

3,000-6,000 lb Capacity Electric Cushion Tire Forklift Trucks



Our N-Generation electric cushion tire forklift trucks deliver exceptional value through a combination of innovative design features. They incorporate the latest in AC technology for enhanced performance and improved energy efficiency, including an industry first modular AC control system that implements the latest MOSFET and heat dissipation technology for reliability and energy efficiency. These 4-wheel electrics are also equipped with an innovative pressure sensing hydraulic control valve specifically designed for electric forklift trucks. This helps to reduce heat and stress on the hydraulic components and contributes to the forklift's lower product lifecycle costs.



Specifications

CHARACTERISTICS				FBC15N		FBC18N				
1	Capacity	at rated load center	lb	kg	3,000	1,500	3,500	1,800		
2		at load center – distance	in	mm	24.0	500	24.0	500		
3	Power	diesel, gasoline, LP gas, electric		electric		electric				
4	Tire type	cushion, pneumatic		cushion		cushion				
5	Wheels (x = driven)	number front / rear		2x / 2		2x / 2				
DIMENSIONS										
10	Lift	maximum fork height with rated load		in	mm	171	4,340	171	4,340	
11	Lift with standard two-stage mast	maximum fork height		in	mm	130	3,320	130	3,320	
12		free fork height		in	mm	4.5	115	4.5	115	
13	Forks	thickness x length x width		in	mm	1.4 x 42.0 x 3.9	35.0 x 1,070 x 100	1.4 x 42.0 x 3.9	35.0 x 1,070 x 100	
	Fork spacing	out-to-out minimum / maximum		in	mm	9.4 / 32.0	240 / 818	9.4 / 32.0	240 / 818	
14	Tilt	forward / backward		deg		5 / 6		5 / 6		
15	Overall dimensions	length to fork face		in	mm	78.0	1,980	78.0	1,980	
16		width	standard		in	mm	37.0	945	37.0	945
			w/wide stance drive wheels		in	mm	39.0	996	39.0	996
17		height	with lowered mast				83.0	2,105	83.0	2,105
18			seat height to SIP		in	mm	47.6	1,209	47.6	1,209
19			to top of overhead guard		in	mm	86.0	2,180	86.0	2,180
20	with extended mast		in	mm	180	4,570	180	4,570		
21	Minimum outside turning radius				in	mm	70.5	1,790	70.5	1,790
22	Load moment constant				in	mm	14.8	376	14.8	376
23	Minimum aisle – 90 deg stack – zero clearance + load length				in	mm	85.0	2,165	85.0	2,165
PERFORMANCE										
24	Speeds	travel loaded / empty		36V	mph	km/h	10.2 / 11.2	16.4 / 18.0	9.3 / 10.8	14.9 / 16.5
				48V	mph	km/h	11.3 / 11.3	18.2 / 18.2	11.3 / 11.3	18.2 / 18.2
25		lift speed loaded / empty		36V	fpm	m/s	75.0 / 106	0.38 / 0.54	71.0 / 106	0.36 / 0.50
				48V	fpm	m/s	104 / 140	0.53 / 0.71	96.0 / 140	0.49 / 0.66
26	lowering speed loaded / empty		36V	fpm	m/s	98.0 / 81.0	0.50 / 0.41	98.0 / 81.0	0.50 / 0.41	
			48V	fpm	m/s	98.0 / 81.0	0.50 / 0.41	98.0 / 81.0	0.50 / 0.41	
28	Gradeability	loaded at 1 mph (1.6 kph)		36V	%		24.0		21.0	
				48V	%		25.0		22.0	
		maximum empty		36V	%		23.0		19.0	
				48V	%		23.0		19.0	
WEIGHT										
29	Empty	w/minimum weight battery		lb	kg	6,200	2,825	6,800	3,080	
30	Axle load	with rated load		front	lb	kg	8,000	3,750	8,800	4,200
				rear	lb	kg	1,200	570	1,480	660
		without load		front	lb	kg	2,500	1,130	2,320	1,050
				rear	lb	kg	3,725	1,690	4,425	2,000
CHASSIS										
31	Tire size	front, standard cushion tires		in	mm	18.0 x 6.0 x 12.2	457 x 152 x 308	18.0 x 6.0 x 12.2	457 x 152 x 308	
		rear cushion tires		in	mm	14.0 x 4.5 x 8.0	356 x 114 x 203	14.0 x 4.5 x 8.0	356 x 114 x 203	
32	Wheel base			in	mm	46.0	1,170	46.0	1,170	
33	Tread width	front, standard cushion tires		in	mm	31.0	793	31.0	793	
34		rear cushion tires		in	mm	32.5	826	32.5	826	
35	Ground clearance	at lowest point @ mast		in	mm	3.0	75.0	3.0	75.0	
36		at center of wheel base		in	mm	4.6	118	4.6	118	
37	Brakes	service		type		foot-operated, hydraulic		foot-operated, hydraulic		
38		parking		type		hand-operated, mechanical		hand-operated, mechanical		
POWERTRAIN										
39	Battery	type				lead-acid		lead-acid		
40		maximum capacity @ 6 hr. discharge rate		36V	Ah	kWh	880	31.7	880	31.7
41				48V	Ah	kWh	770	37.0	770	37.0
42		weight, minimum		lb	kg	1,650	750	1,650	750	
43	Motors	traction output (60 min. rating)		36/48	HP	kW	8.3 / 9.2	6.2 / 6.8	8.3 / 9.2	6.2 / 6.8
44		lift output standard (20% rating)		36/48	HP	kW	8.2 / 11.6	6.2 / 8.8	8.2 / 11.6	6.2 / 8.8
		lift output optional (20% rating)		36/48	HP	kW	9.9 / 15.7	7.4 / 11.7	9.9 / 15.7	7.4 / 11.7
45	Controls	drive		type		AC transistor		AC transistor		
46		hydraulic		std		AC transistor		AC transistor		
47	Relief pressure	for attachments		psi	bar	2,250	155	2,250	155	
48	Noise level	mean value at operator's ear		dB(A)		NA		NA		

	FBC20N		FBC25N		FBC25EN		FBC30N	
00	4,000	2,000	5,000	2,500	5,000	2,500	6,000	3,000
0	24.0	500	24.0	500	24.0	500	24.0	500
	electric		electric		electric		electric	
	cushion		cushion		cushion		cushion	
	2x / 2		2x / 2		2x / 2		2x / 2	
40	188	4,790	170	4,340	188	4,790	200	5,100
20	131	3,340	131	3,340	131	3,340	130	3,310
5	5.1	130	5.1	130	5.1	130	5.3	135
170 x 100	1.6 x 42.0 x 3.9	40.0 x 1,070 x 100	1.6 x 42.0 x 3.9	40.0 x 1,070 x 100	1.6 x 42.0 x 3.9	40.0 x 1,070 x 100	1.8 x 42.0 x 4.9	45.0 x 1,070 x 125
818	9.4 / 32.0	240 / 818	9.4 / 32.0	240 / 818	9.4 / 32.0	240 / 818	9.4 / 32.0	240 / 818
	5 / 6		5 / 6		5 / 6		5 / 6	
80	82.0	2,085	82.0	2,085	86.0	2,185	89.0	2,255
5	41.5	1,055	41.5	1,055	41.5	1,055	43.5	1,103
6	43.5	1,103	43.5	1,103	43.5	1,103	NA	
05	83.5	2,110	83.5	2,110	83.5	2,110	83.5	2,110
09	50.3	1,278	50.3	1,278	50.3	1,278	50.3	1,278
80	87.0	2,210	87.0	2,210	87.0	2,210	87.0	2,210
70	180	4,570	180	4,570	180	4,570	179	4,550
90	74.5	1,890	74.5	1,890	78.5	1,990	80.5	2,045
6	15.5	394	15.5	394	15.5	394	16.0	406
65	90.0	2,285	90.0	2,285	94.0	2,385	96.5	2,455
17.3	9.6 / 10.8	15.5 / 17.4	9.6 / 10.8	15.5 / 17.4	9.6 / 10.8	15.5 / 17.4	9.1 / 10.6	14.6 / 17.1
18.2	11.3 / 11.3	18.2 / 18.2	11.3 / 11.3	18.2 / 18.2	11.3 / 11.3	18.2 / 18.2	11.3 / 11.3	18.2 / 18.2
0.54	63.0 / 106	0.32 / 0.54	55.0 / 106	0.28 / 0.54	55.0 / 106	0.28 / 0.54	49.0 / 93.0	0.25 / 0.47
0.71	89.0 / 124	0.45 / 0.63	75.0 / 128	0.38 / 0.65	75.0 / 128	0.38 / 0.65	71.0 / 108.0	0.36 / 0.55
0.41	98.0 / 98.0	0.50 / 0.50	98.0 / 98.0	0.50 / 0.50	98.0 / 98.0	0.50 / 0.50	98.0 / 89.0	0.50 / 0.45
0.41	98.0 / 98.0	0.50 / 0.50	98.0 / 98.0	0.50 / 0.50	98.0 / 98.0	0.50 / 0.50	98.0 / 89.0	0.50 / 0.45
	27.0		25.0		25.0		23.0	
	27.0		26.0		26.0		23.0	
	24.0		23.0		24.0		21.0	
	24.0		23.0		24.0		21.0	
75	8,100	3,700	9,200	4,200	9,000	4,100	10,400	4,725
00	10,500	4,950	12,600	5,900	12,300	5,800	14,100	6,700
0	1,600	750	1,650	780	1,740	820	2,290	1,070
50	3,400	1,540	3,675	1,670	3,650	1,660	3,725	1,680
10	4,750	2,150	5,600	2,525	5,400	2,440	6,700	3,050
2 x 308	21.0 x 7.0 x 15.0	533 x 178 x 381	21.0 x 7.0 x 15.0	533 x 178 x 381	21.0 x 7.0 x 15.0	533 x 178 x 381	21.0 x 8.0 x 15.0	533 x 203 x 381
4 x 203	16.0 x 5.0 x 10.5	406 x 127 x 267	16.0 x 5.0 x 10.5	406 x 127 x 267	16.0 x 5.0 x 10.5	406 x 127 x 267	16.0 x 5.0 x 10.5	406 x 127 x 267
70	50.5	1,280	50.5	1,280	54.5	1,380	54.5	1,380
3	34.5	875	34.5	875	34.5	875	35.5	900
6	35.5	900	35.5	900	35.5	900	35.5	900
.0	3.0	76.0	3.0	76.0	3.0	76.0	3.0	77.0
8	4.9	124	4.9	124	4.9	124	4.9	124
ilic	foot-operated, hydraulic		foot-operated, hydraulic		foot-operated, hydraulic		foot-operated, hydraulic	
anical	hand-operated, mechanical		hand-operated, mechanical		hand-operated, mechanical		hand-operated, mechanical	
	lead-acid		lead-acid		lead-acid		lead-acid	
.7	1,320	47.5	1,320	47.5	1,540	55.4	1,540	55.4
.0	990	47.5	990	47.5	1,100	52.8	1,100	52.8
0	2,200	1,000	2,600	1,180	3,100	1,410	3,100	1,410
6.8	12.1 / 14.2	9.0 / 10.6	12.1 / 14.2	9.0 / 10.6	12.1 / 14.2	9.0 / 10.6	13.7 / 17.2	10.2 / 12.8
8.8	10.0 / 14.1	7.5 / 10.5	10.0 / 14.1	7.5 / 10.5	10.0 / 14.1	7.5 / 10.5	10.0 / 14.1	7.5 / 10.5
11.7	12.6 / 20.2	9.4 / 15.1	12.6 / 20.2	9.4 / 15.1	12.6 / 20.2	9.4 / 15.1	12.6 / 20.2	9.4 / 15.1
	AC transistor		AC transistor		AC transistor		AC transistor	
	AC transistor		AC transistor		AC transistor		AC transistor	
5	2,250	155	2,250	155	2,250	155	2,250	155
	NA		NA		NA		NA	

Call-out numbers shown in the diagram below correspond to the first column of the specifications chart.

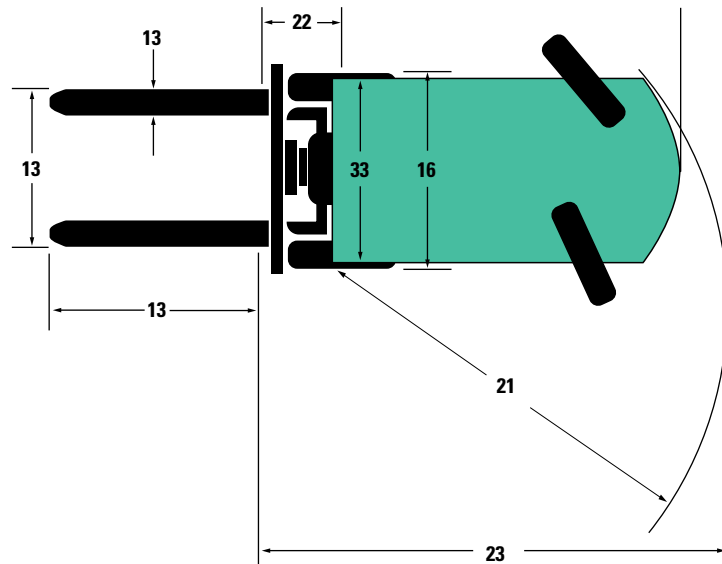
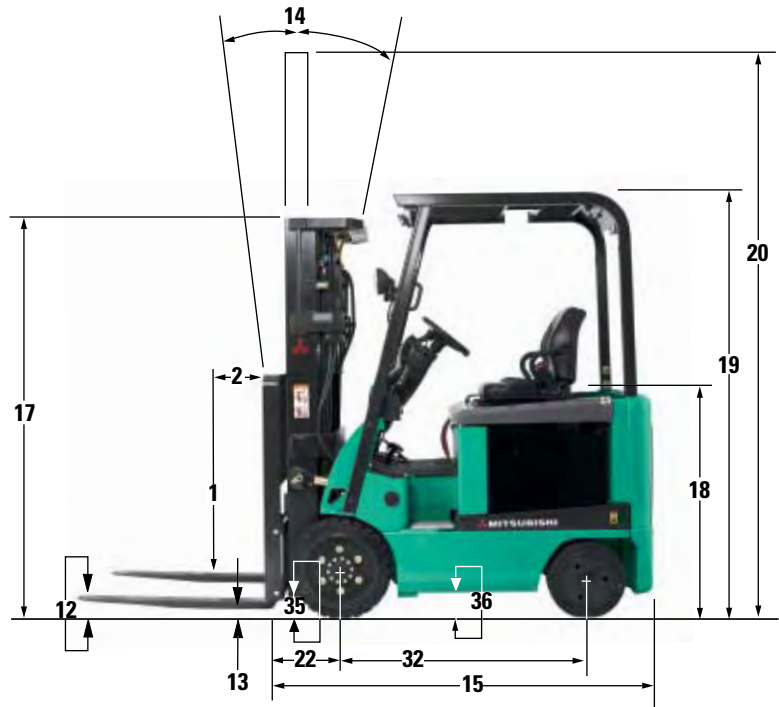
SAFETY STANDARDS

These trucks meet American National Standards Institute/ Industrial Truck Standards Development Foundation, ANSI/ITSDF B56.1. UL-Classified by Underwriters Laboratories, Inc., as to fire and electric shock hazard only; Type E, EE (optional), Industrial Trucks. Users should be aware of, and adhere to, applicable codes and regulations regarding operator training, use, operation and maintenance of powered industrial trucks, including:

- ANSI/ITSDF B56.1.
- NFPA 505, fire safety standard for powered industrial trucks -type designations, areas of use, maintenance and operation.
- Occupational Safety and Health Administration (OSHA) regulations that may apply.

Specifications, equipment, technical data, photos and illustrations based on information at time of printing and subject to change without notice. Some products may be shown with optional equipment.

NOTE: These specifications assume the use of drive axles, tires and tilt angles specified. Any modification to specifications, or any other combination of specifications made after the shipment of the truck, requires prior written approval from Mitsubishi Caterpillar Forklift America Inc. ("MCFA"). (See ANSI/ITSDF B56.1.) Also be advised that overall operating visibility may be affected by the mast configuration and mast options of your forklift truck. Therefore, you may need to add ancillary [auxiliary] devices or modify your operating practices. Consult your dealer for further information.



BATTERY COMPARTMENT INFORMATION*

MODEL	STANDARD BATTERY COMPARTMENT										
		FBC15N		FBC18N		FBC20N		FBC25N		FBC30N	
Length	in mm	27.80	708	27.80	708	30.50	775	30.50	775	34.40	875
Width	in mm	35.80	906	35.80	906	39.90	1,003	39.90	1,003	39.90	1,003
Height	in mm	23.30	592	23.30	592	23.30	592	23.30	592	23.30	592
Roller Height from Ground	in mm	16.6	442	16.6	442	19.0	483	19.0	483	19.0	483
Minimum Battery Weight	lbs kg	1,650	750	1,650	750	2,200	1,000	2,600	1,800	3,100	1,405

* Deduct 0.5 in (13.0 mm) from each dimension for maximum battery size.

Quality

Standard Features

- 36/48V Mitsubishi PM-1000 MOSFET transistor AC traction and hydraulic control system
- AC induction drive motor
- AC induction hydraulic motor
- Five pre-programmed performance modes
- Display panel includes:
 - Five digit hour meter for vehicle, drive motor and pump motor
 - Fault indicator
 - Programmable service indicator
 - Park brake audible and visual warning
 - Brake fluid level indicator
 - Seat belt audible and visual warning
 - Speedometer
 - Real-time clock
 - Battery discharge indicator
- Integrated Presence System (IPS)
- Over temperature protection for control system, drive motor and hydraulic motor
- High strength mast and carriage designs
- Pressure sensing hydraulic control valve
- All steel integral battery restraint system
- Tilt steering column
- Cowl mounted hydraulic levers
- Contoured vinyl seat with operator restraint system
- Electronic back-up alarm

Comfort And Convenience

A contoured vinyl seat includes a cinch resistant comfort-stretch seat belt for comfortable reverse operation. Fore/aft seat adjustment and a tilt steering column accommodates all operators. A rubber floor mat also provides good traction when entering and leaving the vehicle.

Reliability

Control System

The 36/48V Mitsubishi PM-1000 AC control system utilizes the latest in thermal management technology to eliminate the need for fans. The system provides protection for the drive motor, hydraulic motor and control components by reducing power in the event of an engine overheating.

Drive And Hydraulics

AC induction drive motors deliver faster acceleration, higher top speeds and quicker deceleration while reducing battery consumption. Hydraulic functions are powered by a standard high performance AC induction motor, an expensive option on many competitive models. An innovative pressure sensing hydraulic control valve allows the hydraulic system to operate at a lower pressure than many competitive trucks, reducing heat and overall wear and tear on the system.

Mast Design

The design of the mast emphasizes both visibility and strength to improve operator productivity. Strength is maintained with deep channel webs that allow the use of larger mast rollers than most competitive designs, enhancing the rigidity of the mast for improved handling of heavy loads at higher lifting heights.

Diagnostics And Service

A user-friendly diagnostic package allows troubleshooting via laptop computer. Whether accessed via the display panel or laptop computer, access to 32 fault codes allows

Value

pinpoint troubleshooting. By reducing downtime with 500 hour service intervals, planned maintenance is reduced by as much as one-half versus other brands, reducing lifetime ownership costs up to \$2000.

Custom Performance

From the warehouse to the loading dock, performance can be matched to meet your requirements. Travel speed, lift speed, acceleration and regenerative braking are easily customized through the application control system. A wide range of optional equipment is available through your local Mitsubishi forklift truck dealer to meet specific application requirements.



See For Yourself

- These trucks feature high performing, competitive travel speeds, acceleration, lift and lower speeds and contribute to the increased productivity of the truck.
- Customizable features such as five pre-programmable performance modes offer operators greater flexibility in their daily material handling requirements. Operators will be pleased to hear that travel speed, acceleration rate, regenerative braking and auto regenerative braking are all adjustable.
- A standard safety feature on this forklift is the exclusive Integrated Presence System (IPS) which temporarily disengages the drive and hydraulic functions should the operator leave the normal operating position.
- For ease of service these trucks are equipped with the Mitsubishi PM-1000 AC control system which is modular in design. This allows technicians quick access to individual control system components for quick and efficient servicing.



Ready. Reliable. Right On The Money.

Manufactured with superior quality and exceptional value, Mitsubishi forklift trucks are supported by an extensive dealer and field support network. Dealer locations exist throughout North and South America, offering flexible financing options and product support.

Value And Support For The Long Haul

Our programs deliver value just like our forklifts. One example is our parts program, designed to be your single source for quality replacement parts — no matter what forklift brand you own. Another is the Master Protection® program which offers extended powertrain warranties for your Mitsubishi forklifts. Your Mitsubishi forklift truck dealer offers an extensive line of products and services including Master Maintenance® programs, which tailor service and maintenance to your specific applications. Your Mitsubishi forklift truck dealer can provide options and additional visual and audible warning devices aimed at your specific applications and requirements. Operator training programs are also available to help reduce the potential for product damage and personal injury.

3,000-6,000 lb Capacity Electric Cushion Tire Forklift Trucks

Copyright © 2007 by MCFA. All rights reserved. All registered trademarks are the property of their respective owners. Some products may be shown with optional equipment. Printed in U.S.A.

MEHM0030-01

01/07



1-888-MIT-LIFT
www.mit-lift.com