

Noblelift Headquarters

Add:#528 Changzhou Road,Taihu Sub-district,Changxing,313100,China TEL:+86 572 6210311/6120989 FAX:+86 572 6210777 WEB:www.noblelift.com Email: info@noblelift.com

Noblelift North America Corp.

Add:2461 S Wolf Road, Des Plaines, IL 60018 Tel:847-595-7100 Fax:847-595-7200 Email:sales@nobleliftna.com Http://www.nobleliftna.com

Noblelift Europe GmbH Add:Borsigstrasse 9d-93092 Barbing

Germany TEL:+49 9401 607930 FAX:+49 9401 6079329 WEB:www.noblelifteuropr.com Email: mail@noblelifteurope.com

Noblelift Russia

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ООО "Ноблелифт Рус" 194292, Санкт-Петербург Домостроительная ул. 4А офис 301 Бизнес-центр "Парнас" тел.: +7 (800) 700-28-97 Email: sales@noblelift.com.ru

Q max. 1500







Pallet Truck: Li-ion Powered 1.2T- 1.5T- 2.0T & AGM 2.0T

Pallet Stacker: Li-ion or AGM Powered 1.2T, Lift height: up to 3.6m

NOBLELIFT INTELLIGENT EQUIPMENT CO., LTD





www.noblelift.com

INTRODUCTION

The EDGE series was created by Noblelift with the aim to supply product range which is capable to provide high-efficient substitution of manual and semi-electric equipment with affordable cost.

The family was named "Edge" thanks to new cutting-edge technical solutions which allowed us to create full range of compact and smart products.

Clear focus of every employer beside the working efficiency is the reduction of safety risks and injuries for employees. Majority of risks related to injuries of backs, caused by demand of high pulling and pushing force to move not powered equipment around, can be easily eliminated with the new EDGE products.

> With consideration of performance increase and safety risk reduction, the cost of ownership for the products included to the EDGE family is actually lower than the one for manual and semi-electric equipment.

Smart features like speed control in turns, PIN-code or RFID access, function of driving with tiller in its vertical position, fast and opportunity charging for li-ion batteries, which before were not offered for economic material handling powered solutions, are now available for the Edge series products and making the work easier.

> The EDGE series products are strictly conform to requirements of international safety standards.

PT ExxN PT ExxB PS ExxB PS ExxN

- PT—Pallet Truck
- PS—Pallet Stacker
- **E** Entry Level
- **xx**—Capacity (I.E. 1500kg=15)
- **B**—Basic Configuration (AGM)
- **N**—Standard Configuration (Lithium)



PTE12N

Ca

apacity

• 1.2T Capacity Li-ion

- Perfect for light-duty applications.
- Compact & skeleton design
- Fast-charging Li-ion batteries.
- Ideal for occasional operations
- Easy-battery replacement
- High maneuverability



PTE20B

• 2.0T Capacity AGM

- Economic solution for heavy loads move
- Simple but robust skeleton design
- Maintenance-free Lead-acid Battery Pack
- Ideal for industrial applications
- Fast battery replacement
- Powerful drive & pump system

The EDGE Smart Design Pallet Trucks Family

Performance



DC 24V

PTE15N

- 1.5T Capacity Li-ion
- Perfect for light-duty applications.
- Compact & sharp design
- Light service weight
- Fast-charging Li-ion batteries.
- Ideal for use on retail stores, lorries.
- Easy-battery replacement

BLDC 48V

PTE20N • 2.0T Capacity Li-ion

• Ultimate solution for heavy loads move

02

- Compact & robust design
- Fast-charging Li-ion batteries
- Easy-battery replacement
- Great grade-ability performance
- Powerful drive & pump system

Smart and Ergonomic Tillers

FRON

Compact Design and Vertical Driving

The Edge series trucks are configured with control tillers adopted to meet with application needs based on trucks designated performance.



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equipment and significantly reduce probability of injuries of operators caused by manual pumping or pushing/ pulling. At the same time, the service weight is minimized without compromising the robustness of the trucks esp. for delivery applications where the self-weight of the trucks is critical.

RFID Card Access is Standard for PTE20N optional for all other models

RFID card provides faster access to equipment and ideal for applications when one truck needs to be used by different operators

Battery discharge indicator Operating hour counter

On-board diagnostics via error codes





The tiller bar is supported by the air spring which helps to return the tiller to its vertical position without strike in the end point.

For increase of operation comfort and safety the trucks are equipped with speed reduction function ir turns. (Optional for PTE12N and PTE15N, standard for other trucks)

The value of speed reduction is adjustable according to customers



	Model	Body length (L2)	Turning Radius	Weight
$ \rightarrow $	PTE12N	387mm	1337mm	124kg
	PTE15N	380mm	1330mm	123kg
	PTE20N	386mm	1336mm	149kg
	PTE20B	478mm	1428mm	175kg

The function of driving with tiller in the **vertical position** helps with work in confined areas, especially in elevators and lorries without sacrificing of safety.



Smart & Replaceable Batteries for Pallet Trucks

EDGE

SAFETY

The***PTE xxN trucks** are equipped with maintenance-free Li-ion batteries, optional capacities for various applications are available, with its fast charging and opportunity charging features (charge whenever you want and as long as time allows) the operation time can be extended significantly.

All pallet trucks batteries are located in battery compartments securely, any possibility of movement is excluded, therefore the reliability of power supply is ensured.

*****: xx=Capacity

Light weight of the battery(max. 8kg) and the easiest way of fast battery replacement allows even a female operator to double the working time within seconds. The light weight of the batteries can be achieved through use of Li-ion battery type with high ratio of energy density to its self-weight.

All Li-ion batteries are equipped with on-board Battery

Management System (BMS), which provides mandatory control of

all important parameters of the battery during charging and

the whole life-cycle is guaranteed. The Li-ion batteries are

operation. With this control, the safety of Li-ion battery during

certified according to international safety transportation(by sea

with control system of the truck via CAN, the support of the CAN

and by air) and operation standards. The BMS communicates

protocols allows to monitor the condition of the battery and



Optional different battery

for various applications

capacities from 20Ah to 36Ah

Manage your working time with selection of batteries and chargers



▲ Socket on battery case for easy battery charging without necessity to take the battery out

The *** PTE xxN trucks** remains unpowered while charger is connected with the battery charging socket even if the charger is disconnected from the power outlet, therefore, the safety is ensured and the possibility to damage the charger is excluded.

*: xx=Capacity



min. 2.5 hours Excellent working time









The positioning of the battery inside the battery compartment is fast and easy thanks to specially designed battery guiding system



▲ Battery cases for pallet trucks are made out of ABS PC material with **15%** of glass fiber.



◀

The PTE 20B truck is equipped with maintenance-free AGM battery pack, the charging time is **8 hours**.

With the smart design, the battery pack can be replaced when it is necessary to double the operation time.

Gradeablity Performance & Robustness



The Edge series trucks have great performance on ramps even when they are fully loaded regardless their economic positioning, each truck based on its performance level can climb on sufficient level of ramp, therefore, every customer can select the truck with consideration of particular working environment.

Model	PTE12N	PTE15N	PTE20N	PTE20B
Max. grade ability laden	4%	6%	7%	5%
Max. grade ability unladen	16%	16%	16%	16%

The frame of truck is surrounded by stamped steel elements making the truck looking different and also ensuring the protection of components for PTE15N and PTE20N



Forks of the truck with shape for easy entrance and exit from pallets for PTE15N, PTE20B and PTE20N. Full length double sided C-shape reinforcements of forks significantly increase strength and rigidity of frame.

Strong steel apron protects the operator's feet during work and secures the truck's components from collisions with objects.







Drive motor with intelligent Curtis control







For the pallet trucks there are no hoses or pipes used in the hydraulic lifting circuit which significantly improves **reliability** and reduces the amount of potential problems related to leakages through connectors or their seals.

The trucks are equipped with **Curtis** controllers, **CAN-bus** technology makes the diagnostic and troubleshooting easier. The use of proved and certified components helps to ensure the conformity to international safety standards with all the supporting documents available as required by law.



Maintenance Friendly



- Capacit	y Ready 24.50\ 0.00A	Min Volt OmV Avg Volt 0.0mV	Max Volt OmV Communication Normal
Realtim]
Rated Capaci <u>Discharge Cy</u> Times	ty 60.0 Ah	Wh(Current) 0.0 <u>Discharge Cycle</u> Times	Wh Reset
Other -			
Name		Value	Units
Ce ll Temp	1	25.3	C
Ce ll Temp	1	25.1	С
SOC		45	1/255
Power Ten	np	27.1	C
Envir Tem	р	32.2	С
Cell Volt A	larm	none	
Total Volt	Alarm	none	
Current A	larm	none	
Temp Alar	m	none	
Ba l ance A	larm	none	
-Volt —			
Name		Value	Units
Cell		3507	mV
Total		24.5	V
Current		0.0	A
Run(Wh)		0	Wh

Each battery can be diagnosed via CAN connection with help of special software tool, the software can provide information about the battery condition such as balance of cells, amount of charging/discharging cycles, current, energy consumption, temperature, charging/discharging parameters, voltage of every cell, faults and alarms, settings of timing for automatic turn off.

The EDGE Smart Design Pallet Stackers

PSE12B

- **1.2T** Capacity **AGM**
- Perfect for light-duty applications.
- Compact & light service weight
- High maneuverability
- Maintenance-free Lead-acid Battery
- Integrated on-board 12A charger
- Ideal for use on mezzanines

PSE12N

- 1.2T Capacity Li-ion
- Perfect for light-duty applications.
- Compact & light service weight
- High maneuverability
- Fast-charging Li-ion batteries.
- Integrated on-board 25A charger



Smart and Ergnomic Tillers



Vertical Driving in Confined Space



The function of driving with tiller in the vertical position helps with work in confined area without sacrificing of safety.

spring which helps to return the tiller to its vertical position without strike in the end point.

For increase of operation comfort and speed reduction function in turns.



Smart Design with Compact Size and Perfect observation



Model	PSE12B	PSE12N
length(L2)	560mm	560mm
Turning Radius	1350mm	1350mm

Our engineers put a lot of efforts to achieve compactness of the trucks in comparison with traditionally used manual and semi-electric products without sacrificing of stability, robustness, safety and operation comfort.

Robustness



Wide mast provides perfect observation of forks, the field of view is clear and not interrupted by mast sections, cylinder or chains.



The operator can always clearly see the forks which significantly increases safety of operation



Capacity of 1200kg with high residual value at maximum height (load center distance 600 mm)

Real mast profiles are used for long life-time, no cheap bended solutions used. All directed to maintain performance of the truck during its life-cycle.





Gradeablity Performance





Maintenance Friendly

Convenient and fast access to any component of the truck, no elements are	
located in areas difficult to reach. No Special tools are required.	



17.6%	Rea 24.5 0.00	0V	Min Volt OmV Avg Volt 0.0mV	Max Volt OmV Communication Normal
- Realtime — Rated Capac <u>Discharge C</u> Times		Ah	Wh(Current) 0.0 <u>Discharge Cycle</u> Times	Wh Reset
Other —				
Name			Value	Units
Cell Temp	51		25.3	C
Cell Temp	51	25.1		C
SOC			45	1/255
Power Ter	mp	27.1		C
Envir Tem	ıp		32.2	C
Cell Volt /	Alarm	none		
Total Volt	Alarm	none		
Current Alarm			none	
Current A	Temp Alarm			
	rm		none	

Name	Value	Units
Cell	3507	mV
Total	24.5	V
Current	0.0	А
Run(Wh)	0	Wh

The software diagnostic tool for lithium batteries can provide full information about battery's condition and its current status. (The above values are for reference only.)

Battery Management **S**ystem

The BMS of battery controls charging and discharging parameters, working temperature, short circuits, has sleeping mode and is able to turn off the power in case of emergency. Communication with BMS and software adjustment is possible via CAN



The electric system is using CAN communication protocol increasing reliability of the system.

CAN-bus





2x12 85Ah (5Hr) AGM

PSE12N

24V 60Ah Lithium LiFePO4

battery with BMS. Lithium

erminals with screws and

ocated inside the steel cas

battery has connection

SE12B





charger with current The standard charging time is 2.5 hours Opportunity charging s supported

The PSE 12N stacker is equipped with maintenance-free 24V/60Ah LiFePO4 type Li-ion battery with fast charging and ultra-high number of charging /discharging cycles during life time; opportunity charging feature basically does not limit your operation time. The integrated BMS provides the same features as the BMS for the batteries of pallet trucks(refer to pallet truck section).

The on-board charger with 25A current can provide full charge for less than 2.5 hours with great efficiency.

The PSE 12B stacker is equipped with 2x12V 85Ah VRLA-AGM maintenance free batteries. Optionally available 2x12V 105Ah batteries for longer operation.

The stacker is equipped with 12A on-board charger. The charging time is 7-8 hours, opportunity charging is not available.



STANDARD CONFIGURATION & OPTIONS FOR EDGE FAMILY

STANDARD CONFIGURATION OR OPTIONS	PTE12N	PTE15N	PTE20N	PTE20B	PSE12B	PSE12N
Standard Battery	Li—ion 24V/15Ah	Li—ion 24V/20Ah	Li—ion 48V/20Ah	AGM 48V/20Ah	AGM 2x12V/85Ah	Li—ion 24V/60Ah
Li-ion Battery 24V/20Ah	0	S	—	_	—	—
Li-ion Battery 24V/30Ah	0	0	_	_	_	_
Li-ion Battery 24V/36Ah	0	0	—	—	—	—
AGM 2x12V/106Ah (5 Hr)	_	_	_	_	0	—
Standard Charger	24V / 5A	24V / 5A	48V / 9A	48V / 3A	24V / 12A	24V / 25A
Li-ion Charger 24V/5Ah	S	S	—	_	_	—
Li-ion Charger 24V/8Ah	with optional battery only	0	_	—	—	—
Li-ion Charger 24V/12Ah	with 36Ah battery only	with 36Ah battery only	_	_	_	_
Curtis controller	S	S	S	S	S	S
BMS	S	S	S	_	_	S
CAN-communication	S	S	S	S	S	S
Speed Reduction at Turning	0	0	S	S	S	S
Vertical drive/Pin wheel	S	S	S	S	S	S
Fast battery replacement	S	S	S	S	_	_
Entry Roller	S	S	S	S	_	—
Single Fork Roller	S	S	S	S	S	S
Tandem Fork Rollers	0	0	0	0	_	_
On-board charger	_	_	_	_	S	S
Stability Castors	0	0	S	S	S	S
High traction drive wheel tyre	0	0	_	_	_	_
Fork length 800/900/1000mm	0	0	0	0	_	—
Fork width 370/550/570mm	—	0	—	_	_	_
Load backrest(42/48/60")	—	0	0	_	_	_
Pin Code Access	0	S	S	0	S	S
RFID Access	0	0	S	0	_	0
LED Indicators on Tiller	S	_	_	S	_	_
LCD Display on Tiller	0	S	S	0	S	S
			S=Standard	O=Optiona	al —=no	t available

Various Options(Pallet Truck)





Optional tandem fork rollers





Optional high traction drive wheel Optional Stability Casters

Optional backrest



Type sheet for industrial truck acc. to VDI 2198						
Distinguishing mark						
1.2 Manufacturer's type designation		PT E12N				
1.3 Drive		Battery				
1.4 ¦Operator type		Pedestrian				
1.5 Load Capacity / rated load	Q (t)	1.2				
1.6 Load centre distance	<u>c (mm)</u>	600				
1.8 Load distance ,centre of drive axle to fork	x (mm)	942				
1.9 Wheelbase	y (mm)	1185				
Weight 2.1 Service weight	kg	124 129				
4						
2.2 Axle loading, laden front/rear	kg	355/972 425/908				
2.3 ¦Axle loading, unladen front/rear Tyres, chassis	kg	101 / 27 106 / 27				
3.1 ¦Tires		Polyurethane (PU)				
3.2 ¦ Tire size, front	x w (mm)	210×70				
3.3 ¦Tire size,rear	x w (mm)	80×93(80×70)				
3.4 Additional wheels(dimensions)	x w (mm)	-/ 80×30				
3.5 Wheels,number front/rear(x=driven wheels)		1x/2(1x/4) or $1x+2/2(1x+2/4)$				
3.6 ¹ / ₁ Tread, front	b10 (mm)	-/420				
3.7 ¦Tread, rear	b11 (mm)	380 525				
Dimensions	12()	116				
4.4 Lift	h3 (mm)	115				
4.9 Height of tiller in drive position min./ max.	h14 (mm)	700 / 1160				
4.15 Height, lowered	h13 (mm)	80				
4.19 Overall length	11 (mm)	1537				
4.20° Length to face of forks	12 (mm)	387				
4.21 Overall width	b1 (mm)	540 685				
4.22 Fork dimensions	s/e/l (mm)					
4.25 ['] Width across forks	b5 (mm)	540 685				
4.32 Ground clearance, centre of wheelbase	m2 (mm)	32				
4.34 Aisle width for pallets800X1200 lengthways (200mm safe distance)	Ast (mm)	2007				
4.35 Turning radius	Wa (mm)	1337				
Performance Data						
5.1 Travel speed, laden/ unladen	km/h	4.6/4.8				
5.2 ¦Lift speed, laden/ unladen	m/s	0.031 / 0.037				
5.3 Lowering speed, laden/ unladen	m/s	0.069 / 0.051				
5.8 Max. gradeability, laden/ unladen	%	4 / 16				
5.10 Service brake		Electromagnetic				
Electric- engine						
6.1 Drive motor rating S2 60min	kW	0.65				
6.2 Lift motor rating at S3 10%	kW	0.50				
6.3 Battery acc. to DIN 43531/35/36 A, B, C, no		No				
6.4 Battery voltage, nominal capacity K5	V / Ah	24/15				
6.5 Battery weight	kg	4.4				
6.6 ¦Energy consumption acc. to VDI cycle	kWh/h	0.14				
Addition Data						
8.1 Type of drive control		DC speed Control				
8.4 Sound level at driver's ear acc. to EN 12053	dB(A)	<70				

15





Type sheet for industrial truck acc. to VDI 2198

Disting	guishing mark			
	Ianufacturer`stype designation		PT E15N	PT E20N
+ -	ower(battery, diesel, petrolgas, manual)			attery
+ -	perator type			destrian
	oad Capacity / rated load	Q (t)	1.5	2.0
	oad centre distance	c (mm)		600
	oad distance ,centre of drive axle to fork	x (mm)	947	951
	Vheelbase	y (mm)	1185	1189
Weigh				
2.1 S	ervice weight	kg	123 126	149 153
2.2 ¦A	xle loading, laden front/rear	kg	623/1000 626/100	00 621/1528 625/1528
2.3 ¦A	xle loading, unladen front/rear	kg	96/27 99/27	/ 115/34 119/34
	chassis			
3.1 ¦Ti				ethane (PU)
	ire size, front	x w (mm)		10×70
	ire size,rear	x w (mm)		93(80×70) 80×30
	Additional wheels(dimensions) Wheels,number front/rear(x=driven wheels)	x w (mm)		
	read, front	b10 (mm)	1x/ 2(1x/ 4) 01	$\frac{1x+2}{420}$
	read, rear	b11 (mm)	380 525	380 525
Dimen	, ,	()	500 525	000 020
4.4 ¦L	ift height	h3 (mm)		115
4.9 ¦H	leight of tiller in drive position min. / max.	h14 (mm)	700	0 / 1160
	leight, lowered	h13 (mm)		80
4.19 0	Overall length	11 (mm)	1530	1536
4.20 L	ength to face of forks	12 (mm)	380	386
4.21 [†] O	Overall width	b1 (mm)	540 685	540 685
4.22 F	ork dimension	s/e/l (mm)	47 / 1	.60 / 1150
4.25' W	Vidth across forks	b5 (mm)	540 685	540 685
	Fround clearance, centre of wheelbase	m2 (mm)		33
+ -			2000	
	isle width for pallets800X1200 lengthways	Ast (mm)		2006
	urning radius	Wa (mm)	1330	1336
	mance ravel speed, laden/ unladen	km/h	4.6/4.8	4.8/ 5.2
	ift speed, laden/ unladen		0.020 / 0.025	0.017 / 0.022
+ -	owering speed, laden/ unladen	n/s	0.05 / 0.04	0.05 / 0.03
+ -	aradeability, laden/ unladen		6 / 16	7 / 16
Motors	ervice brake		Electi	omagnetic
	Drive motor rating S2 60min	kW	0.65	0.75
	iff motor rating at S3 10%	kW	0.50	0.8
+ -	Battery acc. to DIN 43531/35/36 A, B, C, no			
	Battery voltage, nominal capacity K5	V / Ah	24/20(24/30;2	4/36) 48/20
+ -				
	attery weight (minimum)	kg	4.6	7.5
	nergy consumption acc. to VDI cycle	kWh/h	0.22	0.18
	on Data		DC	and Construct
+ -	ype of drive control			eed Control
8.4 ¦Se	ound level at driver's ear acc. to EN 12053	dB(A)		<70



12	inguishing mark Manufacturer`s type designation		PT E	20B
	Power(battery,diesel,petrolgas,manual)		Batt	
1. <u>3</u> 1.4	Operator type	l 	Pedes	
	Load Capacity / rated load	Q (t)	2.	
	Load centre distance	c (mm)		
	Load distance ,centre of drive axle to fork	x (mm)		
	Wheelbase	y (mm)	128	
Wei				
2.1	Service weight	kg	185	192
2.2	Axle loading, laden front/rear	kg	670 / 1515	673 / 1519
	Axle loading, unladen front/rear	kg	145 / 40	152 / 40
Tyre	es, chassis	-		
3.1	Tires	 	Polyureth	
3.2	Tire size, front	x w (mm)	210	
3.3	Tire size,rear	x w (mm)	80×93(
3.4	Additional wheels(dimensions)	x w (mm)	80×	
$\frac{3.5}{2.6}$	Wheels,number front/rear(x=driven wheels)	1 1 0 (mm)	$\frac{1x}{2(1x)}$ or 1x	
$\frac{3.6}{3.7}$	Tread, front Tread, rear	b10 (mm) b11 (mm)	42	525
	ensions		580	525
	Lift height	h3 (mm)	11	5
	Height of tiller in drive position min./ max.	h14 (mm)		
	Height, lowered	h13 (mm)	80	
	Overall length	11 (mm)	162	
	Length to face of forks	l2 (mm)	47	
	Overall width	b1 (mm)	540	685
	Fork dimensions	s/e/l (mm)	47 / 160	/ 1150
	Width across forks	b5 (mm)	540	685
4.32	Ground clearance, centre of wheelbase	m2 (mm)	33	3
4.34	Aisle width for pallets800X1200 lengthways	Ast (mm)	209	98
4.35	Turning radius	Wa (mm)	142	28
Perf	ormance			
5.1	Travel speed, laden/ unladen	km/h	4.2/	4.6
5.2	Lift speed, laden/ unladen	m/s	0.025 /	0.030
5.3	Lowering speed, laden/ unladen	m/s	0.075 /	0.063
	Max. gradeability, laden/ unladen	%	5 /	16
	Service brake		Electron	agnetic
Mote				
	Drive motor rating S2 60min	kW	0.7	75
6.1		kW	0.	8
	Lift motor rating at S3 10%	IL III		
	+		N	0
6.2 6.3	Battery acc. to DIN 43531/35/36 A, B, C, no		N	
6.2 6.3 6.4	Battery acc. to DIN 43531/35/36 A, B, C, no Battery voltage, nominal capacity K5	V / Ah	N 48/	20
6.2 6.3 6.4 6.5	Battery acc. to DIN 43531/35/36 A, B, C, no Battery voltage, nominal capacity K5 Battery weight (minimum)	V / Ah kg	N 48/ 30	20
6.2 6.3 6.4 6.5 6.6	Battery acc. to DIN 43531/35/36 A, B, C, no Battery voltage, nominal capacity K5 Battery weight (minimum) Energy consumption acc. to VDI cycle	V / Ah	N 48/	20
6.2 6.3 6.4 6.5 6.6 Add	Battery acc. to DIN 43531/35/36 A, B, C, no Battery voltage, nominal capacity K5 Battery weight (minimum)	V / Ah kg	N 48/ 30	20) .9

Disti	inguishing mark			
1.2	Manufacturer`s type designation	 	PT E20B	
1.3	Power(battery,diesel,petrolgas,manual)		Battery	
1.4	Operator type	 l	Pedestrian	1
1.5	Load Capacity / rated load	Q (t)	2.0	
1.6	Load centre distance	_ c (mm)	600	
1.8	Load distance ,centre of drive axle to fork	x (mm)		
	Wheelbase	y (mm)	1281	
Wei	5	1.	105	102
	Service weight	kg i	185	192
	Axle loading, laden front/rear	kg		673 / 1519
	Axle loading, unladen front/rear	kg ¦	145 / 40	152 / 40
	s, chassis Tires	1	Polyurethane ((PII)
3.2	Tire size, front	x w (mm)	210×70	(10)
3.3	Tire size,rear	x w (mm)	80×93(80×7	70)
3.4	Additional wheels(dimensions)	x w (mm)	80×30	
3.5	Wheels,number front/rear(x=driven wheels)		1x/2(1x/4) or $1x + 2/$	2(1x + 2/4)
3.6	Tread, front	b10 (mm)	420	
3.7	Tread, rear	b11 (mm)	380	525
	ensions	12()	11.7	
	Lift height	h3 (mm)	115	
	Height of tiller in drive position min./ max.	h14 (mm)	700 / 1160	
	Height, lowered Overall length	h13 (mm) 11 (mm)	80	
			1628	
	Length to face of forks	12 (mm)	478	685
	Overall width	b1 (mm)	540	
	Fork dimensions	s/e/l (mm)	47 / 160 / 11	
4.25	Width across forks	b5 (mm)	540	685
4.32	Ground clearance, centre of wheelbase	m2 (mm)	33	
4.34	Aisle width for pallets800X1200 lengthways	Ast (mm)	2098	
4.35	Turning radius	Wa (mm)	1428	
Perf	ormance			
	Travel speed, laden/ unladen	km/h	4.2/ 4.6	
5.2	Lift speed, laden/ unladen	m/s	0.025 / 0.03	30
5.3	Lowering speed, laden/ unladen	m/s	0.075 / 0.06	53
	Max. gradeability, laden/ unladen	%	5 / 16	
	Service brake		Electromagne	etic
Moto	Drive motor rating S2 60min	kW	0.75	
	Lift motor rating at S3 10%	kW	0.75	
	Battery acc. to DIN 43531/35/36 A, B, C, no	X7 / A1	No	
	Battery voltage, nominal capacity K5	V/Ah	48/20	
	Battery weight (minimum)	kg		
	Energy consumption acc. to VDI cycle	kWh/h	0.19	
	ition Data			4 1
	Type of drive control	 l	DC speed Cor	ntrol
8.4	Sound level at driver's ear acc. to EN 12053	dB(A)	<70	

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Type sheet for industrial truck acc. to VDI 2198





Mast table PSE 12B/PSE 12N

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)
Single-stage mast	1930	1514	1514	1930	1600
Single-stage mast	2330	1914	1914	2330	2000
	1930		2814	3337	2900
Two-stage mast	2080	-	3114	3637	3200
	2280	_	3514	4037	3600



	shing mark		PS E12B	DC E12N	
1.2	Manufacturer's type designation			PS E12N 500	
1.3	Power (battery ,diesel, petrol, gas, manual)		Bat		
1.4	¦ Operator type		Pedestrian		
1.5	Load Capacity / rated load	Q (t)	1	.2	
1.6	Load centre distance	c (mm)	6	00	
1.8	Load distance ,centre of drive axle to fork	x (mm)	760		
1.9	Wheelbase	y (mm)	11	47	
eight	Comios quielt	lan i	(20	595	
2.1	Service weight	kg	620	585	
2.2	Axle loading, laden front/rear	kg	580 / 1240	560 / 1225	
2.3	Axle loading, unladen front/rear	kg	450 / 170	440 / 145	
res, ch 3.1	Tires		Polvu	rethane	
3.2	Tire size, front	$x w (mm)$ $\Phi 210 \times 70$			
3.3	Tire size,rear	x w (mm)	Φ84×93		
3.4	Additional wheels(dimensions)	x w (mm)	Φ100×50		
3.5	Wheels,number front/rear(x=driven wheels)		1x + 1/2		
3.6	Tread, front	b10 (mm)	550		
3.7 mensio	Tread, rear	b11 (mm)	400	/ 515	
4.2	Lowered mast height	h1 (mm)	22	280	
4.3	Free Lift height	h2 (mm)	_		
4.4	Lift height	h3 (mm)	3514		
4.5	Extended mast height	h4 (mm)	4037		
4.9	Height of tiller in drive position min./ max.	h14 (mm)	710 /1150		
4.15	Height, lowered	h13 (mm)			
4.19	· Overall length	11 (mm)	1710		
4.20	Length to face of forks	l2 (mm)	560		
 4.21	Verall width	b1 (mm)	800		
4.22	Fork dimensions	s/e/l (mm)	60 / 180 / 1150		
4.25	Distance between fork-arms	b5 (mm)	570 /685		
4.32	Ground clearance, centre of wheelbase	m2 (mm)	26		
4.33	Aisle width for pallets 1000X1200 crossways	Ast (mm)	2197		
4.34	Aisle width for pallets 800X1200 lengthways		2197		
	-!	Ast (mm)	1350		
4.35	¦ Turning radius ance Data	Wa (mm)	13	350	
5.1	Travel speed, laden/ unladen	km/h	4.5	/ 4 7	
5.1 5.2	Lift speed, laden/ unladen	m/s	4.5/ 4.7 0.12 / 0.19		
5.2 5.3	Lowering speed, laden/ unladen	m/s	0.13 / 0.11		
5.5 5.8	Max. gradeability, laden/ unladen	%	5 / 10		
5.10	Service brake		Electromagnetic		
	engine				
6.1	Drive motor rating S2 60min	kW	0.	.65	
6.2	Lift motor rating at S3 4.5%	kW	2.2		
6.3	Battery acc. to DIN 43531/35/36 A, B, C, no		۱	 Jo	
 6.4	Battery voltage, nominal capacity K5	V/Ah	2x12/85 ¹)	24/60	
6.5	Battery weight +/-5%	kg	2x27 ²)		
6.6	Energy consumption acc: to VDI cycle	kWh/h			
ditiona				.0	
8.1	Type of drive control	1	Γ	DC	
		Sound level at driver's ear acc. to EN 12053 $dB(A)$ <70			

2) 2x12V/106Ah : 2 x 34

Type sheet for industrial truck acc. to VDI 2198