



E40 / E41 Incremental Rotary Encoders

- Incremental encoders with or without zero pulse
- Pulses/revolution range: 5 to 10000
- Different configurations available
- Accurate, reliable, strong



■ Mechanical versions

Series E40/E41	Series E40A/E41A	Series E40V/E41V	Series E40M/E41M
Body Ø 40 mm Round flange Shaft Ø 6 or 4 mm	Body Ø 40 mm Round flange, 4 holes on Ø 25.4 mm Shaft Ø 6 or 4 mm	Body Ø 40 mm Round flange with screw fixing M18x1 Shaft Ø 6 or 4 mm	Body Ø 40 mm Hollow shaft Ø 6 or 4 mm
ABS plastic case – Connections outlet: axial or radial cable outlet			
Metal case - Connections outlet: radial IP65 cablepress (X. version)			

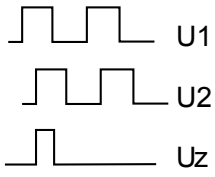
■ Mechanical environmental specifications

	E40/E41	E40A/E41A	E40V/E41V	E40M/E41M
Materials: case shaft	ABS / aluminium (version X..) / Steel AISI 303			
Weight	95 g ca.			
Shaft diameter	4 or 6 mm			Joint hole: 4 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 press)			
Operating temperature	-10 ÷ 60°C			
Stocking temperature	-20 ÷ 80°C			

■ Electrical & operating specifications

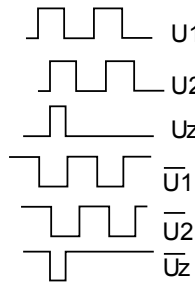
Pulse/code	Incremental
Number of ppr	5 ÷ 10000
Zero pulse	1 pulse per revolution
Output signals	Two square waves 90° ±15° out of phase – Zero pulse width: 90°±15°
Electronic output signals	push-pull, NPN open collector, 5Vdc or 8/24Vdc line driver signals protected against short circuits
Supply	5Vdc or 8/24Vdc - protection against polarity reversal
Power consumption	40 mA max
Max frequency	100/150 KHz
Connection type	Axial or radial cable Optional: radial cablepress, 5-pin Lumberg or 9-pin Connei axial connector

■ **Electronic signals**



Supply voltage 8
 ± 24 Vdc
 5 Vdc $\pm 5\%$
 Signal 2 lags signal 1 with
 counterclockwise rotation
 (shaft sight)

Line driver



Supply voltage 8
 ± 24 Vdc
 5 Vdc $\pm 5\%$
 Signal 2 lags signal 1 with counterclockwise
 rotation (shaft sight)

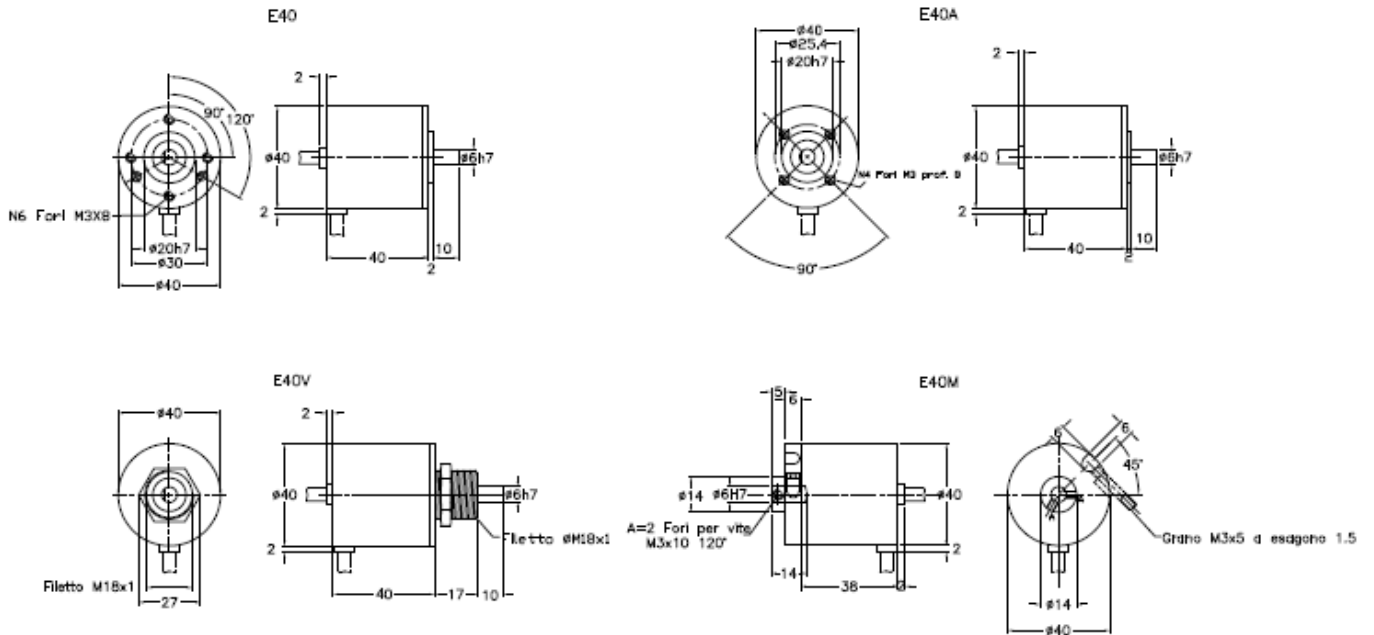
■ **Connections**

● PUSH/PULL – OPEN COLLECTOR NPN OUTPUT		● LINE DRIVER OUTPUT	
White	Signal 10	White	Signal 1
Green	Signal 2	Green	Signal 2
Yellow	0 Signal (E41/E41A/E41M/E41V)	Grey	0 Signal (E41/E41A/E41M/E41V)
Red	+ Vdc	Red	+ Vdc
Blue	0 V	Blue	0 V
Shield	Ground	Brown	Signal 1 ⁻
		Yellow	Signal 2 ⁻
		Pink	0 ⁻ Signal (E41/E41A/E41M/E41V)
		Shiel	Ground

■ **Ordering information**

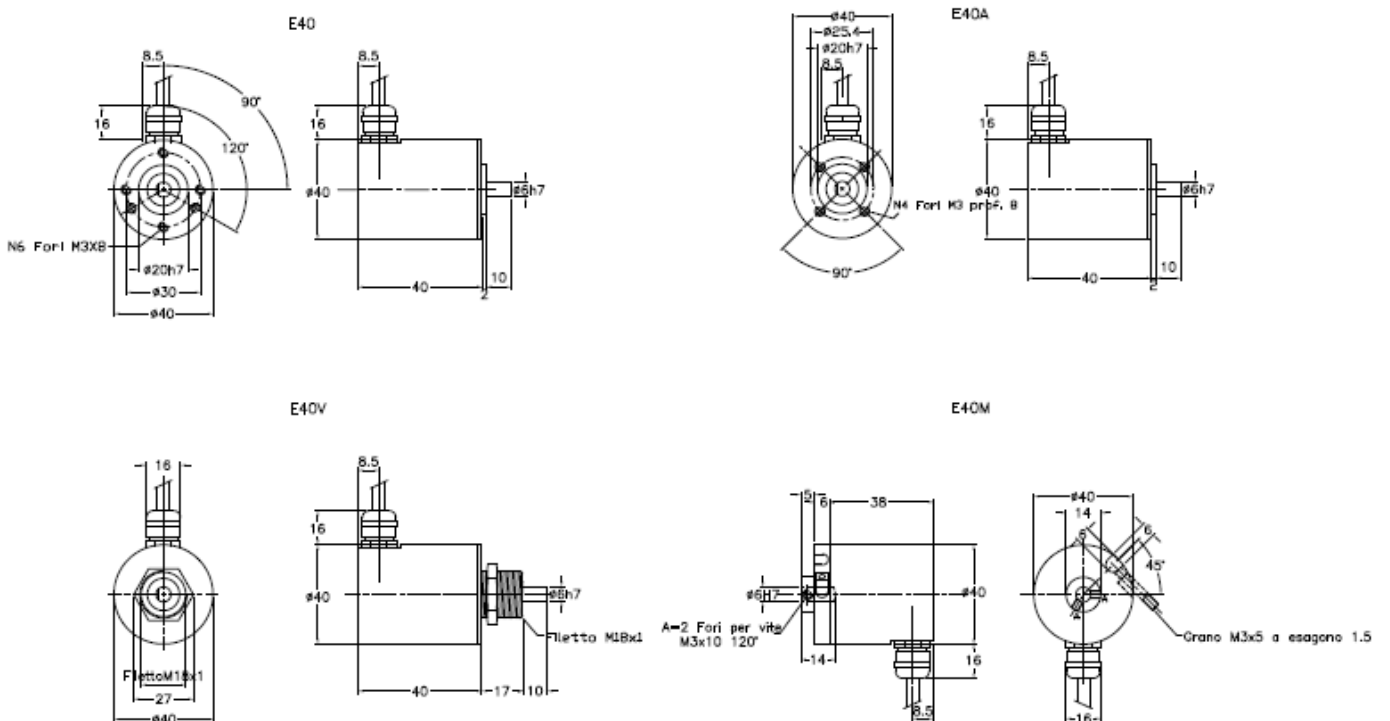
E40	100	824	6	PP
<p>ELECTRONIC OUTPUT PP Push-pull OC Open Collector NPN LD Line-driver</p> <p>SHAFT DIAMETER/JOINT HOLE 6 mm 4 mm</p> <p>SUPPLY VOLTAGE 8/24 Vdc 5 Vdc</p> <p>PPR NO. 5 ÷ 10000</p> <p>TYPE E40/E41 E40A/E41A E40V/E41V E40M/E41M</p>				

■ Dimensions



Dis.M1402V

Version X27 with metal case and IP65 cablepress



Dis.M1404V

LEADERS IN SENSORS & HEAVY DUTY JOYSTICKS

ALTHERIS bv

Scheveningseweg 15
2517 KS DEN HAAG
The Netherlands

+31 (0)70 3924421

+31 (0)70 3644249

Offices in : Benelux | Germany | France | UK | Italy | USA

www.altheris.com

sales@altheris.nl

ALTHERIS
SENSORS & CONTROLS