

NOBLELIFT

Material Handling



















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









PSE12B/BD/BSL/BM

- 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/ND/NSL/NM

- 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
- Ideal for use on mezzanines
- Ultimate solution for light duty operations

Smart and Ergnomic Tillers

Standard For PSE12B and PSE12N





Emergency-reverse &Horn Buttons

Dual butterfly-style thumb driving controls

Electric lifting and lowering

RFID Card Access is optional for PSE12B and standard for PSE12N

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



*PSE12BD/ND、PSE12BSL/NSL、PSE12BM/NM and PSE12B/N have the same tiller as standard, PSE12N、PSE12ND、PSE12NS、PSENM have the RFID card as standard.

Vertical Driving in Confined Space



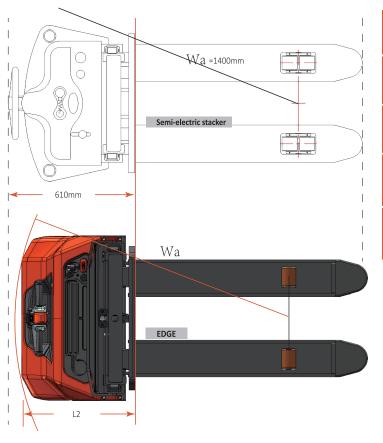
The function of driving with tiller in the **vertical position** helps with work in confined area without sacrificing of safety.

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 in turns.



Smart Design with Compact Size and Perfect observation



Model	length(L2)	Turning Radius
PSE12B/N	560mm	1350mm
PSE12BD/ND	602mm	1467/1384mm
PSE12BSL/NSL	640mm	1345mm
PSE12BM/NM	560mm	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.

Wide mast provides perfect observation of forks, the field of view is clear and not interrupted by mast sections, cylinder or chains. (Except PSE12BM/NM)



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

Robustness

Gradeablity Performance





Steel cover

The main cover is made out of steel with thickness 2.0mm



Tiller is made out of PA6 30% of glass fiber material, having high strength.

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.





Welded forks are used to ensure robustness.



Maintenance Friendly

STANDARD CONFIGURATION & OPTIONS FOR EDGE FAMILY

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



┌ Capacity —			
	Ready	Min Volt	Max Volt
ורח	24.50V	0mV	0mV
17.6%	24.500	Avg Volt	Communication
	0.00A	0.0mV	Normal

┌ Realtime ────	
Rated Capacity 60.0 Ah Wh(Current) 0.0 Discharge Cycle Discharge Cycle Times Times	

Cther —		
Name	Value	Units
Cell Temp1	25.3	°C
Cell Temp1	25.1	C
SOC	45	1/255
Power Temp	27.1	C
Envir Temp	32.2	C
Cell Volt Alarm	none	
Total Volt Alarm	none	
Current Alarm	none	
Temp Alarm	none	
Balance Alarm	none	

┌ Volt		
Name	Value	Units
Cell	3507	mV
Total	24.5	V
Current	0.0	Α
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 System

CAN-bus

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 protoco ncreasing reliability of the system.



SE12B/BD/BSL/BM

2x12 85Ah (5Hr) AGM naintenance free batteries

Optionally available 2x12



For PSE12B the charger with current 12A is used The standard charging time is 7 hours



PSE12N/ND/NSL/NM

24V 60Ah Lithium LiFePO4 battery with BMS. Lithium battery has connection minals with screws and



For PSE12N the charger with current 25A is used The standard charging time is 2.5 hours Opportunity charging s supported

The PSE12N/ND/NSL/NM 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 PSE12B/BD/BSL/BM 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.



PTE12N PTE15N PTE20N PTE20B **CONFIGURATION OR OPTIONS** Li-ion Li-ion Li-ion AGM Standard Battery 24V/15Ah 24V/20Ah 48V/20Ah 48V/20Ah Li-ion Battery 24V/20Ah 0 Li-ion Battery 24V/30Ah 0 Li-ion Battery 24V/36Ah 0 0 AGM 2x12V/106Ah (5 Hr) 24V/5A 24V/5A Standard Charger 48V/9A 48V/3A Li-ion Charger 24V/5Ah S S with optional Li-ion Charger 24V/8Ah 0 battery only with 36Ah with 36Ah Li-ion Charger 24V/12Ah battery only battery only BMS CAN-communication S S S S Speed Reduction at Turning 0 0 Vertical drive/Pin wheel S S S S Fast battery replacement Entry Roller S S S S Single Fork Roller Tandem Fork Rollers 0 0 0 0 On-board charger 0 0 S S Stability Castors 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 0 Pin Code Access 0 **RFID Access** 0 0 S 0 LED Indicators on Tiller LCD Display on Tiller 0 S

Various Options(Pallet Truck)



STANDARD

Optional tandem fork rollers



Optional high traction drive wheel



S=Standard

O=Optional

Optional Stability Casters



— =not available

Optional backrest

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PSE12BM/NM EDGE Stacker-Mono-Mast

Mast table PSE 12BM/PSE 12NM					
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)
	1130	714	1514	1130	800
Single-stage mast	1930	1514	1914	1930	1600
	2330	1914	2514	2330	2000



	Type sheet	for industrial truck a	acc. to VDI 2198		
istingui	shing mark				
1.2	Manufacturer's type designation		PSE12BM	PSE12NM	
1.2	Down (bottom discal natual ass manual)		2000		
1.3	Power (battery ,diesel, petrol, gas, manual) Operator type		Battery		
1.5	Load Capacity / rated load	Q (t)	Pedestrian 1.2		
1.6	Load centre distance	c (mm)	$\frac{1.2}{600}$		
1.8	Load distance ,centre of drive axle to fork	x (mm)	760		
1.9	Wheelbase	y (mm)			
eight		, , , , , , , , , , , , , , , , , , , ,			
2.1	Service weight	kg	530	500	
2.2	Axle loading, laden front/rear	kg	500 / 1230	490 / 1210	
2.3	Axle loading, unladen front/rear	kg	375 / 155	355/ 145	
res, ch					
3.1	Tires	ļ <u>-</u>	Polyureth		
3.2	Tire size, front	x w (mm)	Ф210×		
3.3	Tire size,rear Additional wheels(dimensions)	x w (mm)	Φ84×9		
3.4 3.5	-;	x w (mm)	$\Phi 100 \times \frac{1}{1} \times \frac{1}{1$		
3.6	Wheels,number front/rear(x=driven wheels) Tread, front	b10 (mm)	$\frac{1x + 1}{550}$		
3.7	Tread, rear	b11(mm)	400		
mensic		UTI(IIIIII)	400		
4.2	Lowered mast height	h1 (mm)	2330		
4.3	Free Lift height	h2 (mm)	1914		
4.4	Lift height	h3 (mm)	1914		
4.9	Height of tiller in drive position min./ max.	h14 (mm)	710 /11	50	
4.15	Height, lowered	h13 (mm)	86		
4.19	Overall length	11 (mm)	1710		
4.20	Length to face of forks	12 (mm)			
4.21	! Overall width	b1 (mm)			
4.22	Fork dimensions	s/e/l (mm)	800 60 / 180 / 1150		
4.25	Distance between fork-arms	b5 (mm)	570	1130	
	Ground clearance, centre of wheelbase				
4.32	Aisle width for pallets 1000X1200 crossways	$\frac{m2 \text{ (mm)}}{4 - 4 \text{ (result)}}$	24		
4.33	-,	Ast (mm)	2197		
4.34	Aisle width for pallets 800X1200 lengthways	Ast (mm)	2145		
4.35	Turning radius	Wa (mm)	1350		
_	Travel med lader/andeden	km/h	4.2/ 4.	5	
5.1	Travel speed, laden/ unladen				
5.2	Lift speed, laden/ unladen	m/s	0.11 / 0.14		
5.3	Lowering speed, laden/unladen	m/s	0.13 / 0.11		
5.8	Max. gradeability, laden/ unladen	%	5 / 10		
5.10	Service brake engine	l I	Electromag	gnetic	
6.1	Drive motor rating S2 60min	kW	0.65		
6.2	Lift motor rating at S3 4.5%	kW			
	-	IX VV	2.2		
6.3	Battery acc. to DIN 43531/35/36 A, B, C, no		No		
6.4	Battery voltage, nominal capacity K5	V / Ah	$\frac{2x12/85^{2}}{3}$	24 / 60	
6.5	Battery weight +/-5%	kg	$2x27^{3}$ 17		
6.6	Energy consumption acc: to VDI cycle	kWh/h	0.8		
ditiona					
8.1	Type of drive control		DC		
8.4	Sound level at driver's ear acc. to EN 12053	dB(A)	<70		

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¹⁾ Including the ring screw: +55mm o 2) Option: 2x12V/106Ah o 3) 2x12V/106Ah: 2x34kg o