

Main features

EM series encoders well suit to 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
- Absence of physical contact between encoder and motor shaft
- High temperature resistant
- High resolution and precision
- High enclosure rating
- High working speed
- Excellent mechanical robustness
- Very easy mounting



Ordering code

full stop to separate special versions

EM A 38 A 400 B 5 P P X 6 S 6 PR . XXX

magnetic encoder EM

absolute A
sinusoidal S

size 38

Type of flange

standard A

Resolution

(EMA series) p.p.r. 400 / 500 / 800 / 1000
1600 / 2000 / 1024 / 2048 / 4096 / 8192

(EMS series) p.p.r. 1

Code type (EMA series)

binario B
Gray G

Power supply

5 VDC 5

5÷28 VDC 5/28

Output type

SSI (EMA series) S
push-pull parallel (EMA series) P
sine - cosine (EMS series) L

please directly contact our offices for further measures

special version code numbered from 001 to 999

Output type

PR radial cable output (standard length 0.5m)

Max. rotation speed

6 6000 RPM

Enclosure rating

S IP84

Bore diameter (magnet-carrier)

6 ø 6 H7 mm

8 ø 8 H7 mm

9,5 ø 9.52 H7 mm

10 ø 10 H7 mm

Options

X to be indicated if not used

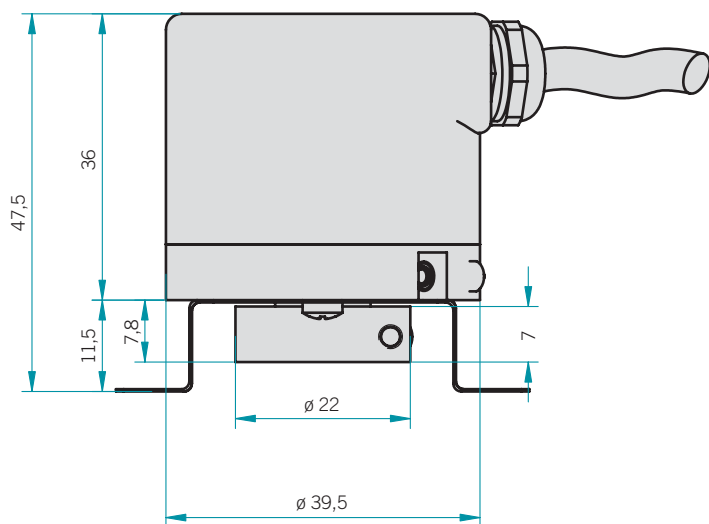
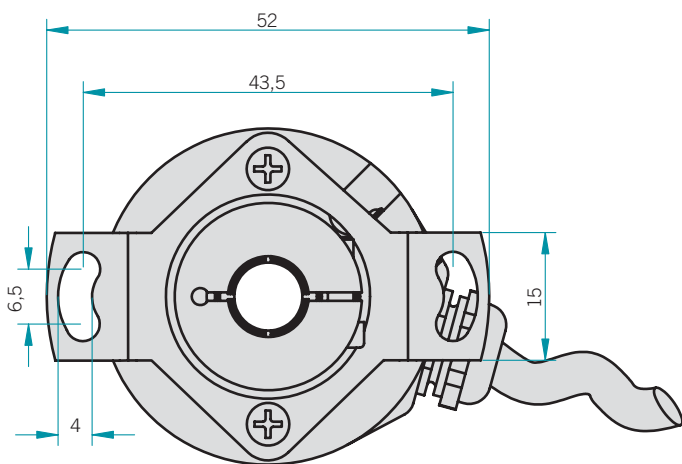
ZE programmable zero pulse (EMA series)

Logic (EMA series)

P positive

N negative

EMA - EMS 38



Electrical specifications

Resolution	absolute SSI up to 8192 p.p.r. absolute parallel up to 8192 p.p.r. sine - cosine (1 sin./turn)
Current consumption without load	100 mA max.
Max. load current	15 mA for channel
Power supply	5 VDC \pm 5% / 5 \div 28 VDC
Output types	sine - cosine (EMS series) push-pull parallel (EMA series) SSI (RS422A) (EMA series)
Max. output frequency	200 kHz
SSI transmission frequency	70 \div 1000 kHz (EMA series)

Mechanical specifications

Bore diameter (magnet-carrier)	up to 10 mm
Enclosure rating	IP64
Max. rotation speed	6000 RPM
Shock	50 G, 11 ms
Vibration	10 G, 10 \div 2000 Hz
Body material	aluminium D11S UNI 9002/5
Housing material	aluminium D11S UNI 9002/5
Operating temperature	-25 \div 100 °C
Storage temperature	-30 \div 105 °C
Weight	250 g