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 (acc. to MIL STD 202F)
Vibrations:	10 g, 5-2000 Hz (acc. to MIL STD 202F)
Operating temperature range:	-20°C +85°C (-4°F +185°F)
Storage temperature range:	-20°C +85°C (-4°F +185°F) (98% R.H.without condensation)
Protection:	IP54
Option:	• IP65 Protection

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:	3000 rpm max.
Starting torque at 20°C:	≤ 1,5 Ncm (typical)
Moment of inertia:	~ 20 gcm²
Bearings life:	10^9 rev. min.
Weight:	~ 0,1 kg (3,5 oz)

ELECTRICAL SPECIFICATIONS

STD pulse rate:	6-10-12-15-25-36-40-45-50-60-80-90-900 1500-2000-2048-2500
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:	anticorodal, UNI EN AW-6082
Housing:	anticorodal, UNI EN AW-6082
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic - UNI EN 4305
Light source:	GaAl diodes

ELECTRICAL CONNECTIONS

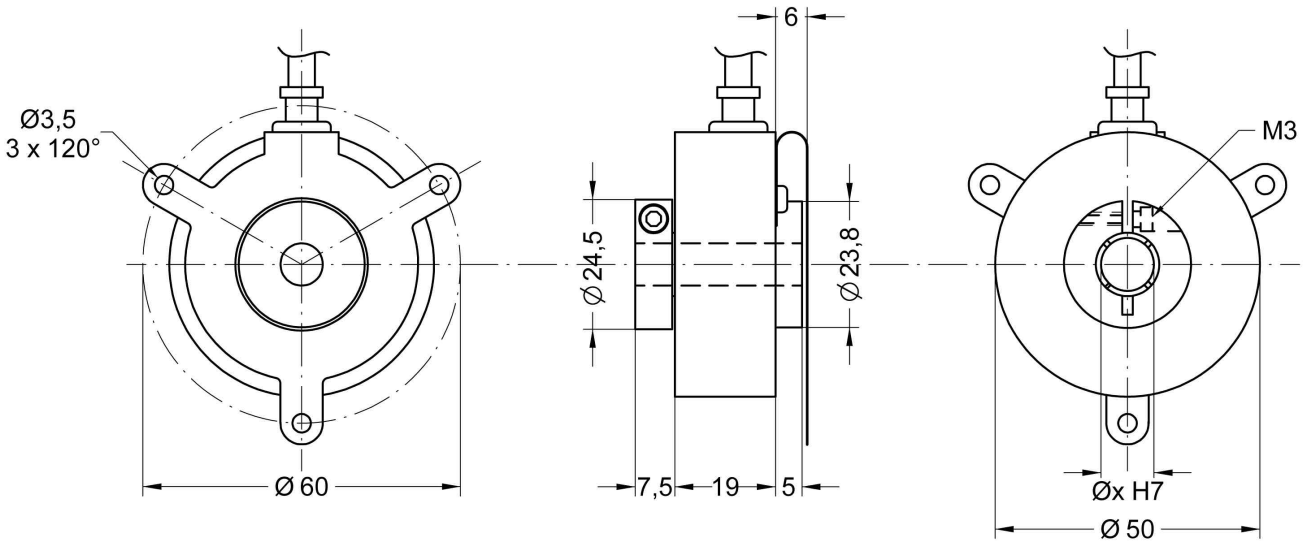
1	2	Function
Brown	Yellow	A
-	Blue	/A
Blue	Green	B
-	Orange	/B
White	White	0
-	Grey	/0
Red	Red	+Vdc
Black	Black	0 Vdc GND

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

ACCESSORIES

EDE9S:	9 pin DSub mating connector

Specifications subject to changes without prior notice



C51

ORDERING CODE

XXXX - X - XXXX X X X X X X

SERIES

C51	

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

ELECTRICAL CONNECTIONS

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

SHAFT DIAMETER

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

SUPPLY VOLTAGE VS OUTPUT CIRCUIT

+5V±5% (L output circuit)	1
+10V÷ +30V (Y output circuit)	2
+5V÷+30V (PP/LD universal circuit)	4

ADDITIONAL CODE (indicate only if necessary)

X X X /Sxxx

/Sxxx

custom version

X

C	Inline connector DSub 9 pin

X

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

X

P	IP65 Protection