



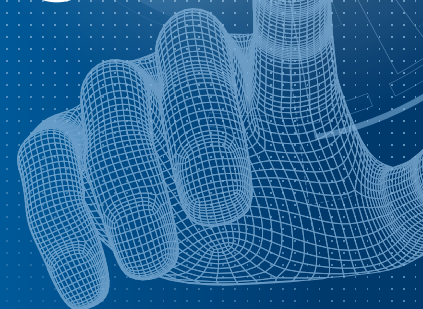
## System Technology for Drive and Automation

The main components and their possible combinations.



**STÖBER**

[www.stober.com](http://www.stober.com)



## STÖBER Virtual Lifetime.

**Condition Monitoring.  
Predictive Maintenance.  
Drive Optimization.**

- Precisely detect drive conditions.
- Without external sensors or additional wiring.
- Act efficiently instead of interpreting.
- Analyze the real load.
- Manage your system sustainably.

**For a long, efficient service life.**

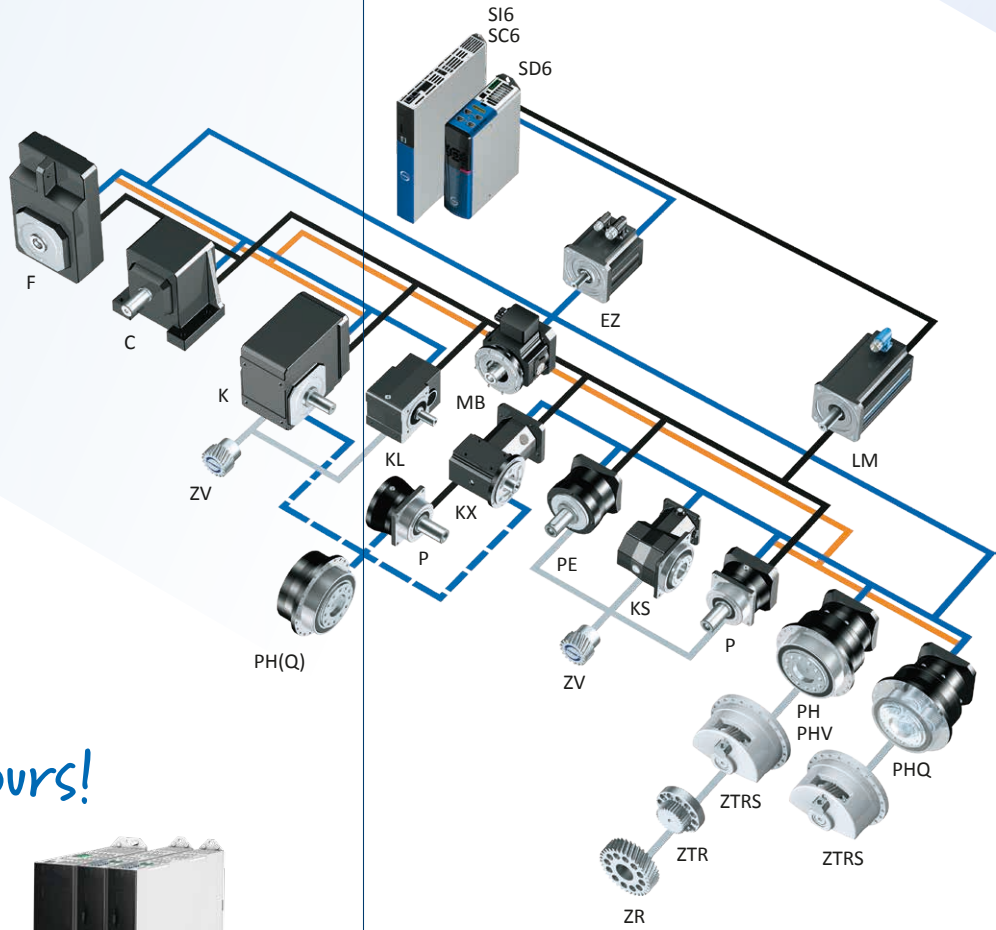
## Everything from a single source.

The STÖBER drive system consisting of gear units, motors, cables and drive controllers has a modular design and is freely scalable – for precise, compact and powerful machine concepts.

**Our experts – for your specific needs!**  
Take advantage of our **cross-industry expertise.**

We're glad to provide you support for your specific application!

With our intuitive **product configurator**, you can easily filter, compare, save, and share suitable drive solutions.



*Make it yours!*

[configurator.stober.com](http://configurator.stober.com)



**„Versatile products, countless possibilities. Your perfect motion is what drives us!“**

– Markus Graf,  
Chief Sales Officer, STÖBER.

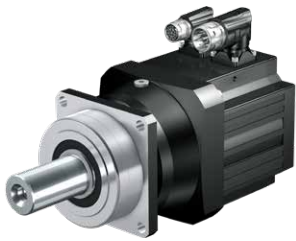
## One partner. All the possibilities.



„Together with our customers, we achieve perfect motion in a wide variety of applications with our precisely coordinated system.

Whenever precision, dynamics and quality are required, we are at your side as a reliable partner.“

– Rainer Wegener,  
Chief Executive Officer, STÖBER.



### P Planetary Geared Motor

Acceleration torque: 10 – 3450 Nm

Backlash: 1 – 8 arcmin

For high precision and smooth operation.



### PH, PHQ, PHV Planetary Geared Motors

Acceleration torque: 24 – 22000 Nm

Backlash: 1 – 4 arcmin

Quattro power for maximum power density.



### PE Planetary Geared Motor

Acceleration torque: 5.7 – 250 Nm

Backlash: 8 – 13 arcmin

The helical economy variant.

## Low-backlash planetary gear units.

For  $\mu\text{m}$ -precise positioning and maximum torsional stiffness. The excellent housing and gearing quality ensures high acceleration torques and also the highest running accuracy. All planetary gear units and right-angle planetary gear units can be combined with motors of the EZ and LM series.

## Need special solutions?

Numerous one-of-a-kind product highlights and project-related adjustments make it possible. With a holistic approach to your specific task, we work together on individualized solutions that are optimally coordinated to your requirements. Dedicated and solution-oriented in the support of your visions and projects.

Contact us: +49 7231 582-3060 | [systemsupport@stoerber.de](mailto:systemsupport@stoerber.de)



### PHKX, PHK, PHQK Right-Angle Planetary Geared Motors

Acceleration torque: 26 – 43000 Nm

Backlash: 1 – 6 arcmin

Quattro power for small installation spaces.



### PKX, PK Right-Angle Planetary Geared Motors

Acceleration torque: 11 – 3300 Nm

Backlash: 1.5 – 8.5 arcmin

High precision for small installation spaces.



### KS Helical Bevel Geared Motor

Acceleration torque: 27 – 400 Nm

Backlash: 4 – 6 arcmin

Strong. Stable. With highest possible power density.

## Compact geared motors that are directly attached.

Save costs and benefit from a lower mass inertia, higher dynamics and increased efficiency at the same time.

**Gear Units**  
**Geared Motors**  
**Motors**  
**Cables and Drive Controllers**



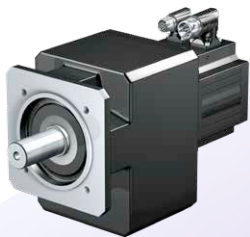
**KL Helical Bevel Geared Motor**

Acceleration torque: 10 – 65 Nm  
 Backlash: 16 – 25 arcmin  
**Elegant. Dynamic.**  
**Completely without offset.**



**K Helical Bevel Geared Motor**

Acceleration torque: 23 – 13200 Nm  
 Backlash: 1.5 – 12 arcmin  
**Versatile. Compact. For exceptional backlash stability.**



**C Helical Geared Motor**

Acceleration torque: 9.7 – 6500 Nm  
 Backlash: 10 – 20 arcmin  
**The classic with helical gearing.**



**F Offset Helical Geared Motor**

Acceleration torque: 21 – 1100 Nm  
 Backlash: 5 – 11 arcmin  
**High positioning accuracy and backlash stability.**



**ZTRSPH, ZTRSPHQ, ZTRSPHV Rack and Pinion Drives with Synchronous Servo Motors**

Module: 2 – 8 mm  
 Feed force: 2.8 – 124 kN  
 Feed velocity: 0.09 – 4 m/s  
**High force for maximum power density.**



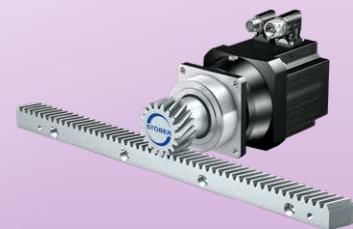
**ZTRPH, ZTRPHV Rack and Pinion Drives with Synchronous Servo Motors**

Module: 2 – 6 mm  
 Feed force: 1.9 – 67 kN  
 Feed velocity: 0.11 – 4 m/s  
**High performance for demanding drive concepts.**



**ZVKS Rack and Pinion Drive with Synchronous Servo Motor**

Module: 2 – 4 mm  
 Feed force: 1.3 – 11 kN,  
 Feed velocity: 0.08 – 3 m/s  
**High flexibility for automation and robotics.**



**ZVP Rack and Pinion Drive with Synchronous Servo Motor**

Module: 2 – 4 mm  
 Feed force: 0.8 – 11 kN,  
 Feed velocity: 0.08 – 4.5 m/s  
**High precision for typical servo applications.**

**Rack and pinion drives with synchronous servo motors.**

Featuring the highest gearing quality and power density for designing precise and dynamic machines.

All pinion designs are available in combination with STÖBER planetary gear units, and the ZV series can also come with helical bevel gear units. Benefit from extremely compact, highly dynamic drive solutions.



## High-performance drive controllers.

Tailor-made for any kind of drive task and with multiple certified safety functions – for the reliable protection of operator and machine.



### SD6 Drive Controller

Powerful stand-alone drive controller. Optimized for drive-based applications in synchronous operation with up to 8 axes. Nominal output current: up to 85 A  
**The high-performer for customized solutions.**



### S16 Drive Controller

Compact drive controller for controller-based multi-axis applications. Connected to a central supply module – no need for additional wiring for each individual axis. Nominal output current: up to 50 A  
**The slim one for multi-axis drive systems.**



### SC6 Drive Controller

Stand-alone drive controller with integrated power supply. Optimized for 2 to 4 axes. Nominal output current: up to 19 A  
**The innovative one for economical application concepts.**



### EZ Synchronous Servo Motor

Highest volume output. High torque. High dynamics.  
 Stall torque: 0.44 – 94 Nm  
**The extremely compact, highly dynamic powerhouse.**



### EZ synchronous servo motor with OCS

The EZ motor in combination with the new STOBER hybrid cable. Reliably connects the motor and drive controller up to 100 meters. For maximum transmission quality.  
**With future-proof HEIDENHAIN EnDat® 3.**

## Bridge the Gap.

The encoderless Lean motor is a compact solution that is lighter, smaller and – with IE5 classification – more energy-efficient than an asynchronous motor while delivering the same power. And it is also cheaper and more rugged than a standard synchronous servo motor.



### LM Lean Motor

Synchronous drive without encoder with only one standard power cable. Fanless. Speed deviation: < 1%,  $\eta$ : up to 96%, Positioning accuracy:  $\pm 1^\circ$ , Stall torque: 2.43– 29.8 Nm  
**Compact. Rugged. Strong. The new motor class.**

## Industrial communication? We speak your language.

Rely on both our mechatronics expertise and the openness of our systems.

We offer interfaces for the connection of fieldbuses such as EtherCAT® and PROFINET®. This naturally includes the associated FSoE® and PROFIsafe® safety protocols.

Safety over  
**EtherCAT®**

**EtherCAT®**

**PROFI  
NET**



## At home in the world of demanding motion.

STOBER has developed and produced excellent drive technology since 1934 and is active internationally with around 1,000 employees at 11 locations.

We put ideas in motion with passion and a great deal of dedication. In doing so, we draw on a broad range of various products. Benefit from precise, practical system solutions with uncompromising quality and expert individual consultation.

With STOBER, you gain a partner who helps you achieve your goals:

- Cost-effectiveness and productivity.
- Energy efficiency and sustainability.
- Flexibility in design.
- Reduced manufacturing costs.
- Standard-compliant machine safety.
- Fail-safe operation and consistent machine availability.



### Service Network

You can rely on our strong partners when it comes to service. They guide you through commissioning, are available on-site in case of faults and offer expert technical advice.

Service Hotline  
**+49 7231 582-3000**

Our service hotline is available around the clock. Instructions for immediate actions can often be given by telephone – and if required, we can of course be on site quickly.

### International Service Network

Thanks to our large and long-standing international network, we offer worldwide service and continuous support. In over 40 countries. Put your trust in our expertise.

### STOBER AUSTRIA

www.stober.at  
+43 7613 7600-0  
sales@stober.at

### STOBER CHINA

www.stober.cn  
+86 512 5320 8850  
sales@stober.cn

### STOBER FRANCE

www.stober.fr  
+33 478 98 91 80  
sales@stober.fr

### STOBER GERMANY

www.stober.de  
+49 7231 582-0  
sales@stober.de

### STOBER ITALY

www.stober.it  
+39 02 93909570  
sales@stober.it

### STOBER JAPAN

www.stober.co.jp  
+81-3-5875-7583  
sales@stober.co.jp

### STOBER SWITZERLAND

www.stober.ch  
+41 56 496 9650  
sales@stober.ch

### STOBER TAIWAN

www.stober.tw  
+886 4 2358 6089  
sales@stober.tw

### STOBER TURKEY

www.stober.com  
+90 216 510 2290  
sales-turkey@stober.com

### STOBER UK

www.stober.co.uk  
+44 1543 458 858  
sales@stober.co.uk

### STOBER USA

www.stober.com  
+1 606 759 5090  
sales@stober.com