



RE/REM620



RE/REM650

RE/REM Square Flanged INCREMENTAL ROTARY ENCODERS

- Incremental rotary encoders with or without zero pulse
- Pulses per revolution: 2 to 12500
- Aluminium housing
- Several configurations available

MECHANICAL VERSIONS		PULSES PER REVOLUTION	
RE620 • REM620	RE650 • REM650	Series RE	Series REM
Body Ø: 58 mm Flange mm 63.5x63.5 Centering mask Ø 31.75 mm Shaft Ø 6, 8, 9.52, 10 mm	Body Ø: 58 mm Flange mm 63.5x63.5 Centering mask Ø 50 mm Shaft Ø 6, 8, 9.52, 10 mm	2, 5, 10, 15, 20, 25, 27, 30, 40, 50, 60, 80, 100, 115, 125, 150, 180, 200, 250, 256, 300, 360, 500, 600, 720, 750, 800, 900, 1000, 1200, 1250, 1440, 1500, 1800, 2000, 2400, 2500, 2700, 2880, 3000, 3600, 4000, 4500, 5000, 7200, 8000, 9000, 10000, 12500	Magnetic operation 8, 10, 16, 20, 25, 32, 40, 50, 64, 80, 100, 125, 128, 200, 250, 256, 400, 500, 512, 1024, 2048

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS	
• Materials: housing shaft	Aluminium AISI 303 steel
• Weight	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	IP65 / optional IP66 with sealing ring*
• Operating temperature	-10 ÷ 70°C
• Stacking temperature	-20 ÷ 80°C

ELECTRICAL & OPERATING SPECIFICATIONS	
• Pulse code	Incremental
• Pulses per revolution	RE 2 ÷ 12500 REM 8÷2048
• 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 5/30 Vdc line driver signals protected against short circuits
• Supply voltage	5/30 Vdc protection against polarity reversal
• Absorption	30÷80 mA max
• Max frequency	100 KHZ / 200 KHZ for ppr>1250
• 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 IP66 sealing ring applied on the shaft: 3000 rpm

* NPN open collector: series **RE** only



CONNECTIONS

SIGNALS	Push Pull – Open Collector NPN			SIGNALS	Line Driver		10-pin connector	Cable colours
	7-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	White	Out 1	A	White	A	White
Out 2	B	E	Green	Out 2	B	Green	B	Green
Out Z <i>RE/REM6x1</i>	C	D	Brown	Out Z			C	Grey
+ Vdc	D	F	Red	+ Vdc	D	Red	D	Red
0V	F	A	Blue	+ Vdc			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

RE620	C	1000	5/30	R	6	PP	2
--------------	----------	-------------	-------------	----------	----------	-----------	----------

CONNECTION DIAGRAM
2 – 4

OUTPUT SIGNALS
PP Push-pull
OC NPN Open Collector (series *RE*)
LD Line-driver

SHAFT Ø
6 -8 – 9.52 - 10

CONNECTIONS POSITIONS
A Axial
R Radial

SUPPLY VOLTAGE
5/30 Vdc

PPR
RE 2 ÷ 12500
REM 8 ÷ 2048

CONNECTION OUTLET – Sealing ring
- Connector
C Cable
K Connector outlet – O-ring on the shaft
J Cable outlet – O-ring on the shaft

TIPO
RE/REM620 – RE/REM650 no zero pulse
RE/REM621 – RE/REM651 zero pulse

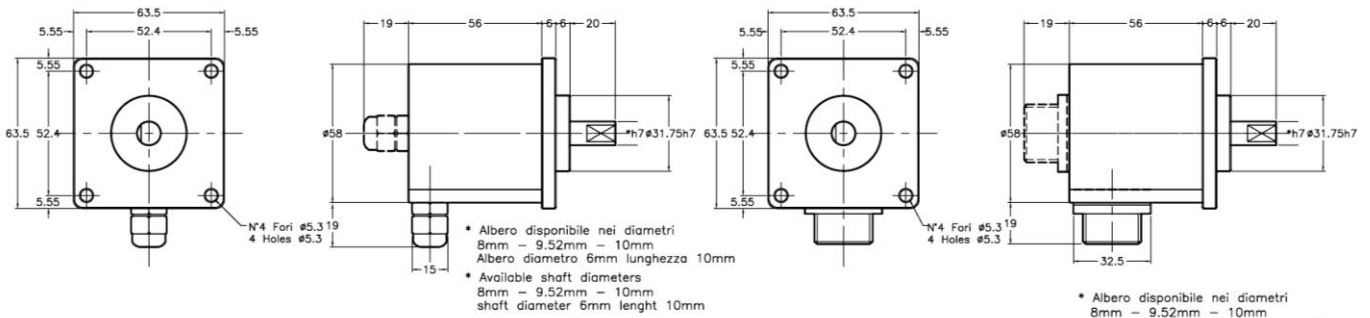
ELAP RESERVES THE RIGHT TO UPGRADE THE PRODUCT WITHOUT NOTICE

DIMENSIONS

RE/REM620

RE620 uscita serracavo
RE620 cable output

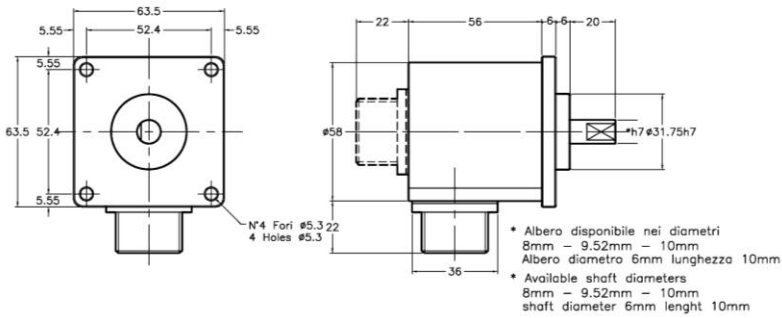
RE620 uscita connettore 7p
RE620 10pin output connector



RE620 uscita connettore 10p
RE620 10pin output connector

* Albero disponibile nei diametri
8mm - 9.52mm - 10mm
Albero diametro 6mm lunghezza 10mm

* Available shaft diameters
8mm - 9.52mm - 10mm
shaft diameter 6mm length 10mm

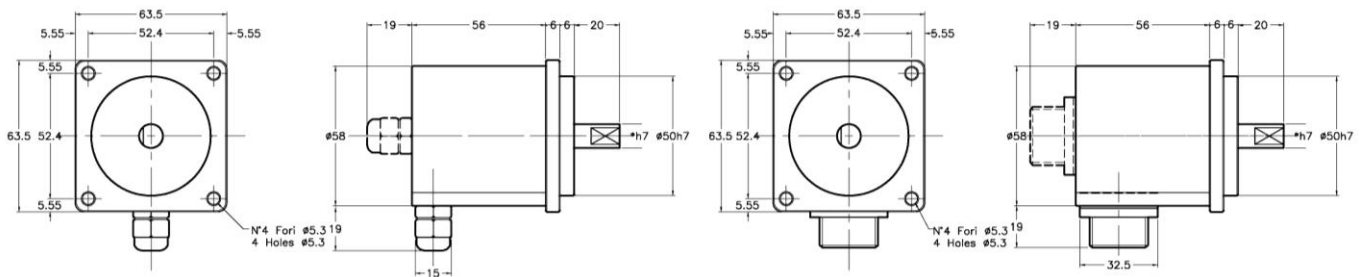


Rif. M1464V

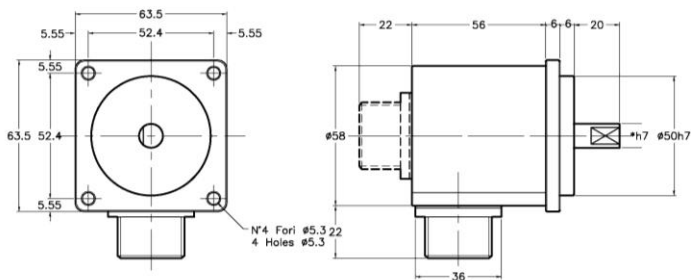
RE/REM650

RE650 uscita serracavo
RE650 cable output

RE650 uscita connettore 7p
RE650 7pin output connector



RE650 uscita connettore 10p
RE650 10pin output connector



Rif. M1972V

Square flanged alternative encoder series:

REC 620	REV 620	REP 621/651
Compact encoders 2÷12500 ppr Body Ø 58 mm, h 38 mm • M12 connector or cable outlet • Aluminium housing	Glass disk encoders 1000÷50000 ppr Body Ø 58 mm • Aluminium housing	Programmable encoders 8÷2048 ppr settable by the user Body Ø 58 mm • Aluminium housing • Magnetic reading • Zero pulse
		

REFERENCES

Further information and dimensional drawings at the following links:

<https://www.elap.it/incremental-encoders/encoder-re620/>

<https://www.elap.it/incremental-encoders/encoder-rem/>



Encoder R6xx



Encoder REM



ELAP VIA VITTORIO VENETO, 4 • I-20094 CORSICO (MI) • TEL. +39.02.4519561
FAX +39.02.45103406 • E-MAIL INFO@ELAP.IT • SITE WWW.ELAP.IT