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Vertical Lift Cylinder shown with optional trolley mount and vacuum end-effector.

Positech's pneumatic Vertical Lift Cylinder (V-Lift) is ideal for straight line transfers, over-the-assembly line handling and reachin operations when combined with an overhead rail system or a Positech Articulated Jib Boom.

Exceptional off-center payload handling for reach-in applications is derived from Positech's heavy duty industry leading design, which uses external cylinder tie rods and dual linear bearings. The V-Lift is available in four model configurations and provides up to 2,500 pounds of payload capacity.





V-Lift mounted on a trolley/overhead bridge crane with an OD gripper end-effector handling furniture.



V-Lift mounted on a trolley/overhead bridge crane with a magnet endeffector for handling steel tubes.



V-Lift mounted on a Positech Articulated Jib Boom with a custom endeffector handling rotary dies.





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# Vertical Lift Cylinder MANIPULATOR

### OFF-CENTER LOADING. REACH-IN CAPABILITY. ERGONOMIC.

#### For Performance and Quality

- Up to 24,000 inch pounds of moment loading for extended reach payload applications
- 360° continuous rotation around vertical axis
- Includes air filter/regulator system
- Standard flange mounting for adaptability to a variety of custom end-effectors
- Precision linear bearings for smooth motion and long life
- Standard pistol grip or optional ergonomic twist grip controls
- Mounting Options: single arm jib crane, Positech Articulated Jib Boom or trolley/overhead bridge crane

#### **Positech Advantages**

- 5:1 design factor minimum on all structural components
- Narrow design of lift assemblies minimizes obstructions in the operator's line of sight
- Pilot operated lock valve on lift cylinder prevents downward movement if sudden loss of air pressure occurs
- Gripper Safety Circuitry available, prevents accidental release of unsupported payloads
- Minimum Lift Circuit is standard, allowing controlled downward movement
- Does not require an air lubricator

#### **Technical Specifications**

Model	Capacity* lbs (kg)	Moment Capacity in-Ibs (N-m)	Stroke in (mm)
VL500	500 (225)	8000 (903)	12-60 (305-1524)
VL800	800 (363)	12000 (1356)	12-60 (305-1524)
VL1400	1400 (635)	12000 (1356)	12-60 (305-1524)
VL2500	2500 (1130)	24000 (2711)	12-60 (305-1524)
Requires 80 psi (5.52 bar) clean, dry air to operate at capacity *Includes payload and end-effector.			





End-effector used to handle office furniture in the assembly process.



OD end-effector handling investment moldings.



OD end-effector handling parts in an assembly process.



Magnet end-effector moving steel sheets in the assembly process.

## 🗯 Custom End-Effectors

Customized end-effectors, operator controls, and specialized pneumatic circuitry are available to meet your requirements.