

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
- IP55 sealing



Ordering code

EL 50 G 1000 Z 5/28 P 8 X 3 P R . XXX

incremental encoder series **EL**

size **50**

Type of flange

- blind hollow shaft (front fixing with spring) **F**
- blind hollow shaft (front fixing with pin) **G**
- blind hollow shaft (rear fixing with screw) **K**

Resolution

ppr from **1** to **5000**

please directly contact our offices for pulses availability

Zero pulse

- without zero pulse **S**
- with zero pulse **Z**

Power supply

5÷28 V DC **5/28**

line driver available only with 5 V DC or 8÷24 V DC power supply

full stop to separate
special versions

special version
code numbered
from 001 to 999

R radial

P cable output with SKINTOP® (standard length 0.5 m)

Max. rotation speed

- 3** 3000 RPM
- 6** 6000 RPM

3000 RPM max. with "S" enclosure rating

Enclosure rating

- X** IP40 standard
- S** IP55 optional

Bore diameter

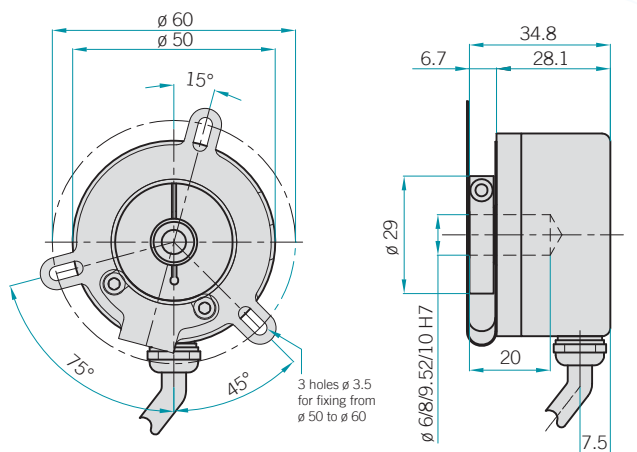
- 6** ∅ 6 mm
- 8** ∅ 8 mm
- 9** ∅ 9.52 mm (3/8")
- 10** ∅ 10 mm

Output type

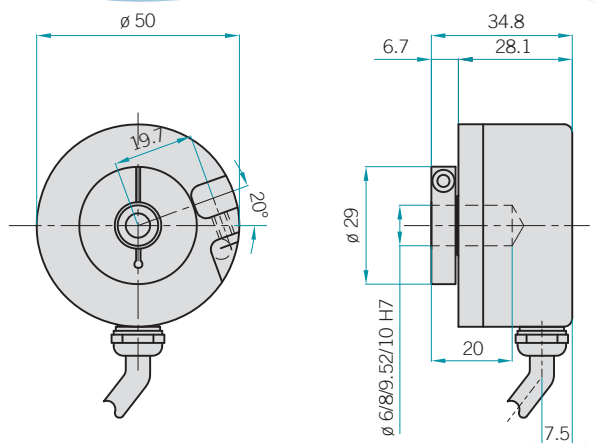
- N** NPN
- C** NPN open collector
- P** push-pull
- L** line driver

please refer to page 92 for optionals about output types

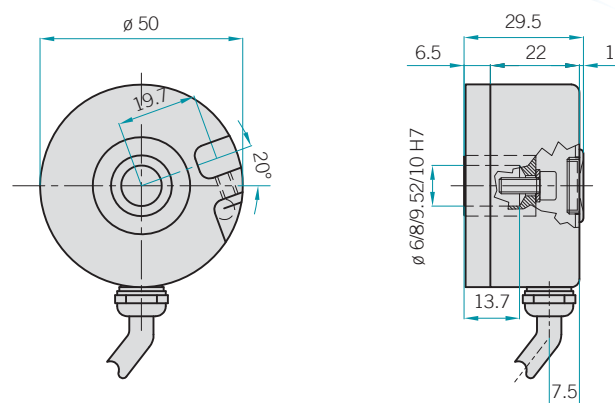
EL 50 F



EL 50 G



EL 50 K



HOW TO MOUNT IT

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

Electrical specifications

Resolution	from 1 to 5000 ppr
Power supply	5÷28 V DC line driver available only with 5 V DC or 8÷24 V DC power supply
Current consumption without load	150 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
Operating frequency	$F = \frac{\text{RPM} \cdot \text{Resolution}}{60}$

Mechanical specifications

Bore diameter	ø 6 / 8 / 9.52 / 10 mm
Enclosure rating	IP40 standard IP55 optional
Max. rotation speed	3000 RPM 6000 RPM 3000 RPM max. with "S" enclosure rating
Shock	50 G, 11 ms
Vibration	5 G, 10÷500 Hz
Bearing life	10 ⁹ revolutions
Bearings	2 ball bearings
Shaft material	stainless steel UNI X10CrNiS1809
Body material	aluminium UNI 9002/5
Housing material	aluminium UNI 9002/5
Operating temperature	0÷60 °C
Storage temperature	-25÷70 °C
Weight	150 g

