## Standard Equipment/Optional Equipment

### Standard Equipment

Long tiller with low mounting point Fibre-glass reinforced tiller and tiller head (Grivory®) Exxtral® motor and battery cover Creep speed control (T20) Proportional speed control (T20) End-of-stroke resistance Wide and deep storage compartments depending on battery size Multi-function display with hourmeter including scheduled maintenance, fault code and battery discharge indicator Key switch or LFM Go (PIN-code access) AC motor

Linde LAC controller CAN-bus architecture Electromagnetic brake Automatic parking brake Cushion rubber or polyurethane drive wheel Single polyurethane load wheels Fork length: 1150 mm Width over forks: 560 mm Protection to -10°C Vertical 2 PzS battery change Horn Clipboard



### **Optional Equipment**

Drive wheels: wet grip, non marking polyurethane, treaded polyurethane, treaded cushion Load wheels: tandem polyurethane, single and tandem polyurethane greaseable Vertical 3 PzS (T18, T20) battery change Lateral 2 PzS (T16, T18, T20) and 3 PzS (T18, T20) battery change Mobile roller trolley (1 battery) Fixed roller trolley (2 batteries) Alternative fork lengths and widths Load backrest Creep speed control (T16, T18) Proportional speed control (T18)

### Li-ION technology

Fast Full Charge Opportunity Charging Fast Intermediate Charging Maintenance Free Long Lifetime Good performance in Cold Store Linde Connected Soultions: 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 Castor wheels with springs & damper Additional emergency stop button Buzzer for noise sensitive areas Initial lift end stop

Other options available on request

### Li-ION batteries

- fits in 2 PzS-B comp. (T16 ION, T18 ION): 1,8kWh-3,6kWh (24V/82-164Ah) - fits in 2 PzS comp. (T16 ION, T18 ION, T20 ION): 4,5kWh-9kWh (205-410Ah) Optimized 24V-Li-ION charger - v90: 1,8kWh (82Ah); v160:3,6kWh (164 Ah) - v225: 4,5kWh-9kWh (205-410 Ah)

### Safety

The lower chassis is rounded in shape and low to the ground protecting the operator's feet whilst the hand guards of the tiller head effectively shield his hands. The long tiller mounted low down on the chassis ensures ample safety clearance between operator and truck as well as keeping steering effort low.

### Performance

The combination of a new AC motor and Linde LAC digital control makes these pallet trucks highly efficient. Operating parameters can be adjusted to match any application. When additional performance is needed, a booster effect automatically provides higher torque.

### Comfort

All controls on the ergonomic tiller can be easily operated by either hand. A Creep speed button offers utmost manoeuvrability in confined areas. Proportional speed feature automatically alters traction speed in relation to the distance between truck and operator. Finished in tactile materials, these trucks deliver effortless, smooth load handling to deliver greater productivity.



### Reliability

Despite their visual appeal, these pallet trucks are rugged and durable. Light, warm and robust at the same time the tiller out of Grivory® material ensures a highly resistant trucks interface. Exxtral®, launched for the motor cover gives no compromise regarding softness and sturdiness protecting the technical compartment. In addition, the fork tips which each withstands 2,000 kg contribute to a long, trouble-free life.

### 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 easy 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

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



### Chassis & Forks

- $\rightarrow$  Compact, rounded shape
- $\rightarrow$  Strong, robust steel construction
- $\rightarrow$  Low chassis skirt to protect operator's feet
- $\rightarrow$  Sturdy fork tips: each can support a load of 2,000 kg without bending
- $\rightarrow$  Large castor wheels with shock absorbers for stability on ramps and uneven floors

### Working station & Display

Braking system

times

or down position

- $\rightarrow$  Wide, deep storage compartment for shrink wrap, pens, markers etc.
- $\rightarrow$  Strong and durable Exxtral® motor and battery cover
- → Multi-function display with hourmeter including scheduled maintenance, fault code and battery discharge indicator

 $\rightarrow$  Highly efficient electromagnetic brake

applied by moving the tiller to fully up

 $\rightarrow$  Automatic braking on releasing traction

butterfly or reversing direction

 $\rightarrow$  Truck slows before coming to a stop,

remaining under total control at all

### Tiller & Tiller head

- $\rightarrow$  The ergonomic Grivory® material ensures effortless operation
- $\rightarrow$  Long tiller with low mounting point provides a large safety clearance
- between operator and chassis  $\rightarrow$  Wrap-around hand protection
- $\rightarrow$  Comfortable controls, operable with either hand and gloves

### AC motor & Booster effect

- $\rightarrow$  Powerful, smooth-running AC motor, 1.2 kW (at 100% output)
- $\rightarrow$  Traction speed adjustable up to 6 km/h, laden or unladen
- $\rightarrow$  Booster effect provides higher torque for additional power
- $\rightarrow$  No roll-back on hill starts  $\rightarrow$  Gradient performance: 24% unladen,
- 10% with 2 t load



### Maintenance/CAN-bus architecture

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



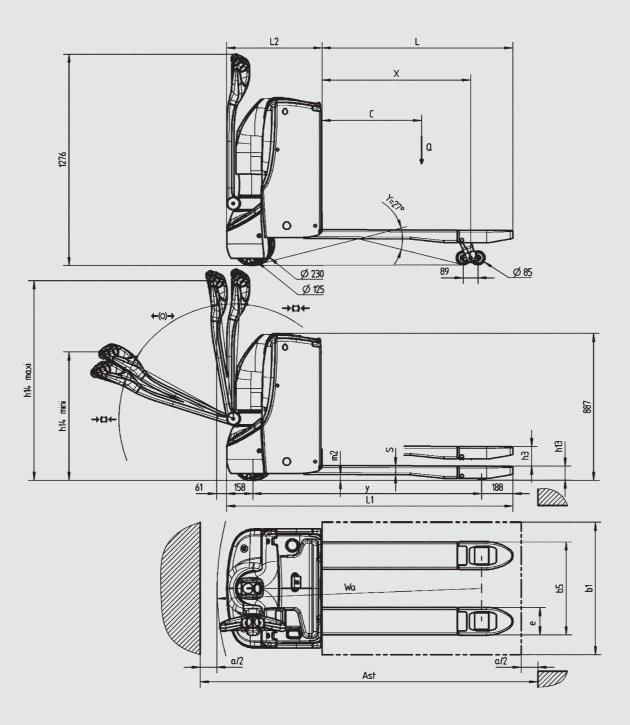
### Compehensive energy solutions

- $\rightarrow$  Wide range of lead acid batteries from 2.1kWh to 7.1kWh (150-375Ah) optionally with build in 35A charger, and side battery change on rollers
- $\rightarrow$  Li-ION batteries from 1.8kWh to 9.0kWh (82-410Ah) with optimized charger



# Technical Data according to VDI 2198

	1.1	Manufacturer		LINDE	LINDE	LINDE
	1.2	Model designation		T16 / [T16 ION] <sup>1)</sup>	T18 / [T18 ION] 1)	T20 / [T20 ION] <sup>1)</sup>
	1.2a	Series		1152	1152	1152
stics	1.3	Power unit		Battery	Battery	Battery
Characteristics	1.4	Operation		Pedestrian	Pedestrian	Pedestrian
hara	1.5	Load capacity/Load	Q (t)	1.6	1.8	2.0
0	1.6	Load centre	c (mm)	600	600	600
	1.8	Axle centre to fork face	x (mm)	890 / 962 2) 3)	890 / 962 2) 3)	890 / 962 2) 3)
	1.9	Wheelbase	y (mm)	1312 / 1378 2) 3)	1312 / 1378 <sup>2) 3)</sup>	1312 / 1378 2) 3)
S	2.1	Service weight	(kg)	421 [328] 1)	485 [349] 1)	582 [426] 1)
weights	2.2	Axle load with load, front/rear	(kg)	681/1340 [591/1337] 1)	748/1537 [650/1499] 1)	874/1708 [749/1677
Ň	2.3	Axle load without load, front/rear	(kg)	327 / 94 [237 / 91] <sup>1)</sup>	350 / 135 [252 / 97] 1)	432 / 150 [307 / 119
	3.1	Tyres rubber, SE, pneumatic, polyurethane		R+P/P <sup>4)</sup>	R+P/P <sup>4)</sup>	R+P/P <sup>4)</sup>
	3.2	Tyre size, front		Ø 230 x 75	Ø 230 x 75	Ø 230 x 75
le?	3.3	Tyre size, rear		Ø 85x105 (Ø 85x100) <sup>5)</sup>	Ø 85x105 (Ø 85x100) <sup>5)</sup>	Ø 85x105 (Ø 85x100)
גאוע לנואאוועע	3.4	Auxiliary wheels (dimensions)		Ø 125 x 40	Ø 125 x 40	Ø 125 x 40
ע	3.5	Wheels, number front/rear (x = driven)		$1x + 2 / 2 (1x + 2 / 4)^{5}$	$1x + 2 / 2 (1x + 2 / 4)^{5}$	1x + 2 / 2 (1x + 2 / 4
<	3.6	Track width, front	b10 (mm)	482	482	482
	3.7	Track width, rear	b11 (mm)	355 / 395 / 515	355 / 395 / 515	355 / 395 / 515
	4.4	Lift	h3 (mm)	125	125	125
	4.9	Height of tiller arm in operating position, min/	h14 (mm)	740 / 1208	740 / 1208	740 / 1208
	4.15	Height, lowered		88	88	88
	4.19	Overall length	l1 (mm)	1650	1725 [1650] <sup>1)</sup>	1800 [1725] <sup>1)</sup>
_	4.20	Length to fork face	l2 (mm)	500	575 [500] 1)	650 [575] <sup>1)</sup>
	4.21	Overall width	b1/b2 (mm)	720	720	720
כווטוכוושוווח	4.22	Fork dimensions	s/e/l (mm)	55 x 165 x 1150	55 x 165 x 1150	55 x 165 x 1150
5	4.25	Fork spread, min/max	b5 (mm)	520 / 540 / 560 / 680	520 / 540 / 560 / 680	520 / 540 / 560 / 68
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	36 / 161 6)	36 / 161 6)	36 / 161 6)
	4.33	Aisle width with pallet 1000 x 1200 across forks	Ast (mm)	1900 7) 8) 9)	1975 [1900] <sup>1) 7) 8) 9)</sup>	2050 [1975] 1) 7) 8) 9)
	4.34	Aisle width with pallet 800 x 1200 along forks	Ast (mm)	1950 <sup>7) 8)</sup>	2025 [1950] 1) 7) 8)	2100 [2025] <sup>1) 7) 8)</sup>
	4.35	Turning radius	Wa (mm)	1440 / 1510 <sup>2)7)</sup>	1515 / 1585 [1440 / 1510] <sup>1) 2) 7)</sup>	1590 / 1660 [1515 1585] <sup>1) 2) 7)</sup>
	5.1	Travel speed, with/without load	(km/h)	6 / 6	6 / 6	6 / 6
ų	5.2	Lifting speed, with/without load	(m/s)	0.035 / 0.044	0.033 / 0.044	0.034 / 0.044
	5.3	Lowering speed, with/without load	(m/s)	0.065 / 0.062	0.065 / 0.063	0.07 / 0.06
רפווחוווקוורפ	5.8	Maximum climbing ability, with/without load	(%)	13.0 / 24.0	12.0 / 24.0	10.0 / 24.0
	5.9	Acceleration time, with/without load	(S)	7.4 / 6.4	7.5 / 6.4	7.6 / 6.4
	5.10	Service brake		Electro-magnetic	Electro-magnetic	Electro-magnetic
	6.1	Drive motor, 60 minute rating	(kW)	1.2	1.2	1.2
	6.2	Lift motor, rating at \$3 15%	(kW)	1	1	1.2
	6.3	Battery according to DIN 43531/35/36 A,B,C,no		2PzS-B [Li-ION]	43 535/B 2PzS [Li-ION]	43 535/B 3PzS [Li-IOI
د	6.4	Battery voltage/rated capacity (5h)	(V/Ah)	24 / 150 [24 / 82] 1)	24 / 250 [24 / 164] 1)	24 / 375 [24 / 410]
	6.5	Battery weight (± 5%)	(kg)	157 [63]	212 [84]	288 [151]
	6.6	Power consumption according to VDI cycle	(kWh/h)	0.38	0.38	0.38
	0.4	Type of drive control		LAC	LAC	LAC
ouners	8.1	Type of diffe control				



	Battery compartment	<b>Energy</b> (kWh) Lead Acid [Li-10N]	<b>Battery Capacity</b> (Ah) Lead Acid [Li-ION]	<b>Battery weight</b> (kg) Lead Acid [Li-ION]	Dimension 12 (mm)	Din (mi			
	2-PzS-B*	2,66 [1,8/3,6]	150 [82/164]	140 [63/84]	500				
	2-PzS	4,44 [4,5/9,0]	250 [205/410]	210 [110/151]	575				
	3-PzS**	6.66	270-375	290	650				

\*not available on the T20 ION / \*\*not available on the T16 models

4) (± 5 mm)
4) Solid rubber + polyurethane / polyurethane
5) Figures in parenthesis with tandem load wheels.

8) Including a 200 mm (min.) operating aisle clearance.9) With fork length 1150 mm

