
REP521


REP541


REP621

INCREMENTAL ROTARY ENCODERS
Programmable series REP

- ***Incremental magnetic encoders***
- ***Programmable ppr no.***
- ***Zero reference pulse***
- ***Aluminium housing***

Incremental encoders **EP/REP** ppr no. ranges from 8 to 2048.

The ppr no. is easily set by the user via PC.

MECHANICAL VERSIONS

REP521	REP541	REP621	REP411	REP451
Round flange Ø 58 mm Servo coupling Centering mask Ø 50 mm Shaft Ø 6, 8, 9.52, 10mm *SYNCHRO FLANGE*	Round flange Ø 58 mm Centering mask Ø 36 mm Shaft Ø 6, 8, 9.52, 10mm *CLAMPING FLANGE*	Square flange 63.5x63.5 mm Centering mask Ø 31.75 mm Shaft Ø 6, 8, 9.52, 10 mm	Hollow shaft Ø 8, 10, 12, 14, 15 mm Antirotational fixing	Hollow shaft Ø 8, 10, 12, 14, 15 mm Fixing by elastic support

Range of programmable ppr no.

8 • 10 • 16 • 20 • 25 • 32 • 40 • 50 • 64 • 80 • 100 • 125 • 128 • 200 • 250 • 256 • 400 • 500 • 512 • 1024 • 2048

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

	REP521/541/621	REP411/451
• Materials: housing shaft	Aluminium Steel AISI 303	
• Weight	210 g circa	
• Shaft/jHollow shaft Ø mm	10, 9.52, 8, 6	10, 9.52, 8, 6
• Revolutions/minute	6000 continuos/10000 temporary*	
• Starting torque	≤0.8 Ncm	
• Inertia	≤25 g cm^2	
• Max load	80 N axial/100 N radial	
• Vibration resistance (10÷2000 Hz)	100 m/sec^2	
• Shock resistance (11 ms)	50 G	
• Protection degree	IP65 – optional IP66 with O-ring mounted on the shaft*	
• Operating temperature	-10 ÷ 70°C	
• Stocking temperature	-20 ÷ 80°C	

**Except hollow shaft types – Max speed with O-ring mounted on the shaft: 3000 rev/min.*

ELECTRICAL & OPERATING SPECIFICATIONS

• Pulse code	Incremental
• Pulses/revolution	8 ÷ 2048
• Zero pulse	One pulse/revolution
• Output signals	Two square waves 90° ±15° out of phase – Zero pulse width: 90°±15°
• Electronic output	push-pull, line driver 5Vdc or 5/28Vdc signals protected against short circuit
• Supply voltage	5/28 Vdc protection against polarity reversa
• Absorption	1,2 W
• Max. frequency	200 KHz
• Connections	Axial or radial connector outlet line driver output: 12-pin M23 connector push-pull output: 7-pin MS connector

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CONNECTIONS

Push Pull output SIGNALS	7-pin connector
0V	A
D+ USB	B
Out 1	C
Out Z	D
Out 2	E
+V	F
D- USB	G

Line Driver output SIGNALS	12-pin connector
Out 1	pin 1
Out 2	pin 2
Out Z	pin 3
D+ USB	pin 4
D- USB	pin 5
Out 1	pin 6
Out 2	pin 7
Out Z	pin 8
+V	pin 11
0V	pin 12

PROGRAMMING KIT

The programming kit includes the 7- or 12-pin flying connector, the USB cable and the programming tool EncoderManager to be downloaded from the site www.elap.it.

A PC with USB port 1.1 or 2.2 and OS Windows 10, 8, 7, Windows Vista o Windows XP is needed for the programming operations.

ORDERING INFORMATION

REP521 | **1024** | **5/28** | **R** | **10** | **PP**

Type
REP521 Round flange, mask 50 mm
REP541 Round flange, mask 36 mm
REP621 Square flange
REP411 Hollow shaft
REP451 Hollow shaft and elastic support

PULSES/REVOLUTION
8 - 2048

SUPPLY VOLTAGE
5/28 Vdc

CONNECTION POSITION
A axial
R radial

SHAFT/HOLLOW SHAFT Ø
Shaft 6 – 8 – 9.52 – 10 mm
Hollow shaft 8 – 10 – 12 – 14 - 15

OUTPUT SIGNALS
PP Push-pull
LD Line-driver
LD5V Line driver 5 Vdc

DIMENSIONS

Encoder with line driver output – 12-pin connector

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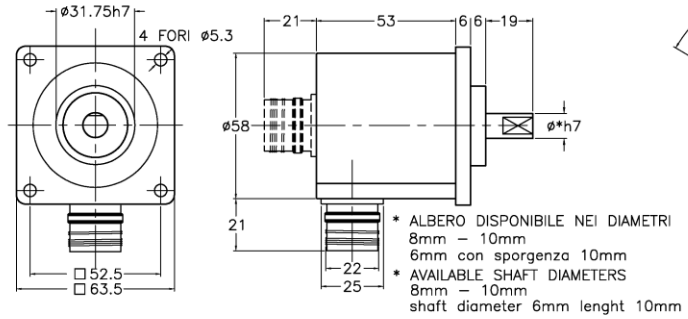

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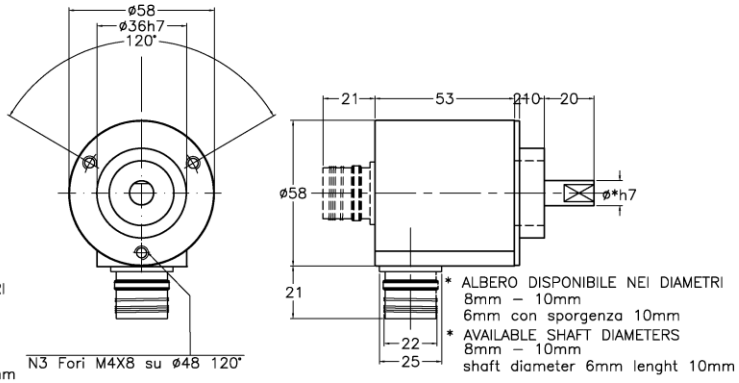

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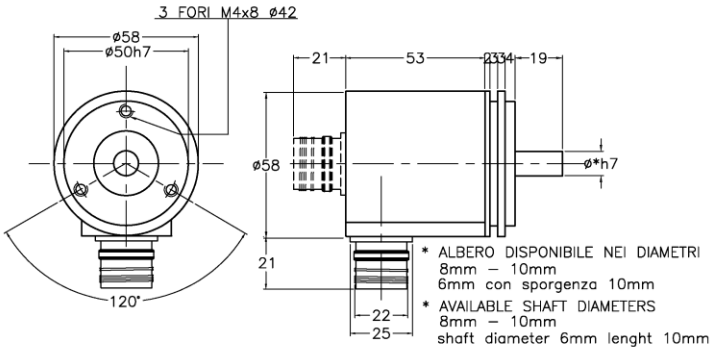

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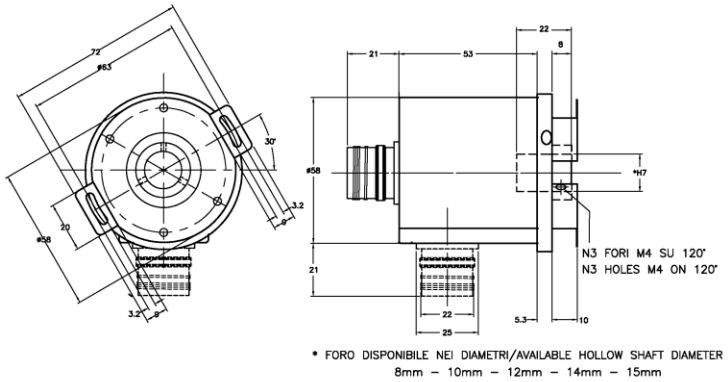

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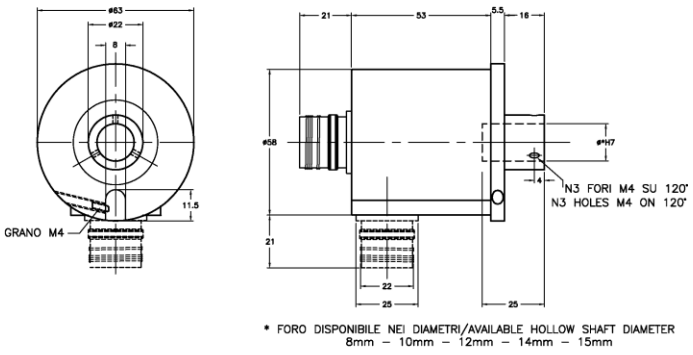
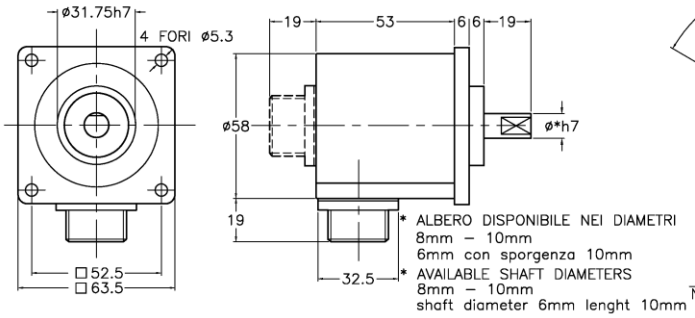


DIMENSIONS

Encoder with push-pull output – 7-pin connector

REP621



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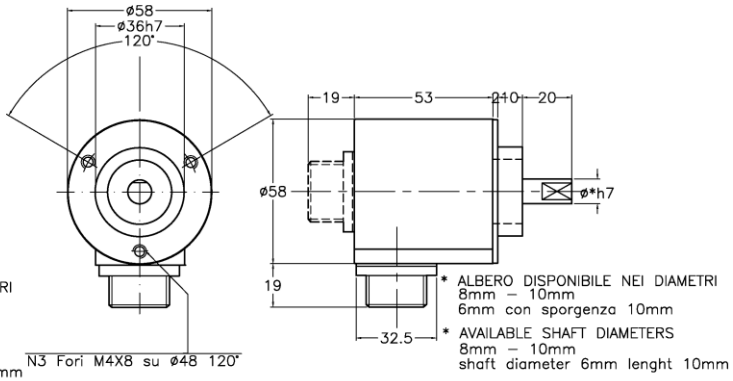

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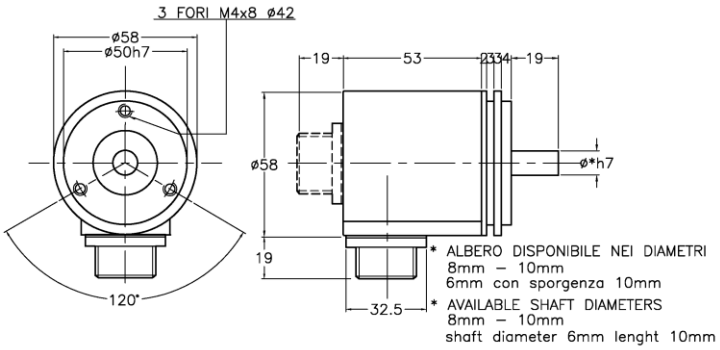

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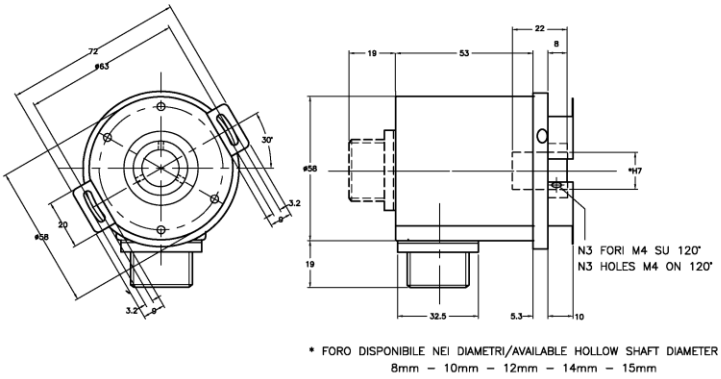

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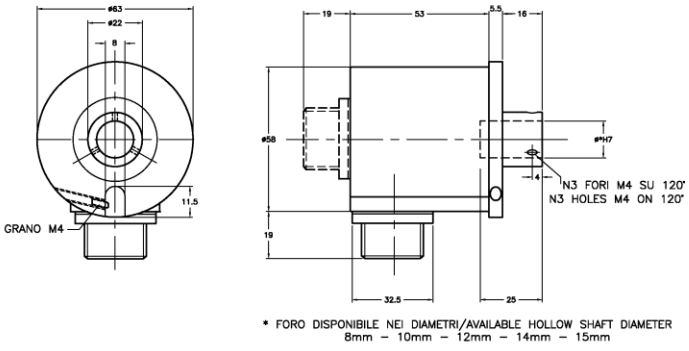

REFERENCES

Information, software, drawings available at:

https://www.elap.it/incremental-encoders/encoder-rep/

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