



Linde Material Handling

*Linde*




## Order Picker

# N16 Li

Capacity 0.8 t | Series 1115

### Maneuverable picking assistant

- Operator's platform in front of the battery ensures maximum maneuverability and a clear view of the warehouse environment
- Small turning circle facilitates excellent maneuvering in narrow aisles
- Liftable forks enable order picking at ergonomic height
- Fully suspended operator's platform reduces vibrations and shocks while driving

 Here you can find more content via your smartphone: [Linde Augmented Reality App](#)



# TECHNICAL DATA (According to VDI 2198)

|                 |  |   |                              |  |
|-----------------|--|---|------------------------------|--|
| Characteristics | 1.1  | Manufacturer  |                              | Linde                                  |
|                 | 1.2  | <b>Model</b>  |                              | <b>N16 Li</b>                          |
|                 | 1.2.a  | Series  |                              | 1115-00                                |
|                 | 1.3.   | Power Unit  |                              | Battery                                |
|                 | 1.4  | Operation   |                              | Preparation                            |
|                 | 1.5  | Load capacity/Load, main lift only; main lift/initial lift; initial lift only | Q (t)                        | 0.8; 1.6 <sup>1)</sup>                 |
|                 | 1.6  | Load centre   | c (mm)                       | 600                                    |
|                 | 1.8  | Axle centre to fork face  | x (mm)                       | 945/875 <sup>2)3)</sup>                |
|                 | 1.9  | Wheelbase   | y (mm)                       | 1546/1476 <sup>2)4)</sup>              |
| Weights         | 2.1  | Service weight  | (kg)                         | 1282                                   |
|                 | 2.2  | Axle load with load, front/rear   | (kg)                         | 1322/1553                              |
|                 | 2.3  | Axle load without load, front/rear  | (kg)                         | 1041/241 <sup>2)</sup>                 |
| Wheels/Tyres    | 3.1  | Tyres rubber, SE, pneumatic, polyurethane                                     |                              | R + P/P; P + P/P                       |
|                 | 3.2  | Tyre size, front  |                              | ø 254 x 102                            |
|                 | 3.3  | Tyre size, rear   |                              | 2x ø 85 x 60 (ø 85 x 85) <sup>5)</sup> |
|                 | 3.4  | Additional wheels   |                              | 2x ø 140 x 50                          |
|                 | 3.5  | Wheels, number front/rear (x = driven)  |                              | 1x + 1/2 (1x + 1/4) <sup>5)</sup>      |
|                 | 3.6  | Track width, front  | b10 (mm)                     | 491                                    |
|                 | 3.7  | Track width, rear   | b11 (mm)                     | 380                                    |
| Dimensions      | 4.2  | Height of mast, lowered   | h1 (mm)                      | 1422                                   |
|                 | 4.3  | Free lift   | h2 (mm)                      | 550                                    |
|                 | 4.4  | Lift  | h3 (mm)                      | 550                                    |
|                 | 4.6  | Initial lift  | h5 (mm)                      | 115                                    |
|                 | 4.8  | Height of seat/stand on platform  | h7 (mm)                      | 867/1000                               |
|                 | 4.10   | Height of wheel arms  | h8 (mm)                      | 80                                     |
|                 | 4.15   | Height at the end of the forks in the lowered position                        | h13 (mm)                     | 86                                     |
|                 | 4.19   | Overall length  | l1 (mm)                      | 2655 <sup>4)</sup>                     |
|                 | 4.20   | Length to fork face   | l2 (mm)                      | 1505 <sup>4)</sup>                     |
|                 | 4.21   | Overall width   | b1 (mm)                      | 800                                    |
|                 | 4.22   | Fork dimensions   | s/e/l (mm)                   | 50/180/1150                            |
|                 | 4.23   | Load arm dimensions   | s/e/l (mm)                   | 75/150/1115                            |
|                 | 4.24   | Width of fork carriage  | b3 (mm)                      | 559                                    |
|                 | 4.25   | Width over forks  | b5 (mm)                      | 560                                    |
|                 | 4.26   | Internal width of the load arm  | b4 (mm)                      | 255                                    |
|                 | 4.31   | Ground clearance, below mast  | m1 (mm)                      | 20/145 <sup>2)</sup>                   |
|                 | 4.32   | Ground clearance, centre of wheelbase   | m2 (mm)                      | 20/145 <sup>2)</sup>                   |
|                 | 4.33   | Load dimensions b12 x l6  | b12 x l6 (mm)                | 800 x 1200 lengthwise                  |
|                 | 4.34   | Aisle width with predetermined load dimensions                                | Ast (mm)                     | 2997/2972 <sup>4)7)</sup>              |
| 4.34.1          | Aisle width with pallet 1000 x 1200 across forks | Ast (mm)  | 3124/3095 <sup>4)7)</sup>    |  |
| 4.34.2          | Aisle width with pallet 800 x 1200 across forks  | Ast (mm)  | 3211/3176 <sup>4)7)</sup>    |  |
| 4.35            | Turning radius                                   | Wa (mm)   | 2450/2380 <sup>4)</sup>      |  |
| Performance     | 5.1  | Travel speed, with/without load   | (km/h)                       | 10/12                                  |
|                 | 5.1.1  | Travel speed, backward, with/without load                                     | (km/h)                       | 10                                     |
|                 | 5.2  | Lifting speed, initial lift, with/without load                                | (m/s)                        | 0.06/0.07                              |
|                 |  | Lifting speed, main lift, with/without load                                   | (m/s)                        | 0.16/0.32                              |
|                 | 5.3  | Lowering speed, initial lift, with/without load                               | (m/s)                        | 0.06/0.08                              |
|                 |  | Lowering speed, main lift, with/without load                                  | (m/s)                        | 0.17/0.19                              |
|                 | 5.8  | Climbing ability, with/without load   | (%)                          | 16/20                                  |
|                 | 5.9  | Acceleration time (10 m), with/without load                                   | (s)                          | 5.6/4.9                                |
|                 | 5.10   | Service brake   |                              | Electro-hydraulic                      |
|                 | Drive  | 6.1   | Drive motor rating S2 60 min | (kW)                                   |
| 6.2             |  | Lift motor rating at S3 5 %   | (kW)                         | 2.2                                    |
| 6.3             |  | Battery according to DIN 43535/36 A/B/C/no                                    |                              | 45535 (3 PzS Lateral Change)           |
| 6.4             |  | Battery voltage/capacity (5 h)  | (V/Ah)                       | 24/375                                 |
| 6.5             |  | Battery weight (± 10 %)   | (kg)                         | 290                                    |
| 6.6             |  | Energy consumption according to VDI cycle normalized                          | (kWh/h)                      | 0.48                                   |
| 6.7             |  | Turnover output according to VDI cycle  | (T/h)                        | 118.4                                  |
| 6.8             |  | Consumption according to turnover output                                      | (kWh/h)                      | 1.63                                   |
| Others          | 8.1  | Type of drive control   |                              | LAC                                    |
|                 | 10.7   | Noise level at operator's ear   | (dB(A))                      | < 85                                   |
|                 |  | Level of vibration felt by the operator                                       | (m/s <sup>2</sup> )          | 0.7                                    |

1) Pallet truck capacity on the fork arms, with initial lift option

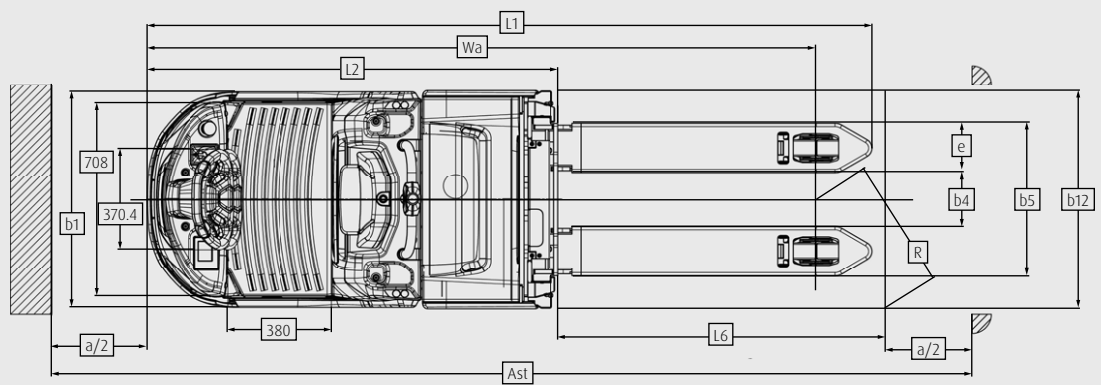
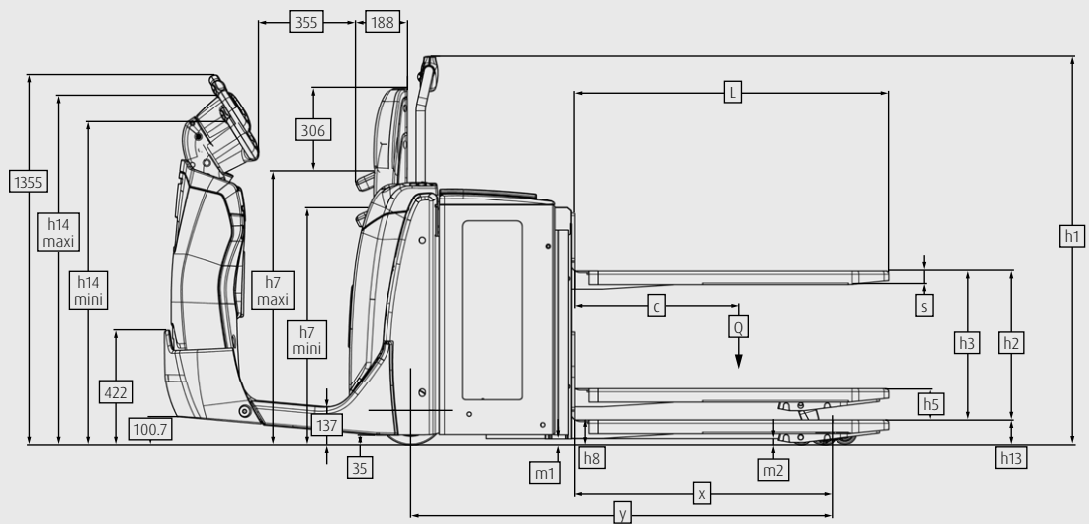
2) Low/high position fork arm

3) Value with a Simplex mast

4) With battery line 6.3 (+ 75 mm for 4 PzS)

5) Figures in ( ): Truck equipped with tandem load wheels

7) Ast = Wa + R + a, Safety distance a = 200 mm



# MAST TABLES

## SIMPLEX MAST (in mm)

|                     |                               |                    |
|---------------------|-------------------------------|--------------------|
| Lift                | h3: 550                       |                    |
| Height measurements | h1: 810<br>h3: 550<br>h5: 115 | h2: 550<br>h4: 810 |
| Model               |                               |                    |
| N16 Li              | ○                             |                    |

○ Optional equipment – Not available

**h1:** Height of mast, lowered

**h2:** Free lift

**h3:** Lift

**h4:** Height of mast, extended

**h5:** Initial lift



# STANDARD AND OPTIONAL EQUIPMENT

| Model/Equipment           |   | N16 Li |
|---------------------------|---|--------|
| Safety                    | Front casted steel bumper   | ●      |
|                           | Front rubber protection (mounted on the casted steel bumper)  | ○      |
|                           | Linde BlueSpot™   | ○      |
|                           | Automatic speed reduction when cornering  | ●      |
|                           | Front feet protection   | ○      |
|                           | Mast stop landing (200 mm)  | ●      |
|                           | Key switch  | ●      |
|                           | Log in PIN code   | ○      |
| Service                   | CAN bus technology  | ●      |
| Digitalisation            | Linde connect   | ○      |
|                           | ac: access control PIN  | ○      |
|                           | ac: access control RFID   | ○      |
|                           | Data transfer Wifi  | ○      |
|                           | Data transfer Online  | ○      |
|                           | dt: crash detection   | ○      |
|                           | an: usage analysis  | ○      |
|                           | Bluetooth USB Stick   | ○      |
|                           | dt: trouble codes   | ○      |
| Operation / Load Handling | Inching control (forward only or forward/backward)  | ○      |
|                           | Rear initial and mast lift control  | ●      |
|                           | Low Speed if initial lift low   | ●      |
|                           | Initial lift electrical stop sensor   | ●      |
|                           | Soft landing on forks   | ○      |
|                           | Mast pressure sensor  | ●      |
|                           | Load backrest 1290 mm   | ○      |
|                           | Automatic fork lifting (up and down or up only)   | ○      |
| Environment               | Side lift control buttons (up and down, located on both sides of the chassis)   | ○      |
| Environment               | Cold store -35°C (in/out)   | ○      |
| Workplace                 | Fully suspended operator compartment  | ●      |
|                           | Height adjustable Linde Steering Wheel  | ○      |
|                           | Knee protection   | ●      |
|                           | Multifunction coloured display hour meter, maintenance indication, battery discharge indicator and internal fault code indication | ●      |
|                           | Fixed roundly-shaped backrest   | ●      |
|                           | Height adjustable backrest incl. foldable seating support   | ○      |
|                           | Front bow   | ○      |
|                           | Vertical central pole   | ○      |
|                           | Support data terminal and power supply cable 24 V   | ○      |
|                           | Support clipboard DIN A4 and support for scanner  | ○      |
|                           | Shrink wrap pole and rear bin   | ○      |
|                           | Rear lower storage  | ○      |
| Attachment / Forks        | Fork carriage: 560 mm   | ●      |
|                           | Fork length: 1150 mm  | ●      |
|                           | Overhang: 188 mm  | ●      |
| Axles and Tyres           | Drive wheel polyurethane  | ●      |
|                           | Drive wheel cushion rubber, non marking and wet grip  | ○      |
|                           | Single load wheels polyurethane   | ●      |
|                           | Tandem load wheels polyurethane (greasable)   | ○      |
|                           | Standard castor wheel   | ●      |
| Drive and Brake-System    | Power assisted steering   | ●      |
|                           | 3 kW AC motor (maintenance free)  | ●      |
|                           | Electromagnetic braking system  | ●      |
|                           | Battery compartment, side change 3 PzS (345 Ah/375 Ah), incl. ergonomic lever and metal rollers                                   | ●      |
|                           | Battery compartment, side change 4 PzS (460 Ah/500 Ah), incl. ergonomic lever and metal rollers                                   | ○      |
|                           | Battery compartment, Li-ION battery 4.5 kWh (205 Ah)/9.0 kWh (410 Ah) incl. side plug for opportunity charging                    | ○      |
|                           | Li-ION 24 V-Charger   | ○      |

● Standard equipment ○ Optional equipment – Not available



# CHARACTERISTICS



Linde BlueSpot™ and front LED light

## Safety

- Three-part brake system adapts flexibly to both the environment and the load weight
- Electromagnetic service brake coupled to deadman switch and emergency button for maximum safety
- Hydraulically assisted brake boosts braking performance as load weight increases
- The vehicle brakes automatically when the drive control is released
- Options such as front LED and Linde BlueSpot™ maximize safety in the warehouse



Intuitive Linde steering wheel

## Ergonomics

- Operator's platform with low access for easy boarding and disembarking
- Operator commissions at back-friendly height thanks to the fork lift
- Pedestrian operation for convenient control over short distances
- Height adjustable steering wheel with intuitive controls for easy operation
- Quick training of new drivers through meaningful symbols on the control elements



Autolift

## Handling

- 3 kW three-phase AC motor for effective acceleration to a top speed of 12 km/h
- High stability due to four-point contact with the ground
- Initial lift facilitates transport over ramps and uneven surfaces
- Multifunctional display always informs about the current charge status of the order picker
- Optional Autolift automatically lifts and lowers forks, eliminating unnecessary movements
- Depending on application requirements, lead-acid or optionally lithium-ion batteries are available



Front casted steel bumper

## Service

- Up to 1000 operating hours without service check
- Maintenance-free three-phase AC technology and adjustment-free brakes reduce service effort
- Service components easily accessible after removal of a service panel
- Essential vehicle parameters can be read out via CAN bus connection via laptop
- Robust cast-steel bumper at the front of the vehicle reduces collision damage

Presented by:

Subject to modification in the interest of progress. Illustrations and technical details could include options and not binding for actual constructions. All dimensions subject to usual tolerances.



**Linde Material Handling GmbH**  
Carl-von-Linde-Platz | 63743 Aschaffenburg | Germany  
Phone + 49 6021 99 0 | Fax + 49 6021 99 1570  
www.linde-mh.com | info@linde-mh.com

Printed in Germany | 098.e.0,5.0819.IndA.Ki

