



# EL30 E/H/I INCREMENTAL ENCODER



## Incremental encoder

Miniaturized Ø30 encoder series. Used when a minimal size is required even providing excellent performances.

- Up to 1024 ppr with Zero.
- Several output types available. Up to 24 Vdc input voltage.
- Up to 100 kHz frequency response
- Output cable. Cable connector available on request.
- Several flanges available
- Up to 3.000 rpm speed rotation
- Up to IP54 sealing



shaft INCREMENTAL ENCODERS

## Ordering code

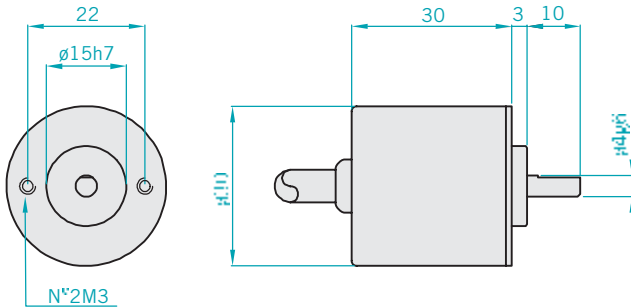
Full stop to separate special version

EL 30 E 50 Z 5 N 4 X 3 P A . XXX

<p>incremental encoder series <b>EL</b></p> <p>body dimension <b>30</b></p> <p><b>Type of flanges</b></p> <p>mod.EL 30 E <b>E</b></p> <p>mod.EL 30 H <b>H</b></p> <p>mod.EL 30 I <b>I</b></p> <p><b>Resolutions</b></p> <p>From <b>1</b> to <b>1024</b> PPR</p> <p><i>Please, directly contact our offices for pulses availability</i></p> <p><b>Zero pulse</b></p> <p>without zero pulse <b>S</b></p> <p>with zero pulse <b>Z</b></p> <p><b>Input voltage</b></p> <p><b>5</b></p> <p><b>8 ÷ 24</b></p>	<p><b>R.P.M.</b></p> <p><b>3</b> 3000</p> <p><b>Enclosure rating</b></p> <p><b>X</b> standard IP54</p> <p><b>Shaft diameter</b></p> <p><b>4</b> ø 4g6 EL 30 E</p> <p><b>6</b> ø 6g6 EL 30 H/I /E</p> <p><b>Output types</b></p> <p><b>N</b> NPN</p> <p><b>C</b> NPN OPEN COLLECTOR</p> <p><b>P</b> PUSH PULL</p> <p><b>L</b> LINE DRIVER</p> <p><i>For optionals about output types please refer to incremental section</i></p>	<p><b>A</b> axial</p> <p><b>P</b> cable output (standard length 0,5 m)</p> <p><b>XXX</b></p> <p>Special version code numbered from 001 to 999</p>
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EL30 E / H / I

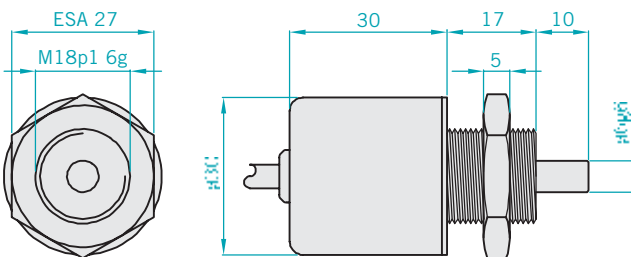
## EL 30 E



### Electrical specifications

<b>Resolution</b>	From 1 to 1024 PPR
<b>Input voltage</b>	5Vdc / 8 ÷ 24 Vdc
<b>Input current with no output load</b>	100 mA Max
<b>Source and sink current</b>	50 mA for channel 20 mA for channel with LINE DRIVER
<b>Output types</b>	NPN / NPNOPEN COLLECTOR / PUSH PULL / LINE DRIVER
<b>Output frequency</b>	100 KHz Max
<b>Frequency response</b>	$F = \frac{\text{RPM} \times \text{Resolution}}{60}$

## EL 30 H



### Mechanical specifications

<b>Shaft diameter</b>	ø4 mm g6 EL 30 E ø6 mm g6 EL 30 H/I/E
<b>Enclosure rating</b>	IP54 standard
<b>Shaft speed</b>	3000 RPM
<b>Max shaft load</b>	5N (0.5 Kp) axial 5N (0.5 Kp) radial
<b>Shock</b>	50 G for 11 msec
<b>Vibrations</b>	10G 10 ÷ 2000 Hz
<b>Bearings life</b>	10 <sup>9</sup> revolutions
<b>Bearings</b>	n° 2 Ball bearings
<b>Shaft material</b>	Stainless steel AISI303
<b>Body material</b>	Aluminium D11S - UNI 9002/5
<b>Housing material</b>	PA 66 reinforced with fiber glass
<b>Operating temperature</b>	0° ÷ +60°C
<b>Storage temperature</b>	-25° ÷ +70°C
<b>Weight</b>	50 g

## EL 30 I

