

MAIN FEATURES

∅ 50 encoder series recommended as motor feedback.

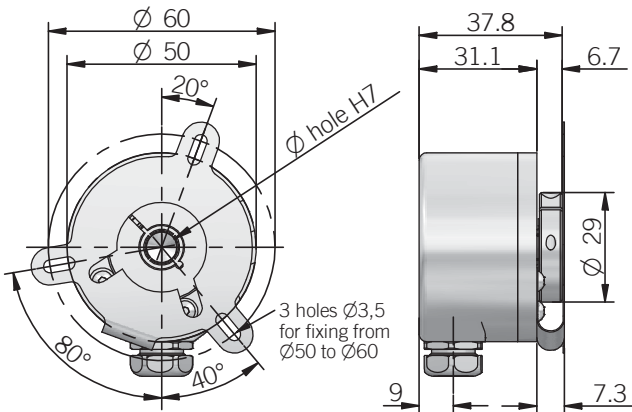
- Several ways to fix it
- Easy mechanical mounting
- Small dimensions
- Up to 5000 ppr with zero signal
- Several output types available
- Up to 150 kHz output frequency
- Up to 6000 RPM rotation speed



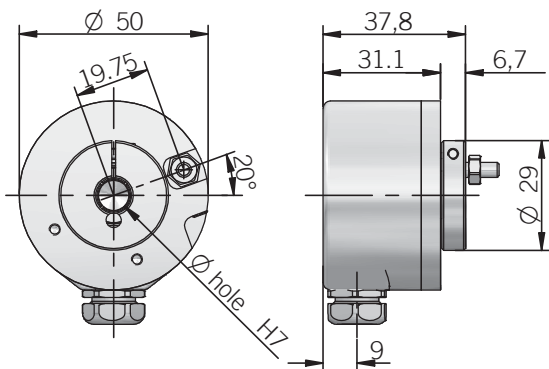
ORDERING CODE

<p>SERIES incremental encoder series EL</p> <p>SIZE mm 50</p> <p>TYPE blind hollow shaft (front fixing with spring) F blind hollow shaft (front fixing with pin) G blind hollow shaft (rear fixing with screw) K</p> <p>RESOLUTION ppr from 1 to 5000</p> <p><i>N.B.: please directly contact our offices for pulses availability</i></p> <p>ZERO PULSE without zero pulse S with zero pulse Z</p> <p>POWER SUPPLY (available only with L electronic output) 5 V DC 5 (available only with L or PC electronic output) 8 ... 24 V DC 8/24 5 ... 28 V DC 5/28</p>	<p>EL 50 G 1000 Z 5/28 P 8 X 3 P R . XXX</p>	<p>VARIANT XXX custom version</p> <p>OUTPUT DIRECTION R radial</p> <p>OUTPUT TYPE P cable output with cable gland (standard length 0.5 m)</p> <p>MAX ROTATION SPEED 3 3000 rpm 6 6000 rpm <i>N.B.: 3000 RPM max. with "S" enclosure rating</i></p> <p>ENCLOSURE RATING X IP 40 S IP 64</p> <p>SHAFT DIAMETER 6 mm 8 mm 9 mm ∅ 9,52 (3/8") 10 mm</p> <p>ELECTRONIC INTERFACE N NPN C NPN open collector P push-pull PC protected push-pull (AEIC-7272) L line driver</p>
---	---	--

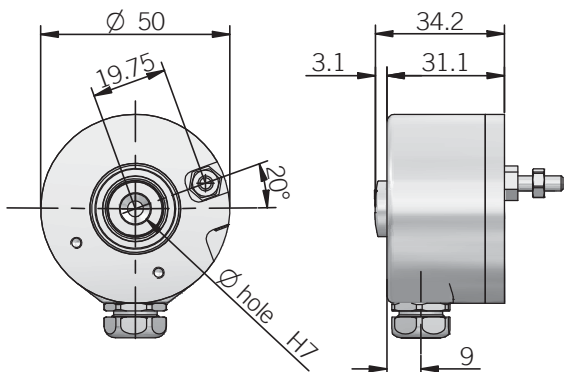
EL 50 F



EL 50 G

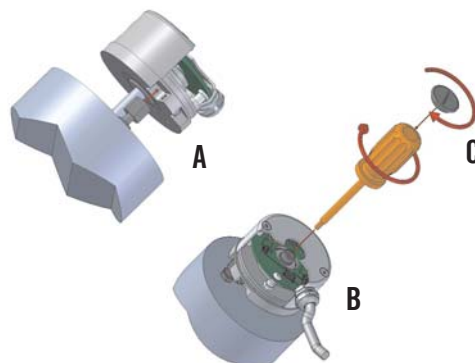


EL 50 K



HOW TO MOUNT IT

- Fix the anti-rotation pin (A).
- Insert encoder on the motor shaft with misalignment recovery system just next to the pin (A).
- Insert the washer (B) on the back and block it using the encoder screw on the motor axle.
- Turn for phasing.
- Fix encoder shaft by metal ring.
- Close the encoder with the plug (C).



Electrical specifications

Resolution	from 1 to 5000 ppr
Power supply	5 V DC $\pm 10\%$ 5 ... 28 V DC $\pm 5\%$ 8 ... 24 V DC $\pm 5\%$ (reverse polarity protection)
Current consumption without load	100 mA max
Max load current	30 mA for channel 20 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 / 9,52 (3/8") / 10 mm
Enclosure rating	IP 40 (IEC 60529) IP 64 (IEC 60529)
Max rotation speed	3000 rpm 6000 rpm
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	5 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	painted aluminum
Operating temperature	$-10^\circ \dots +60^\circ \text{C}$ $-10^\circ \dots +85^\circ \text{C}$ on request
Storage temperature	$-25^\circ \dots +70^\circ \text{C}$
Weight	150 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

