


MOVE THE WORLD FORWARD  MITSUBISHI  
HEAVY  
INDUSTRIES  
GROUP

**AXIA EM** (1.2 - 1.6 TONS)



# PLATFORM STACKERS

SBV12-16P(I)(S) Series

WHEN  
**RELIABILITY** IS  
EVERYTHING...

 **MITSUBISHI**  
FORKLIFT TRUCKS

# MINIMISE YOUR EFFORT... MAXIMISE YOUR VERSATILITY

---

Designed to 'do it all', our **AXiA EM** 1.2 and 1.6 ton platform stackers are the perfect choice for medium stack applications in narrow spaces. However, they excel when shuttling and picking, too. By specifying the Initial Lift (I) option, you can even use it as a double pallet handler, too.

Offering a drive speed of 8.5 km/h, this truck's performance is among the best in its class. It's low maintenance, too, thanks to its easy accessibility and protection against dust and water.

Its robust folding platform is cast in iron – ensuring it can resist knocks, while offering exceptional cushioning. For easy, safe on/off access, side guards can be quickly and easily folded out or in.





**AXIA EM** can be fitted with a fixed overhead guard for a safe and comfortable working above a lift height of 1.8 m. Additionally a stationary operator platform is available.

## DRIVE

- **Initial Lift** increases versatility by allowing the truck to operate on uneven floors and serve as a double pallet handler. (Optional)
- **Powerful AC drive motor** means high drive speed (up to 8.5 km/h) and acceleration – even when loaded – plus smooth, quiet, controlled operation, extended shift length and lower maintenance requirements.

## ELECTRICAL AND CONTROL SYSTEMS

- **Electronic power steering** means smooth, precise control with minimal effort and maximum comfort. (Optional)
- **Power steering resistance** offers a natural driving experience – keeping drivers alert and working safely.
- **Battery discharge indicator** prevents deep discharge and allows for use to be monitored.
- **PIN-code access** prevents unauthorised use of the truck.
- **Performance setting** including pre-set modes – allows instant programming without special tools.
- **Battery rollers** make changes quick, easy and safe.



# EXCEPTIONAL COMFORT AND CONTROL

---

## OPERATOR ENVIRONMENT AND CONTROLS

- **Left-handed or right-handed controls** are possible, thanks to the versatile tiller arm.
- **Easy, foldable side bars** (option) eliminates the need for operators to step off the platform for highly efficient, safe operations.
- **Dampened platform** encourages a natural operating stance for additional protection of operators against knocks or bumps.
- **Keypad and display on tiller head:** Easy to activate the truck, change settings and get information.

## FRAME AND BODY

- **Robust cast-iron platform** offers outstanding cushioning for shift-after-shift comfort.

## OTHERS

- **Rapid access features** give quick and easy entry to all areas for checks and servicing.







**Wide Range of Lift Heights  
and Mast Types**

Includes triplex masts and a choice of standard or free lift masts.

**Tapered Forks**

Enhance safety, while offering quicker and easier access to pallets in racks or block stacks.

**Easy-to-operate Tiller Arm**

Features large, easy-use buttons so operators can focus on the task in hand.

**Ultra-low Step Height**

Offers easy on/off access to keep operators alert and productive through shifts.

# SPECIFICATIONS

CHARACTERISTICS					
1	Manufacturer		Mitsubishi Forklift Trucks	Mitsubishi Forklift Trucks	Mitsubishi Forklift Trucks
2	Manufacturer's model designation		SBV12P	SBV12P(l)	SBV16P
3	Power source		Battery	Battery	Battery
4	Operator type		Pedestrian / Stand-on	Pedestrian / Stand-on	Pedestrian / Stand-on
5	Load capacity	Q kg	1250	1250	1600
6	Load center distance	c mm	600	600	600
7	Load wheel axle to fork face (forks lowered)	x mm	750	750	800
8	Wheelbase	y mm	1412	1646	1529
WEIGHT					
9	Truck weight without load, with maximum battery weight	kg	4200	4200	1230
10	Axle loadings with nominal load & maximum battery weight, drive / load side	kg	1130/1457	1130/1457	738 / 1085
11	Axle loadings without load & with maximum battery weight, drive / load side	kg	924/403	924/403	930 / 350
WHEELS, DRIVE TRAIN					
12	Tyres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side		PT	PT	Vul / Vul
13	Tyre dimensions, drive side	mm	ø230 × 70	ø230 × 70	ø230 × 90
14	Tyre dimensions, load side	mm	ø85 × 99	ø85 × 99	ø85 × 70
15	Castor wheel dimensions (diameter x width)	mm	ø140 × 60	ø140 × 60	ø140 × 60
16	Number of wheels, load / drive side (x = driven)		1x + 1/2	1x + 1/2	1x+1/4
17	Track width (center of tyres), drive side	b10 mm	501	501	501
18	Track width (center of tyres), load side	b11 mm	380	380	390
DIMENSIONS					
19	Height	h1 mm	see tables	see tables	see tables
20	Free lift	h2 mm	see tables	see tables	see tables
21	Lift height	h3 mm	see tables	see tables	see tables
22	Height with mast extended	h4 mm	see tables	see tables	see tables
23	Initial lift	h5 mm	–	110	–
24	Height to top of overhead guard	h6 mm	2288	2288	2288
25	Seat- or stand height	h7 mm	165	165	165
26	Height of tiller arm / steering console (min./max.)	h14 mm	1090/1470	1090/1470	1090/1470
27	Height of support legs	h8 mm	82	82	80
28	Fork height, fully lowered	h13 mm	90	90	85
29	Overall length	l1 mm	2107	2216 / 2622	2140 / 2524 (l=1150)
30	Length to fork face	l2 mm	907	1016 / 1422	990 / 1374
31	Overall width	b1/b2 mm	770	770	770
32	Fork dimensions (thickness, width, length)	s/e/l mm	65 / 180 / 1200, 1000	65 / 180 / 1200, 1000	65 / 180 / 1150, 1000
33	Fork carriage width	b3 mm	590	590	730
34	Outside width over forks (minimum / maximum)	b5 mm	570	570	570
35	Inner width of support legs	b4 mm	210	210	265
36	Ground clearance at center of wheelbase, (forks lowered)	m2 mm	28	28	25
37	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast mm	2526 / 2909	2515 / 2935	2535 / 2920(l=1000)
38	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast mm	2479 / 2862	2537 / 2957	2557 / 2942 (l=1150)
39	Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast3 mm	2325 / 2708	2515 / 2935	2390 / 2775
40	Turning radius	Wa mm	1675 / 2058	1865 / 2285	1790 / 2175
PERFORMANCE					
41	Travel speed, with / without load	km/h	5.6 / 5.6	5.6 / 5.6	8.5 / 8.5
42	Lifting speed, with / without load	m/s	0.13 / 0.26	0.13 / 0.26	0.16 / 0.33
43	Lowering speed, with / without load	m/s	0.33 / 0.21	0.33 / 0.21	0.39 / 0.31
44	Gradeability, with / without load	%	7 / 9	7 / 9	–
45	Maximum gradeability with / without load	%	7 / 9	9.9 / 21.4	7
46	Acceleration time (10 metres) with / without load	s	7.9 / 7.5	7.9 / 7.5	6.6 / 5.6
47	Service brakes (mechanical / hydraulic / electric / pneumatic)		Electric	Electric	Electric
ELECTRIC MOTORS					
48	Drive motor capacity (60 min. short duty)	kW	1.3	1.3	2.2
49	Lift motor output at 15% duty factor	kW	1	1	3.6
50	Battery voltage/capacity at 5-hour discharge	V/Ah	24V / 220Ah-400Ah	24V / 220Ah-400Ah	24V / 220Ah-400Ah
51	Battery weight	kg	250-370	250-370	250-370
52	Energy consumption according to EN16796	kWh/h	–	–	1.138
MISCELLANEOUS					
53	Type of drive control		Stepless	Stepless	Stepless
54	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)	62.8	62.8	–
55	Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ	dB(A)	–	–	67.5

Some options affect VDI measurements, these options are added between brackets '()', and are not separate models.

DS = Duplex with clear-view mast  
 DEV = Duplex with full free lift  
 TREV = Triplex with full free lift  
 h3+h13 = Lifting height  
 h1 = Lowered mast height  
 h2+h13 = Free lift

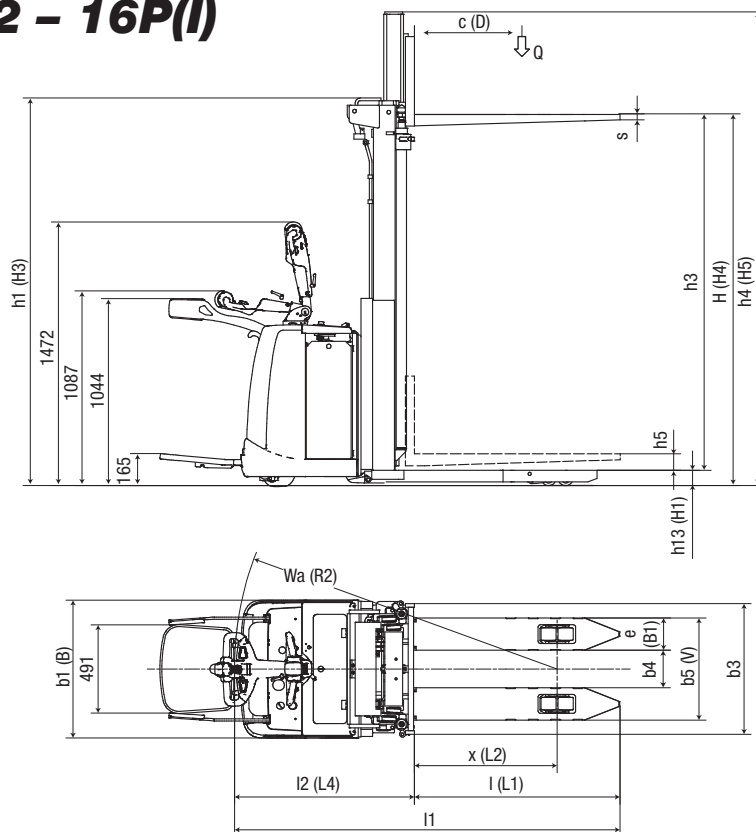
Ast = Working aisle width  
 Ast3 = Working aisle width (b12 < 1000 mm)  
 $Ast = Wa + \sqrt{(l6 - x)^2 + (b12 / 2)^2} + a$   
 Ast3 =  $Wa + l6 - x + a$

Wa = Turning radius  
 l6 = Pallet length  
 x = Load wheel axle to fork face  
 b12 = Pallet width  
 a = Safety clearance = 2 x 100 mm

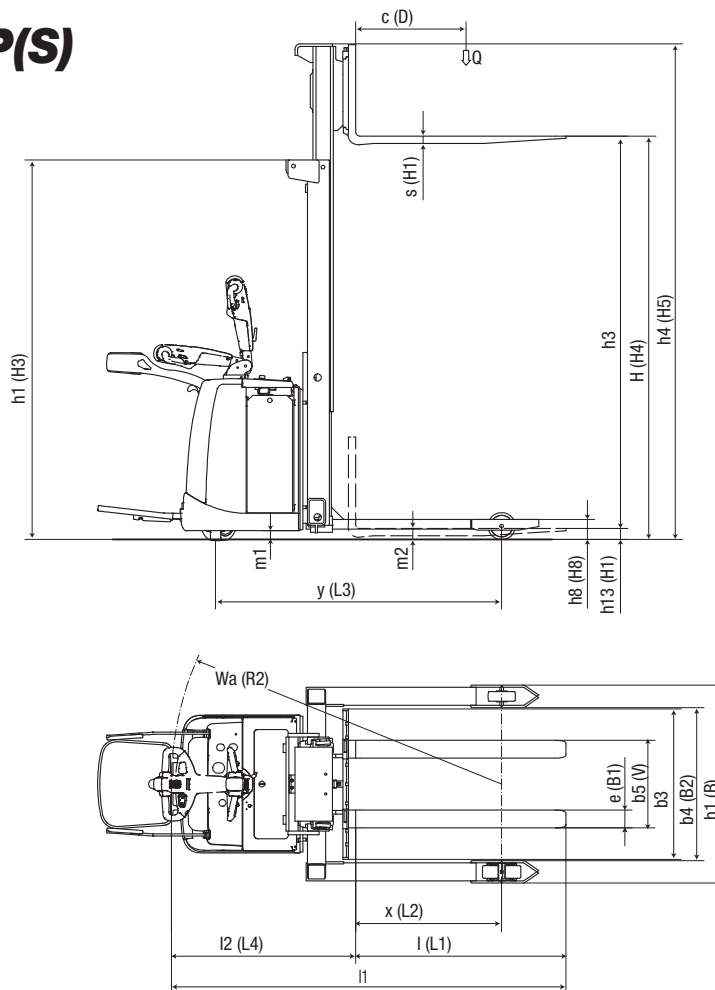


Mitsubishi Forklift Trucks SBV16P(I)	Mitsubishi Forklift Trucks SBV16P(S)
Battery	Battery
Pedestrian / Stand-on	Pedestrian / Stand-on
1600	1600
600	600
800	800
1501	1565
3600	3600
738 / 1085	930 / 2030
930 / 350	940 / 420
Vul / Vul	Vul / Vul
ø230 × 90	ø230 × 90
ø85 × 70	ø85 × 70
ø140 × 60	ø140 × 60
1x+1/4	2+1x/4
501	550
980 / 1180	980 / 1180
see tables	see tables
see tables	see tables
see tables	see tables
see tables	see tables
110	-
2288	2288
165	145
1090/1470	1141/1341
80	-
85	75
2185 / 2569 (l=1150)	2175 / 2559 (l=1150)
1035 / 1419	887 / 1343
770	1105 / 1305
65 / 180 / 1200, 1000	40 / 100 / 1150, 1000, 800
730	840
570	216 / 773
235	855 / 1055
25	38
2604 / 2979 (l=1000)	2547 / 2931(l=1000)
2538 / 2913 (l=1150)	2593 / 2977 (l=1150)
2372 / 2747	2579 / 2963
1172 / 2147	1826 / 2210
8.5 / 8.5	9/9
0.16 / 0.33	0.13 / 0.23
0.39 / 0.31	0.20 / 0.12
-	-
14.6 / 26.5	10 / 10
6.6 / 5.6	6.6 / 5.6
Electric	Electric
2.2	2
3.6	3
24V / 220Ah-400Ah	224V / 375Ah
250-370	285
1.138	1.138
Stepless	Stepless
-	-
67.5	67.5

## SBV12 - 16P(I)



## SBV16P(S)



# MAST PERFORMANCE AND CAPACITY

MAST TYPE	h3 + h13 mm	h1* mm	h2 + h13 mm
<b>SBV12P(I)</b>			
<b>DUPLEX (DS)</b>	2690	1845	80
	2990	1995	80
	3290	2150	80
	3590	2300	80
	4190	2600	80
<b>DUPLEX FREE-LIFT (DEV)</b>	2690	1845	1433
	2990	1995	1583
	3290	2150	1738
	3590	2300	1888
	4190	2600	2188

MAST TYPE	h3 + h13 mm	h1* mm	h2 + h13 mm
<b>SBV16P(I)(S)</b>			
<b>DUPLEX (DS)</b>	1670	1390	130
	2400	1755	130
	2900	2005	130
	3200	2155	130
	3600	2355	130
	3800	2455	130
	4200	2655	130
	4350	-	-
	4800	-	-
	5400	-	-
<b>DUPLEX FREE-LIFT (DEV)</b>	1670	1385	835
	2400	1750	1200
	2900	2000	1450
	3200	2150	1600
	3600	2350	1800
	3800	2450	1900
	4200	2650	2100
<b>TRIPLEX FREE-LIFT (TREV)</b>	3600	1750	1270
	4350	2000	1520
	4800	2150	1670
	5400	2350	1870



\* I model h1 + 110mm when support legs in upper position;  
S model h1 - 30 mm





# STANDARD EQUIPMENT & OPTIONS

● = Standard

▲ = Option

	SBV12P	SBV12P(I)	SBV16P
<b>GENERAL</b>			
Micro-computer incl. Hour meter and battery indicator with cut out (ATC T4)	●	●	●
PIN code log in 100 codes	●	●	●
Foldable platform	●	●	●
Foldable sidebars	▲	▲	▲
Short tiller arm with display and keypad	●	●	●
Chill store design, down to 1°C, with rust protected axles	●	●	●
Speed regulated lift motor	●	●	●
Proportional valve for lowering, controlled by rocker switch on tiller head	●	●	●
Polyurethane wheels	●	●	●
Single load wheel polyurethane	●	●	–
Tandem load wheels polyurethane	▲	▲	●
Battery rollers	●	●	●
<b>ENVIRONMENT</b>			
Cold store design, 0°C to -35°C	▲	▲	▲
<b>DRIVE AND LIFT CONTROLS</b>			
Heavy duty tiller Head - with key switch entry	▲	▲	▲
Tiller arm - Adjustable in length	▲	▲	▲
Tiller up drive	▲	▲	▲
<b>WHEEL OPTIONS</b>			
Polyurethane traction and load wheels	●	●	●
Power friction traction wheel	▲	▲	▲
Non marking drive wheel	▲	▲	▲
Anti static drive wheel	▲	▲	▲
<b>OTHER OPTIONS</b>			
Driver protected platform rear entry	▲	▲	▲
Driver protected platform side entry	▲	▲	▲
Power steering	▲	▲	▲
Overhead guard	▲	▲	▲
Load backrest low or high	▲	▲	▲
Key switch entry	▲	▲	▲
12V DC Power Socket	▲	▲	▲
Equipment bar	▲	▲	▲
Writing desk incl. RAM C holder	▲	▲	▲
Equipment bar holder RAM system size C	▲	▲	▲
Equipment bar holder RAM system size C, 2 pcs	▲	▲	▲
Equipment bar holder RAM size D	▲	▲	▲
Special RAL colour	▲	▲	▲





**Like any product bearing the "MITSUBISHI" 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 dealer, 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 dealer or when you visit our website [www.mitforklift.com.sg](http://www.mitforklift.com.sg)

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

© 2020 by MLAP. All Rights Reserved. All registered trademarks are the property of their respective owners. Printed in Singapore.

FMIT0167 (01/2020)

