

## Standard Equipment/Optional Equipment

### Standard Equipment

#### Sinergo®, the operator / truck interface:

Comfortable operator compartment with fully suspended AP platform
Power assisted steering
Creep speed control
Linde Safety-Lift
End-of-stroke resistance
Dedicated work station (with storage compartments)
OptiLift® proportional lift system on the tiller head
Mast protection (polycarbonate or steel mesh)
Multifunction coloured display as well as hourmeter, maintenance indication, battery discharge indicator and internal fault code indication
Weighing device information from the ground up to 1500 mm with +/- 50 kg accuracy
Folding stand-on platform with side guards
2,3 kW AC motor (maintenance free)

Positive steering (drive wheel) feedback
Automatic speed reduction when cornering
Electromagnetic emergency brake
Key switch or LFMgo (PIN-code access)
CAN bus technology
Vertical battery change 2 PzS or 3 PzS (3 PzS on the 2 t version)
Cushion drive wheel
Polyurethane single load wheels
Double castor wheel
Width over fork carriage: 560 mm, 680 mm (1.4 t and 1.6 t versions) or 580 mm (2 t version)
Fork carriage length / thickness: 1150 mm/71 mm or 55 mm (preferred while using gitter box), 1150 mm/73 mm on the 2 t version
Protection -10°C

### Optional Equipment

Initial lift
Ultra fast lifting (up to +40%)
Drive wheels: polyurethane, wet grip, cushion with tread, polyurethane with tread or non marking
Load wheels: tandem polyurethane, tandem polyurethane gresable
Soft landing of forks (free of charge)
Load backrests
Lateral battery change 3 PzS or 4 PzS (1.4 t and 1.6 t versions)
Standard, Duplex or Triplex masts (mast up to 5316 mm)
Alternative fork carriage length / thickness: 950 mm/71 mm or 55 mm (preferred while using gitter box), 950 mm/73 mm on 2 t version

Linde Connected Solutions: ac:access control, an:usage analysis, dt:crash detection
Pack Clipboard
Mobile or Fixed battery stand (for lateral battery change)
Automatic battery watering system
Built-in charger
Cold store protection -35°C
Other options available on request



**Platform Pallet Stacker**  
Capacity 1400, 1600 and 2000 kg  
L 14 AP, L 16 AP, L 20 AP Series 1173

### Safety

The Linde pallet staker platform version is a perfect fit for any stacking application. A weighing device enables to estimate load's weight up to 1500 mm so as to combine the information with the capacity plate for advanced safety. Traction speed is varied automatically in proportion to the steering angle for maximum safety.

### Performance

High operational efficiency is this truck's true strength with its 2,3 kW AC motor with a top speed of 10 km/h and offers capacities from 1400 kg up to a strengthened 2000 kg version complying with heavy loads handling performances. The robust chassis structure gives this truck exceptional residual capacity.

### Comfort

The AP configuration of this model offers a unique one piece, damped platform, side guards and tiller structure to absorb shocks & vibrations. The OptiLift system, easy access to the controls and fingertip operation of the truck allow precise and comfortable handling.

Linde Material Handling



## Features

#### Steering system & Tiller

- Electric power steering as standard ensures effortless driving
- Twin grip steering control, operable with either hand for easy handling
- Easy-to-reach control buttons permit fingertip operation for utmost efficiency
- Wrap-around hand protection



#### AP platform

- Platform concept:
  - One piece platform with tiller and side guards
  - Cushioned platform reduces shocks & vibration for the operator
- Whole Body Vibration is only 0,68m/s<sup>2</sup>
- Folding side guards allow pedestrian use

#### Linde Weighing Device

- Weight estimation of the load carried up to 1500 mm
- Information available at a glance on a wide multifunctional display
- System accuracy +/- 50 kg

#### Multifunctional Display

- Important information about truck and the load
- Easy and ergonomic navigation within the different settings and information tabs
- Provides hourmeter, battery status and maintenance information

#### AC motor

- Powerful, high-torque 2,3 kW AC drive motor
- Moisture and dust-proof AC motor
- No rollback when starting on a slope
- Traction speed adjustable up to 10km/h in platform mode, laden or unladen



#### Lifting System

- OptiLift® mast control provides precise, fully proportional lifting
- Soft landing of the forks protects the load when lowering
- Initial lift version provides improved clearance on ramps and dock levellers
- Wide range of mast options available to suit any application



#### Brakes

- Automatic braking on release of traction butterfly or selecting the opposite direction
- Truck slows before coming to a stop, remaining under total control at all times
- Highly efficient electromagnetic brake applied by moving the tiller to fully up or down position
- Easy-to-reach emergency isolator on the top of the front cover



#### Battery change

- Vertical battery change as standard
- Lateral change option includes:
  - Rollers inside the battery compartment to aid battery change
  - Lever initiates battery change preventing direct contact

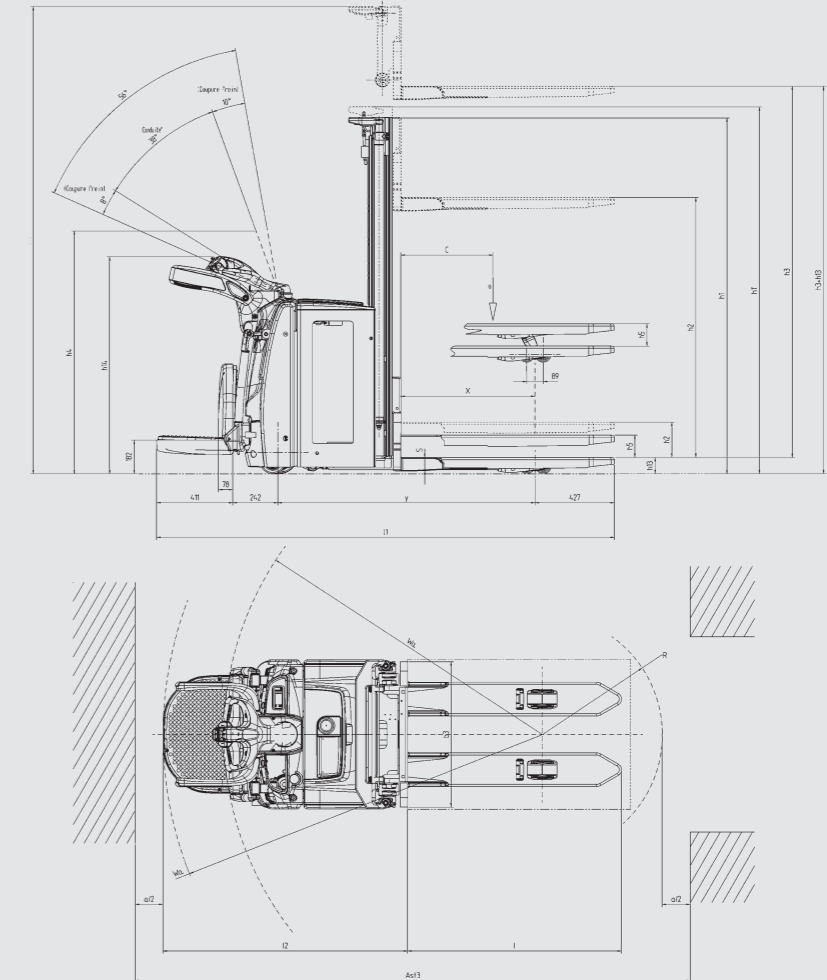


# Technical Data according to VDI 2198

Characteristics			LINDE	LINDE	LINDE
1.1	Manufacturer		LINDE	LINDE	LINDE
1.2	Model designation		<b>L14AP</b>	<b>L16AP</b>	<b>L20AP</b>
1.2a	Series		1173-00	1173-00	1173-00
1.3	Power unit		Battery	Battery	Battery
1.4	Operation		Pedestrian	Pedestrian	Pedestrian
1.5	Load capacity/Load	Q (t)	1.4	1.6	2.0
1.6	Load centre	c (mm)	600	600	600
1.8	Axle centre to fork face	x (mm)	724 (646) <sup>1)2)</sup>	724 (646) <sup>1)2)</sup>	724 (646) <sup>1)2)</sup>
1.9	Wheelbase	y (mm)	1311 (1233) <sup>3)1)4)2)</sup>	1311 (1233) <sup>3)1)4)2)</sup>	1425 (1347) <sup>3)1)4)2)</sup>
Weights					
2.1	Service weight	(kg)	1150 <sup>4)5)</sup>	1150 <sup>4)5)</sup>	1730 <sup>4)5)</sup>
2.2	Axle load with load, front/rear	(kg)	917 / 1633 <sup>4)5)</sup>	936 / 1814 <sup>4)5)</sup>	1336 / 2394 <sup>4)5)</sup>
2.3	Axle load without load, front/rear	(kg)	785 / 365 <sup>4)5)</sup>	785 / 365 <sup>4)5)</sup>	1162 / 568 <sup>4)5)</sup>
Wheels/Tyres					
3.1	Tyres rubber, SE, pneumatic, polyurethane		V+P/P <sup>6)</sup>	V+P/P <sup>6)</sup>	V+P/P <sup>6)</sup>
3.2	Tyre size, front		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>7)</sup>	Ø 85 x 85 (Ø 85 x 60) <sup>7)</sup>	Ø 85 x 105 (Ø 85 x 60) <sup>7)</sup>
3.4	Auxiliary wheels (dimensions)		2x Ø 140 x 50	2x Ø 140 x 50	Ø 150 x 50
3.5	Wheels, number front/rear (x = driven)		1x + 2 / 2 (1x + 1 / 4) <sup>7)</sup>	1x + 2 / 2 (1x + 1 / 4) <sup>7)</sup>	1x + 1 / 2 (1x + 1 / 4) <sup>7)</sup>
3.6	Track width, front	b10 (mm)	534 <sup>2)</sup>	534 <sup>2)</sup>	534 <sup>2)</sup>
3.7	Track width, rear	b11 (mm)	380 <sup>2)</sup>	380 <sup>2)</sup>	370 <sup>2)</sup>
Dimensions					
4.2	Height of mast, lowered	h1 (mm)	1915 <sup>2)</sup>	1915 <sup>2)</sup>	1915 <sup>2)</sup>
4.3	Free lift	h2 (mm)	150 <sup>2)</sup>	150 <sup>2)</sup>	150 <sup>2)</sup>
4.4	Lift	h3 (mm)	2844 <sup>2)</sup>	2844 <sup>2)</sup>	2684 <sup>2)</sup>
4.5	Height of mast, extended	h4 (mm)	3364 <sup>2)</sup>	3364 <sup>2)</sup>	3284 <sup>2)</sup>
4.9	Height of tiller arm in operating position, min/max	h14 (mm)	1162.5 / 1305.6	1162.5 / 1305.6	1162.5 / 1305.6
4.15	Height, lowered	h13 (mm)	86	86	86
4.19	Overall length	l1 (mm)	2057 (2390) <sup>3)8)2)</sup>	2057 (2390) <sup>3)8)2)</sup>	2172 (2505) <sup>3)8)2)</sup>
4.20	Length to fork face	l2 (mm)	907 (1240) <sup>3)8)2)</sup>	907 (1240) <sup>3)8)2)</sup>	1022 (1355) <sup>3)8)2)</sup>
4.21	Overall width	b1/b2 (mm)	800 <sup>2)</sup>	800 <sup>2)</sup>	810 <sup>2)</sup>
4.22	Fork dimensions	s/e/l (mm)	71 x 180 x 1150	71 x 180 x 1150	73 x 210 x 1150
4.24	Width of fork carriage	b3 (mm)	780 <sup>2)</sup>	780 <sup>2)</sup>	780 <sup>2)</sup>
4.25	Fork spread, min/max	b5 (mm)	560 / 680 <sup>2)</sup>	560 / 680 <sup>2)</sup>	580 / 680 <sup>2)</sup>
4.26	Width between reach legs	b4 (mm)	255 / 375	255 / 375	230 / 330
4.32	Ground clearance, centre of wheelbase	m2 (mm)	30 (20/140) <sup>9)1)10)</sup>	30 (20/140) <sup>9)1)10)</sup>	14 (20/115) <sup>9)1)10)</sup>
4.33	Aisle width with pallet 1000 x 1200 across forks	Ast (mm)	2617 (2900) [2539 (2746)] <sup>11)12)13)14)15)</sup>	2617 (2900) [2539 (2746)] <sup>11)12)13)14)15)</sup>	2731 (3014) [2653 (2860)] <sup>11)12)13)14)15)</sup>
4.34	Aisle width with pallet 800 x 1200 along forks	Ast (mm)	2503 (2786) [2425 (2708)] <sup>8)12)13)14)15)</sup>	2503 (2786) [2425 (2708)] <sup>8)12)13)14)15)</sup>	2617 (2900) [2539 (2822)] <sup>8)12)13)14)15)</sup>
4.35	Turning radius	Wa (mm)	1681 <sup>16)3)</sup>	1681 <sup>16)3)</sup>	1795 <sup>17)3)</sup>
Performance					
5.1	Travel speed, with/without load	(km/h)	4/4 6/6 (8/10) <sup>8)18)</sup>	4/4 6/6 (8/10) <sup>8)18)</sup>	4/4 6/6 (7.5/10) <sup>8)18)</sup>
5.2	Lifting speed, with/without load	(m/s)	0.16 / 0.3 (0.4) <sup>19)5)</sup>	0.15 / 0.3 (0.4) <sup>19)5)</sup>	0.12 / 0.25 (0.35) <sup>19)5)</sup>
5.3	Lowering speed, with/without load	(m/s)	0.4 / 0.35 <sup>5)</sup>	0.4 / 0.35 <sup>5)</sup>	0.35 / 0.25 <sup>5)</sup>
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/mechanic	electric/mechanic	electric/mechanic
Drive					
6.1	Drive motor, 60 minute rating	(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 (5h)	(V/Ah)	24 / 250	24 / 250	24 / 270
6.5	Battery weight (± 5%)	(kg)	212	212	249
6.6	Power consumption according to VDI cycle	(kWh/h)	1.47	1.47	1.52
Others					
8.1	Type of drive control		LAC w. microprocessor	LAC w. microprocessor	LAC w. microprocessor
8.4	Noise level at operator's ear	(dB(A))	< 66	< 66	< 66

1) Figures in parenthesis with initial lift  
 2) (± 5 mm)  
 3) ± 0 mm = 2 PzS vertical; + 75 mm = 3 PzS vertical; + 150 mm = 4 PzS vertical  
 4) Figures with battery, see line 6.4/6.5.  
 5) (± 10%)  
 6) Solid rubber + polyurethane / polyurethane  
 7) Figures in parenthesis with tandem load wheels.  
 8) Values in parenthesis refer to lowered Rider Plattform  
 9) Without/with initial lift  
 10) (± 2 mm)  
 11) Values in parenthesis with bumper  
 12) With creep speed = tiller in vertical position

13) [with initial lift]  
 14) Including a 200 mm (min.) operating aisle clearance.  
 15) (± 20 mm)  
 16) with lowered Rider Plattform Wa = 1964 mm, with initial lift Wa = 1603 mm, with initial lift and lowered Rider Plattform Wa = 1886 mm  
 17) with lowered Rider Plattform Wa = 2078 mm, with initial lift Wa = 1717 mm, with initial lift and lowered Rider Plattform Wa = 2000 mm  
 18) (± 5%)  
 19) figures in parenthesis for optional „Lift Speed Booster“



Mast 1.4 and 1.6 t (in mm)		1844 S	2344 S	2844 S	3244 S	3744 S	4144 S	4644 S	1844 D	2344 D
Lift	<b>h3</b>	1844	2344	2844	3244	3744	4144	4644	1844	2344
Lift + fork height	<b>h3+h13</b>	1930	2430	2930	3330	3830	4230	4730	1930	2430
Height, mast lowered	<b>h1</b>	1415	1665	1915	2115	2365	2565	2815	1415	1665
Closed height (with free lift at 150 mm)	<b>h1#</b>	1490	1740	1990	2190	2440	2640	2890	-	-
Height, mast extended	<b>h4</b>	2364	2864	3364	3764	4264	4664	5164	2364	2864
Free lift	<b>h2</b>	150	150	150	150	150	150	150	895	1145

Mast 1.4 and 1.6 t (in mm)		2844 D	3244 D	3744 D	4144 D	3516 T	4266 T	4716 T	5316 T
Lift	<b>h3</b>	2844	3244	3744	4144	3516	4266	4716	5316
Lift + fork height	<b>h3+h13</b>	2930	3330	3830	4230	3602	4352	4802	5402
Height, mast lowered	<b>h1</b>	1915	2115	2365	2565	1665	1915	2065	2265
Closed height (with free lift at 150 mm)	<b>h1#</b>	1915	2115	2365	2565	1665	1915	2065	2265
Height, mast extended	<b>h4</b>	3364	3764	4264	4664	4036	4786	5236	5836
Free lift	<b>h2</b>	1395	1595	1845	2045	1145	1395	1545	1745

Mast 2 t (in mm)		2684 S	3084 S	3584 S	2684 D	3084 D	3584 D	3276 T	4026 T	4476 T
Lift	<b>h3</b>	2684	3084	3584	2684	3084	3584	3276	4026	4476
Lift + fork height	<b>h3+h13</b>	2770	3170	3670	2770	3170	3670	3362	4112	4562
Height, mast lowered	<b>h1</b>	1915	2115	2365	1915	2115	2365	1665	1915	2065
Closed height (with free lift at 150 mm)	<b>h1#</b>	1990	2190	2440	-	-	-	-	-	-
Height, mast extended	<b>h4</b>	3284	3684	4184	3284	3684	4184	3876	4626	5076
Free lift	<b>h2</b>	150	150	150	1315	1515	1765	1065	1315	1465

Other masts on request  
 S=Standard, D=Duplex, T=Triplex