

Standard Equipment/Optional Equipment

Standard Equipment

Sinergo®, the operator / truck interface

Long tiller with low mounting point and off-set head made out of Grivory®

Exxtral® motor and battery cover

Creep speed control (L 12, L 12 i)

Proportional speed control (L 12, L 12 i)

End-of-stroke resistance

Storage compartments

OptiLift® proportional lift system (L 10, L 12, L 12 i)

Hand protection at rear of mast (polycarbonate or steel mesh)

Multifunction display with hourmeter, maintenance indication, battery discharge indicator and internal fault code indication

Key switch or LFM Go (PIN-code access)

AC motor

Linde LAC controller

CAN-bus architecture

Electromagnetic brake

Automatic parking brake

Cushion rubber drive wheel

Single polyurethane load wheels

Fork length: 1150 mm

Width over forks: 560 mm

Initial lift (L 12 i)

Built-in or built-out carriage

Protection to -10°C

Vertical 2 PzS BS battery change (L10 B, L 10, L 12)

Vertical 3 PzS BS battery change (L 12 i)

Horn

Clipboard

Optional Equipment

Drive wheels: polyurethane, wet grip, non marking cushion, treaded cushion

Load wheels: Tandem polyurethane, tandem polyurethane greaseable

Alternative fork lengths and widths

Load backrest

Fleet management LFM Access and LFM Basic

Basic Modules: LFM Access Control PIN

Add-on Modules: LFM Usage Analysis; LFM Impact sensor

Creep speed control (L 10)

Proportional speed control (L 10)

Cold store protection to -35°C

Automatic battery watering system

Built-in charger

High frequency charger

Other options available on request



Electric Pallet Stackers Capacity 1000 - 1200 kg L 10 B, L 10, L 12, L 12 i

Series 1172

Safety

Sinergo® interface is implemented on Linde pedestrian pallet stackers. The hand guards of the off-centred tiller head effectively shield hands and keep the operator safely within the truck's contours with excellent visibility through the mast. The long tiller mounted low down on the chassis ensures ample safety clearance between operator and truck.

Performance

The combination of a new AC motor and Linde LAC digital control makes these pallet stackers highly efficient. Operating parameters can be adjusted to match any application. The OptiLift® mast control provides accurate, fully proportional lifting and assures quiet smooth operation.

Comfort

Through Sinergo®, all controls on the ergonomic tiller head can be easily operated by either hand. A Creep speed button offers utmost manoeuvrability in confined areas. Proportional speed automatically alters traction speed in relation to the truck/operator distance. Finished in tactile materials, these stackers deliver accurate load handling for better productivity.

Reliability

Despite their visual appeal, these pallet stackers are rugged and durable. The mast channels are made from high grade rolled steel sections for strength and durability. Strong, long-lasting, with memory effect, Exxtral® motor and battery cover protect the technical compartment from outside shocks. In addition, a built-out fork carriage with thinner forks is available to protect the mast when handling gitterboxes.

Service

It is not just about the truck in operation: a maintenance-free AC motor maximises uptime reducing operating costs. All truck data is immediately and easily accessible to the service engineer via the CAN-bus architecture. Fast, easy access to all internal components ensures service tasks are completed with a minimum of delay.

Features

Steering system

- Proportional speed control varies truck speed automatically in relation to the tiller angle for safe, comfortable and productive operation
- A Creep speed button ensures high manoeuvrability in confined areas when operating at low speeds with the tiller in the upright position
- End-of-stroke resistance on the tiller avoids accidental, abrupt braking
- Soft tiller fold-back slows down the tiller when returning into upright position, avoiding the tiller snapping on the motor cover

AC motor & Booster effect

- Powerful, smooth-running AC motor, 1.2 kW (at 100% output)
- Traction speed adjustable up to 6 km/h, laden or unladen
- Booster effect provides higher torque when additional power is needed
- No roll-back on hill starts



Braking system

- Highly efficient electromagnetic brake applied by moving tiller to fully up or down position
- Automatic braking on releasing traction butterfly or by reversing direction
- Truck slows before coming to a stop, remaining under total control at all times



Tiller & Tiller head

- Off-set, ergonomic Grivory tiller head ensures safety and visibility
- Long tiller with low mounting point provides safety clearance between operator and chassis
- Wrap-around hand protection
- Comfortable controls, operable with either hand and gloves



Chassis

- Compact, rounded shape avoids snagging
- Highly resistant, robust steel construction
- Low chassis skirt protects operator's feet
- Mast bolted to chassis for maximum rigidity

Lifting system

- OptiLift® mast control provides accurate, fully proportional lifting as well as smooth, quiet operation
- Soft landing of the forks protects load when lowering
- Wide range of mast options available
- Choice of standard or built-out carriage depending on application
- Initial lift on L 12 i ensures ramps and dock levellers are easily negotiated

Working station & Display

- Wide, deep storage compartment for shrink wrap, pens, markers etc.
- Strong Exxtral® motor and battery cover last the lifetime of the truck
- Multifunctional display as standard with hourmeter, maintenance indication, battery discharge indicator, fault code indication



Maintenance and CAN-bus architecture

- Zero maintenance, moisture and dust-proof AC motor
- CAN-bus architecture enables fast, easy access to all truck data
- Individually adjustable parameters via diagnostic plug
- Rapid and convenient access to main components via front service panel

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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.

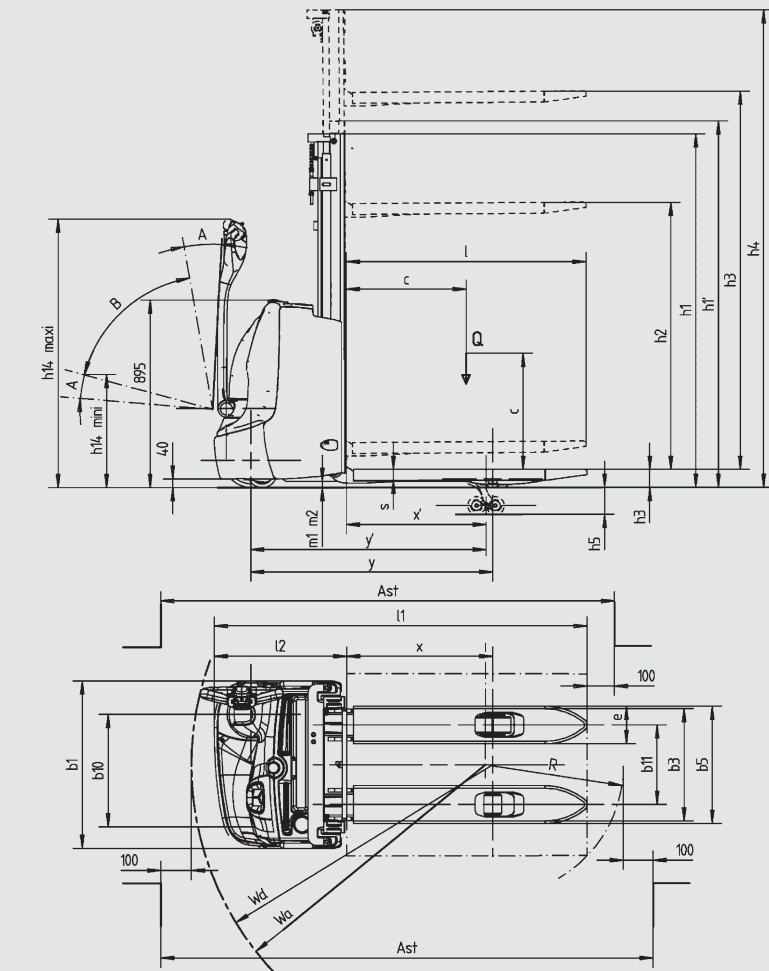
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Technical Data according to VDI 2198

		LINDE					
		L10B	L10	L12	L12i		
Characteristics	1.1	Manufacturer	LINDE	LINDE	LINDE	LINDE	
	1.2	Model designation	L10B	L10	L12	L12i	
	1.3	Power unit	Battery	Battery	Battery	Battery	
	1.4	Operation	Pedestrian	Pedestrian	Pedestrian	Pedestrian	
	1.5	Load capacity	Q (t)	1.0	1.0	1.2	1.2
	1.6	Load centre	c (mm)	600	600	600	600
	1.8	Axle centre to fork face	x (mm)	711	695	695	780/667 ¹⁾
	1.9	Wheelbase	y (mm)	1157	1157	1157	1362/1249 ¹⁾
	Weights	2.1	Service weight	(kg)	708	788	788
2.2		Axle load with load, front/rear	(kg)	614/1094	654/1134	671/1317	707/1402
2.3		Axle load without load, front/rear	(kg)	518/190	572/216	572/216	643/266
Wheels/Tyres	3.1	Tyres	V+P/P ²⁾	V+P/P ²⁾	V+P/P ²⁾	V+P/P ²⁾	V+P/P ²⁾
	3.2	Tyre size, front		230 x 75	230 x 75	230 x 75	230 x 75
	3.3	Tyre size, rear		2x 85 x 100	2x 85 x 100	2x 85 x 100	2x 85 x 100
	3.4	Auxiliary wheels (dimensions)		140 x 54	140 x 54	140 x 54	140 x 54
	3.5	Wheels, number front/rear (x = driven)		1x+1/2	1x+1/2	1x+1/2	1x+1/2
	3.6	Track width, front	b10 (mm)	518	518	518	518
	3.7	Track width, rear	b11 (mm)	380	380	380	380
Dimensions	4.2	Height of mast, lowered	h1 (mm)	2390	1940	1940	1940
	4.3	Free lift	h2 (mm)	150 ³⁾	1462	1462	1462
	4.4	Lift	h3 (mm)	1912 ³⁾	2924	2924	4386
	4.5	Height of mast, extended	h4 (mm)	2393 ³⁾	3402	3402	4868
	4.6	Initial lift	h5 (mm)	-	-	-	130
	4.9	Height of tiller arm in operating position, min/max	h14 (mm)	650 / 1190	650 / 1190	650 / 1190	650 / 1190
	4.15	fork height, lowered	h13 (mm)	85	85	85	91
	4.19	Overall length	l1 (mm)	1772	1788	1788	1908
	4.20	Length to fork face	l2 (mm)	622	638	638	758
	4.21	Overall width	b1/b2 (mm)	800	800	800	800
	4.22	Fork dimensions	s/e/l (mm)	65x180x1150	65x180x1150	65x180x1150	65x180x1150
	4.24	Width of fork carriage	b3 (mm)	534	534	534	534
	4.25	Fork spread, min/max	b5 (mm)	560	560	560	560
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	30	30	30	30
	4.33	Aisle width with pallet 1000 x 1200 across forks	Ast (mm)	2326 (1949) ⁴⁾⁵⁾	2333 (1965) ⁴⁾⁵⁾	2305 (1937) ⁴⁾⁵⁾⁶⁾	2480 (2061)/2412 (2059) ⁴⁾⁵⁾⁶⁾
4.34	Aisle width with pallet 800 x 1200 along forks	Ast (mm)	2292 (2149) ⁴⁾⁵⁾	2304 (2165) ⁴⁾⁵⁾	2276 (2137) ⁴⁾⁵⁾⁶⁾	2421 (2261)/2392 (2259) ⁴⁾⁵⁾⁶⁾	
4.35	Turning radius	Wa (mm)	1460	1460	1432 ⁶⁾	1641/1526 ⁶⁾	
Performance	5.1	Travel speed, with/without load	(km/h)	6 / 6	6 / 6	6 / 6	6 / 6
	5.2	Lifting speed, with/without load	(m/s)	0.09/0.2	0.1/0.2	0.08/0.225	0.08/0.225
	5.3	Lowering speed, with/without load	(m/s)	0.23 / 0.23	0.35 / 0.35	0.4 / 0.3	0.4 / 0.3
	5.8	Maximum climbing ability, with/without load	(%)	5 / 10	5 / 10	5 / 10	10 / 15
	5.9	Acceleration time, with/without load	(s)	8 / 7	8 / 7	8,3 / 7	8,3 / 7
	5.10	Service brake		Electro-magnetic	Electro-magnetic	Electro-magnetic	Electro-magnetic
Drive	6.1	Drive motor, 60 minute rating	(kW)	1.2	1.2	1.2	1.2
	6.2	Lift motor rating at S3 15%	(kW)	0.9	1	2.5	2.5
	6.3	Battery according to DIN 43531/35/36 A,B,C,no		no	no	no	no
	6.4	Battery voltage/rated capacity (5h)	(V/Ah)	24/180	24/180	24/180	24/225
	6.5	Battery weight (± 5%)	(kg)	195	195	195	200
	6.6	Power consumption according to VDI cycle	(kWh/h)	0,72	0,75	1	1
Others	8.1	Type of drive control		LAC	LAC	LAC	LAC
	8.4	Noise level at operator's ear	(dB(A))	65	65	65	65

1) without/with Initial lift
2) Solid rubber + polyurethane / polyurethane
3) Mast available 1462E, 1912E and 2424S only.

4) Calculated with the VDI 2198 (VDI 3597)
5) Including a 200 mm (min.) operating aisle clearance.
6) With creep speed = tiller in vertical position



$$Ast = Wa + \sqrt{((l6 - x)^2 + \left(\frac{b12}{2}\right)^2)} + a$$

$$Ast = Wa + R + a$$

Safety clearance a = 200 mm

Masts (L10/L12) (in mm)	1462 E	1912 E	2024 S	2424 S	2924 S	3324 S	3824 S	4224 S
Lift	h3	1462	1912	2024	2424	2924	3324	3824
Lift + fork height	h3+h13*	1547	1997	2109	2509	3009	4309	4309
Height lowered	h1*	1940	2390	1490	1690	1940	2140	2390
Height raised	h4	1943	2393	2502	2902	3402	3802	4302
Free lift	h2	1462	1912	150	150	150	150	150

Masts (L10/L12) (in mm)	2024 D	2424 D	2924 D	3324 D	3824 D	4224 D	3636 T	4386 T
Lift	h3	2024	2424	2924	3324	3824	4224	4386
Lift + fork height	h3+h13*	2109	2509	3009	3409	3909	3409	4471
Height lowered	h1*	1490	1690	1940	2140	2390	1690	1940
Height raised	h4	2502	2902	3402	3802	4302	4702	4868
Free lift	h2	1012	1212	1462	1662	1912	2112	1462

* initial Lift h5 = 130mm