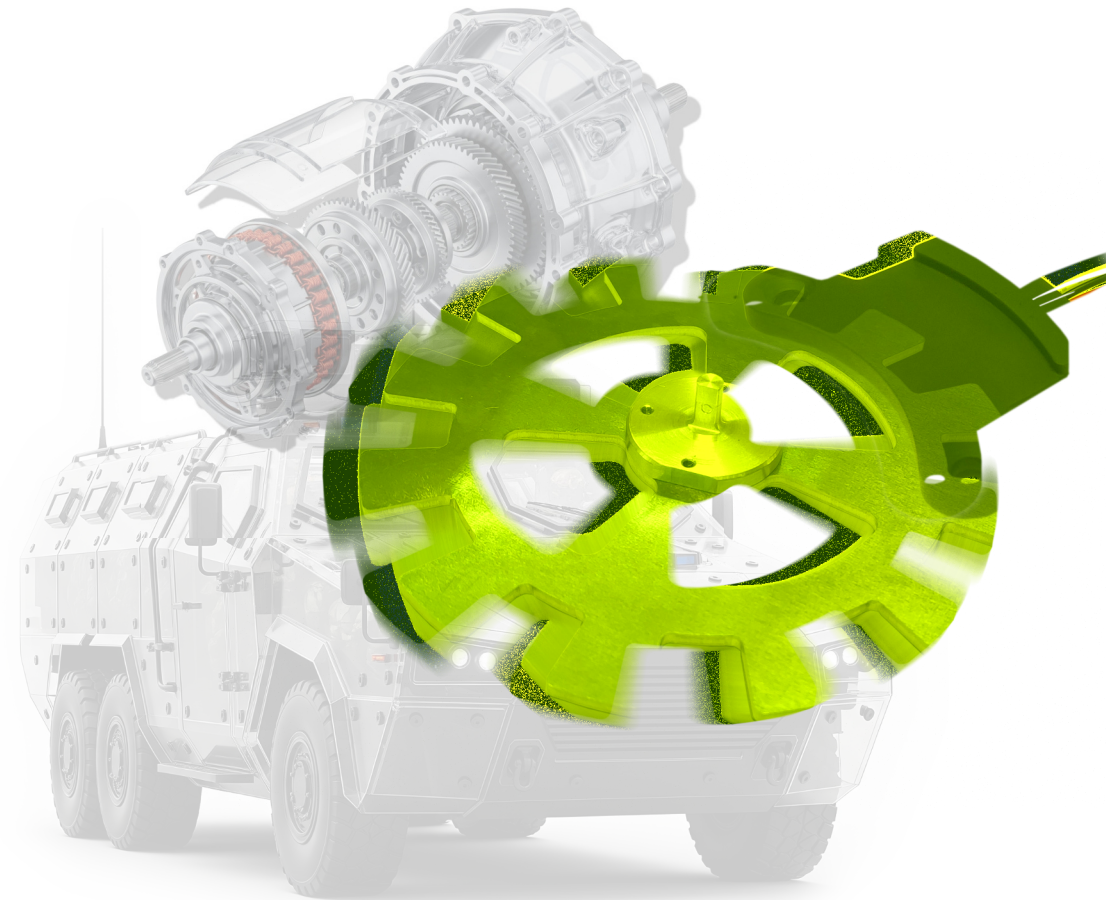


Air | Land | Sea

CONTACTLESS CURRENT & POSITION SENSING FOR HARSH ENVIRONMENTS

*Sensors Engineered
for Every Element*



PIHER *sensing*
systems
an Amphenol® company

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. Our commitment is to achieve carbon-neutral operations by 2028.



PIHER *sensing*
systems
an Amphenol® company

Unmanned Systems

Smart sensing for unmanned missions

Piher delivers 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.

PIHER *sensing*
systems
an Amphenol® company

POSITION
SENSORS
ARTICULATIONS
STEERING &
PEDAL

Play
resistant

CURRENT
SENSORS
MOTOR CONTROL /
CONVERTER /
INVERTER

HIGH SPEED
MOTOR
POSITION
SENSORS

TILT
SENSORS
STABILITY AND
ROLLOVER
PREVENTION

CURRENT
[M]

INCLINATION
[Z]

ANGLE
[A]

STEERING
[S]

ROTOR
[R]

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, suspension height and power distribution. Optimised 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.

PIHER *sensing*
systems
an Amphenol® company

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



INCLINATION



CONTROLS



CURRENT



PEDALS



TRANSMISSION



STEERING



**PEDAL
SENSORS**

RADAR / TURRETS /
ARMS / HATCHES /
DOORS



**SAS
STEERING
ANGLE
SENSORS**



Avionics sensors

Flight-proven precision at altitude.

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.

We deliver 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.

PIHER *sensing*
systems
an Amphenol® company

PRECISION CONTROLS

SIDESTICKS / LEVERS /
SWITCHES / YOKE /
PEDALS

ROTOR



CONTROLS



ROTOR



INCLINATION



ACTUATOR



ANGLE



STEERING



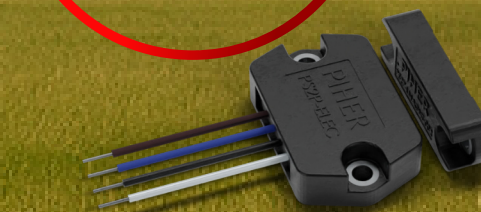
SENSORS FOR ACTUATORS

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

ROTOR POSITION SENSORS

HIGH SPEED
E-MOTOR

ROTARY SENSORS



Marine Solutions

Rugged and Trusted at sea

Piher manufactures sensors that can withstand the harshest environmental conditions such as exposure to saltwater, temperature extremes, high vibration and moisture.

PIHER *sensing*
systems
an Amphenol® company

**ARC
SENSORS**
STEERING
&
TILT

Play
resistant



**ENGINE
THROTTLE
ANGULAR
SENSOR**



**HAND
THROTTLE
POSITION
SENSOR**



**CURRENT
SENSORS**
GENERATORS /
CONVERTER /
INVERTER



ANGLE



CURRENT



ANGLE



ROTOR



Non-Contact Position & Motion Sensing

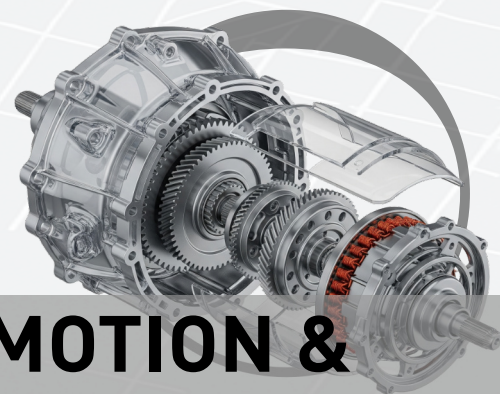
No wear. No drift. No downtime.

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.

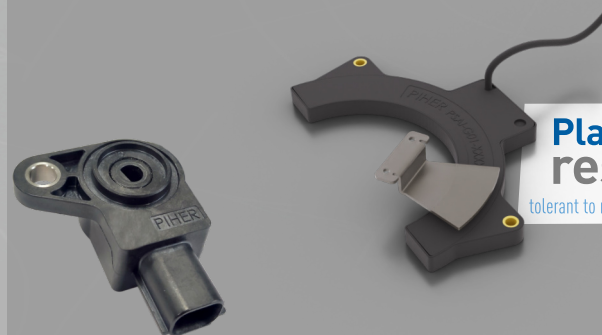
Packages range from fully sealed rotary and rod-style linear formats to "through-shaft" and touchless target-magnet designs, enabling easy retrofit and long service life with minimal maintenance.



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
resistant**

tolerant to radial and axial misalignment



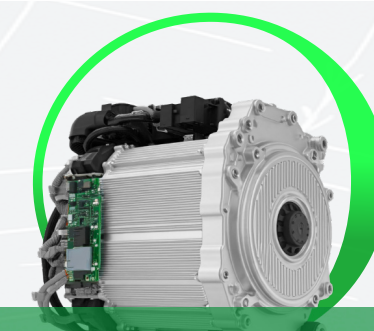
HIGH SPEED E-MOTOR

**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



PIHER *sensing
systems*
an Amphenol® company



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 $\pm 1,500$ 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
info@piher.net

PIHER *sensing*
systems
an Amphenol® company

