

ORDER PICKER N20 C LoL

CAPACITY 1000 KG | SERIES 4589

Safety

The design of the order picker ensures that the operator remains within the truck contours at all time and the rounded shape of the cushioned backrest ensures his comfort. To ensure safety in operation, mast controls are located on both sides of the backrest to ensure that the operator has eyes on the forks at all time when using the lift commands. A pallet locking device ensures that the second pallet is safely stored vertically and can be used a load support.

Performance

The Linde drive system employs a powerful 3 kW AC motor and a 2.2 kW lift motor enabling the N20 C LoL to carry 2000 kg at a top speed of 9 km/h, and ensures safe starting on gradients without rollback. Finally, the N20 C LoL ensures that two pallets can be consecutively prepared in one picking cycle only, one after the other.

Comfort

The height adjustable foldable seating support brings relief to the operator during long transfers. Moreover, the height adjustment of the Linde Steering Wheel guarantees that the operator can adjust the steering wheel to the most comfortable height position. The clever

design of the N20 C LoL ensures that the operator does not have to bend down to place load on the pallet lifted on the forks. The easy-to-use pallet locking device facilitates releasing of the second empty pallet to continue the picking.

Reliability

The trucks are designed, built and tested for consistent reliability in demanding applications. The motor, sub-components and electronics are all protected within the robust chassis structure, which can be further reinforced by different front chassis protection options. These features guarantee a longer operating life, whilst delivering safe, efficient, and productive load handling.

Service

Efficiency at work and when servicing with cost effective maintenance routines are important. With service intervals of up to 1000 hours and a computerized diagnostic system via CAN-bus, maintenance interventions are minimal and operating costs are reduced. Easy accessibility to all components thanks to the front panel and the maintenance free AC technology play an additional part in maximizing uptime.



TECHNICAL DATA

ACCORDING TO VDI 2198

| | 1.1 | Manufacturer | | LINDE |
|------------------|--------|---|---|---|
| <u>cs</u> | 1.2 | Manufacturer's type designation | | N20 C LoL |
| rist | 1.3 | Drive Operator type | | Stand-on |
| Characteristics | 1.4 | Operator type Rated capacity/rated load | Q (t) | 2.0/1.0 on main lift |
| ara | 1.6 | Load centre distance | c (mm) | 1248 / 600 on main lift ¹⁾ |
| ಕ | 1.8 | Load distance, centre of drive axle to fork | x (mm) | 1910 / 1782 ³⁾ |
| | 1.9 | Wheelbase | y (mm) | 3225/3097 3) 4) 5) |
| | 2.1 | Service weight (including battery) | (kg) | 1567 |
| Weight | 2.2 | Axle loading, laden front/rear | (kg) | 1539/2028 |
| We | 2.3 | Axle loading, unladen front/rear | (kg) | 1170/397 |
| | 3.1 | Tyres | (9) | Polyurethane |
| res | 3.2 | Tyre size, front | | 254 x 102 |
| İt | 3.3 | Tyre size, rear | | 85 x 80 |
| Wheels and tyres | 3.4 | Additional wheels (dimensions) | | 150 x 50 |
| | 3.5 | Wheels, number front/rear (x=driven wheels) | | 1x - 1 / 4 |
| , Je | 3.6 | Tread, front | b ₁₀ (mm) | 474 |
| > | 3.7 | Tread, rear | b ₁₁ (mm) | 370 |
| | 4.2 | Height, mast lowered | h ₁ (mm) | see table in Linde World |
| | 4.3 | Free lift | h ₂ (mm) | see table in Linde World |
| | 4.4 | Lift | h ₃ (mm) | 800 |
| | 4.5 | Height, mast extended | h ₄ (mm) | see table in Linde World |
| | 4.6 | Initial lift | h _s (mm) | 130 |
| | 4.8 | Stand height/Seat height (min/max) | h ₇ (mm) | 130 7) |
| | 4.9 | Height drawbar in driving position min/max. | h ₁₄ (mm) | 1258 ⁸⁾ |
| | 4.10 | Height of wheel arms | h ₈ (mm) | 85 |
| | 4.14 | Stand height, elevated (with lifting platform) | h ₁₂ (mm) | 1182/1197 ⁹⁾ |
| S | 4.15 | Forks height, lowered | h ₁₃ (mm) | 91 |
| <u>io</u> | 4.17 | Overhang | I _s (mm) | - |
| Dimensions | 4.19 | Overall length | l ₁ (mm) | 4005 4) 5) |
| Ē. | 4.20 | Length to face of forks | l ₂ (mm) | 1503 4) 5) |
| | 4.21 | Overall width | | 800 |
| | 4.22 | Fork dimensions | s/e/l | 60 (72 max)/200/1295 |
| | 4.24 | Fork-carriage width | b ₃ (mm) | 711 |
| | 4.25 | Distance between fork-arms | b _s (mm) | 570 |
| | 4.31 | Ground clearance, laden, below mast | m ₁ (mm) | 13/100³) |
| | 4.32 | Ground clearance, centre of wheelbase | m ₂ (mm) | 25 / 155 3) |
| | 4.34 | Aisle width for for pallets 800 x l6 lengthways (forks raised) | A _{st} (mm) | see table in Linde World |
| | 4.34.1 | Aisle width for pallets 1000 x 1200 crossways (forks raised) | A _{st} (mm) | see table in Linde World |
| | 4.34.2 | Aisle width for pallets 800 x 1200 crossways (forks raised) | A _{st} (mm) | - |
| | 4.35 | Turning radius | W _a (mm) | 3399/32713)4)5) |
| | 5.1 | Travel speed laden / unladen | (km/h) | 9/12 |
| عار | 5.1.1 | Travel speed laden/unladen,backwards | (km/h) | 8/10 |
| Performance | 5.2 | Lift speed laden / unladen | (m/s) | 0.159 / 0.253 |
| | 5.3 | Lowering speed laden / unladen Max. gradeability laden / unladen | (m/s) | 0.218 / 0.240 7 % / 12 % (6.6 %; 5.3 %) ¹⁴⁾ |
| Рег | 5.8 | Acceleration time, laden/unladen | (%) | |
| | 5.10 | Service brake | (s) | 6.5/5.3 Electromagnetic |
| | 6.1 | Drive motor, rating S2 = 60 min | (kW) | 3 |
| | 6.2 | Lift motor, rating at S3 | (kW) | 2.2/5 % |
| | 6.3 | Battery according to DIN 43531/35/36; A, B, C, no | (***) | no |
| و | 6.4 | Battery voltage/nominal capacity K5 | (V)/(Ah) | 24/345 - 465 |
| Drive | 6.5 | Battery weight ± 5 % | (kg) | 402 |
| _ | 6.6 | Energy consumption according to VDI cycle | (kWh) | 0.55/0.52 15) |
| | 6.7 | Turnover output | (t/h) | - |
| | 6.8 | Energy consumption at turnover output | (kWh/h) | - |
| 2 | 1 | | (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| Others | 8.1 | Drive control | | AC control |

¹⁾ with holder for vertical pallet 1365/765 mm

³⁾ with load arms or forks raised

⁴⁾ with lifting platform + 50 mm

 $^{^{\}rm 5)}$ with tray 4 PzS or Li-ION + 114 mm

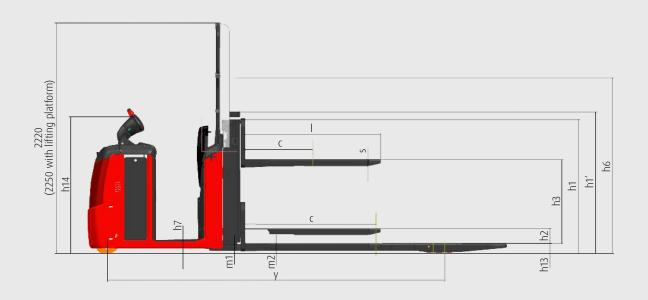
⁷⁾ with lifting platform option standard version + 15 mm; with lifting platform option damped version + 30 mm

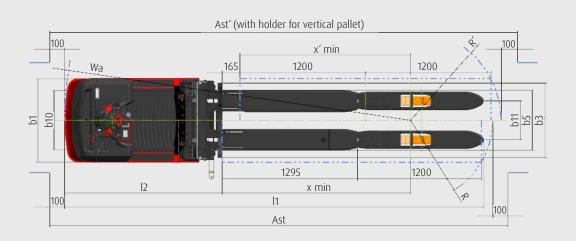
 $^{^{8)}}$ with lifting platform option standard version + 72 mm; with lifting platform option damped version + 87 mm; with tiller adjustment option, h14 setting range = + 89 mm/ - 19 mm

⁹⁾ with lifting platform option standard/damped version

⁽if different); due to manufacturing and assembly tolerances, it is recommended to foresee a decrease in the nominal values of not less than 1 %

 $^{^{\}rm 16)}$ with 1000 kg on mast and 1000 kg on initial lift at max initial lift height





MAST TABLES

| | 8005 | 15805 |
|----------------------------------|------|-------|
| h ₃ | 800 | 1580 |
| h ₃ + h ₁₃ | 891 | 1671 |
| h ₁ | 1276 | 1276 |
| H ₁ | 1351 | 1351 |
| h ₄ | 1676 | 2066 |
| h ₂ | 150 | 150 |

STANDARD EQUIPMENT / OPTIONAL EQUIPMENT

STANDARD EQUIPMENT

Chassis width 800 mm

Rubber platform mat

Anti-slip stripes

Fixed cushioned and roundly shaped backrest equipped with handle

Power assisted steering, adjustable steering resistance

Polyurethane drive wheel

Single polyurethane load wheel greaseable

Tandem polyurethane castor wheels

Workstation with A4 clip integrated

Key switch or PIN code access

Multifunction colored display incl. hour meter, maintenance indication, battery discharge indicator and internal fault code indication

Mast controls integrated on backrest

3 kW AC drive motor (maintenance free)

2.2 kW (5 % rating output) lift motor

CAN-bus technology

Automatic speed reduction in curves

Initial lift electrical stop sensor

Mast lift pressure stop sensor

Speed reduction depending on mast lift height and load

Automatic breaking on releasing butterfly switch

Electromagnetic emergency brake acting proportionally to the load weight

Electric horn

Initial lift of 130 mm

Vertical battery change in 3 and 4 PzS

Protection -10° C

OPTIONAL EQUIPMENT

Drive wheels: cushion rubber, synthetic cushion rubber non marking, wet grip

Load wheels: tandem polyurethane greaseable

Castor wheels: tandem polyurethane and tandem polyurethane greaseable

Raising platform

Pneumatic damping of foot platform

Cushioned knee protection and foldable leg rest step

Height adjustable Linde Steering Wheel

Height adjustable cushioned backrest with foldable seating support

Dashboard with incorporated storage compartments

Inching control (forward only or forward/backward) and initial lift

Accessory supports

Support Clipboard DIN A4 and panoramic mirror

Support data terminal and power supply cable 24 V

Support for scanner and shrink wrap holder

Electric socket 12 V or USB plug

Other options available on request

Masts / Forks

Width over fork carriage 570 mm with fork length 1295 mm

Load arms 2500 mm

Standard masts with lift height of 800 mm or 1580 mm

Speed reduction if forks lowered and soft landing on forks

Safety:

Front chassis protections

Load Backrest 1450 mm

Pallet Locking device

Linde BlueSpot™, Front LED-stripes, Flashing Beacon

Enviroment:

Cold store protection - 35° C

Linde Connected Solutions:

ac: access control (PIN or RFID Dual), an: usage analysis, dt: crash detection, tr: trouble code and hr: operating hours

Data transfer online and data transfer WiFi

Bluetooth USB Stick

Battery:

Lateral battery change 3 PzS/4 PzS low available with an ergonomic battery un/locking with lever and rollers

Lateral battery change 3 PzS/4 PzS high available with a simple battery un/locking system

Lateral battery change 3 PzS/4 PzS for competitor batteries

Built-in charger for lead acid batteries

Li-ION technology:

4 PzS compartment with 4.5 kWh - 9 kWh (205 Ah - 410 Ah)

Li-ION charger:

24 V-Charger v255: 4.5 kWh (full charging time 1 h 30 min) - 9.0 kWh (2 h 40 min)







FEATURES

Optimal load handling

- → 2000 kg total load capacity, to handle two EUR pallets of 1000 kg each
- \rightarrow Up to 1000 kg on main lift
- → High performance 2.2 kW lift motor
- → Mast controls located on both sides of backrest
- → Four points contact configuration for maximum stability on ground
- → Traction speed of 9 km/h loaded and 12 km/h unloaded
- Electromagnetic braking initiated by the emergency stop button acts on the drive motor, proportional



Productivity at the second level

- → Raising platform option to optimize occasional first and second level picking
- → Optional pneumatic damper for optimum comfort on platform
- → Wide access of 428 mm
- → OptiLift® systems ensures proportional lift and lowering of platform and quiet operation
- → Platform lifting command intuitively placed on Linde Steering Wheel for single-hand operation
- → Platform lowering with foot switch

Easy manoeuvering

- → Intuitive Linde Steering Wheel, with all functions (horn, initial lift, traction butterflies) easily accessible without loosing grip ensures one-hand operation
- → Ergonomic and safe driving position
- → Self centering steering for faster picking cycles

Workstation

- → Wide, easy access, from either side
- → Numerous storage compartments, maximized with optional dashboard for increased storage
- → Various optional accessories designed to streamline picking
- → Pedestrian command for traction and initial lift

Work in comfort

- → Wide platform access of 418 mm and low step in height of 130 mm
- → Damped mat or pneumatic damper for reduced vibration levels
- → Height adjustable Linde Steering Wheel
- → Cushioned, rounded-shape backrest, also available with height adjustment with foldable seating support



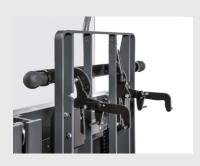
Service Efficiency

- → Integrated CAN-bus diagnostic system for faster analysis and shorter service intervals
- → All truck parameters are configurable by service technician to suit each individual application
- → Rapid and convenient access to main components via front service panel
- → Electronic management of all components permitting quick and easy diagnosis



Efficient drive system

- → Powerful, high-torque and 3 kW AC drive motor
- → Moisture and dust-proof maintenance-free motor with up to 7 % gradeability performance fully loaded
- → Safe starting on gradients without rollback
- → Effortless proportional electric power steering with positive feedback
- → Automatic speed reduction when cornering



Energy for your activity

- → Vertical change as standard, optional side change
- → Wide range of batteries (low and high) from 345 Ah (3 PzS) to 620 Ah (4 PzS)
- → Battery compartments dedicated for competitor batteries
- → Ergonomic lever on low batteries

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 | 63741 Aschaffenburg | Germany Phone + 49 6021 99 0 | Fax + 49 6021 99 1570 www.linde-mh.com | info@linde-mh.com

Printed in Germany 797.e.0,3.0419.IndA.Ki