



- High resolution encoder for rotary & index tables
- Robust construction with IP65 protection
- Large operating temperature range



I105

### 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:	IP64
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 temp. range: -40°C +100°C</li> <li>• IP65 protection</li> </ul>

### MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft hollow:	Ø 10 mm
Shaft loading (axial and radial):	40 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque at 20°C:	≤ 1 Ncm (typical)
Bearings life:	400 x 10 <sup>6</sup> rev. min. (10 <sup>9</sup> rev. min. with 20 N shaft loading max.)
Electrical connections:	cable output 2 m (6.56 ft)
Weight:	~ 900 g (31,7 oz)
Option:	• additional cable

### ELECTRICAL SPECIFICATIONS

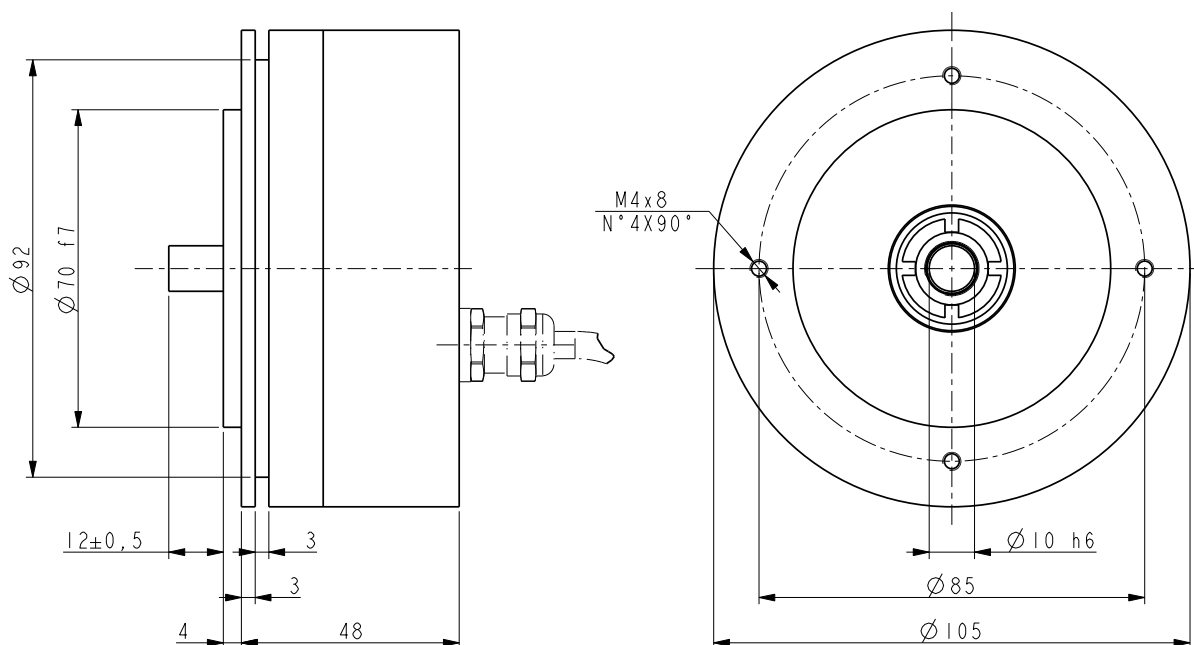
Resolution (PPR):	16384-18000
Counting frequency:	300 kHz max.
Output circuits:	Push-Pull, Line Driver, Universal circuit
Power supply:	+5V±5%, +10V +30V,+5V +30V
Consumption:	100 mA max.
Output current (per channel):	40 mA max.
Protection:	against inversion of polarity and short-circuit (except L circuit)
EMC:	electro-magnetic immunity, according to EN 61000-4-2 EN 61000-4-4

### MATERIALS

Flange:	anticorodal, UNI EN AW-6082
Housing:	anticorodal, UNI EN AW-6082
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic - UNI EN 4305

### ACCESSORIES

EPFL 121:	12 pin M23 mating connector
PAN/PGF:	flexible couplings
LKM-386:	fixing clamps



I105

## Order code

I105	-	XX (a)	-	XXXXX (b)	-	XXX (c)	-	XX (d)	-	X (e)	X (f)	-	X (g)	XXXX (h)	/Sxxx (i)
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## Ⓐ OUTPUT CIRCUITS / POWER SUPPLY

Y2 = Push Pull, +10V± +30V  
 L1 = Line Driver (RS422), +5V±5%  
 H4 = PP/LD universal circuit, +5V± +30V

## Ⓑ RESOLUTION (PPR)

See electrical specifications

## Ⓒ OUTPUT SIGNALS / CONNECTIONS

BCU = AB /AB, cable output  
 BCZ = AB /AB, M23 connector output  
 ZCU = AB0 /AB0, cable output  
 ZCZ = AB0 /AB0, M23 connector output

## Ⓓ SHAFT DIAMETER

10 = 10 mm

## Ⓔ PROTECTION

S = IP64 (standard)  
 P = IP65

## Ⓕ OPERATING TEMPERATURE

T = -20+85°C (-13°F +185°F) (standard)  
 K = -40°C +100°C (-40°F +212°F)

## Ⓖ CONNECTION POSITION

A = axial

## Ⓗ CABLE LENGTH

L020 = cable output 2 m  
 L070 = cable output 7 m  
 Lxxx = cable output x m (max. length 10 m)

## Ⓘ CUSTOM VERSION

Document release	Date	Description
1.0	September 2024	New order code