



EH-EL72A / B INCREMENTAL ENCODERS

Incremental encoders

Standard series for industrial environments with excellent mechanical resistance; possibility of high radial and axial load on the shaft. They can be assembled with flanges or servo fasteners. Studied for the direct assembly on motors or tachimeter generators where the incorporated elastic joint allows the compensation of radial and axial slack on the shaft of the motor.

- Resolutions up to 10000 imp/turn with zero for the EL series and up to 1024 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
- Output : cable and connector
- Different flanges available
- Max output frequency up to 300 KHz for the EL series and up to 100KHz for the EH series
- Speed rotation of up to 6000 rpm
- Protection up to IP67



Ordering codes

EL 72 1 A 1000 Z 5/28 N 10 X 6 M R . XXX

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

72 = body dimension

1 = $\varnothing$ 63.5 mm
2 = $\varnothing$ 65 mm
3 = $\varnothing$ 57 mm
4 = $\varnothing$ 60 mm
Fixing holes diameter

A = mod.EH-EL72A
B = mod.EH-EL72B
Type of flanges

da 1 a 10000 imp./turns E Lserie
da 40 a 1024 imp./turn EH series
Resolutions
N.B.: For impulse availability contact directly our offices

S = without zero impulse
Z = with zero impulse
Zero impulse

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

In case of particular Customer variant separate with a full stop

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

R = radial
A = axial

P = standard output cable 1.5 m
M = connector MS3106E 16S-1S or 18-1S
J = connector JMSP 1607 F or 1610 F

3 = 3000 with IP66 / IP67
6 = 6000
R.P.M.

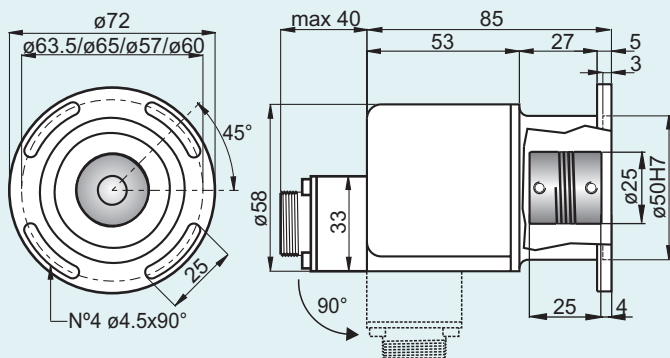
X = standard IP64
S = optional IP66 IP67
Protection

6 = $\varnothing$ 6 mm
8 = $\varnothing$ 8 mm
10 = $\varnothing$ 10 mm
Shaft diameter

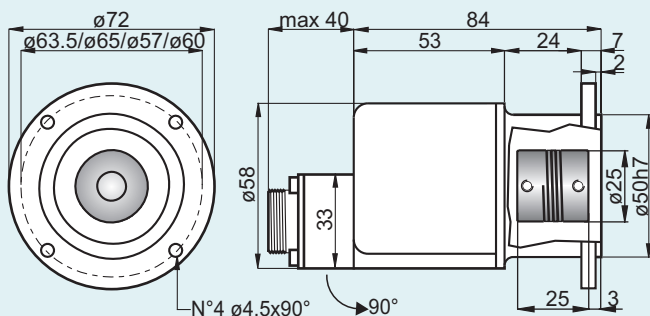
N = NPN
C = NPN OPEN COLLECTOR
P = PUSH PULL
L = LINE DRIVER
Electronic output configuration

N.B.: For the optionals on output configurations see the output incremental connections card

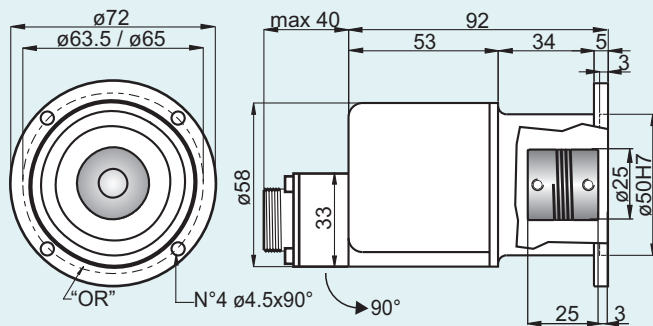
EH-EL72 mod. A



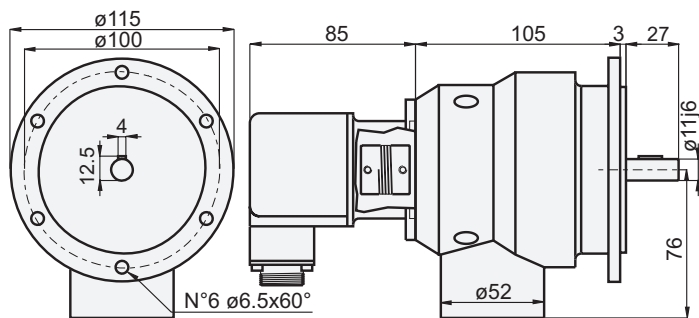
EH-EL72 mod. B



EH-EL72 mod. A IP66 / 67 version



Application on tachimeter generator
 AVAILABLE TACHIMETER A) 20V-1000 turn/min
 B) 60V-1000 turn/min



Electronic Characteristics EL Series

Resolution	From 1 to 10000 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 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 300 KHz $F = \frac{\text{RPM} \times \text{Resolutions}}{60}$

Electronic Characteristics EH Series

Resolution	From 40 to 1024 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 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 100 KHz $F = \frac{\text{RPM} \times \text{Resolutions}}{60}$

Mechanical Characteristics

Shaft diameter (mm)	ø6 / 8 / 10 h7
Protection	IP64 standard IP66 / IP67 optional
R.P.M. Max	6000 continuous 3000 with tin axis IP66 / IP67
Shock	50 G per 11 msec (with flexible disc) 20 G per 11 msec (with glass disc)
Vibrations	10G 10 + 2000 Hz
Bearings life	⁹ 10 revolutions
Bearings	n°2 ball bearings
Shaft material	Stainless steel AISI303
Body material	Aluminium - UNI5076
Cover material	Special plastic reinforced with glass fibre
Operating Temperature	0° + 60°C
Storage temperature	-25° + 70°C
Weight	400 g
Accessories	Precision elastic joints G25A6/10 G25A8/10 G25A10