

MEGA™ SERIES DOCK LEVELER HYDRAULIC SPECIFICATIONS



Design Highlights

- 7' Wide Leveler With 2 - 12" Bumper Assemblies
- Independently Controlled Bumper Assemblies
- Below-dock Endloading Capability
- Regenerative Hydraulics
- Auto Return-to-Dock
- Independent Hydraulic Lip Control (Quick Cycle)
- Mushroom Style Stop Button
- Steel NEMA 12 Push-button Control Panel (Interlock Capable)
- Hydraulic Velocity Fuse Safety Stop
- Dual Integral Maintenance Struts & Lip Support Latch
- Weatherseal
- Full Pit Steel Kit Including Pit Floor Embeds
- Heavy-duty Steel Faced Dock Bumpers
- 16" on 45-50K standard
- 18" on 60-80K standard

Project Information

Job Name _____
 Address _____
 General Contractor _____
 Distributor _____
 Model _____ Quantity _____ Voltage/Phase _____

Certified For Construction

By _____
 Company _____
 Address _____
 Date _____



Available Options

- 18" Lip
- 20" Lip
- Safety Barrier Lip
- Pit Steel/Embed Channel
- Lip Taper _____ (specify)
- Other _____

Accessories

- STAR® Vehicle Restraint _____
- AUTO CHOCK® Wheel Restraint
- SURFACE CHOCK™ Wheel Restraint
- HIDDEN HOOK™ Recessed Restraint
- Master or Combo Control Panel _____

Capacity

45K 50K 60K 80K

MEGA™ SERIES DOCKLEVELER
 HYDRAULIC SPECIFICATIONS



1. General: “MEGA” series hinged lip dockleveler with hydraulic operated platform, hydraulic lip extension, and retraction. Unit conforms to ANSI/MH14.1-1987 requirements. Unit to be manufactured by Kelly.

2. Construction, Platform Assembly: Platform constructed of high tensile steel safety tread deck plate supported by channel beam design construction. Structural members fully welded to front header. Deck to be a minimum of ¼” thick on 45K capacities and ⅜” thick on 50-80K capacities. Patented split box beam deck construction on 45-50K capacity. I-beam deck construction on 60K and 80K.

3. Lip Assembly: All units to be high tensile steel safety tread lip plate with chamfered leading edge. Lip to be ⅝” thick on 45K capacity units, ¾” thick on 50K & 60K capacity units, and 1” thick on 80K capacity units. 7’ wide lip tapers to 6’6” at leading edge (6’-0” taper optional). Front hinge to have full width structural front header and heavy wall tubing with a minimum of ½” wall thickness on 45K and 50K capacity units, ¾” wall thickness on 60K capacity, and 1” thickness on 80K capacity units. Front lip hinge gussets on 45K, 50K, 60K and 80K capacity units. Front hinge shaft is to be a minimum of 1-¼” (60K) and 1-⅜”(80K) solid steel. See model listing for length of lip.

4. Rear Subframe & Hinge: Rear structural frame on 45K and 50K capacities consists of three vertically supported rear hinges. 60K and 80K capacity consists of 5 vertically supported rear hinges.

5. Power Unit: Power unit consists of two electric hydraulic pump and valve assemblies (can be remote mounted). Two separate power units, one for levelers and one for bumpers.

6. Electrical: Motors are 1 h.p., NEMA Standard T.E.N.V./56C frame. Standard motor voltages available are 120/208/240V single phase or 208/240/480V and 575V three phase. RPM: 3450. Electrical system has built-in motor overload protection as standard. Power unit is mounted to unit subframe (elevated off pit floor) and pre-wired to an integral junction box. Bumper power unit mounted to pit floor. (See recommended wire size reference guide for installation).

7. Hydraulic: Dockleveler main cylinder minimum 3-½” diameter bore. Dockleveler lip cylinder to be a minimum 2-½” diameter bore. Adjustable bumpers supported by cylinders with a minimum 2-½” diameter bore. All weather hydraulic fluid with viscosity of 15 cSt at 40°C (100° F). Dual lip and main cylinders on 80K capacity units.

8. Control Panel: Steel interlock capable control panel with motor starter, thermal overload, control circuit breaker with reset capability. Separate control button shall be furnished for lip extension, raise and mushroom-style stop button as standard. Separate control switch and button shall be furnished for bumper raise, lower and trim.

9. Product Finish: Primed followed by an enamel green paint finish.

10. Open Subframe Design: Front sub-frame is open to provide for easy clean out and maintenance.

11. “Nite-Lock”: Permanent “Nite-Lock” to prevent unauthorized entry beneath locked overhead door is standard.

12. Structural Center Deck Support: Standard center beam support (5” structural channel) to reinforce leveler for 3-wheel lifttruck traffic.

13. Toe Guard Protection: Full operating range toe guard protection is provided on the sides and rear of the leveler.

14. Integral Maintenance Strut & Lip Support Latch: A permanently mounted hinged, lockout capable integral maintenance strut & lip support latch are provided to support the lip section and leveler during maintenance. (Two maintenance struts provided on 80K capacity).

15. Grease Fittings: Grease fittings standard on lip hinge.

16. Weatherseal: Neoprene weatherseal standard on leveler sides.

17. Mushroom-style Stop Button: Stops the leveler instantly when depressed. The “STOP” button is maintained contact type which 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.

18. Quick Cycle Lip Extend: Properly sized cylinders and the “LIP EXTEND” button ensure quickest leveler cycle time by not having to fully raise the leveler before extending the lip onto the truck bed.

19. Below-dock Control (Endloading): Push-button controlled feature extending lip beyond lip supports for below-dock endloads.

20. Auto Return-to-Dock: Solid state proximity switch senses when truck has departed and automatically restores leveler to dock level storage position.

21. Out of Level Compensation: Leveler platform on 45K and 50K 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. 60K and 80K capacities have a rigid deck with a floating rear hinge.

22. Float Compensation: Allows for vertical carrier deflection when lip is in contact with truck bed.

23. Operation: Kelley’s “MEGA” series Hydraulic Leveler shall be supplied complete with platform, lip, adjustable bumpers, and power units, including motor, pump and valve assembly. “MEGA” unit to have complete hydraulic control of all functions. Platform, lip and adjustable bumpers to be operated by independent hydraulic cylinders controlled by a remote push-button station. To operate leveler, dock attendant presses the Leveler “RAISE” button, leveler raises and lip extends hydraulically. When button is released, leveler descends under gravity to truck bed and floats with truck movement. To restore leveler, dock attendant presses Leveler “RAISE” button and lip retracts or when truck departs, leveler descends under hydraulic control and automatically restores to cross traffic position. The “LIP EXTEND” button will extend or retract the lip at any point in the leveler cycle. Pushing the mushroom-style “STOP” button allows the dock attendant to immediately stop the leveler when necessary. Pulling out the “STOP” but on allows the leveler to operate again. Standard below-dock level operation allows for below-dock endloading with push-button control. Pushing the “LOWER” button allows the adjustable bumpers to lower to a below-dock position to provide access for wide loads. Pushing the Bumpers “RAISE” button allows bumpers to raise to dock level. Bumper trim control allows bumpers to be operated individually.

24. Installation: Dockleveler shipped complete and ready for installation in pre-formed concrete pit. Pit construction to be in accordance with certified Kelley pit detail drawings. Control panel is furnished for remote mounting and electrically interconnected by others. Bumpers to be installed in accordance with Kelley installation instructions. Contact Kelley for current cost and nearest distributor.

25. Limited Warranty: Kelley warrants all components to be free of defects in material and workmanship, under normal use, for a 1-year base period from date of shipment in accordance with Kelley’s Standard Warranty Policy. The “Base Warranty Period” will begin 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 prorated 10-year structural warranty available upon engineering approval of written application.

26. Bumpers: Unit to include two steel faced bumpers. Riser brackets supplied on all MG-LD models.

NOMINAL DIMENSIONS

MODEL	LEVELER WIDTH	LEVELER LENGTH	LIP SIZE	(BELOW DOCK) RANGE	(ABOVE DOCK) RANGE	BUMPER RISERS	PIT WIDTH	PIT DEPTH
MG12700	7'	12'	20"	18"	12"	NO	9'	32"
MG12700-LD	7'	12'	16"	12"	18"	YES	9'	32"
MG10700	7'	10'	18"	15"	12"	NO	9'	29"
MG10700-LD	7'	10'	16"	12"	15"	YES	9'	29"
MG8700	7'	8'	16"	12"	12"	NO	9'	26"
MG8700-LD	7'	8'	16"	12"	12"	YES	9'	26"