Series **I40 • I41 • CK41 • CK46**

- 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 (only I41)

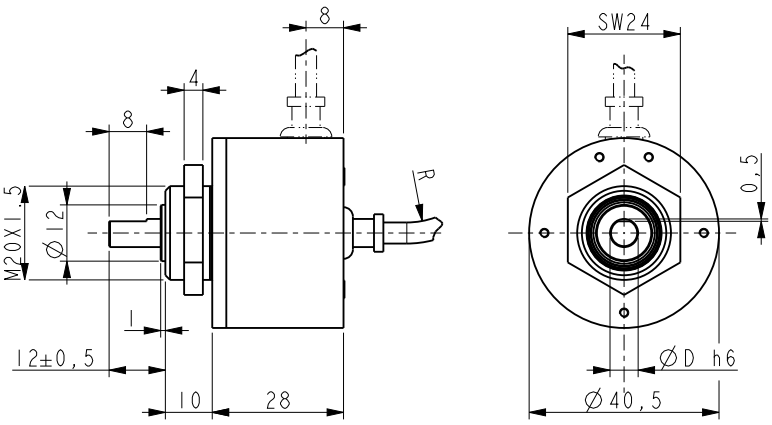
MECHANICAL SPECIFICATIONS	
Dimensions:	see drawing
Shaft diameter:	Ø 6, 6.35, 8 mm
Shaft loading (axial, radial):	20 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque (at 20°C):	0,1 Ncm (typical)
Bearings life:	10^9 rev. min.
Electrical connections:	cable output 1 m (3.3 ft)
Weight:	~ 100 g (3,5 oz)
Option:	• additional cable • DSub 9 pin inline connector • M12 plug

ELECTRICAL SPECIFICATIONS	
Resolution (PPR): *(other resolutions on request)*	1-2-5-8-10-15-30-32-40-50-60-72-84-90-100 180-200-250-256-300-360-400-500-512-600-720 800-900-1000-1024-1440-1600-1800-2000-2048 2400-3600-4000-4096
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

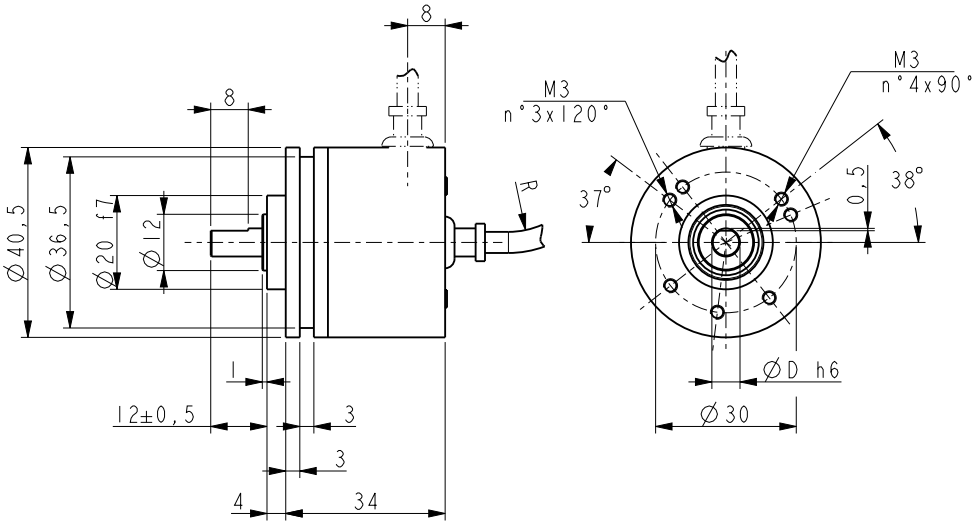
PREFERENTIAL MODELS	
I41-H4-00100-ZCU-06-ST-AL020	100 PPR, HTL/TTL output
I41-H4-00200-ZCU-06-ST-AL020	200 PPR, HTL/TTL output
I41-H4-00360-ZCU-06-ST-AL020	360 PPR, HTL/TTL output
I41-H4-00500-ZCU-06-ST-AL020	500 PPR, HTL/TTL output
I41-H4-01000-ZCU-06-ST-AL020	1000 PPR, HTL/TTL output
I41-H4-01024-ZCU-06-ST-AL020	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

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

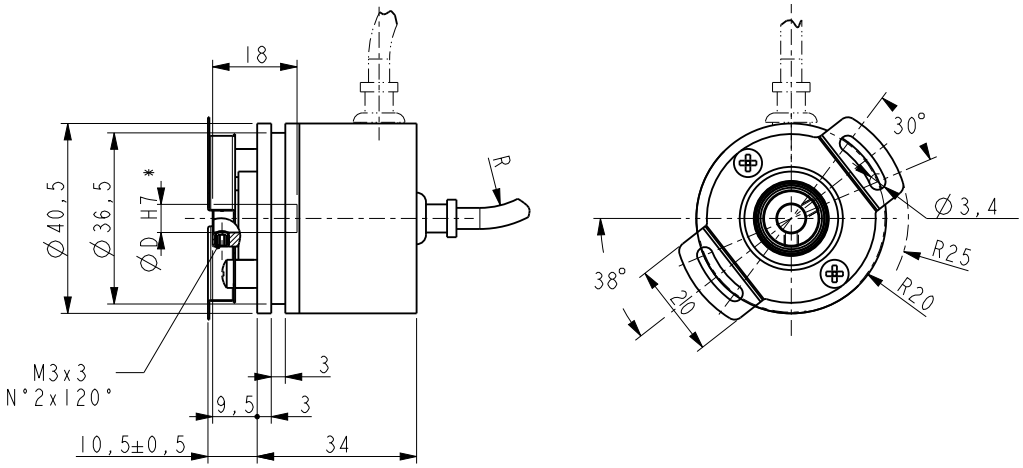
ACCESSORIES	
EDE9S:	9 pin DSub mating connector
EM12F8:	M12 8 pin mating connector
PAN/PGF:	flexible couplings
LKM-386:	fixing clamps



I40

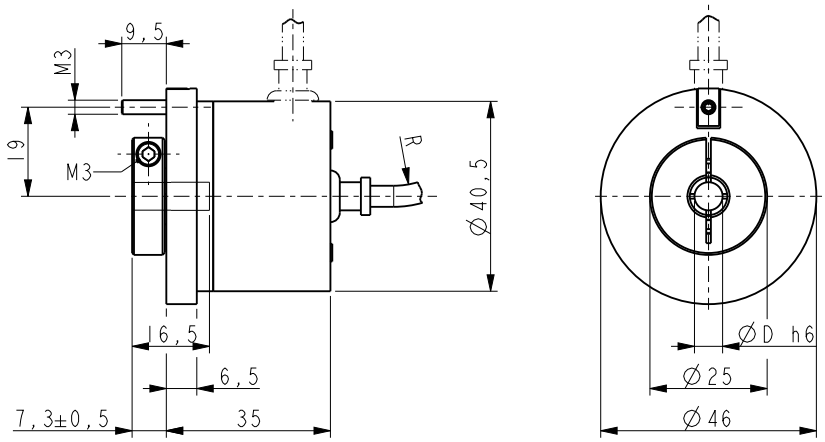


I41



* Ø8 bore depht = 9mm

CK41



CK46

Order code

I40 I41	-	XX ⓐ	-	XXXXX ⓑ	-	XXX ⓒ	-	XX ⓓ	-	X ⓔ	X ⓕ	-	X ⓖ	XXXX ⓗ	/Sxxx ⓘ

ⓐ 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

ⓑ RESOLUTION (PPR)
See electrical specifications

ⓒ OUTPUT SIGNAL
BNF = AB
BCU = AB, /AB
ZNF = AB0
ZCU = AB0, /AB0

ⓓ SHAFT DIAMETER
06 = 6 mm
P6 = 6.35 mm - 1/4"
08 = 8 mm

ⓔ PROTECTION / OPERATING TEMP.
S = IP64
P = IP65
Q = IP66 shaft side *(only I41)*

ⓕ PROTECTION / OPERATING TEMP.
T = -25°C +85°C (-13°F +185°F)

ⓖ CONNECTION POSITION
A = axial
R = radial

ⓗ 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
M020 = 2 m cable + M12 8 pin inline plug

ⓘ CUSTOM VERSION

Order code

CK41 CK46	-	XXX ⓐ	-	XXXXX ⓑ	-	XXX ⓒ	-	XX ⓓ	-	X ⓔ	X ⓕ	-	X ⓖ	XXXX ⓗ	/Sxxx ⓘ

ⓐ 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
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ⓑ RESOLUTION (PPR)
See electrical specifications

ⓒ OUTPUT SIGNALS
BNF = AB
BCU = AB, /AB
ZNF = AB0
ZCU = AB0, /AB0

ⓓ SHAFT DIAMETER
06 = 6 mm
P6 = 6.35 mm - 1/4"
08 = 8 mm (only CK41)

ⓔ PROTECTION / OPERATING TEMP.
S = IP64
P = IP65

ⓕ OPERATING TEMPERATURE
T = -25°C +85°C (-13°F +185°F)

ⓖ CONNECTION POSITION
A = axial
R = radial

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L020 = cable output 2 m
Lxx0 = cable output x m (max. length 10 m)
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M005 = 0,5 m cable + M12 8 pin inline plug
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ⓘ CUSTOM VERSION

Document release	Date	Description
1.1	6.11.2023	Resolution update (added 800 and 1600 PPR)
1.0	September 2023	New order code