

- Feedback encoder for big size motors
- Precise optical sensing
- Very flat design
- Through hollow shaft up to Ø 30 mm
- Robust die cast housing with IP65 protection



C80

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:	-40°C +100°C (-40°F +212°F) (98% R.H. without condensation)
Options:	<ul style="list-style-type: none"> • Operating temperature range: -40°C +100°C (-40°F +212°F) • IP65 Protection (3000 rpm max, torque 2 Ncm)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Hollow shaft diameter:	Ø 25, 30 mm
Reducing sleeves, BR2-xx from Ø 30 mm to:	Ø 15, 5/8" (15,875), 16, 17, 18, 19, 20 22, 23, 24, 1" (25,4), 28 mm
Shaft loading (axial and 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:	M23 12 pin plug or cable output 1 m (3.3 ft)
Weight:	~ 300 g (10,6 oz)
Option:	• additional cable

ELECTRICAL SPECIFICATIONS

Resolution (PPR):	100-200-360-400-500-1000-1024-2000-2048-2500 4096
Counting frequency:	300 kHz max.
Output circuits:	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

MATERIALS

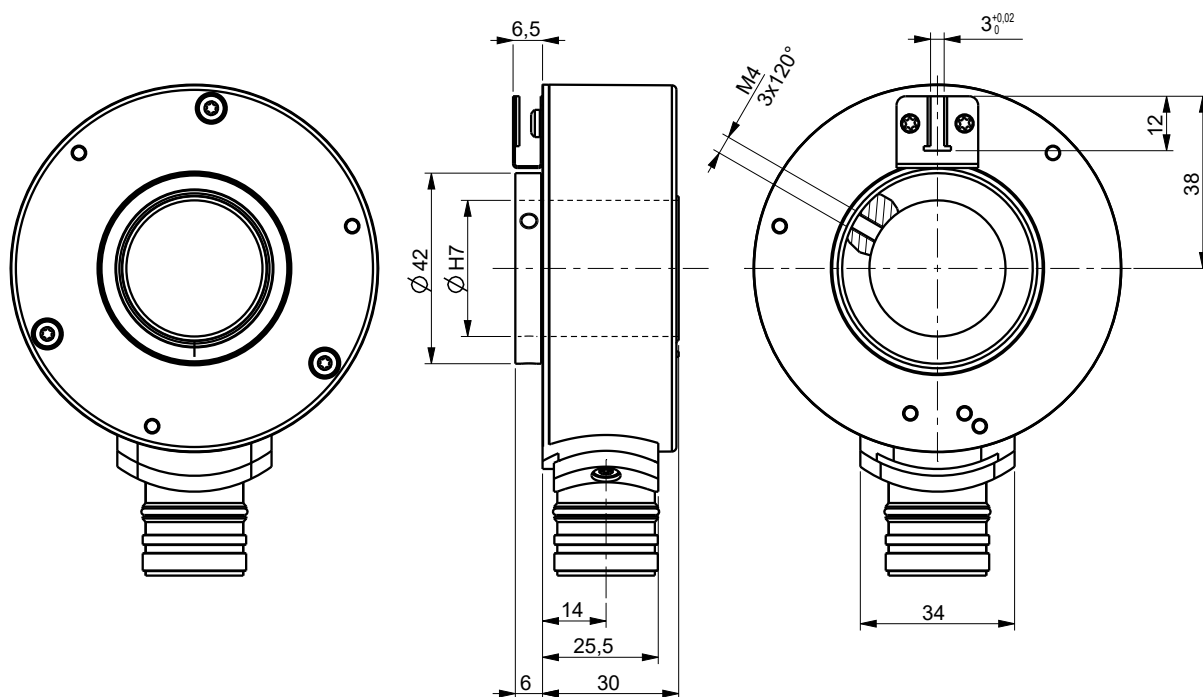
Flange:	die cast aluminium, UNI EN AC-46100
Housing:	die cast aluminium, UNI EN AC-46100
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic 1.4305 (UNI EN 10088-1)

PREFERENTIAL MODELS

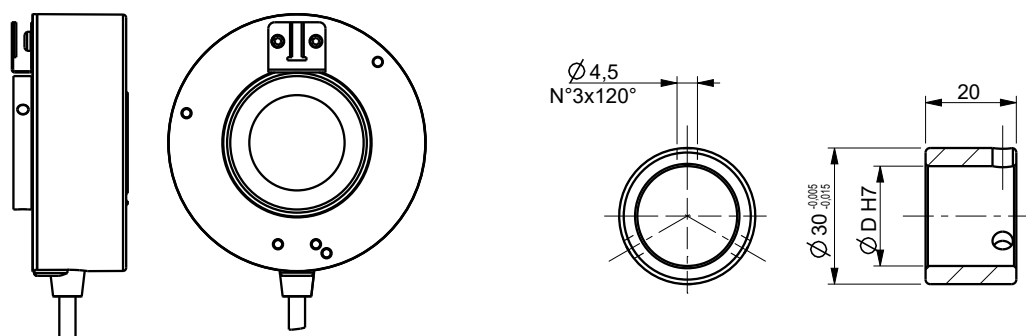
C80-H4-1024-ZCU-30-ST-RL020	1024 PPR, HTL/TTL output
C80-H4-2048-ZCU-30-ST-RL020	2048 PPR, HTL/TTL output

ACCESSORIES

EC-C12F-LK-18-050:	Cordset 5m with M23 connector
EC-C12F-LK-18-100:	Cordset 10m with M23 connector
EDE9S:	9 pin DSub mating connector
BR2-xx:	reducing sleeves
EPFL121:	12 pin M23 mating connector



C80



BR2-xx

Order code

C80	-	XX	-	XXXXX	-	XXX	-	XX	-	X	X	-	X	XXXX	/Sxxx
		(a)		(b)		(c)		(d)		(e)	(f)		(g)	(h)	(i)

<p>(a) OUTPUT CIRCUITS / POWER SUPPLY Y2 = Push Pull, +10V± +30V L1 = Line Driver (RS422), +5V±5% H4 = PP/LD universal circuit, +5V± +30V L2 = Line Driver (RS422), +10V± +30V</p> <p>(b) RESOLUTION (PPR) See electrical specifications</p>	<p>(c) OUTPUT SIGNALS / CONNECTIONS BNF = AB, cable output ZNF = ABO, cable output BCU = AB /AB, cable output ZCU = ABO /ABO, cable output BCZ = AB /AB, M23 12 pin plug ZCZ = ABO /ABO, M23 12 pin plug</p> <p>(d) SHAFT DIAMETER 25 = 25 mm 30 = 30 mm</p>	<p>(e) PROTECTION S = IP64 (standard) P = IP65</p> <p>(f) OPERATING TEMPERATURE T = -25°C +85°C (-13°F +185°F) standard K = -40°C +100°C (-40°F +212°F)</p> <p>(g) CONNECTION POSITION R = radial</p>	<p>(h) CABLE LENGTH L010 = cable output 1 m L020 = cable output 2 m L070 = cable output 7 m Lxxx = cable output x m (max. 10 m) Cxxx = x m cable with DSub 9 pin inline plug</p> <p>(i) CUSTOM VERSION</p>
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Document release	Date	Description
1.0	October 2023	New order code