

AX SERIES

5.0-7.0T ELECTRIC FORKLIFT



AX Series Forklift



umw.siam



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Corporate Brochure

AX SERIES FBAX50-70 Product Features

High voltage lithium batteries

- The on-board voltage platform is 153.6V System nominal voltage is 153.6V
- 12V low voltage system is used to control 153.6V high voltage system, making the whole circuit system more secure
- GB standard connectors are used on high voltage component, the protection grade of the connectors reaches IP65



Permanent magnet motor

- Maximum speed up to 6500 RPM
- Using rotary encoder to detect rotation angle, the motor speed can be faster and more accurately controlled at 6500 RPM
- At the same power, the motor size is smaller than the AC motor, which helps save the space



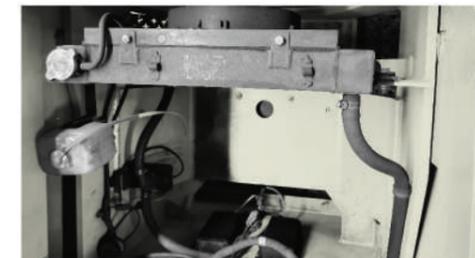
PM controller

- Permanent magnet controllers and independently researched and developed cable protection connectors are used, whose protection grade reaches IP65
- Permanent magnet controller system can greatly improve driving comfort, make low speed control more accurate and high speed response faster
- Compared with common AC forklift, the service time can be extended by about 20%



Water cooling system

- The customized motor housing adopts water cooling technology to control the motor temperature below 60°C to achieve heat balance
- The bottom of the controller is made of customized water-cooled aluminum plate with high protection level. The temperature rise of the controller can be controlled below 60°C to ensure the service life of the controller
- Intelligent electronic fan can be automatically turned on and off according to the temperature
- Silent electronic water pump, with the noise level less than 50dB



Reliability

- FEA finite element analysis design, with the strength of internal combustion vehicle frame, providing excellent vehicle reliability
- The gear pump of Italy-imported brand, using special spiral rotor to reduce the output pressure and ensure the efficiency of the oil pump and high reliability
- Drive axle adopts integral shaft structure, with higher strength, more adaptable to all kinds of harsh conditions
- Intelligent water cooling system keeps the maximum temperature of the system below 60°C, greatly increasing its service life

High efficiency

- Standard equipped batteries can be replaced from the side, which is fast and convenient, improving work efficiency
- With intelligent fast charging, the batteries can be fully charged in 2.5 hours. Competent for various long-term operations of high strength and high load
- Permanent magnet synchronous motor has a protection grade of IP65, provides efficient production efficiency, with the highest efficiency up to 95%

Safety

- High-visibility mast provides great front view
- All cable connections are closed, with great protection performance and high security
- All high pressure components are equipped with safety warning marks for personal warning

Comfort

- The driver's operating position space conforms to the ergonomic design requirements, so that the driver's operation is more comfortable
- Standard vehicle noise is below 70 dB (A)
- Enlarged handle design makes operation more comfortable, more convenient for operators to get on and off the truck

AX SERIES FBAX50-70 Specification

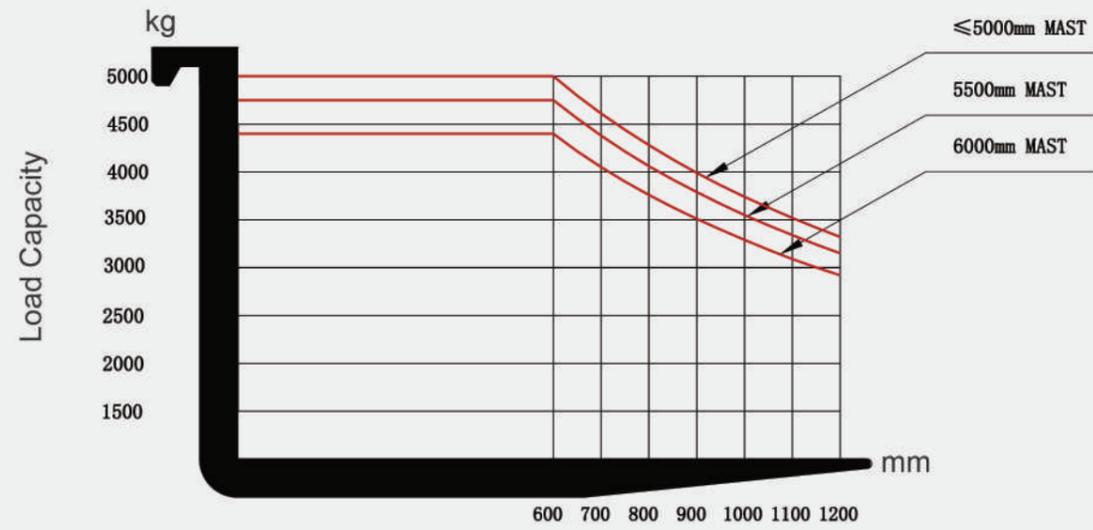
Features	1.1	Manufacturer	HYM	HYM
		1.2	Model	FBAX50-YT2
	1.3	Drive: battery	Battery	Battery
	1.4	Operator type: seated	Seat	Seat
	1.5	Rated Capacity	Q (kg)	5000
	1.6	Load center	c (mm)	600
	1.8	Load Distance	x (mm)	590
	1.9	Wheelbase	y (mm)	2300
Weight	2.1	Service weight	kg	8510
	2.2	Axle loading, laden front / rear	kg	11980 / 1530
	2.3	Axle loading, unladen front / rear	kg	3900 / 4610
Wheels and tires	3.1	Tyres: L = pneumatic, V = cushion, SE = Pneumatic Shape Solid	Pneumatic tire	Pneumatic tire
	3.2	Tire size, front	8.25-15-14PR	8.25-15-14PR
	3.3	Tire size, rear	8.25-15-14PR	8.25-15-14PR
	3.5	Number of wheels, front / rear (X=drive wheels)	4x2	4x2
	3.6	Tread, front wheel	b ₁₀ (mm)	1489
	3.7	Tread, rear wheel	b ₁₁ (mm)	1700
Size	4.1	Tilt of mast / fork carriage forward / backward	degrees	10 / 12
	4.2	Height, mast lowered	h ₁ (mm)	2500
	4.3	Free lift height	h ₂ (mm)	205
	4.4	Fork lift height	h ₃ (mm)	3000
	4.5	Height, mast extended	h ₄ (mm)	4425
	4.7	Height of overhead guard	h ₅ (mm)	2450
	4.8	Seat height relating to SIP / stand height	h _r (mm)	1400
	4.12	Coupling height	h ₁₀ (mm)	345
	4.19	Overall length	l ₁ (mm)	4715
	4.20	Length to face of forks	l ₂ (mm)	3495
	4.21	Overall width	b ₁ (mm)	2020
	4.22	Fork size	s/e/l (mm)	65 / 150 / 1220
	4.23	Fork carriage ISO 2328, class / type A, B		ISO 4A
	4.24	Fork carriage width	b ₃ (mm)	1845
	4.31	Ground clearance, laden, below mast	m ₁ (mm)	200
	4.32	Ground clearance, centre of wheelbase	m ₂ (mm)	230
	4.33	Aisle width for pallets 1000 x 1200 wide	A _{st} (mm)	5260
	4.34	Aisle width for pallets 800 x 1200 long	A _{st} (mm)	5370
	4.35	Turning radius	Wa (mm)	3250
4.36	Internal turning radius	b _{1a} (mm)	1105	
Performance	5.1	Travel speed, laden / unladen	km/h	19 / 20
	5.2	Lift speed, laden / unladen	mm/s	340 / 400
	5.3	Lowering speed, loaded / unloaded	mm/s	500 / 400
	5.6	Maximum drawbar pull laden / unladen (3 minutes)	KN	45 / 40
	5.8	Gradeability laden / unladen, 30 minute rating	%	20 / 20
5.10	Service brake		Hydraulic	
Motor	6.1	Drive motor rating	kW	40KW
	6.2	Lift motor rating	kW	2x20KW
Lithium Battery	6.4	Lithium battery voltage / nominal capacity (5 hours)	V/Ah	352 / 230
	6.5	Lithium battery weight	kg	740
	6.5.1	Lithium battery size	l/w/h (mm)	1210 x 630 x 600

AX SERIES FBAX50-70 Mast

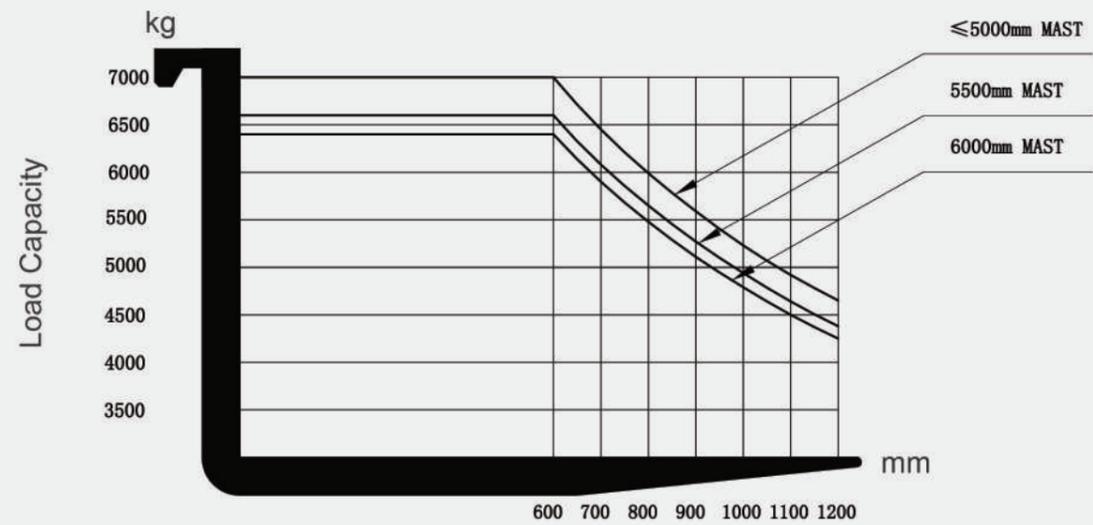
Mast type	Maximum lift height (mm)	Forward/backward tilting angle Deg (°)		Mast retracted height (mm)		Mast extended height				Free lift height		Load capacity		Front overhang (mm)
		forward tilting	backward tilting	5t	7t	without load support (mm)		with load support (mm)		5t - 7t	5t - 7t	Load center (600mm) front Dual Tyres (kg)		
						5t	7t	5t	7t			5t	7t	
2-stage mast	3000	10	12	2500	2625	3955	4080	4425	4425	205	205	5000	7000	590
	3300	10	12	2650	2775	4255	4380	4725	4725	205	205	5000	7000	590
	3500	10	12	2750	2875	4455	4580	4925	4925	205	205	5000	7000	590
	3750	10	12	2875	3000	4705	4830	5175	5175	205	205	5000	7000	590
	4000	10	12	3050	3175	4975	5100	5425	5425	205	205	5000	7000	590
	4500	6	6	3300	3425	5475	5600	5925	5925	205	205	5000	7000	590
	5000	6	6	3550	3675	5975	6100	6425	6425	205	205	5000	7000	590
2-stage full free mast	5500	3	6	3850	3975	6525	6650	6925	6925	205	205	4750	6600	590
	6000	3	6	4100	4225	7025	7150	7425	7425	205	205	4400	6400	590
	3000	10	12	2625		4110		4405		1555	1255	5000	7000	600
	3300	10	12	2775		4410		4705		1705	1405	5000	7000	600
	3500	10	12	2875		4610		4905		1805	1505	5000	7000	600
	3750	10	12	3000		4860		5155		1930	1630	5000	7000	600
	4000	10	12	3175		5110		5405		2105	1805	5000	7000	600
3-stage full free mast	4000	6	6	2505		5080		5405		1460	1135	4500	6400	635
	4350	6	6	2630		5430		5755		1585	1260	4500	6400	635
	4500	6	6	2680		5580		5905		1635	1310	4500	6400	635
	4800	6	6	2780		5880		6205		1735	1410	4500	6300	635
	5000	6	6	2880		6080		6405		1835	1510	4500	6300	635
	5400	3	6	3005		6480		6805		1960	1635	4300	6100	635
	6000	3	6	3305		7080		7405		2260	1935	4000	5500	635
6500	3	6	3530		7580		7905		2485	2160	3500	4700	635	



AX SERIES FBAX50-70 Load Curve



5.0T 2 STAGE MAST LOAD CURVE



7.0T 2 STAGE MAST LOAD CURVE

AX SERIES FBAX50-70 Dimensions

