

## Standard Equipment/Optional Equipment

### Standard Equipment

Linde OptiLift®: fully proportional lifting control on the tiller head  
 Initial lift with equalizing linkage (level compensator) on L14i, L16i  
 Soft lowering of fork carriage  
 Electric power steering  
 Linde Digital Control (LDC) with programmable operating parameters  
 Automatic speed reduction when cornering  
 Automatic braking with Linde Brake Control (LBC)

Polycarbonate/mesh mast protection  
 Cushion rubber drive wheel  
 Single polyurethane load wheels with string guard  
 Polyurethane swiveling castor wheel  
 Vertical battery change (2 & 3 PzS)  
 Battery charger cable and plug  
 Protection to -10°C

### Optional Equipment

Drive wheels: polyurethane, wet grip or treaded cushion rubber  
 Load wheels: tandem polyurethane, tandem polyurethane greasable  
 Load backrest (h=1000 mm)  
 Alternative fork dimensions  
 Different masts types and lift heights: standard, duplex, triplex  
 Ultra fast lifting for loads up to 300 kg

Side battery change (2 & 3 PzS)  
 Battery changing stand or trolley for side battery change  
 Built-in charger (vertical battery change, max. 240 Ah capacity)  
 Cold store version to -35°C  
 Other options available on request



## Electric Pallet Stackers Capacity 1400 and 1600 kg L14, L16/L14i, L16i

Series 372

### Safety

The Linde pedestrian electric pallet stacker is equipped with three independent braking systems. A special booster circuit prevents the truck rolling back when starting on a gradient. Automatic speed reduction when cornering ensures stability in operation. The rounded contours of the chassis enhance operator safety and provide excellent visibility to the fork tips.

### Performance

Rated capacities from 1,400 to 1,600 kg powered by a 3 kW lift motor is associated to an AC traction motor to ensure a superior performance and optimum productivity. The advanced chassis design and mast construction results in market leading residual capacity. The Linde OptiLift® control provides proportional lifting and lowering. The 800 mm width of the chassis allows the stacker to work easily in narrow aisle.

### Comfort

Electric power steering and the ergonomic Linde tiller make the truck very easy to manoeuvre. All controls can be operated with either hand without having to release the tiller. The low pivoting tiller arm places the operator an optimum distance from the mast for an excellent and continuous view of the load, all the way to maximum lift.

### Reliability

These rugged trucks incorporate tried and tested technology and components to ensure consistent reliability. They have already proved their ability to deliver faster, safer load handling over an extended working life in the toughest industrial environments. For heavy duty applications, twin castor wheels are available as an option.

### Service

Linde Pallet Stackers are designed to reduce maintenance costs and deliver the highest levels of productivity over many years. Fast, easy access to all components and electronics sealed in aluminium housings isolating them from road shocks, dust and humidity all play a part in ensuring maximum operational uptime ratios.

## Features

### Chassis & Mast

- Smooth, rounded contours, no sharp edges
- Heavy gauge steel chassis results in exceptional rigidity and durability
- Low, steel chassis surround protects operator's feet
- Rugged clearview mast optimizes visibility
- Wide choice of mast options

### Initial lift versions: L14i, L16i

- 125 mm of initial lift of forks, increases ground clearance increases ground clearance when operating on ramps, dock levellers or bridge plates
- The equalising linkage provides enhanced stability when turning on uneven surfaces
- A 2000 kg load can be transported using the initial lift function



### Tiller

- Operator's hands are fully protected by the sturdy profiled hand guard
- Low pivoting, centrally mounted tiller provides effortless manoeuvrability
- Tiller design places the operator a comfortable distance from the chassis when working
- All traction and lift functions are grouped on tiller head for ease of use with either hand



### Power steering

- Effortless, electric power steering for fatigue-free working
- Precise and easy manoeuvring with low pivoting, ergonomic tiller
- Automatic speed reduction when cornering guarantees stability



### Motor

- Powerful, 2,3 kW AC traction motor
- Adjustable LDC drive controller - all parameters can be customized to suit the application
- No rollback when starting on a gradient
- Max. traction speed of 6 km/h loaded as unloaded

### OptiLift® control

- OptiLift® fully proportional lift and lower control provides smooth, precise, quiet mast operation
- Slide lever control mounted centrally on tiller head
- High-performance, energy-efficient lift unit
- Soft lowering of forks protects loads

### Brakes

- Automatic braking
- On releasing the traction butterfly
- By selecting the opposite direction of travel
- By moving tiller to the fully up or down position
- Emergency brake: emergency isolator interrupts all power to the truck and actuates the electro-mechanical brake



### Batteries & chargers

- 24V batteries from 250 Ah (2PzS) to 375 Ah (3PzS)
- Vertical battery change as standard (2 & 3 PzS), side change as option
- Wide range of battery charger: standard wall-mounted type or high frequency chargers
- Optional built-in charger for all battery capacities

Linde Material Handling 

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Subject to modification in the interests of progress. Illustrations and technical details not binding for actual constructions. All dimensions subject to usual tolerances.

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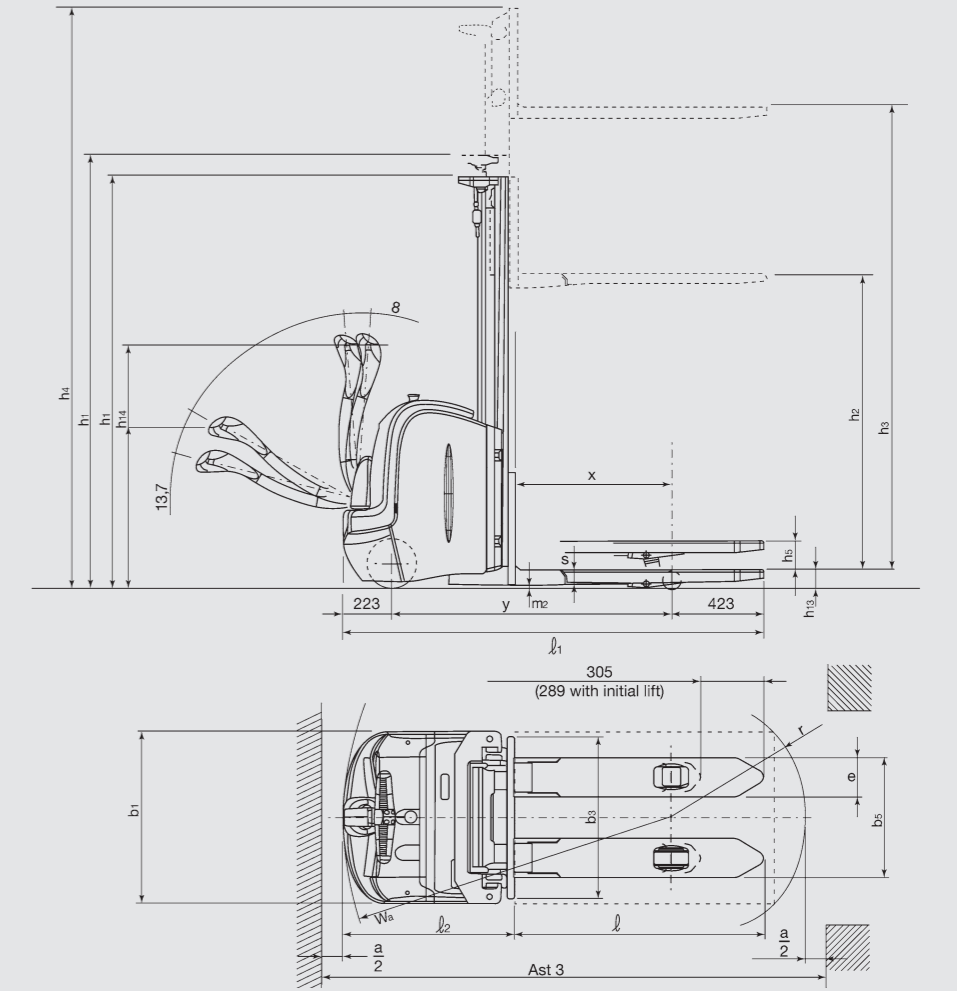
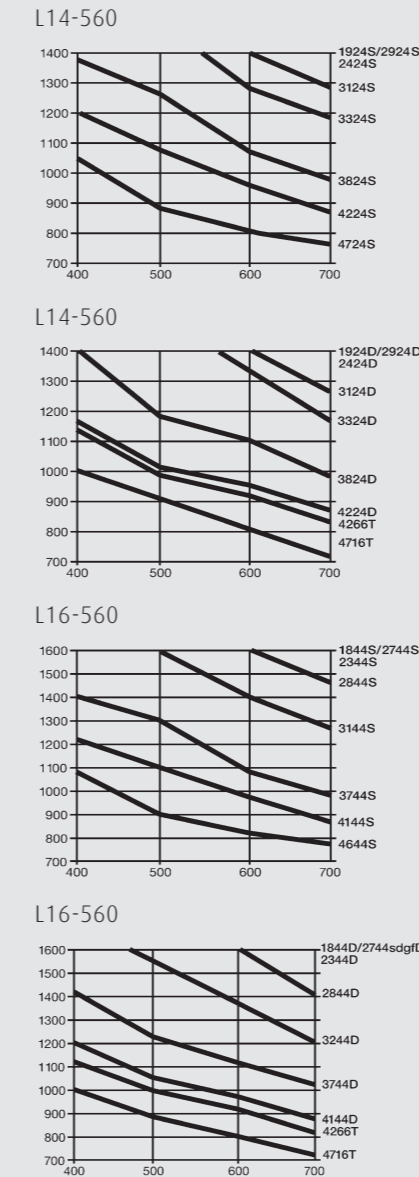
# Technical Data according to VDI 2198

Characteristics			LINDE	LINDE	LINDE	LINDE
1.1	Manufacturer		LINDE	LINDE	LINDE	LINDE
1.2	Model designation		<b>L14</b>	<b>L16</b>	<b>L14i</b>	<b>L16i</b>
1.3	Power unit		Battery	Battery	Battery	Battery
1.4	Operation		Pedestrian	Pedestrian	Pedestrian	Pedestrian
1.5	Load capacity	Q (t)	1.4	1.6	1.4 / 2.0 <sup>1)</sup>	1.6 / 2.0 <sup>1)</sup>
1.6	Load centre	c (mm)	600	600	600	600
1.8	Axle centre to fork face	x (mm)	727	727	727 (648) <sup>2)</sup>	727 (648) <sup>2)</sup>
1.9	Wheelbase	y (mm)	1304 <sup>3)</sup>	1304 <sup>3)</sup>	1304 (1225) <sup>2)3)</sup>	1304 (1225) <sup>2)3)</sup>
Weights						
2.1	Service weight	(kg)	1200 <sup>4)</sup>	1205 <sup>4)</sup>	1190 <sup>4)</sup>	1195 <sup>4)</sup>
2.2	Axle load with load, front/rear	(kg)	1006 / 1594 <sup>4)</sup>	1026 / 1779 <sup>4)</sup>	1001 / 1589 (943 / 2247) <sup>4)7)</sup>	1021 / 1774 (943 / 2252) <sup>4)7)</sup>
2.3	Axle load without load, front/rear	(kg)	870 / 330 <sup>4)</sup>	870 / 335 <sup>4)</sup>	865 / 325 <sup>4)</sup>	865 / 330 <sup>4)</sup>
Wheels/Tyres						
3.1	Tyres rubber, SE, pneumatic, polyurethane		V+P/P <sup>5)</sup>	V+P/P <sup>5)</sup>	V+P/P <sup>5)</sup>	V+P/P <sup>5)</sup>
3.2	Tyre size, front		Ø 230 x 90	Ø 230 x 90	Ø 230 x 90	Ø 230 x 90
3.3	Tyre size, rear		Ø 85 x 85 (Ø 85 x 60) <sup>6)</sup>	Ø 85 x 85 (Ø 85 x 60) <sup>6)</sup>	Ø 85 x 85 (Ø 85 x 60) <sup>6)</sup>	Ø 85 x 85 (Ø 85 x 60) <sup>6)</sup>
3.4	Auxiliary wheels (dimensions)		Ø 150 x 50	Ø 150 x 50	Ø 150 x 50	Ø 150 x 50
3.5	Wheels, number front/rear (x = driven)		1x + 1 / 2 (1x + 1 / 4) <sup>6)</sup>	1x + 1 / 2 (1x + 1 / 4) <sup>6)</sup>	1x + 1 / 2 (1x + 1 / 4) <sup>6)</sup>	1x + 1 / 2 (1x + 1 / 4) <sup>6)</sup>
3.6	Track width, front	b10 (mm)	530	530	530	530
3.7	Track width, rear	b11 (mm)	380	380	380	380
Dimensions						
4.2	Height of mast, lowered	h1 (mm)	1990	1990	1990	1990
4.3	Free lift	h2 (mm)	150	150	150	150
4.4	Lift	h3 (mm)	2924	2844	2924	2844
4.5	Height of mast, extended	h4 (mm)	3460	3380	3460	3380
4.6	Initial lift	h5 (mm)	-	-	110	110
4.9	Height of tiller arm in operating position, min/max	h14 (mm)	750 / 1126	750 / 1126	750 / 1126	750 / 1126
4.15	fork height, lowered	h13 (mm)	86	86	86	86
4.19	Overall length	l1 (mm)	1950 <sup>9)</sup>	1950 <sup>9)</sup>	1950 <sup>9)</sup>	1950 <sup>9)</sup>
4.20	Length to fork face	l2 (mm)	800 <sup>9)</sup>	800 <sup>9)</sup>	800 <sup>9)</sup>	800 <sup>9)</sup>
4.21	Overall width	b1/b2 (mm)	800	800	800	800
4.22	Fork dimensions	s/e/l (mm)	71 x 180 x 1150 <sup>7)</sup>	71 x 180 x 1150 <sup>7)</sup>	71 x 180 x 1150 <sup>7)</sup>	71 x 180 x 1150 <sup>7)</sup>
4.24	Width of fork carriage	b3 (mm)	780	780	780	780
4.25	Fork spread, min/max	b5 (mm)	560 / 680	560 / 680	560 / 680	560 / 680
4.26	Width between reach legs	b4 (mm)	255 / 375	255 / 375	255 / 375	255 / 375
4.32	Ground clearance, centre of wheelbase	m2 (mm)	30	30	20 (145) <sup>9)</sup>	20 (145) <sup>9)</sup>
4.33	Aisle width with pallet 1000 x 1200 across forks	Ast (mm)	2474 (2088) <sup>8)9)</sup>	2474 (2088) <sup>8)9)</sup>	2474 (2088) / 2432 (2088) <sup>10)</sup>	2474 (2088) / 2432 (2088) <sup>10)</sup>
4.34	Aisle width with pallet 800 x 1200 along forks	Ast (mm)	2434 (2288) <sup>8)9)</sup>	2434 (2288) <sup>8)9)</sup>	2434 (2288) / 2418 (2288) <sup>10)</sup>	2434 (2288) / 2418 (2288) <sup>10)</sup>
4.35	Turning radius	Wa (mm)	1615	1615	1615 (1537)	1615 (1537)
Performance						
5.1	Travel speed, with/without load	(km/h)	6 / 6 <sup>12)</sup>	6 / 6 <sup>12)</sup>	6 / 6 <sup>12)</sup>	6 / 6 <sup>12)</sup>
5.2	Lifting speed, with/without load	(m/s)	0.16 / 0.25 (0.4) <sup>13)</sup>	0.14 / 0.22 (0.37) <sup>13)</sup>	0.16 / 0.25 (0.4) <sup>13)</sup>	0.14 / 0.22 (0.37) <sup>13)</sup>
5.3	Lowering speed, with/without load	(m/s)	0.45 / 0.45	0.4 / 0.35	0.45 / 0.45	0.4 / 0.35
5.8	Maximum climbing ability, with/without load	(%)	11.0 / 24.0	10.0 / 24.0	11.0 (8.0) / 24.0	10.0 (8.0) / 24.0
5.10	Service brake		electric/mechanic	electric/mechanic	electric/mechanic	electric/mechanic
Drive						
6.1	Drive motor, 60 minute rating	(kW)	2.3	2.3	2.3	2.3
6.2	Lift motor rating at S3 15%	(kW)	3	3	3	3
6.3	Battery according to DIN 43531/35/36 A,B,C,no		43 535 / B	43 535 / B	43 535 / B	43 535 / B
6.4	Battery voltage/rated capacity (5h)	(V/Ah)	24 / 250	24 / 250	24 / 250	24 / 250
6.5	Battery weight (± 5%)	(kg)	212	212	212	212
6.6	Power consumption according to VDI cycle	(kWh/h)	1,36	1,36	1,36	1,36
Others						
8.1	Type of drive control		LAC mit Mikroprozessor	LAC mit Mikroprozessor	LAC mit Mikroprozessor	LAC mit Mikroprozessor
8.4	Noise level at operator's ear	(dB(A))	< 72.0	< 72.0	< 72.0	< 72.0

1) Load distribution e.g. 1000 kg on the forks, 1000 kg on the fork arms. Total load max. 2000 kg.  
 2) Figures in parenthesis with initial lift  
 3) ± 0 mm = 2 PzS vertical; <br/> + 75 mm = 3 PzS vertical and 3PzS lateral  
 4) Figures with battery, see line 6.4/6.5.  
 5) Solid rubber + polyurethane / polyurethane  
 6) Figures in parenthesis with tandem load wheels.  
 7) (55x180x1150) Option Post pallet FC  
 8) Calculated with the VDI 2198 (VDI 3597)

9) Including a 200 mm (min.) operating aisle clearance.  
 10) without/with initial lift  
 11) With creep speed = tiller in vertical position  
 12) (± 5%)  
 13) figures in parenthesis for optional ultra fast lift

## Load Capacity Diagrams



Mast (in mm)	L14	1924 S	2424 S	2924 S	3324 S	3824 S	4224 S	4724 S	1924 D	2424 D	2924 D	3324 D	3824 D	4224 D	4266 T	4716 T
Lift	<b>h3</b>	1924	2424	2924	3324	3824	4224	4724	1924	2424	2924	3324	3824	4224	4266	4716
Lift + fork height	<b>h3+h13</b>	2010	2510	3010	3410	3910	4310	4810	2010	2510	3010	3410	3910	4310	4352	4802
Height lowered	<b>h1</b>	1490	1740	1990	2190	2440	2540	2890	1415	1665	1915	2115	2365	2565	1915	2065
Height extended	<b>h4</b>	2460	2960	3460	3860	4360	4760	5260	2460	2960	3460	3860	4360	4760	4802	5252
Free lift	<b>h2</b>	150	1912	150	150	150	150	150	862	1212	1462	1662	1912	2112	1379	1529

Mast (in mm)	L16	1844 S	2344 S	2844 S	3244 S	3744 S	4144 S	4644 S	1844 D	2344 D	2844 D	3344 D	3744 D	4144 D	4266 T	4716 T
Lift	<b>h3</b>	1844	2344	2844	3244	3744	4144	4644	1844	2344	2844	3244	3744	4144	4266	4716
Lift + fork height	<b>h3+h13</b>	1930	2430	2930	3330	3830	4230	4730	1930	2430	2930	3330	3830	4230	4352	4802
Height lowered	<b>h1</b>	1490	1740	1990	2190	2440	2640	2890	1415	1665	1915	2115	2365	2565	1915	2065
Height extended	<b>h4</b>	2380	2880	3380	3780	4280	4680	5180	2380	2880	3380	3780	4280	4680	4760	5252
Free lift	<b>h2</b>	150	150	150	150	150	150	150	879	1129	1379	1579	1829	2029	1379	1529

Other mast on request