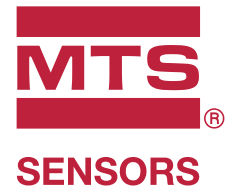


# Temposonics®

Magnetostrictive Linear Position Sensors



## Garbage Trucks Application Note

**SEGMENT:** Mobile Hydraulics  
**BRANCH:** Municipal Vehicles



### WHERE ARE POSITION SENSORS INSTALLED?

- 1 In the front lifting cylinder to control lifting of variable weights
- 2 In the dumping cylinder to safely optimize cycle time
- 3 In the clamping cylinder to control grasping force
- 4 In the side reach and extend cylinder to efficiently align to targets

### MTS SENSORS SOLUTION

More and more, manufacturers are relying on linear position sensing to support the trend to automate on-road vehicles and related mechanisms. Position feedback is utilized not only to improve system performance, but also to improve machine life and safety without having to rely as heavily on operator skills.

### WHY POSITION MEASUREMENT?

Garbage trucks must be fast, efficient, and quiet. As public vehicles, they are expected to efficiently complete a dirty task safely, without disturbing citizens. As a business, cost savings are increased based on how efficiently the truck completes its route. By using cylinder position data, trucks can optimize their dump cycles to be fast and quiet. Monitoring this data over time can also be used for predictive maintenance and route optimization.

### KEY REQUIREMENTS

- Absolute and reliable position feedback for precise movements
- Highest robustness against shock and wear of thousands of cycles
- High sample rate and resolution to optimize cylinder stroke and electronic cushioning

### RECOMMENDED SENSOR MODELS

#### MH-Series MH

Embedded Cylinder Solution



#### MH-Series MH Safety

with SIL 2,  
conform to EN 61508

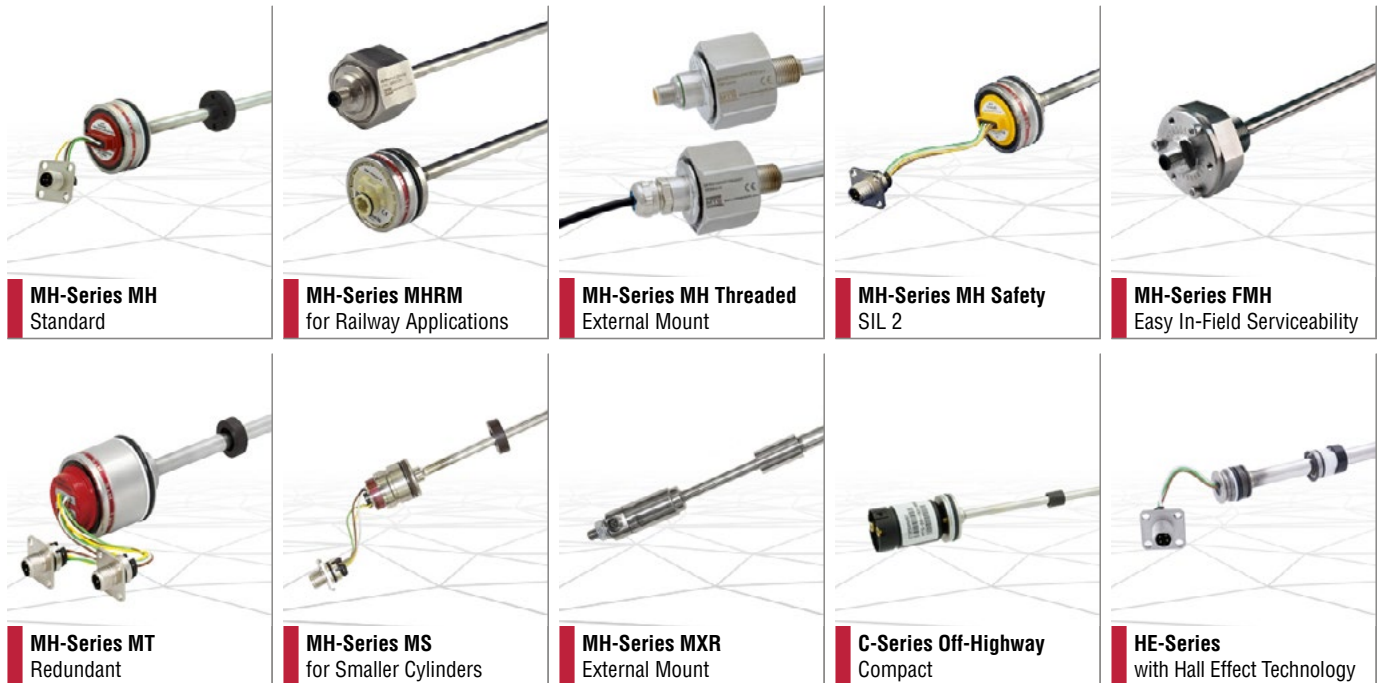


#### MH-Series MH Threaded

External Mount



## MEETING THE CHALLENGES OF MOBILE HYDRAULIC APPLICATIONS



## TOTAL CUSTOMER SATISFACTION

Our commitment at MTS Sensors is to consistently deliver quality products on time to meet your schedules and provide first-class service. Trust in our continuous product development of high-performance position sensors and rely on our highly qualified personnel. At MTS Sensors, we live by the promise of unparalleled service that enables us to take all available means to exceed your expectations. Our goal is to support you optimizing your productivity and we love the idea to make you save your valuable time!

If we can be of further assistance please let us know -

Your MTS Sensors Team



### Document

AN Mobile Garbage Trucks, Rev B (EN) 02/2021

[www.mtssensors.com](http://www.mtssensors.com)

### UNITED STATES

MTS Systems Corporation  
Sensors Division  
Phone: +1 919 677-0100  
E-Mail: [info.us@mtssensors.com](mailto:info.us@mtssensors.com)

### GERMANY

MTS Sensor Technologie  
GmbH & Co. KG  
Phone: +49 2351 9587-0  
E-Mail: [info.de@mtssensors.com](mailto:info.de@mtssensors.com)

### ITALY

Branch Office  
Phone: +39 030 988 3819  
E-Mail: [info.it@mtssensors.com](mailto:info.it@mtssensors.com)

### FRANCE

Branch Office  
Phone: +33 1 58 4390-28  
E-Mail: [info.fr@mtssensors.com](mailto:info.fr@mtssensors.com)

### UK

Branch Office  
Phone: +44 79 44 15 03 00  
E-Mail: [info.uk@mtssensors.com](mailto:info.uk@mtssensors.com)

### SCANDINAVIA

Branch Office  
Phone: +46 70 29 91 281  
E-mail: [info.sca@mtssensors.com](mailto:info.sca@mtssensors.com)

### CHINA

Branch Office  
Phone: +86 21 2415 1000 / 2415 1001  
E-Mail: [info.cn@mtssensors.com](mailto:info.cn@mtssensors.com)

### JAPAN

Branch Office  
Phone: +81 3 6416 1063  
E-Mail: [info.jp@mtssensors.com](mailto:info.jp@mtssensors.com)