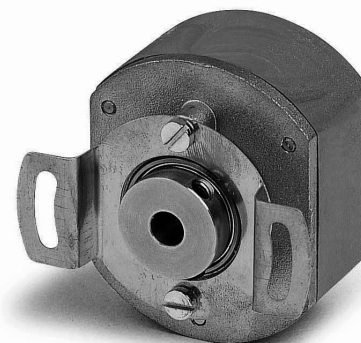


ROTAPULS

Feedback encoders for brushless motors

series

CB50



CB50

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 +100°C (-4°F + 212°F)
Storage temperature range:	-25°C+100°C (-13°F + 212°F) (98% R.H.without condensation)
Protection:	IP20

MECHANICAL SPECIFICATIONS

Dimension:	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
Weight:	0,1 Kg (3,5 oz)
Starting torque at 20°C	0,8 Ncm (typical)
Moment of inertia	~20 gcm ²
Misalignment	± 0,3 mm axial ± 0,06 mm radial ± 0,2° mm angular
Bearings life:	2x10 ⁹ rev/min.
Weight:	~ 0,1 Kg (3,5 oz)

ELECTRICAL SPECIFICATIONS

Pulse rate - Poles (other PPR upon request):	1024/8-2000/4-2000/6-2048/6-2048/8-2500/8
With U, V, W commutations signals	4 - 6 - 8 poles
Power supply:	+5V ±5%, +10V +30V,+5V +30V
Output circuits:	Push-Pull, Line Driver, PP/LD
Output current (per channel):	40 mA max.
Input current:	70 mA max.
Frequency response:	200 kHz max.
Protection:	against inversion of polarity (except +5Vdc version) outputs are protected against short-circuit (except Line Driver version)
Optoelectronic life:	100.000 hrs min.

MATERIALS

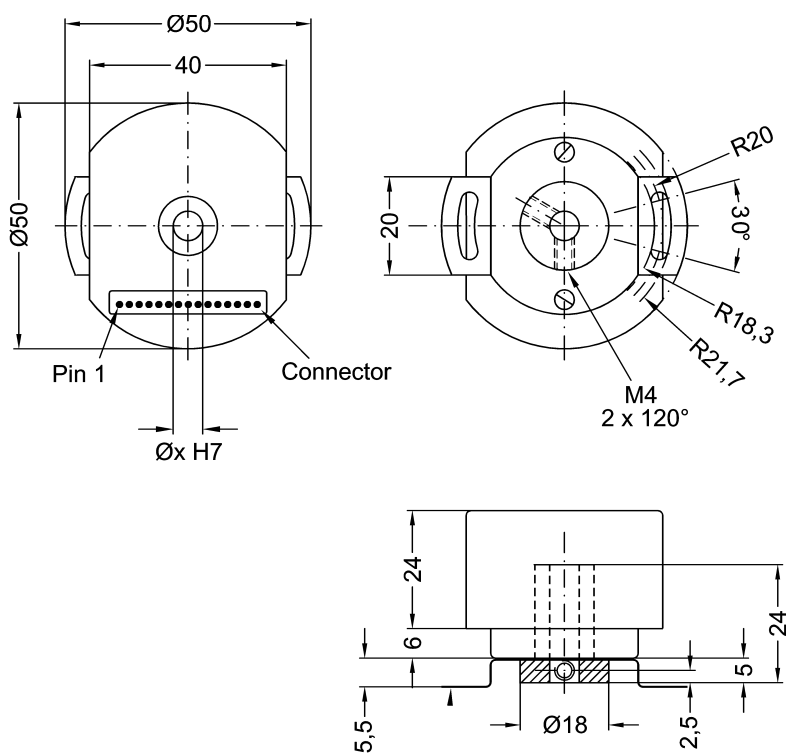
Flange:	non corroding
Housing:	plastic
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic
Light source:	GaAl diodes

ELECTRICAL CONNECTIONS

15 pin PCB connector			
1	0 Vdc	9	U
2	+ Vdc	10	V
3	A	11	W
4	B	12	/U
5	0	13	/V
6	/A	14	/W
7	/B	15	CASE
8	/0		

ACCESSORIES

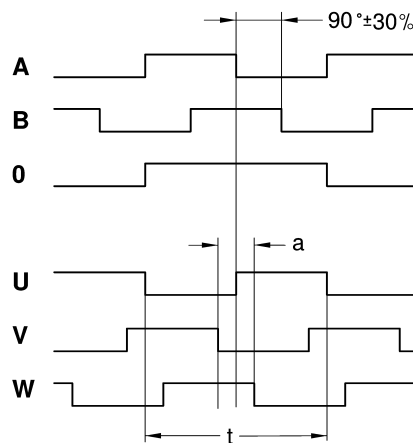
EC-CB50: mating connector with cable (30 cm/11.8 in.)



CB50

OUTPUT PHASE SHIFT

CCW ROTATION (seen from shaft side)



MECHANICAL ANGLES

N° of poles	a	t
4	30° ± 1°	180°
6	20° ± 1°	120°
8	15° ± 1°	90°

ORDERING CODE

XXXX - X - XXXX / X

SERIES

CB50

OUTPUT CIRCUITS

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

N° POLES

4 4 poles
6 6 poles
8 8 poles

SHAFT DIAMETER

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

PULSE RATE (PPR)

See electrical specifications

SUPPLY VOLTAGE VS OUTPUT CIRCUIT

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