A TRUSTED PARTNER

Decades of leadership in magnetostrictive position sensing

Deep, hands-on application expertise across various industries

Highest quality through in-house R&D and production

Commitment to quality, consistency, and compliance

Thinking globally. Acting locally.
As part of the Amphenol Group, we operate state-of-the-art production facilities in Germany (Lüdenscheid & Dortmund) and the USA (Cary, NC), supported by a global network of direct sales offices and authorized distributors.

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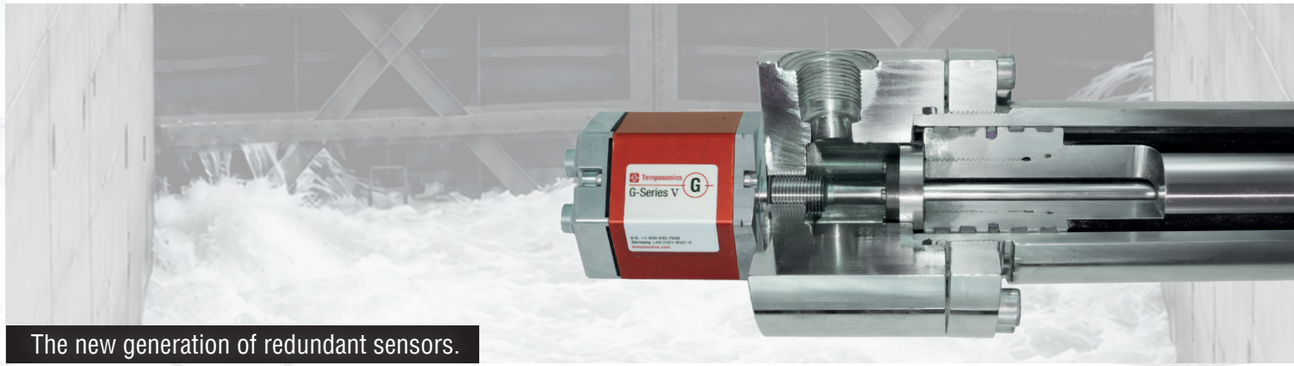
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Temposonics
AN AMPHENOL COMPANY

Use Case Spotlight

Hydraulic Engineering Applications

Magnetostrictive Linear Position Sensors for Reliable Motion Control



The new generation of redundant sensors.

Where value creation depends on fail-safe performance.

– TRUST THE EXPERTS –

WHY POSITION MEASUREMENT?

Whether in water locks, hydropower plants, or flood control systems, accurate position feedback is essential for operational safety, efficient water management, and long-term infrastructure reliability. Temposonics linear position sensors are designed for extreme operating conditions, providing precise, maintenance-friendly performance and long-term durability in wet and corrosive environments.

WHY WE PERFORM WHERE OTHERS FAIL

MAGNETOSTRICTION: PROVEN & ROBUST TECHNOLOGY

- **Absolute, non-contact position sensing**
  – No recalibration required
  – No mechanical wear
  – Maintenance-free operation
- **Safety-critical precision**
  – Reliable positioning in real-time, even under harsh conditions
  – Picosecond-accurate measurement enabled by a proprietary waveguide that we design, manufacture, and control

RUGGED & INNOVATIVE DESIGNS

- **Rugged**
  Resistant to shock, vibration, dust, humidity, extreme temperature, and corrosive environments
- **EMC immunity**
  Stable performance over many years of continuous operation
- **Wide range of form factors** (standard/embedded mounting, rigid/flexible rod) & connector assembly, interfaces & certifications for seamless integration in your application, easy serviceability & maximum flexibility

CUSTOMIZED SOLUTIONS

- **Customer-specific** design and development tailored to application requirements

IN PRACTICE…



WE UNDERSTAND YOUR APPLICATION…

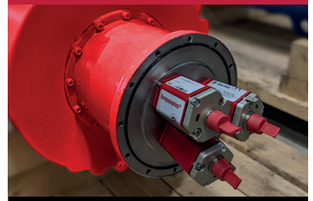
Temposonics® R-Series V and G-Series V sensors can be enhanced with smart diagnostic support on-site, improving system reliability, simplifying maintenance, and enabling efficient operation.



The compact and portable TempoLink® smart assistant enables flexible service. This device act as smart interface between the sensor and the user, delivering valuable diagnostic and operational data for optimized system monitoring and predictive maintenance, including:

- Parameter settings, such as resolution and measurement direction
- Internal sensor temperature
- Total operating hours
- Distance traveled by the position magnet
- Sensor information, including order code and serial number

DEVELOPED FOR HYDRAULIC ENGINEERING



Triple redundancy through integration of 3 position sensors in a single rod.

…AND DELIVER THE OPTIMAL SENSOR SOLUTION WITH EXPERT SUPPORT:



R-Series V FLEXIBLE (RF5)

- High performance sensor
- Flexible rod with 100 mm bend radius
- Stroke length: 150…20.000 mm
- Additional information via the smart assistant



R-Series V ROD (RH5)

- High performance sensor
- Available with flexible sensing element
- Stroke length: 25…7.620 mm
- Additional information via the smart assistant



G-Series V REDUNDANT (GT5)

- Double or triple redundant sensor elements in a single pressure resistant rod
- Stroke length: 50…3.500 mm
- For enhanced safety applications