

## MAIN FEATURES

Miniaturized  $\varnothing$  38 encoder series. Recommended when a minimal size is required even providing excellent performances.

- Up to 1024 ppr with zero signal
- Several output types available
- Up to 24 V DC power supply
- Up to 100 kHz output frequency
- Cable output
- Up to 3000 RPM rotation speed
- Up to IP 54 sealing

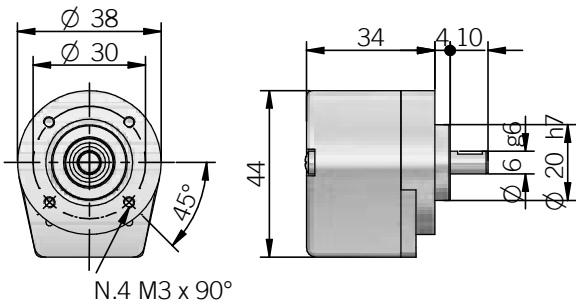


## ORDERING CODE

<b>EH 38 A 500 Z 5 N 6 X 3 PR . XXX</b>											
<b>SERIES</b> incremental encoder series <b>EH</b>	<b>SIZE</b> mm <b>38</b>	<b>TYPE</b> fixing flange $\varnothing$ 20 mm <b>A</b> square flange $\square$ 36,5 mm <b>B</b> square flange $\square$ 32 mm <b>D</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> 5 V DC <b>5</b> 8 ... 24 V DC <b>8/24</b>	<b>VARIANT</b> <b>XXX</b> custom version	<b>OUTPUT TYPE</b> <b>PR</b> radial cable output radial (standard length 0.5 m)	<b>MAX ROTATION SPEED</b> <b>3</b> 3000 rpm	<b>ENCLOSURE RATING</b> <b>X</b> IP 54	<b>SHAFT DIAMETER</b> 6 mm	<b>ELECTRONIC INTERFACE</b> <b>N</b> NPN <b>C</b> NPN open collector <b>P</b> push-pull <b>PC</b> protected push-pull (AEIC-7272) <b>L</b> line driver

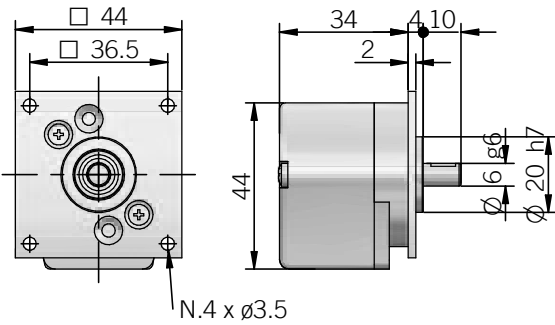
*N.B.: please directly contact our offices for pulses availability*

### EH 38 A



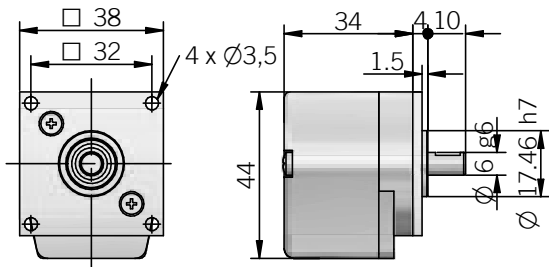
N.4 M3 x 90°

### EH 38 B



N.4 x Ø3.5

### EH 38 D



4 x Ø3,5

### Electrical specifications

<b>Resolution</b>	from 50 to 1024 ppr
<b>Power supply</b>	5 V DC ± 10% 8 ... 24 V DC ± 5%
<b>Current consumption without load</b>	100 mA max
<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>	100 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>Shaft diameter</b>	Ø 6 mm
<b>Enclosure rating</b>	IP 54 (IEC 60529)
<b>Max rotation speed</b>	3000 rpm
<b>Max shaft load</b>	5 N (0.5 kp) axial 5 N (0.5 kp) radial
<b>Shock</b>	50 G, 11 ms (IEC 60068-2-27)
<b>Vibration</b>	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
<b>Body material</b>	aluminum UNI 5076
<b>Shaft material</b>	1.4305 / AISI 303 stainless steel
<b>Housing material</b>	PA66 glass fiber reinforced
<b>Bearings</b>	2 ball bearings
<b>Bearings life</b>	10 <sup>9</sup> revolutions
<b>Operating temperature</b>	-20° ... +70°C
<b>Storage temperature</b>	-25° ... 70°C
<b>Weight</b>	100 g

### 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