



Pallet Stackers

L14 – L20 AP

Capacity 1.4 t - 2.0 t | Series 1173

On a padded platform

- Powerful 2.3 kW motor and high load capacities increase handling performance for loads up to 2000 kilograms
- Control elements on the tiller head allow for intuitive operation
- Electric power steering enables effortless control
- Linde Load Control for precise load handling

TECHNICAL DATA (According to VDI 2198)

	Characteristics					
	1.1	Manufacturer		LINDE MH	LINDE MH	LINDE MH
	1.2	Manufacturer's type designation		L14 AP	L16 AP	L20 AP
	1.2a	Series		1173-01	1173-01	1173-01
	1.3	Power unit		Battery	Battery	Battery
	1.4	Operation		Pedestrian	Pedestrian	Pedestrian
	1.5	Load capacity/Load	Q (t)	1.4 ¹⁾	1.6 ¹⁾	2.0 ¹⁾
	1.6	Load centre distance	c (mm)	600	600	600
	1.8	Axle centre to fork face	x (mm)	724 [646] ^{2) 3)}	724 [646] ^{2) 3)}	724 [646] ^{2) 3)}
	1.9	Wheelbase	y (mm)	1311 [1233] ^{2) 3) 4) 5)}	1311 [1233] ^{2) 3) 4) 5)}	1425 [1347] ^{2) 3) 4) 5)}
		2.1	Service weight	kg	1150 ^{5) 6)}	1150 ^{5) 6)}
2.2		Axle load with load, front/rear	kg	917/1633 ^{5) 6)}	936/1814 ^{5) 6)}	1336/2394 [1326/2344] ^{2) 5) 6)}
2.3		Axle load without load, front/rear	kg	785/365 ^{5) 6)}	785/365 ^{5) 6)}	1162/568 [1152/518] ^{2) 5) 6)}
	3.1	Tyres rubber, SE, pneumatic, polyurethane		R+P/P ⁷⁾	R+P/P ⁷⁾	R+P/P ⁷⁾
	3.2	Tyre size, front		Ø 230 × 90	Ø 230 × 90	Ø 230 × 90
	3.3	Tyre size, rear		Ø 85 × 85 (Ø 85 × 60) ⁸⁾	Ø 85 × 85 (Ø 85 × 60) ⁸⁾	Ø 85 × 85 [105] (Ø 85 × 60 [80]) ^{2) 8)}
	3.4	Auxiliary wheels (dimensions)		2x Ø 140 × 50	2x Ø 140 × 50	2x Ø 140 × 50
	3.5	Wheels, number front/rear (x = driven)		1x + 2/2 (1x + 2/4) ⁸⁾	1x + 2/2 (1x + 2/4) ⁸⁾	1x + 2/2 (1x + 2/4) ⁸⁾
	3.6	Track width, front	b10 (mm)	534 ³⁾	534 ³⁾	534 ³⁾
	3.7	Track width, rear	b11 (mm)	380 ³⁾	380 ³⁾	370 ³⁾
	4.2	Height of mast, lowered	h1 (mm)	1915 ³⁾	1915 ³⁾	1915 ³⁾
	4.3	Free lift	h2 (mm)	150 ³⁾	150 ³⁾	150 ³⁾
	4.4	Lift	h3 (mm)	2844 ³⁾	2844 ³⁾	2684 ³⁾
	4.5	Height of mast, extended	h4 (mm)	3364 ³⁾	3364 ³⁾	3284 ³⁾
	4.6	Initial lift	h5 (mm)	0 [125] ²⁾	0 [125] ²⁾	0 [125] ²⁾
	4.9	Height of tiller arm in operating position, min/max	h14 (mm)	1163/1306	1163/1306	1163/1306
	4.15	Height, lowered	h13 (mm)	86 ³⁾	86 ³⁾	86 ³⁾
	4.19	Overall length	l1 (mm)	2057 (2390) ^{3) 4) 9)}	2057 (2390) ^{3) 4) 9)}	2172 (2505) ^{3) 4) 9)}
	4.20	Length to fork face	l2 (mm)	907 (1240) ^{3) 4) 9)}	907 (1240) ^{3) 4) 9)}	1022 (1355) ^{3) 4) 9)}
	4.21	Overall width	b1/b2 (mm)	800 ³⁾	800 ³⁾	810 ³⁾
	4.22	Fork dimensions DIN ISO 2331	s/e/l (mm)	71 × 180 × 1150	71 × 180 × 1150	73 × 210 × 1150
	4.24	Width of fork carriage	b3 (mm)	780 ³⁾	780 ³⁾	780 ³⁾
	4.25	Fork spread	b5 (mm)	560/680 ³⁾	560/680 ³⁾	580 ³⁾
	4.26	Distance between wheel arms/loading surfaces	b4 (mm)	255/375 ³⁾	255/375 ³⁾	230 ³⁾
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	30 [20/140] ^{2) 10) 11)}	30 [20/140] ^{2) 10) 11)}	14 [20/115] ^{2) 10) 11)}
	4.34.1	Aisle width for pallets 1000 × 1200 crossways	Ast (mm)	2617 (2900) [2539 (2746)] ^{2) 4) 9) 12) 13) 14)}	2617 (2900) [2539 (2746)] ^{2) 4) 9) 12) 13) 14)}	2731 (3014) [2653 (2860)] ^{2) 4) 9) 12) 13) 14)}
	4.34.2	Aisle width with pallet 800 × 1200 along forks	Ast (mm)	2503 (2786) [2425 (2708)] ^{2) 4) 9) 12) 13) 14)}	2503 (2786) [2425 (2708)] ^{2) 4) 9) 12) 13) 14)}	2617 (2900) [2539 (822)] ^{2) 4) 9) 12) 13) 14)}
4.35	Turning radius	Wa (mm)	1681 ^{4) 15)}	1681 ^{4) 15)}	1795 ^{4) 21)}	
	5.1	Travel speed, with/without load	km/h	4/4 6/6 (8/10) ^{9) 16)}	4/4 6/6 (8/10) ^{9) 16)}	4/4 6/6 (7.5/10) ^{9) 16)}
	5.2	Lifting speed, with/without load	m/s	0.16/0.3 (0.4) ^{6) 17)}	0.15/0.3 (0.4) ^{6) 17)}	0.12/0.25 (0.35) ^{6) 17)}
	5.3	Lowering speed, with/without load	m/s	0.4/0.35 ⁶⁾	0.45/0.35 ⁶⁾	0.35/0.25 ⁶⁾
	5.8	Maximum climbing ability, with/without load	%	10.0/24.0	10.0/24.0	8.0/24.0
	5.10	Service brake		Electric	Electric	Electric
	6.1	Drive motor rating S2 60 min	kW	2.3	2.3	2.3
	6.2	Lift motor rating at S3 15%	kW	3.2	3.2	3.2
	6.3	Battery according to DIN 43531/35/36 A,B,C,no		43 535 B/2PzS	43 535 B/2PzS	43 535 B/3PzS
	6.4	Battery voltage/rated capacity (5 h)	(V)/(Ah) o. kWh	24/250	24/250	24/375
	6.5	Battery weight (±5%)	kg	197/230 ¹⁸⁾	197/230 ¹⁸⁾	272/315 ¹⁸⁾
	6.6	Power consumption according to VDI cycle	kWh/h	-	-	1.52
	6.6	Energy consumption according to DIN EN 16796	kWh/h	1.02	1.12	-
	6.6.1	CO ₂ equivalent according to EN 16796	kg/h	0.55	0.61	-
	6.7	Turnover output according to VDI 2198	t/h	63.0 ¹⁹⁾	70.4 ²⁰⁾	-
6.8	Turnover efficiency according to VDI 2198	t/kWh	34	38	-	
	8.1	Type of drive unit		LAC	LAC	LAC
	10.7	Sound pressure level LpAZ (at the driver's seat)	dB(A)	< 66	< 66	< 66

1) 2000 kg on the load arms (initial lift)

2) [with initial lift]

3) (±5 mm)

4) ±0 mm = 2 PzS vertical; + 75 mm = 3 PzS vertical or side change; + 150 mm = 4 PzS side change or Li-ION 205/410 Ah

5) Figures with battery, see line 6.4/6.5.

6) (±10%)

7) Solid rubber + polyurethane/polyurethane

8) Figures in parenthesis with tandem load wheels

9) Values in parenthesis refer to lowered Rider platform

10) Without/with Initial lift

11) (±2 mm)

12) With creep speed = tiller in vertical position

13) Including a 200 mm (min.) operating aisle clearance

14) (±20 mm)

15) with lowered Rider platform Wa = 1964 mm, with initial lift Wa = 1603 mm, with initial lift and lowered Rider platform Wa = 1886 mm

16) (±5%)

17) figures in parenthesis for optional „Lift Speed

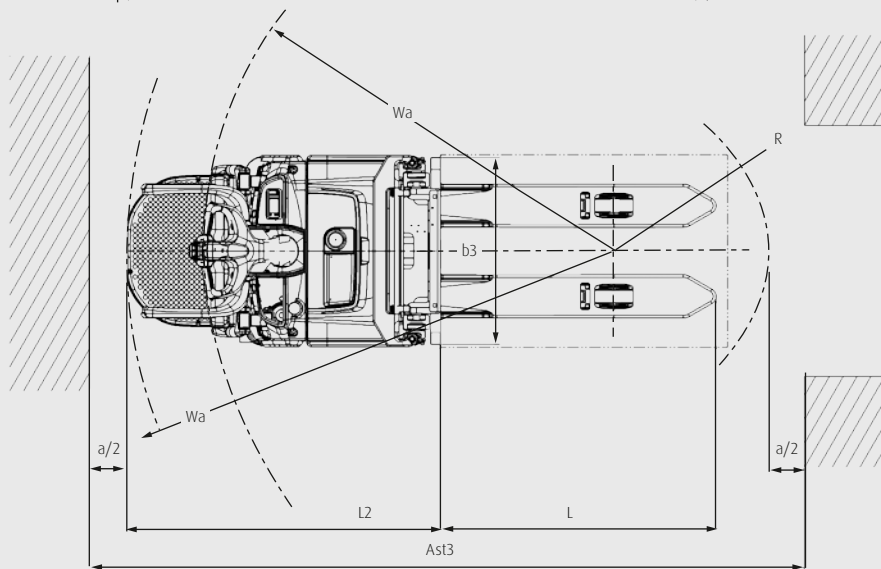
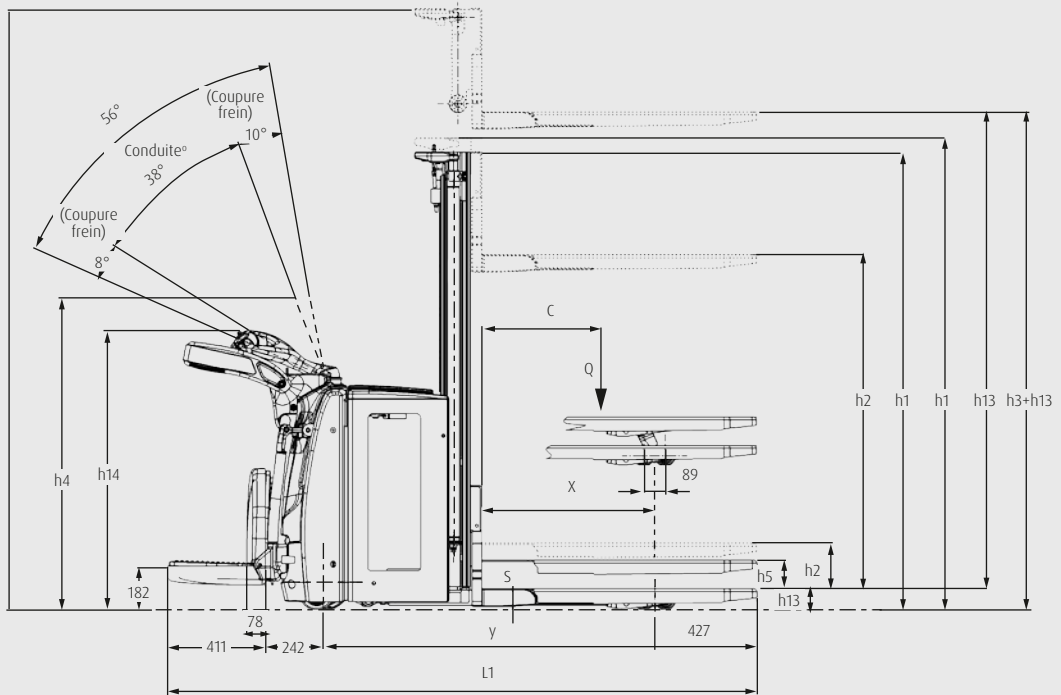
Booster“

18) min./max.

19) CO₂ Equivalent 1,0 kg/h

20) CO₂ Equivalent 1,03 kg/h

21) with lowered Rider platform Wa = 2078 mm, with initial lift Wa = 1717 mm, with initial lift and lowered Rider platform Wa = 2000 mm



b1

MAST TABLES

STANDARD MAST (in mm)

Lift	h3: 1844	h3: 2344	h3: 2684	h3: 2844	h3: 3084
Height Measurements	h1: 1415 h1#: 1490 h2: 150 h3: 1844 h4: 2364 h3 + h13°: 1930	h1: 1665 h1#: 1740 h2: 150 h3: 2344 h4: 2864 h3 + h13°: 2430	h1: 1915 h1#: 1990 h2: 150 h3: 2684 h4: 3284 h3 + h13°: 2770	h1: 1915 h1#: 1990 h2: 150 h3: 2844 h4: 3364 h3 + h13°: 2930	h1: 2115 h1#: 2190 h2: 150 h3: 3084 h4: 3684 h3 + h13°: 3170
Model					
L14 AP	○	○	—	○	—
L16 AP	○	○	—	○	—
L20 AP	—	—	○	—	○

STANDARD MAST (in mm)

Lift	h3: 3244	h3: 3584	h3: 3744	h3: 4144	h3: 4644
Height Measurements	h1: 1415 h1#: 1490 h2: 150 h3: 1844 h4: 2502 h3 + h13°: 1930	h1: 2365 h1#: 2440 h2: 150 h3: 3584 h4: 4184 h3 + h13°: 3670	h1: 2365 h1#: 2440 h2: 150 h3: 3744 h4: 4264 h3 + h13°: 3830	h1: 2565 h1#: 2640 h2: 150 h3: 4144 h4: 4664 h3 + h13°: 4230	h1: 2815 h1#: 2890 h2: 150 h3: 4644 h4: 5164 h3 + h13°: 4730
Model					
L14 AP	○	—	○	○	○
L16 AP	○	—	○	○	○
L20 AP	—	○	—	—	—

DUPLEX MAST (in mm)

Lift	h3: 1844	h3: 2344	h3: 2684	h3: 2844	h3: 3084
Height Measurements	h1: 1415 h1#: - h2: 895 h3: 1844 h4: 2364 h3 + h13°: 1930	h1: 1665 h1#: - h2: 1145 h3: 2344 h4: 2864 h3 + h13°: 2430	h1: 1915 h1#: - h2: 1315 h3: 2684 h4: 3284 h3 + h13°: 2770	h1: 1915 h1#: 1915 h2: 1395 h3: 2844 h4: 3364 h3 + h13°: 2930	h1: 2115 h1#: - h2: 1515 h3: 3084 h4: 3684 h3 + h13°: 3170
Model					
L14 AP	○	○	—	○	—
L16 AP	○	○	—	○	—
L20 AP	—	—	○	—	○

DUPLEX MAST (in mm)

Lift	h3: 3244	h3: 3584	h3: 3744	h3: 4144
Height Measurements	h1: 2115 h1#: 2115 h2: 1595 h3: 3244 h4: 3764 h3 + h13°: 3330	h1: 2365 h1#: - h2: 1765 h3: 3584 h4: 4184 h3 + h13°: 3670	h1: 2365 h1#: 2365 h2: 1845 h3: 3744 h4: 4264 h3 + h13°: 3830	h1: 2565 h1#: 2565 h2: 2045 h3: 4144 h4: 4664 h3 + h13°: 4230
Model				
L14 AP	○	—	○	○
L16 AP	○	—	○	○
L20 AP	—	○	—	—

TRIPLEX MAST (in mm)

Lift	h3: 3276	h3: 3516	h3: 4026	h3: 4266	h3: 4476	h3: 4716	h3: 5316	h3: 5466
Height Measurements	h1: 1665 h1#: - h2: 1065 h3: 3276 h4: 3876 h3 + h13°: 3362	h1: 1665 h1#: 1665 h2: 1145 h3: 3516 h4: 4036 h3 + h13°: 3602	h1: 1915 h1#: - h2: 1315 h3: 4026 h4: 4626 h3 + h13°: 4112	h1: 1915 h1#: - h2: 1465 h3: 4266 h4: 5076 h3 + h13°: 4352	h1: 2065 h1#: - h2: 1545 h3: 4476 h4: 5236 h3 + h13°: 4562	h1: 2065 h1#: 2065 h2: 1545 h3: 4716 h4: 5236 h3 + h13°: 4802	h1: 2265 h1#: 2265 h2: 1745 h3: 5316 h4: 5836 h3 + h13°: 5402	h1: 2315 h1#: - h2: 1795 h3: 5466 h4: 5986 h3 + h13°: 5582
Model								
L14 AP	—	○	—	○	—	○	○	○
L16 AP	—	○	—	○	—	○	○	○
L20 AP	○	—	○	—	○	—	—	—

○ Optional equipment — Not available

h1: Height of mast, lowered
h1#: Height of mast, lowered
(with free lift at 150 mm)

h2: Free lift
h3: Lift

h3 + h13°: Lift + fork height
h4: Height of mast, extended

STANDARD AND OPTIONAL EQUIPMENT

	Model	L14 AP	L16 AP	L20 AP
Safety	Long tiller with low mounting point	●	●	●
	Fibre-glass	●	●	●
	Reinforced tiller and tiller head	●	●	●
	Key switch	●	●	●
	Login PIN code	○	○	○
Service	CAN bus technology	●	●	●
Digitalisation	Data transmission online	○	○	○
	Data transmission WiFi	○	○	○
	Linde Load Management Advanced	○	○	○
	Linde connect:desk - local fleet management with different functional modules	○	○	○
	Linde connect:cloud - fleet management as a service (hosted version)	○	○	○
	Data transfer WIFI	○	○	○
	dt: trouble codes	○	○	○
	Bluetooth USB stick	○	○	○
Operation/Load handling	Initial lift	○	○	○
	OptiLift® proportional lift system	–	●	●
	Creep speed control	●	●	●
	Proportional speed control	–	–	–
	Load backrest 1000/1300/1600 mm	○	○	○
	Multifunction display with hour meter, maintenance indication, battery discharge indicator and internal fault code indication	●	●	●
	Clipboard support	○	○	○
	Extral® motor and battery cover	●	●	●
Environment	Cold store -35°C (in/out)	–	○	○
Mast	Standard	○	○	○
	Duplex	○	○	○
	Triplex	○	○	○
	Mast protection: mesh	○	○	○
Attachment/Forks	Forks width and length: 560 × 1150 mm	●	●	–
	Forks width and length: 580 × 1150 mm	–	–	●
	Forks width and length: 580 × 950 mm	–	–	○
Axles and Tyres	Drive wheels heavy duty 230 × 90 - 45	●	●	●
	Drive wheels rubber 230 × 90 - 45	○	○	○
	Drive wheels High grip 230 × 90 - 45	○	○	○
	Load wheels single polyurethane	●	●	●
	Load wheels tandem polyurethane	○	○	○
	Load wheels tandem polyurethane greaseable	○	○	○
	Single castor wheel	–	–	–
Double castor wheel	●	●	●	
Drive and Braking System	Electromagnetic braking system	●	●	●
	Maintenance-free AC motor	●	●	●
	Li-ion technology - to suit vertical change battery compartments	○	○	○
	Lead-acid battery technology	○	○	○
	Battery compartment 2 PzS, vertical change	●	●	–
	Battery compartment 3 PzS, vertical change	○	○	●
	Battery compartment 3 PzS, lateral change	○	○	○
	Battery compartment 4 PzS, lateral change	○	○	○
	Built-in chargers	○	○	○
External chargers available	○	○	○	

● Standard equipment ○ Optional equipment – Not available

CHARACTERISTICS



3-way braking system gives the operator complete control

Safety

- Spring-loaded platform with fold-out side guards protects the driver during the ride
- Automatic braking when the driver leaves the platform protects the people and objects in the vicinity
- Scale installation displays load weight and prevents overloading
- Linde Curve Assist adjusts speed for safe driving



Foldable platform provides an ergonomic solution for maximum productivity

Ergonomics

- Spring-loaded platform reduces vibrations and ensures driving comfort
- The flexible standing platform enables pedestrian operation
- Ergonomically arranged control elements for simple, efficient work
- Linde Load Control for precise load handling



All controls are ergonomically grouped on the tiller head for operation with either hand

Handling

- Powerful 2.3 kW motor and load capacity of up to 2000 kilograms ensure efficient handling processes
- Strong chassis provides the truck with a high residual load capacity
- Soft Landing function protects fork and load from coming to an abrupt stop



Maintenance-free AC motor

Service

- Multi-function display shows all current truck information
- Service technicians have quick access to all truck data via CAN bus technology
- Robust components and encapsulated, maintenance-free motor extend service intervals and reduce costs

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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Printed in Germany | DS_L14_L20_AP_1173-01_en_B_0523

