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.

■ Type EP

ABS plastic case
Push-pull electronic output
7-pin MS connector axial or radial outlet

■ Type REP

Aluminium case
5 Vdc or 5/28 Vdc line-driver output
12-pin Connei connector axial or radial outlet

■ Mechanical versions

Series EP/REP521:
Round flanged, Ø 58 mm,
servo coupling
Ø 50 mm centering mask
Shaft Ø: 6, 8, 9.52 or 10 mm

Series EP/REP511:
Round flanged, Ø 58 mm
servo coupling
Ø 31.75 mm centering mask
Shaft Ø: 6, 8, 9.52 or 10 mm

Series EP/REP621:
Square flanged 63.5 x 63.5 mm
Centering mask Ø 31.75 mm
Shaft Ø 6, 8, 9.52 or 10 mm

Series EP/REP541:
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

Series EP/REP651:
Square flange 63.5x63.5 mm
Centering mask Ø 50 mm
Shaft Ø 6, 8, 9.52 or 10 mm

Series EP/REP411:
Round flanged, Ø 63 mm Hollow
shaft for direct mounting to a
motor shaft, hole diameter 8,
10, 12, 14 or 15 mm

Series EP/REP401:
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

Series EP/REP471
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
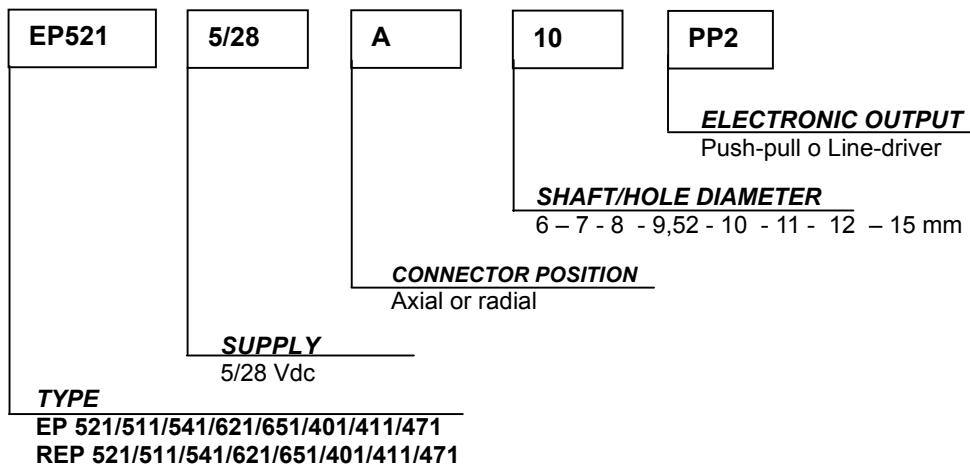
■ Mechanical & environmental specifications

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

ALTHERIS
SENSORS & CONTROLS
W W W . A L T H E R I S . C O M

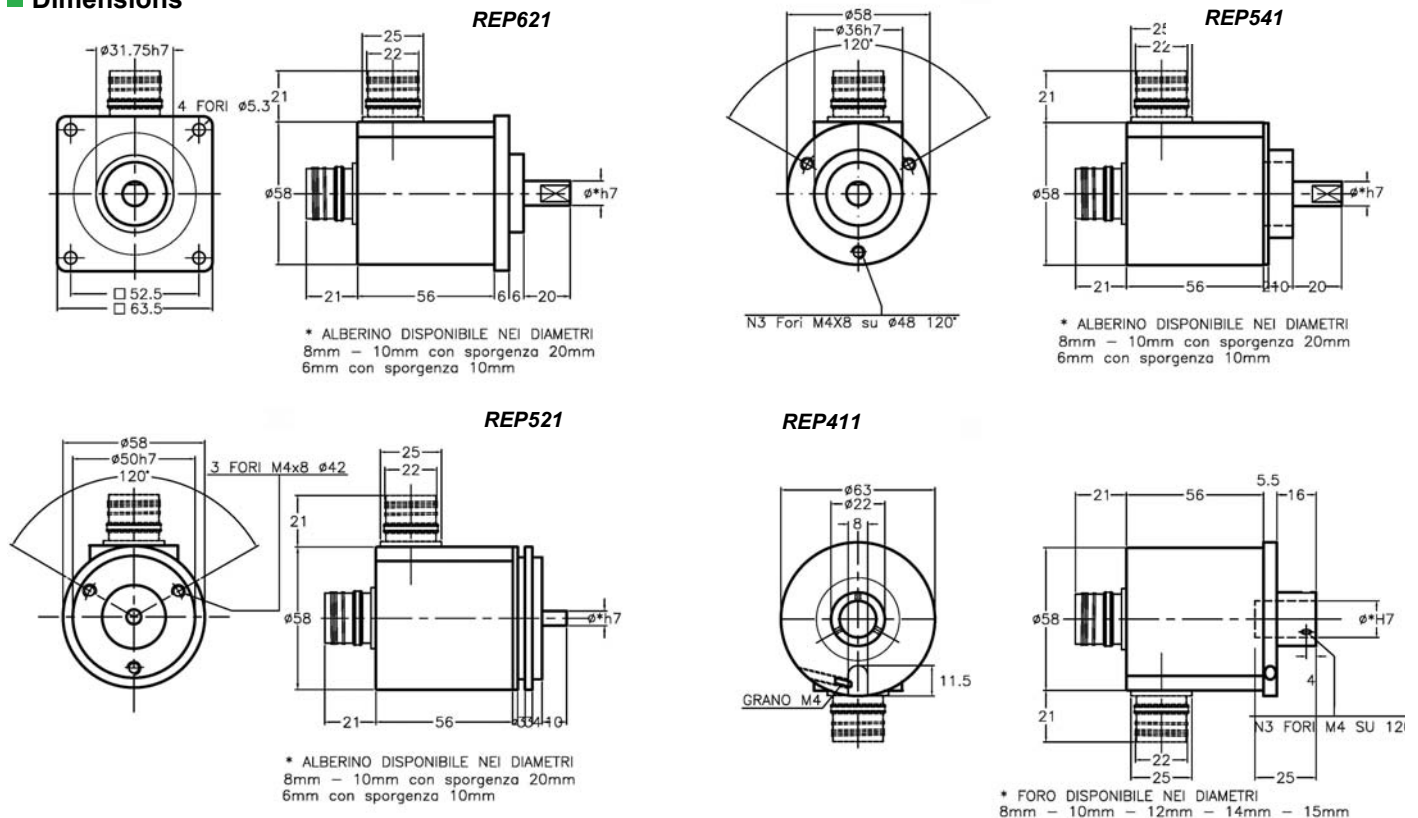## ■ Electrical & Operating specifications

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

■ Ordering information

EP521	5/28	A	10	PP2

ELECTRONIC OUTPUT
Push-pull o Line-driver

SHAFT/HOLE DIAMETER
6 – 7 - 8 - 9,52 - 10 - 11 - 12 – 15 mm

CONNECTOR POSITION
Axial or radial

SUPPLY
5/28 Vdc

TYPE
EP 521/511/541/621/651/401/411/471
REP 521/511/541/621/651/401/411/471

■ Dimensions

REP621

* ALBERINO DISPONIBILE NEI DIAMETRI
8mm – 10mm con sporgenza 20mm
6mm con sporgenza 10mm

N3 Fori M4X8 su ø48 120'

REP541

* ALBERINO DISPONIBILE NEI DIAMETRI
8mm – 10mm con sporgenza 20mm
6mm con sporgenza 10mm

REP521

* ALBERINO DISPONIBILE NEI DIAMETRI
8mm – 10mm con sporgenza 20mm
6mm con sporgenza 10mm

REP411

GRANO M4

* FORO DISPONIBILE NEI DIAMETRI
8mm – 10mm – 12mm – 14mm – 15mm

LEADERS IN SENSORS & HEAVY DUTY JOYSTICKS