

930 mm truck width for comfortable legroom

High speed and acceleration improving productivity

Ergonomic sideways seated position for fatigue-free travel

Multifunction lever for effortless operation

3-phase AC technology for dynamic movement operations



ESC 316 /316z

Electric sideways-seated truck (1,600 kg)

Our ESC 316(z) electric sideways seated stackers are ideally suited for longer transport distances during stacking and retrieval.

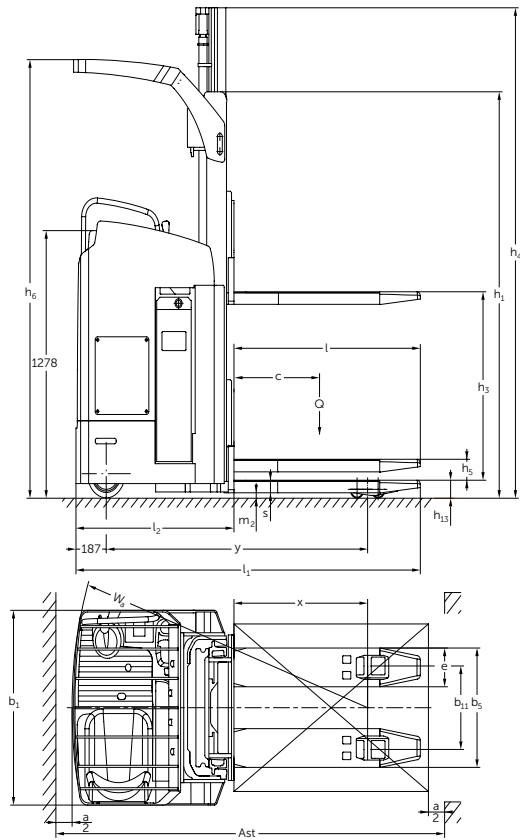
With a width of 930 mm, and as a true sideways seated truck, the ESC 316 offers its operator maximum comfort. The comfortable sideways seating position provides excellent visibility. An advantage which comes into its own during frequent changes of direction. The individual height adjustment of the foot-well provides a relaxed work environment for operators of varied heights.

Other advantages include:

- Powerful, innovative 2.8 kW three-phase AC drive motor for high drive and acceleration performance.

- High residual capacities and powerful lift motor.
 - Extremely durable frame for exceptionally high operational demands.
 - Display with steering position display and selection of travel programs (optional).
 - Electric steering for easy manoeuvring with a few turns of the steering wheel.
 - Excellent energy management for low operating costs.
- Thanks to its initial lift, the ESC 316z is also able to cope effortlessly with uneven floors. All drive and lift functions are performed using the multifunction lever within easy reach. The robust design also offers particular advantages: Frame and load section are designed for rated capacities up to 1600 kg.

ESC 316 /316z



| Standard mast designs ESC 316 /316z | | | | | |
|-------------------------------------|---------------|------------------------------|--------------------|-------------------------------|-----------------------------------|
| | Lift h_3 | Lowered mast height h_1 | Free lift h_2 | Extended mast height h_4 | Height of overhead guard h_6 |
| | (mm) | (mm) | (mm) | (mm) | (mm) |
| Duplex ZT | 2800 | 1995 | 100 | 3372 | 2093 |
| | 3100 | 2145 | 100 | 3672 | 2243 |
| | 3500 | 2345 | 100 | 4072 | 2288 |
| | 4000 | 2595 | 100 | 4572 | 2288 |
| | 4200 | 2695 | 100 | 4772 | 2288 |
| Duplex ZZ | 2800 | 1945 | 1373 | 3372 | 2093 |
| | 3100 | 2095 | 1523 | 3672 | 2243 |
| | 3500 | 2295 | 1723 | 4072 | 2288 |
| | 4000 | 2545 | 1973 | 4572 | 2288 |
| | 4200 | 2645 | 2073 | 4772 | 2288 |
| Triplex DZ | 4200 | 1945 | 1376 | 4770 | 2093 |
| | 5250 | 2295 | 1726 | 5820 | 2288 |
| | 6200 | 2615 | 2046 | 6790 | 2288 |

Technical data in line with VDI 2198

| | | | | | |
|------------------|-------|--------------------------------------------------------------|-----------------------------------|---------------------|---------------------|
| Identification | 1.1 | Manufacturer (abbreviation) | | Jungheinrich | |
| | 1.2 | Model | | ESC 316 | ESC 316z |
| | 1.3 | Drive | | Electric | |
| | 1.4 | Manual, pedestrian, stand-on, seated, order picker operation | | seat | |
| | 1.5 | Load capacity/rated load | Q t | 1.6 | |
| | 1.6 | Load centre distance | c mm | 600 | |
| | 1.8 | Load distance | x mm | 860 | 874 ²⁾ |
| | 1.9 | Wheelbase | y mm | 1,648 | 1,692 ²⁾ |
| Weights | 2.1.1 | Net weight incl. battery (see row 6.5) | kg | 1,746 | 1,685 |
| | 2.2 | Axle load with load front/rear | kg | 1,459 / 1,228 | 1,432 / 1,857 |
| | 2.3 | Axle load without load front/rear | kg | 1,891 / 518 | 1,190 / 495 |
| Wheels / frame | 3.1 | Tyres | | PU | |
| | 3.2 | Tyre size, front | mm | Ø 230 x 77 | |
| | 3.3 | Tyre size, rear | mm | Ø 85 x 85 | |
| | 3.4 | Additional wheels (dimensions) | mm | Ø 140 x 54 | |
| | 3.5 | Wheels, number front/rear (x = driven wheels) | | 2 - 1x / 4 | |
| | 3.6 | Tread width, front | b ₁₀ mm | 645 | |
| | 3.7 | Tread width, rear | b ₁₁ mm | 385 | |
| Basic dimensions | 4.2 | Mast height (lowered) | h ₁ mm | 1,995 | |
| | 4.3 | Free lift | h ₂ mm | 100 | |
| | 4.4 | Lift | h ₃ mm | 2,800 | |
| | 4.5 | Extended mast height | h ₄ mm | 3,422 | |
| | 4.6 | Initial lift | h ₅ mm | 0 | 125 |
| | 4.7 | Height of overhead guard | h ₆ mm | 2,095 ³⁾ | |
| | 4.8 | Seat height/stand height | h ₇ mm | 950 | |
| | 4.15 | Height, lowered | h ₁₃ mm | 90 | |
| | 4.19 | Overall length | l ₁ mm | 2,125 | 2,155 |
| | 4.20 | Length to face of forks | l ₂ mm | 975 | 1,005 |
| | 4.21 | Overall width | b ₁ /b ₂ mm | 930 | 930 / 930 |
| | 4.22 | Fork dimensions | s/e/l mm | 60 / 185 / 1,150 | |
| | 4.25 | Width across forks | b ₅ mm | 570 | |
| | 4.31 | Floor clearance with load under mast | m ₁ mm | 30 | 0 |
| | 4.32 | Ground clearance, centre of wheelbase | m ₂ mm | 30 | 25 |
| | 4.33 | Aisle width for pallets 1000 × 1200 sideways | Ast mm | 2,310 | 2,383 |
| | 4.34 | Aisle width for pallets 800 × 1200 lengthways | Ast mm | 2,360 ¹⁾ | 2,433 ¹⁾ |
| | 4.35 | Turning radius | W _a mm | 1,863 | 1,907 ²⁾ |
| Performance data | 5.1 | Travel speed, laden/unladen | km/h | 9.1 / 9.1 | |
| | 5.2 | Lift speed, laden/unladen | m/s | 0.13 / 0.24 | 0.14 / 0.23 |
| | 5.3 | Lowering speed, laden/unladen | m/s | 0.42 / 0.42 | 0.42 / 0.38 |
| | 5.8 | Max. gradeability, laden/unladen | % | 7 / 12 | |
| | 5.10 | Service brake | | electric | |
| Electrics | 6.1 | Drive motor, output S2 60 min. | kW | 2.8 | |
| | 6.2 | Lift motor, output at S3 15% | kW | 3.0 | |
| | 6.3 | Battery as per DIN 43531 / 35/36 A, B, C, no | | no | |
| | 6.4 | Battery voltage/nominal capacity K5 | V/Ah | 24 / 465 | |
| | 6.5 | Battery weight | kg | 380 | |
| | 6.6 | Energy consumption according to VDI cycle | kWh/h | 2.5 | |
| Misc. | 8.1 | Type of drive control | | AC speedCONTROL | |
| | | | | | |

¹⁾ Diagonal in accordance with VDI: + 190 mm

²⁾ Load section raised: - 78 mm

³⁾ See mast table

Benefit from the advantages



Productivity-enhancing ergonomics

The arrangement of the operator workstation, sideways on to the direction of travel, ensures optimum visibility and reduces potential neck complaints due to frequent changes in direction. A safety switch in the foot-well ensures maximum safety.

- 930 mm truck width for comfortable legroom.
- Comfortable seat with adjustment for body weight.
- Padded armrest.
- Padded knee area.
- Grab handle for safe entry (also serves as the mounting point for storage or for a radio data terminal).

Easy operation and excellent all-round visibility

- Operation of all drives and lift functions by multifunction lever within easy reach.
- Proportional hydraulics for precise load positioning.
- Smooth electric steering.
- Protected seating position within the enclosed truck profile.

- Excellent all-round visibility with no obstructive struts; good view through the mast and overhead guard.

Innovative 3-phase AC technology

Better performance simultaneously combined with reduced operating costs. Make the most of these advantages:

- High level of efficiency with excellent energy management.
- Powerful acceleration.
- Rapid change in direction of travel.
- No carbon brushes – maintenance-free drive motor.
- Two-year warranty on the drive motor.

Comfortable and safe operation

Reliable speed regulation by electronic SpeedControl. SpeedControl ensures maximum safety and effortless control of speed in all situations.

- Roll-back protection on gradients with automatically activated brake.
- Constant travel speed on gradients/descents.
- Energy recovery with regenerative braking.
- Particularly smooth stepless operation.

Versatile utilisation and excellent manoeuvrability

- As a variant with additional lift, the ESC 316z can lift the support arms independently of the forks. This allows the truck to perform effortlessly on uneven floors.
- Short working aisle width and well protected operator position for outstanding operation in narrow working aisles.

Powerful battery

- 3 PzS 465 Ah.
- Lateral battery exchange on rollers.

Robustness and ease of servicing

- Easy access to the controller and electronics.
- Side opening to the drive compartment.
- Robust, enclosed frame.

Additional equipment

- Various storage options.
- Heated seat.
- Load guard.
- Display (travel direction, steering setting, battery status, operating hours, time of day, travel programs).



Earth Moving and Material Handling Equipment
Jeddah-Al-Nahda Dist-Prince Sultan Str.
Kingdom of Saudi Arabia
P.O. Box 52289 Jeddah 21563
Email kbahaa@arabian-roots.com
Mob +966 590950582
Tel +966 126996628 Ext: 245
Fax +966 126221473

The German production facilities in Norderstedt, Moosburg and Landsberg are certified. **ISO 9001**
ISO 14001

Jungheinrich fork lift trucks meet European safety requirements.



JUNGHEINRICH
Machines. Ideas. Solutions.