

# Temposonics®

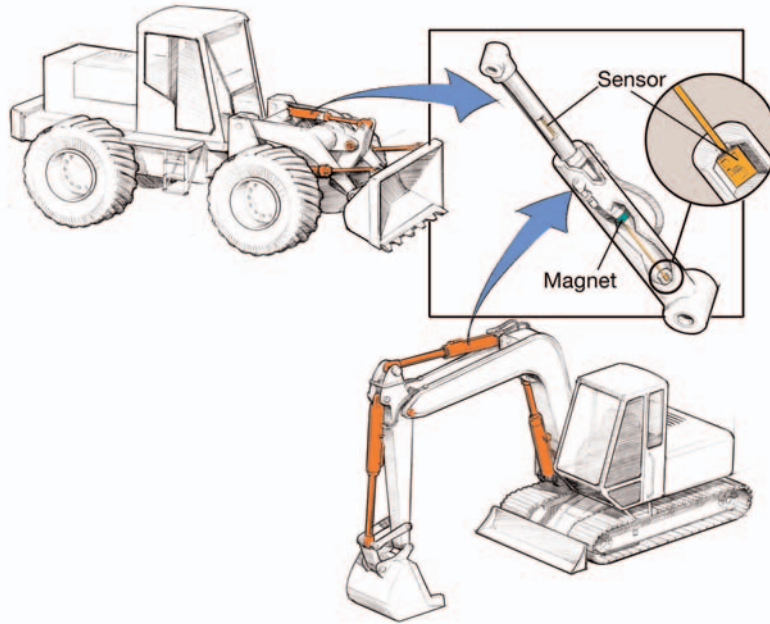
Magnetostrictive Linear-Position Sensors



Construction Equipment

550901 C

## Application Idea



### MTS Temposonics Linear-Position Sensors Provide Reliable Control

With the increasing need for improved safety systems, on-board diagnostic systems, control-by-wire and GPS-based excavation and grading control, more precise, predictable, reliable control of actuator motion is imperative.

MTS position sensors can form the basis of a sound closed-loop control-by-wire scheme. The fast update times and high resolution of Temposonics sensors in the feedback loop allow controllers to perform effective PID loop compensations while giving the control system precise position information. Custom versions of the sensors can also collect and reduce data for diagnostic purposes, such as peak values.

Three fundamental mounting options are possible. The traditional method is to mount the sensor inside the hydraulic actuator, co-axially within a gun drill in the piston rod. This method is proven in thousands of applications and provides the maximum protection for the sensor in a harsh environment. Sensor and electronics can be integrated into one package or separated to offer even more installation options. However, sensors can also be mounted outside the actuator to measure piston extension/retraction or wound around joints to measure rotation.

All specifications are subject to change. Please contact MTS for specifications that are critical to your needs.

**Part Number: 04-05 550901 Revision C**  
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All Temposonics sensors are covered by US patent number 5,545,984.  
Additional patents are pending.  
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