

# ES16-16WA

## ELECTRIC STACKER 1.6T

 1600 kg
  5500 mm
  24 V Lead Acid/Li-ion



The ES-WA Series is designed for warehouses, logistics hubs, and distribution centers that require reliable and heavy-duty stackers for medium-to-high racking. With chassis width of just 800 mm and a turning radius as low as 1463 mm, they perform efficiently in confined spaces. Long tiller design ensures safer and more comfortable operation, while proportional lift system (optional) allows smooth and precise load handling.

SPECIFICATION	REF	UNIT	VALUE
Battery type			Lead Acid/Li-ion
Battery nominal capacity		Ah	100
Battery voltage		V	24
Load capacity	Q	kg	1600
Load centre distance	c	mm	600
Service weight		kg	1070
Retracted mast height	$h_1$	mm	1970
Lift height	$h_3$	mm	2915
Height, mast extended	$h_4$	mm	3425
Overall length		mm	1975
Overall width	$b_1/b_2$	mm	850
Length to face of forks	l <sub>2</sub>	mm	790
Fork dimensions	s/e/l	mm	65x170x1150
Turning radius		Wa	1506
Operator type			Pedestrian
Load distance, centre of drive axle to fork		mm	690

# Features

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## Strong and durable build

Equipped with an innovative AC system, high-strength gearbox, and robust hydraulic unit, the ES-WA Series ensures long service life and reliable performance in intensive warehouse environments.

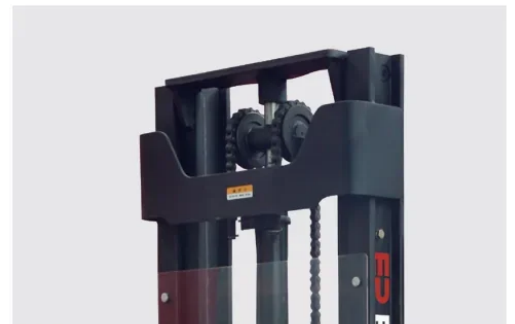


## Safe and ergonomic operation

Safety features include emergency reverse button, anti-rollback brake, multiple lifting limit protections, and automatic speed reduction at height. The long tiller design improves visibility and operator comfort.

## Flexible mast and battery options

With lift heights ranging from 2.5 m to 5.5 m and battery capacities up to 230Ah, the ES-WA Series adapts to diverse warehouse requirements, from light to heavy-duty stacking cycles.





## Efficient and precise load handling

Two-speed lowering and optional proportional lift system give operators greater stability and accuracy when stacking at high levels, ensuring safe and efficient pallet placement.

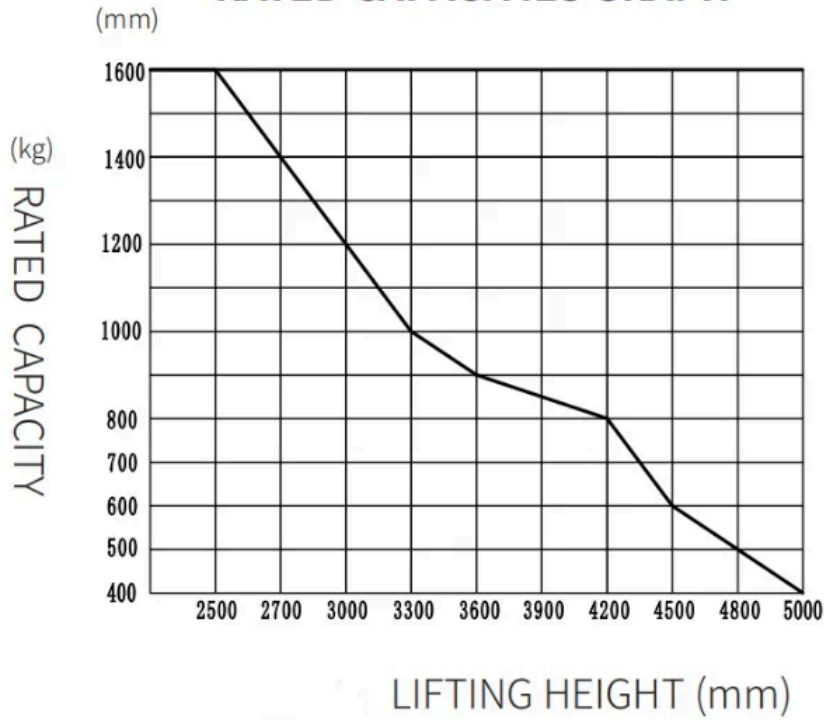
## VDI Chart

	SPECIFICATION	REF	UNIT	VALUE
1.4	Operator type			Pedestrian
1.5	Load capacity	Q	kg	1600
1.6	Load centre distance	c	mm	600
1.8	Load distance, centre of drive axle to fork		mm	690
1.9	Wheelbase		mm	1261
2.1	Service weight		kg	1070
2.2	Axle loading, laden front/rear		kg	780/1890
2.3	Axle loading, unladen front/rear		kg	730/340
3.1	Tyre type			Polyurethane
3.2	Tyre size, front		mm	Φ230x75
3.3	Tyre size, rear		mm	Φ85x70
3.4	Additional wheels (castor wheels)		mm	Φ130x55
3.5	Wheels, number front/rear (x=drive wheels)			1x +1/4
3.6.1	Tread width, front	$b_{10}$	mm	608
3.7.1	Tread width, rear	$b_{11}$	mm	406
4.0	Max lift height	H	mm	5500
4.18	Width of loading surface			190
4.19	Overall length		mm	1975
4.2	Retracted mast height	$h_1$	mm	1970
4.20	Length to face of forks	l2	mm	790
4.21	Overall width	$b_1/b_2$	mm	850
4.22	Fork dimensions	s/e/l	mm	65x170x1150
4.25	Distance between fork-arms			570
4.3	Free lift		mm	100

SPECIFICATION	REF	UNIT	VALUE	
4.32	Ground clearance, centre of wheelbase	mm	30	
4.34.1	Aisle width for pallets 1000×1200 crossways	Ast	2383	
4.34.2	Aisle width for pallets 800×1200 lengthways	Ast	2356	
4.35	Turning radius	Wa	1506	
4.4	Lift height	h <sub>3</sub>	mm	2915
4.5	Height, mast extended	h <sub>4</sub>	mm	3425
4.9	Height of tiller handle in drive position min./max.		1042/1313	
5.1	Travel speed, laden/unladen	km/h	5.0/5.5	
5.10	Service brake		Electromagnetic	
5.2	Lifting speed, laden/unladen	m/s	0.13/0.16	
5.3	Lowering speed, laden/unladen	m/s	0.22/0.13	
5.8	Max. gradeability, laden/unladen	%	8/16	
6.1	Drive motor rating S2 60 min	kW	1.6	
6.2	Lift motor rating at S3 15%	kW	3.0	
6.4	Battery nominal capacity	Ah	100	
6.4	Battery voltage	V	24	
6.4.1	Battery type		Lead Acid/Li-ion	
6.5	Battery weight	kg	40	
6.7	Turnover output according to VDI 2198		48	
6.8	Turnover efficiency according to VDI 2198		43.64	
8.1	Type of drive control		AC	
10.5	Steering design		Mechanical	
10.7	Sound pressure level at the drivers ear	dB(A)	<74	



## RATED CAPACITIES GRAPH



## Mast Options

MAST TYPE	LIFT HEIGHT (H3, MM)	MAST LOWERED HEIGHT (H1, MM)	MAST EXTENDED HEIGHT, NO BACKREST (H4, MM)	FREE LIFT HEIGHT, NO BACKREST (H2, MM)
2-Standard Mast	2500	1770	2965	100
2-Standard Mast	2700	1870	3165	100
2-Standard Mast	3000	2020	3465	100
2-Standard Mast	3300	2170	3765	100
2-Standard Mast	3600	2320	4065	100
2-Standard Mast	3900	2470	4365	100
3-Free Mast	4000	1830	1390	1390
3-Free Mast	4500	2030	1590	1590
3-Free Mast	4800	2130	1690	1690
3-Free Mast	5000	2195	1740	1740
3-Free Mast	5500	2360	1910	1910

# Options

ITEM	OPTIONS (optional items marked in yellow)
Fork dimension	570*1150   570*1220   685*1150   685*1220
Load wheel type	Double
Load wheel material	PU
Drive wheel material	PU
Battery capacity	24V/100Ah (Li-ion)   24V/205Ah (Li-ion)   24V/210Ah (Lead-acid)   24V/240Ah (Lead-acid)
Charger	24V-30A External charger   24V-50A External charger   24V-100A External charger
Battery display indicator (BDI)	With hourmeter   With hourmeter (bluetooth)
Telematics	No   Yes and not customized
Castor wheels	Yes and not customized
Water auto-filling system	No   Yes and not customized
Battery side pull attachment	No
Lifting electronic limit	Yes and not customized
Fork length	1150   1220
Fork width	550   685