

### Main features

EM series encoders well suit 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.

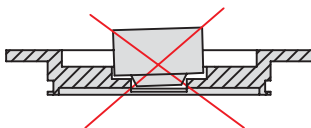
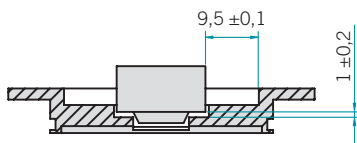
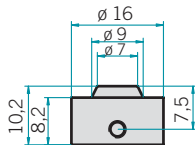
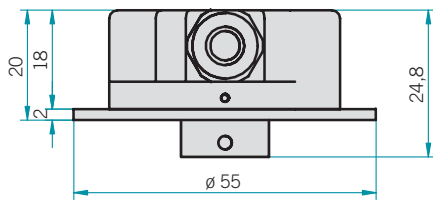
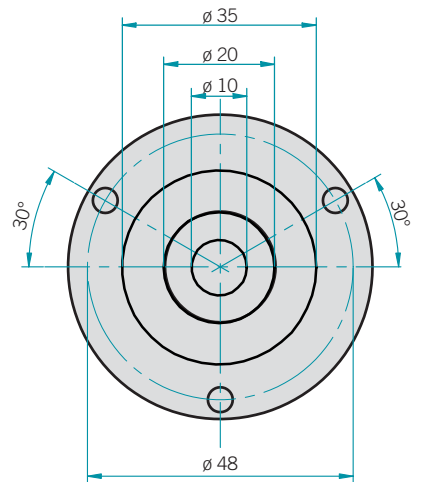
- Compact dimensions
- Absence of physical contact between encoder and motor shaft
- High temperature resistant
- High resolution and precision
- High enclosure rating
- High working speed
- Excellent mechanical robustness
- Very easy mounting



### Ordering code

full stop to separate special versions											
EMI	55	A	100	S	5	P	6	S	10	PR	XXX
magnetic incremental encoder	size	Type of flange	Resolution	Zero pulse	Power supply	Output type	Bore diameter (magnet-carrier)	Enclosure rating	Max. rotation speed	PR	special version code numbered from 001 to 999
	55	standard	p.p.r. 100 / 125 / 200 / 250 / 400 / 500 256 / 512 / 1024 / 2048 <i>please directly contact our offices for pulses availability</i>	without zero pulse with zero pulse programmable zero pulse	5 VDC 5+28 VDC	P push-pull L line driver <i>please directly contact our offices for further measures</i>	6 ø 6 H7 mm 8 ø 8 H7 mm 9,5 ø 9.52 H7 mm 10 ø 10 H7 mm	X IP64 S IP68	10 10000 RPM	radial cable output (standard length 0.5m)	

# EMI 55



## Electrical specifications

<b>Resolution</b>	incremental up to 2048 p.p.r.
<b>Current consumption without load</b>	100 mA max
<b>Max. load current</b>	15 mA max. for channel
<b>Power supply</b>	5 VDC ±5% / 5÷28 VDC
<b>Output types</b>	line driver push-pull
<b>Max. output frequency</b>	200 kHz

## Mechanical specifications

<b>Bore diameter (magnet-carrier)</b>	up to 10 mm
<b>Enclosure rating</b>	IP64 / IP68 on demand
<b>Max. rotation speed</b>	10000 RPM
<b>Shock</b>	50 G, 11 ms
<b>Vibration</b>	10 G, 10÷2000 Hz
<b>Body material</b>	aluminium D11S UNI 9002/5
<b>Housing material</b>	aluminium D11S UNI 9002/5
<b>Magnet-carrier material</b>	aluminium D11S UNI 9002/5
<b>Operating temperature</b>	-25 ÷ 125 °C
<b>Storage temperature</b>	-30 ÷ 130 °C
<b>Weight</b>	150 g
<b>Mounting tolerances</b>	axial: ±0,2 mm radial: ±0,1 mm

## Electrical connections

Cable colour	Function
red	+ VDC
black	0 V
green	A
yellow	B
blue	Z
brown	A
orange	B
white	Z