

FBK PAC Series

Electric Counterbalance • 4 Wheel Pneumatic Tyres
80 Volt AC Power • **2.0 - 3.5 tonnes**

FB20K PAC
FB25K PAC
FB30K PAC
FB35K PAC

As powerful as a diesel... without the emissions

With the application of AC technology, this series gives exceptionally smooth, quiet, controlled, efficient and – above all – **powerful performance**. Suited to both indoor and outdoor use, it is ideal for heavy-duty situations in which the strength and speed of an IC engine are needed but emissions or noise are not acceptable. Everything about this truck has been designed for long life and low operating costs.

What's more, it is protected against moisture and dust – so even in hostile environments it won't let you down.

The FBK PAC shares many of the award-winning qualities of its predecessors. These include comfort, visibility, control, energy efficiency, ease of service, rapid troubleshooting... and the ability to be programmed, without any special tools, to the needs of each application and driver.

Frame and body

- **Robust frame** offers exceptional durability in all working conditions.
- **Compact dimensions** – together with responsive steering and high stability – allow excellent manoeuvrability and high productivity, however tight the space or uneven the ground.
- **Low centre of gravity** means stable, safe operation.

Mast and fork assembly

- **Exceptional visibility** – through the revolutionary high-strength, clear-view mast – maximises driver safety and output.

Drive

- **Powerful AC drive motor** provides high torque – even at fast speeds – for rapid acceleration, great ramp performance and smooth, quiet, controlled operation.
- **Controlled rollback** – and outstanding ramp performance – allows safe and efficient operation on gradients.
- **High energy efficiency of AC motors** – together with highly efficient energy recycling through strong regenerative braking – means longer shifts and less recharging.
- **Sealing of drive motor** protects its components from moisture and dust – for reliable use in tough environments.
- **Pneumatic super-elastic tyres** give smooth ride over a variety of surfaces – ideal for indoor-outdoor operation.

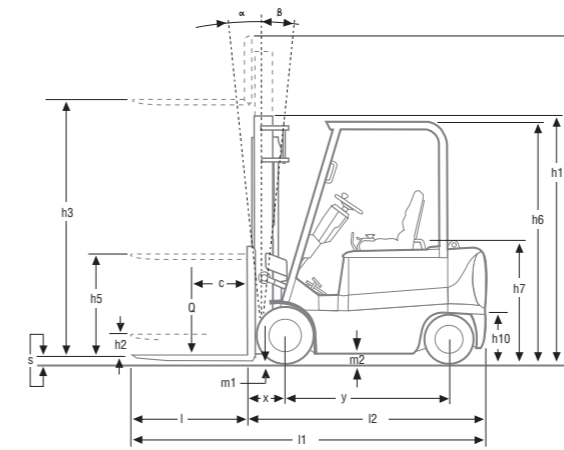


FBK PAC Series

Electric Counterbalance • 4 Wheel Pneumatic Tyres

80 Volt AC Power • 2.0 - 3.5 tonnes

Characteristics							
1.1	Manufacturer (abbreviation)		Mitsubishi	Mitsubishi	Mitsubishi	Mitsubishi	
1.2	Manufacturer's model designation		FB20K PAC	FB25K PAC	FB30K PAC	FB35K PAC	
1.3	Power source: (battery, diesel, LP gas, petrol)		Battery	Battery	Battery	Battery	
1.4	Operator type: pedestrian, (operator)-standing, -seated		Driver seated	Driver seated	Driver seated	Driver seated	
1.5	Load capacity	Q	(kg)	2000	2500	3000	3500
1.6	Load centre distance	c	(mm)	500	500	500	500
1.8	Load distance, axle to fork face	x	(mm)	426	426	490	490
1.9	Wheelbase	y	(mm)	1520	1520	1690	1690
Weight							
2.1	Truck weight, without load / including battery (simplex mast, lowest lift height)		kg	4163	4378	4941	5375
2.2	Axle loading with maximum load, front/rear (simplex mast, lowest lift height)		kg	5263 / 900	6190 / 688	7360 / 580	8164 / 711
2.3	Axle loading without load, front/rear (simplex mast, lowest lift height)		kg	2046 / 2117	2164 / 2214	2595 / 2346	2604 / 2771
Wheels, Drive Train							
3.1	Tyres: V=solid, L=pneumatic, SE=solid pneumatic - front/rear			SE / SE	SE / SE	SE / SE	SE / SE
3.2	Tyre dimensions, front			23x9-10	23x9-10	28x9-15	250-15
3.3	3.03 all trucks Tyre dimensions, rear			18x7-8	18x7-8	18x7-8	18x7-8
3.5	Number of wheels, front/rear (x=driven)			2x / 2	2x / 2	2x / 2	2x / 2
3.6	Track width (centre of tyres), front	b10	(mm)	990	990	990	990
3.7	Track width (centre of tyres), rear	b11	(mm)	898	898	898	898
Dimensions							
4.1	Mast tilt, forwards/backwards	α/β	$^\circ$	6/8	6/8	6/8	6/8
4.2	Height with mast lowered (see tables)	h1	(mm)	2142	2142	2155	2284
4.3	Free lift (see tables)	h2	(mm)	100	100	100	100
4.4	Lift height (see tables)	h3	(mm)	3300	3300	3270	3300
4.5	Overall height with mast raised	h4	(mm)	4355	4355	4325	4340
4.7	Height to top of overhead guard	h6	(mm)	2200	2200	2250	2259
4.8	Seat height	h7	(mm)	1105	1105	1155	1164
4.12	Tow coupling height	h10	(mm)	-	-	-	-
4.19	Overall length	l1	(mm)	3319	3344	3592	3647
4.20	Length to fork face (includes fork thickness)	l2	(mm)	2249	2274	2522	2577
4.21	Overall width	b1/b2	(mm)	1190	1190	1230	1230
4.22	Fork dimensions (thickness, width, length)	s / e / l	(mm)	40x110x1070	40x110x1070	45x125x1070	45x125x1070
4.23	Fork carriage to DIN 15 173 A/B/no			2A	2A	3A	3A
4.24	Fork carriage width	b3	(mm)	1000	1000	1000	1000
4.31	Ground clearance under mast, with load	m1	(mm)	110	110	117	117
4.32	Ground clearance at centre of wheelbase, with load (forks lowered)	m2	(mm)	120	120	130	130
4.33	Working aisle width with 1000 x1200 mm pallets, crosswise	Ast	(mm)	3576	3596	3870	3920
4.34	Working aisle width with 800 x1200 mm pallets, crosswise	Ast	(mm)	3376	3396	3670	3720
4.35	Turning circle radius	Wa	(mm)	1950	1970	2180	2230
4.36	Minimum distance between centres of rotation	b13	(mm)	-	-	-	-
5.1	Travel speed, with/without load		km/h	20.0 / 20.0	20.0 / 20.0	20.0 / 20.0	16.5 / 18.0
5.2	Lifting speed, with/without load		m/s	0.55 / 0.65	0.50 / 0.65	0.45 / 0.60	0.40 / 0.55
5.3	Lowering speed, with/without load		m/s	0.50 / 0.50	0.50 / 0.50	0.50 / 0.50	0.50 / 0.50
5.5	Rated drawbar pull, with/without load		N	8600 / 8850	8400 / 8900	7500 / 8050	7300 / 8000
5.6	Maximum drawbar pull, with/without load (5 min short duty)		N	12650 / 12750	12200 / 12700	11000 / 11600	10800 / 11500
5.7	Gradeability, with/without load		%	18.7 / 29.4	16.5 / 27.9	12.7 / 22.1	11.1 / 20.1
5.8	Maximum gradeability, with/without load		%	20.9 / 32.9	18.5 / 31.1	14.2 / 24.6	12.5 / 22.4
5.9	Acceleration time (10 metres) with/without load		s	4.1 / 3.6	4.3 / 3.7	5.1 / 4.5	5.2 / 4.6
5.10	Service brakes (mechanical/hydraulic/electric/pneumatic)			Hydraulic	Hydraulic	Hydraulic	Hydraulic
Electric motors							
6.1	Drive motor capacity (60 min. short duty)		kW	14.5	14.5	14.5	14.5
6.2	Lift motor output at 15% duty factor		kW	20.0	20.0	20.0	20.0
6.3	Battery to DIN 43 531/35/36 A/B/C/no			43.536A	43.536A	43.536A	43.536A
6.4	Battery voltage/capacity at 5-hour discharge		V / Ah	80 / 600	80 / 600	80 / 750	80 / 750
6.5	Battery weight		kg	1385	1385	1872	1872
Miscellaneous							
8.1	Type of drive control			MOSFET variable	MOSFET variable	MOSFET variable	MOSFET variable
8.2	Maximum operating pressure for attachments		bar	185	185	185	185
8.3	Oil flow for attachments		l/min				
8.4	Noise level, value at operator's ear (EN 12053)		dB(A)				
8.5	Towing coupling design / DIN type, ref.						



$A_{st} = W_a + x + l_6 + a$
 A_{st} = Working aisle width
 W_a = Turning radius
 a = Safety clearance = 2 x 100 mm
 l_6 = Pallet length (800 or 1000 mm)
 b_{12} = Pallet width (1200 mm)

h1 Height with mast lowered
 h2 Standard free lift
 h3 Lift height
 h4 Height with mast raised
 h5 Full free lift
 Q Lifting capacity, rated load
 c Load centre (distance)

Mast Performance and Capacity

Mast Type	FB20K-FB25K PAC				FB20K PAC	FB25K PAC
	h3 mm	h1 mm	h4 ^{1,2} mm	h2 / h5 ³ mm	Q @ c=500 mm kg	Q @ c=500 mm kg
Simplex	2000 ⁴	1495	3055	100	2000	2500
	2570 ⁴	1790	3625	100	2000	2500
	3000 ⁴	1995	4055	100	2000	2500
	3300 ⁴	2145	4355	100	2000	2500
	3740	2410	4795	100	2000	2500
	4100	2590	5155	100	2000	2500
	4500	2800	5555	100	2000	2475
	5000	3050	6055	100	2000	2400
	5500	3300	6555	100	1975	2300
	6000	3550	7055	100	1700	1850
Duplex	3000 ⁴	1995	4055	940	2000	2500
	3300 ⁴	2145	4355	1090	2000	2500
	3700	2410	4755	1355	2000	2500
	4020	2590	5075	1535	2000	2500
Triplex	3730 ⁴	1805	4785	750	2000	2500
	4030 ⁴	1905	5085	850	2000	2500
	4300 ⁴	1995	5355	940	2000	2500
	4750 ⁴	2145	5805	1090	2000	2400
	5060	2265	6115	1210	2000	2325
	5500	2410	6555	1355	1950	2250
	5990	2590	7045	1535	1850	2075
	6500	2850	7555	1795	1525	1675
	7000	3050	8055	1995	1200	1350

Mast Type	FB30K PAC					FB35K PAC				
	h3 mm	h1 mm	h4 ^{1,2} mm	h2 / h5 ³ mm	Q @ c=500 mm kg	h3 mm	h1 mm	h4 ^{1,2} mm	h2 / h5 ³ mm	Q @ c=500 mm kg
Simplex	2000 ⁴	1530	3055	100	3000	2000 ⁴	1460	3055	100	3500
	2560 ⁴	1810	3615	100	3000	2570 ⁴	1740	3625	100	3500
	3030 ⁴	2045	4085	100	3000	3000 ⁴	2180	4055	100	3500
	3270 ⁴	2165	4325	100	3000	3300 ⁴	2300	4355	100	3500
	3700	2430	4755	100	3000	3720	2510	4775	100	3500
	4000	2610	5055	100	3000	4000	2765	5055	100	3500
	4500	2870	5555	100	2900	4500	3010	5555	100	3425
	5000	3120	6055	100	2800	5000	3260	6055	100	3300
	5500	3370	6555	100	2700	5500	3510	6555	100	3200
	6000	3635	7055	100	2600	6000	3760	7055	100	2875
Duplex	3000 ⁴	2035	4055	980	3000	3010 ⁴	2180	4065	1125	3500
	3250 ⁴	2165	4305	1110	3000	3300 ⁴	2300	4355	1245	3500
	3700	2430	4755	1375	3000	3720	2625	4775	1570	3500
	4010	2610	5065	1555	3000	4000	2765	5055	1710	3500
Triplex	3690 ⁴	1825	4745	770	3000	3730 ⁴	1940	4785	885	3500
	3990 ⁴	1925	5045	870	3000	4010 ⁴	2060	5065	1005	3500
	4320 ⁴	2045	5375	990	2900	4390 ⁴	2180	5445	1125	3425
	4700 ⁴	2165	5755	1110	2825	4700 ⁴	2300	5755	1245	3350
	5060	2285	6115	1230	2750	5030	2445	6085	1390	3275
	5450	2430	6505	1375	2675	5580	2625	6635	1570	3150
	5970	2610	7025	1555	2575	6000	2765	7055	1710	3050
	6470	2870	7525	1815	2475	6510	2940	7565	1885	2725
	7000	3070	8055	2015	2000	7000	3135	8055	2080	2100

¹ The h4 dimensions of the simplex mast without load backrest will differ from the table, please consult your dealer for detailed information.
² The h4 dimensions of the duplex/triplex mast without load backrest will differ from the table, please consult your dealer for detailed information.
³ The h5 dimensions of the duplex/triplex mast without load backrest will differ from the table, please consult your dealer for detailed information.
⁴ Masts with h1 lower than Overhead Guard Height

Battery Compartment

	FB20K PAC	FB25K PAC	FB30K PAC	FB35K PAC
Length (min)	mm	718	718	863
Width (min)	mm	1035	1035	1035
Height (min)	mm	784	784	784
Minimum Weight	kg	1385	1385	1872



Steering system

- **Hydrostatic power steering** means precise control with minimal effort.
- **Brushless DC steering motor** – the most efficient unit for this application – gives a perfect balance between efficiency and economy.

Brakes

- **Highly efficient regenerative braking** means effective control and reduced brake wear.
- **Partially sealed drum brakes** ensure effectiveness, reliability and long component life.

Hydraulics

- **Powerful AC hydraulic motor** provides high torque for rapid but smooth – and controlled – lifting and lowering.

Electrical and control systems

- **Advanced MOSFET controller** adjusts acceleration, travel speed, lift/lower speed and braking to suit the load, application and driver – for great versatility.
- **Performance setting** – including pre-set modes – allows instant programming without special tools.
- **Timer programming** adjusts seat switch and 'chat' settings to required levels.

- **On-board diagnostics and fault memory folder** keep operator and service engineer aware of any problems, speed up servicing and help prevent damage.

- **Modular design of controller** allows main components to be individually exchanged.

- **Comprehensive lighting system** includes autolight – with adjustable sensitivity – which automatically activates in dimly lit areas for see-and-be-seen safety.

Operator compartment and controls

- **Low step** – together with non-slip surfaces, grab handle and rounded overhead guard – gives easy on-off access from both sides.

- **Full-suspension, fully adjustable seat** – with hip restraints and belt – keeps driver safe, comfortable and alert through the longest of shifts.

- **Vinyl seat cover** offers wipe-clean simplicity.

- **Driver-friendly fingertip controls** and ergonomically designed operator compartment reduce driver fatigue and increase precision.

- **Clear display alerts drivers and service engineers to potential problems** – helping to avoid damage and encourage maintenance.

Other features

- **Long service interval** – 500 hours – reduces downtime and maintenance bills.

- **Rapid access features** give quick and easy entry to all areas for checks and maintenance.

Options

- **Audible reversing alarm**
- **Full-suspension cloth seat**
- **Foot directional control**
- **DC/DC converter**
- **Road light kit**



when
reliability
is **everything**

Developed for outstanding performance and genuine value for money, the award-winning* range of Mitsubishi forklift trucks and warehouse equipment is built to a higher specification to maximize productivity and ensure utter reliability... whatever the application.

It's what you'd expect from one of the world's largest corporations whose companies are at the leading edge of technologies where performance, quality and dependability can never be compromised.

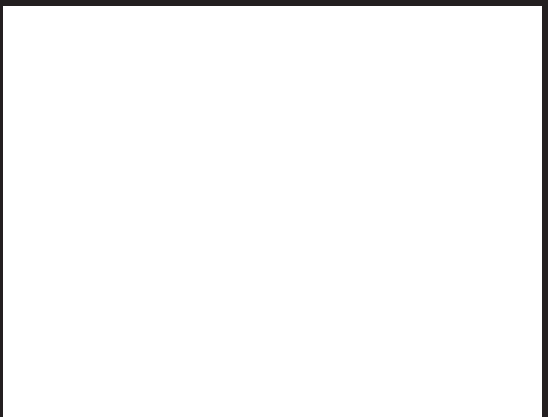
It means that, from a single safe source, we can meet 98% of all handling requirements, supplied to you via a range of competitive finance options including outright purchase, rental or leasing. So your local dealer can advise you on precisely the right product for your application... and your budget.

Moreover, because we understand how much you depend on your Mitsubishi forklift truck, we deliver the highest levels of customer support.

Through a network of carefully selected dealerships, we provide quality maintenance and customer care programmes including a choice of warranties that give complete peace of mind. Every dealership holds extensive stocks of manufacturer-approved parts, backed by a central store that holds literally millions of items constantly in stock and achieves a first-pick fulfilled rate of 97%. So your truck can be fixed first time, virtually every time.



* Mitsubishi Forklift Trucks has won **four** separate Fork Lift Truck Association Annual Awards for Excellence covering the areas of **Ergonomics**, the **Environment** and **Innovation**.



CESM0736 (09/08)
© 2008 MCFE
Printed in The Netherlands

mitforklift@mcf.nl
www.mitforklift.com

NOTE: Performance specifications may vary depending on standard manufacturing tolerances, vehicle condition, types of tyres, floor or surface conditions, applications or operating environment. Trucks may be shown with non-standard options. Specific performance requirements and locally available configurations should be discussed with your distributor of Mitsubishi forklift trucks. Mitsubishi follows a policy of continual product improvement. For this reason, some materials, options and specifications could change without notice.