

Precision. Quality. Reliability.

AD Series (Alpha Drive)

Rotary Indexing Tables







Servo Indexer

Design & Operation

Sankyo is the worldwide leader for indexing technology and continues to develop innovation in motion control. Sankyo's core indexing system is based upon the roller gear cam mechanism, a combination of a globoidal cam and cam followers in a precision machined turret. Output backlash is eliminated by preloading the cam follower bearings against the cam ribs.

The profile of the cam, and the rolling contact surfaces of the cam followers produce perfectly smooth, controlled motions with minimal wear. Compared to the competition, the AD Series has the largest cam followers in the industry. Larger internal components advantages are; rotate less revolutions for longer service life, more surface area for less wear, and more torque capacity for heavier loads with faster cycle times.

Features

- Speed: * Up to 80 CPM, cycle on demand with a VFD controller (index period dependent)
 * Up to 200 CPM, cycle on demand with a servo motor drive or continuous running mode
- Accuracy: ±15 to ±30 arc seconds (motion & housing size dependent)
- Load Capacity: Large internal components can move heavier loads
- Motion Directions: Operates in forward or reversed directions (oscillates with VFD or servo drives)
- Motion Options: Over 700 indexing stops & index period combinations
- · Maintenance Free: Sealed & totally maintenance free for life
- Load Size: Supports 630 to 4,050mm (14 to 160") dial plate diameters
- · Sizes: 8 housing sizes from 70 to 450mm (2.7 to 17.7") shaft centers
- Housing Design: Robust cast iron housing maintains accuracy & dampens vibration
- Output Design: Indexing & stationary flange for dial plate mounting with hollow bore to routing supply lines
- · Input Design: Low profile geared motor or servo motor drives are normally within the indexer housing height
- · Warranty: 4-year warranty

Optional Safety Features

- Emergency Stop: When an emergency stop circuit is designed to stop the indexer mid-cycle, we recommend a fail-safe spring engaged brake motor (engaged without power) or a servo motor drive.
- Overload Clutch: For applications when tooling crashes could occur, we offer an output torque limiting clutch to
 mechanically disconnect the rotating load which protects the indexer from damage.
- Redundant Sensors: Dual timing sensor options can avoid human injury or machinery damage from false starts
 if the main stop sensor fails or a sensor wire is cut/broken.



Geared Motor Drive



Servo Motor Drive