

### Main characteristics

Standard encoder Ø58 series for industrial applications with high mechanical resistance requirements. Those encoders are designed to support high radial and axial shaft load and they can be mounted with flanges or servo-fasteners.

- 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



### Ordering code

Full stop to separate special versions

EL 58 B 1000 Z 5/28 P 6 X 6 P R . XXX

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

body dimension **58**

#### Type of flange

mod.EH-EL 58 B **B**  
mod.EH-EL 58 C **C**  
mod.EH-EL 58 H **H**  
mod.EH-EL 58 T **T**

#### 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*

**R** radial  
**A** axial

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

#### R.P.M.

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

#### Enclosure rating

**X** standard IP54  
**S** optional IP66

#### Shaft diameter

**6** ø 6 g6 mm EH-EL58 B/C/H  
**8** ø 8 g6 mm EH-EL58 B/C/H/T  
**9** ø 9,52 g6 mm (3/8") EH-EL58 B/C/H  
**10** ø 10 g6 mm EH-EL58 B/C/H/T  
**12** ø 12 g6 mm EH-EL58 T

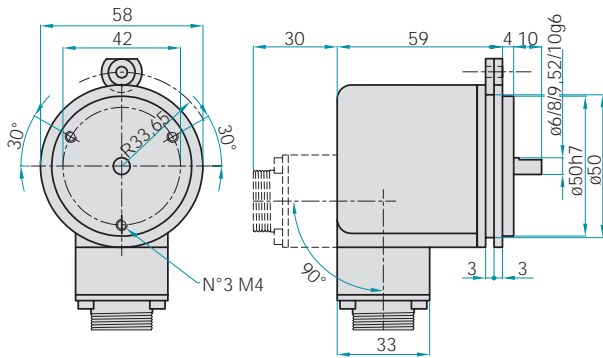
#### Output types

**N** NPN  
**C** NPN OPEN COLLECTOR  
**P** PUSH PULL  
**L** LINE DRIVER ( solo serie EL)

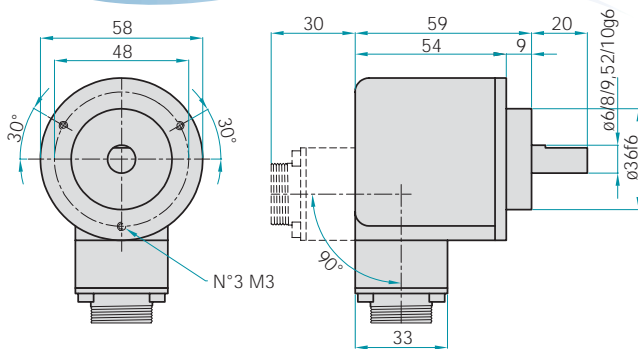
*For optionals about output types please refer to incremental output section*

Special version code numbered from 001 to 999

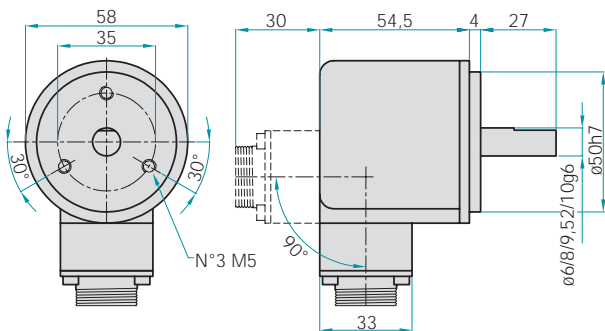
## EH-EL 58 B



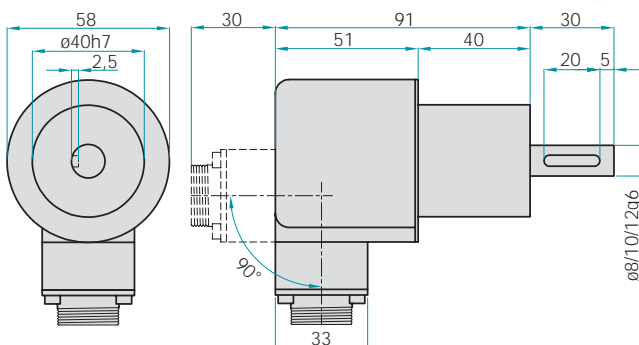
## EH-EL 58 C



## EH-EL 58 H



## EH-EL 58 T



## EL series electrical specifications

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

## EH series electrical specifications

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

## Mechanical specifications

<b>Shaft diameter</b>	ø6/8/9,52 (3/8")/10 mm g6 EH- EL58 B/C/H
<b>Enclosure rating</b>	IP54 standard IP66
<b>Shaft speed</b>	3000 RPM 6000 RPM 3000 RPM MAX with "S" enclosure rating
<b>Max shaft load</b>	10N (1 Kp) axial 20N (2 Kp) radial with shaft ø6 mm 200N (20 Kp) axial 200N (20 Kp) radial
<b>Shock</b>	50 G per 11 msec (with plastic disc) 20 G per 11 msec (with glass disc)
<b>Vibrations</b>	10G 10 ÷ 2000 Hz
<b>Bearings life</b>	10 <sup>9</sup> revolutions
<b>Bearings</b>	n° 2 Ball bearings
<b>Shaft material</b>	Stainless steel AISI303
<b>Body material</b>	Aluminium D11S - UNI 9002/5
<b>Housing material</b>	PA 66 reinforced with fiber glass
<b>Operating temperature</b>	0° ÷ +60°C
<b>Storage temperature</b>	-25° ÷ +70°C
<b>Weight</b>	300 g