

EH-EL90A-R / 115A-R INCREMENTAL ENCODERS

Incremental encoders

Encoder series for grave environments with excellent mechanical resistance.

The 90 model has the possibility of mechanical assembly using flanges or servo-fastener; the 115 model has the compatible attachment with tachimeter generator type REO-444.

- Resolutions up to 10000 imp/turn with zero for EL series and up to 1024 imp/turn for the EH series
- Different electronic configurations available with power supply up to 28 Vdc for EL series and up to 24 Vdc for EH series
- Max output frequency up to 300 KHz for the EL series and up to 100 KHz for the EH series
- Output : cable and connector
- Different flanges available
- Speed rotation up to 6000 rpm
- Protection up to IP66 for mod.90A



Ordering codes

EL 90 A 1000 Z 5/28 N 1000 Z 5/28 N 10 X 6 M R . XXX

In case of particular Customer variant separate with a full stop

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

90 = body dimension
115 = body dimension

A = mod.EH-EL90A / 115A
R = mod.EH-EL90R / 115R with centrifugal relays
Type of flanges

from **1** to **10000** imp./turn EL series
from **40** to **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

N.B.: LINE DRIVER available only with 5 Vdc or 8 ÷ 24 Vdc power supply

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

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
6 = 6000
R.P.M.

X = standard IP54
S = optional IP66 for mod. 90A
Protection

8 = ø 8 mm EH-EL90
9 = ø 9.52 mm (3/8") EH-EL90
10 = ø 10 mm EH-EL90 / 115
11 = ø 11 mm EH-EL115
Shaft diameter

Electronic output configuration

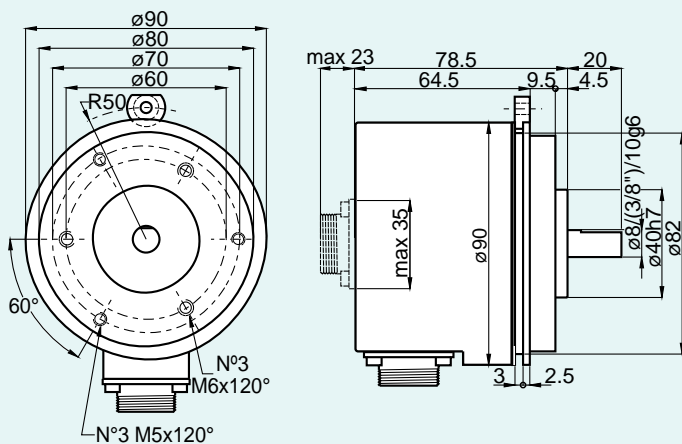
Encoder power supply (Vdc)

Zero Impulse

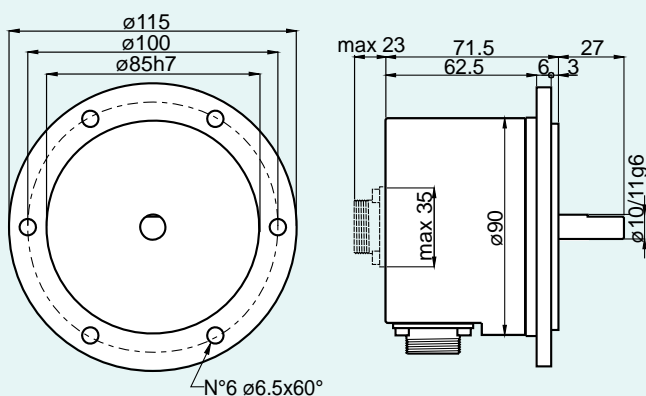
Resolutions

N.B.: TO BE INDICATED ONLY IN THE MODELS OF DOUBLE ELECTRONICS
(For further information contact our offices)

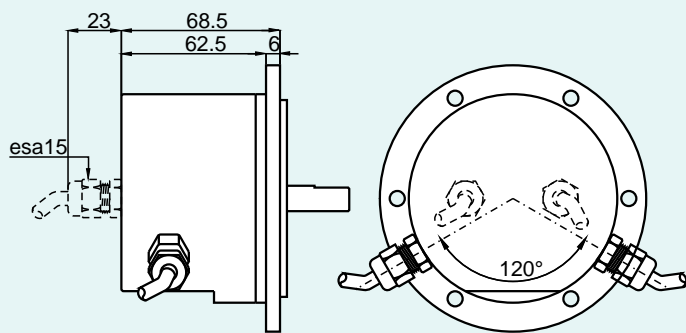
EH-EL90A



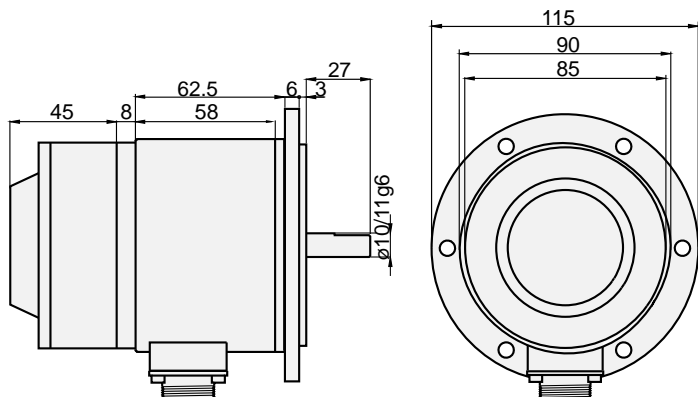
EH-EL115A



90A/115A with double electronics



Clearances 90R/115R for the application of the centrifugal relay



Electronic Characteristics EL series

Resolutions	From 1 to 10000 impulses / turn
Power supply	5 \div 28 Vdc N.B.: LINE DRIVER only with power supply 5 / 8-24 Vdc
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 $F = \frac{RPM \times Resolution}{60}$

Electronic Characteristics EH series

Resolutions	From 40 to 1024 impulses / turn
Power supply	5 Vdc / 8 \div 24 Vdc N.B.: LINE DRIVER only with power supply 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 100 KHz $F = \frac{RPM \times Resolution}{60}$

Mechanical Characteristics

Shaft diameter (mm)	$\varnothing 8 / \varnothing 9.52(3/8) / \varnothing 10g6$ EH-EL90 $\varnothing 10 / \varnothing 11g6$ EH-EL115
Protection	IP54 Standard IP66 Optional per mod. 90A
R.P.M. Max	6000 continuous 3000 with IP66
Max shaft load	200 N (20 Kp) axial 200 N (20Kp) radial
Shock	50 G per 11 msec (with flexible disc) 20 G per 11 msec (with glass disc)
Vibrations	10G 10 \div 2000 Hz
Bearings Life	10^9 revolutions
Bearings	n°2 Ball bearings
Shaft material	Stainless steel AISI303
Body material	Aluminium-UNI 9002/5
Cover Material	Painted Aluminium
Operating temperature	0° \div +60°C
Storage temperature	-25° \div +70°C
Weight	750 g

IN009GB0803A

