

# MiMA

## MJ20 ARTICULATED SERIES

MQC 2500 kgs - 5000 kgs

The **Mima MJ20 Articulated Forklift** is designed for superior efficiency and flexibility in narrow aisle storage and warehouse environments. With an articulated mast design, it provides high maneuverability, allowing for seamless operation in confined spaces while maximizing storage capacity.



### Key Features:

**Articulated Mast Design:** Enables operation in aisles as narrow as 1.9 meters, improving warehouse storage efficiency.

**Electric-Powered System:** Offers zero-emission, energy-efficient operation.

**48V/600Ah Lithium Battery:** Ensures extended runtime and ultra-fast charging capabilities.

**Maintenance-Free AC Drive System:** Provides smooth acceleration, energy efficiency, and reduced upkeep costs.

**High Visibility Cabin:** Features an ergonomic design, ensuring maximum operator comfort and precision.

**Advanced Load Stability System:** Enhances safety when handling loads at high elevations.

**360° Steering Control:** Allows for seamless navigation in tight spaces, optimizing productivity.

**Side-Shift Forks:** Improve efficiency in pallet handling and precision loading.

**Regenerative Braking System:** Enhances energy recovery while increasing operational efficiency.



5 Year Battery Warranty



2 Year Warranty



30 Days Money Back Guarantee



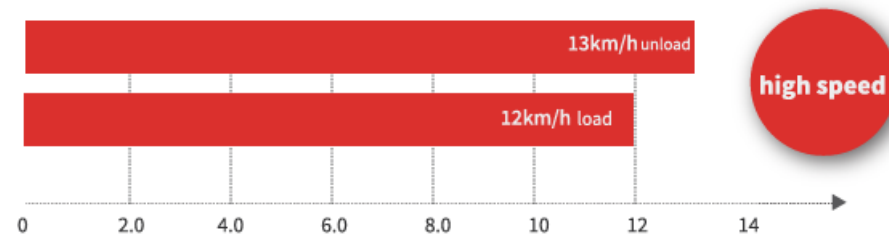
Service Contracts Available

### SAFETY

Equipped with a high-strength chassis and electronic stability control, the MJ20 ensures smooth and precise handling at various load heights. LED lighting, automatic speed reduction, and advanced braking systems contribute to enhanced operator and workplace safety.

- Lithium Battery
- Laser Guiding System
- Ultra HD camera
- 80v System with AC 16.3KW drive motor
- High power maintenance-free AC drive motor
- High power AC 15KW lift motor

### High speed driving High efficient work



### INNOVATION

The MJ20 combines articulated maneuverability with a high lifting capacity, making it ideal for high-density storage applications. The intelligent design allows for tight turning angles, ensuring minimal space is wasted while maximizing efficiency.

### EFFICIENCY

The articulated mast and narrow aisle capability allow the MJ20 to handle materials efficiently in high-density storage environments. The electric AC drive system and intelligent regenerative braking ensure extended operation time, reduced energy consumption, and higher throughput.

### MAINTENANCE

The maintenance-free AC system and modular component design reduce downtime and improve operational longevity. The side-extraction lithium battery enables quick replacements, ensuring uninterrupted work shifts.



## Specification

Standard						
1.1	Manufacturer		MIMA	MIMA	MIMA	MIMA
1.2	Model		MJ20 (narrow)	MJ20H (wide)	MJ20 (narrow)	MJ20H (wide)
1.3	Power type		Battery	Battery	Battery	Battery
1.4	Operation type		Seated	Seated	Seated	Seated
1.5	Rated capacity	Q(kg)	2000	2000	2000	2000
1.6	Load center	C(mm)	600	600	600	600
1.7	Load distance	x(mm)	285	285	285	285
1.8	Wheelbase	y(mm)	1720	1720	1720	1720

Weights						
2.1	Service weight (incl.battery)	kg	7460	8140	7460	8140
2.2	Axle load with load, drive side/load side	kg	5290/4250	5600/4650	5290/4250	5600/4650
2.3	Axle load without load, drive side/load side	kg	2250/5210	2470/5670	2250/5210	2470/5670

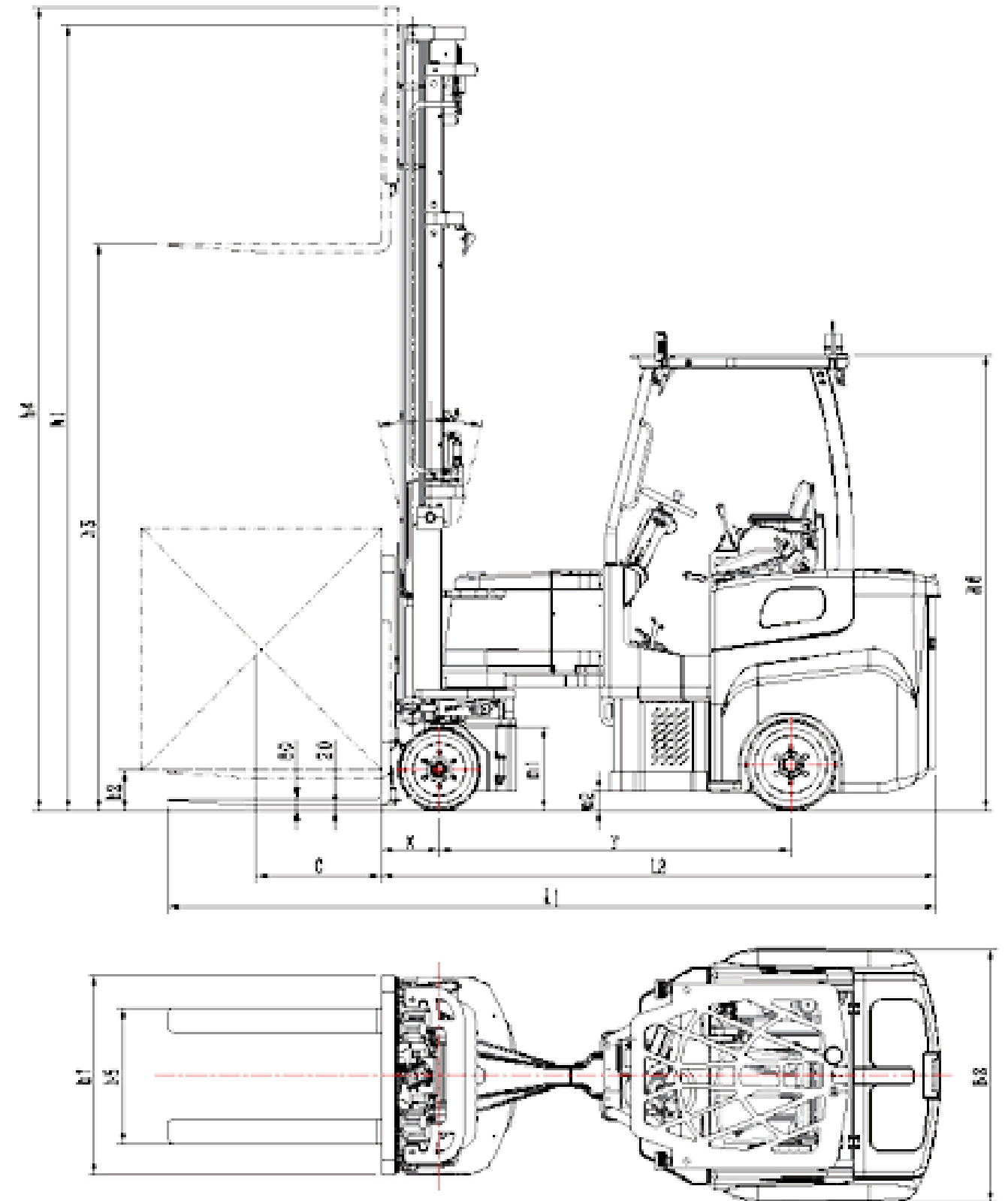
Tyres						
3.1	Tyre type		Solid rubber tire	Solid rubber tire	Solid rubber tire	Solid rubber tire
3.2	Tyre size, load side	mm	Φ457×178	Φ457×178	Φ457×178	Φ457×178
3.3	Tyre size, Drive wheel	mm	Φ415×178	Φ415×178	Φ415×178	Φ415×178
3.4	Number of wheels, front/rear X=drive		2X/2	2X/2	2X/2	2X/2
3.5	Tread, drive side	b10(mm)	800	800	800	800
3.6	Tread, load side	b11(mm)	1090	1090	1090	1220

Dimension						
4.1	Mast tilt, forward/backward	α/β(°)	1/3	1/3	1/3	1/3
4.2	Mast swing angle	(°)	210	210	210	210
4.3	Height, mast closed	h1(mm)	See the mast parameter table	See the mast parameter table	See the mast parameter table	See the mast parameter table
4.4	Free lift height	h2(mm)	See the mast parameter table	See the mast parameter table	See the mast parameter table	See the mast parameter table
4.5	Rated weight lift height	h3(mm)	3300	3300	3300	3300
4.6	Lift height range	h3(mm)	4600~10000	4600~12500	4600~10000	4600~12500
4.7	Height, mast extended	h4(mm)	See the mast parameter table	See the mast parameter table	See the mast parameter table	See the mast parameter table
4.8	Overhead guard height	h6(mm)	2250	2250	2250	2250
4.9	Seat height	h7(mm)	1230	1230	1230	1230
4.10	Overall length	L1(mm)	3830	3830	3830	3830
4.11	Overall length without forks	L2(mm)	2730	2730	2730	2730
4.12	Overall width	b1/b2(mm)	980/1260	980/1400	980/1260	980/1400
4.13	Fork size	l/e/s(mm)	1100/100/50	1100/100/50	1100/100/50	1100/100/50
4.14	Installation level	II	II	II	II	II
4.15	Fork carriage width	b3(mm)	990	990	990	990
4.16	Outside distance between forks	b5(mm)	250~890	250~890	250~890	250~890
4.17	Side shift distance	mm	±100	±100	±100	±100
4.18	Min. ground clearance of mast	m1(mm)	70	70	50	50
4.19	Min. Ground clearance of chassis	m2(mm)	100	100	100	100
4.20*	Min. stacking aisle width (800X1200mm pallet, C=600mm)	mm	1900	2100	1900	2100
	Efficiency aisle Distance between goods to goods ≥	mm	2000	2200	2000	2200
	Distance between rack to rack ≥	mm	2200	2400	2200	2400
	More other stacking aisle width	mm	See aisle parameter table	See aisle parameter table	See aisle parameter table	See aisle parameter table
4.21	Min. main aisle (800X1200mm pallet)	mm	2650	2650	2650	2650
4.22	Turning radius	Wa(mm)	2200	2200	2200	2200

Performance						
5.1	Driving speed, load/unload	km/h	12/13	12/13	15/12	15/12
5.2	Lifting speed, load/unload	mm/s	400/420	400/420	400/420	400/420
5.3	Lowering speed, load/unload	mm/s	280/200	280/200	280/200	280/200
5.4	Traction (S2-5min)	N				
5.5*	Max. Gradeability from slope load/unload (S2-5min)	%(tanθ)	15/15	15/15	1 / 15	15/15
5.6	Braking type		Hydraulic	Hydraulic	Hydraulic	Hydraulic

Driving						
6.1	Drive motor (S2-60min)	kw	AC18.5	AC18.5	AC16.3	AC16.3
6.2	Lifting motor (S3-15%)	kw	AC15	AC15	AC15	AC15
6.3	Battery, voltage/capacity	V/Ah	48/900	48/900	80/500	80/500
6.4	Battery weight	kg	1400	1400	1380	1380
6.5	Steering type		Hydraulic	Hydraulic	Hydraulic	Hydraulic

Others						
7.1	Lithium battery, voltage/capacity (standard)	V/Ah	48/600	48/600	80/460	80/460
7.2	(Optional)	V/Ah	48/700	48/700	80/400	80/400



Load capacity parameter								MJ20 Narrow model	
Lift height (mm)								Capacity	
								kg	
	10000	500	470	450	430	410	390	370	
	9500	650	620	580	560	530	510	490	
	9000	780	740	700	670	640	610	580	
	8500	880	830	790	750	720	690	660	
	8000	950	900	850	810	780	740	710	
	7500	1050	990	940	900	860	820	790	
	7150	1080	1020	970	920	880	840	810	
	7000	1100	1040	990	940	900	860	820	
6750	1150	1090	1030	980	940	900	860		
6300	1200	1140	1080	1030	980	940	900		
5700	1300	1230	1170	1110	1060	1010	970		
5400	1350	1280	1210	1160	1100	1050	1010		
4800	1400	1330	1260	1200	1140	1090	1050		
4600	1450	1370	1300	1240	1180	1130	1080		
3300	2000	1890	1800	1710	1630	1560	1500		
	<b>600</b>	<b>650</b>	<b>700</b>	<b>750</b>	<b>800</b>	<b>850</b>	<b>900</b>		
Horizontal load center mm									

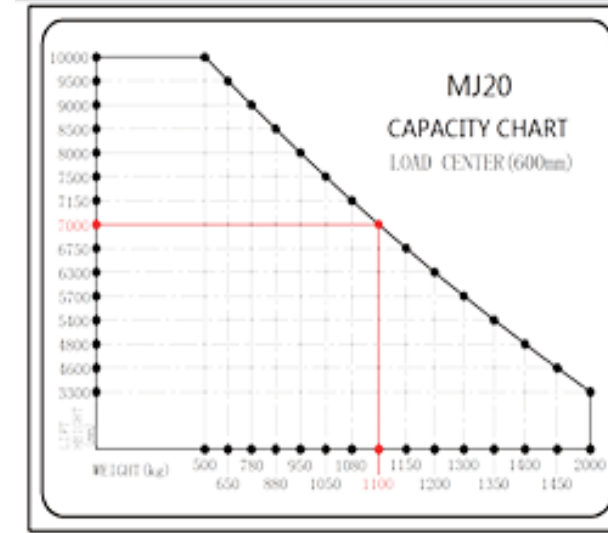
Load capacity parameter								MJ20W Semi-wide model	
Lift height (mm)								Capacity	
								kg	
	12500	/	/	/	/	/	/	/	
	12000	/	/	/	/	/	/	/	
	11500	/	/	/	/	/	/	/	
	11000	/	/	/	/	/	/	/	
	10800	/	/	/	/	/	/	/	
	10500	/	/	/	/	/	/	/	
	10000	800	760	720	680	660	620	600	
	9500	900	850	810	770	730	700	670	
9000	950	900	850	810	780	740	710		
8500	1050	990	940	900	860	820	790		
8000	1150	1090	1030	980	940	900	860		
7500	1250	1180	1120	1070	1020	980	930		
7150	1300	1230	1170	1110	1060	1010	970		
7000	1350	1280	1210	1160	1100	1050	1010		
6750	1380	1310	1240	1180	1130	1080	1030		
6300	1450	1370	1300	1240	1180	1130	1080		
5700	1530	1450	1380	1310	1250	1190	1140		
5400	1600	1510	1440	1370	1310	1250	1200		
4800	1680	1590	1510	1440	1370	1310	1260		
4600	1750	1660	1570	1500	1430	1370	1310		
3300	2000	1890	1800	1710	1630	1560	1500		
	<b>600</b>	<b>650</b>	<b>700</b>	<b>750</b>	<b>800</b>	<b>850</b>	<b>900</b>		
Horizontal load center mm									

Load capacity parameter								MJ20H Wide model	
Lift height (mm)								Capacity	
								kg	
	12500	900	850	810	770	730	700	670	
	12000	950	900	850	810	780	740	710	
	11500	1000	950	900	860	820	780	750	
	11000	1050	990	940	900	860	820	790	
	10800	1070	1010	960	920	870	840	800	
	10500	1100	1040	990	940	900	860	820	
	10000	1200	1140	1080	1030	980	940	900	
	9500	1230	1160	1110	1050	1000	960	920	
9000	1250	1180	1120	1070	1020	980	930		
8500	1300	1230	1170	1110	1060	1010	970		
8000	1350	1280	1210	1160	1100	1050	1010		
7500	1400	1330	1260	1200	1140	1090	1050		
7150	1430	1350	1290	1220	1170	1120	1070		
7000	1500	1420	1350	1280	1220	1170	1120		
6750	1530	1450	1380	1310	1250	1190	1140		
6300	1550	1470	1390	1330	1270	1210	1160		
5700	1600	1510	1440	1370	1310	1250	1200		
5400	1630	1540	1470	1390	1330	1270	1220		
4800	1730	1640	1560	1480	1410	1350	1290		
4600	1800	1700	1620	1540	1470	1410	1350		
3300	2000	1890	1800	1710	1630	1560	1500		
	<b>600</b>	<b>650</b>	<b>700</b>	<b>750</b>	<b>800</b>	<b>850</b>	<b>900</b>		
Horizontal load center mm									

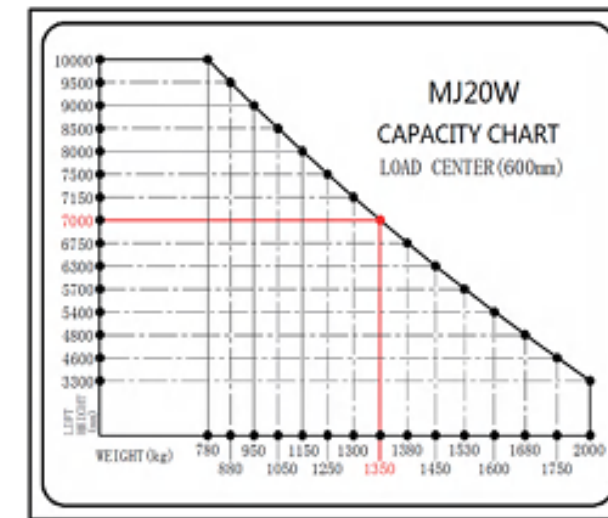
Mast parameter											
Triplex full free mast											
Model	MJ20	46	48	54	57	63	67	70	71	75	80
Lift height	h3(mm)	4620	4820	5420	5720	6320	6770	7020	7170	7520	8020
Mast extended height	h4(mm)	5800	6000	6600	6900	7500	8000	8200	8400	8700	9200
Mast closed height	h1(mm)	2818	2885	3085	3185	3385	3485	3568	3618	3734	3900
Free lift height	h2(mm)	1134	1200	1400	1500	1700	1950	2034	2084	2202	2368
Triplex full free mast											
Model	MJ20	85	90	95	100	105	108	110	115	120	125
Lift height	h3(mm)	8520	9020	9520	10020	10520	10820	11020	11520	12020	12520
Mast extended height	h4(mm)	9700	10200	10700	11200	11700	12000	12200	12700	13200	13700
Mast closed height	h1(mm)	4067	4234	4400	4567	4734	4834	4900	5067	5234	5400
Free lift height	h2(mm)	2534	2700	2868	3034	3200	3300	3368	3534	3700	3868

**Stacking aisle width parameter** MJ20 Narrow model

	Pallet size along forks direction (L)										Swing angle
	mm	1000	1100	1200	1300	1400	1500	1600	1700	1800	
Pallet size across forks direction (w)	800	/	/	1900	2050	2150	2250	/	/	/	±105
	900	/	/	1950	2080	2180	2280	/	/	/	
	1000	1800	1900	2000	2100	2200	2300	2400	2500	2600	
	1100	1830	1930	2030	2130	2230	2330	2430	2530	2630	±100
	1200	1850	1950	2050	2150	2250	2350	2450	2550	2650	
	1300	1900	2000	2150	2200	2300	2400	2500	2600	2700	±95
	1400	2000	2100	2200	2300	2400	2500	2600	2700	2800	
	1500	2350	2450	2550	2650	2750	2850	2950	3050	3150	±90
1600	2400	2500	2600	2700	2800	2900	3000	3100	3200		



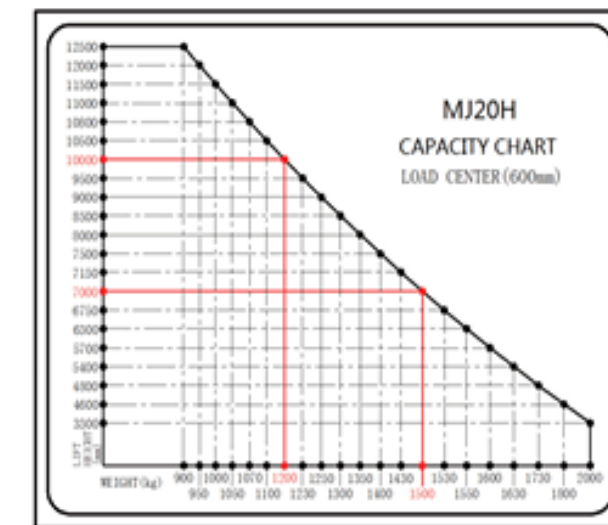
Capacity Chart-MJ20



Capacity Chart -MJ20W

**Stacking aisle width parameter** MJ20W Semi-wide model MJ20H Wide model

	Pallet size along forks direction (L)										Swing angle
	mm	1000	1100	1200	1300	1400	1500	1600	1700	1800	
Pallet size across forks direction (w)	800	/	/	2100	2250	2350	2450	/	/	/	±105
	900	/	/	2150	2280	2380	2480	/	/	/	
	1000	2000	2100	2200	2300	2400	2500	2600	2700	2800	
	1100	2030	2130	2230	2330	2430	2530	2630	2730	2830	±100
	1200	2050	2150	2250	2350	2450	2550	2650	2750	2850	
	1300	2100	2200	2300	2400	2500	2600	2700	2800	2900	±95
	1400	2200	2300	2400	2500	2600	2700	2800	2900	3000	
	1500	2350	2450	2550	2650	2750	2850	2950	3050	3150	±90
1600	2400	2500	2600	2700	2800	2900	3000	3100	3200		



Capacity Chart-MJ20H