



SEB with supporting arm & wheel



SEB



SEB

INCREMENTAL ROTARY ENCODERS

Series SEB

- Incremental rotary encoders with or without zero pulse
- Pulses per revolution: 2 to 12500
- ABS housing
- Optical version (SEB/SEBZ) – Magnetic version (SEBM/SEBZ-M)

MECHANICAL VERSIONS

SEB/SEBM

Body Ø: 50 mm
 Shaft Ø 10 mm
 Cable or connector outlet in axial position
 ABS housing

SEB/SEB-Z: Optical encoder, bidirectional with or without zero pulse
 Number of pulses/revolution: 2 to 12500

SEBM/SEBZ-M: Magnetic encoder, bidirectional with or without zero pulse
 Number of pulses/revolution: 8 to 2048

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS	
	SEB/SEB-Z SEB-M/SEBZ-M
• Materials: case shaft	ABS Steel AISI 303
• Weight	100 g ca.
• Shaft Ø	10 mm
• Revolutions/minute	6000 continuous/10000 temporary
• Starting torque	≤0.8 Ncm
• Inertia	≤25 g cm ²
• Max load	80 N axial/100 N radial
• Vibration resistance (10÷2000 Hz)	100 m/sec ²
• Shock resistance (11 ms)	50 G
• Protection degree	IP64
• Operating temperature	-10 ÷ 70°C
• Stocking temperature	-20 ÷ 80°C

ELECTRICAL & OPERATING SPECIFICATIONS	
• Pulse code	Incremental
• Pulses/revolution	2 to 12500 series SEBM/SEBZ-M : 8 to 2048
• Zero pulse	One pulse/revolution (SEBZ-SEBM-Z)
• Output signals	Two square waves 90° ±15° out of phase – Zero pulse width: 90°±15°
• Electronic output	push-pull, open collector NPN, line driver 5Vdc o 8/24Vdc signals protected against short circuits
• Supply voltage	5Vdc ro 8/24Vdc series SEBM/SEBZ-M : 5/24 Vdc protection against polarity reversal
• Absorption	30÷80 mA max
• Max. frequency	100 KHz
• Connections	Axial cable 3 m long/ 1 m for line driver output MS 5-pin axial connector/ 7-pin connector for line driver output equipped with flying part

*Max operating speed with IP65 sealing ring applied on the shaft: 3000 rpm

The encoder with 0 pulse and line driver output can only be supplied with cable outlet



ELAP VIA VITTORIO VENETO, 4 – I-20094 CORSICO (MI) TEL. ++39.02.4519561
 FAX ++39.02.45103406 E-MAIL: INFO@ELAP.IT WWW.ELAP.IT



SEB con braccio e ruota



SEB



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CONNECTIONS

Push Pull – NPN Open Collector			Line Driver			SIGNALS		
SIGNALS	5-pin connector	Cable colours	SIGNALS	7-pin connector	Cable colours	SIGNALS	7-pin connector	Cable colours
Out 1	E	White	without 0 pulse	A	White	with 0 pulse	A	White
Out 2	A	Green	Out 1	B	Green	Out 1	B	Green
Out Z	C	Brown	Out 2	D	Red	Out Z	D	Grey
+ Vdc	D	Red	+ Vdc	F	Blue	+ Vdc	F	Red
0V	B	Blue	0V	C	Brown	0V	C	Blue
		Shield	Out 1	E	Yellow	Out 1	E	Brown
			Out 2	G		Out 2	G	Yellow
			Non connected			Out Z		Pink
								Shield

ORDERING INFORMATION

SEB	100	C	8/24	PP
<p>OUTPUT SIGNALS PP Push-pull OC Open Collector NPN LD Line-driver</p> <p>SUPPLY VOLTAGE 8/24 Vdc 5 Vdc 5/24 Vdc series SEBM/SEBZ-M</p> <p>CONNECTION TYPE C Connector A Cable</p> <p>PULSES/REVOLUTION 2-12500 8-2048 series SEBM/SEBZ-M</p>				

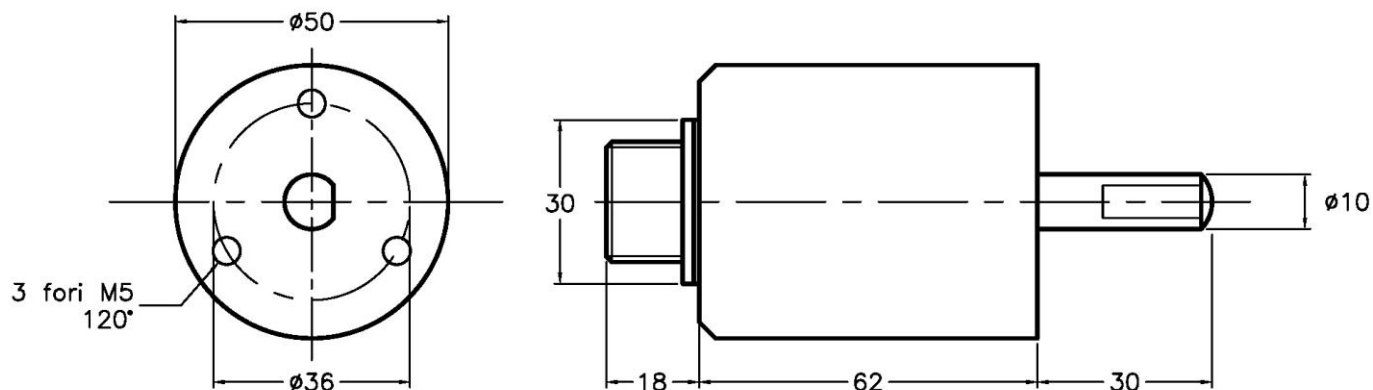
- TYPE**
- SEB** Bidirectional, without zero pulse, 2÷12500 ppr
 - SEB-Z** Bidirectional, with zero pulse, 2÷12500 ppr
 - SEB-M** Magnetic, bidirectional, without zero pulse, 8÷2048 ppr
 - SEBZ-M** Magnetic, bidirectional, with zero pulse, 8÷2048 ppr

VARIATIONS ADMITTED WITHOUT NOTICE

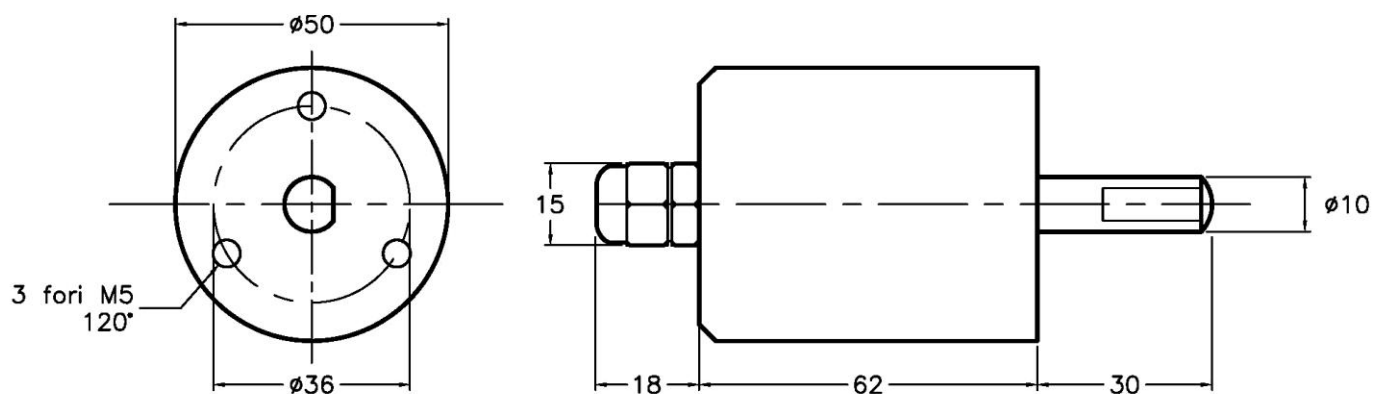
Dimensional drawings available at:
<http://www.elap.it/eng/incremental-encoders/encoder-seb.html>



USCITA CONNETTORE
CONNECTOR OUTLET



USCITA CAVO
CABLE OUTLET



Further dimensional drawings available at
<http://www.elap.it/eng/incremental-encoders/encoder-seb.html>

