

### Main features

EM series encoders are suitable for several application fields like electric motors, marine industry, iron and steel industry, textile machines, wood-working, paper-working, glass-working, marble-working machinery and, more generally, automation and process control fields.

- Compact dimensions
- High temperature resistant
- High resolution and precision
- High protection rating
- High operating speed
- Excellent mechanical sturdiness
- Very easy mounting



### Ordering code

full stop to separate special versions

EMI 38 A 100 S 5 P 6 X 6 PR . XXX

magnetic incremental encoder **EMI**

size **38**

Type of flange

standard **A**

Resolution

(only powers of 2) ppr from **2** to **2048**  
 ppr **10 / 20 / 25 / 40 / 50 / 80 / 100 / 125 / 200 / 250 / 400 / 500**  
*please directly contact our offices for pulses availability*

Zero pulse

without zero pulse **S**  
 with zero pulse **Z**

Power supply

5 V DC **5**  
 8÷24 V DC **8/24**

special version code numbered from 001 to 999

**PA** axial cable output with SKINTOP® (standard length 0.5 m)

**PR** radial cable output with SKINTOP® (standard length 0.5 m)

Max. rotation speed

**6** 6000 RPM

Enclosure rating

**X** IP64

Bore diameter

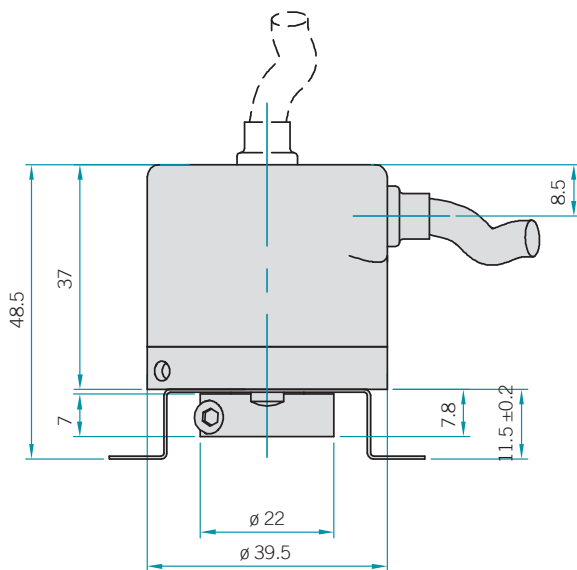
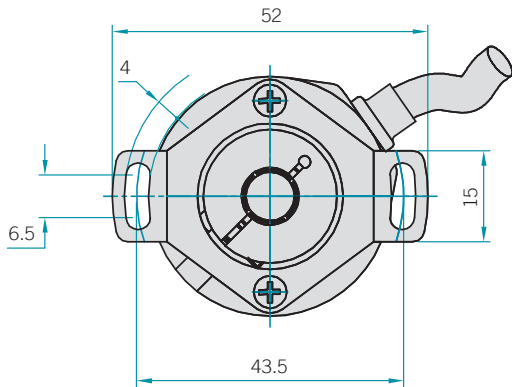
**6** ø 6 mm  
**8** ø 8 mm  
**9** ø 9.52 mm (3/8")  
**10** ø 10 mm

Output type

**P** push-pull  
**L** line driver

*please directly contact our offices for further measures*

## EMI 38



### Electrical specifications

Resolution	up to 2048 ppr
Current consumption without load	100 mA max.
Max. load current	15 mA for channel
Power supply	5 V DC $\pm 5\%$ 8÷24 V DC
Output type	line driver push-pull
Max. output frequency	200 kHz

### Mechanical specifications

Bore diameter	up to 10 mm
Enclosure rating	IP64
Max. rotation speed	6000 RPM
Shock	50 G, 11 ms
Vibration	10 G, 10÷2000 Hz
Body material	aluminium UNI 9002/5
Housing material	aluminium UNI 9002/5
Operating temperature	-25÷100 °C
Storage temperature	-30÷105 °C
Weight	250 g