

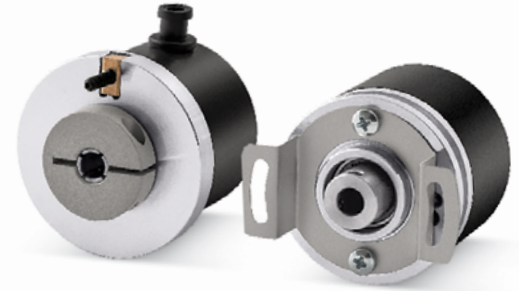
# ROTAPULS

Incremental encoders

Series

CK41 • CK46

- Compact hollow shaft encoders
- Preferential versions with fast delivery
- Universal output circuit
- Resolution up to 4096 PPR



CK46 • CK41

## ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
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)
Protection:	IP64
Option:	• IP65 protection (3000 rpm max, torque 1 Ncm)

## MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft diameter:	Ø 6, 6.35, 8 mm
Shaft loading (axial, radial):	20 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque at 20°C:	0,1 Ncm (typical)
Bearings life:	10 <sup>9</sup> rev. min.
Electrical connections:	cable output 1 m (3.3 ft)
Weight:	~ 100 g (3,5 oz)
Options:	• additional cable • DSub 9 pin inline connector

## ELECTRICAL SPECIFICATIONS

Resolution (PPR):	1-2-5-8-10-15-20-30-32-40-50-60-72-84-90-100-120 125-150-180-200-250-256-300-360-400-500-512-600 720-900-1000-1024-1200-1250-1440-1500-1600-1800 2000-2048-2400-2880-4000-4096
Counting frequency:	50 ÷ 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.

## MATERIALS

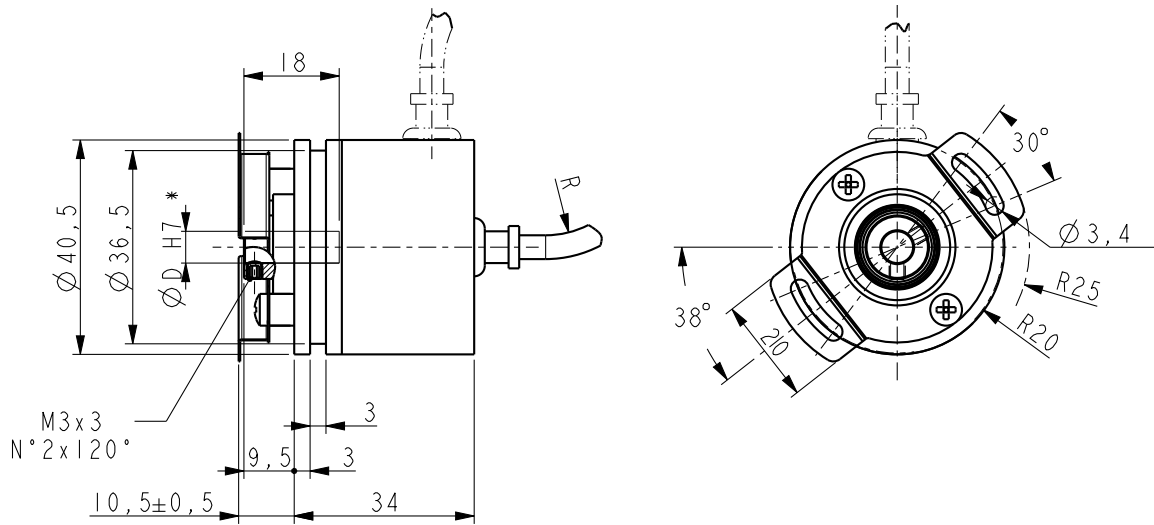
Flange:	anticorrosive, UNI EN AW-6082
Housing:	fibre glass epoxy resin
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic, UNI EN 4305
Light source:	GaAl diodes

## PREFERENTIAL MODELS

CK41-H-1000ZCU46L2	1000 PPR, HTL/TTL output
CK41-H-1024ZCU46L2	1024 PPR, HTL/TTL output
CK41-H-2000ZCU46L2	2000 PPR, HTL/TTL output
CK41-H-2048ZCU46L2	2048 PPR, HTL/TTL output

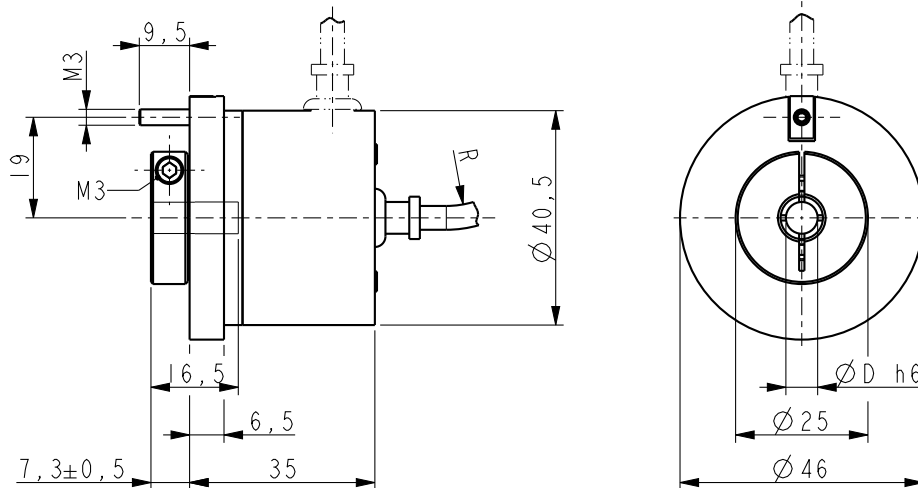
## ACCESSORIES

EDE9S:	9 pin DSub mating connector
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\*  $\varnothing 8$  bore depth = 9mm

CK41



CK46

Order code

CK41	-	X	-	XXXX	XXX	X	XX	X	X	XX	/Sxxx
CK46		Ⓐ		Ⓑ	Ⓒ	Ⓓ	Ⓔ	Ⓕ	Ⓖ	Ⓗ	Ⓘ

Ⓐ OUTPUT CIRCUITS

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

Ⓑ RESOLUTION (PPR)

See electrical specifications

Ⓒ OUTPUT SIGNALS

BNF = AB  
 BCU = AB, /AB  
 ZNF = ABO  
 ZCU = ABO, /ABO

Ⓓ POWER SUPPLY

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

Ⓔ SHAFT DIAMETER

6 = 6 mm  
 P6 = 6.35 mm - 1/4"  
 8 = 8 mm (only CK41)

Ⓕ PROTECTION

- = IP64 (standard)  
 P = IP65

Ⓖ CONNECTION POSITION

- = axial (standard)  
 R = radial

Ⓗ CABLE LENGTH

- = cable output 1 m (standard)  
 L2 = cable output 2 m  
 Lx = cable output x m  
 CLx = x m cable with DSub 9 pin inline plug

Ⓘ CUSTOM VERSION