

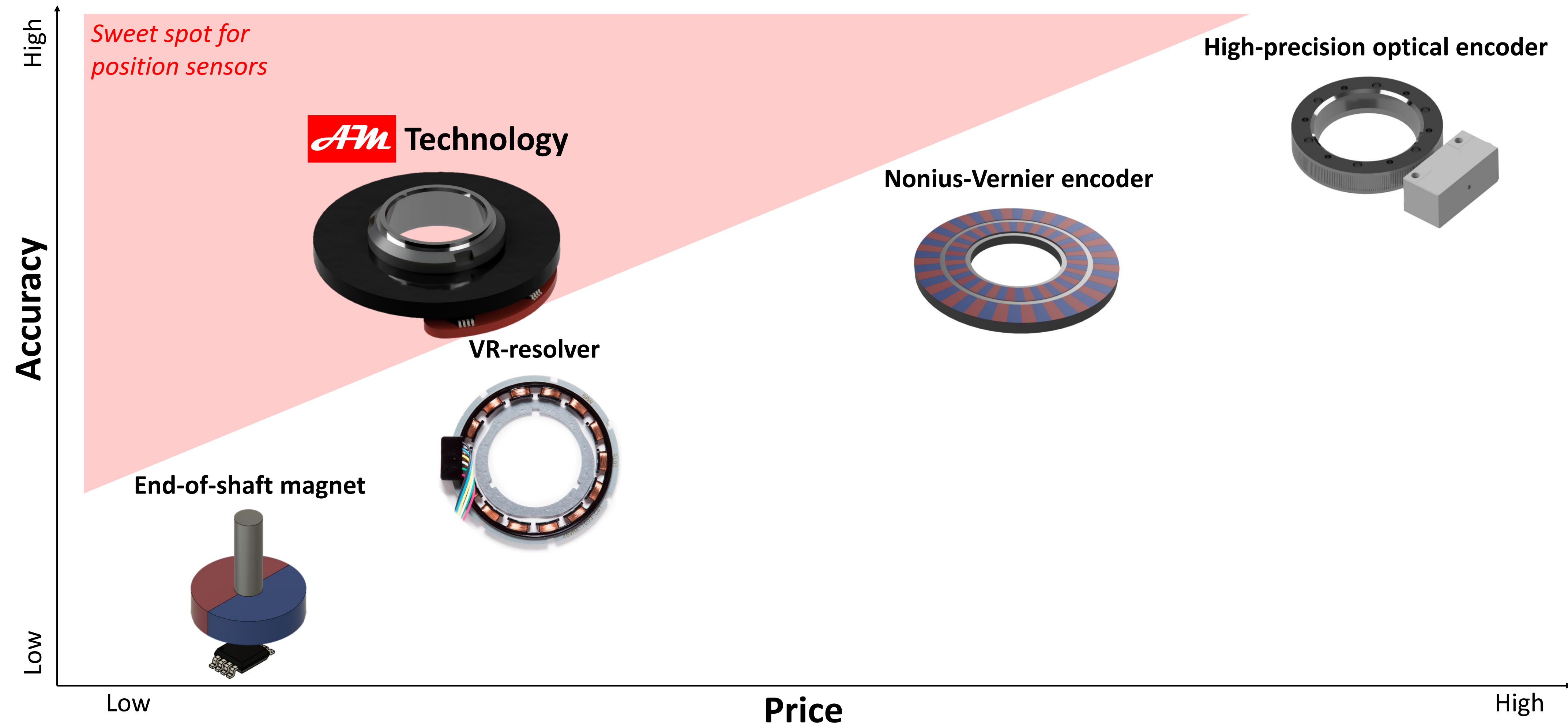
The Future of Magnetic Encoder Technology



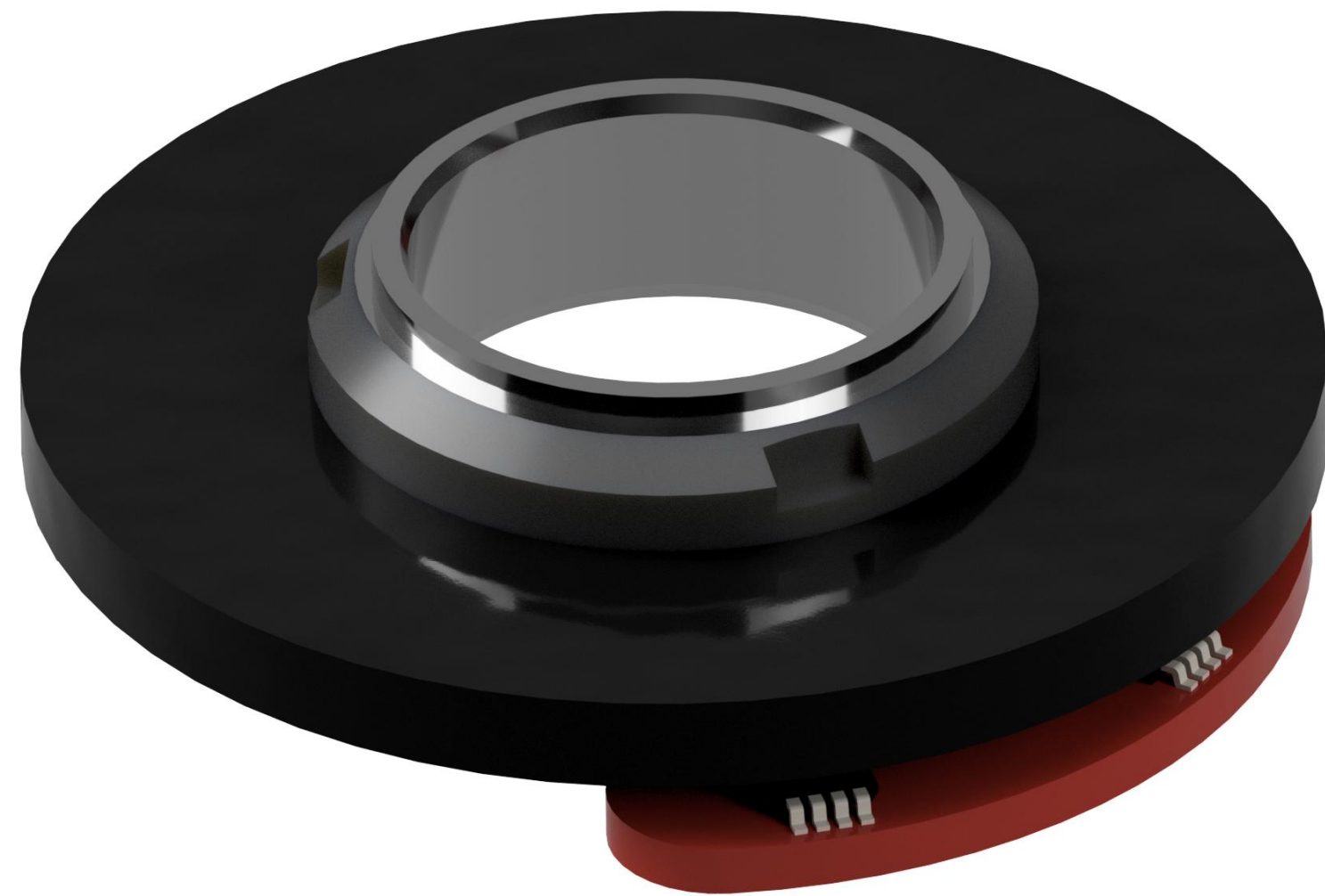
Next-Generation Encoder Technology. Because Every Angle Matters.



AM Technology: Elevated Performance. Exceptional Value.



Robust, Accurate and Stray-Field Immune Encoder Solution Without Any Calibration.

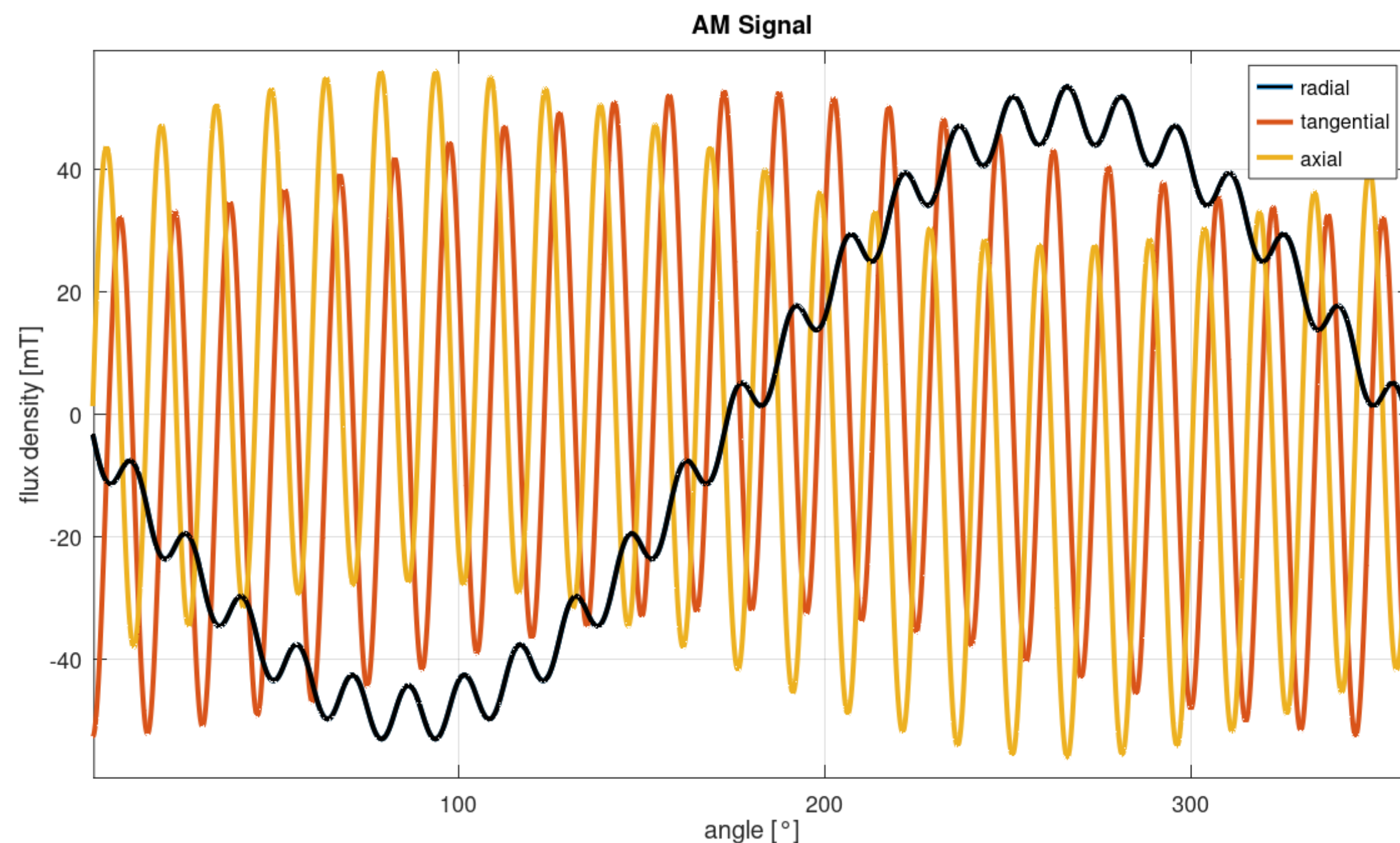


[Link to Video:](#)
[AM Encoder Performance Tests](#)

- ✓ **Absolute position** encoder
- ✓ **No calibration** needed (0.5° accuracy)
- ✓ Robust against external **stray fields**
- ✓ Wide **mounting tolerances** (± 0.5 mm)
- ✓ **Air gap** variation (± 1 mm)
- ✓ **High-speed** (30'000 rpm)
- ✓ **Tailor-made, compact** design
- ✓ **Cost-effective** price

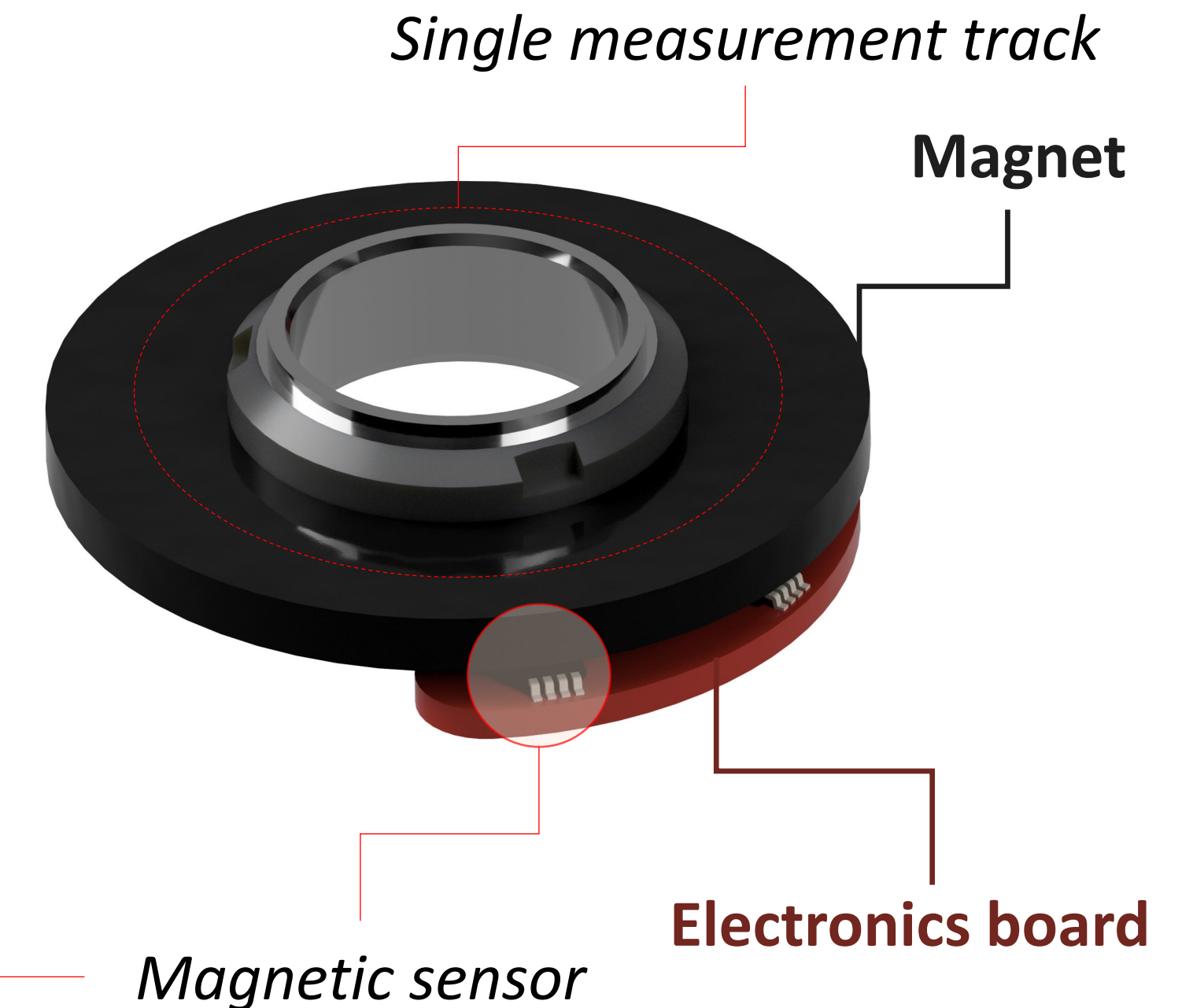
—— The Secret Lies in the Patented Technology for Multi-Periodic Magnetization.

Using **multi-periodic** signals enable us to combine high precision and absolute detection on a single measurement track.



Patented technology

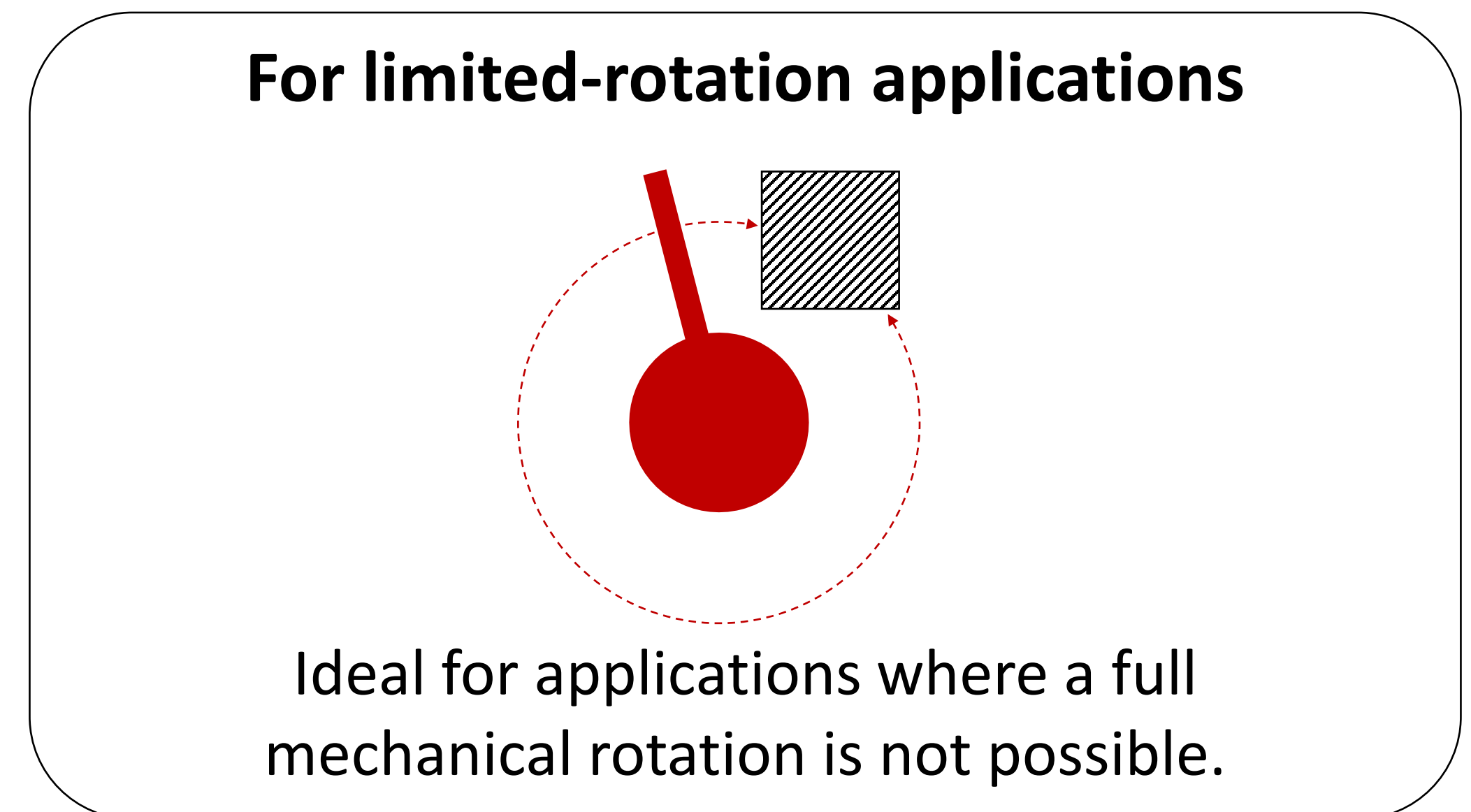
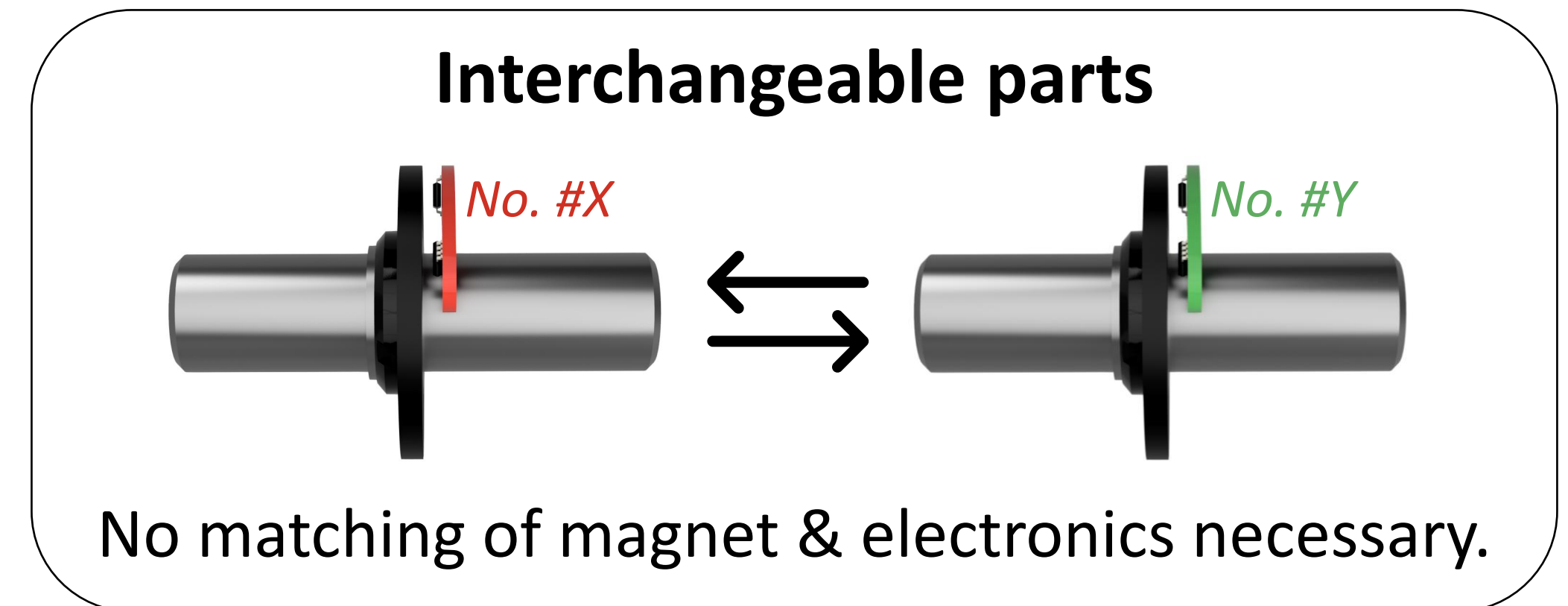
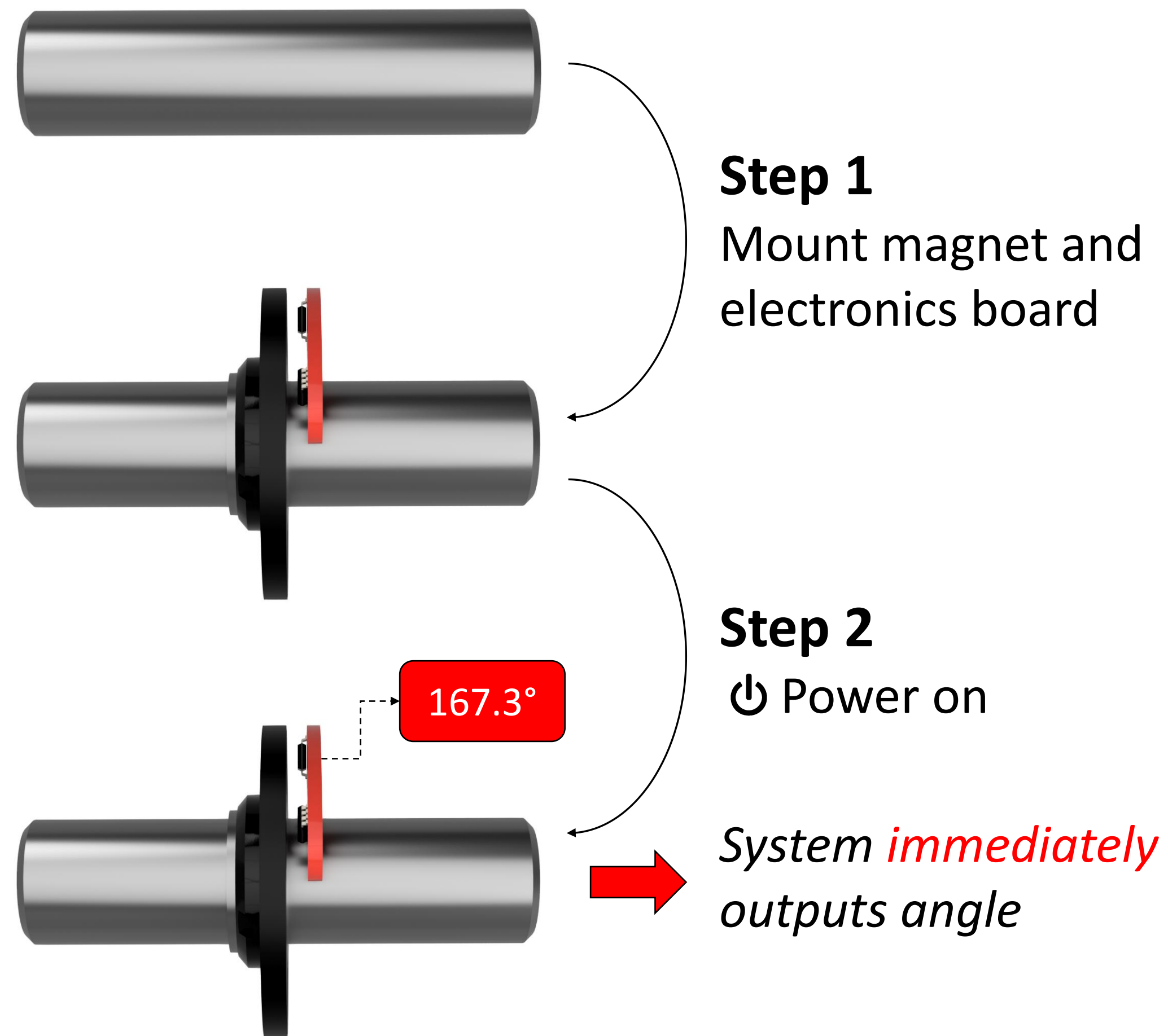
WO2022152996
WO2024110102



These **multi-periodic** signals enables angular detection on different scales simultaneously:

Global position = angle on complete mechanical turn + **Local position** = angle on fine magnetic increment
 ↳ absolute position ↳ high accuracy

— No Calibration Required. No Reference Turn, No Homing. Redefining **Simplicity** in Encoder Technology.

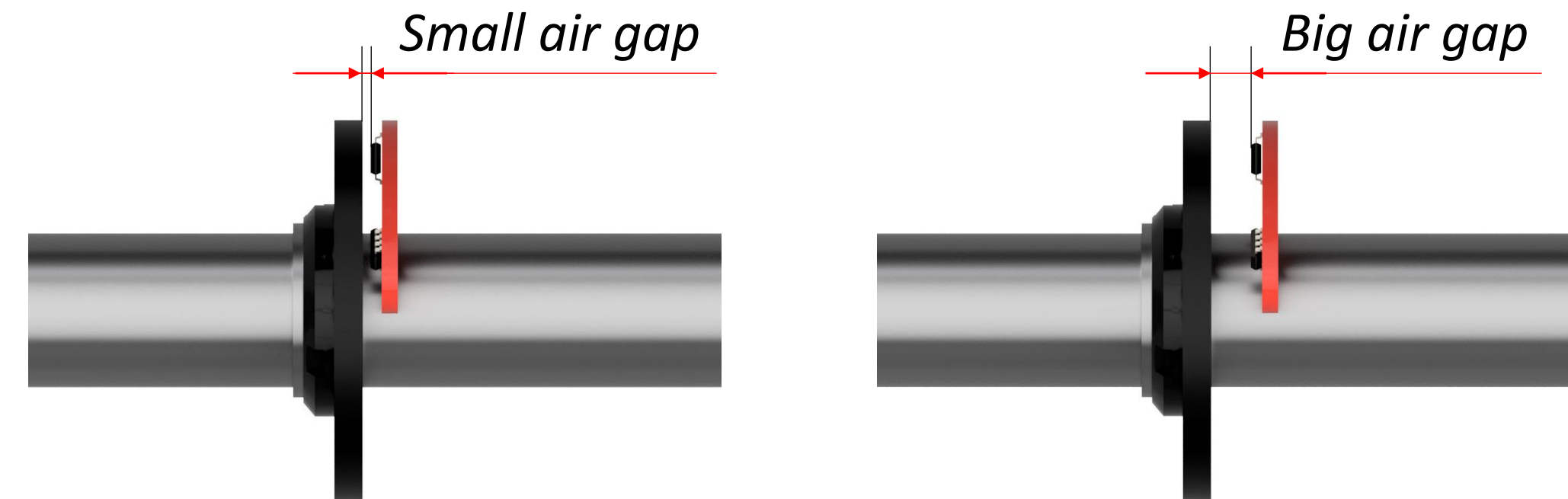


Engineered to **Tolerate Misalignment.** Even During Operation.

Air gap

- ✓ **Big air gaps** up to 5 mm
- ✓ Air gap **variation** of ± 1 mm

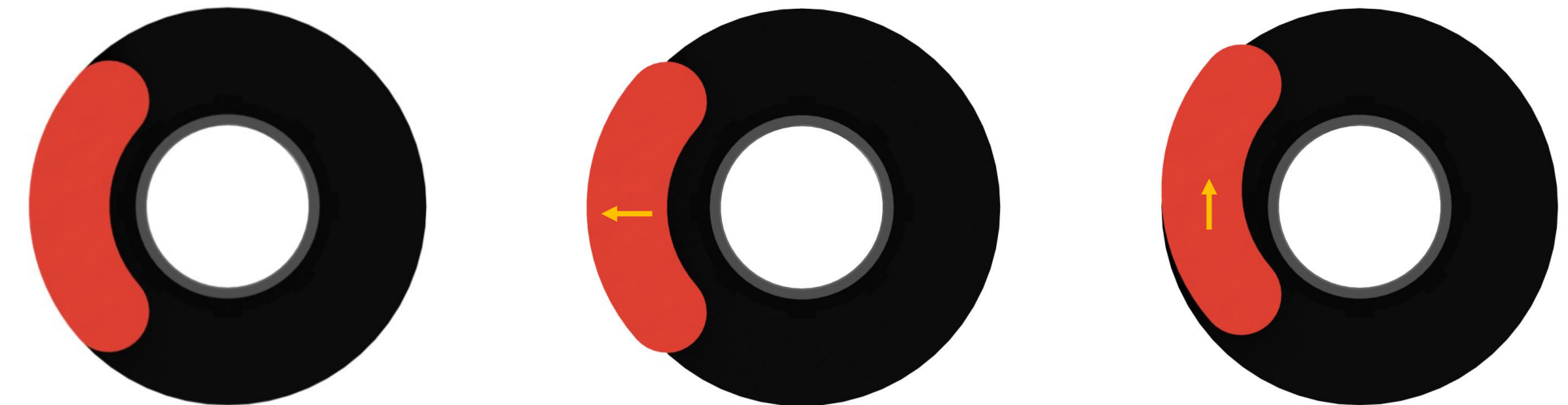
[Link to video: Air gap variation](#)



Misalignment shaft / electronics

- ✓ **Misalignment** of ± 0.5 mm does not increase error

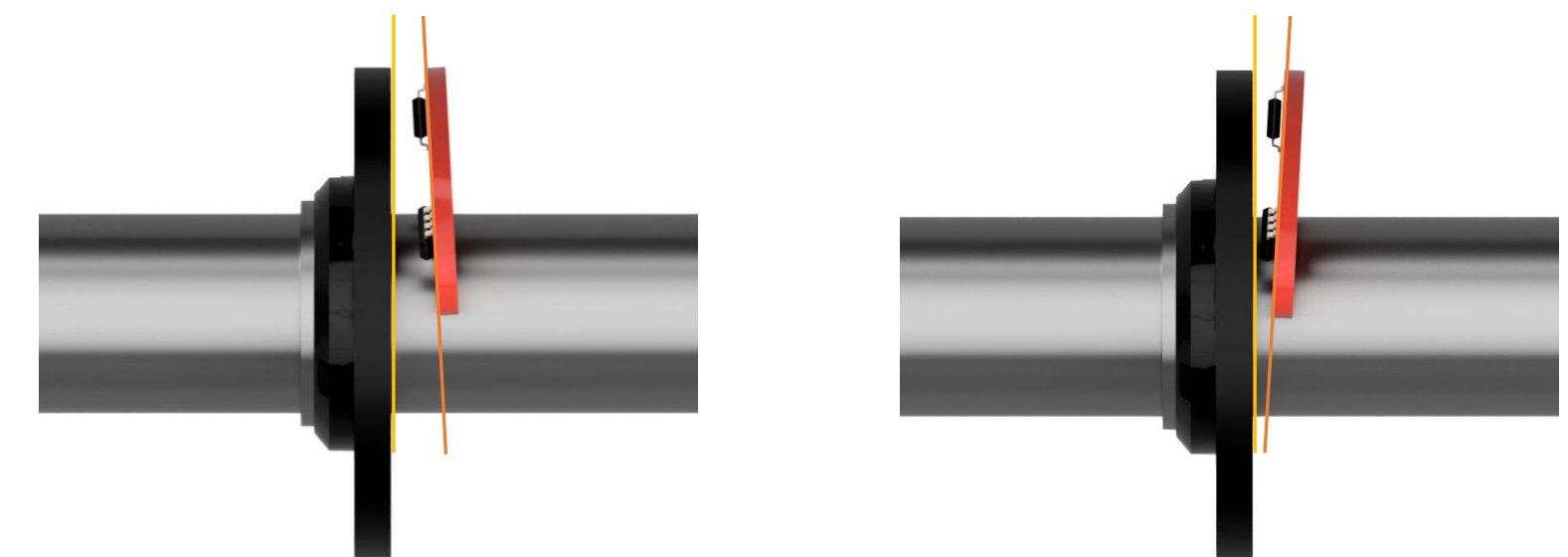
[Link to video: Misalignment / eccentricity](#)



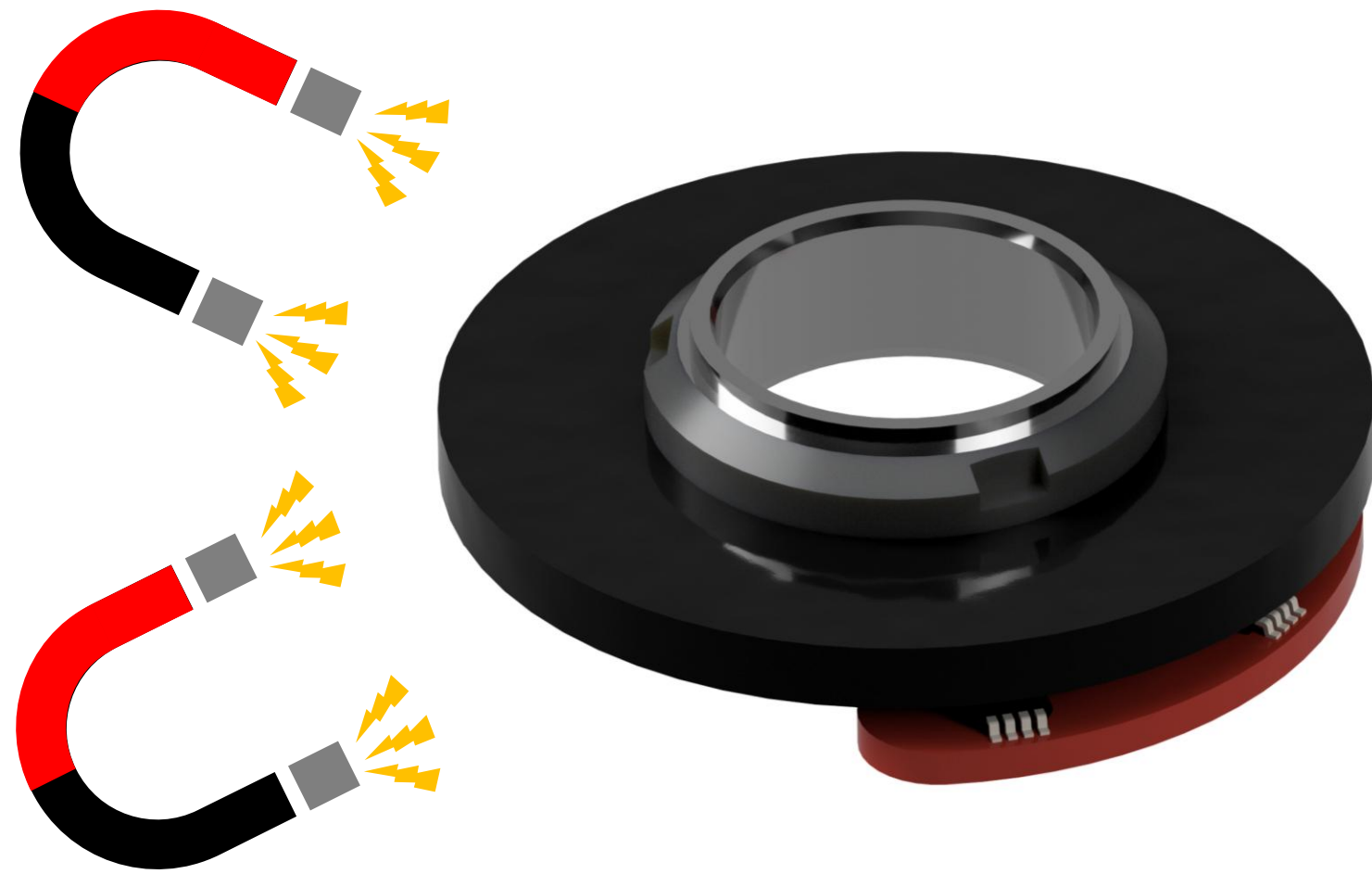
Stable even with extreme combined misalignments

- ✓ **Combinations of mechanical alignments** (air gap, tilt, eccentricity) can be handled without substantial error increase

[Link to Video: Worst case mechanical misalignment](#)



— Built to Resist Magnetic Interference.



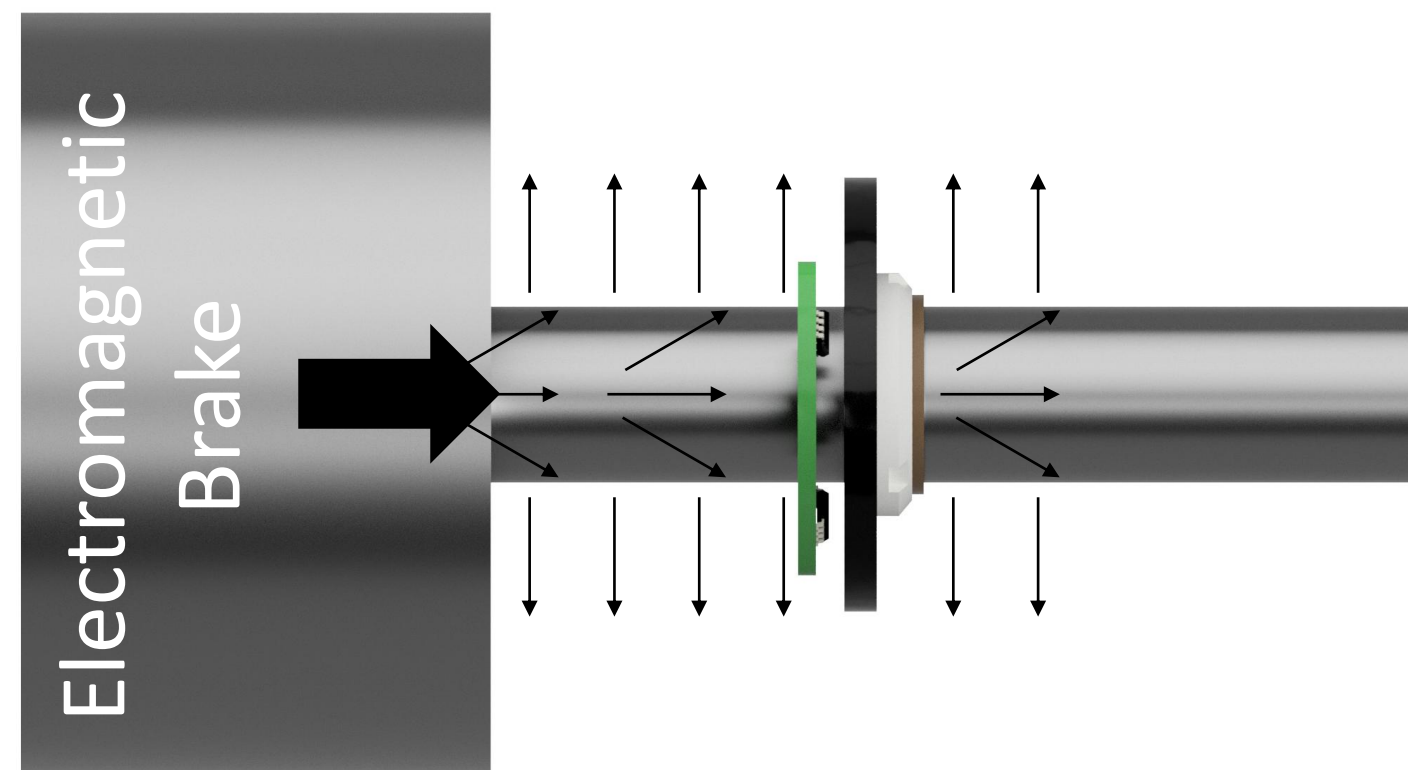
Magnetic stray-fields influencing AM Encoder

[Link to video:](#)
[Stray field immunity](#)
(using 8-times max. ISO norm stray-field)



External stray-fields hardly influence encoder performance

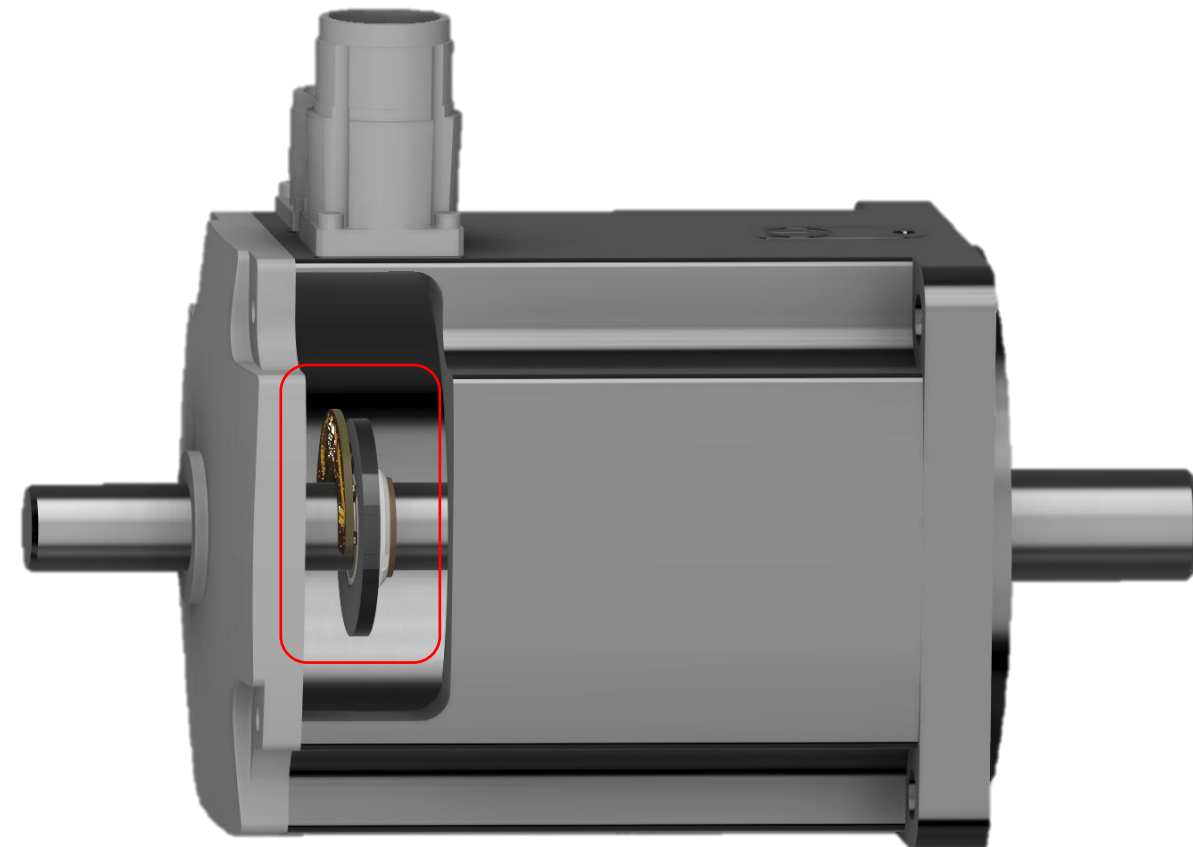
- ✓ Robust against **static and dynamic** stray-fields
- ✓ Operates with stray-fields from **any direction**
- ✓ **No shielding** necessary
- ✓ Usage with **electromagnetic brakes** possible



Stray-fields through ferromagnetic shaft

[Link to video:](#)
[Electromagnetic brake](#)

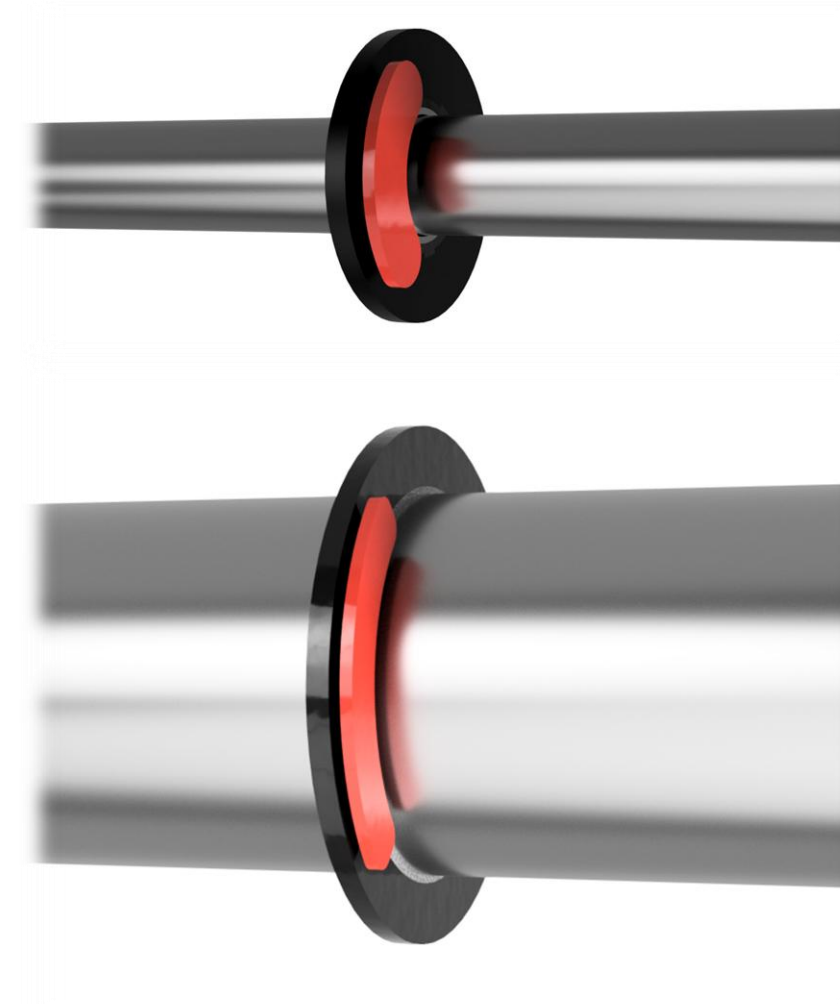
—— **Tailor-Made** for Your Application. Designed for Your Needs.



System integration

Save space where it is most needed.

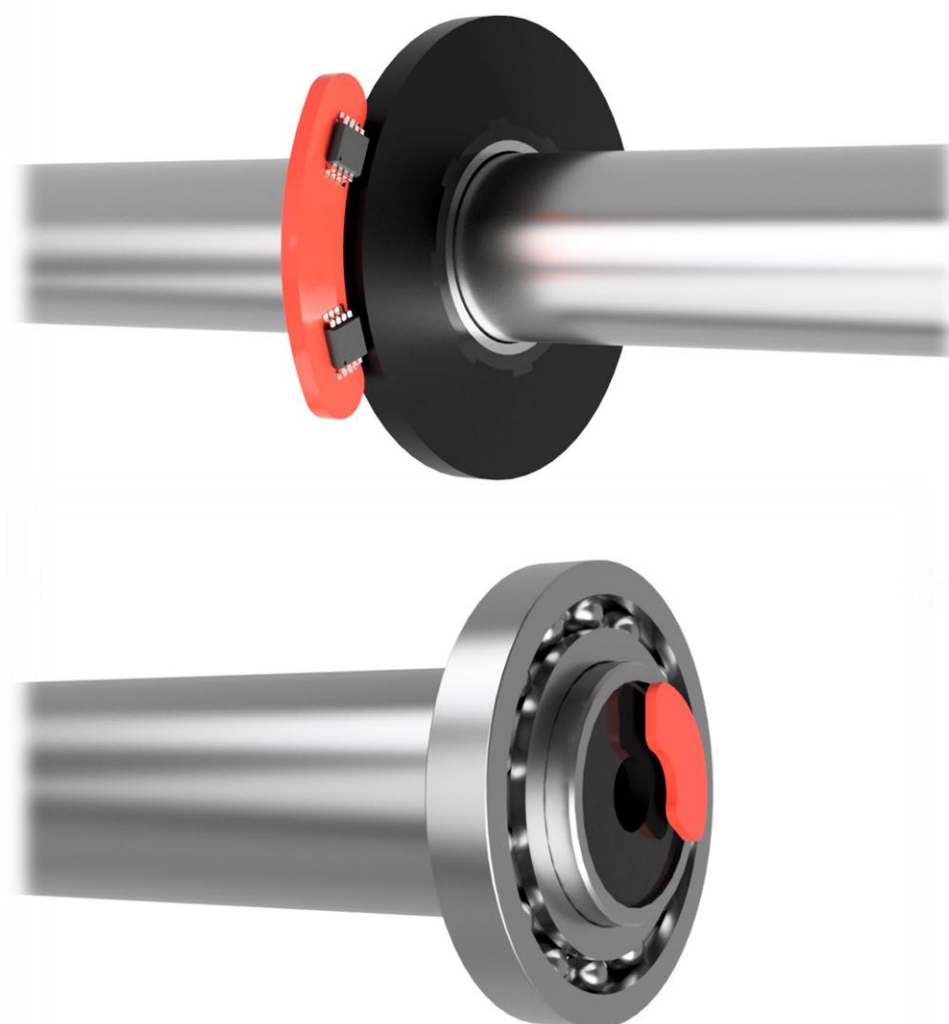
Compact design utilizing synergies of your assembly (no additional bearings, housing etc.)



Customizable size

AM Technology can be adapted to a **wide range of shaft diameters**.

- ✓ **Small shafts** from 4 mm
- ✓ **Big shafts** up to 160 mm



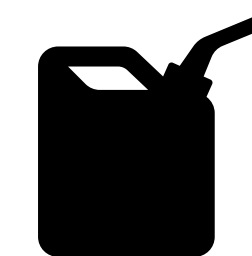
Design **flexibility**

Axial or radial design.

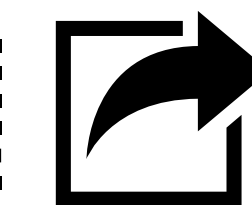
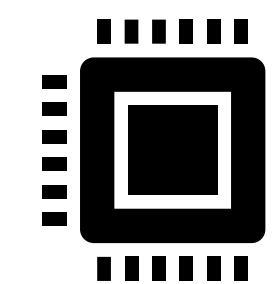
No need to sacrifice shaft end for position sensing.

Integration into hollow shaft possible.

*Temperature
& Environment*



Output Interface

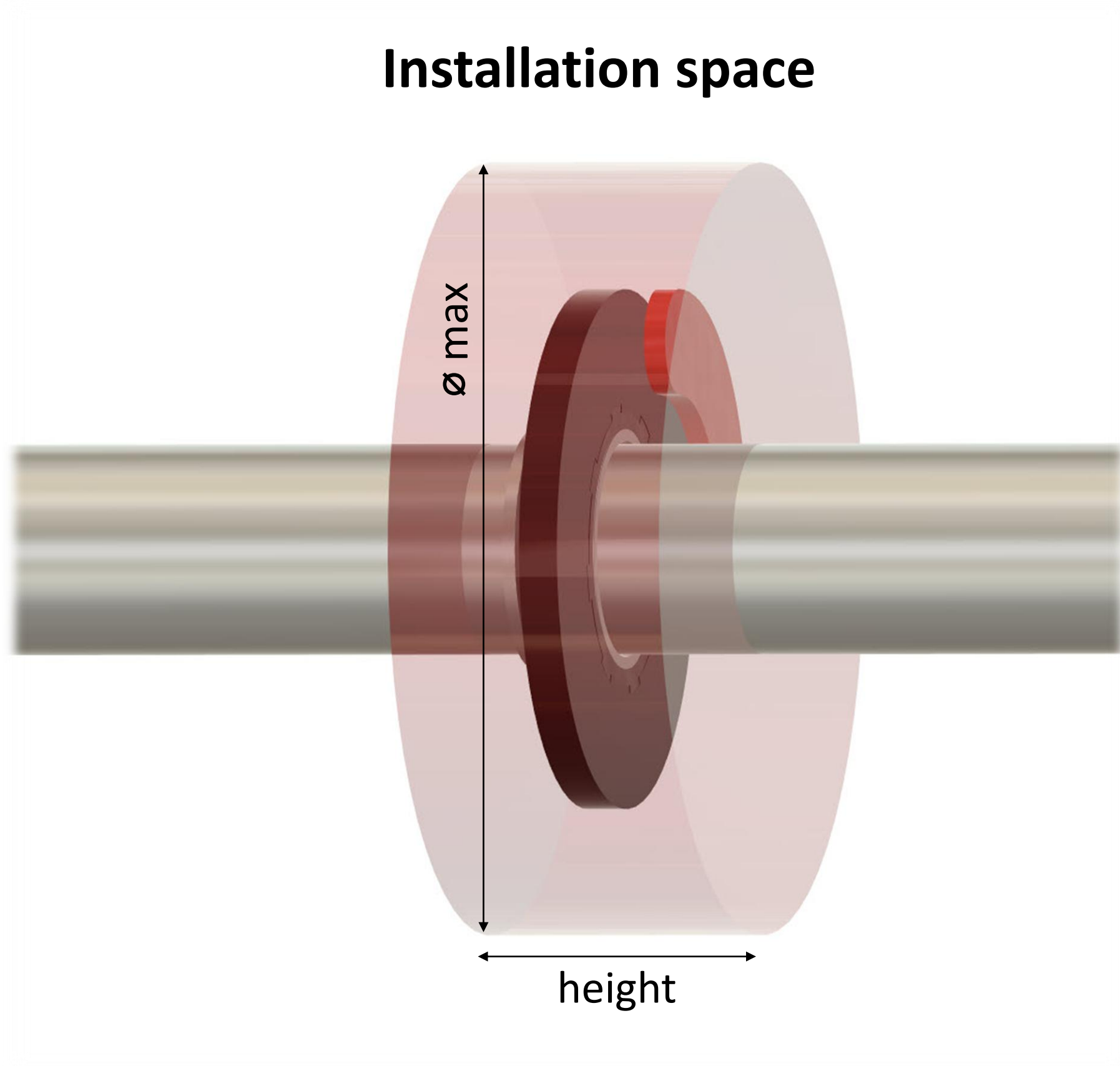


Adaption to your special requirements

Magnet materials can be made **waterproof** and **oil resistant**.

A wide range of **output interfaces** available.

Let Us Have **Your Specifications.**



Property	Your specification
<i>Installation space</i>	CAD model, drawings
<i>Accuracy</i>	Desired, must-have
<i>Max speed</i>	Continuous, peak
<i>Operating temperature</i>	Min, max temperature
<i>Relative movement</i>	Thermal expansion, tolerances
<i>Output signal</i>	ABI, SPI, SSI, fieldbus etc.
<i>Environment</i>	Stray-field, humidity etc.

Initial feedback can be provided with this information.

— Contact Us.

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And test our technology with
the **AM Evaluation Kit**