

Main features

Miniaturized \varnothing 38 encoder series for general applications.

- Resolution up to 3600 ppr with zero signal
- Several electronic output configurations available
- Up to 28 V DC power supply
- Up to 100 kHz output frequency
- Several flanges available
- Up to 3000 RPM rotation speed
- Up to IP54 sealing



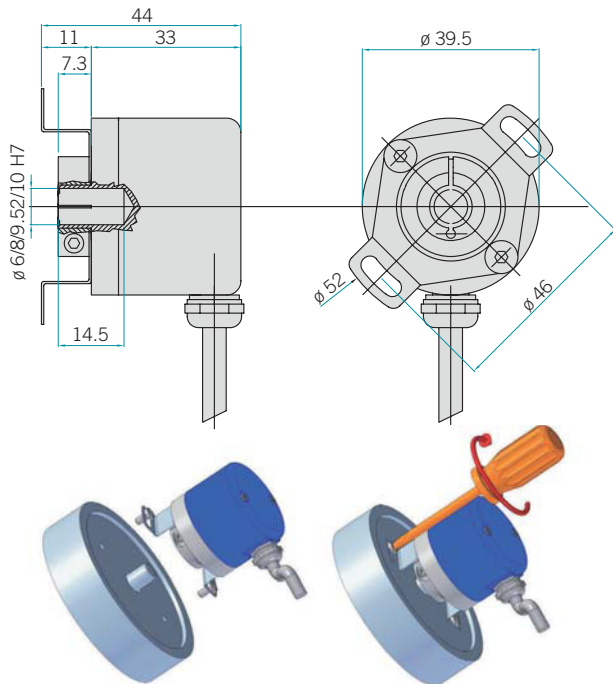
Ordering code

EL 38 F 500 Z 5/28 N 6 X 3 P R . XXX		full stop to separate special versions
incremental encoder series EL	size 38	
Type of flange		R radial
EL 38 F model F		P cable output with SKINTOP [®] (standard length 0.5 m)
EL 38 G model G		
Resolution		Max. rotation speed
ppr from 1 to 3600		3 3000 RPM
<i>please directly contact our offices for pulses availability</i>		Enclosure rating
Zero pulse		X IP54
without zero pulse S		Bore diameter
with zero pulse Z		6 \varnothing 6 mm
		8 \varnothing 8 mm
		9 \varnothing 9.52 mm (3/8")
		10 \varnothing 10 mm
		Output type
Power supply		N NPN
5 \div 28 V DC 5/28		C NPN open collector
<i>line driver available only with 5 V DC or 8-24 V DC power supply</i>		P push-pull
		L line driver
		<i>please refer to page 92 for optionals about output types</i>

Hollow shaft incremental encoders

EL 38 F / G

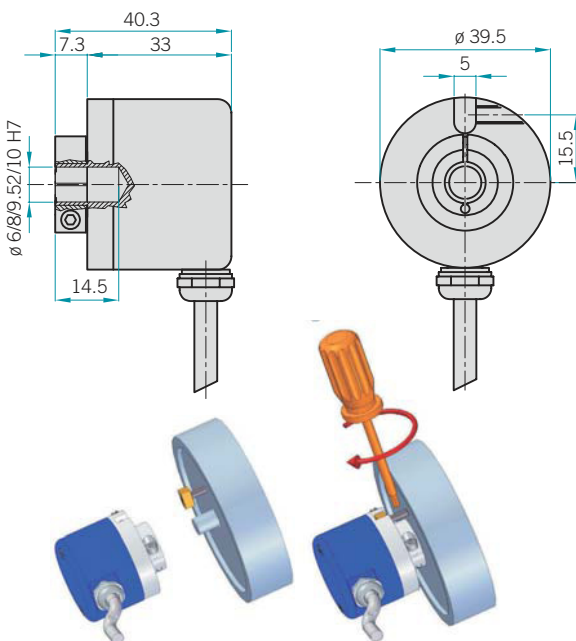
EL 38 F



HOW TO MOUNT IT

- 1) Couple the encoder shaft with the motor shaft.
- 2) Fix the spring to the motor flange without tightening it.
- 3) Fix the encoder shaft by the metal ring.
- 4) Turn for phasing.
- 5) Block the spring.

EL 38 G



HOW TO MOUNT IT

- 1) Mount the anti-rotation pin on the motor flange.
- 2) Couple the encoder shaft with the motor shaft, making sure the pin is inserted in the hole on the front part of the encoder (maintaining a minimum distance of 0.5 mm).
- 3) Fix the encoder shaft by the metal ring.

Electrical specifications

Resolution	from 1 to 3600 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	80 mA max.
Max. load current	50 mA for channel 20 mA for channel (line driver)
Output type	NPN / NPN open collector push-pull / line driver
Max. output frequency	100 kHz
Operating frequency	$F = \frac{\text{RPM} \cdot \text{Resolution}}{60}$

Mechanical specifications

Bore diameter	ø 6 / 8 / 9.52 / 10 mm
Enclosure rating	IP54
Max. rotation speed	3000 RPM
Max. shaft load	5 N (0.5 kgf) axial 5 N (0.5 kgf) radial
Shock	50 G, 11 ms
Vibration	10 G, 10÷2000 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
Operating temperature	0÷60 °C
Storage temperature	-25÷70 °C
Weight	150 g