

DAG MOTORS AND ACTUATORS

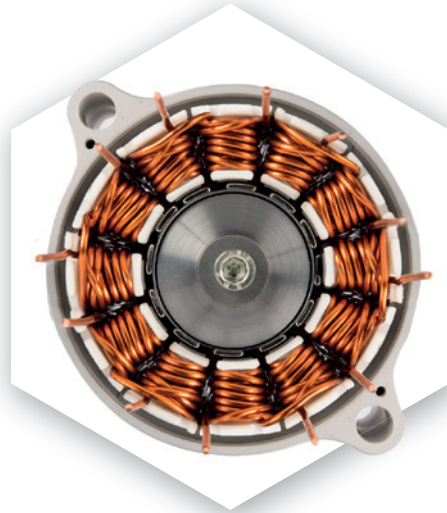
In standard motors, the rotor serves both as a carrier for the magnets and bearings as well as the back flux iron for the torque-producing magnetic flux. This is why the rotor wall must be very thick. LSP's patented Double Air Gap motors feature a rotor with very thin walls, as the rotor is only used as a carrier for the magnets and the bearings. The magnetic flux is closed by a standing back flux iron that requires an additional air gap (Double Air Gap). This significantly reduces the inertia of the rotor, allowing highly compact, dynamic motor applications with great power density.

ABOUT LSP

LSP Innovative Automotive Systems GmbH is an engineering office, development company and think tank with headquarters near Munich (Unterföhring). Our core competence and technology leadership is based on the conception and design of compact and highly dynamic electromechanical drives, primarily for use in chassis and powertrain applications.

Are you interested in our product?
Are you looking for an idea or do you need a solution?
We can help!

We look forward to hearing from you!



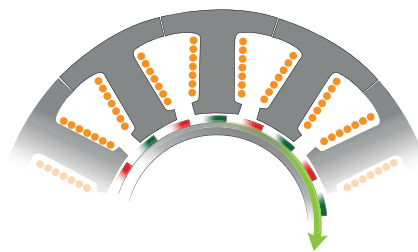
ADVANTAGES

- » Significant increase in dynamic response compared to conventional motors
- » Thus, significant reduction of current peaks
- » More compact design for substantial cost benefits
- » Can be implemented in all common motor types, incl. internal and external rotors, linear motors etc

Applications

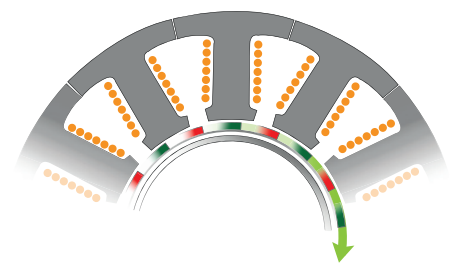
- » Integrated Braking System (IBS)
- » Brake systems used in racing
- » Electric Power Steering (EPS)
- » Actuators for double-clutch transmissions
- » Active damper systems

FUNCTIONALITY AND STRUCTURE



Standard internal rotor

In the standard motor, the rotor serves both as a carrier for the magnets and bearings, and also acts as the back flux iron for the torque-producing magnetic flux. This is why the rotor wall must be very thick.



DAG internal rotor

LSP's patented Double Air Gap motors feature a rotor with very thin walls, as the rotor is only used as a carrier for the magnets and the bearings. The magnetic flux is closed by a standing back flux iron, which requires an additional air gap (Double Air Gap). This significantly reduces the inertia of the rotor, allowing highly compact, dynamic motor applications with great power density.