



RE620



E650



RE620

INCREMENTAL ROTARY ENCODERS

Square Flange

- **Incremental rotary encoders with or without zero pulse**
- **Pulses per revolution: 2 to 36000**
- **ABS or aluminium case (series RE - REV)**
- **Several configurations available**

MECHANICAL VERSIONS

E620/E521

Body Ø: 58 mm
 Flange mm 63.5x63.5
 Centering mask Ø 31.75 mm
 Shaft Ø 6, 8, 9.52, 10 mm

E650/651

Body Ø: 58 mm
 Flange mm 63.5x63.5
 Centering mask Ø 50 mm
 Shaft Ø 6, 8, 9.52, 10 mm

Encoder series **E**: **ABS plastic case**
 Encoder series **RE**: **Aluminium case**
Pulses per revolution range: 2 to 12500
 Encoder series **REV**: **aluminium case, glass disk**
Pulses per revolution range: 1000 to 36000

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

• Materials: case shaft	ABS / aluminium (RE/REV) AISI 303 steel
• Weight	280 g ca / series RE/REV 400 g ca
• Shaft Ø	6, 8, 9.52, 10 mm
• 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	IP64 / optional IP65 with sealing ring*
• Operating temperature	-10 ÷ 70°C
• Stacking temperature	-20 ÷ 80°C

ELECTRICAL & OPERATING SPECIFICATIONS

• Pulse code	Incremental
• Pulses per revolution	2 ÷ 12500 series REV : 1000 ÷ 36000
• Zero reference pulse	one pulse/revolution
• Output signals	Two square waves 90° ±15° out of phase – Zero pulse width: 90°±15°
• Electronic outputs	push-pull, NPN open collector, 5Vdc or 8/24Vdc line driver signals protected against short circuits
• Supply voltage	5Vdc or 8/24Vdc - protection against polarity reversal
• Absorption	30÷80 mA max
• Max frequency	100/200 KHz
• Connections	Axial or radial cable 3 m long /1 m for line driver output Axial or radial MS connector, 7-pin/10-pin for line driver output*

*Max operating speed with IP65 sealing ring applied on the shaft: 3000 rpm

*The encoder configuration: *zero pulse + line drive output +radial connector outlet* can only be supplied with *aluminium case (series RE)*





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CONNECTIONS

SIGNALS	Push Pull – Open Collector NPN		SIGNALS	Line Driver	7-pin connector	Cable colours	10-pin connector	Cable colours
	7-pin connector	Cable colours						
	<i>DIAGRAM 1</i>	<i>DIAGRAM 2</i>			<i>DIAGRAM 3</i>		<i>DIAGRAM 4</i>	
					without 0 pulse		with 0 pulse	
Out 1	A	C	Out 1	A	White	A	White	
Out 2	B	E	Out 2	B	Green	B	Green	
Out Z	C	D	Out Z	C	Brown	C	Grey	
+ Vdc	D	F	+ Vdc	D	Red	D	Red	
0V	F	A	+ Vdc	E	Blue	E	Red	
Non-connected	E	B	0V	F	Blue	F	Blue	
Non-connected	G	G	Out 1	C	Brown	G	Brown	
Earth		Shield	Out 2	E	Yellow	H	Yellow	
			Out Z			I	Pink	
			Non-connected	G		J	Shield	

ORDERING INFORMATION

E620	C	1000	8/24	R	6	PP	2
							CONNECTION DIAGRAM 2 – 4
							OUTPUT SIGNALS PP Push-pull OC NPN Open Collector LD Line-driver
							SHAFT Ø 6 - 8 - 9.52 - 10
							CONNECTIONS POSITIONS A Axial R Radial
							SUPPLY VOLTAGE 8/24 Vdc 5 Vdc
							PPR 2 ÷ 12500 series E/RE 1000 ÷ 36000 series REV
							CONNECTION OUTLET - Connector C Cable
							TIPO

E620 – E650 Plastic case, no zero pulse, 2÷12500 ppr
E621 – E651 Plastic case, zero pulse, 2÷12500 ppr
RE620 – RE650 Aluminium case, no zero pulse, 2÷12500 ppr
RE621 – RE651 Aluminium case, zero pulse, 2÷12500 pp
REV620 – REV650 Custodia in alluminio, senza impulso zero, 1000÷36000 i/g
REV621 – REV651 Aluminium case, zero pulse, 1000÷36000 ppr

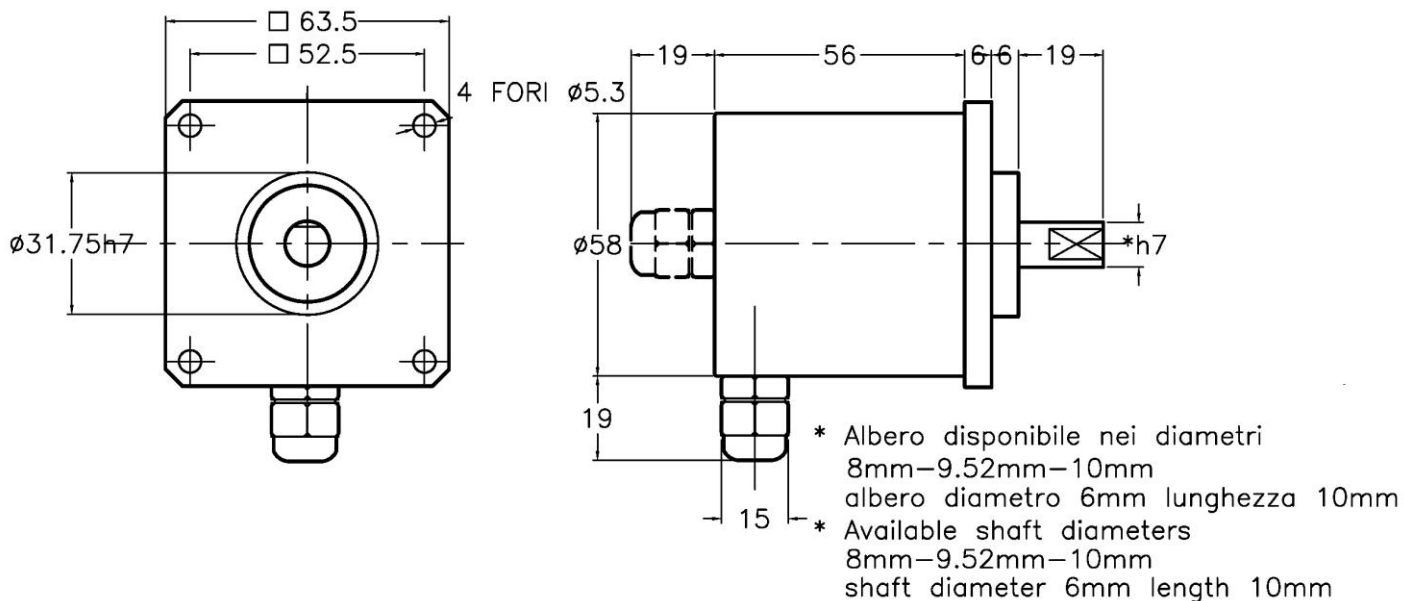
VARIATIONS ADMITTED WITHOUT NOTICE

Dimensional drawings available at
www.elap.it/eng/incremental-encoders/encoder-e620.html

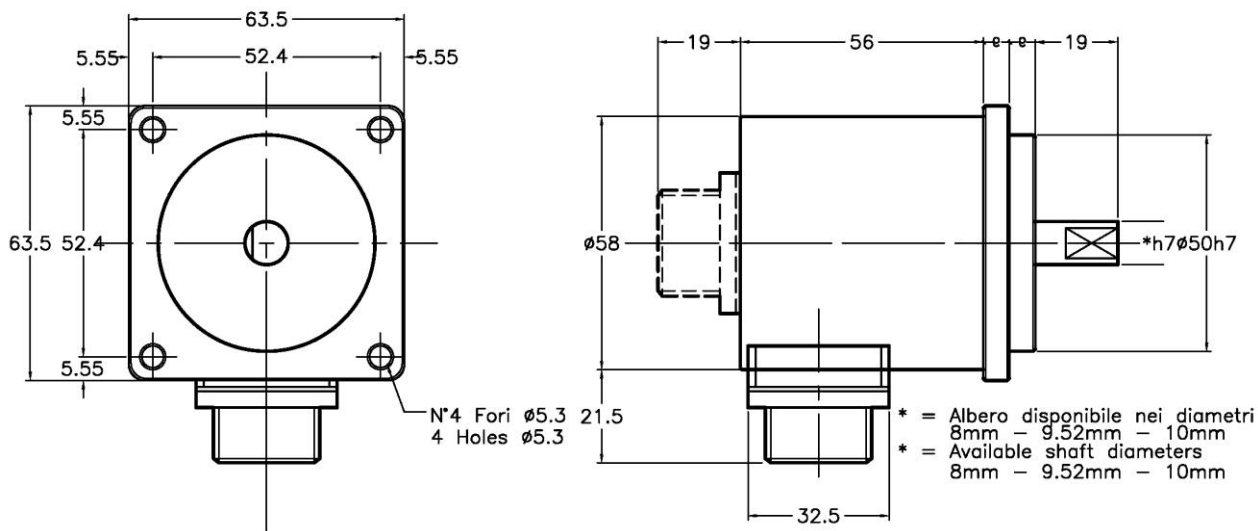


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E620 uscita serracavo
E620 cable outlet

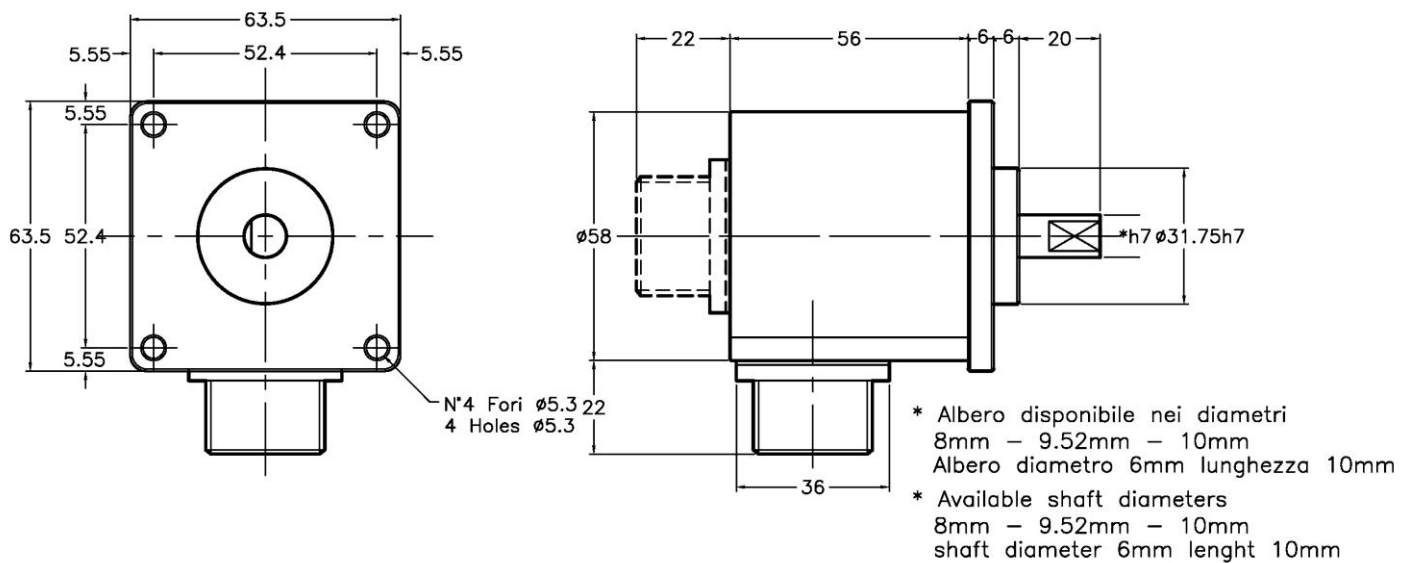


E650 uscita connettore 7p
E650 10pin output connector



DIMENSIONS

RE620 uscita connettore 10p
RE620 10pin output connector



Further dimensional drawings available at
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