

INTRODUCTION

Motion Control for Defense Applications

Our strength is producing a high-power density using high performance materials and the latest design and construction. Our brushless motors mean low wear and low maintenance. Combined with our resolvers we can give you a complete subsystem for your defense applications.

Extensive range of electric motors from a few Watts to more than 200 kW. These motors are intended to fit on-board aerospace, defense and other demanding environments.

- DC brushless motors
- DC brush motors
- DC brush torque motors
- DC brushless torque motors

**PENLINK SOLUTION**

Wide Range of High-quality Electrical Motors

Our range of high-power electric motors, including brushless, brush, and torque motors, are designed to deliver exceptional performance in demanding applications.

These motors are ideally suited for use in systems such as actuators, electric braking, and missile fin controls, where precision and reliability are paramount.

Whether for aerospace, defense, or industrial uses, our motors provide the power and efficiency needed to ensure optimal performance in critical environments. Our solutions provide unmatched

power to weight performance, they are custom designed with a focus on safety, innovation and reliability.

We can provide an electric motor that meets your specific requirements. Our products consists of:

- DC brushless motors
- DC brush motors
- DC brush torque motors
- DC brushless torque motors

Key Customers

We work closely with all the major aerospace and defense OEMs and our electric products are used on a wide range of civil and defense platforms.

At Penlink, we can provide you with an electric motor solution that is specifically designed for your application. To discuss what you need in more detail, please contact us.



**PENLINK SOLUTION****DC Brushless Motors**

High-power electric motors designed for fans, pumps, utilities, servo-controlled actuators, and more. Offering a broad range of power outputs from just a few watts to over 200 kW, these motors are engineered to meet the rigorous demands of aerospace, defense, and other challenging environments.

Available in two configurations—housed as an LRU or frameless for seamless customer integration—they provide flexibility for a variety of applications.

High Power Density

High-performance materials and the latest design and construction.

Excellent Fluid Compatibility

Our motors can operate when immersed in cooling fluids, fuel, oils, and hydraulic fluids (including phosphate-esters such as Skydrol®).

Customized Designs and Reduced Weight

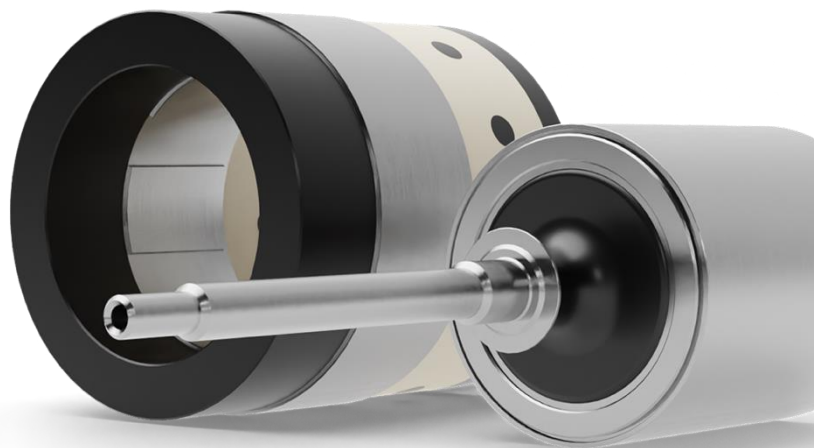
Each motor is tailored to meet the customer's specification and to fit the application. Designs may have conventional inner rotor or also outer rotor.

Brushless Motors for Reduced Maintenance

Segregated dual, triple, or quadruple electrical channels, allowing operation in degraded mode.

Each motor can also integrate the following features:

- Electrically controlled clutch
- Electronic drive
- Fuses (mainly for induction motors)
- Gearhead
- Hydraulic/fluid enclosure and sealing
- Male or female rotor coupling
- Position sensor
- Power-off brake
- Tacho generator
- Temperature sensors



**PENLINK SOLUTION**

DC Brush Torque Motors: Efficient Direct-Drive Solutions for High-Torque Applications

High-torque, low-speed motors designed for direct-drive operation, offering a straightforward solution for systems with limited rotational requirements over their lifetime, such as emergency actuation and ammunition handling systems.

These DC brush torque motors deliver robust torque for direct drives, eliminating the need for a reduction gear and simplifying system design.

DC brush torque motors offer an efficient and straightforward solution for systems with limited rotational requirements throughout their lifespan, such as emergency actuation and ammunition handling systems.

These motors deliver high torque for direct-drive applications, eliminating the need for a reduction gear and simplifying system design.

In collaboration with our supplier, we can provide a DC brush torque motor tailored specifically to your application. Contact us today to discuss your requirements in detail.

Key Features Of Our DC Brush Torque Motors

- Good dynamic bandwidth thanks to low mechanical time constant
- Custom rotor and stator hubs to perfectly fit your system, allowing easier integration
- Simple operation from DC source ON/OFF switching



**PENLINK SOLUTION**

DC Brush Motors: Customized Designs With Reduced Weight

High-power electric motors designed for fans, pumps, utilities, servo-controlled actuators, and more. Offering a wide range of power outputs, from a few watts to over 10 kW, these motors are engineered to perform in aerospace, defense, and other demanding environments.

We offer a wide range of electric motors, from just a few watts to over 10 kW, designed to meet the rigorous demands of aerospace, defense, and other challenging environments.

In collaboration with our supplier, we can deliver a DC motor tailored specifically to your application.

High Power Density

High-performance materials and the latest design and construction.

Excellent Fluid Compatibility

Our motors can operate when immersed in cooling fluids, fuels, and oils.

Customized Designs and Reduced Weight

With the help of our supplier, we can tailor each motor to meet the customer specification and to fit the application.

Each motor can also integrate the following features:

- Electrically controlled clutch
- Electronic drive
- Fuses (mainly for induction motors)
- Gearhead
- Hydraulic/fluid enclosure and sealing
- Position sensor
- Power-off brake
- Tacho generator
- Temperature sensors



**PENLINK SOLUTION**

DC Brushless Torque Motors: Designed To Fit Your System

Our high-torque, low-speed motors are expertly designed for seamless direct-drive operation in gimbals and compact turrets, offering precision and reliability in demanding applications.

These motors feature advanced engineering to deliver exceptional torque while maintaining a low-speed profile, making them ideal for applications where smooth, precise movement is critical.

The motors deliver high torque for direct-drive applications, eliminating the need for a reduction gear. In collaboration with our supplier, we offer DC brushless torque motors tailored specifically to your application. Contact us to discuss your requirements in detail.

- High dynamic bandwidth thanks to low mechanical time constant and high peak current capability
- Improved servo-loop accuracy thanks to possibly reduced friction torque and cogging torque
- Possible degraded operation in case of dual channel, instead of total loss
- Custom rotor and stator hubs to perfectly fit your system, allowing easier integration
- Optional outer rotors to move outer loads



PENLÍNK

Ready to Enhance Your Mission?

Get in touch with us to learn more about the possibilities when choosing a high-power electric motor from our extensive range. We have extensive knowledge in various applications that require significant power, precision, and reliability.

By working with us, you will gain deeper insights into your application, and the solution we design will enhance the overall end-user experience.

Our range of high-power electric motors, including brushless, brush, and torque motors, are designed to deliver exceptional performance in demanding applications. These motors are ideally suited for use in systems such as actuators, electric braking, and missile fin controls, where precision and reliability are paramount.

Whether for aerospace, defense, or industrial uses, our motors provide the power and efficiency needed to ensure optimal performance in critical environments.

Are you interested in our electrical motors? – Talk to us and we will help you find the right solution for you!



CONTACT INFORMATION

info@penlink.se

+46 (0)8 4011010

Penlink AA, Västberga Allé 5,
SE-126 30 Hägersten, Sweden

