



# elap EP / REP

## PROGRAMMABLE MAGNETIC INCREMENTAL ENCODERS

- Magnetic incremental encoders
- Programmable ppr number
- Zero pulse
- Several configurations available
- Accurate, strong and reliable

Incremental encoders **EP/REP** ppr no. ranges from 8 to 2048. The ppr no. is easily set by the user directly via PC; the programming kit supplied with the encoder includes the USB cable ended with the encoder connector, and the CD with the programming software.

**EP/REP** operate according to the magnetic principle, and offer excellent performances in terms of *resistance to vibrations and shocks, acceleration, speed and protection*.

The different mechanical versions can meet every type of application requirement; each mechanical type is available with ABS plastic case – series **EP** with *push-pull output* – or metal case – series **REP** with *line driver output*.

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| <ul style="list-style-type: none"> <li>• <b>Type EP:</b><br/>ABS plastic case<br/>Push-pull electronic output<br/>7-pin MS connector axial or radial outlet</li> </ul> | <ul style="list-style-type: none"> <li>• <b>Type REP:</b><br/>Aluminium case<br/>5 Vdc or 5/28 Vdc line-driver output<br/>12-pin Connei connector axial or radial outlet</li> </ul> |
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### MECHANICAL VERSIONS

<b>Series EP/REP521:</b> Round flanged, Ø 58 mm, servo coupling Ø 50 mm centering mask Shaft Ø: 6, 8, 9.52 or 10 mm	<b>Series EP/REP511:</b> Round flanged, Ø 58 mm servo coupling Ø 31.75 mm centering mask Shaft Ø: 6, 8, 9.52 or 10 mm	<b>Series EP/REP621:</b> Square flanged 63.5 x 63.5 mm Centering mask Ø 31.75 mm Shaft Ø 6, 8, 9.52 or 10 mm
<b>Series EP/REP541:</b> Round flange Ø 58 mm, servo coupl. Centering mask Ø 36 mm 3 M4 holes at 120° on Ø 48 mm Shaft Ø 6, 8, 9.52 or 10 mm	<b>Series EP/REP651:</b> Square flange 63.5x63.5 mm Centering mask Ø 50 mm Shaft Ø 6, 8, 9.52 or 10 mm	<b>Series EP/REP411:</b> Round flanged, Ø 63 mm Hollow shaft for direct mounting to a motor shaft, hole diameter 8, 10, 12, 14 or 15 mm
<b>Series EP/REP401:</b> Round flange, Ø 58 mm, fixing holes on Ø 30 mm Joint for direct mounting to a motor shaft diameter 6, 8 or 10 mm	<b>Series EP/REP471</b> Round flange, Ø.72 mm, fixing holes on Ø 63.5 Joint for direct mounting to a motor shaft diameter 6, 8 or 10 mm	

### MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

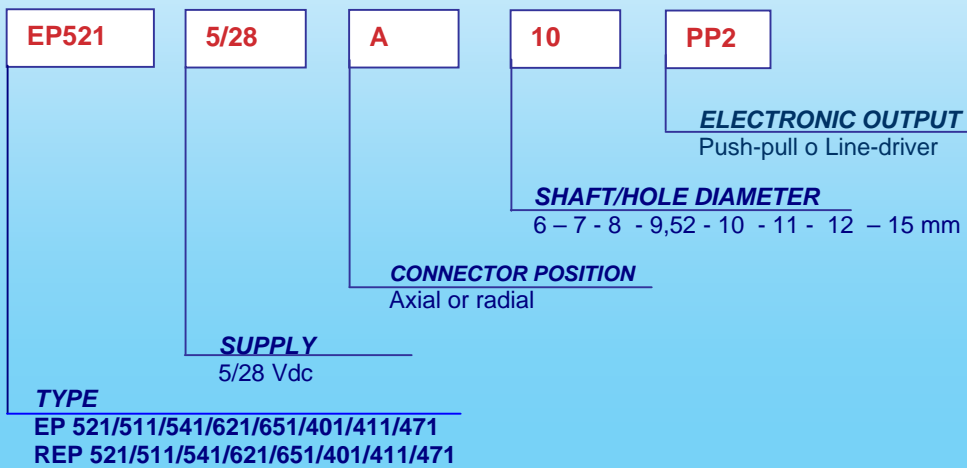
• <b>Materials: case shaft</b>	<b>EP:</b> ABS / <b>REP</b> aluminium Stainless steel AISI 303
• <b>Revolutions/minute</b>	6000* continuous 10000 temporary *max operating speed with IP65 sealing ring applied on the shaft: 3000
• <b>Starting torque</b>	≤0,8 Ncm
• <b>Inertia</b>	≤25 g cm <sup>2</sup>
• <b>Max. load</b>	80N axial/100N radial
• <b>Vibration resistance (10÷2000 Hz)</b>	100 m/sec <sup>2</sup>
• <b>Shock resistance (11 ms)</b>	50 G
• <b>Protection degree</b>	IP64 (optional IP65 with sealing ring)
• <b>Operating temperature</b>	0 ÷ 70°C
• <b>Stocking temperature</b>	-20 ÷ 80°C



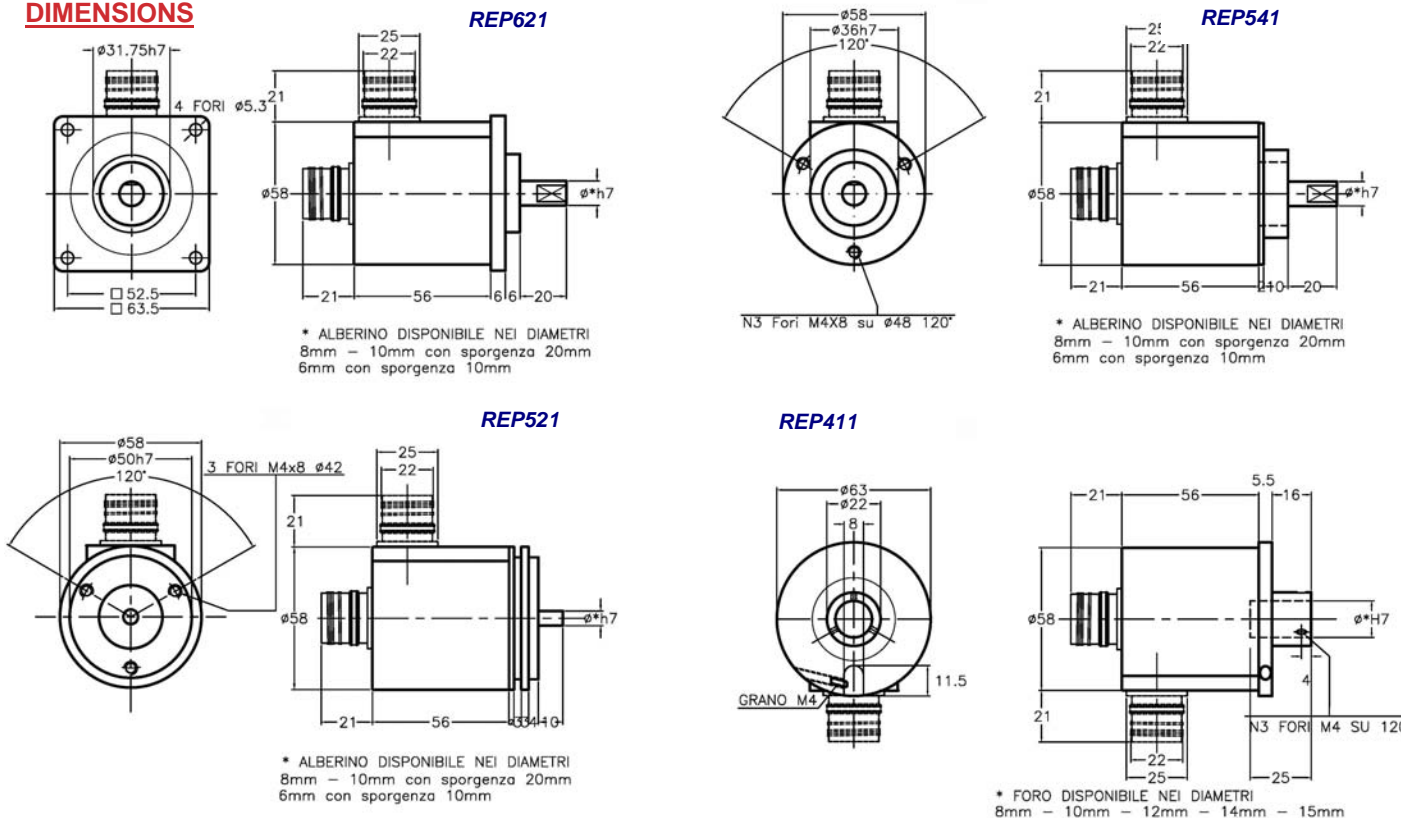
## ELECTRICAL & OPERATING SPECIFICATIONS

• Pulse code	Incremental
• Pulses/revolution	8, 10, 16, 20, 25, 32, 40, 50, 64, 80, 100, 125, 128, 200, 250, 256, 400, 500, 512, 1024, 2048
• Zero pulse	1 pulse each revolution
• Output signals	Two square waves 90° ±15° out of phase - Zero pulse width: 90°±15°
• Electronic output	Push-pull or line driver - Signals protected against short circuits
• Supply voltage	5/28 Vdc - Protection against polarity reversal
• Power consumption	1.2 W
• Max. frequency	200 KHz
• Connection outlets	MS 7-pin axial or radial connector (push-pull output) or Connei 12-pin axial or radial connector (line driver output)

The programming kit includes: 7 or 12-pin connector + USB cable for encoder to PC connection – CD containing the programming tool -.Minimum system requirements: Windows2000/XP/VISTA



## DIMENSIONS



**elap**

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