



EL 40 A/B/C/E/H/I INCREMENTAL ENCODER



Incremental encoder

- 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.



shaft INCREMENTAL ENCODERS

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**

Resolution
 From 1 to 2000 PPR series EL
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

R.P.M.
3 3000
6 6000

Enclosure rating
X standard IP54
S optional IP65 (only EL40 A/B)
PSA optional IP66 with axial cable output (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

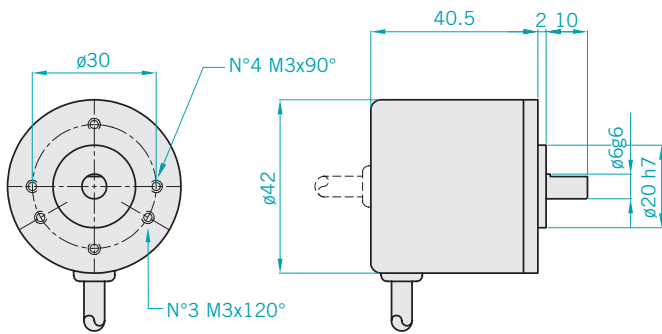
R radial
A axial

P cable output (standard length 0,5 m)

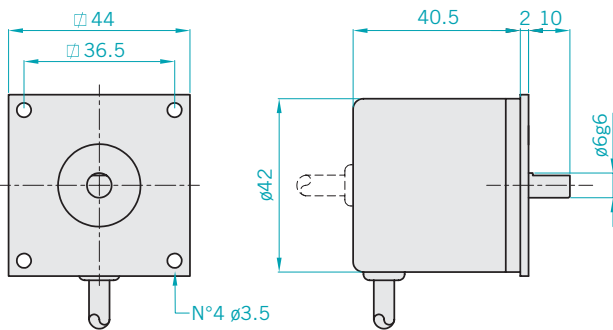
XXX Special version code numbered from 001 to 999

EL40 A/B/C/E/H/I

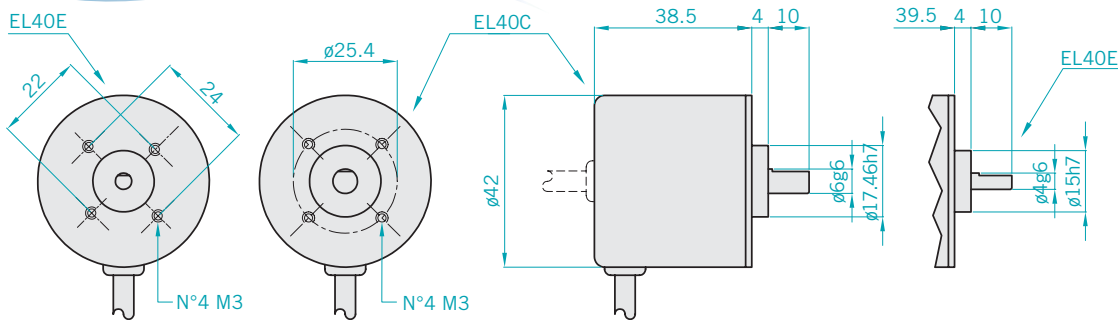
EL 40 A



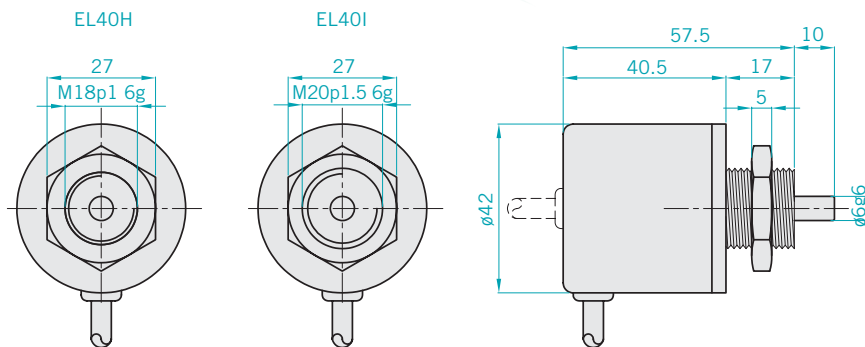
EL 40 B



EL 40 C/E



EL 40 H/I



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
Frequency response	100 KHz MAX (EL) $F = \frac{\text{RPM} \times \text{Resolution}}{60}$

Mechanical specifications

Shaft diameter	$\phi 4$ mm g6 EL40 E $\phi 6$ 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 for 11 msec
Vibrations	10G 10 ÷ 2000 Hz
Bearings life	10^9 revolu-
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