

### Main features

Miniaturized  $\varnothing$  30 encoder series. Recommended when a minimal size is required even providing excellent performances.

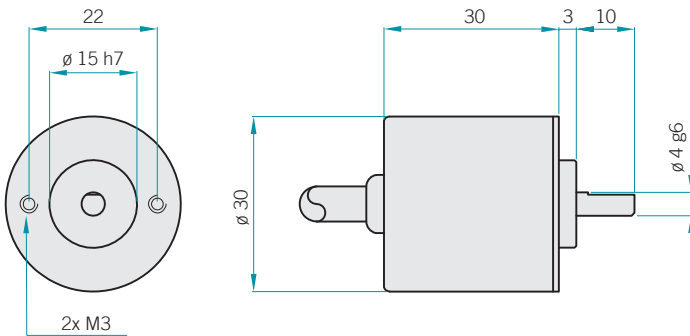
- Up to 1024 ppr with zero signal
- Several output types available
- Up to 24 V DC power supply
- Up to 100 kHz output frequency
- Cable output. Cable with connector at the end available on demand
- Several flanges available
- Up to 3000 RPM rotation speed
- Up to IP54 sealing



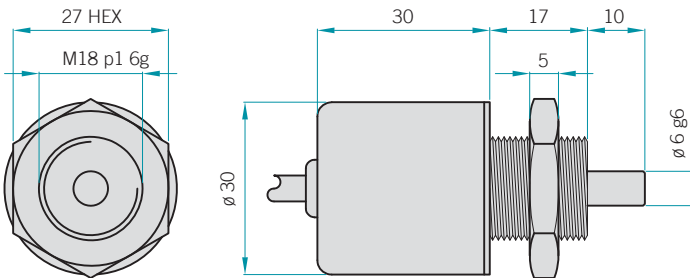
### Ordering code

EL 30 E 50 Z 5 N 4 X 3 P A . XXX		full stop to separate special version
incremental encoder series	EL	
size	30	
Type of flange	E H I	
Resolution	1 to 1024 ppr	
Zero pulse	S Z	
Power supply	5 8/24	
Max. rotation speed	3	3000 RPM
Enclosure rating	X	IP54
Shaft diameter	4 6	$\varnothing$ 4 mm (EL 30 E) $\varnothing$ 6 mm (EL 30 E / H / I)
Output type	N C P L	NPN NPN open collector push-pull line driver
		please refer to page 92 for optionals about output types
		special version code numbered from 001 to 999
		A axial
		P cable output (standard length 0.5 m)

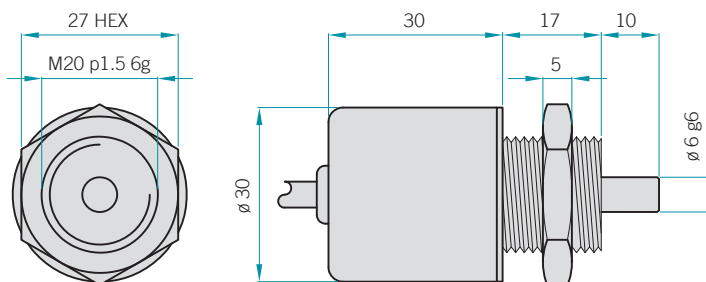
## EL 30 E



## EL 30 H



## EL 30 I



### Electrical specifications

Resolution	from 1 to 1024 ppr
Power supply	5 V DC 8÷24 V DC
Current consumption without load	100 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

Shaft diameter	∅ 4 mm (EL 30 E) ∅ 6 mm (EL 30 E / H / I)
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 <sup>9</sup> revolutions
Bearings	2 ball bearings
Shaft material	stainless steel UNI X10CrNiS1809
Body material	aluminium UNI 9002/5
Housing material	PA66 glass fiber reinforced
Operating temperature	0÷60 °C
Storage temperature	-25÷70 °C
Weight	50 g