

### 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
- ightarrow Liftable forks enable order picking at ergonomic height
- ightarrow Fully suspended operator's platform reduces vibrations and shocks while driving

## **TECHNICAL DATA** (According to VDI 2198)

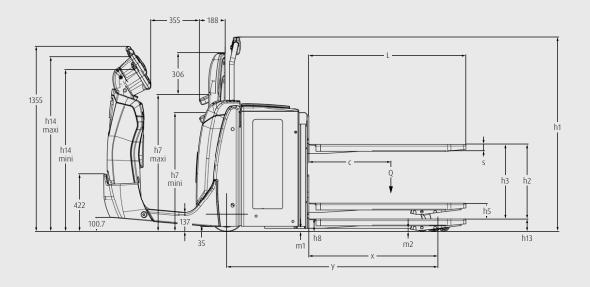
| 1.1    | Manufacturer  |                         | Linde                                  |
|--------|---|-------------------------|--|
| 1.2    | Model   |                         | N16 Li                                 |
| 1.2.a  | Series  |                         | 1115-00                                |
| 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 1)                            |
| 1.6    | Load centre   | c (mm)                  | 600                                    |
| 1.8    | Axle centre to fork face  | x (mm)                  | 945 / 875 2) 3)                        |
| 1.9    | Wheelbase   | y (mm)                  | 1546/1476 <sup>2) 4)</sup>             |
| 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>                 |
| 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) 5)                 |
| 3.6    | Track width, front  | b10 (mm)                | 491                                    |
| 3.7    | Track width, rear   | b11 (mm)                | 380                                    |
| 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   | I2 (mm)                 | 1505 <sup>4)</sup>                     |
| 4.21   | Overall width   | b1 (mm)                 | 800                                    |
| 4.22   | Fork dimensions   | s/e/I (mm)              | 50/180/1150                            |
| 4.23   | Load arm dimensions   | s/e/I (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 2)                              |
| 4.32   | Ground clearance, centre of wheelbase   | m2 (mm)                 | 20/145 2)                              |
| 4.32   | Load dimensions b12 x l6  |                         | 800 x 1200 lengthwise                  |
|        |   | b12 x l6 (mm)  Ast (mm) | 2997 / 2972 <sup>4) 7)</sup>           |
| 4.34   | Aisle width with predetermined load dimensions                                |                         |  |
| 4.34.1 | Aisle width with pallet 1000 x 1200 across forks                              | Ast (mm)                | 3124/3095 4)7)                         |
| 4.34.2 | Aisle width with pallet 800 x 1200 across forks                               | Ast (mm)                | 3211/3176 4)7)                         |
| 4.35   | Turning radius  | Wa (mm)                 | 2450 / 2380 4)                         |
| 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                      |
| 6.1    | Drive motor rating S2 60 min  | (kW)                    | 3.0                                    |
| 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                                   |
| 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/s²)                  | 0.7                                    |

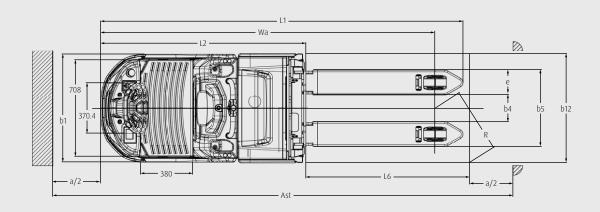
<sup>1)</sup> Pallet truck capacity on the fork arms, with initial lift option

- 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

<sup>2)</sup> Low/high position fork arm

<sup>3)</sup> Value with a Simplex mast





## **MAST TABLES**

### SIMPLEX MAST (in mm)

| Lift                | h3: 550                                       |  |
|---------------------|---|--|
| Height measurements | h1: 810 h2: 550<br>h3: 550 h4: 810<br>h5: 115 |  |
| Model               |   |  |
| N16 Li              | 0   |  |

 $\bigcirc$  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 |
|------------------------------|---|--------|
|                              | Front casted steel bumper   | NIO LI |
|                              | Front rubber protection (mounted on the casted steel bumper)  | 0      |
| Safety                       | Linde BlueSpot™   | 0      |
|                              | Automatic speed reduction when cornering  |        |
|                              | Front feet potection  | 0      |
| · ·                          | Mast stop landing (200 mm)  |        |
|                              | Key switch  |        |
|                              | Log in PIN code   | 0      |
| به                           |   |        |
| Service                      | CAN bus technology  | •      |
| s                            |   |        |
|                              | Linde connect   | 0      |
| Digitalisation               | ac: access control PIN  | 0      |
|                              | ac: access control RFID   | 0      |
|                              | Data transfer Wifi  | 0      |
|                              | Data transfer Online  | 0      |
|                              | dt: crash detection   | 0      |
|                              | an: usage analysis  | 0      |
|                              | Bluetooth USB Stick   | 0      |
|                              | dt: trouble codes   | 0      |
|                              | Inching control (forward only or forward/backward)  | 0      |
|                              | Rear initial and mast lift control  | •      |
| /-<br>ing                    | Low Speed if initial lift low   | •      |
| Operation /<br>Load Handling | Initial lift electrical stop sensor   |        |
| eral<br>I Ha                 | Soft landing on forks   | 0      |
| 0p<br>.oac                   | Mast pressure sensor  | 0      |
| _                            | Load backrest 1290 mm   | 0      |
|                              | Automatic fork lifting (up and down or up only)   | 0      |
|                              | Side lift control buttons (up and down, located on both sides of the chassis)   | 0      |
| Enviro-<br>ment              | Cold store -35°C (in/out)   | 0      |
|                              | Fully suspended operator compartment  | •      |
|                              | Height adjustable Linde Steering Wheel  | 0      |
|                              | Knee protection   |        |
|                              | Multifunction coloured display hour meter, maintenance indication, battery discharge indicator and internal fault code indication | •      |
| ace                          | Fixed roundly-shaped backrest   |        |
| cpla                         | Height adjustable backrest incl. foldable seating support   | 0      |
| Work                         | Front bow   | 0      |
| >                            | Vertical central pole   | 0      |
|                              | Support data terminal and power supply cable 24 V   | 0      |
|                              | Support clipboard DIN A4 and support for scanner  | 0      |
|                              | Shrink wrap pole and rear bin   | 0      |
|                              | Rear lower storage  | 0      |
| int /                        | Fork carriage: 560 mm   | •      |
| Attachement ,<br>Forks       | Fork length: 1150 mm  | •      |
| Atta                         | Overhang: 188 mm  | •      |
| es                           | Drive wheel polyurethane  | •      |
| Ţ.                           | Drive wheel cushion rubber, non marking and wet grip  | 0      |
| and                          | Single load wheels polyurethane   | •      |
| Axles and Tyres              | Tandem load wheels polyurethane (greasable)   | 0      |
| A×                           | Standard castor wheel   | •      |
|                              | Power assisted steering   | •      |
| re and<br>-System            | 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                                   |        |
| ve ai<br>e-Sys               |   |        |
| Drive and<br>rake-Syste      | Battery compartment, side change 4 PzS (460 Ah/500 Ah), incl. ergonomic lever and metal rollers                                   | 0      |
| Drive and<br>Brake-System    |   |        |

### **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

- ightarrow 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

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.

