



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.

Incremental encoder series	EL	63	G	1000	Z	5/28	N	8	X	3	M	R	XXX
Incremental encoder series	EH												
Body dimension	58												
Body dimension	63												
mod.EH-EL58F / EH-EL63F			F										
mod.EH-EL58G / EH-EL63G			G										
mod.EH-EL63P			P										
mod.EH-EL63PB			PB										
mod.EH-EL63GB			GB										
mod.EH-EL63FB			FB										
mod.EH-EL63PC			PC										
mod.EH-EL63PBF			PBF										
mod.EH-EL63PCF			PCF										
from 1 to 10000 PPR series EH/EL58F/G-EL63F/G													
from 1 to 2048 PPR series EH63P/PB/GB/FB/PC/PFB/PCF													
from 40 to 1024 PPR series EH58F/G-EH63F/G													
<i>Please, directly contact our offices for pulses availability</i>													
Zero pulse													
without zero pulse	S												
with zero pulse	Z												
Input voltage													
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>													
Special version code													numbered from 001 to 999
R radial												R	
A axial (only for EH-EL58-63F/G)												A	
P cable output (standard length 0.3 m)												P	
M connector MS3106E 16S-1S or 18-1S for EH-EL58-63F/G												M	
J connector JMSP 1607 F or 1610 for EH-EL58-63F/G												J	
R.P.M.													
3 3000													
Enclosure rating													
X standard IP54													
S IP66 (only for EH-EL58-63F/G)													
Bore diameter													
8 ø 8 mm													
9 ø 9,52 mm (3/8")													
10 ø 10 mm													
12 ø 12 mm													
14 ø 14 mm													
15 ø 15 mm													
Output types													
N NPN													
C NPN OPEN COLLECTOR													
P PUSH PULL													
L LINE DRIVER													
<i>For optionals about output types please refer to incremental outputs section</i>													

hollow shaft INCREMENTAL ENCODERS

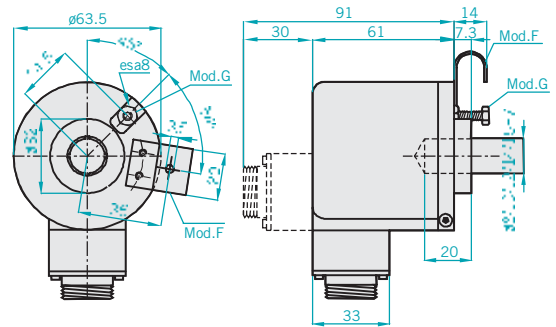
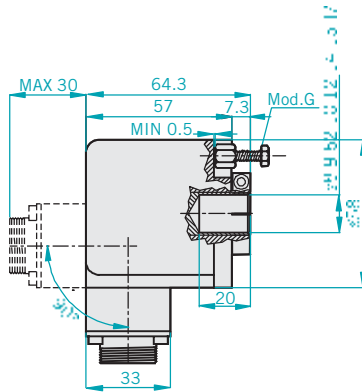
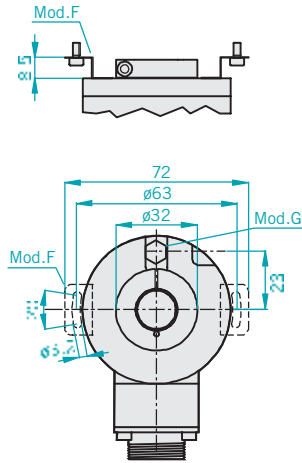
EH-EL58-63
EH-EL58F/G/ EH-EL63F/G/FB/GB

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

Blind hollow shaft encoder

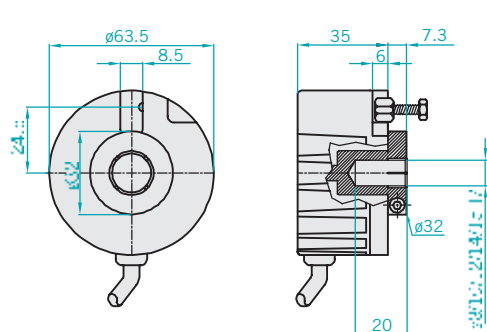
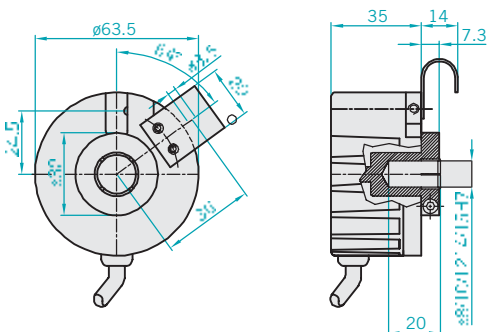
EH-EL 58 F/G

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

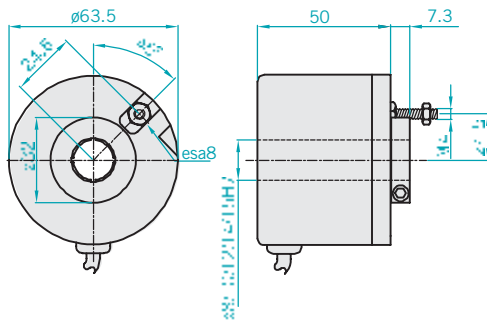
- 1) Mount the antirotation pin on the motor flange.
- 2) Couple the encoder shaft with the motor shaft, ensuring that the pin is inserted on the cave on the encoder front part (maintaining a minimum distance of 0,5 mm)
- 3) Fix the encoder shaft by the metal ring



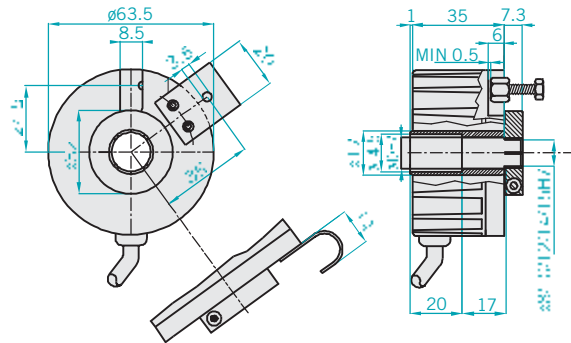
EH-EL63P/PB/PBF/PC/PCF

Through hollow shaft encoder

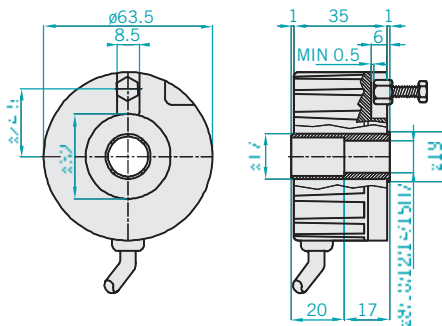
EL 63 P



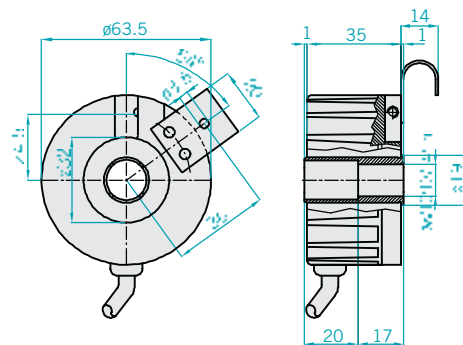
EL 63 PB / PBF



EL 63 PC



EL 63 PCF

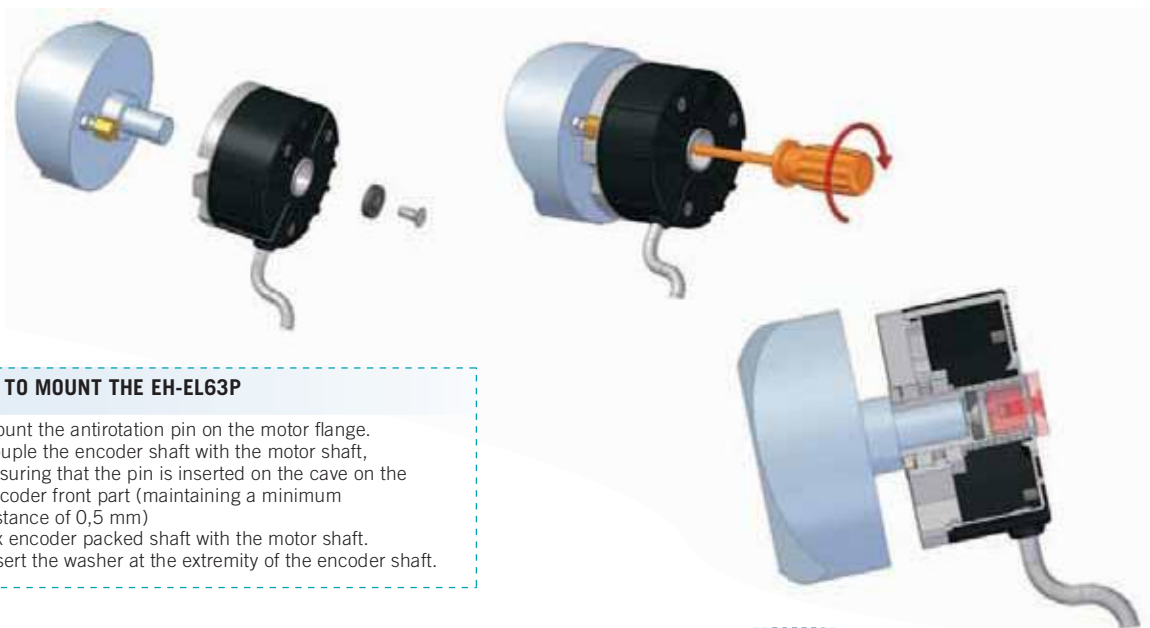


hollow shaft INCREMENTAL ENCODERS

EH-EL58-63
EH-EL63P/PB/GB/FB/PC/PBF/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 on 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.



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

