



EL50 FA/FP/GA/GP INCREMENTAL ENCODER



Incremental encoder

- Ø50 encoder series used on motors.
- Several way to fix it
- Easy mechanical mounting
- 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 P 1000 Z 5/28 P 8 X 3 P R . XXX

Special version code numbered from 001 to 999

Incremental encoder series **EL**

Body dimension **50**

fixed with spring **F**
fixed with pin **G**

encoder with front side fixing **A**
encoder with back side fixing **P**

Resolutions

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

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

R radial

P cable output (standard length 0,5 m)

R.P.M.

3 3000

6 6000

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

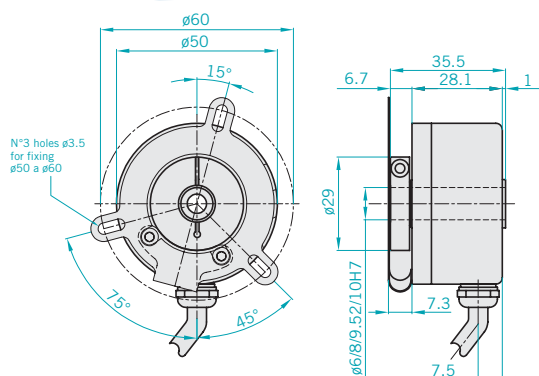
L LINE DRIVER

For optionals about output types please refer to incremental outputs section

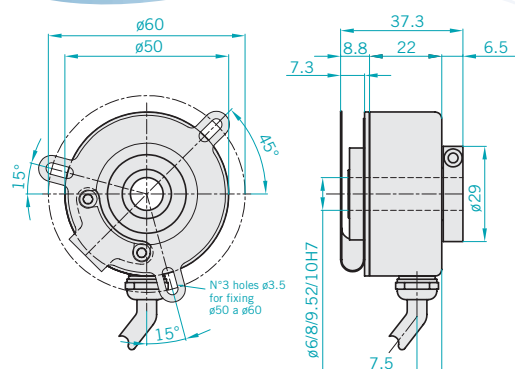
hollow shaft INCREMENTAL ENCODERS

EL50 FA/FP/GA/GP

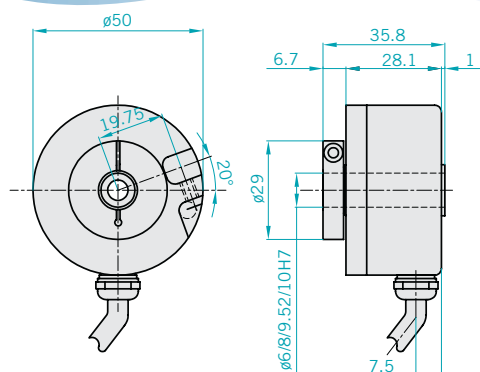
EL 50 FA



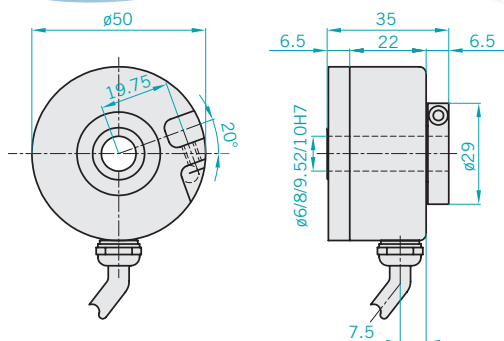
EL 50 FP



EL 50 GA



EL 50 GP

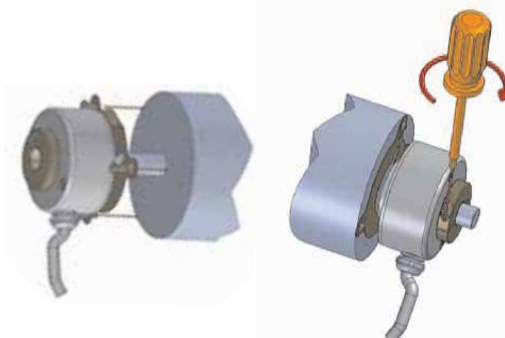


Electrical specifications

Resolution	from 1 to 2048 PPR
Input voltage	5 ÷ 28 Vdc LINE DRIVER only available with input voltage 5/8 ÷ 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	$F = \frac{\text{RPM} \times \text{Resolution}}{60}$

Mechanical specifications

Bore diameter	ø6 - ø8 - ø9.52 (3/8") - ø10 mm H7
Enclosure rating	IP40 - Standard IP55 - Optional
Shaft speed	3000 RPM 6000 RPM
Shock	50 G for 11 msec
Vibrations	5G 10 ÷ 500 Hz
Bearings life	10 ⁹ revolutions
Bearings	n° 2 ball bearings
Shaft material	Stainless steel AISI303
Body material	Aluminium D11S - UNI 9002/5
Housing material	Aluminium D11S - UNI 9002/5
Operating temperature	0° ÷ +60°C
Storage temperature	-25° ÷ +70°C



HOW TO MOUNT IT

- 1) Couple the encoder shaft with the motor shaft
- 2) Fix the spring at the motor flanges without screwing it
- 3) Fix the encoder shaft by the metal gear
- 4) Turn for phasing
- 5) Block the spring

