

PS12 / 16/16CB-ION

Self-propelled lithium-ion electric counterbalance stacker with load capacities of 1,200, 1,600, and 1,800 kg



INTRODUCTION

The PS CB-ION series of counterbalance stackers is the ideal solution for applications where stacking goods on low- and medium-height racks is limited to a few hours per day.

These stackers can be used in applications where conventional stackers are unsuitable due to their side rails, such as when lifting closed pallets (with a bottom panel) directly from the floor.

The PS CB-ION series of counterbalance stackers have capacities of 1,200, 1,600, and 1,800 kg, and their lift heights can reach up to 4,500 mm.

// ADVANTAGES

- Compact design: short wheelbase and tight turning radius. Perfectly suited for applications in narrow aisles
- High efficiency and high travel speed: 7 km/h at full load, 8 km/h without a load
- Optimized overall design for enhanced stability and safety
- Side-mounted for simple, quick, and efficient battery replacement
- Precise load positioning thanks to proportional lift control



Standard mast tilt



Optional access control panel via PIN code or RFID card reader. This feature greatly simplifies the authorization process, particularly when multiple operators may use the machine.

Photos and technical specifications are subject to change. The manufacturer reserves the right to make changes without notice.





A powerful AC motor designed and manufactured by Schabmüller. Speed up to 8 km/h; the gearbox is manufactured by Kordel. In addition, Rader Vogel drive wheels imported from Germany contribute to the motor unit's service life.



The electric power steering system can quickly and precisely control the steering wheel's position with high reliability while complying with safety standards.



Italian Zapi variable speed drives offer a reliable and flexible high-performance solution.



German Rema drawbar with a reliable and ergonomic control system.



French HPI hydraulic system ensuring precise fork positioning during lifting and lowering. Acceleration and deceleration are smoother. Ideal for handling fragile items.

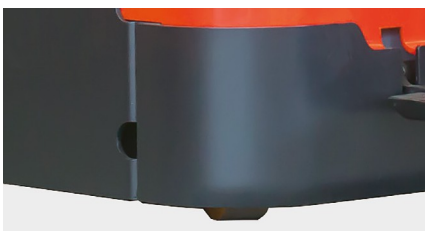


The multifunctional display can show the machine's operating status, operating time, battery charge level, travel speed, and steering angle.

The USB charging port allows you to power other devices.



The platform and foldable protective arms, along with the new internal chassis structure, minimize the stacker's overall length and achieve a tighter turning radius. Additionally, the shock-absorbing structure of the self-propelled platform makes operations more comfortable.



The thickness of the housing (8 mm) ensures the sturdiness of the unit's body. The steel battery cover also helps reinforce the overall protection of the unit.

HIGH-END COMPONENTS

REMA

Rema multifunction tiller with ergonomic touchless switches
(German)

Schabmüller AC traction motor
(German)

SCHABMÜLLER

KORDEL

Kordel Gearbox
(German)

Rader Vogel Steering Wheels
(German)

RÄDER-VOGEL
FOR BETTER WHEELS AND BETTER SERVICE

ZAPI

Zapi speed variator
(Italian)

HPI Hydraulic Unit
(French)

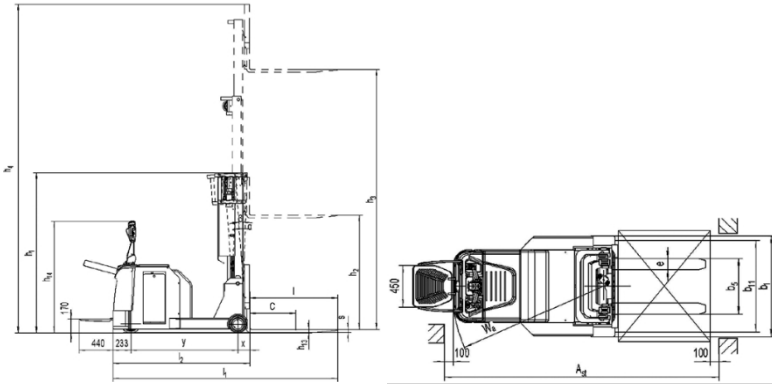
HPI

S.P.E. ELETTRONICA INDUSTRIALE

SPE or ATIB Loaders
(Italian)

A.T.I.B. ELETTRONICA
Battery Chargers & Electronics

The components used reduce maintenance costs and ensure the performance and reliability required for the most demanding tasks.



Stockman Reference	Mast	Lowered mast height <i>h</i> 1 (mm)	Free lift <i>h</i> 2 (mm)	Standard lift <i>h</i> 3 (mm)	Mast height when extended <i>h</i> 4 (mm)	Weigh t (kg)
PS12CB-ION						
PS12CB1600-ION150AH	Simplex	2196	-	1600	2450	1915
PS12CB1600-ION200AH		2196	-	1600	2450	1925
PS12CB2500-ION150AH	Duplex	1,850	-	2,500	3,350	2040
PS12CB2500-ION200AH		1,850	-	2,500	3,350	2050
PS12CB3000-ION150AH		2,100	-	3000	3,850	2080
PS12CB3000-ION200AH		2,100	-	3000	3,850	2090
PS12CB3200-ION150AH		2,200	-	3200	4050	2090
PS12CB3200-ION200AH		2,200	-	3200	4050	2,100
PS12CB3600-ION150AH		2,400	-	3600	4,450	2115
PS12CB3600-ION200AH		2,400	-	3600	4,450	2125
PS12CB4000-ION150AH		2,600	-	4000	4,850	2,140
PS12CB4000-ION200AH		2,600	-	4000	4,850	2,150
PS16CB-ION						
PS16CB1600-ION150AH	Simplex	2196	-	1600	2450	1965
PS16CB1600-ION200AH		2196	-	1600	2450	1975
PS16CB2500-ION150AH	Duplex	1,850	-	2,500	3,350	2090
PS16CB2500-ION200AH		1,850	-	2,500	3,350	2,100
PS16CB3000-ION150AH		2,100	-	3000	3,850	2130
PS16CB3000-ION200AH		2,100	-	3000	3,850	2,140
PS16CB3200-ION150AH		2,200	-	3200	4050	2,140
PS16CB3200-ION200AH		2,200	-	3200	4050	2,150
PS16CB3600-ION150AH		2,400	-	3600	4,450	2165
PS16CB3600-ION200AH		2,400	-	3600	4,450	2175
PS16CB4000-ION150AH		2,600	-	4000	4,850	2,190
PS16CB4000-ION200AH		2,600	-	4000	4,850	2,200
PS18CB-ION						
PS18CB1600-ION150AH	Simplex	2196	-	1600	2450	2120
PS18CB1600-ION200AH		2196	-	1600	2450	2130
PS18CB2500-ION150AH	Duplex	1,850	-	2,500	3,350	2,245
PS18CB2500-ION200AH		1,850	-	2,500	3,350	2255
PS18CB3000-ION150AH		2,100	-	3000	3,850	2285
PS18CB3000-ION200AH		2,100	-	3000	3,850	2295
PS18CB3200-ION150AH		2,200	-	3200	4050	2295
PS18CB3200-ION200AH		2,200	-	3200	4050	2305
PS18CB3600-ION150AH		2,400	-	3600	4,450	2320
PS18CB3600-ION200AH		2,400	-	3600	4,450	2,330
PS18CB4000-ION150AH		2,600	-	4000	4,850	2,345

7. Industrial Electric Stackers

PS18CB4000-ION200AH		2,600	-	4000	4,850	2,355
---------------------	--	-------	---	------	-------	-------

Technical specifications according to VDI 2198					
Specifications	1.2	Part Number - Model		PS12CB-ION 150AH	PS12CB-ION 200AH
	1.3	Propulsion Type		electric	electric
	1.4	Drive type		Accompanied / Self-propelled	
	1.5	Rated capacity	Q (t)	1.2	1.2
	1.6	Center of gravity	c (mm)	500	500
	1.8	Distance from the deck to the roller axis	x (mm)	150	150
	1.9	Wheelbase	y (mm)	1350	1350
Weight	2.1	Weight with batteries	kg	see table opposite	
	2.2	Axle load with front/rear load	kg	420 / 2,945	420 / 2,945
	2.3	Axle load without front/rear load	kg	985 / 1180	985 / 1180
Wheels Chassis	3.1	Wheels		polyurethane (PU)	
	3.2	Drive wheel dimensions	Ø x w (mm)	Ø 250 x 82	Ø 250 x 82
	3.3	Front roller dimensions	Ø x w (mm)	Ø 230 x 100	Ø 230 x 100
	3.5	Number of front/rear wheels (x = drive wheel)		1 x / 2	1 x / 2
	3.6	Wheelbase	b10 (mm)	-	-
	3.7	Rear wheelbase	b11 (mm)	988	988
Dimensions	4.1	Tilt of front/rear fork carriage	°	1.5 / 4	1.5 / 4
	4.2	Lowered mast height	h1 (mm)	see table opposite	
	4.3	Free lift	h2 (mm)	see table opposite	
	4.4	Standard stroke	h3 (mm)	see table opposite	
	4.5	Extended mast height	h4 (mm)	see table opposite	
	4.9	Drawbar height in minimum/maximum driving position	h14 (mm)	970 / 1370	970 / 1370
	4.15	Minimum fork height	h13 (mm)	60	60
	4.19	Overall length	l1 (mm)	2690	2690
	4.20	Length without forks	l2 (mm)	1740	1740
	4.21	Overall width	b1 (mm)	1090	1090
	4.22	Fork dimensions	s / e / l (mm)	35 / 100 / 950	35 / 100 / 950
	4.25	Outer fork width	b5 (mm)	220 / 760	220 / 760
	4.32	Ground clearance	m2 (mm)	52	52
	4.33	Aisle width with a 1000 x 1200 mm pallet placed crosswise	Ast (mm)	3110	3110
	4.34	Aisle width with a 800 x 1200 mm pallet placed lengthwise	Ast (mm)	3220	3220
	4.35	Turning radius	Wa (mm)	1605	1605
Performance	5.1	Travel speed without / with load	km/h	8 / 7	8 / 7
	5.2	Lifting speed without / with load	mm/s	200 / 140	200 / 140
	5.3	Lowering speed without / with load	mm/s	200 / 250	200 / 250
	5.8	Permissible slope without / with load	%	15 / 6	15 / 6
	5.10	Service brake		electromagnetic	
Electrical system	6.1	Traction motor, S2 power rating for 60 min	kW	2.6	2.6
	6.2	Lifting motor, S3 power rating 10%	kW	3 / 3.2	3 / 3.2
	6.3	Batteries according to DIN 43 531 / 35 / 36 A, B, C, No		DIN	DIN
	6.4	Battery voltage / rated capacity K5	V / Ah	24 / 150	24 / 200
	6.5	Battery weight	kg	280	290
	6.6	Power consumption according to VDI cycle	kWh/h	1.8	1.8
Miscellaneous	8.1	Transmission type		AD	AD
	8.4	Noise level at the driver's ear according to EN 12 053	dB (A)	68	68

Technical specifications according to VDI 2198					
Specifications	1.2	Part Number - Model		PS16CB-ION 150AH	PS16CB-ION 200AH
	1.3	Propulsion Type		electric	electric
	1.4	Drive type		Accompanied / Self-propelled	
	1.5	Rated capacity	Q (t)	1.6	1.6
	1.6	Center of gravity	c (mm)	500	500
	1.8	Distance from the apron to the roller axis	x (mm)	150	150
	1.9	Wheelbase	y (mm)	1450	1450
Weight	2.1	Weight with batteries	kg	see table opposite	
	2.2	Axle load with front/rear load	kg	381 / 3,484	381 / 3,484
	2.3	Axle load without front/rear load	kg	1082 / 1182	1082 / 1182
Wheels Chassis	3.1	Wheels		polyurethane (PU)	
	3.2	Drive wheel dimensions	Ø x w (mm)	Ø 250 x 82	Ø 250 x 82
	3.3	Front roller dimensions	Ø x w (mm)	Ø 230 x 100	Ø 230 x 100
	3.5	Number of front/rear wheels (x = drive wheel)		1 x / 2	1 x / 2
	3.6	Wheelbase	b10 (mm)	-	-
	3.7	Rear wheelbase	b11 (mm)	988	988
Dimensions	4.1	Tilt of the front/rear fork carriage	°	1.5 / 4	1.5 / 4
	4.2	Lowered mast height	h1 (mm)	see table opposite	
	4.3	Free lift	h2 (mm)	see table opposite	
	4.4	Standard stroke	h3 (mm)	see table opposite	
	4.5	Extended mast height	h4 (mm)	see table opposite	
	4.9	Drawbar height in minimum/maximum operating position	h14 (mm)	970 / 1370	970 / 1370
	4.15	Minimum fork height	h13 (mm)	60	60
	4.19	Overall length	l1 (mm)	2790	2790
	4.20	Length without forks	l2 (mm)	1840	1840
	4.21	Overall width	b1 (mm)	1090	1090
	4.22	Fork dimensions	s / e / l (mm)	35 / 100 / 950	35 / 100 / 950
	4.25	Outer fork width	b5 (mm)	220 / 760	220 / 760
	4.32	Ground clearance	m2 (mm)	52	52
	4.33	Aisle width with 1000 x 1200 mm pallet placed crosswise	Ast (mm)	3210	3210
	4.34	Aisle width with a 800 x 1200 mm pallet placed lengthwise	Ast (mm)	3320	3320
	4.35	Turning radius	Wa (mm)	1705	1705
Performance	5.1	Travel speed without / with load	km/h	8 / 7	8 / 7
	5.2	Lifting speed without / with load	mm/s	200 / 120	200 / 120
	5.3	Lowering speed without / with load	mm/s	200 / 300	200 / 300
	5.8	Maximum slope without / with load	%	15 / 6	15 / 6
	5.10	Service brake		electromagnetic	
Electrical system	6.1	Traction motor, S2 power rating for 60 min	kW	2.6	2.6
	6.2	Lifting motor, S3 power rating 10%	kW	3 / 3.2	3 / 3.2
	6.3	Batteries according to DIN 43 531 / 35 / 36 A, B, C, No		DIN	DIN
	6.4	Battery voltage / rated capacity K5	V / Ah	24 / 150	24 / 200
	6.5	Battery weight	kg	280	290
	6.6	Power consumption according to VDI cycle	kWh/h	1.88	1.88
Miscellaneous	8.1	Transmission type		AD	AD
	8.4	Noise level at the driver's ear according to EN 12 053	dB (A)	68	68

Technical specifications according to VDI 2198					
Specifications	1.2	Part Number - Model		PS18CB-ION 150AH	PS18CB-ION 200AH
	1.3	Propulsion Type		electric	electric
	1.4	Drive type		Accompanied / Self-propelled	
	1.5	Rated capacity	Q (t)	1.8	1.8
	1.6	Center of gravity	c (mm)	500	500
	1.8	Distance from the deck to the roller axis	x (mm)	150	150
	1.9	Wheelbase	y (mm)	1700	1700
Weight	2.1	Weight with batteries	kg	See the table on the right	
	2.2	Axle load with front/rear load	kg	505 / 3,685	505 / 3,685
	2.3	Axle load without front/rear load	kg	1138 / 1212	1138 / 1212
Wheels Chassis	3.1	Wheels		polyurethane (PU)	
	3.2	Drive wheel dimensions	Ø x w (mm)	Ø 250 x 82	Ø 250 x 82
	3.3	Front roller dimensions	Ø x w (mm)	Ø 230 x 100	Ø 230 x 100
	3.5	Number of front/rear wheels (x = drive wheel)		1 x / 2	1 x / 2
	3.6	Wheelbase	b10 (mm)	-	-
	3.7	Rear wheelbase	b11 (mm)	988	988
Dimensions	4.1	Tilt of front/rear fork carriage	°	1.5 / 4	1.5 / 4
	4.2	Lowered mast height	h1 (mm)	See the table on the right	
	4.3	Free lift	h2 (mm)	See the table on the right	
	4.4	Standard stroke	h3 (mm)	See the table on the right	
	4.5	Extended mast height	h4 (mm)	See the table on the right	
	4.9	Drawbar height in minimum/maximum operating position	h14 (mm)	970 / 1370	970 / 1370
	4.15	Minimum fork height	h13 (mm)	60	60
	4.19	Overall length	l1 (mm)	3060	3060
	4.20	Length without forks	l2 (mm)	1990	1990
	4.21	Overall width	b1 (mm)	1090	1090
	4.22	Fork dimensions	s / e / l (mm)	40 / 120 / 1070	40 / 120 / 1070
	4.25	Outer fork width	b5 (mm)	220 / 760	220 / 760
	4.32	Ground clearance	m2 (mm)	52	52
	4.33	Aisle width with a 1000 x 1200 mm pallet placed crosswise	Ast (mm)	3360	3360
	4.34	Aisle width with a 800 x 1200 mm pallet placed lengthwise	Ast (mm)	3470	3470
	4.35	Turning radius	Wa (mm)	1855	1855
Performance	5.1	Travel speed without / with load	km/h	7 / 6	7 / 6
	5.2	Lifting speed without / with load	mm/s	200 / 100	200 / 100
	5.3	Lowering speed without / with load	mm/s	200 / 300	200 / 300
	5.8	Maximum slope without / with load	%	15 / 6	15 / 6
	5.10	Service brake		electromagnetic	
Electrical system	6.1	Traction motor, S2 power rating for 60 min	kW	2.6	2.6
	6.2	Lifting motor, S3 power rating 10%	kW	3 / 3.2	3 / 3.2
	6.3	Batteries according to DIN 43 531 / 35 / 36 A, B, C, No		DIN	DIN
	6.4	Battery voltage / rated capacity K5	V / Ah	24 / 150	24 / 200
	6.5	Battery weight	kg	280	290
	6.6	Power consumption according to VDI cycle	kWh/h	1.8	1.8
Miscellaneous	8.1	Transmission type		AD	AD
	8.4	Noise level at the driver's ear according to EN 12 053	dB (A)	68	68

RESIDUAL CAPACITIES

- **SX:** Simplex
- **DX:** Duplex
- **TX:** Triplex
- **SL:** Frame-type stringers
- **FFL:** Large free lift
- **LI:** Initial lift
- **LP:** Proportional lift
- **DA:** Power steering
- **SC:** Integrated weighing
- **CP:** PIN code

PS12CB

pp. 164–167

PS12CB1600 SX

PS12CB2500 DX

PS12CB3000 DX

PS12CB3200 DX

PS12CB3600 DX

PS12CB4000 DX

**PS12CB1600 SX**

h3 (mm)	Q (kg)		
1600	1200	900	

cdg (mm)	500	600	
----------	-----	-----	--

PS12CB2500 DX

h3 (mm)	Q (kg)		
2500	1200	900	

cdg (mm)	500	600	
-----------------	-----	-----	--

PS12CB3000 DX

h3 (mm)	Q (kg)		
3000	1200	900	

cdg (mm)	500	600	
-----------------	-----	-----	--

PS12CB3200 DX

h3 (mm)	Q (kg)		
3200	1200	900	

cdg (mm)	500	600	
----------	-----	-----	--

PS12CB3600 DX

h3 (mm)	Q (kg)		
3600	1000	700	
3,300	1,200	900	

cdg (mm)	500	600	
----------	-----	-----	--

PS12CB4000 DX

h3 (mm)	Q (kg)		
4,000	800	500	
3,600	1,000	700	
3,300	1,200	900	

cdg (mm)	500	600
-----------------	-----	-----

PS16CB

pp. 164–167

PS16CB1600 SX**PS16CB2500 DX****PS16CB3000 DX**

PS16CB3200 DX

PS16CB3600 DX

PS16CB4000 DX



PS16CB1600 SX

h3 (mm)	Q (kg)		
1600	1600	1300	

cdg (mm)	500	600	
----------	-----	-----	--

PS16CB2500 DX

h3 (mm)	Q (kg)		
2,500	1600	1300	

cdg (mm)	500	600	
----------	-----	-----	--

PS16CB3000 DX

Diagram illustrating the dimensions and components of the system:

- h3 (mm):** Vertical dimension, ranging from 0 to 3,000 mm.
- Q (kg):** Horizontal dimension, ranging from 0 to 1,600 kg.
- cdg (mm):** Horizontal dimension, ranging from 0 to 1,000 mm.

The diagram shows a vertical axis (h3) and two horizontal axes (Q and cdg) originating from a common point. The Q axis is labeled with values 1,600 and 1,300. The cdg axis is labeled with values 500 and 700. A table is shown with 8 rows and 3 columns, representing data points for the system.

PS16CB3200 DX

h3 (mm)	Q (kg)		
3200	1600	1300	

cdg (mm)	500	600	
-----------------	-----	-----	--

PS16CB3600 DX

h3 (mm)	Q (kg)		
3,600	1,400	1100	
3,300	1,600	1,300	

cdg (mm)	500	600	
----------	-----	-----	--

PS16CB4000 DX

h3 (mm)	Q (kg)		
4,000	1,200	900	
3,600	1,400	1,100	
3,300	1,600	1,300	

cdg (mm)	500	600	
-----------------	-----	-----	--

PS18CB

pp. 164-167

- PS18CB1600 SX
- PS18CB2500 DX
- PS18CB3000 DX
- PS18CB3200 DX
- PS18CB3600 DX
- PS18CB4000 DX



PS18CB1600 SX				PS18CB2500 DX				PS18CB3000 DX			
h3 (mm)	Q (kg)			h3 (mm)	Q (kg)			h3 (mm)	Q (kg)		
1600	1800	1500		2500	1800	1500		3000	1800	1500	
cdg (mm)				cdg (mm)				cdg (mm)			
	500	600			500	600			500	600	

PS18CB3200 DX				PS18CB3600 DX				PS18CB4000 DX			
h3 (mm)	Q (kg)			h3 (mm)	Q (kg)			h3 (mm)	Q (kg)		
3200	1800	1500		3,600 3,300	1,600 1,800	1300 1,500		4,000 3,600 3,300	1,400 1,600 1,800	1100 1,300 1,500	
cdg (mm)				cdg (mm)				cdg (mm)			
	500	600			500	600			500	600	