

# EH 17 M - EH 30 M

## INCREMENTAL KIT ENCODER



### MAIN FEATURES

Series of miniaturized encoders for integration on small size AC/DC motors, stepper motors or for limited size applications

- Up to 1024 ppr
- No wear due to absence of bearings
- Easy assembly
- Compact size



### ORDERING CODE

<b>EH 30 M 500 Z 8/24 P 6 X 6 PR . XXX</b>
<b>SERIES</b> incremental encoder series <b>EH</b>
<b>SIZE</b> mm <b>17</b> mm <b>30</b>
<b>TYPE</b> kit encoder EH17 M - EH30 M <b>M</b>
<b>RESOLUTION</b> ppr from <b>50</b> to <b>1024</b>
<b>ZERO PULSE</b> without zero pulse <b>S</b> with zero pulse <b>Z</b>
<b>POWER SUPPLY</b> <b>5</b> V DC <b>5</b> <b>8 ... 24</b> V DC <b>8/24</b>
<b>OUTPUT TYPE</b> <b>PR</b> radial cable output (standard length 0.5 m)
<b>MAX ROTATION SPEED</b> <b>6</b> 6000 rpm
<b>ENCLOSURE RATING</b> <b>X</b> IP 54
<b>BORE DIAMETER</b> <b>6</b> $\phi$ 6 mm <b>6,35</b> $\phi$ 6,35 mm (1/4")
<b>ELECTRONIC INTERFACE</b> <b>N</b> NPN <b>C</b> NPN open collector <b>P</b> push pull <b>L</b> line driver
<b>VARIANT</b> <b>XXX</b> custom version

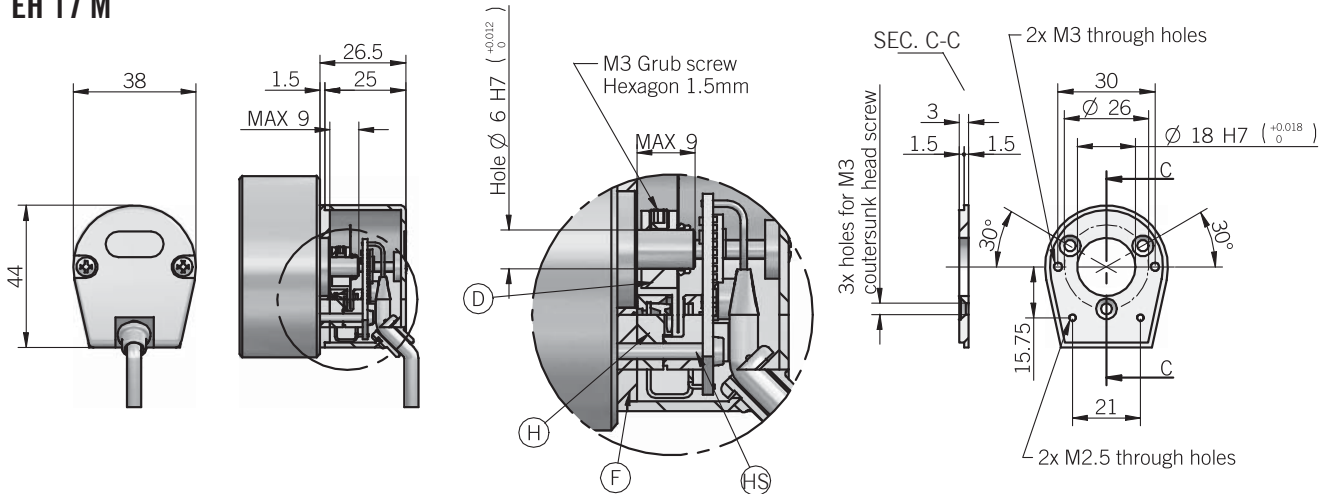
### Electrical specifications

<b>Resolution</b>	from 50 to 1024 ppr
<b>Power supply</b>	5 V DC $\pm$ 10% 8 ... 24 V DC $\pm$ 5%
<b>Current consumption without load</b>	50 mA bidirectional 100 mA bidirectional with zero
<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>	105 KHz
<b>Counting direction</b>	A leads B clockwise (shaft view)
<b>Electromagnetic compatibility</b>	IEC 61000-6-1 IEC 61000-6-4

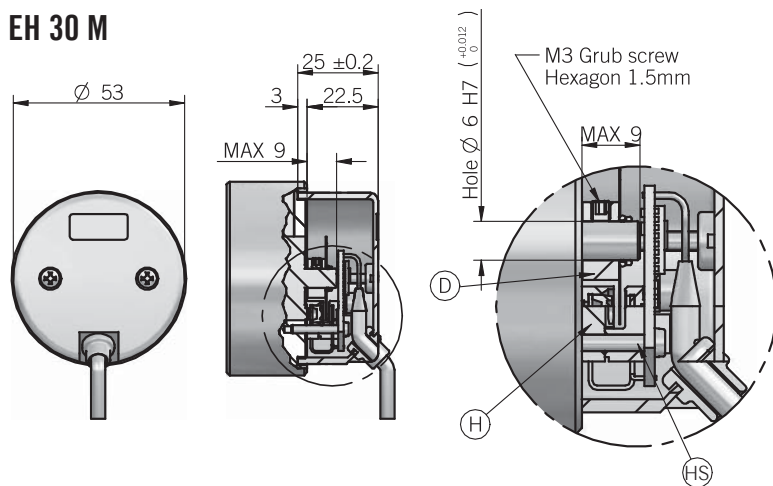
### Mechanical specifications

<b>Bore diameter</b>	$\phi$ 6 / 6,35 (1/4") mm H7
<b>Enclosure rating</b>	IP 54
<b>Max rotation speed</b>	6000 rpm
<b>Hub material</b>	Aluminium
<b>Flange material</b>	Aluminium
<b>Cover material</b>	PA 66 reinforced with glass fiber
<b>Operating temperature</b>	-20° ... +60 °C
<b>Storage Temperature</b>	-25° ... +70 °C

## EH 17 M

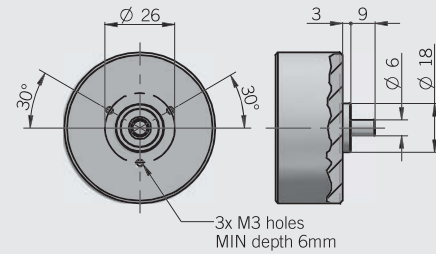


## EH 30 M

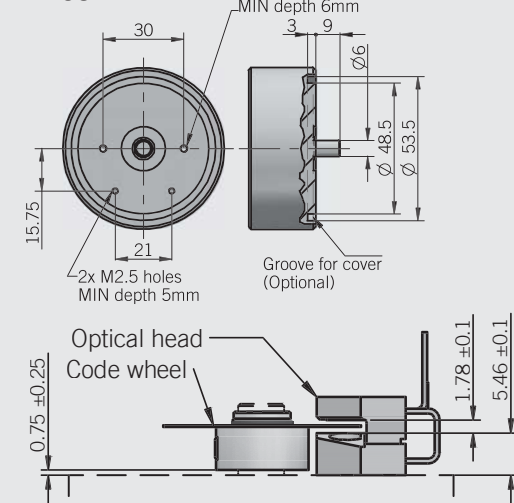


### Raccomandato motor flange design

#### EH 17 M



#### EH 30 M



### How to install

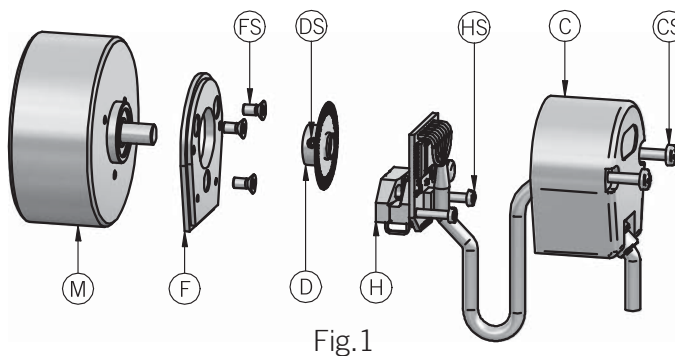


Fig.1

#### EH17M

- 1 - Fix the flange F on the motor using three screws FS with a flared head of M3.
- 2 - Insert the disc-holder D on the shaft motor without fix.
- 3 - Put the encoder H and fix using two screws HS of M2.5.
- 4 - Place the disc D in half the reading head and tighten the screw M3 of the disc-holder (fig.2)
- 5 - Close the cover C with the M3X25 screws CS.

#### EH30

Repeat all steps except 1.

Fig.2

### Connections and standard colours

Function	Push pull / Npn / Npn open collector	Line driver
+V DC	red	red
0 V	black	black
Ch. A	green	green
Ch. A-	/	brown
Ch. B	yellow	yellow
Ch. B-	/	orange
Ch. Z	blue	blue
Ch. Z-	/	white
⊥	shield	shield