



WPio12

Lithium-Ion Electric Hand Pallet Jack



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CLARK
THE FORKLIFT



Load capacity:
max. 1,200 kg



Lift height:
max. 195mm



Travel speed:
max. 4.5km/h



Stacking aisle width:
min. 1,640mm



Lithium-Ion Battery:
Rapid Charging



Drive motor rating:
0.65 kW

Extremely compact and light weight, the CLARK WPio12 is ready to go with its rapid charging lithium-ion battery. High on safety and low on effort, the WPio12 is the must have replacement to a manual pallet jack!

The WPio12 CLARK Lithium-Ion Electric Hand Pallet Jack is an ideal alternative to traditional manual hand pallet jacks. The removable battery pack features the latest lithium-ion battery technology, rapid charging, top-up charging and double service life all in a small package.

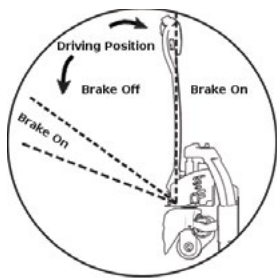
A full recharge is achievable within only 2.5 hours with charging to 60% from full discharge taking only 40 minutes. With no battery acid, maintenance is reduced compared to a standard lead acid battery.

The WPio12 is ideal for transporting all kinds of goods over short distances in applications such as industrial, logistics and retail.

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WPio12 - Features and Benefits

- Lithium-ion powered lifting removed the effort out of a job needed with a manual pallet jack
- Ready to go with rapid charging lithium ion battery - After a deep discharge, 60% charge reached in 40 minutes or full capacity after 2.5 hours
- Up to 3 hours of operation on a single charge
- Reduces the risk of injury associated with a manual pallet jack
- Easy to use with intuitive operation and no forklift license required
- Extremely compact and low weight (just 130kg) makes it ideal for transport in trucks or on tail lifts
- Convenient charge station is small in size and weight and plugs into a standard power point – the battery itself weights just 5.1 kg!
- 30% less energy consumption than similar models with a lead-acid battery
- Twice the service life of conventional lead-acid batter with approximately 1,000 charge cycles
- Know your operation time left with smart display with battery charge and operator hour meter
- Gets into confined spaces larger materials handling equipment cannot fit in
- Ergonomic design with easily accessible controls
- Safe with built in horn and belly button reversing switch
- The brake is fully applied by lowering or raising the steering arm and when in the upright position the brake acts as a parking brake (see figure below)



Advantages of lithium-ion technology in the WPio12

High performance in a compact design

The high energy density of the installed lithium-ion battery provides great travel performance and long operating periods of up to 3 hours. At the same time, the WPio12 is very compact and has a low service weight, which means it consumes up to 30 % less energy than vehicles with lead-acid batteries.

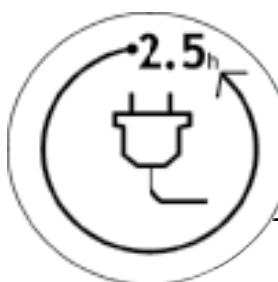
Fast charging + top-up charging

Top-up charging can be used between full charges without affecting the service life of the battery. The battery can be recharged with any 240 V socket. No costs are incurred for adapting the existing charging infrastructure (e.g. ventilation).

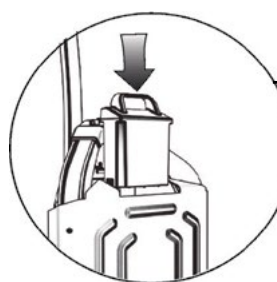
After deep discharge cycle, charging to 60% battery capacity takes only 40 minutes and the battery is charged to full capacity after 2.5 hours.

Double service life + maintenance-free battery

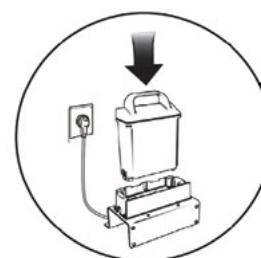
The lithium-ion battery has approximately twice the service life of a conventional lead-acid battery (approximately 1,000 charge cycles). Furthermore, it does not require any maintenance with regard to battery acid.



Rapid charging,
fully recharged
within only
2.5 h



Lithium-Ion
battery weight of
only 5.1 kg



Charging at
any standard
240 V socket

FEATURES

WPio12

Electrical lift and manual lowering

- Sensitive lifting and lowering
- Drive and operating switches with easy reach position
- Automatic lift stop (at maximum lift)

Smart Display

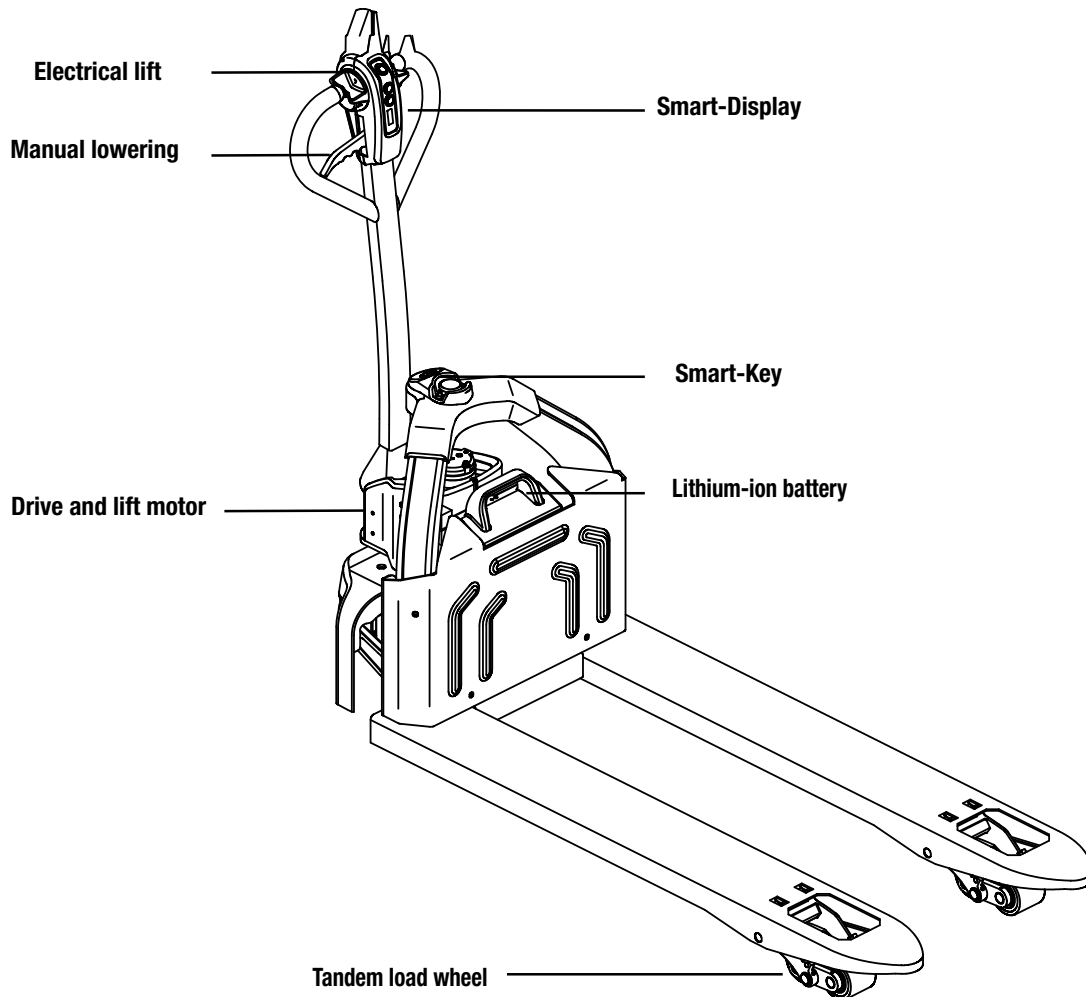
- Battery discharge indicator
- Operating hour counter
- Battery management system
- On-board diagnostics via error codes

Smart Key

- Smart-Key activation
- Easy to use
- Access control

Application

- Specially developed for use on level ground
- Ideal for slight gradients of maximum 4 degree
- Always usable with the lithium-ion battery from top-up charging
- Quick charging times
- Maneuverability in tight corners
 - Total width (b1) only 685 mm
 - Length to fork face (l2) only 390 mm



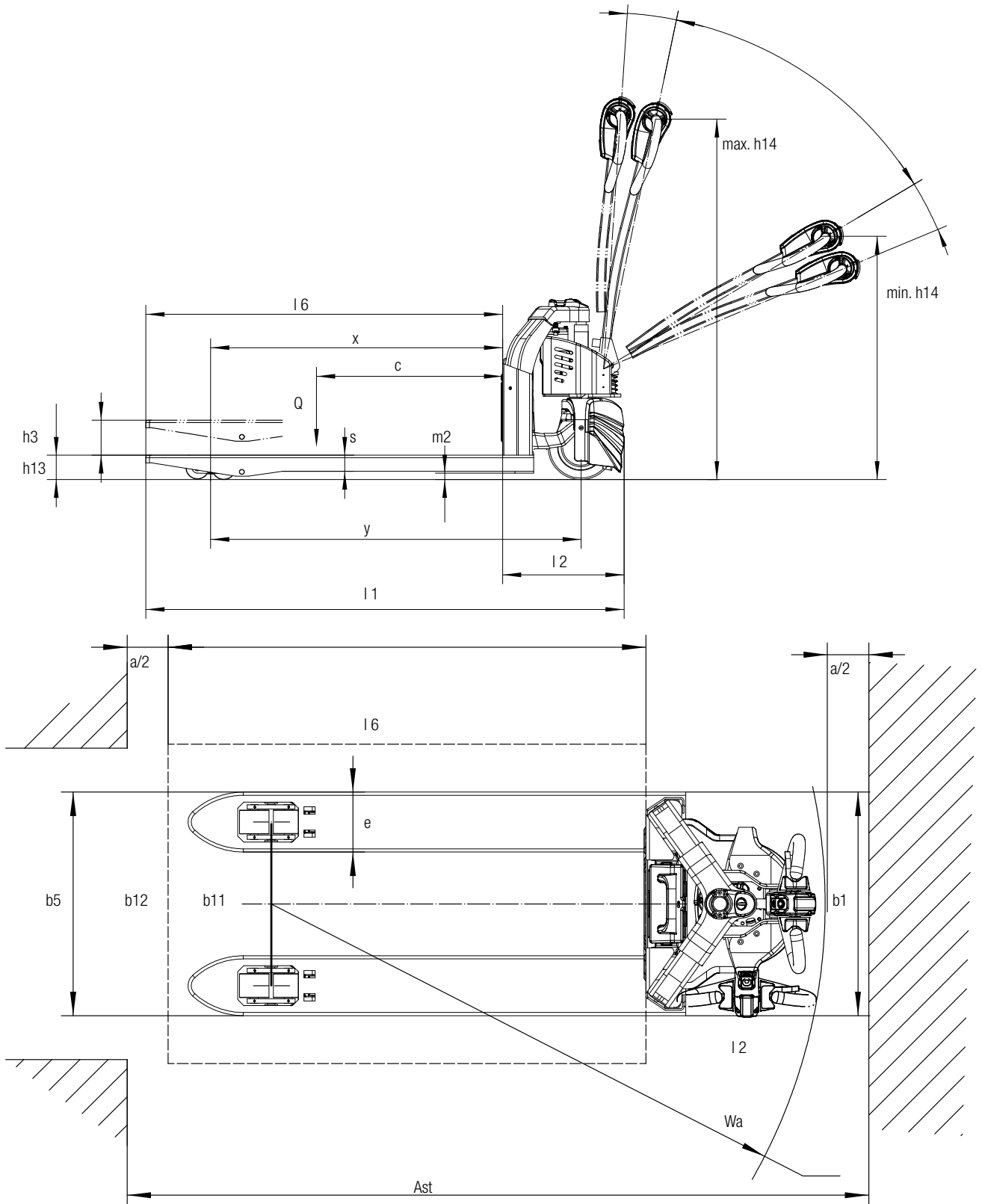
DIMENSIONS

WPio12

$$R_h = \sqrt{x^2 + \left(\frac{b_{12}}{2}\right)^2}$$

$$A_{st} = W_a + l_6 - x + a \quad \text{if } R_h < W_a$$

$$A_{st} = R_h + l_6 - x + a \quad \text{if } R_h > W_a$$



For corresponding data see specification chart.

SPECIFICATIONS

WPio12

Product Specification acc. to VDI 2198

	1.1 Manufacturer (Abbreviation)		CLARK
Specifications	1.2 Manufacturer's designation		WPio12
	1.3 Drive		24V Electric
	1.4 Operator type		Pedestrian
	1.5 Rated capacity/rated load	Q (kg)	1200
	1.6 Load centre distance	c (mm)	600
	1.8 Load distance	x (mm)	880
	1.9 Wheelbase	y (mm)	1120
Weight	2.1 Service weight incl. battery (see 6.5)	kg	130
	2.2 Axle loading, laden front/rear	kg	420/910
	2.3 Axle loading, unladen front/rear	kg	110/20
Tyres, Chassis	3.1 Tyres		Polyurethane
	3.2 Tyre size, front		Ø 210x70
	3.3 Tyre size, rear		Ø74x88
	3.4 Additional wheels (dimensions)		-
	3.5 Wheels, number front/rear (x = driven wheels)		1x / 2
	3.6 Tread, front	b10 (mm)	-
	3.7 Tread, rear	b11 (mm)	410
Dimensions	4.4 Lift	h3 (mm)	115
	4.4 Lift height	h3 + h13 (mm)	195
	4.9 Height tiller in driving position min./max.	h14 (mm)	750/1190
	4.15 Height, lowered	h13 (mm)	80
	4.19 Overall length	l1 (mm)	1540
	4.20 Length to face of forks	l2 (mm)	390
	4.21 Overall width	b1 (mm)	685
	4.22 Fork dimensions	s • e • l (mm)	53x150x1150
	4.25 Outside width of the forks	b5 (mm)	685
	4.32 Ground clearance, centre of wheelbase	m2 (mm)	27
	4.33 Aisle width for pallets 1000 x 1200 sideways	Ast (mm)	1640
4.34 Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	1840	
4.35 Turning radius	Wa (mm)	1390	
Performance	5.1 Travel speed, laden/unladen	km/h	4.0/4.5
	5.2 Lift speed, laden/unladen	m/s	0.02/0.025
	5.3 Lowering speed, laden/unladen	m/s	0.06/0.03
	5.8 Max. gradeability, laden/unladen *1	%	4/10
	5.10 Service brake		Electric
Electrics	6.1 Drive motor rating S2 60 min	kW	0.65
	6.2 Lift motor rating at S3 15 %	kW	0.5
	6.3 Battery acc. to DIN 43531/35/36 A, B, C, no		No
	6.4 Battery voltage/nominal capacity (Option)	A h	24 / 20 (26)
	6.5 Battery weight	kg	5.1
	6.6 Energy consumption acc. to VDI cycle	kWh/h	0.25
	- Battery type		Lithium-ion
8.1 Type of drive unit		DC	
Misc.	10.5 Steering design		Mechanical
	10.7 Sound pressure level at the driver's seat acc. to EN 12053	dB(A)	<64

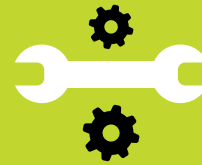
*1) At friction coefficient $\mu=0.6$ with 1.6 km/h

CLARK products, illustrations and specifications are subject to change without notice.
Performance may vary +5% and -10% due to motor and system efficiency tolerance.



GLOBAL PRESENCE

CLARK products are in operation all around the world. An estimated 350,000 units in operation currently!



RELIABLE SPARE PARTS SERVICE

CLARK has state of the art distribution warehouses in USA, South Korea, Brazil, China, Australia, Germany and Vietnam.



COMPREHENSIVE DEALER NETWORK

Over 550 sales & distribution partners in more than 90 countries ensure a high level of availability of our products and services.



EXCELLENT QUALITY

CLARK is the forerunner in high quality standards and innovative product developments.