

Main characteristics

Miniaturized Ø42 encoder series for general applications.

- Up to 2.000 ppr with zero.
- Several output types available.
- Up to 28 Vdc input voltage.
- Up to 100 kHz frequency response.
- Output cable. Cable connector available on request.
- Several flanges available.
- Up to 6.000 rpm speed rotation.
- Up to IP65 sealing.


Ordering code

Full stop to separate special versions

EL 40 A 500 Z 5/28 N 6 X 3 P R . XXX

 incremental encoder series **EL**

 body dimension **40**
Type of flange

- mod. EL 40 A **A**
- mod. EL 40 B **B**
- mod. EL 40 C **C**
- mod. EL 40 E **E**
- mod. EL 40 H **H**
- mod. EL 40 I **I**

- R** radial
- A** axial

P cable output (standard length 0,5 m)

PS optional IP66 with axial cable output (only EL40 A/B)

R.P.M.

- 3** 3000
- 6** 6000

Enclosure rating

- X** standard IP54
- S** optional IP65 (only EL40 A/B)

Shaft diameter

- 4** ø 4 g6 mm EL40 E
- 6** ø 6 g6 mm EL40 A/B/C/H/I

Output types

- N** NPN
- C** NPN OPEN COLLECTOR
- P** PUSH PULL
- L** LINE DRIVER

For optionals about output types please refer to incremental output section

Special version code numbered from 001 to 999

Resolution

 PPR: series EL from **1** to **2000**

Please, directly contact our offices for pulses availability

Zero pulse

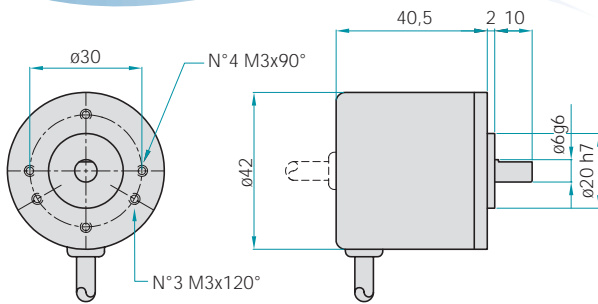
- without zero pulse **S**
- with zero pulse **Z**

Input voltage

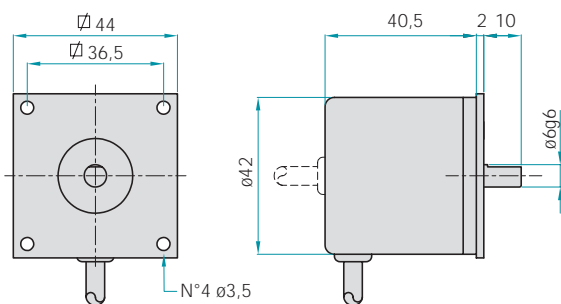
 input voltage EL **5 ÷ 28**

LINE DRIVER available only with input voltage 5 Vdc. or 8 ÷ 24 Vdc

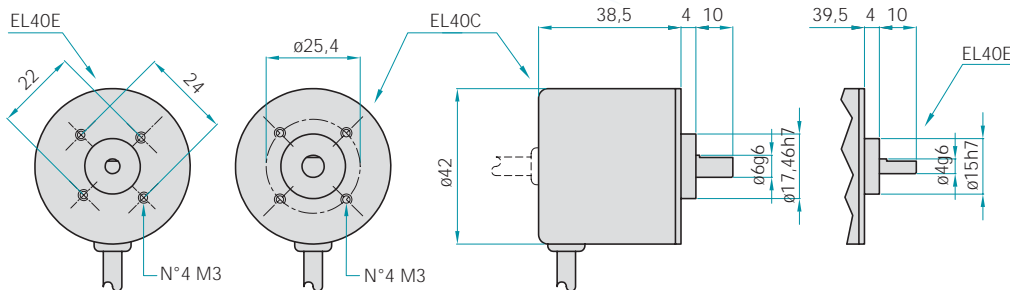
EL 40 A



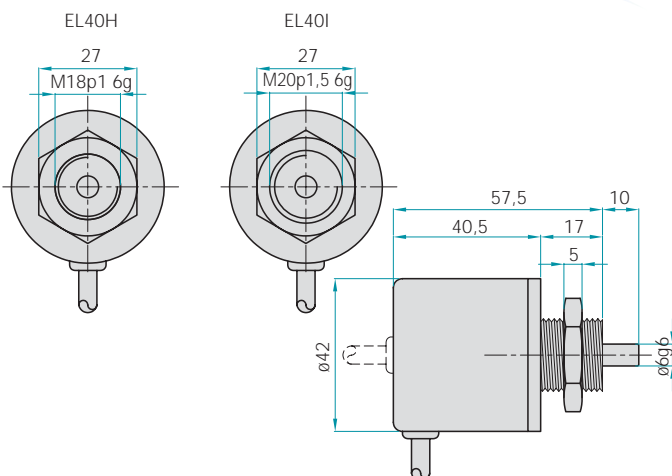
EL 40 B



EL 40 C / E



EL 40 H / I



Mechanical specifications

Shaft diameter	ø4 mm g6 EL40 E ø6 mm g6 EL40 A/B/C/H/I
Enclosure rating	IP54 standard EL40 C/E/H/I IP65 standard EL40 A/B IP66 standard EL40 A/B (only axial output with skintop)
Shaft speed	3000 RPM 6000 RPM
Max shaft load	5N (0.5 Kp) axial 5N (0.5 Kp) radial
Shock	50 G per 11 msec
Vibrations	10G 10 ÷ 2000 Hz
Bearings life	10 ⁹ revolutions
Bearings	n° 2 Ball bearings
Shaft material	Stainless steel AISI303
Body material	Aluminium D11S - UNI 9002/5
Housing material	PA 66 reinforced with fiber glass
Operating temperature	0° ÷ +60°C
Storage temperature	-25° ÷ +70°C
Weight	100 g

Electrical specifications

Resolution	From 1 to 2000 PPR
Input voltage	5 ÷ 28 Vdc LINE DRIVER only available with input voltage 5 / 8-24
Input current with no output load	100 mA Max
Source and sink current	50 mA for channel 20 mA for channel with LINE DRIVER
Output types	NPN / NPN OPEN COLLECTOR / PUSH PULL / LINE DRIVER
Output frequency	100 KHz Max (EL)
Frequency response	$F = \frac{\text{RPM} \times \text{Resolution}}{60}$