



Pallet Stackers

L14 – L16 SP

Capacity 1.4 t – 1.6 t | Series 1177

PB ION H₂

Flexible lifting talent

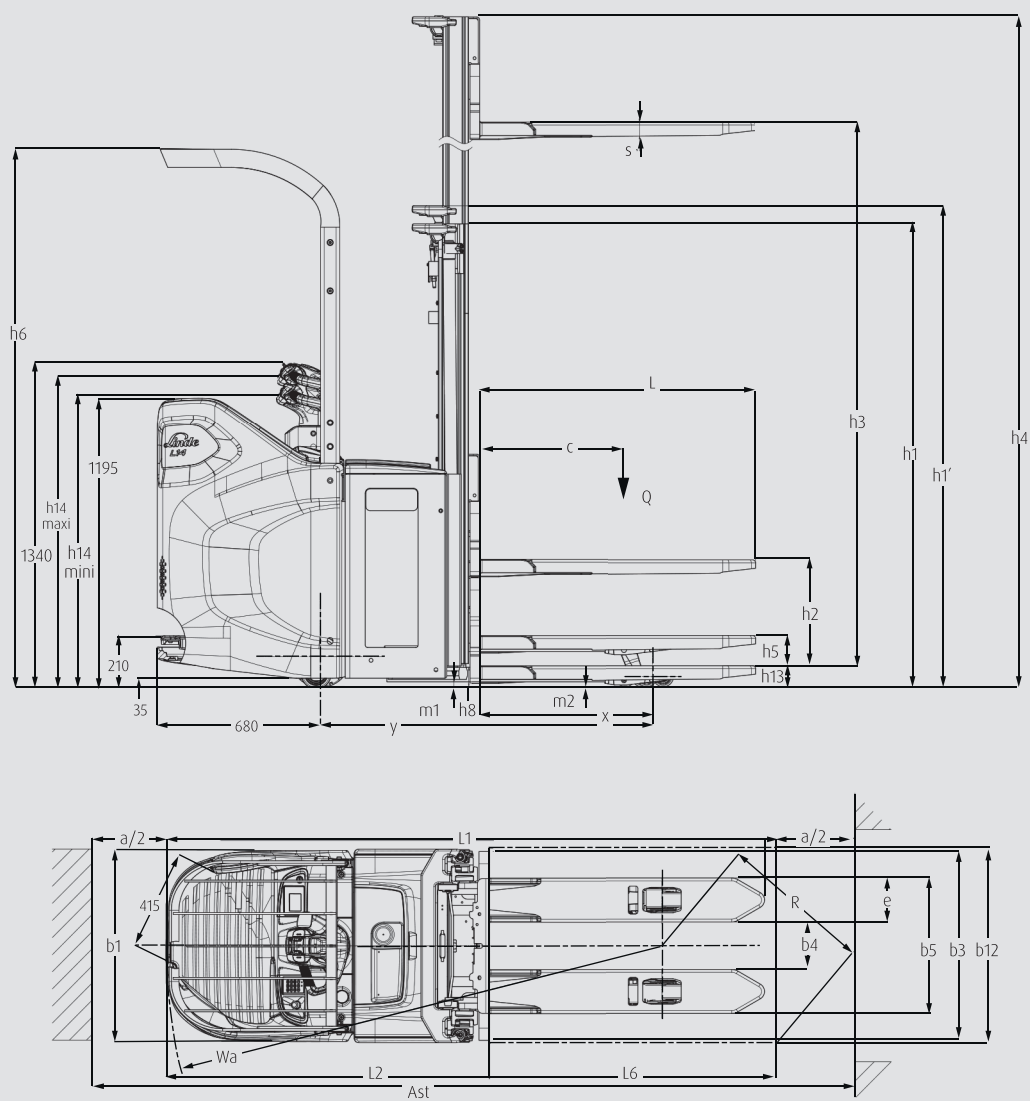
- Versatile pallet stacker for storage and retrieval at a height of up to 5.3 metres and for longer transport journeys
- Solid steel skirt around the standing platform for effective protection in case of collision
- Unique platform concept with standing position at 45° angle and Linde e-driver control for better all-round vision and an ergonomic posture
- Linde OptiLift assistance system for precise mast control and energy-efficient load handling
- Innovative castor wheel concept for maximum stability when storing and retrieving at height

TECHNICAL DATA (according to VDI 2198)

Characteristics	1.1	Manufacturer (abbreviation)		Linde MH	Linde MH
	1.2	Manufacturer's type designation		L14 SP	L16 SP
	1.2a	Series		1177-00	1177-00
	1.3	Drive		Battery	Battery
	1.4	Operation		Stand on	Stand on
	1.5	Rated capacity/rated load	Q (t)	1.4/(2.0) ¹⁾	1.6/(2.0) ¹⁾
	1.6	Load centre distance	c (mm)	600	600
	1.8	Load distance, centre of drive axle to fork	x (mm)	654/724 ²⁾³⁾	654/724 ²⁾³⁾
	1.9	Wheelbase	y (mm)	1316/1386 ²⁾³⁾	1316/1386 ²⁾³⁾
Weight	2.1	Service weight	kg	1600 ³⁾⁶⁾	1600 ³⁾⁶⁾
	2.2	Axle loading, laden front/rear	kg	1237/1763 ³⁾⁶⁾	1246/1954 ³⁾⁶⁾
	2.3	Axle loading, unladen front/rear	kg	1180/420 ⁵⁾⁶⁾	1180/420 ⁵⁾⁶⁾
Tyres/chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane	Polyurethane
	3.2	Tyre size, front		Ø 254 × 102	Ø 254 × 102
	3.3	Tyre size, rear		Ø 85 × 85 (2x Ø 85 × 60) ⁷⁾	Ø 85 × 85 (2x Ø 85 × 60) ⁷⁾
	3.4	Additional wheels (dimensions)		2x Ø 140 × 50	2x Ø 140 × 50
	3.5	Wheels, number front/rear (x = driven wheels)		1x + 1/2 (1x + 1/4) ⁷⁾	1x + 1/2 (1x + 1/4) ⁷⁾
	3.6	Tread, front	b10 (mm)	491 ²⁾	491 ²⁾
	3.7	Tread, rear	b11 (mm)	380/500 ²⁾	380/500 ²⁾
Dimensions	4.2	Mast height, lowered	h1 (mm)	2265 ²⁾	2265 ²⁾
	4.3	Free lift	h2 (mm)	1745 ²⁾	1745 ²⁾
	4.4	Lift	h3 (mm)	5316 ²⁾	5316 ²⁾
	4.5	Mast height, extended	h4 (mm)	5836 ²⁾	5836 ²⁾
	4.6	Initial lift	h5 (mm)	115 ⁸⁾	115 ⁸⁾
	4.7	Height of overhead guard (cabin)	h6 (mm)	2224 ²⁾	2224 ²⁾
	4.9	Height drawbar in driving position min./max.	h14 (mm)	1207/1287 ²⁾	1149/1357 ²⁾
	4.10	Height of wheel arms	h8 (mm)	80 ⁹⁾	80 ⁹⁾
	4.15	Height, lowered	h13 (mm)	86 ⁹⁾	86 ⁹⁾
	4.19	Overall length	l1 (mm)	2494 ²⁾	2467 ²⁾
	4.20	Length to fork face	l2 (mm)	1347 ²⁾	1347 ²⁾
	4.21	Overall width	b1/b2 (mm)	800 ²⁾	800 ²⁾
	4.22	Fork dimensions DIN ISO 2331	s/e/l (mm)	71/180/1150 ¹⁰⁾	71/180/1150 ¹⁰⁾
	4.24	Fork carriage width	b3 (mm)	780 ²⁾	780 ²⁾
	4.25	Fork spread	b5 (mm)	560/680 ²⁾	560/680 ²⁾
	4.26	Distance between wheel arms/loading surfaces	b4 (mm)	196/316 ²⁾	196/316 ²⁾
	4.31	Ground clearance, laden, below mast	m1 (mm)	135/20 ³⁾	135/20 ³⁾
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	135/20 ³⁾	135/20 ³⁾
	4.34.1	Aisle width for pallets 1000 × 1200 crossways	Ast (mm)	2894/2931 ³⁾⁴⁾¹¹⁾	2894/2931 ³⁾⁴⁾¹¹⁾
	4.34.2	Aisle width with pallet 800 × 1200 lengthways	Ast (mm)	2878/2893 ³⁾⁴⁾¹¹⁾	2878/2893 ³⁾⁴⁾¹¹⁾
Performance	4.35	Turning radius	Wa (mm)	2001/2071 ³⁾⁴⁾	2001/2071 ³⁾⁴⁾
	5.1	Travel speed, laden/unladen	km/h	9.5/9.5 ²⁾	9.5/9.5 ²⁾
	5.2	Lifting speed, laden/unladen	m/s	0.19/0.32 (0.57/0.89) ⁶⁾¹³⁾	0.19/0.32 (0.57/0.89) ⁶⁾¹³⁾
	5.3	Lowering speed, laden/unladen	m/s	0.39/0.4 (0.68/0.72) ⁶⁾¹³⁾	0.39/0.4 (0.68/0.72) ⁶⁾¹³⁾
	5.8	Max. gradeability, laden/unladen	%	8.0/15.0	8.0/15.0
	5.9	Acceleration time, laden/unladen	s	6.0/5.1	6.0/5.1
	5.10	Service brake		electric/mechanic	electric/mechanic
Electric-engine	6.1	Drive motor rating at S2 60 min	kW	3	3
	6.2	Lift motor rating at S3 15%	kW	3.2	3.2
	6.3	Battery according to DIN 43531/35/36 A,B,C,no		43 535 B/3PzS	43 535 B/3PzS
	6.4	Battery voltage/nominal capacity (5h)	(V)/(Ah) o. kWh	24/375	24/375
	6.5	Battery weight (±5%)	kg	333	333
	6.6	Energy consumption according to DIN EN 16796	kWh/h	0.97	1.09
	6.6.1	CO2 equivalent according to EN 16796	kg/h	0.52	0.59
	6.7	Turnover output according to VDI 2198	t/h	62.0	70.0
	6.8	Turnover efficiency according to VDI 2198	t/kWh	33	35
Drive	8.1	Type of drive unit		AC control	AC control
Additional data	10.7	Sound pressure level LpAZ (at the operator's seat)	dB(A)	67	67

- 1) Load distribution, e.g. 1000 kg on the forks, 1000 kg on the fork arms, total load max. 2000 kg) (±5 mm)
- 2) Load arms upraised/lowered
- 3) Load arms upraised/lowered
- 4) -75 mm = 2 PzS vertical; ±0 mm = 3 PzS vertical or side change; +75 mm 4PzS side change
- 5) Figures with battery, see line 6.4/6.5.
- 6) (±10%)
- 7) Figures in parenthesis with tandem load wheels
- 8) (0/-5 mm)
- 9) (0/+5 mm)
- 10) Reach legs 75 × 150 × 1115 mm
- 11) Including a 200 mm (min.) opening aisle clearance
- 12) (±5%)
- 13) Figures in parenthesis with initial lift

L14-L16 SP



MAST TABLES

STANDARD MAST (in mm)

Lift	h3: 1844	h3: 2344	h3: 2844	h3: 3244	h3: 3744	h3: 4144	h3: 4644
Height measurements	h1: 1415 h2: 150 h4: 2364 h1': 1490	h1: 1665 h2: 150 h4: 2364 h1': 1740	h1: 1915 h2: 150 h4: 3364 h1': 1990	h1: 2115 h2: 150 h4: 3764 h1': 2190	h1: 2365 h2: 150 h4: 4264 h1': 2440	h1: 2565 h2: 150 h4: 4664 h1': 2640	h1: 2815 h2: 150 h4: 5164 h1': 2890
Manufacturer's type designation							
L14 SP	○	○	○	○	○	○	○
L16 SP	○	○	○	○	○	○	○

DUPLEX MAST (in mm)

Lift	h3: 1844	h3: 2344	h3: 2844	h3: 3244	h3: 3744	h3: 4144
Height measurements	h1: 1415 h2: 895 h4: 2364 h1': -	h1: 1665 h2: 1145 h4: 2864 h1': -	h1: 1915 h2: 1395 h4: 3364 h1': -	h1: 2115 h2: 1595 h4: 3764 h1': -	h1: 2365 h2: 1845 h4: 4264 h1': -	h1: 2565 h2: 2045 h4: 4664 h1': -
Manufacturer's type designation						
L14 SP	○	○	○	○	○	○
L16 SP	○	○	○	○	○	○

TRIPLEX MAST (in mm)

Lift	h3: 3516	h3: 4266	h3: 4716	h3: 5316
Height measurements	h1: 1665 h2: 1145 h4: 4036 h1': -	h1: 1915 h2: 1395 h4: 4786 h1': -	h1: 2065 h2: 1542 h4: 5236 h1': -	h1: 2265 h2: 1745 h4: 5836 h1': -
Manufacturer's type designation				
L14 SP	○	○	○	○
L16 SP	○	○	○	○

- h1: Height of mast, lowered

h2: Free lift

h3: Lift
- h4: Height of mast, extended

h1': Height of mast, with initial lift (+75 mm)

○ Optional equipment

STANDARD AND OPTIONAL EQUIPMENT

Manufacturer's type designation/equipment		L14 SP	L16 SP
Safety	Automatic speed reduction when cornering	●	●
	Key switch	●	●
	Log in PIN code	○	○
	Unique, safe and intuitive 45° operating position	●	●
	Linde BlueSpot – optical warning signal for pedestrians and drivers	○	○
	Foot detection sensor – truck slows down or stops if operator's foot is detected outside of the platform contours	○	○
Service	CAN bus technology	●	●
Digitalisation	Data transmission online		
	Data transmission Wifi		
	Linde connect:desk – local fleet management with different functional modules	○	○
	Linde connect:cloud – fleet management as a service (hosted version)	○	○
	Linde Pre-Op Check App – individualisable daily check protocol for operational readiness	○	○
Operation/load handling	Initial lift	○	○
	Ultra-fast lifting	○	○
	Soft landing on forks	○	○
	Low speed if initial lift lowered	○	○
	Maximum operating speed limitation (8 or 10 km/h)	○	○
	Load backrest h = 1000 mm	○	○
	Overhead guard	○	○
Environment	Coldstore -35°C (in/out) – with grid or standard floor mat	○	○
Workplace	Fully suspended operator compartment – both feet platform and steering unit are suspended	●	●
	Padded leg rest and backrest	●	●
	Twin-grip handlebar	●	●
	Innovative Linde e-driver control perfectly suited for operation at a 45° angle in standing position	○	○
	Height adjustable steering unit	○	○
	Multi-function coloured display hour meter, maintenance indication, battery discharge indicator and internal fault code indication	●	●
	Accessory support	○	○
	Support for data terminal and power supply cable 24 V	○	○
	Scanner support and clipboard	○	○
	Electrical socket USB 5 V	○	○
Mast	Standard	○	○
	Duplex	○	○
	Triplex	○	○
	Mast protection: mesh	○	○
Attachment/forks	Width over fork carriage 560 mm with fork length 950 mm or 1150 mm	○	○
	Width over fork carriage 680 mm with fork length 1150 mm	○	○
Axles and tyres	Drive wheel heavy duty, polyurethane non-marking	●	●
	Drive wheel high grip, polyurethane non-marking	○	○
	Drive wheel rubber	○	○
	Single load wheel, polyurethane	●	●
	Tandem load wheel, polyurethane (also available in greasable version)	○	○
	Double castor wheel (also available in greasable version)	●	●
Drive and brake system	Power steering	●	●
	Maintenance-free AC motor	●	●
	Electromagnetic braking system (or electromechanic)	●	●
	Li-ION and lead-acid technology available with different battery capacities depending on the model	○	○
	Integrated charger for lead-acid and Li-ION batteries	○	○
	External chargers available	○	○
Lighting	Working lamp – with on/off switch for operation in dark environments	○	○

● Standard equipment

○ Optional equipment

CHARACTERISTICS



Operator remains safe within the chassis contours

Safety

- Solid steel apron around the standing platform protects the operator from injury in the event of collision
- Optimised visibility through the mast for safe load handling
- Dead man's switch and traction control for the highest possible safety in every work situation
- Optional foot detection can also slow down or bring the vehicle to a smooth stop when operator's feet leave the platform
- Automatic braking when cornering to prevent risky operating manoeuvres



Ergonomic, height-adjustable tiller

Ergonomics

- Linde OptiLift assistance system for precise control of mast functions and energy-saving load handling, even at high working speeds
- Electric power steering with adjustable steering resistance for effortless vehicle control in any work situation
- Fully decoupled and suspended operator platform to protect the operator from vibrations and shocks
- Unique design with 45° standing position and innovative steering concept Linde e-driver for optimum all-round vision without straining the back and neck
- Workstation with multifunction display and storage compartments for work utensils and personal items (optional)



Precise handling and easy manoeuvrability

Handling

- High lifting speeds for maximum handling performance
- Ergonomic tiller with all control functions (traction motor, initial stroke, horn, etc.) for effortless vehicle handling
- High residual capacities for efficient and safe stacking and transport of large loads
- Initial lift function for better load handling on slopes, ramps or uneven ground (optional)
- Soft-landing function to protect the load from damage by gently setting down the forks



Easy access to all data with multi-function display

Service

- Maintenance-free three-phase motor for long service intervals and permanently low maintenance costs
- Solid construction with durable parts and sturdy chassis for maximum vehicle availability
- Effortless accessibility of all relevant components thanks to consistent design-to-service principle
- Innovative CAN bus architecture for easy access to all vehicle data via diagnostic connector
- Modern E/E architecture allows remote installation of updates and new functions

Presented by:

Subject to modification in the interest of progress. Illustrations and technical details could include options and are not binding for actual constructions. All dimensions subject to usual tolerances.



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