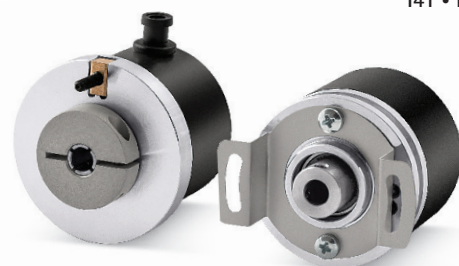


- Compact industrial encoders
- Solid or hollow shaft version
- Preferential versions with fast delivery
- Universal output circuit HTL/TTL
- High resolution up to 4096 PPR



I41 • I40



CK46 • CK41

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)
Option:	• IP65, IP66 protection shaft end

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 ⁹ rev. min.
Electrical connections:	cable output 1 m (3.3 ft)
Weight:	~ 100 g (3,5 oz)
Option:	• additional cable • DSub 9 pin inline connector • M12 plug

ELECTRICAL SPECIFICATIONS

Resolution (PPR):	1-2-5-8-10-15-30-32-40-50-60-72-84-90-100 (other resolutions on request)
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
EMC:	electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4

MATERIALS

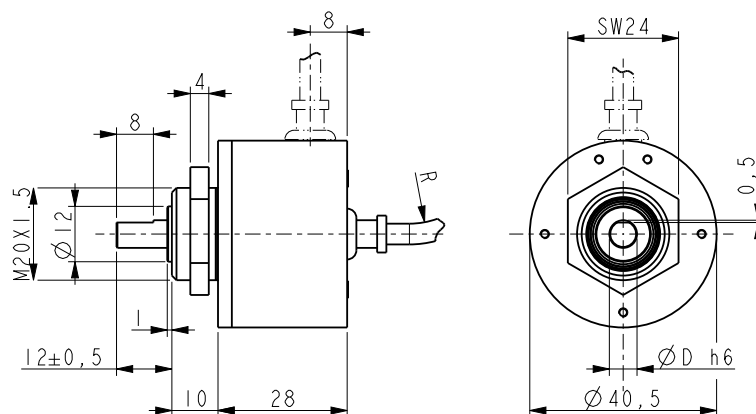
Flange:	anticorodal, UNI EN AW-6082
Housing:	fibre glass epoxy resin
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic, UNI EN 4305

PREFERENTIAL MODELS

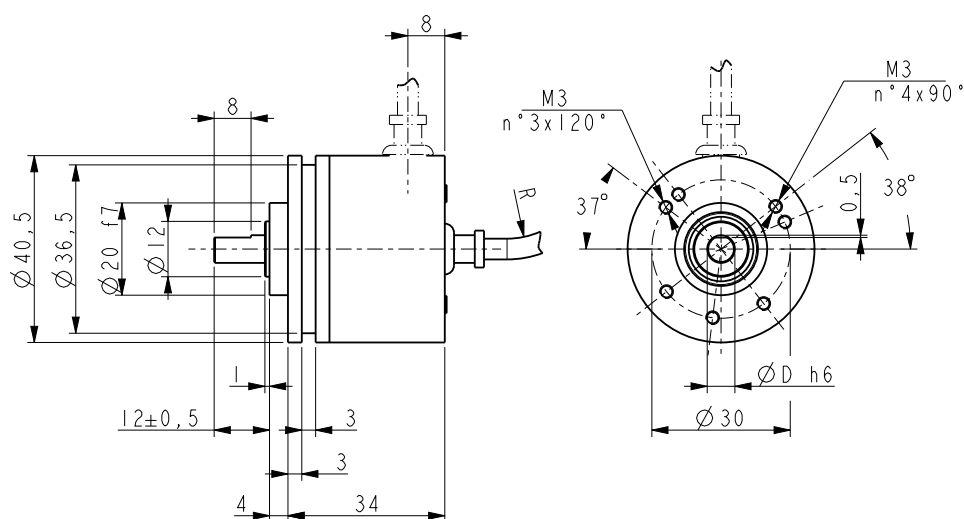
I41-H4-00100-ZCU-06-ST-AL020	100 PPR, HTL/TTL output
I41-H4-00200-ZCU-06-ST-AL020	200 PPR, HTL/TTL output
I41-H4-00360-ZCU-06-ST-AL020	360 PPR, HTL/TTL output
I41-H4-00500-ZCU-06-ST-AL020	500 PPR, HTL/TTL output
I41-H4-01000-ZCU-06-ST-AL020	1000 PPR, HTL/TTL output
I41-H4-01024-ZCU-06-ST-AL020	1024 PPR, HTL/TTL output
CK41-H4-00100-ZCU-06-ST-AL020	100 PPR, HTL/TTL output
CK41-H4-00200-ZCU-06-ST-AL020	200 PPR, HTL/TTL output
CK41-H4-00360-ZCU-06-ST-AL020	360 PPR, HTL/TTL output
CK41-H4-00500-ZCU-06-ST-AL020	500 PPR, HTL/TTL output
CK41-H4-01000-ZCU-06-ST-AL020	1000 PPR, HTL/TTL output
CK41-H4-01024-ZCU-06-ST-AL020	1024 PPR, HTL/TTL output
CK41-H4-02000-ZCU-06-ST-AL020	2000 PPR, HTL/TTL output
CK41-H4-02048-ZCU-06-ST-AL020	2048 PPR, HTL/TTL output

ACCESSORIES

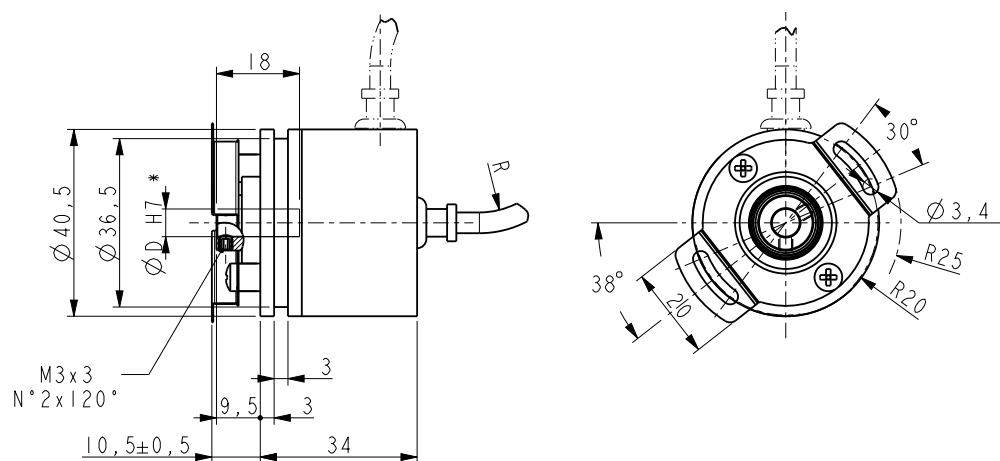
EDE9S:	9 pin DSub mating connector
EM12F8:	M12 8 pin mating connector
PAN/PGF:	flexible couplings
LKM-386:	fixing clamps



I40

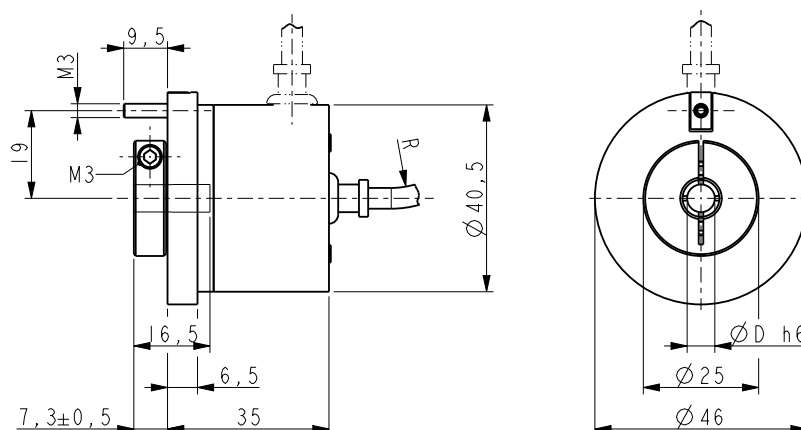


I41



* $\varnothing 8$ bore depth = 9mm

CK41



CK46

Order code

I40 I41	-	XX (a)	-	XXXXX (b)	-	XXX (c)	-	XX (d)	-	X (e)	X (f)	-	X (g)	XXXX (h)	/Sxxx (i)
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(a) OUTPUT CIRCUITS / POWER SUPPLY N2 = NPN o.c., +10V÷ +30V P2 = PNP o.c., +10V÷ +30V Y2 = Push Pull, +10V÷ +30V L1 = Line Driver (RS422), +5V±5% H4 = PP/LD universal circuit, +5V÷ +30V L2 = Line Driver (RS422), +10V÷ +30V (b) RESOLUTION (PPR) See electrical specifications	(c) OUTPUT SIGNAL BNF = AB BCU = AB, /AB ZNF = ABO ZCU = ABO, /ABO (d) SHAFT DIAMETER 06 = 6 mm P6 = 6.35 mm - 1/4" 08 = 8 mm	(e) PROTECTION S = IP64 P = IP65 Q = IP66 shaft side (f) OPERATING TEMPERATURE T = -25°C +85°C (-13°F +185°F) (g) CONNECTION POSITION A = axial R = radial	(h) CABLE LENGTH L010 = cable output 1 m (standard) L020 = cable output 2 m Lxx0 = cable output x m (max. length 10 m) Cxx0 = x m cable with DSub 9 pin inline plug M005* = 0,5 m cable + M12 8 pin inline plug *(only with BCU and ZCU) M020* = 2 m cable + M12 8 pin inline plug *(only with BCU and ZCU) (i) CUSTOM VERSION
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Order code

CK41 CK46	-	XXX (a)	-	XXXXX (b)	-	XXX (c)	-	XX (d)	-	X (e)	X (f)	-	X (g)	XXXX (h)	/Sxxx (i)
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(a) OUTPUT CIRCUITS / POWER SUPPLY N2 = NPN o.c., +10V÷ +30V P2 = PNP o.c., +10V÷ +30V Y2 = Push Pull, +10V÷ +30V L1 = Line Driver (RS422), +5V±5% H4 = PP/LD universal circuit, +5V÷ +30V L2 = Line Driver (RS422), +10V÷ +30V (b) RESOLUTION (PPR) See electrical specifications	(c) OUTPUT SIGNALS BNF = AB BCU = AB, /AB ZNF = ABO ZCU = ABO, /ABO (d) SHAFT DIAMETER 06 = 6 mm P6 = 6.35 mm - 1/4" 08 = 8 mm (only CK41)	(e) PROTECTION S = IP64 P = IP65 (f) OPERATING TEMPERATURE T = -25°C +85°C (-13°F +185°F) (g) CONNECTION POSITION A = axial R = radial	(h) CABLE LENGTH L010 = cable output 1 m (standard) L020 = cable output 2 m Lxx0 = cable output x m (max. length 10 m) Cxx0 = x m cable with DSub 9 pin inline plug M005* = 0,5 m cable + M12 8 pin inline plug *(only with BCU and ZCU) M020* = 2 m cable + M12 8 pin inline plug *(only with BCU and ZCU) (i) CUSTOM VERSION
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Document release	Date	Description
1.3	26.06.2026	Note on the order code for M005 and M020
1.2	22.04.2024	I40-I41 order code (Q protection also for I40)
1.1	6.11.2023	Resolution update (added 800 and 1600 PPR)
1.0	September 2023	New order code