

ROTAPULS

Incremental encoder

Series

C51



- Small size incremental encoder with high resolution
- DC and AC motor feedback



C51

ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
Protection:	IP54
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 Protection

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Hollow shaft diameter:	Ø 6, 6.35, 8, 9.52, 10 mm
Shaft loading (axial, radial):	20 N max.
Shaft rotational speed:	3000 rpm max.
Starting torque at 20°C:	≤ 1,5 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

ELECTRICAL SPECIFICATIONS

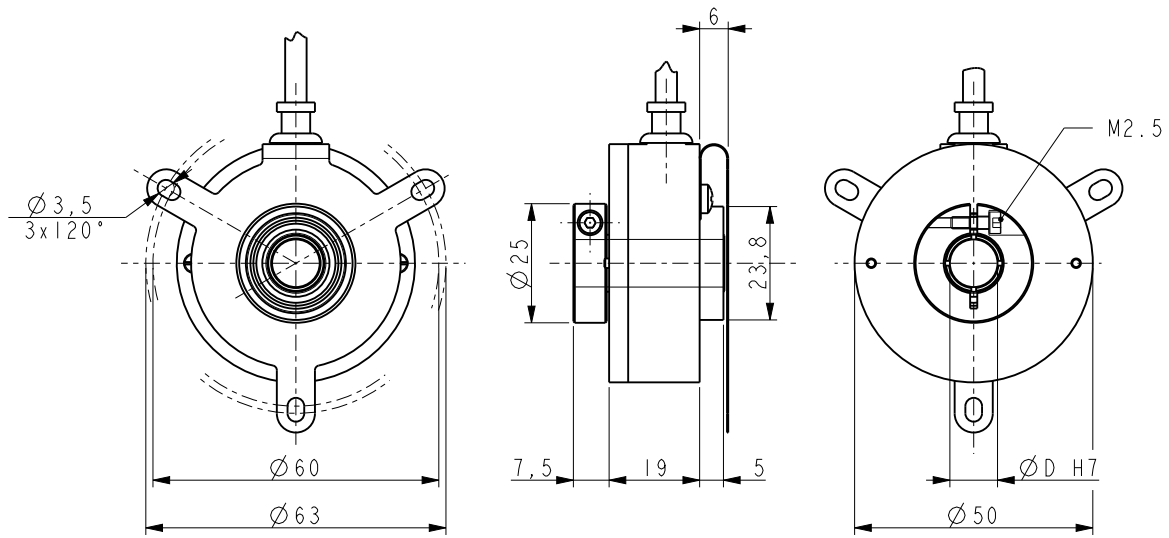
Resolution (PPR):	6-10-12-25-40-50
Counting frequency:	100 kHz max.
Output circuits:	Push-Pull, Line Driver, Universal circuit
Power supply:	+5V±5%, +10V +30V,+5V +30V
Consumption:	70 mA (typical)
Output current (each channel):	40 mA max.
Protection:	against inversion of polarity and short-circuit (except L circuit)
EMC:	electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4
Optoelectronic life:	100.000 hrs min.

MATERIALS

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

ACCESSORIES

EDE9S:	9 pin DSub mating connector
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C51

Order code

C51	-	X (a)	-	XXXX (b)	XXX (c)	X (d)	XX (e)	X (f)	XX (g)	/Sxxx (h)
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(a) OUTPUT CIRCUITS

Y = Push Pull
L = Line Driver (RS422)
H = PP/LD universal circuit

(b) RESOLUTION (PPR)

See electrical specifications

(c) OUTPUT SIGNALS

BNF = AB
BCU = AB, /AB
ZNF = AB0
ZCU = AB0, /AB0

(d) SUPPLY VOLTAGE

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

(e) SHAFT DIAMETER

6 = 6 mm
P6 = 6.35 mm - 1/4"
8 = 8 mm
P9 = 9.52 mm - 3/8"
10 = 10 mm

(f) PROTECTION

- = IP54 (standard)
P = IP65

(g) 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

(h) CUSTOM VERSION