

M-Series Analogue/PWM Test Kit

Magnetostrictive Linear Position Sensors

Document Part No.
551139 Revision A



Features:

- Easy connection to MTS' M12 integrated connector system
- Easy to use push-button controls
- Supports voltage (0-10 Vdc) and current (0-20 mA) outputs
- Tolerances 5 Vdc \pm 10 mV, 20 mA \pm 0,02 mA
- Supports scaled PWM and time of flight (TOF) PWM outputs
- Compact construction for use in field applications
- Provides both +5 Vdc and +12 Vdc sensor power supply
- Rechargeable battery that provides up to 8 hours of operation per charge
- Battery level monitoring
- Automatic detection of PWM sensor frequency
- Carrying case

Benefits:

- Isolates sensor from vehicle system to independently determine functionality of the sensor
- Designed for use in both factory and in-field applications

Applications

There exists a strong need in the off-highway market to quickly verify the of an embedded sensor application throughout the supply chain. Sensor manufacturer's have sophisticated equipment to test, program, calibrate and verify that each sensor meets specifications. Once the sensor leaves the factory, verification of functionality throughout the supply chain can become more difficult. In many situations, without direct knowledge of how to connect a volt meter, current meter, or oscilloscope to the sensor verifying functionality can become a daunting task.

Functional verification is required because it is possible for the sensor to be exposed to potentially damaging situations during the hydraulic cylinder assembly process. As a result, many cylinder manufacturers prefer a way to verify functionality after the cylinder is assembled.

Additionally, equipment OEM's require the ability to verify sensor functionality and troubleshoot their equipment, both at the factory and in the field. MTS Sensors Division developed the portable analogue/PWM Test Kit to provide direct feedback from M-Series analogue/PWM sensors.

Temposonics M-Series

Analogue/PWM Test Kit

Product Overview

The M-Series analogue/PWM Tester supports M-Series sensors with analogue, 0-20 mA and 0-10 Vdc, scaled Pulse Width Modulated (PWM), and PWM time of flight (ToF) sensor outputs. With its rechargeable battery, the M-Series Tester can provide power directly to the sensor thus isolating the sensor from the rest of the vehicle.

This is useful in situations where a vehicle harness could be mis-wired or there could be an error in the software that makes the sensor appear to be malfunctioning. By isolating the sensor the operator can quickly determine if the sensor is functioning or not. This eliminates time wasted on replacing a functioning sensor.

Whether in the factory or in the field the M-Series analogue/PWM Tester can be quickly attached to the sensor under test by using one of three cables included in the kit. Two test cable comes with a M12 plug, that mates with MTS' M12 integrated connector system, and color coded banana plugs that mate with the terminals of the tester. The third cable is a simple pigtail cable with color coded banana plugs that allows the cable to be customized to other connector systems that may be in use.

How to order

A Test Kit includes:

- M-Series analogue/PWM Tester
- M12 cable
- Pigtail cable
- 12 Vdc charger with adapter
- CD-Rom with User's Guide
- Carrying case
- Power Plug EU
- Power plug UK

| <u>Description</u> | <u>Part. No.</u> |
|--------------------------------|------------------|
| M-Series analogue/PWM Test Kit | 280 618 |

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