

# STANDARD SPECIFICATIONS

	Item	Summary	Unit	FBR9 FBRM9	FBRA9 FBRMA9	FBR10 FBRM10	FBR13 FBRM13	FBRA13 FBRMA13	FBR10H FBRM10H	FBR13H FBRM13H	FBRA13H FBRMA13H	FBR14 FBRM14	FBRA14 FBRMA14	FBR15 FBRM15	FBRA15 FBRMA15	FBR18 FBRM18	FBRA18 FBRMA18	FBR20 FBRM20	FBRA20 FBRMA20	FBR25 FBRM25	FBRA25 FBRMA25	FBR30 FBRM30	FBRA30 FBRMA30		
Type	1	Capacity	Rated Capacity	kg	900	900	1000	1250	1250	1000	1250	1250	1350	1350	1500	1500	1800	1800	2000	2000	2500	2500	3000	3000	
	2	Load Center		mm	400	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	
	3	Motor Type			AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	
	4	Operator Type	Stand-on / Seated		Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on	Stand-on
Dimensions	5	Lift Height	H <sub>3</sub> +s	mm	3000	4000	3000	3000	4000	3000	3000	4000	3000	4000	3000	4000	3000	4000	3000	4000	3000	4000	3000	4000	
	6	Free Lift	H <sub>2</sub> +s	mm	405	405	405	405	405	405	405	405	405	405	405	405	405	405	400	400	400	400	400	400	
	7	Tilt Angle	Upward / Downward	a/b	deg.	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 / 3	5 / 3	5 / 3	
	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	1070/100/35	1070/100/35	1070/100/35	1070/100/35	1070/100/38	1070/100/38	1070/122/40	1070/122/40	1070/122/40	1070/122/40	1070/122/44	1070/122/44	
	9	Length	Overall Length	L <sub>1</sub>	mm	2075	2075	2075	2075	2155	2130	2130	2170	2200	2200	2200	2200	2205	2255	2320	2320	2320	2370	2430	2530
	10		Frame		mm	1392	1472	1472	1612	1692	1447	1597	1647	1597	1697	1697	1877	1877	1927	1901	2071	2071	2141	2176	2371
	11		To Fork Face	L <sub>2</sub>	mm	1005	1005	1005	1005	1085	1060	1060	1100	1130	1130	1130	1130	1135	1185	1250	1250	1250	1300	1360	1460
	12	Reach Stroke		E	mm	420	500	500	640	640	420	570	570	500	600	600	780	780	780	680	850	850	870	840	940
	13	Width	Overall Width	B	mm	990	990	990	990	990	1090	1090	1090	1090	1090	1090	1090	1090	1090	1165	1165	1215	1215	1230	1230
	14	Between Legs			mm	655	655	655	655	655	750	750	750	750	750	750	750	750	795	795	795	795	795	795	
	15	Frame			mm	990	990	990	990	990	1090	1090	1090	1090	1090	1090	1090	1090	1165	1165	1165	1165	1165	1165	
	16	Mast Lowered Height		H <sub>1</sub>	mm	1995	2495	1995	1995	2495	1995	1995	2495	1995	2495	1995	2495	1995	2495	2050	2550	2050	2550	2050	2550
	17	Mast Extended Height		H <sub>4</sub>	mm	3900	4900	3900	3900	4900	3900	3900	4900	3900	4900	3900	4900	3900	4900	3950	4950	3950	4950	4050	5050
	18	Overhead Guard Height		H <sub>6</sub>	mm	2200	2200	2220	2220	2220	2220	2220	2220	2220	2220	2220	2220	2220	2220	2330	2330	2330	2330	2330	2330
	19	Front Overhang		x	mm	175	175	175	175	175	175	175	175	175	175	175	180	180	180	180	180	180	180	180	
	20	Min. Turning Radius		Wa	mm	1260	1330	1330	1470	1560	1315	1460	1510	1460	1555	1555	1735	1735	1785	1750	1940	1940	2000	2040	2240
	21	90° Turning Aisle *	1100 x 1100 Pallet		mm	1705	1730	1730	1790	1840	1750	1810	1840	1820	1860	1860	1940	1940	1970	2000	2090	2120	2155	2175	2280
	22	90° Stacking Aisle *	1100 x 1100 Pallet	Ast	mm	2475	2480	2480	2510	2600	2530	2555	2605	2610	2625	2625	2680	2680	2730	2765	2840	2840	2885	2945	3085
	Performance	23	Travel Speed	Laden / Unladen	km/h	9.5 / 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	9.5 / 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	10 / 11.5	9.5 / 11.5	9.5 / 11.5	9.0 / 11.0	9.0 / 11.0
		24	Lifting Speed	Laden / Unladen	mm/s	275 / 450	275 / 450	265 / 450	240 / 450	240 / 450	340 / 540	320 / 540	320 / 540	310 / 540	310 / 540	310 / 540	310 / 540	300 / 540	300 / 540	290 / 490	290 / 490	270 / 490	270 / 490	220 / 400	220 / 400
		25	Max. Gradeability	3min. 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	10 / 14.3
	Wheel and Tires	26	Service Weight	Without Battery	kg	1450	1540	1480	1640	1800	1620	1740	1890	1730	1780	1720	1820	1780	1920	2310	2440	2400	2530	2640	2780
27		Tyres	Front, Load (Rubber)		φ255×114	φ255×114	φ255×114	φ255×114	φ255×114	φ255×114	φ255×114	φ255×114	φ255×114	φ254×114/ Urethane	φ254×114/ Urethane	φ254×114/ Urethane	φ254×114/ Urethane	φ254×114/ Urethane	φ267×114/ Urethane	φ267×114/ Urethane	φ267×135/ Urethane	φ267×135/ Urethane	φ267×135/ Urethane	φ267×135/ Urethane	
28			Rear, Drive (Rubber)		φ280×135	φ280×135	φ280×135	φ280×135	φ280×135	φ330×145	φ330×145	φ330×145	φ330×145	φ330×145	φ330×145	φ330×145	φ330×145	φ330×145	φ330×145	φ380×165	φ380×165	φ380×165	φ380×165	φ380×165	φ380×165
29			Rear, Caster (Rubber)		φ178×73	φ178×73	φ178×73	φ178×73	φ178×73	φ178×73	φ178×73	φ178×73	φ178×73	φ178×73	φ178×73	φ178×73	φ178×73	φ178×73	φ178×73	φ204×76	φ204×76	φ204×76	φ204×76	φ204×76/ Urethane	φ204×76/ Urethane
30		Wheel Base	y	mm	1040	1120	1120	1260	1260	1095	1245	1245	1245	1345	1345	1525	1525	1525	1530	1700	1700	1770	1800	2000	
31		Tread	Front	mm	876	876	876	876	876	976	976	976	976	976	976	976	976	976	1051	1051	1080	1080	1095	1095	
32			Rear	mm	580	580	580	580	580	680	680	680	680	680	680	680	680	680	726	726	726	726	726	726	
33		Service Brake	Mech. / Hydr. / Electr. / Pneum.		Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.	Mech.
34		Parking Brake	Foot / Hand / Deadman		Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman	Deadman
Drive unit and Control		35	Battery	Type		11D-F4N-E	11D-F4N-E	11D-F6A-E	11D-F6A-E	11D-F6A-E	11E-F3A-E	11E-F3A-E	11E-F3A-E	11D-F3C-E	11D-F3C-E	11F-F4N-E	11F-F4N-E	11F-F4N-E	11F-F4N-E	35T-F5A-E	35T-F5A-E	35T-F5A-E	35T-F5A-E	35T-GF370-E	35T-GF370-E
	36	Voltage / Capacity (5hr. Rating)		V/Ah	24 / 280	24 / 280	24 / 390	24 / 390	24 / 390	48 / 201	48 / 201	48 / 201	48 / 210	48 / 210	48 / 280	48 / 280	48 / 280	48 / 280	48 / 320	48 / 320	48 / 320	48 / 320	48 / 370	48 / 370	
	37	Weight		kg	230	230	290	290	290	340	340	340	400	400	450	450	450	450	520	520	520	520	560	560	
	38	Drive Motor	60min. Rating	kW	2.6	2.6	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	
	39		Control		IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	
	40	Hydraulic Motor	5min. Rating	kW	6.0	6.0	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	
	41		Control		IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	IGBT Inverter	
	42	Power Steering Motor	60min. Rating	kW	0.15	0.15	0.15	0.15	0.15	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	
	43		Control		FET	FET	FET	FET	FET	FET	FET	FET	FET	FET	FET	FET	FET	FET	FET	FET	FET	FET	FET	FET	FET
	44	Charger (option)	Type (Built-in / Stationary)		Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	
45	Charging Method			Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	
46	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	3 / 200	3 / 200	3 / 200	
47	Capacity		kVA	2.4	2.4	3.4	3.4	3.4	3.4	3.8	3.8	3.8	3.8	3.8	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	6.5	6.5	

\* Included 200mm for clearance.