FGC20-33N Series

LPG Counterbalance • 4 Wheel Cushion Tyres

2.0 – 3.3 tonnes

FGC20N
FGC25N
FGC30N
FGC33N

Setting standards... maximising productivity

Setting the highest standards for IC engine cushion tyre counterbalance forklift trucks, the FGC20-33N series has been developed to help your operator achieve maximum productivity with effortless efficiency. Fast, strong, highly manoeuvrable, ergonomic, environmentally friendly and safe, this truck meets every need.

Perfect for indoor work on smooth surfaces, it offers all of the cushion tyre advantages – including excellent traction, low energy consumption, compact dimensions and powerful lifting with high residual capacities.

Meanwhile, its clean-burning LPG engine ensures high performance with low emissions. Packed with advanced features as standard, the FGC20-33N can also be supplied with a wide range of options to match your specific application precisely.

Frame and body

- **Compact dimensions** *allow excellent manoeuvrability, however restricted the space.*
- **Low centre of gravity** *gives high stability – for safe travel and lifting.*

Mast and fork assembly

- **Clear-view construction** *allows exceptional visibility through mast, fork carriage and overhead guard – for maximum operator safety and output.*

Drive

- **Advanced LPG engine** *with engine management system and 3-way catalytic converter delivers precisely controlled performance, high fuel economy and low emissions.*
- **Industry-leading travel speeds** *save time and increase productivity – particularly over longer distances.*
- **Active engine protection** *and other damage avoidance features – including durable, distributor-less ignition system, clogging-resistant, square-wave fin radiator, and single-piece, leak-free, cast drive axle housing – extend component life and uptime.*
- **Smooth cushion tyres** *offer excellent traction while minimising rolling resistance – for lower energy consumption – and maximising stability at high lifts.*

Steering system

- **Fully hydrostatic steering** *with small and responsive steering wheel ensures precise, effortless manoeuvring.*

Brakes

- **Powerful drum brakes** *give excellent control with little effort and are easy to maintain.*

MITSUBISHI FORKLIFT TRUCKS

FGC20-33N Series

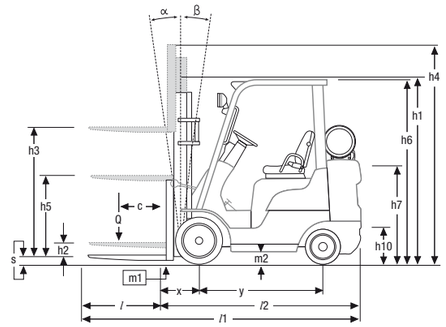
LPG Counterbalance • 4 Wheel Cushion Tyres

2.0 – 3.3 tonnes

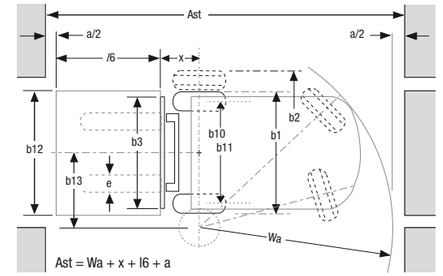
	Characteristics							
1.1	Manufacturer (abbreviation)			Mitsubishi	Mitsubishi	Mitsubishi		Mitsubishi
1.2	Manufacturer's model designation			FGC20N	FGC25N	FGC30N		FGC33N
1.3	Power source: (battery, diesel, LP gas, petrol)			LPG	LPG	LPG		LPG
1.4	Operator type: pedestrian, (operator)-standing, -seated			Seated	Seated	Seated		Seated
1.5	Load capacity	Q	(kg)	2000	2500	3000		2950
1.6	Load center distance	c	(mm)	500	500	500		600
1.8	Load distance, axle to fork face	x	(mm)	415	420	435		435
1.9	Wheelbase	y	(mm)	1400	1400	1400		1400
	Weight							
2.1	Truck weight, without load / including battery (simplex mast, lowest lift height)		kg	3320	3680	4280		4480
2.2	Axle loading with maximum load, front/rear (simplex mast, lowest lift height)		kg	4530/-	5200/-	6040/-		6350/-
2.3	Axle loading without load, front/rear (simplex mast, lowest lift height)		kg	1380/1950	1270/2420	1280/2980		1190/3210
	Wheels, Drive Train							
3.1	Tyres: V=solid, L=pneumatic, SE=solid pneumatic - front/rear			V/V	V/V	V/V		V/V
3.2	Tyre dimensions, front			21 x 7 x 15	21 x 7 x 15	21 x 8 x 15		21 x 8 x 15
3.3	Tyre dimensions, rear			16 x 6 x 10-1/2	16 x 6 x 10-1/2	16 x 6 x 10-1/2		16 x 6 x 10-1/2
3.5	Number of wheels, front/rear (x=driven)			2x /2	2x /2	2x /2		2x /2
3.6	Track width (center of tyres), front	b10	(mm)	886.4	886.4	911.8		911.8
3.7	Track width (center of tyres), rear	b11	(mm)	890	890	890		890
	Dimensions							
4.1	Mast tilt, forwards/backwards	α/β	°	5/9	5/9	5/6		5/6
4.2	Height with mast lowered (see tables)	h1	(mm)	2110	2110	2110		2230
4.3	Free lift (see tables)	h2	(mm)	80	80	90		90
4.4	Lift height (see tables)	h3	(mm)	3295	3295	3265		3265
4.5	Overall height with mast raised	h4	(mm)	4570	4570	4540		4570
4.7	Height to top of overhead guard	h6	(mm)	2075	2075	2075		2075
4.8	Seat height	h7	(mm)	1050	1050	1050		1050
4.12	Tow coupling height	h10	(mm)	-	-	-		-
4.19	Overall length	l1	(mm)	3320	3385	3475		3475
4.20	Length to fork face (includes fork thickness)	l2	(mm)	2295	2360	2450		2475
4.21	Overall width	b1/b2	(mm)	1065 / 1130	1065 / 1130	1115 / 1155		1115 / 1155
4.22	Fork dimensions (thickness, width, length)	s / e / l	(mm)	45 / 100 / 1070	45 / 100 / 1070	45 / 125 / 1070		45 / 125 / 1070
4.23	Fork carriage to DIN 15 173 A/B/no			2A	2A	3A		3A
4.24	Fork carriage width	b3	(mm)	920	920	960		960
4.31	Ground clearance under mast, with load	m1	(mm)	80	80	80		80
4.32	Ground clearance at center of wheelbase, with load (forks lowered)	m2	(mm)	139	139	139		139
4.33	Working aisle width with 1000 x1200 mm pallets, crosswise	Ast	(mm)	3580	3640	3730		3760
4.34	Working aisle width with 800 x1200 mm pallets, crosswise	Ast	(mm)	3380	3440	3530		3560
4.35	Turning circle radius	Wa	(mm)	1965	2020	2095		2125
4.36	Minimum distance between centers of rotation	b13	(mm)	-	-	-		-
	Performance							
5.1	Travel speed, with/without load		km/h	17.5/18	17.5/18	16.5/17		16.5/17
5.2	Lifting speed, with/without load		m/s	0,58 / 0,59	0,58 / 0,59	0,53 / 0,54		0,53 / 0,54
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	167000/-	19200/-	20000/-		19900/-
5.6	Maximum drawbar pull, with/without load (5 min short duty)		N	18900/-	21700/-	22600/-		22600/-
5.7	Gradeability, with/without load		%	35/-	29/-	33/-		31/-
5.8	Maximum gradeability, with/without load		%	40.5/25	34/20	35/17		35/16
5.9	Acceleration time (10 metres) with/without load		s	-	-	-		-
5.10	Service brakes (mechanical/hydraulic/electric/pneumatic)			Hydraulic	Hydraulic	Hydraulic		Hydraulic
	IC Engine							
7.1	Manufacturer / Type			K25	K25	K25		K25
7.2	Rated / Nominal output to ISO 1585**		kW	47	47	47		47
7.3	Rated speed to DIN 70 020		rpm	2700	2700	2700		2700
7.4	Number of cylinders / cubic capacity		cm3	4/2500	4/2500	4/2500		4/2500
7.5	Fuel consumption according to VDI 60 cycle		l/h/kg/h	-	-	-		-
	Miscellaneous							
8.1	Type of drive control			Powershift 1/1	Powershift 1/1	Powershift 1/1		Powershift 1/1
8.2	Maximum operating pressure for attachments		bar	158	158	158		158
8.3	Oil flow for attachments		l/min	89.1	89.1	89.1		89.1
8.4	Noise level, value at operator's ear (EN 12053)		dB(A)	-	-	-		-
8.5	Towing coupling design / DIN type, ref.			-	-	-		-

Continuing improvement may lead to changes in these specifications.

** Net power according 97/68/EC: 52kW



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)



Ast = Wa + x + l6 + a
Ast = Working aisle width
Wa = Turning radius
a = Safety clearance = 2 x 100 mm
l6 = Pallet length (800 or 1000 mm)
b12 = Pallet width (1200 mm)

Mast Performance and Capacity

Mast type	FGC20N/FGC25N h3 (mm)	h1 (mm)	h4 (mm)	h2/h5 (mm)	FGC20N Q @ c=500mm	FGC25N Q @ c=500mm
Simplex	2000	1460	3260	80	2000	2500
	2760	1840	4020	80	2000	2500
	3000	1960	4260	80	2000	2500
	3290	2105	4550	80	2000	2500
	3720	2365	4980	80	2000	2500
	4090	2550	5350	80	2000	2500
Duplex	2820	1870	4090	605	2000	2500
	3000	1960	4270	690	2000	2500
	3300	2110	4570	845	2000	2500
Triplex	4030	1870	5300	605	2000	2500
	4300	1960	5570	695	2000	2500
	4750	2110	6020	845	1950	2450
	5060	2230	6330	965	1900	2400
	5500	2375	6770	1105	1800	1850
	5990	2555	7260	1290	1050	1050

Mast type	FGC30N/FGC33N h3 (mm)	h1 (mm)	h4 (mm)	h2/h5 (mm)	FGC30N Q @ c=500mm	FGC33N Q @ c=600mm
Simplex	3030	1990	4300	90	3000	2950
	3270	2110	4540	90	3000	2950
	3700	2375	4970	90	3000	2950
	4000	2555	5270	90	3000	2950
Duplex	2770	1870	4040	600	3000	2950
	3000	1990	4270	720	3000	2950
	3250	2110	4520	840	3000	2950
Triplex	4320	1990	5590	720	3000	2950
	4700	2110	5970	840	2950	2950
	5060	2230	6330	960	2900	2850
	5450	2375	6720	1105	1850	1400

Easy on-off access

Market-leading ergonomic design

Auto-style pedals

MITSUBISHI FORKLIFT TRUCKS

Fingertip hydraulic controls (optional)

RapidAccess features

Practical layout

Hydraulics

- **Powerful hydraulic system** *offers high residual capacities for comfortable handling of heavier loads.*
- **Industry-leading lift and lowering speeds** *combine with exceptional manoeuvrability to maximise output.*

Electrical and control systems

- **Integrated Presence System (IPS)** *pioneered by Mitsubishi prevents all movement of the truck and its mast if the operator is not seated, as well as providing a seatbelt warning light and parking brake alarm.*
- **Operator identification system** *can be activated – if owner wishes – to prevent unauthorised use of the truck.*
- **Onboard diagnostics** *and detailed fault diagnosis via laptop connection alerts service engineers to problems, speeds up servicing and prevents damage.*

Operator compartment and controls

- **Market-leading ergonomic design** *results in easy on-off access, user-friendly controls, a practical layout and great all-round visibility – for maximum precision and productivity.*
- **Open step, convenient grab bar and seat hip restraint** *offer three secure aids to easy on-off access from both sides.*
- **Adjustable steering column** *with unique, time-saving memory function helps guarantee optimum driving position, every time.*
- **Hydraulic control levers** *are easy to reach and easy to use.*
- **Optional fingertip hydraulic controls** *with integrated, fully adjustable, high-comfort armrest (an award-winning concept) allows effortless precision.*
- **Automotive-style pedals** *with optimum pedal angle are easy to use and give good control without leg strain.*
- **Low noise level at operator's ear** *and low vibration from powertrain increases comfort and reduces fatigue.*
- **Clear and comprehensive instrument panel** *with LCD display keeps operator and manager fully informed (of, for example, speed, time, engine hours, service intervals and faults) to optimise productivity, truck life and safety.*

Other features

- **Long service interval (500 hours)** *and choice of high-quality components, together with low-maintenance design, minimises downtime and cost of ownership.*
- **RapidAccess features** *give unequalled ease of entry to all areas for checks and maintenance.*

Options

- **LED front work lights and rear combination lights**
- **Additional working lights and revolving lamps**
- **High-exit exhaust**
- **Dual front wheels**
- **Fingertip hydraulic controls**
- **Swing-down LPG tank bracket**
- **Fuel-saver mode**
- **Ground speed control**

IPS INTEGRATED PRESENCE SYSTEM

Integrated Presence System (IPS) provides:

- a hydraulic and travel interlock system that prevents all movement of the truck and its mast if the driver is not seated
- a seat belt warning light
- a parking brake alarm

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.

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You can find your nearest dealer at
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MITSUBISHI FORKLIFT TRUCKS

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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.