



## Electric pedestrian stacker

**ERC 214bi–216bi**

Lift height: 2400-6000 mm / Load capacity: 1400-1600 kg



The drawing consists of two views of a truck chassis:

- Side View (Top):** Shows the profile of the chassis. Key dimensions include:
  - $h_4$ : Total height from the ground to the top of the cab.
  - $h_6$ : Height from the ground to the top of the engine compartment.
  - $1271$ : Height from the ground to the top of the cab.
  - $h_{14}$ : Height from the ground to the top of the chassis frame.
  - $195$ : Height from the ground to the bottom of the chassis frame.
  - $631$ : Distance from the front axle to the center of the chassis frame.
  - $l_2$ : Distance from the front axle to the rear axle.
  - $y$ : Distance from the center of the chassis frame to the rear axle.
  - $l_1$ : Total wheelbase.
  - $h_3$ : Height from the ground to the top of the chassis frame.
  - $h_1$ : Height from the ground to the top of the chassis frame.
  - $h_2$ : Height from the ground to the top of the chassis frame.
  - $h_{13}$ : Height from the ground to the bottom of the chassis frame.
  - $m_2$ : Distance from the rear axle to the center of the chassis frame.
  - $x$ : Distance from the center of the chassis frame to the rear axle.
  - $l$ : Distance from the center of the chassis frame to the rear axle.
  - $c$ : Distance from the center of the chassis frame to the rear axle.
  - $Q$ : Downward force at the rear axle.
  - $s$ : Distance from the center of the chassis frame to the rear axle.
- Top View (Bottom):** Shows the chassis from above. Key dimensions include:
  - $800$ : Width of the chassis frame.
  - $560$ : Width of the chassis frame.
  - $b_{10}$ : Width of the chassis frame.
  - $a/2$ : Distance from the center of the chassis frame to the front axle.
  - $Wa$ : Weight of the chassis frame.
  - $l_6$ : Distance from the front axle to the center of the chassis frame.
  - $e$ : Distance from the center of the chassis frame to the rear axle.
  - $b_1$ : Width of the chassis frame.
  - $b_{11}$ : Width of the chassis frame.
  - $b_4$ : Width of the chassis frame.
  - $b_{12}$ : Width of the chassis frame.
  - $a_{st}$ : Total width of the chassis frame.
  - $a/2$ : Distance from the center of the chassis frame to the rear axle.

## ERC 214bi–216bi

| ERC 214bi            | Lift (h3) | Retracted mast height (h1) | Free lift (h2) | Extended mast height (h4) |
|----------------------|-----------|----------------------------|----------------|---------------------------|
| Duplex mast ZT       | 2500 mm   | 1800 mm                    | 100 mm         | 3025 mm                   |
|                      | 2760 mm   | 1930 mm                    | 100 mm         | 3285 mm                   |
|                      | 2900 mm   | 2000 mm                    | 100 mm         | 3425 mm                   |
|                      | 3160 mm   | 2130 mm                    | 100 mm         | 3685 mm                   |
|                      | 3600 mm   | 2350 mm                    | 100 mm         | 4125 mm                   |
|                      | 4100 mm   | 2600 mm                    | 100 mm         | 4625 mm                   |
|                      | 4300 mm   | 2700 mm                    | 100 mm         | 4825 mm                   |
| Triplex mast DZ      | 4090 mm   | 1880 mm                    | 1348 mm        | 4622 mm                   |
|                      | 4300 mm   | 1950 mm                    | 1418 mm        | 4832 mm                   |
|                      | 4690 mm   | 2080 mm                    | 1548 mm        | 5222 mm                   |
|                      | 5350 mm   | 2300 mm                    | 1768 mm        | 5882 mm                   |
| ERC 214bi, ERC 216bi | Lift (h3) | Retracted mast height (h1) | Free lift (h2) | Extended mast height (h4) |
| Triplex mast DZ      | 6000 mm   | 2550 mm                    | 1968 mm        | 6582 mm                   |
| ERC 216bi            | Lift (h3) | Retracted mast height (h1) | Free lift (h2) | Extended mast height (h4) |
| Duplex mast ZT       | 2400 mm   | 1800 mm                    | 100 mm         | 2975 mm                   |
|                      | 2660 mm   | 1930 mm                    | 100 mm         | 3235 mm                   |
|                      | 2800 mm   | 2000 mm                    | 100 mm         | 3375 mm                   |
|                      | 3060 mm   | 2130 mm                    | 100 mm         | 3635 mm                   |
|                      | 3500 mm   | 2350 mm                    | 100 mm         | 4075 mm                   |
|                      | 4000 mm   | 2600 mm                    | 100 mm         | 4575 mm                   |
|                      | 4200 mm   | 2700 mm                    | 100 mm         | 4775 mm                   |
| Triplex mast DZ      | 3990 mm   | 1880 mm                    | 1298 mm        | 4572 mm                   |
|                      | 4200 mm   | 1950 mm                    | 1368 mm        | 4782 mm                   |
|                      | 4590 mm   | 2080 mm                    | 1498 mm        | 5172 mm                   |
|                      | 5250 mm   | 2300 mm                    | 1718 mm        | 5832 mm                   |

## VDI table

|                  |        |                                                     |       |      |                   |             |
|------------------|--------|-----------------------------------------------------|-------|------|-------------------|-------------|
| Characteristic   | 1.1    | Manufacturer (abbreviated description)              |       |      | Jungheinrich      |             |
|                  | 1.2    | Manufacturer's type designation                     |       |      | ERC 214bi         | ERC 216bi   |
|                  | 1.3    | Drive type                                          |       |      | electric          |             |
|                  | 1.4    | Operation                                           |       |      | Operator platform |             |
|                  | 1.5    | Load capacity/load                                  | Q     | kg   | 1400              | 1600        |
|                  | 1.6    | Load centre distance                                | c     | mm   | 600               |             |
|                  | 1.8    | Load distance, centre of drive axle to fork         | x     | mm   | 681               |             |
|                  | 1.9    | Wheelbase                                           | y     | mm   | 1324              |             |
| Weights          | 2.1.1  | Service weight (incl. battery)                      |       | kg   | 1500              | 1510        |
|                  | 2.2    | Axle load laden front/rear                          |       | kg   | 1215 / 1685       | 1230 / 1880 |
|                  | 2.3    | Axle load unladen front/rear                        |       | kg   | 1145 / 355        | 1150 / 360  |
| Wheels/chassis   | 3.1    | Tyres                                               |       |      | Polyurethane (PU) |             |
|                  | 3.2    | Tyre size, front                                    |       |      | Ø 230 x 77        |             |
|                  | 3.3    | Tyre size, rear                                     |       |      | Ø 85 x 75         |             |
|                  | 3.4    | Additional wheels                                   |       |      | Ø 140 x 57        |             |
|                  | 3.5    | Wheels, number front/back (x=driven)                |       |      | 1x + 1 / 4        |             |
|                  | 3.6    | Tread width, front                                  | b10   | mm   | 535               |             |
|                  | 3.7    | Tread width, rear                                   | b11   | mm   | 1000              |             |
|                  | 3.7.1  | 2. Tread width, rear                                |       | mm   | 1170              |             |
|                  | 3.7.2  | 3. Tread width, rear                                |       | mm   | 1370              |             |
| Basic dimensions | 4.2    | Retracted mast height (h1)                          | h1    | mm   | 2300              |             |
|                  | 4.3    | Free lift (h2)                                      | h2    | mm   | 1768              | 1718        |
|                  | 4.4    | Lift (h3)                                           | h3    | mm   | 5350              | 5250        |
|                  | 4.5    | Extended mast height (h4)                           | h4    | mm   | 5882              | 5832        |
|                  | 4.7    | Height of overhead guard (cab)                      | h6    | mm   | 2300              |             |
|                  | 4.9    | Height of tiller handle in drive position min./max. | h14   | mm   | 1185 / 1245       |             |
|                  | 4.19   | Total length                                        | l1    | mm   | 2425              |             |
|                  | 4.20   | Length including fork shank                         | l2    | mm   | 1274              |             |
|                  | 4.21.1 | total width                                         | b1    | mm   | 1100              |             |
|                  | 4.22   | Fork dimensions                                     | s/e/l | mm   | 40 x 100 x 1150   |             |
|                  | 4.24   | Fork carriage width                                 | b3    | mm   | 800               |             |
|                  | 4.32   | Ground clearance centre of wheelbase                | m2    | mm   | 50                |             |
|                  | 4.34.1 | Aisle width (pallet 1000×1200 sideways)             | Ast   | mm   | 2632              |             |
|                  | 4.34.2 | Aisle width (pallet 800x1200 length)                | Ast   | mm   | 2682              |             |
|                  | 4.35   | Turning radius                                      | Wa    | mm   | 1963              |             |
| Performance data | 5.1    | Travel speed laden/unladen                          |       | km/h | 9 / 12            |             |
|                  | 5.2    | Lift speed laden/unladen                            |       | m/s  | 0.19 / 0.35       |             |
|                  | 5.3    | Lowering speed laden/unladen                        |       | m/s  | 0.43 / 0.49       |             |
|                  | 5.8    | Max. gradeability laden/unladen                     |       | %    | 8 / 16            |             |
|                  | 5.10   | Service brake                                       |       |      | generative        |             |

|                                                                                                                                                                                                   |       |                                           |        |                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------------------------------------------|--------|---------------------|
| Electric motor/electronics                                                                                                                                                                        | 6.1   | Drive motor, performance S2 60 min        | kW     | 3.2                 |
|                                                                                                                                                                                                   | 6.2   | Lift motor, performance with S3           | kW     | 3                   |
|                                                                                                                                                                                                   | 6.3   | Battery according to DIN 43531/35/36      |        | Jungheinrich Li-ion |
|                                                                                                                                                                                                   | 6.4   | Battery voltage/nominal capacity          | V / Ah | 24 / 260            |
|                                                                                                                                                                                                   | 6.5   | Battery weight                            | kg     | 98                  |
|                                                                                                                                                                                                   | 6.6   | Energy consumption according to VDI cycle | kWh/h  | 0                   |
|                                                                                                                                                                                                   | 6.6.1 | Energy consumption according to EN cycle  | kWh/h  | 0.96                |
|                                                                                                                                                                                                   | 6.6.2 | CO2 equivalent according to EN ISO 23308  | kg/h   | 0.52                |
|                                                                                                                                                                                                   | 6.7   | Throughput                                | t/h    | 83                  |
|                                                                                                                                                                                                   | 6.8.1 | Energy consumption with max. throughput   | kWh/h  | 2.31                |
| Other                                                                                                                                                                                             | 8.1   | Type of drive control                     |        | AC                  |
|                                                                                                                                                                                                   | 10.7  | Sound pressure level according to EN12053 | dB (A) | 68                  |
| - This data sheet according to VDI guideline 2198 only states the technical values of the standard truck. Different tyres, other masts, additional equipment etc. may result in different values. |       |                                           |        |                     |

The values in the table apply for the 260-Ah Li-ion battery, DZ 5350 / DZ 5250 mast, fork length 1,150 mm, with overhead guard, without bumper.

- VDI no. 1.8: with duplex telescopic mast: x + 32 mm
- VDI no. 4.19: with duplex telescopic mast: l1 - 32 mm
- VDI no. 4.20: with duplex telescopic mast: l2 - 32 mm
- VDI no. 4.21: depending on tread width: 1,100 / 1,270 / 1,470 mm
- VDI no. 4.24: available fork carrier widths: ISO 2A 800 / 975 mm
- VDI no. 4.34.1: diagonal as per VDI, depending on tread width: aisle width + 211 / + 211 / + 273 mm; with duplex telescopic mast: aisle width - 32 mm
- VDI no. 4.34.2: diagonal as per VDI, depending on tread width: aisle width + 136 / + 136 / + 223 mm; with duplex telescopic mast: aisle width - 32 mm
- VDI no. 6.2: with S3 = 11%
- VDI no. 6.5: with 130-Ah battery = 76 kg

The German production facilities in  
Norderstedt, Moosburg and Landsberg are  
certified as well as our Genuine Parts  
Center in Kaltenkirchen.

ISO 9001  
ISO 14001

Jungheinrich fork lift trucks meet European  
safety requirements.



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