

All motors for drive, lifting and steering with 3-phase AC technology

Space saving design, minimises aisle widths

Operators cab with class leading ergonomics

Low running costs with energy reclamation during braking and lowering (optional)

MULTI-PILOT control for ease of operation

Curve Control for optimum safety during travel whilst cornering



ETM 214/ETV 214/ETM 216/ETV 216

Electric Reach Truck (1400, 1600 kg)

Space-saving design, high performance motors and ergonomically optimised cab. These are the strengths of Jungheinrich Reach Trucks, ETM/ETV 214/216.

The advantages: Space-saving through narrow working aisle widths from 2692 mm (according to VDI when picking up Euro pallets lengthways). Higher productivity as well as minimised servicing – through the use of 3-phase AC technology. Motivated, relaxed operators through efficiency promoting ergonomics.

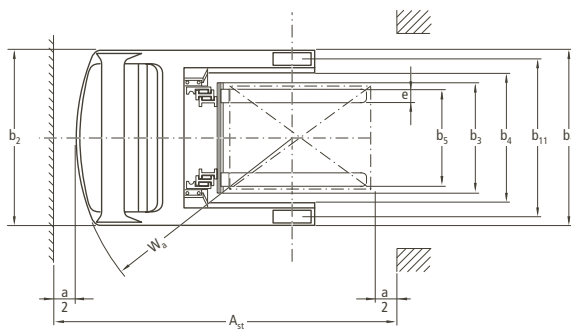
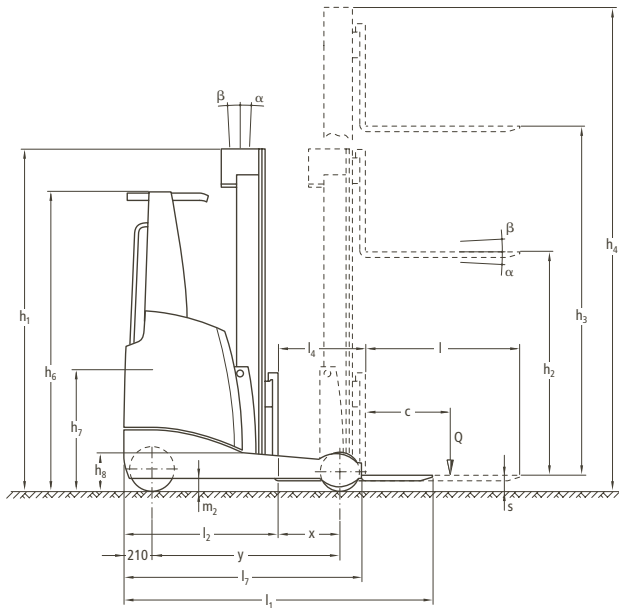
The operator feels the benefit of comfort from the start: from the lowered entry height he comfortably reaches the 5 way adjustable comfort seat, adjustable arm-rest, MULTI-PILOT control lever and vertically/horizontally steplessly adjustable steering wheel.

By using the display/operating instruments arranged in front of him, the operator can call up all operational and safety-relevant data and individually adjust or select various travel programmes. Arrangement and design of the instruments contribute

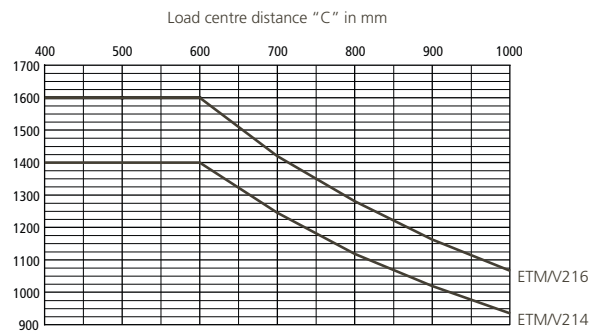
towards safety as well as the excellent visibility through the panorama mast and the operator protecting roof.

The Jungheinrich 2 series reach trucks are the basis for cost effective stacking and retrieval at high lift heights and in the most confined spaces. No matter whilst working in any type of racking, whether for particularly narrow or low clearance heights, whether for single shift or multi-shift applications – the reach trucks 214/216 provide the ideal solution for every application.

ETM 214/ETV 214/ETM 216/ETV 216



Capacity



| Mast Table ETM 214/ETV 214/ETM 216/ETV 216 | | | | | | |
|--|--------------------------------|-------------------------|-----------------------|----------------------------------|---|---|
| Designation | Closed mast height h_1 mm | Lift height h_3 mm | Free lift h_2 mm | Extended mast height h_4 mm | Mast tilt forward/backward α°/β° | Fork tilt forward/backward α°/β° |
| Two-stage ZT | 1950 | 2900 | 80 | 3544 | 2/5 | – |
| | 2050 | 3100 | 80 | 3744 | 2/5 | – |
| | 2200 | 3400 | 80 | 4044 | 2/5 | – |
| | 2300 | 3600 | 80 | 4244 | 2/5 | – |
| | 2400 | 3800 | 80 | 4444 | 1/5 | – |
| | 2500 | 4000 | 80 | 4644 | 1/5 | – |
| Three-stage DZ | 2700 | 4400 | 80 | 5044 | 1/5 | – |
| | 1950 | 4250 | 1306 | 4894 | 1/5 | – |
| | 2200 | 5000 | 1556 | 5644 | 1/5 | 2/5 |
| | 2300 | 5300 | 1656 | 5944 | 1/5 | 2/5 |
| | 2400 | 5600 | 1756 | 6244 | 1/3 | 2/5 |
| | 2500 | 5900 | 1856 | 6544 | 1/3 | 2/5 |
| | 2600 | 6200 | 1956 | 6844 | 1/3 | 2/5 |
| | 2700 | 6500 | 2056 | 7144 | 0.5/2 | 2/5 |
| | 2800 | 6800 | 2156 | 7444 | 0.5/2 | 2/5 |
| | 2900 | 7100 | 2256 | 7744 | 0.5/2 | 2/5 |
| | 3000 | 7400 | 2356 | 8044 | 0.5/1 | 2/5 |
| | 3100 | 7700 | 2456 | 8344 | 0.5/1 | 2/5 |
| | 3200 | 8000 | 2556 | 8644 | 0.5/1 | 2/5 |
| | 3300 | 8300 | 2656 | 8944 | 0.5/1 | 2/5 |
| | 3340 | 8420 | 2696 | 9064 | 0.5/1 | 2/5 |
| | 3440 | 8720 | 2796 | 9364 | 0.5/1 | 2/5 |
| 3540 | 9020 | 2896 | 9664 | 0.5/1 | 2/5 | |
| 3670 | 9410 | 3026 | 10054 | – | 2/5 | |
| 3840 | 9920 | 3196 | 10564 | – | 2/5 | |
| 3950 | 10250 | 3306 | 10894 | – | 2/5 | |

Technical Data in line with VDI 2198 as at: 08/2010

| | | | | | | | | | |
|------------------|---|--|---|-------------------------|-------------------------|-------------------------|-------------------------|---------------------|-----|
| Identification | 1.1 | Manufacturer (abbreviation) | Jungheinrich | Jungheinrich | Jungheinrich | Jungheinrich | 1.1 | | |
| | 1.2 | Manufacturer's type designation | ETM 214 | ETV 214 | ETM 216 | ETV 216 | 1.2 | | |
| | | G = fork; E = integrated sideshift | GE | GE | GE | GE | | | |
| | 1.3 | Drive | electric | electric | electric | electric | 1.3 | | |
| | 1.4 | Operator type | seated | seated | seated | seated | 1.4 | | |
| | 1.5 | Load capacity/rated load | Q (t) | 1.4 | 1.4 | 1.6 | 1.6 | 1.5 | |
| | 1.6 | Load centre distance | c (mm) | 600 | 600 | 600 | 600 | 1.6 | |
| | 1.8 | Load distance (Centre of load axle to fork face) | x (mm) | 345 ¹⁾ | 417 ¹⁾ | 395 ¹⁾ | 395 ¹⁾ | 1.8 | |
| | | Mast pushed forward | x ₁ (mm) | 205 | 205 | 205 | 205 | | |
| 1.9 | Wheelbase | y (mm) | 1410 | 1410 | 1460 | 1460 | 1.9 | | |
| Weights | 2.1 | Service weight incl. battery (see line 6.5) | kg | 2925 | 2950 | 3045 | 3070 | 2.1 | |
| | 2.3 | Axle loading, unladen front/rear | kg | 1755/1170 | 1770/1180 | 1827/1218 | 1842/1228 | 2.3 | |
| | 2.4 | Axle loading, fork advanced, laden front/rear | kg | 475/3806 | 522/3828 | 557/4088 | 560/4110 | 2.4 | |
| | 2.5 | Axle loading, fork retracted, laden front/rear | kg | 1557/2768 | 1566/2784 | 1672/2973 | 1681/2989 | 2.5 | |
| | Wheels, Chassis | 3.1 | Tyres | Vulkollan® | Vulkollan® | Vulkollan® | Vulkollan® | 3.1 | |
| 3.2 | | Tyre size, front | mm | Ø343 x 114 | Ø343 x 114 | Ø343 x 114 | Ø343 x 114 | 3.2 | |
| 3.3 | | Tyre size, rear | mm | Ø285 x 100 | Ø285 x 100 | Ø285 x 100 | Ø285 x 100 | 3.3 | |
| 3.5 | | Wheels, number front rear (x = driven wheels) | | 1x/2 | 1x/2 | 1x/2 | 1x/2 | 3.5 | |
| 3.7 | | Track width, rear | b ₁₁ (mm) | 986 | 1136 | 986 | 1136 | 3.7 | |
| Basic Dimensions | | 4.1 | Tilt of mast/fork carriage forward/backward | α/β (°) | 1/5 ²⁾ | 1/5 ²⁾ | 1/5 ²⁾ | 1/5 ²⁾ | 4.1 |
| | | 4.2 | Closed mast height | h ₁ (mm) | 2300 | 2300 | 2300 | 2300 | 4.2 |
| | 4.3 | Free lift | h ₂ (mm) | 1656 | 1656 | 1656 | 1656 | 4.3 | |
| | 4.4 | Lift | h ₃ (mm) | 5300 | 5300 | 5300 | 5300 | 4.4 | |
| | 4.5 | Height, mast extended | h ₄ (mm) | 5944 | 5944 | 5944 | 5944 | 4.5 | |
| | 4.7 | Height of overhead guard (cabin) | h ₆ (mm) | 2150 | 2150 | 2150 | 2150 | 4.7 | |
| | 4.8 | Seat height/stand height | h ₇ (mm) | 960 | 960 | 960 | 960 | 4.8 | |
| | 4.10 | Height of wheel arms | h ₈ (mm) | 285 ³⁾ | 285 ³⁾ | 285 ³⁾ | 285 ³⁾ | 4.10 | |
| | 4.19 | Overall length | l ₁ (mm) | 2418 ¹⁾ | 2346 ¹⁾ | 2418 ¹⁾ | 2418 ¹⁾ | 4.19 | |
| | 4.20 | Length to face of forks | l ₂ (mm) | 1268 ¹⁾ | 1196 ¹⁾ | 1268 ¹⁾ | 1268 ¹⁾ | 4.20 | |
| | 4.21 | Overall width | b ₁ /b ₂ (mm) | 1120/1120 | 1270/1270 | 1120/1120 | 1270/1270 | 4.21 | |
| | 4.22 | Fork dimensions | s/e/l (mm) | 40/120/1150 | 40/120/1150 | 40/120/1150 | 40/120/1150 | 4.22 | |
| | 4.23 | Fork carriage ISO 2328, class/type A, B | | 2/B | 2/B | 2/B | 2/B | 4.23 | |
| | 4.24 | Fork-carriage width | b ₃ (mm) | 800/620 | 800/620 | 800/620 | 800/620 | 4.24 | |
| | 4.25 | Width across forks | b ₅ (mm) | 336/692 | 336/692 | 336/692 | 336/692 | 4.25 | |
| | 4.26 | Distance between wheel arms/loading surfaces | b ₄ (mm) | 782 | 942 | 782 | 942 | 4.26 | |
| | 4.28 | Reach distance | l ₄ (mm) | 550 ¹⁾ | 622 ¹⁾ | 600 ¹⁾ | 600 ¹⁾ | 4.28 | |
| 4.32 | Ground clearance, centre of wheelbase | m ₂ (mm) | 80 | 80 | 80 | 80 | 4.32 | | |
| 4.33 | Aisle width for pallets 1000x1200 crossways | Ast (mm) | 2701/2468 ⁴⁾ | 2669/2415 ⁴⁾ | 2715/2468 ⁴⁾ | 2715/2468 ⁴⁾ | 4.33 | | |
| 4.34 | Aisle width for pallets 800x1200 lengthways | Ast (mm) | 2757/2668 ⁴⁾ | 2711/2615 ⁴⁾ | 2762/2668 ⁴⁾ | 2762/2668 ⁴⁾ | 4.34 | | |
| 4.35 | Turning radius | Wa (mm) | 1613 | 1613 | 1663 | 1663 | 4.35 | | |
| 4.37 | Length across wheel arms | l ₇ (mm) | 1792 | 1792 | 1842 | 1842 | 4.37 | | |
| Performance Data | 5.1 | Travel speed, laden/unladen | km/h | 14.0/14.0 | 14.0/14.0 | 14.0/14.0 | 14.0/14.0 | 5.1 | |
| | 5.2 | Lift speed, laden/unladen | m/s | 0.44/0.70 ²⁾ | 0.44/0.70 ²⁾ | 0.40/0.70 ²⁾ | 0.40/0.70 ²⁾ | 5.2 | |
| | 5.3 | Lowering speed, laden/unladen | m/s | 0.5/0.5 ²⁾ | 0.5/0.5 ²⁾ | 0.5/0.5 ²⁾ | 0.5/0.5 ²⁾ | 5.3 | |
| | 5.4 | Reaching speed, laden/unladen | m/s | 0.2/0.2 ⁵⁾ | 0.2/0.2 ⁵⁾ | 0.2/0.2 ⁵⁾ | 0.2/0.2 ⁵⁾ | 5.4 | |
| | 5.7 | Gradeability, laden/unladen | % | 9/13 | 9/13 | 8/12 | 8/12 | 5.7 | |
| | 5.8 | Max. gradeability, laden/unladen | % | 10/15 | 10/15 | 10/15 | 10/15 | 5.8 | |
| | 5.9 | Acceleration time, laden/unladen | s | 4.8/4.4 | 4.8/4.4 | 4.8/4.4 | 4.8/4.4 | 5.9 | |
| | 5.10 | Service brake | | electric | electric | electric | electric | 5.10 | |
| | E-Motor | 6.1 | Drive motor rating S ₂ 60 min | kW | 6.9 | 6.9 | 6.9 | 6.9 | 6.1 |
| | | 6.2 | Lift motor rating at S ₃ 15% | kW | 10/14 ⁶⁾ | 10/14 ⁶⁾ | 10/14 ⁶⁾ | 10/14 ⁶⁾ | 6.2 |
| 6.3 | | Battery acc. to DIN 43531/35/36 A, B, C, no | | 43531 B | 43531 C | 43531 B | 43531 C | 6.3 | |
| 6.4 | | Battery voltage, nominal capacity K _s | V/Ah | 48/420 ¹⁾ | 48/420 ¹⁾ | 48/420 ¹⁾ | 48/420 ¹⁾ | 6.4 | |
| 6.5 | | Battery weight | kg | 750 | 750 | 750 | 750 | 6.5 | |
| | | Battery dimensions (l/w/h) | mm | 1035/353/787 | 1223/283/787 | 1035/353/787 | 1223/283/787 | | |
| Others | 8.1 | Type of drive control | | MOSFET Control AC | MOSFET Control AC | MOSFET Control AC | MOSFET Control AC | 8.1 | |
| | 8.2 | Operating pressure for attachments | bar | 150 | 150 | 150 | 150 | 8.2 | |
| | 8.3 | Oil volume for attachments | l/min | 20 | 20 | 20 | 20 | 8.3 | |
| | 8.4 | Sound level at driver's ear according to EN 12 053 | dB(A) | 68 | 68 | 68 | 68 | 8.4 | |

1) other battery sizes change these values 2) dependent on mast 3) with load wheel covering +30 mm 4) for floor storage 5) up to 5600 mm lift height 6) with regenerative lowering

Make use of the advantages

High-performance mast

Jungheinrich masts provide maximum safety and space utilisation up to high lift heights:

- Excellent visibility towards load.
- Patented mast reach cushioning; in addition, the travel speed is automatically reduced to crawl speed if the load is raised above the free lift height.
- Integrated sideshift.
- Lowest clearance heights together with high lift heights.
- Choice of mast tilt or fork tilt.
- Extremely long life through high-quality sections.
- High residual capacity to high lift heights.
- Lift heights up to 10250 mm.

Ergonomic operator cab

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

- Comfort seat adjustable to any driver (sitting position/backrest, weight).
- Many storage facilities.
- Important controls are accessible without reaching round.
- Generous space.
- 3-phase AC steering (capable of being switched over from 180° to 360°) with optimised steering wheel position.



Ergonomic operators cab



MULTI-PILOT

- Automatic sideshift centralising at the touch of a button (optional).
- Automatic horizontal positioning of forks (with fork tilt) at the touch of a button (optional).

MULTI-PILOT control lever

Centrally positioned control lever to control all hydraulic functions, choice of travel direction and horn.

- All controls are within sight and each have a clear function.
- No awkward reaching is required even during the use of additional hydraulic functions (e.g. fork adjuster, optional).



Operators display

- Maximum productivity through the simultaneous use of two hydraulic functions (e.g. lifting and reaching).
- Precise operation through proportional hydraulics for all functions.

Operator display

High-quality control display of most important operating data.

- Travel direction and wheel position display.
- 180°-/360° steering mode.
- Battery condition with residual running time display.
- Selected travel programme with performance characteristics.
- Operating hours.
- Time.
- Lift height (optional).
- Centralising sideshift (optional).

Onboard computer (optional)

The onboard computer combines several functions in one and ensures reliability during daily high-productivity operations.

- Large colour screen (TFT-Display).
- PIN access with user administration.
- Speed display.
- Input of height selection for faster depositing at high lift heights (optional).
- Control monitor for video camera (optional).

3-phase AC technology

Powerful 3-phase AC technology for simultaneous drive, lifting and steering offers a range of advantages compared with traditional direct current motors.

- Powerful acceleration.
- Quick direction change.
- High operational availability through maintenance-free motors without carbon brushes.
- Longer operating times through energy reclamation whilst decelerating and during lowering of load (optional).

Jungheinrich UK Ltd.

Head Office:

Sherbourne House · Sherbourne Drive

Tilbrook · Milton Keynes MK7 8HX

Phone 01908 363100

Fax 01908 363180

info@jungheinrich.co.uk

www.jungheinrich.co.uk



Jungheinrich trucks conform to the European Safety Requirements.

JUNGHEINRICH
Well worthwhile