# Standard Equipment /Optional Equipment

## Standard Equipment

- Narrow chassis width 820mm
- Key switch or PIN Code access
- Multifunction coloured display as well as hourmeter, maintenance indication, battery discharge indicator and internal fault code indication
- Power assisted steering
- Automatic speed reduction when cornering
- ECO-Mode with up to 12% energy savings
- 3 kW AC motor (maintenance free)
- Drive wheel position mentioned in display
- CAN bus technology
- Lateral battery change 3PzS available with an ergonomic battery un/locking with lever & rollers (l2=1037mm)
- Overhead guard
- Soft landing on forks
- Drive wheel Polyurethane
- Single load wheel Polyurethane
- Width over fork carriage: 560mm
- Fork carriage length: 1150mm
- Protection -10°C

## Optional Equipment

- Drive wheels: cushion rubber, synthetic cushion rubber non marking, wet grip
- Load wheels: tandem polyurethane, tandem polyurethane greasable
- Lateral battery change 4PzS available with ergonomic battery un/locking with lever & rollers (l2=1112mm)
- Leather seat & seat heating
- Different Standard and Duplex masts with maximum lift height 2344mm
- Load backrests with h=100mm
- Floor compensator
- Speed reduction if forks lowered
- Mast Protection: polycarbonate, steel mesh
- **Linde Connected Solutions:**
- ac:access control (PIN or RFID Dual), an: usage analysis and dt: crash detection
- Flashing beacon
- Support Clipboard DIN A4 & panoramic mirror
- Support data terminal incl. power supply cable 24V
- Mobile or Fixed battery stand
- Automatic battery watering system
- Cold store protection -35°C

**Other options available on request**

**Li-ION**
- Rapid Full Charge
- Opportunity Charging
- Rapid Intermediate Charging
- Maintenance Free
- Extended Lifetime
- Efficient performance in Cold Stores
- Side Plug available

**Li-ION Batteries**
- fits in 4 PzS SL compartment : 4,5kWh-9kWh (205Ah-410Ah) includes battery housing extra weight

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


# Seated Double Pallet Stacker
# Capacity 1,200 kg
# D 12 R

Series 1164

Linde Material Handling

## Safety

High productivity combined with safety. The operator's body always remains within the chassis contours. An overhead guard provides additional protection. A dead-man foot switch actuates an electromagnetic brake on the drive wheel for impressively smooth and rapid stopping performance when required.

## Performance

One of the truck's many is its highly efficient productivity performance. The compact and powerful 3 kW AC drive unit enables precise manoeuvring, with speeds up to 10 km/h. With capacities up to 2,000 kg, the Linde Seated Double Stacker is designed to load/unload and or transfer two double-stacked pallets simultaneously. It can also be used as a normal stacker to store and retrieve 1,200 kg loads in narrow aisles.

## Comfort

The 90° seating position incorporating a padded armrest provides the operator with an ergonomic work station and effortless access to all operating controls. Three independent seat adjustments are are complemented by an adjustable floorplate to suit each operator's preferences

## Reliability

Rugged construction and the use of tried and tested components make this a truck that can be relied on. Motor, subcomponents and electronics are all protected within the robust chassis structure. A pallet stop ensure durability of lifting units. These features guarantee a longer operating life combined with fast, safe and highly efficient load handling.

## Service

Efficiency at work and efficiency in servicing with cost effective maintenance routines. Easy access to all components and maintenance-free technology also play their part in increasing truck uptime and availability. CAN bus connectivity provides a computerised diagnostic system for rapid analysis so that maintenance intervals are also minimised for maximum uptime.

# Features

### Ergonomics
- Ergonomic operator's compartment with fabric or leather seat available incorporating three independent adjustments
- Heated seat available as an option
- Padded hand grip for easy access and an adjustable floor plate to suit individual operator's
- 90° Side-stance seating posture ensures excellent visibility in both directions of travel
- Overhead guard design provides optimum visibility

### Lifting systems
- Lift control provides accurate lifting as well as smooth, quiet operation
- Soft landing on forks protects the load when lowering
- Initial lift independent of main lift
- Max. lift height up to 2344mm
- Max. load capacity in Stacker use : 1,200kg on load arms
- Max. load capacity when Double-Stacking : 1000kg on forks/1000kg

### Handling
- Chassis width b1= 820mm
- Small l2 dimension = 1037mm
- High maneuverability when operating in lorries or confined spaces
- High seated position for good visibility
- Stable 4 point configuration
- Pallet stop for fast, efficient stacking of two pallets

### TipControl®
- Traction, lift controls, initial lift and horn grouped in one single ergonomic unit
- Enables intuitive, fatigue-free operation of all controls
- Height adjustable hand support

### Drive control and settings
- Steering effort adjusts automatically relative to speed and turning radius
- Speed is automatically reduced in relation to the steering angle
- Speed profiles available
- ECO-Mode up to12% energy savings to finish shift with low battery status

### Workstation
- Multifunctional instrument display with a user-friendly menu structure
- Truck access control by PIN code or ignition key
- Support clipboard DIN A4, flashing beacon available as options
- Emergency isolator located for instant actuation

### Comprehensive energy solutions
- 24V batteries : capacities from 345 Ah (3PzS) to 500 Ah (4PzS)
- Standard Lateral change including rollers inside the battery compartment to aid battery change
- Lever initiates battery change preventing direct contact
- Li-ION batteries with 4,5KWh(205Ah) and 9,0kWh(410Ah)
- Fast full charge in 1h30min with optimized charger

### AC drive motor
- Powerful, 3 kW drive motor
- Moisture and dust proof maintenance-free, AC drive motor
- Gradient performance of max. 15% (laden)
- No roll back on gradient starts
- High torque motor negotiates loading docks with ease




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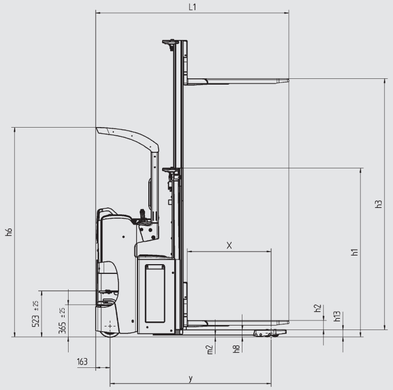
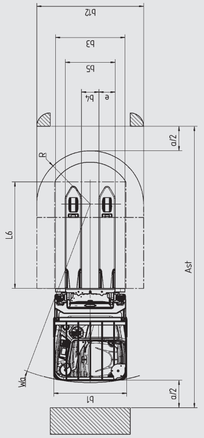
# Technical Data according to VDI 2198

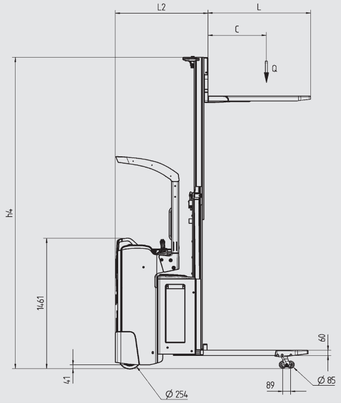
| | | | | |
|---|---|---|---|---|
| Characteristics | 1.1 | Manufacturer | | LINDE |
| | 1.2 | Manufacturer's type designation | | **D12R** |
| | 1.2a | Series | | 1164-01 |
| | 1.3 | Power unit | | Battery |
| | 1.4 | Operation | | Seat |
| | 1.5 | Load capacity/Load | Q (t) | 1.2 / 2.0 [1] [2] |
| | 1.6 | Load centre distance | c (mm) | 600 |
| | 1.8 | Axle centre to fork face | x (mm) | 950 (835) [3] [4] |
| | 1.9 | Wheelbase | y (mm) | 1824 (1709) [3] [4] |
| Weights | 2.1 | Service weight | (kg) | 1451 [3] [4] |
| | 2.2 | Axle load with load, front/rear | (kg) | 1402 / 2049 (1267 / 2184) [3] [5] [7] |
| | 2.3 | Axle load without load, front/rear | (kg) | 992 / 459 [3] [4] |
| Wheels/Tyres | 3.1 | Tyres rubber, SE, pneumatic, polyurethane | | V+P/P [8] [9] |
| | 3.2 | Tyre size, front | | Ø 254 x 102 |
| | 3.3 | Tyre size, rear | | Ø 85 x 85 (Ø 85 x 60) [10] |
| | 3.4 | Auxiliary wheels (dimensions) | | Ø 140 x 50 |
| | 3.5 | Wheels, number front/rear (x = driven) | | 1x + 2 / 2 (1x + 2 / 4) [10] |
| | 3.6 | Track width, front | b10 (mm) | 541 [4] |
| | 3.7 | Track width, rear | b11 (mm) | 380 [4] |
| Dimensions | 4.2 | Height of mast, lowered | h1 (mm) | 1665 [4] |
| | 4.3 | Free lift | h2 (mm) | 150 [4] |
| | 4.4 | Lift | h3 (mm) | 2344 [4] |
| | 4.5 | Height of mast, extended | h4 (mm) | 2864 [4] |
| | 4.6 | Initial lift | h5 (mm) | 125 |
| | 4.7 | Height of overhead guard (cabin) | h6 (mm) | 2260 |
| | 4.10 | Height of reach legs | h8 (mm) | 80 [11] |
| | 4.15 | Height, lowered | h13 (mm) | 86 [11] |
| | 4.19 | Overall length | l1 (mm) | 2187 [4] |
| | 4.20 | Length to fork face | l2 (mm) | 1037 [4] |
| | 4.21 | Overall width | b1/b2 (mm) | 820 [4] |
| | 4.22 | Fork dimensions DIN ISO 2331 | s/e/l (mm) | 55 x 180 x 1150 [12] |
| | 4.24 | Width of fork carriage | b3 (mm) | 780 [4] |
| | 4.25 | Fork spread | b5 (mm) | 560 [4] |
| | 4.26 | Distance between wheel arms/loading surfaces | b4 (mm) | 255 [4] |
| | 4.32 | Ground clearance, centre of wheelbase | m2 (mm) | 20 [13] |
| | 4.34.1 | Aisle width for pallets 1000 × 1200 crossways | Ast (mm) | 2814 (2834) [3] [14] |
| | 4.34.2 | Aisle width with pallet 800 x 1200 along forks | Ast (mm) | 2684 (2754) [3] [14] |
| | 4.35 | Turning radius | Wa (mm) | 2012 |
| Performance | 5.1 | Travel speed, with/without load | (km/h) | 10 / 10 [15] |
| | 5.2 | Lifting speed, with/without load | (m/s) | 0.107 / 0.174 (0.034 / 0.07) [3] [6] |
| | 5.3 | Lowering speed, with/without load | (m/s) | 0.377 / 0.394 (0.084 / 0.084) [3] [6] |
| | 5.8 | Maximum climbing ability, with/without load | (%) | 15.0 (10.0) / 20.0 [3] |
| | 5.9 | Acceleration time, with/without load | (s) | 6.1 / 4.8 |
| | 5.10 | Service brake | | Electro-magnetic |
| Drive | 6.1 | Drive motor rating S2 60 min | (kW) | 3 |
| | 6.2 | Lift motor rating at S3 15% | (kW) | 2.2 |
| | 6.3 | Battery according to DIN 43531/35/36 A,B,C,no | | 43 535 / B |
| | 6.4 | Battery voltage/rated capacity (5h) | (V)/(Ah) | 24 / 345/375 |
| | 6.5 | Battery weight (± 5%) | (kg) | 287 |
| | 6.6 | Power consumption according to VDI cycle | (kWh/h) | 1.08 |
| | 6.7 | Turnover output | (t/h) | 48.0 |
| | 6.8 | Energy consumption at turnover output | (kWh/h) | 1.7 |
| | 8.1 | Type of drive unit | | LAC |
| | 10.7 | Sound pressure level LpAZ (at the driver's seat) | (dB(A)) | 69 [16] |

1) (Load distribution e.g. 1000 kg on the forks, 1000 kg on the fork arms. Total load max. 2000 kg.)
2) 2000 kg on the load arms (initial lift)
3) Figures in parenthesis with initial lift
4) (± 5 mm)
5) Figures with battery, see line 6.4/6.5.
6) (± 10%)
7) Load: 2000 kg
8) Drive Wheel Option: rubber non marking, Polyurethane and wet grip
9) Solid rubber + polyurethane / polyurethane
10) Figures in parenthesis with tandem load wheels.
11) (-0/+5 mm)
12) Reach legs 75x150x1115
13) (± 2 mm)
14) Including a 200 mm (min.) operating aisle clearance.
15) (± 5%)
16) (± 2.5)








| Mast D12 R (in mm) | | 1844 S | 2344 S | 1844 D | 2344 D |
|---|---|---|---|---|---|
| Lift | **h3** | 1844 | 2344 | 1844 | 2344 |
| Lift + fork height | **h3+h13** | 1930 | 2430 | 1930 | 2430 |
| Height, mast lowered | **h1** | 1415 | 1665 | 1415 | 1665 |
| Closed height (with free lift at 150 mm) | **h1#** | 1490 | 1740 | - | - |
| Height, mast extended | **h4** | 2364 | 2864 | 2364 | 2864 |
| Free lift | **h2** | 150 | 150 | 895 | 1145 |