



EH-EL90A/115 A-R INCREMENTAL ENCODER



Incremental encoder

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



shaft INCREMENTAL ENCODERS

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

from **1** to **10000** PPR for series EL
from **40** to **1024** PPR for series EH
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 optionlas 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

Enclosure rating S 3000 turn

Enclosure rating

X standard IP54
S optional IP66 for 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

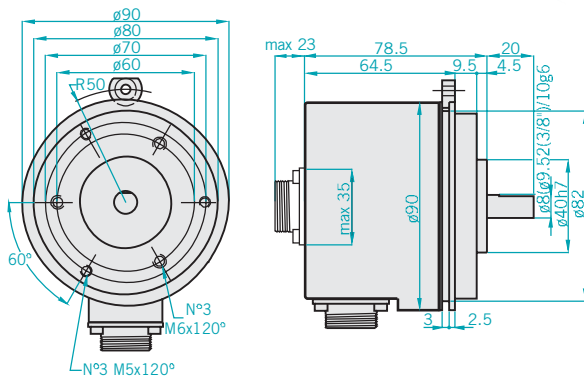
Zero pulse

Resolution

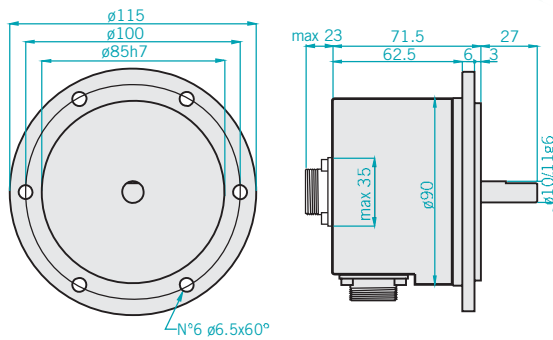
To be indicated only on models with double electronics for more information please contact our offices!

EH-EL 90A/115 A-R

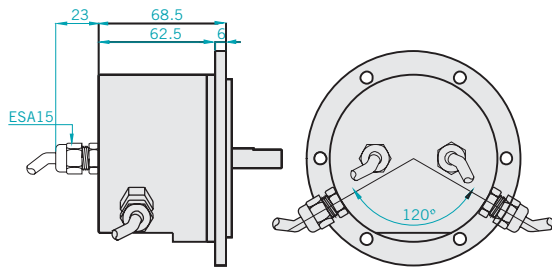
EH-EL 90 A



EH-EL 115 A

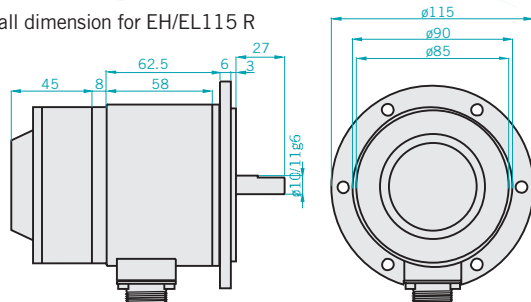


EH-EL 90 A/115 A with double electronic



EH-EL 115 R with centrifugal relè

Overall dimension for EH/EL115 R



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
Frequency response	300 KHz Max $F = \frac{\text{RPM} \times \text{Resolution}}{60}$

EH series electrical specifications

Resolution	From 40 to 1024 PPR
Input voltage	5 Vdc / 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
Frequency response	100 KHz Max $F = \frac{\text{RPM} \times \text{Resolution}}{60}$

Mechanical specifications

Shaft diameter	$\varnothing 8 / \varnothing 9,52$ (3/8") / $\varnothing 10$ mm g6 $\varnothing 10 / \varnothing 11$ mm g6	EH-EL90 EH-EL115
Enclosure rating	IP54 standard IP66 optional mod. 90 A	
Shaft speed	3000 RPM 6000 RPM 3000 RPM MAX with "S" rating	
Max shaft load	200N (20 Kp) axial 200N (20 Kp) radial	
Shock	50 G for 11 msec (with plastic disc) 20 G for 11 msec (with glass disc)	
Vibrations	10G 10 ÷ 2000 Hz	
Bearings life	10^9 revol-	
Bearings	n° 2 Ball bearings	
Shaft material	Stainless steel AISI303	
Body material	Aluminium D11S - UNI	
Housing material	Painted aluminium	
Operating temperature	0° ÷ +60°C	
Storage temperature	-25° ÷ +70°C	
Weight	750 g	



MSW Motion Control GmbH
Schloßstr. 32
D-33824 Werther

Tel: +49 (0)5203-919200
Fax: +49 (0)5203-5004

www.msw-motion.de
info@msw-motion.de