

ORDER PICKER N20 C L

CAPACITY 1200 KG | SERIES 4590

Safety

The design of the order picker ensures that the operator remains within the truck contours at all time and the standard load backrest ensures protection from falling objects on the lifted forks. Lowering of the forks is not possible without operator's detection in the platform and mast commands are integrated on the backrest to ensure that the operator has eyes on the load.

Performance

The N20 C L has a total capacity of 1200 kg and is able to reach a top speed of 12 km/h unloaded thanks to its powerful 3 kW AC motor. It is highly manoeuvrable even in the narrowest aisle thanks to its compact dimensions. The mast commands are located on both sides of the backrest for easy operation. The raising platform option enables efficient picking at the first level thanks to 2.8 m picking height.

Comfort

The pneumatically damped workstation provides relief and comfort to operators from shocks due to rough flooring. Combined with the height adjustable Linde Steering Wheel and foldable seating support, operator's experience utmost comfort whilst driving. Picking operations are also made easier with the working bench provided by the lifted forks.

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 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 |
|-----------------|--------|--|----------------------|--------------------------|
| S | 1.2 | Manufacturer's type designation | | N20 C L |
| Characteristics | 1.3 | Drive | | Electric |
| | 1.4 | Operator type | | Stand-on |
| | 1.5 | Rated capacity/rated load | Q (t) | 1.2 |
| | 1.6 | Load centre distance | c (mm) | 600 |
| | 1.8 | Load distance, centre of drive axle to fork | x (mm) | 670 |
| | 1.9 | Wheelbase | y (mm) | 1823 4) 5) |
| Weight | 2.1 | Service weight (including battery) | (kg) | 1308 |
| | 2.2 | Axle loading, laden front/rear | (kg) | 920/1588 |
| | 2.3 | Axle loading, unladen front/rear | (kg) | 875/433 |
| S | 3.1 | Tyres | | Polyurethane |
| yre | 3.2 | Tyre size, front | | 254 x 102 |
| s and tyres | 3.3 | Tyre size, rear | | 85 x 60 |
| | 3.4 | Additional wheels (dimensions) | | 150 x 50 |
| Wheels | 3.5 | Wheels, number front/rear (x=driven wheels) | | 1x - 1/4 |
| Ň | 3.6 | Tread, front | b ₁₀ (mm) | 474 |
| | 3.7 | Tread, rear | b ₁₁ (mm) | (348) 388 |
| | 4.2 | Height, mast lowered | h ₁ (mm) | 1375 6) |
| | 4.3 | Free lift | h ₂ (mm) | |
| | 4.4 | Lift | h ₃ (mm) | 700 |
| | 4.5 | Height, mast extended | h ₄ (mm) | 2075 6) |
| | 4.6 | Initial lift | h _s (mm) | - |
| | 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) | <u>-</u> |
| | 4.14 | Stand height, elevated (with lifting platform) | h ₁₂ (mm) | 1182 / 1197 9 |
| SI | 4.15 | Forks height, lowered | h ₁₃ (mm) | 86 |
| jo | 4.17 | Overhang | l₅ (mm) | - |
| Dimensions | 4.19 | Overall length | | 2532 ^{4) 5)} |
| Ë | 4.20 | Length to face of forks | l ₂ (mm) | 1342 4) 5) |
| | 4.21 | Overall width | | 800 |
| | 4.22 | Fork dimensions | s/e/l | 55/172/1190 |
| | 4.24 | Fork-carriage width | | 796 6) |
| | 4.25 | Distance between fork-arms | b _s (mm) | (520) 560 |
| | 4.31 | Ground clearance, laden, below mast | | <u>-</u> |
| | 4.32 | Ground clearance, centre of wheelbase | m ₂ (mm) | 30 |
| | 4.34 | Aisle width for for pallets 800 x l6 lengthways (forks raised) | | 2871 4) 5) |
| | 4.34.1 | Aisle width for pallets 1000 x 1200 crossways (forks raised) | A _{st} (mm) | - |
| | 4.34.2 | Aisle width for pallets 800 x 1200 crossways (forks raised) | A _{st} (mm) | - |
| | 4.35 | Turning radius | W _a (mm) | 2007 4) 5) |
| Performance | 5.1 | Travel speed laden/unladen | (km/h) | 9/12 |
| | 5.1.1 | Travel speed laden/unladen,backwards | (km/h) | 8/10 |
| | 5.2 | Lift speed laden/unladen | (m/s) | 0.135 / 0.218 |
| | 5.3 | Lowering speed laden/unladen | (m/s) | 0.130/0.122 |
| | 5.8 | Max. gradeability laden/unladen | (%) | 7.8 % / 15 % (6.2 %) 15) |
| | 5.9 | Acceleration time, laden/unladen | (s) | 5.8/4.9 |
| | 5.10 | Service brake | | Electromagnetic |
| | 6.1 | Drive motor, rating S2 = 60 min | (kW) | 3 |
| | 6.2 | Lift motor, rating at S3 | (kW) | 2.2/5 % |
| 01 | 6.3 | Battery according to DIN 43531/35/36; A, B, C, no | 63.77.13 | NO 24/245 465 |
| Others Drive | 6.4 | Battery voltage / nominal capacity K5 | (V)/(Ah) | 24/345 - 465 |
| | 6.5 | Battery weight ± 5 % | (kg) | 402 |
| | 6.6 | Energy consumption according to VDI cycle | (kWh) | 0.54 |
| | 6.7 | Turnover output | (t/h) | - |
| | 6.8 | Energy consumption at turnover output | (kWh/h) | - |
| | 8.1 | Drive control | | AC control |
| | 10.7 | Sound level at driver's ear | (dB(A)) | < 70 |

⁴⁾ with lifting platform + 50 mm

⁵⁾ with tray 4 PzS or Li-ION + 114 mm

 $^{^{\}rm 6)}$ with mandatory load backrest (1290 mm from the forks to the top for and N20C L)

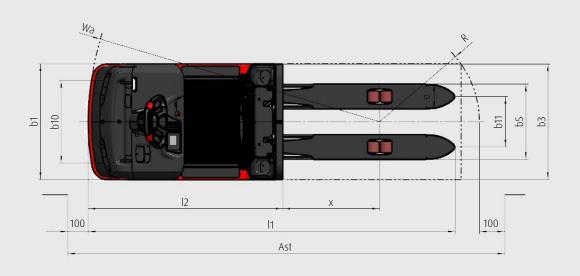
⁷⁾ with lifting platform option standard version + 15 mm; with lifting platform option damped

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

¹⁰⁾ minimum ground clearance under the chassis with mandatory foot guard = 24 mm
¹⁵⁾ in bracket: minimum geometric limit on unrounded edge slope without or with foot guard (if different); due to manufacturing and assembly tolerances, it is recommended to foresee a decrease in the nominal values of not less than 1 %





MAST TABLES

| | 700E |
|----------------|------|
| h ₃ | 700 |
| $h_3 + h_{t3}$ | 786 |
| h, | 1375 |
| h ₄ | 2075 |
| h ₂ | 700 |

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

Tandem polyurethane load wheels greaseable

Single polyurethane castor wheel

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

Load Backrest 1290 mm

3 kW AC drive motor (maintenance free)

2.2 kW (5 % rating output) lift motor

CAN-bus technology

Automatic speed reduction in curves

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

Vertical battery change in 3 PzS and 4 PzS

Protection -10° C

OPTIONAL EQUIPMENT

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

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)

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 520 mm or 560 mm with fork length 1190 mm

Simplex mast with lift height of 700 mm

Soft landing on forks

Safety:

Front chassis protections

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

- → 1200 kg total load capacity to handle one EUR pallet at 786 mm
- → 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
- → Wide access of 418 mm
- → OptiLift® system 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, traction butterflies) easily accessible ensures one-hand operation
- → Ergonomic and safe driving position
- → Self centering steering for faster picking cycles

Workstation

- \rightarrow Wide, easy access, from either side
- → Numerous storage compartments, maximised with optional dashboard for increased storage
- → Various optional accessories designed to streamline picking
- → Pedestrian command available

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



→ Integrated CAN-bus diagnostic system

for faster analysis and shorter service

→ All truck parameters are configurable by

→ Rapid and convenient access to main

components permitting quick and

→ Electronic management of all

components via front service panel

service technician to suit each individual

Service Efficiency

application

easy diagnosis

Efficient drive system

- → Powerful, high-torque and 3 kW AC drive motor
- → Moisture and dust-proof maintenance-free motor with up to 7.8 % grade ability 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
- → Li-ION batteries available

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.

