

Application Note

Sugar Beet Harvester Magnetostrictive Linear Position Sensors

SEGMENT: Mobile Hydraulics
BRANCH: Agricultural Machines



WHERE ARE POSITION SENSORS INSTALLED?

- ① Inside beet lifter cylinder and topper
- ② Inside plowshares cylinder for height control
- ③ Inside steering cylinders
- ④ Inside fuel tank (liquid level)
- ⑤ Inside conveyer transfer cylinder for height control
- ⑥ Inside slope cylinder for compensation

TEMPOSONICS SOLUTION

Temposonics linear position sensors allow on-board intelligent controls to improve accuracy through automated monitoring and avoid dangerous situations all while improving productivity, safety and ergonomics. The MH-Series is specifically designed for full sealing and embedding in hydraulic cylinders. The proprietary M12 connector system enables IP69K.

WHY POSITION MEASUREMENT?

Automated sugar beet harvesting machines have to be able to automatically perform every task needed in the field without stopping. This includes topping, lifting, collecting and depositing crops without human intervention. Additionally, the controls must be reliable, require as little maintenance as possible, and, when necessary, be able to react if something does break or fall out of performance parameters.

KEY REQUIREMENTS

- Absolute and reliable position feedback for precise steering control
- Highest robustness against shock and wear of thousands of cycles
- Increased stability and efficiency
- Optimize refuelling process with accurate tank measurements

RECOMMENDED SENSOR MODELS

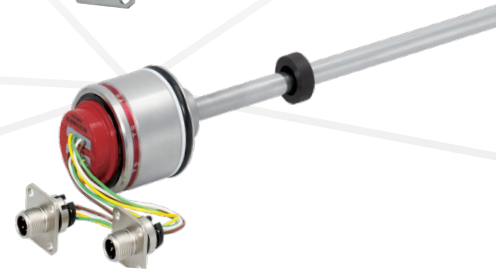
MH-Series MH

Embedded Cylinder Solution



MH-Series MT

Redundant, with 2 independent sensing elements

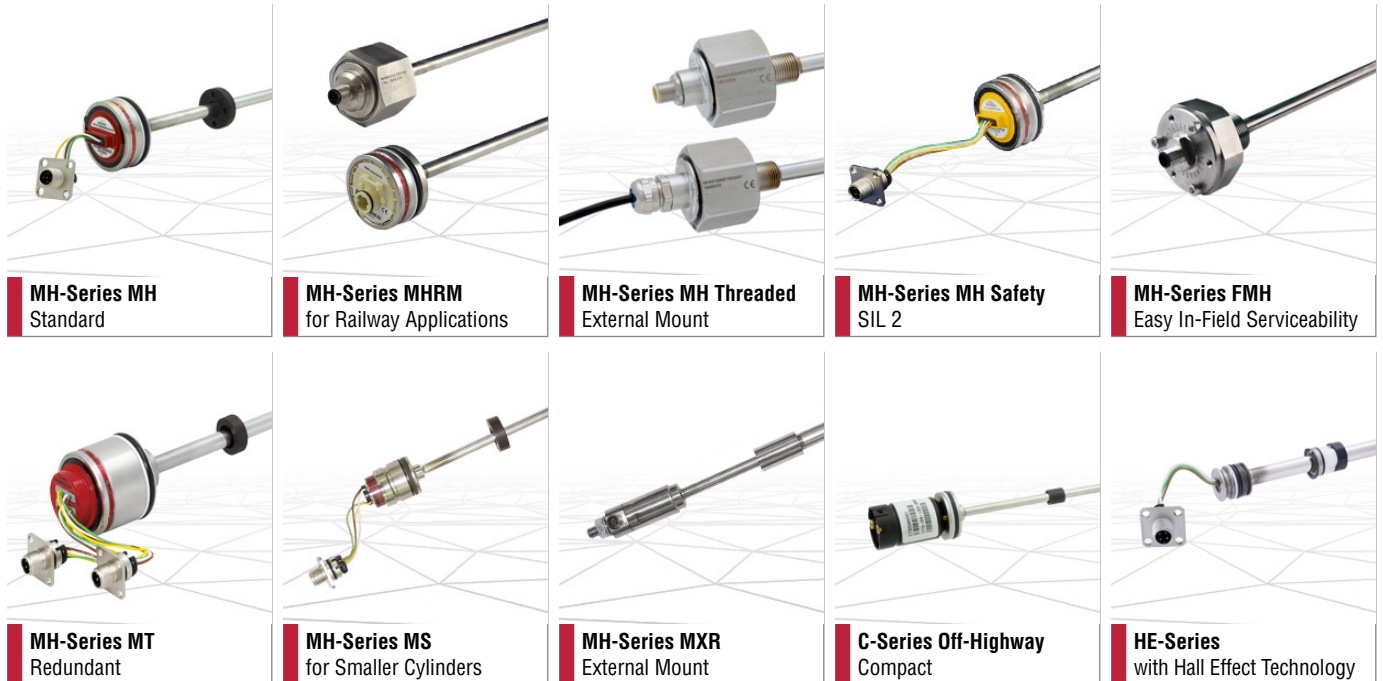


MH-Series MH Threaded

with Level Kit



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_Sugar Beet Harvester, Rev B (EN) 01/2022

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