

## Standard Equipment /Optional Equipment

### Standard Equipment

Fully suspended operator compartment

Narrow chassis width b1=770mm

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

ECO-Mode with up to 12% energy savings

Drive wheel position mentioned in display (S)

Steering wheel left or right side (S)

Automatic speed reduction when cornering

Electromagnetic emergency brake acting proportionally to the load weight

CAN bus technology

Drive wheel Polyurethane

Single load wheel Polyurethane

Battery compartment for 3PzS and 4PzS

Width over fork carriage: 580mm

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 3PzS and 4PzS with ergonomic battery un/locking with lever

Load backrests with h=800mm

Floor compensator

Speed reduction if forks lowered

#### Linde Connected Solutions:

ac:access control (PIN or RFID Dual), an:usage analysis and dt:crash detection

Mast Protection: polycarbonate, mesh

Flashing beacon

Support Clipboard DIN A4

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 technology

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 3 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)



## Stand-on Double Stacker Capacity 1200 kg D12 S, D12 SF

Series 1164

Linde Material Handling



### Safety

High performance combined with safety. The operator's body remains safely within the chassis contours at all times.

A deadman foot switch ensures instant braking response when necessary. The truck comes rapidly to a smooth stop thanks to an electromagnetic brake which acts proportionally to the load on the forks. Due to its compact chassis, the fork tips are easily visible ensuring safe load handling.

### Performance

One of the truck's great strengths is its productivity.

With capacity up to 2,000 kg, and a powerful maintenance-free 3 kW drive motor providing a maximum speed of 10 km/h, the Linde Stand-on Double Stacker is designed to load/unload and transfer two double-stacked pallets simultaneously, but can also be used as a normal stacker to store and retrieve loads in narrow aisles and for rapid pallet transfer applications.

### Comfort

The fully suspended operator compartment, completely decoupled from the chassis keeps the driver concentrated and maintains high efficiency levels throughout the shift. Allied with a padded backrest, the operator's stability is assured.

### Reliability

Rugged construction and the use of tried and tested components make this a truck that can be relied on. Smooth fork entry into close pallets is assured by the profiled shape of the fork tips and the entry skid. These features guarantee a longer operating life combined with fast, safe and easy load handling.

### Service

Efficiency at work and efficiency in servicing with cost effective maintenance routine. 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 to ensure maintenance intervals are also minimised.

## Features

#### Fully suspended operator compartment

- Standard on all truck versions (S and SF)
- Decoupled stand-on platform and drive unit from the chassis (S and SF)
- Comfortable and curved padded backrest (S)
- Significant reduction of vibrations transmitted to the body
- Ergonomic 90° driving position (S)

#### Narrow chassis

- Chassis width = 770mm
- Small I2 dimension = 800mm
- High maneuverability when operating in lorries or confined spaces
- High stand-on position for good visibility
- Stable 4 point configuration



#### Workstation

- Multifunctional coloured display with easy & ergonomic menu structure
- Truck access control by PIN code or ignition key
- Wide and deep storage compartment for work gloves, writing utensils etc
- Support clipboard DIN A4, flashing beacon available as option



#### TipControl®

- Traction, lift controls and horn grouped in one single ergonomic unit
- Enables one-handed operations
- High modularity: either left or right side
- Height adjustable hand platform
- Available on Side (S) version



#### Comprehensive energy solutions

- Battery tray for DIN batteries
- 24V batteries: capacities from 345 Ah (3PzS) to 500 Ah (4PzS)
- Lateral battery change with ergonomic battery lever & spring (option)
- Li-ION batteries from 4,5kWh to 9kWh (205-410Ah/3PzS)
- Rapid full charge in 1h30min with optimized charger

#### Multiple driving positions

- Side (S) version: vertical to forks direction
- TipControl®, an innovative drive and lift control unit
- Steering wheel on right or left side
- Ergonomic driving position with comfortable backrest
- Stand Front (SF) version: in forks direction
- Twin grip handle bar

#### Drive control and settings

- Steering effort adjusts automatically to speed and turning radius
- Speed is automatically reduced in relation to the steering angle
- ECO-Mode up to 12% energy savings to finish shift with low battery status



#### AC motor

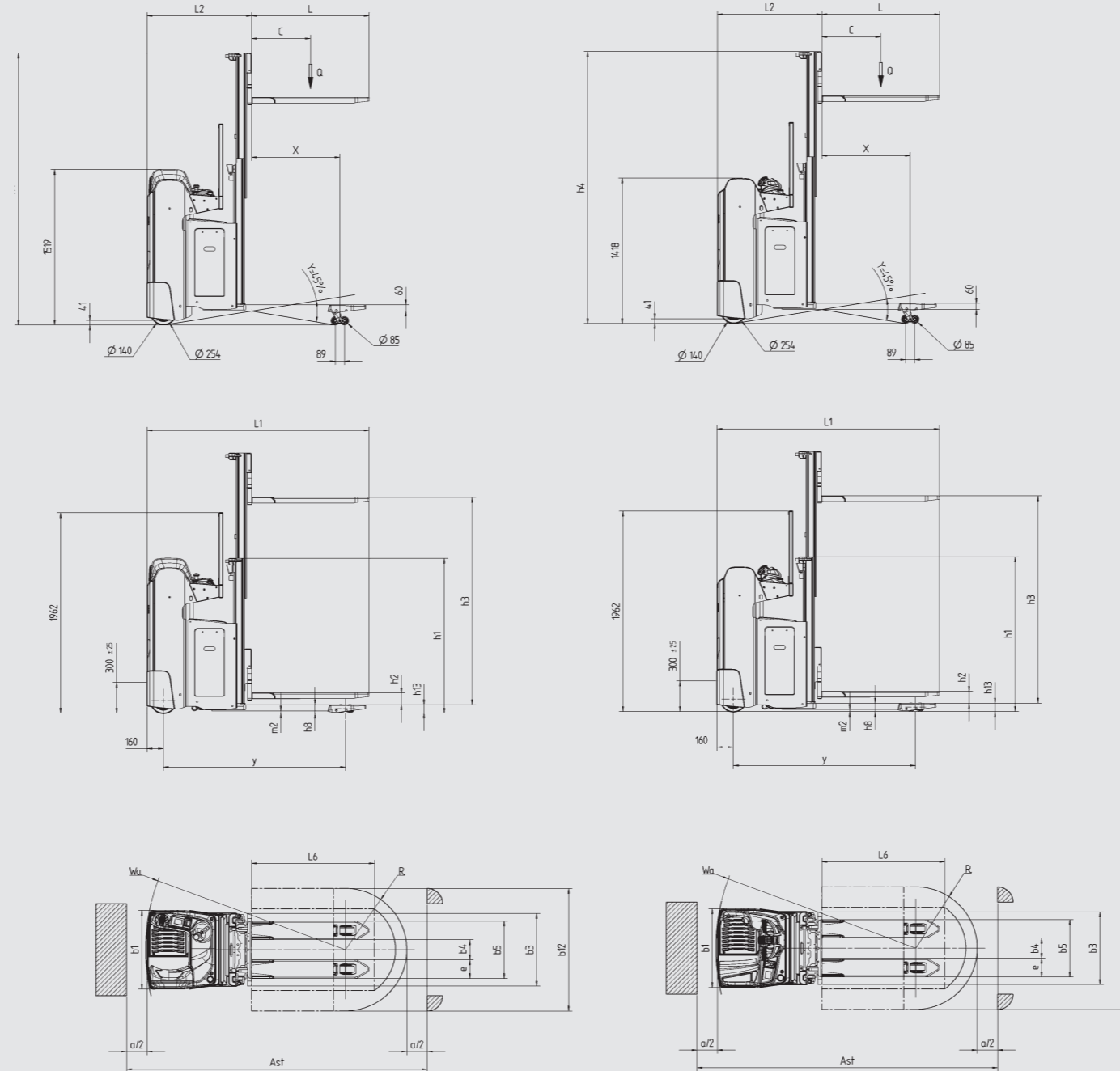
- Powerful, 3 kW drive motor
- Maintenance-free, moisture and dust proof AC motor
- Gradient performance of max. 15% (laden)
- No roll back on gradient starts
- High torque motor negotiates loading docks with ease



# Technical Data according to VDI 2198

Characteristics		LINDE		LINDE	
1.1	Manufacturer	LINDE		LINDE	
1.2	Manufacturer's type designation	<b>D12S</b>		<b>D12SF</b>	
1.2a	Series	1164-00		1164-00	
1.3	Power unit	Battery		Battery	
1.4	Operation	Stand on		Stand on	
1.5	Load capacity/Load	Q (t)		1.2 / 1.8 <sup>1)</sup>	
1.6	Load centre distance	c (mm)	600	600	
1.8	Axle centre to fork face	x (mm)	860 (745) <sup>2) 3)</sup>	860 (745) <sup>2) 3)</sup>	
1.9	Wheelbase	y (mm)	1780 (1665) <sup>2) 4) 3)</sup>	1780 (1665) <sup>2) 4) 3)</sup>	
2.1	Service weight	(kg)	1348 <sup>5) 6)</sup>	1348 <sup>5) 6)</sup>	
2.2	Axle load with load, front/rear	(kg)	1224 / 1924 (1100 / 2048) <sup>5) 7) 7)</sup>	1224 / 1924 (1100 / 2048) <sup>5) 7) 7)</sup>	
2.3	Axle load without load, front/rear	(kg)	943 / 405 <sup>5) 6)</sup>	943 / 405 <sup>5) 6)</sup>	
3.1	Tyres rubber, SE, pneumatic, polyurethane	V+P/P <sup>8) 9)</sup>		V+P/P <sup>8) 9)</sup>	
3.2	Tyre size, front	Ø 254 x 102		Ø 254 x 102	
3.3	Tyre size, rear	Ø 85 x 85 (2x Ø 85 x 60) <sup>10)</sup>		Ø 85 x 85 (2x Ø 85 x 60) <sup>10)</sup>	
3.4	Auxiliary wheels (dimensions)	2x Ø 140 x 50		2x Ø 140 x 50	
3.5	Wheels, number front/rear (x = driven)	1x + 2 / 2 (1x + 2 / 4) <sup>10)</sup>		1x + 2 / 2 (1x + 2 / 4) <sup>10)</sup>	
3.6	Track width, front	b10 (mm)	484 <sup>3)</sup>	484 <sup>3)</sup>	
3.7	Track width, rear	b11 (mm)	380 <sup>3)</sup>	380 <sup>3)</sup>	
4.2	Height of mast, lowered	h1 (mm)	1315 <sup>3)</sup>	1315 <sup>3)</sup>	
4.3	Free lift	h2 (mm)	795 <sup>3)</sup>	795 <sup>3)</sup>	
4.4	Lift	h3 (mm)	1724 <sup>3)</sup>	1724 <sup>3)</sup>	
4.5	Height of mast, extended	h4 (mm)	2244 <sup>3)</sup>	2244 <sup>3)</sup>	
4.6	Initial lift	h5 (mm)	125	125	
4.15	Height, lowered	h13 (mm)	86	86	
4.19	Overall length	l1 (mm)	2170 <sup>4) 3)</sup>	2170 <sup>4) 3)</sup>	
4.20	Length to fork face	l2 (mm)	1020 <sup>4) 3)</sup>	1020 <sup>4) 3)</sup>	
4.21	Overall width	b1/b2 (mm)	770 <sup>3)</sup>	770 <sup>3)</sup>	
4.22	Fork dimensions DIN ISO 2331	s/e/l (mm)	55 x 180 x 1150 <sup>11)</sup>	55 x 180 x 1150 <sup>11)</sup>	
4.24	Width of fork carriage	b3 (mm)	710 <sup>3)</sup>	710 <sup>3)</sup>	
4.25	Fork spread	b5 (mm)	560 <sup>3)</sup>	560 <sup>3)</sup>	
4.26	Distance between wheel arms/loading surfaces	b4 (mm)	196	196	
4.32	Ground clearance, centre of wheelbase	m2 (mm)	20 <sup>12)</sup>	20 <sup>12)</sup>	
4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	2766 (2802) <sup>4) 2) 13)</sup>	2766 (2802) <sup>4) 2) 13)</sup>	
4.34.2	Aisle width with pallet 800 x 1200 along forks	Ast (mm)	2675 (2756) <sup>4) 2) 13)</sup>	2675 (2756) <sup>4) 2) 13)</sup>	
4.35	Turning radius	Wa (mm)	1950 <sup>4)</sup>	1950 <sup>4)</sup>	
5.1	Travel speed, with/without load	(km/h)	10 / 10 <sup>14)</sup>	10 / 10 <sup>14)</sup>	
5.2	Lifting speed, with/without load	(m/s)	0.013 / 0.023 (0.064 / 0.089) <sup>2) 4)</sup>	0.013 / 0.023 (0.064 / 0.089) <sup>2) 4)</sup>	
5.3	Lowering speed, with/without load	(m/s)	0.045 / 0.032 (0.073 / 0.075) <sup>2) 4)</sup>	0.045 / 0.032 (0.073 / 0.075) <sup>2) 4)</sup>	
5.8	Maximum climbing ability, with/without load	(%)	13.0 / 20.0	13.0 / 20.0	
5.10	Service brake	Electro-magnetic		Electro-magnetic	
6.1	Drive motor rating S2 60 min	(kW)	3	3	
6.2	Lift motor rating at S3 15%	(kW)	2.2	2.2	
6.3	Battery according to DIN 43531/35/36 A,B,C,no	43 535 / B		43 535 / B	
6.4	Battery voltage/rated capacity (5h)	(V)/(Ah)	24 / 345/375	24 / 345/375	
6.5	Battery weight (± 5%)	(kg)	287	287	
6.6	Power consumption according to VDI cycle	(kWh/h)	1.01	1.01	
8.1	Type of drive unit	LAC		LAC	
10.7	Sound pressure level LpAZ (at the driver's seat)	(dB(A))	67 <sup>15)</sup>	67 <sup>15)</sup>	

1) Load distribution e.g. 800 kg on the forks, 1000 kg on the fork arms. Total load max. 1800 kg.  
 2) Figures in parenthesis with initial lift  
 3) (± 5 mm)  
 4) ± 0 mm = 3 PzS lateral, <br><br>+ 100 mm = 3 PzS vertical and 4PzS lateral, <br><br>+ 150 mm = 4 PzS vertical, <br><br>+ 225 mm = 5 PzS vertical  
 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) Reach legs 75x150x1115  
 12) (± 2 mm)  
 13) Including a 200 mm (min.) operating aisle clearance.  
 14) (± 5%)  
 15) (± 2.5)



Masts (D12 S / D12 SF) (in mm)	1574 S	1724 S	1924 S	2024 S	2124 S	1574 D	1724 D	1924 D	2024 D	2124 D
Lift	<b>h3</b>	1574	1724	1924	2024	2124	1574	1724	1924	2024
Lift + fork height	<b>h3+h13</b>	1660	1810	2010	2110	2210	1660	1810	2010	2110
Height, mast lowered	<b>h1</b>	1315	1390	1490	1540	1590	1315	1390	1490	1540
Height, mast extended	<b>h4</b>	2094	2244	2444	2544	2644	2094	2244	2444	2544
Free lift	<b>h2</b>	150	150	150	150	150	720	795	895	945

