

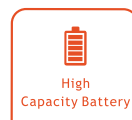


PT12Li

NEW!

Long Tiller Electric Pallet Truck with Lithium battery

The PT12Li Electric Pallet Truck with Lithium battery is the ideal choice for material transportation in short-distance or confined space. As the environmental friendly Lithium battery, it is especially suitable for food, chemical, or pharmacy industries which has high standard of the environment.



ENVIRONMENT-FRIENDLY FAST CHARGE



- **ERGONOMIC, COMPACT AND SAFE LONG TILLER DESIGN**
- **CORE COMPONENTS FORM TOP QUALITY BRANDS**
- **EASY AND FAST CHARGING FOR CONTINUES AND SAFE OPERATION**

ADVANTAGES

- Lithium battery pack
- Compact Design for Smallest Turning Radius
- Sideway castors
- Entry Rollers
- Reinforced and Robust Chassis
- Reinforced Battery Cover
- Sideway Battery Replacement
- Long Tiller Design for Ergonomics and Safety
- German AC Drive Unit



Reinforced Battery Cover

CE-conformed reinforced steel battery cover, protecting the batteries with test of 3kg item dropping from 3m high.



German AC Drive Unit

Maintenance-free German AC drive unit for high performance, efficiency and stability and at the same time reducing running cost.



Sideway castors

Sideway castors ensure high driving stability and safety even the floor condition is very bad.

Reinforced and Robust Chassis

Robust chassis with reinforcement for long service life.

Entry Rollers

The design of the entry rollers ensures easy entry of the pallet.

CAN-BUS



Long Tiller Design for Ergonomics and Safety

Ergonomically designed long tiller allows comfortable and efficient operation, and at the same time safety for the operator by keeping a safe distance.





Compact Design for Smallest Turning Radius

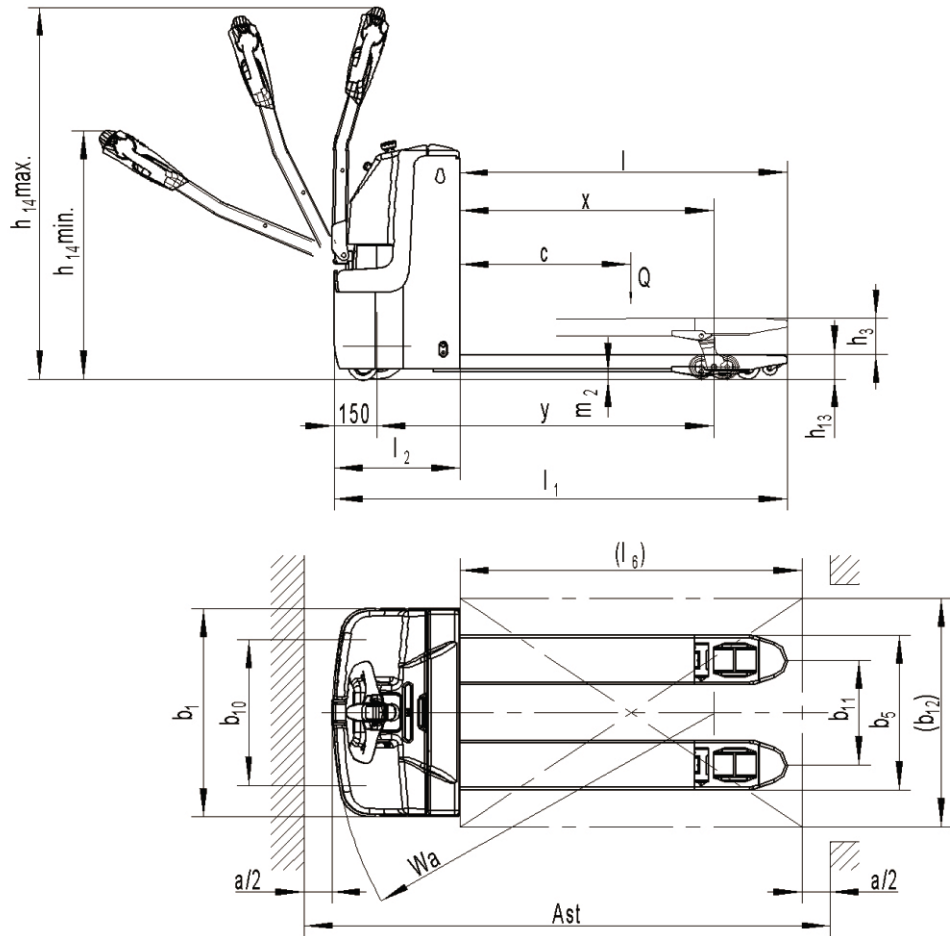
Overall length 1590mm and turning radius 1340mm only, about 100mm less than the similar truck with normal battery, working easily in confined spaces.

Lithium battery pack

Clean, environment-friendly Lithium battery pack, no risk of acid leakage, ideal for food, chemical, or pharmacy industries which has high standard of the environment. At the same time, the fast charge and long life cycle makes it more attractive.

Sideway Battery Replacement

Sideway battery replacement and light battery weight allows easy and fast replacement battery, ideal for multi-shift operations.



Ttype sheet for industrial truck acc. to VDI 2198 1KG=2.2LB 1INCH=25.4MM				
Distinguishing mark	1.2	Manufacturer's type designation		PT12Li
	1.3	Power (battery ,diesel, petrol, gas, manual)		Battery
	1.4	Operator type		Pedestrian
	1.5	Load Capacity / rated load	Q(t)	1.2
	1.6	Load centre distance	c(mm)	600
	1.8	Load distance ,centre of drive axle to fork	x(mm)	892
	1.9	Wheelbase	Y(mm)	1183
Weight	2.1	Service weight	kg	345
	2.2	Axle loading, laden front/rear	kg	550/960
	2.3	Axle loading, unladen front/rear	kg	270/70
Tires, chassis	3.1	Tires		Polyurethane (PU)
	3.2	Tire size, front	Øx w (mm)	Ø230×70
	3.3	Tire size, rear	Øx w (mm)	Ø84×84
	3.4	Additional wheels(dimensions)	Øx w (mm)	Ø100×40
	3.5	Wheels, number front/rear(x=driven wheels)		1 x+2/4
	3.6	Track, front	b10mm	510
	3.7	Track, rear	b11 (mm)	367/512
Dimensions	4.4	Lift height	h3 (mm)	120
	4.9	Height of tiller in drive position min./ max.	h14mm	850/1385
	4.15	Height, lowered t	h13mm	85
	4.19	Overall length	l1mm	1592
	4.20	Length to face of forks	l2mm	440
	4.21	Overall width	b1mm	729
	4.22	Fork dimensions	s/e/l (mm)	60/173/1150
	4.25	Distance between fork-arms	b5 (mm)	540
	4.32	Ground clearance, centre of wheelbase	m2mm	25
	4.34	Aisle width for pallets 800X1200 lengthways	Ast (mm)	2040
	4.35	Turning radius	Wa (mm)	1340
Performance	5.1	Travel speed, laden/ unladen	km/h	5.7/ 6.0
	5.2	Lift speed, laden/ unladen	m/s	0.025/0.035
	5.3	Lowering speed, laden/ unladen	m/s	0.035/0.030
	5.8	Max. gradeability, laden/ unladen	%	8/ 15
	5.10	Service brake		Electromagnetic
Motors	6.1	Drive motor rating S2 60min	kW	1.3
	6.2	Lift motor rating at S3 4.5%	kW	0.8
	6.3	Battery acc. to DIN 43531/35/36 A, B, C, no		
	6.4	Battery voltage, nominal capacity K5	V/Ah	24/ 50
	6.5	Battery weight (minimum)	kg	20
	6.6	Energy consumption acc: to VDI cycle	KWh/h	0.29
	8.1	Type of drive control		AC- speed control
	8.4	Sound level at driver's ear acc. to EN 12053	dB(A)	67





PT 16L / PT 20L / PT 25L

Electric Pedestrian Power Pallet Truck with capacities of 1600/ 2000/ 2500kg

- Ergonomic, Compact and Safe Long Tiller Design
- Reliable and Strong Chassis
- Powerful, Maintenance Free German AC Power Train
- Core Components from Top Quality Brands

NEW!

INTRODUCTION

The PT16L- 25L series is the first choice for truck loading and unloading as well for universal transportation on short distances with capacities from 1600kg up to 2500kg.

With the short chassis length (PT 16L) the truck is tailored to operate in confined areas.

With its high- quality and state of the art top-brand components and technologies, the truck competes with leading well- known brands in the market.



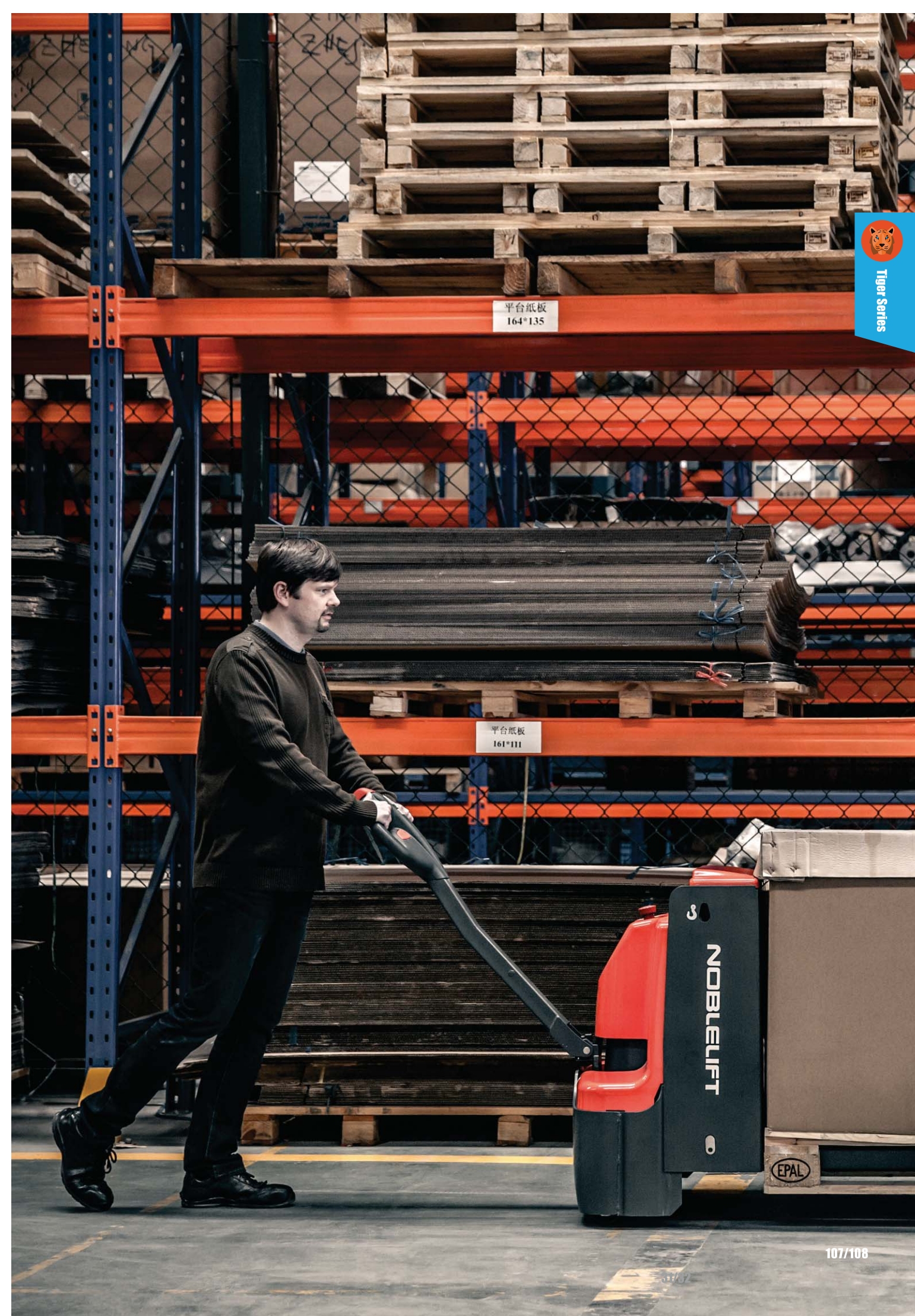
PT 16L

Top brand qualified components

Using high quality core components:

- Reliable multifunctional REMA tiller with ergonomic contactless rocker- switches
- Top quality Schabmueller AC drive motor
- Kordel gearbox
- Intorque brake
- Wicke drive wheel
- Zapi controller

The parts used reduce high service costs and give you the performance and reliability which is required for the most demanding harsh loading- and unloading operations.



Tiger Series



German AC drive technology

The powerful German Schabmueller maintenance free AC Drive motor in combination with the German Kordel gearbox, Intorqe brake and Wicke drive wheel give best performance, efficiency and reliability to reduce the running costs!
Whatever desired, the AC Drive gives always the right response: gentle or fast acceleration.



Long tiller design for ergonomics and safety



In particular through the long tiller design the operator can always keep a safe distance to the truck during proceeding the work very ergonomically. The design ensures lower operational forces than trucks with a short tiller. The tillers operating height is naturally positioned to ergonomic, operator friendly controlling positions.

CANBUS technology

The CANBUS technology is due to less wiring more reliable. For maintenance the CANBUS technology makes analysis and adjustments easier so that the downtime is lower than for trucks without CANBUS. Digital signals further makes parts longer lasting than analogue signals.

CAN-BUS

Maintenance friendly



The trucks design and the used components are tailored to make service and maintenance easy. All components are easy to reach when removing the main cover only with 2 screws, drive- and castor wheel are easy to exchange without craning the truck.

Robust and reliable design

The robust chassis with the strong 8mm thick apron protects the truck and the components against mechanical impacts from the outside.

In combination with the strong metal battery cover, the truck is well- equipped to reduce service work and damages to a minimum.

Dirty floor environments have less influence to the vertical AC motor design as the components and the brake are out of the reach of direct impacts. IP 54 protected controller, safe against dust and splash water.



Long lasting battery capacities

With the PT-L series for every application the right battery:

- PT 16L with 160 Ah 2VBS battery with very short truck length and maneuverability for restricted operating areas.
- PT 20L with 210 Ah DIN 2PzS battery
- PT 25L with 350 AH DIN 3PzS battery and as standard with sideways battery exchange for long operations and multi- shifts.

Optional sideways battery exchange compartment for PT20L with 210 Ah battery.



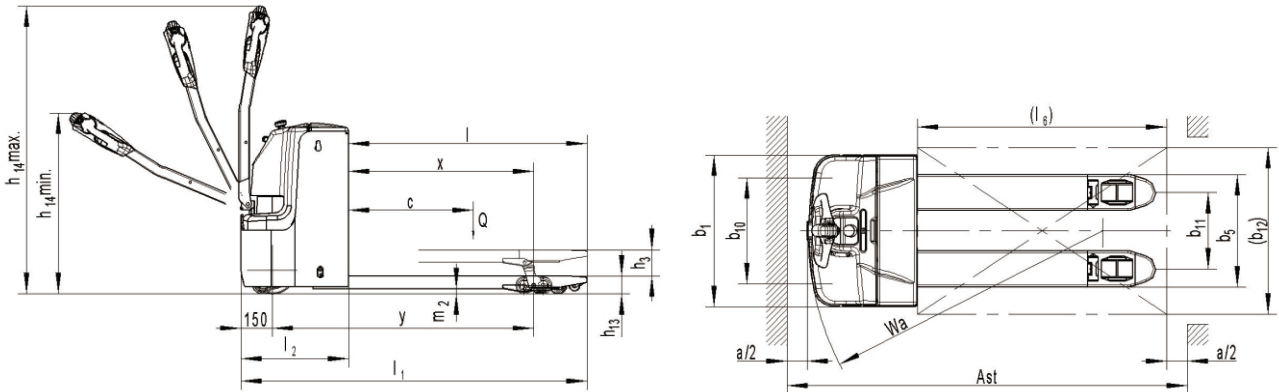
Various options

- Load backrest
- Sideways battery exchange
- Different fork-versions on request

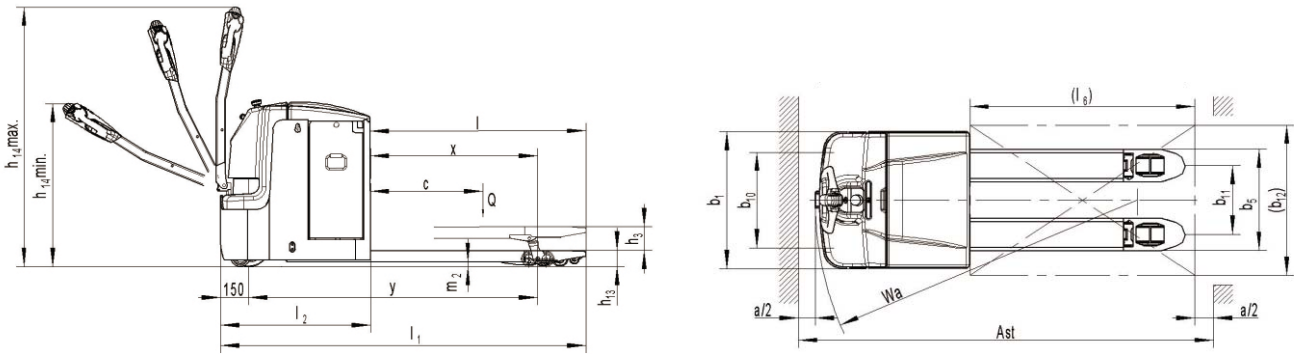
Entry rollers as standard.

PT 25L

PT 16/20L



PT 25L



Ttype sheet for industrial truck acc. to VDI 2198 1KG=2.2LB 1INCH=25.4MM						
Distinguishing mark	1.2	Manufacturer`s type designation		PT 16L	PT 20L	PT25L
	1.3	Power (battery ,diesel, petrol, gas, manual)			Battery	
	1.4	Operator type			Pedestrian	
	1.5	Load Capacity / rated load	Q(t)	1.6	2.0	2.5
	1.6	Load centre distance	c(mm)		600	
	1.8	Load distance ,centre of drive axle to fork	x(mm)		892	
	1.9	Wheelbase	Y(mm)	1261	1327	1541
Weight	2.1	Service weight	kg	445	535	720
	2.2	Axle loading, laden front/rear	kg	715/1330	855/1680	1040/2200
	2.3	Axle loading, unladen front/rear	kg	345/100	415/120	540/200
Tires, chassis	3.1	Tires		Polyurethane (PU)		
	3.2	Tire size, front	Øx w (mm)	Ø230×70		
	3.3	Tire size, rear	Øx w (mm)	Ø84×84		
	3.4	Additional wheels(dimensions)	Øx w (mm)	Ø100×40		
	3.5	Wheels, number front/rear(x=driven wheels)		1x+2/4		
	3.6	Track, front	b10mm	510		
	3.7	Track, rear	b11 (mm)	367/512		
Dimensions	4.4	Lift height	h3 (mm)	125		
	4.9	Height of tiller in drive position min./ max.	h14mm	800/1335		
	4.15	Height, lowered t	h13mm	85		
	4.19	Overall length	l1mm	1670	1735	1950
	4.20	Length to face of forks	l2mm	520	595	810
	4.21	Overall width	b1mm	729		
	4.22	Fork dimensions	s/e/l (mm)	60/173/1150		
	4.25	Distance between fork-arms	b5 (mm)	540/685		
	4.32	Ground clearance, centre of wheelbase	m2mm	25		
	4.33	Aisle width for pallets 1000X1200 crossways	Ast (mm)	1885	1955	2175
	4.34	Aisle width for pallets 800X1200 lengthways	Ast (mm)	1935	2005	2225
	4.35	Turning radius	Wa (mm)	1440	1490	1750
Performance	5.1	Travel speed, laden/ unladen	km/h	5.7/6.0		
	5.2	Lift speed, laden/ unladen	m/s	0.025/0.035	0.022/0.030	0.035/0.045
	5.3	Lowering speed, laden/ unladen	m/s	0.035/0.030	0.035/0.035	0.040/0.040
	5.8	Max. gradeability, laden/ unladen	%	8/15		
	5.10	Service brake		Electromagnetic		
Motors	6.1	Drive motor rating S2 60min	kW	1.3		
	6.2	Lift motor rating at S3 4.5%	kW	0.8		
	6.3	Battery acc. to DIN 43531/35/36 A, B, C, no		2VBS	2PzS	3PzS
	6.4	Battery voltage, nominal capacity K5	V/Ah	160	210	350
	6.5	Battery weight (minimum)	kg	150	215	285
	6.6	Energy consumption acc: to VDI cycle	KWh/h	0.44	0.39	0.92
	8.1	Type of drive control		AC-Speed Control		
	8.4	Sound level at driver`s ear acc. to EN 12053	dB(A)	67	69	65



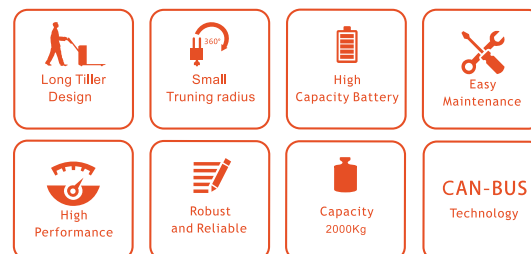


PT20i



Noblelift Power Electric Pallet Truck With Mast Lift for Order Picking

The PT 20i is the ideal choice if transportation operations needs to be combined with health friendly order picking operations. The low-lift transportation capacity of max.2000kg is enough to unload delivery lorries and to do picking operations in the warehouse or in the salesroom. The sideways lifting buttons are ergonomically located nearby the picking area.



DOUBLE LIFTING DESIGN CORE COMPONENTS FORM TOP QUALITY BRANDS

- Initial lifting
- Easy for operation
- Side-way battery replacement
- Capacities for different applications

ADVANTAGE:

- Power pallet truck with additional health-friendly mast lift
- AC drive system
- Long tiller for easy and ergonomic operations
- Slow-speed button for safe operations in narrow spaces



Core Components from Top Quality Brands

German KORDEL gear box, INTORQ Brake, WICK drive wheel, Italian ZAPI Controller ensure the high performance, efficiency and stability, at the same time reduce the running cost .



Robust and Reliable Design

The robust chassis with the strong 8mm thick apron protects the truck and the components against mechanical impacts from the outside. The steel battery cover ensures the battery well protected.



Static design of the hydraulic system

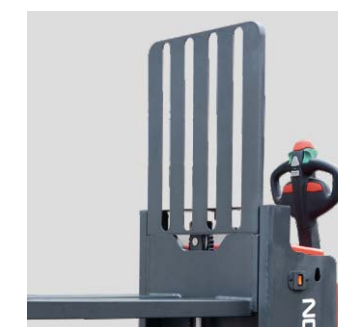
There is no movement of the hydraulic systems during lifting and lowering of the truck, ensures the stability and safety of the hydraulic system .



Long Tiller Design

Ergonomically designed long tiller allows comfortable and efficient operation, and at the same time safety for the operator by keeping a safe distance.

CAN-BUS



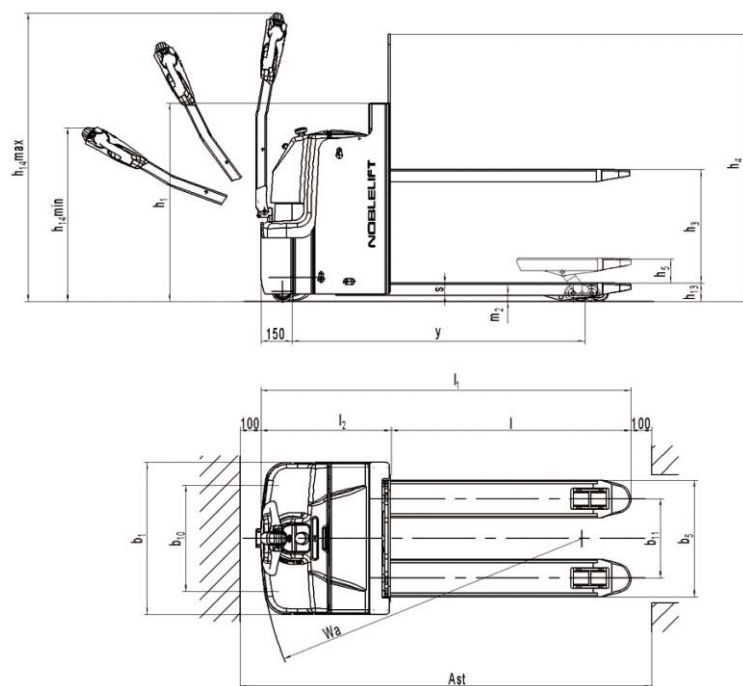
Initial lifting(double lifting design)

Additional healthy-friendly mast lift height up to 800mm with lift capacity 1000kg, ideal for trailer unloading, short distance material transportation and factory assembly line.





PT20I



Ttype sheet for industrial truck acc. to VDI 2198 1KG=2.2LB 1INCH=25.4MM

Distinguishing mark	1.2	Manufacturer's type designation		PT 20I	
	1.3	Drive		Battery	
	1.4	Operator type		Pedestrian	
	1.5	Load capacity / rated load	Q (t)	2.0	
		Load capacity at mast lift	Q (t)	1.0 ¹⁾	
		Load capacity at support arm lift	Q (t)	2.0 ¹⁾	
	1.6	Load center distance	C (mm)	600	
	1.8	Load distance ,centre of drive axle to fork	X (mm)	916	
	1.9	Wheelbase	Y (mm)	1386	1557
Weight	2.1	Service weight	kg	656	855
	2.2	Axle loading, laden front/rear	kg	765/1891	845/2010
	2.3	Axle loading, unladen front/ rear	kg	476/180	612/243
Tires, chassis	3.1	Tires		Polyurethane (PU)	
	3.2	Tire size, front	Ø x w (mm)	Ø230 x70	
	3.3	Tire size, rear	Ø x w (mm)	Ø80x70	
	3.4	Additional wheels(dimensions)	Ø x w (mm)	Ø100x40	
	3.5	Wheels, number front/ rear(x=driven wheels)		1x+2/4	
	3.6	Tread, front	b10 (mm)	510	
	3.7	Tread, rear	b11 (mm)	380	
Dimensions	4.2	Lowered mast height	h1 (mm)	950	855
	4.4	lift	h3 (mm)	550	
	4.5	Extended maximal height	h4 (mm)	1717	1558
	4.6	Initial lift	h5 (mm)	120	
	4.9	Height of tiller in drive position min./ max.	h14 (mm)	820/1335	
	4.15	Height, lowered	h13 (mm)	88	
	4.19	Overall length	l1 (mm)	1770	1940
	4.20	Length to face of forks	l2 (mm)	620	790
	4.21	Overall width	b1 (mm)	729	
	4.22	Fork dimensions	s/e/l (mm)	60 / 180 / 1150	
	4.25	Distance between fork- arms	b5 (mm)	560	
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	28	
	4.33	Aisle width for pallets 1000x1200 crossways	Ast (mm)	1970	2041
	4.34	Aisle width for pallets 800x1200 lengthwise	Ast (mm)	2020	2091
	4.35	Turning radius	Wa (mm)	1536	1707
Performance	5.1	Travel speed, laden/ unladen	km/h	6.0/ 6.0	
	5.2	Lift speed, laden/ unladen	mm/s	95/ 150	85/140
	5.3	Lowering speed, laden/ unladen	mm/s	90/ 70	80/65
	5.8	Max. gradeability, laden/ unladen	%	8/ 20	
	5.10	Service brake		Electromagnetic	
Motors	6.1	Drive motor rating S2 60min	kW	1.3	1.7
	6.2	Lift motor rating at S3 10%	kW	1.2	2.2
	6.3	Battery acc. to DIN 43531/ 35/ 36 A, B, C, no		No, 2VBS	No, 3VBS
	6.4	Battery voltage, nominal capacity K5	V/Ah	24/ 160	24/ 210
	6.5	Battery weight	kg	150	185
	6.6	Energy consumption acc. to VDI cycle	kWh/h	1.0	
Addition data	8.1	Type of drive control		AC- speed control	
	8.4	Sound level at driver's ear acc. to EN 12053	dB(A)	<70	

1) in double-deck operation: mast lift 1.0t.,support arm lift 1.0t



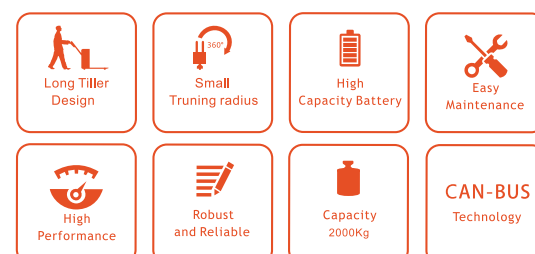


INTRODUCTION

The Multi-functional Truck bridges the electric pallet truck and stacker.

The PT20D Series is a multi-functional truck when it comes to the handling of materials by combining the features of a pedestrian pallet truck and stacker in one truck.

It handles not only the transporting of the goods horizontally but also handles loading and unloading HGVs(Heavy goods vehicle) and stacking of pallets with max. lift height up to 2500 mm, what's more, with its double lifting function, it is able to lift two Euro pallets at the same time. All operations can therefore be performed twice as quickly in comparison with a traditional pedestrian pallet truck or stacker. The PT20D can carry 2000 kg when used as a pallet truck, 1000 kg with the forks raised or 2 x 1000 kg in double-deck operation.



ADVANTAGE:

- Power pallet truck with additional health-friendly mast lift
- AC drive system
- Long tiller for easy and ergonomic operations
- Double-lift with max. lift height up to 1600/2000/2500mm
- Core components from top quality brands
- Proportional lifting and lowering for accurate control of lift heights



CAN-BUS



Long Tiller Design

Ergonomically designed long tiller allows comfortable and efficient operation, and at the same time safety for the operator by keeping a safe distance.



Sideway battery exchange

Standard powerful 210Ah battery with battery sideway battery replacement for easy battery replacement, maintenance and multi-shift operation.



Double lifting design

With its double lifting function, the efficiency is doubled than the traditional pedestrian pallet truck or stacker. The raising support arms with bigger ground clearance also contribute to safe travel, for instance on thresholds, ramps and uneven floors. And with its low overall height, it comes with excellent view of operation.



Robust and Reliable Design

The robust chassis with the strong 8mm thick apron protects the truck and the components against mechanical impacts from the outside. The steel battery cover ensures the battery well protected.



Side switch

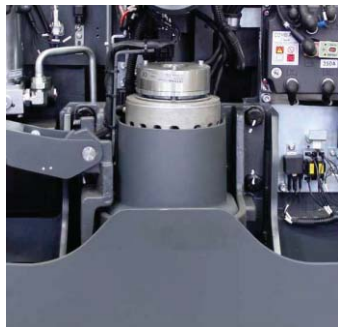
The standard equipped sideways located lifting and lowering buttons makes the lifting and lowering of the goods much easier and safer when the operator need to monitor the height closely from the side.



Convenient Maintenance

To easier the maintenance has been considered during the vehicle design and parts selection. For example, all the parts to be within arms reach after removing the encloser which fixed by one piece of screw only, and the Driving Wheels and Steering Wheels could be changed easily and no need to hoist the whole vehicle.





Core Components from top Quality Brands
German KORDEL gear box, INTORQ Brake, WICK drive wheel, Italian ZAPI Controller ensure the high performance, efficiency and stability, at the same time reduce the running cost .



Static design of the hydraulic system
There is no movement of the hydraulic systems during lifting and lowering of the truck, ensures the stability and safety of the hydraulic system .

Electronic proportional lifting and lowering

The electronically controlled proportional lifting system ensures accurate positioning and stacking operations at every lifting height.

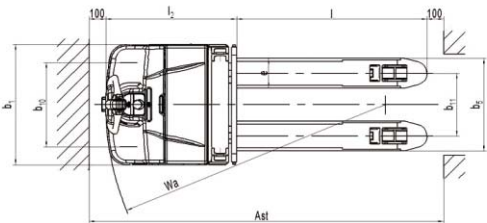
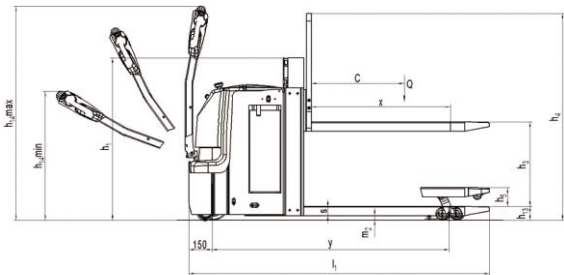
In specific with high masts the electronic controlled proportional lifting performs at its best.



PT20D

Ttype sheet for industrial truck acc. to VDI 2198 1KG=2.2LB 1INCH=25.4MM					
Distinguishing mark	1.1	Brand	Noblelift		
	1.2	Manufacturer* type designation	PT 20D		
	1.3	Drive(electric,diesel,petrol,gas,main electric)	Battery		
	1.4	Operator type	Pedestrian		
	1.5	Load capacity / rated load	Q (t)	2.0	
		Load capacity at mast lift	Q (t)	1.0 ¹⁾	
		Load capacity at support arm lift	Q (t)	2.0 ¹⁾	
	1.6	Load center distance	C (mm)	600	
	1.8	Load distance ,centre of drive axle to fork	X (mm)	916	
Weight	1.9	Wheelbase	Y (mm)	1532	
	2.1	Service weight	kg	990	1010
	2.2	Axle loading, laden front/rear	kg	880/2110	890/2120
Tires, chassis	2.3	Axle loading, unladen front/ rear	kg	648/342	658/352
	3.1	Tires	Polyurethane (PU)		
	3.2	Tire size, front	Ø x w (mm)	Ø 230 x70	
	3.3	Tire size, rear	Ø x w (mm)	Ø 80x70	
	3.4	Additional wheels(dimensions)	Ø x w (mm)	Ø 100x40	
	3.5	Wheels, number front/ rear(x=driven wheels)		1x+2/4	
	3.6	Tread, front	b10 (mm)	510	
Dimensions	3.7	Tread, rear	b11 (mm)	380	
	4.2	Lowered mast height	h1 (mm)	1178	1378
	4.4	lift	h3 (mm)	1400	1800
	4.5	Extended maximal height	h4 (mm)	2528	2928
	4.6	Initial lift	h5 (mm)		120
	4.9	Height of tiller in drive position min./ max.	h14 (mm)		800/1335
	4.15	Height, lowered	h13 (mm)		88
	4.19	Overall length	l1 (mm)	1940	1955
	4.20	Length to face of forks	l2 (mm)	790	805
	4.21	Overall width	b1 (mm)		729
	4.22	Fork dimensions	s/e/l (mm)		60 / 180 / 1150
	4.25	Distance between fork- arms	b5 (mm)		560
	4.32	Ground clearance, centre of wheelbase	m2 (mm)		28
	4.33	Aisle width for pallets 1000x1200 crossways	Ast (mm)	2140	2155
	4.34	Aisle width for pallets 800x1200 lengthwise	Ast (mm)	2190	2205
Performance	4.35	Turning radius	Ast (mm)	1682	
	5.1	Travel speed, laden/ unladen	km/h	6,0/ 6,0	
	5.2	Lift speed, laden/ unladen	mm/s	85/140	
	5.3	Lowering speed, laden/ unladen	mm/s	80/65	
	5.8	Max. gradeability, laden/ unladen	%	8/ 20	
Motors	5.10	Service brake		Electromagnetic	
	6.1	Drive motor rating S2 60min	kW	1.3	
	6.2	Lift motor rating at S3 10%	kW	2.2	
	6.3	Battery acc. to DIN 43531/ 35/ 36 A, B, C, no		No, 3VBS	
	6.4	Battery voltage, nominal capacity K5	V/Ah	24/ 210	
	6.5	Battery weight	kg	185	
Addition data	6.6	Energy consumption acc. to VDI cycle	kWh/h	1.0	
	8.1	Type of drive control		AC- speed control	
	8.4	Sound level at driver's ear acc. to EN 12053	dB(A)	<70	

1) in double-deck operation: mast lift 1.0t., support arm lift 1.0t





PS 12L / PS 16L / PS 20L



Electric Pedestrian Stacker with capacities of 1200/ 1600/ 2000kg

- Ergonomic, Compact and Safe Long Tiller Design
- Precise Lifting and Lowering with Full Proportional Hydraulic System
- Powerful, Maintenance Free German AC Power Train
- Core Components from Top Quality Brands
- 4 Wheel Structure for Stability

INTRODUCTION

The PS 12- 20L series is tailored to most pedestrian controlled stacking operations with capacities from 1200kg up to 2000kg.

With the long mounted tiller the operator keeps safe and ergonomic distance to perform his work.

Due to the gentle operating full proportional lifting system stacking operations becomes more safer and quicker.

With the high- quality and state of the art top-brand components and technologies, the truck competes with leading well- known brands in the market.

Top brand qualified components

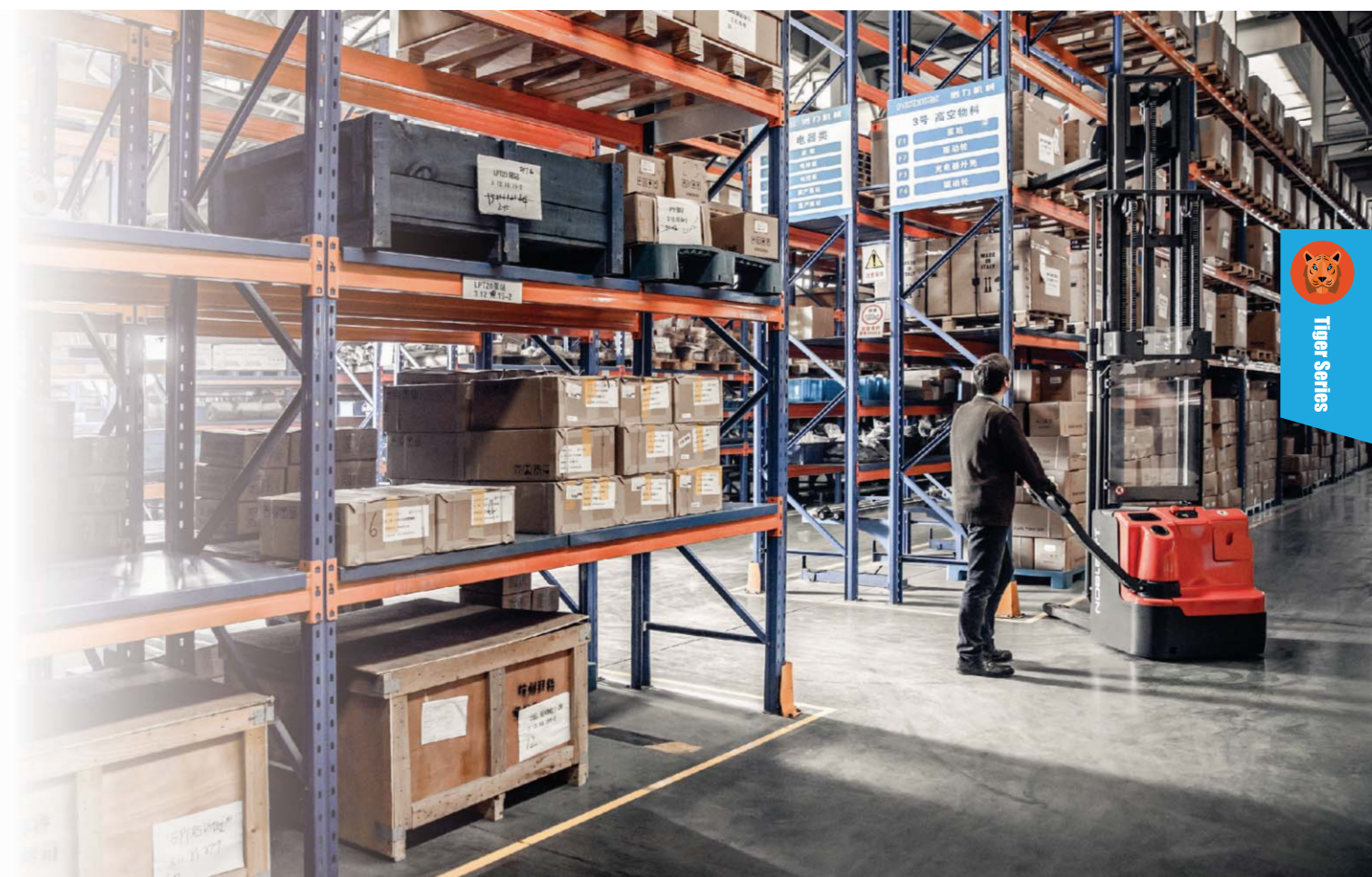
Using high quality core components:

- Reliable multifunctional REMA tiller with ergonomic contact less rocker- switches
- Top quality Schabmueller AC drive motor
- Kordel gearbox
- HPI hydraulic power pack
- Zapi controller
- Intorque brake
- Wicke drive wheel

The used parts reduce high service costs and give you the performance and reliability which is required for the demanding stacking operations.



PS 16L



Long tiller design for ergonomics and safety

In particular through the long tiller design the operator can always keep a safe distance to the truck during proceeding the work very ergonomically. The design ensures lower operational forces than trucks with a short tiller. The tillers operating height is naturally positioned to ergonomic, operator friendly controlling positions.

Specifically staking operations becomes more ergonomically and quicker due to the safe distance and better view to the forks. The 4 wheel design with the sideways long mounted tiller gives particular an exact and perfect view to the forks.

Electronic proportional lifting and lowering

The electronically controlled proportional lifting system ensures accurate positioning and stacking operations at every lifting height.

In specific with high masts the electronic controlled proportional lifting performs at its best.



CAN-BUS

CANBUS technology

The CANBUS technology is due to less wiring more reliable.

For maintenance the CANBUS technology makes analysis and adjustments easier so that the downtime is lower than for trucks without CANBUS.

Digital signals further makes parts longer lasting than analogue signals.



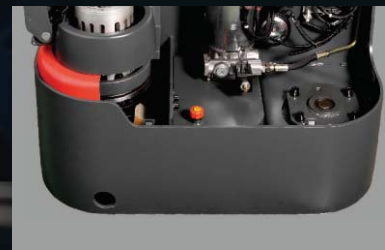
Robust and Reliable Design

The robust chassis with the strong 8mm thick apron protects the truck and the components against mechanical impacts from the outside.

In combination with the metal battery cover, the truck is well- equipped to reduce maintenance work and damages to a minimum.

Dirty floor environments have less influence to the vertical AC motor design as the components and the brake are out of the reach of direct impacts.

IP 54 protected controller, safe against dust and splash water.



German AC drive technology

The powerful German Schabmueller maintenance free AC Drive motor in combination with the German Kordel gearbox, Intorqe brake and Wicke drive wheel give best performance, efficiency and reliability to reduce the running costs!

Whether smooth or fast acceleration is applied, the AC Drive gives always the right and direct response.



Maintenance friendly

The trucks design and the used components are tailored to make service and maintenance easy. All components are easy to reach when removing the main cover only with 2 screws. The drive wheel and the castor wheel are easy to exchange without craning the truck.



For every application the right battery capacity

With the PS-L series for every truck the right battery:

- PS 12L with 180 Ah 2VBS battery for short truck length, good maneuverability and for operating restricted areas.
- PS 16L with 270 Ah 3VBS battery
- PS 20L with 350 AH DIN 3PzS battery for long operations and multi- shifts.



Optional sideways battery exchange compartment for PT20L with 210 Ah battery.

Options

- Various mast versions
- Load backrest
- Sideways battery exchange for PS 16L and PS 20L

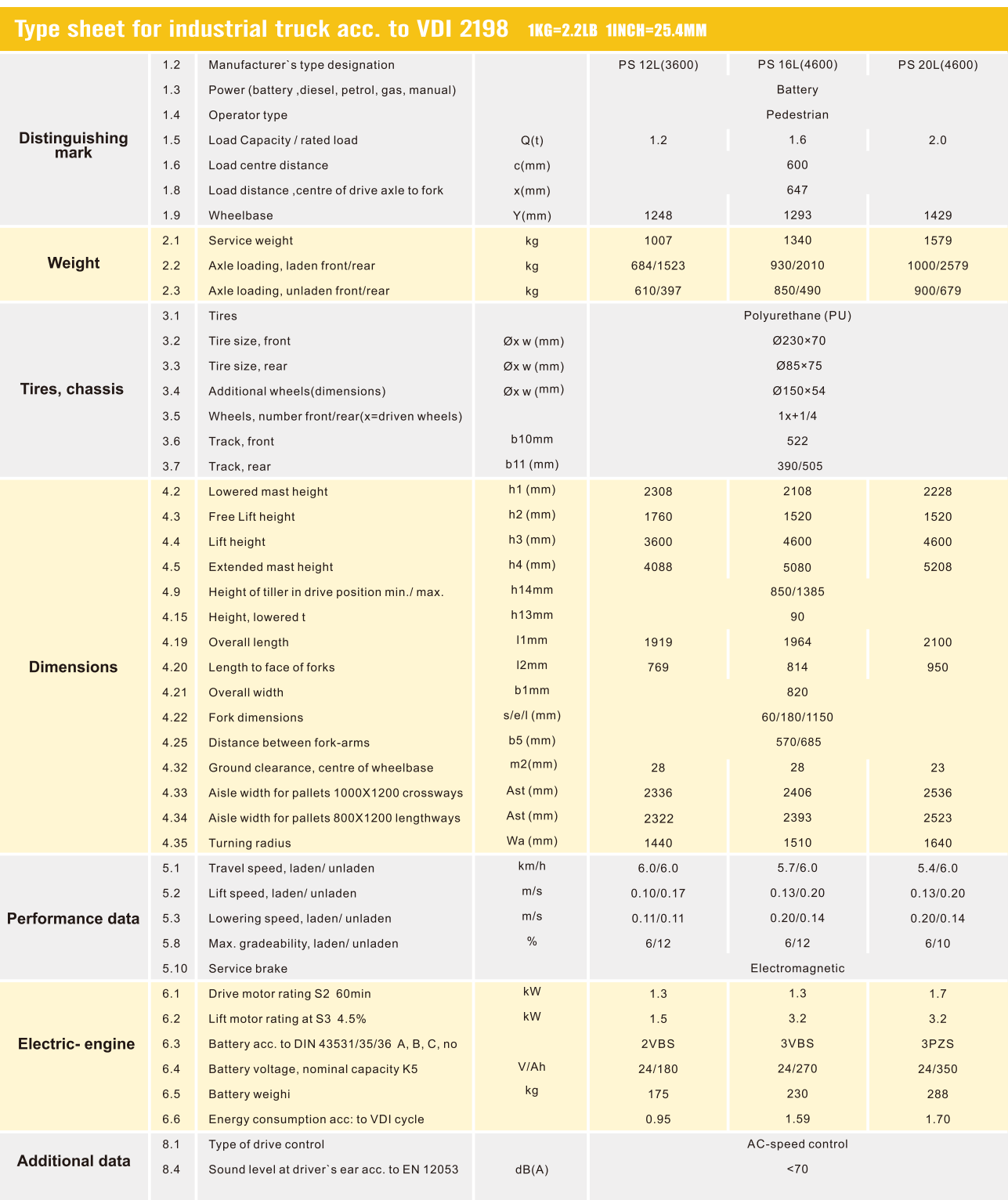


PS 20L



Technical drawing of a crane showing dimensions and labels. The drawing includes the following dimensions and labels:

- h_1 : Total height of the crane.
- h_2 : Height of the crane body.
- h_3 : Height of the crane body.
- h_4 : Height of the crane body.
- h_{13} : Height of the crane body.
- Q : Crane capacity.
- c : Crane capacity.
- x : Crane capacity.
- m_2 : Crane capacity.
- l_1 : Crane capacity.
- Y : Crane capacity.
- 893 : Crane capacity.
- 1385 : Crane capacity.
- 168 : Crane capacity.





PS16L SL/PS20L SL

Straddle-leg Electric Pedestrian Stacker with capacities of 1600/2000kg

- Ergonomic, Compact and Safe Long Tiller Design
- Precise Lifting and Lowering with Full Proportional Hydraulic System
- Powerful, Maintenance Free German AC Power Train
- Core Components from Top Quality Brands
- 4 Wheel Structure for Stability



INTRODUCTION

- The PS16-20L SL series is tailored to most pedestrian controlled stacking operations with capacities from 1600kg up to 2000kg.
- With the long mounted tiller the operator keeps safe and ergonomic distance to perform his work.
- Due to the gentle operating full proportional lifting system stacking operations becomes more safer and quicker.
- With the high- quality and state of the art top-brand components and technologies, the truck competes with leading well- known brands in the market.



Straddle leg

Adjustable straddle leg design, suitable for diverse pallet sizes and more stability



For every application the right battery capacity

with the PS-L SL series for every truck the right battery:

PS 16L SL with 270 Ah 3VBS battery
PS 20L SL with 350 Ah DIN 3PzS battery for long operations and multi-shifts.

Electronic proportional lifting and lowering

The electronically controlled proportional lifting system ensures accurate positioning and stacking operations at every lifting height.

In specific with high masts the electronic controlled proportional lifting performs at its best.



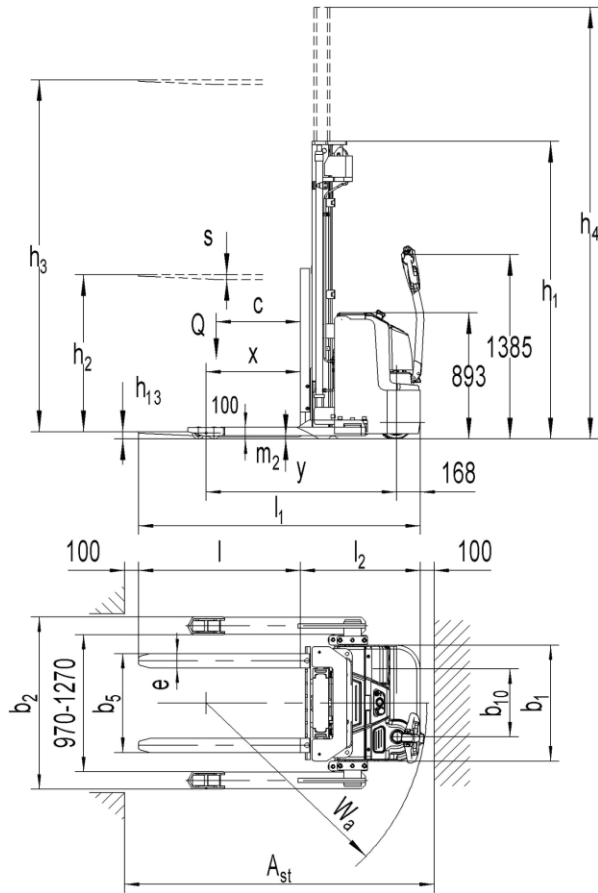
Long tiller design for ergonomics and safety

In particular through the long tiller design the operator can always keep a safe distance to the truck during proceeding the work very ergonomically. The design ensures lower operational forces than trucks with a short tiller. The tillers operating height is naturally positioned to ergonomic, operator friendly controlling positions.

Specifically staking operations becomes more ergonomically and quicker due to the safe distance and better view to the forks. The 4 wheel design with the sideways long mounted tiller gives particular an exact and perfect view to the forks.



Designation	Lowered mast height h1(mm)	Free Lift height h2(mm)	Lift height h3(mm)	Extended mast height h4(mm)	Lift+fork height h3+h13(mm)
PS16L SL					
Two stage mast	1958	--	2830	3380	2920
	2108	--	3130	3680	3220
	2308	--	3530	4080	3620
Two stage mast FFL (Full-Free-Lift)	1958	1410	2830	3380	2920
	2108	1560	3130	3680	3220
	2308	1760	3530	4080	3620
Three stage mast	2008	--	4230	4780	4320
	2108	--	4530	5080	4620
Three stage mast FFL (Full-Free-Lift)	1908	1320	3930	4480	4020
	2008	1420	4230	4780	4320
	2108	1520	4530	5080	4620
	2343	1756	5230	5780	5320
PS20L SL					
Two stage mast	2078	--	2830	3500	2920
	2228	--	3130	3800	3220
	2428	--	3530	4200	3620
Two stage mast FFL (Full-Free-Lift)	1978	1310	2630	3300	2720
	2078	1410	2830	3500	2920
	2228	1560	3130	3800	3220
	2428	1760	3530	4200	3620
Three stage mast	2128	--	4230	4900	4320
	2228	--	4530	5200	4620
Three stage mast FFL (Full-Free-Lift)	1978	1310	3930	4600	4020
	2128	1420	4230	4900	4320
	2228	1520	4530	5200	4620



Type sheet for industrial truck acc. to VDI 2198 1KG=2.2LB 1INCH=25.4MM					
Distinguishing mark	1.2	Manufacturer's type designation		PS 16L SL(4600)	PS 20L SL(4600)
	1.3	Power (battery ,diesel, petrol, gas, manual)			Battery
	1.4	Operator type			Pedestrian
	1.5	Load Capacity / rated load	Q(t)	1.6	2.0
	1.6	Load centre distance	c(mm)		600
	1.8	Load distance ,centre of drive axle to fork	x(mm)	692	673
	1.9	Wheelbase	Y(mm)	1378	1490
Weight	2.1	Service weight	kg	1460	1700
	2.2	Axle loading, laden front/rear	kg	1000/2060	1100/2600
	2.3	Axle loading, unladen front/rear	kg	1020/440	1010/690
Tires, chassis	3.1	Tires		Polyurethane (PU)	
	3.2	Tire size, front	Øx w (mm)	Ø230X75	
	3.3	Tire size, rear	Øx w (mm)	Ø84×70	
	3.4	Additional wheels(dimensions)	Øx w (mm)	Ø150x54	
	3.5	Wheels, number front/rear(x=driven wheels)		1x+1/4	
	3.6	Track, front	b10mm	522	
	3.7	Track, rear	b11 (mm)	—	
Dimensions	4.2	Lowered mast height	h1 (mm)	2108	2228
	4.3	Free Lift height	h2 (mm)	1520	1520
	4.4	Lift height	h3 (mm)	4530	4530
	4.5	Extended mast height	h4 (mm)	5088	5208
	4.9	Height of tiller in drive position min./ max.	h14mm	850/1385	
	4.15	Height, lowered t	h13mm	50	
	4.19	Overall length	l1mm	2004	2135
	4.20	Length to face of forks	l2mm	854	985
	4.21	Overall width	b1/b2(mm)	820(1170-1470)	
	4.22	Fork dimensions	s/e/l (mm)	40x120x1150	
	4.25	Distance between fork-arms	b5 (mm)	255-730	
	4.32	Ground clearance, centre of wheelbase	m2(mm)	40	
	4.33	Aisle width for pallets 1000X1200 crossways	Ast (mm)	2555	2674
	4.34	Aisle width for pallets 800X1200 lengthways	Ast (mm)	2527	2652
	4.35	Turning radius	Wa (mm)	1680	1790
Performance data	5.1	Travel speed, laden/ unladen	km/h	5.7/6.0	5.4/6.0
	5.2	Lift speed, laden/ unladen	m/s	0.13/0.20	
	5.3	Lowering speed, laden/ unladen	m/s	0.20/0.14	
	5.8	Max. gradeability, laden/ unladen	%	6/12	6/10
	5.10	Service brake		Electromagnetic	
Electric- engine	6.1	Drive motor rating S2 60min	kW	1.3	1.7
	6.2	Lift motor rating at S3 4.5%	kW	3.2	
	6.3	Battery acc. to DIN 43531/35/36 A, B, C, no		3VBS	3PZS
	6.4	Battery voltage, nominal capacity K5	V/Ah	24/270	24/350
	6.5	Battery weighi	kg	230	288
	6.6	Energy consumption acc: to VDI cycle	kWh/h	1.59	1.70
Additional data	8.1	Type of drive control		AC- speed control	
	8.4	Sound level at driver's ear acc. to EN 12053	dB(A)	69	

