

MAIN FEATURES

∅ 48 encoder series recommended for motor feedback.

- Easy mechanical mounting
- Small dimensions
- Up to 2048 ppr with zero signal
- Several output types available
- Up to 150 kHz output frequency
- 6000 RPM rotation speed



HOLLOW SHAFT INCREMENTAL ENCODERS

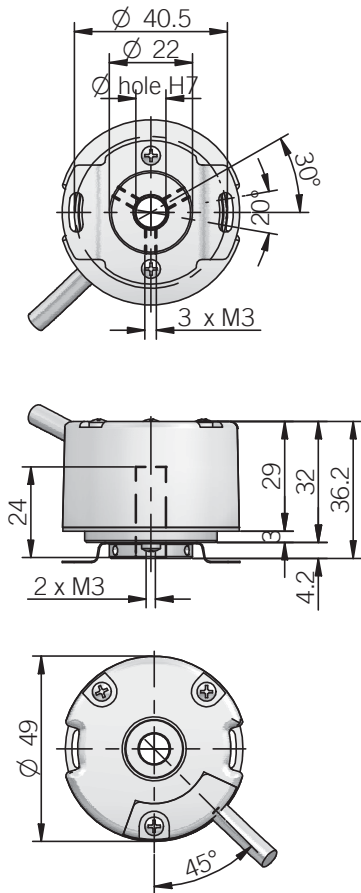
ORDERING CODE

EL 48 C 1000 Z 8/24 P 8 X 6 PR . XXX

SERIES incremental encoder series EL	SIZE mm 48	TYPE blind hollow shaft C through hollow shaft P	RESOLUTION ppr from 1 to 2048	ZERO PULSE without zero pulse S with zero pulse Z	POWER SUPPLY 5 V DC 5 8 ... 24 V DC 8/24	VARIANT XXX custom version	OUTPUT TYPE PR radial cable output (standard length 0.3 m)	MAX ROTATION SPEED 6 6000 rpm	ENCLOSURE RATING X IP 40	SHAFT DIAMETER 6 mm 8 mm	ELECTRONIC INTERFACE N NPN C NPN open collector P push-pull PC protected push-pull (AEIC-7272) L line driver
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N.B.: please directly contact our offices for pulses availability

EL 48 C / P



HOW TO MOUNT IT

- Couple encoder shaft with motor shaft.
- Fix spring to motor flange without tightening it.
- Fix the encoder shaft with the two grub screws.
- Turn for phasing.
- Fix the spring.



Electrical specifications

Resolution	from 1 to 2048 ppr
Power supply	5 V DC \pm 10% 8 ... 24 V DC \pm 5%
Current consumption without load	100 mA max
Max load current	30 mA for channel 15 mA for channel (line driver)
Output type	NPN NPN open collector push-pull line driver
Max output frequency	150 kHz
Counting direction	A leads B clockwise (shaft view)
Electromagnetic compatibility	IEC 61000-6-1 IEC 61000-6-3

Mechanical specifications

Shaft diameter	6 / 8 mm
Enclosure rating	IP 40 (IEC 60529)
Max rotation speed	6000 rpm
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	10 G, 10 ... 500 Hz (IEC 60068-2-6)
Bearings	2 ball bearings
Bearings life	10 ⁹ revolutions
Body material	EN-AW 2011 aluminum
Shaft material	1.4305 / AISI 303 stainless steel
Housing material	PA 66 glass fiber reinforced
Operating temperature	-20° ... +85 °C
Storage temperature	-25° ... +85 °C
Weight	100 g

Connections and standard colours

Function	Push pull / Npn / Npn open collector	Line driver
+V DC	red	red
0 V	black	black
Ch. A	green	green
Ch. A-	/	brown
Ch. B	yellow	yellow
Ch. B-	/	orange
Ch. Z	blue	blue
Ch. Z-	/	white
\equiv	shield	shield