

KDE Series

360 Degree Dual Axis Torque

Kinematics' dual-axis actuators rotate around two independent axes. The KDE Series is powered by our patented hourglass worm technology for reliable accuracy. The consistent and efficient precision offers a wide range of motion control capabilities from satellite ground stations to hydro-vac vehicles.



We Integrate So You Don't Need To

Planetary reducers, motors, torque sensors, and encoders are available to be factory integrated, offering our customers a drop-in solution for precise positioning. Can be provided with torque sensors, planetary reducers, motors, and encoders to meet your requirements.

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.

Installation Ready

The KDE Series comes ready to install and is an easy drop-in solution. It is designed to allow for azimuth and elevation actuation in one complete assembly. It comes with standard options for metric or imperial mounting threads and can be purchased with or without a motor and reducer.

Custom Engineering

Kinematics engineers thrive on solving your problem with a specialize 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	Overturning Moment
KDE3	76.2mm	2.1 kN.m	0.5 kN.m
KDE5	102.3mm	5.5 kN.m	2.8 kN.m
KDE7	163mm	10.0 kN.m	13.5 kN.m
KDE9	222.5mm	39.0 kN.m	33.9 kN.m
KDE12	310.3mm	49.9 kN.m	40.68 kN.m
KDE14	342.5mm	54.4 kN.m	47.4 kN.m
KDE17	422.1mm	65.6 kN.m	94.9 kN.m
KDE21	470 mm	85 kN.m	152.5 kN.m