

# The ultimate in precision and dynamics.



The combination of Vogel MPR/MPG planetary gearboxes with Lenze servo motors represents the optimum solution for dynamic or highly dynamic applications requiring the greatest precision. These solutions cater to various requirements, such as those encountered on a daily basis in the printing and packaging industry, the fields of robot, filling and materials handling technology and, in many cases, also general engineering.

The MPR/MPG planetary gearboxes excel through their extremely high degree of torsional stiffness, combined with backlash as low as one angular minute. In connection with MCS synchronous servo motors and MCA asynchronous servo motors, this allows flexible and particularly energy-efficient solutions to be created that can handle virtually any application.

## Highlights

- Robust planetary gearboxes with solid shaft (MPR) or hollow shaft and flange (MPG)
- High degree of precision for the respective application thanks to low backlash (min.  $\leq 1$  angular minute)
- Efficient drive solution with high efficiency ( $\geq 95\%$  to  $\geq 97\%$ )
- Can be installed in any orientation, which can also subsequently be revised
- IP65 enclosure (dust-tight, protection from spray water at any angle)

# MPR/MPG gearboxes – deployments

- Control system for basic machine requirements
- The planetary gearboxes are maintenance-free and lubricated for life. This ensures maximum availability.
- The dirt does not stand a chance! Thanks to the intelligent design, there are no dirt traps or areas where soiling can accumulate.
- The gearboxes boast high efficiency of  $\geq 95\%$  to  $\geq 97\%$ . In future, it will be possible to determine the cost-cutting potential for the respective application using the Lenze Energy Performance Certificate.
- Long service life of  $\sim 20,000$  hours

## Dimensioning made easy

Planetary gearboxes are very often used for applications that are extremely dynamic and very precise. In many cases, however, it can be difficult to dimension these drives.

Lenze simplifies these calculations for the user and makes the subsequent design process easy. The DSD engineering tool can be used to dimension the necessary drives in a clearly structured process. The necessary engineering information, such as the CAD data, can then be selected from the DSC electronic catalogue.

## Matched to your environmental conditions

Gearboxes with	Servo motors
<b>Degree of protection</b> EN 60529	IP54 / IP65
<b>Approvals</b>	cURus, EAC, CCC and UkrSepro
<b>Climatic conditions</b>	
Storage temperature	-30°C to +60°C (-22°F to +140°F)
Operating temperature	-20°C to +40°C (-4°F to +104°F)
<b>Surface and corrosion protection</b>	
OKS-G (primed)	1K primer coat
OKS-S (small)	2K-PUR top coat
OKS-M (medium)	1K primer coat, 2K-PUR top coat
OKS-L (large)	2K-EP primer coat, 2K-PUR top coat