

## Newsletter March 2024

### AKP18 small and compact magnetic encoder for EOAT applications

With the combination of **AKP18 absolute magnetic encoder** and the wide choice of **magnetic scales and rings**, BOGEN Magnetics GmbH offers a lineup of cost-efficient and reliable solutions for absolute linear and rotary measuring tasks.

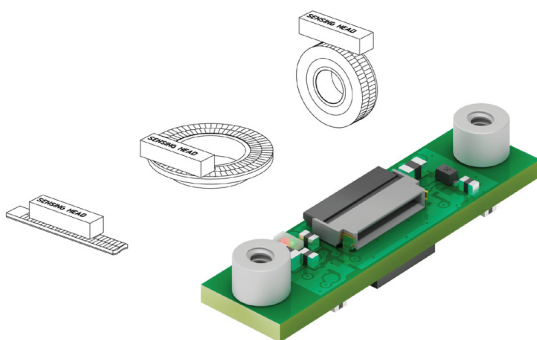
The AKP18 is **extremely light and compact** (it is only 22.5 mm long and 3.9 mm thick) and therefore fits well even into the most constricted installation spaces. It is available in various standard sizes and enables **linear measurements up to 256 mm and rotary solutions** from diameters less than 4 mm up to 94 mm max. with both radial and axial alignment/scanning.

Magnetic and non-contact operation reduces the risk of failures and problems caused by wear, vibration, shock or mechanical stress.

It can be operated at a work temperature of up to +100°C and it is even possible to install and operate up to seven AKP18 measuring heads with Wire2board connectors in a Daisy Chain network connection. Two integral LEDs provide useful diagnostic information.

The AKP18 is well suited for **handling systems, factory automation and electromedical devices**, but it is also ideal for demanding **robotic applications** including bionics and exoskeletons, inspection and surveillance robots, **robotic arms and robot end effectors** (EOAT, End Of Arm Tooling) such as grippers and tools, and surgical robotics. It is also perfect for many other weight- and size-sensitive applications and is an optimal alternative to bulkier encoders.

Customer-specific adjustments and individual solutions can be implemented on request at Lika and BOGEN.



The AKP18 encoder can be read via **SSI or BiSS C-mode interfaces**. The resolution is up to 20 bits (244 nm in linear measurements / 1,048,576 cpr in rotary measurements).

