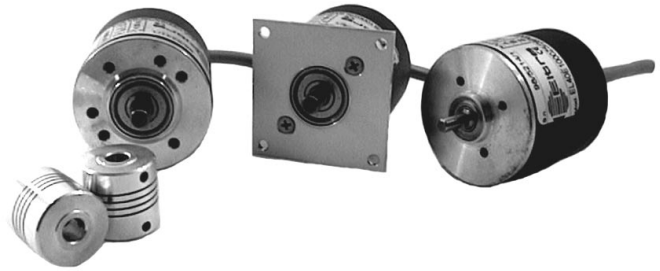




EH-EL40A / B / C / E INCREMENTAL ENCODERS

Incremental encoders

- Series of miniaturized encoders $\varnothing 42$ for general applications.
- Resolutions up to 2000 imp/turn with zero for EL series and up to 400 imp/turn for the EH series.
 - Different electronic configurations available with power supply up to 28 Vdc for the EL series and up to 24 Vdc for the EH series
 - Max output frequency up to 100 KHz for the EL series and up to 40KHz for the EH series
 - Output cable, eventual connector applied to the end of the cable
 - Different flanges available
 - Speed rotation up to 6000 rpm
 - Protection IP66



Ordering codes

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

In case of particular Customer variant separate with a full stop

EL = incremental encoder EL series
EH = incremental encoder EH series

XXX = Particular Customer variants indicated by a progressive number from 001 to 999

40 = body dimension

R = radial
A = axial

A = mod.EH-EL40A
B = mod.EH-EL40B
C = mod.EH-EL40C
E = mod.EH-EL40E
Type of flanges

P = standard output cable 0.5 m

from **1 to 2000** imp./turn EL series
from **50 to 400** imp./turn EH series
Resolutions
N.B.: For impulse availability contact directly our offices

3 = 3000 EH-EL40C / E
6 = 6000 EL40A / B
R.P.M.

S = without zero impulse
Z = with zero impulse (only EL series)
Zero Impulse

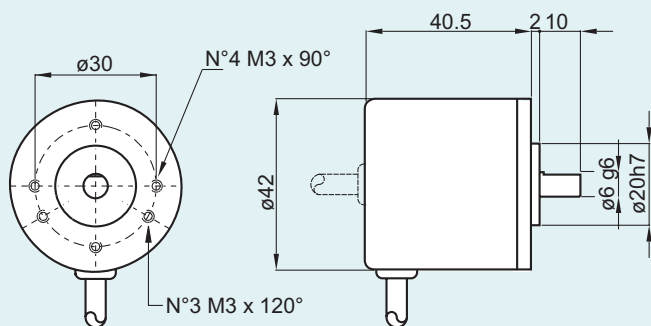
X = standard IP54
S = optional IP66
Protection

5 ÷ 28 = power supply for the EL series
5 / 8 ÷ 24 = power supply for the EH series
Encoder power supply (Vdc)
N.B.: LINE DRIVER available only with 5 Vdc or 8 ÷ 24 Vdc power supply

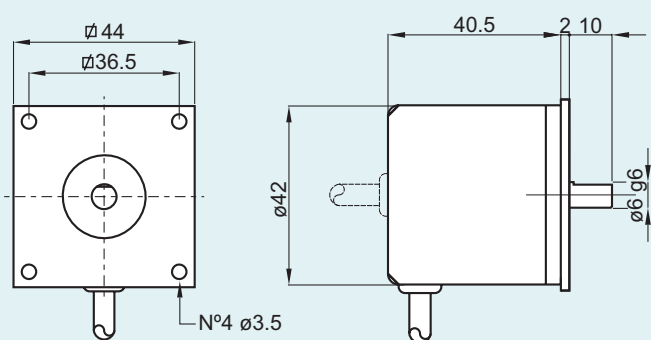
4 = \varnothing 4 mm EH-EL40E
6 = \varnothing 6 mm EH-EL40A / B / C
Shaft diameter

N = NPN
C = NPN OPEN COLLECTOR
P = PUSH PULL
L = LINE DRIVER (only the EL series)
Electronic output configuration
N.B.: For the optionals on the output configurations see the output incremental connections card

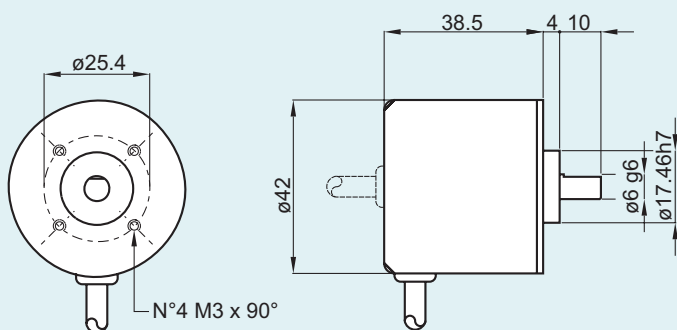
EH-EL40A



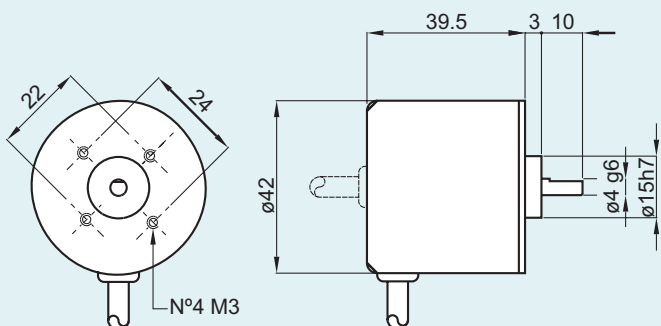
EH-EL40B



EH-EL40C



EH-EL40E



Electronic Characteristics EL Series

| | |
|---|---|
| Resolutions | From 1 to 2000 impulses / turn |
| Power supply | 5 + 28 Vdc N.B.: LINE DRIVER only with 5 / 8+24 Vdc power supply |
| Current consumption without load | 80 mA |
| Max commutable current | 50 mA per channel 20 mA per channel with LINE DRIVER |
| Electronic output configuration | NPN / NPN OPEN COLLECTOR / PUSH PULL / LINE DRIVER |
| Max output frequency | Max 100 KHz $F = \frac{\text{RPM} \times \text{Resolutions}}{60}$ |

Electronic Characteristics EH Series

| | |
|---|---|
| Resolutions | From 50 to 400 impulses / turn |
| Power supply | 5 Vdc / 8 + 24 Vdc N.B.: LINE DRIVER only with 5 / 8+24 Vdc power supply |
| Current consumption without load | 50 mA bidirectional |
| Max commutable current | 50 mA per channel 20 mA per channel with LINE DRIVER |
| Electronic output configuration | NPN / NPN OPEN COLLECTOR / PUSH PULL / LINE DRIVER |
| Max output frequency | Max 40 KHz $F = \frac{\text{RPM} \times \text{Resolution}}{60}$ |

Mechanical characteristics

| | | | | | |
|------------------------------|---|-------|----------|-------|------------------|
| Shaft diameter (mm) | <table border="0"> <tr> <td>Ø4 g6</td> <td>EH-EL40E</td> </tr> <tr> <td>Ø6 g6</td> <td>EH-EL40A / B / C</td> </tr> </table> | Ø4 g6 | EH-EL40E | Ø6 g6 | EH-EL40A / B / C |
| Ø4 g6 | EH-EL40E | | | | |
| Ø6 g6 | EH-EL40A / B / C | | | | |
| Protection | IP54 - Standard EH-EL40C / E IP64 - Optional EH-EL40A / B | | | | |
| R.P.M. Max | 3000 continuous EH-EL40C / E 6000 continuous EL40A / B | | | | |
| 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 | | | | |
| Cover material | Special plastic reinforced with glass fibre | | | | |
| Operating Temperature | 0° + +60°C | | | | |
| Storage Temperature | -25° + +70°C | | | | |
| Weight | 100 g | | | | |

