Electric high level combination order picker / tri-lateral stacker

EKX 410-516

Lift height: 3,000-18,000 mm / Load capacity: 1,600 kg
The powerful man-up stacker for narrow aisles.

For efficient picking at heights up to 18 meters.

The powerful and efficient EKK series 4 and 5 tri-lateral stackers are our specialists for economical stacking and retrieval of entire pallets or picking individual articles in high bay warehouses. Whether middle lifting segment or lifting heights up to 18 meters - with our EKK you take your warehouse logistics to a new level.

Intelligent lightweight construction and maintenance-free synchronous reluctance motors ensure first-class performance and outstanding efficiency. The driver and forklift work according to the man-up principle, where the driver’s platform and forks are always at the same level. Patented vibration damping, RFID ground control and smart assistance systems guarantee optimal handling and maximum safety.

Working while sitting or standing: On a generously dimensioned driver's seat with adjustable control panel, large storage areas and various equipment options - always ready to individually adapt to your warehouse requirements.

100% satisfaction. Guaranteed.

We are convinced our lithium-ion technology is right for you. That’s why we guarantee that you can easily and quickly switch back to the technology you originally used at any time within the first 6 months after delivery – without giving reasons.

5 years carefree. Guaranteed.

Extremely fast charging times and zero maintenance make li-ion batteries by far the most enduring energy source. With our 5-year guarantee on li-ion batteries, we give you a long-term performance promise, regardless of operating hours.

All benefits at a glance:

- Maintenance-free and highly efficient synchronous reluctance motors
- Intelligent tracking of the truck via RFID technology
- Vibration damping for use on uneven ground
- Modular system with 5 million configuration options
- Electric control panel adjustment
Your Jungheinrich high platform forklift
for maximum customer benefits.

**Efficiency**
Maximum performance with the most efficient trucks.

Two series that outperform each other with maximum efficiency, innovative service packages and state-of-the-art technology.

**Maximum efficiency**
- Motor technology: AC drives cut energy loss in half, allowing for even longer operating times.
- Double energy recovery during braking and lowering with maximum effectiveness due to patented hydraulic valve technology.
- Compact hydraulics with short distances and low resistance for less energy consumption.
- Fewer cables and plugs as well as optimum matching of all components due to compact electronics.
- The active battery and energy management reduces peak currents and reduces the load on the battery and components.
- High-performance capability lasting 2 shifts without battery change.

**Optional sideshiftPLUS performance package for Series 5**
- The active sideshiftPLUS (optional) extends the reach distance by up to 100 mm and makes it possible to handle different load sizes.

**Optional Floor Pro performance package for Series 5**
- Innovative system for vibration damping.
- Reduces swaying of the truck from side to side.
- Smooth and fast driving on uneven surfaces.

**Available with lithium-ion technology**
- High availability thanks to extremely short charging times.
- No battery exchange required.
- Saving costs due to longer service life and zero maintenance as compared to lead-acid batteries.
- No charging rooms and ventilation required as there is no build-up of gas.

**Safety**
Best prerequisites for working safely.

Secure handling you can always count on: Clever assistance systems and optimum view reduce risks in your warehouse to a minimum.

**Safe Handling**
- Large panoramic window with very good view of fork tips for reliable lifting of loads.
- Large color display with all important information available at a glance.

**warehouseNAVIGATION (optional)**
- Up to 25% greater throughput in narrow aisle warehouses.
- Easy to set up a connection from the EKX to your Warehouse Management System with the Jungheinrich logistics interface.
- Target position is transferred direct to the truck control system.
- Automatic vertical and horizontal positioning.
- Automatic stacking operation and effective twin cycles.
- Automatic confirmation to the Warehouse Management System increases process reliability and saves time - safety scan no longer takes place.
- Maximum flexibility in the warehouse, as the existing Warehouse Management Systems can be modified to cater for warehouse extensions.

**Commissioning and maintenance**
- Quick and reliable commissioning through teach-in process.
- The integrated diagnostic system allows for fast and accurate fault diagnosis.
- 1000 operating hours maintenance interval for high truck availability.
- Maintenance-free AC motors and wear-free sensor systems ensure a high level of operational safety and reliability.

**Individuality**
A forklift truck as individual as your business.

So much flexibility: Intelligent stacking and comfortable working conditions in one truck.

**Ergonomic workstation**
- Comfortable and fast entering and exiting through the lowest entry step in its class.
- Generous space for ample freedom of movement. Increase in cabin depth and height (optional).
- Control panel with electrically adjustable height/tilt for optimum operating position.
- Upholstered knee supports with integrated storage space for comfortable picking.
- Relaxed sitting and comfortable standing with sprung, adjustable and foldable comfort seat.
- Modular storage and holder system (optional).

**Intelligent stacking**
- RFID technology for truck positioning in narrow aisles.
- Inductive guidance with multi-frequency control.
- In-aisle travel distance and height measuring.
- Active reach control and correction of the mast backward tilt.
- warehouseNAVIGATION with precise approach and automatic stacking.
- Load handling by sideshift or telescopic forks.

**Flexibility**
- The optional modular performance packages ensure that the EKX is equipped for every application.
- Various assistance systems increase process reliability and safe time in pallet handling.
- As cold store version usable at temperatures as low as -28°C (optional for series 5).
Overview
The right solution for your applications:

<table>
<thead>
<tr>
<th>Name</th>
<th>Load capacity/load</th>
<th>Lift height (max.)</th>
<th>Travel speed</th>
<th>Lift speed unladen</th>
</tr>
</thead>
<tbody>
<tr>
<td>EKX 410</td>
<td>1.000 kg</td>
<td>8.500 mm</td>
<td>10.5 km/h</td>
<td>0.4 m/s</td>
</tr>
<tr>
<td>EKX 412</td>
<td>1.200 kg</td>
<td>8.500 mm</td>
<td>10.5 km/h</td>
<td>0.4 m/s</td>
</tr>
<tr>
<td>EKX 514</td>
<td>1.400 kg</td>
<td>9.500 mm</td>
<td>10.5 km/h</td>
<td>0.45 m/s</td>
</tr>
<tr>
<td>EKX 516k</td>
<td>1.600 kg</td>
<td>10.500 mm</td>
<td>12 km/h</td>
<td>0.6 m/s</td>
</tr>
<tr>
<td>EKX 516</td>
<td>1.600 kg</td>
<td>14.500 mm</td>
<td>12 km/h</td>
<td>0.6 m/s</td>
</tr>
</tbody>
</table>

The German production facilities in Norderstedt, Moosburg and Landsberg are certified.

Jungheinrich fork lift trucks meet European safety requirements.