

### Main features

ø 36 encoder series recommended in feedback control systems on AC servomotors. It includes a traditional incremental encoder and the Hall effect phases.

- Interchangeable with size 15 Resolver; it allows easy and cost effective mounting
- Easy mechanical mounting
- Small dimensions
- Wide range of resolutions available



### Ordering code

full stop to separate special versions

**EF 36 K 4 L 512 Z 5 L 8 X 3 PR . XXX**

incremental encoder with Hall phases **EF**

size **36**

**Type of flange**

blind hollow shaft with rear fixing **K**

**Poles of the motor**

4 poles **4**

6 poles **6**

8 poles **8**

**Output type for Hall phases**

NPN open collector **C**

line driver **L**

**Resolution**

ppr from **1** to **2048**

*please directly contact our offices for pulses availability*

**Zero pulse**

without zero pulse **S**

with zero pulse **Z**

**Power supply**

5 V DC **5**

special version code numbered from 001 to 999

**PR** radial cable output (standard length 0.3 m)

**Max. rotation speed**

**3** 3000 RPM

**6** 6000 RPM

**Enclosure rating**

**X** IP40

**Bore diameter**

**8** ø 8 mm

**9** ø 9.52 mm (3/8")

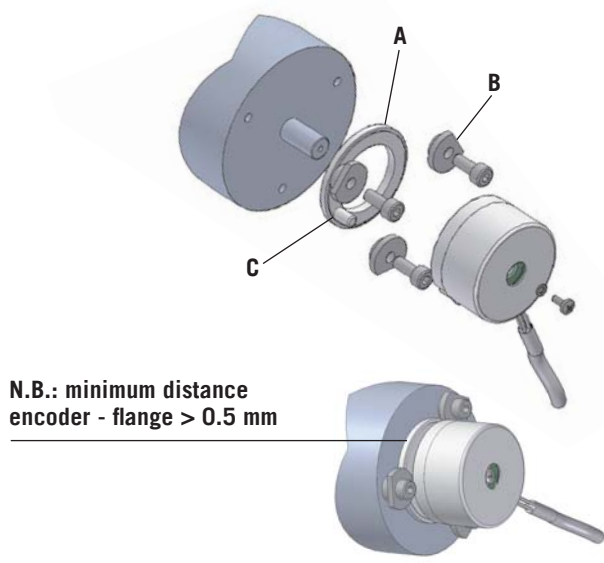
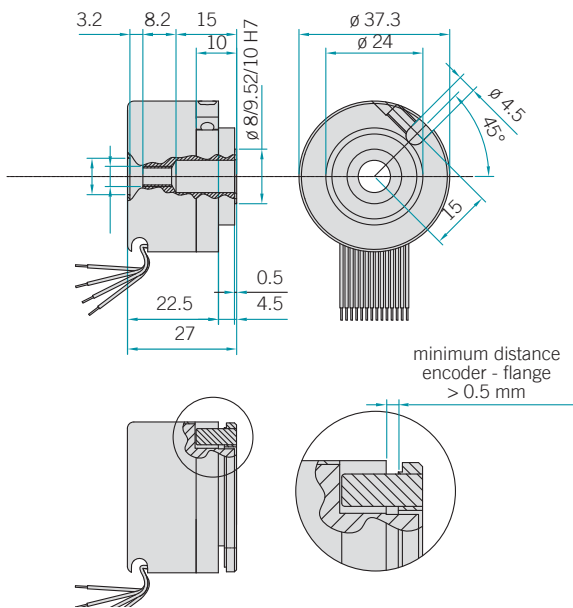
**10** ø 10 mm

**Output type for incremental signals**

**L** line driver

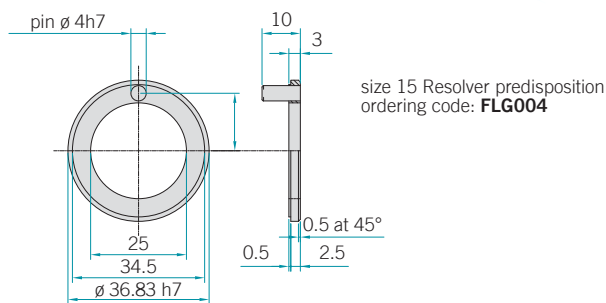
*please refer to page 92 for optionals about output types*

# EF 36 K



N.B.: minimum distance encoder - flange > 0.5 mm

## ACCESSORIES Flanges for motor fixing



### HOW TO MOUNT IT

- 1) Insert the flange (A) on the motor.
- 2) Tighten the appropriate servo-fasteners (B) without blocking them.
- 3) Insert the encoder on the motor shaft (misalignment recovery system must correspond to the peg (C)).
- 4) Block the encoder on the motor axle by the proper screw.
- 5) Turn for phasing.
- 6) Finally, fix the servo-fasteners (B).
- 7) Verify the right working of the misalignment recovery system.

### Electrical specifications

Resolution	from 1 to 2048 ppr
Current consumption without load	15 mA for channel (line driver) 30 mA for channel
Max. output frequency	150 kHz
Operating frequency	$F = \frac{\text{RPM} \cdot \text{Resolution}}{60}$
Power supply	5 V DC $\pm 5\%$
Output type for incremental signals	line driver
Output type for Hall phases	line driver NPN open collector
Current consumption without load	150 mA max.

### Mechanical specifications

Bore diameter	$\varnothing 8 / 9.52 / 10 \text{ mm}$
Enclosure rating	IP40
Max. rotation speed	6000 RPM
Shock	50 G, 11 ms
Vibration	5 G, 10÷500 Hz
Bearings	2 ball bearings
Shaft material	stainless steel UNI X10CrNiS1809
Body material	aluminium UNI 9002/5
Housing material	aluminium UNI 9002/5
Operating temperature	-10÷85 °C
Storage temperature	-25÷85 °C
Weight	50 g
Accessories	flange for mounting on motors (size 15 Resolver type)