



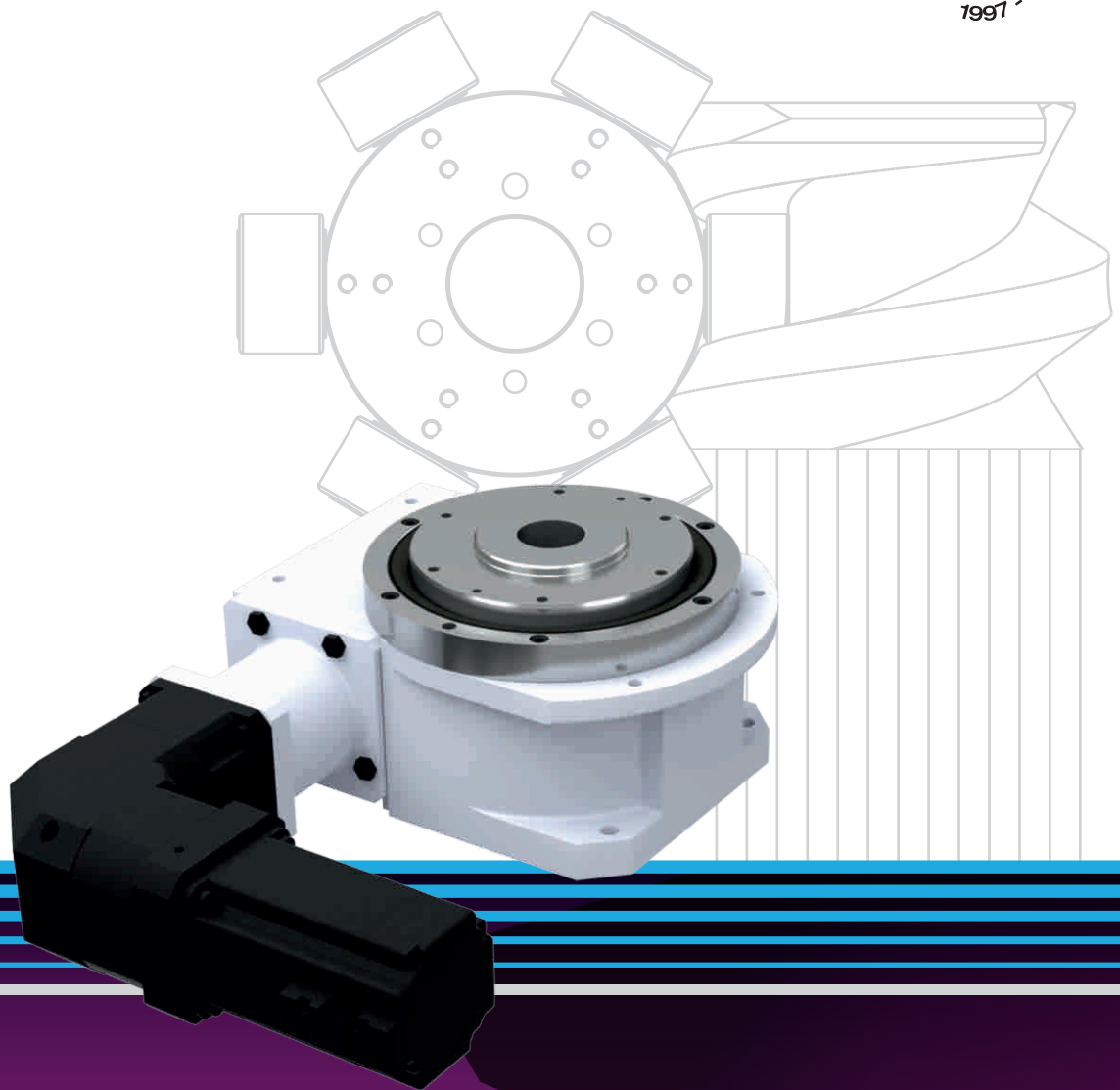
South Asia



EN ISO 12100:2010

CAM INDEXERS

SERVO-MECHANICAL DRIVES



SERVO-MECHANICAL INDEXER

Servo-mechanical Indexer for precise motion and flexibility achieved with Packam's Zero-backlash Technology.



An innovative solution developed on the basis of our understanding of customers requirements & functionality.

COMBINING THE BEST OF THE OLD, WITH THE NEW...

The SM Series of indexers are servo-mechanical indexers designed for application where different output motions are required on the same table.

A standard mechanical cam indexer is driven by an inline or right-angle servo reducer matching customers speed and load requirements.

These indexers provide highly accurate motion, with the added capability to move medium to heavy loads. Our preloaded cam & turret mechanism provides a zero-backlash solution for all your automation needs. The servo drive makes it freely-programmable.

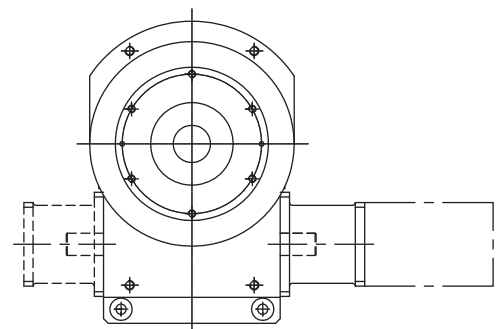
These servo-mechanical indexers come with varying ratios to maximize the motor's torque capacity, speed requirements and enhance the overall accuracy. These Indexers reduces the demand for speed of the servomotor while delivering powerful torque, rigidity and stability.

Features

- Preloaded Mechanism
 - Zero backlash
 - High accuracy
 - Smooth motion
- Indexing flexibility
 - Freely-programmable
 - Run different parts on the same indexer
 - Infinite number of stops
 - Flexible index / dwell times
 - Variable indexing: forward, reverse, vary distance with each index
- 4:1 to 12:1 ratios options available

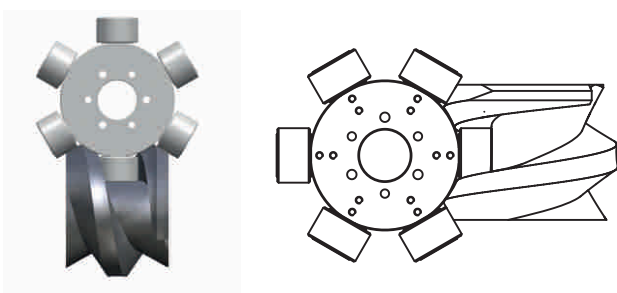
Key Advantages

- Precision engineered Globoidal Cam Mechanism
- Through hardened and CNC ground cam
- Oil bath lubrication for high-speed and higher torque applications
- 40mm thru-hole for electric & pneumatic lines
- Compatible with multiple brands of servo motors
- Compact design & layout



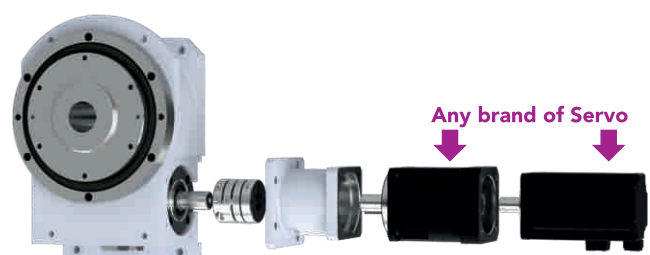
Zero Backlash Roller Gear Cam Mechanism

Precision engineered Constant Velocity (CV) Globoidal Cam Mechanism ensures zero backlash, precision and efficiency. It also provides long-term, consistent accuracy.



Flexible Drive Options

These indexer are supplied with Zero backlash coupler and motor mounting spacer compatible with multiple brands of servo motors.

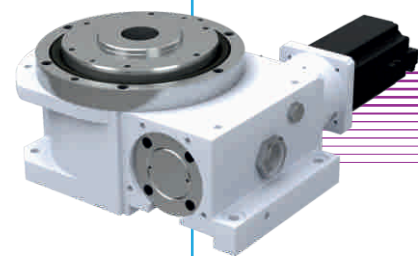


SM TYPE

Servo-mechanical indexers play a major role in defining the performance of the equipment.

In any industrial automation equipment, motion control using servo is an important element which greatly affects the equipment performance. Therefore, equipment specifications and performance are designed assuming that the expected motion will be achieved.

But if there are factors such as backlash, insufficient rigidity or motion instability, then output motion will deviate from the input commands thus making it difficult to attain the expected performance. The perfect motion is achieved with our Zero-backlash Technology.



Direct Drive

Zero Backlash Applications

The direct drive option provides zero backlash, high precision operation. The globoidal cam mechanism is preloaded so that it delivers zero backlash for superior accuracy, stiffness and long term durability.



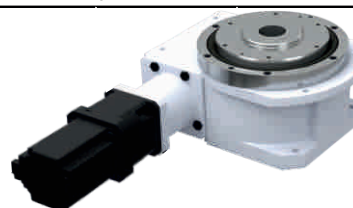
This servo driven rotary table is the ultimate motion control solution

GENERAL SPECIFICATIONS		STANDARD	OPTIONAL (available on request)					
Reduction Ratio		8:1	4:1	5:1	9:1	10:1	12:1	
Maximum Torque Capacity	Nm	442	428	433	442	443	443	
Maximum inertia on output dial	kgm ²	0.29	0.04	0.07	0.42	0.57	0.99	
Input torque of unit only	Nm	6.37						
Input RPM	RPM	300						
Stiffness	(10 ⁶ Nm/rad)	0.115						
Maximum Axial load	N	6471						
Maximum Radial load	N	3235						
Max. offset loading (Overturning moment)	Nm	366						
O/P face flatness	microns	±0.025						
Axial run out	microns	±0.020						
Accuracy of indexer	arc sec	±40" (±0.040mm@200mm radius) #						
Repeatability of indexer	arc sec	±20" (±0.040mm@200mm radius) #						
Torsional backlash in indexer	arc sec	0						
Operating temperature range	°C	10-60						
Centre distance	mm	108						
Thru-hole diameter	mm	40						
Weight of indexer	kg	45						

High Torque Gear Drive

High Inertia Application

The high-torque gear drive option is used for applications with large inertia requirements while maintaining a small motor size.



In addition to the internal cam ratio, the overall ratio can be increased with a secondary reducer option.

GENERAL SPECIFICATIONS		STANDARD	OPTIONAL (available on request)					
Reduction Ratio		8:1	4:1	5:1	9:1	10:1	12:1	
Maximum Torque Capacity	Nm	442	428	433	442	443	443	
Maximum inertia on output dial	kgm ²	6.18	0.74	1.48	8.83	12.16	21.11	
Input torque of unit only	Nm	22.5						
Input RPM	RPM	300						
Stiffness	(10 ⁶ Nm/rad)	0.115						
Maximum Axial load	N	6471						
Maximum Radial load	N	3235						
Max. offset loading (Overturning moment)	Nm	366						
O/P face flatness	microns	±0.025						
Axial run out	microns	±0.020						
Accuracy of indexer	arc sec	±40" (±0.040mm@200mm radius) #						
Repeatability of indexer	arc sec	±20" (±0.040mm@200mm radius) #						
Torsional backlash in indexer	arc sec	0*						
Operating temperature range	°C	10-60						
Centre distance	mm	108						
Thru-hole diameter	mm	40						
Weight of indexer	kg	45						

* backlash of 2nd reducer, depends on specific make # higher available on request

dimensions and technical information are subject to change without notice kindly refer to Packam warranty and support terms and conditions for additional information visit Packam website www.packam.co.in



Packam Controls Private Limited
Patel Vanika, Western Express Highway,
Goregaon (East), Mumbai - 400 063, India

T +91 22 61206600
F +91 22 61206606

E info@packam.co.in
U www.packam.co.in

Domestic Sales Enquiry sales@packam.co.in
International Sales Enquiry export@packam.co.in
After Sales Service service@packam.co.in

