

PT20/25/30H PT20H PLUS

High-speed Logistic Center Special Version Lithium-ion Pallet Truck

- H series is the special developed to meet the demand and characteristics of logistics and leasing industry. A variety of models can satisfy the working condition of heavy transport environment, such as PT20H/PT20HPLUS/PT25H/PT30H. 2000/2500/3000 kg load capacity, the highest speed of 12 km/h with high efficiency and it is suitable for long-distance transportation.
- The battery doesn't rise when operating. It lowers energy consumption and makes the battery working time longer.
- The drive system is with load-assisted pressure-adjust system, which improves the service life of the drive wheels and decreases the cost of using sliding frame and pull rod structure. The service life of structure is longer and the maintenance is more convenient and lower cost.
- Standard high-performance lithium-ion batteries. The battery can be charged fast and there is no need for the maintenance. Moreover, it also has longer service life. Remote control module and the battery heating system are optional.
- Rich model selection. H series are suitable for all kinds of working condition of demand. All trucks have electrical steering in this series that makes the operation flexible and easily except 20HPLUS.



Standard high-performance lithium battery

| Comparison of Lithium Battery & Lead Acid | | |
|-------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Model | Lithium battery | Lead-acid batteries |
| Cycle life | 2000-4000cycles | 300-500cycles |
| Safe | Green and pollution-free | corrosion, pollution |
| Charging time | <2h | Above8h |
| Power conversion rate | Power conversion rate >97% | Power conversion rate ≤80% |
| Volume | Small size: 2/3 of the volume of lead-acid batteries | Big |
| Weight | Light weight: 1/3-1/4 of lead-acid batteries | heavy |
| Maintenance-free | Maintenance free | Distilled water or acid solution needs to be added regularly |
| Powerful | Stable voltage output, low self-weight, strong power | The voltage in the first half is high, the voltage in the second half is low, and the power is attenuated when the voltage is low |
| Memory effect | No memory effect, can be charged and discharged at any time | Has memory (affects battery life) |



FAST CHARGING

Charge your battery whenever and wherever you need

The unique fast-charging feature of lithium battery makes it an ideal choice for multi-shift work. Comparing with traditional lead-acid battery, it is no longer needed to change batteries among shifts, or prepare stand-by battery and special charging area for Li-ion powered trucks. Fast charging allows charging at interval from operations which extends greatly the working time of truck. In addition, lithium battery has no memory of charging cycles which will not affect the life time at all. The lithium charger is no longer required to be placed in a specified area due to the environment-friendly feature of lithium battery, which brings much higher flexibility.



ENVIRONMENT-FRIENDLY

High cost performance

The Lithium battery is more environment-friendly. There is no acid evaporation, odor and pollution during the charging process. The operation of Li-ion powered trucks are relatively quiet and zero carbon dioxide emissions. Therefore, Li-ion powered trucks is an ideal plan for the industry that has environment concern, such as food processing, chemical and pharmaceutical industry.

Each lithium truck requires only one battery attributing to its fast charging feature no matter how many work shifts. Life time of lithium battery is three times that of lead acid battery. The maintenance-free feature of lithium battery gives much higher cost performance than lead-acid battery.

SAFETY

Efficient, Maintenance-free

The power lithium battery system is composed of high-safety high-density lithium iron phosphate battery, intelligent battery management system (BMS), thermal management system, and automotive-grade DC high-voltage control system. BMS enables the communication network between the power lithium battery and controller, the truck itself, the charger and the remote management platform, real-time detection of the status of the lithium battery, the operating state of the truck and the charging state, so as to maximize the safety and reliability of lithium batteries.



Pallet Truck



Fast, efficient and flexible

The highest speed of fast, efficient, super power motor can race up to 12 km/h unloaded, 9 km/h fully load. Easy and convenient to get on and off with comfortable operation . You can choose three different platform model according to different working scenarios.



Pallet Truck



Reliable control system and intelligent tiller with great ergonomic. In addition, the non-contact hoisting and falling plate switch extend the service life of the handle.



Multi-function LCD instrument shows the battery power, alarm, fault code, running time and speed information, etc.



A variety of security measures such as emergency button, reverse button on tiller, and tiller push emergency stop ensure the operator's safety.

Reliable performance, easy maintenance



AC drive system:

Powerful AC drive system to ensure high performance and low maintenance cost of the truck. Does not roll back on the ramp.

EPS electric power steering, automatically slow down:

The standard electric power steering makes operation convenient and effortless. Truck in the process of steering will automatically slow down. Under the condition of high speed, it can avoid roll-back or tip-over to ensure the safety of the operator.

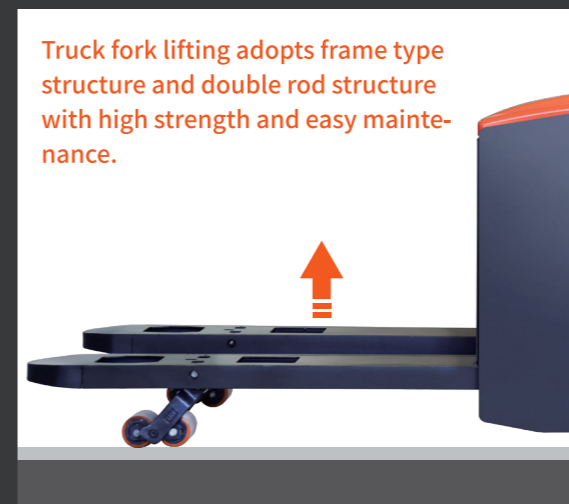
Five points structure:

The whole truck uses five points structure, equipped with high-performance stability wheels on both sides. Drive system with suspended pressurized structure to prevent drive slippage, sharply reduce the impact, and risk of tip-over of the truck during high speed turning.

Robust and durable design:

The truck is specially developed for the logistics industry. Therefore, it is robust and durable and suitable for heavy duty material handling operations.

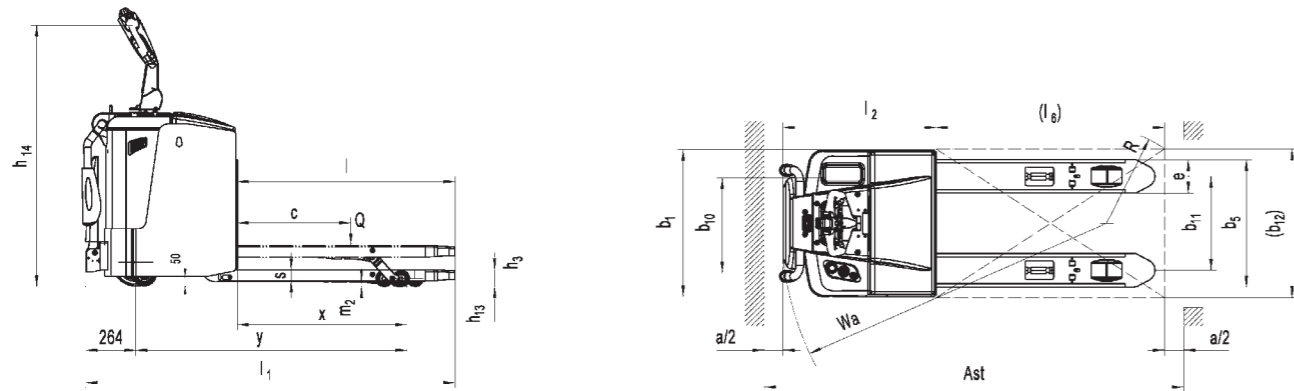
Truck fork lifting adopts frame type structure and double rod structure with high strength and easy maintenance.



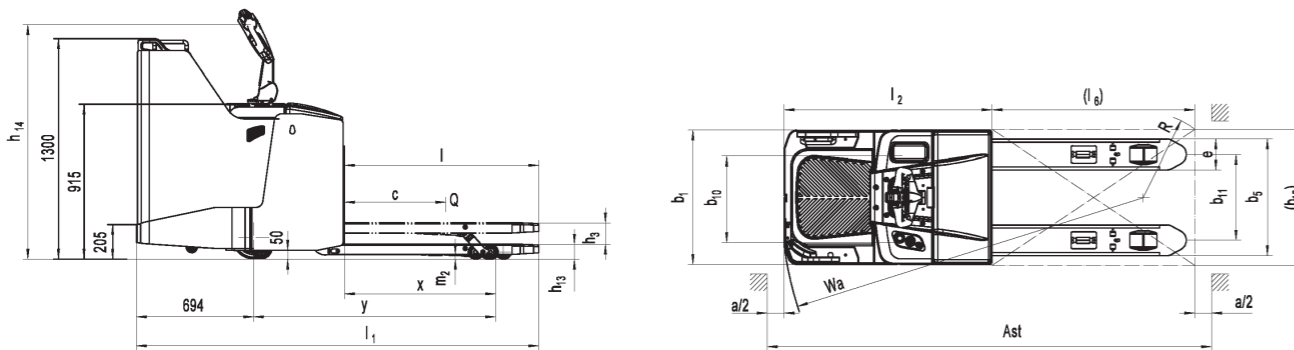
Open the battery cover, you can see the controller debugging connection of the Lithium-ion battery. Don't need to remove the cover. Convenient and high efficiency.



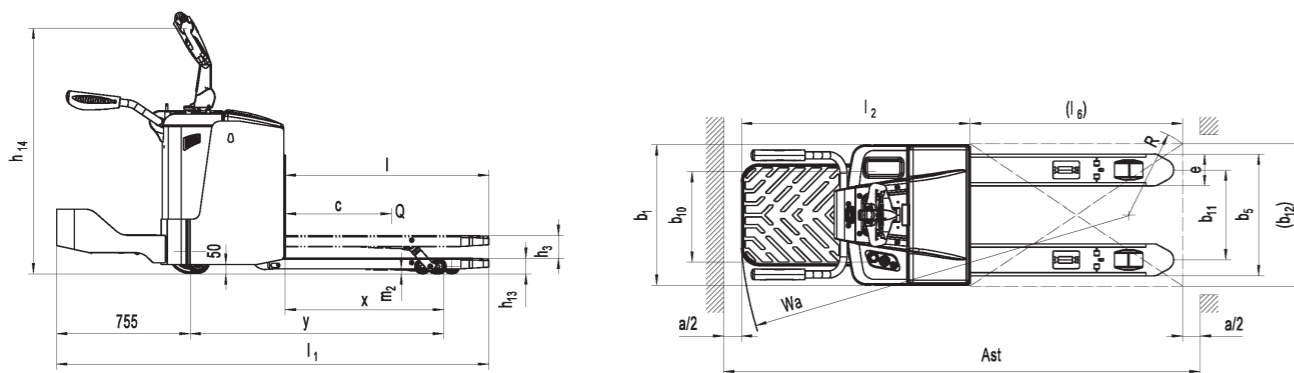
PT 20/25/30H, PT 20H PLUS Foldable Platform



PT 20/25/30H, PT 20H PLUS Enclosed fixed Platform



PT 20/25/30H, PT 20H PLUS Fixed Platform



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

| Identification | | PT 20H | | | PT 20H PLUS | | | PT 25H | | | PT 30H | | | |
|------------------|-----------------------------------------------|-------------------|-------------------------|----------------|-------------------|-------------------------|----------------|-------------------|-------------------------|----------------|-------------------|-------------------------|----------------|-----------|
| | | Foldable Platform | Enclosed fixed Platform | Fixed Platform | Foldable Platform | Enclosed fixed Platform | Fixed Platform | Foldable Platform | Enclosed fixed Platform | Fixed Platform | Foldable Platform | Enclosed fixed Platform | Fixed Platform | |
| 1.2 | Manufacturer's type designation | | | | | | | | | | | | | |
| 1.3 | Drive | Battery | | | Battery | | | Battery | | | Battery | | | |
| 1.4 | Operator type | Stand | | | Stand | | | Stand | | | Stand | | | |
| 1.5 | Load Capacity / rated load | Q (t) | 2.0 | | 2.0 | | | 2.5 | | | 3.0 | | | |
| 1.6 | Load centre distance | c (mm) | 600 | | 600 | | | 600 | | | 600 | | | |
| 1.8 | Load distance, centre of drive axle to fork | x (mm) | 895 | | 895 | | | 895 | | | 895 | | | |
| 1.9 | Wheelbase | y (mm) | 1432 | | 1432 | | | 1432 | | | 1432 | | | |
| Weights | | | | | | | | | | | | | | |
| 2.1 | Service weight | kg | 730 | 800 | 750 | 730 | 800 | 750 | 730 | 800 | 750 | 730 | 800 | 750 |
| 2.2 | Axle loading, laden front/rear | kg | 975/1795 | 1040/1790 | 995/1795 | 975/1795 | 1040/1790 | 995/1795 | 1085/2145 | 1170/2140 | 1105/2145 | 1195/2495 | 1260/2490 | 1215/2495 |
| 2.3 | Axle loading, unladen front/rear | kg | 585/145 | 670/140 | 605/145 | 585/145 | 670/140 | 605/145 | 585/145 | 670/140 | 605/145 | 585/145 | 670/140 | 605/145 |
| Wheels, Chassis | | | | | | | | | | | | | | |
| 3.1 | Tires | | Polyurethane | | | Polyurethane | | | Polyurethane | | | Polyurethane | | |
| 3.2 | Tire size, front | Øxw (mm) | Ø250X80 | | | Ø250X80 | | | Ø250X80 | | | Ø250X80 | | |
| 3.3 | Tire size, rear | Øxw (mm) | Ø82X82 | | | Ø82X82 | | | Ø82X82 | | | Ø82X82 | | |
| 3.4 | Additional wheels(dimensions) | Øxw (mm) | Ø124X60 | | | Ø124X60 | | | Ø124X60 | | | Ø124X60 | | |
| 3.5 | Wheels,number front/rear(x=driven wheels) | | 1x+2/4 | | | 1x+2/4 | | | 1x+2/4 | | | 1x+2/4 | | |
| 3.6 | Tread, front | b10 (mm) | 544 | | | 544 | | | 544 | | | 544 | | |
| 3.7 | Tread, rear | b11 (mm) | 505 | | | 505 | | | 505 | | | 505 | | |
| Basic Dimensions | | | | | | | | | | | | | | |
| 4.4 | Lift | h3 (mm) | 120 | | | 120 | | | 120 | | | 120 | | |
| 4.9 | Height of tiller in drive position min./ max. | h14 (mm) | 1075/1375 | | | 1075/1375 | | | 1075/1375 | | | 1075/1375 | | |
| 4.15 | Height, lowered | h13 (mm) | 85 | | | 85 | | | 85 | | | 85 | | |
| 4.19 | Overall length | l1 (mm) | 1950 | 2383 | 2443 | 1950 | 2383 | 2443 | 1950 | 2383 | 2443 | 1950 | 2383 | 2443 |
| 4.20 | Length to face of forks | l2 (mm) | 800 | 1233 | 1293 | 800 | 1233 | 1293 | 800 | 1233 | 1293 | 800 | 1233 | 1293 |
| 4.21 | Overall width | b1 (mm) | 790 | | | 790 | | | 790 | | | 790 | | |
| 4.22 | Fork dimensions | s/c/l (mm) | 60/180/1150 | | | 60/180/1150 | | | 60/180/1150 | | | 60/180/1150 | | |
| 4.25 | Width across forks | b5 (mm) | 685 | | | 685 | | | 685 | | | 685 | | |
| 4.32 | Ground clearance, centre of wheelbase | m2 (mm) | 25 | | | 25 | | | 25 | | | 25 | | |
| 4.33 | Aisle width for pallets 1000X1200 crossways | Ast (mm) | 2530 | 2960 | 3020 | 2530 | 2960 | 3020 | 2530 | 2960 | 3020 | 2530 | 2960 | 3020 |
| 4.34 | Aisle width for pallets 800X1200 lengthways | Ast (mm) | 2415 | 2845 | 2905 | 2415 | 2845 | 2905 | 2415 | 2845 | 2905 | 2415 | 2845 | 2905 |
| 4.35 | Turning radius | Wa (mm) | 1710 | 2140 | 2200 | 1710 | 2140 | 2200 | 1710 | 2140 | 2200 | 1710 | 2140 | 2200 |
| Performance Data | | | | | | | | | | | | | | |
| 5.1 | Travel speed, laden/ unladen | km/h | 9/12 | | | 9/12 | | | 8/9 | | | 6/7 | | |
| 5.2 | Lift speed, laden/ unladen | m/s | 0.035/0.048 | | | 0.035/0.048 | | | 0.030/0.048 | | | 0.030/0.042 | | |
| 5.3 | Lowering speed, laden/ unladen | m/s | 0.040/0.025 | | | 0.040/0.025 | | | 0.045/0.025 | | | 0.040/0.025 | | |
| 5.8 | Max. gradeability, laden/ unladen | % | 6/15 | | | 8/15 | | | 6/15 | | | 6/15 | | |
| 5.10 | Service brake | | Eletromagnetic | | | Eletromagnetic | | | Eletromagnetic | | | Eletromagnetic | | |
| E-Motor | | | | | | | | | | | | | | |
| 6.1 | Drive motor rating S2 60min | kW | 1.8 | | | 2.5 | | | 2.5 | | | 2.5 | | |
| 6.2 | Lift motor rating at S3 10% | kW | 2.2 | | | 2.2 | | | 2.2 | | | 2.2 | | |
| 6.3 | Battery acc. to DIN 43531/ 35/ 36 A, B, C, no | | / | | | / | | | / | | | / | | |
| 6.4 | Battery voltage, nominal capacity K5 | V / Ah | 24V/150Ah(200) | | | 24V/150Ah(200) | | | 24V/150Ah(200) | | | 24V/150Ah(200) | | |
| 6.5 | Battery weight | kg | 75 | | | 75 | | | 75 | | | 75 | | |
| 6.6 | Energy consumption acc. to VDI cycle | kWh/h | 0.55 | | | 0.65 | | | 0.75 | | | 0.65 | | |
| Other Details | | | | | | | | | | | | | | |
| 8.1 | Type of drive control | | AC speed Control | | | AC speed Control | | | AC speed Control | | | AC speed Control | | |
| 8.4 | Sound level at driver's ear acc. to EN 12053 | dB(A) | 69 | | | 69 | | | 69 | | | 69 | | |

Pallet Truck