

AksIM-4 Dual Concentric

Off-axis Rotary Absolute Magnetic Encoder

2 in 1

POSITION
FEEDBACK

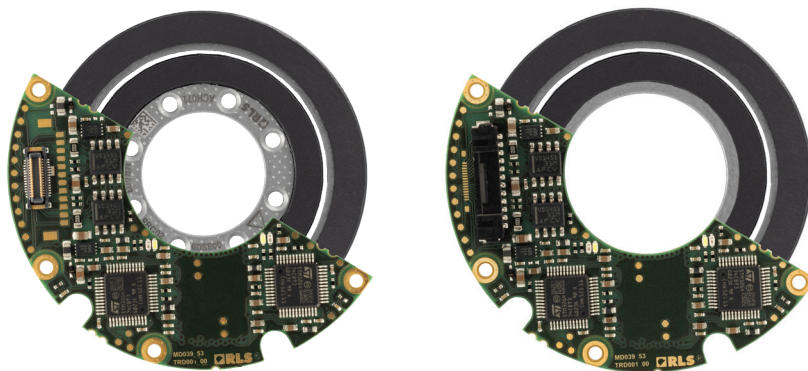


HIGH ACCURACY
& REPEATABILITY



IDEAL FOR
HUMANOIDS

The AksIM-4 dual concentric high-performance encoder integrates two non-contact, absolute rotary sensors in a single device. This innovative solution provides simultaneous motor and reducer position feedback in a robot joint, for exceptionally smooth, synchronised and accurate motion control. Its compact, space-saving design, makes it perfect for advanced robotics and other applications where installation space is limited – without sacrificing accuracy, reliability, or performance.



NEW

Why choose AksIM-4™ Dual Concentric?

FEATURES:

- ✓ Two-in-one encoder solution
- ✓ Ultra-compact, low-profile design
- ✓ Locking & board-to-board connector options
- ✓ Multiturn counter option
- ✓ Immunity to external magnetic fields

BENEFITS:

- ✓ Saves space
- ✓ Reduces complexity in robotic joints
- ✓ Immediate feedback at power-up
- ✓ Reliable performance in demanding environments



HUMANOID
ROBOTS



COLLABORATIVE &
INDUSTRIAL ROBOTS



SURGICAL
ROBOTS



AVIATION



EXOSKELETONS

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AksIM-4 Dual Concentric technical specifications

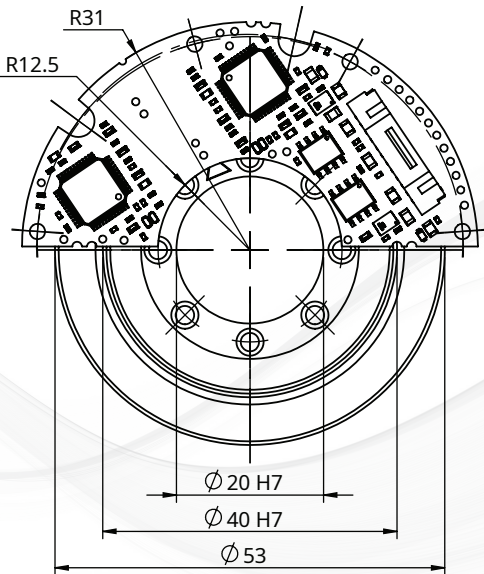
SYSTEM DATA	
Reading type	Axial reading
Resolution	Input encoder: 19 bit; Output encoder: 19 bit
Maximum speed	7,500 rpm
Repeatability	Within the range of position noise
System accuracy	Input encoder: $\pm 0.006^\circ$ / ± 22 arcsec; Output encoder: $\pm 0.012^\circ$ / ± 44 arcsec
ELECTRICAL DATA	
Supply voltage	4.5 V to 5.5 V at the connector
MECHANICAL DATA	
Ring material type	EN 1.4016 / AISI430 with glued CPE rubber filled with ferrite particles
ENVIRONMENTAL DATA	
Operating and storage temperature	-40°C to $+105^\circ\text{C}$

AksIM-4 Dual Concentric dimensions

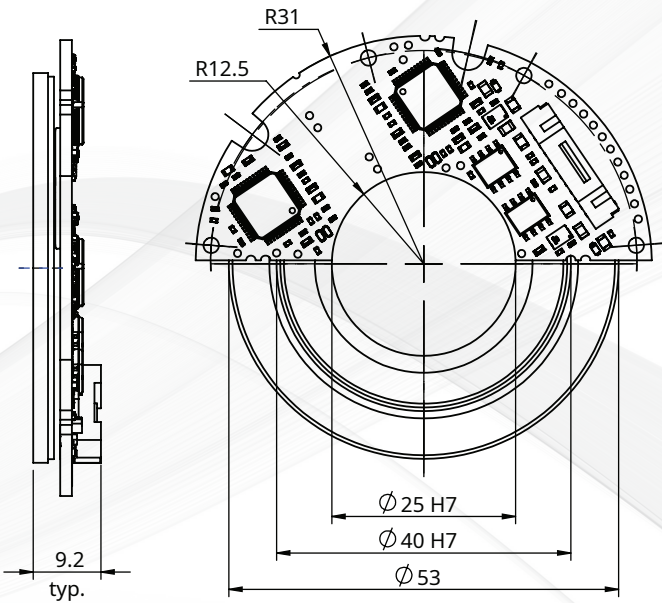
Dimensions and tolerances are in mm. Dimensions without tolerance values are in accordance with ISO 2768-m.



Inner ring installation with fasteners



Inner ring installation with adhesive



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