

INTRODUCTION

The PT E12 is designed for the last "Mile"deliveries where the pallet weight is not more than 800kg normally. With its low service weight the truck is tailored to the downtown low duty delivery applications with tail-lifts.

Ergonomic tiller with Battery Discharge Indicator

We concentrated on ergonomic and easy solutions. The result is a smart control and indication unit, where all necessary functions are implemented.

Electric lifting function with long tiller

The electric lifting function gives the operator the daily comfort which is required for daily operations. Through the electric lifting button the load is effortless lifted while the manually lowering lever gives more sensitivity to be able to place the goods silently.

Exchangeable battery

The PT E12 is equipped with an powerful 45 Ah maintenance free AGM battery system. When the battery capacity comes to an end, the truck can be further operated by just replacing the battery with another one (option) to enlarge (double) the operating time.



Less Service costs with less wiring

The components are arranged in a way which reduces the wiring and which reduces possible electrical defects. The controller is assembled directly to the electrical lifting system. The only lifted cables are the battery cables.



Low Service weight and robust design

Through the total new design, the truck is robust at the drive end side as well as to the fork-side. All parts are easy to maintain.



Low Service Weight predestinated

Low Noise High Quality Drive Motor

for Tail-lift use



Economic Power-Electric Pallet Truck Compact and Reliable Design

INTRODUCTION

The PT E15 is an economic walkie-electric pallet truck, with rated capacity of 1500kg/3300lbs.

The compact and light design is suitable for a variety low duty applications in ware-houses or delivery applications on lorries with tail lifts.

With the electric lifting and the lowering both function can be controlled easy and safe.

ADVANTAGES

- Ideal solution for low-duty applications.
- Built- in charger for high autonomy optional external charger available.
- Battery discharge indicator with automatic lift cut-off function for higher battery lifetime.
- Additional stabilization through stabilizers.
- Optional backrest on request.
- Several fork versions and backrest available on request
- Unique design with the electric lifting and the lowering lever, both function can be controlled easy and safe.







Built-in charger

The built-in charger makes operations more autonomy and increases the operating range. Optional external charger.



Easy pallet entry

Additional entry rollers ensure easy pallet entry and preventing possible damages.



Robust chassis

Robust chassis with reinforced fork-structure (7mm together).

Sideways castors

Sideways castors ensure travelling stability and safety in medium applications.



The powerful 64Ah (2x12V 64Ah) batteries gives enough autonomy the truck needs. Optional 2x12V 85Ah battery.



Deep discharge protection

Proofed and ergonomic emergency button and discharge indicator, more robust and reliable than other. The included automatic battery protection ensures high lifetime for the batteries.

Proofed components

Proofed components such as sensors micro-switches and controller, and hydraulic units from international brands.

Fulfilling standards

Fulfilling the actual valid European standards, also in ISO 13849, performance level.



Suspension Castors

Suspension castors better with performance in overcoming obstacles. high travelling stability, and less wear & noise.

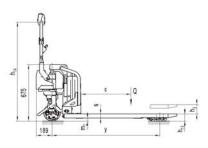
Protection

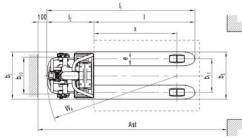
Motor and wheel protection out of robust metal. Also gives perfect foot protection.



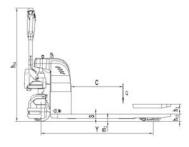


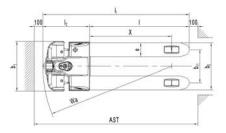
PTE12





PTE15





Ttype sheet for industrial truck acc. to VDI 2198 1KG-2.2LB 1INCH-25.4MM								
	1.2	Manufacturer's type designation			PT E12		PTE15	
	1.3	Drive			Battery		electric	
	1.4	Operator type			Pedestrian		Pedestrian	
Distinguishing	1.5	Load Capacity / rated load	Q(t)	lbs	1.2	1.5	1.5	3300
mark	1.6	Load centre distance	c(mm)	in	600	600	600	23.6
	1.8	Load distance ,centre of drive axle to fork	x(mm)	in	947	946	946	37.2
	1.9	Wheelbase	Y(mm)	in	1293	1293	1363	53.9
	2.1	Service weight	kg	lbs	170	190	200	440
Weight	2.2	Axle loading, laden front/rear	kg	lbs	500/870	510/1180	560/1140	1232/2508
	2.3	Axle loading, unladen front/rear	kg	lbs	130 / 40	150/40	160/40	352/88
	3.1	Tires				1	Polyurethane (PU)
	3.2	Tire size, front	Øx w (mm)	in	Ø220×70	Ø220×70	Ø220×70	Ø 8.7×2.8
	3.3	Tire size, rear	Øx w (mm)	in	Ø80×93 Ø80×70	Ø80×70	Ø80×93	Ø 3.1×3.7
Tires, chassis	3.4	Additional wheels(dimensions)	Øx w (mm)	in	Ø80×30	Ø80×30	Ø80×30	Ø3.1×1.2
	3.5	Wheels, number front/rear(x=driven wheels)				1x+2/4	1x +2/2	
	3.6	Track, front	b10mm	in	420	410	410	16.1
	3.7	Track, rear	b11 (mm)	in	380	380	380	15
	4.4	Lift	h3 (mm)	in	115	115	115	4.5
	4.9	Height of tiller in drive position min./ max.	h14mm	in	840 / 1185	820 / 1310	820 / 1310	32.3/51.6
	4.15	Height, lowered	h13mm	in	85	85 (80)	80	3.1
	4.19	Overall length	I1mm	in	1686	1690	1760	69.3
	4.20	Length to face of forks	I2mm	in	536	540	540	21.3
	4.21	Overall width	b1mm	in	540	574	705	27.8
Dimensions	4.22	Fork dimensions	s/e/l (mm)	in	48 / 160 / 1150	48/60/1150 ¹⁾	48/60/1220 ¹⁾	1.9/2.4/481)
	4.25	Distance between fork-arms	b5 (mm)	in	540	540 (520)	685 (520, 540)	27(20.5,21.3)
	4.32	Ground clearance, centre of wheelbase	m2mm	in	37	37(32)	32	1.3
	4.34	Aisle width for pallets 800X1200 lengthways	Ast (mm)	in	2156	2160	2230	87.8
	4.35	Turning radius	Wa (mm)	in	1482	1485	1555	61.2
	5.1	Travel speed, laden/ unladen	km/h	mph	4.0/4.5	4.2 / 4.6	4.2/4.6	2.6/2.9
	5.2	Lift speed, laden/ unladen	m/s	fpm	0.030/0.053	0.03/0.053	0.03/0.053	5.9/10.4
Performance data	5.3	Lowering speed, laden/ unladen	m/s	fpm	0.050/0.048	-	-	-
	5.8	Max. gradeability, laden/ unladen	%		4 / 10		4/10	
	5.10	Service brake					Electromagnetic	
	6.1	Drive motor rating S2 60min	kW	Нр	0.45	0.45	0.45	0.6
	6.2	Lift motor rating at S3 10%	kW	Нр	0.8	0.8	0.8	1.1
Electric- engine	6.3	Battery acc. to DIN 43531/35/36 A, B, C, no			no		no	
Electric- engine	6.4	Battery voltage, nominal capacity K5	V/Ah		2x12V / 45		2×12V / 64	
	6.5	Battery weight	kg	lbs	28	40	40	88
	6.6	Energy consumption acc. to VDI cycle	KWh/h		0.25		0,39	
	8.1	Type of drive control					DC speed Control	
Addition data	8.4	Sound level at driver`s ear acc. to EN 12053	dB(A)		<70		69	

Note: 1) Available fork length: 800, 1000, 1150, 1220mm

05/06



Economic Power-Electric Pallet Truck Compact and Reliable Design

INTRODUCTION

The EPT 15 / SPT 15 is an economic walkie-electric / semielectric pallet truck, with rated capacity of 1500kg/3300lbs.

The compact and light design is suitable for a variety low duty applications in ware-houses or delivery applications on lorries with tail lifts.

ADVANTAGES





Built-in charger The built-in charger makes

operations more autonomy and increases the operating range.



Easy pallet entry Additional entry rollers ensure

easy pallet entry and preventing possible damages.



Robust chassis

Robust chassis with reinforced fork-structure (7mm together).



Powerful batteries

batteries.

EPT 15: 2x12V 64Ah (option 85Ah) SPT 15: 2X12V 40Ah (option 64Ah)

powerful VRLA-AGM maintenance-free



Deep discharge protection Proofed and ergonomic emergency

Proofed components

button and discharge indicator, more robust and reliable than other. The

included automatic battery protection ensures high lifetime for the batteries.

Proofed components such as sensors micro-switches and controller, and hydraulic units from international brands.



EPT 15W and EPT 15C with suspension castors better with performance in overcoming obstacles, high travelling stability, and less wear & noise.





Motor and wheel protection out of robust metal. Also gives perfect foot protection.

Sideways castors ensure travelling stability and safety in medium applications.



EPT 15W / EPT 15C



EPT 15C: 1500kg capacity with rubber drive wheel, who else can offer this for delivery application?

- With the larger drive wheel diameter of 230mm travelling over obstacles becomes effortless.
- The soft but reliable rubber material gives the traction where it is needed.



- Because the truck is used inside as well as partly outside, our material is designed as standard in "Non Marking".
- Shocks are absorbed by the rubber wheel.
- High quality and high efficient European motor.
- Additional large diameter sideways castors emphasize even more the perfect travelling behaviour.

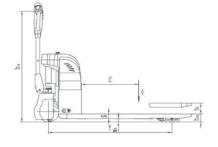


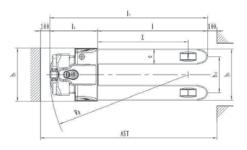
 Through the LOW NOISE the truck is predestinated for delivery applications in residential areas as well as in city center during closing hours or within the night.

Type sheet for industrial tr	uck acc. to VDI 2198	1KG=2.2LB 1INCH=25.4MM
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	1.2	Manufacturer's type designation		EPT 15		SPT 15		
		•• •		Electric			Battery	
Dietiensiehler	1.3	Drive					*	
	1.4	Operator type	0.00	Pede		Pedes		
Distinguishing mark	1.5	Load Capacity / rated load	Q (t)	1.		1.		
	1.6	Load centre distance	c (mm)	60		60		
	1.8	Load distance ,centre of drive axle to fork	x (mm)	94		94		
	1.9	Wheelbase	y (mm)	12		12		
	2.1	Service weight	kg	190	200	165	175	
Weight	2.2	Axle loading, laden front/rear	kg	510/1180	560/1140	458/1207	480/1195	
	2.3	Axle loading, unladen front/rear	kg	150/40	160/40	130/35	140/35	
	3.1	Tires		Polyureth	ane (PU)	Polyureth	ane (PU)	
	3.2	Tire size, front	Øxw(mm)	Ø 220×70	(230×73) ³⁾	Ø 220	0×70	
	3.3	Tire size,rear	Ø x w (mm)	Ø 80×70	Ø 80×93	Ø 80×70	Ø 80×93	
Tyres, chassis	3.4	Additional wheels(dimensions)	Øxw(mm)	Ø 50(8	0) ["] ×30	Ø 50	×30	
	3.5	Wheels,number front/rear(x=driven wheels)		1x +2/4	1x +2/2	1x +2/ 4	1x +2/2	
	3.6	Tread, front	b10 (mm)	340(410)''	34	10	
	3.7	Tread, rear	b11 (mm)	380		380		
	4.4	Lift	h3 (mm)	115		115		
	4.9	Height of tiller in drive position min./ max.	h14 (mm)	800 / 1170		850 / 1295		
	4.15	Height, lowered	h13 (mm)	85(80)	80	85(80)	80	
	4.19	Overall length	I1 (mm)	1648(1660)1)	1718(1730)	1666	1736	
	4.20	Length to face of forks	I2 (mm)	498(510) ¹⁾	51	6	
	4.21	Overall width	b1 (mm)	560(574)1)	705	560	705	
Dimensions	4.22	Fork dimensions	s/e/I (mm)	48/160/1150 ²⁾	48/160/122021	48/160/1150 ²⁾	48/160/1220 ²⁾	
	4.25	Distance between fork- arms	b5 (mm)	540(520)	685(520,540)	540(520)	685(520,540)	
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	37(32)	32	37(32)	32	
	4.34	Aisle width for pallets 800X1200 lengthways	Ast (mm)	19	50	1961		
	4.35	Turning radius	Wa (mm)	1445(1460)		1507		
	5.1	Travel speed, laden/ unladen	km/h	4.2/	4.4	4.2/4.4		
	5.2	Lift speed, laden/ unladen	m/s	0.03/	0.053			
Performance data	5.3	Lowering speed, laden/ unladen	m/s	0.049	0.036			
uala	5.8	Max. gradeability, laden/ unladen	%	4/	10	4/	10	
	5.10	Service brake		Electron		Electrom		
	6.1	Drive motor rating \$2.60min	kW	0,-		0.4	•	
	6.2	Lift motor rating at S3 10%	kW	0.				
	6.3	Battery acc. to DIN 43531/35/36 A, B, C, no		N		N	0	
Electric- Motor	6.4	Battery voltage, nominal capacity K5	V/Ah	2x12'		2x12		
	6.5	Battery weight	kg	4		31		
	6.6	Energy consumption acc. to VDI cycle	kWh/h	0.:				
	8.1		KYYDII	DC-Spee		DC-Spee	d Control	
Additional data		Type of drive control	dB(A)	bo-spee 6		6:		
	8.4	Sound level at driver's ear acc. to EN 12053	UD(M)	0		0:		

Note: ⁽¹⁾For EPT 15W with suspension castors ⁽²⁾ With optional length 800mm and 1000mm ⁽³⁾ For EPT 15C with rubber steering wheel







Standard ESR-EL-4 kit for EPT15SC:

- Tolerance: +/-0.4% of the rated truck capacity 1500kg(max +/-6kg) by standard loadcells.
- Graduation in 1 and 2kg steps(multirange)
- Scale functions: zero correction, gross/net weighing, total weight.
- Power supply: 4×1.5V AA batetries.
- Low battery warning + auto shut off function after 3 minutes.

Totalising function

Adds up multiple pallet weights to a total weight per shipment or order, also for avoiding overloads. When weight is added, the display shows the new total weight and the number of pallets weighed. This permits the user to verify that he did not forget to weigh any pallets or weighed the same pallet twice.

High battery autonomy

Four standard AA-batteries (2.7Ah) allow 70 hours of use. The automatic sleep mode assures that 4200 weighting actions can be taken. In most common use this means that batteries will have to be changed* only one time per year (*or charged if rechargeable batteries are used).

High contrast display

Display can be read from any angle: when operator is standing near the pallet for dosing, or for adding products to the pallet by weight. The display does not need a backlight because it reads extremely well at ambient light conditions.

Big function keys that "click"

When pushing the function keys, the operator senses a "click" movement. Even when working with gloves, the operator feels whether he has pressed the key properly.

Water and dust proof to norm IP65

One of the most important characteristics for a reliable mobile scale. IP65 means that the pallet truck scale can be used outside or lorries and be cleaned with water (but not by high pressure!!!) The load cells in the forks have an even higher protection level. Product is CE conform for Europe and FUC conform for the USA.

OPTIONAL

Option 1: Improved Accuracy

- Tolerance: +/-0.2% of the rated truck capacity by better loadcells.
- Graduation in 1kg steps for the full range.

Option 2: Power supply by truck battery

- Internal power converter with input range 12-40V.

Option 3: Thermal Printer

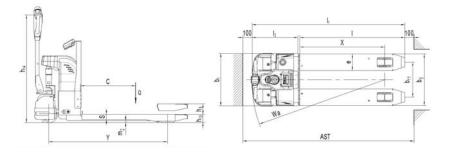
Printer which is reliable in mobile applications. Use of printer does hardly influence the life time of the batteries. The printer is protected for use at low battery voltage levels. The printer is also resistant to



	Type sheet fo	r ind	lustrial truck acc. to VDI 2198 $^{\circ}$	IKG=2.2LB 1INCH=2	5.4MM
i		1.2	Manufacturer`s type designation		EPT15SC
		1.3	Drive		Electric
		1.4	Operator type		Pedestrian
	Distinguishing	1.5	Load Capacity / rated load	Q(t)	1.5
	mark	1.6	Load centre distance	c(mm)	600
		1.8	Load distance ,centre of drive axle to fork	x(mm)	946
		1.9	Wheelbase	Y(mm)	1293
		2.1	Service weight	kg	235
	Weight	2.2	Axle loading, laden front/rear	kg	515/1220
		2.3	Axle loading, unladen front/rear	kg	170/65
		3.1	Tires		Polyurethane (PU)
		3.2	Tire size, front	Øx w (mm)	Ø200 × 70
		3.3	Tire size, rear	Øx w (mm)	Ø80×70
	Tires, chassis	3.4	Additional wheels(dimensions)	Øx w (mm)	Ø80×30
		3.5	Wheels, number front/rear(x=driven wheels)		1x+2/4
		3.6	Track, front	b10mm	410
		3.7	Track, rear	b11 (mm)	380
		4.4	Lift	h3 (mm)	115
		4.9	Height of tiller in drive position min./ max.	h14mm	800/1170
		4.15	Height, lowered	h13mm	90
		4.19	Overall length	I1mm	1675
		4.20	Length to face of forks	I2mm	510
	Dimensions	4.21	Overall width	b1mm	574
		4.22	Fork dimensions	s/e/I (mm)	56/180/1143
		4.25	Distance between fork-arms	b5 (mm)	560
		4.32	Ground clearance, centre of wheelbase	m2mm	23
		4.34	Aisle width for pallets 800X1200 lengthways	Ast (mm)	1950
		4.35	Turning radius	Wa (mm)	1470
		5.1	Travel speed, laden/ unladen	km/h	4.2/4.6
		5.2	Lift speed, laden/ unladen	m/s	0.03/0.53
	Performance data	5.3	Lowering speed, laden/ unladen	m/s	0.049/0.036
		5.8	Max. gradeability, laden/ unladen	%	4/10
		5.10	Service brake		electromagnetic
		6.1	Drive motor rating S2 60min	kW	0.45
		6.2	Lift motor rating at S3 10%	kW	0.8
	Electric- engine	6.3	Battery acc. to DIN 43531/35/36 A, B, C, no		no
	2.50ti lo- crigille	6.4	Battery voltage, nominal capacity K5	V/Ah	2x12V / 64
		6.5	Battery weighi	kg	48
		6.6	Energy consumption acc: to VDI cycle	kWh/h	0.39
		8.1	Type of drive control		DC speed Control

Type cheet for industrial truck acc. to VDI 2109 186-9 918 1868-95

Additional data 8.4 Sound level at driver's ear acc. to EN 12053











Economic Long-tiller Electric Pallet Truck

INTRODUCTION

The PTE18L Electric Pallet Truck is the ideal choice for material transportation in short - distance or trailer loading/unloading.

It is developed based on PT20L targeting to markets such as North American market.

It is equipped with AC drive unit, Curtis Controller and maintenance-free battery and built-in charger, competitive in cost with attractive price comparing to counterparts in the industry.

WITH HIGH PRICE/ PER FORMANCE RATIO

- Continuous work of 7 hours
- Adapt to any conditions





Special design

Special design for fork tip with 3 entry rollers and 4 exit rollers for easy entry and exit of the pallet, esp. when the pallet is empty or light loaded.





Built-in Charger

The built-in charger is located above the battery, easy charging after opening the battery cover.



Creep Button

Creep/Slow speed button for safe and easy operation esp. in confined spaces such as steering in the trailer.



Bigger ground clearance



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. IP54 protection for the controller for safe operation for delivery applications where the dust and water droplets is







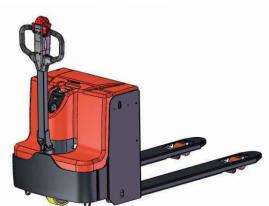






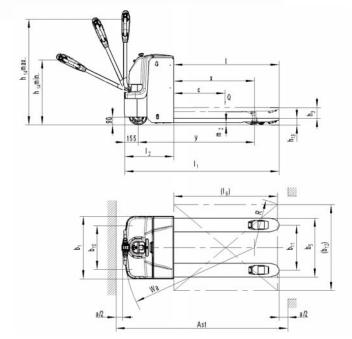






Big capacity Maintenance-free Battery Equipped with 160Ah maintenance-free

battery, with working time 12hours according to the VDI calculation, or for continuous work of 7 hours.
There are many advantages comparing to Lead-acid battery:
No acid refilling maintenance
Less cable corrosion with the connection pile head
More protection on over-charging
Bigger initiating current
Longer electricity storage time
More environment-friendly





Type sheet for industrial truck acc. to VDI 2198						
a X	1.2 1.3	Manufacturer`s type designation Power(battery,diesel,petrol gas,manual)		PTE18L Battery		
ů m d	1.4	Operator type		pedestrian		
Distinguishing mark	1.5	Load Capacity / rated load	Q (t)	1.8		
ngui	1.6	Load centre distance	C (mm)	600		
Distli	1.8	Load distance, centre of drive axle to fork	X (mm)	948 1)		
	1.9	Wheelbase	y (mm)	1360 ¹⁾		
***	2.1	Service weight	kg	415		
Weight	2.2	Axle loading, laden front/rear	kg	785/1430		
>	2.3	Axle loading, unladen front/ rear	kg	335/80		
	3.1	Tires		Polyurethane (PU)		
	3.2	Tire size, front	φx w (mm)	210X70		
88.	3.3	Tire size, rear	φx w (mm)	74X100		
Tires, chassis	3.4	Additional wheels (dimensions)	φx w (mm)	1		
res	3.5	Wheels, number front/ rear(x=driven wheels)		1×+2		
-	3.6	Tread, front	b10 (mm)	510		
	3.7	Tread, rear	b11 (mm)	525		
	4.4	Lift height	h3 (mm)	120		
	4.9	Height of tiller in drive position min. / max.	b14 (mm)	770/1230		
	4.15	Height, lowered	b13 (mm)	75		
	4.19	Overall length	I1 (mm)	1790		
ø	4.20	Length to face of forks	I2 (mm)	570		
sion	4.21	Overall width	b1 (mm)	729		
Dimensions	4.22	Fork dimensions	s/e/I (mm)	50/160/1220(1150)		
Ξ	4.25	Distance between fork-arms	b5 (mm)	685		
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	25		
	4.34	Aisle width for pallets 1000X1200 lengthways	Ast (mm)	2270		
	4.35	Turning radius	Wa (mm)	1525		
	5.1	Travel speed, laden/ unladen	km/h	5.0/5.2		
Joe	5.2	Lift speed, laden/ unladen	m/s	0.025/0.030		
Performance	5.3	Lowering speed, laden / unladen	m/s	0.030/0.025		
erfo	5.8	Gradeability, laden/ unladen	%	8/12		
۵.	5.10	Service brake		Electromagnetic		
	6.1	Drive motor rating S2 60min	kW	0.75		
	6.2	Lift motor rating at S3 10%	kW	0.8		
ors	6.3	Battery acc. to DIN 43531 /35 / 36 A, B, C, no		1		
Motors	6.4	Battery voltage, nominal capacity K5	V/Ah	24/160		
	6.5	Battery weight (minimum)	kg	145		
	8.1	Type of drive control		AC -Speed Control		
	8.4	Sound level at driver`s ear acc. to EN 12053	dB(A)	69		
1) Load	sectio	n lowered:+62mm				

15/16







Economic Electric Pallet Truck

INTRODUCTION

The economic electric pallet Truck PTE20X is the ideal choice for short-distance transportation of goods. The new unique design with 36V system with powerful traction and compact design for confined space operations. The sidebattery replacement is easy to exchange the battery for multi-shift operation.















Advantages:

- Long tiller design for easy steering
- Unique 36V system with high performance
- Powerful battery with 6 hours using time
- Bigger supporting wheels for high stability
- Side-battery replacement for easy battery change
- Robust chassis and apron for long service
- Metal battery cover for better protection
- Compact ad smart design for easy maintenance

High Performance **Comfortable operation**

- Unique 36V system
- High performance sidebattery-replacement



◆ 36V The Unique 36V Systems:

Comparing to 24V systems, the 36V system has obvious advantages: the same power, reduce operating current by 1/3, so the heat losses from the vehicle power is also reduced by 1/3, comprehensive energy consumption is lower; less current in operation significantly reduce the heat of the battery and motor, can effectively reduce the possibility of the battery and motor failure.

Noblelift developed the 36V drive system specifically for PTE20X, the energy consumption (according to the VDI cycle) is only 0.28kWh/h, far less than the products of the same capacity, even lower than the energy consumption of our existing EPT15 1.5 ton truck (0.39kWh/h). So the battery can actually last much longer than the similar trucks.

The speed for PTE20X is 5.8 /5.5Km/h, much faster than the 1500-1800kg capacity truck in market, while its capacity is 2000kg, which delivers high efficiency to you with economic cost.



Integrated hydraulic pump One-piece integrated hydraulic pump with compact size.

Bigger Steering wheel for stability The bigger steering wheels ensures high stability for the pallet truck.



High performance side-battery-replacement High performance 36V battery, with side battery replacement easy for battery replacement and maintenance.



Long tiller design for ergonomics and safety Ergonomic long tiller design for comfortable and efficient operation, keep a safe distance for the operator ensures safety.



Unique new 36V system 36V system with high performance of the battery for longer operation

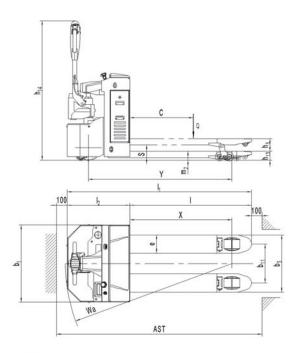
approximately 6 hours.

Optional Battery Charger Standard built-in charger and optional external charger for different customer



Robust and reliable design

The robust chassis with the strong thick apron protects the truck and the components against mechanical impact from outside. The metal battery cover protects the battery well from outside too.





Type she	eet for ir	dustrial truck acc. to VDI 2198						
	1.2	Manufacturer's type designation		PTE	20X			
Вu	1.3	Power (battery ,diesel, petrol, gas, manual)		Battery				
shi x	1.4	Operator type		Pedes	trian			
Distingui shi ng mark	1.5	Load Capacity / rated load	Q(t)		2.0			
ŧ,	1.6	Load centre distance	c(mm)	600	600			
ä	1.8	Load distance ,center of drive axle to fork	x(mm)	965	1035			
	1.9	Wheelbase	Y(mm)	1362	1432			
Ħ	2.1	Wheelbase	kg	405	410			
Weight	2.2	Axle loading, laden front/rear	kg	785/1620	785/1625			
>	2.3	Axle loading, unladen front/rear	kg	315/90	315/95			
	3.1		(m /)	Polyuretha φ242				
<u>s</u> :	3.2	Tire size, front	Øx w (mm)					
jas	3.3	Tire size, rear	Øx w (mm)	φ84×85	φ82×110			
Tires, chassis	3.4	Additional wheels(dimensions)	Øx w (mm)	φ100				
res	3.5	Wheels,number front/ rear(x=driven wheels)		1×+2/2; +2/4	1×+-/2;+2/2			
F	3.6	Tread, front	b10mm	50				
	3.7	Tread, rear	b11 (mm)	367/				
	4.4		h3 (mm)	11				
	4.9	Height of tiller in drive position min./ max.	h14mm	880/				
	4.15	Height, lowered	h13mm	4750	83			
	4.19	Overall length	I1mm	1750	1820			
ns	4.20	Length to face of forks	I2mm	60				
Dimensions	4.21	Overall width	b1mm		29			
nen	4.22	Fork dimensions	s/e/I (mm)	60/173/1150	60/173/1220			
μ̈	4.25	Distance between fork- arms	b5 (mm)		/685			
	4.32	Ground clearance, centre of wheelbase	m2mm	25	23			
	4.33	Aisle width for pallets 800X1200 lengthways	Ast (mm)	2300	2370			
	4.35	Turning radius	Wa (mm)	1610	1680			
	5.1	Travel speed, laden/ unladen	km/h	5.8/	5.5			
Performanc e data	5.2	Lift speed, laden/ unladen	m/s	0.03/0	0.05			
rforma e data	5.3	Lowering speed, laden/ unladen	m/s	0.05/	0.04			
erfo	5.8	Max. gradeability, laden/ unladen	%	4/1	0			
ď	5.10	Service brake		Electroma	agnetic			
	6.1	Drive motor rating S2 60min	kW	2.0)			
	6.2	Lift motor rating at S3 15%	kW	3.0				
Electric- engine	6.3	Battery acc. to DIN 43531/35/36 A, B, C, no		No				
Electric	6.4	Battery voltage, nominal capacity K5	V/Ah	3 12V/	85Ah			
ШΦ	6.5	Battery weight	kg	100)			
	6.6	Energy consumption acc. to VDI cycle	KWh/h	0.2	8			
5	8.1	Type of drive control		DC- spee	d control			
Add it ion al data	8.4	Sound level at driver's ear acc. to EN 12053	dB(A)	69				





Self-lift Stacker Rated Load 500Kg

Self-lift Stacker

INTRODUCTION

Self-lift Stacker(or "Flying" Stacker) is an innovation and unique choice for delivery of goods, one product can replace your Tail-lift, Hand Pallet Truck, Stacker, Ramp and Swing lift. It is easy and quick to transport, by loading itself into your Van, Pick-up, Lorry, or Trailer (with or without a load on the forks), so that there will be no unloading or reloading problems at your destination, which increases the efficiency significantly and makes the deliveries easier and faster.



Application Video

Please find the application video for the PS05F at http://www.noblelift.com





Advantage

- · Muti-purpose functions with its unique Self-Lift design, it is so convenient to travel with the vehicle to serve for different purposes.
- · Unique design to ensure the stacker can lift itself safely without a load on
- The Noblelift 12V/42Ah maintenance -free battery for stable performance and easy service and maintenance.
- · High performance pump unit gives fast and stable lift and low noise.

Operation flow

Push the pallet into the lorry



Check the position of truck



Lift the truck from the ground surface



Remove the pin



Pull out supporting legs



Continue to lift the truck



Push back supporting legs



Install the pin

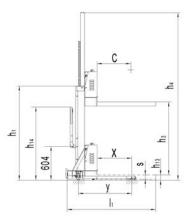


Lift the load and push the truck inside

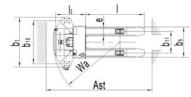




Tiller with lifting /lowering button



Reliable protection for wires





Easy maintenance



Bulit in charger

Built-in Charger for easy charging between deliveries on the vehicles.



Emergency switch



Castors with brakes

Wheel protection as well as foot brake to make sure the stacker travels with the vehicle safely.



Type sheet for industrial truck acc. to VDI 2198							
	1.2	Manufacturer's type designation		PS 05F-1300	PS 05F-800		
	1.3	Power (battery ,diesel, petrol, gas, manual)		Manual	Manual		
	1.4	Operator type		Pedestrian	Pedestrian		
Distinguishing	1.5	Load Capacity / rated load	Q (t)	0.5	0.5		
mark	1.6	Load centre distance	C (mm)	500	500		
	1.8	Load distance ,centre of drive axle to fork	X (mm)	618	618		
	1.9	Wheelbase	Y (mm)	951	951		
	2.1	Service weight	kg	303	277		
Weight	2.2	Axle loading, laden front/rear	kg	237/566	225/552		
Worgin	2.3	Axle loading, unladen front/ rear	kg	175/128	163/114		
	3.1	Tires		Polyurethane (PU)	Polyurethane (PU)		
	3.2	Tire size, front	x w	128 × 40	128 × 40		
-	3.3	Tire size, rear	x w	74 × 60	74 × 60		
Tires Chassis	3.5	Wheels, number front/rear(x=driven)		2/4	2/4		
Ondooro	3.6	Tread, front	b10 (mm)	768	768		
	3.7	Tread, rear	b11 (mm)	386	386		
	4.2	Lowered mast height	h1 (mm)	1681	1181		
	4.4	Lift	h3 (mm)	1300	800		
	4.5	Extended mast height	h4 (mm)	3000	1990		
	4.9	Height of tiller in drive position min./ max.	h14 (mm)	980/ 1300	980/ 1300		
	4.15	Height, lowered	h13 (mm)	80	80		
	4.19	Overall length	I1 (mm)	1608	1608		
Dimensions	4.20	Length to face of forks	12 (mm)	523	523		
	4.21	Overall width	b1 (mm)	888	888		
	4.22	Fork dimensions	s/e/I (mm)	75/160/1050	75/160/1050		
	4.25	Distance between fork- arms	b5 (mm)	540	540		
	4.33	Aisle width for pallets 1000X1200	Ast (mm)	2481	2481		
	4.34	Aisle width for pallets 800X1200	Ast (mm)	2181	2181		
	4.35	Turning radius	Wa (mm)	1200	1200		
Performance	5.2	Lift speed, laden/ unladen	m/s	0.047/0.060	0.047/0.060		
data	5.3	Lowering speed, laden/ unladen	m/s	0.144/0.103	0.144/0.103		
	6.2	Lift motor rating at S3 7.5%	kW	0.8	0.8		
Electric-	6.3	Battery acc. to DIN43 531/35/36 A,B,C,no		Maintenance free	Maintenance free		
Motor	6.4	Battery voltage, nominal capacity K51)	V/Ah	12/42	12/42		
	6.5	Battery weight	kg	14	14		

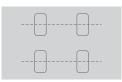






Built-in charger

The built-in charger makes operations more autonomy and increases the operating range.



4-Wheel design with sideways tiller for excellent view and maneuverability as well as high stability.



Robust profile

Robust mast with real mast profils for perfect stability, accuracy and high lifetime.



Powerful battery

2x12V 85Ah powerful VRLA-AGM main-tenance free batteries (option 2x12V 106Ah).



Battery deep discharge protection

Proofed and ergonomic emergency button and discharge indicator, more robust and reliable than other. The included automatic battery protection ensures high lifetime for the batteries.

Proofed components

Proofed components such as sensors, micro-switches, controller and hydraulic power- pack from international brands.

Fulfilling standards

Fulfilling the actual valid European standards, also in ISO 13849, performance level.

Applications

Ideal economic solution for all indoor low duty and occasional stacking



Economic robust handle

Robust but economic handle with steel housing and plastic coating ensures reliable and comfortable operation.

Optional straddle leg

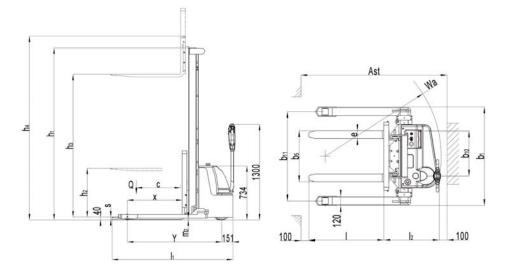
Adjustable straddle leg design, suitable for diverse pallet sizes and more stablity.

Several masts

2 single mast versions(1600mm/63inch, 2000mm/78.7inch lift height) and one 2-stage duplex mast with 2900mm/114inch, 3200mm/126inch and 3500mm/138inch (All with perfect view through the mast). b5=686mm/27inch and straddle leg version optional. (b5=569mm/22.4inch standard).



Other type date										
1.2	Manufacturer's type designation		ECL1016	ECL1020	ECL1032	ECL1035	ECL1016 M	ECL1020 M	ECL1032M	ECL1035N
1.8	Load distance ,centre of drive axle to fork	x(mm)	82		8	09		45		33
2.1	Service weight	kg	430 450 525			540	676	696	771	786
2.2	Axle loading, laden front/rear	kg	550/880	560/890	590/935	600/940	736/940	756/940	796/975	406/980
2.3	Axle loading, unladen front/rear	kg	335/105	340/110	395/130	405/135	500/176	510/186	540/231	550/236
4.2	Lowered mast height	h1 (mm)	1950	2350	2100	2250	1935	2335	2085	2235
4.3	Free Lift height	h2 (mm)	1530	1930	70	70	1530	1930	70	70
4.4	Lift	h3 (mm)	1530	1930	3140	3440	1530	1930	3140	3440
4.5	Extended mast height	h4 (mm)	1950	2350	3625	3925	2120	2520	3720	4020
4.20	Length to face of forks	12 (mm)	I2 (mm) 620		632		688		700	
4.33	Aisle width for pallets 1000X1200 crossways	Ast (mm)	(mm) 2314		2318		2336		23	41
4.34	Aisle width for pallets 800X1200 lengthways	Ast (mm)	22	42	2250		2290		2300	
6.6	Energy consumption acc. to VDI cycle	kWh/h	0.0	68	0.	73	0.	71	0.	76





Type sheet for in	ıdust	trial truck acc. to VDI 2198	1KG=2.2LB 1	IINCH=25.4MM	
	1.2	Manufacturer's type designation		ECL1029	ECL1029M
	1.3	Drive		Batt	ery
Distinguishing mark	1.4	Operator type		Pedes	strian
	1.5	Load Capacity / rated load	Q (t)	1.	0
	1.6	Load centre distance	C (mm)	60	0
	1.8	Load distance ,centre of drive axle to fork	X (mm)	800	733
	1.9	Wheelbase	Y (mm)	121	31
	2.1	Service weight	kg	510	756
Weight	2.2	Axle loading, laden front/rear	kg	580/930	786/970
	2.3	Axle loading, unladen front/rear	kg	385/125	530/226
	3.1	Tires		Polyureth	ane (PU)
	3.2	Tire size, front	Øxw(mm)	220	× 70
	3.3	Tire size, rear	Øxw(mm)	Ø80	× 93
Tyres, chassis	3.4	Additional wheels(dimensions)	Ø x w (mm)	Ø124	
	3.5	Wheels, number front/rear(x=driven wheels)		1x+*	
	3.6	Tread, front	b10 (mm)	52	
	3.7	Tread, rear	b11 (mm)	420/535	1130-1500
	4.2	Lowered mast height	h1 (mm)	1950	1935
	4.3	Free Lift height	h2 (mm)	70	70
	4.4	Lift	h3 (mm)	2840	2840
	4.5	Extended mast height	h4 (mm) h14 (mm)	3325	3420
	4.9	Height of tiller in drive position min./ max.	h13 (mm)	785/1	
	4.15	Height, lowered	11 (mm)	85	40 1838
Dimensions	4.19	Overall length Length to face of forks	12 (mm)	1800 632	1838 700
Dimensions	4.20	Overall width	b1 (mm)	800	1250
	4.21	Fork dimensions	s/e/I (mm)	60/150/1150	35/100/1150 ¹⁾
	4.25	Distance between fork- arms	b5 (mm)	570/685	282-800
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	29	25
	4.33	Aisle width for pallets 1000X1200 crossways	Ast (mm)	2318	2341
	4.34	Aisle width for pallets 800X1200 lengthways	Ast (mm)	2250	2300
	4.35	Turning radius	Wa (mm)	141	
	5.1	Travel speed, laden/ unladen	km/h	4.3/	
	5.2	Lift speed, laden/ unladen	m/s	0.11/	
Performance data	5.3	Lowering speed, laden/ unladen	m/s	0.13/	0.11
	5.8	Max. gradeability, laden/ unladen	%	5/1	10
	5.10	Service brake		Electrom	
	6.1	Drive motor rating S2 60min	kW	0.4	15
	6.2	Lift motor rating at \$3.7.5%	kW	2.	2
Electric- Motor	6.3	Battery acc. to DIN 43531/35/36 A, B, C, no		ne	o
Electric- Wotor	6.4	Battery voltage, nominal capacity K5	V/Ah	2X 12/	85 ²⁾
	6.5	Battery weight	kg	2X	25
	6.6	Energy consumption acc. to VDI cycle	kWh/h	0.73	0.76
Additional data	8.1	Type of drive control		DC- Spee	d Control
Additional data	8.4	Sound level at driver's ear acc. to EN 12053	dB(A)	< 7	0

For specifications of the other lifting heights, please refer to the other type data. 1) Optional:35/100/950 2) Optional:2x12V/106/Ah

27/28





ECL 10SC

Electric Stacker with scale

Totalising function

Adds up multiple pallet weights to a total weight per shipment or order, also for avoiding overloads. When weight is added, the display shows the new total weight and the number of pallets weighed. This permits the user to verify that he did not forget to weigh any pallets or weighed the same pallet twice.

Standard ESR-ST-4 kit for ECL10SC:

- Tolerance: +/-0.4% of the rated truck capacity 1000kg(max +/-4kg) by standard loadcells.
- Graduation in 1 and 2kg steps(multirange).
- Scale functions: zero correction, gross/net weighing, total weight.
- Power supply: 4×1.5V AA batetries.
- Low battery warning + auto shut off function after 3 minutes.

High battery autonomy

Four standard AA-batteries (2.7Ah) allow 70 hours of use. The automatic sleep mode assures that 4200 weighting actions can be taken. In most common use this means that batteries will have to be changed* only one time per year (*or charged if rechargeable batteries are used).

High contrast display

Display can be read from any angle: when operator is standing near the pallet for dosing, or for adding products to the pallet by weight. The display does not need a backlight because it reads extremely well at ambient light conditions.

Big function keys that "click"

When pushing the function keys, the operator senses a "click" movement. Even when working with gloves, the operator feels whether he has pressed the key properly.

OPTIONAL

Option 1: Improved Accuracy

Tolerance: +/-0.2% of the rated truck capacity by better loadcells. - Graduation in 1kg steps for the full range.

Option 2: Power supply by truck battery - Internal power converter with input range 12-40V.

Option 3: Thermal Printer

Printer which is reliable in mobile applications. Use of printer does hardly influence the life time of the batteries. The printer is protected for use at low battery voltage levels. The printer is also resistant to vibrations and shocks.





	1.2	Manufacturer's type designation		ECL10SC
	1.3	Drive		Electric
	1.4	Operator type		Pedestrian
Distinguishing	1.5	Load Capacity / rated load	Q(t)	1.0
mark	1.6	Load centre distance	c(mm)	600
	1.8	Load distance ,centre of drive axle to fork	x(mm)	780
	1.9	Wheelbase	Y(mm)	1281
	2.1	Service weight	kg	570
Weight	2.2	Axle loading, laden front/rear	kg	590/960
	2.3	Axle loading, unladen front/rear	kg	405/145
	3.1	Tires		Polyurethane (PU)
	3.2	Tire size, front	Øx w (mm)	Ø220 × 70
	3.3	Tire size, rear	Øx w (mm)	Ø80×93
Tires, chassis	3.4	Additional wheels(dimensions)	Øx w (mm)	Ø124×60
	3.5	Wheels, number front/rear(x=driven wheels)		1x+1/2
	3.6	Track, front	b10mm	529
	3.7	Track, rear	b11 (mm)	420/535
	4.2	Lowered mast height	h1 (mm)	1950
	4.3	Free Lift height	h2 (mm)	70
	4.4	Lift	h3 (mm)	2808
	4.5	Extended mast height	h4 (mm)	3325
	4.9	Height of tiller in drive position min./ max.	h14mm	785/1300
	4.15	Height, lowered	h13mm	92
	4.19	Overall length	I1mm	1820
Dimensions	4.20	Length to face of forks	I2mm	652
	4.21	Overall width	b1mm	800
	4.22	Fork dimensions	s/e/I (mm)	83/167/1150
	4.25	Distance between fork-arms	b5 (mm)	584
	4.32	Ground clearance, centre of wheelbase	m2mm	9
	4.33	Aisle width for pallets 1000X1200 crossways	Ast (mm)	2318
	4.34	Aisle width for pallets 800X1200 lengthways	Ast (mm)	2250
	4.35	Turning radius	Wa (mm)	1485
	5.1	Travel speed, laden/ unladen	km/h	4.3/4.5
	5.2	Lift speed, laden/ unladen	m/s	0.11/0.16
Performance data	5.3	Lowering speed, laden/ unladen	m/s	0.13/0.11
	5.8	Max. gradeability, laden/ unladen	%	5/10
	5.10	Service brake		electromagnetic
	6.1	Drive motor rating S2 60min	kW	0.45
	6.2	Lift motor rating at S3 7.5%	kW	2.2
Electric- engine	6.3	Battery acc. to DIN 43531/35/36 A, B, C, no		no
ŭ	6.4	Battery voltage, nominal capacity K5	V/Ah	2X 12/ 85 ¹⁾
	6.5	Battery weighi	kg	2X25
	6.6	Energy consumption acc: to VDI cycle	kWh/h	0.73
	8.1	Type of drive control		DC-Speed Controller
Additional data	8.4	Sound level at driver's ear acc. to EN 12053	dB(A)	< 70

Water and dust proof to norm IP65

One of the most important characteristics for a reliable mobile scale. IP65 means that the pallet truck scale can be used outside or lorries and be cleaned with water (but not by high pressure !!!) The load cells in the forks have an even higher protection level.

Product is CE conform for Europe and FUC conform for the USA

