

ROTAPULS

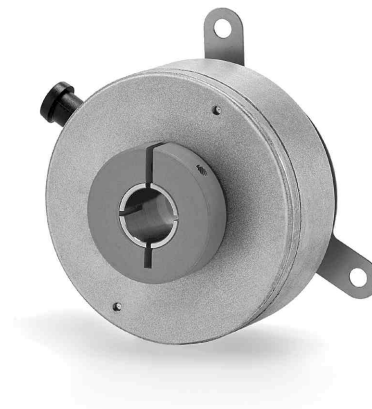
Incremental encoder

series

C50



- Small size incremental encoder
- Operating temperature -40°C +100°C
- DC and AC motor feedback
- Preferential encoder on stock



C50

ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms (acc. to MIL STD 202F)
Vibrations:	10 g, 5-2000 Hz (acc. to MIL STD 202F)
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)
Protection:	IP65
Option:	• IP54 Protection (low inertia bearings, 10000 rpm for short periods)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft hollow:	Ø 6, 6.35, 8, 9.52, 10 mm
Shaft loading (axial and radial):	20 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque at 20°C:	≤ 0,25 Ncm (typical)
Moment of inertia:	~ 20 gcm ²
Bearings life:	10 ⁹ rev. min.
Weight:	~ 0,1 kg (3,5 oz)

ELECTRICAL SPECIFICATIONS

STD pulse rate:	100-180-200-250-256-300-360-400-500-512-600 1000-1024
Power supply:	+5V±5%, +10V +30V,+5V +30V
Output circuits:	Push-Pull, Line Driver, PP/LD
Output current (per channel):	40 mA max.
Output frequency:	100 kHz max.
Input current:	70 mA max.
Protection:	against inversion of polarity (except +5V version)
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

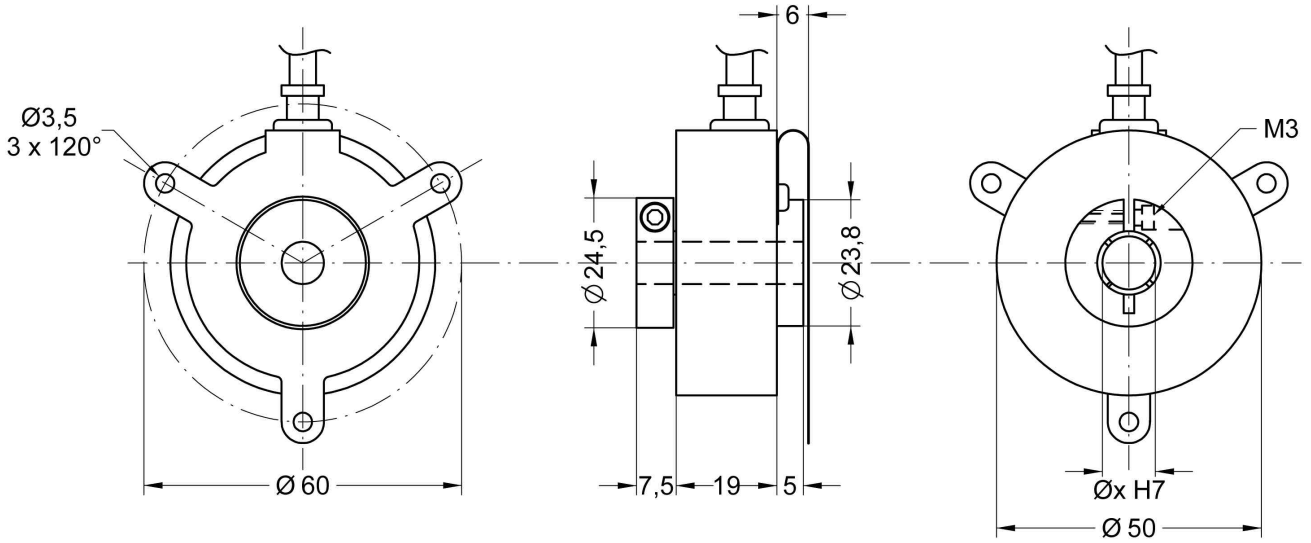
ELECTRICAL CONNECTIONS

1	2	Function
Brown	Yellow	A
-	Blue	/A
Blue	Green	B
-	Orange	/B
White	White	0
-	Grey	/0
Red	Red	+Vdc
Black	Black	0 Vdc GND

1 = Shielded cable LIKA 5x0,22 mm²
2 = Shielded cable LIKA 8x0,22 mm²

ACCESSORIES

EDE9S: 9 pin DSub mating connector



C50

ORDERING CODE

ADDITIONAL CODE (indicate only if necessary)

XXXX - X - XXXX X

SERIES
C50

OUTPUT CIRCUITS
Push-Pull Y
Line Driver AD26LS31 or eqv. L
PP/LD universal circuit H

PULSE RATE (PPR)
See electrical specifications

OUTPUT SIGNALS CONFIGURATION
Bidirectional B
Bidirectional with index pulse Z

X X X X

SHAFT DIAMETER
6 6 mm
P6 6.35 mm / 1/4"
8 8 mm
P9 9.52 mm / 3/8"
10 10 mm

ELECTRICAL CONNECTIONS
N Normal output F 5 wires cable, 1m. (3.3 ft)
C Complementary outputs U 8 wires cable, 1m. (3.3 ft)

SUPPLY VOLTAGE VS OUTPUT CIRCUIT
+5V±5% (L output circuit) 1
+10V± +30V (Y output circuit) 2
+5V± +30V (PP/LD universal circuit) 4

X X X /Sxxx

custom version

C Inline connector DSub 9 pin

Lx Cable length on request
Ex.: L4 = 4 m (13.2 ft)
L7 = 7 m (23.0 ft)

V IP54 Protection (low inertia bearings)