



EH - EL58/63 INCREMENTAL ENCODER



Incremental encoder

Hollow shaft encoder 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.

- Resolution 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



Ordering code

Full stop to separate special versions.

<p>Incremental encoder series EL</p> <p>Incremental encoder series EH</p> <p>Body dimension 58</p> <p>Body dimension 63</p> <p>mod.EH-EL58F / EH-EL63F F</p> <p>mod.EH-EL58G / EH-EL63G G</p> <p>mod.EH-EL63P P</p> <p>mod.EH-EL63PB PB</p> <p>mod.EH-EL63GB GB</p> <p>mod.EH-EL63FB FB</p> <p>mod.EH-EL63PC PC</p> <p>mod.EH-EL63PBF PBF</p> <p>mod.EH-EL63PCF PCF</p>	<p>EL 63 G 1000 Z 5/28 N 8 X 3 M R . XXX</p> <p>from 1 to 10000 PPR series EH/EL58F/G-EL63F/G</p> <p>from 1 to 2048 PPR series EH63P/PB/GB/FB/PC/PBF/PCF</p> <p>from 40 to 1024 PPR series EH58F/G-EH63F/G</p> <p><i>Please, directly contact our offices for pulses availability</i></p>	<p>R radial</p> <p>A axial (only for EH-EL58-63F/G)</p> <p>P cable output (standard length 0.3 m)</p> <p>M connector MS3106E 16S-1S or 18-1S for EH-EL58-63F/G</p> <p>J connector JMSP 1607 F or 1610 for EH-EL58-63F/G</p> <p>R.P.M.</p> <p>3 3000</p> <p>Enclosure rating</p> <p>X standard IP54</p> <p>S IP66 (only for EH-EL58-63F/G)</p> <p>Bore diameter</p> <p>8 ø 8 mm</p> <p>9 ø 9,52 mm (3/8")</p> <p>10 ø 10 mm</p> <p>12 ø 12 mm</p> <p>14 ø 14 mm</p> <p>15 ø 15 mm</p> <p>Output types</p> <p>N NPN</p> <p>C NPN OPEN COLLECTOR</p> <p>P PUSH PULL</p> <p>L LINE DRIVER</p>	<p>Special version code numbered from 001 to 999</p>
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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 8 ÷ 24 Vdc

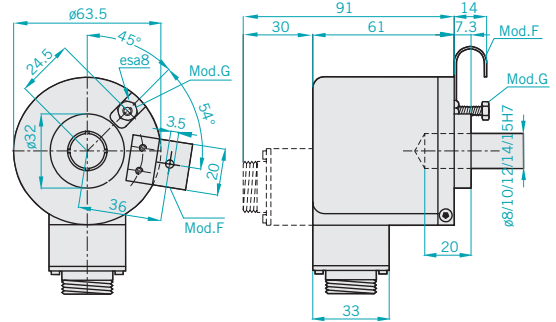
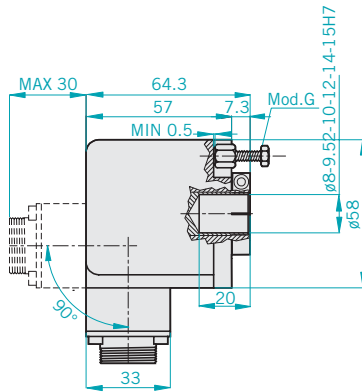
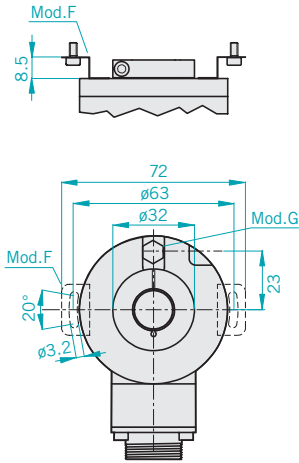
For optional about output types please refer to incremental outputs section

EH-EL58F/G EH-EL63F/G/FB/GB

Blind hollow shaft encoder

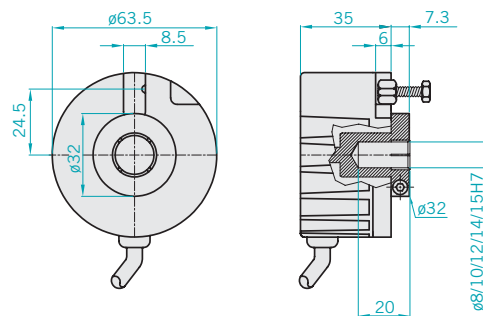
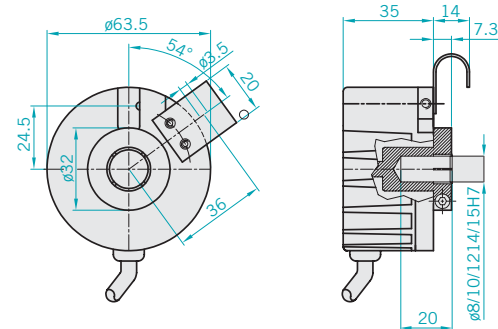
EH-EL 58 F/G

EH-EL 63 F/G



EL 63 FB

EL 63 GB



HOW TO MOUNT THE EH-EL63F

- 1) Couple the encoder shaft with the motor shaft
- 2) Fix the spring at the motor flanges without screwing it
- 3) Fix the encoder shaft by the metal gear.
- 4) Block the spring

HOW TO MOUNT THE EH-EL63G

- 1) Mount the antirotation pin on the motor flange.
- 2) Couple the encoder shaft with the motor shaft, ensuring that the pin is inserted on the cave on the encoder front part (maintaining a minimum distance of 0,5 mm)
- 3) Fix the encoder shaft by the metal ring





EH - EL72A/B INCREMENTAL ENCODER



Incremental encoder

Standard encoder series for industrial environments with high mechanical resistance requirements. Those encoders are designed to face high radial and axial shaft load and they can be mounted with flanges or servo-fasteners. Specifically designed for direct mounting on motors or tachometer generators. Our integrated elastic couplings allows radial and axial slack compensation

- 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

hollow shaft INCREMENTAL ENCODERS

EH-EL72A/B

Incremental encoder series EL		Incremental encoder series EH		Body dimension 72		mod.EH-EL72B A		mod.EH-EL72B B		Resolutions		Zero pulse		Input voltage		Output types			
Full stop to separate special versions.		Special version code numbered from 001 to 999		72		A		B		from 1 to 10000 PPR series EL from 40 to 1024 PPR series EH <i>Please, directly contact our offices for pulses availability</i>		without zero pulse S with zero pulse Z		input voltage EL 5 ÷ 28 input voltage EH 5/8 ÷ 24 <i>LINE DRIVER available only with input voltage 5 Vdc 8 ÷ 24 Vdc</i>		N NPN C NPN OPEN COLLECTOR P PUSH PULL L LINE DRIVER <i>For optional about output types please refer to incremental outputs section</i>			
EL 72 1 A 1000 Z 5/28 N 10 X 6 M R . XXX				1 ø 63,5 mm 2 ø 65 mm 3 ø 57 mm 4 ø 60 mm		R radial A axial				R.P.M. 3 3000 6 6000		P cable output (standard length 1,5 m) M connector MS3106E 16S-1S or 18-1S J connector JMSP 1607 F or 1610 F		Enclosure rating X standard IP54 S optional IP66		Bore diameter 6 ø 6 H7 mm 8 ø 8 H7 mm 10 ø 10 H7 mm			

Electrical specifications series EL

Resolution	from 1 to 10000 PPR for EL58-63F/G from 1 to 2048 PPR for EL63P/PB/GB/FB/PC/PBF/PCF
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 with LINE DRIVER
Output types	NPN / NPNOPEN COLLECTOR/ PUSH PULL / LINE DRIVER
Frequency response	300 KHz Max $F = \frac{\text{RPM} \times \text{Resolution}}{60}$

Electrical specifications series EH

Resolution	from 40 to 1024 PPR for EH58-63F/G
Input voltage	5Vdc / 8 ÷ 24 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 with LINE DRIVER
Output types	NPN / NPNOPEN COLLECTOR/ PUSH PULL / LINE DRIVER
Frequency response	100 KHz Max $F = \frac{\text{RPM} \times \text{Resolution}}{60}$

Mechanical specifications

Bore diameter	ø6-ø9,52(only mod.58)-ø10-ø12-ø14-ø15 mm H7
Enclosure rating	IP54 standard IP66 optional (only EH-EL58-63F/G)
Shaft speed	3000 RPM
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 revolutions
Bearings	n° 2 ball bearings
Shaft material	Stainless steel AISI303
Body material	Aluminium UNI 5076
Housing material	PA 66 reinforced with fiber glass
Operating temperature	0° ÷ +60°C
Storage temperature	-25° ÷ +70°C
Weight	350 g

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hollow shaft INCREMENTAL ENCODERS

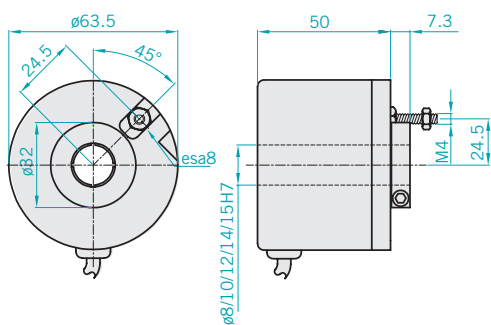
EH-EL58-63F/G
EH-EL63P/PB/GB/FB/PC/PBF/PCF



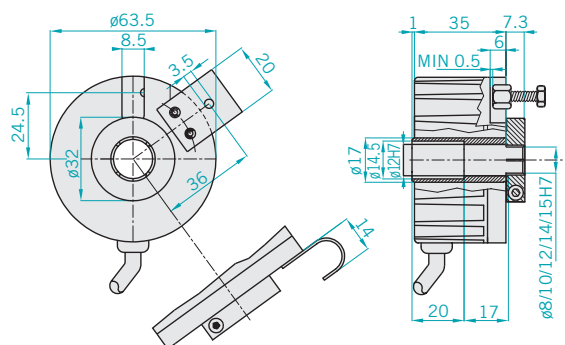
EH-EL63P/PB/PBF/PC/PCF

Through hollow shaft encoder

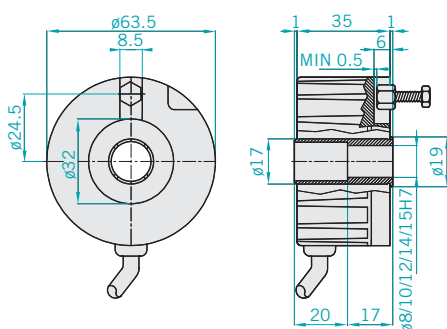
EL 63 P



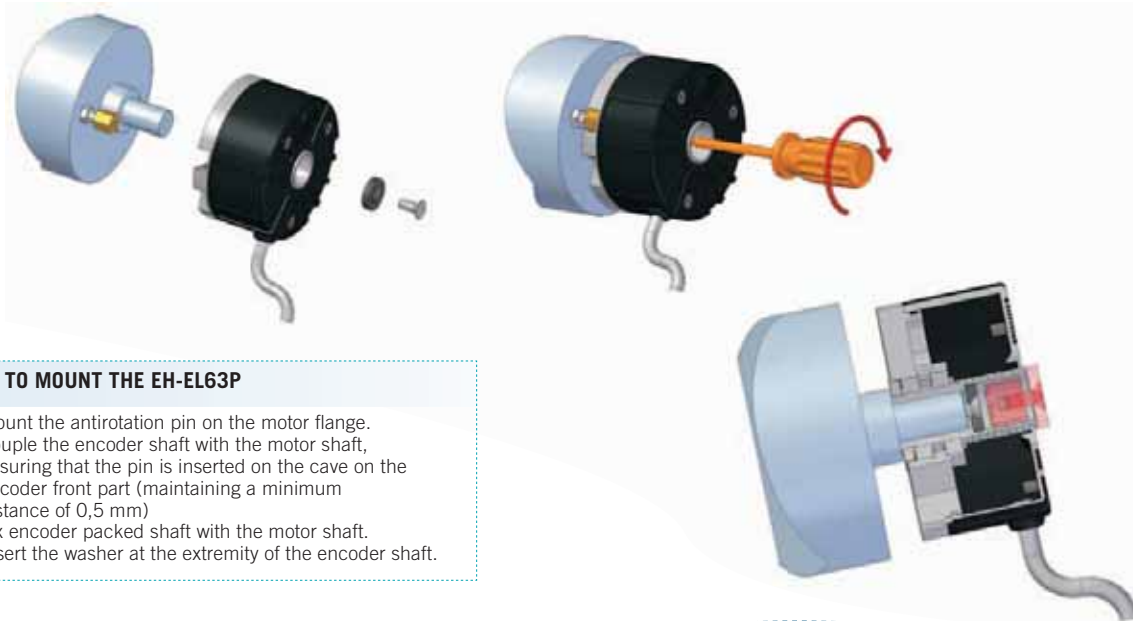
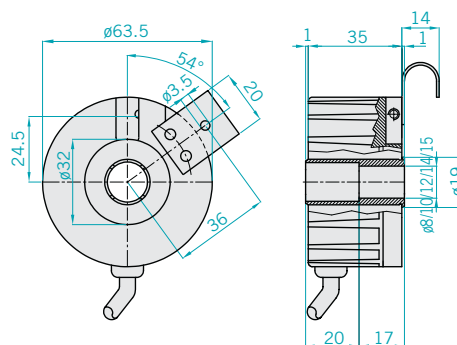
EL 63 PB / PBF



EL 63 PC



EL 63 PCF



HOW TO MOUNT THE EH-EL63P

- 1) Mount the antirotation pin on the motor flange.
- 2) Couple the encoder shaft with the motor shaft, ensuring that the pin is inserted into the cave on the encoder front part (maintaining a minimum distance of 0,5 mm)
- 3) Fix encoder packed shaft with the motor shaft. Insert the washer at the extremity of the encoder shaft.