



Rotary Position Sensor

in Construction Applications - Excavators

Construction Applications

- Excavators

Reliability and precision are critical considerations for an excavator operator. Accurate cab position monitoring, repeatable return-to-dig automation, and the need to function reliably in extreme environments, demands best in class measurement equipment.

The NRH27x rotary sensor from Curtiss-Wright uses industry-proven Hall-effect technology to measure angular displacement for safe machine positioning and optimisation of cycle times.

The compact, 2-piece design mitigates against misalignment-induced failure as a result of over-stressed mechanical interfaces, providing a truly non-contacting solution with minimal space claim.



Feature	Function	Benefit
Dual-redundant measurement	Safely measures angular position	Improving safety of site and operator
2-piece, separate magnet design	Tolerates mechanical misalignment	Increasing service life
Fully encapsulated electronics	Reliably reports position in extreme environments	Improving accuracy of operation

Product Solutions from Curtiss-Wright



Reliability

- Non-contacting design
- Precise angular measurement
- Dual-redundant output signal

Boosts machine performance and runtime by enabling enhanced monitoring and control



Safety

- MTTFd >150 years
- Dual sensor architecture
- Designed for compatibility with safety-rated systems e.g. EN13849

Plays a major role in improving safety



NRH27x Series

Value to OEM Customers



Performance

- Optimisation of field-to-signal improves linearity, enhancing accuracy and facilitating machine optimisation
- Essential data for tracking machine motion, safe and accurate assisted dig, and geo-fencing functions



Durability

- IP67/69K enclosure, ensuring operation in extreme environments and reducing total cost of ownership
- Solid-state 'fit and forget' technology, increasing time between vehicle services and enhancing product life cycle



Easy Integration

- 9-30Vdc operating range, compatible with 12 and 24Vdc systems for ease of integration
- Flying lead fitted with industrial standard connectors for flexible and reliable connection and ease of installation

Other Applications



Lift & Access Equipment

- Reliable measurement of boom rotation/elevation and height adjustment for accurate load position monitoring and passenger safety
- Sealed, 2-piece design for continuous operation in extreme environments, mitigating against adverse performance in hostile conditions



Agricultural Equipment

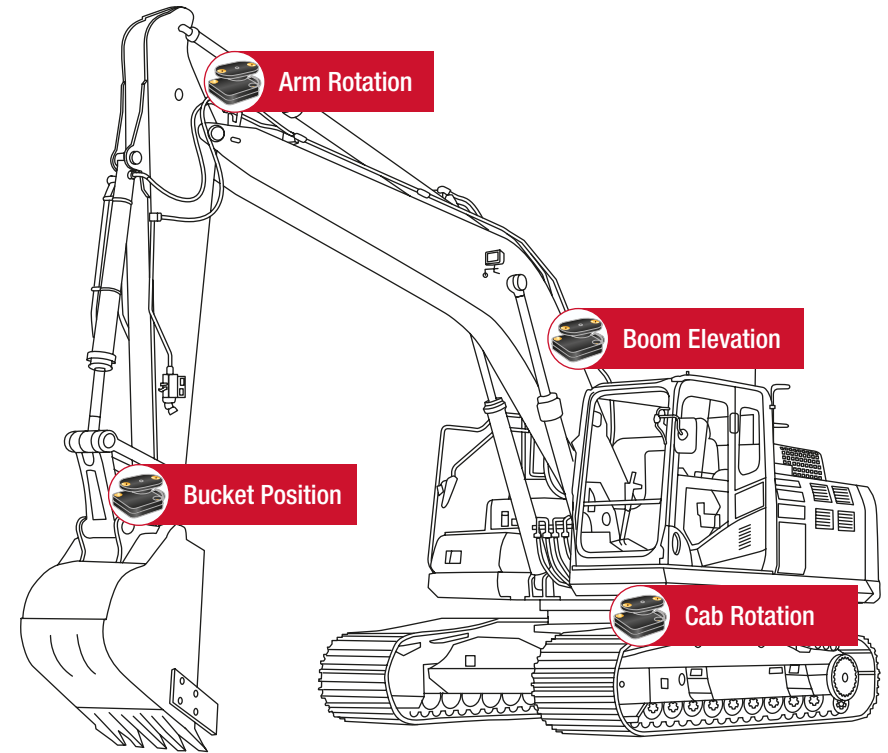
- Reliable measurement of vehicle attachments such as sprayers and cutters for accurate operation of ancillary functions, improving efficiency and reducing waste
- Sealed, 2-piece design for continuous operation in extreme environments, mitigating against adverse performance in hostile conditions



Material Handling Equipment

- Reliable measurement of load position for safe and consistent operation, improving efficiency and site safety
- Sealed, 2-piece design for continuous operation in extreme environments, mitigating against adverse performance in hostile conditions

NRH27x Series Usage



Other CW Products for Excavators



Joysticks
JC6000



Tilt
Sensors
VTS Series



HMI
Human
Machine
Interface



Shifters
Column
Shifter



Electric
Throttles
WM-537

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