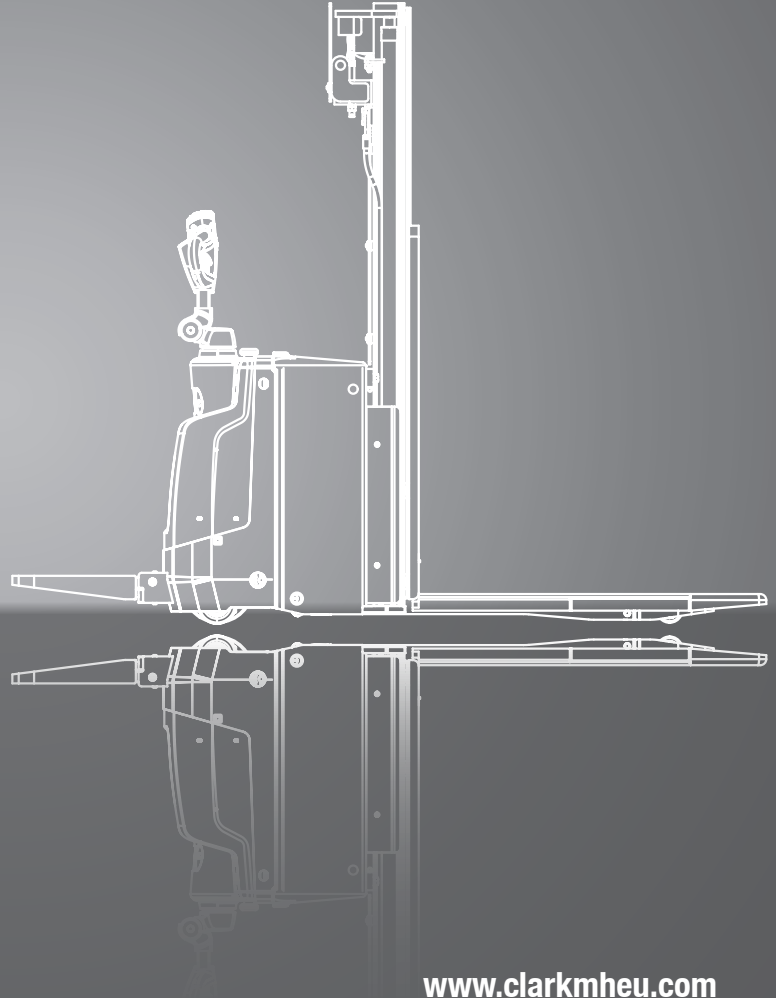
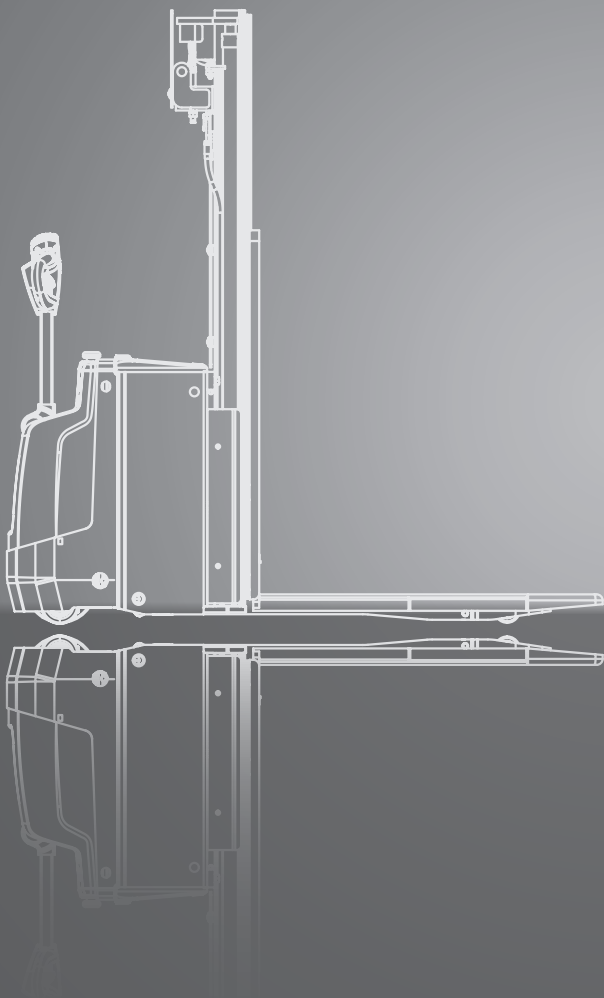


# SX 12/16

Electric stacker trucks

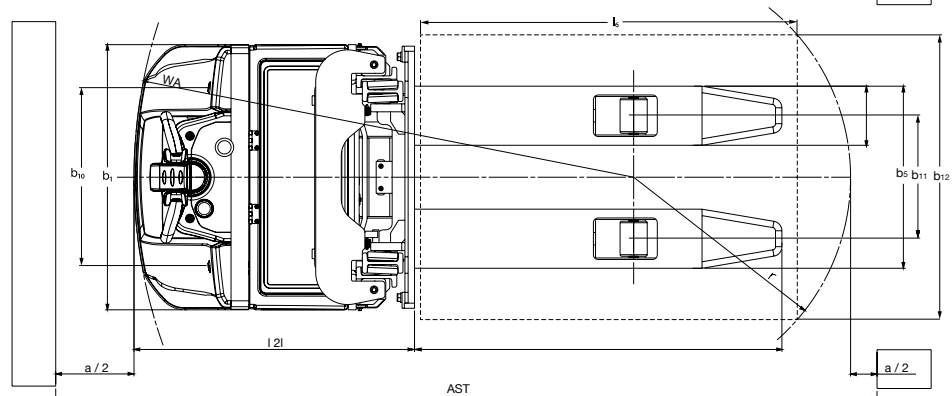
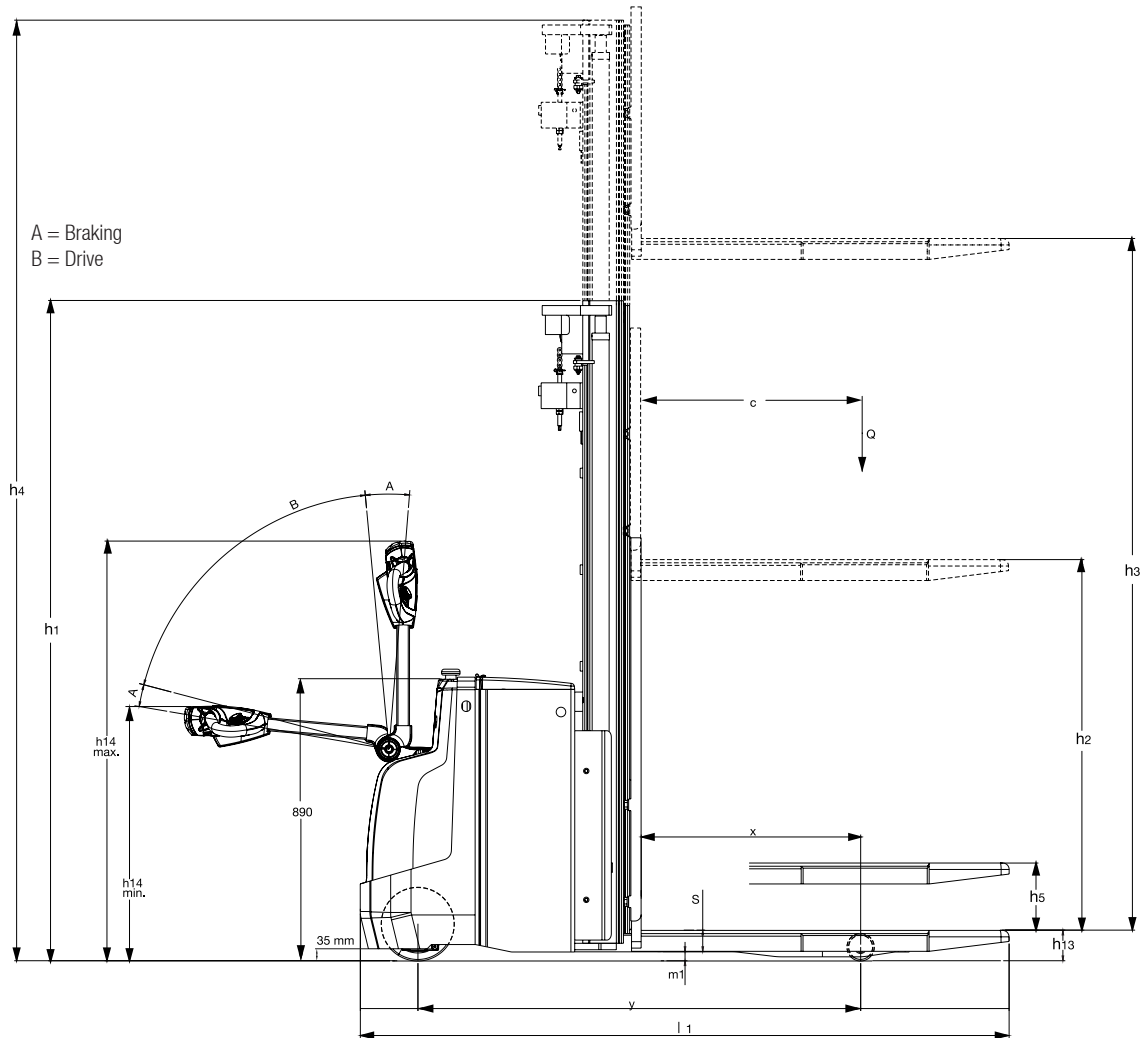
1.200 kg

1.600 kg



# DIMENSIONS

## SX12/16



$$R = \sqrt{(l_2 - x)^2 + \left(\frac{b_{12}}{2}\right)^2}$$

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

$$A_{st} = W_a + R + a \text{ if } R_h < W_a$$

$$A_{st} = R_h + R + a \text{ if } R_h > W_a$$

For data see corresponding number in chart „Product Specifications“

# SPECIFICATIONS

	1,1	Manufacturer (Abbreviation)	CLARK	CLARK	
Specifications	1,2	Manufacturer's designation	<b>SX12</b>	<b>SX16</b>	
	1,3	Drive unit	24V-Electric	24V-Electric	
	1,4	Operator type	Pedestrian	Pedestrian	
	1,5	Load Capacity	Q(t)	1,2	1,6
	1,6	Load Center distance	c(mm)	600	600
	1,8	Load Center distance, centre of drive axle to fork face	x (mm)	830	797
	1,9	Wheelbase	y (mm)	1361	1435
	WT	2,1	Service weight incl. Battery	kg	920
2,2		Axle loading, laden front / rear	kg	742/ 1378	738/ 1827
2,3		Axle loading, unladen front / rear	kg	653/267	707/ 303
Tyres, Chassis	3,1	Tyre type	PU	PU	
	3,2	Tyre size ( front / drive )	230x82	230x82	
	3,3	Tyre size ( rear / load side ) (double load wheel)	85x110/2x85x70	85x110/2x85x70	
	3,4	Support tyre size	125x40	125x40	
	3,5	Wheels, number front/rear (x=drive wheel / (double load wheel)	1x + 2 / 2 (4)	1x + 2 / 2 (4)	
	3,6	Tread, front	b10 (mm)	504	504
	3,7	Tread, rear	b11 (mm)	385	385
Dimensions	4,2	Height, upright lowered	h1 (mm)	2050	2050
	4,3	Freelift	h2 (mm)	125	125
	4,4	Lift height	h3 (mm)	3085	3085
	4,5	Height upright extended	h4 (mm)	3555	3555
	4,6	Initial lift (Option)	h5 (mm)	110	110
	4,8	Platform height (Optional)	h7 (mm)	160	160
	4,9	Height of tiller in drive position min./max.	h14 (mm)	823/1246	823/1246
	4,9	Height of tiller in drive position min/max (Optional platform)	(mm)	1066/1290	1066/1290
	4,15	Fork height lowered	h13 (mm)	95	95
	4,19	Overall length	l1 (mm)	1856	1936
	4,20	Length to face of forks	l2 (mm)	706	813
	4,21	Width	b1 (mm)	830	830
	4,22	Fork dimensions	s • e • l (mm)	55x185x1150	65x185x1150
	4,24	Fork carriage width	b3 (mm)	786	786
	4,25	Overall fork width	b5 (mm)	570	570
	4,31	Ground clearance minimum, unladen	m1 (mm)	55	55
	4,32	Ground clearance center of wheelbase	m2 (mm)	28	28
4,33	Aisle Width for pallets 1000 x 1200 crossways	Ast (mm)	2.358	2.452	
4,34	Aisle width for pallets 800 X 1200 lengthways	Ast (mm)	2.281	2.378	
4,35	Turning radius	Ast (mm)	1536	1610	
Performance	5,1	Travel speed laden/unladen	km/h	6,0/6,0	6,0/6,0
	5,2	Lift speed laden/unladen	m/s	0,15/0,24	0,12/0,2
	5,3	Lowering speed laden/unladen	m/s	0,3/0,25	0,3/0,25
	5,8	Max. gradeability laden/unladen	%	8/12	8/12
	5,10	Service brake		electromagnetic	electromagnetic
Drive line	6,1	Drive motor rating (S2 60min)	kW	1,2	1,2
	6,2	Lift motor rating (S3 15%)	kW	3,2	3,2
	6,3	Battery acc. to DIN43535		-	DIN43535 B
	6,4	Battery voltage, nominal capacity	AH/5hr	24V/150	24V/250
	6,5	Battery weight (min.-max.)	kg	143/159	171/286
	6,6	Energy consumption acc. to VDI cycle	kWh/h	-	-
	8,1	Type of control		AC	AC
Misc.	10,7	Sound level, driver's ear according to DIN 12053	dB(A)		

All values shown are for standard lift truck with standard equipment (SX12 , small battery compartment , SX15 medium battery compartment). If the truck is supplied with options, values may change.

# PRODUCT DESCRIPTION

With the electric stacker trucks SX12 and SX16 CLARK, The inventor of the forklift presents strong and reliable warehouse trucks according to the well known "Built To Last-Philosophy"©.

This means the Clark design provides the user with robust and long lasting electric stacker trucks. Whether for loading and unloading of vehicles or heavy material handling in the warehouse, CLARK warehouse trucks are made for tough applications and can be equipped with batteries up to 375Ah. The optional side battery removal enables these trucks to be used in two or three-shift applications.

## More productivity

All functions for lifting and lowering are controlled by a newly developed ergonomic tiller arm. For the operator this means more time to focus on the application. The precise proportional control of the hydraulic lift on SX12 and SX16 offers a safe, precise and accurate positioning of the goods onto warehouse racking.

## Powerfull AC-motor

With a maintenance free AC-drive motor the CLARK electric stacker and pallet trucks are dynamic and at the same time precise. the Zapi-control (Zapi AC-O) allows the individual adjustment of the driving behaviour so the performance can be adapted to the respective application.

The AC traction motor and the one-piece front cover allow service technicians fast and easy access to major components, ensuring high availability and reducing your maintenance costs to a minimum.

## Uprights

Developed by CLARK these uprights ensure high residual capacities even at high lift heights.

A standard built in upright damping system reduces shocks and vibrations to protect the upright components and the load .

## Outstanding view through the SX-Upright

By extra wide upright rails the best possible visibility through our uprights could be realized.

480mm on Standard uprights and 390mm on Triplex uprights. This allows for precise handling and increases safety during transportation of goods.

## Safety

The precise proportional control of the hydraulic lift on SX12 and SX16 offers a safe, precise and accurate positioning of the goods onto warehouse racking. All functions for lifting and lowering are controlled by a newly developed ergonomic tiller arm. From the tiller arm each movement can be controlled quickly and easily.

If the tiller arm is released, the arm automatically returns back to the neutral position activating the automatic braking.

For left and right-handed operators the SX and PX models are equally well controlled – all levers and buttons for driving and lifting function are arranged on both sides of the ergonomically designed tiller arm.

## Battery compartments and integrated charger

The standard display provides information on operating hours, battery capacity and also includes a maintenance indicator. Various versions of the one piece frame are available depending on battery capacity.

A metal battery hood cover is standard equipment.

SX12: 150Ah or 250Ah batteries

SX16: 250Ah or 375Ah batteries

For the 375Ah battery compartment an additional side battery change is possible (option).

For easy operation the optional integrated battery charger allows you to recharge the battery at any mains socket.

## Low maintenance costs

The maintenance-free AC traction motors and the one-piece hood reduce your Maintenance costs to a minimum. Service technicians have easy and quick access to the Major key components. The electronics in the tiller arm, the truck controller and the integrated charger (option) are protection against dirt and moisture (IP54).

## Activation via PIN-Code

With a four-digit PIN, the truck can be activated even without the ignition key. Thus, only authorized persons have access to the trucks – also an automatic shut down protects against unauthorized usage.

## Optional operator's platform

The model series SX can be equipped with a folding operator's platform.

This allows increased safety and ergonomics during the application. The step area of the platform has a non-slip surface and provides additional suspension for optimum comfort.

The low step platform height of only 160 mm allows easy step on and step off for ease of operation and reduced fatigue throughout the working day. The folding platform option also increases visibility when in the down position allowing full and unobstructed view of the load and surrounding area. Should the operator step off the platform allowing slight elevation, the vehicle automatically switches to standby mode and can no longer be moved.

## Initial lift for SX12 and SX16

The „Initial lift“ option (110mm (h3) allows SX trucks to operate on uneven floors and cross small ramps or loading bridges.

The fact that two parts of the truck (battery compartment, as well as the forks) are lifted increases the ground clearance even with nominal load capacity. A further advantage: The Initial lift allows simultaneous transportation of two loads at the same time (double-stack loading).

Capacity of the initial lift (separately) (1200 kg) or SX16 (1,600 kg).

Load capacity combined SX12 (600/600 kg) or SX16 (800/800 kg).

## Activation for operation with vertical tiller

As an optional request a button for operation with vertical tiller arm can be installed on the underside of the tiller head. Thus, the vehicle can be accurately and sensitively driven through narrow spaces.

For example on Lorries, this allows the positioning of euro pallets as close as possible to the sidewall.

(1x slow driving forwards, 2x slow driving backwards)

## Available additional equipment:

- Various Uprights Simplex, Standard, Hi-Lo, Triplex
- TANDEM LOAD WHEEL
- Smart Backup Alarm (Travel Alarm )
- Key Pad (PIN-Code access)
- Integrated onboard charger
- Load Backrest
- Integrated onboard charger
- Platform-Version
- Wire Mesh Screen Mast Guard
- Various Battery compartments
- Side Battery removal (only for large Battery compartment)
- Battery change table for side removal (1 Battery)

# GENERAL DATA

## Upright table

Mast type	Maximum Fork Height (h3)	Mast Lowered (h1)	Mast Extended (h4)		Free Lift (h2)
			without load backrest	with load backrest	
SIMPLEX (only SX12)	1515	1965	1985	2734	1495
Standard	2585	1800	3055	3804	125
	3085	2050	3555	4304	125
	3385	2200	3855	4604	125
	3585	2300	4055	4804	125
	3790	2410	4260	5009	125
	4090	2565	4560	5309	125
Triplex	4065	1875	4535	5284	1405
	4410	1990	4880	5629	1520
	4800	2125	5270	6019	1655
	5210	2270	5680	6429	1800
HI-LO	2925	1965	3395	4144	1495
	3215	2110	3685	4434	1640
	3515	2265	3985	4734	1795

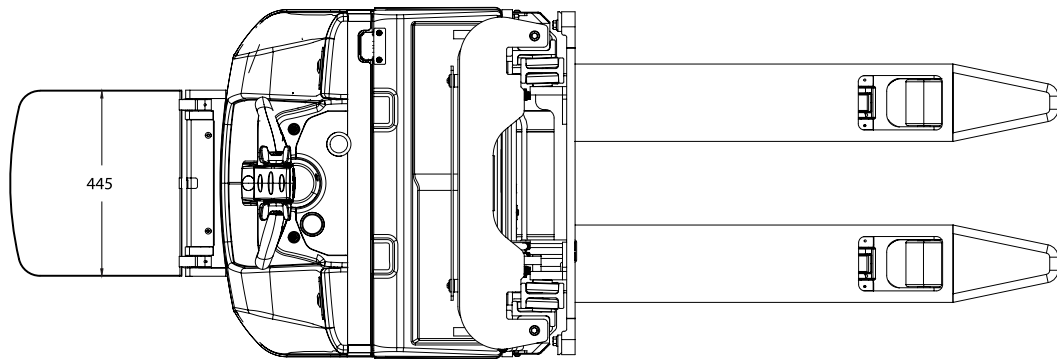
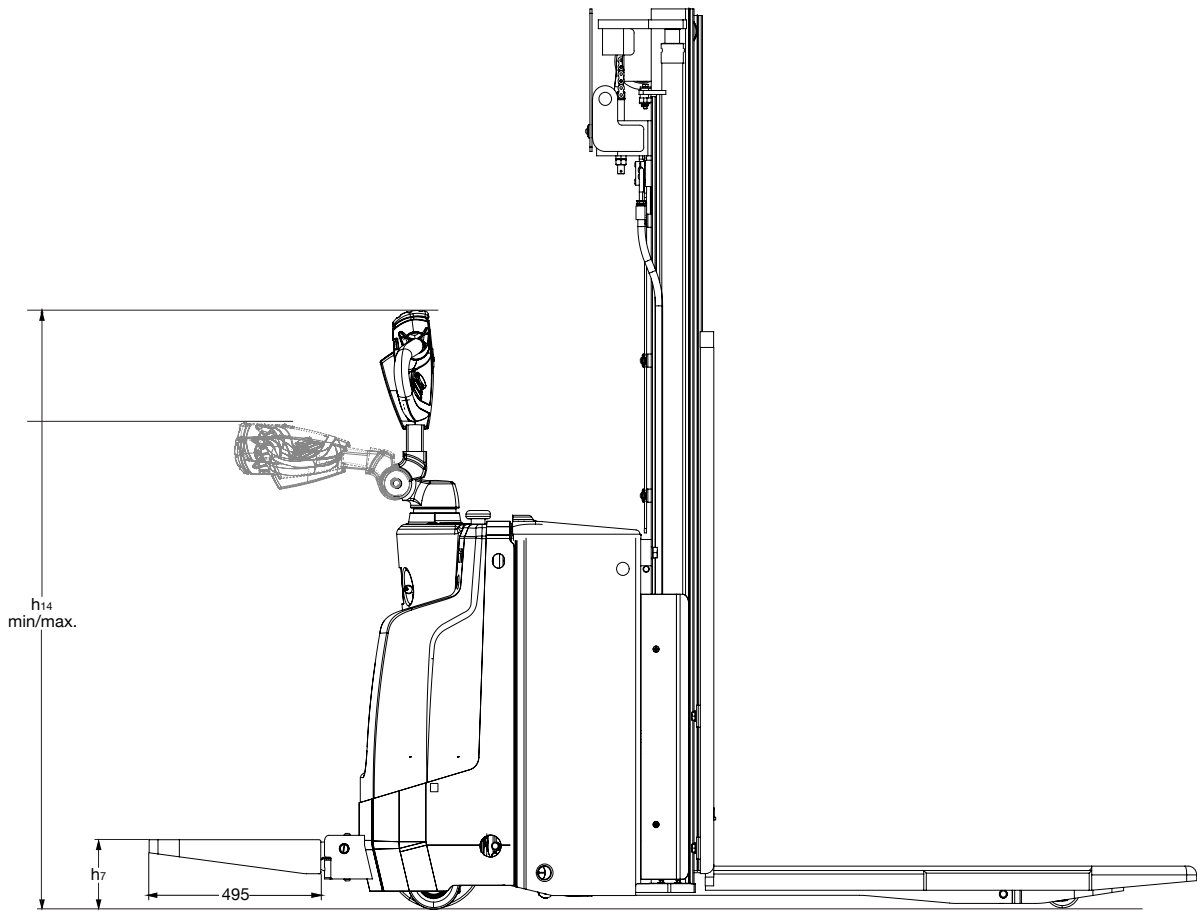
\* Mast lowered +110 mm if initial lift is elevated

## Truck dimension relative to battery size

Dimensions		Battery Change		SX12				SX16		
				Standard				Standard		
		Battery compartment		Small	Medium		Medium	Large*		
1,9	Wheelbase	y	mm	1.361	1.435		1.435	1.500		
4,19	Overall length	Without platform	l1	mm	1.856	1.930		1.936	2.028	
		With platform up/down			1.950	2.356	2.024	2.430	2.057	2.463
4,20	Length to face of forks	Without platform	l2	mm	706	780		813	878	
		With platform up/down			800	1.206	874	1.280	907	1.313
4,33	Aisle width for pallets 1000 x 1200 crossways	Without platform	Ast	mm	2.358	2.432		2.452	2.517	
		With platform up/down			2.452	2.858	2.526	2.932	2.546	2.952
4,34	Aisle width for pallets 800 X 1200 lengthways	Without platform	Ast	mm	2.281	2.355		2.378	2.443	
		With platform up/down			2.375	2.781	2.449	2.855	2.472	2.878
4,35	OutsideTurning radius	Without platform	Ast	mm	1.536	1.610		1.610	1.675	
		With platform up/down			1.630	2.036	1.704	2.110	1.704	2.110
6,4	Nominal capacity		AH/5hr	150	250		250	375		
6,5	Battery weight (Min/Max)		kg	143/159	171/286		171/286	231/361		

\* With battery side removal no change of the dimensions

All values given may vary +5% and -10%. Subject to technical modifications.



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