

### Main features

ø 40 encoder series recommended in feedback control systems on AC servomotors. It includes a traditional incremental encoder and the Hall effect phases.

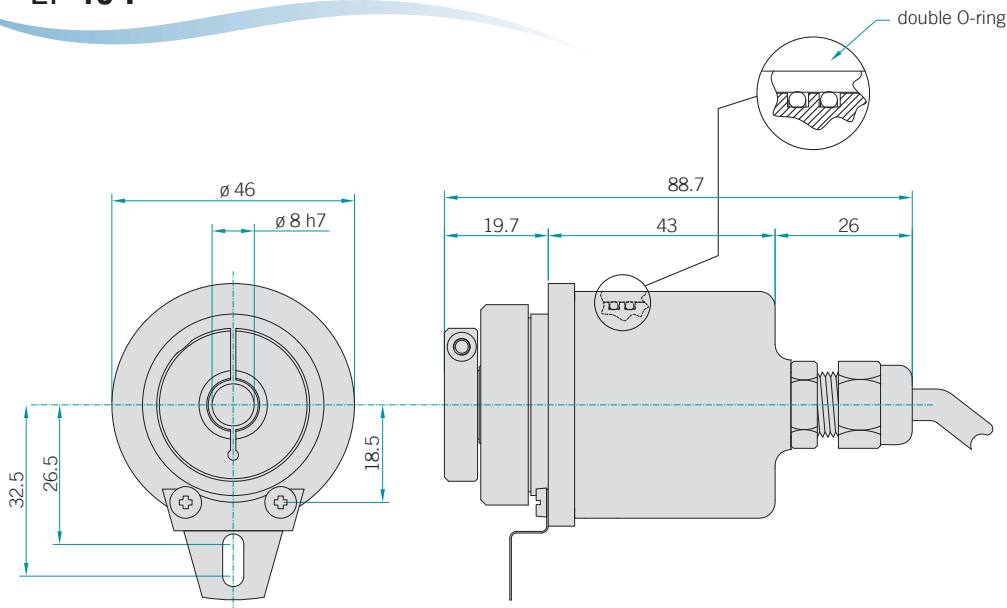
- Easy mechanical mounting
- Small dimensions
- Wide resolution range available



### Ordering code

EF 40 F 4 L 1024 Z 5 L 6 S 3 PSA . XXX																										
incremental encoder with Hall phases	EF	size 40	Type of flange	F	blind hollow shaft with front fixing by spring	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 1024 <i>please directly contact our offices for pulses availability</i>	Zero pulse	without zero pulse S with zero pulse Z	Power supply	5 V DC 5	full stop to separate special versions	special version code numbered from 001 to 999	PSA axial cable output with SKINTOP® (standard length 0.5 m)	Max. rotation speed	3 3000 RPM	Enclosure rating	S IP66	Bore diameter	6 ø 6 mm 8 ø 8 mm 9 ø 9.52 mm (3/8") 10 ø 10 mm 12.7 ø 12.7 mm (1/2")	Output type for incremental signals	L line driver <i>please directly contact our offices for optionals about output types</i>

# EF 40 F



## Electrical specifications

Resolution	from 1 to 1024 ppr
Power supply	5 V DC $\pm$ 5%
Current consumption without load	150 mA max.
Max. load current	15 mA for channel (line driver) 30 mA for channel
Output type for incremental signals	line driver
Output type for Hall phases	line driver NPN open collector
Max. output frequency	150 kHz
Operating frequency	$F = \frac{\text{RPM} \cdot \text{Resolution}}{60}$

## Mechanical specifications

Bore diameter	$\varnothing$ 6 / 8 / 9.52 / 10 / 12.7 mm
Enclosure rating	IP66
Max. rotation speed	3000 RPM
Shock	50 G, 11 ms
Vibration	5 G, 10÷500 Hz
Max. shaft load	5 N (0.5 kgf) axial 5 N (0.5 kgf) radial
Bearings	2 ball bearings
Shaft material	stainless steel UNI X10CrNiS1809
Body material	aluminium UNI 9002/5
Housing material	PA66 glass fiber reinforced
Operating temperature	-10÷85 °C
Storage temperature	-25÷85 °C
Weight	70 g