

Embedded Linear Transducers for Mobile Industries



► Problem

Clevis style Hydraulic cylinders are used in a variety of mobile industries/applications, to move heavy loads. To automate these machines a linear transducer is typically installed inside of the cylinder. OEM's typically want to protect the sensor from the outside elements while keeping the same pin-to-pin center of the cylinder; this makes using the traditional Rod Style linear transducer very difficult if not impossible.

► Solution

With this in mind, we designed the 958A, focusing on the mobile hydraulics market. The 958A utilizes our field-proven Magnetostrictive technology to give absolute analog position, accurate to 0.04% of the programmable sensing distance. It is a rugged, accurate, programmable (zero & span), auto-tuning, non-

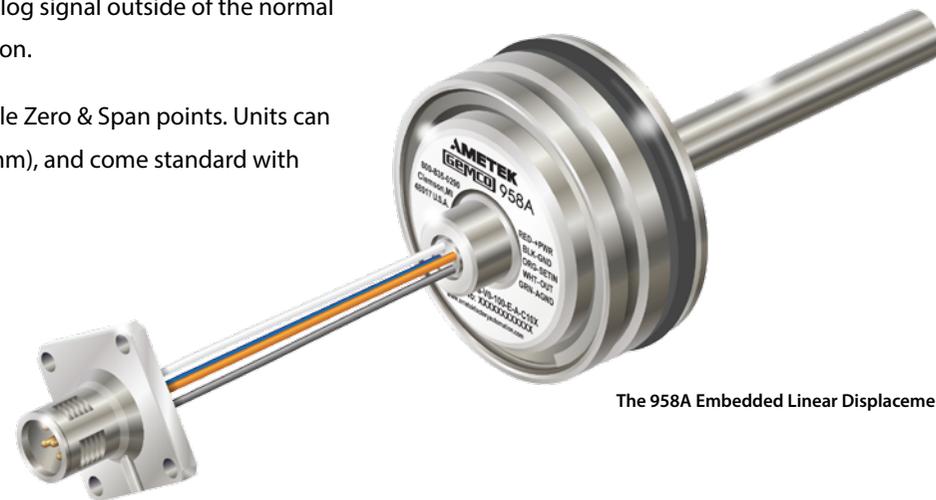
contact linear displacement transducer in a compact embedded rod-style package. The embedded package style allows the unit to be totally installed inside of a hydraulic cylinder, thus protecting the transducers from outside conditions.

The 958A includes three unique features: (1) The unit can be powered from 8 to 30 VDC at 1.6 watts, making it easy to fit into a variety of systems. (2) The unit features an auto-tuning capability, which allows it to sense a magnet other than the standard ring magnet, and adjust its signal strength accordingly. (3) The unit includes diagnostics, which indicate if the magnet position lies outside of the specified range by outputting an analog signal outside of the normal operating range. All units can easily be changed in the field for reverse operation.

Our units offer a variety of different analog outputs, all with field programmable Zero & Span points. Units can be ordered in English or metric span lengths from 2" to 100" (50 mm to 2540 mm), and come standard with either integral cable assemblies, bare leads, or M12 style connectors.

Potential Customers

Hydraulic Cylinders, Agriculture, Construction, Mining, Commercial Vehicles.



The 958A Embedded Linear Displacement Transducer