

MAIN FEATURES

∅ 50 encoder series recommended as motor feedback.

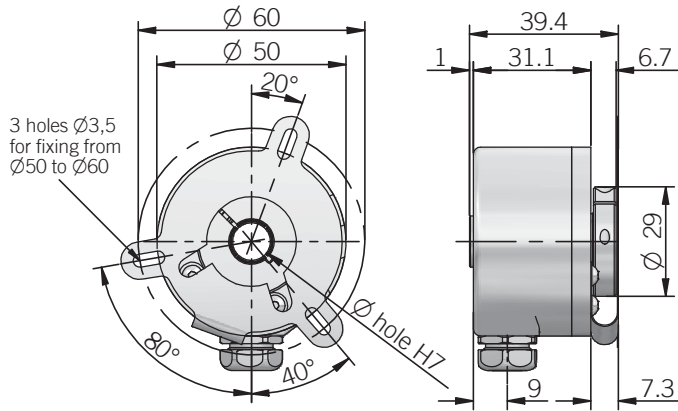
- Several ways to fix it
- Easy mechanical mounting
- Small dimensions
- Up to 5000 ppr with zero signal
- Several output types available
- Up to 150 kHz output frequency
- Up to 6000 RPM rotation speed



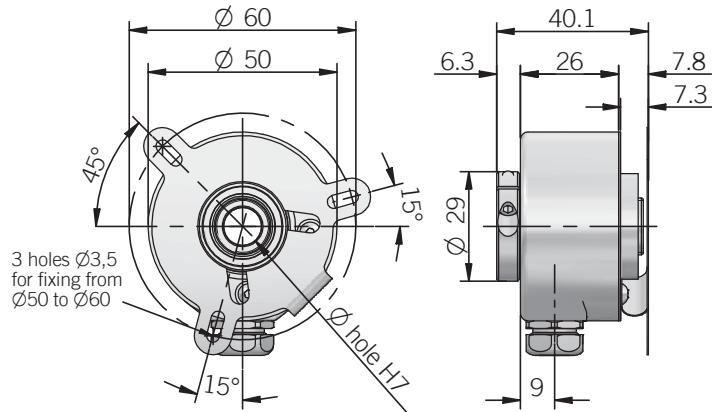
ORDERING CODE

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

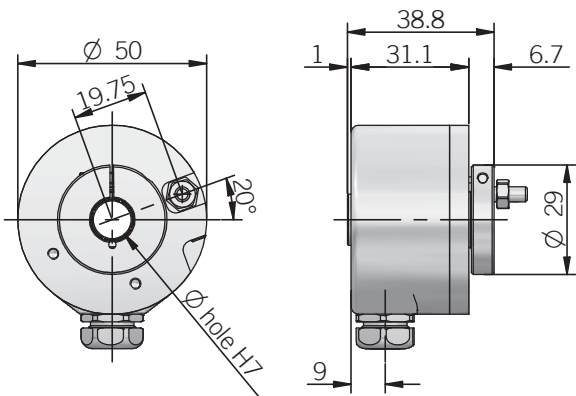
EL 50 FA



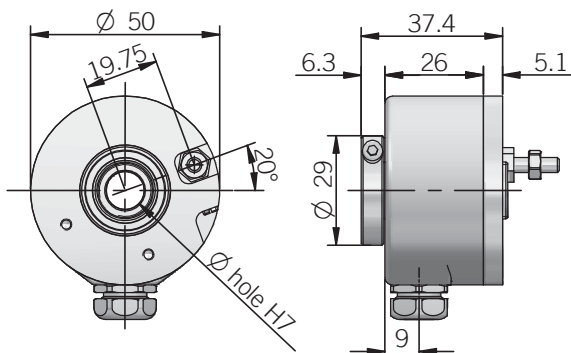
EL 50 FP



EL 50 GA



EL 50 GP



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 / 10 mm
Enclosure rating	IP 40 (IEC 60529)
Max rotation speed	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° ... +60 °C -10° ... +85 °C on request
Storage temperature	-25° ... +70 °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
⏏	shield	shield

HOW TO MOUNT IT

- Couple encoder shaft with motor shaft.
- Fix the spring to the motor flange without tightening it.
- Fix encoder shaft by the metal ring.
- Turn for phasing.
- Block the spring.

