

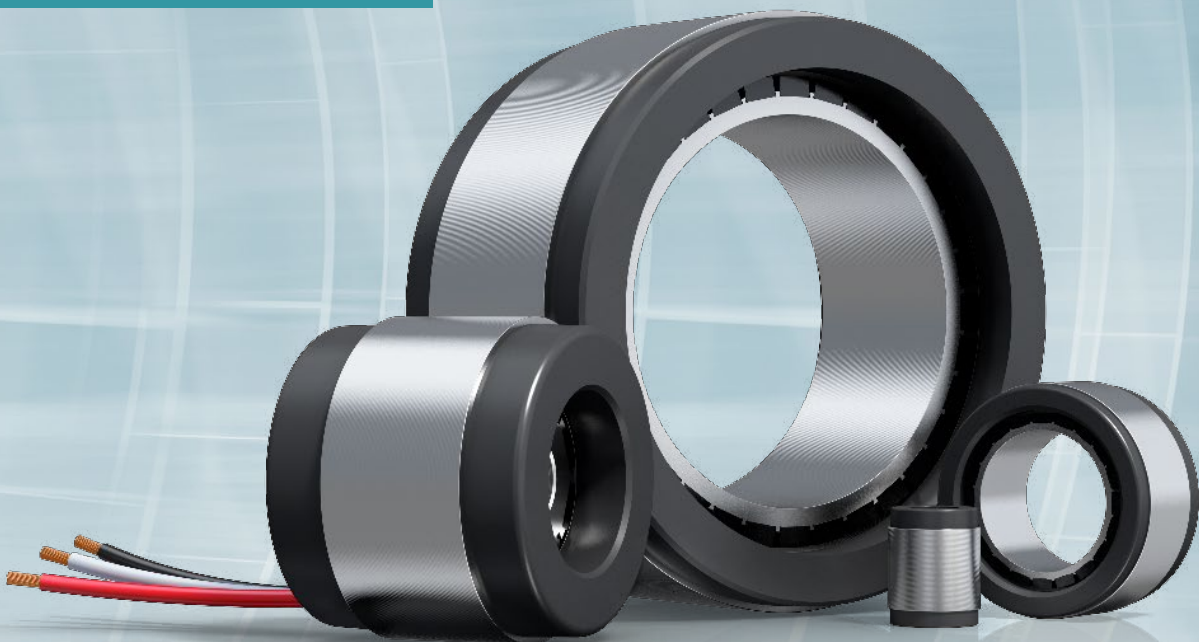


WITTENSTEIN

cyber motor

cyber[®] kit motors Frameless servo motors

compact
dynamic
highly integrable



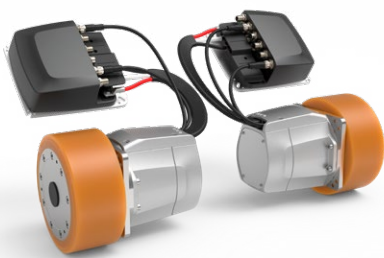
WITTENSTEIN cyber motor sets international benchmarks in mechatronic drive technology

MADE IN GERMANY

EVERYTHING FROM A SINGLE SOURCE

- > DEVELOPMENT
- > PRODUCTION
- > SALES & SERVICE

► BROAD MOTOR BASE AS A STARTING POINT FOR CUSTOMIZED SOLUTIONS



MECHATRONIC SYSTEM SOLUTIONS

We combine expertise from the following areas:

- Servo motors (rotary & linear)
- Servo actuators (linear & rotary)
- Drive electronics
- Sensors
- Software

Testing, approval and certification

Our products can be certified according to:



From industrial applications to extreme environmental conditions

- Industrial environment
- High and low temperatures
- Vacuum
- Clean room
- Food industry
- Potentially explosive atmospheres
- Radiation

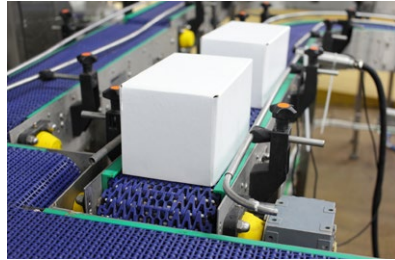


Applications for frameless servo motors

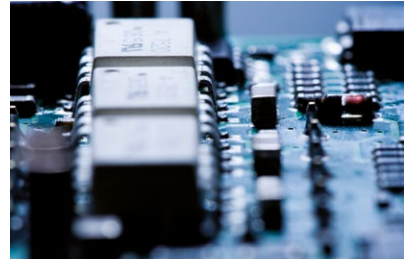
Measurement and testing technology



Electr. automation and drive technology



Semiconductor and electronics production



Assembly and production machines



Robotics and handling



Food and packaging



Benefits of frameless servo motors

Compact design

- Maximum torque density
- Power density up to 10 kW/kg
- Low axial length due to minimized height of winding head

Efficiency

- Low power losses
- Low mass inertia
- Increased heat dissipation

Flexibility

- Stator diameters from 19 mm to 440 mm
- Voltages up to 750V_{DC} possible
- Power & torque-optimized versions



Suitable for integration

- Support with integration (magnet retaining sleeve, insertion fixture)
- Customer-specific interfaces (mounting pattern, motor shaft, etc.)
- Expansion of the scope of delivery to provide a ready-to-install system

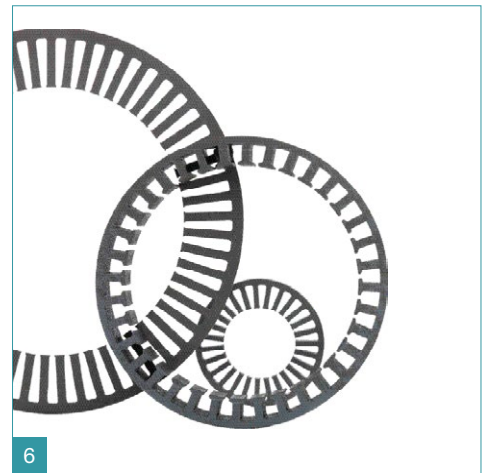
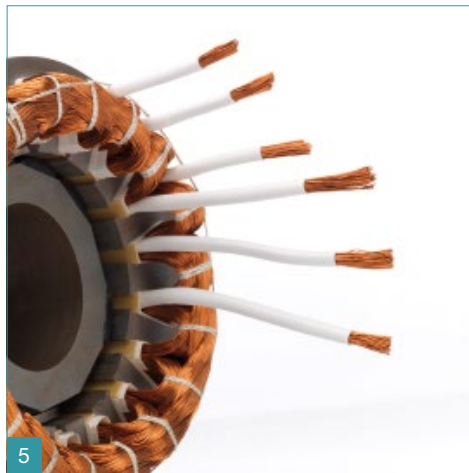
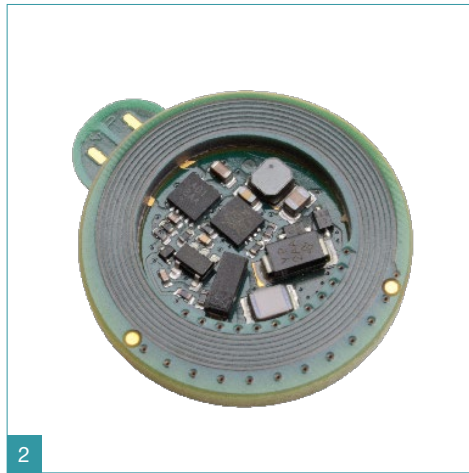
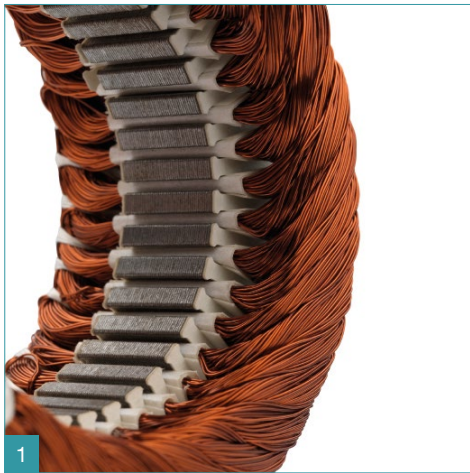
Precision

- Optimized synchronization characteristics
- Low torque ripple
- Minimal cogging torque

Robustness

- Potted stators
- Test bench for frameless motors
- Extended and customized testing

Options



Wide range of motor products for individual solutions

1) WINDING

Winding is adapted to achieve the required speed, torque, voltage or current input.

2) SENSORS

Optionally available with integrated sensors, e.g. temperature sensor, Hall sensor, etc.

3) INTERFACES

Individual mechanical adjustments to rotor and stator to ensure optimum integration in customer application.

4) COOLING

Standard: Convection cooled
Optional: Liquid cooling

5) CABLE OUTLET

Standard: Axial
Optional: Individual outlet direction (radial)

6) INDIVIDUAL LAMINATED CORES

Customer-specific lamination design

Integration in the overall system

INCREASE THE DEGREES OF FREEDOM IN YOUR DESIGN

Maximum efficiency and superior performance data in a limited space are typical requirements for frameless motors. We can help you achieve ideal integration in your system. We can modify the interface and/or scope of delivery to ensure reliable and cost-effective installation.

YOUR OPTIONS

We simplify and speed up integration in your application.

Support with integration

We take on subsequent production steps

Help with integration

WITTENSTEIN provides insertion devices and training courses (e.g. magnetic bonding, shrink fitting)



Assembly at

- Customer -

Technical support by WITTENSTEIN

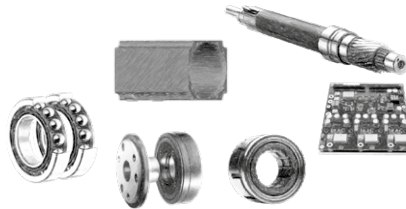


Independent integration with technical support

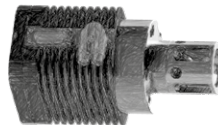
cyber® kit motor



Extendible scope of delivery



Individualized assembly / application



We perform integration

WITTENSTEIN deals with the parts provided and assembles them to produce ready-to-install assemblies



Assembly at

- WITTENSTEIN -

You provide the individual components



Delivery of a ready-to-install system

Your advantages if we help with integration

- We minimize your risks by providing expert support
- You increase your internal added value
- We share our development & production expertise with you

Your advantages if we take on subsequent production steps

- You benefit from our experience in development & assembly
- Ideal level of integration reduces your costs
- Delivery of a ready-to-install assembly simplifies integration in your system



cyber motor

WITTENSTEIN cyber motor GmbH · Walter-Wittenstein-Straße 1 · 97999 Igersheim · Germany
Tel. +49 7931 493-15800 · info@wittenstein-cyber-motor.de

WITTENSTEIN Inc. · 1249 Humbracht Circle · Bartlett, IL 60103 · USA
Tel. +1 630 540 5300 · info.cyber-motor@wittenstein-us.com

WITTENSTEIN S.P.A. · Via Giosuè Carducci 125 · 20099 Sesto San Giovanni MI · Italy
Tel. +39 02 241357-1 · info@wittenstein.it

WITTENSTEIN Co., Ltd. · 2-6-6 Shibadaimon Minato-ku · 105-0012 Tokyo · Japan
Tel. +81 3 6680 2835 · sales@wittenstein.jp

WITTENSTEIN (Hangzhou) Co., Ltd. · No. 355 Tianmushan West Road · 311122 Hangzhou · China
Tel. +86 571 8869 5852 / 5851 · info@wittenstein.cn

WITTENSTEIN – one with the future

www.wittenstein-cyber-motor.de