

WP Series

Double Reduction, Smooth Rotation

The WP series actuators are one-source, drop-in, double-reduction drives that combine the benefits of traditional worm drives with the advantages of a second spur gear reduction. The WP series is the right choice for crane or aerial lift applications requiring high shock.

Kinematics has industry-leading application understanding and skilled engineering support, enabling us to design and build solutions that meet your specific application.



The added mesh of the WP actuator creates double-reduction and allows for higher efficiency and smoother operation than single-reduction drives. The aluminum/bronze worm wheel reduces friction and adds another stable and effortless operation element.

Performance and Value

Kinematics delivers cost-competitive global manufacturing with US-based engineering, sales, and customer support. Since 1996 we have been delivering reliable, innovative products. Kinematics drives can be trusted for the lifetime of each rugged application.



Installation Ready

The WP Series comes ready to install and is an easy drop-in solution. The pre-greased worm and bearing, and various motor mount options for hydraulic or electric motors make this product ideal for crane applications. Due to the higher numeric gear ratio, the torque input requirements are lower, allowing for smaller hydraulic or electric motor options and permitting the user to reduce their pressure, flow, and power consumption requirements.

Custom Engineering

Kinematics engineers thrive on solving your problem with a specialized solution. Remove the risk and guesswork by allowing us to provide an integrated solution of actuators, custom mounting solutions, motors, counterbalance valves, and position-sensing technology.

Drive Size	Raceway Diameter	Backwards Holding Torque
WP14	342.5mm	16.0 kN.m
WP17	422.1mm	12.0 kN.m