System Technology for Drive and Automation

The most important components and their possible combinations

STÖBER

MORE THAN JUST A GEARBOX
Planetary gear units from STOBER

High-performance. Precise. Perfect fit.

Planetary gear units from STOBER.

- The most compact planetary geared motors on the market.
- Superior precision and performance.
- Exceptional variety of combinations and options.
- Extreme ruggedness.
- Ready-to-install drive solutions for machine tools and packaging machines as well as applications in automation and robotics.

Make it yours!

configurator.stober.com

Excellent Drive Technology for Automation, Systems and Machines

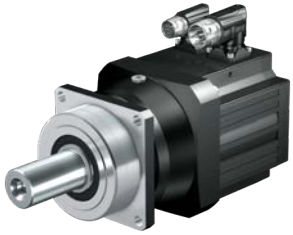
STOBER offers a wide range of product variants with a focus on the details to allow a perfect configuration for any actuator system. And that means no compromises! Excellent technical solutions without unnecessary costs.

STOBER Controller

MC6 Motion Controller
Scalable computing power in the system.
It is possible to execute everything from simple synchronous applications to a multi-axis CNC machine.
With CODESYS SoftMotion or CODESYS SoftMotion CNC.

Synchronous Servo Geared Motors

PH, PHQ Planetary Geared Motor
PH acceleration torque: 19 – 7500 Nm
PHQ acceleration torque: 45 – 22000 Nm
PH, PHQ backlash: ≤ 1 – 4 arcmin
The ultimate – quattro - servodrive



P Planetary Geared Motor
P acceleration torque: 11 – 3450 Nm
P backlash: ≤ 1 – 8 arcmin
Precision for high positioning accuracy

PE Planetary Geared Motor
Acceleration torque: 11 – 310 Nm
Backlash: ≤ 8 – 10 arcmin
Standard helical geared motor

C Helical Geared Motor
Acceleration torque: 9.7 – 6500 Nm
Backlash: ≤ 10 – 20 arcmin
Compact helical geared motor

PH(Q)K, PHKX
Right-Angle Planetary Geared Motor
PHK acceleration torque: 89 – 7500 Nm
PHQK acceleration torque: 123 – 43000 Nm
PHKX acceleration torque: 24 – 2300 Nm
PHK backlash: ≤ 1.5 – 4.5 arcmin
PHQK backlash: ≤ 1.5 – 4 arcmin
PHKX backlash: ≤ 1 – 6 arcmin
Huge potential with low backlash

KS Right-Angle Servo Geared Motor
Acceleration torque: 27 – 400 Nm
Backlash: ≤ 4 – 6 arcmin
The drive typefor high demands

PK, PKX Right-Angle Planetary Geared Motor
PK acceleration torque: 68 – 3105 Nm
PKX acceleration torque: 11 – 2000 Nm
PK backlash: ≤ 1.5 – 5 arcmin
PKX backlash: ≤ 2 – 8.5 arcmin
Large transmission-ratio range

KL Helical Bevel Geared Motor
Acceleration torque: 11 – 65 Nm
Backlash: ≤ 16 – 25 arcmin
Super compact drive solution for small servo drives

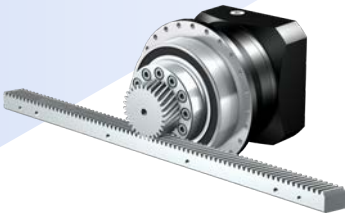
STOBER
Power Electronics

SD6 Drive Controller
Powerful stand-alone drive controller that can be custom configured. Optimized for drive-based applications in synchronous operation with up to 8 axes. Available as a single-axis controller in four sizes with a nominal output current up to 85 A.

SI6 Drive Controller (Multi-Axis Drive System)
Compact drive controller for drive control in a multi-axis drive system. Optimized for controller-based multi-axis applications > 4 axes. Available in four sizes (as single or double-axis controller) with a nominal output current up to 50 A.

Rack and Pinion Drives

F Offset Helical Geared Motor
Acceleration torque: 21 – 1,100 Nm
Backlash: ≤ 5 – 11 arcmin
Servo axis with parallel offset



ZTRPH, ZTRPHV Rack and Pinion Drive
Module: 2 – 8
Feed force: 5.8 – 67 kN
Feed velocity: up to 4.7 m/s
Helical gearing

K Helical Bevel Geared Motor
Acceleration torque: 23 – 13200 Nm
Backlash: ≤ 1.5 – 12 arcmin
Versatile with flange, solid or hollow shaft

ZTRSPH, ZTRSPHQ, ZTRSPHV Rack and Pinion Drive
Module: 2 – 10, Feed force: 16 – 159 kN,
Feed velocity: up to 4.7 m/s
Highest power density thanks to a supporting bearing holder

ZVKS Rack and Pinion Drive
Module: 2 – 4
Feed force: 4.2 – 12 kN
Feed velocity: 0.07 – 3 m/s
Compact, no offset

ZVP Rack and Pinion Drive
Module: 2 – 4
Feed force: 2 – 15 kN,
Feed velocity: 0.14 – 5.3 m/s
Precision for typical servo applications

Motors

EZS Synchronous Servo Motor for Screw Drives
Direct drive of the threaded spindle motor.
Shaft as a blind hole hollow shaft.
Axial forces (convection cooling): 760 – 31271 N
For high axial forces

EZM Synchronous Servo Motor for Screw Drives
Direct drive of the threaded nut.
Axial forces (convection cooling): 751 – 21375 N
For spindle rods of any length

SC6 Drive Controller
Compact stand-alone drive controller for sensorless control of STOBER LeanMotors of the LM series. Optimized for drive-based applications with 2 to 4 axes. Available in three sizes (as single or double-axis controller) with a nominal output current up to 19 A.

POSIDYN® SDS 5000 Servo Inverter
Servo inverter with high dynamics for fully digital servo axes. Offers an isochronic system bus (IGB) for communication between up to 32 servo inverters. Available in four sizes with a nominal output current up to 85 A and a power range up to 45 kW.

POSIDRIVE® FDS 5000 Frequency Inverter
The asynchronous servo axis designed for function. Optimized for asynchronous geared motors with practice-oriented functionality. Available in two sizes with a nominal output current up to 16 A and a power range up to 7.5 kW.

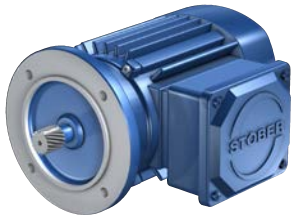
LM LeanMotor
Electric drive without encoder with just one standard power cable. Fanless.
Speed accuracy ± 1 %, η up to 96 %,
Positioning accuracy ± 1 °,
Stall torque: 2.48 – 29.9 Nm
Precise and compact, robust and strong

EZ Synchronous Servo Motor
Highest volume output. High torque. High dynamics.
Stall torque: 1.0 – 66.1 Nm
Extremely compact

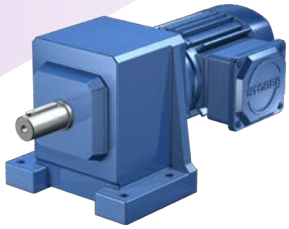
HIPERFACE DSL One Cable Solution (OCS)
High system accuracy with up to 20 bit resolution (single-turn encoder). Electronic nameplate for fast and reliable commissioning.
Multi-turn encoder with 12 bit resolution

EZHD Synchronous Servo Motor with Hollow Shaft
Super compact with extremely high power density.
Stall torque: 2.6 – 31.1 Nm
For high axial forces

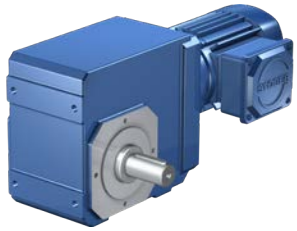
Asynchronous Geared Motors



IE3 Asynchronous Motor
14 selection parameters (standard).
Motor rating: 0.75 – 45 kW
Optional: brake, forced ventilation unit, incremental encoder or multi-turn absolute encoder



C Helical Geared Motor
Motor rating: 0.12 – 45 kW
Backlash: ≤ 10 – 20 arcmin
Versatile thanks to housing variants



K Helical Bevel Geared Motor
Motor rating: 0.12 – 45 kW
Backlash: ≤ 10 – 12 arcmin
Highly rigid geared motor

Applications and Solutions

Every drive solution has its own unique character.

During the design phase, it is helpful to talk to a drive professional with experience implementing similar projects. Ask for a STOBER expert that is well-versed in your industry or who already has experience with your specific situation.

- **Electronic cam disk**
- **Winding**
- **Positioning**
- **Synchronous run**
- **Conveying and moving**
- **CNC**
- **Coordinate transformation**
- **Flying shear**
- **Flying saws**
- **Rotating shear**
- **Pick and place**

The STOBER System

STOBER has its roots in the development and construction of geared motors. For more than 30 years, we have been developing and producing suitable drive controllers for these applications. Connected through plug and play, these STOBER components form reliable drive systems.

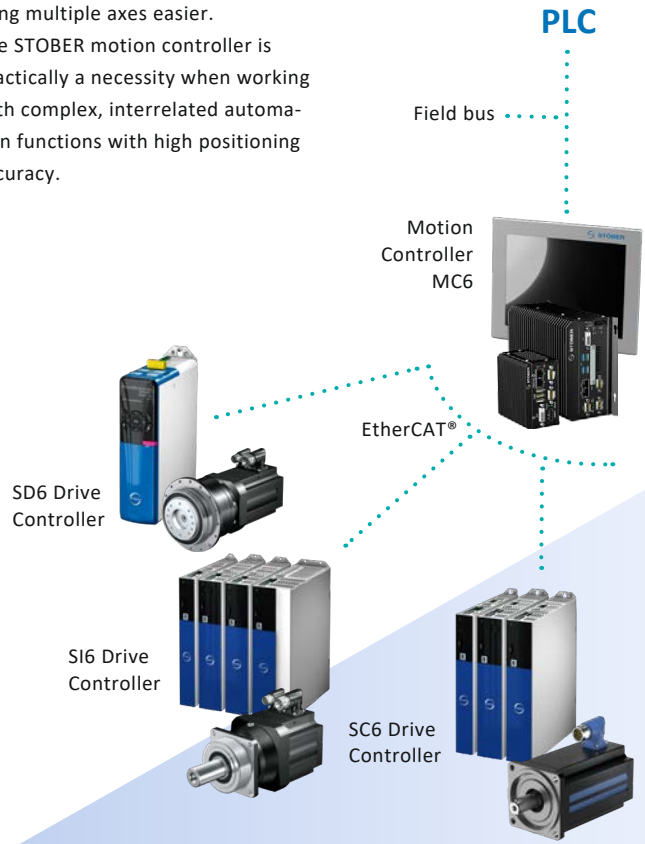
STOBER Industrial Automation as a Complete Motion-Control Solution

Melding drive control and drive technology

The STOBER MC6 Motion Controller enables convenient, efficient engineering in the design of drive technology. It results in lean, economical complete solutions.

Motion Control makes some things easier and makes many things possible

All control-related drive functions are gathered into a central program sequence (embedded systems).
In many cases, this makes programming multiple axes easier.
The STOBER motion controller is practically a necessity when working with complex, interrelated automation functions with high positioning accuracy.



You Can Trust in STOBER

Productive teamwork

Grounded

innovative power

Dynamics

Reliability

Dedication

Technical qualification

Friendly, clear communication

STOBER in motion

STOBER has been building excellent drive technology for over 80 years. As a medium-sized, owner-operated company, STOBER understands the needs of its customers. Our customers can find certified experts in every area, whether in research and development, production, technical consultation or design support. We revel in innovation while bearing radition in mind. We continue to push ourselves forward and to refine our products further. We do this by implementing suggestions from real-world use, giving due consideration to customer requests and constantly seeking out even better solutions. This is all made possible by the competitive spirit with which we face every exciting challenge.

www.stober.com

STOBER Service
The STOBER service network includes 38 trusted partners in Germany. They guide you through commissioning, available on-site in case of faults and offer expert technical advice.

Service Hotline
+49 7231 582-3000

The STOBER service specialists can be reached around the clock and if needed, they can be on-site quickly. Thanks to their experience, they are often able to guide your employees through suitable immediate measures over the phone. What's more, STOBER drive controllers allow for maintenance via remote access.

STOBER Service Network
The STOBER INTERNATIONAL SERVICE NETWORK offers worldwide support and service.
It includes over 80 top-performing service partners in 39 countries.

STOBER STOBER

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