



PENLINK

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, defence and other demanding environments.

Motion Control for Defense Applications

APPLICATION NOTE

Electric Motors

Use our electric motors for more accurate movement of flight controls and actuation systems. 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

They can be used in a vast range of applications such as Actuators, Servo-systems, Cooling Pumps Systems, Electric Braking Systems, Fans, Flight Controls and much more:

- + Hydraulic And Fuel Pumps
- + Missile Fin Controls
- + Remote Controlled Weapon Systems (Rcws)
- + Turret And Radar Motorisation Systems
- + Windshield Wipers



Key Customers

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

Motion Control for Defense Applications

APPLICATION NOTE

DC Brushless Motors

Extensive range of electric motors from a few Watts to more than 200 kW. These motors are intended to fit on-board aerospace, defence and other demanding environments. They are available as a LRU (housed) or frameless that can be integrated by the customer.

With high performance materials and the latest design and construction, our motors can operate when immersed in cooling fluids, fuel, oils and hydraulic fluids (including phosphate-esters such as Skydrol®).

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

Segregated dual, triple or quadruple electrical channels, allow 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



DC Brush Torque Motors

DC brush torque motors provide a simple solution for systems making a limited number of turns all along their life (e.g. emergency actuation and ammunition actuation systems). They power high torque direct drives while preventing the need for a reduction gear.

- + 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

Applications

Used primarily on military applications including:

- + Ammunition activation mechanism
- + Ammunition fins actuation
- + Ammunition/missile seeker head actuation
- + Emergency actuator

We can provide you with a DC brush torque motor that is specifically designed for your application. To discuss what you need in more detail, please contact us.



Motion Control for Defense Applications

APPLICATION NOTE

DC Brush Motors

Extensive range of electric motors from a few Watts to more than 10 kW. These motors are intended to fit on-board aerospace, defence and other demanding environments.

- + High power density
- + Excellent fluid compatibility
- + Customised designs and reduced weight

High performance materials and the latest design and construction. Our motors can operate when immersed in cooling fluids, fuels and oils. Our engineers 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
- + Male or female rotor coupling
- + Position sensor
- + Power-off brake
- + Tacho-generator
- + Temperature sensors



DC brushless torque motors

These low friction motors power high torque direct drives while preventing the need for a reduction gear. Our torque motors offers 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.

With dual channels motors can run in degraded operation, instead of total loss. We can also offer custom rotor and stator hubs to perfectly fit your system, allowing easier integration. Options are also available for outer rotors to move outer loads.

Used primarily on military applications including

- + Conventional radar antenna
- + Electro-optical systems
- + Remote control weapon systems (RCWS)
- + Targeting gimbals rotation



Get in touch with us today to start your next project!

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Engineering &
Product design



Inspection &
Quality management



Simulation &
Design verification



Assembly &
Testing



Advanced
Manufacturing



Value-Added
Products & Services

We supply only the best solution for each and every industry, get in touch with us to learn more about your possibilities when working with Penlink.

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