

MOTION INDEX DRIVES

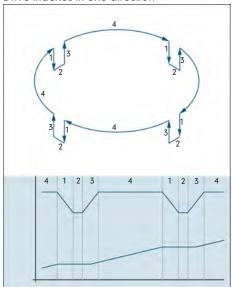
PICK AND PLACE UNIT Multiple Series



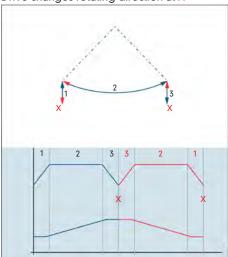
Pick and Place Units

Available Courses of Motion

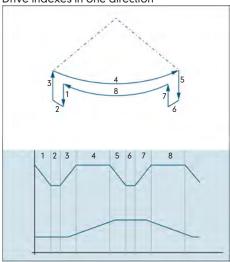
Pick and Place Unit Drive indexes in one direction



Plck and Place Unit Drive changes rotating direction at X



Pendulum Pick and Place Unit Drive indexes in one direction



Series GH

- Single drive for pick and place
- Right angle cam for rotation
- Flat cam for lift
- The relationship between lift and rotation can be customized
- Compact, durable unit
- Optional thru-hole

Series RH

- Single drive for pick and place
- Barrel cam for rotation
- Flat cam for lift
- Compact, durable unit
- Optional thru-hole
- Maintenance-free lubrication

Series PH

- Single drive for pick and place
- Barrel cam for lift
- Large torque with use of flat cam
- Flat cam for rotation
- Compact, durable unit
- Optional thru-hole
- Maintenance-free lubrication

Series RT + VP

- Standard indexer for rotating
- Pneumatic cylinder for lifting
- Pick and placing are independently controlled from each other
- Compact, durable unit
- Optional thru-hole



RH 100 Vertical stroke [mm] 90° 60° Rotation Pendulum

PH 065 Vertical stroke [mm] Rotation Pendulum

180°



RT100 + VT30 Vertical stroke [mm] Rotation Pendulum



* larger pendulum angle by changing the rotating direction of the drive

Pick and Place Units

All units are customized based on the requirements of each application. With the combination options of cylinder, disk cam, disc groove, globoid, pneumatics and servo technology results in a large variety of pick and place solutions.

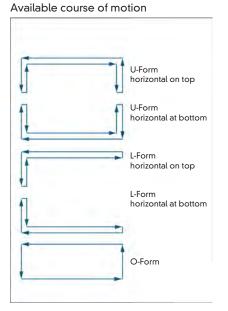
Series RT + VP

- Standard indexer for rotating
- Pneumatic cylinder for lifting
- Lifting and rotating are independently controlled from each other
- Compact, durable unit
- Optional thru-hole

Series HDM

- Two different servo drives for lift and rotate
- Vertical stroke and rotating angle are fully programmable
- Customized servo drives are optional
- Course of motion controlled by servo
- Maintenance-free lubrication
- Optional thru-hole

Linear - Units



Series AL

- Common drive for lift and rotation
- Flat cam for rotation
- Flat cam for lift
- Vertical stroke protected by a spring
- Compact, durable unit
- Many available courses of motion
- Multiple units can be connected using a common shaft

RT100 + VP300

Vertical stroke [mm] Rotation Pendulum 300 180° 90°*

*Larger pendulum angle by changing the rotating direction of the drive



HDM 30 Vertical stroke [mm] Rotation

55 free



AL 80 Vertical stroke [mm] Horizontal stroke [mm]

35





Lift and Carry transfer systems are designed to transfer large products down a linear path, usually through various positions for production. Since the products need to be lifted over obstacles or a system by which they could be transferred via the ground would interfere with production, Lift and Carry Systems can be found in the majority of assembly lines working on large items.

Motion Index Drives' Lift and Carry Systems have been placed in a large number of North America's automotive production facilities. These applications are among the most demanding in the world, proving a testament to the strength and reliabilty of Motion Index Drives quality. This is also, however, the only existing industry-wide application of Lift and Carry Systems.

Lift and Carry Systems can be applied to high-production facilities that manufacture products large in physical dimensions. Motion Index Drives has worked to integrate Llft and Carry Systems in industries including defense manufacturing and off-highway haevy machinery, but current industry systems aren't configured in a fashion that can easily accept a Lift and Carry System.

Smaller scale, lightweight systems can be handled by products such as our AL series Walking Beam.

Llft and Carry Systems

Motion Index Drives, Inc. is a leading provider of heavy-duty Lift and Carry Machines. Our Lift and Carry Systems operate with minimal motor power and are capable of lifting and transferring an average of 10 complete underbody structures (2,000 lbs. each) over an average linear distance of 19 feet at once. From transferring full length truck frames to engine box and underbody lines, Motion Index Drives has a high-precision engineered solution for your application

Key Features and Benefits

- Smooth lift and lowering motion
- Hydraulic compensation system to assist on lift strokes
- Special tooling inserts with customer specified hole patterns
- High-quality extruded steel rails available in many sizes
- Hardened gear rack and pinions for transfers
- Pevolan and Vulkollan transfer rollers for noise reduction and increased life of shuttle rails
- Many different standard and custom lift and transfer shuttle options available

