

Main features

Standard \varnothing 58 encoder series for industrial applications with high mechanical resistance requirements. These encoders are designed to support high radial and axial shaft load and they can be mounted by means of flanges or servo-fasteners.

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

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

size **58**

Type of flange

EH - EL 58 B model **B**
EH - EL 58 C model **C**
EH - EL 58 H model **H**
EH - EL 58 T model **T**

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

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

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

Shaft diameter

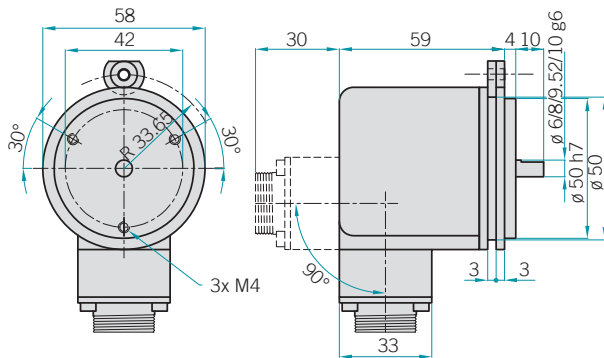
6 \varnothing 6 mm (EH - EL 58 B / C / H)
8 \varnothing 8 mm (EH - EL 58 B / C / H / T)
9 \varnothing 9,52 mm (3/8") (EH - EL 58 B / C / H)
10 \varnothing 10 mm (EH - EL 58 B / C / H / T)
12 \varnothing 12 mm (EH - EL 58 T)

Output type

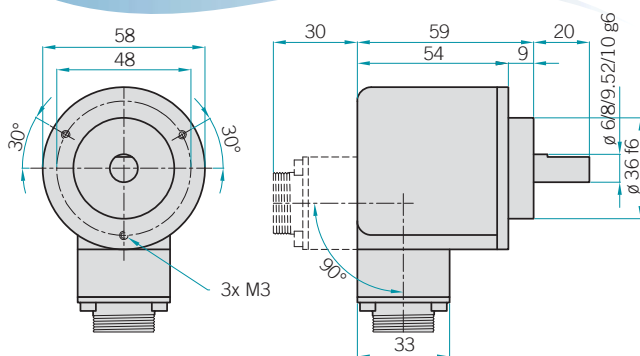
N NPN
C NPN open collector
P push-pull
L line driver (EL series)
please refer to page 92 for optionals about output types

special version code numbered from 001 to 999

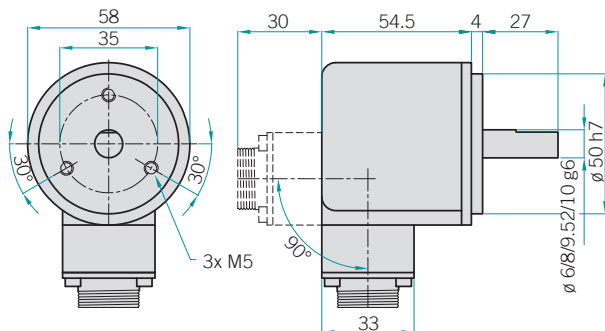
EH - EL 58 B



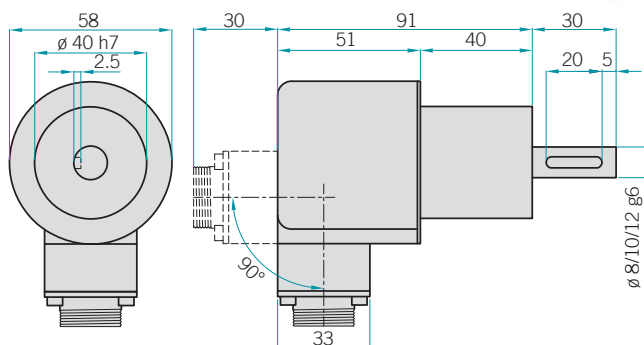
EH - EL 58 C



EH - EL 58 H



EH - EL 58 T



Electrical specifications (EL series)

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

Electrical specifications (EH series)

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

Mechanical specifications

| | |
|-----------------------|--|
| Shaft diameter | ø 6 / 8 / 9.52 / 10 mm (EH - EL 58 B / C / H) |
| Enclosure rating | IP54 standard IP66 optional |
| Max. rotation speed | 3000 RPM 6000 RPM 3000 RPM max. with "S" enclosure rating |
| Max. shaft load | 10 N (1 kgf) axial with ø 6 mm shaft 20 N (2 kgf) radial with ø 6 mm shaft 200 N (20 kgf) axial 200 N (20 kgf) radial |
| Shock | 50 G, 11 ms (plastic disc) 20 G, 11 ms (glass disc) |
| Vibration | 10 G, 10÷2000 Hz |
| Bearing life | 10 ⁹ revolutions |
| Bearings | 2 ball bearings |
| Shaft material | stainless steel UNI X10CrNiS1809 |
| Body material | aluminium UNI 9002/5 |
| Housing material | PA66 glass fiber reinforced |
| Operating temperature | 0÷60 °C |
| Storage temperature | -25÷70 °C |
| Weight | 300 g |

