



E430



E410



RE400

INCREMENTAL ROTARY ENCODERS Hollow Shaft

- Incremental rotary encoders with or without zero pulse
- Pulses per revolution: 2 to 12500
- ABS or aluminium case (series RE)
- Several configurations available

MECHANICAL VERSIONS

E400/E401	E470/E471	E410/E411	E430/E431
Body Ø: 58 mm Flange Ø: 53.5 mm Fixing holes on Ø 30 mm Motor fixing through joint with hole Ø 6, 8 or 10 mm	Body Ø: 58 mm Flange Ø: 72 mm Fixing holes on Ø 63.5 mm Motor fixing through joint with hole Ø 6, 8 or 10 mm	Body Ø: 58 mm Flange Ø: 63 mm Hollow shaft for motor fixing with hole Ø 8, 10, 12, 14 or 15 mm	Body Ø: 58 mm Flange Ø: 63 mm Hollow shaft for motor fixing with hole Ø 8, 10, 12, 14 or 15 mm Fixing by antirotational elastic support

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

	E400	E470	E410	E430
• Materials: case shaft	ABS / aluminium (type RE) AISI 303 steel			
• Weight	280 g circa			
• Shaft/joint hole	6, 8, 10 mm		8, 10, 12, 14, 15 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	IP64			
• Operating temperature	-10 ÷ 70°C			
• Stacking temperature	-20 ÷ 80°C			

ELECTRICAL & OPERATING SPECIFICATIONS

• Pulse code	Incremental
• Pulses per revolution	2 ÷ 12500
• 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*

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





CONNECTIONS

SIGNALS	Push Pull – Open Collector NPN		SIGNALS	Line Driver	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	Grey
+ Vdc	D	F	+ Vdc	D	Red	D	Red
0V	F	A	0V	F	Blue	E	Red
Non-connected	E	B	Out 1	C	Brown	F	Blue
Non-connected	G	G	Out 2	E	Yellow	G	Brown
Earth		Shield	Out Z			H	Yellow
			Non-connected	G		I	Pink
			Non-connected			J	Shield

ORDERING INFORMATION

E400	C	1000	8/24	R	6	PP	2
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CONNECTION DIAGRAM
2 – 4

OUTPUT SIGNALS
PP Push-pull
OC NPN Open Collector
LD Line-driver

HOLE Ø
6 -8 -10 -12 - 14- 15 mm

CONNECTIONS POSITIONS
A Axial
R Radial

SUPPLY VOLTAGE
8/24 Vdc
5 Vdc

PPR
2 ÷ 12500

CONNECTION OUTLET
- Connector
C Cable

TYPE
E400 – E470 – E410 – E430 Plastic case, no zero pulse
E401 – E471 – E411 – E431 Plastic case & zero pulse
RE400 – RE470 – RE410 – RE430 Aluminium case, no zero pulse
RE401 – RE471 – RE411 – RE431 Aluminium case & zero pulse

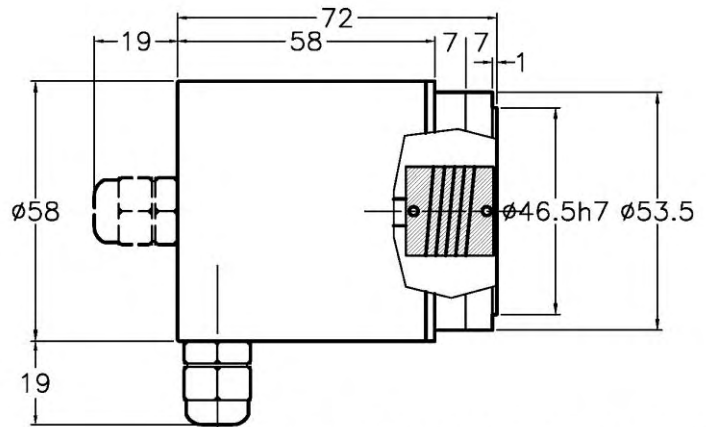
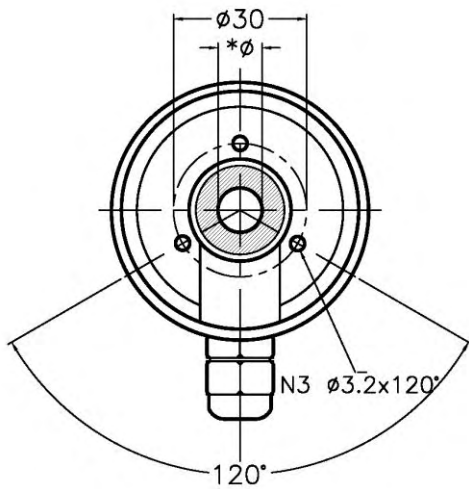
VARIATIONS ADMITTED WITHOUT NOTICE

Dimensional drawings available at
www.elap.it/eng/incremental-encoders/e400-e410-e430-e470.html



Automática Electrónica y Control, S.L. Lacy, 30 Acc. - 08202 Sabadell (Barcelona)
 Tel 937 207 066 Fax 937 209 999 www.automatica-elec.es info@automatica.cat

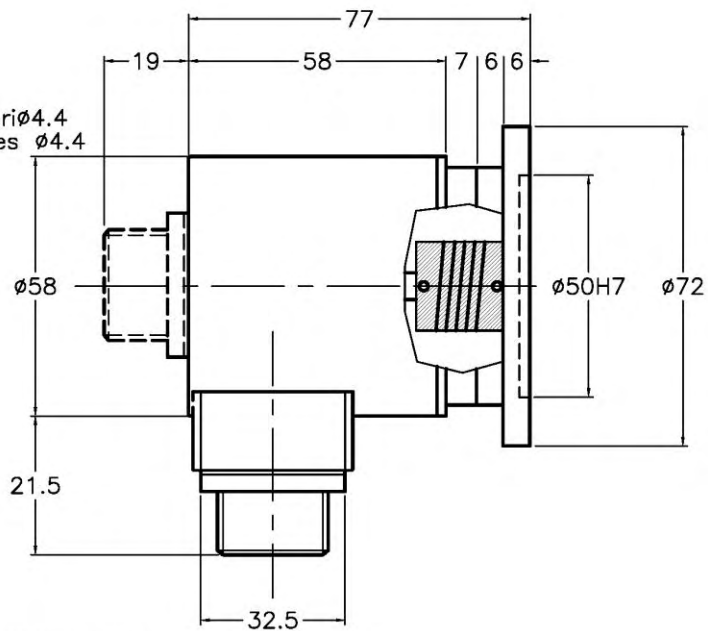
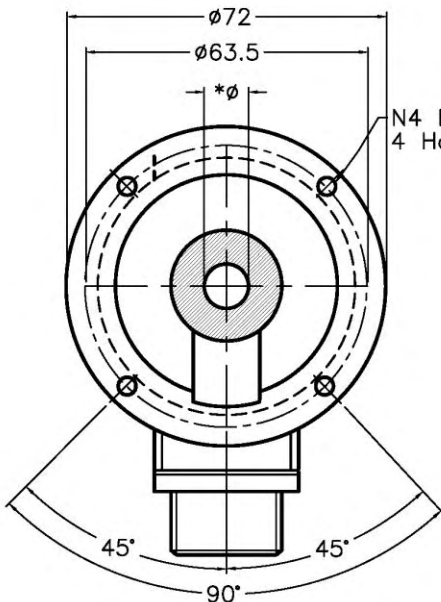
E400 uscita serracavo
E400 cable outlet



* FORO GIUNTO DISPONIBILE nei diametri
6mm-8mm-10mm

* AVAILABLE JOINT HOLE DIAMETERS
6mm-8mm-10mm

E470 uscita connettore 7p
E470 7pin output connector

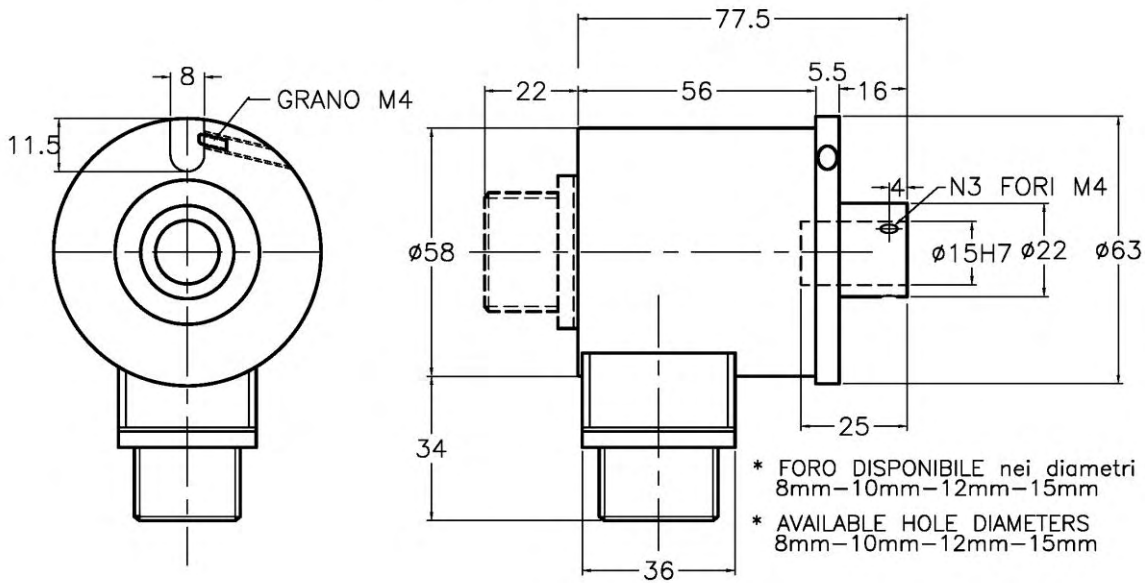


* FORO GIUNTO DISPONIBILE nei diametri
6mm-8mm-10mm

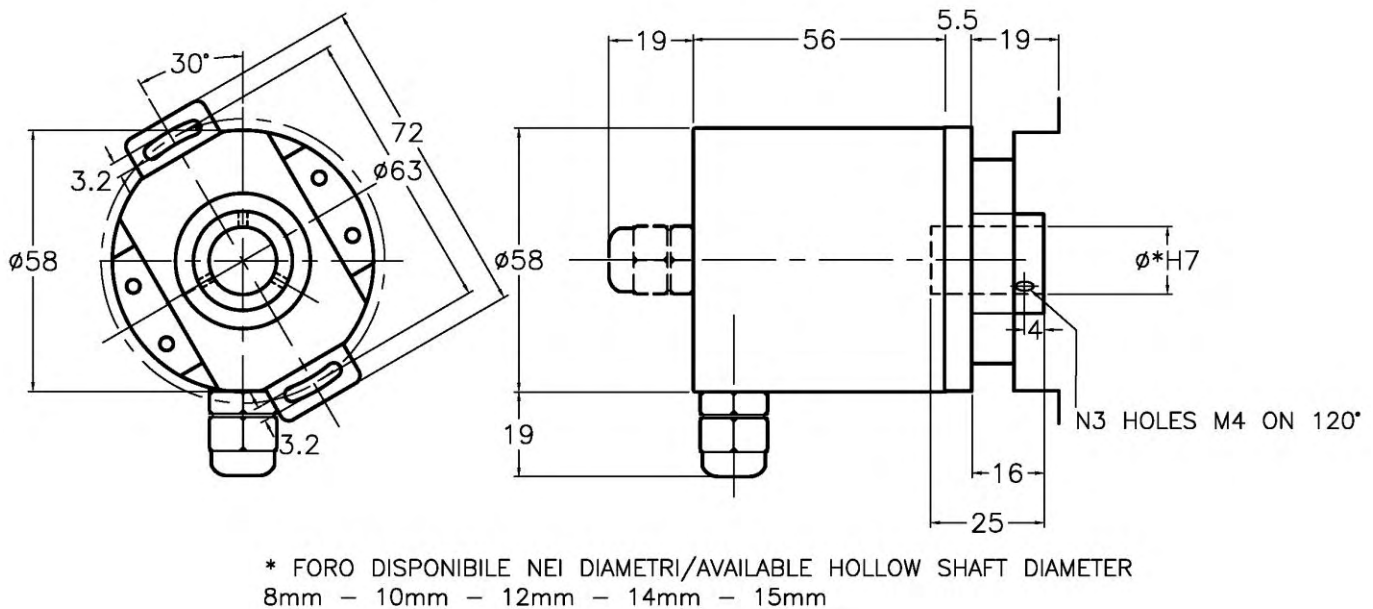
* AVAILABLE JOINT HOLE DIAMETERS
6mm-8mm-10mm



E410 uscita connettore 10 poli
E410 10pin connector outlet



E430 uscita serracavo
E430 cable outlet



Further dimensional drawings available at
www.elap.it/eng/incremental-encoders/e400-e410-e430-e470.html

