

Main characteristics

Ø50 encoder series used on motor feedback.

- Several way to fix it
- Easy mechanical installation
- Contained dimensions
- Up to 2.048 ppr with zero.
- Several output types available.
- Up to 6.000 rpm speed rotation
- IP55 sealing



Ordering code

Full stop to separate special versions.

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

Incremental encoder series **EL**

Body dimension **50**

Type of flanges

blind hole fixed with spring **F**

blind hole fixed with pin **G**

with blind hole fixed with screw **K**

Resolutions

PPR: from **1** to **2048**

Please, directly contact our offices for pulses availability

Zero pulse

without zero pulse **S**

with zero pulse **Z**

Input voltage

Input voltage **5 ÷ 28**

LINE DRIVER available only with input voltage 5 Vdc 8 ÷ 24 Vdc

Special version code numbered from 001 to 999

R radial

P cable output (standard length 0,5 m)

R.P.M.

3 3000

6 6000

3000 RPM MAX with "S" enclosure rating

Enclosure rating

X standard IP40

S optional IP55

Bore diameter

6 ø 6 H7 mm

8 ø 8 H7 mm

9 ø 9,52 H7 mm (3/8")

10 ø 10 H7 mm

Output types

N NPN

C NPN OPEN COLLECTOR

P PUSH PULL

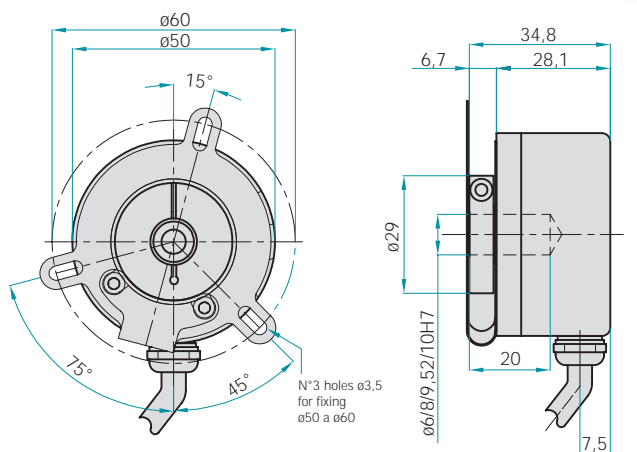
L LINE DRIVER

For optionals about output types please refer to incremental outputs section

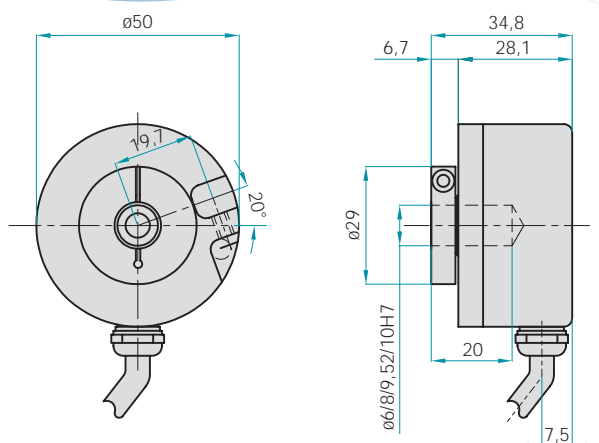
Hollow shaft incremental encoder

EL50 F / G / K

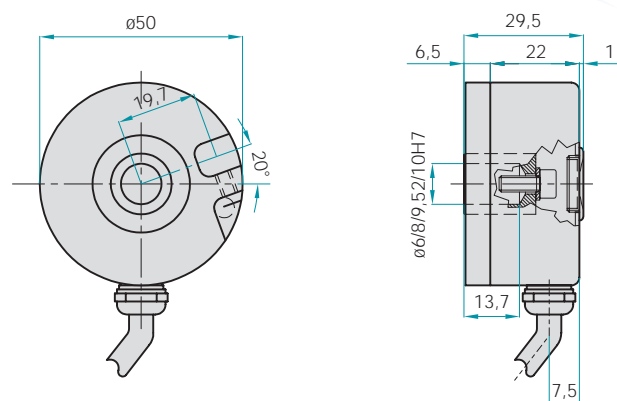
EL 50 F



EL 50 G



EL 50 K



HOW TO MOUNT IT

- 1) Fix the A antirotation pin
- 2) Insert the encoder on the motor shaft with misalignment recuperation system corresponding to the A pin
- 3) Insert the B washer on the back and block it using the encoder screw on the motor axle
- 4) Phase the encoder
- 5) Fix the encoder shaft by the metal gear.
- 6) Close the encoder with the C cover.

Electrical specifications

Resolution	from 1 to 2048 PPR
Input voltage	5 \pm 28 Vdc LINE DRIVER available only with input voltage 5/8 \pm 24 Vdc
Input current with no output load	150 mA Max
Source and sink current	30 mA for channel 15 mA for channel LINE DRIVER
Output types	NPN / NPN OPEN COLLECTOR / PUSH PULL / LINE DRIVER
Output frequency	150 KHz Max
Frequency response	$F = \frac{RPM \times Resolution}{60}$

Mechanical specifications

Bore diameter	$\phi 6 - \phi 8 - \phi 9.52 (3/8") - \phi 10 H7$
Enclosure rating	IP40 - Standard IP55 - Optional
Shaft speed	3000 6000 3000 RPM MAX with "S" enclosure rating
Shock	50 G for 11 msec
Vibrations	5G 10 \pm 500 Hz
Bearings life	10 ⁹ revolutions
Bearings	n° 2 ball bearings
Shaft material	Stainless steel AISI303
Body material	Aluminium D11S - UNI 9002/
Housing material	Aluminium D11S - UNI 9002/
Operating temperature	0° \pm +60°C
Storage temperature	-25° \pm +70°C

