

Powerful and efficient 3-phase AC drive, lift and steer control

Ergonomic and spacious operator compartment

Compact design for greater maneuverability

The right drive and lifting performance package to match your material handling needs

Outstanding capacity retention and load stability at high lift heights



ETV 110 / 112

Sit-Down Moving Mast Reach Truck (2,200 – 2,600 lbs.)

The ETV 1 series of moving mast reach trucks offers the right solution for a wide range of applications.

- **Performance** – Can drive up to 6.8 mph (loaded or unloaded) with excellent acceleration characteristics.
- **Energy efficient** – Jungheinrich® 4th generation AC technology allows the truck to run up to two shifts on a single battery charge in most applications.
- **Outstanding residual capacities** – With lift heights over 23 feet, this truck can reach your tallest racks and can typically retain full capacity over 22 feet (depending on the reach truck configuration).
- **Extremely compact chassis** – The Jungheinrich space-saving design allows the operator to efficiently and effectively work in aisles well under 9 feet in width.¹⁾

Premium ergonomics come standard with Jungheinrich's moving mast reach trucks. This includes:

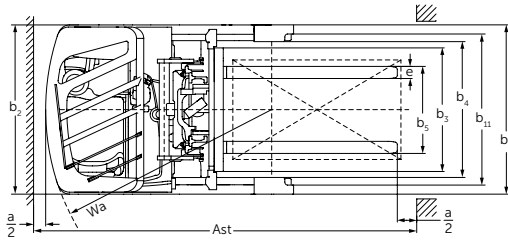
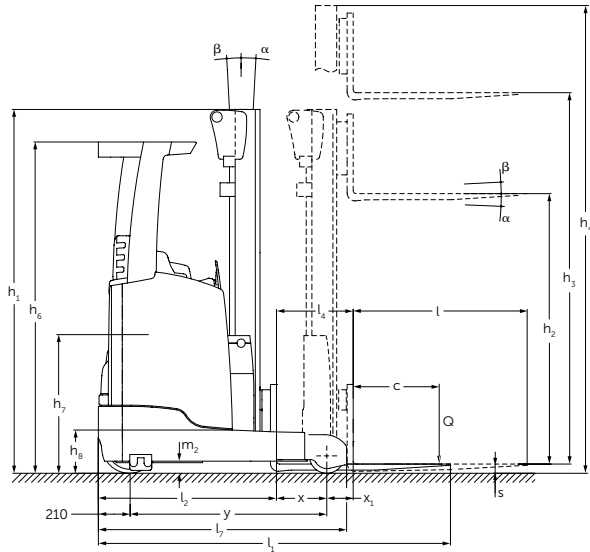
- Spacious, highly-adjustable operator compartment suitable for a wide range of operators.
- Automotive-style drive pedals allow for intuitive operation.
- The soloPILOT and multiPILOT control handles are both ergonomic and highly-productive. The driving direction switch is more visible with a different color, and the horn button is integrated in the front area for faster operation. The multiPILOT has an optional, integrated acknowledgement button for clamped attachments.

- curveCONTROL, which provides automatic speed reduction during cornering, provides the operator with confidence while driving the reach truck, particularly when working in confined areas.

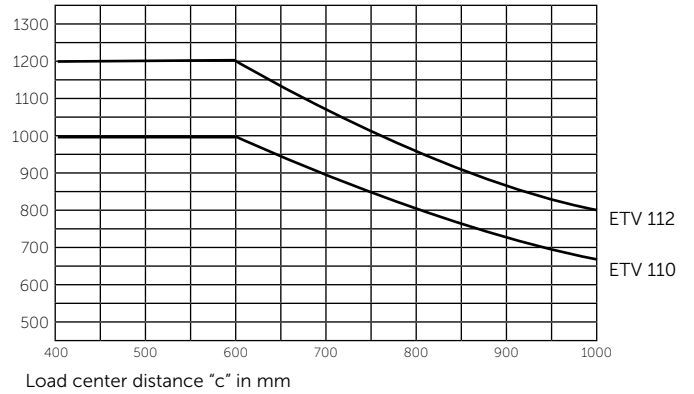
¹⁾ Minimum aisle width is dependent upon many factors. Contact your local Jungheinrich dealer for more information.

**JUNGHEINRICH®**

ETV 110 /112



Capacity



| Characteristics | | | | | | | | | |
|-----------------|---------------|-------|-----------------------|-------|--------------------|-------|------------------------------|---------|--|
| | Lift h_3 | | Lowered mast h_1 | | Free lift h_2 | | Extended mast height h_4^* | | Mast tilt forward / back (α/β) |
| | in | mm | in | mm | in | mm | in | mm | degrees (°) |
| Triplex DZ | 179.0 | 4,550 | 81.0 | 2,050 | 55.0 | 1,408 | 243.5 | 5,192 | 1 / 3 |
| | 196.5 | 5,000 | 87.0 | 2,200 | 61.0 | 1,558 | 261.5 | 5,642 | 1 / 3 |
| | 206.0 | 5,240 | 90.0 | 2,280 | 64.0 | 1,638 | 270.5 | 5,882 | 1 / 3 |
| | 208.5 | 5,300 | 91.0 | 2,300 | 65.0 | 1,658 | 273.0 | 5,942 | 1 / 3 |
| | 220.0 | 5,600 | 95.5 | 2,400 | 69.0 | 1,758 | 285.0 | 6,242 | 1 / 3 |
| | 232.0 | 5,900 | 98.5 | 2,500 | 73.0 | 1,858 | 296.5 | 6,542 | 1 / 3 |
| | 244.0 | 6,200 | 102.5 | 2,600 | 77.0 | 1,958 | 308.5 | 6,842 | 1 / 3 |
| | 255.5 | 6,500 | 106.5 | 2,700 | 81.0 | 2,058 | 320.5 | 7,142 | 0.5 / 2 |
| | 267.5 | 6,800 | 110.5 | 2,800 | 84.5 | 2,158 | 332.0 | 7,442 | 0.5 / 2 |
| 279.5 | 7,100 | 114.5 | 2,900 | 88.5 | 2,258 | 344.0 | 7,742 | 0.5 / 2 | |

* Includes standard load backrest with height of 39.4 inches.

Technical data

as of: 12/2016

| | | | | | Jungheinrich | | Jungheinrich | | | |
|------------------|--|---|---------------------------------|-------|------------------------|---------------------------------|-----------------------------|---------------------------------|-----------------------------|------|
| | | | | | ETV 110 | | ETV 112 | | | |
| Characteristics | 1.1 | Manufacturer | | | | | | | | |
| | 1.2 | Model | | | | | | | | |
| | 1.3 | Drive | | | | Electrics | | Electrics | | |
| | 1.4 | Manual, pedestrian, stand-on, seated order picker operation | | | | Transverse seat | | Transverse seat | | |
| | 1.5 | Load capacity / rated load | lb | kg | 2,205 | 1,000 | 2,646 | 1,200 | | |
| | 1.6 | Load center distance | in | mm | 24 | 610 | 24 | 610 | | |
| | 1.8 | Load distance | in | mm | 13.4 ¹⁾ | 339 ¹⁾ | 16.7 ¹⁾ | 424 ¹⁾ | | |
| | 1.81 | Load distance, mast extended forward | in | mm | 6.7 | 170 | 6.7 | 170 | | |
| | 1.9 | Wheelbase | in | mm | 51.2 | 1,300 | 54.5 | 1,385 | | |
| Weight | 2.1 | Service weight without battery | | lb | kg | 4,418 | 2,004 | 4,462 | 2,024 | |
| | 2.1.1 | Service weight including battery (see line 6.5) | | lb | kg | 5,644 | 2,560 | 5,688 | 2,580 | |
| | 2.3 | Axle loading, no load, front / rear | | lb | kg | 3,499 / 2,145 | 1,587 / 973 | 3,499 / 2,189 | 1,587 / 993 | |
| | 2.4 | Axle loading, fork extended, loaded front / rear | | lb | kg | 1,398 / 6,451 | 634 / 2,926 | 1,138 / 7,196 | 516 / 3,264 | |
| | 2.5 | Axle loading, fork retracted, loaded front / rear | | lb | kg | 2,826 / 5,022 | 1,282 / 2,278 | 3,000 / 5,333 | 1,361 / 2,419 | |
| Wheels / Chassis | 3.1 | Tire type / material | | | | Vulkollan® | | Vulkollan® | | |
| | 3.2 | Tire size, drive | in | mm | 13.5 x 4.5 | 343 x 114 | 13.5 x 4.5 | 343 x 114 | | |
| | 3.3 | Tire size, load | in | mm | 9.1 x 3.3 | 230 x 85 | 9.1 x 3.3 | 230 x 85 | | |
| | 3.5 | Wheels, number, drive / load (x=driven) | | | | 1x / 2 | | 1x / 2 | | |
| | 3.7 | Track width, drive / load (center of tires) | b11 | in | mm | 39.1 | 993 | 39.1 | 993 | |
| | 4.1 | Mast or fork carriage tilt forward / backward | α/β | deg ° | | 1° / 3° ²⁾ | | 1° / 3° ²⁾ | | |
| | 4.2 | Lowered mast height (see tables) (OACH) | h1 | in | mm | 91.0 ²⁾ | 2,300 ²⁾ | 91.0 ²⁾ | 2,300 ²⁾ | |
| 4.3 | Fork free lift height (see tables) (FFH) | h2 | in | mm | 65.0 ²⁾ | 1,658 ²⁾ | 65 ²⁾ | 1,658 ²⁾ | | |
| 4.4 | Maximum fork height (see tables) (MFH) | h3 | in | mm | 208.5 ²⁾ | 5,300 ²⁾ | 208.5 ²⁾ | 5,300 ²⁾ | | |
| 4.5 | Extended mast height (including LBR) (OAE) | h4 | in | mm | 273.0 ^{2) 5)} | 5,942 ^{2) 5)} | 273.0 ^{2) 5)} | 5,942 ^{2) 5)} | | |
| 4.7 | Overhead guard height (top) | h6 | in | mm | 86.2 | 2,190 | 86.2 | 2,190 | | |
| 4.8 | Seat height / Ground to seat index point | h7 | in | mm | 37.8 | 960 | 37.8 | 960 | | |
| 4.10 | Height of wheel arms | h8 | in | mm | 11.6 | 295 | 11.6 | 295 | | |
| 4.19 | Overall length (incl. forks) (see line 4.22) | l1 | in | mm | 91.4 ^{1) 6)} | 2,321 ^{1) 6)} | 91.4 ^{1) 6)} | 2,321 ^{1) 6)} | | |
| 4.20 | Length to fork face (incl. fork thickness) (see line 4.22) | l2 | in | mm | 46.2 ¹⁾ | 1,174 ¹⁾ | 46.2 ¹⁾ | 1,174 ¹⁾ | | |
| 4.21 | Overall width - chassis / wheel legs | b1 / b2 | in | mm | 441 / 441 | 1,120 / 1,120 | 441 / 441 | 1,120 / 1,120 | | |
| 4.22 | Fork dimensions - length / width / thickness | l / e / s | in | mm | 45.3 / 3.1 / 1.6 | 1,150 / 80 / 40 | 45.3 / 3.1 / 1.6 | 1,150 / 80 / 40 | | |
| 4.23 | Fork carriage type (to ISO 2328, class / type A,B) | | | | | 2 / B | | 2 / B | | |
| 4.24 | Fork carriage width | b3 | in | mm | 31.5 | 800 | 31.5 | 800 | | |
| 4.25 | Overall fork width (minimum / maximum) | b5 | in | mm | 11.7 / 26.6 | 296 / 677 | 11.7 / 26.6 | 296 / 677 | | |
| 4.26 | Distance between wheel arms (BLO) | b4 | in | mm | 35.4 | 900 | 35.4 | 900 | | |
| 4.28 | Reach distance | l4 | in | mm | 20.0 ¹⁾ | 509 ¹⁾ | 23.4 ¹⁾ | 594 ¹⁾ | | |
| 4.32 | Ground clearance at center of wheelbase | m2 | in | mm | 3.1 | 80 | 3.1 | 80 | | |
| 4.32.1 | Ground clearance at lowest point | | in | mm | 1.2 | 30 | 1.2 | 30 | | |
| 4.33 | Aisle width (for 40 x 48 pallets L x W) | Ast | in | mm | 103.5 ^{1) 3)} | 2,626 ^{1) 3)} | 104.5 ^{1) 3)} | 2,645 ^{1) 3)} | | |
| 4.34 | Aisle width (for 48 x 48 pallets L x W) | Ast | in | mm | 110.0 ^{1) 3)} | 2,785 ^{1) 3)} | 110.5 ^{1) 3)} | 2,797 ^{1) 3)} | | |
| 4.35 | Minimum outside turning radius | Wa | in | mm | 59.6 | 1,515 | 62.8 | 1,595 | | |
| 4.37 | Length to tip of wheel arms | l7 | in | mm | 64.6 | 1,640 | 68.0 | 1,725 | | |
| Performance | 5.1 | Travel speed, loaded / no load | | mph | km/h | 6.8 / 6.8 ⁴⁾ | 11 / 11 ⁴⁾ | 6.8 / 6.8 ⁴⁾ | 11 / 11 ⁴⁾ | |
| | 5.2 | Lift speed, loaded / no load | | fpm | m/s | 94.5 / 137.8 | 0.48 / 0.70 | 84.7 / 137.8 | 0.43 / 0.70 | |
| | 5.3 | Lowering speed, loaded / no load | | fpm | m/s | 98.4 / 98.4 | 0.5 / 0.5 | 98.4 / 98.4 | 0.5 / 0.5 | |
| | 5.4 | Reaching speed, loaded / empty | | fpm | m/s | 39.4 / 39.4 ²⁾ | 0.2 / 0.2 ²⁾ | 39.4 / 39.4 ²⁾ | 0.2 / 0.2 ²⁾ | |
| | 5.7 | Gradeability loaded / empty | | | | 7 / 10 | | 7 / 10 | | |
| | 5.8 | Maximum gradeability loaded / empty | | | | 10 / 15 | | 10 / 15 | | |
| | 5.9 | Acceleration time loaded / empty | | | | 5.1 / 4.8 | | 5.1 / 4.8 | | |
| | 5.10 | Brakes - service | | | | electric | | electric | | |
| | Motors | 6.1 | Drive motor (rating 60 minutes) | | HP | kW | 8.0 | 6.0 | 8.0 | 6.0 |
| | | 6.2 | Lift motor rating at 15% | | HP | kW | 17.8 | 13.3 | 17.8 | 13.3 |
| 6.4 | | Battery voltage / nominal capacity K5 | | V | Ah | 48 | 280 | 48 | 280 | |
| 6.5 | | Battery weight, minimum / maximum | | lb | kg | 1,571 / 2,326 ¹⁾ | 713 / 1,055 ¹⁾ | 1,571 / 2,326 ¹⁾ | 713 / 1,055 ¹⁾ | |
| 6.5.1 | | Battery dimensions (length x width x height) | | in | mm | 13.97x48.15x30.87 ¹⁾ | 355x1,223x784 ¹⁾ | 13.97x48.15x30.87 ¹⁾ | 355x1,223x784 ¹⁾ | |
| Misc. | 8.1 | Type of drive control | | | | Impulse / Mosfet AC | | Impulse / Mosfet AC | | |
| | 8.2 | Operating pressure for attachments | | PSI | bar | 2,175 | 150 | 2,175 | 150 | |
| | 8.3 | Hydraulic flow rate for attachments | | gpm | lpm | 5.3 | 20 | 5.3 | 20 | |
| | 8.4 | Sound pressure level at operator's ear | | dB(A) | | 68 | | 68 | | |

1) Different battery compartment sizes change these values

2) Dependent on type of mast

3) For floor storage with 8 inches maneuvering space included

4) In load direction 6.2 mph (9.98 km/hr)

5) Includes backrest with height of 39.4 inches / 1,000 mm

6) Different fork lengths change these values

The Jungheinrich Advantage

Jungheinrich's AC technology

- Jungheinrich's 4th generation AC technology provides improved performance and energy efficiency.
- Sealed motors, controllers and connectors provide for better durability, especially when working in dusty or damp applications.
- AC electric power steering provides improved serviceability, performance and energy efficiencies.
- AC motors lower maintenance costs by removing wear items commonly found in DC motors, such as contactors, brushes and springs.

Premium ergonomics

- Full-suspension fabric seat with fore/aft, backrest and weight adjustments.
- Highly-adjustable operator compartment, which allows operators of various sizes to be comfortable and productive.
- Ergonomic and intuitive operator controls.
- All drive and hydraulic functions are comfortably controlled by either the multiPILOT or soloPILOT control handles.
- Low-effort AC electric power steering.

- Premium, state-of-the-art 4" LED color operator display provides immediate feedback to both the operator and technician.
- The 4" color display (6" option available) offers warnings in signal color for better readability.
- 360° steer direction indicator.
- Battery discharge indicator.
- Three performance modes, which can be modified to suit any application.
- Optional readouts, such as lift height indicator and load weight display.

Robust and durable mast design

- High residual capacities.
- Good visibility both through and around the mast.
- Patented and proprietary mast reach cushioning allows for an improvement in operational productivity.
- Optional regenerative lowering can provide even more battery life, especially in those high lift applications.
- Laser can be integrated into the fork tip to project a red line on a pallet or beam for better work level awareness, especially when forks are elevated (CSM).



multiPILOT hydraulic control (optional)

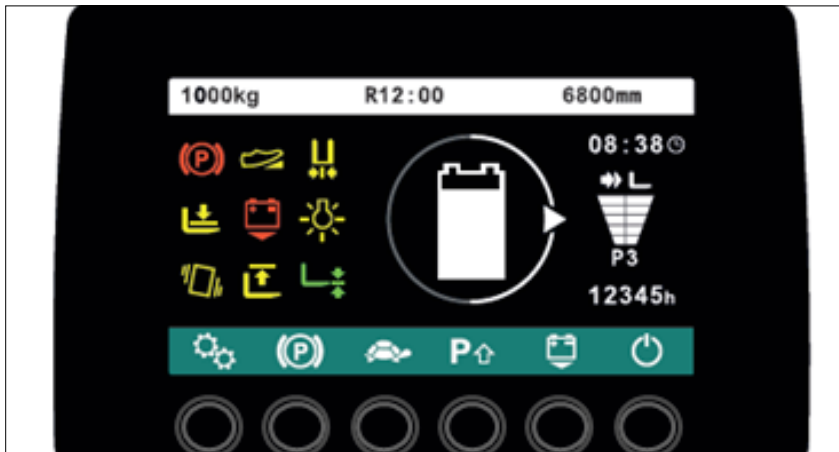
Performance-enhancing options to meet your application

- Anti-Slip Regulation (ASR) option for controlled acceleration on smooth or wet surfaces.
- A wide range of lift and lower limit options.

Parts when you need them

Jungheinrich's Parts Fast or Parts Free Guarantee ensures next-business-day delivery by 5:00 PM of all Jungheinrich parts in the United States, or they're free, including freight. For customers in Canada and Mexico, the guarantee ensures shipping of parts within 24 hours from the time the order was placed by the dealer. See your local Jungheinrich dealer for program details.

* Programs may be subject to change without notice and may vary by region. Please ask your local Jungheinrich dealer for complete terms and conditions.



Informative display