



VSXL Series Dock Leveler

Product Specifications



*Representative image. Digital Master Control Panel shown.
Standard VSXL ships with push button panel.

DESIGN HIGHLIGHTS

- Leveler powered down to working range via constant pressure push-button
- Unique factory-provided rear embed with no pit floor attachment for easy cleaning. 7 factory-welded hinges. All hinge points are a minimum 2 inches off the floor
- Dual-acting lip cylinder powered in both directions
- Remote-mounted power unit with mounting bracket & hydraulic hose
- Patented hinged bottom draft pad
- Terminals for interlocking door or restraint
- 4" high runoff guards
- Structural channel deck beams
- Integral maintenance locking rotating handle with lock-out/tag-out capability
- Two VB420-11 steel face rear impact guard (SF RIG) bumpers
- Standard 20" lip with no lip taper

AVAILABLE OPTIONS

- ☐ Additional hose length over 20' standard length for remote mount power unit (includes all 3 hose assemblies) (Survey and dock pictures for bumper design required)
- ☐ Lip keepers
- ☐ Hot-dip galvanized rear embed
- ☐ Hot-dip galvanized deck, lip & embed
- ☐ Door opened/closed switches
- ☐ Control panel stanchion
- ☐ Other _____

CAPACITY

- ☐ 50K lb (22.7K kg)
- ☐ 60K lb (27.2K kg)

ACCESSORIES

- ☐ Star Series restraint _____ ☐ HH3000 recessed restraint
- ☐ SC2000 series Surface Chock™ surface-mounted wheel restraint
- ☐ AC series Auto Chock in-ground wheel restraint
- ☐ KMWC series manual surface chock wheel restraint
- ☐ VERSACHOCK wheel restraint
- ☐ TALON® wheel restraint
- ☐ ALS light communication system ☐ MLS light communication system
- ☐ Digital master or combination control panel with HMI _____
- ☐ TKO doors _____ ☐ APS guard rails & accessories

BUMPER OPTIONS

- ☐ Traditional style gusseted VB420-11 bumpers with riser brackets
- ☐ Traditional style gusseted VB620-11 bumpers with riser brackets

PROJECT INFORMATION

JOB NAME _____

ADDRESS _____

GENERAL CONTRACTOR _____

DISTRIBUTOR _____

MODEL _____ QUANTITY _____

VOLTAGE/PHASE _____

CERTIFIED FOR CONSTRUCTION

BY _____ DATE _____

COMPANY _____

ADDRESS _____

1. **General:** "VSXL" Series hinged lip vertical storing dock leveler with a hydraulically operated platform and hydraulic lip extension and retraction. Conforms to ANSI MH14.1-1987 performance requirements. Unit to be manufactured by Kelley.
2. **Construction, Platform Assembly:** Platform constructed of high tensile steel safety tread deck plate supported by channel beam design construction. Structural members are fully welded to the front header. High quality products are manufactured in a Certified Welding Fabricator (CWF) facility. Deck to be $\frac{3}{8}$ " thick on 50K and 60K.
3. **Lip Assembly:** Lip to be 20" high tensile steel safety tread lip plate with beveled leading edge. Lip to be $\frac{3}{4}$ " thick on 50K and 60K capacity units. Lip hinge to have full width structural front header and heavy wall tubing with a minimum of $\frac{1}{2}$ " wall thickness on 50K and $\frac{3}{4}$ " on 60K capacity units. Hinge tubes to have gussets on 50K and 60K capacity units. The lip hinge shaft is 1 $\frac{3}{8}$ " on 50K and 60K capacity units.
4. **Rear Channel & Hinge:** Rear channel to be a minimum of 50K rated capacity and shall include seven 1"-diameter rear hinge pins. Rear hinges to include wear-resistant bushings. Channel height is 12" for 6' long, and 15" for 8' long. Consult factory for other combinations of channel height to suit the leveler length. Rear channel assembly eliminates horizontal structural members, enabling full access to the pit floor for easy clean-out and maintenance.
5. **Power Unit:** Power unit is an electric/hydraulic motor pump and valve assembly.
6. **Product Finish:** Direct to metal gray paint finish.
7. **Electrical:** Motor is 2 HP NEMA Standard T.E.N.V./56C frame. Standard motor voltage is 208/240V/480V and 575V three phase. RPM: 3450. The control panel has built-in motor overload protection as standard. Remote solenoid valves and power pack supplied with standard wall mount bracket.
8. **Hydraulic:** Main cylinder minimum 4" diameter bore. Lip cylinder to be a minimum of 2 $\frac{1}{2}$ " diameter bore. All weather hydraulic fluid with viscosity of 15 cSt at 40°C (100° F).
9. **Control Panel:** Solid state control panel (9" W x 20" H x 8" D) features a programmable logic controller and "real time" diagnostic capability, industrial quality push-buttons, integral LED visual safety warning system, and printed operational instructions.
10. **Safety Stop System:** Hydraulic velocity fuse safety stop will arrest the platform from free fall if the truck pulls out while the load is on the platform. The velocity fuse safety system is reusable and non-adjustable.
11. **Mushroom-style Stop Button:** Stops the leveler instantly when depressed at any time to enhance safety. The "STOP" button is a maintained contact type that activates a solenoid on the leveler hydraulic system. The dock attendant does not have to continuously hold the "STOP" button to maintain the leveler in a stop position.
12. **Quick Cycle Lip:** Properly sized cylinders and the "LIP EXTEND/LIP RETRACT" buttons reduce cycle time by not having to fully raise the leveler to extend or retract the lip during endloading.
13. **Below-dock Control (End loading):** Push-button control feature retracts the lip from any deck position, including stored, to handle end loads.
14. **Out of Level Compensation:** Leveler platform on all capacities is designed to compensate for canted truck beds up to 4", and the rear of the deck remains flush with the pit to eliminate pinch points.
15. **Float Compensation:** Allows for vertical carrier deflection when the lip is in contact with the truck bed.
16. **Hinged Bottom Pad:** Patented hinged bottom pad attaches to the leveler deck for added environmental control.
17. **Operation:** Kelley's Vertical Storing Leveler will be supplied with a rear subframe assembly, a platform and lip assembly, an electrical power-pack assembly including motor and pump, hydraulic cylinders, hoses, and valves. The platform and lip are to be operated by independent hydraulic cylinders controlled by a remote push-button station. To operate the leveler the dock attendant pulls the "STOP" button (amber light indicates power on) on the control panel. The attendant presses and holds the "LOWER" button to lower the leveler onto the truck bed. An audible alarm will sound any time the leveler is stopped between the stored position and the operating range. Above the operating range, while the motor is running, releasing the "LOWER" button will stop all leveler motion. Pressing the "STOP" button at any time will immediately stop all movement. When the leveler lowers to near working range (approximately 18" above dock level), the motor will stop, and the platform will automatically float down to rest on the truck bed and float with truck movement. The green light will illuminate to indicate the leveler has reached the operating range. If the truck departs when the lip is extended, the leveler descends under hydraulic control, and the lip falls to the pendant position. Pressing the "LIP EXTEND/LIP RETRACT" button will extend or retract the lip at any point in the leveler cycle. Standard below-dock level operation allows for below-dock end loading with push-button control. The dock leveler is restored by pressing the "RAISE" button and holding until the platform and lip are in their vertical storing positions. The dock attendant presses the "STOP" button on the control panel to remove electrical power from the dock leveler (amber light off). The working range is to be 6" above-dock and 6" below-dock for 6' units and 9" above and 9" below-dock for 8' units. The lip extends a minimum of 15" beyond the face of a 4" bumper.
18. **Installation:** Unit shipped partially assembled. Rear channel assembly supplied by Kelley to be embedded in concrete by others. Unit to be assembled at the site by mounting the platform to the hinge channel assembly and installing the hydraulic power unit. The control panel furnished with the unit is to be electrically interconnected by others.
19. **Limited Warranty:** Limited parts & labor warranty on all components under normal use for a 1-year "Base Warranty Period" beginning on the completion of installation or the sixtieth (60th) day after shipment, whichever is earlier. Additional limited 4-year parts only warranty on hydraulic power unit and cylinders. Limited 10-year structural warranty available upon engineering approval of written application.
20. **Dock Bumpers:** Unit to include two model VB420-11 steel face rear impact guard (SF RIG) bumpers (4" Thick x 11" W x 20" H).

NOMINAL DIMENSIONS		
MODEL	LEVELER WIDTH	LEVELER LENGTH
VSXL8X6	8'	6'
VSXL8.5X6	8.5'	6'
VSXL8X8	8'	8'
VSXL8.5X8	8.5'	8'



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