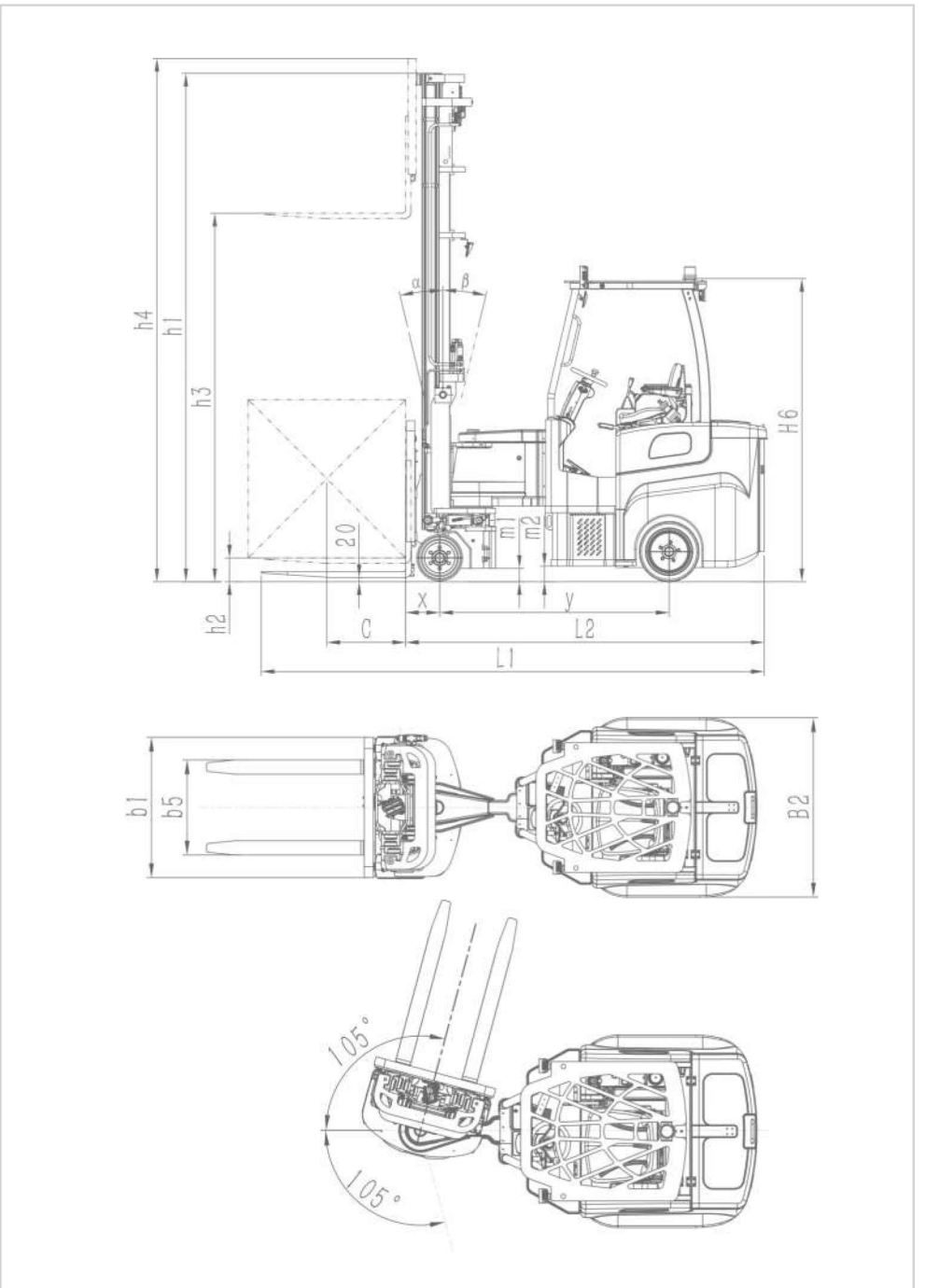
GROS

Specification

standard						
1.1	Manufacturer		MIMA	MIMA	MIMA	MIMA
1.2	Model		MJ20 (narrow)	MJ20 H(wide)	MJ20(narrow)	MJ20 H(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	1090
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
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	1900	1900	1900
	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	12/13	12/13
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	15/15	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	48/500	48/500	80/300	80/300
7.2	(Optional)	V/Ah	48/700	48/700	80/400	80/400

Marks: Above data is for standard model. Varies depending on different configuration. 4.20★ The minimum aisle is the net width between goods and goods, and the distance between rack and rack should be increased accordingly, it is recommended to add 200 mm or more. 5,5★ It is the maximum gradeability from the slope, and the maximum gradeability (load/unload) is 15/15.



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	
	600	**650**	**700**	**750**	**800**	**850**	**900**	
	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	
	600	**650**	**700**	**750**	**800**	**850**	**900**	
	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	
	600	**650**	**700**	**750**	**800**	**850**	**900**	
	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

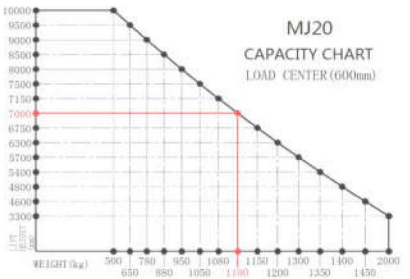
	Pallet size along forks direction (L)									Swing angle
Pallet size across forks direction (w)	mm	1000	1100	1200	1300	1400	1500	1600	1700	1800	
	800	/	/	1900	2050	2150	2250	/	/	/	±105
	900	/	/	1950	2080	2180	2280	/	/	/	
	1000	1800	1900	2000	2100	2200	2300	2400	2500	2600	
	1100	1830	1930	2030	2130	2230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

Stacking aisle width parameter

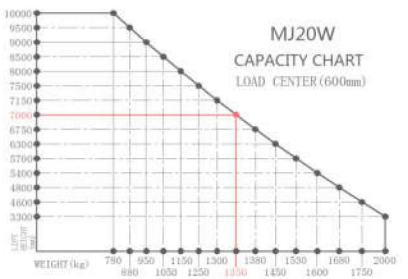
MJ20W Semi-wide model MJ20H Wide model

	Pallet size along forks direction (L)									Swing angle
Pallet size across forks direction (w)	mm	1000	1100	1200	1300	1400	1500	1600	1700	1800	
	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	
	1200	2050	2150	2250	2350	2450	2550	2650	2750	2850	
	1300	2100	2200	2300	2400	2500	2600	2700	2800	2900	±100
	1400	2200	2300	2400	2500	2600	2700	2800	2900	3000	±95
	1500	2350	2450	2550	2650	2750	2850	2950	3050	3150	±90
	1600	2400	2500	2600	2700	2800	2900	3000	3100	3200	

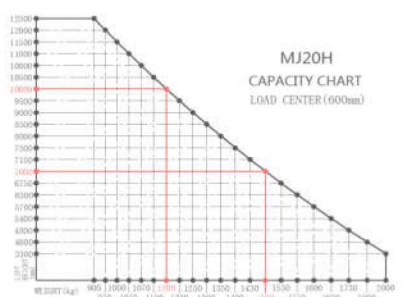
Note 1: The above indicates minimum aisle width,which is the net aisle width between goods to goods;when the goods extend out of racks,the aisle width need to be increased accordingly,recommended to be added 200 or more, efficiency net aisle width needs to be added 100 or more.
Note 2 :When W is bigger than 1200mm,lift height is less than 2500mm,the swing angle will be less than 210 degree.The larger W, the smaller swing angle.



Capacity Chart-MJ20



Capacity Chart -MJ20W



Capacity Chart-MJ20H