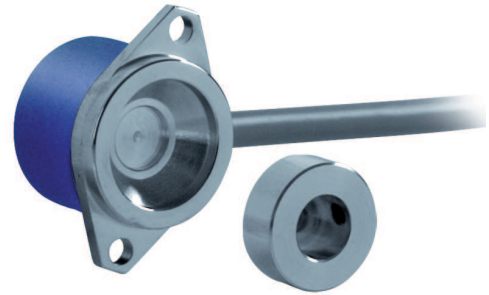


MAIN FEATURES

EMI 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.

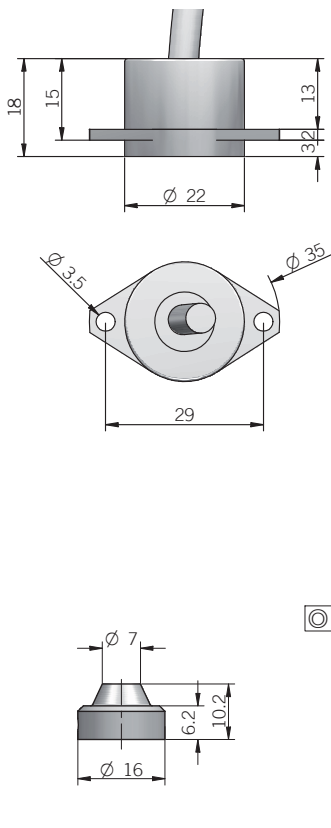
- Compact dimensions
- Absence of physical contact between encoder and motor shaft
- High temperature resistant
- High resolution and precision
- High protection rating
- High operating speed
- Excellent mechanical sturdiness
- Very easy mounting



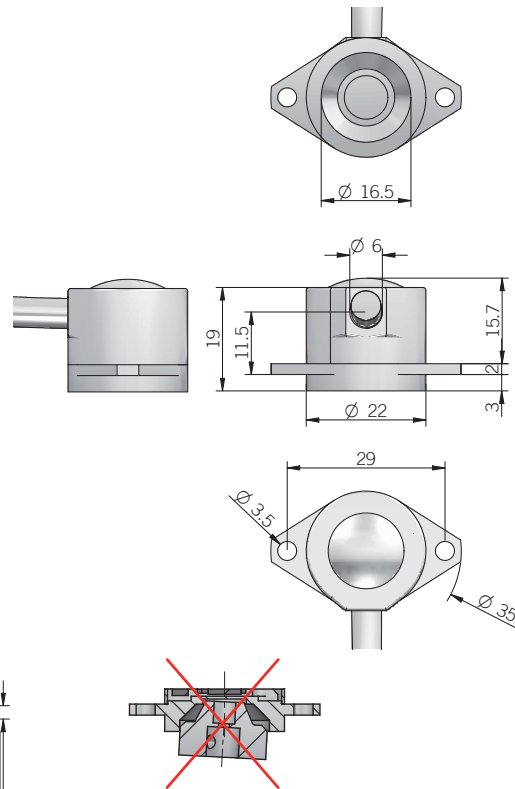
ORDERING CODE

EMI 22	A	100	S	5	P	6	S	10	P	R	.	XXX
SERIES magnetic incremental encoder EMI	SIZE mm 22	TYPE BODY AND FLANGING flange type A aluminum A flange type A anodized aluminum AY	RESOLUTION (only powers of 2) ppr from 2 to 2048 ppr 10 / 20 / 25 / 40 / 50 / 80 / 100 / 125 / 200 / 250 / 400 / 500 <i>please directly contact our offices for pulses availability</i>	ZERO PULSE without zero pulse S with zero pulse Z	POWER SUPPLY 5 V DC 5	BORE DIAMETER 6 mm 8 mm 9.52 mm (3/8") 10 mm	ELECTRONIC INTERFACE P push-pull L line driver	MAX ROTATION SPEED 10 10000 rpm	ENCLOSURE RATING S IP 68	OUTPUT DIRECTION A axial R radial	OUTPUT TYPE P cable output (standard length 0.5 m)	VARIANT XXX custom version

EMI 22 axial cable output



EMI 22 radial cable output



Electrical specifications

Resolution	up to 2048 ppr
Power supply	5 V DC $\pm 10\%$
Current consumption without load	100 mA max
Max load current	15 mA for channel
Signal pattern	B follows A with clockwise rotation (magnet-carrier view)
Electronic interface for incremental signals	push-pull line driver RS422
Max output frequency	205 kHz
Accuracy	$\pm 0.35^\circ$ max
Electromagnetic compatibility	IEC 61000-6-2 IEC 61000-6-3

Connections and standard colours

Wire colours	Function
black	0 Volt
red	+ Vdc
green	Ch. A
yellow	Ch. B
blue	Ch. Z
brown	Ch. A -
orange	Ch. B -
white	Ch. Z -
shield	\perp

Mechanical specifications

Bore diameter (magnet-carrier)	up to 10 mm
Enclosure rating	IP 68 (optional) (IEC 60529)
Max rotation speed	10000 rpm
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
Body material	aluminum UNI 9002/5
Magnet-carrier material	aluminum UNI 9002/5
Housing material	aluminum UNI 9002/5
Operating temperature	$-40^\circ \dots +125^\circ\text{C}$
Storage temperature	$-25^\circ \dots +85^\circ\text{C}$
Weight	30 g
Mounting tolerances	± 0.2 mm (axial) ± 0.1 mm (radial)