



RE50



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INCREMENTAL ROTARY ENCODERS

Series RE50

- **Incremental rotary encoders with or without zero pulse**
- **Pulses per revolution: 2 to 12500**
- **Aluminium housing**
- **Body Ø 50 mm, length 48 mm**

RE50

Bidirectional encoder with or without zero pulse • PPR: 2 to 12500

Body Ø 50 mm • Length 48 mm • Round flange Ø 50 mm • 3 fixing holes M5 120° on Ø 36 mm

Shaft Ø 10, 8 or 6 mm

Connections by cable 1 m long or M12 connector placed axially

Aluminium housing

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

• Materials: housing shaft	Aluminium Steel AISI 303
• Weight	210 g ca.
• Shaft Ø	10, 8 or 6 mm
• Revolutions/minute	6000 continuous/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
• Operating temperature	-10 ÷ 70°C
• Stocking temperature	-20 ÷ 80°C

ELECTRICAL & OPERATING SPECIFICATIONS

• Pulse code	Incremental
• Pulses/revolution	2 ÷ 12500
• Zero pulse	One pulse/revolution (RE51)
• Output signals	Two square waves 90° ±15° out of phase – Zero pulse width: 90°±15°
• Electronic output	push-pull, line driver 5Vdc or 5/30Vdc 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 cable 1 m long 5-pin M12 axial plug connector 8-pin connector for line driver output Optional: tap connector with cable

CONNECTIONS

Push Pull SIGNALS	5-pin connector		Line Driver SIGNALS	8-pin connector	
	pin	Cable colours		pin	Cable colours
Out 1	pin 2	White	Out 1	pin 1	White
Out 2	pin 4	Green	Out 2	pin 3	Green
Out Z (RE51 only)	pin 5	Brown	Out Z (RE51 only)	pin 5	Grey
+ Vdc	pin 1	Red	+ Vdc	pin 8	Red
0V	pin 3	Blue	0V	pin 7	Blue
		Shield	Out 1	pin 2	Brown
			Out 2	pin 4	Yellow
			Out Z (RE51 only)	pin 6	Pink
					Shield

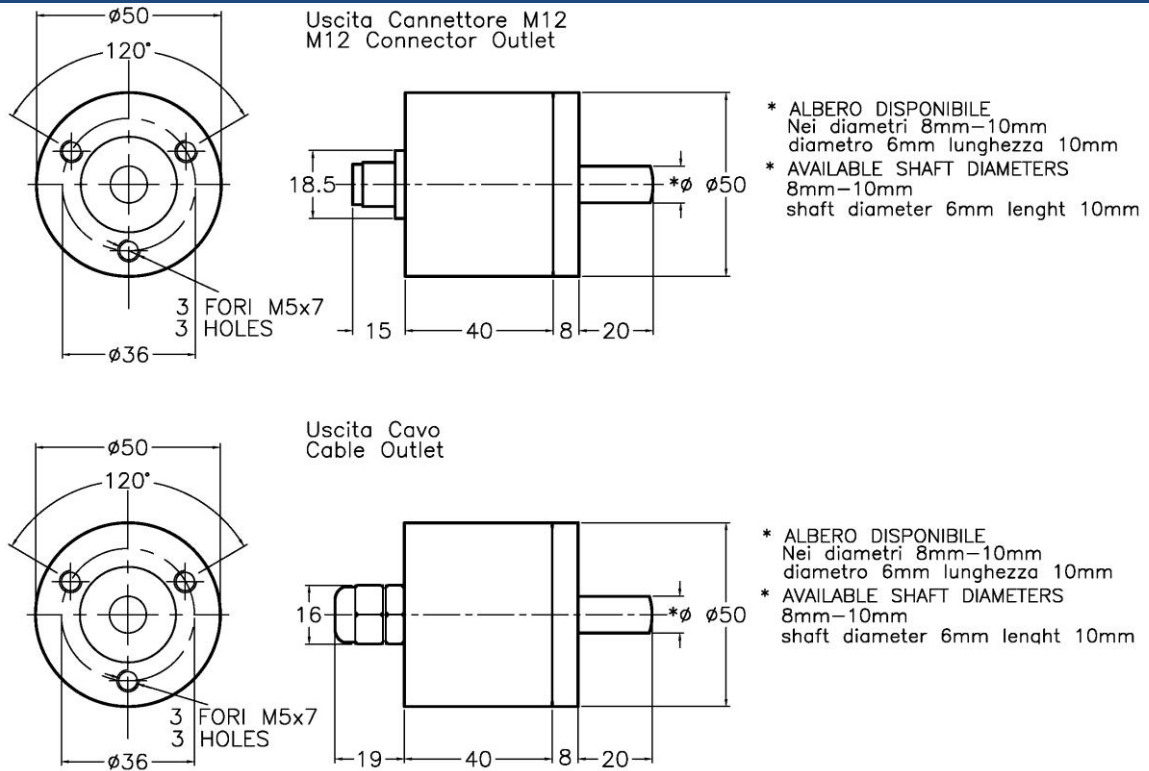


ORDERING INFORMATION

RE50	C	100	5/30	A	10	PP
						OUTPUT SIGNALS PP Push-pull LD Line-driver LD5V Line driver 5 Vcc
						SHAFT Ø 10 mm - 8 mm - 6 mm
						CONNECTIONS POSITION A Axial
						SUPPLY VOLTAGE 5/30 Vdc
						PULSES/REV. 2-12500
						CONNECTION OUTLET - M12 Connector C Cable
TYPE RE50 Bidirectional, no zero pulse, 2÷12500 ppr RE51 Bidirectional, one zero pulse, 2÷12500 ppr						

ELAP RESERVES THE RIGHT TO UPGRADE THE PRODUCT WITHOUT NOTICE

DIMENSIONS



REFERENCES

Further information at:

<https://www.elap.it/incremental-encoders/encoder-re50/>



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