

# Counterbalanced Electric Stacker 1000, 1200 and 1600 kg

*Linde*



**L 10 AC**  
**L 12 AC**  
**L 16 AC**

Electric tiller arm counterbalanced pallet stackers provide all the versatility of a front-seat stacker, easy to operate, economical to buy and operate, and the ideal solution for short-distance operation and medium lifting heights.

#### **Main Features**

- Excellent stability, especially on bends, thanks to low centre of gravity and wide wheelbase
- Fine sensitivity and smooth driving behaviour and rapid response thanks to the modern pulse-steering system with MOSFET technology
- Ergonomically-designed Linde tiller arm, light and easy to operate with reliable protection for the hands
- Strong, long-life design for all components
- Semicircular front section without any projecting parts, preventing hard impacts against merchandise or other equipment

#### **Operation**

The Linde tiller arm, provided as standard, which is shaped like a protective shield, provides optimum protection for the operator's hands. The large radius of the hand protection arrangement prevents any hooking on obstacles. The handles and switch-

ing elements are of skin-friendly material, making them pleasant to operate. The operating elements are in a logical arrangement, with the drive and horn functions capable of being operated with the left or right hand from the tiller bar handle without reaching across. Raising, lowering, and inclining movements of the lifting mast are actuated with fine sensitivity by means of two control levers positioned for optimum access.

#### **Chassis**

The frame is made of high-strength steel components with extremely good torsional rigidity, and provides easy access for servicing work. Large radii exert a deflecting effect and so reduce the risk of any damage to the surrounding area and increase safety further still. The frame is entirely enclosed at the bottom, so providing optimum protection for the structural components against dirt.

#### **Drive**

Drive motor designed for high sustained output performance, with 10 kW hourly output and high torque in the run-up range.

#### **Drive control**

The units are equipped as standard with a new electronic control system, combining

rapid and powerful run-up to full power with jerk-free acceleration and precise regulation of travel speeds.

#### **Wheels and rollers**

Drive wheel and load wheels are fitted as standard with wear-resistant polyurethane tyres. The load wheels are equipped with filament protection.

#### **Lifting**

The inclinable lifting masts are made of wear-resistant special profiles in unrestricted visibility design, and bolted into the frame (a particular advantage for repair and specification adaptation). They are extremely torsion-resistant and are available in standard and duplex designs. Lifting height up to 4290 mm, with levers on the chassis for fine-sensitivity lifting, lowering, and inclination.

#### **Braking**

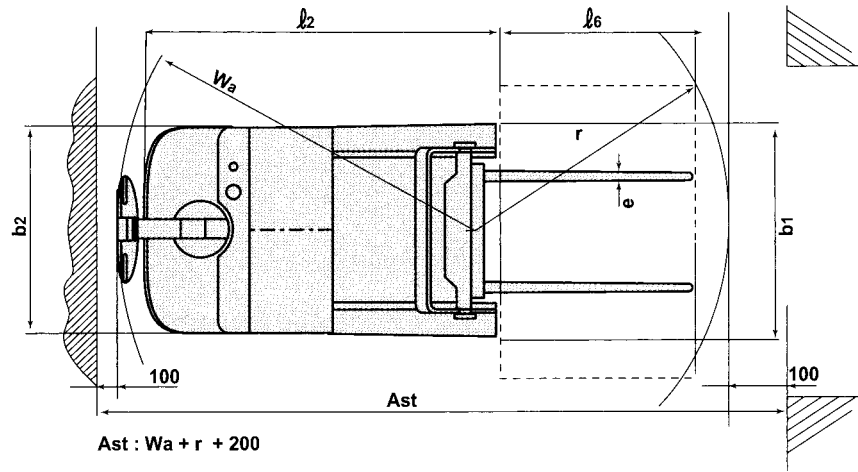
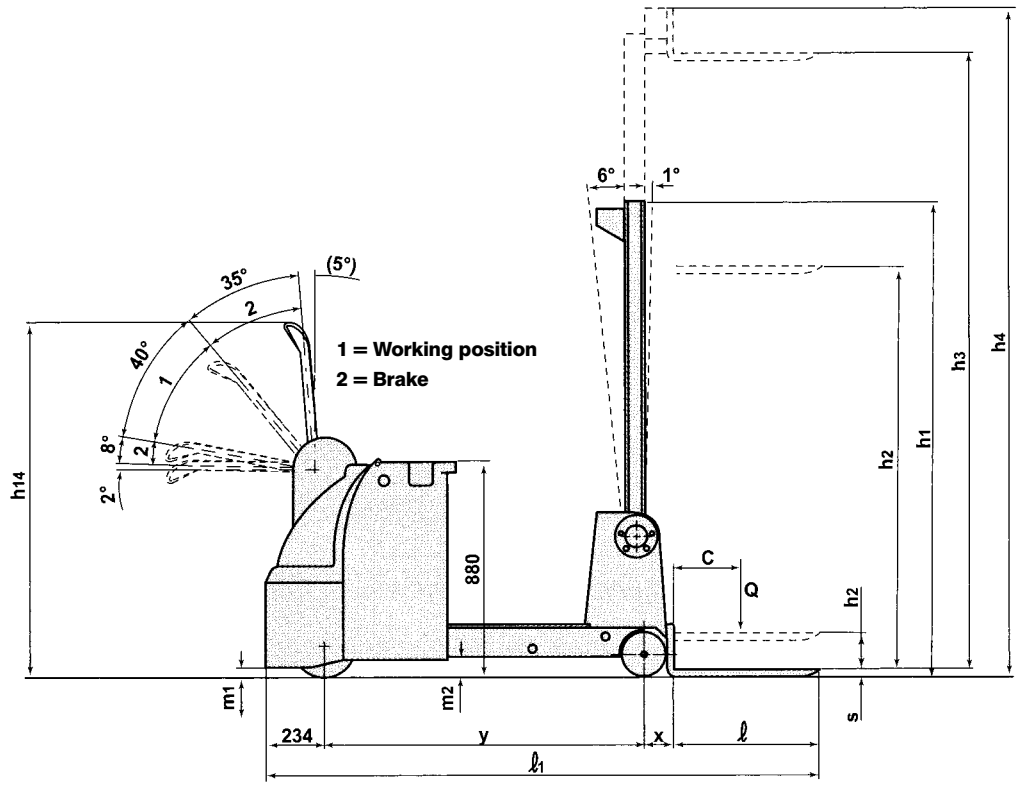
Two independent braking systems:

- Electro-magnetically vented adjustable disk brake, taking effect on the motor shaft, combined with drive current disconnection, actuated in each case in the horizontal or vertical tiller bar position
- Electronic brake by actuation of the drive switch in the opposite direction

LINDE		Counterbalanced Electric Stacker		Data sheet for materials handling equipment		EGG
June 2002		Designation to VDI 3586				Abbreviation to
Characteristics	1.1	Manufacturer		Linde	Linde	
	1.2	Model designation		<b>L 10 AC</b>	<b>L 12 AC</b>	
	1.3	Power unit: battery, diesel, petrol, LP gas, AC		Battery	Battery	
	1.4	Operation: manual, pedestrian, rider-stand, rider seat, order picker		Pedestrian	Pedestrian	
	1.5	Load capacity	Q (kg)	1000	1200	
	1.6	Load center	c (mm)	500	500	
	1.8	Load distance	x (mm)	140	140	
Weights	1.9	Wheelbase	y (mm)	1190	1390	
	2.1	Service weight	kg	1915	1996	
	2.2	Axle load with load, front / rear	kg	500/2415	599/2597	
Wheels and tyres	2.3	Axle load without load, front / rear	kg	1125/790	1186/810	
	3.1	Tyres: Solid Rubber (R), Super Elastic (SE), Pneumatic (P), Vulkollan (V)		Polyurethane	Polyurethane	
	3.2	Tyre size, front		250 x 100	250 x 100	
	3.3	Tyre size, rear		180 x 100	180 x 100	
	3.4	Auxiliary wheels (dimensions)		-	-	
	3.5	Wheels, number front / rear (x = driven)		1 x/2	1 x/2	
	3.6	Track width, front	b <sub>10</sub> (mm)	-	-	
Dimensions	3.7	Track width, rear	b <sub>11</sub> (mm)	785	785	
	4.1	Mast/fork carriage tilt, forward / backward	deg.	1/6	1/6	
	4.2	Mast height, lowered	h <sub>1</sub> (mm)	1905 <sup>1)</sup>	1905 <sup>1)</sup>	
	4.3	Free lift	h <sub>2</sub> (mm)	150 <sup>1)</sup>	150 <sup>1)</sup>	
	4.4	Lift	h <sub>3</sub> (mm)	2750 <sup>1)</sup>	2750 <sup>1)</sup>	
	4.5	Mast height, extended	h <sub>4</sub> (mm)	3307 <sup>1)</sup>	3307 <sup>1)</sup>	
	4.6	Initial lift height	h <sub>5</sub> (mm)	-	-	
	4.9	Height of tiller arm in operating position, min / max	h <sub>14</sub> (mm)	880/1240	880/1240	
	4.15	Fork height, lowered	h <sub>13</sub> (mm)	40	40	
	4.19	Overall length	l <sub>1</sub> (mm)	2664	2864	
	4.20	Length to fork face	l <sub>2</sub> (mm)	1564	1764	
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub> (mm)	885	885	
	4.22	Fork dimensions	s/e/l (mm)	40/80/1100	40/80/1100	
	4.24	Fork carriage width	b <sub>3</sub> (mm)	850/565	850/565	
	4.25	Fork spread, minimum / maximum	b <sub>5</sub> (mm)	520	520	
	4.31	Ground clearance under mast, with load	m <sub>1</sub> (mm)	40	40	
	4.32	Ground clearance, center of wheelbase	m <sub>2</sub> (mm)	70	70	
	4.33	Aisle width, 1000 x 1200 pallet crosswise	A <sub>st</sub> (mm)	3243 (3095) <sup>2) 3)</sup>	3443 (3295) <sup>2) 3)</sup>	
4.34	Aisle width, 800 x 1200 pallet lengthwise	A <sub>st</sub> (mm)	3353 (3295) <sup>3)</sup>	3553 (3495) <sup>3)</sup>		
4.35	Turning radius	W <sub>a</sub> (mm)	1755	1955		
Performance	5.1	Travel speed, with / without load	km/h	4.3/4.6	4.2/4.6	
	5.2	Lifting speed, with / without load	m/s	0.14/0.20	0.13/0.20	
	5.3	Lowering speed, with / without load	m/s	0.34/0.23	0.34/0.23	
	5.7	Gradeability, with / without load	%	-	-	
	5.8	Maximum gradeability, with / without load	%	10/16	9/16	
	5.10	Service brake		Electro-magnetic	Electro-magnetic	
Drive	6.1	Drive motor (S2 60 minute rating)	kW	1.0	1.0	
	6.2	Lift motor (S3 15% rating)	kW	3.0	3.0	
	6.3	Battery IEC		254-2	254-2	
	6.4	Battery voltage / rated capacity (5 h)	V/Ah	24/240, DIN A	24/240, DIN A	
	6.5	Battery weight	kg	215	215	
	6.6	Energy consumption, VDI Cycle	kWh/h	-	-	
Other	8.1	Drive control		LTM Electronic drive control	LTM Electronic drive control	
	8.4	Noise level at driver's ear	dB(A)	below 70	below 70	
1) For other mast heights see table on page 3.						
2) With fork length 1000 mm.						
3) Figures in brackets calculated according to VDI 2198, June 1980.						

VDI 2198

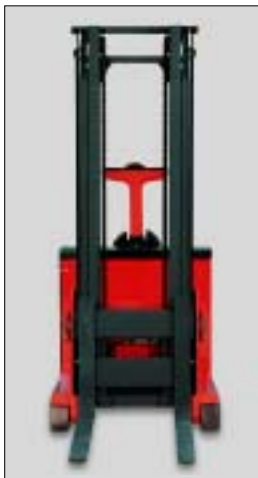
Linde
<b>L 16 AC</b>
Battery
Pedestrian
1600
500
140
1590
2091
591/3100
1253/838
Polyurethane
250 x 100
230 x 110
-
1 x/2
-
800
1/6
1905 <sup>1)</sup>
150 <sup>1)</sup>
2750 <sup>1)</sup>
3307 <sup>1)</sup>
-
880/1240
40
3064
1964
910/885
40/100/1100
850/565
520
40
70
3643 (3495) <sup>2) 3)</sup>
3753 (3695) <sup>3)</sup>
2155
4.2/4.6
0.11/0.20
0.34/0.23
-
7/15
Electro-magnetic
1.0
3.0
254-2
24/240, DIN A
215
-
LTM Electronic drive control
below 70



Overall height and lift height (mm)	2750 S*	3250 S*	3750 S*	4250 S*	2750 D	3250 D	3750 D	4250 D	
Lift	h3	2750	3250	3750	4250	2750	3250	3750	4250
Lift + fork height	h3+s	2836	3336	3836	4336	2836	3336	3790	4290
Overall height, mast retracted	h1	1905	2155	2405	2655	1855	2105	2355	2605
Overall height, mast extended	h4	3307	3807	4307	4807	3307	3807	4307	4807
Free lift	h2	150	150	150	150	-	-	-	-
Special free lift	h2	-	-	-	-	1313	1563	1813	2063

\* Overall height with free lift as stated.

# Equipment



## Standard equipment

- Standard unrestricted visibility lifting mast with mast inclination by means of two inclination cylinders, one degree forwards, six degrees backwards
- Continuous pulse drive circuit with braking effect almost free of wear or loss by means of counter-current
- Electro-magnetic tiller-arm brake, taking effect on the motor shaft
- Security switch lock
- Safety head on tiller arm
- Horn
- Emergency stop switch
- Drive wheel and load wheels with wear-resistant polyurethane tyres
- Battery compartment suitable for 24 V PzS-L battery, 240 or 330 Ah

## Battery and Charger

PzS-L batteries 24 V, 240 Ah to 330 Ah. A selection of suitable charging devices are available for all types of batteries.

## Special options

- Alternative mast types and heights with or without free lift up to 4250 mm
- Alternative fork lengths, 800 to 1200 mm
- Load protection grille
- Instrument cluster (operating hours counter and battery discharge indicator)
- Electrical steering support
- Single supplementary hydraulics
- Double supplementary hydraulics
- Side thruster
- Lifting speed reduction, depending on lifting height
- Battery side removal
- Macrolon mast protection
- Rubber drive wheel
- Grooved drive wheel

Other options available on request.

Subject to modification in the interests of progress. Illustrations and technical specifications are non-binding. All dimensions subject to customary tolerances.