Standard Equipment/Optional Equipment

Standard Equipment

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 (L12i)
Built-in or built-out fork carriage
Protection to -10°C
Vertical 2 PzS-B battery change (L10B, L10, L12)
Vertical 3 PzS-B battery change (L12i)
Horn
Clipboard

Optional Equipment

Drive wheels: polyurethane, wet grip, non marking cushion,
treaded cushion
Load wheels: Tandem polyurethane, tandem polyurethane
greasable
Alternative fork lengths and widths
Load backrest
Creep speed control (L10)
Proportional speed control (L10)

Linde Connected Solutions:
ac:access control (PIN or RFID Dual), an:usage analysis and
dt:crash detection
Cold store protection to -35°C
Automatic battery watering system
Built-in charger
High frequency charger

Other options available on request

Li-ION technology Fast Full Charge Opportunity Charging Fast Intermediate Charging Maintenance Free Long Lifetime Good performance in Cold Store

Li-ION batteries

- specific lithium-ion battery compartment: 1,8kWh-3,6kWh (24V/82-164Ah)

Optimized 24V-Li-ION charger - v90: 1,8kWh (82 Ah) - v160: 3,6kWh (164 Ah)



Linde Material Handling

Safety

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 controller makes these pallet stackers highly efficient.

Operating parameters can be adjusted to match any application. The OptiLift mast control assures accurate, fully proportional lifting as well as smooth and quiet operation.

Comfort

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 and long-lasting 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 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 tiller in 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



Lifting system

- → OptiLift mast control provides accurate, fully proportional lifting as well as smooth and 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 L12i ensures easy crossing of ramps and dock levellers

nead

- → Powerful, smooth-running 1.2 kW AC
- → 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

AC motor & Booster effect

Tiller & Tiller hea

- → 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

Working station & Display→ Wide, deep storage compartment for shrink wrap, pens, markers etc.

- shrink wrap, pens, markers etc.
 → Durable and long lasting Exxtral®
- motor and battery cover

 Multi-function display as standard
- → Multi-function display as standard with hourmeter including scheduled maintenance, fault code and battery discharge indicator



Braking system

- → Highly efficient electro-magnetic 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
- → Truck slows before coming to a stop, remaining under total control at all times



Chassis

- → Compact, rounded shape avoids snagging
- → Highly resistant, robust steel construction
- on → Low chassis skirt protects operator's stop.



Maintenance and CAN-bus architecture

- → Zero maintenance, moisture and
- dust-proof 1.2 kW 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



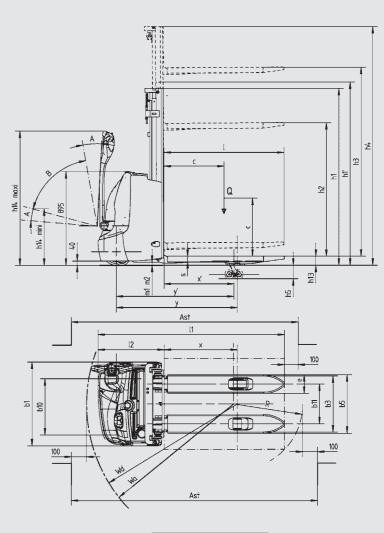
Technical Data according to VDI 2198

1.1 Manufacturer		LINDE	LINDE	LINDE	LINDE
1.2 Manufacturer's type designation		L12i	L10B / [L10B ION] 1)	L10 / [L10 ION] ¹⁾	L12 / [L12 ION] 1)
1.2a Series		1172	1172	1172	1172
1.3 Power unit		Battery	Battery	Battery	Battery
1.4 Operation		Pedestrian	Pedestrian	Pedestrian	Pedestrian
1.5 Load capacity/Load	Q (t)	1.2	1.0	1.0	1.2
1.6 Load centre distance	c (mm)	600	600	600	600
1.8 Axle centre to fork face	x (mm)	780 / 709 2) 3)	715 ⁴⁾	695³)	695³)
1.9 Wheelbase	y (mm)	1362 / 1291 ²⁾	1157 [1177] ¹⁾	1157 [1177] ¹⁾	1157 [1177] ¹⁾
2.1 Service weight	(kg)	909	708	788	788
2.2 Axle load with load, front/rear	(kg)	744 / 1365	617 / 1091 [616 / 1092]	654 / 1134 [653 / 1135]	671 / 1317 [669 / 1319]
2.3 Axle load without load, front/rear	(kg)	643 / 266 5)	518 / 190	572 / 216	572 / 216
3.1 Tyres rubber, SE, pneumatic, polyurethane		V+P/P ⁶⁾	V+P/P ⁶⁾	V+P/P ⁶⁾	V+P/P 6)
3.2 Tyre size, front		Ø 230 x 75	Ø 230 x 75	Ø 230 x 75	Ø 230 x 75
3.3 Tyre size, rear		2x Ø 85 x 85	2x Ø 85 x 100	2x Ø 85 x 100	2x Ø 85 x 100
3.4 Auxiliary wheels (dimensions)		Ø 140 x 54	Ø 140 x 54	Ø 140 x 54	Ø 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
4.2 Height of mast, lowered	h1 (mm)	1996	2390	1940	1940
4.3 Free lift	h2 (mm)	150	1912	150	150
4.4 Lift	h3 (mm)	2424	1912	2924	2924
4.5 Height of mast, extended	h4 (mm)	4868	2390	3402	3402
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 Height, lowered	h13 (mm)	86	86	86	86
4.19 Overall length	I1 (mm)	19077)	1768 [1788] ^{1) 7)}	1788 [1808] 1) 7)	1788 [1808] 1) 7)
4.20 Length to fork face	I2 (mm)	757	618 [638] 1)	638 [658] 1)	638 [658] 1)
4.21 Overall width	b1/b2 (mm)	800	800	800	800
4.22 Fork dimensions DIN ISO 2331	s/e/I (mm)	65 x 180 x 1150 ⁸⁾	65 x 180 x 1150 ⁸⁾	65 x 180 x 1150 ⁸⁾	65 x 180 x 1150 ⁸⁾
4.24 Width of fork carriage	b3 (mm)	534	534	534	534
4.25 Fork spread	b5 (mm)	560	560	560	560
4.32 Ground clearance, centre of wheelbase	m2 (mm)	20 / 150 ²⁾	30	30	30
4.34.1 Aisle width for pallets 1000 × 1200 crossways	Ast (mm)	2480 (2061) / 2437 (2061) 2) 9) 10) 11)	2324 (1945) [2344 (1965)] 9) 10) 1)	2333 (1965) [2353 (1985)] 9) 10) 1)	2305 (1937) [2325 (1957)] 9) 10) 11
4.34.2 Aisle width with pallet 800 x 1200 along forks	Ast (mm)	2421 (2261) / 2403 (2261) 2) 9) 10) 11)	2289 (2145) [2309 (2165)] 9) 10) 1)	2304 (2165) [2324 (2185)] 9) 10) 1)	2276 (2137) [2296 (2157)] 9) 10) 1]
4.35 Turning radius	Wa (mm)	1641 / 1570 2) 11)	1460 [1480] 1)	1460 [1480] 1)	1432 [1452] 11) 1)
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)	0.11 / 0.225	0.09 / 0.2	0.1 / 0.2	0.11 / 0.225
5.3 Lowering speed, with/without load	(m/s)	0.4 / 0.3	0.23 / 0.23	0.35 / 0.35	0.4 / 0.3
5.8 Maximum climbing ability, with/without load	(%)	10.0 / 15.0	5.0 / 10.0	5.0 / 10.0	5.0 / 10.0
5.9 Acceleration time, with/without load	(S)	8.3 / 7.0	8.0 / 7.0	8.0 / 7.0	8.3 / 7.0
5.10 Service brake		Electro-magnetic	Electro-magnetic	Electro-magnetic	Electro-magnetic
6.1 Drive motor rating S2 60 min	(kW)	1.2	1.2	1.2	1.2
6.2 Lift motor rating at S3 15%	(kW)	2.5	0.9	1	2.5
6.3 Battery according to DIN 43531/35/36 A,B,C,no		no	по	по	no
6.4 Battery voltage/rated capacity (5h)	(V)/(Ah)	24 / 225 12)	24 / 180 [24 / 82] 1)	24 / 180 [24 / 82] 1)	24 / 180 [24 / 82] 1)
6.5 Battery weight (± 5%)	(kg)	200	195 [51] 1)	195 [51]1)	195 [51] 1)
6.6 Power consumption according to VDI cycle	(kWh/h)	1	0.7	0.8	1
8.1 Type of drive unit		LAC	LAC	LAC	LAC
10.7 Sound pressure level LpAZ (at the driver's seat)	(dB(A))	65	65	65	65

1) Figures in [] with Li-ION battery see line 6.4 2) Without/with Initial lift

2) Without/ with Initial lift
3) With Simplex masts + 20 mm; with Triplex masts - 57 mm. Forks carriages with fork thickness s = 60 mm, preferred while using gitter box, are also available: the x dimension decreases of -44 mm for Simplex masts and -35 mm for Standard and Duplex masts.
4) With Standard mast - 20 mm. Forks carriages with fork thickness s = 60 mm, preferred while using gitter box, are also available: the x dimension decreases of -44 mm for Simplex masts and -35 mm for Standard mast.

5) Forks lowered
6) Solid rubber + polyurethane / polyurethane
7) with fork lenght I = 1000 mm I1 decreases of -150 mm.
8) Optionally 65 x 180 x 1000
9) Calculated with VDI 2198 (VDI 3597)
10) Including a 200 mm (min.) operating aisle clearance.
11) With creep speed = tiller in vertical position
12) Trough number 68



$$= Wa + \sqrt{(16 - x)^2 + \left(\frac{b12}{2}\right)^2 + a}$$

Ast = Wa + R + aSafety clearance a = 200 mm

Masts (L10/L12) (in mm)		1462 E	1912 E	2024 \$	2424 \$	2924 \$	3324 \$	3824 S	4224 S
Lift	h3	1462	1912	2024	2424	2924	3324	3824	4224
Lift + fork height	h3+h13*	1547	1997	2109	2509	3009	4309	3909	4309
Height lowered	h1*	1940	2390	1490	1690	1940	2140	2390	2590
Height raised	h4	1943	2393	2502	2902	3402	3802	4302	4702
Free lift	h2	1462	1912	150	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	3636	4386
Lift + fork height	h3+h13*	2109	2509	3009	3409	3909	3409	3721	4471

2902

3402

3802

1662

4302

4702 4118

1912 2112 1212

4868

2502

Height raised

* Initial lift h5 = 130 mm E=Simplex mast, S=Standard mast, D=Duplex mast, T=Triplex mast