

PRELIMINARY  
SPECIFICATIONS

MOVE THE WORLD FORWARD  MITSUBISHI  
HEAVY  
INDUSTRIES  
GROUP

**SENSIA** EX

**RBM20-25N3 Series**

# 4-WAY REACH TRUCKS

2.0 - 2.5 tonnes

**STRONG, STABLE, SWIFT...  
EVEN IN SMALL SPACES**

The RBM20-25N3 Series of four-way reach trucks is an ideal choice if you're looking for a smart, flexible, and highly ergonomic reach truck that can deal with long or bulky goods with ease.

## SPECIFICATIONS

RBM20N3  
RBM25N3



**WHEN  
RELIABILITY IS  
EVERYTHING...**

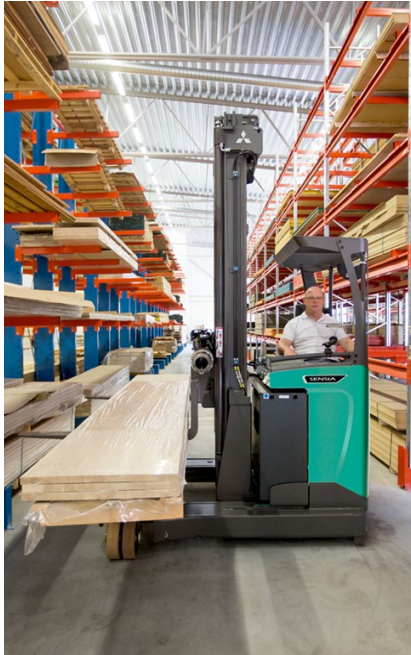
 **MITSUBISHI  
FORKLIFT TRUCKS**

# SENSiA EX

## RBM20-25N3 Series

### 4-WAY REACH TRUCKS

2.0 – 2.5 tonnes



Equally capable of handling long loads and standard pallets, the RBM20-25N3 Series offers lift heights up to 9.7 metres. As it's four-way and can carry long loads sideways, aisles can be kept to a minimum, allowing you to maximise storage space.

With a long battery life and a suite of operator-focused features available, it makes lengthy shifts a breeze for both truck and driver. Exceptional all-round visibility and stability aides allow operators to work with greater confidence and safety. Combined with a top speed of 13 km/h this makes for an incredibly efficient and productive truck.

#### DRIVE

- **Intelligent Cornering System**  
The truck senses the angle of a turn and reduces speed early for maximum stability and accurate, positive cornering.
- **Active Spin Reduction (ASR)**  
Helps to stop the drive wheel spinning. This minimises grip loss while also reducing wear on the wheel.
- **Durable drive wheel**  
Low-wear drive wheel means less maintenance and lower costs.



#### ELECTRICAL AND CONTROL SYSTEMS

- **Quick battery inspection**  
Battery is on steel rollers for ease of inspection.
- **Advanced on-board computer**  
Stores power and hydraulic preference settings for up to 350 different users.
- **Built-in Li-ion battery (option)**  
Fast opportune charging removes the need for extra batteries and allows 24/7 operation.
- **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.
- **S3 - 2**  
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 and overhead guard**  
These maximise operator field of vision for increased productivity and safety.
- **Level Assistance System (option)**  
This patented system detects the operator's intention and automatically stops when the forks are at precisely at the right level.
- **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.



For more information on SENSiA EX Series please visit our website



mft2.eu/rbm3

# SENSIA EX

## RBM20-25N3 Series

### 4-WAY REACH TRUCKS

2.0 – 2.5 tonnes



#### 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.
- **RapidAccess features**  
These allow quick and easy entry to all areas for checks and maintenance.

#### HYDRAULICS

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

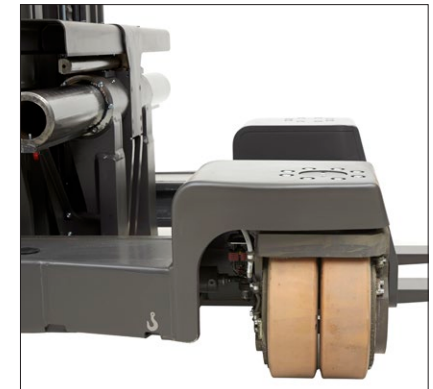
#### OPERATOR COMPARTMENT AND CONTROLS

- **Electrically adjustable floor height**  
Can be adjusted to suit each operator and provide a more ergonomic seating position.
- **Weight indicator**  
Displays the load weight as well as the option to add multiple weights of up to 100kg.
- **Tilting seat with ergonomic backrest**  
Drivers are kept safe, comfortable, and alert through long shifts.

- **Heated cabin (option)**  
Makes for more comfortable operation in cold environments.
- **Spacious and 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**  
Includes ergonomic hand bars, low non-slip step and wide entry to provide 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.
- **Synchronised steering mode**  
Allows for quick changes in travel direction.
- **360-degree steering**  
The operator can keep the truck in constant motion — saving seconds on every turn.
- **Midi steering wheel (option)**  
Adjustable positioning with tilt function.



For more information on SENSIA EX Series please visit our website



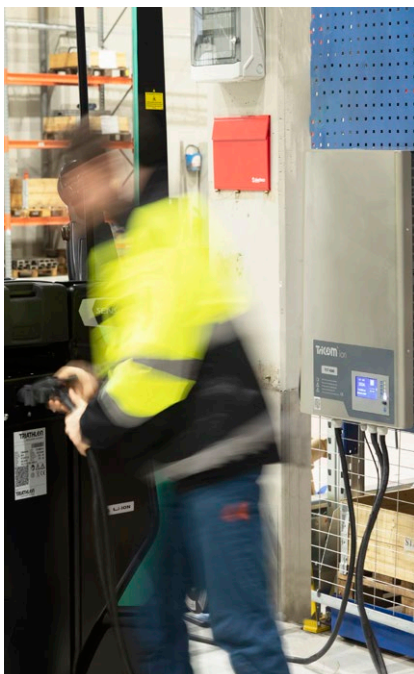
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# SENSIA EX

## 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 and space efficient operation**  
with 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, deepdischarge 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
1.1	Manufacturer			RBM20N3	RBM25N3
1.2	Manufacturer's model designation			Battery	Battery
1.3	Power source			Seated	Seated
1.4	Operator type			2000	2500
1.5	Load capacity	Q	kg	600	600
1.6	Load center distance	c	mm	see table	see table
1.8	Load wheel axle to fork face (forks lowered)	x	mm	1505	1665
1.9	Wheelbase	y	mm		
WEIGHT					
2.1b	Truck weight without load, with maximum battery weight		kg	4360	4960
2.3	Axle loadings without load & with maximum battery weight, drive / load side		kg	2550 / 1810	2880 / 2080
2.4	Axle loading, mast forward, with nominal load, drive / load side		kg	800 / 5560	660 / 6800
2.5	Axle loading, mast retracted, with nominal load, drive / load side		kg	2360 / 4000	2830 / 4630
WHEELS, DRIVE TRAIN					
3.1	Tyres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side			Vul	Vul
3.2	Tyre dimensions, drive side		mm	355 x 155	355 x 155
3.3	Tyre dimensions, load side		mm	260 x 85	260 x 85
3.5	Number of wheels, load / drive side (x = driven)			2 + 2 / 1x	2 + 2 / 1x
3.7	Track width (center of tyres), load side	b11	mm	1444	1444
DIMENSIONS					
4.1	Fork tilt, forwards / backwards	α, β	°	1.5/3.5 <sup>9)</sup> 1/3 <sup>9)</sup> 1/1 <sup>9)</sup>	1.5/3.5 <sup>9)</sup> 1/3 <sup>9)</sup> 1/1 <sup>9)</sup>
4.2a	Height with mast lowered	h1	mm	see table	see table
4.3	Free lift	h2	mm	see table	see table
4.4	Lift height	h3	mm	see table	see table
4.5	Height with mast extended	h4	mm	see table	see table
4.7	Height to top of overhead guard	h6	mm	2215	2215
4.8	Seat- or stand height	h7	mm	1087 <sup>1)</sup>	1087 <sup>1)</sup>
4.10	Height of support legs	h8	mm	430	430
4.15	Fork height, fully lowered	h13	mm	65	65
4.19	Overall length	l1	mm	2473	2555
4.20	Length to fork face	l2	mm	1323	1405
4.21	Overall width	b1/b2	mm	1744 / 1498	1744 / 1498
4.22	Fork dimensions (thickness, width, length)	s/e/l	mm	45 / 125 / 1150	45 / 125 / 1150
4.24	Fork carriage width	b3	mm	1500 / 2170	1500 / 2170
4.25	Outside width over forks (minimum / maximum)	b5	mm	556-1546 / 2216	556-1546 / 2216
4.26	Inner width of support legs	b4	mm	903	903
4.28	Mast reach	l4	mm	704	782
4.32	Ground clearance at center of wheelbase, (forks lowered)	m2	mm	80	80
4.33a	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise	Ast	mm	2787	2896
4.34a	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast	mm	2823	2915
4.35	Turning radius	Wa	mm	1772	1932
4.37	Truck length including support legs	l7	mm	1942	2102
PERFORMANCE					
5.1	Travel speed, with / without load		km/h	13 / 13	13 / 13
5.2	Lifting speed, with / without load		m/s	0.33 / 0.55	0.32 / 0.53
5.3	Lowering speed, with / without load		m/s	0.54 / 0.47	0.53 / 0.53
5.5	Rated drawbar pull, with / without load		N	0.2 / 0.2	0.2 / 0.2
5.8	Maximum gradeability with / without load		%	10 / 15	9 / 14
5.9	Acceleration time (10 metres) with / without load		s	5.7 / 5.0	6.2 / 5.2
5.10	Service brakes (mechanical / hydraulic / electric / pneumatic)			Electric	Electric
ELECTRIC MOTORS					
6.1	Drive motor capacity (60 min. short duty)		kW	7.2	7.2
6.2	Lift motor output at 15% duty factor		kW	15	15
6.4	Battery voltage/capacity at 5-hour discharge		V/Ah	48 - 465 / 620 / 775 / 930	48 - 620 / 775 / 930
6.5	Battery weight		kg	712 / 892 / 1063 / 1567	892 / 1063 / 1567
MISCELLANEOUS					
8.1	Type of drive control			Stepless	Stepless
10.1	Maximum operating pressure for attachments		bar	150	150
10.2	Oil flow for attachments		l / min	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)	59.7	59.7

**SENSIA EX**

## RBM20-25N3 Series 4-WAY REACH TRUCKS

2.0 – 2.5 tonnes



1) Measured with standard seat to SIP point  
9) Mast tilt

# MAST PERFORMANCE AND CAPACITY

**SENSIA EX**

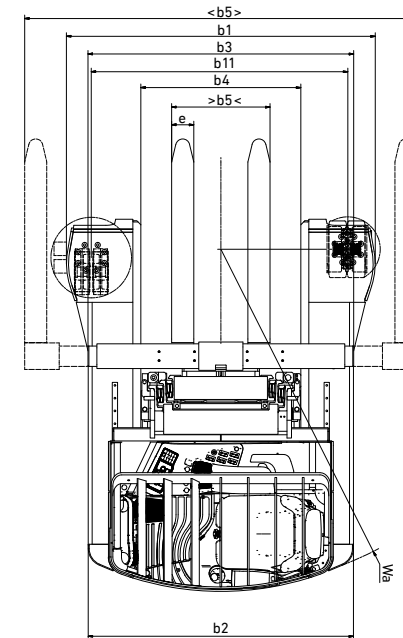
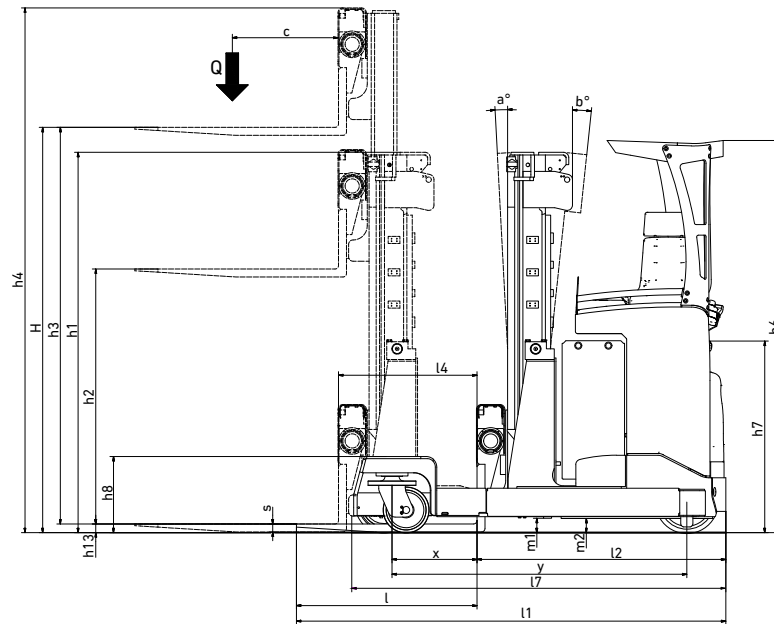
## RBM20-25N3 Series

RBM20N3				
MAST TYPE	h3 + h13 mm	h1 mm	h2 + h13 mm	h4 mm
DTFV TRIPLEX	4350	2165	1487	5063
	4950	2365	1687	5663
	5250	2465	1787	5963
	5850	2665	1987	6563
	6300	2815	2137	7013
	6800	2982	2304	7513
	7500	3215	2537	8213
	8000	3382	2704	8713
8500	3548	2870	9213	
RBM25N3				
DTFV TRIPLEX	4500	2365	1687	5213
	4800	3465	1787	5513
	5400	2665	1987	6113
	5850	2815	2137	6563
	6350	2982	2304	7063
	7050	3215	2537	7763
	7550	3382	2704	8263
	8050	3548	2870	8763
	8500	3698	3020	9213
	9000	3865	3187	9713
	9350	3982	3304	10063
9700	4098	3420	10413	

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

$A_{st} = Wa + \sqrt{(l_6 - x)^2 + (b_{12} / 2)^2 + a}$   
 $A_{st}$  = 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

MODEL	BATTERY CAPACITY	BATTERY WEIGHT	1.8
	Ah	kg	x mm
RBM20N3	465	708	449
	620	892	377
	775	1063	305
	930	1240	233
	620	892	527
RBM25N3	775	1063	445
	930	1240	383



# STANDARD EQUIPMENT & OPTIONS

- = Standard
- = Option

	RBM20N3	RBM25N3
<b>GENERAL</b>		
Automatic electric parking brake	●	●
Steering wheel angle indicator	●	●
Battery indicator with cut out at 20% remaining battery level	●	●
Multifunctional colour display	●	●
Electric adjustable floor height	●	●
Suspension seat with weight controlled tilting high backrest	●	●
Chill store design, down to +1° Celsius	●	●
Paper storage and cup holder	●	●
Battery reach out	●	●
Battery on rollers	●	●
Other RAL-colour	●	●
<b>POWER SOURCE</b>		
Li-ion battery*	●	●
Lead acid battery	●	●
Battery cover plate	●	●
<b>MAST, FORKS AND CARRIAGE</b>		
Tilting mast	●	●
Integral Fork positioner 560 - 1550mm	●	●
Manual Fork positioner 560 - 1550mm	●	●
Manual Fork positioner 560 - 2220mm	●	●
Fork safe zone system	●	●
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)	●	●
Reverse travel camera	●	●
Horizontal forks	●	●
S3 - Stability support system with soft motion	●	●

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

## SENSIA EX RBM20-25N3 Series 4-WAY REACH TRUCKS

2.0 – 2.5 tonnes



Battery on rollers



Midi steering wheel



Ergologic Joystick

# STANDARD EQUIPMENT & OPTIONS

- = Standard
- = Option

	RBM20N3	RBM25N3
<b>DRIVE AND LIFT CONTROLS</b>		
Electric power mini steering in floating armrest	●	●
360-degree steering	●	●
Active Spin Reduction	●	●
Intelligent Cornering System (ICS)	●	●
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	●	●
<b>ELECTRIC</b>		
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 Volt connector	●	●
Converter 48 - 12 V	●	●
Radio with MP3	●	●
Service alarm	●	●
<b>OHG AND CABIN</b>		
Heated cabin**	●	●
Window opening in cabin door (CSM)	●	●
2-way intercom for cold store cabin (CSM)	●	●
Panoramic ProVision roof	●	●
Mesh metal on overhead guard	●	●
Heated seat – fabric	●	●
Heated seat – PVC	●	●
Headrest for seat	●	●
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	●	●
<b>WHEEL OPTIONS</b>		
Vulkolan® traction wheel 95 Shore	●	●
Tractothan® traction wheel 93 Shore	●	●
<b>ENVIRONMENT</b>		
Cold store design, 0C° to -30C°**	●	●

\*\* Not in combination with Li-ion battery

**SENSIA EX**

**RBM20-25N3 Series**

**4-WAY REACH TRUCKS**

2.0 – 2.5 tonnes



Blue point safety light



Panoramic MaxVision roof



Suspension seat with tilting backrest



# 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](http://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.

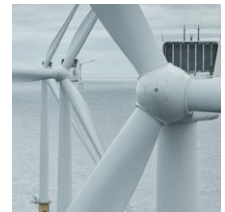
Specific performance requirements and locally available configurations should be discussed with your distributor.

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](mailto:info@mitforklift.com)

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