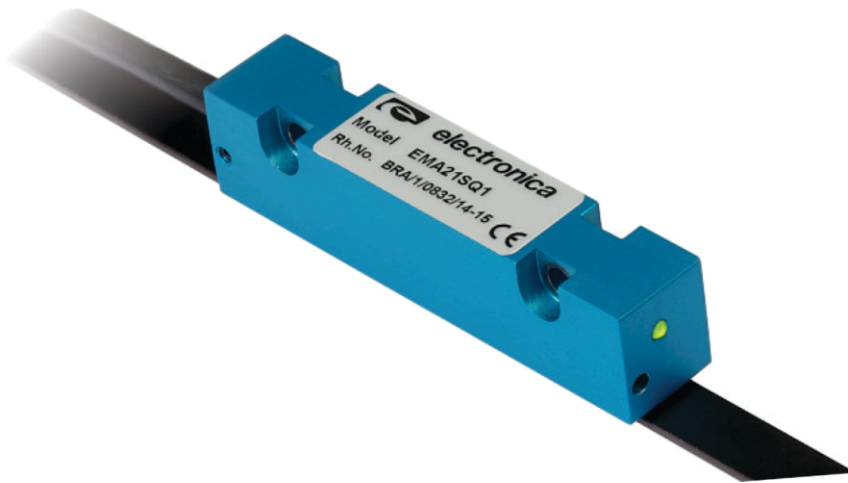


EMA21 Absolute Magna

Absolute Magnetic Linear Encoder System

EMA21 an indigenously designed & built Absolute Magnetic Encoder System offers true absolute position data along with the advantages offered by Magnetic encoder technology.



Salient Features:-

- Accuracy of $\pm 15\mu\text{m}/\text{meter}$ at $1\mu\text{m}$ resolution
- Supports measuring speed of 4 m/s at $1\mu\text{m}$ resolution
- Maximum measuring length available up to 60 mtrs, standard magnetic tapes are 20 mtrs in roll form
- Supports popular industrial absolute protocols like SSI & BiSS-C (unidirectional), additionally supports incremental O/P RS422 digital / $1V_{pp}$ analog
- Ingress Protection class IP67
- Wide supply range available: Option 1 - 5 VDC &
Option 2 - 6.5 V to 28 VDC
- Reader head O/P is with cable or with direct connector on housing for ease of installation
- LED indication on reader head to help user during installation & application
- Error O/P in case of absolute code mismatch, higher speed & other such cases..



Major Applications:-

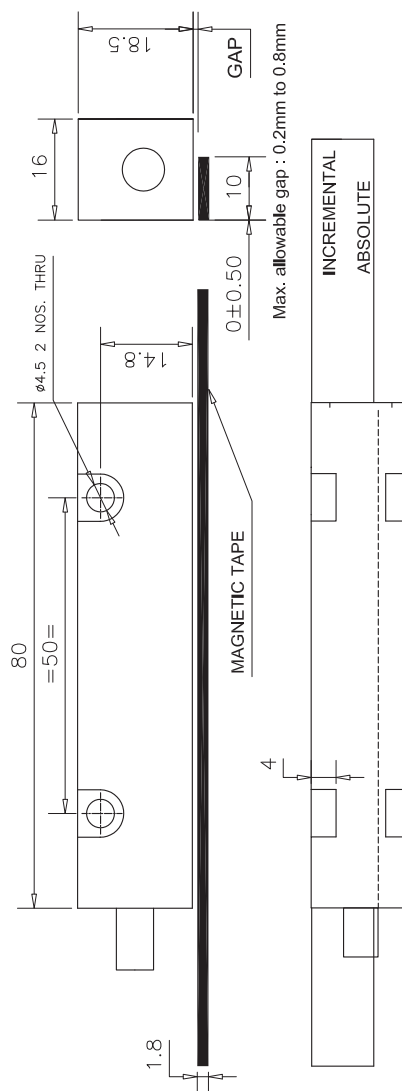
- Robotics
- Automation
- Dispensing Machines
- Pick & Place Machines
- Length cutting Machines
- Linear Motor Applications
- Special Purpose Machines
- Material Handling Machines

EMA21 Absolute Magna

Absolute Magnetic Linear Encoder System

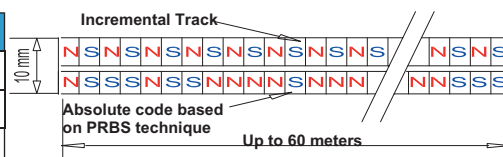
Specification

Output Specifications	
Resolution	1μ, other resolutions available on request
Absolute Output	SSI – 70KHz to 1.6MHz
	BiSS-C Unidirectional – 100KHz to 10MHz
Measuring Speed	4 m/s
Incremental Output	1V _{pp} Analog output @ 10 m/s max
	RS422 differential output @ 4 m/s max
Accuracy	±15μ
Repeatability	±1 count
Hysteresis	< 3μ
Mechanical Specifications	
Tape Dimensions	10mm width, 1.8mm thickness
Maximum tape length	60 Mtrs.
Reader Head dimensions (L X W X H)	80mm X 16mm X 18.5mm
Cable and Connector Specifications	
Output connector	Option 1: 12 Pin M12 X 1 on reader head Option 2: cable from reader read
Output cable	PUR cable
Electrical Specifications	
Supply Voltage	Option 1: 5VDC ± 5% standard. Option 2: 6.5VDC to 28VDC
Operating current	< 200mA
Environmental Specifications	
Ingress protection class	IP67
Storage & Operating Temperature	-20°C to +85°C
Relative humidity	20% to 80% non-condensing



BiSS-C Frame				
Total number of Bits: 36 Bits				
Null Bits	Position	Error	Warning	CRC
2	26	1	1	6

SSI Frame		
Total number of Bits: 32 Bits		
Error	Null Bits	Position
1	5	26



Electronica Mechatronic Systems (I) Pvt. Ltd.
Unit No. 37 & 44, Electronic Co-op. Estate, Pune-Satara Road,
Pune 411009 India
Tel.: +91-20-2422 4440, 2422 2293
Email: enquiry@electronicaems.com
Web: www.electronicaems.com

Version: EMA2126012015
Code : 0073-50-0210

Owing to continuous product Research and Development designs and specifications are subject to change

Dealer Stamp