

FBNT Series

Electric Counterbalance • 3 Wheel Pneumatic Tyres
48 Volt AC Power • **1.6 - 2.0 tonnes**

**FB16NT
FB18NT
FB20NT**

An unbeatable combination of speed, power and sheer flexibility

A worthy successor to the award-winning FBKT series of three wheel electrics, the FBNT series adds all the advantages of AC power – and much more – to this successful formula. High strength and speed have been coupled with ergonomic excellence and a compact design to create a truck that performs productively wherever you are – indoors or outdoors... in tight corners or in open spaces.

Operation is smoother, quieter and even more controlled than ever. An advanced controller allows instant programming of this flexible truck to meet the needs of each driver and application. Meanwhile, great energy efficiency and low maintenance requirements – with a 500-hour service interval – mean operating costs are minimised.

Frame and body

- **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.
- **Curved overhead guard** – with specially shaped cross-sectional profile – gives better strength and protection, and allows quick, easy, secure fitting of cabin panels.

Mast and fork assembly

- **Exceptional visibility** – through the revolutionary high-strength, clear-view mast – maximises driver safety and output.
- **Square fork bar structure** minimises obstruction of driver's view.
- **Unique cross member design** combines excellent torsion strength – at all heights – with clear view.
- **Standard backrest** aids load stability.



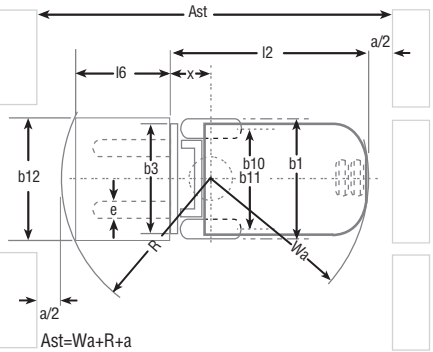
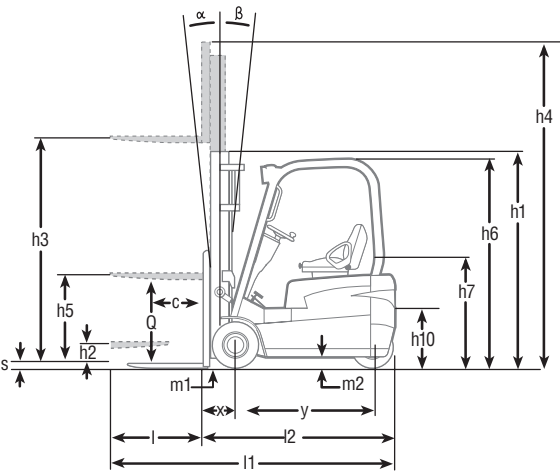
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Characteristics					
1.1	Manufacturer (abbreviation)			Mitsubishi	Mitsubishi
1.2	Manufacturer's model designation			FB16NT	FB18NT
1.3	Power source: (battery, diesel, LP gas, petrol)			Electric	Electric
1.4	Operator type: pedestrian, (operator)-standing, -seated			Seated	Seated
1.5	Load capacity	Q	(kg)	1.600	1.800
1.6	Load centre distance	c	(mm)	500	500
1.8	Load distance, axle to fork face	x	(mm)	376	376
1.9	Wheelbase	y	(mm)	1307	1410
Weight					
2.1	Truck weight, without load / including battery (simplex mast, lowest lift height)		kg	3090	3290
2.2	Axle loading with maximum load, front/rear (simplex mast, lowest lift height)		kg	4175/515	4500/590
2.3	Axle loading without load, front/rear (simplex mast, lowest lift height)		kg	1500/1590	1590/1700
Wheels, Drive Train					
3.1	Tyres: V=solid, L=pneumatic, SE=solid pneumatic - front/rear			SE / SE	SE / SE
3.2	Tyre dimensions, front			18 x 7-8	18 x 7-8
3.3	Tyre dimensions, rear			15 x 4,5-8	15 x 4,5-8
3.5	Number of wheels, front/rear (x=driven)			2x /2	2x /2
3.6	Track width (centre of tyres), front	b10	(mm)	913	935
3.7	Track width (centre of tyres), rear	b11	(mm)	170	170
Dimensions					
4.1	Mast tilt, forwards/backwards	α/β	°	6° /7°	6° / 7°
4.2	Height with mast lowered (see tables)	h1	(mm)	2105	2105
4.3	Free lift (see tables)	h2	(mm)	80	80
4.4	Lift height (see tables)	h3	(mm)	3265	3265
4.5	Overall height with mast raised	h4	(mm)	4332	4332
4.7	Height to top of overhead guard	h6	(mm)	2048	2048
4.8	Seat height	h7	(mm)	973	973
4.12	Tow coupling height	h10	(mm)	420	420
4.19	Overall length	l1	(mm)	2813	2916
4.20	Length to fork face (includes fork thickness)	l2	(mm)	1893	1996
4.21	Overall width	b1/b2	(mm)	1070	1130
4.22	Fork dimensions (thickness, width, length)	s / e / l	(mm)	35x100x920	35x100x920
4.23	Fork carriage to DIN 15 173 A/B/no			2A	2A
4.24	Fork carriage width	b3	(mm)	920	920
4.31	Ground clearance under mast, with load	m1	(mm)	75	75
4.32	Ground clearance at centre of wheelbase, with load (forks lowered)	m2	(mm)	100	100
4.33	Working aisle width with 1000 x1200 mm pallets, crosswise	Ast	(mm)	3218	3321
4.34	Working aisle width with 800 x1200 mm pallets, crosswise	Ast	(mm)	3037	3140
4.35	Turning circle radius	Wa	(mm)	1517	1620
4.36	Minimum distance between centres of rotation	b13	(mm)	0	0
Performance					
5.1	Travel speed, with/without load		km/h	17/17	17/17
5.2	Lifting speed, with/without load		m/s	0.5/0.6	0.44/0.6
5.3	Lowering speed, with/without load		m/s	0.52/0.5	0.52/0.5
5.5	Rated drawbar pull, with/without load		N	4920/5390	4800/5330
5.6	Maximum drawbar pull, with/without load (5 min short duty)		N	13740/14210	13620/14150
5.7	Gradeability, with/without load		%	13/22	13/22
5.8	Electric Maximum gradeability, with/without load		%	27/35	25/35
5.9	Acceleration time (10 metres) with/without load		s	4.4/4.0	4.4/4.0
5.10	Service brakes (mechanical/hydraulic/electric/pneumatic)			Mech./hydr.	Mech./hydr.
Electric motors					
6.1	Drive motor capacity (60 min. short duty)		kW	5.0x2	5.0x2
6.2	Lift motor output at 15% duty factor		kW	14	14
6.3	Battery to DIN 43 531/35/36 A/B/C/no			-	-
6.4	Battery voltage/capacity at 5-hour discharge		V /Ah	48 V 600Ah	48V 720Ah
6.5	Battery weight		kg	865	1000
6.6	Energy consumption according to VDI 60 cycle		kWh/h	-	-
Miscellaneous					
8.1	Type of drive control			Impulse /AC	Impulse /AC
8.2	Maximum operating pressure for attachments		bar	181	181
8.3	Oil flow for attachments		l/min	-	-
8.4	Noise level, value at operator's ear (EN 12053)		dB(A)	69.1	69.1
8.5	Towing coupling design / DIN type, ref.				

Mast Performance and Capacity

FB16NT • FB18NT • FB20NT					FB16NT	FB18NT	FB20NT
Mast Type	h3	h1	h4	h2 / h5	Q @ c=500 mm kg	Q @ c=500 mm kg	Q @ c=500 mm kg
	mm	mm	mm	mm			
Simplex	2000	1460	3045	80	1600	1800	2000
	2560	1740	3605	80	1600	1800	2000
	2760	1840	3805	80	1600	1800	2000
	3000	1960	4045	80	1600	1800	2000
	3290	2105	4335	80	1600	1800	2000
	3720	2365	4765	80	1600	1800	2000
	4090	2550	5135	80	1575	1800	2000
	4480	2755	5525	80	1525	1750	2000
	5000	3015	6045	80	1275	1300	1925
	5500	3265	6545	80	975	1100	1300
Duplex	6000	3515	7045	80	850	875	1225
	3000	1960	4045	915	1600	1800	2000
	3295	2105	4340	1060	1600	1800	2000
	3700	2365	4745	1320	1600	1800	2000
Triplex	4030	2550	5075	1505	1575	1800	2000
	3710	1760	4755	715	1600	1800	2000
	4010	1860	5055	815	1575	1800	2000
	4310	1960	5355	915	1550	1800	2000
	4750	2105	5795	1060	1375	1425	1950
	5090	2225	6135	1180	1375	1425	1800
	5490	2365	6535	1320	1025	1075	1300
	5990	2550	7035	1505	775	800	1225
	6490	2810	7535	1765	675	675	875
	7000	3015	8045	1970	475	500	775

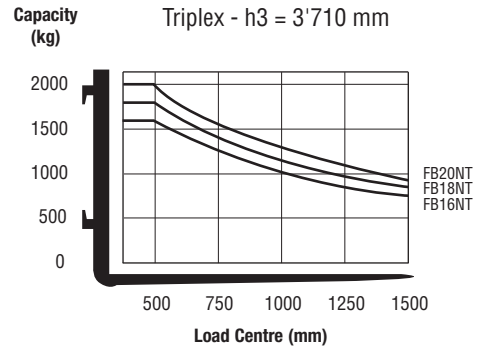
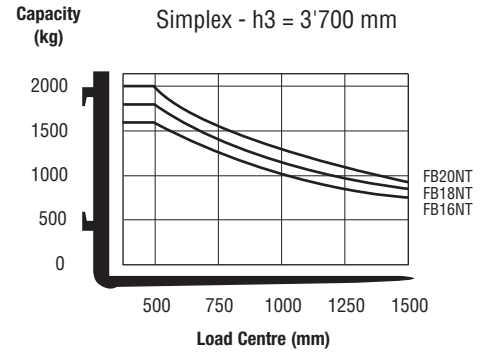
(Consult your dealer for the maximum back tilt allowed to obtain the capacities specified.)



Ast = Working aisle width
Wa = Turning radius
a = Safety clearance = 2 x 100 mm
 $R = \sqrt{(l6 + x)^2 + (b12 / 2)^2}$
l6 = Pallet length (800 or 1000 mm)
b12 = Pallet width (1200 mm)

Battery Compartment		FB16NT	FB18NT	FB20NT
Length (min)	mm	531	634	634
Width (min)	mm	1016	1016	1016
Height (min)	mm	650	650	650
Minimum weight	kg	865	1000	1000

Capacities at various load centres





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.

Steering system

- **Hydrostatic power steering** means smooth, precise control with minimal effort, whatever the truck's speed.
- **Constant power** – to both drive wheels – ensures optimum grip and tight, precise turns, with no surprises.

Brakes

- **High-quality brake pad material and design** reduces noise, wear and brake fade.
- **Highly efficient regenerative braking** means effective control and reduced brake wear.

Hydraulics

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

Electrical and control systems

- **New generation control system** 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.
- **PDA or laptop connection to control system** allows great refinement in programming and data analysis.
- **On-board diagnostics and fault memory folder** keep operator and service engineer aware of any problems, speed up servicing and help prevent damage.
- **Integrated Presence System** provides a parking brake alarm, a seat belt warning light and a hydraulic and travel interlock system for added safety.

Operator compartment and controls

- **Ergonomic operator compartment** – equipped with adjustable steering column, optional fingertip hydraulic control unit and other carefully positioned controls – reduces driver fatigue and increases precision.
- **Full-suspension, fully adjustable seat** – with hip restraints and belt – keeps driver safe, comfortable and alert through the longest of shifts.

Other features

- **Long service interval** – 500 hours – and lower maintenance requirements of AC motors, brakes, CAN-bus electrical system and other components reduces downtime and bills.
- **Rapid access features** – including improved access to electrical system and controllers – give quick and easy entry to all areas for checks and maintenance.

Options

- Latest generation fingertip controls with adjustable armrest
- Strobe light
- Integral side shifter
- Lateral battery changing device
- Range of tyres



when
reliability
is **everything**

Developed for outstanding performance and genuine value for money, the awardwinning* 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**.



CESM0707 (09/08)
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Printed in The Netherlands

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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.