MiMA

MBC SERIES – COMPACT ELECTRIC PALLET STACKER



MBC Series – Compact Electric Pallet Stacker
Capacity: 1,600 – 2,000 Kgs | Lift Height: 1.6m up to 5m – (Available with straddle option)

The MBC is a compact, stand-on electric pallet stacker designed for efficient lifting and stacking in narrow aisle and space-constrained environments. With a 1.6/ 2.0-tonne capacity, it combines powerful performance with agile manoeuvrability, making it ideal for warehouses where precision handling and high productivity are essential. Its slim chassis and intuitive control layout provide operators with excellent visibility and comfort during operation, while the fully electric lift and travel system ensures smooth, responsive performance.

Ideal for:

Medium-duty stacking in narrow aisle warehouses Internal pallet movement and goods handling Operators needing compact, high-precision performance

Electic Pallet Stacker MBC16 Series

Characteristics						
1.1	Manufacturer		MiMA	MiMA	MiMA	MiMA
1.2	Model		MBC16	MBC16	MBC16	MBC16
1.3	Model code		MBC1630F02	MBC1630	MBC1645S	MBC1645SQ
1.4	Power type		Battery	Battery	Battery	Battery
1.5	Operation		Walking	Walking	Walking	Walking
1.6	Load capacity	Q(kg)	1600	1600	1600	1600
1.7	Load center distance	C(mm)	600	600	600	600
1.8	Overhang	x(mm)	647	647	637	637
1.9	Wheelbase	y(mm)	1290	1290	1290	1290
Weights						
2.1	Service Weight(incl.battery)	kg	1150	1200	1300	1300
2.2	Axle load with full load drive/load	kg	/	/	/	/
2.3	Axle load without load drive/load	kg	/	/	/	/
Wheels						
3.1	Tyre type		Polyurethane	Polyurethane	Polyurethane	Polyurethane
3.2	Tyre size, front	mm	Φ80×70	Φ80×70	Φ80×70	Φ80×70
3.3	Tyre size, rear	mm	Φ230×75	Φ230×75	Φ230×75	Φ230×75
3.4	Balance wheel	mm	Φ125×50	Φ125×50	Φ125×50	Φ125×50
3.5	Wheels,number front/rear		4/1x+1	4/1x+1	4/1x+1	4/1x+1
3.6	Track width, rear	b10(mm)	530	530	530	530
3.7	Track width, front	b11(mm)	490	490	490	490
Dimenions						
4.1	Mast Closed height	h1(mm)	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification
4.2	Free lift height	h2(mm)	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification
4.3	Lift height	h3(mm)	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification
4.4	Mast extended height	h4(mm)	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification
4.5	Handle height Min./Max.	h14(mm)	700/1300	700/1300	700/1300	700/1300
4.6	Ground clearance,Min fork surface	h13(mm)	90	90	90	90
4.7	Overall length	l1(mm)	1990	1990	1990	1990
4.8	Overall width	b1/b2(mm)	820	820	820	820
4.9	Fork dimensions	l/e/s(mm)	1150/190/58	1150/190/58	1150/190/58	1150/190/58
4.10	Fork outside distance	b5(mm)	680*	680*	680*	680*
4.11	Mast ground clearance	mm	30	30	30	30
4.12	Aisle width with pallet 1000*1200mm, C=500mm	Ast(mm)	2375	2375	2375	2375
4.13	Aisle width with pallet 800*1200mm, C=600mm	Ast(mm)	2375	2375	2375	2375
4.14	Turning radius	Wa(mm)	1490	1490	1490	1490
Performance						
5.1	Driving speed, laden/unladen	km/h	5.0/6.0	5.0/6.0	5.0/6.0	5.0/6.0
5.2	Lift speed, laden/unladen	mm/s	90/130	125/175	90/130	80/135
5.3	Lowering speed, laden/unladen	mm/s	110/130	115/135	95/100	160/130
5.4	Gradeability,	%(tanθ)	6/12	6/12	6/12	6/12
5.5	Service brake		Electromagnetic	Electromagnetic	Electromagnetic	Electromagnetic
Drive						
6.1	Drive motor, rating S2=60	kw	1.5	1.5	1.5	1.5
6.2	Lift motor, rating S3=15%	kw	2	3	3	3
6.3	Lead acid battery voltage/nominal capacity	V/Ah	24/210*	24/210*	24/210*	24/210*
6.4	Battery weight	kg	180	180	180	180
6.5	Steering system		Mechanical	Mechanical	Mechanical	Mechanical
Others						
7.1	Battery replacement method		Side pull	Side pull	Side pull	Side pull
7.2	Mast		Single cylinder duplex mast	Double cylinders duplex mast	Triplex mast*	Triplex full free mast*

Note* (1): The optional fork outer distance is 570mm;

* (2): When the fork outer distance is 570mm, the lifting height of MBC16 is H1600~5000mm;

* (3): When the fork outer distance is 570mm, the lifting height of MBC16 is H1600~2500mm without load loss;

The lifting height is H2500~5000mm, and the load is reduced by 150Kg based on the standard load curve;

* (4): 150/200 lithium battery is optional, and the triplex mast model needs to be equipped with 200 lithium battery;

* (5): Triplex full free mast is optional.

Electric Pallet Stacker MBC20 Series

Characteristics						
1.1	Manufacturer		MiMA	MiMA	MiMA	MiMA
1.2	Model		MBC20	MBC20	MBC20	MBC20
1.3	Technical ode		MBC2030F02	MBC2030	MBC2045S	MBC2045SQ
1.4	Power type		Battery	Battery	Battery	Battery
1.5	Operation		Walking	Walking	Walking	Walking
1.6	Load capacity	Q(kg)	2000	2000	2000	2000
1.7	Load center distance	C(mm)	600	600	600	600
1.8	Overhang	x(mm)	647	647	637	637
1.9	Wheelbase	y(mm)	1290	1290	1290	1290
Weights						
2.1	Service Weight(incl.battery)	kg	1150	1200	1300	1300
2.2	Axle load with full load drive/load side	kg	/	/	/	/
2.3	Axle load without load drive/load side	kg	/	/	/	/
Wheels						
3.1	Tyre type		Polyurethane	Polyurethane	Polyurethane	Polyurethane
3.2	Tyre size, front	mm	Φ80×70	Φ80×70	Φ80×70	Φ80×70
3.3	Tyre size, rear	mm	Φ230×75	Φ230×75	Φ230×75	Φ230×75
3.4	Balance wheel	mm	Φ125×50	Φ125×50	Φ125×50	Φ125×50
3.5	Wheels,number front/rear (X=driven)		4/1x+1	4/1x+1	4/1x+1	4/1x+1
3.6	Track width, rear	b10(mm)	530	530	530	530
3.7	Track width, front	b11(mm)	490	490	490	490
Dimenions						
4.1	Mast Closed height	h1(mm)	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification
4.2	Free lift height	h2(mm)	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification
4.3	Lift height	h3(mm)	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification
4.4	Mast extended height	h4(mm)	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification
4.5	Handle height Min./Max.	h14(mm)	700/1300	700/1300	700/1300	700/1300
4.6	Ground clearance,Min fork surface	h13(mm)	90	90	90	90
4.7	Overall length	l1(mm)	1990	1990	1990	1990
4.8	Overall width	b1/b2(mm)	820	820	820	820
4.9	Fork dimensions	l/e/s(mm)	1150/190/58	1150/190/58	1150/190/58	1150/190/58
4.10	Fork outside distance	b5(mm)	680*	680*	680*	680*
4.11	Mast ground clearance	mm	30	30	30	30
4.12	Aisle width with pallet 1000*1200mm, C=500mm	Ast(mm)	2375	2375	2375	2375
4.13	Aisle width with pallet 800*1200mm, C=600mm	Ast(mm)	2375	2375	2375	2375
4.14	Turning radius	Wa(mm)	1490	1490	1490	1490
Performance						
5.1	Driving speed, laden/unladen	km/h	5.0/6.0	5.0/6.0	5.0/6.0	5.0/6.0
5.2	Lift speed, laden/unladen	mm/s	90/130	125/175	90/130	80/135
5.3	Lowering speed, laden/unladen	mm/s	110/130	115/135	95/100	160/130
5.4	Gradeability, laden/unladen(S2-5min)	%(tanθ)	6/12	6/12	6/12	6/12
5.5	Service brake		Electromagnetic	Electromagnetic	Electromagnetic	Electromagnetic
Drive						
6.1	Drive motor, rating S2=60	kw	1.5	1.5	1.5	1.5
6.2	Lift motor, rating S3=15%	kw	2	3	3	3
6.3	Lead acid battery voltage/nominal capacity	V/Ah	24/210*	24/210*	24/210*	24/210*
6.4	Battery weight	kg	180	180	180	180
6.5	Steering system		Mechanical steering	Mechanical steering	Mechanical steering	Mechanical steering
Others						
7.1	Battery replacement method		Side pull	Side pull	Side pull	Side pull
7.2	Mast		Single cylinder duplex mast	Double cylinders duplex mast	Triplex mast*	Triplex full free mast*

Note* (1): The optional fork outer distance is 570mm;

* (2): When the fork outer distance is 570mm, the lifting height of MBC20 is H1600~4500mm;

* (3): When the fork outer distance is 570mm,The lifting height is H1600~5000mm, and the load is reduced by 200Kg based on the standard load curve;

* (4): 150AH lithium battery is optional;

* (5): Triplex full free mast is optional.

Mast specification

Single mast			MBC1616/MBC2016				
Model		Unit	MBC1616 MBC2016				
Mast type			Single mast				
Lift height	h3	mm	1600				
Mast closed height	h1	mm	2090				
Mast extended height	h4	mm	2090				
Free lift height	h2	mm	1600				
Single cylinder duplex mast			**MBC16/20F02 series**				
Model		Unit	MBC1625F02 MBC2025F02	MBC1630F02 MBC2030F02	MBC1635F02 MBC2035F02	MBC1640F02 MBC2040F02	MBC1645F02 MBC2045F02
			duplex mast	duplex mast	duplex mast	duplex mast	duplex mast
Lift height	h3	mm	2500	3000	3500	4000	4500
Mast closed height	h1	mm	1775	2025	2275	2575	2825
Mast extended height	h4	mm	3000	3500	4000	4500	5000
Double cylinders duplex mast			**MBC16/20 series**				
Model		Unit	MBC1625 MBC2025	MBC1630 MBC2030	MBC1635 MBC2035	MBC1640 MBC2040	MBC1645 MBC2045
Lift height	h3	mm	2500	3000	3500	4000	4500
Mast closed height	h1	mm	1775	2025	2275	2575	2825
Mast extended height	h4	mm	3000	3500	4000	4500	5000
Triplex common mast			**MBC16/20S series**				
Model		Unit	MBC1640S MBC2040S	MBC1645S MBC2045S	MBC1650S MBC2050S		
Lift height	h3	mm	4000	4500	5000		
Mast closed height	h1	mm	1933	2100	2267		
Mast extended height	h4	mm	4500	5000	5500		
Triplex full free mast			**MBC16/20SQ series**				
Model		Unit	MBC1640SQ MBC2040SQ	MBC1645SQ MBC2045SQ	MBC1650SQ MBC2050SQ		
Lift height	h3	mm	4000	4500	5000		
Mast closed height	h1	mm	1933	2100	2267		
Free lift height	h2	mm	1383	1550	1717		
Mast extended height	h4	mm	4500	5000	5500		





