

Standard Equipment/Optional Equipment

Standard Equipment

| | |
|---|--|
| Backlit multifunction display | AC drive motor |
| Key switch or PIN-code access | Automatic braking on releasing butterfly switch |
| Safe operator compartment with cushioned full-suspension platform | Electromagnetic emergency brake acting proportionally to the load weight |
| Workstation incorporating storage compartments | Active castor wheels (on the five-point contact HP version) |
| Clipboard | Cushion drive wheel |
| Adjustable backrest | Single or tandem polyurethane load wheels |
| Power-assisted steering, adjustable steering resistance | Electric horn |
| Self-centering steering | Low temperature protection to -10°C |
| Automatic speed reduction on turns | |

Optional Equipment

| | |
|--|--------------------------------------|
| Other fork dimensions (length to 2900 mm) | Data terminal on the bow (front) |
| Drive wheel: polyurethane, cushion non-marking or wet grip | Battery on rollers for side change |
| Single or tandem greasable load wheels | Cold store version to -35°C |
| Inching buttons on each side (forward direction or forward&backward direction) | Linde Connected Solutions |
| Adjustable Linde control handlebars | ac:access control (PIN or RFID Dual) |
| Load backrests | an:usage analysis |
| Equipments on the pole | dt:crash detection |
| Support for data terminal or barcode reader (centre) | Other options available on request. |

Li-ION technology

| |
|--------------------------------|
| Fast Full Charge |
| Opportunity Charging |
| Fast Intermediate Charging |
| Maintenance Free |
| Long Lifetime |
| Good performance in Cold Store |

Li-ION batteries

fits in 3 PzS compartment with 4,5kWh and 9kWh (24V/205Ah-24V/410Ah)

Li-ION Charger

optimized 24V-Charger v255: full charging time in 1h30min (4,5 kWh) and in 2h40min (9,0 kWh)



Low-Level Order Picker Capacity 2000 - 2400 kg N 20, N 20 HP, N 24 HP

Series 132

Safety

Unique Linde twin-grip steering and chassis design ensure that no part of operator's body is exposed outside its contours at any time. Steel front shield and twin-grip hand guard provide additional protection. The front driving position affords optimum visibility for enhanced safety and efficiency.

Performance

The Linde drive system employing advanced control technology translates the powerful output of the maintenance-free AC traction and pump motors into seamless productivity. The 3 kW drive motor delivers full power to give 13% gradeability and safe starting on gradients without rollback. A wide range of batteries is available to match individual order picking applications.

Comfort

A perfect interface between operator and truck is assured with the Linde N series design concept. The series incorporates the unique Linde twin-grip steering and control system for effortless travelling and manoeuvring. Truck functions are actuated by tactile, thumb operated dual controls intuitively grouped on the protected steering control head for ease of use by either hand.

Reliability

The N series is constructed for consistent reliability in demanding applications. Its compact, robot-welded chassis ensures maximum structural integrity and durability. The rugged structure and components provide a low centre of gravity for excellent stability.

Productivity

Efficiency at work, efficiency in servicing. With uptime ratios of up to 1000 hours between services and a computerised diagnostic system, maintenance intervals are minimal and operating costs are reduced. Easy accessibility of all components and the maintenance free AC technology employed play an additional part in maximising uptime.

Features

Drive system

- Four-point contact configuration for maximum stability (N 20)
- Maximum speed 10 km/h laden, 12 km/h unladen
- Automatic regenerative braking as traction butterfly is released to neutral or opposite direction of travel is selected
- Electromagnetic braking initiated by the emergency stop button acts on the drive motor, proportional to the load carried



Comprehensive energy solutions

- Range of Lead Acid batteries (low&high) from 4,9kWh to 8,81kWh (345-620Ah/3PzS-4PzS)
- Battery locking system for side change option secures battery compartment and assists the battery change
- Li-ION batteries from 4,5kWh to 9kWh (205-410Ah/3PzS)

Linde twin-grip steering controller

- Superbly functional twin-grip steering controller
- All controls ergonomically grouped on twin grip controller for convenient use by either hand
- Optimum protection for both hands
- Twin-grip design minimises operator's arm movements when turning



Workstation

- Wide, easy access from either side
- Ergonomic and intuitive control layout
- Generous storage compartments for shrink wrapping, pens, gloves, etc.
- Digital instrument display
- Padded, adjustable scoop seat provides additional comfort
- A cushioned platform isolates operator from surface vibrations
- Excellent all-round visibility



AC motor

- Powerful, high-torque 3 kW AC drive motor
- Moisture and dust-proof maintenance-free motor
- 13% gradeability performance fully laden
- Safe starting on gradients without rollback
- Responsive acceleration to maximum speed within 5 metres

High-performance option (HP)

- Five-point contact configuration for optimum stability (N 20 HP/N 24 HP)
- Electronically controlled, hydraulically suspended active castor wheels automatically select optimum ratio between stability and traction for constant ground contact
- Maximum speed 12 km/h laden and unladen

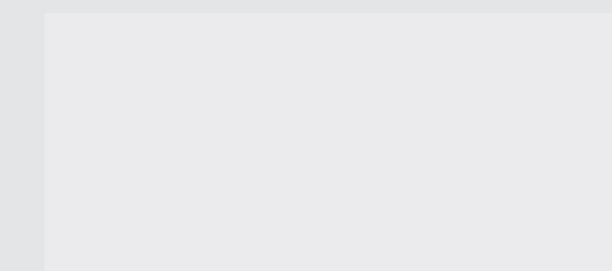
CAN bus connectivity

- Integrated CAN bus diagnostic system for faster analysis and shorter service intervals
- Performance parameters can be configured by the service technician to suit individual applications



Power steering

- Effortless, proportional electric power steering with positive feedback
- Self centring steering for faster picking cycles
- Automatic speed reduction when cornering



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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.

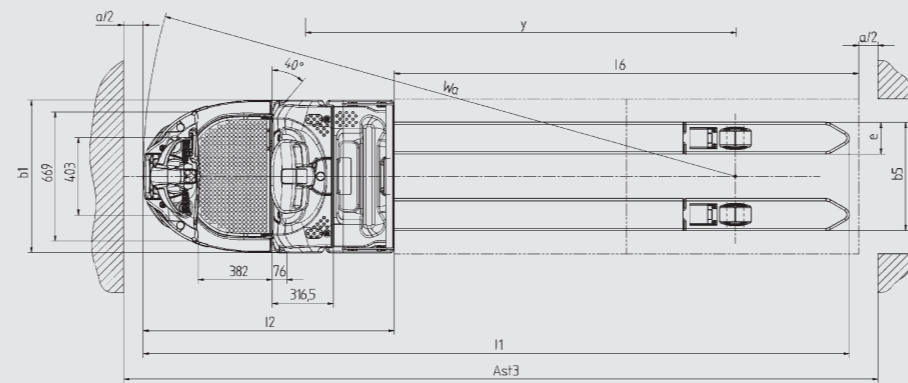
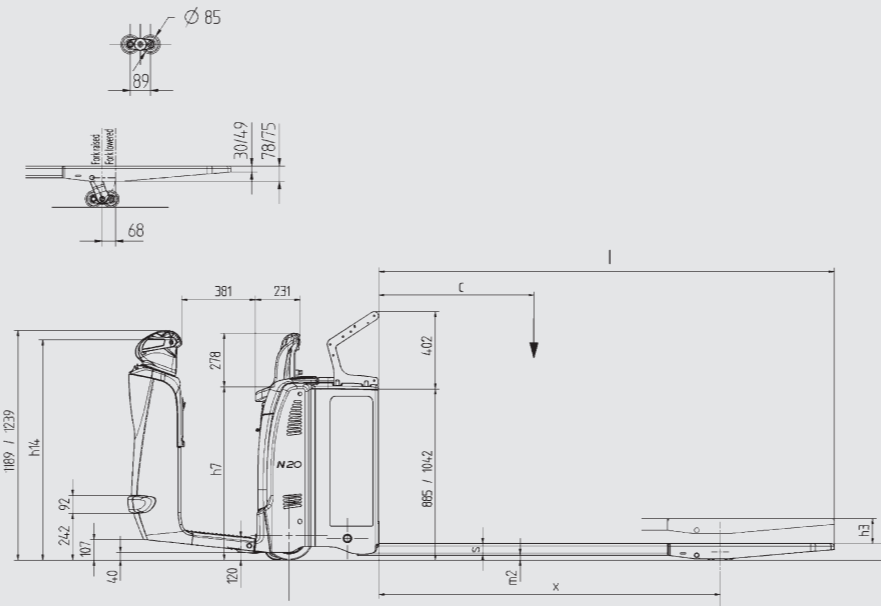
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Technical Data according to VDI 2198

| | | | LINDE | LINDE | LINDE | |
|-----------------|--|---|---|---|---|-----------------------------------|
| Characteristics | 1.1 | Manufacturer | LINDE | LINDE | LINDE | |
| | 1.2 | Manufacturer's type designation | N20 / [N20 ION] ¹⁾ | N20HP / [N20HP ION] ¹⁾ | N24HP / [N24HP ION] ¹⁾ | |
| | 1.2a | Series | 132-00 | 132-00 | 132-00 | |
| | 1.3 | Power unit | Battery | Battery | Battery | |
| | 1.4 | Operation | Order Picker | Order Picker | Order Picker | |
| | 1.5 | Load capacity/Load | Q (t) | 2.0 ²⁾ | 2.0 ²⁾ | 2.4 |
| | 1.6 | Load centre distance | c (mm) | 1200 | 1200 | 600 |
| | 1.8 | Axle centre to fork face | x (mm) | 1763 / 1702 ³⁾⁴⁾ | 1763 / 1702 ³⁾⁴⁾ | 963 / 902 ³⁾⁴⁾ |
| | 1.9 | Wheelbase | y (mm) | 2325 / 2264 ³⁾³⁾⁴⁾ | 2325 / 2264 ³⁾³⁾⁴⁾ | 1525 / 1464 ³⁾³⁾⁴⁾ |
| Wheels/Tyres | 2.1 | Service weight | (kg) | 1175 [1075] ⁴⁾¹⁾⁷⁾ | 1175 [1086] ⁴⁾¹⁾⁷⁾ | 1175 [1086] ⁴⁾¹⁾⁷⁾ |
| | 3.1 | Tyres rubber, SE, pneumatic, polyurethane | | V+P/P ⁸⁾⁹⁾ | V+P/P ⁸⁾⁹⁾ | V+P/P ⁸⁾⁹⁾ |
| | 3.2 | Tyre size, front | | Ø 254 x 102 | Ø 254 x 102 | Ø 254 x 102 |
| | 3.3 | Tyre size, rear | | Ø 85 x 105 | Ø 85 x 105 | Ø 85 x 105 |
| | 3.4 | Auxiliary wheels (dimensions) | | Ø 125 x 60 | Ø 125 x 60 | Ø 125 x 60 |
| | 3.5 | Wheels, number front/rear (x = driven) | | 1x + 1 / 2 (1 / 4) | 1x + 2 / 2 (1x + 2 / 4) | 1x + 2 / 2 (1x + 2 / 4) |
| Dimensions | 3.6 | Track width, front | b10 (mm) | 544 ⁴⁾ | 544 ⁴⁾ | 544 ⁴⁾ |
| | 4.4 | Lift | h3 (mm) | 120 ⁴⁾ | 120 ⁴⁾ | 120 ⁴⁾ |
| | 4.8 | Height of seat/stand on platform | h7 (mm) | 900 / 1000 | 900 / 1000 | 900 / 1000 |
| | 4.9 | Height of tiller arm in operating position, min/max | h14 (mm) | 1136 / 1173 | 1136 / 1173 | 1136 / 1173 |
| | 4.15 | Height, lowered | h13 (mm) | 85 | 85 | 85 |
| | 4.19 | Overall length | l1 (mm) | 3747 [3647] ⁵⁾⁴⁾¹⁾ | 3747 [3647] ⁵⁾⁴⁾¹⁾ | 2547 [2447] ⁵⁾⁴⁾¹⁾ |
| | 4.20 | Length to fork face | l2 (mm) | 1397 [1297] ⁵⁾⁴⁾¹⁾ | 1397 [1297] ⁵⁾⁴⁾¹⁾ | 1397 [1297] ⁵⁾⁴⁾¹⁾ |
| | 4.21 | Overall width | b1/b2 (mm) | 790 ⁴⁾ | 790 ⁴⁾ | 790 ⁴⁾ |
| | 4.22 | Fork dimensions DIN ISO 2331 | s/e/l (mm) | 60 x 166 x 2350 | 60 x 166 x 2350 | 60 x 166 x 1150 |
| | 4.25 | Fork spread | b5 (mm) | 520 ⁴⁾ | 520 ⁴⁾ | 520 ⁴⁾ |
| | 4.33 | Load dimension b12 x l6 | b12 x l6 (mm) | 800 x 2400 | 800 x 2400 | - |
| 4.34 | Aisle width predetermined load dimensions | Ast (mm) | 4110 [4010] ⁵⁾¹⁰⁾¹⁾ | 4110 [4010] ⁵⁾¹⁰⁾¹⁾ | - | |
| 4.35 | Turning radius | Wa (mm) | 3158 / 3090 [3058 / 2990] ¹⁾⁵⁾³⁾ | 3158 / 3090 [3058 / 2990] ¹⁾⁵⁾³⁾ | 2358 / 2290 [2258 / 2190] ¹⁾⁵⁾³⁾ | |
| Performance | 5.1 | Travel speed, with/without load | (km/h) | 10 / 12 ¹¹⁾ | 12 / 12 ¹¹⁾ | 12 / 12 ¹¹⁾ |
| | 5.2 | Lifting speed, with/without load | (m/s) | 0.031 / 0.039 ⁷⁾ | 0.031 / 0.039 ⁷⁾ | 0.031 / 0.039 ⁷⁾ |
| | 5.3 | Lowering speed, with/without load | (m/s) | 0.076 / 0.073 ⁷⁾ | 0.076 / 0.073 ⁷⁾ | 0.076 / 0.073 ⁷⁾ |
| | 5.8 | Maximum climbing ability, with/without load | (%) | 6.0 / 17.0 | 8.0 / 17.0 | - |
| | 5.9 | Acceleration time, with/without load | (s) | 1.4 / 1.0; 1.5 / 1.2 ¹²⁾ | 1.4 / 1.0; 1.5 / 1.2 ¹²⁾ | - |
| | 5.10 | Service brake | | Electric/hydraulic | Electric/hydraulic | Electric/hydraulic |
| Drive | 6.1 | Drive motor rating S2 60 min | (kW) | 3 | 3 | 3 |
| | 6.2 | Lift motor rating at S3 15% | (kW) | 1 | 1 | 1 |
| | 6.3 | Battery according to DIN 43531/35/36 A,B,C,no | | 43 535/B [Li-ION] | 43 535/B [Li-ION] | 43 535/B [Li-ION] |
| | 6.4 | Battery voltage/rated capacity (Sh) | (V)/(Ah) | 24 / 620 [24 / 205] ¹⁾ | 24 / 620 [24 / 410] ¹⁾ | 24 / 620 [24 / 410] ¹⁾ |
| | 6.5 | Battery weight (± 5%) | (kg) | 485 [110] | 485 [151] | 485 [151] |
| | 6.6 | Power consumption according to VDI cycle | (kWh/h) | 0.48 | 0.48 | 0.48 |
| | 8.1 | Type of drive unit | | LAC | LAC | LAC |
| 10.7 | Sound pressure level LpAZ (at the driver's seat) | (dB(A)) | <85 | <85 | <85 | |

1) Figures in [] with Li-ION battery see line 6.4
 2) With evenly distributed load.
 3) lowered/raised
 4) (± 5 mm)
 5) -100 mm = 3 Pz5; ± 0 mm = 4 Pz5; + 50 mm = 5 Pz5
 6) Figures with battery, see line 6.4/6.5.

7) (± 10%)
 8) Drive Wheel Option: rubber non marking, Polyurethane and wet grip
 9) Solid rubber + polyurethane / polyurethane
 10) Including a 200 mm (min.) operating aisle clearance.
 11) (± 5%)
 12) forward; backward



AST = Wa - x + l6 + a
 Security distance a = 200 mm

