

Application Note

Garbage Trucks Magnetostrictive Linear Position Sensors

SEGMENT: Mobile Hydraulics
BRANCH: Municipal Vehicles



WHERE ARE POSITION SENSORS INSTALLED?

- ❶ In the front lifting cylinder to control lifting of variable weights
- ❷ In the dumping cylinder to safely optimize cycle time
- ❸ In the clamping cylinder to control grasping force
- ❹ In the side reach and extend cylinder to efficiently align to targets

TEMPOSONICS 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?

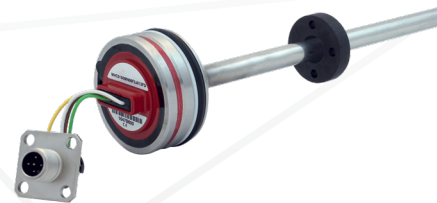
Garbage trucks must be fast, efficient, and quiet. As public vehicles, they are expected to efficiently complete a dirty task safely, without disturbing citizens. As a business, cost savings are increased based on how efficiently the truck completes its route. By using cylinder position data, trucks 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

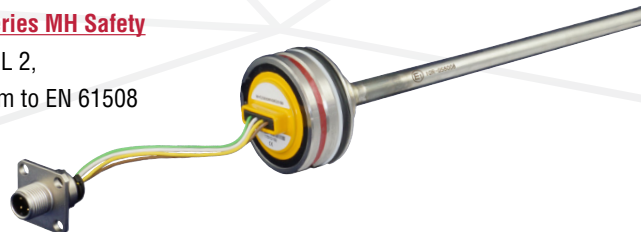
- Absolute and reliable position feedback for precise movements
- Highest robustness against shock and wear of thousands of cycles
- High sample rate and resolution to optimize cylinder stroke and electronic cushioning

RECOMMENDED SENSOR MODELS

MH-Series MH
Embedded Cylinder Solution



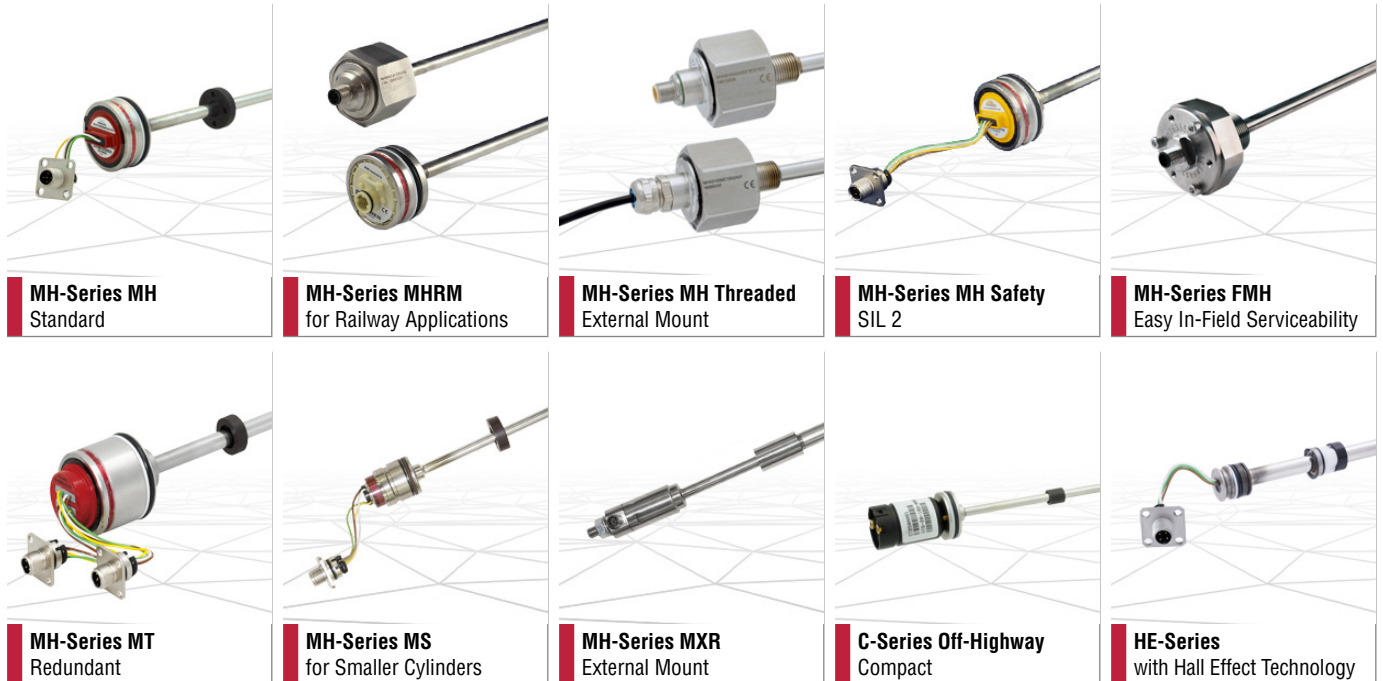
MH-Series MH Safety
with SIL 2,
conform to EN 61508



MH-Series MH Threaded
External Mount



MEETING THE CHALLENGES OF MOBILE HYDRAULIC APPLICATIONS



TOTAL CUSTOMER SATISFACTION

Our commitment at Temposonics 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 Temposonics, 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 Temposonics Team



Document

AN Mobile Garbage Trucks, Rev B (EN) 01/2022

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