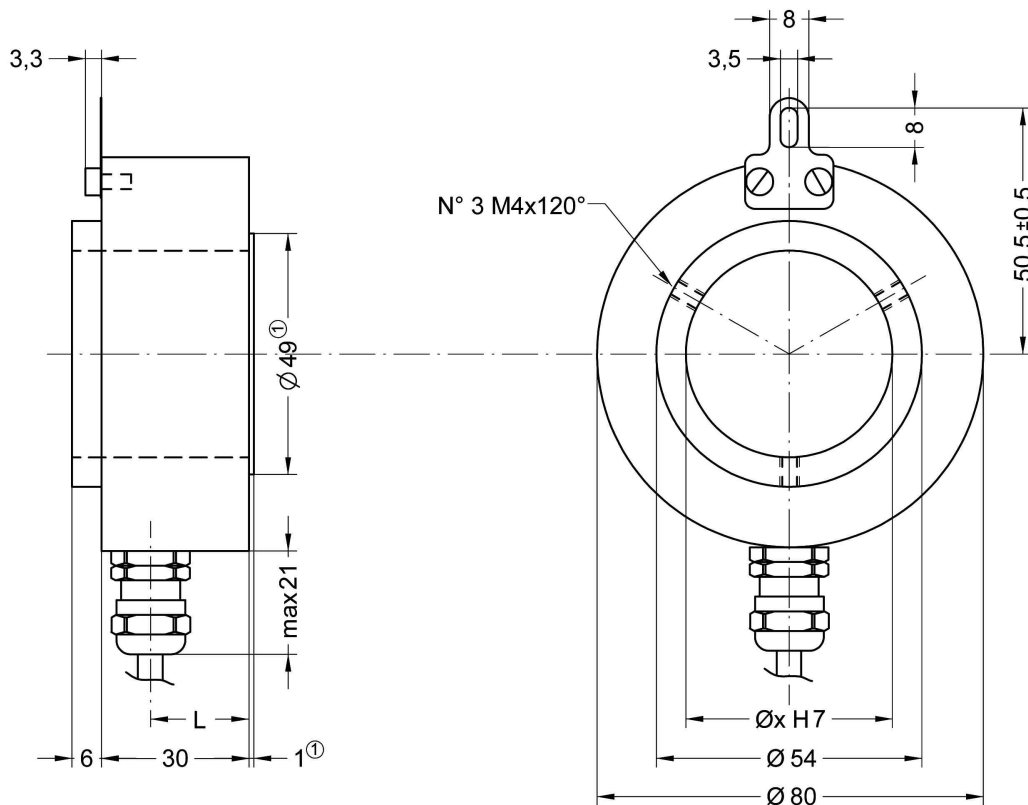
## ELECTRICAL CONNECTIONS

1	2	Function
Brown	Yellow	A
-	Blue	/A
Blue	Green	B
-	Orange	/B
White	White	0
-	Grey	/0
Red	Red	+Vdc
Black	Black	0 Vdc GND

1 = Shielded cable LIKA 5x0,22 mm<sup>2</sup>  
 2 = Shielded cable LIKA 8x0,22 mm<sup>2</sup>

## ACCESSORIES

EDE9S:	9 pin DSub mating connector
BR2-xx:	reducing sleeves (from ø30 mm to ø...)



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L = 10 mm, with shaft  $\varnothing 44$  mm = 20 mm  
 1 = only with shaft  $\varnothing 44$  mm

ORDERING CODE

ADDITIONAL CODE (indicate only if necessary)

