

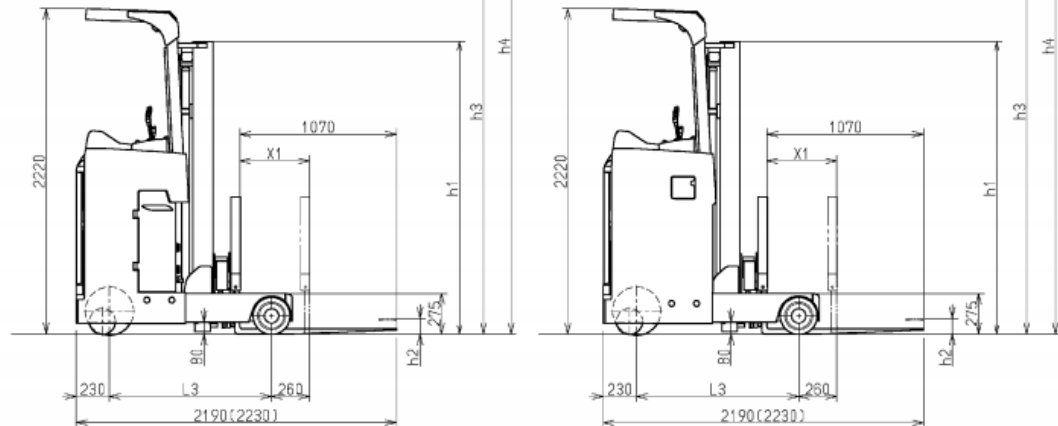
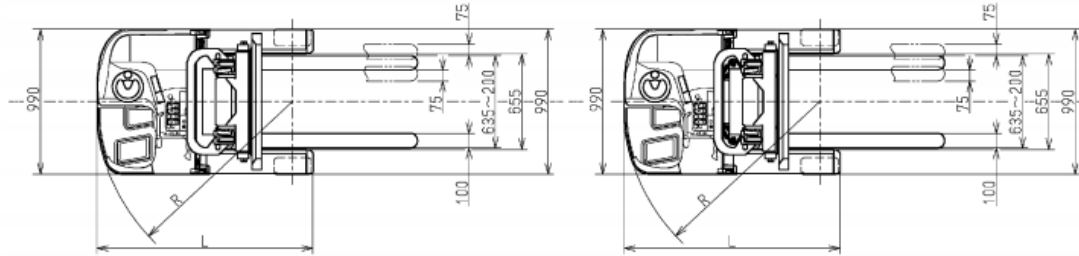
MAST DATA - 2 Stage Mast

FRB10-9LC

MAST (VM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	SERVICE WEIGHT (w/o BATT.) G kg	FREE LIFT h2 mm
250	900	2500	3400	1745	1485	105
270	900	2700	3600	1845	1505	
300	900	3000	3900	1995	1515	
330	900	3300	4200	2145	1545	400
350	900	3500	4400	2245	1555	
370	900	3700	4600	2345	1575	
400	900	4000	4900	2495	1605	
430	850	4300	5200	2745	1635	
450	850	4500	5400	2845	1645	
470	750	4700	5600	2945	1655	
500	700	5000	5900	3095	1675	

FRB12-9LC

MAST (VM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	SERVICE WEIGHT (w/o BATT.) G kg	FREE LIFT h2 mm
250	1070	2500	3400	1745	1575	105
270	1070	2700	3600	1845	1585	
300	1070	3000	3900	1995	1605	
330	1070	3300	4200	2145	1635	400
350	1070	3500	4400	2245	1645	
370	1070	3700	4600	2345	1655	
400	1070	4000	4900	2495	1695	
430	930	4300	5200	2745	1725	
450	930	4500	5400	2845	1735	
470	850	4700	5600	2945	1745	
500	800	5000	5900	3095	1765	



**BATTERY SIDE LOADING
FRB10/12-9LC**

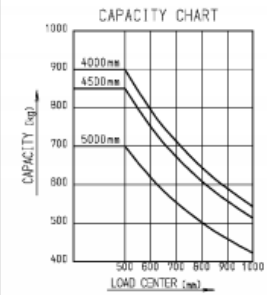
**BATTERY FRONT LOADING
FRB10/12-9LC**

SPECIFICATIONS

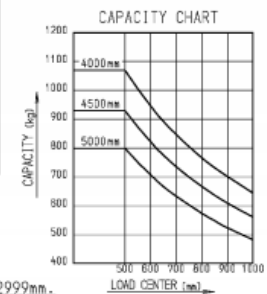
ITEMS		UNIT	FRB10-9LC	FRB12-9LC	
TRAVEL SPEED	LADEN	kn/h	9.5	←	
	UNLADEN	kn/h	10.5	←	
LIFT SPEED	LADEN	nn/s	2.75	2.65 ←	
	UNLADEN	nn/s	4.50	←	
MOTORS	TRACTION	kw	2.6	←	
	HYDRAULIC	kw	6.0	←	
	POWER STR.	kw	0.15	←	
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL		
	HYDRAULIC		←		
	POWER STR.		CHOPPER CONTROL		
BATTERY WEIGHT M.J.N./MAX.	kg	230 / 450	300 / 450	←	
BATTERY (24V)	Ah/SHR	260	390	←	
CHARGER (3PHASE 200V)	AUTOMATIC STATIONARY CHARGER				
	KVA	2.4	3.4	←	
TYRES		SOLID			
LOAD (URETHANE)		#254x114 2PCS.			
DRIVE (RUBBER)		#330x145 1PC.			
CASTER (RUBBER)		#178x73 2PCS.			
MIN. TURNING RADIUS R	mm	1275	1350	1455	
REACH STROKE X1	mm	400	475	565	
		(360)	(435)	(545)	
WHEELBASE L3	mm	1030	1105	1215	
OVERALL LENGTH L	TO FRONT-END OF OUTRIGGER	mm	1400	1475	1585

NOTE: DIMENSIONS IN BRACKETS ARE FOR THE MAST OF LIFT HEIGHT LESS THAN 2999mm.

FRB10-9LC



FRB12-9LC



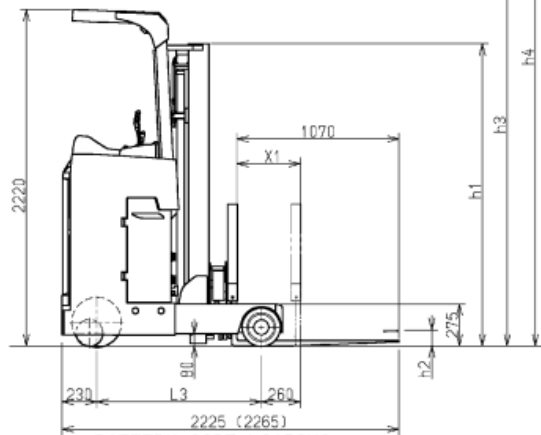
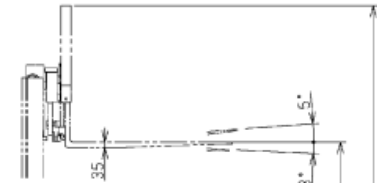
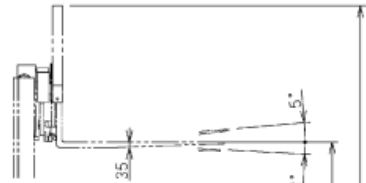
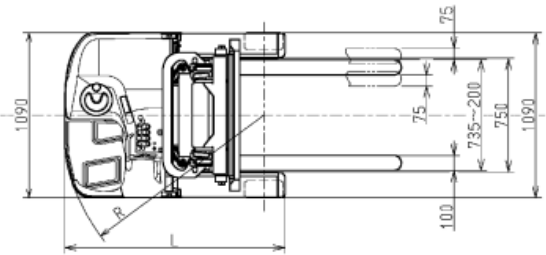
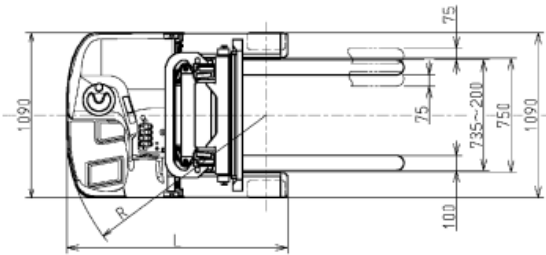
MAST DATA - 2 Stage Mast

FRB12-9L

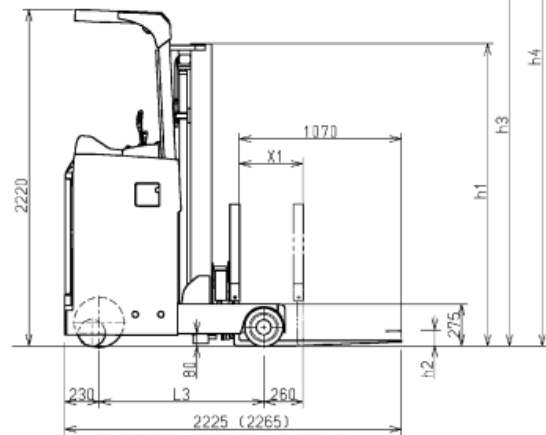
MAST (VM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	D. A. H		SERVICE WEIGHT (w/o BATT.) G kg	FREE LIFT h2 mm
			RAISED h4 mm	LOWERED h1 mm		
250	1070	2500	3400	1745	1650	105
270	1070	2700	3600	1845	1660	
300	1070	3000	3900	1995	1680	
330	1070	3300	4200	2145	1710	400
350	1070	3500	4400	2245	1720	
370	1070	3700	4600	2345	1730	
400	1070	4000	4900	2495	1770	
430	1030	4300	5200	2745	1800	
450	1000	4500	5400	2845	1810	
470	950	4700	5600	2945	1820	
500	900	5000	5900	3095	1840	

FRHB12-9L

MAST (VM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O. A. H		SERVICE WEIGHT (w/o BATT.) G kg	FREE LIFT h2 mm
			RAISED h4 mm	LOWERED h1 mm		
250	1070	2500	3400	1745	1660	105
270	1070	2700	3600	1845	1670	
300	1070	3000	3900	1995	1680	
330	1070	3300	4200	2145	1720	400
350	1070	3500	4400	2245	1730	
370	1070	3700	4600	2345	1740	
400	1070	4000	4900	2495	1780	
430	1070	4300	5200	2745	1810	
450	1070	4500	5400	2845	1820	
470	1070	4700	5600	2945	1830	
500	1070	5000	5900	3095	1850	



**BATTERY SIDE LOADING
FR(H)B 12-9L**



**BATTERY FRONT LOADING
FR(H)B 12-9L**

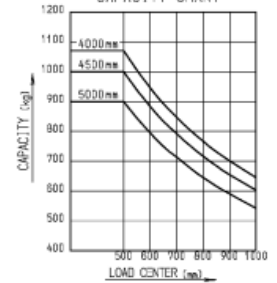
SPECIFICATIONS

ITEMS	UNIT		FRB12-9L	FRHB12-9L
TRAVEL SPEED	LADEN	km/h	10.5	↑
	UNLADEN	km/h	10.5	↑
LIFT SPEED	LADEN	mm/s	340	320
	UNLADEN	mm/s	540	↑
MOTORS	TRACTION	kw	4.3	↑
	HYDRAULIC	kw	8.8	↑
CONTROL SYSTEM	POWER STR.	kw	0.3	↑
	TRAVEL		INVERTER CONTROL	
BATTERY WEIGHT MIN./MAX.		kg	340 / 450	↑
				↑
BATTERY (48V)		Ah/SHR	201	↑
				↑
CHARGER (3PHASE 200V)		AUTOMATIC STATIONARY CHARGER		
		kVA	3.8	↑
TYRES			SOLID	
LOAD (URETHANE)			#254×114 2PCS.	
DRIVE (RUBBER)			#330×145 1PC.	
CASTER (RUBBER)			#178×73 2PCS.	
MIN. TURNING RADIUS R	mm	1340	1455	1510
REACH STROKE X1	mm	420	540	600
		(380)	(500)	(560)
WHEELBASE L3	mm	1065	1205	1265
OVERALL LENGTH TO FRONT-END OF COUNTER	L	mm	1455	1575
				1635

NOTE) DIMENSIONS IN BRACKETS ARE FOR THE MAST OF LIFT HEIGHT LESS THAN 2999mm.

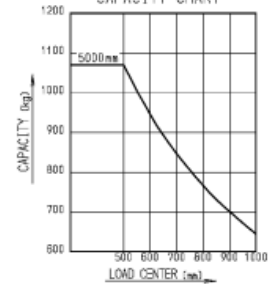
FRB12-9L

CAPACITY CHART



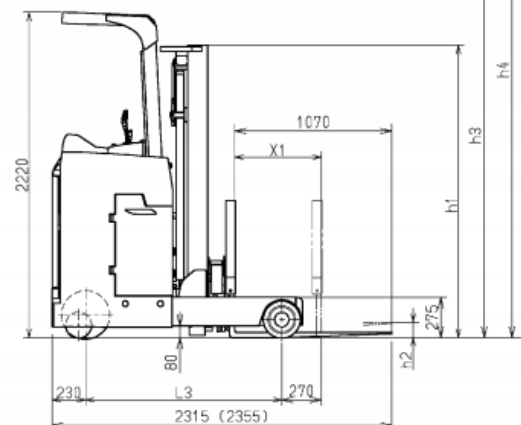
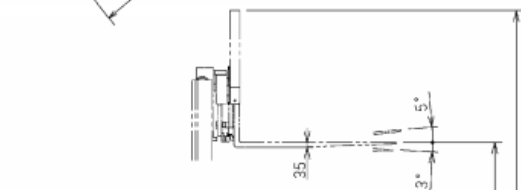
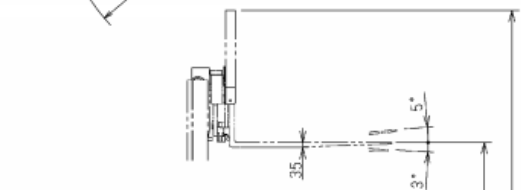
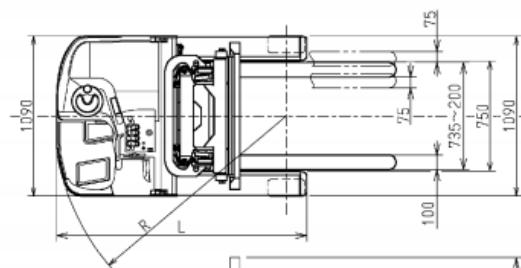
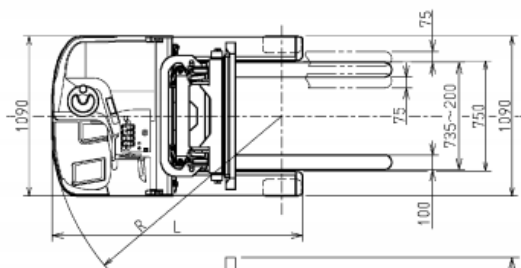
FRHB12-9L

CAPACITY CHART

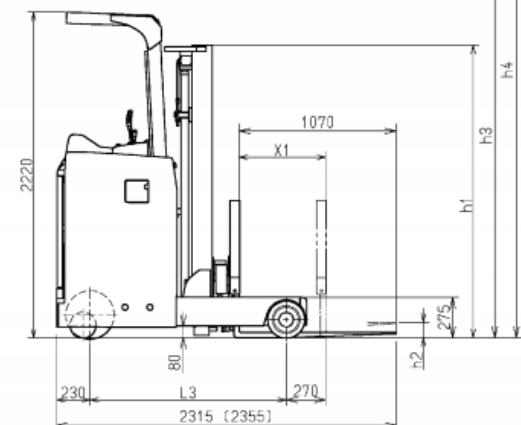


FRB15-9L

MAST (VM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O. A. H		SERVICE WEIGHT (W/O BATT.) G kg	FREE LIFT h2 mm
			RAISED h4 mm	LOWERED h1 mm		
250	1350	2500	3400	1745	1655	105
270	1350	2700	3600	1845	1665	
300	1350	3000	3900	1995	1685	
330	1350	3300	4200	2145	1725	400
350	1350	3500	4400	2245	1735	
370	1350	3700	4600	2345	1745	
400	1350	4000	4900	2495	1785	
430	1300	4300	5200	2745	1815	
450	1300	4500	5400	2845	1825	
470	1250	4700	5600	2945	1885	
500	1250	5000	5900	3095	1905	



BATTERY SIDE LOADING
FRB15-9L

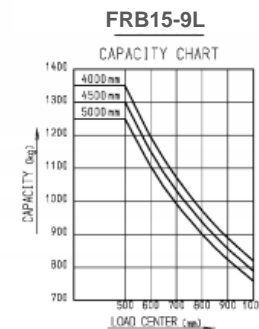


BATTERY FRONT LOADING
FRB15-9L

SPECIFICATIONS

ITEMS		UNIT	FRB15-9L	
TRAVEL SPEED	LADEN	km/h	9.5	←←←←
	UNLADEN	km/h	10.5	←←←←
LIFT SPEED	LADEN	m/s	3.10	←←←←
	UNLADEN	m/s	5.40	←←←←
MOTORS	TRACTION	kw	4.3	←←←←
	HYDRAULIC	kw	8.8	←←←←
	POWER STR.	kw	0.3	←←←←
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL	
	HYDRAULIC		CHOPPER CONTROL	
	POWER STR.		CHOPPER CONTROL	
BATTERY WEIGHT MIN./MAX.	kg	400 / 600	450 / 750	
BATTERY (48V)	Ah/5HR	210	280	
CHARGER (3PHASE 200V)		AUTOMATIC STATIONARY CHARGER		
	KVA	3.8	4.7	
TYRES			SOLID	
LOAD (URETHANE)			∅254 × 114	2PCS.
DRIVE (RUBBER)			∅330 × 145	1PC.
CASTER (RUBBER)			∅178 × 73	2PCS.
MIN. TURNING RADIUS	R mm	1520	1580	
REACH STROKE	X1 mm	530	590	
		(490)	(550)	
WHEELBASE	L3 mm	1275	1335	
OVERALL LENGTH	TO FRONT-END OF OUTRIGGER	L mm	1645	1705

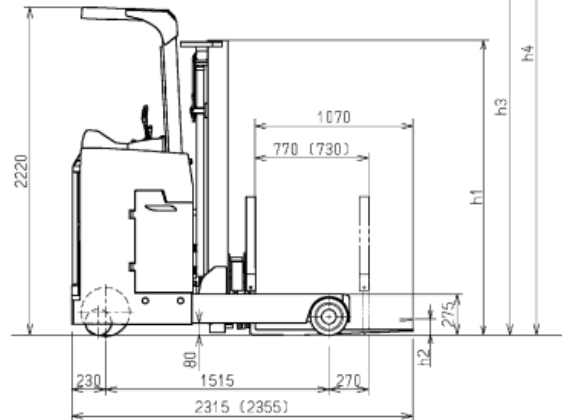
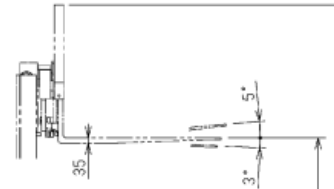
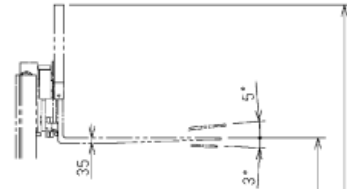
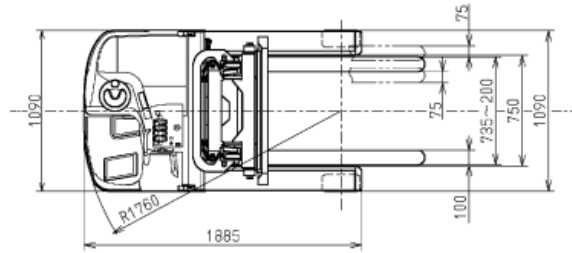
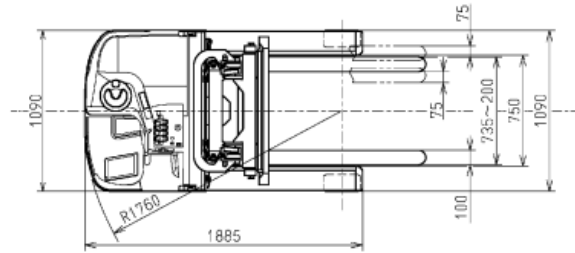
NOTE) DIMENSIONS IN BRACKETS ARE FOR THE MAST OF LIFT HEIGHT LESS THAN 2999mm OR MORE THAN 4501mm.



MAST DATA - 2 Stage Mast

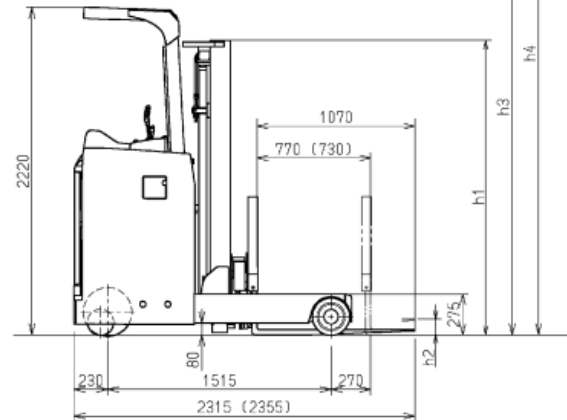
FRB18-9L

MAST (VM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	SERVICE WEIGHT (W/O BATT.) G, kg	FREE LIFT h2 mm
250	1600	2500	3400	1745	1905	105
270	1600	2700	3600	1845	1815	
300	1600	3000	3900	1995	1835	
330	1600	3300	4200	2145	1875	
350	1600	3500	4400	2245	1885	
370	1600	3700	4600	2345	1895	400
400	1600	4000	4900	2495	1975	
430	1570	4300	5200	2745	2005	
450	1530	4500	5400	2845	2025	
470	1430	4700	5600	2945	2035	
500	1370	5000	5900	3095	2055	



BATTERY SIDE LOADING

FRB18-9L

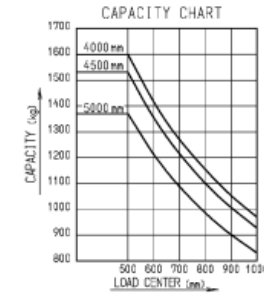


BATTERY FRONT LOADING

FRB18-9L

CAPACITY CHART

FRB18-9L



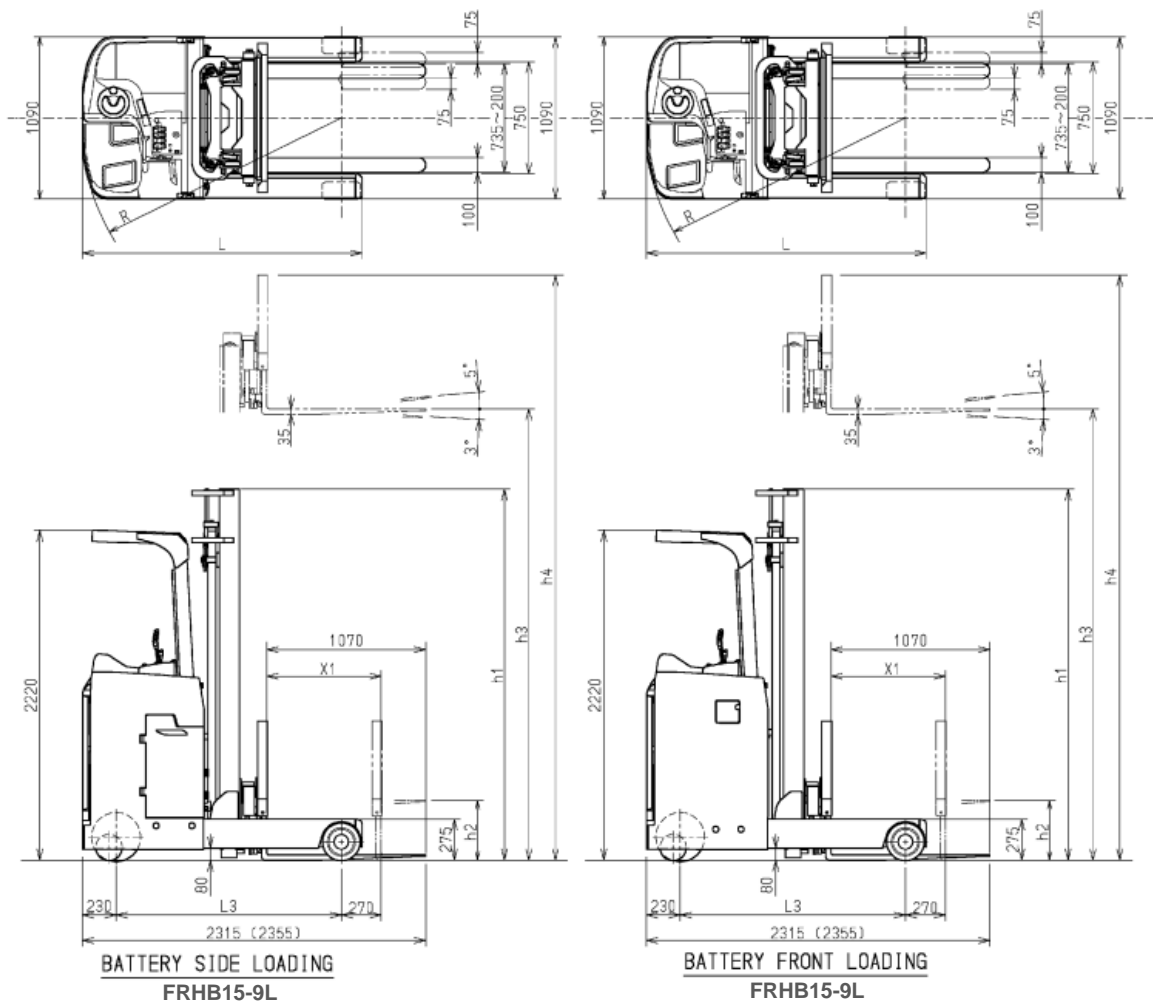
SPECIFICATIONS

ITEMS		UNIT	FRB18-9L
TRAVEL SPEED	LADEN	kn/h	9.5
	UNLADEN	kn/h	10.5
LIFT SPEED	LADEN	mm/s	300
	UNLADEN	mm/s	540
MOTORS	TRACTION	kw	4.3
	HYDRAULIC	kw	8.8
	POWER STR.	kw	0.3
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL
	HYDRAULIC		
	POWER STR.		CHOPPER CONTROL
BATTERY WEIGHT MIN./MAX.	kg	450 / 750	
BATTERY (48V)	Ah/SHR	260	
CHARGER (3PHASE 200V)			AUTOMATIC STATIONARY CHARGER
		kVA	4.7
TYRES			SOLID
LOAD (URETHANE)			φ254 × 114 2PCS.
DRIVE (RUBBER)			φ330 × 145 1PC.
CASTER (RUBBER)			φ178 × 73 2PCS.

NOTE) DIMENSIONS IN BRACKETS ARE FOR THE MAST OF LIFT HEIGHT LESS THAN 2999mm OR MORE THAN 3701mm.

FRHB15-9L

MAST (VM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT		O. A. H		SERVICE WEIGHT (w/o BATT.) G kg	FREE LIFT h2 mm
		h3 mm	h4 mm	h1 mm	h2 mm		
250	1350	2500	3400	1745	1795	105	
270	1350	2700	3600	1845	1805		
300	1350	3000	3900	1995	1825		
330	1350	3300	4200	2145	1855		
350	1350	3500	4400	2245	1885		
370	1350	3700	4600	2345	1885		
400	1350	4000	4900	2495	1915		
430	1350	4300	5200	2745	1945		
450	1350	4500	5400	2845	1965		
470	1350	4700	5600	2945	2025		
500	1350	5000	5900	3095	2045	400	

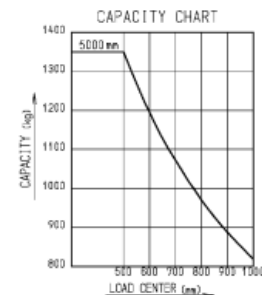


SPECIFICATIONS

ITEMS		UNIT	FRHB15-9L	
TRAVEL SPEED	LADEN	k _m /h	9.5	←
	UNLADEN	k _m /h	10.5	←
LIFT SPEED	LADEN	m/s	3.10	←
	UNLADEN	m/s	5.40	←
MOTORS	TRACTION	k _w	4.3	←
	HYDRAULIC	k _w	8.8	←
	POWER STR.	k _w	0.3	←
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL	
	HYDRAULIC			
	POWER STR.		CHOPPER CONTROL	
BATTERY WEIGHT MIN./MAX.	kg	400 / 600	450 / 750	
BATTERY (48V)	Ah/5HR	210	280	
CHARGER (3PHASE 200V)	KVA	AUTOMATIC STATIONARY CHARGER		
		3.8	4.7	
TYRES		SOLID		
LOAD (URETHANE)		∅254 × 114 2PCS.		
DRIVE (RUBBER)		∅330 × 145 1PC.		
CASTER (RUBBER)		∅178 × 73 2PCS.		
MIN. TURNING RADIUS	R mm	1580	1760	
REACH STROKE	X1 mm	590	770	
		(550)	(730)	
WHEELBASE	L3 mm	1335	1515	
OVERALL LENGTH TO FRONT-END OF OUTRIGGER	L mm	1705	1885	

NOTE) DIMENSIONS IN BRACKETS ARE FOR THE MAST OF LIFT HEIGHT LESS THAN 2999mm OR MORE THAN 4501mm.

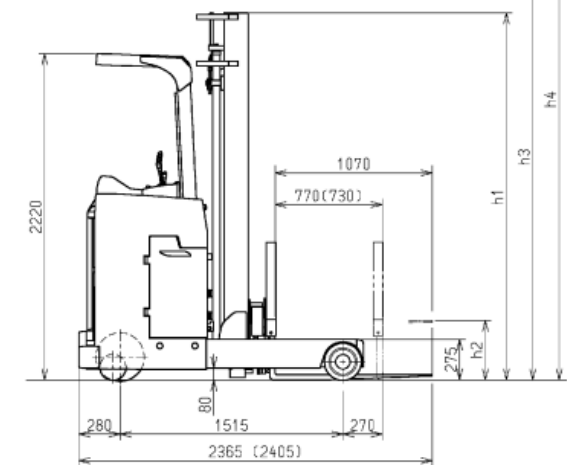
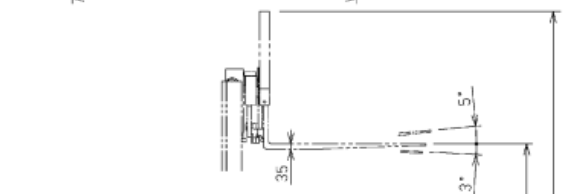
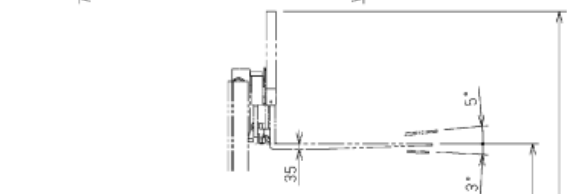
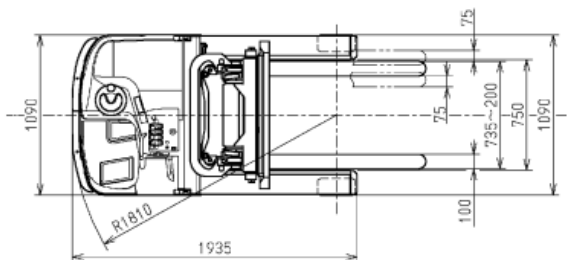
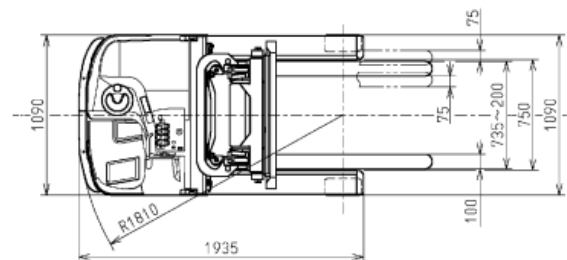
FRHB15-9L



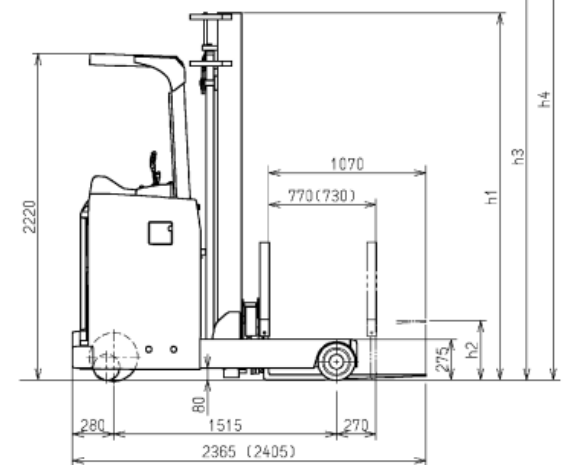
MAST DATA - 2 Stage Mast

FRHB18-9L

MAST (VM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	SERVICE WEIGHT (w/o BATT.) G kg	FREE LIFT h2 mm
250	1600	2500	3400	1745	1865	105
270	1600	2700	3600	1845	1875	
300	1600	3000	3900	1995	1885	
330	1600	3300	4200	2145	1925	
350	1600	3500	4400	2245	1935	
370	1600	3700	4600	2345	1945	
400	1600	4000	4900	2495	2035	
430	1600	4300	5200	2745	2065	
450	1600	4500	5400	2845	2075	
470	1600	4700	5600	2945	2085	
500	1600	5000	5900	3095	2105	



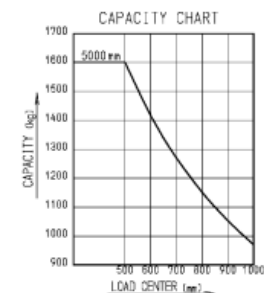
BATTERY SIDE LOADING
FRHB18-9L



BATTERY FRONT LOADING
FRHB18-9L

CAPACITY CHART

FRHB18-9L



SPECIFICATIONS

ITEMS	UNIT	FRHB18-9L
TRAVEL SPEED	LADEN	km/h 9.5
	UNLADEN	km/h 10.5
LIFT SPEED	LADEN	mm/s 300
	UNLADEN	mm/s 540
MOTORS	TRACTION	kW 4.3
	HYDRAULIC	kW 8.8
	POWER STR.	kW 0.3
CONTROL SYSTEM	TRAVEL	INVERTER CONTROL
	HYDRAULIC	
	POWER STR.	CHOPPER CONTROL
BATTERY WEIGHT MIN./MAX.	kg	450 / 750
BATTERY (48V)	Ah/5HR	280
CHARGER (3PHASE 200V)		AUTOMATIC STATIONARY CHARGER
	KVA	4.7
TYRES		SOLID
LOAD (URETHANE)		φ254×114 2PCS.
DRIVE (RUBBER)		φ330×145 1PC.
CASTER (RUBBER)		φ178×73 2PCS.

NOTE) DIMENSIONS IN BRACKETS ARE FOR THE MAST OF LIFT HEIGHT LESS THAN 2999mm OR MORE THAN 3701mm.

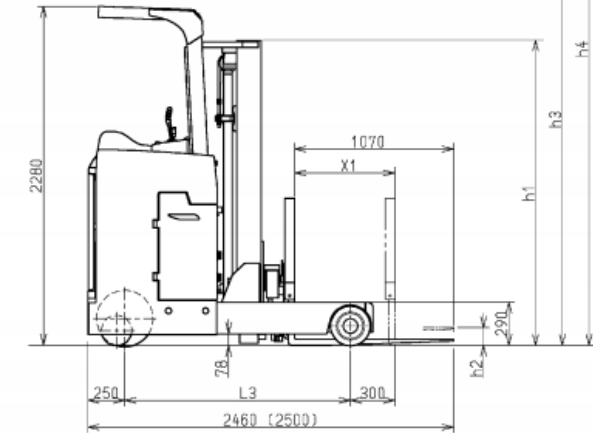
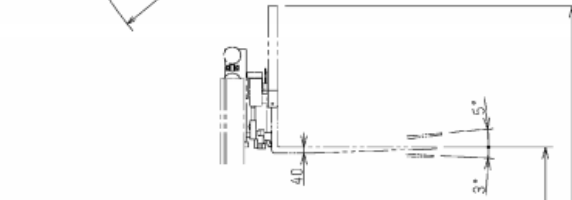
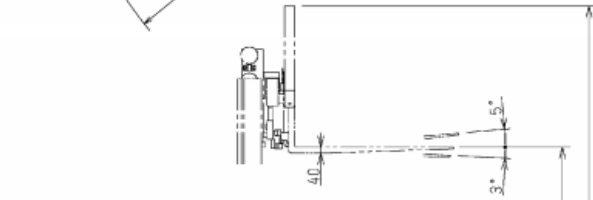
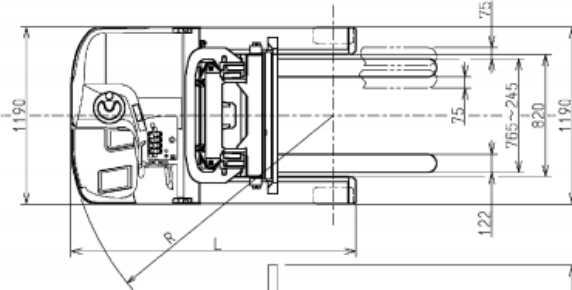
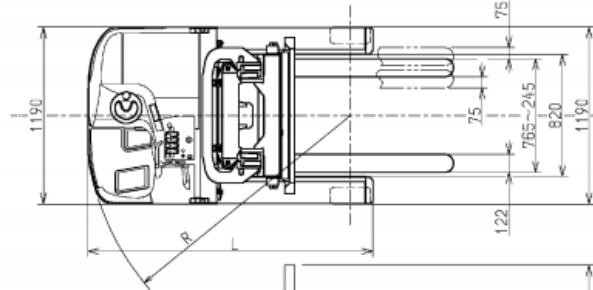
MAST DATA - 2 Stage Mast

FRB20-9L

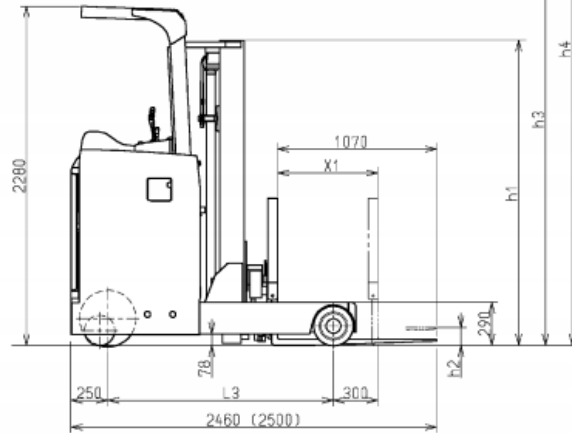
MAST (VM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O. A. H. RAISED h4 mm	D. A. H. LOWERED h1 mm	SERVICE WEIGHT (w/o BATT.) G kg	FREE LIFT h2 mm
250	1800	2500	3450	1800	2300	120
270	1800	2700	3550	1900	2310	
300	1800	3000	3950	2050	2340	
330	1800	3300	4250	2200	2380	400
350	1800	3500	4450	2300	2400	
370	1800	3700	4650	2400	2410	
400	1800	4000	4950	2550	2470	
430	1750	4300	5250	2800	2510	
450	1700	4500	5450	2900	2530	
470	1650	4700	5650	3000	2540	
500	1650	5000	5950	3150	2570	

FRHB20-9L

MAST (VM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O. A. H. RAISED h4 mm	D. A. H. LOWERED h1 mm	SERVICE WEIGHT (w/o BATT.) G kg	FREE LIFT h2 mm
250	1800	2500	3450	1800	2320	120
270	1800	2700	3550	1900	2340	
300	1800	3000	3950	2050	2360	
330	1800	3300	4250	2200	2410	400
350	1800	3500	4450	2300	2430	
370	1800	3700	4650	2400	2440	
400	1800	4000	4950	2550	2500	
430	1800	4300	5250	2800	2540	
450	1800	4500	5450	2900	2550	
470	1800	4700	5650	3000	2570	
500	1800	5000	5950	3150	2590	



BATTERY SIDE LOADING
FR(H)B20-9L



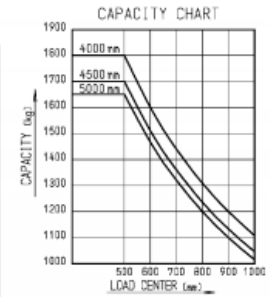
BATTERY FRONT LOADING
FR(H)B20-9L

SPECIFICATIONS

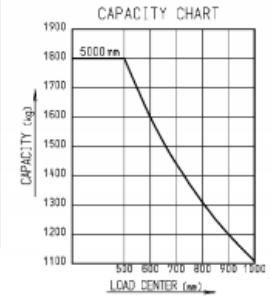
ITEMS	UNIT	FRB20-9L	FRHB20-9L
TRAVEL SPEED	LADEN	km/h	10.0
	UNLADEN	km/h	11.5
LIFT SPEED	LADEN	m/s	2.90
	UNLADEN	m/s	4.90
MOTORS	TRACTION	kw	5.0
	HYDRALIC POWER STR.	kw	11.0
CONTROL SYSTEM	TRAVEL	INVERTER CONTROL	
	HYDRALIC POWER STR.	CHOPPER CONTROL	
BATTERY WEIGHT MIN./MAX.	kg	525 / 900	←
BATTERY (48V)	Ah/5HR	320	←
CHARGER (3PHASE 200V)	AUTOMATIC STATIONARY CHARGER		
	KVA	4.7	←
TYRES	SOLID		
LOAD (URETHANE)		∅267 x 114	2PCS.
DRIVE (RUBBER)		∅380 x 165	1PC.
CASTER (RUBBER)		∅204 x 76	2PCS.
MIN. TURNING RADIUS	R mm	1785	1955
REACH STROKE	X1	675	845
		(635)	(805)
WHEELBASE	L3 mm	1515	1685
OVERALL LENGTH	L mm	1915	2085
	TO FRONT-END OF OUTRIGGER		

CAPACITY CHART

FRB20-9L



FRHB20-9L



NOTE) DIMENSIONS IN BRACKETS ARE FOR THE MAST OF LIFT HEIGHT LESS THAN 2999mm.

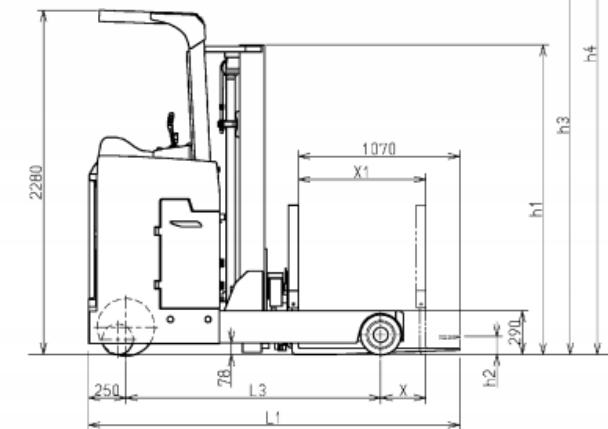
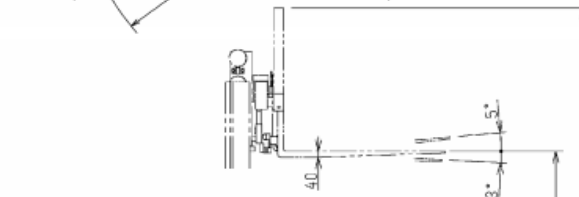
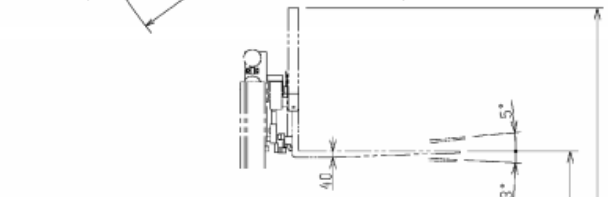
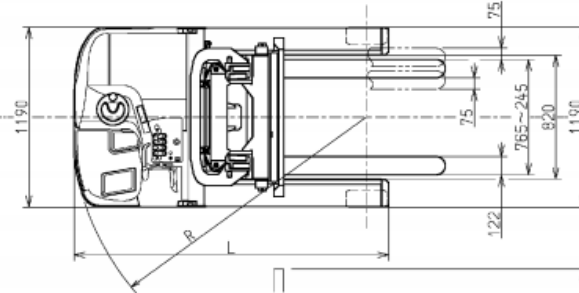
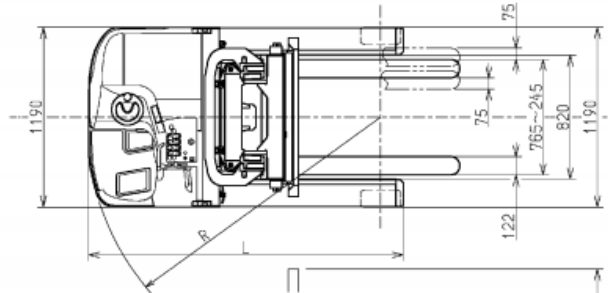
MAST DATA - 2 Stage Mast

FRB25-9L

MAST (VM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	SERVICE WEIGHT (w/o BATT.) G kg	FREE LIFT h2 mm
250	2250	2500	3450	1800	2380	120
270	2250	2700	3650	1900	2400	
300	2250	3000	3950	2050	2420	
330	2250	3300	4250	2200	2470	
350	2250	3500	4450	2300	2490	
370	2250	3700	4650	2400	2500	
400	2250	4000	4950	2550	2560	
430	2200	4300	5250	2800	2600	400
450	2150	4500	5450	2900	2610	
470	2100	4700	5650	3000	2630	
500	2070	5000	5950	3150	2650	

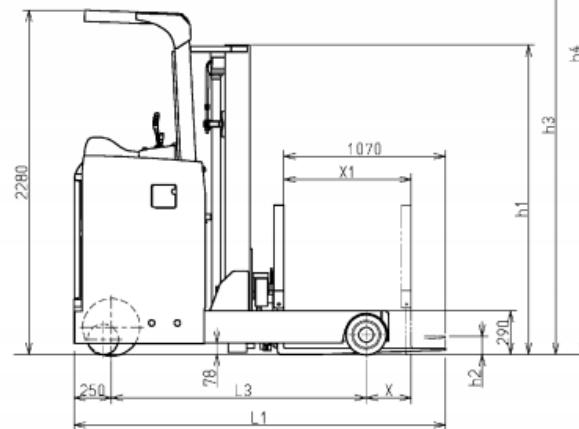
FRHB25-9L

MAST (VM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	SERVICE WEIGHT (w/o BATT.) G kg	FREE LIFT h2 mm
250	2250	2500	3450	1800	2390	120
270	2250	2700	3650	1900	2410	
300	2250	3000	3950	2050	2430	
330	2250	3300	4250	2200	2480	
350	2250	3500	4450	2300	2500	
370	2250	3700	4650	2400	2510	
400	2250	4000	4950	2550	2570	
430	2250	4300	5250	2800	2610	400
450	2250	4500	5450	2900	2620	
470	2250	4700	5650	3000	2640	
500	2250	5000	5950	3150	2660	



BATTERY SIDE LOADING

FR(H)B25-9L



BATTERY FRONT LOADING

FR(H)B25-9L

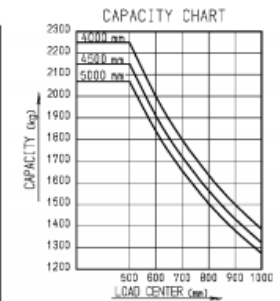
SPECIFICATIONS

ITEMS		UNIT	FRB25-9L	FRHB25-9L
TRAVEL SPEED	LADEN	km/h	9.5	←
	UNLADEN	km/h	11.5	←
LIFT SPEED	LADEN	m/s	2.70	←
	UNLADEN	m/s	4.90	←
MOTORS	TRACTION	kw	5.0	←
	HYDRAULIC	kw	11.0	←
	POWER STR.	kw	0.3	←
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL	
	HYDRAULIC		←	
	POWER STR.		CHOPPER CONTROL	
BATTERY WEIGHT MIN./MAX.	kg	525 / 900	←	
BATTERY (46V)	Ah/5HR	320	←	
CHARGER (3PHASE 200V)		AUTOMATIC STATIONARY CHARGER		
	KVA	4.7	←	
TYRES			SOLID	
LOAD (URETHANE)			φ267×114	2PCS.
DRIVE (RUBBER)			φ380×165	1PC.
CASTER (RUBBER)			φ204×76	2PCS.
MIN.TURNING RADIUS	R mm	1955	2020	
REACH STROKE	X1 mm	845	870	
		(805)		
WHEELBASE	L3 mm	1695	1755	
FRONT OVERHANG	X mm	300	295	
OVERALL LENGTH	TO FRONT-END OF FORK	L1 mm	2460	2500
	TO FRONT-END OF OUTRIGGER	L mm	(2500)	
			2085	2155

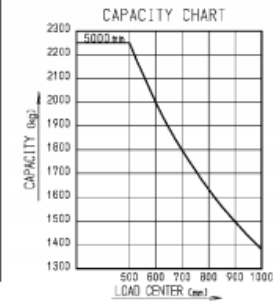
NOTE) DIMENSIONS IN BRACKETS ARE FOR THE MAST OF LIFT HEIGHT LESS THAN 2999mm.

CAPACITY CHART

FRB25-9L



FRHB25-9L



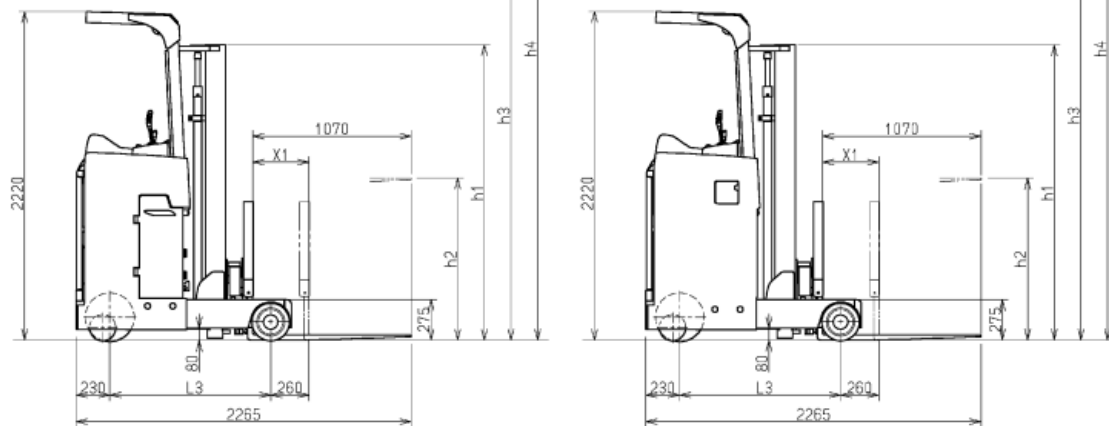
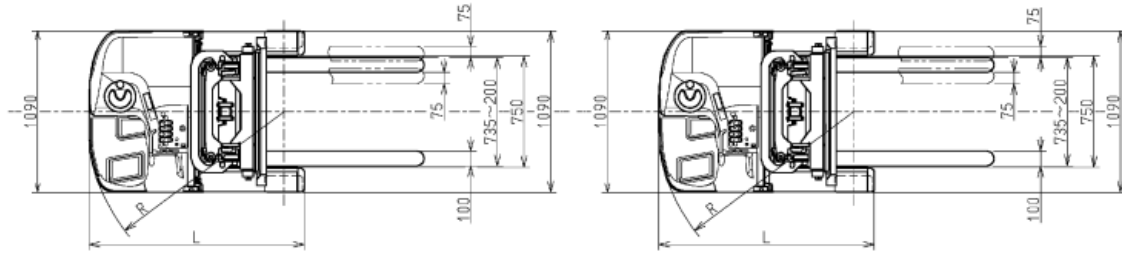
MAST DATA - 2 Stage FullFree Mast

FRB12-9L

MAST (VFM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	FREE LIFT h2 mm	SERVICE WEIGHT (W/O BATT.) G. kg
250PFL	1070	2500	3400	1745	845	1670
270PFL	1070	2700	3600	1845	945	1690
300PFL	1070	3000	3900	1995	1095	1710
330PFL	1070	3300	4200	2145	1245	1730
350PFL	1070	3500	4400	2245	1345	1740
370PFL	1070	3700	4600	2345	1445	1750
400PFL	1070	4000	4900	2495	1595	1790
430PFL	1030	4300	5200	2745	1845	1820
450PFL	1000	4500	5400	2845	1945	1830
470PFL	950	4700	5600	2945	2045	1850
500PFL	900	5000	5900	3095	2195	1860

FRHB12-9L

MAST (VFM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	FREE LIFT h2 mm	SERVICE WEIGHT (W/O BATT.) G. kg
250PFL	1070	2500	3400	1745	845	1680
270PFL	1070	2700	3600	1845	945	1690
300PFL	1070	3000	3900	1995	1095	1710
330PFL	1070	3300	4200	2145	1245	1730
350PFL	1070	3500	4400	2245	1345	1740
370PFL	1070	3700	4600	2345	1445	1760
400PFL	1070	4000	4900	2495	1595	1800
430PFL	1070	4300	5200	2745	1845	1830
450PFL	1070	4500	5400	2845	1945	1840
470PFL	1070	4700	5600	2945	2045	1850
500PFL	1070	5000	5900	3095	2195	1870



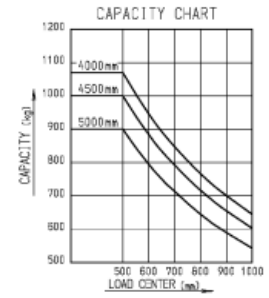
**BATTERY SIDE LOADING
FR(H)B 12-9L**

**BATTERY FRONT LOADING
FR(H)B 12-9L**

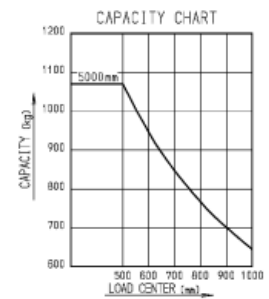
SPECIFICATIONS

ITEMS		UNIT	FRB12-9L	FRHB12-9L
TRAVEL SPEED	LADEN	km/h	10.5	←
	UNLADEN	km/h	10.5	←
LIFT SPEED	LADEN	mm/s	320	←
	UNLADEN	mm/s	460	←
MOTORS	TRACTION	kw	4.3	←
	HYDRAULIC	kw	8.8	←
	POWER STR.	kw	0.3	←
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL	
	HYDRAULIC		CHOPPER CONTROL	
	POWER STR.			
BATTERY WEIGHT MIN./MAX.	kg	340 / 450	←	←
BATTERY (48V)	Ah/SHR	201	←	←
CHARGER (3PHASE 200V)	AUTOMATIC STATIONARY CHARGER			
	KVA	3.8	←	←
TYRES	SOLID			
LOAD (URETHANE)		#254 x 114 2PCS.		
DRIVE (RUBBER)		#330 x 145 1PC.		
CASTER (RUBBER)		#178 x 73 2PCS.		
MIN. TURNING RADIUS	R	mm	1340	1455
REACH STROKE	X1	mm	380	500
WHEELBASE	L3	mm	1085	1205
OVERALL LENGTH	TO FRONT-END OF OUTRIGGER	L	mm	1455
				1575
				1635

FRB12-9L

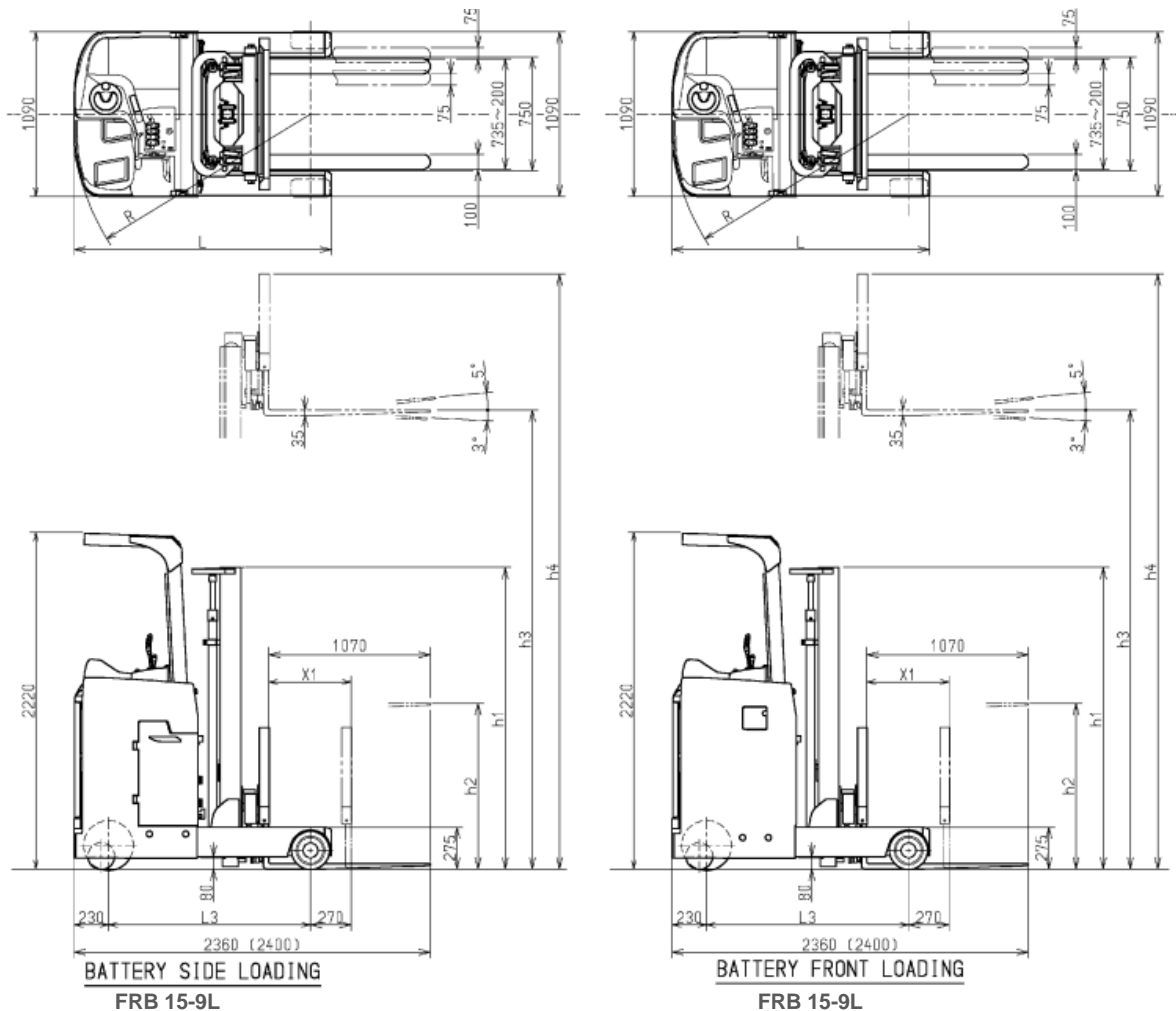


FRHB12-9L



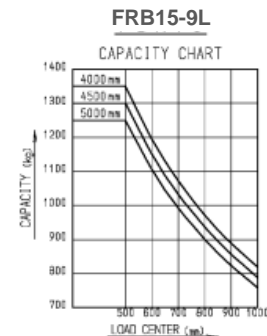
FRB15-9L

MAST (VFM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED		FREE LIFT h2 mm	SERVICE WEIGHT (w/o BATT.) G kg
			h4 mm	h1 mm		
250PFL	1350	2500	3400	1745	845	1675
270PFL	1350	2700	3600	1845	945	1695
300PFL	1350	3000	3900	1995	1095	1705
330PFL	1350	3300	4200	2145	1245	1725
350PFL	1350	3500	4400	2245	1345	1745
370PFL	1350	3700	4600	2345	1445	1755
400PFL	1350	4000	4900	2495	1595	1795
430PFL	1300	4300	5200	2745	1845	1825
450PFL	1300	4500	5400	2845	1945	1835
470PFL	1250	4700	5600	2945	2045	1905
500PFL	1250	5000	5900	3095	2195	1925



SPECIFICATIONS

ITEMS		UNIT	FRB15-9L	
TRAVEL SPEED	LADEN	km/h	9.5	←
	UNLADEN	km/h	10.5	←
LIFT SPEED	LADEN	m/s	2.80	←
	UNLADEN	m/s	4.60	←
MOTORS	TRACTION	kw	4.3	←
	HYDRAULIC	kw	8.6	←
	POWER STR.	kw	0.3	←
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL	
	HYDRAULIC			
	POWER STR.		CHOPPER CONTROL	
BATTERY WEIGHT MIN./MAX.	kg	400 / 600	450 / 750	
BATTERY (48V)	Ah/SHR	210	280	
CHARGER (3PHASE 200V)		AUTOMATIC STATIONARY CHARGER		
	KVA	3.8	4.7	
TYRES		SOLID		
LOAD (URETHANE)		φ254 × 114	2PCS.	
DRIVE (RUBBER)		φ330 × 145	1PC.	
CASTER (RUBBER)		φ178 × 73	2PCS.	
MIN.TURNING RADIUS	R	1520	1580	
REACH STROKE	X1	485	545	
		(445)	(505)	
WHEELBASE	L3	1275	1335	
OVERALL LENGTH	TO FRONT-END OF OUTRIGER	L	1645	1705



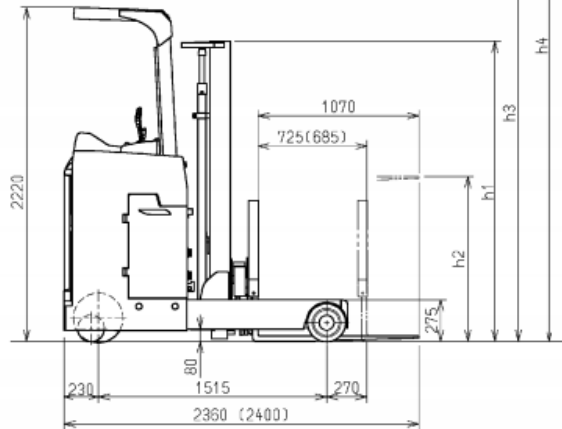
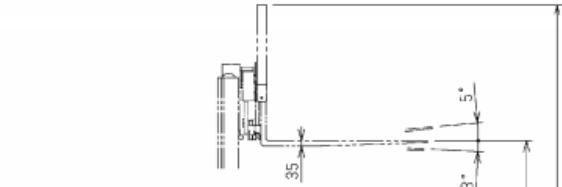
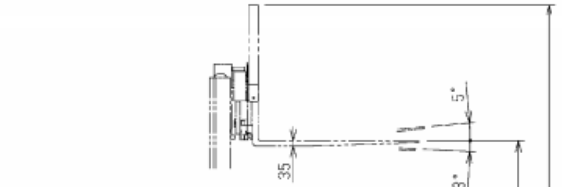
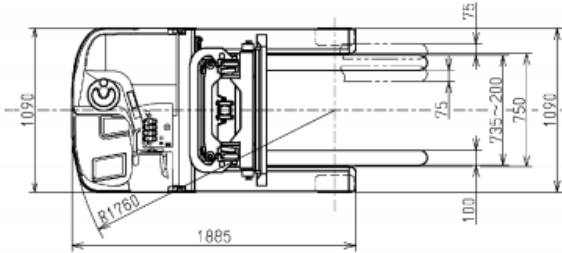
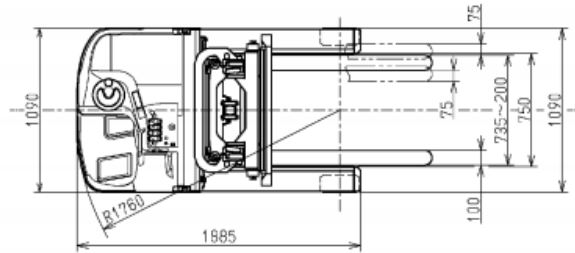
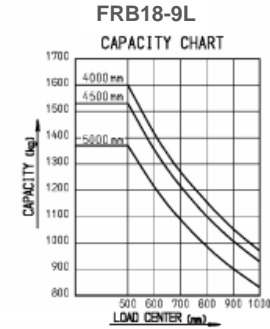
NOTE) DIMENSIONS IN BRACKETS ARE FOR THE MAST OF LIFT HEIGHT MORE THAN 4501mm.

MAST DATA - 2 Stage FullFree Mast

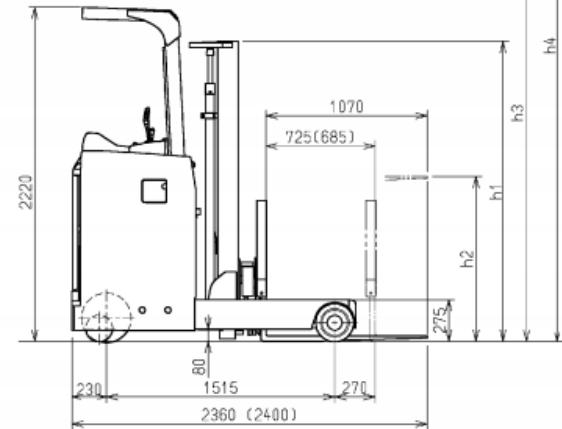
FRB18-9L

MAST (VFM)	CAPACITY (LC 500mm)		O. A. H. RAISED		O. A. H. LOWERED		FREE LIFT	SERVICE WEIGHT (w/3 BATT.)
	kg	h3 mm	h4 mm	h1 mm	h2 mm	h2 mm		
250PFL	1600	2500	3400	1745	845	1825		
270PFL	1600	2700	3600	1845	945	1845		
300PFL	1600	3000	3900	1995	1095	1855		
330PFL	1600	3300	4200	2145	1245	1875		
350PFL	1600	3500	4400	2245	1345	1885		
370PFL	1600	3700	4600	2345	1445	1905		
400PFL	1600	4000	4900	2495	1595	1995		
430PFL	1570	4300	5200	2745	1845	2025		
450PFL	1530	4500	5400	2845	1945	2045		
470PFL	1430	4700	5600	2945	2045	2055		
500PFL	1370	5000	5900	3095	2195	2075		

CAPACITY CHART



BATTERY SIDE LOADING
FRB18-9L



BATTERY FRONT LOADING
FRB18-9L

FRB18-9L

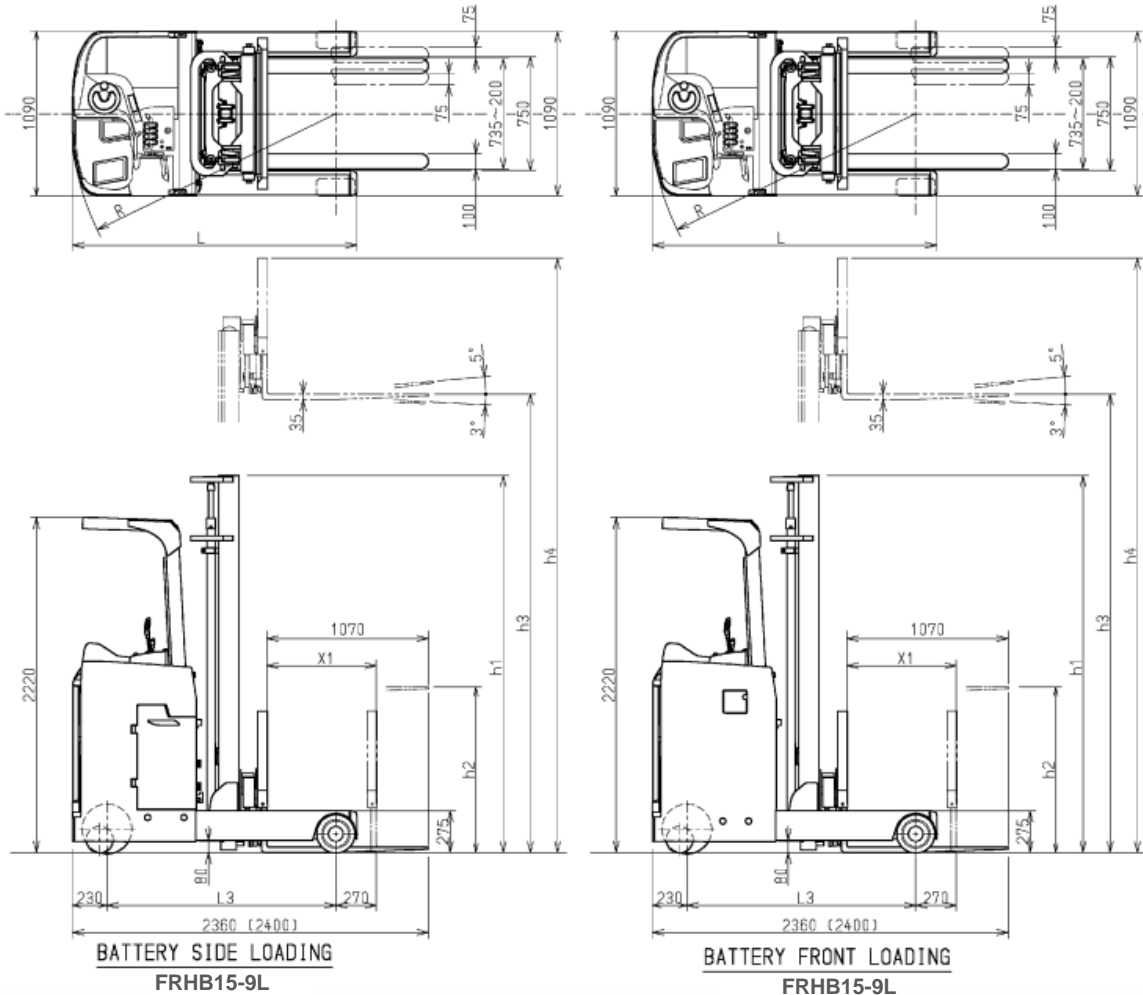
SPECIFICATIONS

ITEMS		UNIT	FRB18-9L
TRAVEL SPEED	LADEN	k m / h	9 . 5
	UNLADEN	k m / h	1 0 . 5
LIFT SPEED	LADEN	m m / s	2 7 0
	UNLADEN	m m / s	4 6 0
MOTORS	TRACTION	k w	4 . 3
	HYDRAULIC	k w	8 . 6
	POWER STR.	k w	0 . 3
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL
	HYDRAULIC		
	POWER STR.		CHOPPER CONTROL
BATTERY WEIGHT MIN./MAX.	kg		450 / 750
BATTERY (48V)	Ah/SHR		2 8 0
CHARGER (3PHASE 200V)			AUTOMATIC STATIONARY CHARGER
	K V A		4 . 7
TYRES			SOLID
LOAD (URETHANE)			φ254 × 114 2PCS.
DRIVE (RUBBER)			φ330 × 145 1PC.
CASTER (RUBBER)			φ178 × 73 2PCS.

NOTE) DIMENSIONS IN BRACKETS ARE FOR THE MAST OF LIFT HEIGHT MORE THAN 3701mm.

FRHB15-9L

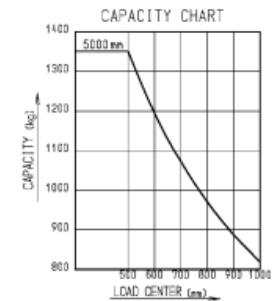
MAST (VFM)	CAPACITY (LC 500mm)	LIFT HEIGHT		O.A.H RAISED		O.A.H LOWERED		FREE LIFT	SERVICE WEIGHT (W/O BATT.) G kg
	kg	h3 mm	h4 mm	h4 mm	h1 mm	h2 mm	h2 mm		
250PFL	1350	2500	3400	1745	845	1815			
270PFL	1350	2700	3600	1845	945	1825			
300PFL	1350	3000	3900	1995	1095	1845			
330PFL	1350	3300	4200	2145	1245	1865			
350PFL	1350	3500	4400	2245	1345	1875			
370PFL	1350	3700	4600	2345	1445	1895			
400PFL	1350	4000	4900	2495	1595	1935			
430PFL	1350	4300	5200	2745	1845	1965			
450PFL	1350	4500	5400	2845	1945	1975			
470PFL	1350	4700	5600	2945	2045	2045			
500PFL	1350	5000	5900	3095	2195	2065			



SPECIFICATIONS

ITEMS		UNIT	FRHB15-9L	
TRAVEL SPEED	LADEN	km/h	9.5	←
	UNLADEN	km/h	10.5	←
LIFT SPEED	LADEN	m/s	2.60	←
	UNLADEN	m/s	4.60	←
MOTORS	TRACTION	kw	4.3	←
	HYDRALIC	kw	8.8	←
	POWER STR.	kw	0.3	←
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL	
	HYDRALIC			
	POWER STR.		CHOPPER CONTROL	
BATTERY WEIGHT MIN./MAX.	kg	400 / 600	450 / 750	
BATTERY (48V)	Ah/SHR	210	280	
CHARGER (3PHASE 200V)		AUTOMATIC STATIONARY CHARGER		
	kVA	3.8	4.7	
TYRES		SOLID		
LOAD (URETHANE)		∅254×114	2PCS.	
DRIVE (RUBBER)		∅330×145	1PC.	
CASTER (RUBBER)		∅178×73	2PCS.	
MIN. TURNING RADIUS	R mm	1580	1760	
REACH STROKE	X1 mm	545	725	
		(505)	(685)	
WHEELBASE	L3 mm	1335	1515	
OVERALL LENGTH TO FRONT-END OF COUNTER	L mm	1705	1885	

FRHB15-9L



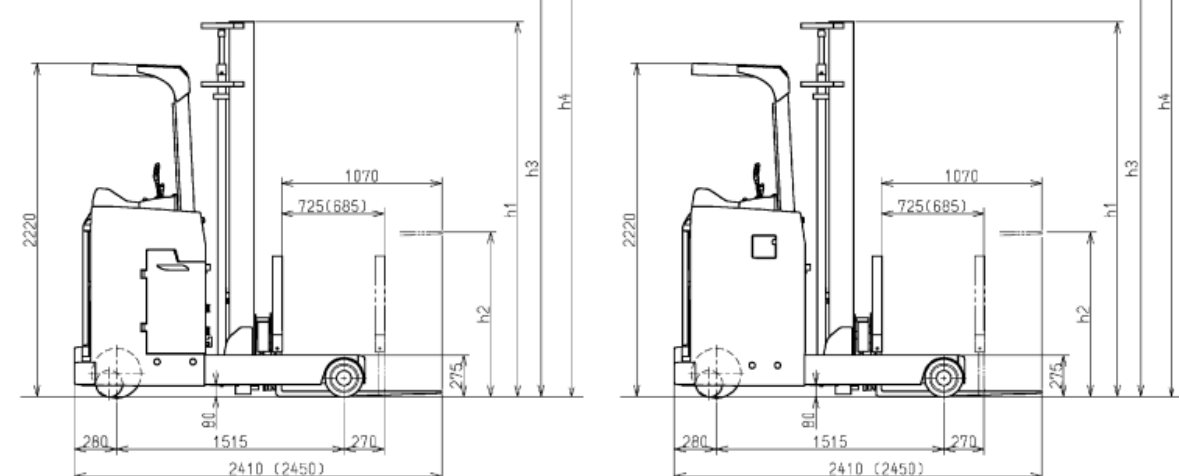
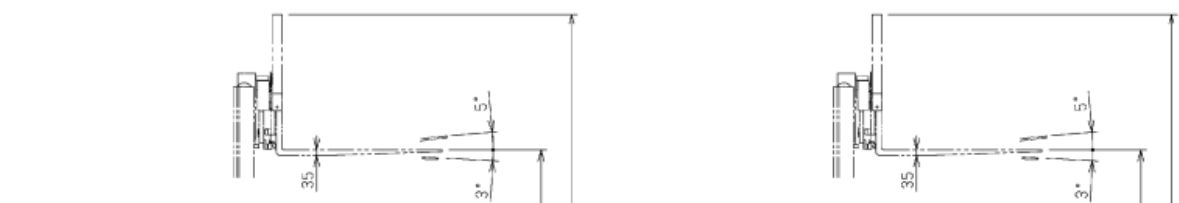
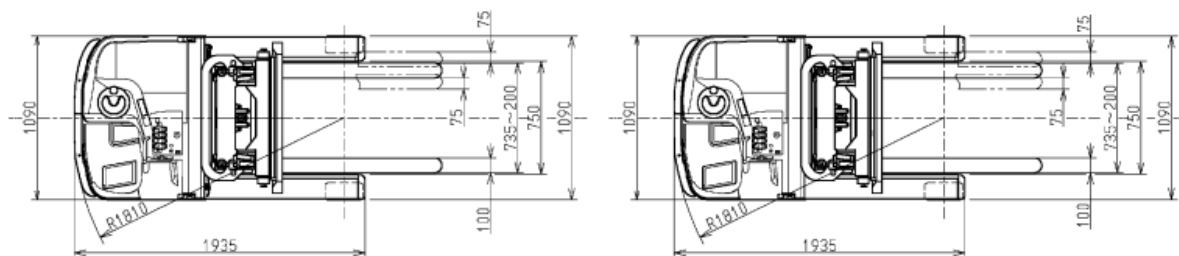
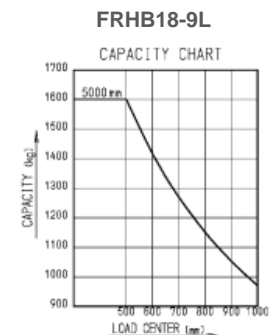
NOTE) DIMENSIONS IN BRACKETS ARE FOR THE MAST OF LIFT HEIGHT MORE THAN 4501mm.

MAST DATA - 2 Stage FullFree Mast

FRHB18-9L

MAST (VFM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	FREE LIFT h2 mm	SERVICE WEIGHT (#/0 BATT.) G kg
250PFL	1600	2500	3400	1745	845	1885
270PFL	1600	2700	3600	1845	945	1895
300PFL	1600	3000	3900	1995	1095	1915
330PFL	1600	3300	4200	2145	1245	1935
350PFL	1600	3500	4400	2245	1345	1945
370PFL	1600	3700	4600	2345	1445	1955
400PFL	1600	4000	4900	2495	1595	2045
430PFL	1600	4300	5200	2745	1845	2085
450PFL	1600	4500	5400	2845	1945	2095
470PFL	1600	4700	5600	2945	2045	2115
500PFL	1600	5000	5900	3095	2195	2135

CAPACITY CHART



BATTERY SIDE LOADING
FRHB18-9L

BATTERY FRONT LOADING
FRHB18-9L

SPECIFICATIONS

ITEMS		UNIT	FRHB18-9L
TRAVEL SPEED	LADEN	km/h	9.5
	UNLADEN	km/h	10.5
LIFT SPEED	LADEN	mm/s	270
	UNLADEN	mm/s	460
MOTORS	TRACTION	kw	4.3
	HYDRALLIC	kw	8.8
	POWER STR.	kw	0.3
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL
	HYDRALLIC		
	POWER STR.		CHOPPER CONTROL
BATTERY WEIGHT MIN./MAX.	kg	450 / 750	
BATTERY (48V)	Ah/SHR	280	
CHARGER (3PHASE 200V)	KVA	AUTOMATIC STATIONARY CHARGER 4.7	
TYRES		SOLID	
LOAD (URETHANE)		∅254×114 2PCS.	
DRIVE (RUBBER)		∅330×145 1PC.	
CASTER (RUBBER)		∅178×73 2PCS.	

NOTE) DIMENSIONS IN BRACKETS ARE FOR THE MAST OF LIFT HEIGHT MORE THAN 3701mm.

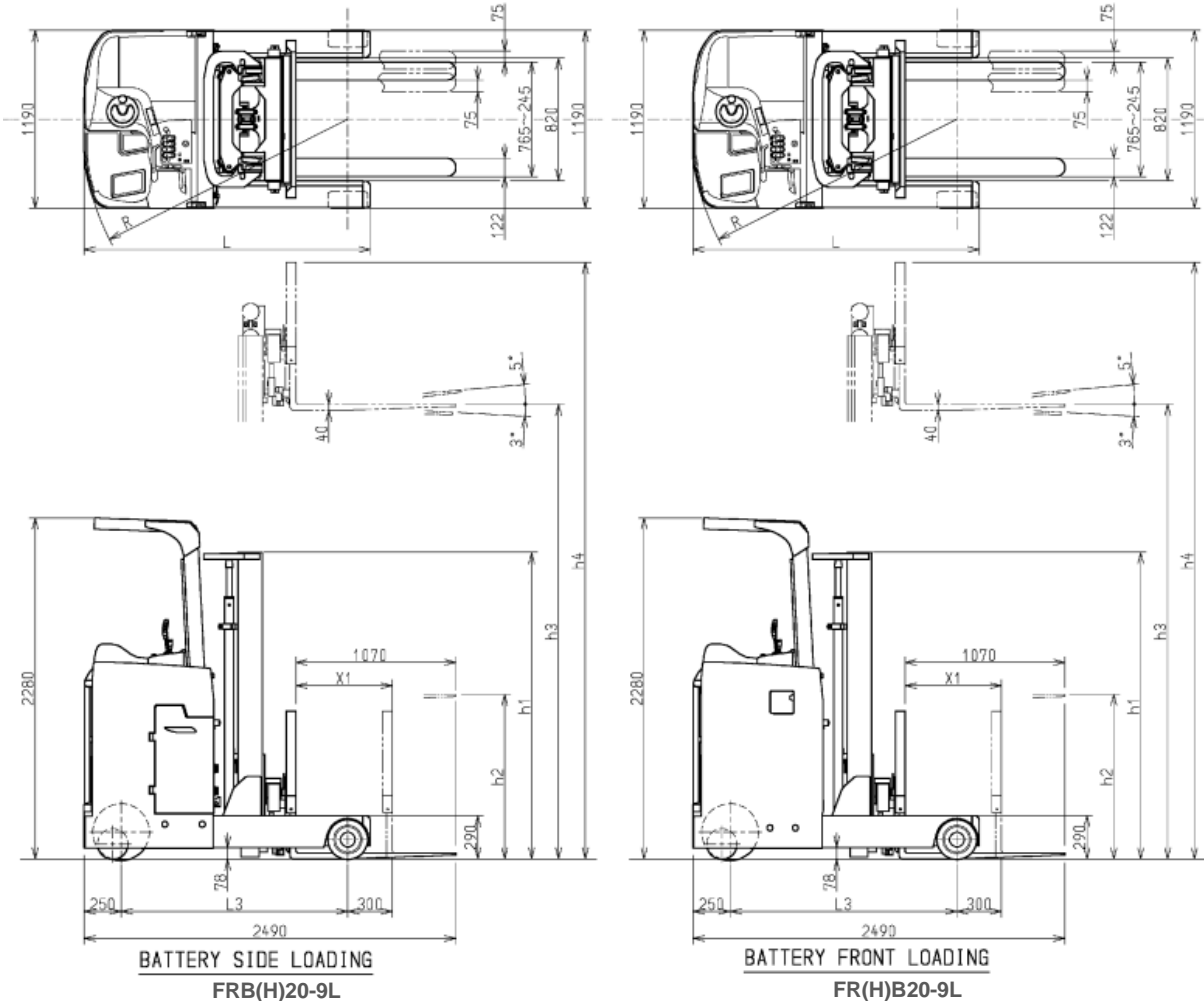
MAST DATA - 2 Stage FullFree Mast

FRB20-9L

MAST (VFM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	FREE LIFT h2 mm	SERVICE WEIGHT (#/O BATT.) G kg
250PFL	1800	2500	3450	1800	850	2340
270PFL	1800	2700	3650	1900	950	2360
300PFL	1800	3000	3950	2050	1100	2390
330PFL	1800	3300	4250	2200	1250	2410
350PFL	1800	3500	4450	2300	1350	2430
370PFL	1800	3700	4650	2400	1450	2450
400PFL	1800	4000	4950	2550	1600	2510
430PFL	1750	4300	5250	2800	1850	2560
450PFL	1700	4500	5450	2900	1950	2570
470PFL	1650	4700	5650	3000	2050	2590
500PFL	1650	5000	5950	3150	2200	2620

FRHB20-9L

MAST (VFM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	FREE LIFT h2 mm	SERVICE WEIGHT (#/O BATT.) G kg
250PFL	1800	2500	3450	1800	850	2370
270PFL	1800	2700	3650	1900	950	2390
300PFL	1800	3000	3950	2050	1100	2410
330PFL	1800	3300	4250	2200	1250	2440
350PFL	1800	3500	4450	2300	1350	2450
370PFL	1800	3700	4650	2400	1450	2470
400PFL	1800	4000	4950	2550	1600	2540
430PFL	1800	4300	5250	2800	1850	2580
450PFL	1800	4500	5450	2900	1950	2600
470PFL	1800	4700	5650	3000	2050	2620
500PFL	1800	5000	5950	3150	2200	2640

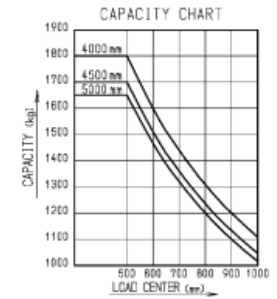


SPECIFICATIONS

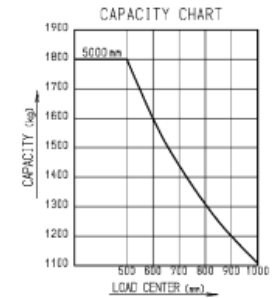
ITEMS		UNIT	FRB20-9L	FRHB20-9L
TRAVEL SPEED	LADEN	km/h	10.0	←
	UNLADEN	km/h	11.5	←
LIFT SPEED	LADEN	mm/s	26.0	←
	UNLADEN	mm/s	41.0	←
MOTORS	TRACTION	kw	5.0	←
	HYDRAULIC POWER STR.	kw	0.3	←
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL	
	HYDRAULIC POWER STR.		CHOPPER CONTROL	
BATTERY WEIGHT MIN./MAX.	kg	525 / 900	←	
BATTERY (48V)	Ah/5HR	320	←	
CHARGER (3PHASE 200V)		AUTOMATIC STATIONARY CHARGER		
		KVA	4.7	←
TYRES		SOLID		
LOAD (URETHANE)		∅267×114	2PCS.	
DRIVE (RUBBER)		∅380×165	1PC.	
CASTER (RUBBER)		∅204×76	2PCS.	
MIN. TURNING RADIUS	R mm	1785	1955	
REACH STROKE	X1 mm	645	815	
WHEELBASE	L3 mm	1515	1685	
OVERALL LENGTH TO FRONT-END OF OUTRIGGER	L mm	1915	2085	

CAPACITY CHART

FRB20-9L



FRHB20-9L



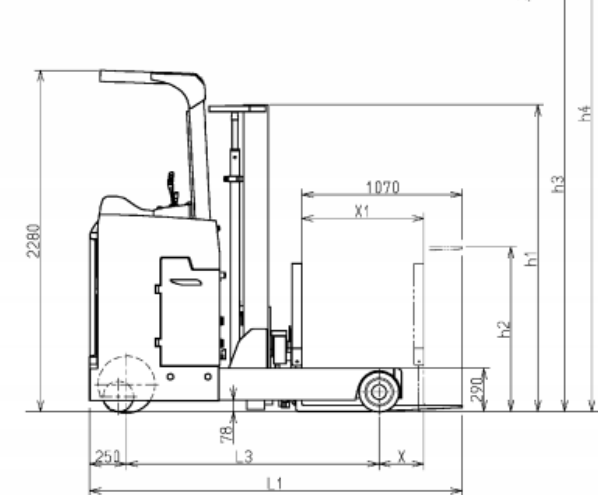
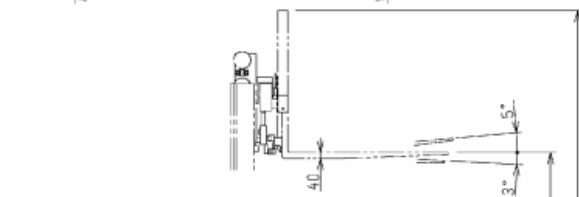
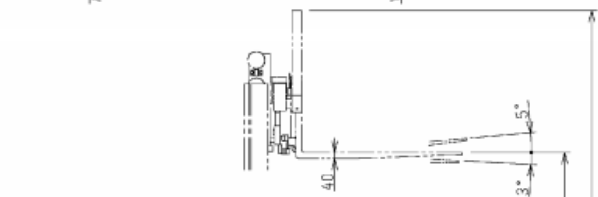
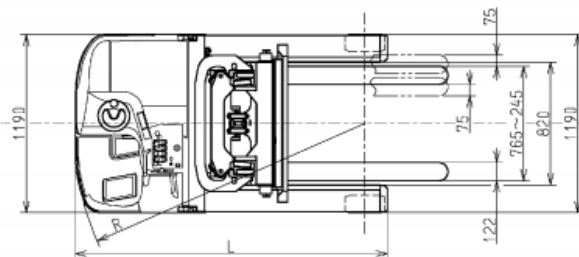
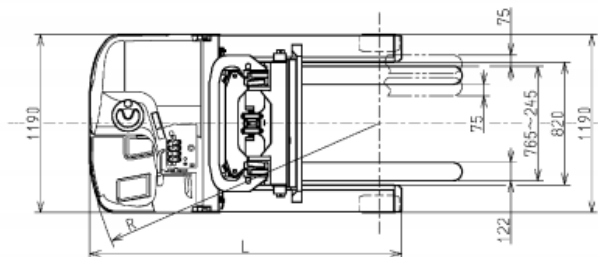
MAST DATA - 2 Stage FullFree Mast

FRB25-9L

MAST (VFM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	FREE LIFT h2 mm	SERVICE WEIGHT (w/o BATT.) G kg
250PFL	2250	2500	3450	1800	850	2430
270PFL	2250	2700	3650	1900	950	2450
300PFL	2250	3000	3950	2050	1100	2470
330PFL	2250	3300	4250	2200	1250	2500
350PFL	2250	3500	4450	2300	1350	2510
370PFL	2250	3700	4650	2400	1450	2540
400PFL	2250	4000	4950	2550	1600	2600
430PFL	2200	4300	5250	2800	1850	2650
450PFL	2150	4500	5450	2900	1950	2670
470PFL	2100	4700	5650	3000	2050	2690
500PFL	2070	5000	5950	3150	2200	2710

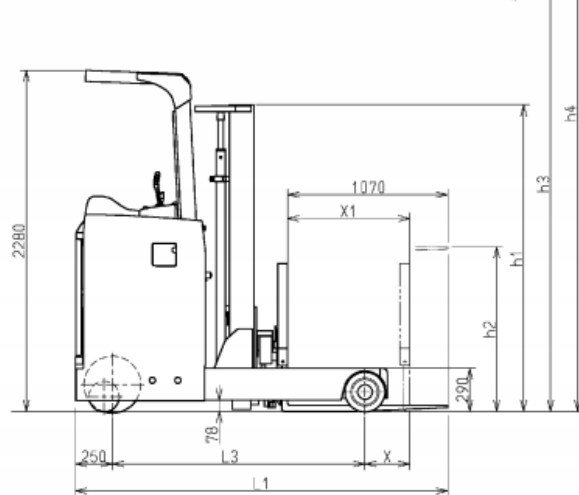
FRHB25-9L

MAST (VFM)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	FREE LIFT h2 mm	SERVICE WEIGHT (w/o BATT.) G kg
250PFL	2250	2500	3450	1800	850	2440
270PFL	2250	2700	3650	1900	950	2460
300PFL	2250	3000	3950	2050	1100	2480
330PFL	2250	3300	4250	2200	1250	2510
350PFL	2250	3500	4450	2300	1350	2520
370PFL	2250	3700	4650	2400	1450	2540
400PFL	2250	4000	4950	2550	1600	2610
430PFL	2250	4300	5250	2800	1850	2650
450PFL	2250	4500	5450	2900	1950	2670
470PFL	2250	4700	5650	3000	2050	2690
500PFL	2250	5000	5950	3150	2200	2710



BATTERY SIDE LOADING

FR(H)B25-9L



BATTERY FRONT LOADING

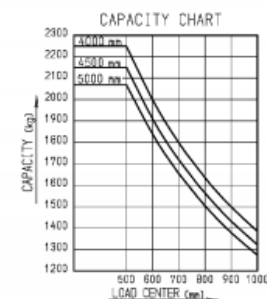
FR(H)B25-9L

SPECIFICATIONS

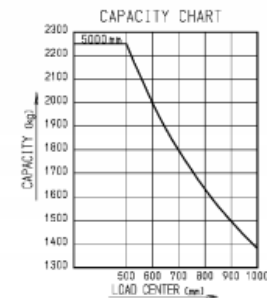
ITEMS		UNIT	FRB25-9L	FRHB25-9L	
TRAVEL SPEED	LADEN	km/h	9.5	←	
	UNLADEN	km/h	11.5	←	
LIFT SPEED	LADEN	mm/s	240	←	
	UNLADEN	mm/s	410	←	
MOTORS	TRACTION	kw	5.0	←	
	HYDRAULIC	kw	11.0	←	
	POWER STR.	kw	0.3	←	
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL		
	HYDRAULIC				
	POWER STR.		CHOPPER CONTROL		
BATTERY WEIGHT MIN./MAX.	kg	525 / 900	←		
BATTERY (48V)	Ah/SHR	320	←		
CHARGER (3PHASE 200V)		AUTOMATIC STATIONARY CHARGER			
	KVA	4.7	←		
TYRES			SOLID		
LOAD (URETHANE)			φ267 × 114	2PCS.	
DRIVE (RUBBER)			φ380 × 165	1PC.	
CASTER (RUBBER)			φ204 × 76	2PCS.	
MIN. TURNING RADIUS	R	mm	1955	2020	
REACH STROKE	X1	mm	815	840	
WHEELBASE	L3	mm	1685	1755	
FRONT OVERHANG	X	mm	300	295	
OVERALL LENGTH	TO FRONT-END OF FORK	L1	mm	2490	2530
	TO FRONT-END OF OUTRIGGER	L	mm	2085	2155

CAPACITY CHART

FRB25-9L



FRHB25-9L

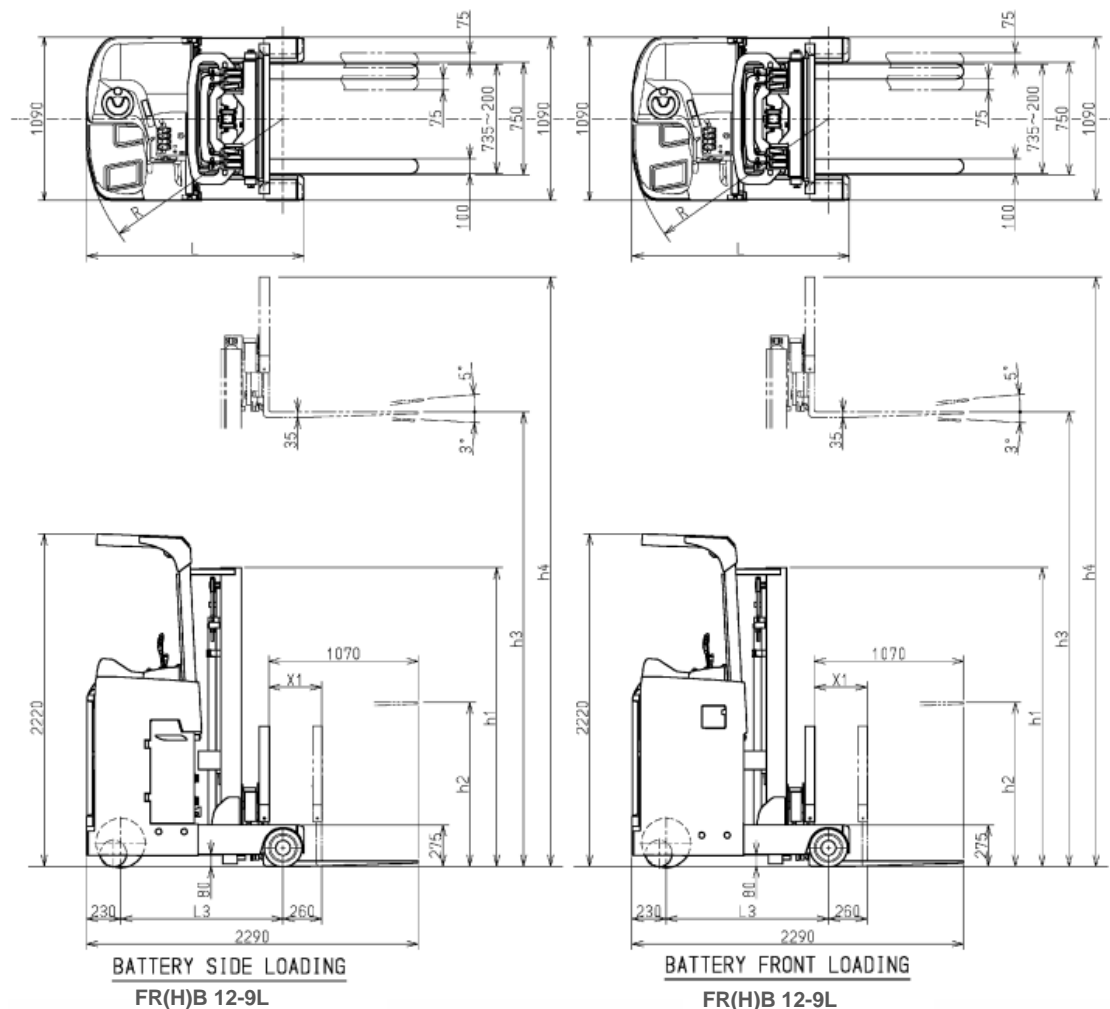


FRB12-9L

MAST (VFH)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	FREE LIFT h2 mm	SERVICE WEIGHT (w/o BATT.) G kg
350M	1070	3500	4400	1745	845	1800
370M	1070	3700	4600	1795	895	1810
400M	1070	4000	4900	1895	995	1830
430M	1030	4300	5200	1995	1095	1850
450M	970	4500	5400	2065	1165	1860
470M	970	4700	5600	2145	1245	1870
500M	900	5000	5900	2245	1345	1890
530M	800	5300	6200	2345	1445	1910
550M	700	5500	6400	2400	1500	1920
570M	550	5700	6600	2495	1595	1960
600M	470	6000	6900	2595	1695	1980

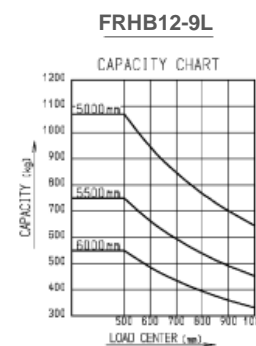
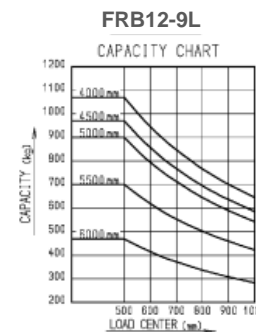
FRHB12-9L

MAST (VFH)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	FREE LIFT h2 mm	SERVICE WEIGHT (w/o BATT.) G kg
350M	1070	3500	4400	1745	845	1810
370M	1070	3700	4600	1795	895	1820
400M	1070	4000	4900	1895	995	1840
430M	1070	4300	5200	1995	1095	1850
450M	1070	4500	5400	2065	1165	1870
470M	1070	4700	5600	2145	1245	1880
500M	1070	5000	5900	2245	1345	1900
530M	830	5300	6200	2345	1445	1920
550M	750	5500	6400	2400	1500	1930
570M	630	5700	6600	2495	1595	1960
600M	550	6000	6900	2595	1695	1980



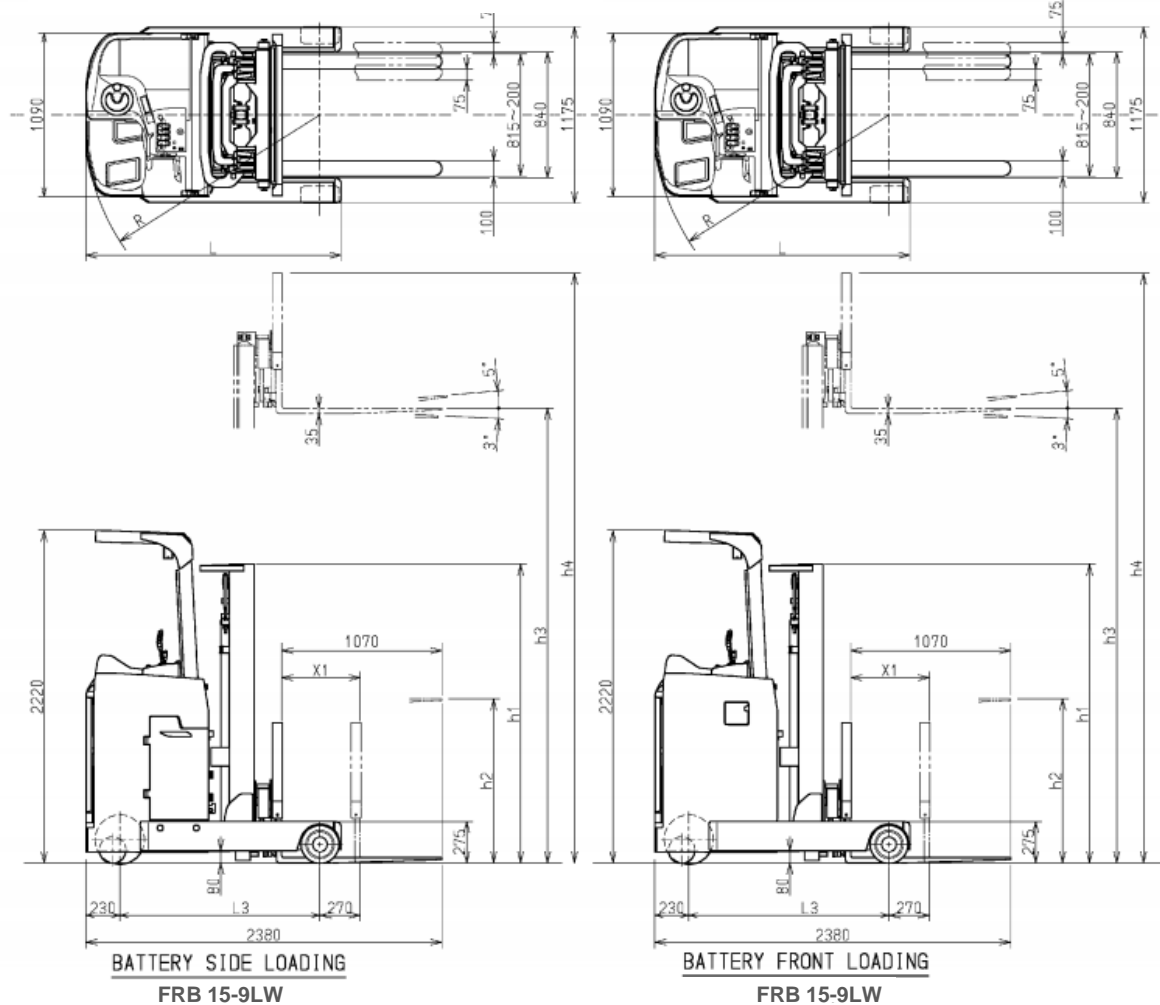
SPECIFICATIONS

ITEMS		UNIT	FRB12-9L	FRHB12-9L
TRAVEL SPEED	LADEN	km/h	9.5	←
	UNLADEN	km/h	10.5	←
LIFT SPEED	LADEN	m/s	3.40	←
	UNLADEN	m/s	5.00	←
MOTORS	TRACTION	kw	4.3	←
	HYDRAULIC	kw	8.8	←
	POWER STR.	kw	0.3	←
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL	
	HYDRAULIC		←	
	POWER STR.		CHOPPER CONTROL	
BATTERY WEIGHT MIN./MAX.	kg	340 / 450	←	←
BATTERY (48V)	Ah/SHR	201	←	←
CHARGER (3PHASE 200V)			AUTOMATIC STATIONARY CHARGER	
	KVA	3.8	←	←
TYRES SOLID				
LOAD (URETHANE)			∅254 x 114	2PCS.
DRIVE (RUBBER)			∅330 x 145	1PC.
CASTER (RUBBER)			∅178 x 73	2PCS.
MIN. TURNING RADIUS	R	mm	1340	1455
REACH STROKE	X1	mm	355	475
WHEELBASE	L3	mm	1085	1205
OVERALL LENGTH	L	mm	1455	1575
	TO FRONT-END OF OUTRIGGER		1575	1635



FRB15-9LW

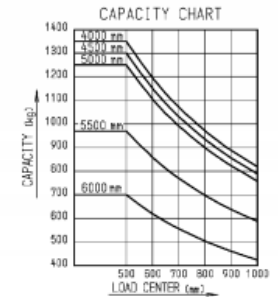
MAST (VFH)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED		O.A.H LOWERED		FREE LIFT h2 mm	SERVICE WEIGHT (w/o BATT.) G kg
			h4 mm	h1 mm	h4 mm	h1 mm		
350M	1350	3500	4400	1745	845	1855		
370M	1350	3700	4600	1795	895	1865		
400M	1350	4000	4900	1895	995	1875		
430M	1350	4300	5200	1995	1095	1895		
450M	1300	4500	5400	2085	1165	1915		
470M	1300	4700	5600	2145	1245	1925		
500M	1250	5000	5900	2245	1345	1945		
530M	1050	5300	6200	2345	1445	1965		
550M	970	5500	6400	2400	1500	1975		
570M	800	5700	6600	2495	1595	2015		
600M	700	6000	6900	2595	1695	2035		



SPECIFICATIONS

ITEMS		UNIT	FRB15-9LW	
TRAVEL SPEED	LADEN	km/h	9.5	←
	UNLADEN	km/h	10.5	←
LIFT SPEED	LADEN	mm/s	290	←
	UNLADEN	mm/s	500	←
MOTORS	TRACTION	kw	4.3	←
	HYDRAULIC	kw	8.8	←
	POWER STR.	kw	0.3	←
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL	
	HYDRAULIC		CHOPPER CONTROL	
	POWER STR.		CHOPPER CONTROL	
BATTERY WEIGHT MIN./MAX.	kg	400 / 600	450 / 750	
BATTERY (48V)	Ah/SHR	210	280	
CHARGER (3PHASE 200V)	AUTOMATIC STATIONARY CHARGER			
	KVA	3.8	4.7	
TYRES		SOLID		
LOAD (URETHANE)		∅254 × 114	2PCS.	
DRIVE (RUBBER)		∅330 × 145	1PC.	
CASTER (RUBBER)		∅178 × 73	2PCS.	
MIN. TURNING RADIUS R	mm	1520	1560	
REACH STROKE X1	mm	465	525	
WHEELBASE L3	mm	1275	1335	
OVERALL LENGTH TO FRONT-END OF DRIVE TYRE L	mm	1645	1705	

FRB15-9LW



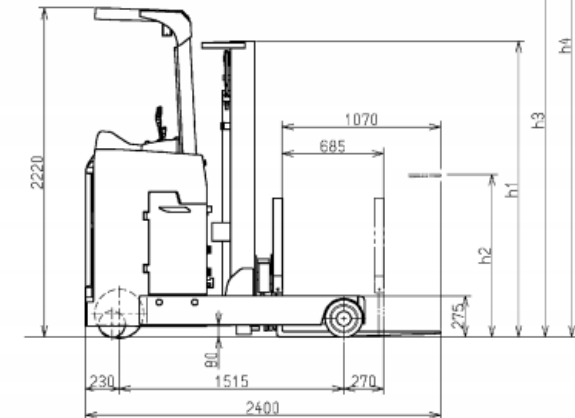
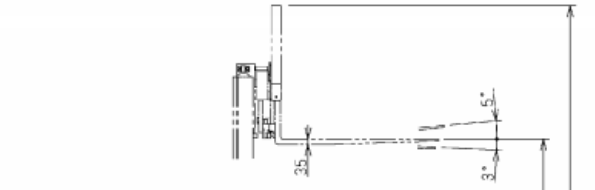
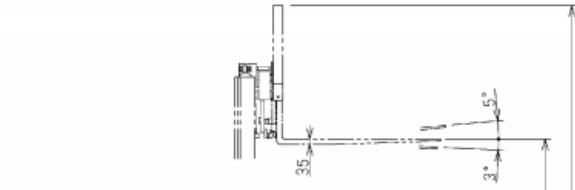
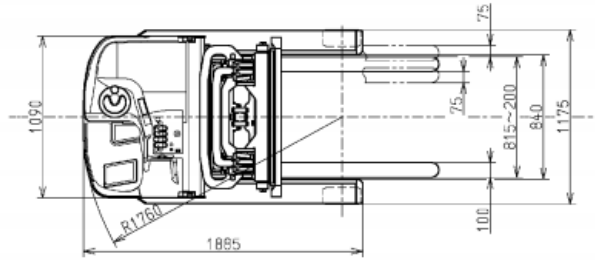
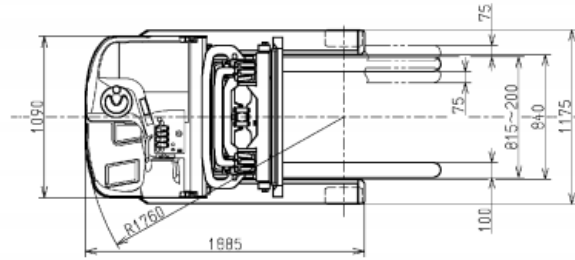
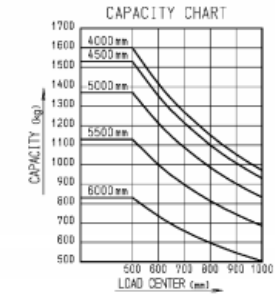
MAST DATA - 3 Stage FullFree Mast

FRB18-9LW

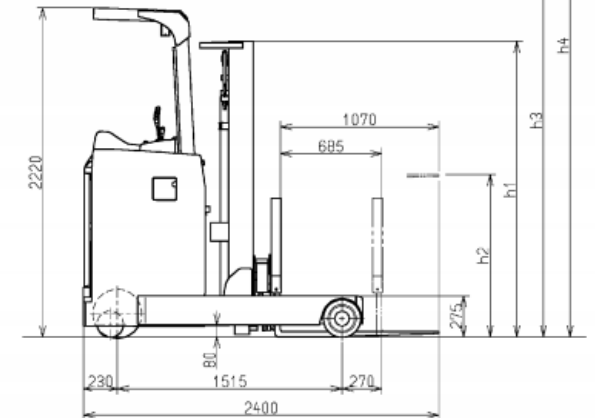
MAST (VFH)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H RAISED h4 mm	O.A.H LOWERED h1 mm	FREE LIFT h2 mm	SERVICE WEIGHT (W/O BATT.) G kg
350M	1600	3500	4400	1745	845	1995
370M	1600	3700	4600	1795	895	2005
400M	1600	4000	4900	1895	995	2025
430M	1570	4300	5200	1995	1095	2045
450M	1530	4500	5400	2065	1165	2065
470M	1470	4700	5600	2145	1245	2075
500M	1370	5000	5900	2245	1345	2095
530M	1230	5300	6200	2345	1445	2115
550M	1130	5500	6400	2400	1500	2125
570M	870	5700	6600	2495	1595	2165
600M	830	6000	6900	2595	1695	2185

CAPACITY CHART

FRB18-9LW



BATTERY SIDE LOADING
FRB18-9LW



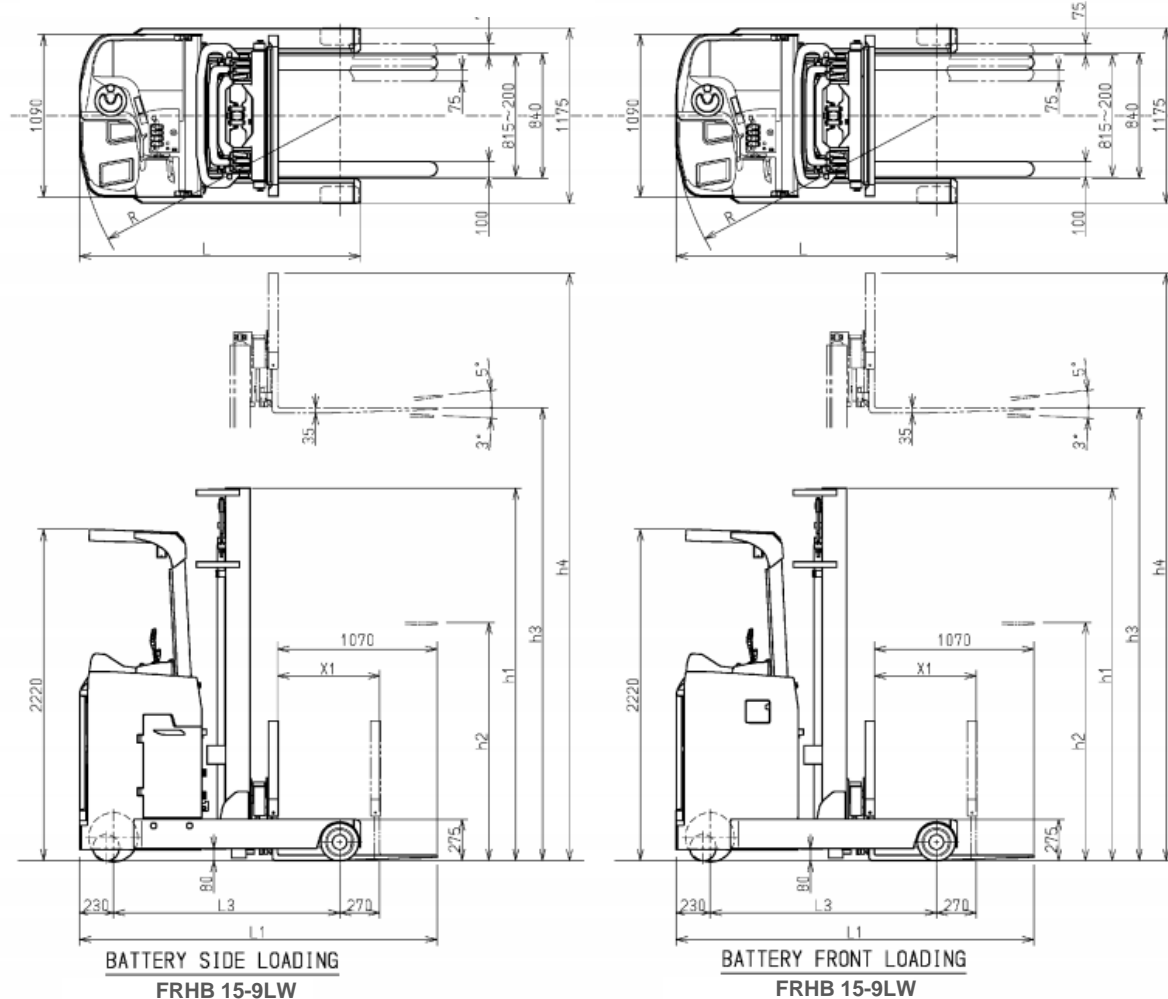
BATTERY FRONT LOADING
FRB18-9LW

SPECIFICATIONS

ITEMS		UNIT	FRB18-9LW
TRAVEL SPEED	LADEN	km/h	9.5
	UNLADEN	km/h	10.5
LIFT SPEED	LADEN	m/s	2.80
	UNLADEN	m/s	5.00
MOTORS	TRACTION	kw	4.3
	HYDRAULIC	kw	8.8
	POWER STR.	kw	0.3
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL
	HYDRAULIC		
	POWER STR.		CHOPPER CONTROL
BATTERY WEIGHT MIN./MAX.	kg	450 / 750	
BATTERY (48V)	Ah/SHR	280	
CHARGER (3PHASE 200V)			AUTOMATIC STATIONARY CHARGER
	KVA		4.7
TYRES			SOLID
LOAD (URETHANE)			φ254 × 114 2PCS.
DRIVE (RUBBER)			φ330 × 145 1PC.
CASTER (RUBBER)			φ178 × 73 2PCS.

FRHB15-9LW

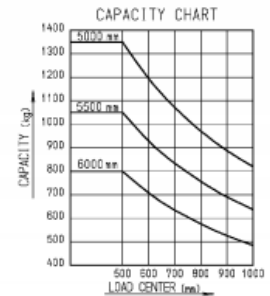
MAST (VFH)	CAPACITY (CLC 500mm) kg	LIFT HEIGHT h3 mm	D.A.H RAISED h4 mm	D.A.H LOWERED h1 mm	FREE LIFT h2 mm	SERVICE WEIGHT (#/O BATT.) G kg
350M	1350	3500	4400	1745	845	1995
370M	1350	3700	4600	1795	895	1995
400M	1350	4000	4900	1895	995	2015
430M	1350	4300	5200	1995	1095	2035
450M	1350	4500	5400	2065	1165	2055
470M	1350	4700	5600	2145	1245	2065
500M	1350	5000	5900	2245	1345	2085
530M	1130	5300	6200	2345	1445	2105
550M	1050	5500	6400	2400	1500	2115
570M	850	5700	6600	2495	1595	2155
600M	800	6000	6900	2595	1695	2175



SPECIFICATIONS

ITEMS		UNIT	FRHB15-9LW		
TRAVEL SPEED	LADEN	kn/h	9.5	▲	
	UNLADEN	kn/h	10.5	▲	
LIFT SPEED	LADEN	nn/s	2.90	▲	
	UNLADEN	nn/s	5.00	▲	
MOTORS	TRACTION	kw	4.3	▲	
	HYDRAULIC	kw	8.8	▲	
	POWER STR.	kw	0.3	▲	
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL		
	HYDRAULIC				
	POWER STR.		CHOPPER CONTROL		
BATTERY WEIGHT MIN./MAX.	kg	400 / 600	450 / 750		
BATTERY (48V)	Ah/SHR	210	280		
CHARGER (3PHASE 200V)		AUTOMATIC STATIONARY CHARGER			
	KVA	3.8	4.7		
TYRES		SOLID			
LOAD (URETHANE)		∅254 x 114 2PCS.			
DRIVE (RUBBER)		∅330 x 145 1PC.			
CASTER (RUBBER)		∅178 x 73 2PCS.			
MIN. TURNING RADIUS	R nn	1580	1760		
REACH STROKE	X1 nn	525	685		
WHEELBASE	L3 nn	1335	1515		
OVERALL LENGTH	TO FRONT-END OF FORK	L1 nn	2360	2400	
	TO FRONT-END OF OUTRIGGER	L nn	1705	1885	

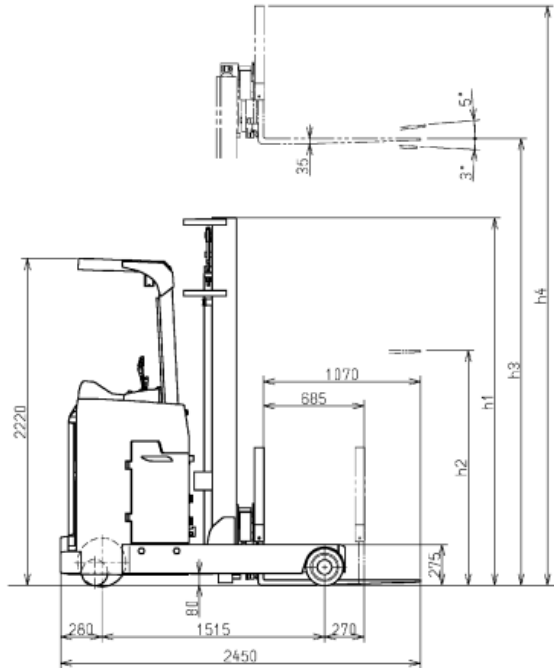
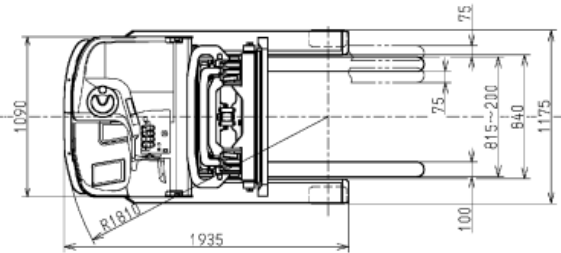
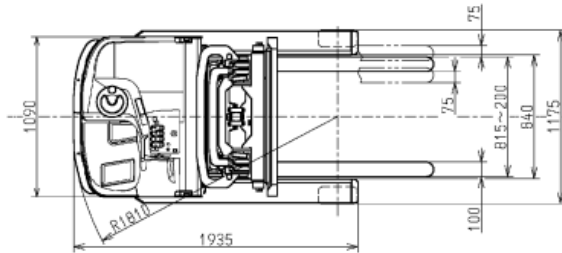
FRHB15-9LW



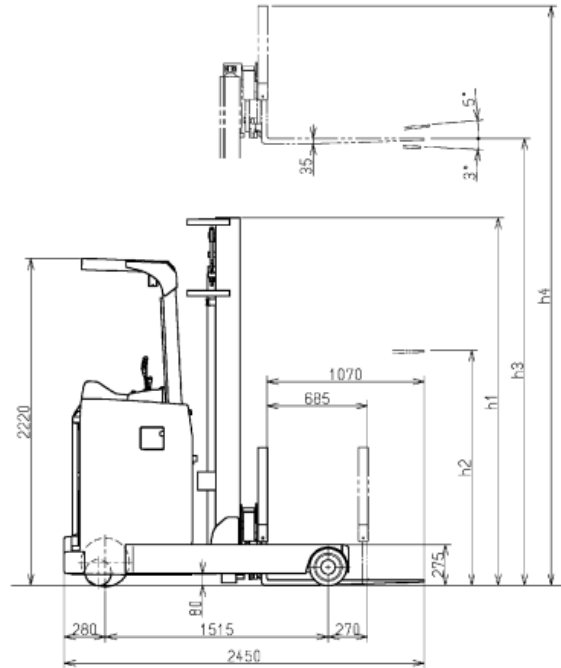
MAST DATA - 3 Stage FullFree Mast

FRHB18-9LW

MAST (VFH)	CAPACITY (LC 500mm)	LIFT HEIGHT	D. A. H RAISED	D. A. H LOWERED	FREE LIFT	SERVICE WEIGHT (W/O BATT.)
	kg	h3 mm	h4 mm	h1 mm	h2 mm	G kg
350M	1600	3500	4400	1745	845	2055
370M	1600	3700	4600	1795	895	2065
400M	1600	4000	4900	1895	995	2085
430M	1600	4300	5200	1995	1095	2105
450M	1600	4500	5400	2065	1165	2115
470M	1600	4700	5600	2145	1245	2135
500M	1600	5000	5900	2245	1345	2155
530M	1400	5300	6200	2345	1445	2175
550M	1270	5500	6400	2400	1500	2185
570M	1000	5700	6600	2495	1595	2225
600M	870	6000	6900	2595	1695	2245



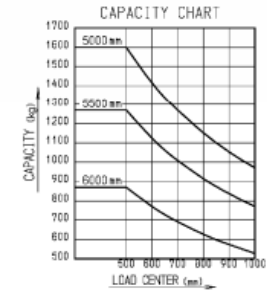
BATTERY SIDE LOADING
FRHB 18-9LW



BATTERY FRONT LOADING
FRHB 18-9LW

CAPACITY CHART

FRHB18-9LW



SPECIFICATIONS

ITEMS		UNIT	FRHB18-9LW
TRAVEL SPEED	LADEN	km/h	9.5
	UNLADEN	km/h	10.5
LIFT SPEED	LADEN	m/s	2.80
	UNLADEN	m/s	5.00
MOTORS	TRACTION	kw	4.3
	HYDRAULIC	kw	9.8
	POWER STR.	kw	0.3
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL
	HYDRAULIC		
	POWER STR.		CHOPPER CONTROL
BATTERY WEIGHT MIN./MAX.	kg	450 / 750	
BATTERY (48V)	Ah/SHR	280	
CHARGER (3PHASE 200V)	KVA	4.7	
TYRES		SOLID	
LOAD (URETHANE)		# 254 x 114 2PCS.	
DRIVE (RUBBER)		# 330 x 145 1PC.	
CASTER (RUBBER)		# 178 x 73 2PCS.	

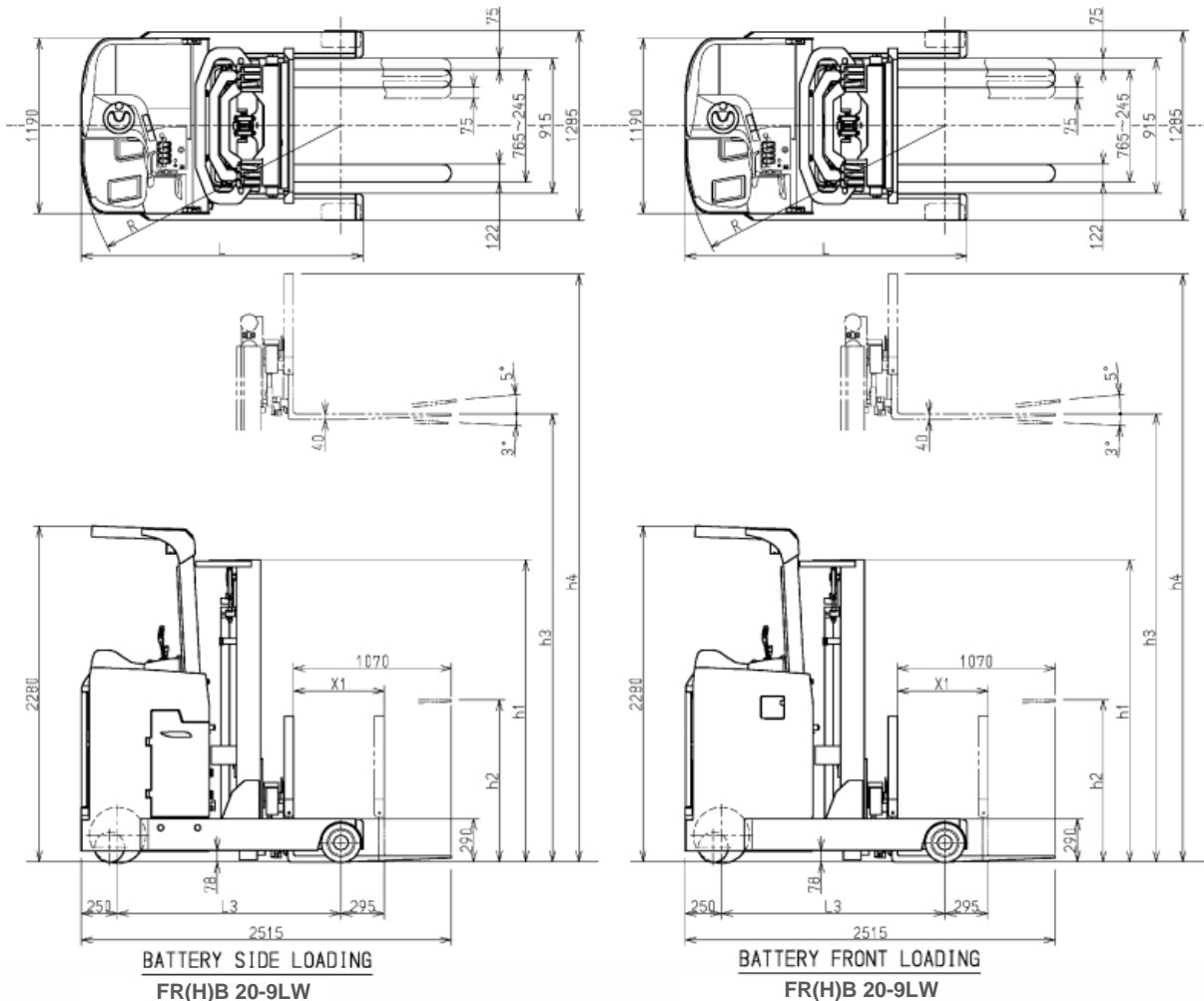
MAST DATA - 3 Stage FullFree Mast

FRB20-9LW

MAST (VFH)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H. RAISED h4 mm	O.A.H. LOWERED h1 mm	FREE LIFT h2 mm	SERVICE WEIGHT (w/o BATT.) G kg
350M	1800	3500	4450	1800	850	2520
370M	1800	3700	4650	1850	900	2530
400M	1800	4000	4950	1950	1000	2550
430M	1800	4300	5250	2050	1100	2580
450M	1800	4500	5450	2150	1200	2600
470M	1800	4700	5650	2200	1250	2610
500M	1800	5000	5950	2300	1350	2630
530M	1600	5300	6250	2400	1450	2660
550M	1570	5500	6450	2470	1520	2670
570M	1530	5700	6650	2550	1600	2720
600M	1400	6000	6950	2640	1690	2740

FRHB20-9LW

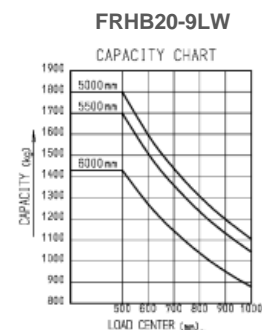
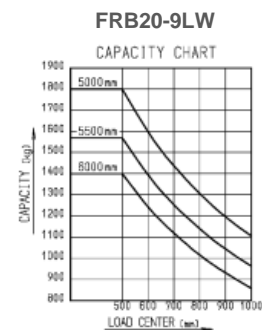
MAST (VFH)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O.A.H. RAISED h4 mm	O.A.H. LOWERED h1 mm	FREE LIFT h2 mm	SERVICE WEIGHT (w/o BATT.) G kg
350M	1800	3500	4450	1800	850	2660
370M	1800	3700	4650	1850	900	2670
400M	1800	4000	4950	1950	1000	2700
430M	1800	4300	5250	2050	1100	2720
450M	1800	4500	5450	2150	1200	2740
470M	1800	4700	5650	2200	1250	2760
500M	1800	5000	5950	2300	1350	2780
530M	1700	5300	6250	2400	1450	2800
550M	1700	5500	6450	2470	1520	2820
570M	1600	5700	6650	2550	1600	2870
600M	1430	6000	6950	2640	1690	2890



SPECIFICATIONS

ITEMS		UNIT	FRB20-9LW	FRHB20-9LW
TRAVEL SPEED	LADEN	km/h	10.0	←
	UNLADEN	km/h	11.5	←
LIFT SPEED	LADEN	m/s	2.70	←
	UNLADEN	m/s	4.60	←
MOTORS	TRACTION	kw	5.0	←
	HYDRAULIC	kw	11.0	←
	POWER STR.	kw	0.3	←
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL	
	HYDRAULIC			
	POWER STR.		CHOPPER CONTROL	
BATTERY WEIGHT MIN./MAX.	kg	525 / 900	←	
BATTERY (48V)	Ah/5HR	320	←	
CHARGER (3PHASE 200V)		AUTOMATIC STATIONARY CHARGER		
	KVA	4.7	←	
TYRES		SOLID		
LOAD (URETHANE)		φ267 × 114 2PCS.		
DRIVE (RUBBER)		φ380 × 165 1PC.		
CASTER (RUBBER)		φ204 × 76 2PCS.		
MIN. TURNING RADIUS	R	mm	1785	1955
REACH STROKE	X1	mm	615	785
WHEELBASE	L3	mm	1515	1685
OVERALL LENGTH	TO FRONT-END OF OUTRIGGER	L	mm	1915
				2085

CAPACITY CHART



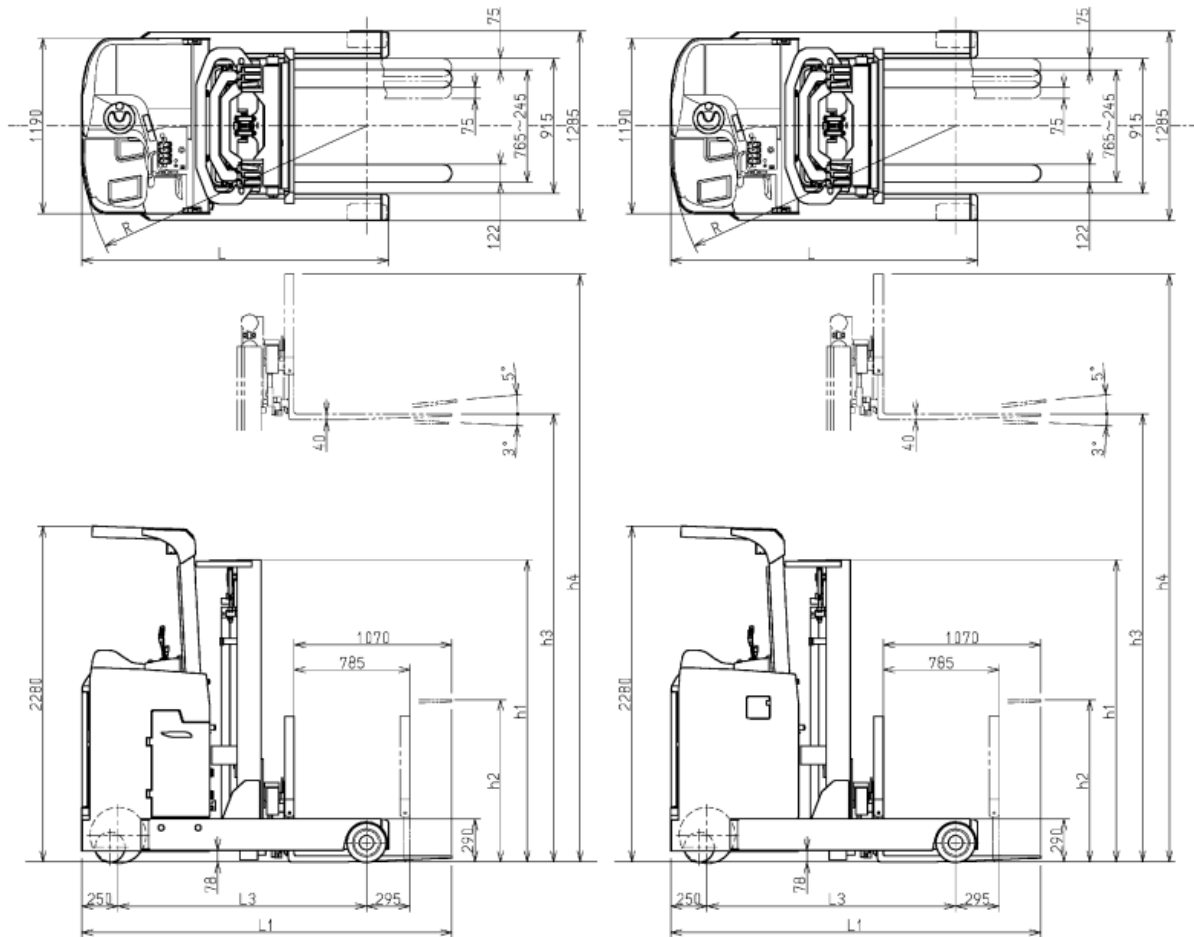
MAST DATA - 3 Stage FullFree Mast

FRB25-9LW

MAST (VFH)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O. A. H RAISED h4 mm	O. A. H LOWERED h1 mm	FREE LIFT h2 mm	SERVICE WEIGHT (W/O BATT.) G kg
350M	2250	3500	4450	1800	850	2660
370M	2250	3700	4650	1850	900	2680
400M	2250	4000	4950	1950	1000	2700
430M	2250	4300	5250	2050	1100	2720
450M	2250	4500	5450	2150	1200	2740
470M	2250	4700	5650	2200	1250	2760
500M	2250	5000	5950	2300	1350	2780
530M	1950	5300	6250	2400	1450	2800
550M	1900	5500	6450	2470	1520	2820
570M	1800	5700	6650	2550	1600	2870
600M	1670	6000	6950	2640	1690	2890

FRHB25-9LW

MAST (VFH)	CAPACITY (LC 500mm) kg	LIFT HEIGHT h3 mm	O. A. H RAISED h4 mm	O. A. H LOWERED h1 mm	FREE LIFT h2 mm	SERVICE WEIGHT (W/O BATT.) G kg
350M	2250	3500	4450	1800	850	2700
370M	2250	3700	4650	1850	900	2710
400M	2250	4000	4950	1950	1000	2730
430M	2250	4300	5250	2050	1100	2750
450M	2250	4500	5450	2150	1200	2780
470M	2250	4700	5650	2200	1250	2790
500M	2250	5000	5950	2300	1350	2810
530M	2100	5300	6250	2400	1450	2830
550M	2100	5600	6450	2470	1520	2850
570M	1870	5700	6650	2550	1600	2900
600M	1700	6000	6950	2640	1690	2920



BATTERY SIDE LOADING
FR(H)B 25-9LW

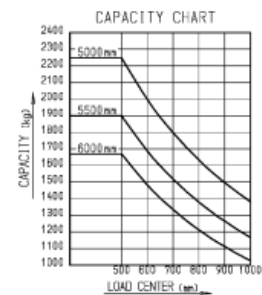
BATTERY FRONT LOADING
FR(H)B 25-9LW

SPECIFICATIONS

ITEMS		UNIT	FRB25-9LW	FRHB25-9LW
TRAVEL SPEED	LADEN	km/h	9.5	←
	UNLADEN	km/h	11.5	←
LIFT SPEED	LADEN	mm/s	25.0	←
	UNLADEN	mm/s	46.0	←
MOTORS	TRACTION	kw	5.0	←
	HYDRAULIC	kw	11.0	←
	POWER STR.	kw	0.3	←
CONTROL SYSTEM	TRAVEL		INVERTER CONTROL	
	HYDRAULIC			
	POWER STR.		CHOPPER CONTROL	
BATTERY WEIGHT MIN./MAX.	kg	525 / 900	←	
BATTERY (48V)	Ah/5HR	320	←	
CHARGER (3PHASE 200V)		AUTOMATIC STATIONARY CHARGER		
		kVA	4.7	←
TYRES		SOLID		
LOAD (URETHANE)		∅267 × 114	2PCS.	
DRIVE (RUBBER)		∅380 × 165	1PC.	
CASTER (RUBBER)		∅204 × 76	2PCS.	
MIN. TURNING RADIUS	R	mm	1955	2020
WHEELBASE	L3	mm	1685	1755
	L1	mm	2515	2585
	L	mm	2085	2155

CAPACITY CHART

FRB25-9LW



FRHB25-9LW

