



RE/REM520



RE/REM540



RE/REM530

RE/REM Round 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

RE520 • REM520

Body Ø: 58 mm
Flange Ø: 58 mm
Servo coupling
Centering mask Ø 50 mm
Shaft Ø 6, 8, 9.52, 10 mm
SYNCHRO FLANGE

RE540 • REM540

Body Ø: 58 mm
Flange Ø: 58 mm
Centering mask Ø 36 mm
Shaft Ø 6, 8, 9.52, 10 mm

CLAMPING FLANGE

RE530 • REM530

Body Ø: 58 mm
Flange: RE0444
Shaft Ø 11 mm
Aluminium

PULSES PER REVOLUTION

Series RE

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 series REM

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

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

	RE/REM 520 • 540	RE/REM530
• Materials: housing shaft	Aluminium AISI 303 steel	
• Weight	400 g ca	
• Shaft Ø	6, 8, 9.52, 10 mm	11 mm
• Revolutions/minute	6000 continuos/10000 temporary*	
• Starting torque	≤0,8 Ncm	
• Intertia	≤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	100/200 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



RE/REM540



RE/REM520

CONNECTIONS

Push Pull – Open Collector NPN				Line Driver					
SIGNALS	7-pin connector		Cable colours	SIGNALS	7-pin connector		Cable colours	10-pin connector	Cable colours
	DIAGRAM 1	DIAGRAM 2			DIAGRAM 3 without 0 pulse			DIAGRAM 4 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 RE/REMSx1	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

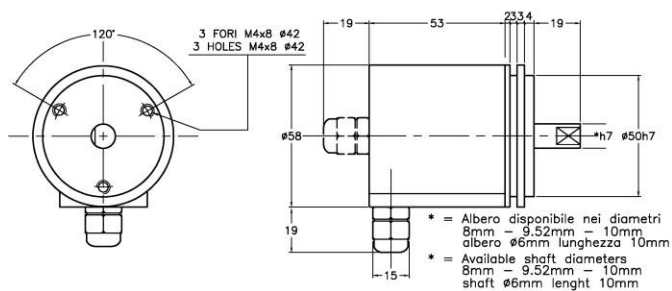
RE520	C	1000	5/30	R	6	PP	2
							<u>CONNECTION DIAGRAM</u> 2 – 4
							<u>OUTPUT SIGNALS</u> PP Push-pull OC NPN Open Collector (RE only) LD Line-driver
					<u>SHAFT Ø</u> 6 -8 – 9.52 - 10 RE/REM530: 11 mm		
				<u>CONNECTIONS POSITIONS</u> A Axial R Radial			
			<u>SUPPLY VOLTAGE</u> 5/30 Vdc				
		<u>PPR</u> RE 2 ÷ 12500 REM 8 ÷ 2048					
<u>CONNECTION OUTLET & SEALING RING</u> - Connector C Cable K Connector and O-ring on the shaft J Cable and O-ring on the shaft							
<u>TYPE</u> RE/REM520 – RE/REM540 – RE/REM530 no zero pulse RE/REM521 – RE/REM541 – RE/REM531 zero pulse							
ELAP RESERVES THE RIGHT TO UPGRADE THE							

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PRODUCT WITHOUT NOTICE

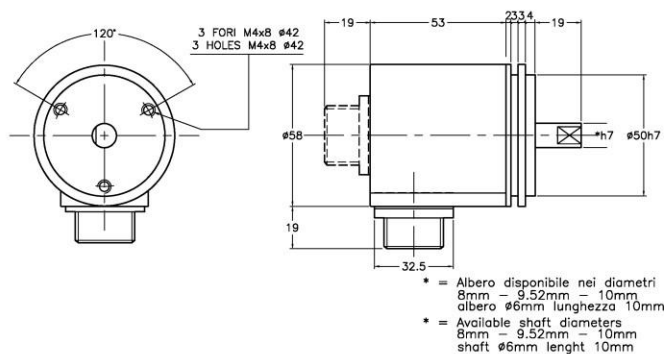
DIMENSIONS

RE/REM520

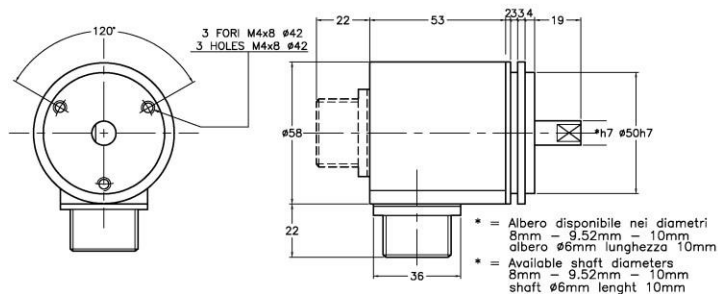
RE520 uscita serracavo
RE520 cable output



RE520 uscita connettore 7p
RE520 7pin output connector



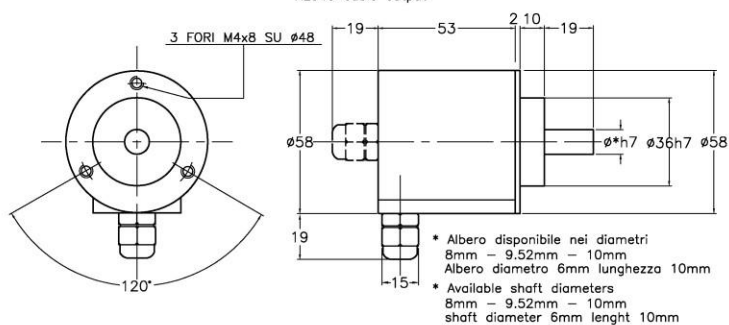
RE520 uscita connettore 10p
RE520 10pin output connector



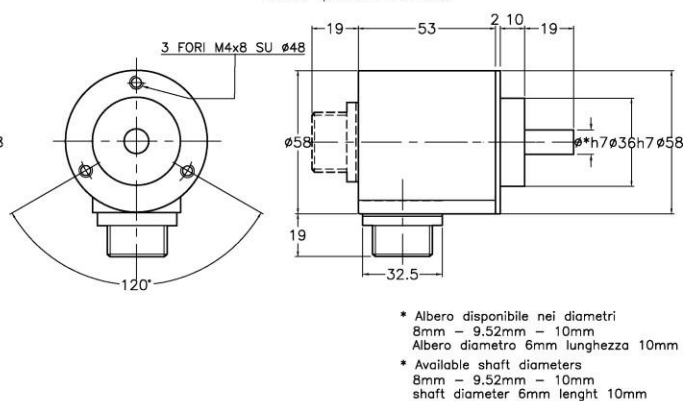
Ref. M1477

RE/REM540

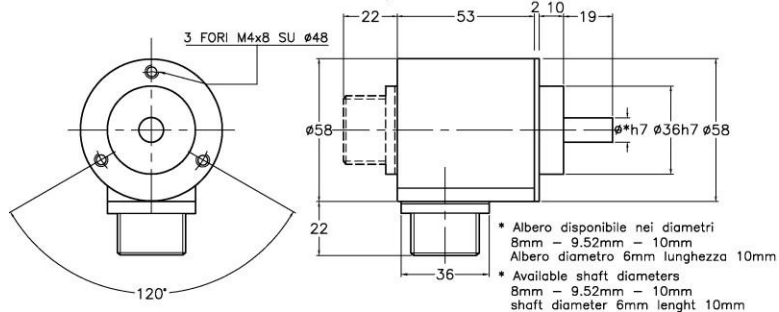
RE540 uscita serracavo
RE540 cable output



RE540 uscita connettore 7p
RE540 7pin output connector



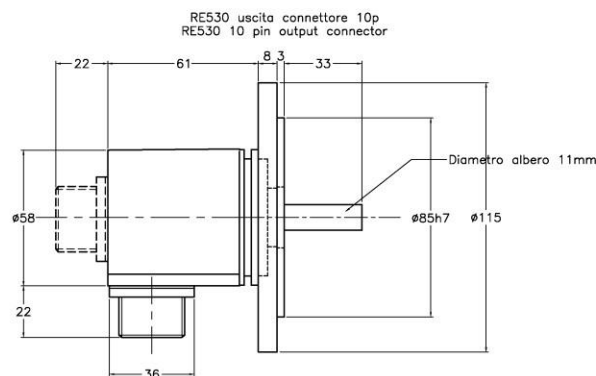
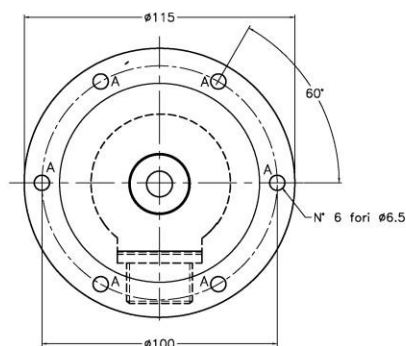
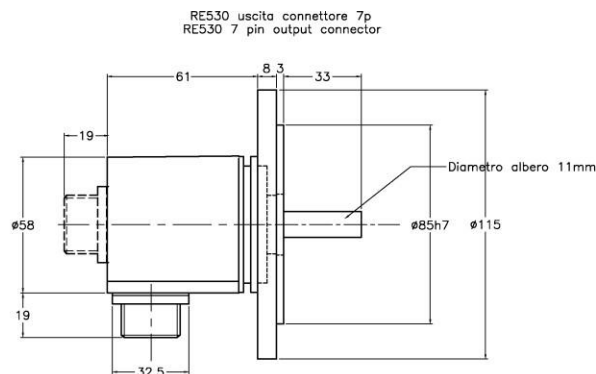
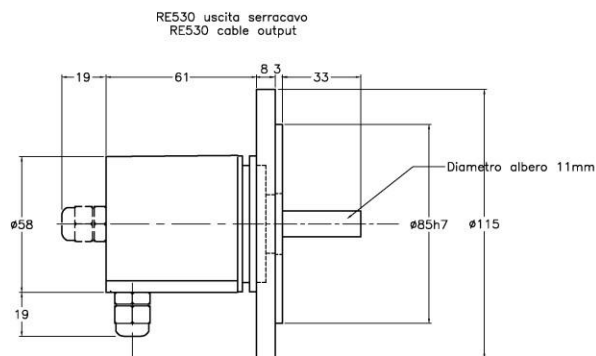
RE540 uscita connettore 10p
RE540 10pin output connector



Ref. M1973

DIMENSIONS

RE/REM530



Ref. M1137

REFERENCES

Further information and dimensional drawings at the following links:

<https://www.elap.it/incremental-encoders/encoder-re520/>

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



Encoder RE5xx



Encoder REM

ROUND FLANGED ALTERNATIVE ENCODER SERIES

REC 520/540/530

Compact encoders

2÷12500 ppr

Body Ø 58 mm, h 38 mm • M12 connector or cable outlet • Aluminium housing • UL Listed



[Encoder REC](#)

REV 520/540

Glass disk encoders

1000÷50000 ppr

Body Ø 58 mm • Aluminium housing



[Encoder REV](#)