



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

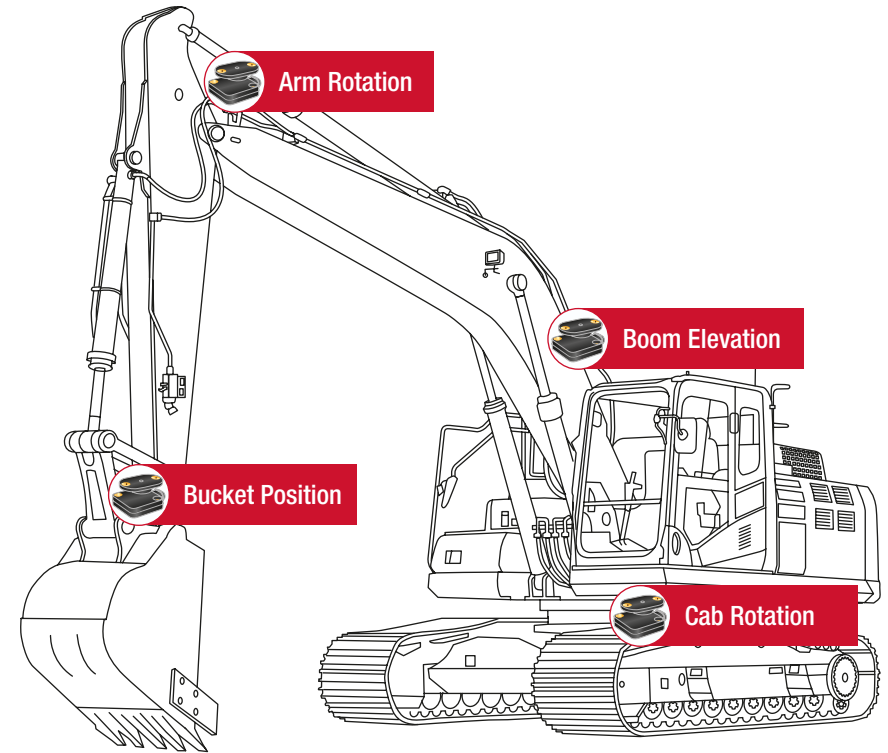
- Reliable measurement of vehicle attachments such as sprayers and cutters for accurate operation of ancillary functions, improving efficiency and reducing waste
- Sealed, 2-piece design for continuous operation in extreme environments, mitigating against adverse performance in hostile conditions



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

