

Nexen Ring Drive Indexing vs. Cam Indexer Series

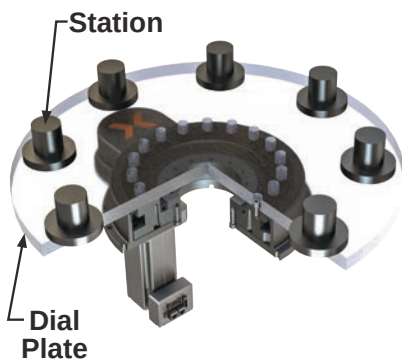
The Nexen Ring Drive product utilizes mechanical components and servo motor/drive technology in order to provide optimum indexing flexibility and positioning. The unique RPG design provides high accuracy at a large pitch radius, which is closer to the “work” radius during assembly and positioning. When compared to a roller-gear-cam mechanical indexer, the Nexen Ring Drive pitch radius can be larger than the cam / cam follower pitch radius. Near zero backlash is achieved and unlimited positional moves can be programmed. Maintenance is simplified since there is no oil “bath” to account for. Since the Ring Drive design does not require an oil reservoir, there are no seals where a leak can occur. The extremely large center access hole of the Ring Drive design allows for wiring and plumbing of accessory positioning and tooling components. There is no need for an external encoder or limit switch, since the servo motor feedback is all that is needed. A wide variety of acceleration profiles can be programmed for flexibility and application needs.



	601RDM Roller Dial Index Drive	Nexen CRD250-MRS Precision Rotary Indexer
Max Speed	N/A	225 RPM
Radial Loading	4203 N	19,000 N
Axial Loading	10,498 N	300,000 N
Moment Loading	373 Nm	800 Nm
Unit Height	157.23 mm	133 mm
Unit OD	431.8 mm	440 mm
Center Hole	44.45 mm	115 mm
Accuracy	39 ± arcsec	41 ± arcsec
Repeatability	10 ± arcsec	6.8 ± arcsec
Backlash	N/A	Zero Backlash
Programmable Moves	No	Yes

Nexen Ring Drive Advantages:

- Higher Accuracy and Repeatability
- Near Zero Backlash
- Unlimited Positional Index Moves
- Flexible Acceleration Profiles that can be changed
- Extremely Large Center Through-Hole
- No External Encoder or Limit Switch to be installed and adjusted
- Low-Profile Design accommodating work space requirements
- Simple Operation without an Oil Reservoir



Application Data	Application Example
Move (Output Displacement)	90 degrees
Move Time	1.5 seconds
Output Average Velocity	60 degrees/second
Output Maximum Velocity	120 degrees/second (20 RPM)
Inertia	15 kg/m ²
Acceleration Time	0.75 seconds
Peak Acceleration	160 degrees/second ² (2.79 rad/seconds ²)
Acceleration Torque	41.888 Nm

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