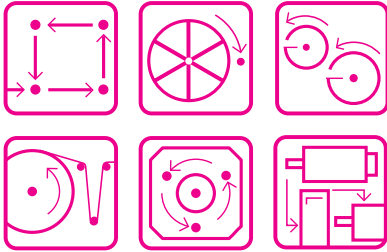


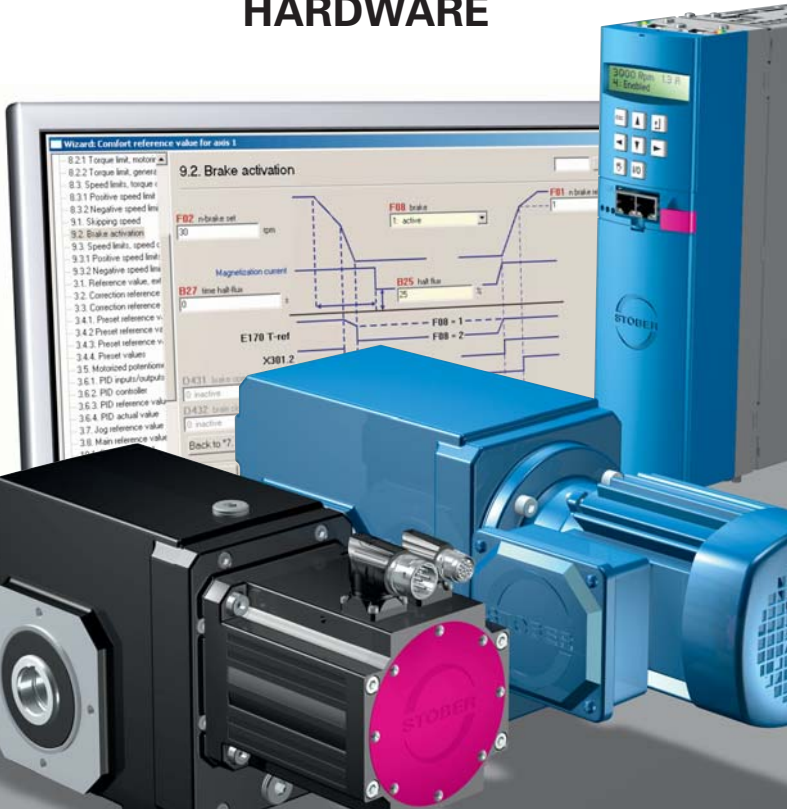


**STÖBER**

## **FREELY CONFIGURABLE SYSTEM DRIVES**



## **SOFTWARE AND HARDWARE**



## Optimized drive technology for automation, industrial plants and engineering

The wide range of STÖBER hardware makes it possible to configure the right actuator technology consistently for every specification. So costs can be optimized without having to accept technical risks.

### Highly dynamic, powerful and super compact

The three servo motor series EZ, EK and ED form the basis for optimum application-specific drives.

### SMS and MGS geared motors are characterized by

Power and speed are logically grouped. All gear units feature a torsionally rigid, leakage-proof block design. The units' low heat generation makes for maintenance-free operation.



**Gear unit with motor adapter**  
All SMS and MGS gear units are available with motor adapters so that STÖBER gear units can also be used with motors from other manufacturers.

## STÖBER power electronics



**POSIDYN® SDS 5000 Servo Inverter**  
Fully digital, for SMS geared motors  
Rated current 1.5 to 60 A  
POSITool commissioning software



**POSIDRIVE® MDS 5000 Servo Inverter**  
Fully digital, for SMS and MGS geared motors  
Rated current 1.5 A to 60 A  
Motor power 0.75 to 45 kW  
POSITool commissioning software



**POSIDRIVE® FDS 5000 Frequency Inverter**  
for MGS geared motors  
Motor power 0.37 to 7.5 kW  
POSITool commissioning software



## SMS Geared Motors



**SMS P/PA Planetary Geared Motor**  
Acceleration torque P: 10 – 3,000 Nm  
Acceleration torque PA: 30 – 1,600 Nm  
Backlash P: < 3 – 8 arcmin  
Backlash PA: < 1 – 3 arcmin  
**Precision for positioning and synchronisation**



**SMS PH(A) Planetary Geared Motor**  
Acceleration torque PH: 34 – 6,910 Nm  
Acceleration torque PHA: 36 – 6,910 Nm  
Backlash PH: < 3 – 4 arcmin  
Backlash PHA: < 1 – 2 arcmin  
**Designed for high-performance servo drives**



**SMS PHQ(A) Planetary Geared Motor**  
Acceleration torque PHQ(A): 510 – 10,000 Nm  
Backlash PHQ: < 3 arcmin  
Backlash PHQA: < 1 arcmin  
**The ultimate servo quattro drive**



**SMS KL Helical Bevel Geared Motor**  
Acceleration torque: 15 – 65 Nm  
Backlash : < 16 – 25 arcmin  
**Super compact drive solution for small servo drives**



**SMS F Shaft-Mounted Helical Geared Motor**  
Acceleration torque: 23 – 1,100 Nm  
Backlash: reduced < 5 – 8 arcmin  
**Servo axis with parallel axle offset**



**SMS S Helical Worm Geared Motor**  
Acceleration torque: 29 – 960 Nm  
**Compact and inexpensive**



**SMS PK/PKX Right-Angle Planetary Geared Motor**  
Acceleration torque PK: 120 – 2,700 Nm  
Acceleration torque PKX: 15 – 3,000 Nm  
Backlash PK: < 3,5 – 5 arcmin  
Backlash PKX: < 4 – 8.5 arcmin  
**Right-angle drive with large ratio range**



**SMS PHK/PHKX Right-Angle Planetary Geared Motor**  
Acceleration torque PHK: 140 – 7,500 Nm  
Acceleration torque PHKX: 36 – 7,500 Nm  
Backlash PK: < 3,5 – 4.5 arcmin  
Backlash PKX: < 3 – 6 arcmin  
**Lots of variations with low backlash**



**SMS PHQK Right-Angle Planetary Geared Motor**  
Acceleration torque: 230 – 10,000 Nm  
Backlash : < 3.5 – 4 arcmin  
**Quattro Power in the compact right-angle design**



**SMS KS Right-Angle Servo Geared Motor**  
Acceleration torque: 33 – 400 Nm  
Backlash : < 4 – 6 arcmin  
**The drive type for high demands**



**SMS C Helical Geared Motor**  
Acceleration torque: 7.6 – 6,500 Nm  
Backlash: < 10 - 20 arcmin  
**Various housing options**



**SMS K Helical Bevel Geared Motor**  
Acceleration torque: 29 – 13,200 Nm  
Backlash: reduced class I < 1.5 - 3 arcmin  
**Versatile with flange, solid or hollow shaft**

## Motors



**EZ/EZF Servo Motor**  
Super compact, with maximum power density  
3 sizes: EZ 401 – EZ 705  
Static torque: 2.6 – 31 Nm  
**Super compact, also with hollow bore**



**MGS System Motor**  
Three-phase AC asynchronous motor  
Motor power: 0.12 – 45 kW  
**Optional: brake, forced cooling fan, incremental encoder or multiturn absolute encoder**



**ED Servo Motor**  
Slim design, high torque  
6 sizes: ED 202 – ED 808  
Static torque: 0.43 – 84 Nm  
**Optimized for applications with high dynamics**



**EK Servo Motor**  
Compact design, strong torque  
3 sizes: EK 501 – EK 803  
Static torque: 3.36 – 33.5 Nm  
**Excellent smooth running at low speeds**

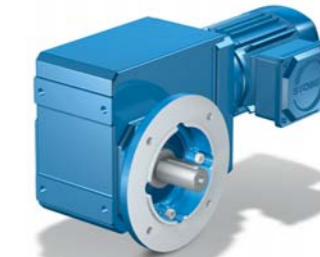
## MGS Geared Motors



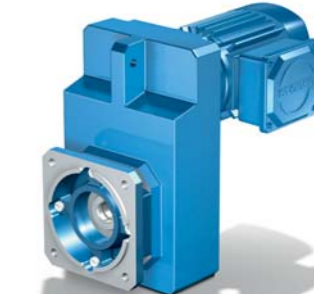
**MGS C Helical Geared Motor**  
Motor power: 0.12 – 45 kW  
Backlash: < 10 - 20 arcmin  
**Versatile, with different housing options**



**MGS S Helical Worm Geared Motor**  
Motor power: 0.12 – 5.5 kW  
**Compact and inexpensive for standard tasks**



**MGS K Helical Bevel Geared Motor**  
Motor power: 0.12 – 45 kW  
Backlash: < 10 - 12 arcmin  
**Highly rigid geared motor**



**MGS F Shaft-Mounted Helical Geared Motor**  
Motor power: 0.12 – 9.2 kW  
Backlash: < 10 – 11 arcmin  
**Particularly suitable as travel drive**



## The 5000 inverter generation

The hardware platform for generation 5000 has been completed with the new POSIDYN® SDS 5000 series of inverters. In conjunction with the POSITool commissioning software, it has been possible to redefine the performance and functionality of the STÖBER power electronics.



Fig. 1

Fig. 2

Fig. 3

Fig. 4

### POSIDRIVE® FDS 5000

(Fig. 1) Ideal for feeder and positioning drives with MGS geared motors, e.g. for packaging machines, automation and machine tools.

Three different operating modes can be selected:

VC mode with speed feedback and high-dynamic vector control. SLVC motor control through sensorless vector control.

V/f motor control through frequency selection.

### POSIDRIVE® MDS 5000

(Fig. 2) Fully digital inverter for control of SMS and MGS geared motors. This universality opens up new potential for innovative actuator system concepts.

### POSIDYN® SDS 5000

(Fig. 3) Fully digital servo inverter for high-performance servo axes. Basic features include the self-configuring integrated bus (IGB) for the new IGB network. This enables up to 32 axes to be real-time controlled. For system maintenance and service a secure remote maintenance concept was developed.

### POSIswitch® AX 5000

(Fig. 4) In conjunction with the POSISwitch® AX 5000 digital axis switcher and the POSIDRIVE® MDS 5000 or POSIDYN® SDS 5000 inverters, up to four motors can be controlled sequentially from only one inverter.

## 5<sup>th</sup> generation software

The software suite V5 contains the POSITool commissioning software, a comprehensive library of standard applications and the firmware for SDS 5000, MDS 5000 and FDS 5000.

The development of POSITool has created a new, fully integrated 3-level architecture. It offers clarity, maximum reliability and efficiency for program generation and start-up.

### Easy, quick and dependable

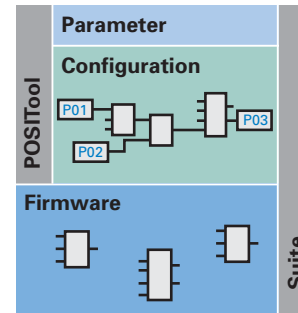
The application library with the ready-made basic applications provides modules for:

- Speed operation (fast reference value, comfort reference value)
- Position-controlled operation (command positioning, motion block positioning)
- Synchronous function (synchronous position control, electronic cam function)

### POSITool commissioning software

The POSITool Windows software supports the user during:

- Programming of the application (optional)
- Configuration and commissioning of the application
- Diagnostics (event memory, oscilloscope function)



### For general users

The consistent project orientation of the modules gives users effective support when programming standard applications. The Assistant function ensures that parameterization proceeds efficiently.

### For experts

Experienced, trained users can use the graphics editor layer (extended in conformance with PLCopen) to configure their own applications (customer application).

### Extra service

With the service package 'Tailor Made Application' STÖBER ANTRIEBSTECHNIK offers functional extensions or comprehensive adaptation of basic applications.

## Accurate start-up Easiest possible use

Every drive should be adapted to the actual situation with the necessary care. During the inverter planning phase, the axis functionality is matched perfectly to the requirements with the help of the hardware and software. STÖBER ANTRIEBSTECHNIK offers various functional modules for start-up and for use in operation.

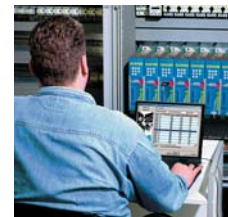
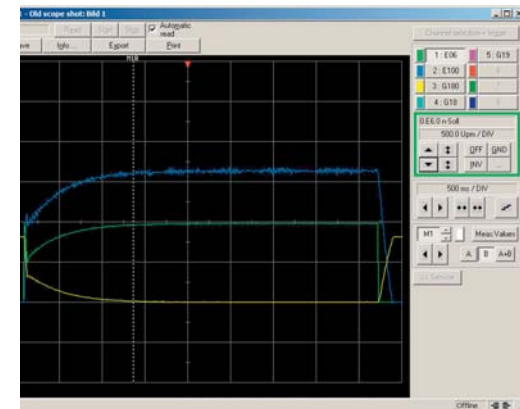


### CONTROLBOX

Universal terminal for parameterization and start-up. With display and keypad for fast diagnosis, status monitoring, direct parameter access and manual operation functions.

### PARAMODUL

Plug-in memory module for easy data transfer of all program and settings data (also for unit replacement). Ideal for documenting operational data.



### POSIOSCOPE

Diagnostic tool for individual drive optimization. This software tool minimizes the number of trial runs.



# STÖBER

## STÖBER presence

### STÖBER hotline

**+49 (0)180 5 786323**  
**(+49 (0)180 5 STÖBER)**

For a global telephone presence 24/7 and out of hours emergencies, expert STÖBER technology advisers are available to offer help and advice to customers and users at any time.

### STÖBER service network

Support and service for worldwide installations are guaranteed by the STÖBER INTERNATIONAL SERVICE NETWORK.

More than 80 efficient service partner in 39 countries work in close communication with STÖBER ANTRIEBSTECHNIK.

### STÖBER ANTRIEBSTECHNIK GmbH + Co. KG

Kieselbronner Str. 12  
75177 PFORZHEIM  
GERMANY  
Phone +49 (0)7231 582-0  
Fax +49 (0)7231 582-1000  
mail@stoeber.de

STOBER DRIVES LTD.  
ESSEX EN9 1JH  
UNITED KINGDOM  
mail@stober.co.uk  
www.stober.co.uk

STOBER DRIVES, INC.  
MAYSVILLE, KY 41056  
USA  
sales@stober.com  
www.stober.com

STÖBER  
ANTRIEBSTECHNIK GmbH  
4662 STEYRERMÜHL  
AUSTRIA  
office@stoeber.at  
www.stoeber.at

STOBER CHINA  
BEIJING 100004  
CHINA  
info@stoeber.cn  
www.stoeber.cn

STOBER S.a.r.l.  
69300 CALUIRE ET CUIRE  
FRANCE  
mail@stober.fr  
www.stober.fr

STÖBER TRASMISSIONI s.r.l.  
20017 MAZZO DI RHO (MILANO)  
ITALY  
info@stoeber.it  
www.stoeber.it

STOBER Japan K. K.  
TOKYO  
JAPAN  
mail@stober.co.jp  
www.stober.co.jp

STOBER Singapore  
SINGAPORE 787494  
SINGAPORE  
info@stober.sg  
www.stober.sg

STÖBER Schweiz AG  
5453 REMETSCHWIL  
SWITZERLAND  
info@stoeber.ch  
www.stoeber.ch