

ZOOMLION

DB12-DB20W Electric Stacker



◆ Product characteristics

CAN-BUS

CANBUS technology

The CANBUS technology is due to less wiring more reliable.

For maintenance the CANBUS technology makes analysis and adjustments easier so that the downtime is lower than for trucks without CANBUS.

Digital signals further makes parts longer lasting than analogue signals.

Electronic proportional lifting and lowering

The electronically controlled proportional lifting system ensures accurate positioning and stacking operations at every lifting height.

In specific with high masts the electronic controlled proportional lifting performs at its best.



German AC drive technology

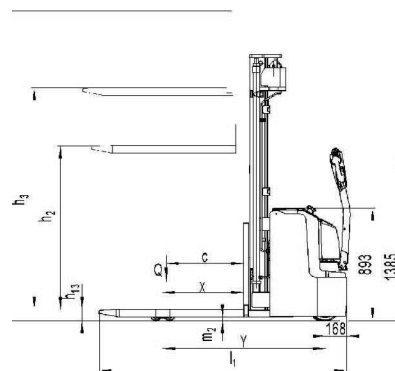
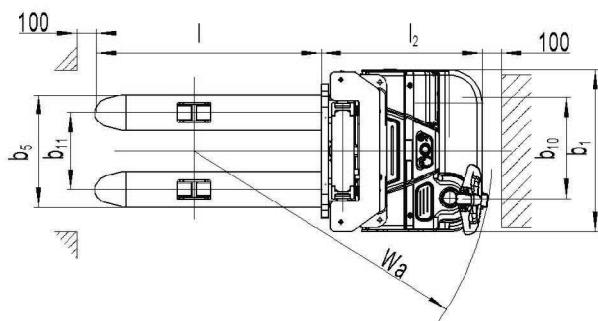
The powerful German Schabmueller maintenance free AC Drive motor in combination with the German Kordel gearbox, Intorqe brake and Wicke drive wheel give best performance, efficiency and reliability to reduce the running costs!

Whether smooth or fast acceleration is applied, the AC Drive gives always the right and direct response.

Type sheet for industrial truck acc. to VDI 2198

1.2	Manufacturer's type designation		DB12W(3600)	DB12W(4600)	DB16W(4600)	DB20W(4600)
1.3	Power (battery ,diesel, petrol, gas, manual)		Battery			
1.4	Operator type		pedestrian			
1.5	Load Capacity / rated load	Q(t)	1.2		1.6	2.0
1.6	Load centre distance	C(mm)	600			
1.8	Load distance ,centre of drive axle to fork	x(mm)	647	637	647	
1.9	Wheelbase	y(mm)	1248		1293	1429
Weight						
2.1	Service weight	kg	1007	1150	1340	1579
2.2	Axle loading, laden front/rea	kg	684/1523	735/1610	930/2010	1000/2579
2.3	Axle loading, unladen front/rear	kg	610/397	720/430	850/490	900/679
Tires, chassis						
3.1	Tires		Polyurethane (PU)			
3.2	Tire size, front	ΦxW (mm)	Φ 230×70			
3.3	Tire size, rear	ΦxW (mm)	Φ 84×70			
3.4	Additional wheels(dimensions)	ΦxW (mm)	Φ 150x54			
3.5	Wheels, number front/rear(x=driven wheels)		1x+1/4			
3.6	Track, front	b ₁₀ (mm)	522			
3.7	Track, rear	b ₁₁ (mm)	390/505			
Dimensions						
4.2	Lowered mast height	h ₁ (mm)	2308	2108	2108	2228
4.3	Free Lift height	h ₂ (mm)	1760	1520	1520	1520
4.4	Lift height	h ₃ (mm)	3530	4530	4530	4530
4.5	Extended mast height	h ₄ (mm)	4088	5088	5088	5208
4.9	Height of tiller in drive position min./ max.	h ₁₄ (mm)	850/1385			
4.15	Height, lowered	h ₁₃ (mm)	90			
4.19	Overall length	l ₁ (mm)	1919	1929	1964	2100
4.20	Length to face of forks	l ₂ (mm)	769	779	814	950
4.21	Overall width	b ₁ (mm)	820			
4.22	Fork dimensions	s/e/l(mm)	60/180/1150			
4.25	Distance between fork-arms	b ₅ (mm)	570/685			
4.32	Ground clearance, centre of wheelbase	m ₂ (mm)	28		28	23
4.33	Aisle width for pallets 1000X1200 crossways	Ast(mm)	2336		2406	2536
4.34	Aisle width for pallets 800X1200 lengthways	Ast(mm)	2323		2393	2523
4.35	Turning radius	Wa(mm)	1440		1510	1640
Performance						
5.1	Travel speed, laden/ unladen	km/h	6.0/6.0		5.7/6.0	5.4/6.0
5.2	Lift speed, laden/ unladen	m/s	0.09/0.14	0.13/0.20	0.13/0.20	0.13/0.20
5.3	Lowering speed, laden/ unladen	m/s	0.25/0.2	0.28/0.23	0.28/0.23	0.28/0.23
5.8	Max. gradeability, laden/ unladen	%	6/12		6/12	6/10
5.10	Service brake		Electromagnetic			
Electric-engine						
6.1	Drive motor rating S2 60min	KW	1.3		1.3	1.7
6.2	Lift motor rating at S3 10%	KW	1.5	3.2	3.2	3.2
6.3	Battery acc. to DIN 43531/35/36 A, B, C, no		2PZB		3VBS	3PZS
6.4	Battery voltage, nominal capacity K5	V/Ah	24/180		24/270	24/350
6.5	Battery weight	kg	175		230	288
6.6	Energy consumption acc: to VDI cycle	kWh/h	0.95		1.59	1.70
Additional data						
8.1	Type of drive control		AC- speed control			
8.4	Sound level at driver's ear acc. to EN 12053	dB(A)	<70			

Designation	Lowered mast height h_1 (mm)	Free Lift height h_2 (mm)	Lift height h_6 (mm)	Extended mast height h_3 (mm)	Lift+fork height h_3+h_{13} (mm)
DB12W					
Two stage mast	1958	/	2830	3380	2920
	2108	/	3130	3680	3220
	2308	/	3530	4080	3620
Two stage mast FFL (Full-Free-Lift)	1958	1410	2830	3380	2920
	2108	1560	3130	3680	3220
	2308	1760	3530	4080	3620
Three stage mast FFL (Full-Free-Lift)	2008	1420	4230	4780	4320
	2108	1520	4530	5080	4620
DB16W					
Two stage mast	1958	/	2830	3380	2920
	2108	/	3130	3680	3220
	2308	/	3530	4080	3620
Two stage mast FFL (Full-Free-Lift)	1958	1410	2830	3380	2920
	2108	1560	3130	3680	3220
	2308	1760	3530	4080	3620
Three stage mast	2008	/	4230	4780	4320
	2108	/	4530	5080	4620
Three stage mast FFL (Full-Free-Lift)	1708	1120	3330	3880	3420
	1908	1320	3930	4480	4020
	2008	1420	4230	4780	4320
	2108	1520	4530	5080	4620
	2343	1756	5230	5780	5320
	2408	1820	5430	5980	5520
DB20W					
Two stage mast	2078	/	2830	3500	2920
	2228	/	3130	3800	3220
	2428	/	3530	4200	3620
Two stage mast FFL (Full-Free-Lift)	1978	1310	2630	3300	2720
	2078	1410	2830	3500	2920
	2228	1560	3130	3800	3220
	2428	1760	3530	4200	3620
Three stage mast	2128	/	4230	4900	4320
	2228	/	4530	5200	4620
Three stage mast FFL (Full-Free-Lift)	1978	1310	3930	4600	4020
	2128	1420	4230	4900	4320
	2228	1520	4530	5200	4620



Maintenance friendly

The trucks design and the used components are tailored to make service and maintenance easy. All components are easy to reach when removing the main cover only with 2 screws. The drive wheel and the castor wheel are easy to exchange without craning the truck.



For every application the right battery capacity

With the DB-W series for every truck the right battery:

- DB12W with 180 Ah 2VBS battery for short truck length, good maneuverability and for operating restricted areas.
- DB16W with 270 Ah 3VBS battery
- DB20W with 350 AH DIN 3PzS battery for long operations and multi- shifts.



Optional sideways battery exchange compartment for DB20W with 210 Ah battery.

Options

- Various mast versions
- Load backrest
- Sideways battery exchange for DB12W and DB20W



New mast

New developed three stage mast for DB12W with 4300mm and 4600mm lifted height.



Robust and Reliable Design

The robust chassis with the strong 8mm thick apron protects the truck and the components against mechanical impacts from the outside.

In combination with the metal battery cover, the truck is well- equipped to reduce maintenance work and damages to a minimum.

Dirty floor environments have less influence to the vertical AC motor design as the components and the brake are out of the reach of direct impacts.

IP 54 protected controller, safe against dust and splash water.

