

ROTAPULS

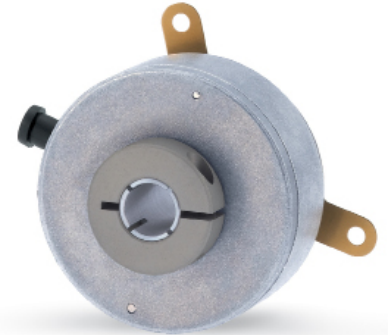
Incremental encoder

Series

C50



- Best selling small size hollow shaft encoder
- Ideal for motor feedback applications
- Extended standard operating temperature from -40°C to 100°C
- Preferential versions with fast delivery
- Universal output circuit TTL/HTL 5-30Vdc



C50

ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
Protection:	IP65
Operating temperature range:	-40°C + 100°C (-40°F + 212°F)
Storage temperature range:	-40°C + 100°C (-40°F + 212°F) (98% R.H. without condensation)
Option:	<ul style="list-style-type: none"> • IP54 Protection (low inertia bearings, 10000 rpm for short periods)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Hollow shaft diameter:	∅ 6, 6.35, 8, 9.52, 10 mm
Solid shaft:	1:10 taper
Shaft loading (axial, radial):	20 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque (at 20°C):	≤ 0,25 Ncm (typical)
Bearings life:	10 ⁹ rev. min.
Electrical connections:	cable output 1 m (3.3 ft)
Weight:	~ 100 g (3,5 oz)
Options:	<ul style="list-style-type: none"> • additional cable • DSub 9 pin inline connector

ELECTRICAL SPECIFICATIONS

Resolution (PPR):	100-180-200-250-256-300-360-400-500-512-600 1000-1024-2000-2048-4096
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

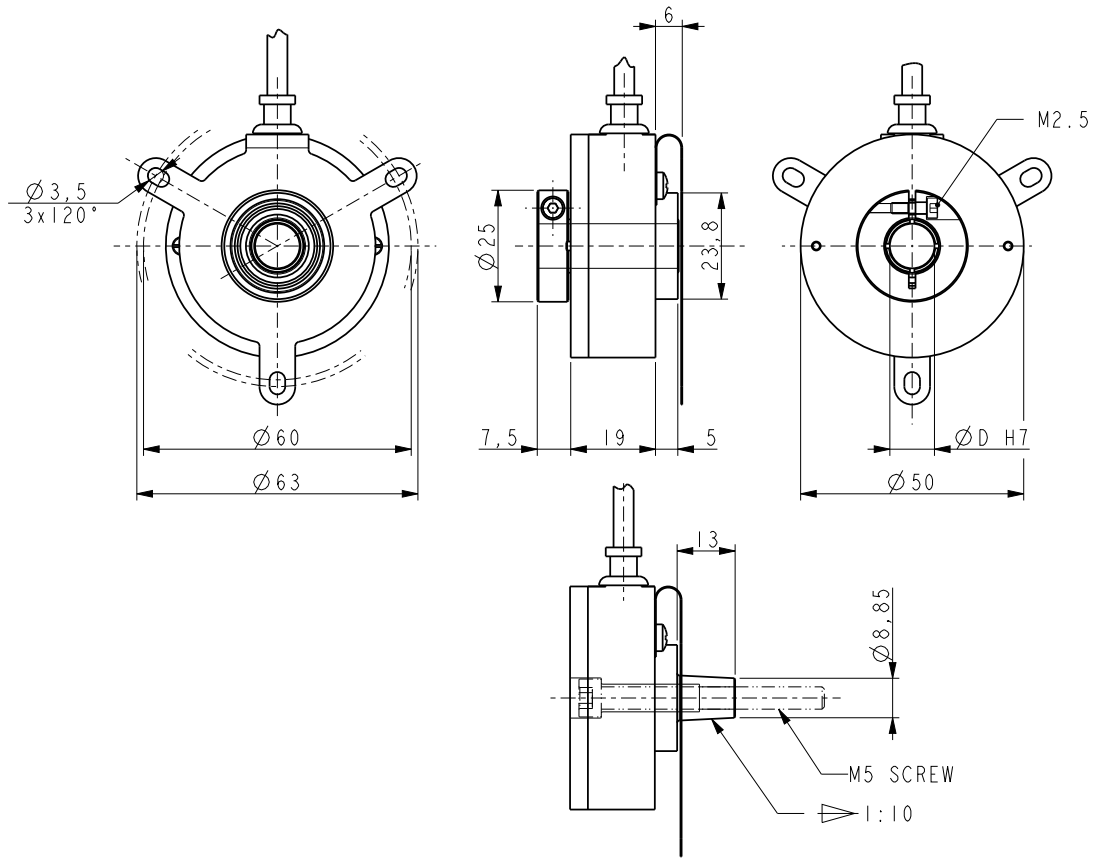
Flange:	zamac die cast
Housing:	zamac die cast
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic - UNI EN 4305
Light source:	GaAl diodes

PREFERENTIAL MODELS

C50-H-100ZCU410	100 PPR, HTL/TTL output
C50-H-360ZCU410	360 PPR, HTL/TTL output
C50-H-500ZCU410	500 PPR, HTL/TTL output
C50-H-1000ZCU410L2	1000 PPR, HTL/TTL output
C50-H-1024ZCU410L2	1024 PPR, HTL/TTL output

ACCESSORIES

EDE9S:	9 pin DSub mating connector
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C50

Order code

C50	-	X	-	XXXX	XXX	X	XX	XX	X	/Sxxx
		(a)		(b)	(c)	(d)	(e)	(f)	(g)	(h)

<p>(a) OUTPUT CIRCUITS Y = Push Pull L = Line Driver (RS422) H = PP/LD universal circuit</p> <p>(b) RESOLUTION (PPR) See electrical specifications</p>	<p>(c) OUTPUT SIGNALS BNF = AB BCU = AB, /AB ZNF = ABO ZCU = ABO, /ABO</p> <p>(d) SUPPLY VOLTAGE 1 = +5V±5% (L output circuit) 2 = +10V÷ +30V (Y output circuit) 4 = +5V÷ +30V (H output circuit)</p>	<p>(e) SHAFT DIAMETER 6 = 6 mm P6 = 6.35 mm - 1/4" 8 = 8 mm P9 = 9.52 mm - 3/8" 10 = 10 mm C10 = 1:10 taper</p> <p>(g) PROTECTION - = IP65 (standard) V = IP54 (low inertia bearings)</p>	<p>(f) 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</p> <p>(h) CUSTOM VERSION</p>
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