



# EH-EL 63 A/D/E INCREMENTAL ENCODER



## Incremental encoder

- Standard encoder Ø63 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



shaft INCREMENTAL ENCODERS

## Ordering code

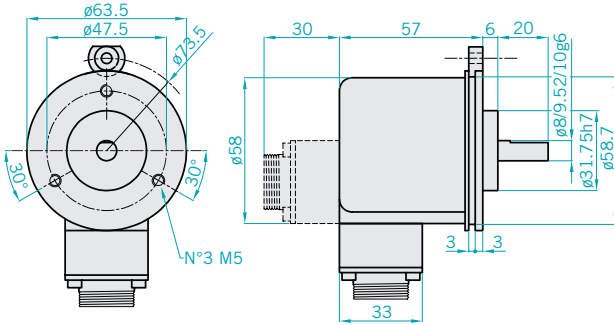
Full stop to separate special versions

**EL 63 A 1000 Z 5/28 P 6 X 6 M R . XXX**

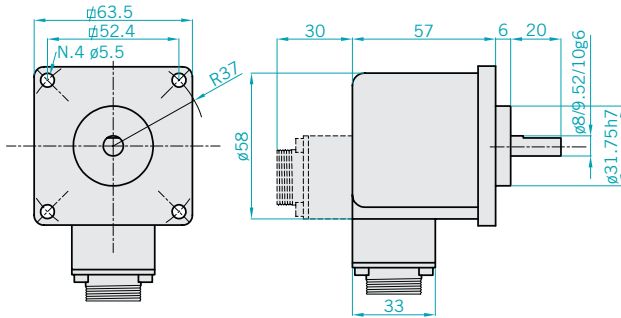
incremental encoder series <b>EL</b>	incremental encoder series <b>EH</b>	body dimension <b>63</b>	<b>Type of flange</b> mod.EH-EL 63 A <b>A</b> mod.EH-EL 63 D <b>D</b> mod.EH-EL 63 E <b>E</b>	<b>Resolution</b> <b>1 to 10000</b> PPR for series EL <b>40 to 1024</b> PPR for series EH <i>Please, directly contact our offices for pulses availability</i>	<b>Zero pulse</b> without zero pulse <b>S</b> with zero pulse <b>Z</b>	<b>Input voltage</b> input voltage EL <b>5 ÷ 28</b> input voltage EH <b>5 / 8 ÷ 24</b> <i>LINE DRIVER available only with input voltage 5 Vdc or 8 ÷ 24 Vdc</i>	<b>Special version code</b> numbered from 001 to 999
							<b>R</b> radial <b>A</b> axial
							<b>P</b> cable output (standard length 1,5 m) <b>M</b> connector MS3106E 16S-1S or 18-1S <b>J</b> connector JMSP 1607 F or 1610 F
							<b>R.P.M.</b> <b>3</b> 3000 <b>6</b> 6000 <i>Enclosure rating "S" 3000 RPM</i>
							<b>Enclosure rating</b> <b>X</b> standard IP54 <b>S</b> optional IP66
							<b>Shaft diameter</b> <b>8</b> ø 8 mm <b>9</b> ø 9,52 mm (3/8") <b>10</b> ø 10 mm
							<b>Output types</b> <b>N</b> NPN <b>C</b> NPN OPEN COLLECTOR <b>P</b> PUSH PULL <b>L</b> LINE DRIVER <i>For optionals about output types please refer to incremental output section</i>

EH-EL63 A/D/E

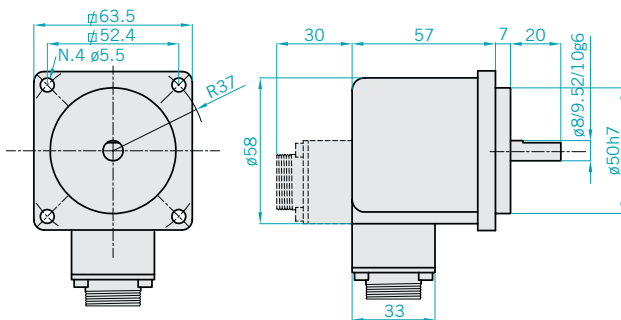
## EH-EL 63 A



## EH-EL 63 D



## EH-EL 63 E



### EL 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>Frequency response</b>	300 KHz Max $F = \frac{\text{RPM} \times \text{Resolution}}{60}$

### EH electrical specifications

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

### Mechanical specifications

<b>Shaft diameter</b>	$\phi 6 - \phi 9.52 (3/8") - \phi 10 \text{ mm g6}$
<b>Enclosure rating</b>	IP54 standard IP66
<b>Shaft speed</b>	3000 RPM 6000 RPM Enclosure rating "S" 3000 RPM
<b>Shock</b>	50 G for 11 msec (with plastic disc) 20 G for 11 msec (with glass disc)
<b>Vibrations</b>	10G 10 ÷ 2000 Hz
<b>Bearings life</b>	$10^9$ revolutions
<b>Bearings</b>	n° 2 Ball bearings
<b>Shaft material</b>	Stainless steel AISI303
<b>Body material</b>	Aluminium UNI 5076
<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>	350 g