



EH-EL 90 A / 115 A / R

INCREMENTAL ENCODER



Main characteristics

Encoder series for critical environments with high mechanical resistance requirements. The 90 model can be mounted with flanges or servo-fasteners; the 115 model has a tachometer generator type REO-444 compatible plug.

- Up to 10.000 ppr with zero for EL series, up to 1024 ppr for EH series.
- Several output types available.
- Up to 28 Vdc input voltage for EL series and up to 24 Vdc for EH series.
- Up to 300 kHz frequency response for EL series and up to 100 kHz for EH series
- Output cable with connector.
- Several flanges available
- Up to 6.000 rpm speed rotation
- Up to IP66 sealing model 90A



Ordering code

Full stop to separate special versions

EL 90 A 1000 Z 5/28 N 1000 Z 5/28 N 8 X 6 M R . XXX

incremental encoder series **EL**
incremental encoder series **EH**

body dimension **90**
body dimension **115**

Type of flange

mod.EH-EL 90A / 115A **A**
only mod.EH / EL115R **R**

Resolution

PPR: for series EL from **1** to **10000**
PPR: for series EH from **40** to **1024**
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**
input voltage EH **5 / 8 ÷ 24**
LINE DRIVER available only with input voltage 5 Vdc or 8 ÷ 24 Vdc

Output types

NPN **N**
NPN OPEN COLLECTOR **C**
PUSH PULL **P**
LINE DRIVER **L**
For options about output types please refer to incremental output section

Special version code numbered from 001 to 999

R radial
A axial

P cable output (standard length 1,5 m)
M connector MS3106E 16S-1S or 18-1S
J connector JMSP 1607 F or 1610 F

R.P.M.

3 3000
6 6000
3000 RPM MAX with "S" enclosure rating

Enclosure rating

X standard IP54
S optional IP66 per mod 90 A

Shaft diameter

8 ø 8 g6 mm EH-EL90
9 ø 9,52 g6 mm (3/8") EH-EL90
10 ø 10 g6 mm EH-EL90 / 115
11 ø 11 g6 mm EH-EL115

Output types

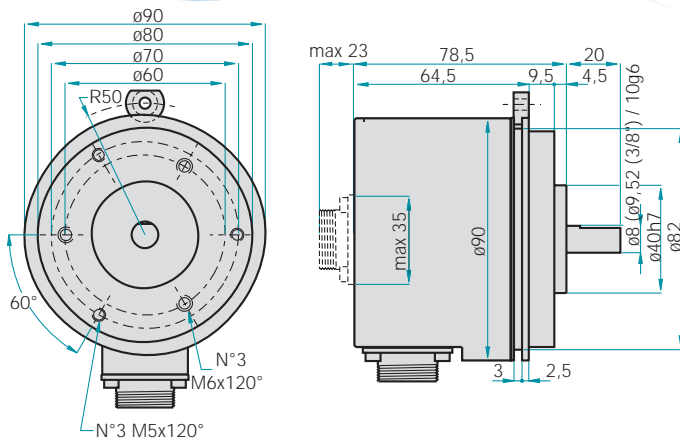
Input voltage

Zero pulse

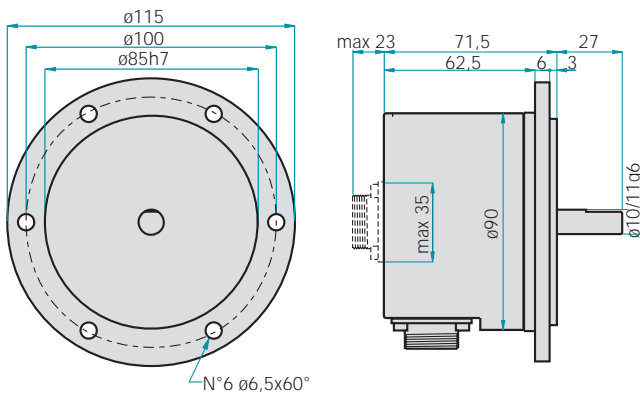
Resolution

To be indicated only on models with double electronics for more information please contact our offices

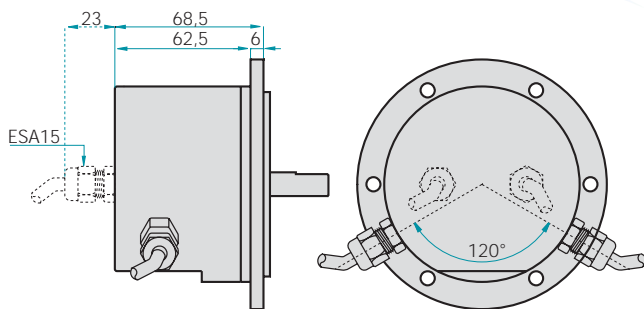
EH-EL 90 A



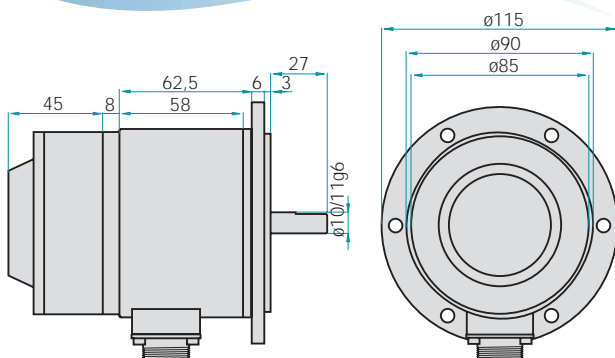
EH-EL 115 A



EH-EL 90 A / 115 A with double electronic



EH-EL 115 R with centrifugal relè



EL series electrical specifications

Resolution	From 1 to 10000 PPR
Input voltage	5 ÷ 28 Vdc LINE DRIVER only available with input voltage 5 / 8-24 Vdc
Input current with no output load	100 mA Max
Source and sink current	50 mA for channel 20 mA for channel LINE DRIVER
Output types	NPN / NPN OPEN COLLECTOR / PUSH PULL / LINE DRIVER
Output frequency	300 KHz Max
Frequency response	$F = \frac{\text{RPM} \times \text{Resolution}}{60}$

EH series electrical specifications

Resolution	From 40 to 1024 PPR
Input voltage	5Vdc / 8 ÷ 24 Vdc
Input current with no output load	100 mA Max
Source and sink current	50 mA for channel 20 mA for channel LINE DRIVER
Output types	NPN / NPN OPEN COLLECTOR / PUSH PULL / LINE DRIVER
Output frequency	100 KHz Max
Frequency response	$F = \frac{\text{RPM} \times \text{Resolution}}{60}$

Mechanical specifications

Diametro albero (mm)	ø8 / ø9,52 (3/8") / ø10 mm g6 ø10 / ø11 mm g6	EH-EL 90 EH-EL 115
Enclosure rating	IP54 standard IP66 optional mod. 90 A	
Shaft speed	3000 6000 3000 RPM MAX with "S" enclosure rating	
Max shaft load	50 G per 11 msec (with plastic disc) 20 G per 11 msec (with glass disc)	
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	
Housing material	Painted aluminium	
Operating temperature	0° ÷ +60°C	
Storage temperature	-25° ÷ +70°C	
Weight	750 g	