

# FD100-150NM1S Series

Diesel Counterbalance

6 Wheel Pneumatic Tyres • 10.0 – 15.0 tonnes

FD100NM1S  
FD120NM1S  
FD135NM1S  
FD150NM1S

## Engineered to perform... built to last

Demanding applications can take a toll on your forklift trucks... and your budgets. That's why this series of 10.0 to 15.0 tonne diesel counterbalance trucks has been specially developed to deliver outstanding lifting performance and non-stop reliability.

The secret to this series' powerful performance is its turbocharged six-cylinder diesel engine. Its high-efficiency drivetrain, featuring six-speed automatic transmission, converts engine power to torque for optimal power in rugged applications. The low-speed torque gives controlled, yet powerful, acceleration unlocking maximum productivity.

A forklift, however, is only as productive as its operator, so every model is highly intuitive to drive – giving operators the precise, predictable and effortless performance they need to maximise their potential – whatever the environment.

In short, it's everything you'd expect from a Mitsubishi forklift... and then some.

### Frame and body

- **Optimal counterweight design** delivers ideal weight positioning, allowing for a shorter turning radius with maximum residual capacity.
- **Full-floating drive axle** increases load capacity for heavy-duty applications.
- **Robust steer axle** is all-in-one, ensuring exceptional strength and rigidity.
- **Heavy-duty steel frame** optimised by finite element modelling offers superior durability
- **Low centre of gravity** and rugged design result in higher residual capacity.
- **Low counterweight design** provides optimum visibility during reverse operations.
- **Fully enclosed wheel arches** protect vital components from dust – minimising the risk of premature failure and reducing noise.

### Mast and fork assembly

- **High visibility mast** utilises narrow mast channels and slim lift cylinders to provide exceptional operator visibility.
- **Six-roller mast with side rollers** – as standard – ensures load stability, while keeping fork lift tips and load in full view.
- **Easy-to-reach lubrication points** allow for easy maintenance.



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## Diesel Counterbalance

### 6 Wheel Pneumatic Tyres • 10.0 – 15.0 tonnes

Characteristics						
1.1	Manufacturer (abbreviation)		Mitsubishi	Mitsubishi	Mitsubishi	
1.2	Manufacturer's model designation		FD100NM1S	FD120NM1S	FD135NM1S	
1.3	Power source: (battery, diesel, LP gas, petrol)		Diesel	Diesel	Diesel	
1.4	Operator type: pedestrian, (operator)-standing, -seated		Seated	Seated	Seated	
1.5	Load capacity	Q (kg)	10000	12000	135000	
1.6	At load centre	c (mm)	600	600	600	
1.8	Load distance, axle to fork face (forks lowered)	x (mm)	755	765	790	
1.9	Wheelbase	y (mm)	2800	2800	2800	
Weight						
2.1	Truck weight, without load / including battery (simplex mast, lowest lift height)	kg	14660	15900	17540	
2.2	Axle loading with maximum load, front/rear (simplex mast, lowest lift height)	kg	22200 / 2460	25150	28010 / 3030	
2.3	Axle loading without load, front/rear (simplex mast, lowest lift height)	kg	7355 / 7305	7310 / 8590	7805 / 9735	
Wheels, Drive Train						
3.1	Tyre type: V=solid, L=pneumatic, SE=solid pneumatic - front/rear		L / L	L / L	L / L	
3.2	Tyre dimensions, front		10.00 × 20-14 PR	10.00 × 20-16 PR	10.00 × 20-18 PR	
3.3	Tyre dimensions, rear		10.00 × 20-14 PR	10.00 × 20-16 PR	10.00 × 20-18 PR	
3.5	Number of wheels, front/rear (x=driven)		4x / 2	4x / 2	4x / 2	
3.6	Track width (centre of tyres), front	b10 (mm)	1905	1905	1905	
3.7	Track width (centre of tyres), rear	b11 (mm)	1965	1965	1925	
Dimensions						
4.1	Mast tilt, forwards/backwards	$\alpha / \beta$ °	15 / 12	15 / 12	15 / 12	
4.2	Height with mast lowered (see tables)	h1 (mm)	3240	3240	3480	
4.3	Free lift (see tables)	h2 (mm)	72	79	88	
4.4	Lift height (see tables)	h3 (mm)	3300	3300	3300	
4.5	Overall height with mast raised	h4 (mm)	4890	4890	5130	
4.7	Height to top of overhead guard	h6 (mm)	2915	2915	2960	
4.8	Seat height	h7 (mm)	1915	1915	1960	
4.12	Tow coupling height	h10 (mm)	695	695	740	
4.19	Overall length	l1 (mm)	5530	5610	5755	
4.20	Length to fork face (includes fork thickness)	l2 (mm)	4308	4386	4537	
4.21	Overall width	b1 (mm)	2515	2515	2605	
4.22	Fork dimensions (thickness, width, length)	s / e / l (mm)	72 × 180 × 1220	79 × 180 × 1220	88 × 180 × 1220	
4.23	Fork carriage to DIN 15 173 A/B/no		no	no	no	
4.24	Fork carriage width	b3 (mm)	2010	2010	2260	
4.31	Ground clearance under mast, with load	m1 (mm)	260	260	305	
4.32	Ground clearance at centre of wheelbase, with load (forks lowered)	m2 (mm)	310	310	355	
4.33	Working aisle width with 1000 x1200 mm pallets, crosswise	Ast (mm)	5970	6040	6160	
4.34a	Working aisle width with 800 x1200 mm pallets, lengthwise	Ast (mm)	6170	6240	6360	
4.35	Turning circle radius	Wa (mm)	4000	4060	4160	
4.36	Minimum distance between centres of rotation	b13 (mm)	1565	1565	1565	
Performance						
5.1	Travel speed, with/without load	(mm)	24.5 / 30.0	23.0 / 29.5	20.5 / 30.0	
5.2	Lifting speed, with/without load	m/s	0.46 / 0.50	0.39 / 0.50	0.34 / 0.42	
5.3	Lowering speed, with/without load	m/s	0.46 / 0.48	0.46 / 0.48	0.48 / 0.40	
5.5	Rated drawbar pull, with/without load	N	73000 / 34000	72000 / 33000	67000 / 35000	
5.7	Gradeability, with/without load	%	31.6 / 21.9	27.2 / 19.8	22.7 / 19.0	
5.10	Service brakes (mechanical/hydraulic/electric/pneumatic)		Pneumatic	Pneumatic	Pneumatic	
IC Engine						
7.1	Manufacturer / Type		6D16-TL	6D16-TL	6D16-TL	
7.2	Rated output B to ISO 1585	kW	100	100	100	
7.3	Rated speed to DIN 70 020	rpm	2200	2200	2200	
7.4	Number of cylinders / cubic capacity	cm <sup>3</sup>	6 / 7550	6 / 7550	6 / 7550	
Miscellaneous						
8.1	Type of drive control		Powershift / 3	Powershift / 3	Powershift / 3	
8.2	Maximum operating pressure for attachments	bar	206	206	206	
8.3	Oil flow for attachments	l/min	-	-	-	
8.4	Noise level, mean value at operator's ear	dB(A)	85	85	85	
8.5	Towing coupling design / DIN type, ref.		Pin	Pin	Pin	

Mitsubishi
FD150NM1S
Diesel
Seated
15000
600
795
3100
18010
29910 / 3100
8170 / 9840
L / L
10.00 × 20-18 PR
10.00 × 20-18 PR
4x / 2
1905
1925
15 / 12
3480
88
3300
5130
2960
1960
735
6060
4842
2605
88 × 180 × 1220
no
2280
300
355
6555
6755
4550
1815
19.0 / 29.5
0.33 / 0.42
0.48 / 0.40
67000 / 38000
21.2 / 19.7
Pneumatic
6D16-TL
100
2200
6 / 7550
Powershift / 3
206
-
85
Pin

## FD100NM1S/FD120NM1S Model

### Mast Performance and Capacity

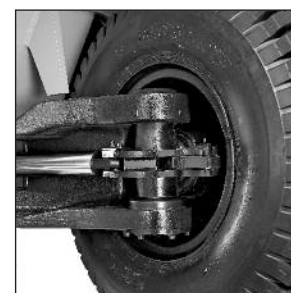
Mast type	FD100NM1S, FD120NM1S				FD100NM1S		FD120NM1S	
	h1 mm	h3 mm	h4 mm	Tilt deg	h2/h3 mm	Q @ c = 600mm kg	h2/h3 mm	Q @ c = 600mm kg
Simplex	3090	3000	4490	15°F/12°B	70	10000	75	12000
	3240	3300	4790	15°F/12°B	70	10000	75	12000
	3340	3500	4990	15°F/12°B	70	10000	75	12000
	3440	3700	5190	15°F/12°B	70	10000	75	12000
	3590	4000	5490	15°F/12°B	70	10000	75	12000
	3840	4500	5990	15°F/12°B	70	10000	75	12000
	4090	5000	6490	15°F/12°B	70	10000	75	12000
	4340	5500	6990	15°F/12°B	70	10000	75	12000
	4640	6000	7490	6°F/6°B	70	9800	75	11800
	4940	6600	8090	6°F/6°B	70	9400	75	11300
	5190	7000	8490	6°F/6°B	70	9200	75	11100



Full-suspension vinyl seat



Spacious operator compartment

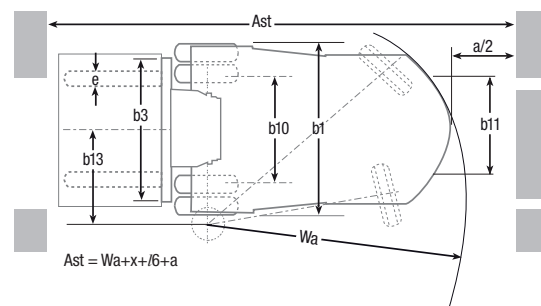
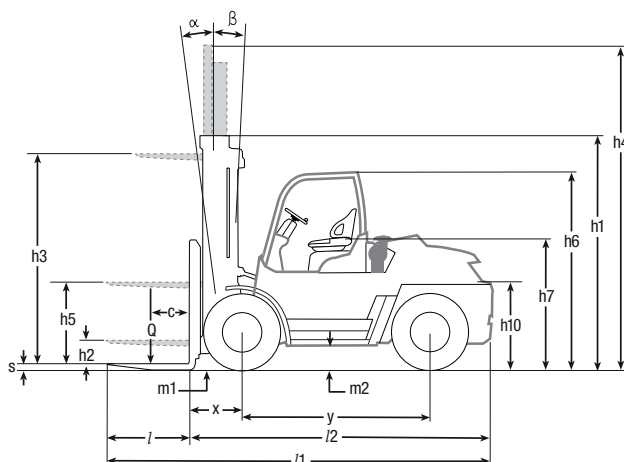


Heavy-duty steer axle

## FD135NM1S/FD150NM1S Model

### Mast Performance and Capacity

Mast type	FD135NM1S, FD150NM1S			FD135NM1S		FD150NM1S		
	h3 mm	h4 mm	Tilt deg	h2/h3 mm	h1 mm	Q @ c = 600mm kg	h1 mm	Q @ c = 600mm kg
Simplex	3000	4930	15°F/12°B	90	3335	13500	3335	15000
	3300	5230	15°F/12°B	90	3485	13500	3485	15000
	3500	5430	15°F/12°B	90	3635	13500	3585	15000
	3700	5630	15°F/12°B	90	3735	13500	3685	15000
	4000	5930	15°F/12°B	90	3885	13500	3885	15000
	4500	6430	15°F/12°B	90	4135	13500	4135	15000
	5000	6930	15°F/12°B	90	4385	13500	4385	13500
	5500	7430	15°F/12°B	90	4685	13500	4685	15000
	6000	7930	6°F/6°B	90	4935	13300	4935	14600
	6600	8530	6°F/6°B	90	5285	12800	5285	14200
	7000	8930	6°F/6°B	90	5485	12600	5485	13800



- Ast = Working aisle width
- Wa = Turning radius
- a = Safety clearance = 2 × 100 mm
- l/6 = Pallet length (800 or 1000 mm)
- b12 = Pallet width (1200 mm)



Premium LED/LCD information panel



Responsive hydrostatic steering



Easy access step and grab handle

## Drive

- **Powerful six-cylinder diesel engine** provides superior performance.
- **Low-speed torque** delivers controlled, yet powerful acceleration for maximum productivity.
- **Rapid-response turbocharger** maximises operator performance.
- **High-efficiency drivetrain** features 3/3 speed automatic transmission that converts engine power to torque, for optimal power in rugged applications.

## Hydraulics

- **Large, easy-to-reach levers** give operators precise control of hydraulics – with minimum effort.
- **Intuitive fingertip controls** available as an option offers the ultimate in driver ergonomics and, if needed, can even be operated using heavy, protective gloves.

## Electrical and control systems

- **Integrated Presence System (IPS)** provides parking brake alarm, seat belt, warning light and hydraulic and interlock system for added safety

## Operator compartment and controls

- **Small-diameter steering wheel**, with full hydrostatic steering assistance, ensures precise and rapid steering response – with very little effort.
- **Premium information display** keeps operators aware of issues affecting performance – from fuel levels to fluid temperatures – encouraging good maintenance.
- **Wide steps with grab handles** offer easy on/off access to the spacious operator's compartment – reducing operator fatigue and risk of slips, trips and falls.

- **Generous leg room** with tiltable steering column and adjustable full-suspension seat ensures a relaxed driving position for all operators.

## Other features

- **RapidAccess features** include quick release floor and side panels – no tools required – for faster daily inspections.
- **Low-noise design** features rubber-mounted components, fully insulated steel engine hood, helical gears and enclosed wheel arches for maximum operator comfort.
- **500-hour service interval** and long component life reduces downtimes and associated costs.

## Options

- **Intuitive fingertip controls**
- **Choice of seats**
- **Integral sidsifter**
- **Dust protection packages**
- **Front and rear working lights**
- **Integral fork positioner**
- **Oil-cooled disk brakes**



The term 'Integrated Presence System' (IPS) is intended as a trading style, only to describe a number of design features on the Mitsubishi trucks to which IPS is applied. It does not imply that the truck can be driven without appropriate operator training and without due care and attention. The manufacturer (MCFE, Almere, the Netherlands) cannot accept any responsibility for any accidents or damage caused by incorrect or dangerous use of its equipment.

# when reliability is everything

Like any product bearing the Mitsubishi name, our materials handling equipment benefits from the huge resources and cutting-edge technology of one of the world's largest corporations. So when we promise you **quality, reliability** and **value for money**, you know it's a guarantee we have the power to deliver.

Every model in our comprehensive, award-winning range of forklift trucks and warehouse equipment is built to a high specification and is designed to keep on working for you... day after day... year after year... whatever the job... whatever the conditions.

To ensure your truck stays in constant productive action, we have a network of local dealers – hand-picked for their commitment to customer care... and backed up by the Mitsubishi Forklift Trucks organisation. No matter where you are, we have a dealer close by – ready and willing to meet your needs.

That friendly local service covers everything from identifying the perfect model and configuration for your application to providing competitive, flexible finance and maintenance packages, unbeatable warranties, long and short term hire, and highly responsive field service and repairs... as well as the industry's quickest and most reliable parts supply.

Only Mitsubishi can give you this combination of global engineering excellence and outstanding local support... only Mitsubishi offers you such a quality product at such an affordable price... and only Mitsubishi places reliability as high as you do in its priorities. Contact your local dealer now and see what Mitsubishi can do for you.

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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.