Temposonics®

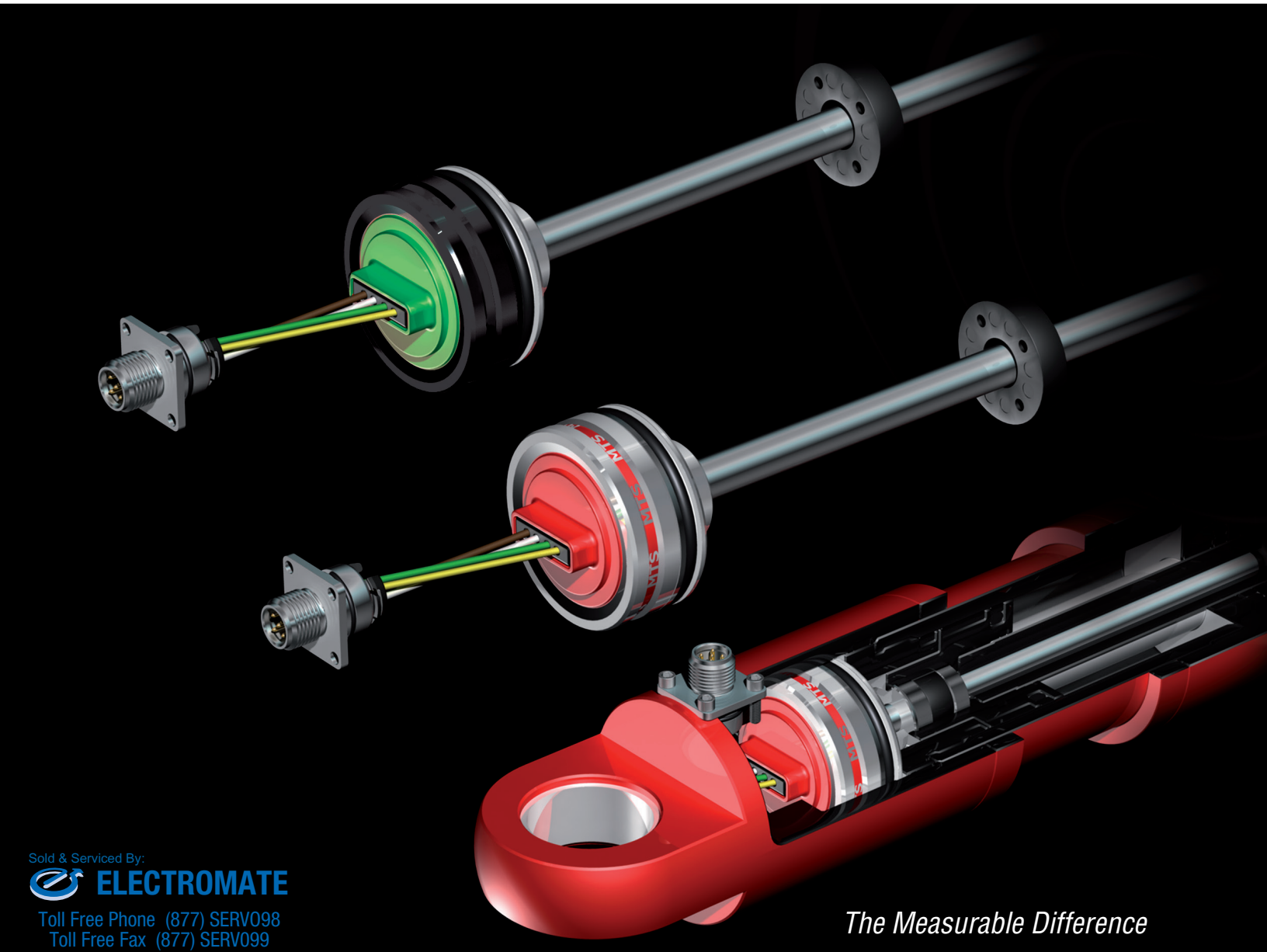
MTS SENSORS

Absolute, Non-Contact Position Sensors

MH-Series Sensors

Document Part Number
551115 Revision E

Mobile Hydraulic Product Overview



The Measurable Difference

MTS SENSORS

MH-SERIES

						
	Model MH In-cylinder Design Analog, Digital & PWM Outputs	**Model MH Agri** In-cylinder Design Analog Output	**Model HE** (Hall Effect Technology) In-cylinder Design Analog Output	**Model MT** In-cylinder Design Redundant Sensor With 2 individual Analog Outputs	**Model MS** In-cylinder Design With Voltage and Current Outputs	**Model MXR** External Mount PWM and Analog Output
AVAILABLE OUTPUT	Voltage, Voltage SIL 2, Current, CANOpen, CANOpen Safety CAN J1939 & PWM	Voltage	Voltage	Voltage and Current	PWM, Voltage, Current	PWM, Voltage, Current
MEASURING RANGE: (POSITION & VELOCITY)	50 mm (2 in.) to 5000 mm (200 in.)	50 mm (2 in.) to 1000 mm (40 in.)	100 mm (4 in.) to 400 mm (16 in.)	50 mm (2 in.) to 1500 mm (59 in.)	50 mm (2 in.) to 2000 mm (79 in.)	50 mm (2 in.) to 600 mm (24 in.)
	± 1.0 m / sec (CAN only)	-	-	-	-	-
LINEARITY (ACCURACY)	≤ ± 0.1 mm @ ≤ 250 mm ± 0.8 mm @ ≤ 2500 mm ≤ ± 1.6 mm @ ≤ 5000 mm	≤ ± 0.2 mm @ ≤ 250 mm ± 0.8 mm @ ≤ 1000 mm	± 1.0 mm @ ≤ 250 mm	≤ ± 0.1 mm @ ≤ 250 mm ≤ ± 0.6 mm @ ≤ 1500 mm	≤ ± 0.1 mm @ ≤ 250 mm ± 0.8 mm @ ≤ 2500 mm	≤ ± 0.3 mm @ ≤ 250 mm ≤ ± 0.6 mm @ ≤ 600 mm
RESOLUTION	Varies by output (see data sheet)	± 0.25 mm typical	≤ ± 0.50 mm @ ≤ 250 mm	0.1 - 0.4 mm (length dependent)	0.1 - 0.6 mm (length dependent)	0.1 - 0.4 mm (length dependent)
REPEATABILITY	± 0.2 mm (± 0.10 mm CAN only)	± 0.40 mm	± 0.25 mm	± 0.20 mm		± 0.25 mm
OPERATING TEMPERATURE	-40 °C (-40 °F) to 105 °C (221 °F)		-40 °C (-40 °F) to 85 °C (185 °F)	-40 °C (-40 °F) to 105 °C (221 °F) -40 °C (-40 °F) to 105 °C (221 °F)		
PRESSURE RATING	Rod diameter 10 mm: Operating = 350 bar / Pmax. = 450 bar Rod diameter 7 mm: Operating = 300 bar / Pmax = 400 bar	Rod diameter 10 mm: Operating = 350 bar / Pmax. = 450 bar			Rod diameter 7 mm: Operating = 300 bar / Pmax. = 400 bar	-
SHOCK RATING	IEC 60068-2-27, 100 g Single Hit	IEC 60068-2-27, 50 g Single Hit	IEC 60068-2-27, 25 g Single Hit	IEC 60068-2-27, 100 g Single Hit		
VIBRATION RATING	IEC 60068-2-6 (10 to 2000 Hz) Rod diameter 10 mm to 25 g (rms) Rod diameter 7 mm to 15 g (rms)	IEC 60068-2-6 (10 to 2000 Hz) Rod diameter 10 mm to 20 g (rms)	IEC 60068-2-6 (10 to 2000 Hz) Rod diameter 10 mm 15 g (rms)	IEC 60068-2-6 (10 to 2000 Hz) Rod diameter 10 mm to 15 g (rms)	IEC 60068-2-6 (10 to 2000 Hz) Rod diameter 7 mm 15 g (rms)	IEC 60068-2-6 (10 to 2000 Hz) 15 g (rms)
INGRESS PROTECTION	IP67 (IP69K with M12 x 1 connector attached)			IP67 (IP69K with M12 x 1 connector attached)		
ELECTRICAL INSTALLATION	Operating voltage: 12/24 Vdc Operating range: 8 to 32 Vdc Power Consumption: < 1 W Electrical isolation: 500 Vdc (DC ground to machine ground) Polarity protection: -36 Vdc Overvoltage protection: 36 Vdc	Operating voltage: 12 Vdc Operating range: 8 to 16 Vdc Power Consumption: < 1 W Electrical isolation: 500 Vdc (DC ground to machine ground) Polarity protection: -36 Vdc Overvoltage protection: 36 Vdc	Operating voltage: 12 Vdc Operating range: 8 to 15 Vdc Power Consumption: < 1 W Electrical isolation: 500 Vdc (DC ground to machine ground) Polarity protection: -30 Vdc Overvoltage protection: 30 Vdc	Operating voltage: 12/24 Vdc Operating range: 8 to 32 Vdc Power Consumption: < 1 W Electrical isolation: 500 Vdc (DC ground to machine ground) Polarity protection: -36 Vdc Overvoltage protection: 36 Vdc		Operating voltage: 5/12/24 Vdc Operating range: 4.75 to 32 Vdc Power Consumption: < 1 W Electrical isolation: 500 Vdc (DC ground to machine ground) Polarity protection: -36 Vdc Overvoltage protection: 36 Vdc
EMI (IMMUNITY ONLY)	ISO 11452-2 (Antenna Method) ISO 11452-4 (Bulk Current Injection) IEC 61000-4-3 (Radio Frequency Interference) IEC 61000-4-6 (Conducted Disturbances) IEC 61000-4-4 (Burst) IEC 61000-4-8 (Magnetic Fields)		Call for Details	ISO 11452-2 (Antenna Method) ISO 11452-4 (Bulk Current Injection) IEC 61000-4-3 (Radio Frequency Interference) IEC 61000-4-6 (Conducted Disturbances) IEC 61000-4-4 (Burst) IEC 61000-4-8 (Magnetic Fields		