

Jungheinrich® proprietary 3-phase AC technology in drive, lift and steering motors

Solid pneumatic tires and high ground clearance for indoor and outdoor use

Side-facing seat provides excellent visibility when transporting high loads

Smooth and sensitive operation with soloPILOT hydraulic control

Jungheinrich curveCONTROL for advanced stability during cornering

All weather cabins for frequent outdoor applications (optional)



ETV C16 / ETV C20

Electric Moving Mast Reach Truck (3,500 / 4,400 lbs.)

The ETV C16 / C20 series of reach trucks is suitable for both indoor and outdoor use, including operation on smooth concrete warehouse floors or for loading/unloading on bumpy asphalt surfaces. Whether handling pallets, operating in single- or multi-shift applications or frequently working outside, these reach trucks provide the ideal solution.

The key advantages:

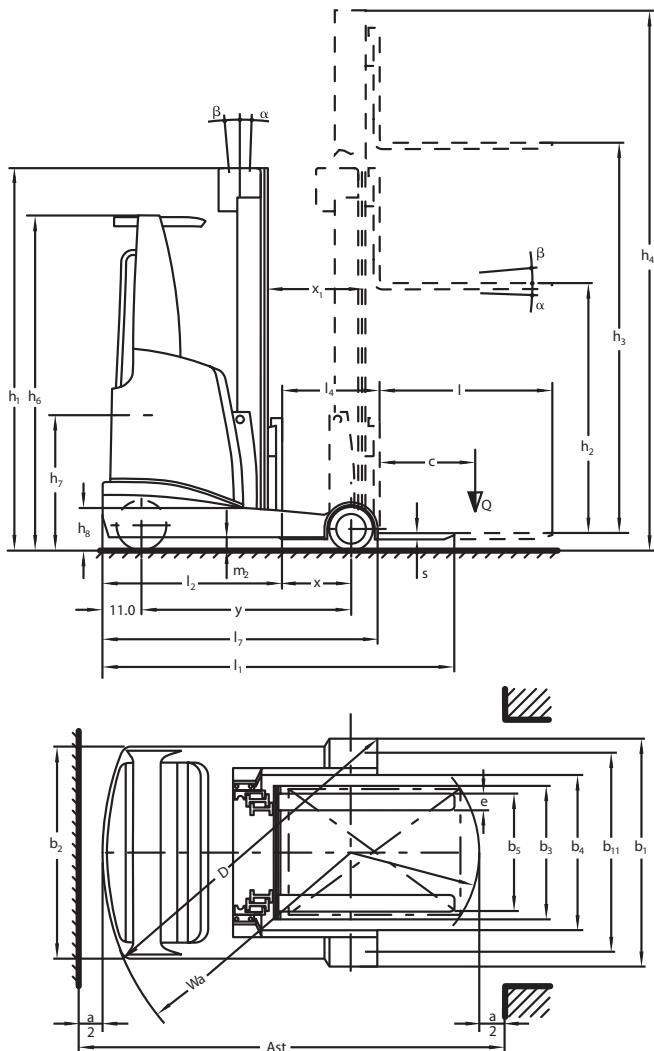
- Flexible for indoor and outdoor operation on different surfaces. Suitable for applications with smooth, concrete floors in the warehouse or for loading and unloading outside on rough surfaces.
- Compact chassis design allows the truck to work in a narrow working aisle (widths from 111 inches).
- Higher productivity and fewer maintenance requirements due to Jungheinrich's proprietary 3-phase AC technology.

- A highly-adjustable and extremely comfortable operator compartment helps provide a premium experience for the operator. Additional seat options also available.

The ETV C16 / ETV C20 can be used at high levels for efficient stacking and retrieval of pallets that need to be transferred in narrow aisles. Whether handling pallets, working in drive-in racking or operating outside– these reach trucks provide the ideal solution for virtually every application.

 **JUNGHEINRICH®**

ETV C16 / ETV C20



| Standard mast types | | | | | | | | | | | | | | | |
|---------------------|-------------|-------|---------------------|-------|---------|-------|-----------|-------|---------|-------|----------------------|-------|---------|-------|--|
| | Lift height | | ETV C16 | | ETV C20 | | ETV C16 | | ETV C20 | | ETV C16 | | ETV C20 | | Mast tilt forward / back α°/β° |
| | | | Lowered mast height | | | | Free lift | | | | Extended mast height | | | | |
| | h_3 | | h_1 | | | | h_2 | | | | h_4^* | | | | |
| Three-stage mast DZ | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | ° |
| | 167.3 | 4,250 | — | — | 80.7 | 2,050 | — | — | 52.0 | 1,320 | — | — | 196.7 | 4,996 | 2 / 4 |
| | 179.1 | 4,550 | 80.7 | 2,050 | — | — | 55.4 | 1,406 | — | — | 204.5 | 5,194 | — | — | 2 / 4 |
| | 185.0 | 4,700 | — | — | 86.6 | 2,200 | — | — | 57.9 | 1,470 | — | — | 214.4 | 5,446 | 2 / 4 |
| | 196.9 | 5,000 | 86.6 | 2,200 | 90.6 | 2,300 | 61.3 | 1,556 | 61.8 | 1,570 | 222.2 | 5,644 | 226.2 | 5,746 | 2 / 4 |
| | 206.3 | 5,240 | 89.8 | 2,280 | — | — | 64.4 | 1,636 | — | — | 231.7 | 5,884 | — | — | 2 / 4 |
| | 208.7 | 5,300 | 90.6 | 2,300 | 94.5 | 2,400 | 65.2 | 1,656 | 65.7 | 1,670 | 234.0 | 5,944 | 238.0 | 6,046 | 2 / 4 |
| | 213.4 | 5,420 | — | — | 96.1 | 2,440 | — | — | 67.3 | 1,710 | — | — | 242.8 | 6,166 | 2 / 4 |
| | 214.6 | 5,450 | 92.5 | 2,350 | — | — | 67.2 | 1,706 | — | — | 239.9 | 6,094 | — | — | 2 / 4 |
| | 220.5 | 5,600 | 94.5 | 2,400 | 98.4 | 2,500 | 69.1 | 1,756 | 69.7 | 1,770 | 245.8 | 6,244 | 249.8 | 6,346 | 2 / 4 |
| | 225.2 | 5,720 | 96.1 | 2,440 | — | — | 70.7 | 1,796 | — | — | 250.6 | 6,364 | — | — | 2 / 4 |
| | 228.7 | 5,810 | 97.2 | 2,470 | — | — | 71.9 | 1,826 | — | — | 254.1 | 6,454 | — | — | 2 / 4 |
| | 232.3 | 5,900 | 98.4 | 2,500 | 102.4 | 2,600 | 73.1 | 1,856 | 73.6 | 1,870 | 257.6 | 6,544 | 261.7 | 6,646 | 2 / 4 |
| | 238.2 | 6,050 | — | — | 104.3 | 2,650 | — | — | 75.6 | 1,920 | — | — | 267.6 | 6,796 | 2 / 4 |
| | 244.1 | 6,200 | 102.4 | 2,600 | 106.3 | 2,700 | 77.0 | 1,956 | 77.6 | 1,970 | 269.4 | 6,844 | 273.5 | 6,946 | 2 / 4 |
| | 255.9 | 6,500 | 106.3 | 2,700 | 110.2 | 2,800 | 80.9 | 2,056 | 81.5 | 2,070 | 281.3 | 7,144 | 285.3 | 7,246 | 2 / 4 |
| 267.7 | 6,800 | 110.2 | 2,800 | 114.2 | 2,900 | 84.9 | 2,156 | 85.4 | 2,170 | 293.1 | 7,444 | 297.1 | 7,546 | 2 / 4 | |
| 273.6 | 6,950 | — | — | 116.1 | 2,950 | — | — | 87.4 | 2,220 | — | — | 303.0 | 7,696 | 2 / 4 | |
| 279.5 | 7,100 | 114.2 | 2,900 | — | — | 88.8 | 2,256 | — | — | 304.9 | 7,744 | — | — | 2 / 4 | |
| 291.3 | 7,400 | — | — | 122.0 | 3,100 | — | — | 93.3 | 2,370 | — | — | 320.7 | 8,146 | 2 / 4 | |

*Includes standard load backrest with height 39.4 inches.

Nota: equipar este modelo (estos modelos) con una fuente de energía (por ejemplo, litio-ion, pila de combustible de hidrógeno, etc.) que no haya sido aprobado previamente por la fábrica se considera una modificación. Según OSHA 1910.178 y ANSI/ITSDF B56.1, por favor consulte con su representante de fábrica antes de instalar cualquier fuente de alimentación que no sea OEM y que no haya sido aprobada previamente.

Technical data

as of: 12/2016

| Characteristics | Manufacturer | | | | Jungheinrich | | Jungheinrich | | | |
|-----------------|---|--|---|-----------|------------------------|-------------------------------------|---------------------------------|-------------------------------------|---------------------------------|------|
| | Model | | | | ETV C16 | | ETV C20 | | | |
| 1.1 | G = fork, E = integrated sideshift | | | | GE | | GE | | | |
| 1.3 | Drive | | | | electric | | electric | | | |
| 1.4 | Type of operation | | | | transverse seat | | transverse seat | | | |
| 1.5 | Load capacity / rated load | Q | lbs | kg | 3,500 | 1,580 | 4,400 | 1,980 | | |
| 1.6 | Load center distance | c | in | mm | 24 | 610 | 24 | 610 | | |
| 1.8 | Load distance, center of drive axle to fork | x | in | mm | 15.7 ¹⁾ | 400 ¹⁾ | 16.6 ¹⁾ | 421 ¹⁾ | | |
| | Mast pushed forward | x ₁ | in | mm | 11.4 | 290 | 11.4 | 290 | | |
| 1.9 | Wheelbase | y | in | mm | 57.5 | 1,460 | 59.8 | 1,520 | | |
| Weights | 2.1 | Service weight without battery | | lbs | 5,959 | 2,703 | 6,775 | 3,073 | | |
| | 2.1.1 | Service weight including battery (see line 6.5) | | lbs | 7,926 | 3,595 | 8,741 | 3,965 | | |
| | 2.3 | Axle loading – unloaded, drive / load | | lbs | 4,856 / 3,070 | 2,202 / 1,393 | 5,253 / 3,488 | 2,383 / 1,582 | | |
| | 2.4 | Axle loading – fork advanced, loaded drive / load | | lbs | 1,461 / 9,965 | 662 / 4,513 | 1,115 / 12,026 | 504 / 4,549 | | |
| | 2.5 | Axle loading – fork retracted, loaded drive / load | | lbs | 4,285 / 7,141 | 1,941 / 3,234 | 4,692 / 8,449 | 2,123 / 3,822 | | |
| Wheels, Chassis | 3.1 | Tires | | | | SE | | SE | | |
| | 3.2 | Tire size, drive | | | | 200 / 50-10 | | 200 / 50-10 | | |
| | 3.3 | Tire size, load | | | | 180 / 60-10 | | 180 / 60-10 | | |
| | 3.5 | Wheels – number, drive / load (x = driven wheels) | | | | 1x / 2 | | 1x / 2 | | |
| 3.7 | Track width, load side | b ₁₁ | in | mm | 47.6 | 1,210 | 48.8 | 1,240 | | |
| Dimensions | 4.1 | Mast – fork carriage tilt, forward / backward | | degrees | 2° / 4° ²⁾ | | 2° / 4° ²⁾ | | | |
| | 4.2 | Collapsed mast height | h ₁ | in | mm | 91.0 ²⁾ | 2,300 ²⁾ | 94.5 ²⁾ | 2,400 ²⁾ | |
| | 4.3 | Free-lift | h ₂ | in | mm | 65.2 ²⁾ | 1,656 ²⁾ | 65.7 ²⁾ | 1,670 ²⁾ | |
| | 4.4 | Maximum fork height (MFH) | h ₃ | in | mm | 208.5 ²⁾ | 5,300 ²⁾ | 208.5 ²⁾ | 5,300 ²⁾ | |
| | 4.5 | Overall extended height (OAE) | h ₄ | in | mm | 250.0 ^{2) 5)} | 5,944 ^{2) 5)} | 254.0 ^{2) 5)} | 6,046 ^{2) 5)} | |
| | 4.7 | Overhead load guard (cab) height | h ₆ | in | mm | 90.2 | 2,290 | 90.2 | 2,290 | |
| | 4.8 | Seat height / standing height | h ₇ | in | mm | 45.9 | 1,166 | 45.9 | 1,166 | |
| | 4.10 | Height of outriggers | h ₈ | in | mm | 18.3 | 464 | 18.3 | 464 | |
| | 4.19 | Overall length | l ₁ | in | mm | 97.8 ^{1) 6)} | 2,484 ^{1) 6)} | 99.4 ^{1) 6)} | 2,524 ^{1) 6)} | |
| | 4.20 | Length to fork face, headlength | l ₂ | in | mm | 51.9 ¹⁾ | 1,320 ¹⁾ | 53.5 ¹⁾ | 1,360 ¹⁾ | |
| | 4.21 | Overall width | b ₁ / b ₂ | in | mm | 54.4 / 50.0 | 1,382 / 1,270 | 55.5 / 50.0 | 1,409 / 1,270 | |
| | 4.22 | Fork dimensions, thick / width | s / e / l | in | mm | 1.6 / 4.8 / 45.3 | 40 / 120 / 1,150 | 1.6 / 4.8 / 45.3 | 40 / 120 / 1,150 | |
| | 4.23 | Fork carriage, class / type A,B | | | | 2 / B | | 2 / B | | |
| | 4.24 | Fork carriage width | b ₃ | in | mm | 32.7 | 830 | 32.7 | 800 | |
| | 4.25 | Overall fork width | b ₅ | in | mm | 13.2 / 28.7 | 335 / 730 | 14.0 / 29.5 | 356 / 750 | |
| | 4.26 | Distance between outriggers | b ₄ | in | mm | 37.0 | 940 | 37.0 | 940 | |
| | 4.28 | Reach distance | l ₄ | in | mm | 27.2 ¹⁾ | 690 ¹⁾ | 28.0 ¹⁾ | 711 ¹⁾ | |
| 4.32 | Ground clearance, center of wheelbase | m ₂ | in | mm | 3.1 | 80 | 3.1 | 80 | | |
| 4.32.1 | Ground clearance, at lowest point | | in | mm | 2.2 | 55 | 2.2 | 55 | | |
| 4.33 | Aisle width (for 48 x 40 in / 1,219 x 1,016 mm pallets) | Ast | in | mm | 110.3 ^{1) 3)} | 2,802 ^{1) 3)} | 112.1 ^{1) 3)} | 2,847 ^{1) 3)} | | |
| 4.34 | Aisle width (for 48 x 48 in / 1,219 x 1,219 mm pallets) | Ast | in | mm | 116.4 ^{1) 3)} | 2,956 ^{1) 3)} | 118.1 ^{1) 3)} | 2,999 ^{1) 3)} | | |
| 4.35 | Turning radius | Wa | in | mm | 68.3 | 1,735 | 70.7 | 1,795 | | |
| 4.37 | Length to tip of outrigger | l ₇ | in | mm | 78.2 | 1,986 | 80.6 | 2,046 | | |
| Performance | 5.1 | Travel speed, loaded / unloaded | | mph | km/h | 7.3 / 7.6 ⁴⁾ | 11.8 / 12.2 ⁴⁾ | 7.3 / 7.6 ⁴⁾ | 11.8 / 12.2 ⁴⁾ | |
| | 5.2 | Lift speed, loaded / unloaded | | ft / min | m / s | 78.7 / 137.8 | 0.40 / 0.70 | 63.0 / 118.1 | 0.32 / 0.60 | |
| | 5.3 | Lowering speed, loaded / unloaded | | ft / min | m / s | 98.4 / 98.4 | 0.5 / 0.5 | 98.4 / 98.4 | 0.5 / 0.5 | |
| | 5.4 | Reach speed, loaded / unloaded | | ft / min | m / s | 39.4 / 39.4 ²⁾ | 0.20 / 0.20 ²⁾ | 29.5 / 29.5 ²⁾ | 0.15 / 0.15 ²⁾ | |
| | 5.7 | Gradeability, loaded / unloaded | | % | | 7 / 10 | | 6 / 10 | | |
| | 5.8 | Maximum gradeability, loaded / unloaded | | % | | 10 / 15 | | 10 / 15 | | |
| | 5.9 | Acceleration time, loaded / unloaded | | sec | | 5.2 / 4.8 | | 5.4 / 4.6 | | |
| | 5.10 | Service brake | | | | electric | | electric | | |
| | Motors | 6.1 | Drive motor (rating S ₂ 60 minute) | | hp | kW | 10.1 | 7.5 | 10.1 | 7.5 |
| | | 6.2 | Lift motor rating at S ₂ 15% | | hp | kW | 17.8 | 13.3 | 17.8 | 13.3 |
| 6.4 | | Battery voltage / nominal capacity | | V | Ah | 48 / 560 | | 48 / 560 | | |
| 6.5 | | Battery weight, minimum / maximum | | lbs | kg | 1,966 / 2,173 ¹⁾ | 892 / 986 ¹⁾ | 1,966 / 2,173 ¹⁾ | 892 / 986 ¹⁾ | |
| | | Battery dimensions, l / w / h | | in | mm | 13.97 / 48.15 / 30.87 ¹⁾ | 355 / 1,223 / 784 ¹⁾ | 13.97 / 48.15 / 30.87 ¹⁾ | 355 / 1,223 / 784 ¹⁾ | |
| Other | 8.1 | Type of drive control | | | | AC technology | | AC technology | | |
| | 8.2 | Operating pressure for attachments | | psi | bar | 2,175 | 150 | 2,175 | 150 | |
| | 8.3 | Flowrate for attachments | | gal / min | l / min | 5.3 | 20 | 5.3 | 20 | |
| | 8.4 | Sound level at driver's ear | | | | 70 | | 70 | | |

1) Other battery sizes change these values

2) Dependent on type of mast

3) For floor storage with 8 inches (200 mm) total maneuvering clearance included

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

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

6) Different fork lengths change these values

This specification sheet only provides technical values for the standard truck. Non-standard tires, different masts, additional equipment, etc., could produce other values. Rights reserved for technical changes and improvements.

The Jungheinrich Advantage

Powerful mast

Jungheinrich masts provide maximum space utilization at high lift heights.

- Excellent visibility to the load.
- Integrated sideshift.
- Low collapsed heights combined with high lift heights.
- Smooth mast tilt.
- High residual capacities at maximum fork height.
- Lift heights up to 24.3 feet.
- Integrated hose routing for auxiliary hydraulics (no hose reel).

Ergonomic operator compartment

The operator compartment provides ideal working conditions for high performance and ease of operation.

- Horizontally- and vertically-adjustable steering wheel.
- Full-suspension comfort seat with adjustment features such as seating position, backrest and body weight.
- Side-facing seat offers enhanced visibility when transporting heavy loads.
- Numerous storage options.
- Generous space available in compartment.
- Automatic centering of sideshift at the push of a button (optional).



Informative display

Easy control with soloPILOT

- Multiple control handles are used to activate all hydraulic functions, including lifting / lowering, travel direction, sideshift and the horn.
- All operating controls are visible and have a designated function. Mast reach and mast tilt are controlled by two separate levers.
- soloPILOT also controls auxiliary equipment, such as the fork positioner (optional).
- Precise operation through application of all functions.
- Comfortable posture with padded armrest.

Easy-to-read operator display

- Travel direction and wheel position display.
- Battery discharge indicator.
- Three adjustable travel programs to suit every application.
- Operating hours and clock.
- Lift height and load weight (optional).
- The color display is 4" with 480x272 pixels. A 6" display is also available as an option.

Jungheinrich's proprietary 3-phase AC technology

Powerful 3-phase AC technology in drive, lift and steering motors offers several advantages over traditional DC motors.

- Powerful acceleration.
- Quick plugging without hesitation.
- Greater operational availability due to maintenance-free motors without carbon brushes, brush springs or commutators.
- Longer operating times due to energy reclamation during braking.

Additional options

- Lift height pre-selection with SNAP function.
- Floor spot light.
- Panoramic overhead guard roof.
- Load weight indicator.

Lithium-ion Package Advantages

- Fast charging with no need for battery exchanges
- Maintenance-free with no odors from gases or acidification
- Longer service life and lower maintenance compared with lead-acid batteries
- Charging can be interrupted at anytime
- 5-year battery warranty included

Parts when you need them

Jungheinrich's Parts Fast or Parts Free Guarantee ensures next-business-day delivery by 5:00 p.m. 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.