

ROTAPULS

Incremental encoder

Series

CK61



- Hollow shaft encoder with integrated shaft coupling
- Expansion shaft for precise mounting
- M12, M23 connector or cable output



CK61

ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
Protection:	IP65 (mounted)
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:	• Operating temperature range: -40°C +100°C (-40°F +212°F)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft diameter:	Ø 10, 12 mm
Shaft loading (axial, radial):	30 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque at 20°C:	< 1,5 Ncm (typical)
Bearings life:	400 x 10 ⁶ rev. min. (10 ⁹ rev. min. with 20 N shaft loading max.)
Electrical connections:	M12, M23 plug or cable output 1 m (3.3 ft)
Weight:	~ 200 g (7 oz)
Option:	• additional cable

ELECTRICAL SPECIFICATIONS

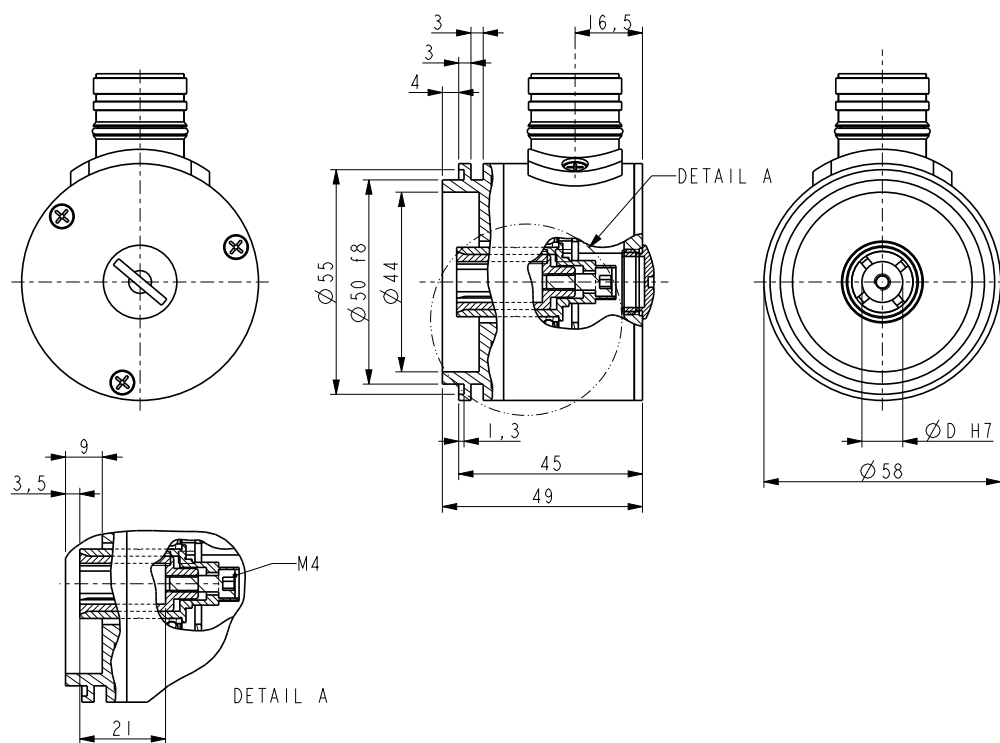
Resolution (PPR):	2-4-5-8-10-12-15-16-20-24-25-30-35-36-40-50-60-64-70-80-90 100-120-127-142-150-160-180-200-216-230-236-240-250-254 256-267-270-300-314-360-375-400-410-435-471-500-512-600 635-720-750-800-900-1000-1024-1068-1200-1250-1270-1400 1440-1500-1800-2000-2048-2250-2400-2500-3000-3600-4000 4096-5000
Counting frequency:	100 kHz max.
Output circuits:	NPN, PNP, 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 (except L circuit)
EMC:	electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4
Optoelectronic life:	100.000 hrs min.
Option:	• Counting frequency up to 300 kHz

MATERIALS

Flange:	anticorodal, UNI EN AW-6082
Housing:	anticorodal, UNI EN AW-6082
Bearings:	ABEC 5
Shaft:	brass
Light source:	GaAl diodes

ACCESSORIES

EPFL121:	12 pin M23 mating connector
EC-C12F-LK-I8-x:	cordset x meter, M23 connector
EM12F8:	8 pin M12 mating connector
LKM-386:	fixing clamps



CK61

Order code

CK61	-	X	-	XXXXX	XXX	X	XX	X	X	XX	/Sxxx
		(a)		(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)

(a) OUTPUT CIRCUITS

N = NPN o.c.
P = PNP o.c.
Y = Push Pull
L = Line Driver (RS422)
H = PP/LD universal circuit

(b) RESOLUTION (PPR)

See electrical specifications

(c) OUTPUT SIGNALS / CONNECTIONS

ZCU = AB0 /AB0, cable output
ZCZ = AB0 /AB0, M23 12 pin plug
ZCM = AB0 /AB0, M12 8 pin plug

(d) SUPPLY VOLTAGE

1 = +5V±5% (L output circuit)
2 = +10V÷ +30V (N, P, Y output circuit)
4 = +5V÷ +30V (H output circuit)

(e) SHAFT DIAMETER

10 = 10 mm
12 = 12 mm

(f) COUNTING FREQUENCY

- = 100 kHz (standard)
W = 300 kHz

(g) OPERATING TEMPERATURE

- = -25°C +85°C (-13°F +185°F) standard
K = -40°C +100°C (-40°F +212°F)

(h) CABLE LENGTH (only with ZCU)

- = cable output 1 m (standard)
L2 = cable output 2 m
Lx = cable output x m

(i) CUSTOM VERSION