



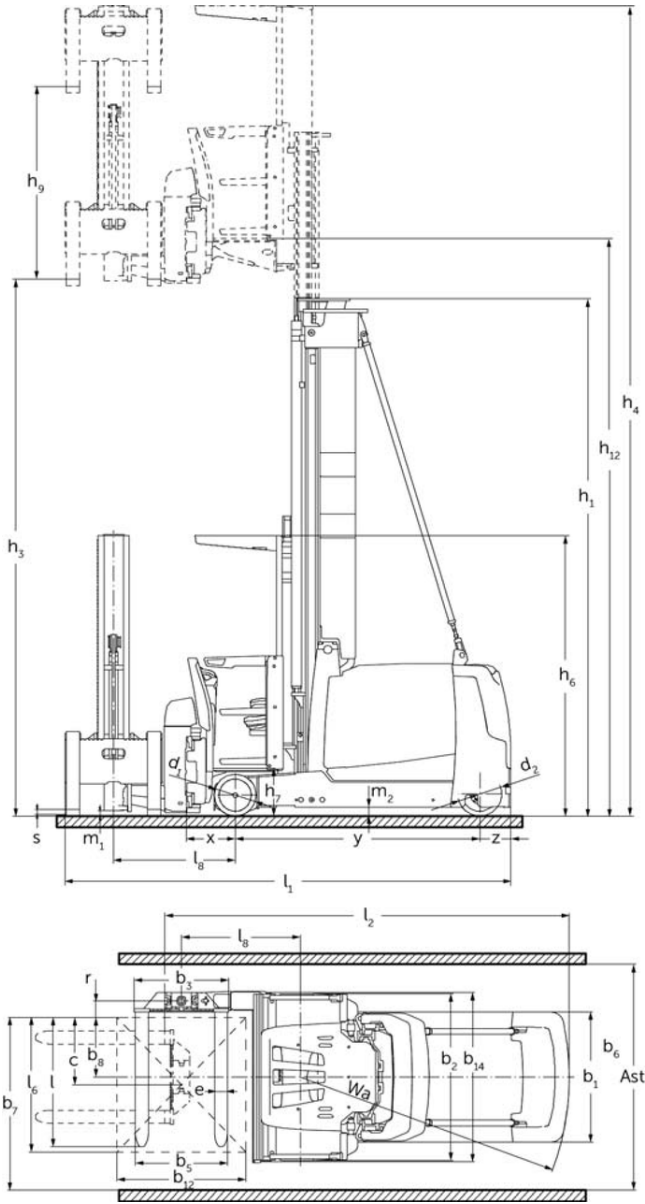
## **Electric high level combination order picker / tri-lateral stacker**

**EKH 410-516**

Lift height: 3000-18000 mm / Load capacity: 1000-1600 kg



EKX 410-516



EKX BR 5 07 2015

# EKX 410-516

| EKX 410, EKX 412           | Lift (h3) | Retracted mast height (h1) | Free lift (h2) | Extended mast height (h4) |
|----------------------------|-----------|----------------------------|----------------|---------------------------|
| Duplex mast ZT             | 3000 mm   | 2600 mm                    |                | 5550 mm                   |
|                            | 3500 mm   | 2850 mm                    |                | 6050 mm                   |
|                            | 4000 mm   | 3100 mm                    |                | 6550 mm                   |
|                            | 4500 mm   | 3350 mm                    |                | 7050 mm                   |
|                            | 5000 mm   | 3600 mm                    |                | 7550 mm                   |
|                            | 5500 mm   | 3850 mm                    |                | 8050 mm                   |
|                            | 6000 mm   | 4100 mm                    |                | 8550 mm                   |
|                            | 6500 mm   | 4375 mm                    |                | 9050 mm                   |
|                            | 7000 mm   | 4650 mm                    |                | 9550 mm                   |
|                            | 7500 mm   | 4925 mm                    |                | 10050 mm                  |
| Triplex mast DZ            | 4500 mm   | 2625 mm                    | 75 mm          | 7050 mm                   |
|                            | 5000 mm   | 2800 mm                    | 250 mm         | 7550 mm                   |
|                            | 5500 mm   | 2975 mm                    | 425 mm         | 8050 mm                   |
|                            | 6000 mm   | 3150 mm                    | 600 mm         | 8550 mm                   |
|                            | 6500 mm   | 3325 mm                    | 775 mm         | 9050 mm                   |
|                            | 7000 mm   | 3500 mm                    | 950 mm         | 9550 mm                   |
|                            | 7500 mm   | 3675 mm                    | 1125 mm        | 10050 mm                  |
| EKX 412                    | Lift (h3) | Retracted mast height (h1) | Free lift (h2) | Extended mast height (h4) |
| Duplex mast ZT             | 8000 mm   | 5200 mm                    |                | 10550 mm                  |
|                            | 8500 mm   | 5475 mm                    |                | 11050 mm                  |
| Triplex mast DZ            | 8000 mm   | 3850 mm                    | 1300 mm        | 10550 mm                  |
|                            | 8500 mm   | 4025 mm                    | 1475 mm        | 11050 mm                  |
| EKX 514, EKX 516k, EKX 516 | Lift (h3) | Retracted mast height (h1) | Free lift (h2) | Extended mast height (h4) |
| Duplex mast ZT             | 3000 mm   | 2705 mm                    |                | 5550 mm                   |
|                            | 3500 mm   | 2955 mm                    |                | 6050 mm                   |

|                 |           |                            |                |                           |
|-----------------|-----------|----------------------------|----------------|---------------------------|
|                 | 4000 mm   | 3205 mm                    |                | 6550 mm                   |
|                 | 4500 mm   | 3455 mm                    |                | 7050 mm                   |
|                 | 5000 mm   | 3705 mm                    |                | 7550 mm                   |
|                 | 5500 mm   | 3955 mm                    |                | 8050 mm                   |
|                 | 6000 mm   | 4205 mm                    |                | 8550 mm                   |
|                 | 6500 mm   | 4555 mm                    |                | 9050 mm                   |
|                 | 7000 mm   | 4805 mm                    |                | 9550 mm                   |
|                 | 7500 mm   | 5055 mm                    |                | 10050 mm                  |
|                 | 8000 mm   | 5305 mm                    |                | 10550 mm                  |
|                 | 8500 mm   | 5655 mm                    |                | 11050 mm                  |
|                 | 9000 mm   | 5905 mm                    |                | 11550 mm                  |
|                 | 9500 mm   | 6155 mm                    |                | 12050 mm                  |
| Triplex mast DZ | 4000 mm   | 2550 mm                    |                | 6550 mm                   |
|                 | 4500 mm   | 2710 mm                    | 160 mm         | 7050 mm                   |
|                 | 5000 mm   | 2895 mm                    | 345 mm         | 7550 mm                   |
|                 | 5500 mm   | 3095 mm                    | 545 mm         | 8050 mm                   |
|                 | 6000 mm   | 3295 mm                    | 745 mm         | 8550 mm                   |
|                 | 6500 mm   | 3495 mm                    | 945 mm         | 9050 mm                   |
|                 | 7000 mm   | 3695 mm                    | 1145 mm        | 9550 mm                   |
|                 | 7500 mm   | 3895 mm                    | 1345 mm        | 10050 mm                  |
|                 | 8000 mm   | 4095 mm                    | 1545 mm        | 10550 mm                  |
|                 | 8500 mm   | 4295 mm                    | 1745 mm        | 11050 mm                  |
|                 | 9000 mm   | 4495 mm                    | 1945 mm        | 11550 mm                  |
|                 | 9250 mm   | 4595 mm                    | 2045 mm        | 11800 mm                  |
|                 | 9500 mm   | 4695 mm                    | 2145 mm        | 12050 mm                  |
| EKX 516         | Lift (h3) | Retracted mast height (h1) | Free lift (h2) | Extended mast height (h4) |
| Triplex mast DZ | 11000 mm  | 5215 mm                    | 2665 mm        | 13550 mm                  |
|                 | 11500 mm  | 5395 mm                    | 2845 mm        | 14050 mm                  |
|                 | 12000 mm  | 5565 mm                    | 3015 mm        | 14550 mm                  |

|                   |           |                            |                |                           |
|-------------------|-----------|----------------------------|----------------|---------------------------|
|                   | 12500 mm  | 5750 mm                    | 3200 mm        | 15050 mm                  |
|                   | 13000 mm  | 5950 mm                    | 3400 mm        | 15550 mm                  |
|                   | 13500 mm  | 6250 mm                    | 3700 mm        | 16050 mm                  |
|                   | 14000 mm  | 6550 mm                    | 4000 mm        | 16550 mm                  |
|                   | 14500 mm  | 6850 mm                    | 4300 mm        | 17050 mm                  |
| EKX 516k, EKX 516 | Lift (h3) | Retracted mast height (h1) | Free lift (h2) | Extended mast height (h4) |
| Duplex mast ZT    | 10000 mm  | 6405 mm                    |                | 12550 mm                  |
|                   | 10500 mm  | 6655 mm                    |                | 13050 mm                  |
| Triplex mast DZ   | 10000 mm  | 4875 mm                    | 2325 mm        | 12550 mm                  |
|                   | 10500 mm  | 5045 mm                    | 2495 mm        | 13050 mm                  |

## VDI table

|                  |         |                                             |                                |                                    |             |                 |             |             |
|------------------|---------|---------------------------------------------|--------------------------------|------------------------------------|-------------|-----------------|-------------|-------------|
| Characteristic   | 1.1     | Manufacturer (abbreviated description)      |                                | Jungheinrich                       |             |                 |             |             |
|                  | 1.2     | Manufacturer's type designation             |                                | EKX 410                            | EKX 412     | EKX 514         | EKX 516k    | EKX 516     |
|                  | 1.3     | Drive type                                  |                                | electric                           |             |                 |             |             |
|                  | 1.4     | Operation                                   |                                | Order picker / tri-lateral stacker |             |                 |             |             |
|                  | 1.5     | Load capacity/load                          | Q    kg                        | 1000                               | 1200        | 1400            | 1600        |             |
|                  | 1.6     | Load centre distance                        | c    mm                        | 600                                |             |                 |             |             |
|                  | 1.8     | Load distance, centre of drive axle to fork | x    mm                        | 450                                |             | 445             |             |             |
|                  | 1.9     | Wheelbase                                   | y    mm                        | 1807                               |             | 1840            | 1950        | 2220        |
|                  | 1.10    | Centre drive wheel/counterweight            | z    mm                        | 320                                |             | 282             |             |             |
|                  | Weights | 2.1.1                                       | Service weight (incl. battery) | kg                                 | 5515        | 5895            | 6350        | 6750        |
| 2.2              |         | Axle load laden front/rear                  | kg                             | 4895 / 1630                        | 5400 / 1705 | 5720 / 1880     | 6190 / 2060 | 6590 / 2810 |
| 2.3              |         | Axle load unladen front/rear                | kg                             | 3270 / 2245                        | 3450 / 2445 | 3850 / 2500     | 3980 / 2770 | 4480 / 3420 |
| Wheels/chassis   | 3.1     | Tyres                                       |                                | Bestthane                          |             |                 |             |             |
|                  | 3.2     | Tyre size, front                            |                                | Ø 295 x 144                        |             | Ø 380 x 192     |             |             |
|                  | 3.3     | Tyre size, rear                             |                                | Ø 343 x 110                        |             | Ø 400 x 160     |             |             |
|                  | 3.5     | Wheels, number front/back (x=driven)        |                                | 2 / 1 x                            |             | 2 / 1x          |             |             |
|                  | 3.6     | Tread width, front                          | b10   mm                       | 1306                               |             | 1258            |             |             |
| Basic dimensions | 4.2     | Retracted mast height (h1)                  | h1   mm                        | 2850                               |             | 2955            |             |             |
|                  | 4.3     | Free lift (h2)                              | h2   mm                        | 0                                  |             |                 |             |             |
|                  | 4.4     | Lift (h3)                                   | h3   mm                        | 3500                               |             |                 |             |             |
|                  | 4.5     | Extended mast height (h4)                   | h4   mm                        | 6050                               |             |                 |             |             |
|                  | 4.7     | Height of overhead guard (cab)              | h6   mm                        | 2550                               |             |                 |             |             |
|                  | 4.8     | Seat height/stand height                    | h7   mm                        | 430                                |             |                 |             |             |
|                  | 4.11    | Additional lift                             | h9   mm                        | 1780                               |             |                 |             |             |
|                  | 4.14    | Stand height, elevated                      | h12   mm                       | 3930                               |             |                 |             |             |
|                  | 4.19    | Total length                                | l1    mm                       | 3665                               |             | 3775            |             | 4045        |
|                  | 4.20    | Length including fork shank                 | l2    mm                       | 3379                               |             | 3489            |             | 3759        |
|                  | 4.21.1  | total width                                 | b1    mm                       | 1210                               |             |                 |             |             |
|                  | 4.21.2  | total width                                 | b2    mm                       | 1450                               |             |                 |             |             |
|                  | 4.22    | Fork dimensions                             | s/<br>e/l   mm                 | 40 x 120 x 1200                    |             | 50 x 120 x 1200 |             |             |
|                  | 4.23    | Fork carriage connection class              |                                | 2B                                 |             |                 |             |             |
|                  | 4.24    | Fork carriage width                         | b3    mm                       | 880                                |             |                 |             |             |
|                  | 4.25    | Width across forks                          | b5    mm                       | 856                                |             |                 |             |             |
|                  | 4.29    | Reach, lateral                              | mm                             | 1300                               |             |                 |             |             |
|                  | 4.30    | Reach, lateral from centre of truck         | mm                             | 480                                |             |                 |             |             |
|                  | 4.31    | Ground clearance laden under mast           | m1   mm                        | 80                                 |             |                 |             |             |
|                  | 4.32    | Ground clearance centre of wheelbase        | m2   mm                        | 80                                 |             |                 |             |             |

|                                                                                                                                                                                                   |        |                                           |                       |        |                        |                           |           |           |           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------------------------------|-----------------------|--------|------------------------|---------------------------|-----------|-----------|-----------|
|                                                                                                                                                                                                   | 4.35   | Turning radius                            | Wa                    | mm     | 2122                   |                           | 2232      | 2502      |           |
|                                                                                                                                                                                                   | 4.38   | Distance swivelling fork pivot point      |                       | mm     | 1103                   |                           |           |           |           |
|                                                                                                                                                                                                   | 4.38.4 | Pallet width                              |                       | mm     | 1200                   |                           |           |           |           |
|                                                                                                                                                                                                   | 4.38.5 | Pallet length                             |                       | mm     | 1200                   |                           |           |           |           |
| Performance data                                                                                                                                                                                  | 5.1    | Travel speed laden/unladen                |                       | km/h   | 10.5 / 10.5            |                           | 12 / 12   |           |           |
|                                                                                                                                                                                                   | 5.2    | Lift speed laden/unladen                  |                       | m/s    | 0.4 / 0.4              | 0.45 / 0.45               | 0.6 / 0.6 |           |           |
|                                                                                                                                                                                                   | 5.3    | Lowering speed laden/unladen              |                       | m/s    | 0.4 / 0.4              | 0.5 / 0.5                 |           |           |           |
|                                                                                                                                                                                                   | 5.4    | Reach speed laden/unladen                 |                       | m/s    | 0.4 / 0.4              | 0.4 / 0.5                 |           |           |           |
|                                                                                                                                                                                                   | 5.10   | Service brake                             |                       |        | regenerative           |                           |           |           |           |
|                                                                                                                                                                                                   | 5.11   | Parking brake                             |                       |        | Electric sprung-loaded |                           |           |           |           |
| Electric motor/electronics                                                                                                                                                                        | 6.1    | Drive motor, performance S2 60 min        |                       | kW     | 6.9                    |                           | 9         |           |           |
|                                                                                                                                                                                                   | 6.2    | Lift motor, performance with S3           |                       | kW     | 10                     |                           | 25        |           |           |
|                                                                                                                                                                                                   | 6.3    | Battery according to DIN 43531/35/36      |                       |        | 6 PzS 750              | 6 PzS 930                 | 3 PzS 465 | 4 PzS 620 | 6 PzS 930 |
|                                                                                                                                                                                                   | 6.4    | Battery voltage/nominal capacity          |                       | V / Ah | 48 / 750               | 48 / 930                  | 80 / 465  | 80 / 620  | 80 / 930  |
|                                                                                                                                                                                                   | 6.5    | Battery weight                            |                       | kg     | 1011                   | 1388                      | 1238      | 1558      | 2178      |
|                                                                                                                                                                                                   | Other  | 8.1                                       | Type of drive control |        |                        | AC synchronous reluctance |           |           |           |
| 10.5                                                                                                                                                                                              |        | Steering version                          |                       |        | electric               |                           |           |           |           |
| 10.7                                                                                                                                                                                              |        | Sound pressure level according to EN12053 |                       | dB (A) | 64                     |                           |           |           |           |
| - 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 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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