

ROTAPULS

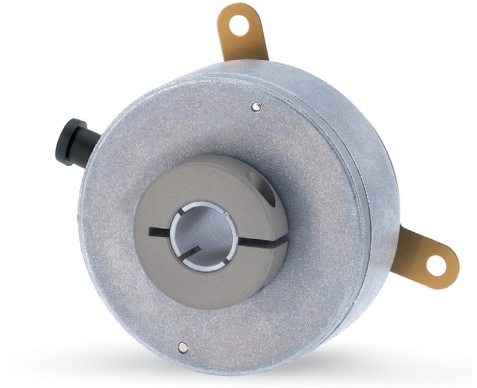
Incremental encoder

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 on stock
- Universal output circuit TTL/HTL 5-30Vdc



C50

ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms (acc. to MIL STD 202F)
Vibrations:	10 g, 5-2000 Hz (acc. to MIL STD 202F)
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:	• 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
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.
Weight:	~ 0,1 kg (3,5 oz)
Electrical connections:	cable 1 m
Options:	• additional cable • DSub 9 pin inline connector

ELECTRICAL SPECIFICATIONS

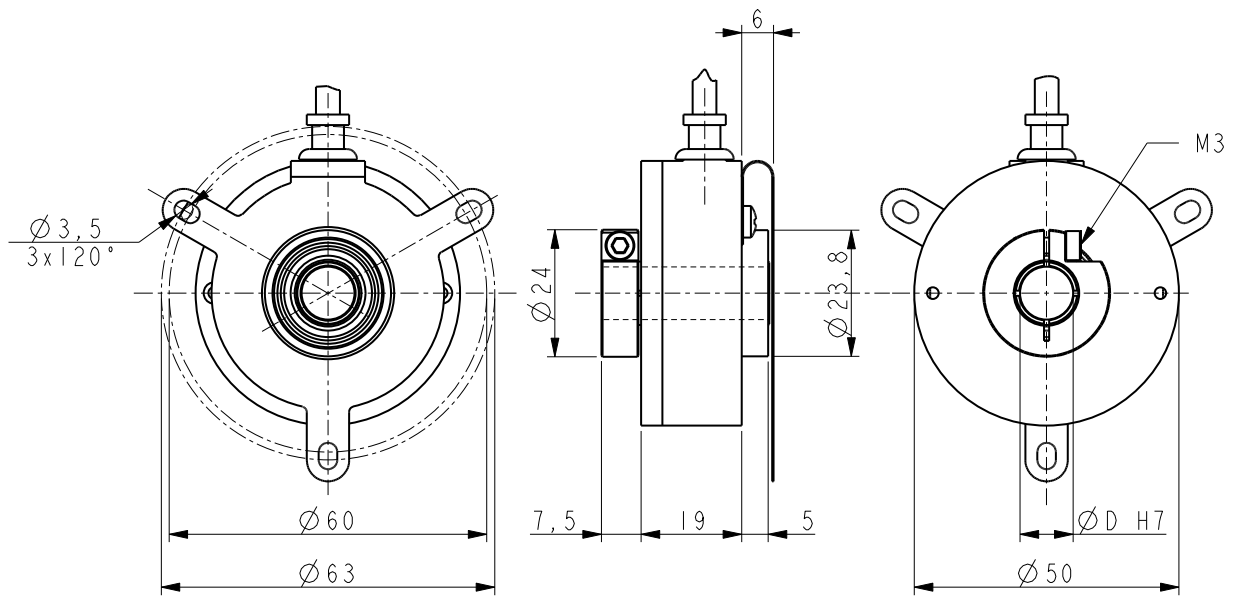
Resolution (PPR):	100-180-200-250-256-300-360-400-500-512-600 1000-1024-2000-2048-4096
Counting frequency:	100 kHz max.
Output circuits:	Push-Pull, Line Driver, Universal circuit
Power supply:	+5V±5%, +10V +30V, +5V +30V
Consumption:	70 mA max.
Output current (each channel):	40 mA max.
Protection:	against inversion of polarity (except +5V version)
EMC:	electro-magnetic emission (according to EN 61000-6-4) electro-magnetic immunity (according to EN 61000-6-2)
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

ACCESSORIES

EDE9S:	9 pin DSub mating connector
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C50

Order code

Additional code (optional)

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

<p>(a) OUTPUT CIRCUITS Y = Push Pull L = Line Driver (RS422) H = PP/LD universal circuit</p> <p>(b) PULSE RATE (PPR) See electrical specifications</p>	<p>(c) OUTPUT SIGNALS BNF = AB BCU = AB, /AB ZNF = AB0 ZCU = AB0, /AB0</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</p> <p>(f) CONNECTIONS - = 1 m cable (standard) L2 = 2 m cable Lx = x m cable</p>	<p>(g) PROTECTION - = IP65 (standard) V = IP54 protection (low inertia bearings)</p> <p>(h) C = Inline connector DSub 9 pin</p> <p>(i) CUSTOM VERSION</p>
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