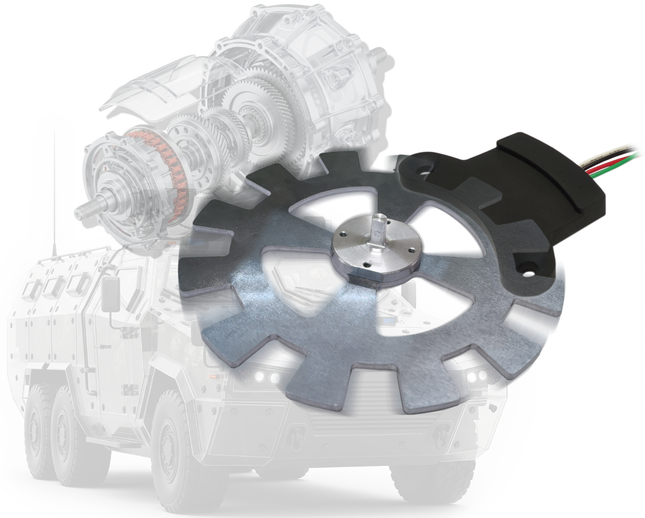
PIHER sensing systems
an Amphenol® company

Air | Land | Sea

CONTACTLESS CURRENT & POSITION SENSING FOR HARSH ENVIRONMENTS

Sensors Engineered for Every Element



Amphenol Sensors

Why Piher

Compliance at a Glance — Anywhere, Everywhere

When missions depend on precision, every component counts. Piher designs and builds rugged position and current sensing solutions—non-contact rotary/linear sensors, potentiometers, and actuator position-feedback modules—that deliver stable, reliable feedback across systems. We co-design from day one so packaging, sealing, redundancy, and interfaces fit your architecture and protect SWaP. Our commitment is to achieve carbon-neutral operations by 2028.

RoHS compliant
REACH compliant
HALO GEN FREE
Available with CAN
CE

We are one of more than 20 brands of Amphenol Sensor Technology Group (ASTG), offering an innovative and diverse portfolio covering an extensive range of measurands for regulatory- and industry-driven applications. Close collaboration with our sister companies enables us to offer clients a full spectrum of dedicated sensing solutions.

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Unmanned Systems

Smart sensing for unmanned missions

Piher delivers mission-ready current and position feedback for unmanned platforms—UAVs, UGVs, and USVs—through rugged, non-contact Hall-effect rotary/linear sensors and open-loop current sensors that precisely control actuators, steering, gimbals, power distribution, and battery systems.

Our compact, low-power designs provide stable, low-latency signals with high repeatability under shock, vibration, and wide temperature conditions.

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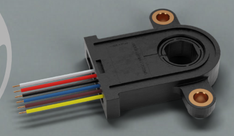
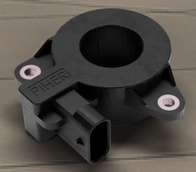
THROUGH SHAFT POSITION SENSORS
STEERING & PEDAL



ANGULAR SENSORS
AMMUNITION SYTEMS / TURRETS

TILT SENSORS
STABILITY AND ROLLOVER PREVENTION

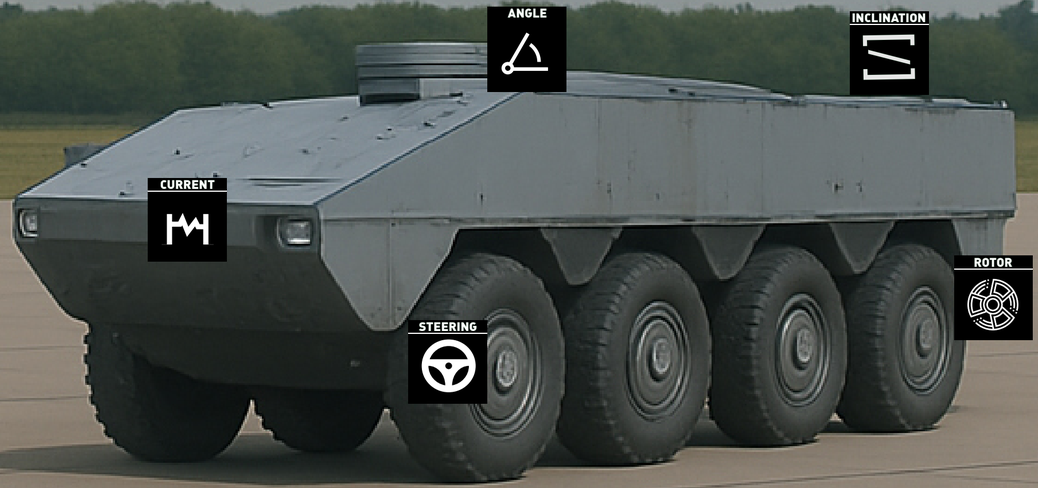
CURRENT SENSORS
MOTOR CONTROL / CONVERTER / INVERTER



HIGH SPEED MOTOR POSITION SENSORS

ARC SENSING
ARTICULATIONS

Play resis+ant



Ground Vehicles

Built for shock, dust and duty.

Piher equips defence ground vehicles with rugged, non-contact position sensors and open-loop current sensors that deliver precise feedback for steer-by-wire, brake/throttle pedals, transmission control, turret/gun positioning, suspension height and power distribution. Optimised for SWaP and built to endure shock, vibration, dust/mud and temperature extremes, our designs provide stable, low-latency signals with high repeatability and strong electromagnetic robustness.

We co-design from day one so packaging, sealing, redundancy and interfaces (analog, PWM, CAN J1939/CANopen) drop cleanly into your architecture, cutting integration risk and supporting safety goals. Optional diagnostics and redundant channels enable failsafe behaviour and condition-based maintenance to maximise availability and mission readiness.

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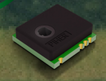
TILT SENSORS
STABILITY / SUSPENSION / RIDE CONTROL

SENSORS FOR TRANSMISSION
CRANKSHAFT & CAMSHAFT / SHIFT-BY-WIRE

MINIATURE HALL EFFECT SENSOR
GEAR SHIFTER / SELECTORS / SWITCHES



HALL EFFECT PEDAL SENSORS
RADAR / TURRETS / ARMS / HATCHES / DOORS

BATTERY MANAGEMENT SYSTEMS
MOTOR CONTROL / CONVERTER / INVERTER

SAS STEERING & TORQUE SENSORS

LINEAR SENSORS
SUSPENSION / FUEL LEVEL / CHASSIS HEIGHT

Avionics sensors

Flight-proven precision at altitude.

Rotorcraft see salt, sand, spray and ice—and still must hold a tight hover. Piher brings stable position feedback for pilot controls, swashplate/actuator position, hoist and cargo-hook monitoring, landing-gear lock status, and doors/ramps. Our contactless designs resist wear from vibration and micro-movement, maintaining smooth control feel and accurate trim over the airframe life.

In fast-jet and transport fleets, Piher delivers fail-safe position sensing for control surfaces and actuators, nose-wheel steering angle, thrust-reverser/linkage position, wing-flap, cockpit controls and detents, and canopy/door status. Our sensors hold linearity over temperature, reject electrical noise, and offer low latency.

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COCKPIT CONTROLS
SIDESTICKS / LEVERS / SWITCHES / YOKE / PEDALS

ROTARY SENSORS FOR ACTUATORS

INDUCTIVE POSITION SENSORS
HIGH SPEED E-MOTOR

ACTUATOR SENSORS
ELEVATOR / AILERON / FLAPS / SLATS / FLY-BY-WIRE

Naval Solutions

Rugged and Trusted at sea

From fin stabilisers and steering gear to doors, hatches and launcher auxiliaries, Piher manufactures sensors that can withstand the harshest environmental conditions such as exposure to saltwater, temperature extremes, high vibration and moisture.

Our sensors use non-contact sensing technologies that do not require physical contact with the object being sensed. This design gives the sensor a high immunity level to a variety of environmental factors that could typically affect other sensing technologies. The sensor maintains its accuracy to ensure the safety of the crew and vessel.

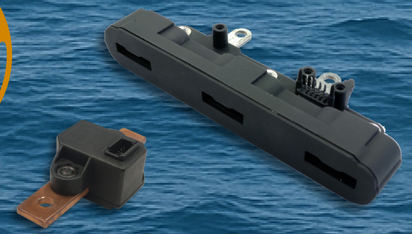
ARC SENSORS
STEERING & TILT

Play resis+ant

ENGINE THROTTLE ANGULAR SENSOR

HAND THROTTLE POSITION SENSOR

CURRENT SENSORS
GENERATORS / CONVERTER / INVERTER



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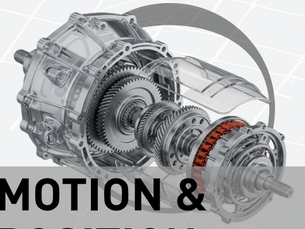
Non-Contact Position & Motion Sensing

No wear. No drift. No downtime.

Piher's non-contact portfolio covers angular and linear position, speed, tilt and current—built on Hall-effect and magnetoresistive principles to deliver repeatable accuracy without mechanical wear. Sealed, magnet-based architectures maintain performance in dust, mud, salt fog and aviation fluids, while resisting shock and vibration. We offer configurable signal paths (ratiometric analog, PWM, CAN/SSI) with optional dual-redundant outputs and built-in diagnostics for safety-critical control. Packages range from fully sealed rotary and rod-style linear formats to "through-shaft" and touchless target-magnet designs, enabling easy retrofit and long service life with minimal maintenance.

Across platforms, our sensors close the loop on the motions and systems that win missions. Angular sensors track turret azimuth, gun elevation and cockpit controls; linear devices map throttle, brake-by-wire, actuators and suspension height; speed sensing validates wheel/track rotation, gearbox and rotor tach; tilt monitors launcher leveling, mast/gimbal attitude and platform stabilization; and current transducers protect power distribution, battery systems and drives with galvanic isolation and fast fault detection. Each solution can be tailored for harsh-duty requirements—extended temperature ranges, environmental sealing and EMC robustness—so integrators get precise data, higher MTBF and simplified lifecycle support.



MOTION & POSITION

Non-contact rotary and linear position monitoring using Hall-effect or inductive technology.

- Through-shaft, end-of shaft, ARC and touchless versions for applications such as pedal-by-wire, transmissions and steering. High accuracy and precision
- Low current consumption
- Stable performance in harsh environmental conditions
- Contactless measurement of rotating gears in transmission, wheels, motors and brake systems.
- MEMS accurate inclinometers

Play resis+ant
tolerant to radial and axial misalignment

HIGH SPEED E-MOTOR

Inductive e-Rotor Position Sensors for Enhanced E-Motor Control

- Through-shaft, end-of-shaft and ARC/off-axis configurations
- Magnet-free. Wear-free
- Stray-field immune
- Lightweight
- ASIL-D ready

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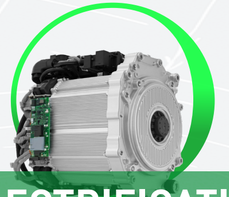

ELECTRIFICATION

Precise Current Feedback for Optimal Motor Control

Based on two different technologies: open-loop **Hall-Effect and coreless TMR** sensors. Both technologies provide **accurate, non-intrusive measurement** of currents with galvanic separation between power and control.

- Measured values from ±30 A to ±1,500 A
- Busbar or wire mounting
- Total accuracy over temp error < 1% FS
- Linear error < 0.1% FS
- Simple or redundant analog ratiometric output

Bespoke Sensors - Co-Engineered for the Mission

Your envelope. Your interface. Our know-how.

> **Fast, schedule-driven design delivery**: Rapid electrical/mechanical designs for build-to-print, redesign, new designs, and testing—backed by application know-how, world-class engineering, and global manufacturing.

> **Feature-rich, retrofit-friendly designs:** Integrates gearing, redundant channels, environmental sealing, and more—while reducing component count for weight savings.

> **Configurable, plug-and-play ready solutions:** From simple packaged sensors to multi-function integrated assemblies, including fully sealed, qualified products with connectors and mounting.

> **Lifecycle support & rugged reliability:** Global customer support from design through production and beyond; field-proven durability under pressure cycling, wash-down, temperature extremes, and high vibration.

MAKE IT HAPPEN

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