

Newsletter January 2024

ALS21 linear encoder from Bogen Magnetics

The **ALS21 absolute linear encoder from Bogen Magnetics** provides fine resolution down to **1 μm** and **high accuracy of $\pm 2 \mu\text{m}$** at fast speed up to 10 m/s. It is ideally suited for challenging applications where small size, fine resolution and great accuracy are mandatory such as in linear motors, product handling equipment, cutting machines, pick & place robots and lines, electronic assembly systems, printing and measuring machinery, electro-medical instruments, machine tools.

The measuring system is designed to provide both the absolute and the incremental information. The LMS2-A153 tape encodes two tracks: the true absolute pattern for position information and a 2 mm (0.078") pole pitch incremental track for speed feedback. It is shrunk down in width to 10 mm only (0.39") while the measuring length is lengthened up to **8.1 m** (26.57 ft).

The LMS2-A153 tape is insensitive to dust, oil, grease, water, and common chemical agents, thus the measuring system can reliably operate in the most aggressive industrial environments.

In addition, the dimensions of the sensing head are minimized; the enclosure is very compact and slim for installation in tight spaces, yet it maintains its toughness. High-quality and selected electronics are fully overmoulded and resin-coated, so the encoder can guarantee IP67-rated environmental protection along with immunity to contaminants and interference.

By virtue of the non-contact operation, the measuring system is virtually wear and maintenance-free and ensures strong reliability throughout its operating life.

The **ALS21 offers high resolution down to 1 μm** and **enables speeds up to 10 m/s** (32.8 ft/s).

It delivers the absolute information through the BiSS-C, SSI, and Panasonic interfaces and the incremental information through the AB incremental output circuit. The ALS21 is equipped with first-rate components and a high-flex cable especially suited for use in cable drag chains – it is tested for more than 1 million cycles.

For longer measuring lengths up to 32.7 m (107.28 ft) the ALS26 is the perfect choice with the same features as the ALS21.

Bogen Magnetics products portfolio *includes a wide selection of incremental and absolute linear encoders designed for the most diverse applications and needs.*

Pick from the [comprehensive list](#) .

