ServoFit® PE planetary gear units



New technology standard for applications in automation and robotics



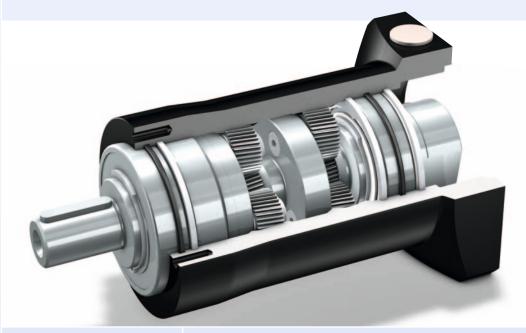


With motor adapter for universal motor mounting ...

Specially designed for typical applications in automation and robotics

Servo drives are used for many different applications. This results in a variety of torque and backlash requirements for the gear units. Whatever these requirements may be, power density, endurance and noise level are also high priority factors.

STOBER developed the new PE gear unit for this requirement profile.



Section: ServoFit® PE4 two-stage planetary gear unit

Monobloc housing for two-stage planet gear set for mounting to standard servo motors

The helical planet gears make the difference

The usual industry standard only provides for simple, spur gear versions. The noise level of these simply designed gear units is an indication of their limited running quality and wear resistance.

This is quite different in the highquality design of the ServoFit® PE helical planetary gear units. STOBER sets a new standard for the functional and manufacturing quality of simple industrial servo gear units – without increasing the price structure.



The helical gearing makes the difference in running quality and particularly endurance. This gearing simply means reliability.

Reduced noise emissions

Automation systems are rarely housed in noise-absorbing enclosures. So it is beneficial for operators if the noise emissions from the servo drives are kept within limits.

The quiet running smoothness of the ServoFit® PE planetary gear units is provided by the helical planet gear sets and the high quality they are manufactured in.

The new series: ServoFit® PE planetary gear units

Monobloc housing, ultracompact with integral motor mounting system

The new single-piece housing type for single and two stage versions is optimized for the mounting of standard industrial servo motors.

The integral, zero-backlash clamp coupling gives maximum mounting convenience. In just a few steps a motor is adapted.

The precise centring of the servo motor prevents mounting errors. A clamping screw produces the interference fit. A thermal expansion feature is integrated.

For special motors, adapter versions for almost any interface layout can be supplied on request.



ServoFit® PE2 single-stage planetary gear unit ServoFit® PE3 single-stage planetary gear unit ServoFit® PE4 single-stage planetary gear unit ServoFit® PE5 single-stage planetary gear unit



View of the ME motor adapter with the EasyAdapt® clamp coupling for reliable quick motor installation



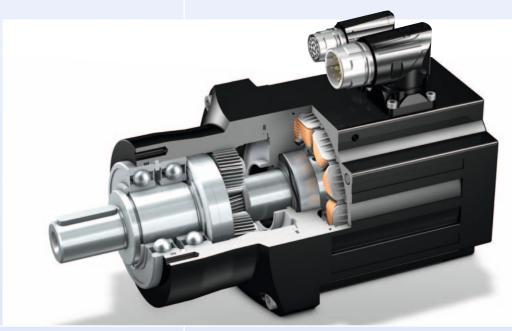
ServoFit® PE4 single-stage planetary gear unit with ZV spur pinion output

ServoFit® PE4 two-stage planetary gear unit

SMS PE planetary geared motor

Туре		PE2	PE3	PE4	PE5
Gear ratios i (1-stage)	[-]	4/5/7/10	3/4/5/7/10	3/4/5/7/10	3/4/5/7/10
Gear ratios i (2-stage)	[-]	16/20/25/28/35/ 40/50/70/100	12/15/16/20/25/28/35/40/50/70/100		
Rated torque	[Nm]	6 – 6.5	19 – 30	45 – 65	90 – 160
Accelerating torque	[Nm]	13 – 14	37 – 55	90 – 120	180 – 305
Backlash	[arcmin]	10 – 13	8 – 10	8 – 10	8 – 10

or as a compact servo geared motor



Section: SMS PE_EZ planetary geared motor

Fully integrated, high-rigidity compact solution, particularly in combination with short design EZ motors

SMS PE planetary geared motor

All PE gear unit models are also available as SMS PE synchronous servo geared motors.

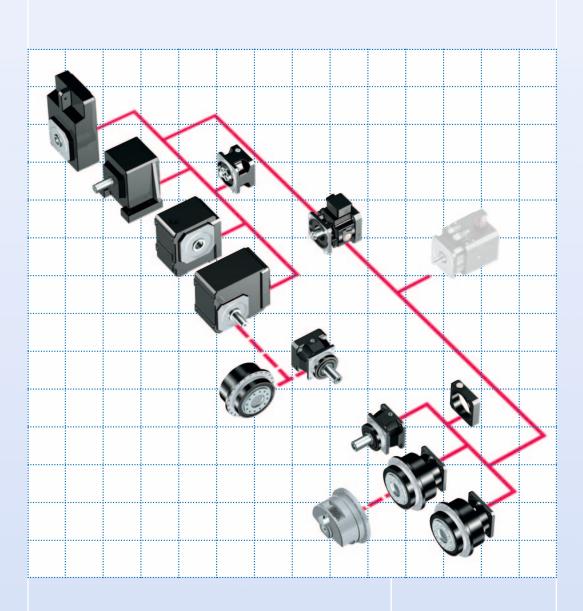
A modified gear unit version allows the synchronous servo motors from STOBER to be mounted directly without a coupling.

The motor shaft, designed in the form of a coupling hub, then accepts the sun gear shaft directly. This integrated design eliminates the standard connecting coupling, and therefore the space normally required.

In combination with the new, equally compact EZ synchronous servo motor, extremely short and therefore relatively lightweight servo drives can be obtained.

Made in Germany

ServoFit® servo gear unit system



Versatility for uncompromising design

The ServoFit® product range, with its numerous coaxial and right-angle servo gear units, offers unusually wide adaptability for many different servo functions.

All the units have high-quality helical gearing, which gives them unrivalled running smoothness and backlash stability. In some cases the gear units can be combined to form multistage versions.

The most important ServoFit® system data:

Lowest torsional backlash on the market Gear ratios: from 3 – 680 Accelerating torque: 19 – 22 000 Nm



STOBER offers consistent solutions

As a system supplier STOBER has a complete product range for digital drive technology. The MC6 motion controller uses the CODESYS programming software to keep up with the trend towards open systems in the world of automation.

In combination with digital servo axes, STOBER solutions can be used for small or more extensive drive applications.

Note on the design of axes and drives

For optimum axis design, it makes sense to focus primarily on the gear units or geared motors. A useful aid is the design software SERVOsoft®.

For an overall approach, use the specific expertise of the STOBER application consultants.

Contact and advice: applications@stoeber.de

Service

The STOBER service system comprises 38 expert partners in Germany and more than 80 companies in the STOBER SERVICE NETWORK worldwide.

This service concept guarantees local expertise and availability when needed.

In general, the service specialists can be reached at any time via a 24/7 service hotline.

When necessary, a problem can be addressed immediately.

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