

LA11

absolute magnetic encoder system

LA11 is an absolute magnetic linear encoder system designed for motion control applications as a position and velocity control loop feedback element. The encoder system is highly reliable due to contactless absolute measuring principle, built-in safety algorithms and high quality materials/components used.



HIGH SPEED



NON-CONTACT

13

13 BITS
RESOLUTION



Why choose LA11?

FEATURES:

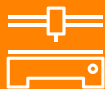
- ✓ True absolute
- ✓ System accuracy to $\pm 40 \mu\text{m/m}$
- ✓ Resolution to $0.244 \mu\text{m}$
- ✓ Speeds up to 7 m/s at $1 \mu\text{m}$ resolution
- ✓ Lengths up to 16.3 m

BENEFITS:

- ✓ Simple and fast installation
- ✓ Built-in self-monitoring
- ✓ Integrated status LED
- ✓ SSI, SPI or BiSS
- ✓ Excellent degree of protection to IP68



SMT PICK AND
PLACE



PRINTING
TECHNOLOGY



MACHINE TOOLS



MEDICAL



ASSEMBLY LINES

RLS merilna tehnika d.o.o.
Poslovna cona Žeje pri Komendi
Pod vrbami 2
SI-1218 Komenda
Slovenia

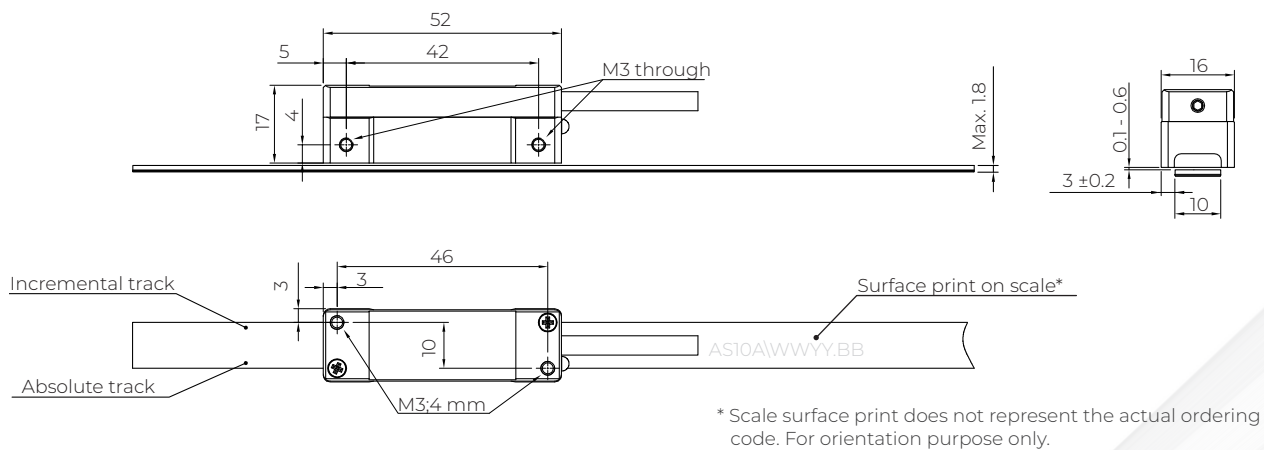
T: +386 1 5272100
F: +386 1 5272129
E: mail@rls.si

A RENISHAW  **associate company**

LA11 technical specifications

SYSTEM DATA	
Maximum length for AS scale	16.3 m
Incremental pole length	2 mm
System accuracy	$\pm 40 \mu\text{m/m}$
Short range accuracy	$< \pm 10 \mu\text{m}/10 \text{ mm}$
Coefficient of thermal expansion	$17 \pm 1 \mu\text{m/m/K}$
Repeatability	Unit of resolution
Hysteresis	$< 2 \mu\text{m}$ at 0.1 mm ride height
ELECTRICAL DATA	
Supply voltage	Option A: From 4.75 V to 5.75 V - Voltage on readhead, consider voltage drop over cable Option B: From 8 V to 30 V
Reverse polarity protection	For option A only
Set-up time after switch-on	$< 350 \text{ ms}$
Current consumption (without load)	$< 150 \text{ mA}$ at 5 V power supply
Voltage drop over cable	$\sim 80 \text{ mV/m}$ - without load
MECHANICAL DATA	
Cable	PUR high flexible cable, drag-chain compatible, double-shielded
ENVIRONMENTAL DATA	
Temperature	Operating 0°C to $+55^\circ\text{C}$
	Storage -20°C to $+70^\circ\text{C}$

LA11 dimensions



All dimensions in mm.

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SI-1218 Komenda
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