







Lithium battery
AGM

The **EDGE** Smart Design Pallet Stackers

FPS12X-A

• 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

FPS12X-I

- 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





Standard For FPS12X-A and FPS12X-I





Emergency-reverse &Horn Buttons

Dual butterfly-style thumb driving controls

Electric lifting and lowering

RFID Card Access is optional for FPS12X-A and standard for FPS12X-I

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



Vertical Driving in Confined Space



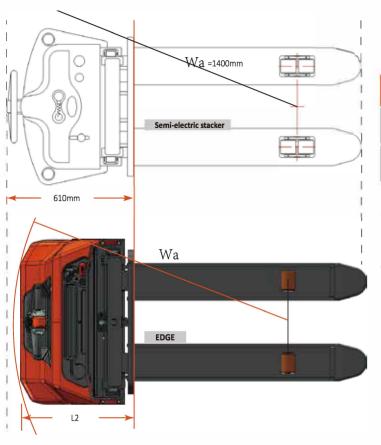
The function of driving with tiller in the vertical position helps with work in confined area without sacrificing of safety.

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	FPS12X-A	FPS12X-I
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.



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

Robustness

Steel cover

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

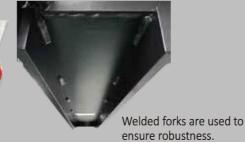


Tiller is made out of PA6 30% of glass fiber material, having high strength.

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.







Gradeablity Performance



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.



Ready	Min Volt	Max Volt
24 501/	0mV	0mV
24.300	Avg Volt	Communication
0.00A	0.0mV	Normal
	24.50V	24.50V OmV Avg Volt

Realtime					
Rated Capacity 60.0	Ah	Wh(Current)	0.0	Wh	Reset
Discharge Cycle		Discharge Cycl	e		
Times		Times			

Other —		
Name	.Valu e	Un it.s
Cell Temp1	25.3	C
Cell Temp1	25.1	C
SOC	45	1/255
Power Temp	27.1	Č
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

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 protocol ncreasing reliability of the system.



PS12X-A 2x12 85Ah (5Hr) AGM maintenance free batteries

Optionally available 2x12 106Ah (5Hr).



For FPS12X-I the charger with current 25A is used The standard charging time is 2.5 hours Opportunity charging is

For FPS12X-A the

12A is used The

is 7 hours

charger with current

standard charging time

The FPS12X-I 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 FPS12X-A 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 FPS12X-A FPS12X-I **CONFIGURATION OR OPTIONS** AGM Li-ion Standard Battery 2x12V/85Ah 24V/60Ah Li-ion Battery 24V/20Ah Li-ion Battery 24V/30Ah Li-ion Battery 24V/36Ah 0 AGM 2x12V/106Ah (5 Hr) 24V / 12A 24V / 25A Standard Charger Li-ion Charger 24V/5Ah Li-ion Charger 24V/8Ah Li-ion Charger 24V/12Ah Curtis controller BMS S **CAN-communication** S S Speed Reduction at Turning Vertical drive/Pin wheel Fast battery replacement **Entry Roller** Single Fork Roller S S Tandem Fork Rollers On-board charger S S Stability Castors High traction drive wheel tyre Fork length 800/900/1000mm Fork width 370/550/570mm Load backrest(42/48/60") Pin Code Access S S RFID Access LED Indicators on Tiller LCD Display on Tiller



Optional tandem fork rollers Optional high traction drive wheel Optional Stability Casters



S=Standard

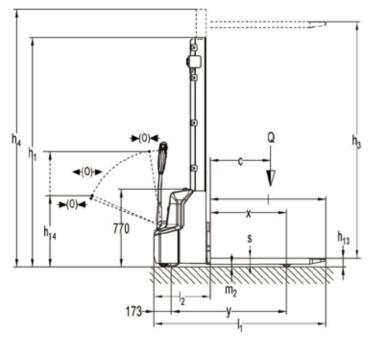
O=Optional

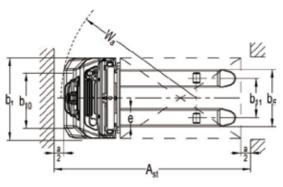


Optional backrest

Various Options(Pallet Truck)

— =not available





Mast table FPS12X-A/ FPS12X-I					
Designation	Lowered mast height h ₁ (mm)	Free lift height h ₂ (mm)	Lift height h_3 (mm)	Extended mast height h_4 (mm)	Lift + fork height $h_3 + h_{13}(mm)$
C' 1	1930	1514	1514	1930	1600
Single-stage mast	2330	1914	1914	2330	2000
	1780	-	2514	3037	2600
Two-stage mast	1930	-	2814	3337	2900
	2080	-	3114	3637	3200
	2280	- -	3514	4037	3600



	Type sheet for in	dustrial truck ac	c. to VDI 2198		
Distinguis	shing mark				
1.2	Manufacturer`s type designation		FPS12X-A FPS12X-I		
	·l		3600		
1.3	Power (battery ,diesel, petrol, gas, manual)	ļi	Battery		
1.4	Operator type		Pedestrian		
1.5	Load Capacity / rated load Load centre distance	$\frac{Q(t)}{Q(t)}$	1.2		
1.8	Load distance ,centre of drive axle to fork	c (mm) x (mm)			
1.9	Wheelbase	y (mm)	1147		
Weight		<i>y</i> (2222)	11.1		
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		
Tyres, ch					
3.1	Tires	ļ <u>-</u>	Polyurethane		
$-\frac{3.2}{3.2}$	Tire size, front	x w (mm)			
3.3 3.4	Tire size,rear Additional wheels(dimensions)	x w (mm)	Φ84×93 Φ100×50		
3.4	Wheels,number front/rear(x=driven wheels)	x w (mm)	-1x + 1/2		
3.6	Tread, front	b ₁₀ (mm)	550		
3.7	Tread, rear	b ₁₁ (mm)	400 / 515		
Dimensio					
4.2	Lowered mast height	h ₁ (mm)	2280		
4.3	Free Lift height	<u>h</u> ₂ (mm)	 		
4.4	Lift height	h ₃ (mm)	3514		
4.5	Extended mast height	h ₄ (mm)	4037		
4.9 	Height of tiller in drive position min./ max.	h ₁₄ (mm)	710 /1150		
4.15	Height, lowered	h ₁₃ (mm)	86		
4.19	Overall length	l ₁ (mm)	1710		
4.20	Length to face of forks	l ₂ (mm)	560		
4.21	Overall width	b ₁ (mm)	800		
4.22	Fork dimensions	s/e/l (mm)	60 / 180 / 1150		
4.25	Distance between fork-arms	b ₅ (mm)	570 /685		
4.32	Ground clearance, centre of wheelbase	m ₂ (mm)	24		
4.33	Aisle width for pallets 1000X1200 crossways	Ast (mm)	2197		
4.34	Aisle width for pallets 800X1200 lengthways	Ast (mm)	2145		
4.35	Turning radius	Wa (mm)	1350		
	ince Data				
5.1	Travel speed, laden/ unladen	km/h	4.2/4.5		
5.2	Lift speed, laden/ unladen	m/s	0.11/0.16		
5.3	Lowering speed, laden/ unladen	m/s	0.13 / 0.11		
5.8	Max. gradeability, laden/ unladen	%	5 / 10		
5.10	Service brake	<u> </u>	Electromagnetic		
Electric-			2.65		
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		No		
6.4	Battery voltage, nominal capacity K5	V/Ah	2x12/85 ¹⁾ 24/60		
6.5	Battery weight +/-5%	kg	2x27 ²⁾ 19		
6.6	Energy consumption acc: to VDI cycle	kWh/h	0.8		
Additiona	1				
8.1	Type of drive control		DC		
8.4	Sound level at driver`s ear acc. to EN 12053	dB(A)			
4) 6 1		1			

¹⁾ Option: 2x12V/106Ah

^{2) 2}x12V/106Ah : 2 x 34