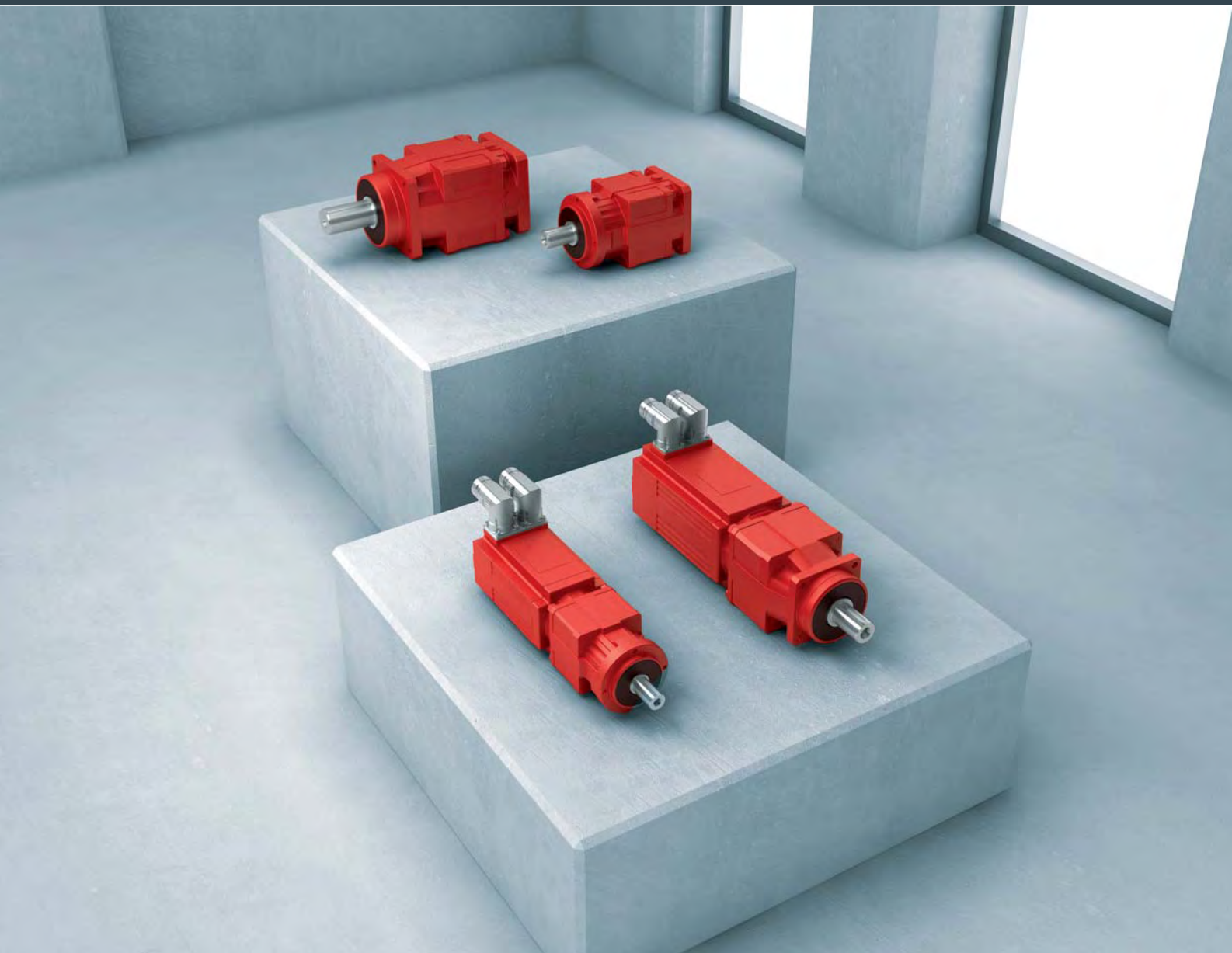


Cost-effectiveness, flexibility, and high power density  
**The new PSC low backlash  
servo planetary gear units**



## Select the optimum drive for each application from a multitude of synchronous servo gearmotors

Differing or reduced machine performance often entails an adaptation of the required drive technology. Even so, the highest possible degree of flexibility and cost-effectiveness is to be ensured for the installed products. The new PSC “competitive” low backlash planetary gear units were developed to fulfill these requirements.

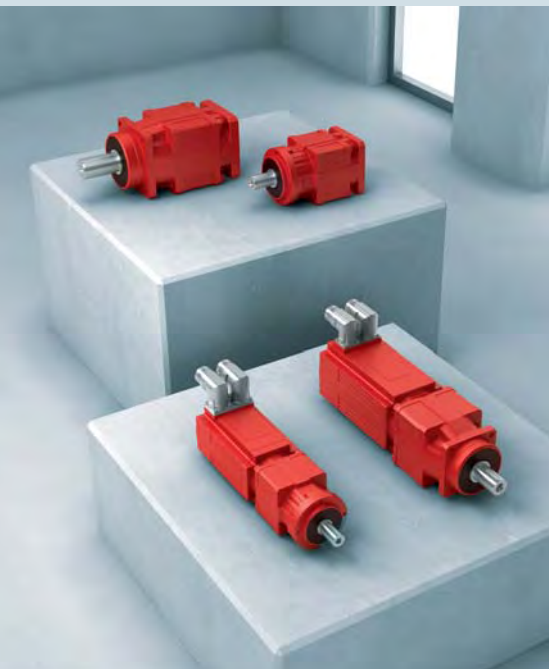
Here, too, the tried and tested modular principle enables a direct combination of planetary gear units and synchronous servomotors. The new PSC planetary servo gear units are connected directly and without adapter to the dynamic synchronous servomotors of the DS, CM or CMP series from SEW-EURODRIVE.

The smaller and more lightweight drives make for a compact design of the system. Most importantly, each application is safer thanks to the completely positive connection in the driveline, and there is no longer a risk that non-positive connections could become loose.

In comparison with a corresponding drive with adapter, the servo gearmotor in direct mounting offers major advantages.

### **Elimination of the adapter makes the entire drive:**

- completely positive
- lighter
- more cost-effective
- more torsionally rigid
- shorter
- more compact
- more dynamic
- less mass moment of inertia



### The PSC gear unit series at a glance

In combination with servomotors, the new PSC planetary servo gear unit series is the basis for a variety of options to realize flexible, dynamic, and, most of all, cost-effective drive solutions in coaxial design with a small unit volume and high power density.

- High permitted torques and overhung loads
- High efficiency levels

- Extremely high level of reliability, availability and a long service life
- Constant circumferential backlash
- Lifetime lubrication
- Synthetic lubricants
- Either oil or grease lubrication
- Any mounting position
- Surface protection OS1 to OS4

The B5 output variants of the gear unit series are compatible with the successful, well-known PSF planetary servo gear unit series. One application can thus be equipped with different performance grades, with corresponding costs on the customer's side (LOW INVEST). Design modifications of the machine by the customer

are not necessary. The same applies, of course, to the PSC output in B14 design, which is equally compatible with the well-established PSE series.

Another focal point, next to cost-effectiveness, is the flexibility of the system with respect to motor

mounting. In addition to the SEW-EURODRIVE motor direct mounting to the PSC gear units, synchronous servomotors can also be mounted with an adapter (ECH adapter). Many common motor types can so be mounted to the PSC gear units.

## Technical data

Size	Torque $M_N$ [Nm]	Gear ratios		Circumf. Backlash [°]
		1-stage [i]	2-stage [i]	
PSC 221	30	3, 5, 7, 10		10-15
PSC 222			15, 21, 25, 30, 35, 49, 50, 70, 100	
PSC 321	65	3, 5, 7, 10		
PSC 322			15, 21, 25, 30, 35, 49, 50, 70, 100	
PSC 521	160	3, 5, 7, 10		
PSC 522			15, 21, 25, 30, 35, 49, 50, 70, 100	
PSC 621	330	5, 7, 10		
PSC 622			25, 35, 49, 50, 70, 100	

$M_N$  = Rated torque

## Designs

- PSC** = B5 output, smooth output shaft
- PSKC** = B5 output, with keyway
- PSC/Z** = B14 output, smooth shaft
- PSKC/Z** = B14 output, with keyway

