



INCREMENTAL ROTARY ENCODERS

Series E40

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

MECHANICAL versions			
E40/E41	E40A/E41A	E40V/E41V	E40Q/E41Q
Body Ø: 40 mm Round flange Shaft Ø: 6 or 4 mm	Body Ø: 40 mm Round flange with 4 holes on Ø 25.4 mm Shaft Ø: 6 or 4 mm	Body Ø: 40 mm Round flange, M18x1 screw fixing Shaft Ø: 6 or 4 mm	Body Ø: 40 mm Square flange, mm 43x43 Shaft Ø: 6 or 4 mm
E40M/E41M	E40S/E41S	ABS plastic case	
Body Ø: 40 mm Hollow shaft flange Hole Ø 6 or 8 mm	Body Ø: 40 mm Hollow shaft flange Hole Ø 6 or 8 mm Fixing by antirotational elastic support	Connections outlet: axial or radial cable	
		Aluminium case (type X..) Connections outlet: cable gland in radial position	

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS						
	E40/E41	E40A/E41A	E40V/E41V	E40Q/E41Q	E40M/E41M	E40S/E41S
• Materials: case shaft			ABS / aluminium (type X..) AISI 303 steel			
• Weight			95 g ca.			
• Shaft diameter		4 or 6 mm			Hole 8 or 6 mm	
• Revolutions/minute			6000			
• Starting torque			≤0,2 Ncm			
• Inertia			≤5 g cm ²			
• Max load			10N axial / 20N radial			
• Vibration resistance (10÷2000 Hz)			10 G			
• Shock resistance (11 ms)			30 G			
• Protection degree		IP54 (optional IP65 with metal case and cable gland)				
• Operating temperature		-10 ÷ 60°C				
• Stocking temperature		-20 ÷ 80°C				





E40M



E40AX27



E40



E40AX27

ELECTRICAL & OPERATING SPECIFICATIONS

• Pulse code	Incremental
• Pulses/revolution	2 ÷ 12500
• Zero pulse	One pulse/revolution
• Output signals	Two square waves 90° ±15° out of phase – Zero pulse width: 90°±15°
• Electronic output	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	40 mA max
• Max. frequency	100/150 KHz
• Connections	Axial or radial cable 1 m long Optional: radial cablepress, 5-pin Lumberg or DB9 axial connector

CONNECTIONS

Push/Pull – NPN Open SIGNALS	Collector Output Cable Colours	Line Driver Output SIGNALS	Cable Colours
Out 1	White	Out 1	White
Out 2	Green	Out 2	Green
Out Z(E41)	Yellow	Out Z (E41)	Grey
+ Vdc	Red	+ Vdc	Red
0V	Blue	0V	Blue
Earth	Shield	Out 1	Brown
		Out 2	Yellow
		Out Z	Pink
		Earth	Shield

ORDERING INFORMATION

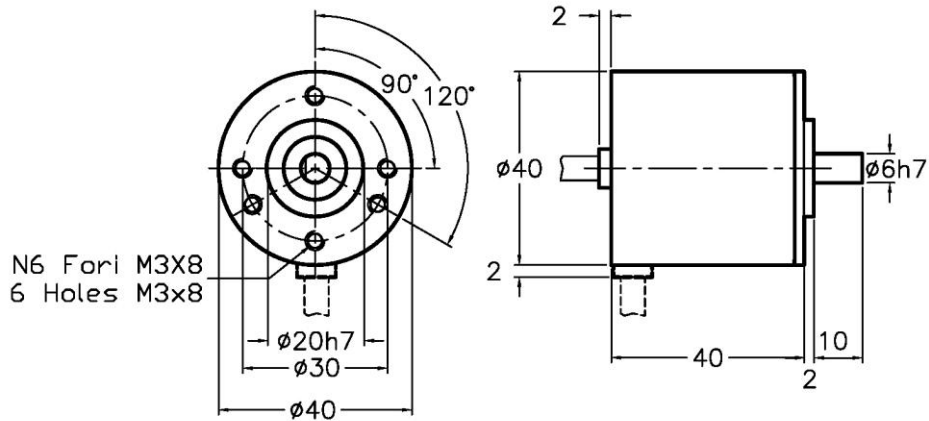
E40	1000	824	R	6	PP
TYPE E40/E41 E40A/E41A E40V/E41V E40Q/E41Q E40M/E41M E40S/E41S	PPR NO. 2 ÷ 12500	SUPPLY VOLTAGE 8/24 Vdc 5 Vdc	CONNECTIONS POSITION A Axial R Radial	SHAFT/HOLE DIAMETER 6 mm 4 mm 8 mm	ELECTRONIC OUTPUT PP Push-pull OC Open Collector NPN LD Line-driver

VARIATIONS ADMITTED WITHOUT NOTICE

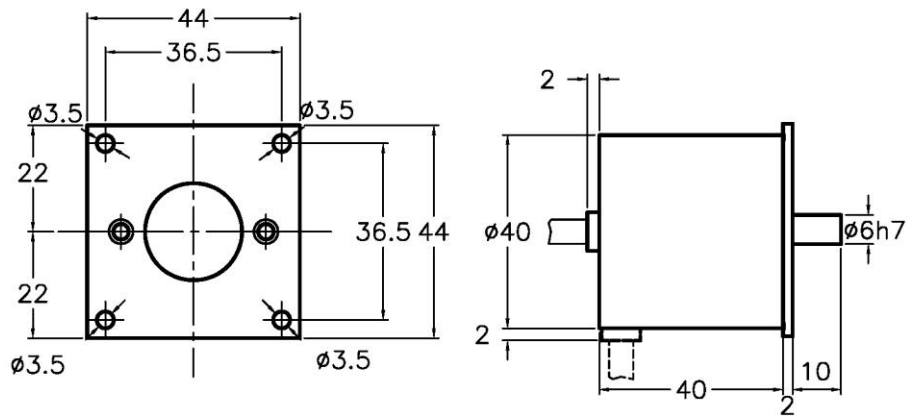
Dimensional drawings available at
www.elap.it/eng/incremental-encoders/encoder-e40.html



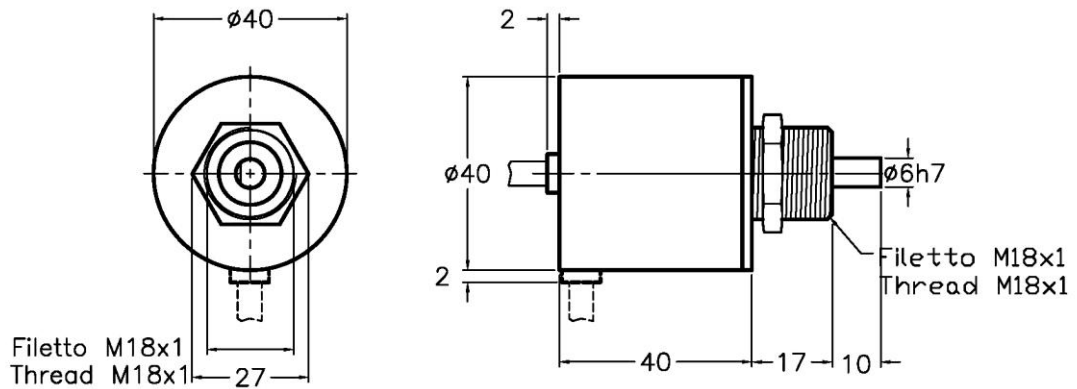
E40



E40Q

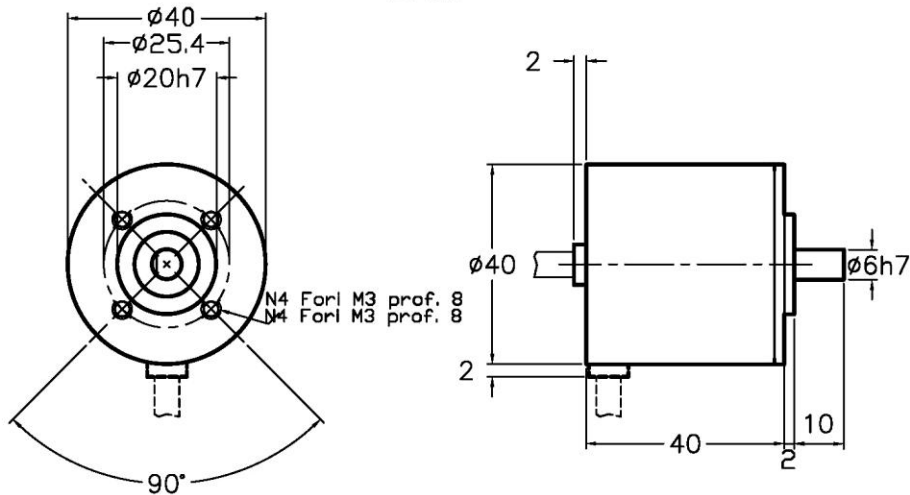


E40V

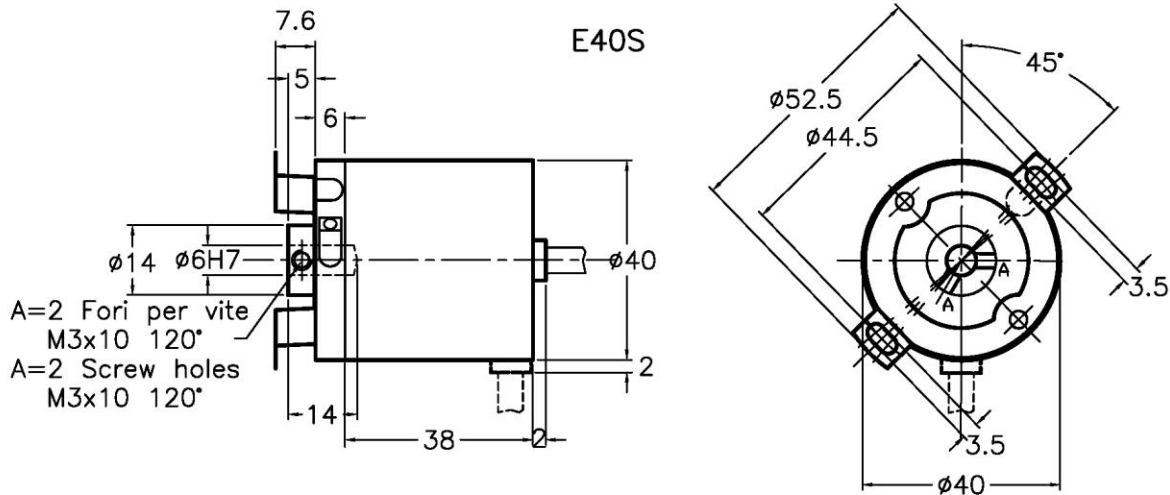


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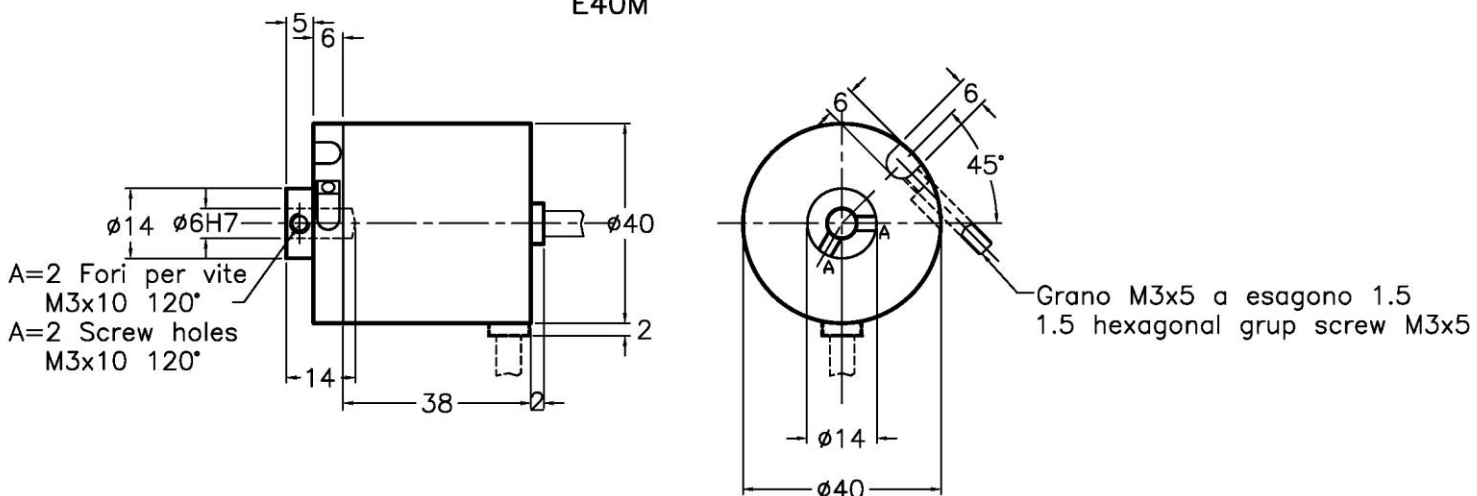
E40A



E40S



E40M



Dimensional drawings available at www.elap.it/eng/incremental-encoders/encoder-e40.html

