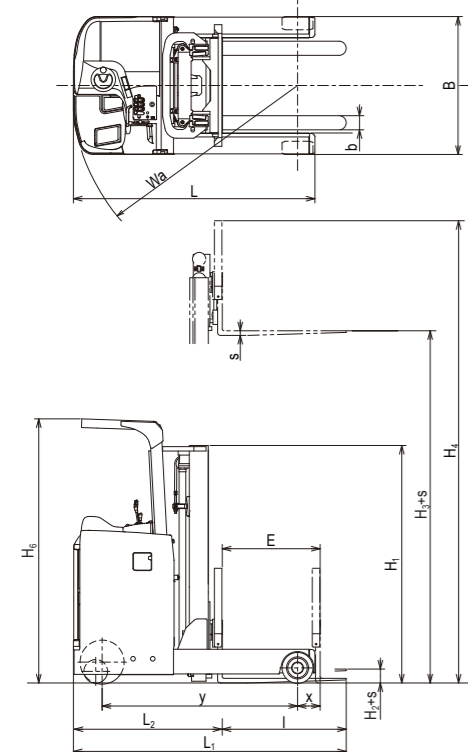
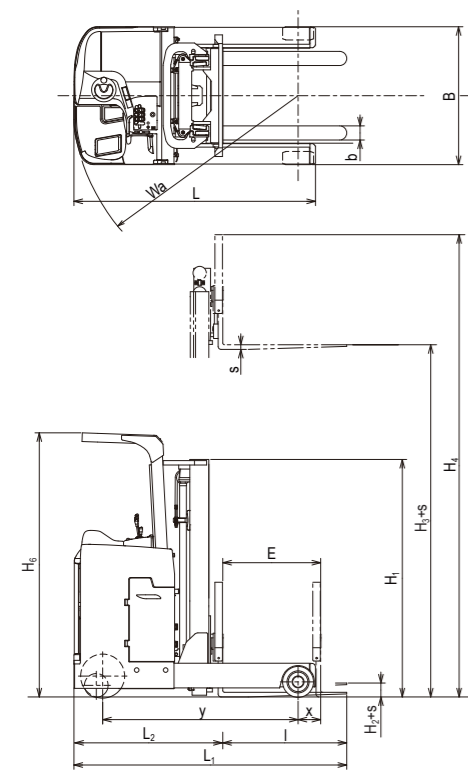


FBR(A)(W)20-30

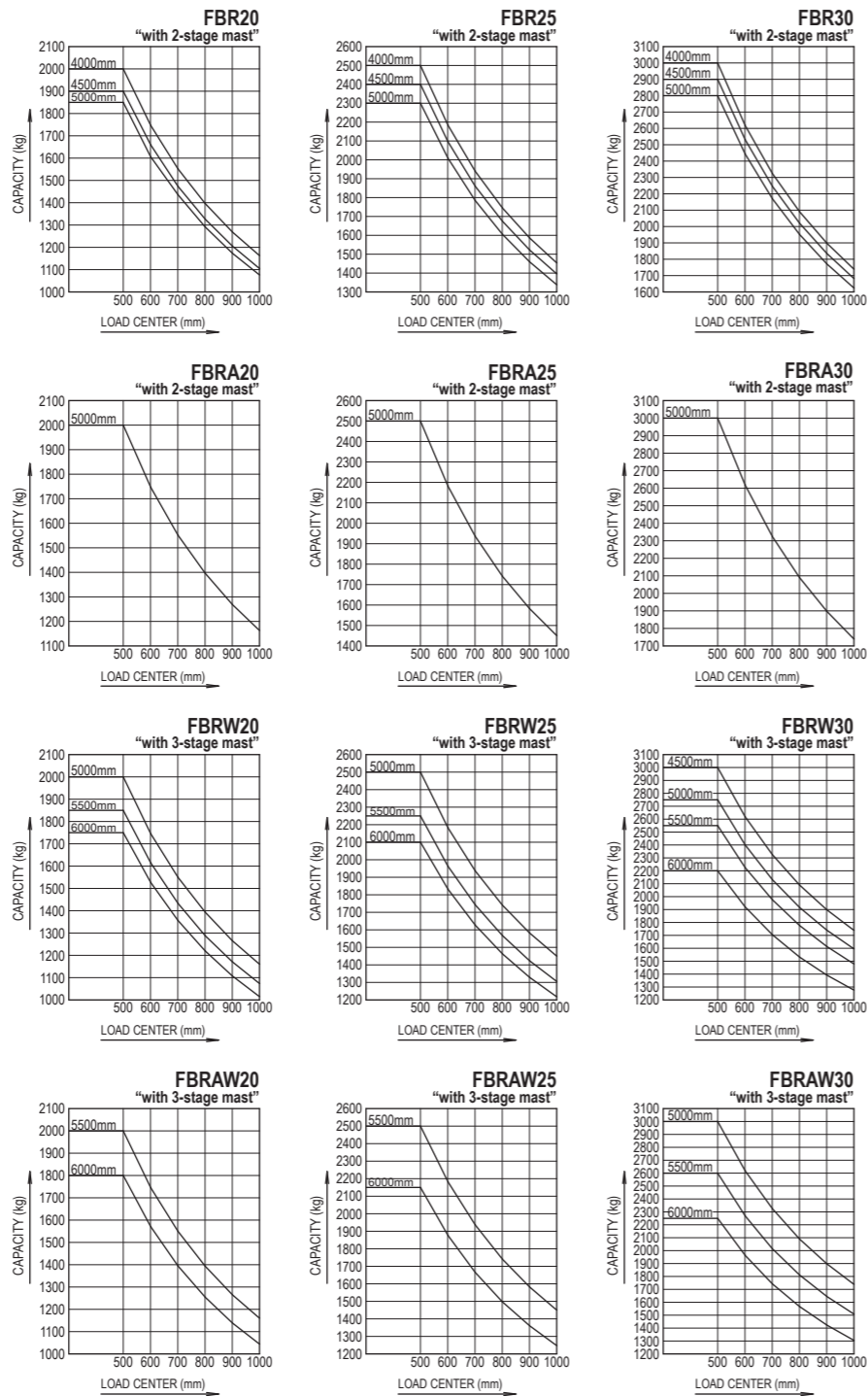


[Battery Front Loading model]

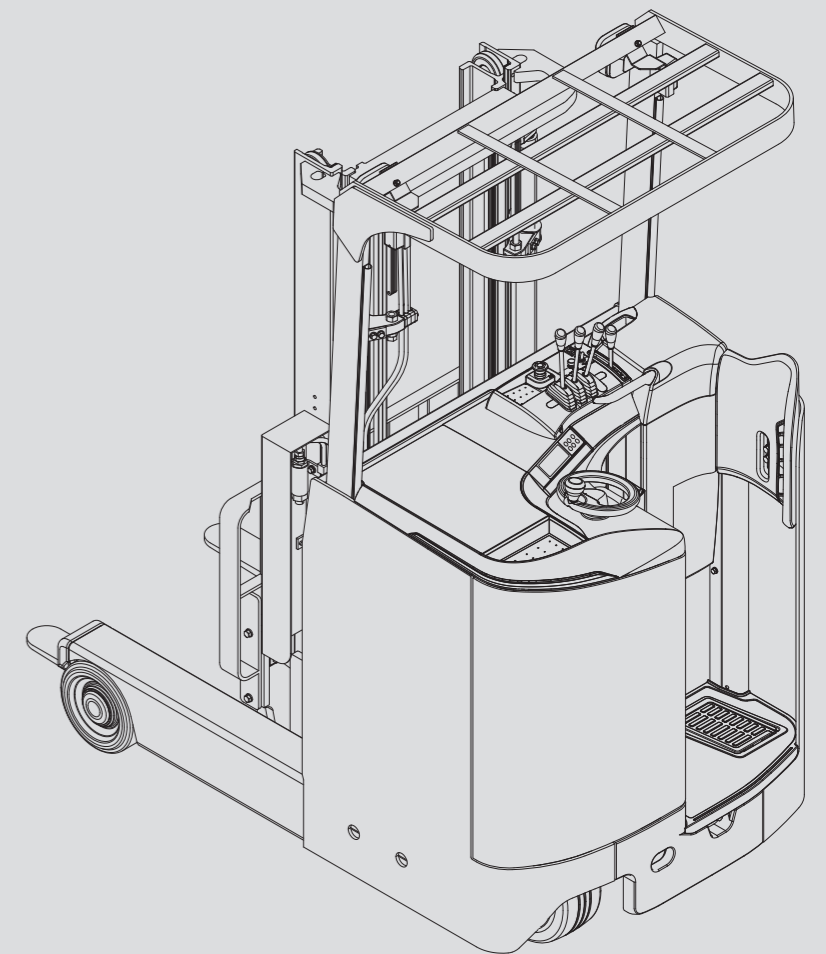


[Battery Side Loading model]

Capacity Chart



**ELECTRIC FORKLIFT TRUCK
SPECIFICATIONS**



STAND-ON REACH TRUCK

80 SERIES

FBR9/10/12/14/15/16/18/20/25/30

All specifications have been determined according to Nichiyu's terms and conditions.
Specifications are subject to change without notice in the interests of product improvement.

STANDARD SPECIFICATIONS

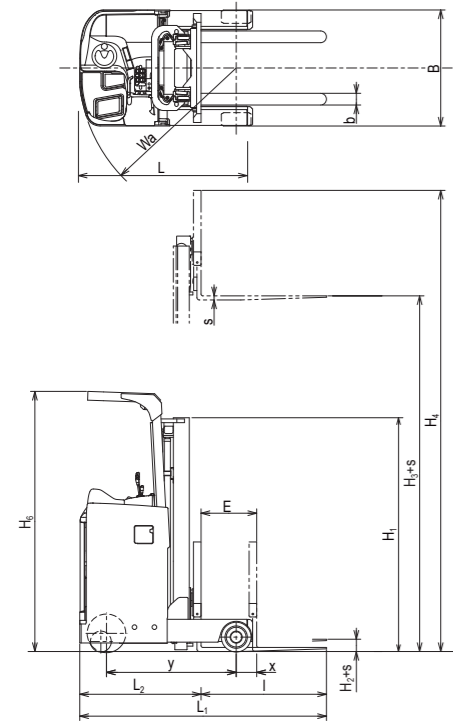
Type	Item	Summary	Unit	Standard																				
				N series									High mast									High mast		
				FBR(M)9N	FBR(M)10N	FBR(M)12N	FBR(M)10	FBR(M)12	FBR(M)A12	FBR(M)14	FBR(M)15	FBR(M)16	FBR(M)18	FBR(M)A14	FBR(M)A15	FBR(M)A18	FBR(M)20	FBR(M)25	FBR(M)30	FBR(M)A20	FBR(M)A25	FBR(M)A30		
Type	1	Model		FBR(M)9N	FBR(M)10N	FBR(M)12N	FBR(M)10	FBR(M)12	FBR(M)A12	FBR(M)14	FBR(M)15	FBR(M)16	FBR(M)18	FBR(M)A14	FBR(M)A15	FBR(M)A18	FBR(M)20	FBR(M)25	FBR(M)30	FBR(M)A20	FBR(M)A25	FBR(M)A30		
	2	Capacity	kg	900	1000	1200	1000	1200	1200	1400	1500	1600	1800	1400	1500	1800	2000	2500	3000	2000	2500	3000		
	3	Load center	mm	400	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500		
	4	Motor type		AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC		
Dimensions	5	Lift height	H ₃ +s	mm	3000	3000	3000	3000	3000	4000	3000	3000	3000	4000	4000	4000	3000	3000	3000	4000	4000	4000		
	6	Free lift	H ₂ +s	mm	105	105	105	105	105	400	105	105	110	110	400	400	405	120	120	125	400	400	405	
	7	Tilt angle	Down/Up	a/b	deg	3/5	3/5	3/5	3/5	3/5	3/5	3/5	3/5	3/5	3/5	3/5	3/5	3/5	3/5	3/5	3/5	3/5		
	8	Fork size	Length/Width/Thickness	l/b/s	mm	1070/100/35	1070/100/35	1070/100/35	1070/100/35	1070/100/35	1070/100/35	1070/100/35	1070/100/38	1070/100/38	1070/100/35	1070/100/35	1070/100/38	1070/122/40	1070/122/40	1070/122/44	1070/122/40	1070/122/40	1070/122/44	
	9	Fork setting	Min./Max	mm	225 ~ 635	225 ~ 635	225 ~ 635	225 ~ 735	225 ~ 735	225 ~ 735	225 ~ 735	225 ~ 735	225 ~ 735	225 ~ 735	225 ~ 735	225 ~ 735	225 ~ 735	285 ~ 765	285 ~ 765	285 ~ 765	285 ~ 765	285 ~ 765	285 ~ 765	
	10	Length	Overall length	L ₁	mm	2105	2105	2105	2140	2140	2140	2230	2230	2235	2235	2230	2230	2325	2355	2355	2460	2355	2395	2560
	11		Frame	L	mm	1400	1475	1585	1455	1575	1635	1645	1705	1765	1885	1705	1885	1935	1915	2085	2185	2085	2155	2385
	12		To fork face	L ₂	mm	1035	1035	1035	1070	1070	1070	1160	1160	1165	1165	1160	1160	1255	1285	1285	1390	1285	1325	1490
	13	Reach stroke		E	mm	400	475	585	420	540	600	530	590	650	770	590	770	730	675	845	835	845	870	935
	14	Overall width	Overall width	B	mm	990	990	990	1090	1090	1090	1090	1090	1090	1090	1090	1090	1090	1190	1190	1230	1190	1190	1230
	15		Between legs		mm	655	655	655	750	750	750	750	750	750	750	750	750	750	820	820	795	820	820	795
	16		Frame		mm	990	990	990	1090	1090	1090	1090	1090	1090	1090	1090	1090	1090	1190	1190	1190	1190	1190	1190
	17	Height	Leg		mm	275	275	275	275	275	275	275	275	275	275	275	275	290	290	295	290	290	295	
	18		Mast lowered height	H ₁	mm	1995	1995	1995	1995	1995	2495	1995	1995	1995	1995	2495	2495	2495	2050	2050	2050	2550	2550	2550
	19		Mast extended height	H ₄	mm	3900	3900	3900	3900	3900	4900	3900	3900	3900	3900	4900	4900	4900	3950	3950	4050	4950	4950	5050
	20		Overhead guard height	H ₆	mm	2220	2220	2220	2220	2220	2220	2220	2220	2220	2220	2220	2220	2220	2280	2280	2280	2280	2280	2280
	21	Front overhang	Reach out	x	mm	175	175	175	175	175	175	185	185	190	190	185	185	190	195	195	190	195	190	
	22	Floor height			mm	265	265	265	265	265	265	265	265	265	265	265	265	315	315	315	315	315	315	
	23	Min. turning radius		Wa	mm	1275	1350	1455	1340	1455	1510	1520	1580	1640	1760	1580	1760	1810	1785	1955	2050	1955	2020	2250
	24	Right angle turning aisle width	1100×1100 pallet (incl. 200mm clearance)		mm	1700	1725	1765	1750	1795	1815	1830	1855	1880	1930	1855	1930	1960	2015	2090	2160	2090	2125	2265
	25	Right angle stacking aisle width	1100×1100 pallet (incl. 200mm clearance)	Ast	mm	2510	2520	2540	2560	2575	2585	2660	2670	2685	2715	2670	2715	2795	2815	2865	2970	2865	2915	3105
	Performance	26	Travel speed	Laden/Unladen	km/h	9.5/10.5	9.5/10.5	9.5/10.5	10.5/10.5	10.5/10.5	10.5/10.5	9.5/10.5	9.5/10.5	9.5/10.5	9.5/10.5	9.5/10.5	9.5/10.5	10/11.5	9.5/11.5	9.0/11.0	10/11.5	9.5/11.5	9.0/11.0	
		27	Lift speed	Laden/Unladen	mm/s	275/450	265/450	240/450	340/540	320/540	320/540	310/540	310/540	310/540	300/540	310/540	310/540	300/540	290/490	270/490	220/400	290/490	270/490	220/400
		28	Max. Gradeability	3 min. rating, 1.5km/h and over	%	10/14.3	10/14.3	10/14.3	10/14.3	10/14.3	10/14.3	10/14.3	10/14.3	10/14.3	10/14.3	10/14.3	10/14.3	10/14.3	10/14.3	10/14.3	10/14.3	10/14.3	10/14.3	10/14.3
		29	Service weight	With standard battery	kg	1700	1780	1870	1890	1980	2080	2040	2100	2120	2250	2140	2330	2450	2790	2870	3210	2950	3020	3390
Wheel and tire	30	Number	Load/Drive/Caster		2/1/2	2/1/2	2/1/2	2/1/2	2/1/2	2/1/2	2/1/2	2/1/2	2/1/2	2/1/2	2/1/2	2/1/2	2/1/2	2/1/2	2/1/2	2/1/2	2/1/2			
	31	Load		mm	φ254 × 114 (Urethane)	φ254 × 114 (Urethane)	φ254 × 114 (Urethane)	φ254 × 114 (Urethane)	φ254 × 114 (Urethane)	φ254 × 114 (Urethane)	φ254 × 114 (Urethane)	φ254 × 114 (Urethane)	φ254 × 114 (Urethane)	φ254 × 114 (Urethane)	φ254 × 114 (Urethane)	φ254 × 114 (Urethane)	φ267 × 114 (Urethane)	φ267 × 114 (Urethane)	φ267 × 135 (Urethane)	φ267 × 114 (Urethane)	φ267 × 114 (Urethane)	φ267 × 135 (Urethane)		
	32		Tire	Drive	mm	φ330 × 145 (Rubber)	φ330 × 145 (Rubber)	φ330 × 145 (Rubber)	φ330 × 145 (Rubber)	φ330 × 145 (Rubber)	φ330 × 145 (Rubber)	φ330 × 145 (Rubber)	φ330 × 145 (Rubber)	φ330 × 145 (Rubber)	φ330 × 145 (Rubber)	φ330 × 145 (Rubber)	φ330 × 145 (Rubber)	φ380 × 165 (Rubber)	φ380 × 165 (Rubber)	φ380 × 165 (Rubber)	φ380 × 165 (Rubber)	φ380 × 165 (Rubber)		
	33			Caster	mm	φ178 × 73 (Rubber)	φ178 × 73 (Rubber)	φ178 × 73 (Rubber)	φ178 × 73 (Rubber)	φ178 × 73 (Rubber)	φ178 × 73 (Rubber)	φ178 × 73 (Rubber)	φ178 × 73 (Rubber)	φ178 × 73 (Rubber)	φ178 × 73 (Rubber)	φ178 × 73 (Rubber)	φ178 × 73 (Rubber)	φ204 × 76 (Rubber)	φ204 × 76 (Rubber)	φ204 × 76 (Urethane)	φ204 × 76 (Rubber)	φ204 × 76 (Rubber)		
	34	Wheelbase	y	mm	1030	1105	1215	1085	1205	1265	1275	1335	1395	1515	1335	1515	1515	1515	1685	1785	1685	1755	1985	
	35	Tread	Front	mm	875	875	875	975	975	975	975	975	975	975	975	975	975	1075	1075	1095	1075	1075	1095	
	36		Rear	mm	565	565	565	640	640	640	640	640	640	640	640	640	640	695	695	695	695	695	695	
	37	Road clearance	Center of wheelbase		mm	80	80	80	80	80	80	80	80	80	80	80	80	78	78	78	78	78	78	
	38	Service brake	Mech./Hydr./Electr./Pneum.			Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	
	39	Parking brake	Foot/Hand/Deadman			Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	
Drive unit and control	40	Battery	Voltage/Capacity (5hr. Rating)	V/Ah	24/280	24/390	24/390	48/201	48/201	48/201	48/210	48/280	48/280	48/280	48/210	48/280	48/280	48/320	48/320	48/370	48/320	48/320	48/370	
	41		Mass (w/case) (min/max)	kg	245 (230/450)	315 (300/450)	315 (300/450)	355 (340/450)	355 (340/450)	355 (340/450)	420 (400/600)	470 (450/750)	470 (450/750)	470 (450/750)	420 (400/600)	470 (450/750)	470 (450/750)	550 (525/900)	550 (525/900)	575 (560/900)	550 (525/900)	550 (525/900)	575 (560/900)	
	42	Drive motor	60 min. rating	kW	2.6	2.6	2.6	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	5.0	5.0	5.0	5.0	5.0	5.0		
	43		Control		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	
	44	Hydraulic motor	5 min. rating	kW	6.0	6.0	6.0	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	11.0	11.0	11.0	11.0	11.0	11.0		
	45		Control		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	
	46	Power steering motor	60 min. rating	kW	0.22	0.22	0.22	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
47	Control			Chopper	Chopper	Chopper	Chopper	Chopper	Chopper	Chopper	Chopper	Chopper	Chopper	Chopper	Chopper	Chopper	Chopper	Chopper	Chopper	Chopper	Chopper	Chopper		
48	Charger (option)	Type (built-in/stationary)			Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary			
49		Charging method			Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic		
50		Input	φ/V		3/200	3/200	3/200	3/200	3/200	3/200	3/200	3/200	3/200	3/200	3/200	3/200	3/200	3/200	3/200	3/200	3/200	3/200		
51		Capacity	kVA		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.6	3.6	3.6	3.0	3.6	3.6	5.2	5.2	5.2	5.2	5.2		

RATED CAPACITIES AND MAST SPECIFICATIONS

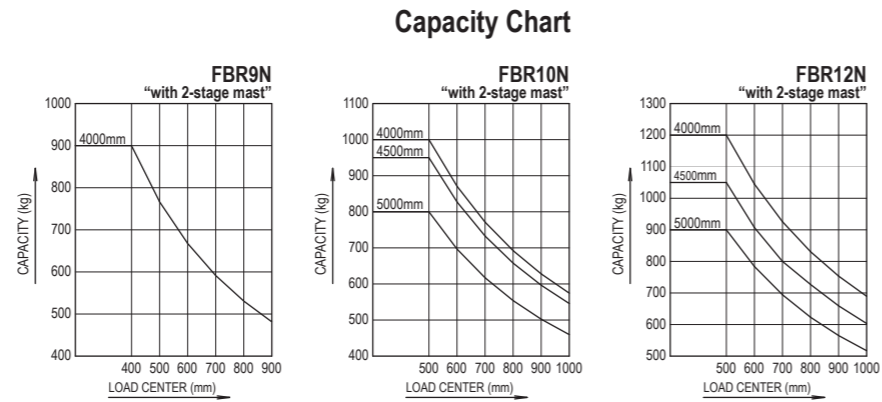
Mast Type		Lifting Height H ₃ +s (mm)	Capacity Q (kg) at 500mm Load Center																		Overall Height (mm)						Free Lift H ₂ +s (mm)				Tilt Angle (deg.)		
			Mast Raised									Mast Lowered									Mast Raised			Mast Lowered			Backward α	Forward β					
			FBR9N	FBR10N	FBR12N	FBR10	FBR12	FBRA12	FBR14	FBRA14	FBR15	FBRA15	FBR16	FBR18	FBRA18	FBR20	FBRA20	FBR25	FBRA25	FBR30	FBRA30	9-18	20/25	30	9-18	20/25			30	9-15	16/18	20/25	30
Two-Stage Full Visibility Mast	250	2500	900	1000	1200	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	3400	3450	3550	1745	1800	1800	105	110	120	125	5	3
	270	2700	900	1000	1200	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	3600	3650	3750	1845	1900	1900	105	110	120	125	5	3
	300	3000	900	1000	1200	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	3900	3950	4050	1995	2050	2050	105	110	120	125	5	3
	330	3300	900	1000	1200	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	4200	4250	4350	2145	2200	2200	400	405	400	405	5	3
	350	3500	900	1000	1200	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	4400	4450	4550	2245	2300	2300	400	405	400	405	5	3
	370	3700	900	1000	1200	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	4600	4650	4750	2345	2400	2400	400	405	400	405	5	3
	400	4000	900	1000	1200	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	4900	4950	5050	2495	2550	2550	400	405	400	405	5	3
	430	4300	-	950	1050	1000	1150	1200	1350	1400	1450	1500	1550	1750	1800	1950	2000	2450	2500	2950	3000	5200*	5250	5350	2745*	2800	2800	400*	405	400	405	5	3
	450	4500	-	950	1050	1000	1100	1200	1350	1400	1450	1500	1550	1700	1800	1900	2000	2400	2500	2900	3000	5400*	5450	5550	2845*	2900	2900	400*	405	400	405	5	3
	470	4700	-	850	950	950	1100	1200	1300	1400	1400	1500	1500	1600	1800	1850	2000	2350	2500	2850	3000	5600*	5650	5750	2945*	3000	3000	400*	405	400	405	5	3
500	5000	-	800	900	900	1000	1200	1300	1400	1400	1500	1500	1550	1800	1850	2000	2300	2500	2800	3000	5900*	5950	6050	3095*	3150	3150	400*	405	400	405	5	3	
Two-Stage Full Free Mast	250	2500	-	-	-	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	3400*	3450	3550	1745*	1800	1800	845*	850	850	750	5	3
	270	2700	-	-	-	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	3600*	3650	3750	1845*	1900	1900	945*	950	950	850	5	3
	300	3000	-	-	-	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	3900*	3950	4050	1995*	2050	2050	1095*	1100	1100	1000	5	3
	330	3300	-	-	-	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	4200*	4250	4350	2145*	2200	2200	1245*	1250	1250	1150	5	3
	350	3500	-	-	-	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	4400*	4450	4550	2245*	2300	2300	1345*	1350	1350	1250	5	3
	370	3700	-	-	-	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	4600*	4650	4750	2345*	2400	2400	1445*	1450	1450	1350	5	3
	400	4000	-	-	-	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	4900*	4950	5050	2495*	2550	2550	1595*	1600	1600	1500	5	3
	430	4300	-	-	-	1000	1150	1200	1350	1400	1450	1500	1550	1750	1800	1950	2000	2450	2500	2950	3000	5200*	5250	5350	2745*	2800	2800	1845*	1850	1850	1750	5	3
	450	4500	-	-	-	1000	1100	1200	1350	1400	1450	1500	1550	1700	1800	1900	2000	2400	2500	2900	3000	5400*	5450	5550	2845*	2900	2900	1945*	1950	1950	1850	5	3
	470	4700	-	-	-	950	1100	1200	1300	1400	1400	1500	1500	1600	1800	1850	2000	2350	2500	2850	3000	5600*	5650	5750	2945*	3000	3000	2045*	2050	2050	1950	5	3
500	5000	-	-	-	900	1000	1200	1300	1400	1400	1500	1500	1550	1800	1850	2000	2300	2500	2800	3000	5900*	5950	6050	3095*	3150	3150	2195*	2200	2200	2100	5	3	
Three-Stage Full Free Mast	350M	3500	-	-	-	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	4400	4450	4550	1745	1800	1900	845	850	850	850	5	3
	370M	3700	-	-	-	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	4600	4650	4750	1795	1850	1950	895	900	900	900	5	3
	400M	4000	-	-	-	1000	1200	1200	1400	1400	1500	1500	1600	1800	1800	2000	2000	2500	2500	3000	3000	4900	4950	5050	1895	1950	2050	995	1000	1000	1000	5	3
	430M	4300	-	-	-	950	1150	1200	1400	1400	1500	1500	1600	1750	1800	2000	2000	2500	2500	3000	3000	5200	5250	5350	1995	2050	2150	1095	1100	1100	1100	5	3
	450M	4500	-	-	-	950	1100	1200	1350	1400	1450	1500	1550	1700	1800	2000	2000	2500	2500	3000	3000	5400	5450	5550	2065	2150	2200	1165	1170	1200	1150	5	3
	470M	4700	-	-	-	900	1100	1200	1350	1400	1450	1500	1500	1650	1800	2000	2000	2500	2500	2850	3000	5600	5650	5750	2145	2200	2300	1245	1250	1250	1250	5	3
	500M	5000	-	-	-	900	1000	1200	1300	1400	1400	1500	1500	1550	1800	2000	2000	2500	2500	2750	3000	5900	5950	6050	2245	2300	2400	1345	1350	1350	1350	5	3
	530M	5300	-	-	-	850	950	1000	1150	1200	1250	1350	1350	1450	1650	1900	2000	2300	2500	2600	2800	6200	6250	6350	2345	2400	2500	1445	1450	1450	1450	5	3
	550M	5500	-	-	-	800	850	900	1050	1100	1150	1250	1300	1350	1500	1850	2000	2250	2500	2550	2600	6400	6450	6550	2400	2470	2570	1500	1505	1520	1520	5	3
	570M	5700	-	-	-	650	700	750	900	950	950	1000	1000	1050	1200	1800	1900	2150	2200	2250	2400	6600	6650	6750	2495	2550	2650	1595	1600	1600	1600	5	3
600M	6000	-	-	-	600	650	700	800	850	900	1000	1000	1050	1100	1750	1800	2100	2150	2200	2250	6900	6950	7050	2595	2640	2740	1695	1700	1690	1690	5	3	

* Except for FBR9

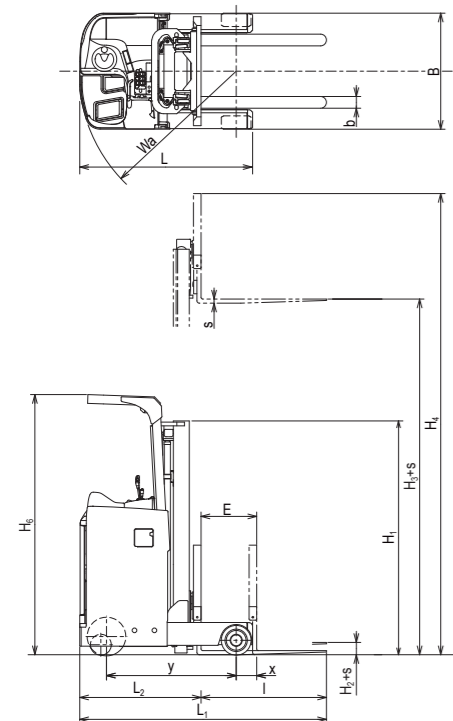
FBR9-12N



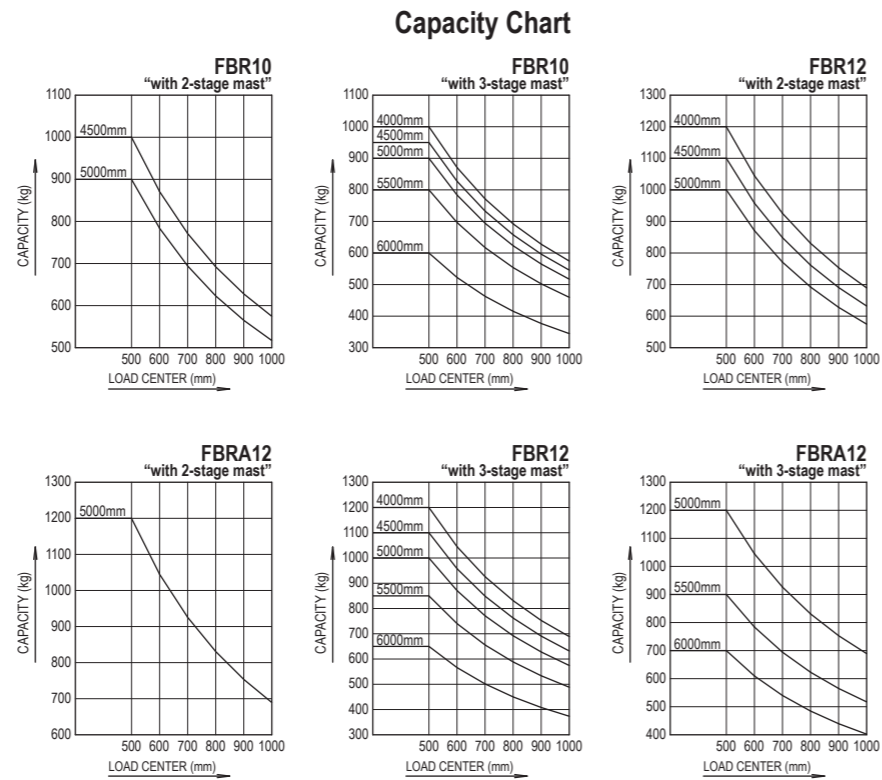
[Battery Front Loading model]



FBR(A)10-12



[Battery Front Loading model]



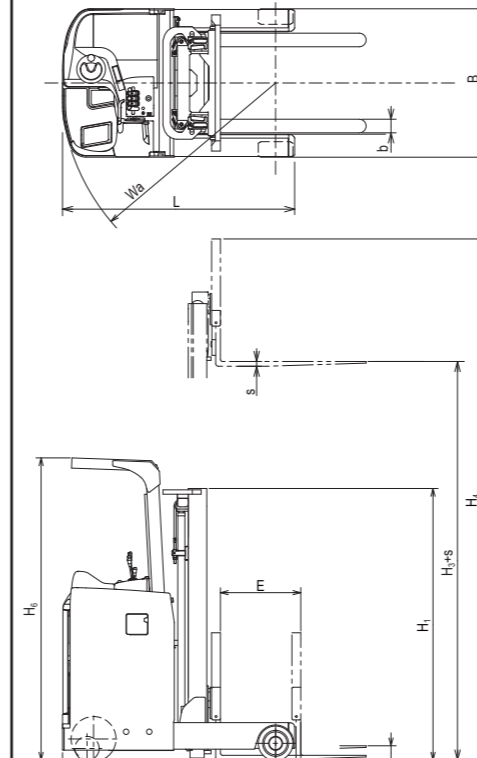
Standard equipment

- Hour Meter
- Battery Discharge Indicator
- Headlights
- Electric Power Steering
- Electric Horn
- Load Wheel Cover
- Waist Pad
- Automatic Suspension

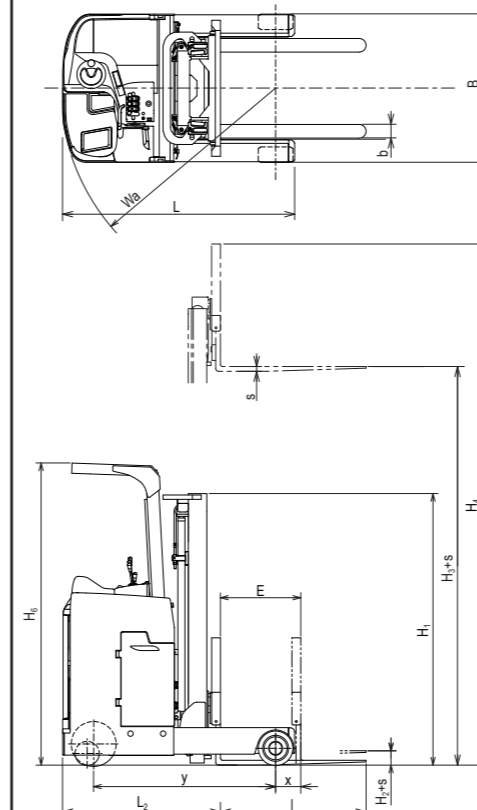
Batteries (5 hours rating)

- FBR9N : STD 280AH
- FBR10N/12N : STD 390AH
- FBR10/12 : STD 201AH, OPT 240AH
- FBR14 : STD 210AH, OPT 280AH, 320AH, 370AH
- FBR15/16/18 : STD 280AH, OPT 320AH, 370AH, 470AH
- FBR20/25 : STD 320AH, OPT 370AH, 390AH, 470AH, 575AH
- FBR30 : STD 370AH, OPT 390AH, 470AH, 575AH

FBR(A)(W)14-18



[Battery Front Loading model]



[Battery Side Loading model]

