

SENSIA ES

LIGHT REACH TRUCKS

1.2 - 1.4 tonnes

**SMALL IN SIZE...
BIG ON FEATURES**

Incredibly nimble, the RB12-14N3(L)(C) series offers high productivity and exceptional value in a light reach truck. An impressive achievement in a truck this size, it strikes the perfect balance between cutting-edge features and low total cost of operation.

SPECIFICATIONS

RB12N3L
RB14N3L
RB14N3C

**WHEN
RELIABILITY IS
EVERYTHING...**

RB12-14N3(L)(C) Series



Model shown: RB14N3C with option rail guidance for Drive - In racks

SENSiA ES

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And with a host of exceptional ergonomic features, it's sure to be a favourite of operators. Adjustable seating, and a choice of adjustable controls make driving feel natural and incredibly intuitive for operators of all sizes.

Specially designed for drive-in racking applications, the RB14N3C model keeps the same compact chassis and performance, yet lifts to even greater heights.

BRAKES

- **High-efficiency regenerative braking**
This gives more effective control and reduces brake wear.

DRIVE

- **Intelligent Cornering System**
The truck senses the angle of a turn and reduces speed early for maximum stability and accurate, positive cornering.
- **Durable drive wheel**
Low-wear drive wheel means less maintenance and lower costs.

ELECTRICAL AND CONTROL SYSTEMS

- **Advanced on-board computer**
Stores power and hydraulic preference settings for up to 350 different users.

- **Stability Support System (S3)**
Hydraulic functions such as mast reach and mast tilt are automatically optimised along with a reach damping function to make pallet placement and retrieval safer and quicker. (Standard on N3C model, option on other models.)
- **S3 - 2 (option)**
Works to adjust maximum travel speed in relation to actual load weight for the best levels of safety and performance.

FORKS AND MAST

- **MaxVision mast**
This maximises operator field of vision for increased productivity and safety.
- **Level Assistance System**
Automatically detects the operator's intention and automatically stops when the forks are precisely at the right level. (N3C model option only)
- **Mast Tilt Control (MTC)**
The automatic damping function absorbs unwanted mast movements, reduces the speeds of tilt, side shift and angle, and ensures 80 percent faster mast stabilisation.
- **Low noise mast**
Efficient damping and cutting-edge design contribute to very low operational noise levels.

FRAME AND BODY

- **Modular design**
Limits the number of parts used meaning service engineers can carry fewer parts to keep the first-time fix rate incredibly high.
- **EasyAccess battery compartment**
This allows quick access for checks and maintenance.
- **Compact design**
1120mm width allows for easy operation in narrow spaces.

HYDRAULICS

- **Soft Motion**
A finely tuned algorithm adjusts reach, tilt and sideshift speed to greatly improve productivity and handling speed.



For more information on
SENSiA ES Series
please visit our website



mft2.eu/rb12n3

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OPERATOR COMPARTMENT AND CONTROLS

- **Comfortable cabin, clear view and fast, accurate fork positioning**
This all helps to increase productivity and reduce risks of driver fatigue - even on the longest shifts.
- **Easy-access compartment**
Including ergonomic hand bars, low non-slip step and wide entry provides safe and effortless entry and exit.
- **Multifunctional Ergologic Joystick**
This intuitive and highly ergonomic joystick controls seven different functions, including lifting, lowering, reaching and tilting.
- **Automotive-style pedals**
Pedals are placed in a familiar position for intuitive operation.
- **PIN-code access**
Stops unauthorised truck use and keeps you aware of who's operating at all times.
- **Optional fingertip hydraulic controls**
Integrated, fully adjustable, and allows effortless precision.

STEERING SYSTEM

- **Mini steering wheel with floating armrest**
Ergonomically adjustable to reduce strain and lower risk of RSI.
- **360-degree steering (option)**
The operator can keep the truck in constant motion - saving seconds on every turn.
- **Midi steering wheel (option)**
Adjustable positioning with tilt function.



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SENSIA ES

OPTIONAL LI-ION BATTERY SYSTEMS

MAKE YOUR FORKLIFT GO EVEN FURTHER



Tried, tested and proven in the field, lead-acid batteries have been the long-standing choice for companies employing electric lift trucks. However, with long charging times, demanding maintenance requirements, the need for extra batteries, and high risk of operator misuse, day-to-day use can be a challenge.

Fortunately, there's a new battery system on the block: Li-ion from Mitsubishi Forklift Trucks.

Designed to meet your business' demands — including multi-shift (24/7) operations — without the need for spare batteries, our high-performance Li-ion battery system is up to 30% more efficient than lead-acid counterparts. Plus, it's virtually error-proof, thanks to its ultra-low-maintenance design which prevents cell damage.

- **Gas-emission free**
No need for air ventilation.

- **Exceptional high battery and charger efficiency**
State-of-the-art technology delivers up to 30% more power efficiency than lead-acid batteries.
- **Maintenance-free design**
No need for daily checks and water re-fills. This reduces the risk of operators damaging cells and reducing their lifetime. Needs a full charge each week to activate cell balancing.
- **No need for spare batteries or charging room**
You can save both space and costs in multi-shift applications, maximising profitability.
- **Quick charge capabilities**
Just 15 minutes is all your battery needs to keep your truck going for a few more hours. It only takes 1 to 2 hours to fully charge a completely discharged battery.

- **Higher sustained voltage**
This gives more consistent lifting and driving performance — particularly noticeable towards the end of a shift.
- **Multiple safety features**
This includes circuit protection, deep-discharge and overcharge protection, and individual cell temperature and voltage monitoring.
- **On-the-go performance and monitoring**
The system's integrated monitoring system has an easy-to-read display unit.
- **Wide choice of battery and charger capacities**
The most suitable power supply can be matched to the exact requirements of a specific application.



Clean Li-ion batteries are ideal for sensitive environments such as those in the food or packaging industries.

Fully integrated Li-ion battery

Features a sophisticated CANbus communication and an automatic ON/OFF synchronization between battery and truck. Battery level, notifications and alarms are integrated into the truck display, to secure clear and easy overview for the truck operator.

For more information on Li-ion please visit our website



VDI - PERFORMANCE & DIMENSIONS

CHARACTERISTICS				Mitsubishi Forklift Trucks Mitsubishi Forklift Trucks Mitsubishi Forklift Trucks		
1.1	Manufacturer			RB12N3L	RB14N3L	RB14N3C
1.2	Manufacturer's model designation			Battery	Battery	Battery
1.3	Power source			Seated	Seated	Seated
1.4	Operator type			1200	1400	1400
1.5	Load capacity	Q	kg	600	600	600
1.6	Load center distance	c	mm	see table	see table	see table
1.8	Load wheel axle to fork face (forks lowered)	x	mm	1378	1378	1378
1.9	Wheelbase	y	mm			
WEIGHT						
2.1b	Truck weight without load, with maximum battery weight		kg	2780	3010	3410
2.3	Axle loadings without load & with maximum battery weight, drive / load side		kg	1630 / 950	1690 / 1120	1780 / 1230
2.4	Axle loading, mast forward, with nominal load, drive / load side		kg	490 / 3290	540 / 3670	570 / 3840
2.5	Axle loading, mast retracted, with nominal load, drive / load side		kg	1450 / 2330	1400 / 2810	1450 / 2960
WHEELS, DRIVE TRAIN						
3.1	Tyres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side			Vul	Vul	Vul
3.2	Tyre dimensions, drive side		mm	355 x 155	355 x 155	355 x 155
3.3	Tyre dimensions, load side		mm	220 x 85	220 x 85	220 x 85
3.5	Number of wheels, load / drive side (x = driven)			2 / 1 x	2 / 1 x	2 / 1 x
3.7	Track width (center of tyres), load side	b11	mm	995	995	995
DIMENSIONS						
4.1	Fork tilt, forwards / backwards	∅, β	°	1 / 4 ⁹⁾	1 / 4 ⁹⁾	1 / 4
4.2a	Height with mast lowered	h1	mm	see table	see table	see table
4.3	Free lift	h2	mm	see table	see table	see table
4.4	Lift height	h3	mm	see table	see table	see table
4.5	Height with mast extended	h4	mm	see table	see table	see table
4.7	Height to top of overhead guard	h6	mm	2205	2205	2205
4.8	Seat- or stand height	h7	mm	1146 ¹⁾	1146 ¹⁾	1146 ¹⁾
4.10	Height of support legs	h8	mm	235	235	235
4.15	Fork height, fully lowered	h13	mm	65	65	65
4.19	Overall length	l1	mm	see table	see table	see table
4.20	Length to fork face	l2	mm	see table	see table	see table
4.21	Overall width	b1/b2	mm	1120	1120	1120
4.22	Fork dimensions (thickness, width, length)	s/e/l	mm	40 / 100 / 1150	40 / 100 / 1150	40 / 100 / 1150
4.23	Fork carriage to DIN			FEM 2A	FEM 2A	FEM 2A
4.24	Fork carriage width	b3	mm	910	910	830
4.25	Outside width over forks (minimum / maximum)	b5	mm	316 / 697	316 / 697	316 / 697
4.26	Inner width of support legs	b4	mm	900	900	900
4.28	Mast reach	l4	mm	see table	see table	see table
4.32	Ground clearance at center of wheelbase, (forks lowered)	m2	mm	70	70	70
4.33a	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise	Ast	mm	see table	see table	see table
4.34a	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast	mm	see table	see table	see table
4.35	Turning radius	Wa	mm	see table	see table	see table
4.37	Truck length including support legs	l7	mm	1725	1725	1725
PERFORMANCE						
5.1	Travel speed, with / without load		km/h	12.3 / 12.5	12.3 / 12.5	12.3 / 12.5
5.2	Lifting speed, with / without load		m/s	0.50 / 0.65	0.49 / 0.65	0.32 / 0.49
5.3	Lowering speed, with / without load		m/s	0.58 / 0.55	0.59 / 0.55	0.57 / 0.48
5.5	Rated drawbar pull, with / without load		N	0.2 / 0.2	0.2 / 0.2	0.2 / 0.2
5.8	Maximum gradeability with / without load		%	13.1 / 19.6	13.1 / 19.6	13.1 / 19.6
5.9	Acceleration time (10 metres) with / without load		s	4.9 / 4.4	4.9 / 4.4	4.9 / 4.4
5.10	Service brakes (mechanical / hydraulic / electric / pneumatic)			Electric	Electric	Electric
ELECTRIC MOTORS						
6.1	Drive motor capacity (60 min. short duty)		kW	5.9	5.9	5.9
6.2	Lift motor output at 15% duty factor		kW	11	11	11
6.4	Battery voltage/capacity at 5-hour discharge		V/Ah	48 - 300 ¹¹⁾ / 465	48 - 465 / 620	48 - 465 / 620 / 775
6.5	Battery weight		kg	533 / 708	708 / 890	708 / 890 / 1063
6.6b	Energy consumption according to VDI 60 cycle		kW / h	5.1	5.1	5.1
MISCELLANEOUS						
8.1	Type of drive control			Stepless	Stepless	Stepless
10.1	Maximum operating pressure for attachments		bar	150	150	150
10.2	Oil flow for attachments		l / min	25	25	25
10.7	Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871 in work LpAZ		dB(A)	57.4	57.4	57.4

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RB12-14N3(L)(C) Series LIGHT AND NARROW REACH TRUCKS

1.2 – 1.4 tonnes



- 1) Measured with standard seat to SIP point
9) Mast tilt
11) DTFV mast

MAST PERFORMANCE AND CAPACITY

SENSIA^{ES} RB12-14N3(L)(C) Series

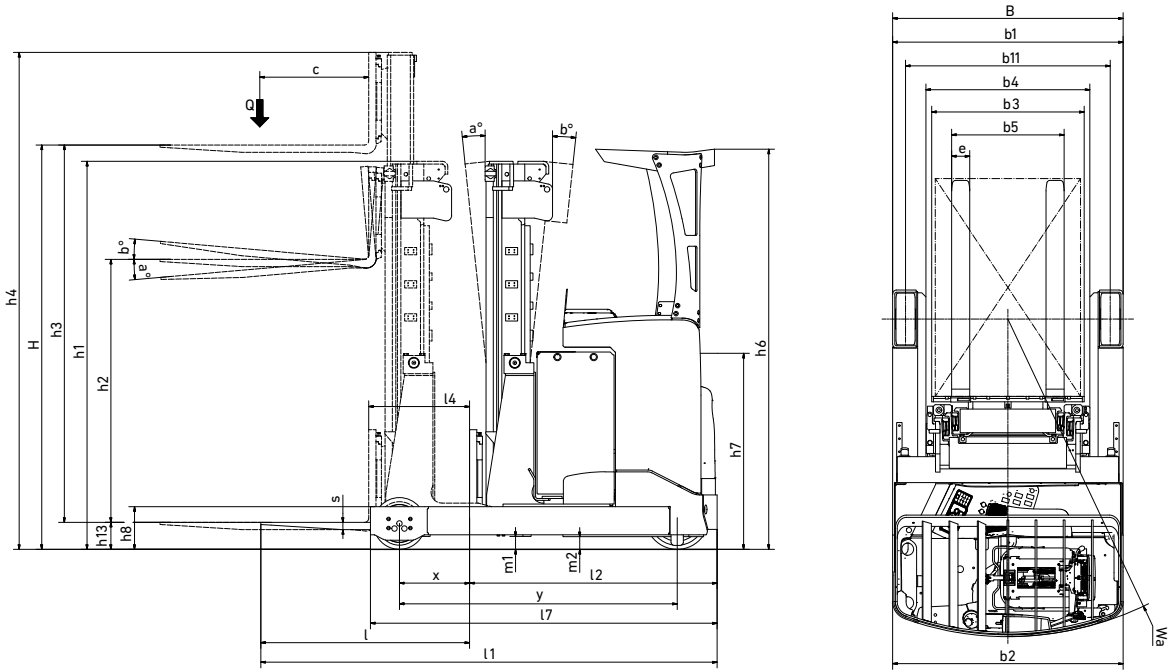
RB12N3L - RB14N3L				
MAST TYPE	h3 + h13 mm	h1 mm	h2 + h13 mm	h4 mm
DTFV TRIPLEX	4800	2153	1645	5345
	5400	2353	1854	5945
	5700	2453	1945	6245
	6300	2653	2145	6845
	6750	2803	2295	7295
	7250 ¹⁾	2970	2462	7795
RB14N3C				
DTFV TRIPLEX	4800	2155	1615	5340
	5400	2355	1815	5940
	5700	2455	1915	6240
	6300	2655	2115	6840
	6750	2805	2265	7290
	7250	2972	2432	7790
	7950	3205	2665	8490
	8450	3372	2832	8990
	8950	3538	2998	9490

1) Only RB14N3L

h3+h13 = Lifting height
h1 = Lowered mast height
h2+h13 = Free lift
h4 = Raised mast height

Ast = $Wa + \sqrt{(l6 - x)^2 + (b12 / 2)^2} + a$
Ast = Working aisle width with load
Wa = Turning radius
l6 = Pallet length (1200 mm)
x = Load wheel axle to fork face
b12 = Pallet width (800 or 1000 mm)
a = Safety clearance = 2 x 100 mm
Q = Lifting capacity, rated load
c = Load centre (distance)

MODEL	BATTERY CAPACITY	BATTERY WEIGHT	4.33a	4.34a	4.28	4.20	4.19	1.8	4.35
	Ah	kg	AST mm	AST mm	L4 mm	L2 mm	L1 mm	x mm	Wa mm
RB12N3L	310	533	2643	2688	557	1193	2343	405	1598
	465	708	2694	2751	487	1263	2413	335	1598
RB14N3L	465	708	2694	2751	487	1263	2413	335	1598
	620	890	2762	2833	397	1353	2503	245	1598
RB14N3C	465	708	2716	2778	457	1293	2443	305	1598
	620	890	2786	2861	367	1383	2533	215	1598
	775	1063	2859	2945	227	1473	2623	125	1598



STANDARD EQUIPMENT & OPTIONS

- = Standard
- = Option

	RB12N3L	RB14N3L	RB14N3C
GENERAL			
Automatic electric parking brake	●	●	●
Steering wheel angle indicator	●	●	●
Battery indicator with cut out at 20% remaining battery level	●	●	●
Multifunctional colour display	●	●	●
Integrated sideshift DTFV mast	●	●	●
Rail guidance for drive-in racking	-	-	●
Chill store design, down to +1° Celsius	●	●	●
Paper storage and cup holder	●	●	●
Battery reach out	●	●	●
Battery on rollers	●	●	●
Other RAL-colour	●	●	●
POWER SOURCE			
Lead acid battery	●	●	●
Li-ion battery*	●	●	●
Battery cover plate	●	●	●
MAST, FORKS AND CARRIAGE			
Tilting mast	●	●	●
Fork tilt	-	-	●
Integral fork positioner/sideshift DTFV mast	●	●	●
Load backrest	●	●	●
Load backrest in combination with fork positioner/sideshift	●	●	●
Mast Tilt Control, MTC (std @ lift height > 7.2 m, Option < 7.2 m)	●	●	●
Lift stop with-/without restart	●	●	●
Lift height indicator (std in S3-2 Increased performance)	●	●	●
Level selector	-	-	●
Level assistance system, LAS	-	-	●
Load weight indicator (std in S3-2 Increased performance)	●	●	●
Horizontal forks	-	-	●
Central position of sideshift	-	-	●
S3 - Stability Support System with Soft Motion	●	●	●

* Not in combination Cold store design, 0C° to -30C°

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Multifunctional colour display



Battery on rollers



Blue point safety light

STANDARD EQUIPMENT & OPTIONS

- = Standard
- = Option

	RB12N3L	RB14N3L	RB14N3C
DRIVE AND LIFT CONTROLS			
Electric power mini steering in floating armrest	●	●	●
180-degree steering	●	●	●
360-degree steering	●	●	●
Active Spin Reduction	●	●	●
Intelligent Cornering System (ICS)	●	●	●
Hands-free direction control, HFDC, in accelerator pedal	●	●	●
Hand-operated direction control	●	●	●
Ergologic Joystick	●	●	●
Fingertip controls	●	●	●
Midi steering wheel	●	●	●
Key switch entry	●	●	●
Creep speed at preset level 500 mm	-	-	●
Creep speed at other levels	-	-	●
S3-2 Increased performance	●	●	●
ELECTRIC			
Blue / Red point safety light, towards driving direction	●	●	●
Automatic logoff	●	●	●
Working lights LED	●	●	●
Working lights LED for cabin	●	●	●
Warning light on the roof	●	●	●
Warning light for Heated cabin	●	●	●
12 V connector	●	●	●
Converter 48 - 12 V	●	●	●
Radio with MP3	●	●	●
Service alarm	●	●	●
OHG AND CABIN			
Heated cabin	●	●	●
Window opening in cabin door (CSM)	●	●	●
2-Way intercom for cold store cabin (CSM)	●	●	●
Tapered overhead guard	-	-	●
Mesh metal on overhead guard	●	●	●
Heated seat – fabric	●	●	●
Heated seat – PVC	●	●	●
Rear view mirror	●	●	●
Writing desk	●	●	●
Equipment holder, RAM system size C	●	●	●
Equipment holder, RAM system size C, 2 pcs	●	●	●
Equipment holder, RAM system size D	●	●	●
WHEEL OPTIONS			
Vulkolan® traction wheel 93 Shore	●	●	●
Tractothan® traction wheel 93 Shore	●	●	●
Load wheel Ø 220mm	●	●	●
ENVIRONMENT			
Cold store design, 0C° to -30C°	●	●	●

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Ergologic joystick



Midi steering wheel



2-way intercom for cold store cabin

WHEN RELIABILITY IS EVERYTHING...



Like any product bearing the Mitsubishi Forklift Trucks name, our materials handling equipment benefits from the tremendous heritage, huge resources and cutting-edge technology of one of the world's largest corporations – Mitsubishi Heavy Industries Group.

Engineering spacecraft, jet planes, power plants and more, MHI specialises in those technologies where performance, dependability and superiority decide your success or failure...

So when we promise you quality, reliability and value for money, you know it's a guarantee we have the power to deliver.

That's why every model in our award winning and comprehensive range of lift trucks and warehouse equipment is built to a high specification – to ensure it keeps working for you. Day after day. Year after year. Whatever the job. Whatever the conditions.

YOU'LL NEVER WORK ALONE

As your local authorised distributor, we are here to keep your trucks working – through our extensive experience, our technical excellence and our commitment to customer care.

We are your local experts, backed by efficient channels to the entire organisation of Mitsubishi Forklift Trucks.

No matter where you are, we are close by – with the capability to meet your needs.

Discover how Mitsubishi Forklift Trucks give you more from your local authorised distributor or when you visit our website www.mitforklift.com

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.

We follow a policy of continual product improvement. For this reason, some materials, options and specifications could change without notice.

QUALITY | RELIABILITY | VALUE FOR MONEY

info@mitforklift.com

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