



Pallet Mover

User Directed AMR

Collaborative autonomous mobile robot designed to empower workers and drive operational productivity. Easy to set-up, map, and start missions in less than 1 hour.

CAPACITY

4,400 lbs.

BATTERY

Integrated 205AH lithium battery with on-board 120vac charger

TRAVEL SPEED

24-volt AC Curtis Travel Controller

Variable up to 2.8 mph

TIRES AND WHEELS

DRIVE tire

(1) 9" x 2.95" polyurethane

STABILITY casters

(2) 5.12" x 2.16" polyurethane

Dual LOAD Wheels

(4) 2.91" x 2.56" polyurethane



SELF-DRIVEN BY
thoro.ai

AUTONOMOUS SYSTEM

Fusion sensor architecture comprised of a primary safety Lidar and advanced camera module complies with ANSI/ITSD F B56.5 and B56.1. Obstacle detection and avoidance is active during autonomous travel and mapping is stored locally so no data connection or infrastructure is required for operation. The localization and self-driving software utilizes natural feature recognition to operate in dynamic environments once a given work area is established.

OPERATION & CONTROLS

The Pallet Mover User Directed AMR is based on our popular end control rider pallet truck chassis, and supports both conventional and autonomous operation. A tablet and intuitive UI is provided to support the easy creation of automated tasks and missions for once the machine is loaded by a human operator. This highly compact unit features electronic power steering and a small rider platform which allows for easy operation from either the floor or riding position, creating maps for autonomous self driving, or navigating in tight areas. The position of the control head and grab bar supports good ergonomics for most operators with easy to use controls are provided for travel, lift, lower and horn functions. Dual butterfly thumb controls for forward and reverse travel support driver stances on the left or right side of the vehicle.

ELECTRICAL

Heavy-duty, 24-Volt AC system for demanding warehouse applications. The programmable Curtis traction controller and matching drive motor provide high performance throughout the entire speed and torque range. Emergency power disconnect, hour meter and battery discharge indicator and key switch, and belly button reversing switch are provided as standard equipment.

The integrated lithium battery and battery management system communicate through the vehicle's CAN system to deliver optimal performance during operation, opportunity charging or full cycle charging operations.

HYDRAULICS

Heavy duty pump motor hydraulic reservoir, solenoid, and gear pump with center mounted lift cylinder. Integral pressure compensated flow control valve regulates lowering speeds.

DRIVE UNIT

Vertically mounted drive motor is directly mounted to gear housing. Oil bathed bevel gear drive train with tapered roller bearings transfers power to axle. State of the art optimized gear technology supplies advantages such as zero maintenance, low noise level, high efficiency and high performance.

BRAKE SYSTEM

Electromagnetic brake is mounted on motor armature shaft multiplying the braking power through the transmission. Brake is applied when control arm is in the vertical or lowered horizontal handle position. System features anti-roll back & neutral braking.

CASTER SYSTEM

Heavy duty spring loaded articulating system designed to maintain good truck performance and operator confidence during use.

LOW PROFILE FORK ASSEMBLY

Low profile forks with collapsed height under 3" and pallet entry rollers for easy pallet entry and exit. Split dual load wheels disperse heat while maintaining solid life expectancy.

Easily accessed grease zerks are provided on pivot points for ease of maintenance and to ensure long equipment service life.

Heavy duty adjustable pull rods

ACCESSIBILITY

Heavy duty composite single piece cover exposes major components for inspection and maintenance.

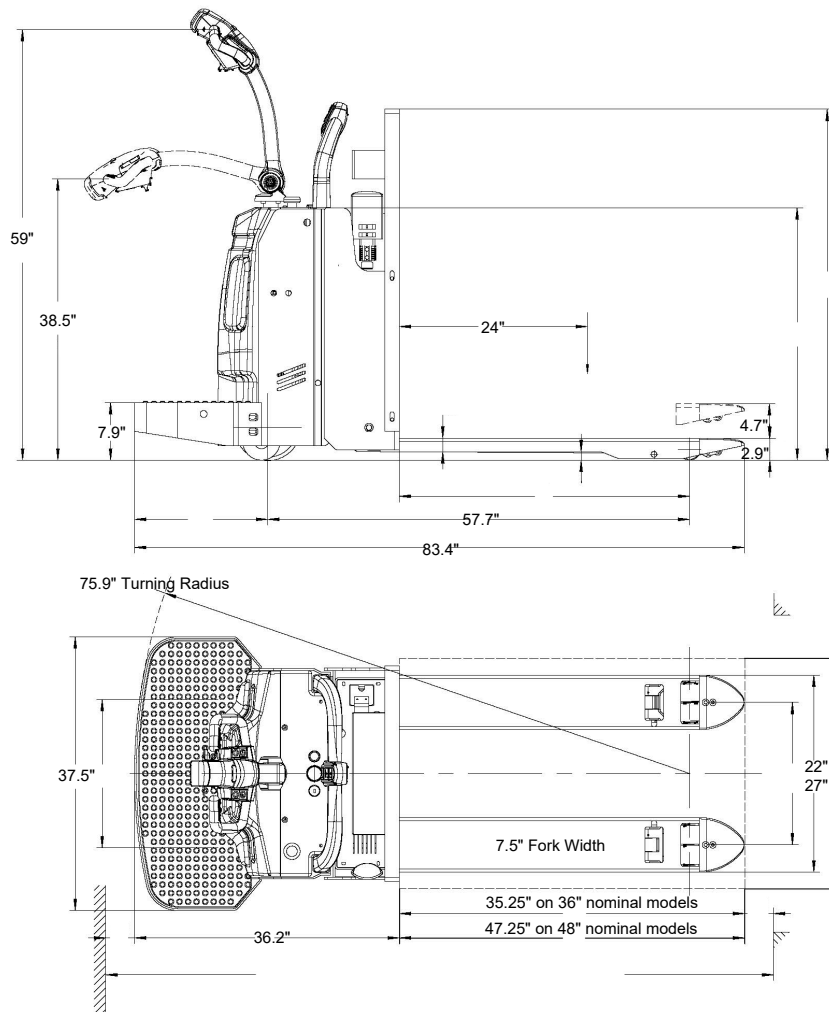
OPTIONAL EQUIPMENT

- 48" or 60" high load backrest
- 27" and 22" nominal fork widths
- 48" and 36" nominal fork lengths
- Universal Carrier Load Platform

Pallet Mover

DIMENSIONS

User Directed AMR



All measurements shown are in standard "inch" units.

Truck Model	Forks	Capacity	Actual Fork Width	Actual Fork Length	Overall Width	Overall Length	* Weight (lbs)
Fork Dimension: 27" Wide							
BPM44	27 x 48	4,400lbs	27	47.25	37.5	84	1450

* Estimated shipping weight with battery and charger