

Product Specifications



PARAMETER SPECIFICATION

<b>HOUSING</b>	
<b>Protection type:</b>	Approved by Factory Mutual Research for: Class I, Division 1, Groups B, C, & D Class II/III, Division 1, Groups E, F, & G
<b>Material/Finish:</b>	Copper-free Aluminum Alloy/Silver Powder Epoxy Paint
<b>Conduit openings:</b>	3/4 in. - 14 NPT
<b>Ingress Protection:</b>	NEMA 4/IP66

<b>ROD</b>	
<b>Material:</b>	Stainless steel 304L (1.4306)
<b>Mounting Flange:</b>	M18 x 1.5 (metric) or 3/4in. - 16 UNF-3A (US std.)
<b>Operating Pressure:</b>	350 bar static, 690 bar spike (5000 psi static, 10,000 psi spike)

<b>R SERIES POSITION SENSOR</b>	
<b>(Reference RH Product Specification for complete details)</b>	
<b>Resolution:</b>	Up to 0.002 mm (0.00008 in.)*
<b>Non-Linearity:</b>	< ± 0.01% of full stroke or ± 0.04 mm (0.0016 in.), whichever is greater*
<b>Repeatability:</b>	< ± 0.001% of full scale or ± 0.0025 mm (0.0001 in.), whichever is greater
<b>Hysteresis:</b>	< 0.004 mm (0.00016 in.)
<b>Output Styles:</b>	Analog, CANbus, DeviceNet®, SSI
<b>Measuring Range:</b>	25 to 7620 mm (1 to 300 in.)*
<b>Ingress Protection:</b>	IP 67

<b>L SERIES POSITION SENSORS</b>	
<b>(Reference LH Product Specification for complete details)</b>	
<b>Resolution:</b>	Digital: 1 ÷ [gradient x crystal freq. (MHz) x circulation]
<b>Non-Linearity**:</b>	± 0.02% or ± 0.05 mm (± 0.002 in.), whichever is greater. 0.002 in. is the minimum absolute linearity and varies with sensor model
<b>Repeatability:</b>	Equal to resolution
<b>Hysteresis:</b>	< 0.02 mm (0.0008 in.)***
<b>Output Styles:</b>	Digital Only: Start/Stop or PWM
<b>Measuring Range:</b>	25 to 7620 mm (1 to 300 in.)
<b>Ingress protection:</b>	IP 67

Features

- Available with the Temposonics R Series and L Series Position Sensors
- Explosion-proof
- Dust/Ignition Proof
- Weatherproof
- 2-year Warranty



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

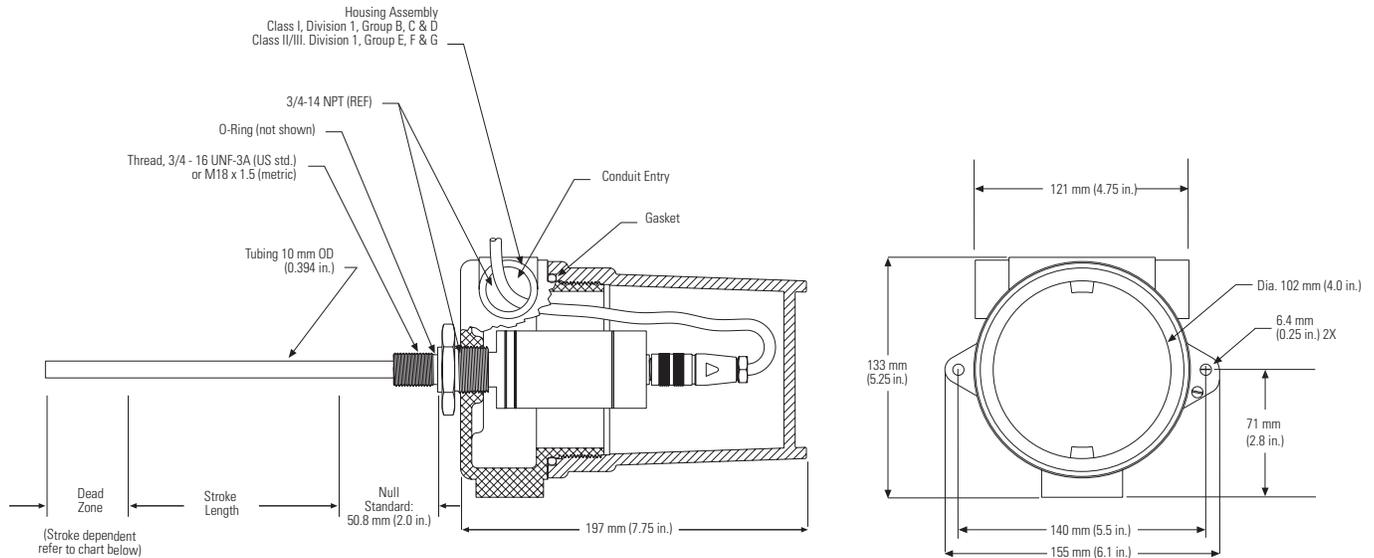
\* Varies with model

\*\* Non-linearity increases with multiple circulations.

\*\*\* Power supply dependent

For additional information, refer to (www.mtssensors.com).

# D I M E N S I O N S



All dimensions shown are for reference only.

Stroke-dependent Dead Zones	
Stroke Length	Dead Zone
25 - 5000 mm (1 - 197 in.)	63.5 mm (2.5 in.)
5005 - 7620 mm (197.1 - 300 in.)	66 mm (2.6 in.)

## NOTES FOR ORDERING:

Reference the RH and LH\* Product Specification brochures for "How to Order" model number information.\*\*  
Use the following **Housing Style** options to indicate appropriate TempoGuard model.

### Housing Style

- K = US Customary threads, raised-faced hex, explosion-proof housing and pressure tube
- Z = US Customary threads, flat-faced hex, explosion-proof housing and pressure tube
- J = Metric threads, raised-faced hex, explosion-proof housing and pressure tube
- W = Metric threads, flat-faced hex, explosion-proof housing and pressure tube

\* LH models available with Start/Stop or PWM outputs only

\*\* Only the following connector options are available for their appropriate output styles: D6, D60, D70, D51.

R Series sensors having stroke lengths over 3500 mm (137.8 in.), [2540 mm (100.0 in.) for CANbus], have a longer electronics housing, and therefore, require the integral cable option, or the use of non-standard extension cable connectors to still fit inside the TempoGuard housing.



**SENSORS**  
GROUP

Pioneers,  
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**UNITED STATES**  
MTS Systems Corporation  
Sensors Division  
3001 Sheldon Drive  
Cary, NC 27513  
Tel: 800.633.7609  
Fax: 919.677.0200  
Web: www.mtssensors.com  
Email:  
displacement@mtssensors.com

**GERMANY**  
MTS Systems Corporation  
Sensors Technologie  
Auf dem Schuffel 9, D-58513 Lüdenscheid, Germany  
Postfach 8130 D-58489 Lüdenscheid, Germany  
Tel: + 49.2351.95870  
Fax: + 49.2351.56491  
Web: www.mtssensor.de

**JAPAN**  
MTS Systems Corporation  
Sensors Technologie Japan  
Ushikubo Bldg.  
737 Aihara-cho, Machida-shi  
Tokyo 194-0211, Japan  
Tel: + 81 (42) 775.3838  
Fax: + 81 (42) 775.5512

