



## Order Pickers

# N20 XL

Capacity 0.6 t | Series 1115

PB

ION

### Powerful picking solution

- Long forks enable the simultaneous transport of two pallets with a total weight of up to 1.6 t on initial lift
- Simultaneous preparation of 2x 800 kg pallets on the main lift, which allows pallet height to be adjusted to avoid back strain
- Operator's platform at front provides a clear view when changing aisles
- Fully suspended operator's platform provides optimum protection against shock and vibrations

# TECHNICAL DATA (according to VDI 2198)

|                         |   |  |                           |  |
|-------------------------|---|--|---------------------------|--|
| Characteristics         | 1.1                                       | Manufacturer (abbreviation)                                |                           | Linde MH                                 |
|                         | 1.2                                       | <b>Manufacturer's type designation</b>                     |                           | <b>N20 XL</b>                            |
|                         | 1.2a                                      | Series   |                           | 1115-00                                  |
|                         | 1.3                                       | Drive  |                           | Battery                                  |
|                         | 1.4                                       | Operation  |                           | Order picker                             |
|                         | 1.5                                       | Rated capacity/rated load                                  | Q (t)                     | 0.6/1.6 <sup>1)</sup>                    |
|                         | 1.6                                       | Load centre distance                                       | c (mm)                    | 600/1800                                 |
|                         | 1.8                                       | Load distance, centre of drive axle to fork                | x (mm)                    | 862/932 <sup>2)3)</sup>                  |
|                         | 1.9                                       | Wheelbase  | y (mm)                    | 1565/1635 <sup>2)3)4)</sup>              |
| Weight                  | 2.1                                       | Service weight   | kg                        | 1477 <sup>5)</sup>                       |
|                         | 2.2                                       | Axle loading, laden front/rear                             | kg                        | 817/2260 <sup>5)</sup>                   |
|                         | 2.3                                       | Axle loading, unladen front/rear                           | kg                        | 1081/396 <sup>5)</sup>                   |
| Tyres/chassis           | 3.1                                       | Tyres: solid rubber, superelastic, pneumatic, polyurethane |                           | P+2xP/P                                  |
|                         | 3.2                                       | Tyre size, front   |                           | Ø 254 × 102                              |
|                         | 3.3                                       | Tyre size, rear  |                           | Ø 85 × 60 <sup>6)</sup>                  |
|                         | 3.4                                       | Additional wheels (dimensions)                             |                           | Ø 125 × 60                               |
|                         | 3.5                                       | Wheels, number front/rear (x = driven wheels)              |                           | 1x + 2/4 <sup>6)</sup>                   |
|                         | 3.6                                       | Tread, front   | b10 (mm)                  | 572 <sup>3)</sup>                        |
|                         | 3.7                                       | Tread, rear  | b11 (mm)                  | 370 <sup>3)</sup>                        |
| Dimensions              | 4.2                                       | Mast height, lowered                                       | h1 (mm)                   | 1465 <sup>3)</sup>                       |
|                         | 4.3                                       | Free lift  | h2 (mm)                   | 750 <sup>3)</sup>                        |
|                         | 4.4                                       | Lift   | h3 (mm)                   | 750 <sup>3)</sup>                        |
|                         | 4.5                                       | Mast height, extended                                      | h4 (mm)                   | 1465 <sup>3)</sup>                       |
|                         | 4.6                                       | Initial lift   | h5 (mm)                   | 115 <sup>7)</sup>                        |
|                         | 4.8                                       | Seat height relating to SIP/stand height                   | h7 (mm)                   | 867/1000 <sup>3)8)9)</sup>               |
|                         | 4.9                                       | Height drawbar in driving position min./max.               | h14 (mm)                  | 1216/1316 <sup>3)</sup>                  |
|                         | 4.10                                      | Height of wheel arms                                       | h8 (mm)                   | 80 <sup>10)</sup>                        |
|                         | 4.15                                      | Height, lowered  | h13 (mm)                  | 90 <sup>10)</sup>                        |
|                         | 4.19                                      | Overall length   | l1 (mm)                   | 2707 <sup>3)4)</sup>                     |
|                         | 4.20                                      | Length to fork face  | l2 (mm)                   | 1607 <sup>3)4)</sup>                     |
|                         | 4.21                                      | Overall width  | b1/b2 (mm)                | 800 <sup>3)</sup>                        |
|                         | 4.22                                      | Fork dimensions DIN ISO 2331                               | s/e/l (mm)                | 70/210/2400 / 60/140/1100 <sup>11)</sup> |
|                         | 4.23                                      | Fork carriage ISO 2328, class/type A, B                    |                           | no                                       |
|                         | 4.24                                      | Fork carriage width  | b3 (mm)                   | 780 <sup>3)</sup>                        |
|                         | 4.25                                      | Fork spread  | b5 (mm)                   | 580 <sup>3)</sup>                        |
|                         | 4.26                                      | Distance between wheel arms/loading surfaces               | b4 (mm)                   | 160 <sup>3)</sup>                        |
|                         | 4.31                                      | Ground clearance, laden, below mast                        | m1 (mm)                   | 135/20 <sup>2)12)</sup>                  |
|                         | 4.32                                      | Ground clearance, centre of wheelbase                      | m2 (mm)                   | 135/20 <sup>2)12)</sup>                  |
| 4.33                    | Load dimension b12 × l6                   | b12 × l6 (mm)  | 2x 800 × 1200             |  |
| 4.34                    | Aisle width predetermined load dimensions | Ast (mm)   | 4255 <sup>9)13)14)</sup>  |  |
| 4.35                    | Turning radius                            | Wa (mm)  | 2466/2536 <sup>2)4)</sup> |  |
| Performance             | 5.1                                       | Travel speed, laden/unladen                                | km/h                      | 10/12 <sup>15)</sup>                     |
|                         | 5.1.1                                     | Travel speed, laden/unladen, backwards                     | km/h                      | 8/10 <sup>15)</sup>                      |
|                         | 5.2                                       | Lifting speed, laden/unladen                               | m/s                       | 0.13/0.17 (0.06/0.08) <sup>5)16)</sup>   |
|                         | 5.3                                       | Lowering speed, laden/unladen                              | m/s                       | 0.32/0.26 (0.08/0.08) <sup>5)16)</sup>   |
|                         | 5.8                                       | Max. gradeability, laden/unladen                           | %                         | 12.0/20.0                                |
|                         | 5.9                                       | Acceleration time, laden/unladen                           | s                         | 6.1/5.2                                  |
|                         | 5.10                                      | Service brake  |                           | Electric/hydraulic                       |
| Electric-engine         | 6.1                                       | Drive motor rating S2 60 min                               | kW                        | 3  |
|                         | 6.2                                       | Lift motor rating at S3 15%                                | kW                        | 2.2/10%                                  |
|                         | 6.3                                       | Battery according to DIN 43531/35/36 A, B, C, no           |                           | 43 535/3P2S <sup>17)</sup>               |
|                         | 6.4                                       | Battery voltage/nominal capacity K5                        | (V)/(Ah) o. kWh           | 24/375                                   |
|                         | 6.5                                       | Battery weight (± 5%)                                      | kg                        | 272/315 <sup>5)15)</sup>                 |
|                         | 6.6                                       | Energy consumption according to DIN EN 16796               | kWh/h                     | 0.41                                     |
|                         | 6.7                                       | Turnover output according to VDI 2198                      | t/h                       | 120.0                                    |
|                         |   | Turnover efficiency according to VDI 2198                  | t/kWh                     | 83                                       |
| Drive/lifting mechanism | 8.1                                       | Type of drive unit   |                           | LAC                                      |
| Additional data         | 10.7                                      | Sound pressure level LpAZ (at the operator's seat)         | dB(A)                     | < 85                                     |

1) Pallet truck capacity: on the fork arms only; on the fork arms resting on the wheel arms in initial lift position  
 2) Forks upraised/lowered  
 3) (± 5 mm)  
 4) + 75 mm = 4 P2S side change  
 5) (± 10%)

6) Figures in parenthesis with tandem load wheels.  
 7) (0/-5 mm)  
 8) Min./max.  
 9) With optional operator's seat  
 10) (-0/+5 mm)  
 11) Forks/Load arms

12) (± 2 mm)  
 13) Including a 200 mm (min.) operating aisle clearance  
 14) Forks upraised  
 15) (± 5%)  
 16) Figures in paranthesis = initial lift  
 17) Lateral change



# MAST TABLE

## SIMPLEX MAST (in mm)

|                                 |                       |         |
|---------------------------------|-----------------------|---------|
| Lift                            | h3: 750               |         |
| Height measurements             | h1: 1465              | h2: 750 |
|                                 | h4: 1465              | h5: 115 |
| Manufacturer's type designation |                       |         |
| N20 XL                          | <input type="radio"/> |         |

Optional equipment

**h1:** Mast height, lowered

**h4:** Height of mast, extended

**h2:** Free lift

**h5:** Initial lift

**h3:** Lift



# STANDARD AND OPTIONAL EQUIPMENT

| Manufacturer's type designation/equipment |  | N20 XL |
|---|--|--------|
| Safety                                    | Front cast steel bumper  | ●      |
|   | Automatic speed reduction when cornering   | ●      |
|   | Linde BlueSpot - visual warning of truck presence integrated in the front top cover  | ○      |
|   | Front rubber protection (mounted on the cast steel bumper)   | ○      |
|   | Front foot protection  | ○      |
|   | Soft landing of forks (300 mm)   | ●      |
|   | Key switch   | ●      |
|   | Log in PIN code  | ○      |
| Service                                   | CAN bus technology   | ●      |
| Digitalisation                            | Linde connect: desk  | ○      |
|   | ac: access control (PIN or RFID)   | ○      |
|   | dt: crash detection  | ○      |
|   | an: usage analysis   | ○      |
|   | Linde connect: cloud   | ○      |
|   | Basic Package (trouble codes, operating hours, truck mapping)  | ○      |
|   | Data transmission Wifi   | ○      |
|   | Data transmission Online   | ○      |
| Operation/load handling                   | Initial lift control   | ●      |
|   | Initial lift electrical stop sensor  | ●      |
|   | Soft landing of forks  | ○      |
|   | Load backrest height: 1000 mm  | ○      |
|   | Inching control (forward only or forward/backward)   | ○      |
| Environment                               | Cold store -35 °C (in/out)   | ○      |
| Workplace                                 | Fully suspended operator's compartment   | ●      |
|   | Height adjustable Linde Steering Wheel   | ○      |
|   | Knee protection  | ●      |
|   | Multifunction colour display: hour meter, battery discharge indicator, maintenance and internal fault indication                         | ●      |
|   | Fixed rounded backrest   | ●      |
|   | Height adjustable backrest including folding seat  | ○      |
|   | Front bow  | ○      |
|   | Support data terminal and power supply cable 24 V  | ○      |
|   | Support clipboard DIN A4 and support for scanner   | ○      |
|   | Shrink wrap pole   | ○      |
| Rear lower storage                        | ○  |        |
| Mast                                      | Mast protection: polycarbonate   | ●      |
|   | Mast protection: mesh  | ○      |
| Attachment/forks                          | Fork carriage width: 580 mm  | ●      |
|   | Fork length: 2400 mm   | ●      |
|   | Load arm length: 1200 mm   | ●      |
|   | Overhang: 188 mm   | ●      |
| Axles and tyres                           | Drive wheel polyurethane   | ○      |
|   | Tandem load wheels polyurethane  | ○      |
|   | Tandem load wheels polyurethane greasable  | ●      |
|   | Standard castor wheel  | ●      |
| Drive and brake system                    | Power-assisted steering  | ●      |
|   | 3 kW maintenance-free AC motor   | ●      |
|   | Electromagnetic braking system   | ●      |
|   | Battery compartment, lateral battery change 3 PzS (345 Ah/375 Ah) and 4 PzS (460 Ah/500 Ah), including ergonomic lever and metal rollers | ○      |
|   | Battery compartment, Li-ION battery available  | ○      |
|   | Li-ION 24 V charger  | ○      |

● Standard equipment

○ Optional equipment

# CHARACTERISTICS



Linde BlueSpot and front LED light

## Safety

- Three independent braking systems protect the operator and load
- Chassis and platform designed without sharp corners protects operator
- Self-centering electric steering speeds up operation
- Automatic braking when operator steps off the platform or presses the emergency isolator
- Additional options such as front LED and Linde BlueSpot maximise safety in the warehouse



Intuitive Linde Steering Wheel

## Ergonomics

- Wide operator's platform with low access step provides easy on/off access
- Mast lift allows comfortable picking onto 2 pallets avoiding back strain
- Multiple storage compartments provide space for equipment and personal items
- Adjustable Linde Steering Wheel provide intuitive operation with clear symbols on all controls
- Fully suspended operator's platform reduces shocks and vibration in operation



Pedestrian control

## Handling

- 3 kW three-phase AC motor for powerful acceleration to a top speed of 12 km/h
- Lead acid or Li-ION batteries available to suit the application
- Wide pedestrian access to platform eases picking from either side of the aisle
- Initial lift eases operation over ramps and uneven surfaces



Computerised diagnostic

## Service

- 1000 operating hour service intervals
- Maintenance-free three-phase AC motor and self-adjusting brakes reduce service costs
- Motor and battery covers provide easy access to technical compartment
- Harnesses and cables neatly arranged for ease of maintenance
- Truck status and fault history quickly accessed via CAN bus connection
- Robust cast steel front bumper protects truck chassis and operator's platform from damage

Presented by:

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



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