

AXiA EM

SBV/SBF12-16N3(I)(S)(R) Series

PLATFORM STACKER

1.25 - 1.60 tonnes

HIGH PERFORMANCE INTUITIVE OPERATION

The compact and versatile AXiA EM 1.25 and 1.60 tonne platform stacker series is the perfect choice for high level stacking applications, order picking, and transport operations in narrow spaces.

SPECIFICATIONS

SBV12N3	SBV16N3	SBF16N3IS
SBV12N3I	SBV16N3I	SBF16N3SR
SBF12N3R	SBV16N3S	SBF16N3SS
SBF12N3S	SBF16N3R	
SBF12N3IR	SBF16N3S	
SBF12N3IS	SBF16N3IR	



**WHEN
RELIABILITY IS
EVERYTHING...**

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1.25 - 1.60 tonnes



The series is available in foldable platform models with optional sidebars for use in narrow spaces, fixed platform rear entry models for fast operations where maximum operator protection is required, and fixed platform side entry models for easy on-off access on both sides for picking applications. There are also wide straddle models available to allow greater flexibility in pallet handling, including closed and specialised carrier material. These models also enable the use of a variety of special handling attachments e.g. spikes, clamps, rolls, etc.

AXiA EM has a sturdy 4-point chassis where the drive system is designed to increase traction and stabilisation proportional to the load. This keeps the truck consistently stable for safe, productive performance and confident operation.

BRAKES

- **High-efficiency regenerative braking**
Some charge is regenerated back into the battery, and gives more effective control and reduces brake wear.

DRIVE

- **Powerful AC drive motor**
Excellent traction, smooth, quiet, controlled operation, extended shift length and lower maintenance requirements.
- **Controlled Cornering System**
The truck senses both the velocity of the steering and the angle of a turn and reduces speed early for maximum stability and accurate, positive cornering.



- **Large drive wheel**
Increased radius extends the life of the wheel and reduces vibration on uneven surfaces for a more comfortable drive.

ELECTRICAL AND CONTROL SYSTEMS

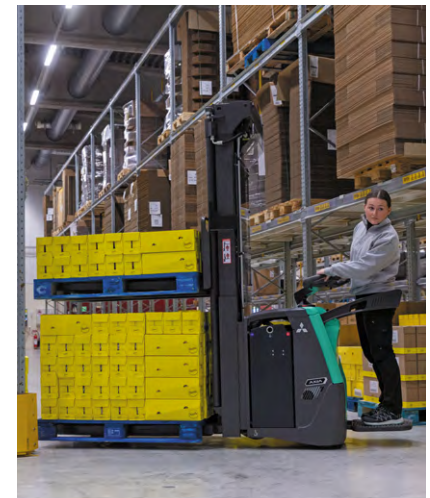
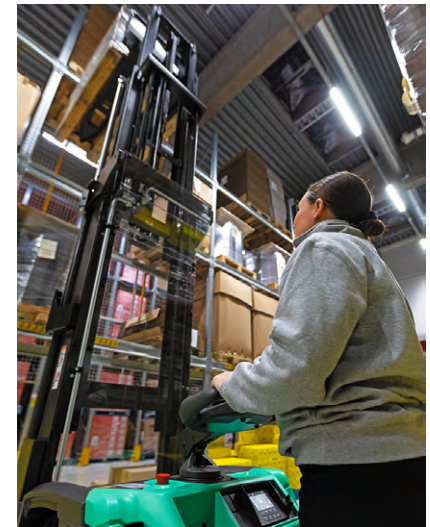
- **Combi controller lift system**
Proportional rocker switch control for lifting and lowering.
- **Built-in Li-ion battery**
Fast opportune charging removes the need for extra batteries and allows 24/7 operation. (Option)
- **Mounted battery plug**
Plug is contained within a tray so there is no risk of loose cables getting caught when changing the battery.
- **Sealed electrical connectors**
Sealed compartment prevents system failure and corrosion from water and dust.

FORKS AND MAST

- **Robust, tapered forks**
Strong welded construction with pointed tips for effortless pallet entry. Access to pallets in racks or block stacks is easier, quicker and safer.
- **Initial Lift**
This allows for better ground clearance on ramps, inclines, and uneven floors, and allows for double pallet handling. (I models only)

- **Wide Straddle Legs**
Legs feature tandem wheels as standard. Straddle models have low profile forged forks. Open space allows a variety of specialised handling assemblies to be used. (Straddle models only)

- **Robust, clear view mast**
Optimised design means excellent visibility of the forks and load.
- **Exceptionally smooth 'no knock' transition between mast stages**
Vulkollan dampers ensure quieter movement over the lift range.
- **Load carrier stop in Initial Lift models**
This enables quicker, easier, and safer alignment when double stacking pallets.
- **Smooth landing of the fork carriage**
Hydraulic attenuation in the free-lift cylinder makes this much quieter.



For more information on AXiA EM please visit our website



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FRAME AND BODY

- **Compact, robust chassis**
Built for intensive operations, with great inherent strength and high residual capacities. Narrow and compact, the truck excels in small spaces.
- **Shared components in stackers and pallet trucks**
Service costs and downtime are kept to a minimum and allows a more unified user experience for better familiarity and greater productivity.
- **High stability design**
Traction, dampening and stability are all optimised to work in close harmony and produce unequalled drivability and stability — particularly beneficial when stacking.

OPERATOR COMPARTMENT AND CONTROLS

- **Ergonomic ErgoSteer tiller head**
Best-in-class, impact-resistant tiller head with large, easy-to-reach buttons placed at a patented ergonomic distance for reduced fatigue and safer operation. IP65 rated.
- **Conventional tiller arm**
The standard mechanical steering option offers easy steering for low-intensity work. The design of the linkage system allows for a more compact, optimised arm than most stackers.



- **Power steering**
Power steering allows for a short tiller arm with a reduced steering angle for comfortable, precise control and smooth cornering. (Option)
- **Pivot steering**
Electric-powered steering without arm offers less operator fatigue in combination with the ergonomic platform. (Option)
- **Damped platform**
Foldable platforms and side/rear entry platforms are damped to ensure minimum vibrations and bumps for greater operator comfort. (All models)
- **Adjustable EasyRide electric damping**
Unique electric damping capability allows operator to adjust the platform to their weight or preference — ideal for applications on ramps, uneven floors, and working over long distances. (Option on fixed platform trucks)
- **Foldable side bars**
High, cushioned ergonomic side bars can be moved up or down and can be quickly switched to suit different operations. (Option)
- **Operator Presence Sensor**
This locks all movement of the truck and its mast if the operator is not present.

- **Creep speed function and tiller-up drive**

Both help to maximise safety and control in confined spaces. (Option on foldable platform trucks)

- **Choice of three operating modes (PRO, ECO and Easy)**

Different driver modes: PRO for advanced drivers, ECO for low energy consumption, Easy for sensitive goods or beginners.

OTHER FEATURES

- **RapidAccess features**
These allow quick and easy entry to all areas for checks and maintenance.
- **Storage compartment**
Operator can store tools and other required items.



For more information on AXiA EM please visit our website



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AXIA EM 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**



Li-ion battery option is available in selected regions.

Continuing improvement may lead to changes in these specifications

mft2.eu/ion

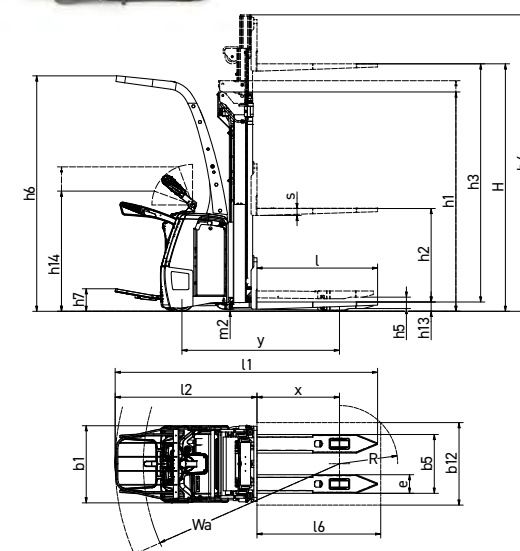
VDI - PERFORMANCE & DIMENSIONS

CHARACTERISTICS			Mitsubishi Forklift Trucks			
1.1	Manufacturer		SBV12N3	SBV12N3I	SBV16N3	SBV16N3I
1.2	Manufacturer's model designation		Battery	Battery	Battery	Battery
1.3	Power source		Pedestrian / Stand-on	Pedestrian / Stand-on	Pedestrian / Stand-on	Pedestrian / Stand-on
1.4	Operator type					
1.5	Load capacity	Q kg	1250	1250	1600	1600
1.6	Load center distance	c mm	600	600	600	600
1.8	Load wheel axle to fork face (forks lowered)	x mm	800	800	800 ¹⁾	800
1.9	Wheelbase	y mm	1429	1503	1503 ²⁾	1533
WEIGHT						
2.1b	Truck weight without load, with maximum battery weight	kg	1350	1450	1560	1660
2.2	Axle loadings with nominal load & maximum battery weight, drive / load side	kg	1005 / 1410 ¹³⁾	1020 / 1495 ¹³⁾		1235 / 1975 ¹³⁾
2.3	Axle loadings without load & with maximum battery weight, drive / load side	kg	825 / 310 ¹³⁾	855 / 375 ¹³⁾		1095 / 485 ¹³⁾
WHEELS, DRIVE TRAIN						
3.1	Tyres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side		Vul / Vul	Vul / Vul	Vul / Vul	Vul / Vul
3.2	Tyre dimensions, drive side	mm	235 x 75	235 x 75	235 x 75	235 x 75
3.3	Tyre dimensions, load side	mm	85 x 76 ³⁾	85 x 76 ³⁾	85 x 76 ³⁾	85 x 76 ³⁾
3.4	Castor wheel dimensions (diameter x width)	mm	150 x 55	150 x 55	150 x 55	150 x 55
3.5	Number of wheels, load / drive side (x = driven)		4 ³⁾ / 1 x + 1	4 ³⁾ / 1 x + 1	4 ³⁾ / 1 x + 1	4 ³⁾ / 1 x + 1
3.6	Track width (center of tyres), drive side	b10 mm	497	497	497	497
3.7	Track width (center of tyres), load side	b11 mm	402	390	402	390
DIMENSIONS						
4.2a	Height with mast lowered	h1 mm	see tables	see tables	see tables	see tables
4.2b	Height	h1 mm	see tables	see tables	see tables	see tables
4.3	Free lift	h2 mm	see tables	see tables	see tables	see tables
4.4	Lift height (stroke)	h3 mm	see tables	see tables	see tables	see tables
4.5	Height with mast extended	h4 mm	see tables	see tables	see tables	see tables
4.6	Initial lift (stroke)	h5 mm		110		110
4.7	Height to top of overhead guard	h6 mm	2283	2283	2283	2283
4.8	Seat- or stand height	h7 mm	171	171	171	171
4.9	Height of tiller arm / steering console (min./max.)	h14 mm	1099 / 1512	1099 / 1512	1099 / 1512	1099 / 1512
4.10	Height of support legs	h8 mm	82	87	80	87
4.15	Fork height, fully lowered	h13 mm	89	93	89	93
4.19	Overall length	l1 mm	2090 / 2450 ^{4) 14)}	2163 / 2523 ^{4) 14)}	2164 / 2525 ^{4) 14)}	2193 / 2554 ^{4) 14)}
4.20	Length to fork face	l2 mm	920 / 1280 ^{4) 14)}	993 / 1353 ^{4) 14)}	994 / 1355 ^{4) 14)}	1023 / 1384 ^{4) 14)}
4.21	Overall width	b1 mm	748	748	748	748
4.22	Fork dimensions (thickness, width, length)	s/e/l mm	70 / 180 / 1170	70 / 180 / 1170	70 / 180 / 1170 ⁵⁾	70 / 180 / 1170
4.24	Fork carriage width	b3 mm	670	670	730	730
4.25	Outside width over forks (minimum / maximum)	b5 mm	570	570	570 ⁶⁾	570
4.26	Inner width of support legs	b4 mm	N/A ⁷⁾	N/A ⁷⁾	N/A ⁷⁾	N/A ⁷⁾
4.32	Ground clearance at center of wheelbase, (forks lowered)	m2 mm	32	20-130	25	20-130
4.34a	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast mm				
4.34c	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast mm	2509 / 2846 ⁴⁾ [2841 ⁹⁾]	2581 / 2919 ⁴⁾ [2914 ⁹⁾]	2582 / 2921 ⁴⁾ [2915 ⁹⁾]	2611 / 2950 ⁴⁾ [2944 ⁹⁾]
4.35	Turning radius	Wa mm	1743 / 2080 ⁴⁾ [2075 ⁹⁾]	1815 / 2153 ⁴⁾ [2148 ⁹⁾]	1816 / 2155 ⁴⁾ [2149 ⁹⁾]	1845 / 2184 ⁴⁾ [2178 ⁹⁾]
PERFORMANCE						
5.1	Travel speed, with / without load	km/h	6.0 / 6.0 ¹⁰⁾ 8.5 / 8.5 ¹¹⁾	6.0 / 6.0 ¹⁰⁾ 8.5 / 8.5 ¹¹⁾	6.0 / 6.0 ¹⁰⁾ 8.5 / 8.5 ¹¹⁾	6.0 / 6.0 ¹⁰⁾ 8.5 / 8.5 ¹¹⁾
5.2	Lifting speed, with / without load	m/s	0.20 / 0.34	0.20 / 0.34	0.16 / 0.28	0.16 / 0.28
5.3	Lowering speed, with / without load	m/s	0.47 / 0.40	0.47 / 0.33	0.42 / 0.41	0.42 / 0.36
5.7	Gradeability, with / without load	%	8.7 / 8.7	11.9 / 17.2	6.1 / 6.1	11.3 / 17.2
5.9	Acceleration time (10 metres) with / without load	s	5.7 / 5.3 ¹³⁾	5.7 / 5.3 ¹³⁾	6.3 / 5.3 ¹³⁾	6.3 / 5.3 ¹³⁾
5.10	Service brakes (mechanical / hydraulic / electric / pneumatic)		Electric ¹²⁾	Electric ¹²⁾	Electric ¹²⁾	Electric ¹²⁾
ELECTRIC MOTORS						
6.1	Drive motor capacity (60 min. short duty)	kW	2.4	2.4	2.4	2.4
6.2	Lift motor output at 15% duty factor	kW	3.0 ¹⁵⁾	3.0 ¹⁵⁾	3.0 ¹⁵⁾	3.0 ¹⁵⁾
6.4	Battery voltage/capacity at 5-hour discharge	V/Ah	24 / 270-400	24 / 270-400	24 / 270-400	24 / 270-400
6.5	Battery weight	kg	285-350	285-350	285-350	285-350
6.6a	Energy consumption according to EN16796	kW/h	0.68 ¹⁶⁾	0.68 ¹⁶⁾	0.72 ¹⁶⁾	0.72 ¹⁶⁾
MISCELLANEOUS						
8.1	Type of drive control		AC	AC	AC	AC
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)	<70	<70	<70	<70

AXIA EM

SBV12-16N3(I) Series PLATFORM STACKER FOLDING PLATFORM

1.25 - 1.60 tonnes



- 1) 500-1230 mm or alt. 600 mm for straddle models
- 2) at x=800 mm
- 3) bogie (tandem)
- 4) platform up / down
- 5) variable length 800-1600, for straddle models 800-1400
- 6) variable fork width 550-660
- 7) derive from b5 and e
- 8) with pivot power steering
- 9) with overhead guard
- 10) without side protection bars
- 11) with side protection bars
- 12) incl. also parking brake
- 13) Varies acc. to configuration
- 14) For l1 / l2 with OHG add +350 mm to platform up
- 15) 12% duty factor
- 16) Varies acc. to config. and actual usage pattern
- 17) There are two standard straddle/support legs widths available to choose from (ref. b1/b4)

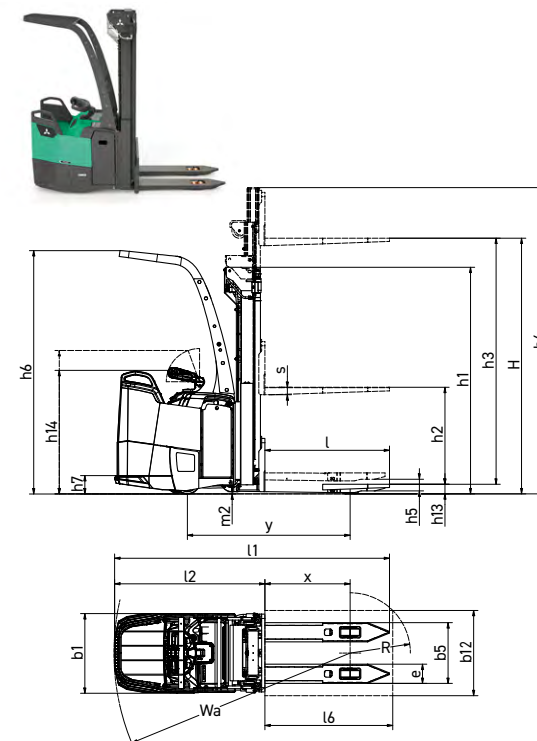
VDI - PERFORMANCE & DIMENSIONS

CHARACTERISTICS				Mitsubishi Forklift Trucks			
1.1	Manufacturer			SBF12N3R	SBF12N3IR	SBF16N3R	SBF16N3IR
1.2	Manufacturer's model designation			Battery	Battery	Battery	Battery
1.3	Power source			Stand-on	Stand-on	Stand-on	Stand-on
1.4	Operator type						
1.5	Load capacity	Q	kg	1250	1250	1600	1600
1.6	Load center distance	c	mm	600	600	600	600
1.8	Load wheel axle to fork face (forks lowered)	x	mm	800	800	800 ¹⁾	800
1.9	Wheelbase	y	mm	1429	1503	1503 ²⁾	1533
WEIGHT							
2.1b	Truck weight without load, with maximum battery weight		kg	1420	1520	1600	1730
2.2	Axle loadings with nominal load & maximum battery weight, drive / load side		kg			1320 / 1835 ¹³⁾	1355 / 1895 ¹³⁾
2.3	Axle loadings without load & with maximum battery weight, drive / load side		kg			1130 / 390 ¹³⁾	1175 / 445 ¹³⁾
WHEELS, DRIVE TRAIN							
3.1	Tyres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side			Vul / Vul	Vul / Vul	Vul / Vul	Vul / Vul
3.2	Tyre dimensions, drive side		mm	235 x 75	235 x 75	235 x 75	235 x 75
3.3	Tyre dimensions, load side	Ø	mm	85 x 76 ³⁾	85 x 76 ³⁾	85 x 76 ³⁾	85 x 76 ³⁾
3.4	Castor wheel dimensions (diameter x width)		mm	150 x 55	150 x 55	150 x 55	150 x 55
3.5	Number of wheels, load / drive side (x = driven)			4 ³⁾ / 1 x + 1	4 ³⁾ / 1 x + 1	4 ³⁾ / 1 x + 1	4 ³⁾ / 1 x + 1
3.6	Track width (center of tyres), drive side	b10	mm	497	497	497	497
3.7	Track width (center of tyres), load side	b11	mm	402	390	402	390
DIMENSIONS							
4.2a	Height with mast lowered	h1	mm	see tables	see tables	see tables	see tables
4.2b	Height	h1	mm	see tables	see tables	see tables	see tables
4.3	Free lift	h2	mm	see tables	see tables	see tables	see tables
4.4	Lift height (stroke)	h3	mm	see tables	see tables	see tables	see tables
4.5	Height with mast extended	h4	mm	see tables	see tables	see tables	see tables
4.6	Initial lift (stroke)	h5	mm		110		110
4.7	Height to top of overhead guard	h6	mm	2283	2283	2283	2283
4.8	Seat- or stand height	h7	mm	170	170	170	170
4.9	Height of tiller arm / steering console (min./max.)	h14	mm	1119 / 1428	1119 / 1428	1119 / 1428	1119 / 1428
4.10	Height of support legs	h8	mm	82	87	80	87
4.15	Fork height, fully lowered	h13	mm	89	93	89	93
4.19	Overall length	l1	mm	2482	2556	2556	2585
4.20	Length to fork face	l2	mm	1312	1386	1386	1415
4.21	Overall width	b1	mm	748	748	748	748
4.22	Fork dimensions (thickness, width, length)	s/e/l	mm	70 / 180 / 1170	70 / 180 / 1170	70 / 180 / 1170 ⁵⁾	70 / 180 / 1170
4.24	Fork carriage width	b3	mm	670	670	730	730
4.25	Outside width over forks (minimum / maximum)	b5	mm	570	570	570 ⁶⁾	570
4.26	Inner width of support legs	b4	mm	N/A ⁷⁾	N/A ⁷⁾	N/A ⁷⁾	N/A ⁷⁾
4.32	Ground clearance at center of wheelbase, (forks lowered)	m2	mm	32	20-130	25	20-130
4.34a	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast	mm	2878	2956	2957	2986
4.34c	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast	mm				
4.35	Turning radius	Wa	mm	2112	2190	2191	2220
PERFORMANCE							
5.1	Travel speed, with / without load		km/h	8.5 / 8.5	8.5 / 8.5	8.5 / 8.5	8.5 / 8.5
5.2	Lifting speed, with / without load		m/s	0.20 / 0.34	0.20 / 0.34	0.16 / 0.28	0.16 / 0.28
5.3	Lowering speed, with / without load		m/s	0.47 / 0.40	0.47 / 0.33	0.42 / 0.41	0.42 / 0.36
5.7	Gradeability, with / without load		%	8.7 / 8.7	11.4 / 15.0	6.1 / 6.1	10.9 / 15.0
5.9	Acceleration time (10 metres) with / without load		s	5.7 / 5.3 ¹³⁾	5.7 / 5.3 ¹³⁾	6.3 / 5.3 ¹³⁾	6.3 / 5.3 ¹³⁾
5.10	Service brakes (mechanical / hydraulic / electric / pneumatic)			Electric ¹²⁾	Electric ¹²⁾	Electric ¹²⁾	Electric ¹²⁾
ELECTRIC MOTORS							
6.1	Drive motor capacity (60 min. short duty)		kW	2.4	2.4	2.4	2.4
6.2	Lift motor output at 15% duty factor		kW	3.0 ¹⁵⁾	3.0 ¹⁵⁾	3.0 ¹⁵⁾	3.0 ¹⁵⁾
6.4	Battery voltage/capacity at 5-hour discharge		V/Ah	24 / 270-400	24 / 270-400	24 / 270-400	24 / 270-400
6.5	Battery weight		kg	285-350	285-350	285-350	285-350
6.6a	Energy consumption according to EN16796		kW/h	0.68 ¹⁶⁾	0.68 ¹⁶⁾	0.72 ¹⁶⁾	0.72 ¹⁶⁾
MISCELLANEOUS							
8.1	Type of drive control			AC	AC	AC	AC
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)	<70	<70	<70	<70

AXIA EM

SBF12-16N3(I)(R) Series PLATFORM STACKER REAR ENTRY PLATFORM

1.25 - 1.60 tonnes



- 1) 500-1230 mm or alt. 600 mm for straddle models
- 2) at x=800 mm
- 3) bogie (tandem)
- 4) platform up / down
- 5) variable length 800-1600, for straddle models 800-1400
- 6) variable fork width 550-660
- 7) derive from b5 and e
- 8) with pivot power steering
- 9) with overhead guard
- 10) without side protection bars
- 11) with side protection bars
- 12) incl. also parking brake
- 13) Varies acc. to configuration
- 14) For l1 / l2 with OHG add +350 mm to platform up
- 15) 12% duty factor
- 16) Varies acc. to config. and actual usage pattern
- 17) There are two standard straddle/support legs widths available to choose from (ref. b1/b4)

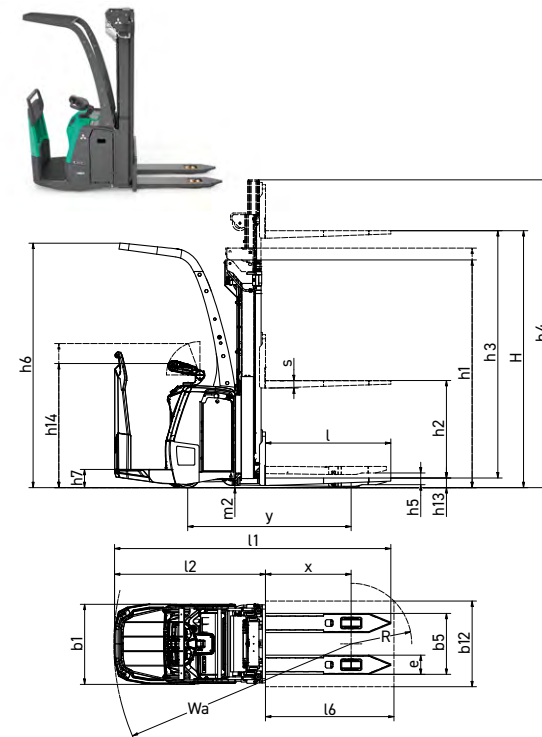
VDI - PERFORMANCE & DIMENSIONS

CHARACTERISTICS				Mitsubishi Forklift Trucks			
1.1	Manufacturer			SBF12N3S	SBF12N3IS	SBF16N3S	SBF16N3IS
1.2	Manufacturer's model designation			Battery	Battery	Battery	Battery
1.3	Power source			Stand-on	Stand-on	Stand-on	Stand-on
1.4	Operator type						
1.5	Load capacity	Q	kg	1250	1250	1600	1600
1.6	Load center distance	c	mm	600	600	600	600
1.8	Load wheel axle to fork face (forks lowered)	x	mm	800	800	800 ¹⁾	800
1.9	Wheelbase	y	mm	1429	1503	1503 ²⁾	1533
WEIGHT							
2.1b	Truck weight without load, with maximum battery weight		kg	1420	1520	1600	1730
2.2	Axle loadings with nominal load & maximum battery weight, drive / load side		kg			1320 / 1835 ¹³⁾	1355 / 1895 ¹³⁾
2.3	Axle loadings without load & with maximum battery weight, drive / load side		kg			1130 / 390 ¹³⁾	1175 / 445 ¹³⁾
WHEELS, DRIVE TRAIN							
3.1	Tyres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side			Vul / Vul	Vul / Vul	Vul / Vul	Vul / Vul
3.2	Tyre dimensions, drive side		mm	235 x 75	235 x 75	235 x 75	235 x 75
3.3	Tyre dimensions, load side	Ø	mm	85 x 76 ³⁾	85 x 76 ³⁾	85 x 76 ³⁾	85 x 76 ³⁾
3.4	Castor wheel dimensions (diameter x width)		mm	150 x 55	150 x 55	150 x 55	150 x 55
3.5	Number of wheels, load / drive side (x = driven)			4 ³⁾ / 1x + 1	4 ³⁾ / 1x + 1	4 ³⁾ / 1x + 1	4 ³⁾ / 1x + 1
3.6	Track width (center of tyres), drive side	b10	mm	497	497	497	497
3.7	Track width (center of tyres), load side	b11	mm	402	390	402	390
DIMENSIONS							
4.2a	Height with mast lowered	h1	mm	see tables	see tables	see tables	see tables
4.2b	Height	h1	mm	see tables	see tables	see tables	see tables
4.3	Free lift	h2	mm	see tables	see tables	see tables	see tables
4.4	Lift height (stroke)	h3	mm	see tables	see tables	see tables	see tables
4.5	Height with mast extended	h4	mm	see tables	see tables	see tables	see tables
4.6	Initial lift (stroke)	h5	mm		110		110
4.7	Height to top of overhead guard	h6	mm	2283	2283	2283	2283
4.8	Seat- or stand height	h7	mm	170	170	170	170
4.9	Height of tiller arm / steering console (min./max.)	h14	mm	1130 / 1297 ⁸⁾	1130 / 1297 ⁸⁾	1130 / 1297 ⁸⁾	1130 / 1297 ⁸⁾
4.10	Height of support legs	h8	mm	82	87	80	87
4.15	Fork height, fully lowered	h13	mm	89	93	89	93
4.19	Overall length	l1	mm	2482	2556	2556	2585
4.20	Length to fork face	l2	mm	1312	1386	1386	1415
4.21	Overall width	b1	mm	748	748	748	748
4.22	Fork dimensions (thickness, width, length)	s/e/l	mm	70 / 180 / 1170	70 / 180 / 1170	70 / 180 / 1170 ⁵⁾	70 / 180 / 1170
4.24	Fork carriage width	b3	mm	670	670	730	730
4.25	Outside width over forks (minimum / maximum)	b5	mm	570	570	570 ⁶⁾	570
4.26	Inner width of support legs	b4	mm	N/A ⁷⁾	N/A ⁷⁾	N/A ⁷⁾	N/A ⁷⁾
4.32	Ground clearance at center of wheelbase, (forks lowered)	m2	mm	32	20-130	25	20-130
4.34a	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast	mm	2878	2956	2957	2986
4.34c	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast	mm				
4.35	Turning radius	Wa	mm	2112	2190	2191	2220
PERFORMANCE							
5.1	Travel speed, with / without load		km/h	8.5 / 8.5	8.5 / 8.5	8.5 / 8.5	8.5 / 8.5
5.2	Lifting speed, with / without load		m/s	0.20 / 0.34	0.20 / 0.34	0.16 / 0.28	0.16 / 0.28
5.3	Lowering speed, with / without load		m/s	0.47 / 0.40	0.47 / 0.33	0.42 / 0.41	0.42 / 0.36
5.7	Gradeability, with / without load		%	8.7 / 8.7	11.4 / 15.0	6.1 / 6.1	10.9 / 15.0
5.9	Acceleration time (10 metres) with / without load		s	5.7 / 5.3 ¹³⁾	5.7 / 5.3 ¹³⁾	6.3 / 5.3 ¹³⁾	6.3 / 5.3 ¹³⁾
5.10	Service brakes (mechanical / hydraulic / electric / pneumatic)			Electric ¹²⁾	Electric ¹²⁾	Electric ¹²⁾	Electric ¹²⁾
ELECTRIC MOTORS							
6.1	Drive motor capacity (60 min. short duty)		kW	2.4	2.4	2.4	2.4
6.2	Lift motor output at 15% duty factor		kW	3.0 ¹⁵⁾	3.0 ¹⁵⁾	3.0 ¹⁵⁾	3.0 ¹⁵⁾
6.4	Battery voltage/capacity at 5-hour discharge		V/Ah	24 / 270-400	24 / 270-400	24 / 270-400	24 / 270-400
6.5	Battery weight		kg	285-350	285-350	285-350	285-350
6.6a	Energy consumption according to EN16796		kW/h	0.68 ¹⁶⁾	0.68 ¹⁶⁾	0.72 ¹⁶⁾	0.72 ¹⁶⁾
MISCELLANEOUS							
8.1	Type of drive control			AC	AC	AC	AC
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)	<70	<70	<70	<70

AXIA EM

SBF12-16N3(I)(S) Series PLATFORM STACKER SIDE ENTRY PLATFORM

1.25 - 1.60 tonnes



- 1) 500-1230 mm or alt. 600 mm for straddle models
- 2) at x=800 mm
- 3) bogie (tandem)
- 4) platform up / down
- 5) variable length 800-1600, for straddle models 800-1400
- 6) variable fork width 550-660
- 7) derive from b5 and e
- 8) with pivot power steering
- 9) with overhead guard
- 10) without side protection bars
- 11) with side protection bars
- 12) incl. also parking brake
- 13) Varies acc. to configuration
- 14) For l1 / l2 with OHG add +350 mm to platform up
- 15) 12% duty factor
- 16) Varies acc. to config. and actual usage pattern
- 17) There are two standard straddle/support legs widths available to choose from (ref. b1/b4)

VDI - PERFORMANCE & DIMENSIONS

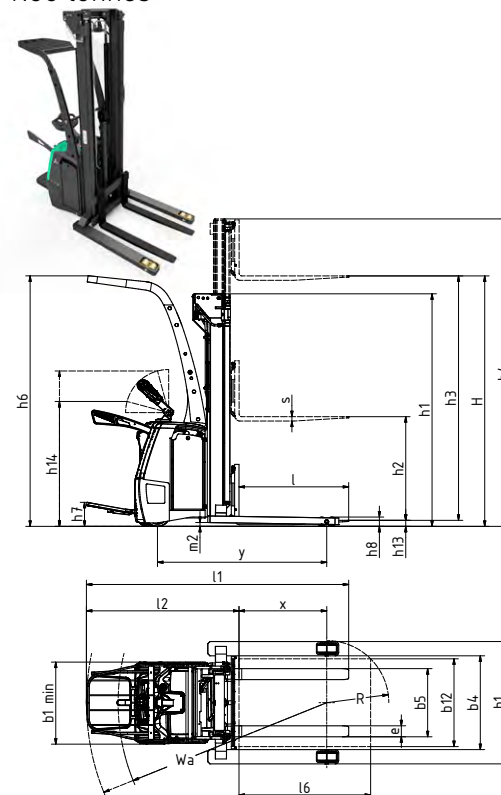
CHARACTERISTICS				Mitsubishi Forklift Trucks		
1.1	Manufacturer			SBV16N3S	SBF16N3SR	SBF16N3SS
1.2	Manufacturer's model designation			Battery	Battery	Battery
1.3	Power source			Pedestrian/Stand-on	Stand-on	Stand-on
1.4	Operator type					
1.5	Load capacity	Q	kg	1600	1600	1600
1.6	Load center distance	c	mm	600	600	600
1.8	Load wheel axle to fork face (forks lowered)	x	mm	800 ¹⁾	800 ¹⁾	800 ¹⁾
1.9	Wheelbase	y	mm	1543 ²⁾	1543 ²⁾	1543 ²⁾
WEIGHT						
2.1b	Truck weight without load, with maximum battery weight		kg	1580	1650	1650
2.2	Axle loadings with nominal load & maximum battery weight, drive / load side		kg	1320 / 1845 ¹³⁾		
2.3	Axle loadings without load & with maximum battery weight, drive / load side		kg	1025 / 425 ¹³⁾		
WHEELS, DRIVE TRAIN						
3.1	Tyres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side			Vul / Vul	Vul / Vul	Vul / Vul
3.2	Tyre dimensions, drive side		mm	235 x 75	235 x 75	235 x 75
3.3	Tyre dimensions, load side	Ø	mm	85 x 76 ³⁾	85 x 76 ³⁾	85 x 76 ³⁾
3.4	Castor wheel dimensions (diameter x width)		mm	150 x 55	150 x 55	150 x 55
3.5	Number of wheels, load / drive side (x = driven)			4 ³⁾ / 1 x + 1	4 ³⁾ / 1 x + 1	4 ³⁾ / 1 x + 1
3.6	Track width (center of tyres), drive side	b10	mm	497	497	497
3.7	Track width (center of tyres), load side	b11	mm	985 / 1185 ³⁾	985 / 1185 ³⁾	985 / 1185 ³⁾
DIMENSIONS						
4.2a	Height with mast lowered	h1	mm	see tables	see tables	see tables
4.2b	Height	h1	mm	see tables	see tables	see tables
4.3	Free lift	h2	mm	see tables	see tables	see tables
4.4	Lift height (stroke)	h3	mm	see tables	see tables	see tables
4.5	Height with mast extended	h4	mm	see tables	see tables	see tables
4.6	Initial lift (stroke)	h5	mm	-	-	-
4.7	Height to top of overhead guard	h6	mm	2283	2283	2283
4.8	Seat- or stand height	h7	mm	171	170	170
4.9	Height of tiller arm / steering console (min./max.)	h14	mm	1099 / 1512	1119 / 1428	1130 / 1297 ⁸⁾
4.10	Height of support legs	h8	mm	92 ³⁾	92 ³⁾	92 ³⁾
4.15	Fork height, fully lowered	h13	mm	55	55	55
4.19	Overall length	l1	mm	2184 / 2545 ^{4) 14)}	2576	2576
4.20	Length to fork face	l2	mm	1034 / 1395 ^{4) 14)}	1426	1426
4.21	Overall width	b1	mm	1115 / 1315 ^{3) 17)}	1115 / 1315 ^{3) 17)}	1115 / 1315 ^{3) 17)}
4.22	Fork dimensions (thickness, width, length)	s/e/l	mm	40 / 100 / 1150 ⁵⁾	40 / 100 / 1150 ⁵⁾	40 / 100 / 1150 ⁵⁾
4.23	Fork carriage to DIN			FEM 2/A	FEM 2/A	FEM 2/A
4.24	Fork carriage width	b3	mm	840	840	840
4.25	Outside width over forks (minimum / maximum)	b5	mm	316 / 773	316 / 773	316 / 773
4.26	Inner width of support legs	b4	mm	855 / 1055 ¹⁷⁾	855 / 1055 ¹⁷⁾	855 / 1055 ¹⁷⁾
4.32	Ground clearance at center of wheelbase, (forks lowered)	m2	mm	30 ³⁾	30 ³⁾	30 ³⁾
4.33a	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise	Ast	mm		3063 ²⁾	3063 ²⁾
4.33c	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast	mm	2688 / 3027 ⁴⁾		
4.34a	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast	mm		2997 ²⁾	2997 ²⁾
4.34c	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast	mm	2622/2961 ²⁾ ⁴⁾ [2955 ⁹⁾		
4.35	Turning radius	Wa	mm	1856/2195 ²⁴⁾ [2189 ⁹⁾	2231 ²⁾	2231 ²⁾
PERFORMANCE						
5.1	Travel speed, with / without load		km/h	6.0/6.0 ¹⁰⁾ 8.5/ 8.5 ¹¹⁾	8.5 / 8.5	8.5 / 8.5
5.2	Lifting speed, with / without load		m/s	0.15 / 0.24	0.15 / 0.24	0.15 / 0.24
5.3	Lowering speed, with / without load		m/s	0.33 / 0.30	0.33 / 0.30	0.33 / 0.30
5.7	Gradeability, with / without load		%	6.1 / 6.1	6.1 / 6.1	6.1 / 6.1
5.9	Acceleration time (10 metres) with / without load		s	6.3 / 5.3 ¹³⁾	6.3 / 5.3 ¹³⁾	6.3 / 5.3 ¹³⁾
5.10	Service brakes (mechanical / hydraulic / electric / pneumatic)			Electric ¹²⁾	Electric ¹²⁾	Electric ¹²⁾
ELECTRIC MOTORS						
6.1	Drive motor capacity (60 min. short duty)		kW	2.4	2.4	2.4
6.2	Lift motor output at 15% duty factor		kW	3.0 ¹⁵⁾	3.0 ¹⁵⁾	3.0 ¹⁵⁾
6.4	Battery voltage/capacity at 5-hour discharge		V/Ah	24 / 270-400	24 / 270-400	24 / 270-400
6.5	Battery weight		kg	285-350	285-350	285-350
6.6a	Energy consumption according to EN16796		kW/h	0.72 ¹⁶⁾	0.72 ¹⁶⁾	0.72 ¹⁶⁾
MISCELLANEOUS						
8.1	Type of drive control			AC	AC	AC
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)	<70	<70	<70

AXIA EM

SBV/SBF16N3S(R)(S) Series

**PLATFORM STACKER
WITH STRADDLE LEGS**

1.60 tonnes



- 1) 500-1230 mm or alt. 600 mm for straddle models
- 2) at x=800 mm
- 3) bogie (tandem)
- 4) platform up / down
- 5) variable length 800-1600, for straddle models 800-1400
- 6) variable fork width 550-660
- 7) derive from b5 and e
- 8) with pivot power steering
- 9) with overhead guard
- 10) without side protection bars
- 11) with side protection bars
- 12) incl. also parking brake
- 13) Varies acc. to configuration
- 14) For l1 / l2 with OHG add +350 mm to platform up
- 15) 12% duty factor
- 16) Varies acc. to config. and actual usage pattern
- 17) There are two standard straddle/support legs widths available to choose from (ref. b1/b4)

MAST PERFORMANCE AND CAPACITY



SBV/SBF12-16N3(I)(S)(R) Series

PLATFORM STACKER

1.25 - 1.60 tonnes

MAST TYPE	h3 + h13 mm	h1 mm	h4 mm	h2 + h13 mm
NARROW	SBV/SBF12N3(R)(S)			
Duplex with clear view mast (TV)	2690	1857	3120	159
	2990	2007	3420	159
	3290	2157	3720	159
	3590	2307	4020	159
	4190	2607	4620	159
Duplex with clear view and full free lift (TFV)	2690	1857	3120	1389
	2990	2007	3420	1539
	3290	2157	3720	1689
	3590	2307	4020	1839
	4190	2607	4620	2139
NARROW	SBV/SBF16N3(R)(S)			
Duplex with clear view and full free lift (TFV)	2900	2000	3405	1499
	3200	2150	3705	1649
	3600	2350	4105	1849
	3800	2450	4305	1949
	4200	2650	4705	2149
Triplex with clear view and full free lift (DTFV)	4350	2000	4882	1519
	4800	2150	5332	1669
	5400	2350	5932	1869

MAST TYPE	h3 + h13 mm	h1 mm	h4 mm	h2 + h13 mm
WIDE STRADDLE	SBV/SBF16N3S(R)(S)			
Duplex with clear view and full free lift (WTFV)	2900	2000	3410	1465
	3200	2150	3710	1615
	3600	2350	4110	1815
	3800	2450	4310	1915
	4200	2650	4710	2115

MAST TYPE	h3 + h13 mm	h1 mm	h4 mm	h2 + h13 mm
INITIAL LIFT	SBV/SBF12N3I(R)(S)			
Duplex with clear view mast (TV)	2690	1862	3125	163
	2990	2012	3425	163
	3290	2162	3725	163
	3590	2312	4025	163
	4190	2612	4625	163
Duplex with clear view and full free lift (TFV)	2690	1862	3125	1393
	2990	2012	3425	1543
	3290	2162	3725	1693
	3590	2312	4025	1843
	4190	2612	4625	2143
INITIAL LIFT	SBV/SBF16N3I(R)(S)			
Duplex with clear view and full free lift (TFV)	2900	2005	3412	1503
	3200	2155	3712	1653
	3600	2355	4112	1853
	3800	2455	4312	1953
	4200	2655	4712	2153
Triplex with clear view and full free lift (DTFV)	4350	2005	4889	1523
	4800	2155	5339	1673
	5400	2355	5939	1873

TV / DS = Duplex with clear view mast
 TFV / DEV = Duplex with clear view and full free lift
 DTFV / TREV = Triplex with clear view and full free lift

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

STANDARD EQUIPMENT & OPTIONS

- = Standard
- = Option

	SBV12-16N3	SBV12-16N3I	SBF12-16N3R	SBF12-16N3IR	SBF12-16N3S	SBF12-16N3IS	SBV16N3S	SBF16N3SR	SBF16N3SS
GENERAL									
Drive motor 2.4 kW AC	●	●	●	●	●	●	●	●	●
Lift motor 3.0 kW DC (S3=12%)	●	●	●	●	●	●	●	●	●
Micro-computer with standard display (HMI-10), incl. hour meter and BDI	●	●	●	●	●	●	●	●	●
Initial straddle lift (for double pallet handling and cross-docking)	-	●	-	●	-	●	-	-	-
Wide straddle legs for handling of also closed load carriers (std width 855 or 1055 mm)	-	-	-	-	-	-	●	●	●
Foldable platform, without side protection bars (6.0 km/h)	●	●	-	-	-	-	●	-	-
Fixed operator protected platform, rear entry (8.5 km/h)	-	-	●	●	-	-	-	●	-
Fixed operator protected platform, side entry (8.5 km/h)	-	-	-	-	●	●	-	-	●
Mechanical steering tiller arm (fixed length 450 mm)	●	●	-	-	-	-	●	-	-
Power steering tiller arm	●	●	●	●	-	-	●	●	●
Pivot steering (Comfort Steering tiller arm)	-	-	●	●	●	●	-	●	●
Vulkollan® drive wheel	●	●	●	●	●	●	●	●	●
Tandem load wheels dia 85 mm, Vulkollan®	●	●	●	●	●	●	●	●	●
Single load wheels dia 150 mm, Vulkollan®	-	-	-	-	-	-	●	●	●
BATTERY AND CHARGER									
Battery connector: Rema 160	●	●	●	●	●	●	●	●	●
Battery compartment without rollers	●	●	●	●	●	●	●	●	●
Battery on steel rollers **	●	●	●	●	●	●	●	●	●
Quick release of battery lock (only in combination with steel rollers)	●	●	●	●	●	●	●	●	●
Li-ion batteries and chargers *	●	●	●	●	●	●	●	●	●
Lead acid batteries and chargers	●	●	●	●	●	●	●	●	●
ENVIRONMENT									
Grease nipples in lifting profiles and rust protected axles	●	●	●	●	●	●	●	●	●
Chill store design, down to -10°C	●	●	●	●	●	●	●	●	●
Cold store design, down to -30°C **	●	●	●	●	●	●	●	●	●
DRIVE AND LIFT CONTROLS									
Speed regulated lift motor and proportional valve for lowering, controlled by large rocker switch on tiller head	●	●	●	●	●	●	●	●	●
Tiller-up drive	●	●	-	-	-	-	●	-	-

* Li-ion battery option is available in selected regions.

** Not in combination with Li-ion battery

AXIA EM SBV/SBF12-16N3(I) (S)(R) Series PLATFORM STACKER 1.25 - 1.60 tonnes



Mechanical steering tiller arm



Power steering tiller arm



Pivot (comfort) steering

STANDARD EQUIPMENT & OPTIONS

- = Standard
- = Option

	SBV12-16N3	SBV12-16N3I	SBF12-16N3R	SBF12-16N3IR	SBF12-16N3S	SBF12-16N3IS	SBV16N3S	SBF16N3SR	SBF16N3SS
DRIVE WHEEL OPTIONS									
Vulkollan 93®	●	●	●	●	●	●	●	●	●
Tractothan 93	●	●	●	●	●	●	●	●	●
Super grip 93	●	●	●	●	●	●	●	●	●
PEVODYN-Soft 78	●	●	●	●	●	●	●	●	●
Vulkollan 95 ELF®	●	●	●	●	●	●	●	●	●
OTHER FEATURES AND OPTIONS									
Overhead guard (not in combination with mechanical steering)	●	●	●	●	●	●	●	●	●
Foldable side protection bars, incl. increased drive 8.5 km/h (only with foldable platform)	●	●	–	–	–	–	●	–	–
Fixed platform adjustable damped floor, electric by toggle switch for individual settings/preference	–	–	●	●	●	●	–	●	●
Foot protection, by light curtain in platform opening (rear entry platform version only)	–	–	●	●	–	–	–	●	–
Power steering	●	●	●	●	●	●	●	●	●
Active Spin Reduction	●	●	●	●	●	●	●	●	●
Multi-function display incl. hour meter and BDI (HMI-20), <99 individual PIN codes log in and graphic icons	●	●	●	●	●	●	●	●	●
Load backrest 1200	●	●	●	●	●	●	●	●	●
Key switch entry	●	●	●	●	●	●	●	●	●
12 V DC power socket (not in combination with 5 V USB)	●	●	●	●	●	●	●	●	●
5 V USB socket (not in combination with 12 V)	●	●	●	●	●	●	●	●	●
Accessory rack (not in combination with OHG, already included in OHG)	●	●	●	●	●	●	●	●	●
Writing desk incl. RAM C holder (accessory rack or OHG required)	●	●	●	●	●	●	●	●	●
Equipment holder, RAM system size C (accessory rack or OHG required)	●	●	●	●	●	●	●	●	●
Equipment holder, RAM system size C, 2 pcs (accessory rack or OHG required)	●	●	●	●	●	●	●	●	●
Equipment holder, RAM size D (accessory rack or OHG required)	●	●	●	●	●	●	●	●	●
Special RAL colour	●	●	●	●	●	●	●	●	●
Battery creep (limp home) safety feature, Lead-acid (DoD 15%) / Li-ion (DoD 7%)	●	●	●	●	●	●	●	●	●
Battery level audible warning, lead acid (DoD 20%) / Li-ion (DoD 10%)	●	●	●	●	●	●	●	●	●
Service interval alarm	●	●	●	●	●	●	●	●	●
Automatic log-off (HMI-20 required, not in combination with key switch entry)	●	●	●	●	●	●	●	●	●
Revert to low speed at log-off (not in combination with 'at operator absent')	●	●	●	●	●	●	●	●	●
Revert to low speed at operator absent (not in combination with 'at log-off')	●	●	●	●	●	●	●	●	●
Floor spot Red or Blue (not combined, OHG required)	●	●	●	●	●	●	●	●	●

AXIA EM SBV/SBF12-16N3(I) (S)(R) Series PLATFORM STACKER 1.25 - 1.60 tonnes



Wide straddle legs



Foldable side bars



Initial lift

WHEN RELIABILITY IS EVERYTHING...



AXiA
THE ALL ROUNDER

With a name that reflects its manoeuvrability, AXiA combines award-winning ergonomics with high performance and low maintenance features to deliver a complete warehouse support package.

Efficient, versatile and durable, AXiA is the perfect choice for every workplace.

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

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