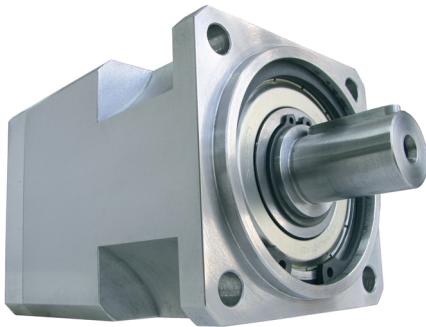


NEW

Magnetic gearboxes



With magnetic gearboxes, GEORGII KOBOLD reveals an entirely new transmission technology:

Do you need high speed in your application, but don't want to do without a high power density? Do you have the highest requirement for cleanliness and/or for a drive solution with a low noise level?

Thanks to their non-contact power transmission, magnetic gearboxes offer a truly innovative solution. The availability of different ratios and sizes gives you additional flexibility when applying these gearboxes.

Main features:

- Non-contact power transmission
- High speeds while maintaining a competitive power density
- No wear
- No gear lubrication
- No backlash

- Low noise
- Inherent overload protection
- Input and output are mechanically separated
- High level of integration
- High single-stage reductions

Principle of Operation

The magnetic gearbox (shown below) consists of three components: the inner magnetic wheel (drive), the modulator (output) and the external magnetic wheel. All components are made of steel, whereas additional magnets of alternating polarity are affixed to the inner and outer wheel.

All components are made of steel, whereas additional magnets of alternating polarity are affixed to the inner and outer wheel. The modulator directs the magnetic flux of the excitation system of the inner and the outer magnet wheel in a clever manner, whereby a reduction ratio is created. Magnetic gearboxes, therefore, enable a non-contact torque/speed conversion.

