

# ROTAPULS

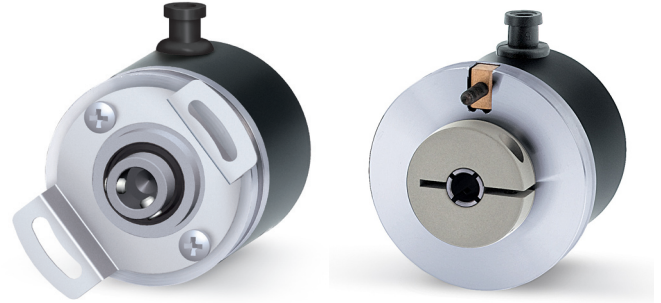
Incremental encoders

Series

CK41 - CK46



- Compact hollow shaft encoders
- Preferential versions on stock
- Universal output circuit
- Resolution up to 4096 PPR



CK41 - CK46

## 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:	-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:	Ø 6, 6.35 mm
Shaft loading (axial and radial):	20 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque at 20°C:	≤ 0,3 Ncm (typical)
Moment of inertia:	~20 gcm <sup>2</sup>
Bearings life:	10 <sup>9</sup> rev. min.
Weight:	~ 0,1 kg (3,5 oz)

## ELECTRICAL SPECIFICATIONS

STD pulse rate (other PPR upon request):	1-5-8-10-15-20-25-30-32-40-50-60-64-72-84-90 100-125-127-150-176-180-200-250-256-300-314 320-360-400-500-512-540-600-625-635-720-900 1000-1024-1080-1200-1250-1440-1500-1600-1800 2000-2048-2500-3000-3600-4096-5000
Power supply:	+5V±5%, +10V +30V,+5V +30V
Output circuits:	NPN, PNP, Push-Pull, Line Driver, PP/LD
Output current (per channel):	40 mA max.
Output frequency:	50 kHz max.
Input current:	50 mA max.
Protection:	against inversion of polarity and short cut (except L circuit)
Optoelectronic life:	100.000 hrs min.

## MATERIALS

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

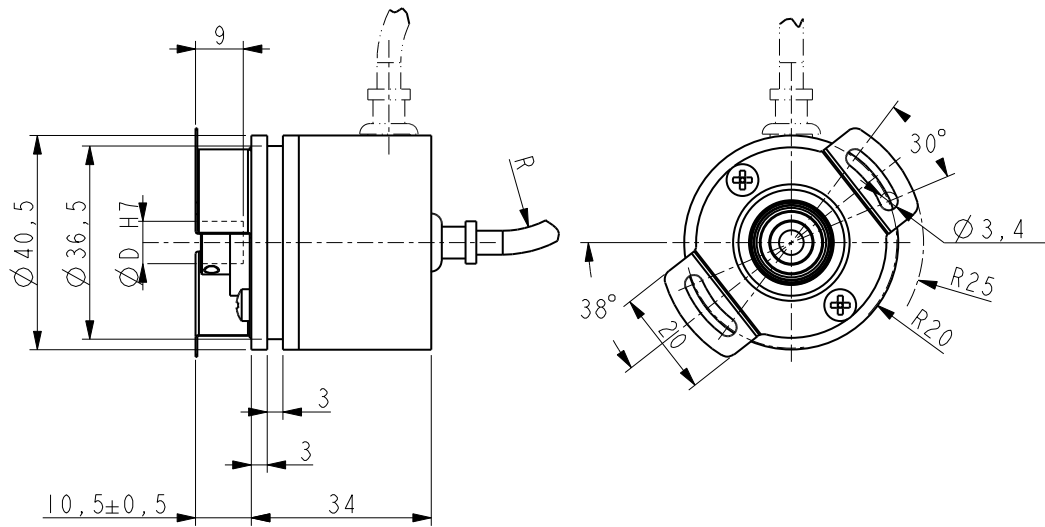
## ELECTRICAL CONNECTIONS

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

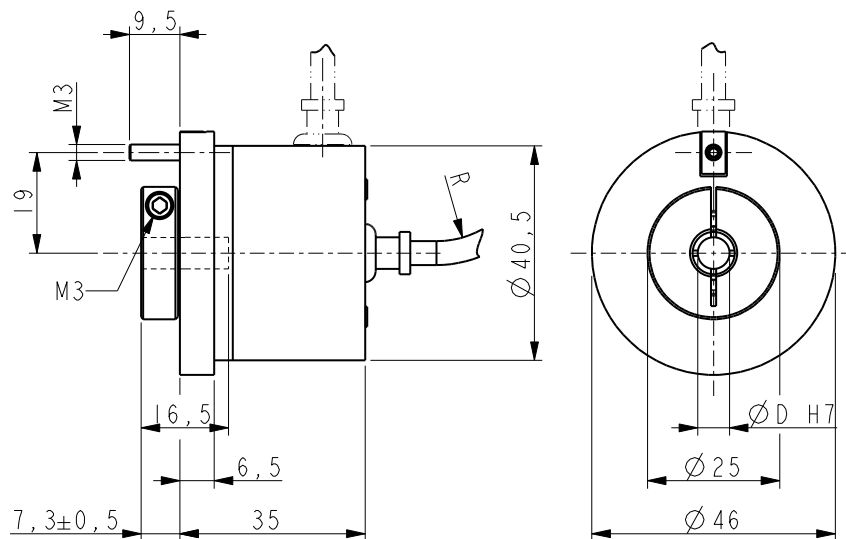
1 = Shielded cable Lika 5x0,22 mm<sup>2</sup>  
2 = Shielded cable Lika 8x0,22 mm<sup>2</sup>

## ACCESSORIES

EDE9S:	9 pin DSub mating connector
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CK41



CK46

Order code

Additional code (optional)

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

<p><b>Ⓐ OUTPUT CIRCUITS</b>                  N = NPN o.c.                  P = PNP o.c.                  Y = Push Pull                  L = Line Driver                  H = PP/LD universal circuit</p> <p><b>Ⓑ RESOLUTION (PPR)</b>                  See electrical specifications</p>	<p><b>Ⓒ OUTPUT SIGNALS</b>                  BNF = AB                  BCU = AB, /AB                  ZNF = ABO                  ZCU = ABO, /ABO</p> <p><b>Ⓓ POWER SUPPLY</b>                  1 = +5V±5% (L output circuit)                  2 = +10V÷ +30V (Y, N, P output circuit)                  4 = +5V÷ +30V (H output circuit)</p>	<p><b>Ⓔ SHAFT DIAMETER</b>                  6 = 6 mm                  P6 = 6.35 mm - 1/4"</p> <p><b>Ⓕ CONNECTION POSITION</b>                  - = axial (standard)                  R = radial</p>	<p><b>Ⓖ CONNECTIONS</b>                  - = 1 m cable (standard)                  L2 = 2 m cable                  Lx = x m cable</p> <p><b>Ⓖ IP PROTECTION</b>                  - = IP64 (standard)                  P = IP65</p> <p>Ⓛ C = Inline connector DSub 9 pin</p> <p>Ⓛ CUSTOM VERSION</p>
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