

### Main features

Standard encoder series for industrial environments with high mechanical resistance requirements. These encoders are designed to withstand high radial and axial shaft loads and they can be mounted by means of flanges or servo-fasteners. Specifically designed for direct mounting on motors or speedometer dynamos. Our integrated elastic coupling allows radial and axial slack compensation.

- Up to 10000 ppr with zero signal for EL series, up to 1024 ppr for EH series
- Several output types available
- Up to 28 V DC power supply for EL series and up to 24 V DC for EH series
- Up to 300 kHz output frequency for EL series and up to 100 kHz for EH series
- Cable or connector output
- Several flanges available
- Up to 6000 RPM rotation speed
- Up to IP66 sealing



### Ordering code

full stop to separate special versions

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

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

size **72**

#### Distance between holes on flange

- ∅ 63.5 mm **1**
- ∅ 65 mm **2**
- ∅ 57 mm **3**
- ∅ 60 mm **4**

#### Type of flange

- EH - EL 72 A model **A**
- EH - EL 72 B model **B**

#### Resolution

(EL series) ppr from **1** to **10000**  
(EH series) ppr from **40** to **1024**  
*please directly contact our offices for pulses availability*

#### Zero pulse

- without zero pulse **S**
- with zero pulse **Z**

#### Power supply

(EL series) 5÷28 V DC **5/28**  
(EH series) 5 V DC **5**  
(EH series) 8÷24 V DC **8/24**  
*line driver available only with 5 V DC or 8÷24 V DC power supply*

special version code numbered from 001 to 999

- R** radial
- A** axial

- P** cable output (standard length 1.5 m)
- M** M connector output
- J** J connector output

#### Max. rotation speed

- 3** 3000 RPM
- 6** 6000 RPM  
*3000 RPM max. with "S" enclosure rating*

#### Enclosure rating

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

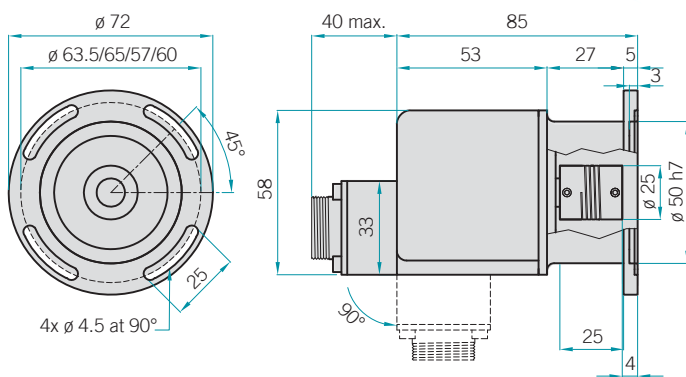
#### Bore diameter

- 6** ∅ 6 mm
- 8** ∅ 8 mm
- 10** ∅ 10 mm

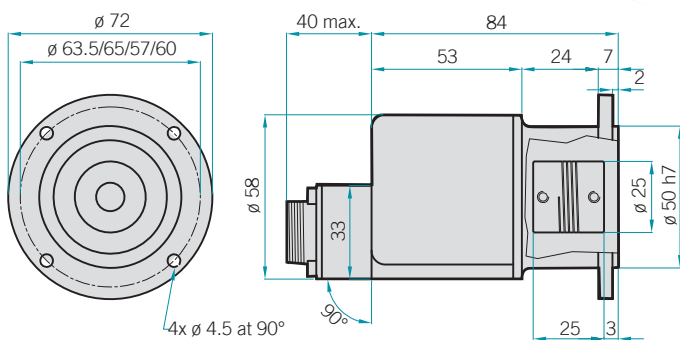
#### Output type

- N** NPN
- C** NPN open collector
- P** push-pull
- L** line driver  
*please refer to page 92 for optionals about output types*

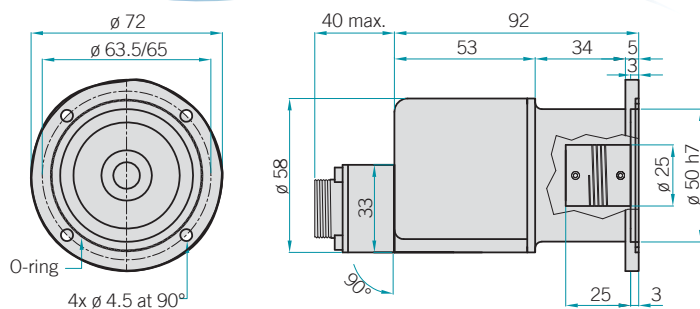
## EH - EL



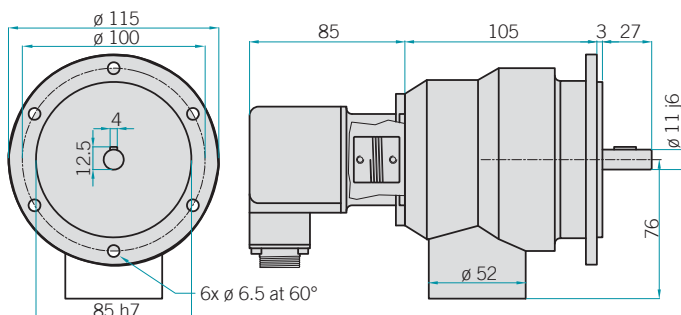
## EH - EL



## EH - EL IP66 version



Use on speedometer dynamo  
Available dynamos: A) 20 V - 1000 RPM  
B) 60 V - 1000 RPM



<b>Resolution</b>	from 1 to 10000 ppr
<b>Power supply</b>	5÷28 V DC line driver available only with 5 V DC or 8÷24 V DC power supply
<b>Current consumption without load</b>	100 mA max.
<b>Max. load current</b>	50 mA for channel 20 mA for channel (line driver)
<b>Output type</b>	NPN / NPN open collector push-pull / line driver
<b>Max. output frequency</b>	300 kHz
<b>Operating frequency</b>	$F = \frac{\text{RPM} \cdot \text{Resolution}}{60}$



<b>Resolution</b>	from 40 to 1024 ppr
<b>Power supply</b>	5 V DC 8÷24 V DC
<b>Current consumption without load</b>	100 mA max.
<b>Max. load current</b>	50 mA for channel 20 mA for channel (line driver)
<b>Output type</b>	NPN / NPN open collector push-pull / line driver
<b>Max. output frequency</b>	100 kHz
<b>Operating frequency</b>	$F = \frac{\text{RPM} \cdot \text{Resolution}}{60}$



<b>Bore diameter</b>	ø 6 / 8 / 10 mm
<b>Enclosure rating</b>	IP54 standard IP66 optional
<b>Max. rotation speed</b>	3000 RPM 6000 RPM 3000 RPM max. with "S" enclosure rating
<b>Shock</b>	50 G, 11 ms (plastic disc) 20 G, 11 ms (glass disc)
<b>Vibration</b>	10 G, 10÷2000 Hz
<b>Bearing life</b>	10 <sup>9</sup> revolutions
<b>Bearings</b>	2 ball bearings
<b>Shaft material</b>	stainless steel UNI X10CrNiS1809
<b>Body material</b>	aluminium UNI 5076
<b>Housing material</b>	PA66 glass fiber reinforced
<b>Operating temperature</b>	0÷60 °C
<b>Storage temperature</b>	-25÷70 °C
<b>Weight</b>	400 g
<b>Accessories</b>	Precision elastic couplings G25A6/10 G25A8/10 G25A/10