

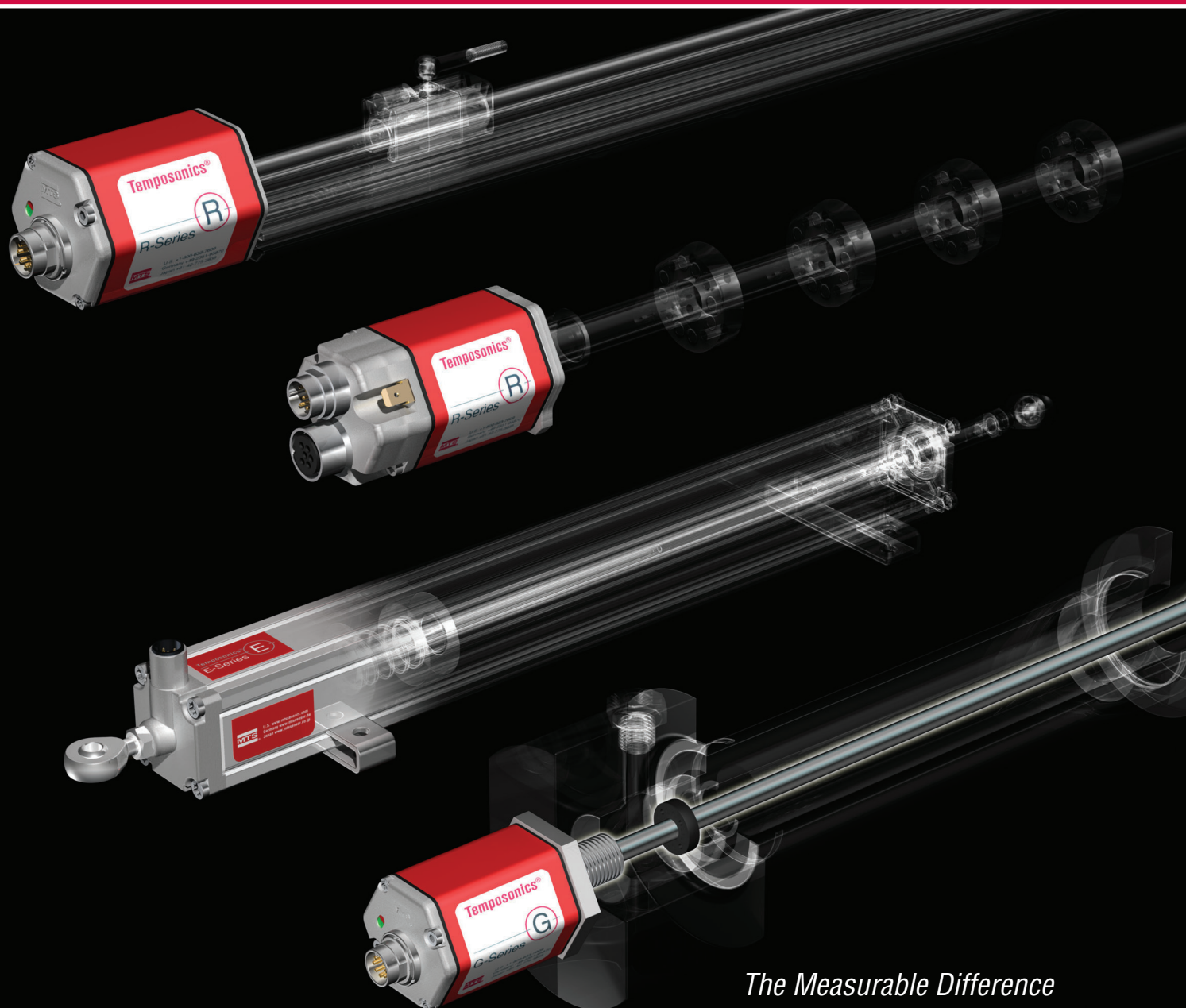
Temposonics®







Magnetostrictive, Absolute, Non-contact
Linear-Position Sensors

Document Part Number
550937 Revision H

Industrial Product Overview








The Measurable Difference

| | | | |
|---|--|---|--|
|  |  |  |  |
| <p>Model RH Rod style housing for use in hydraulic/pneumatic cylinders</p> | <p>Model RP Aluminum extrusion profile housing easily mounts on machine surface</p> | <p>Model RF Flexible rod housing for mounting along an arc or for limited installation space</p> | <p>Model RD4 Rod style housing with detached electronics and mounting block. Ideal for use in clevis mounted cylinders.</p> |

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|------------------------|---|-------------------------------|---|-------------------------------|
| OUTPUT | Voltage: 0 to 10 Vdc, 10 to 0 Vdc, -10 to +10 Vdc, +10 to -10 Vdc Additional output ranges available between -10 and +10 Vdc | | | |
| | Current: 4 to 20 mA, 20 to 4 mA Additional output ranges available between 0 and 20 mA. | | | |
| | SSI (Synchronous Serial Interface): Gray or binary format, data length selectable, synchronous / asynchronous measurement, optional parity and error bit. | | | |
| | Fieldbus: CANbus, DeviceNet, Profibus-DP, EtherCAT®, EtherNet/IP | | | |
| MEASURING RANGE | 25 to 7,620 mm (1 to 300 in.) | 25 to 5,080 mm (1 to 200 in.) | 250 to 10,060 mm (10 to 396 in.) Contact factory for longer lengths. | 25 to 5,080 mm (1 to 200 in.) |
| | RESOLUTION Voltage and Current: 16 Bit, 0.0015% Digital: SSI; 0.5 µm (0.00002 in.), Profibus, EtherCAT®, EtherNet/IP; 1 µm (0.00004 in.), CANbus, DeviceNet; 2 µm (0.00008 in.). | | | |
| FEATURES | Position + Velocity Measurement (see data sheets) | | | |
| | <p>Simultaneous Multi-Position Measurements:</p> <ul style="list-style-type: none"> • Voltage or Current; 2 positions • Profibus, CANbus, EtherCAT, EtherNet/IP; up to 20 positions • SSI: 2 magnet differential | | | |
| DIAGNOSTICS | Handheld programmers and PC programming kits allow adjustment of the measurement stroke length and sensor parameters. | | | |
| | Sensor LEDs indicate sensor status, field bus activity and diagnostics. | | | |

CUSTOM AND SPECIAL FUNCTION SENSORS (REFER TO WWW.MTSENSORS.COM)







| | | | | |
|---|---|---|--|---|
|  |  |  |  |  |
| MODEL GB SENSOR | MODEL MH SENSOR | C-SERIES MODELS CS/CM SENSORS | MODEL GT REDUNDANT | C-SERIES WITH H2 HOUSING AND FLOAT OPTIONS |

G-SERIES

Backward compatibility and upgraded performance for legacy sensor retrofits

E-SERIES

Economical sensor models for simplistic position feedback applications

| | | | | | |
|---|--|---|--|---|---|
|  |  |  |  |  |  |
| Model GH & GP Rod or profile style housings | Model EP2 Magnet is secured to the moving machine part and travels over the sensor housing | Model EH Compact rod style housing for use in hydraulic / pneumatic cylinders | Model EP Aluminum extrusion profile housing easily mounts on machine surface | Model EL Low height profile housing for lower clearance on machine | Model ER Rod-and-cylinder housing provides versatile mounting options and internal magnet |
| Voltage: Ranges between -10 and +10 Vdc | Voltage: 0 to 10 Vdc and / or 10 to 0 Vdc | | | | |
| Current: Ranges between 0 and 20 mA | Current: 4 to 20 mA or 20 to 4 mA | | | | |
| Digital Pulse: Start / Stop or PWM | Digital Pulse: Start / Stop | | | | |
| Voltage and Current: 50 to 2540 mm (2 to 100 in.) Digital Pulse: 50 to 5080 mm (2 to 200 in.) Rod style up to 7620 mm (300 in.) | 4, 6, 9, 12, 15, 18, 21, 24, 30, 36, 42, 48, 54 and 60 in. | 50 to 2500 mm (2 to 100 in.) For EP Start / Stop only: 50 to 3000 mm (2 to 120 in.) | | | 50 to 1500 mm (2 to 60 in.) |
| Voltage and Current: Infinite (restricted by output ripple) | Voltage and Current: Infinite (restricted by output ripple) | | | | |
| Digital Pulse: 5 µm, dependent on controller | Digital Pulse: 5 µm, dependent on controller | | | | |
| Position Measurement | Position Measurement | | | | |
| Simultaneous Multi-Position Measurement for Start / Stop (controller dependent) | Simultaneous Multi-Position Measurement: <ul style="list-style-type: none"> • Voltage or current; 2 positions • Start/Stop (controller dependent) | | | | |
| Change measurement stroke length and output using handheld programmers and PC programming kits | Sensor parameters upload feature for Start/Stop models | | | | |
| Sensor LEDs indicate status and diagnostics | | | | | |

ACCESSORIES

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|---|---|---|--|---|
|  |  |  |  |  |
| CONNECTORS & CABLES | MAGNETS & FLOATS | PROGRAMMING TOOLS | EXPLOSION-PROOF HOUSING | PROTECTIVE HOUSINGS |

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