

EH-EL40G / H / I INCREMENTAL ENCODERS

Incremental encoders

- Series of miniaturized encoders $\varnothing 42$ for generic applications.
- Resolutions up to 2000 imp/turn with zero for the 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 3000 rpm
 - Protection up to IP54



Ordering Codes

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

In case of particular Customer variant separate with a full stop

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

40 = body dimension

G = mod.EH-EL40G
H = mod.EH-EL40H
I = mod.EH-EL40I
Type of flanges

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

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

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

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

R = radial
A = axial

P = standard output cable 0.5 m

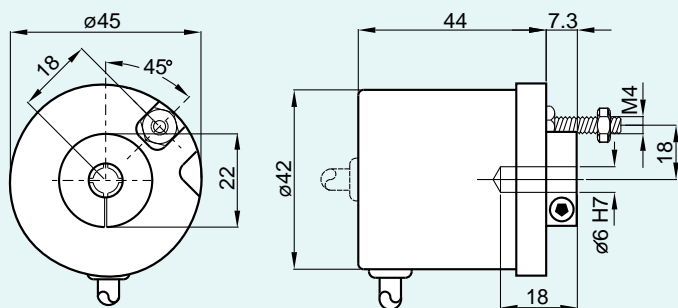
3 = 3000 **R.P.M.**

X = standard IP54 **Protection**

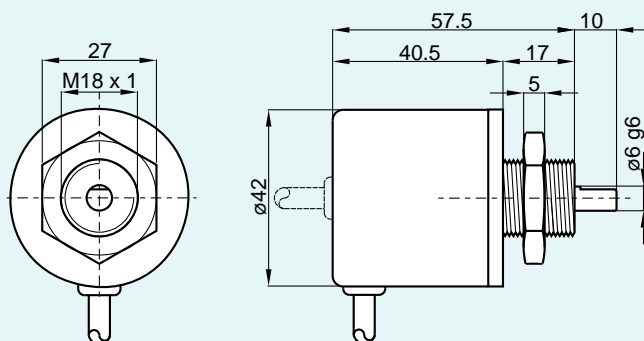
6 = \varnothing 6 mm EH-EL40G **Hole diameter**
6 = \varnothing 6 mm EH-EL40H / I **Shaft diameter**

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

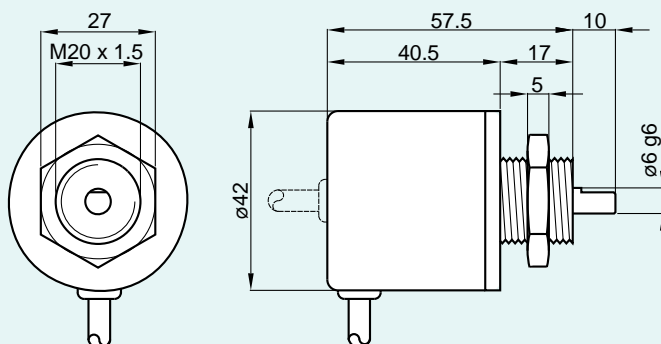
EH-EL40G



EH-EL40H



EH-EL40I



Electronic Characteristics EL series

Resolutions	from 1 to 2000 impulses / turn
Power Supply	5 ÷ 28 Vdc N.B.: LINE DRIVER only 5 / 8-24 Vdc configuration
Current consumption without load	80 mA
Max output 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 $F = \frac{\text{RPM} \times \text{Resolution}}{60}$

Electronic Characteristics EH series

Resolutions	from 50 to 400 impulses / turn
Power Supply	5 Vdc / 8 ÷ 24 Vdc N.B.: LINE DRIVER only with supply of 5 / 8-24 Vdc
Current consumption without load	50 mA bidirectional 100 mA bidirectional with zero
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)	ø6 g6	EH-EL40H / I
Hole diameter(mm)	ø6 h7	EH-EL40G
Protection	IP54 - Standard	
R.P.M. Max	3000 continuous	
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 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	150 g	

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