

MOVE THE WORLD FORWARD  MITSUBISHI
HEAVY
INDUSTRIES
GROUP

VELIA EX (1.0 – 1.2 TONS)

MID AND HIGH LEVEL ORDER PICKERS



OPBH12PH

OPBM10P

OPBM10P/OPBH12PH Series

WHEN
RELIABILITY IS
EVERYTHING...

 **MITSUBISHI**
FORKLIFT TRUCKS

Exceptionally high visibility?

Yes, thanks to our MaxVision mast and clearview overhead guard.

Ultimate reliability?

Yes. With our **VELiA EX** mid and high-level order pickers – including a high-performance 48 V model with unbeatable 1250 kg capacity, you can expect practically perfect picking.

Outstanding comfort features?

Of course. Like every Mitsubishi order picker, it's got those crucial differences which never fail to impress operators (or their employers).

FRAME AND BODY

- **Chillproof design with rust-proof axles** ensures reliable performance at temperatures as low as 0°C.
- **MaxVision mast and overhead guard** maximises operator field of vision for increased productivity and safety.
- **Robust construction** ensures smooth, stable ride and excellent picking performance.
- **Low maintenance design** gives quick and easy access to key targets and motor – for minimum downtime.

DRIVE

- **Powerful AC motor** means high drive speed and acceleration – even when loaded – plus smooth, quiet, controlled operation, extended shift length and lower maintenance requirements.
- **ECO mode** reduces energy consumption – without compromising on performance.
- **Smart curve control** automatically reduces speed when cornering for enhanced stability.

ELECTRICAL CONTROL SYSTEMS

- **Performance setting** – including pre-set modes – allows instant programming without special tools.
- **On-board diagnostics and fault memory folder** keep operator and service engineer aware of any problems, speed up servicing and help prevent damage.



OPERATOR ENVIRONMENT AND CONTROLS

- **Ultra-low step height** (just 215mm) offers easy on/off access to keep operators alert and productive throughout shifts.
- **Easy-access operator's compartment** is spacious and features an extra-wide entry in for faster mounting and dismounting.
- **High-visibility cabin** features see-through panels for maximum forward views – reducing damage risk, while increasing operator comfort and efficiency.
- **Operator Presence Sensor** covers a wide area and eliminates need for dead man's switch (and associated risks).
- **Super-grip floor** is non-slip ensuring operators are safe, for confident operations.
- **PIN-code access** for up to 100 users is possible – preventing unauthorised use.
- **Easy-grip handles** ensure safe and easy entry and exit from spacious platform.
- **Battery discharge indicator** keeps operators aware of battery discharge levels – ensuring high-efficiency operations and long battery life.
- **MaxPro side-access gates with automatic sensors** prevent unsafe use of truck with gates open at heights above 1200 mm.
- **Easy-access storage compartments** ensure pickers have everything they need to work productively within easy reach.
- **Fully adjustable ergonomic seat** provides a comfortable seat or cushion to lean on during long journeys – minimising risk of fatigue.

OTHER FEATURES

- **Rapid battery access** reduces time needed for daily checks – for maximum uptime.
- **Warning lights** fitted on straddle legs and chassis alert vehicle and on-foot traffic – for enhanced safety.
- **Hydraulic and drive interlock** prevents truck use while operator isn't present.



SPECIFICATIONS

CHARACTERISTICS				
1	Manufacturer		Mitsubishi	Mitsubishi
2	Manufacturer's model designation		OPBM10P DUPLEX	OPBM10P TRIPLEX FREE LIFT
3	Power source: (battery, diesel, LP gas, petrol)		Battery	Battery
4	Operator type: pedestrian, (operator)-standing, -seated		Stand-on	Stand-on
5	Load capacity	Q kg	1000	1000
6	Load center distance	c mm	600	600
7	Load wheel axle to fork face (forks lowered)	x mm	125	204
8	Wheelbase	y mm	1568	1568
WEIGHT				
9	Truck weight with load, with maximum battery weight	kg	2050 kg + 96 × h12 (m)	2260 kg + 91.5 × h12 (m)
10	Axle loadings with nominal load & maximum battery weight, drive/load side	kg	1110 / 2800	1210 / 2910
11	Axle loadings without load & with maximum battery weight, drive/load side	kg	1660 / 1250	1790 / 1330
WHEELS, DRIVE TRAIN				
12	Tyres: PT=Power Thane, Vul=Vulkollan, drive/load side		Vul / Vul	Vul / Vul
13	Tyre dimensions, drive side	mm	250 × 105	250 × 105
14	Tyre dimensions, load side	mm	150 × 55	150 × 55
15	Number of wheels, load/drive side (x=driven)		8 / 1x	8 / 1x
16	Track width (center of tyres), load side	b11 mm	806 / 906 / 1006	906 / 1006
DIMENSIONS				
17	Height with mast lowered	h1 mm	h12 / 2 + 592	h12 / 3 + 637
18	Lift height (without h9)	h3 mm	3285 - 7185	4885 - 8035
19	Height with mast extended	h4 mm	h12 + 2140	h12 + 2160
20	Height to top of overhead guard	h6 mm	2356	2356
21	Seat- or Stand height (at fully lowered height)	h7 mm	215	215
22	Height of support legs	h8 mm	175	175
23	Supplementary lift	h9 mm	775	775
24	Platform height, raised	h12 mm	3500 - 7400	5100 - 8250
25	Fork height, fully lowered	h13 mm	90	90
26	Overall length	l1 mm	3055	3135
27	Length to fork face	l2 mm	1903	1982
28	Overall width	b1 mm	970 / 1070 / 1170	1070 / 1170
29	Fork dimensions (thickness, width, length)	s/e/l mm	70 / 147 / 1150	70 / 147 / 1150
30	Fork carriage width	b3 mm	560	560
31	Outside width over forks (minimum/maximum)	b5 mm	450 - 800	450 - 800
32	Innerwidth of support legs	b4 mm	n/a	n/a
33	Width over guide rollers (min.)	b6 mm	1148 - 1814	1248 - 1814
34	Ground clearance at center of wheelbase, (forks lowered)	m2 mm	25	25
35	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise	Ast mm	Platform/load width + 125 mm clearance / each side	
36	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast mm	Platform/load width + 125 mm clearance / each side	
37	Turning radius	Wa mm	1790	1790
38	Transfer aisle width (pallet 1000 × 1200 mm lengthwise & 200 mm clearance)	l8 mm	3375	3450
PERFORMANCE				
39	Travel speed, with/without load	km/h	11 / 11	11 / 11
40	Lifting speed, with/without load	m/s	0.21 / 0.32	0.26 / 0.37
41	Lowering speed, with/without load	m/s	0.4 / 0.4	0.43 / 0.45
42	Maximum gradeability, with/without load	%	7.1	7.1
43	Acceleration time (10 metres) with/without load	s	6.3 / 5.8	6.3 / 5.8
44	Service brake		Electrical	Electrical
ELECTRIC MOTORS				
45	Drive motor capacity (60 min. short duty)	kW	2.7	2.7
46	Lift motor output at 15% duty factor	kW	8 (20%)	8 (20%)
47	Battery to DIN 43 531/35/36 A/B/C/no		BS	BS
48	Battery voltage/capacity at 5-hour discharge	V/Ah	24 / 560 - 775	24 / 560 - 775
49	Battery weight	kg	500 - 700	500 - 700
MISCELLANEOUS				
50	Type of drive control		Stepless	Stepless
50	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)	66	66

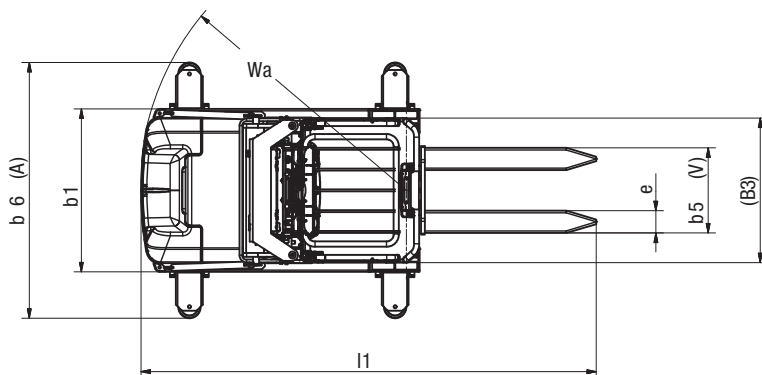
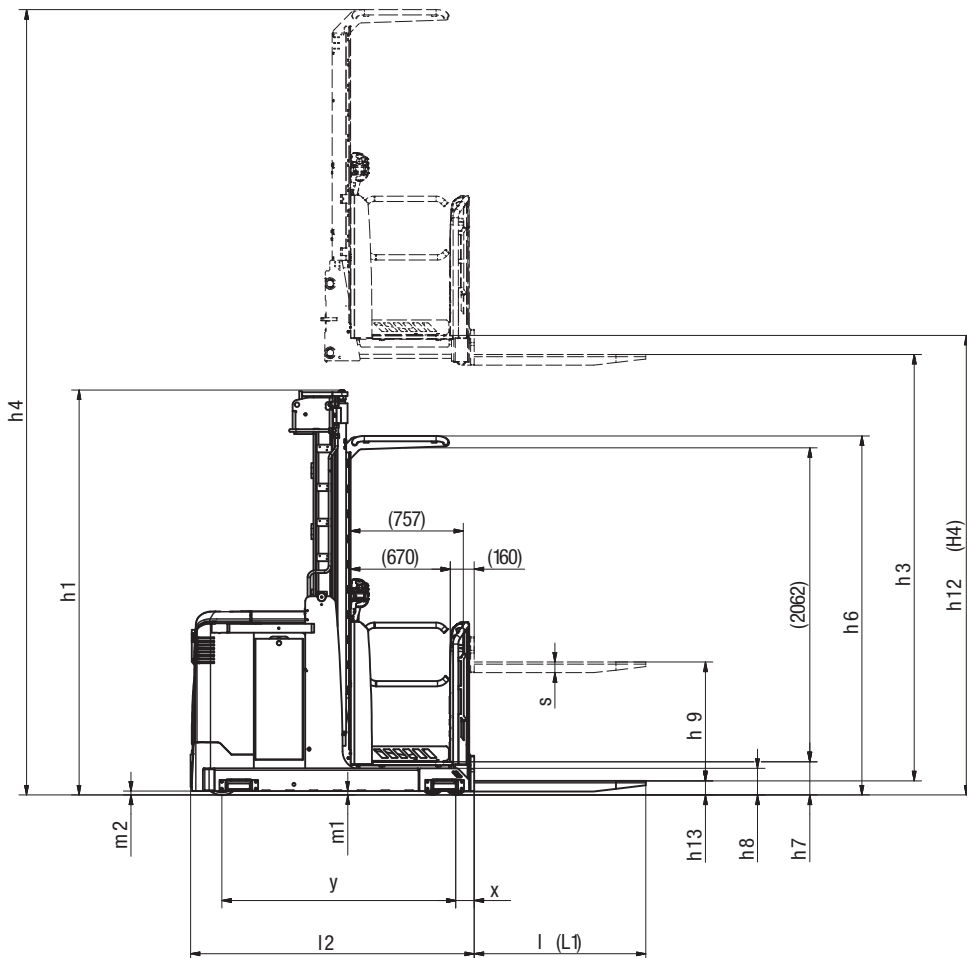
Continuing improvement may lead to changes in these specifications.



VELIA EX

**Mitsubishi OPBM10P Series
Mid Level Order Pickers**

1.0 ton



- Ast = Wa + R + a
- Ast = Working aisle width
- Wa = Turning radius
- a = Safety clearance = 2 × 100 mm
- R = $\sqrt{(l6 + x)^2 + (b12 / 2)^2}$
- l6 = Pallet length (800 or 1000 mm)
- b12 = Pallet width (1200 mm)

SPECIFICATIONS

CHARACTERISTICS			
1	Manufacturer		Mitsubishi
2	Manufacturer's model designation		OPBH12PH
3	Power source: (battery, diesel, LP gas, petrol)		Battery
4	Operator type: pedestrian, (operator)-standing, -seated		Stand-on
5	Load capacity	Q kg	1250
6	Load center distance	c mm	600
7	Load wheel axle to fork face (forks lowered)	x mm	126
8	Wheelbase	y mm	1760
WEIGHT			
9	Truck weight with load, with minimum battery weight	kg	2950 kg + 97 × h12 (m)
10	Axle loadings with nominal load & minimum battery weight, drive/load side	kg	1780 / 3510
11	Axle loadings without load & with minimum battery weight, drive/load side	kg	2390 / 1650
WHEELS, DRIVE TRAIN			
12	Tyres: PT=Power Thane, Vul=Vulkollan, drive/load side		Vul / Vul
13	Tyre dimensions, drive side	mm	355 × 155
14	Tyre dimensions, load side	mm	150 × 55
15	Number of wheels, load/drive side (x=driven)		8 / 1x
16	Track width (center of tyres), load side	b11 mm	1006 / 1186
DIMENSIONS			
17	Height with mast lowered	h1 mm	h12 / 3 + 770
18	Lift height	h3 mm	5785 - 10285
19	Height with mast extended	h4 mm	h12 + 2160
20	Height to top of overhead guard	h6 mm	2356
21	Seat- or Stand height (at fully lowered height)	h7 mm	215
22	Height of support legs	h8 mm	175
23	Supplementary lift	h9 mm	775
24	Platform height, raised	h12 mm	6000 - 10500
25	Fork height, fully lowered	h13 mm	90
26	Overall length with fork l = 1150	l1 mm	3290
27	Length to fork face	l2 mm	2139
28	Overall width	b1 mm	1170 / 1350
29	Fork dimensions (thickness, width, length)	s/e/l mm	70 / 147 / 1150
30	Width of fork carriage	b3 mm	560
31	Outside width over forks (minimum/maximum)	b5 mm	450 - 800
32	Width over guide rollers (minimum-maximum.)	b6 mm	1348 - 1814
33	Ground clearance at center of wheelbase, (forks lowered)	m2 mm	25
34	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise	Ast mm	Platform/load width + 125 mm clearance each side
35	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast mm	Platform/load width + 125 mm clearance each side
36	Turning radius	Wa mm	2020
37	Transfer aisle width (pallet 1000 × 1200 mm lengthwise & 200 mm clearance)	l8 mm	3606
PERFORMANCE			
38	Travel speed, with / without load	km/h	12 / 12
39	Lifting speed, with / without load	m/s	0.36 / 0.44
40	Lowering speed, with / without load	m/s	0.41 / 0.45
41	Maximum gradeability, with/without load	%	6.2
42	Acceleration time (over 10 m), with / without load	s	5.5 / 5.2
43	Service brake		Electrical
ELECTRIC MOTORS			
44	Drive motor capacity (60 min. short duty)	kW	5.9
45	Lift motor output at 15% duty factor	kW	11
46	Battery according to DIN 43531/35/36, A, B, C, no		DIN 43531 B
47	Battery voltage/capacity at 5-hour discharge	V/Ah	48 / 500 - 620
48	Battery weight (± 5%)	kg	890 - 1125
MISCELLANEOUS			
49	Type of drive control		Stepless
50	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)	65

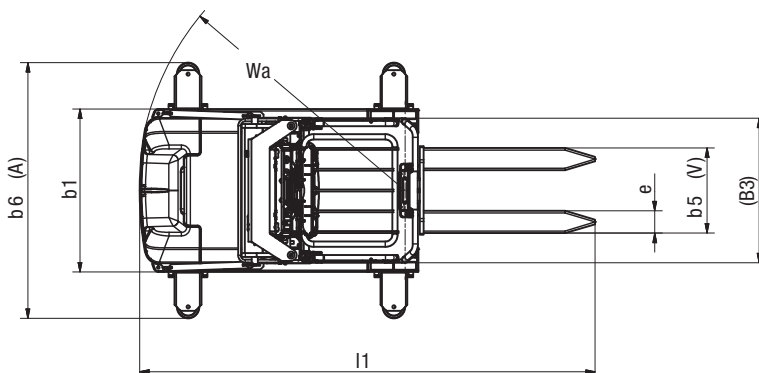
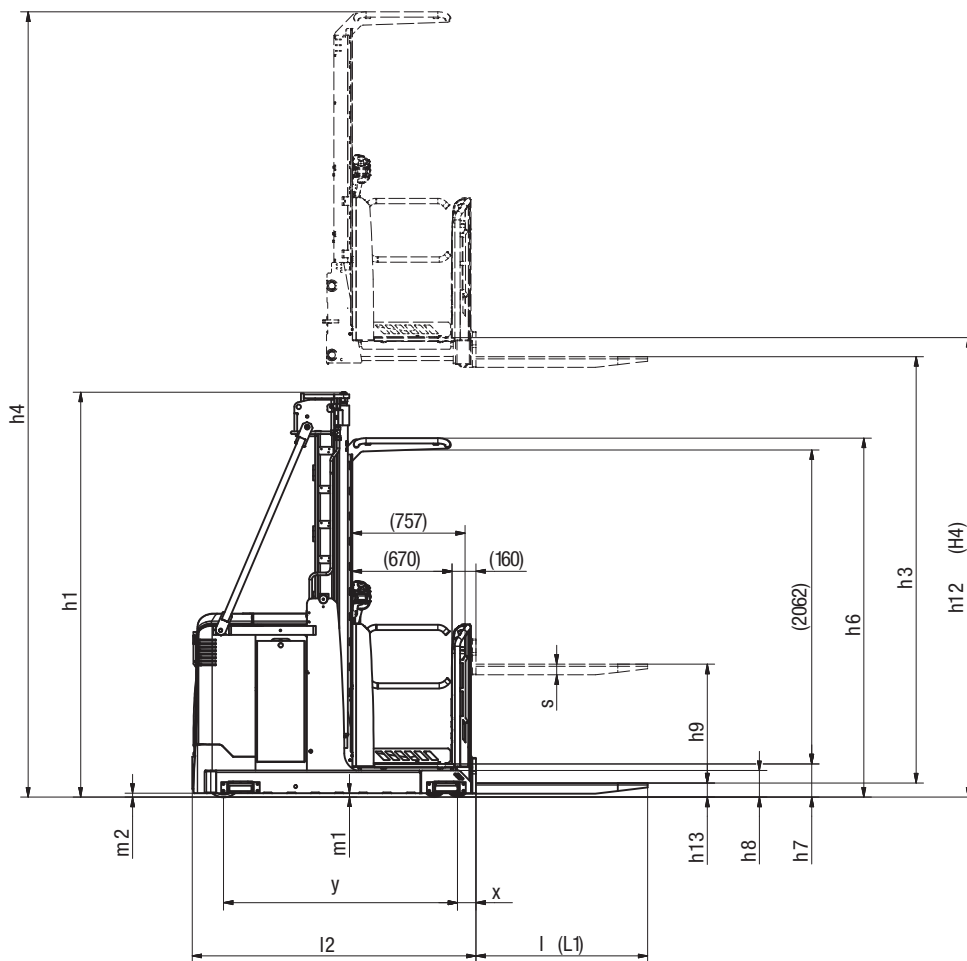
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VELIA EX

**Mitsubishi OPBH12PH Series
High Level Order Pickers**

1.2 tons



- Ast = Wa + R + a
- Ast = Working aisle width
- Wa = Turning radius
- a = Safety clearance = 2 × 100 mm
- R = $\sqrt{(l6 + x)^2 + (b12 / 2)^2}$
- l6 = Pallet length (800 or 1000 mm)
- b12 = Pallet width (1200 mm)



VELIA EX

Mitsubishi OPBM10P Series Mid Level Order Pickers

1.0 ton

OPBM10P				mL ≤ 25 mm	mL ≤ 25 mm	mL ≤ 25 mm
Mast type	h12 mm	h1 mm	h = h12-125+775 mm	B = 970	B = 1070	B = 1170
	Platform floor height	Closed mast height	Fork height EasyLift raised	Q @ c = 400-600mm kg	Q @ c = 400-600mm kg	Q @ c = 400-600mm kg
Duplex	3600	2392	4250	1000	1000	1000
	4000	2592	4650	1000	1000	1000
	4400	2792	5050	1000	1000	1000
	4700	2942	5350	1000	1000	1000
	5000	3092	5650	1000	1000	1000
	5400	3292	6050	1000	1000	1000
	5800	3492	6450	-	1000	1000
	6200	3692	6850	-	1000	1000
	6600	3892	7250	-	-	1000
	7000	4092	7650	-	-	500
7400	4292	8050	-	-	650	
Triplex Free-Lift	5200	2370	5850	N/A	1000	1000
	5500	2470	6150	N/A	1000	1000
	6100	2670	6750	N/A	1000	1000
	6550	2820	7200	N/A	-	1000
	7000	2970	7650	N/A	-	800
	7800	3237	8450	N/A	-	650
	8250	3387	8900	N/A	-	600

Load deration based on load evenly spread along the forks
 Load deration on request when LC >600 mm
 mL = is ground clearance

Standard lift heights are limited by truck width
 Therefore residual capacity is shown at maximum standard lift height for the relative truck width
 Other higher options may be available but subject to special design.

Continuing improvement may lead to changes in these specifications.

h1 Closed mast height
 h12 Lift height
 h Fork height EasyLift raised
 B Chassis width
 Q Lifting capacity, rated load
 c Load centre (distance)



Mitsubishi OPBH12PH Series High Level Order Pickers

1.2 tons

OPBH12PH				mL ≤ 15 mm	mL ≤ 15 mm
Mast type	h12 mm	h1 mm	h = h12-125+775 mm	B = 1170	B = 1350
	Platform floor height	Closed mast height	Fork height EasyLift raised	Q @ c = 400-600 mm kg	Q @ c = 400-600 mm kg
Triplex Free-Lift	6000	2770	6650	1250	1250
	6750	3020	7400	1250	1250
	7500	3270	8150	1250	1250
	(7750)	3353	8400	1100	1250
	8250	3520	8900	900	1250
	(8500)	3603	9150	850	1250
	9000	3770	9650	750	1250
	9750	4020	10400	-	1100
	(10000)	4103	10650	-	1000
	10500	4270	11150	-	900

() = Non standard mast, only to show capacity
 Load deration based on load evenly spread along the forks
 Load deration on request when LC >600 mm
 mL = is ground clearance

Standard lift heights are limited by truck width.
 Therefore residual capacity is shown at max. standard lift height for the relative truck width.
 Other higher options may be available but subject to special design.

All capacities are based on VNA standard floors where ground clearance is not greater than 15 mm.
 If adjustable lugs are altered to be greater than 15mm then capacity will be reduced.

h1 Closed mast height
 h12 Lift height
 h Fork height EasyLift raised
 B Chassis width
 Q Lifting capacity, rated load
 c Load centre (distance)

STANDARD EQUIPMENT AND OPTIONS

VELIA EX

Mitsubishi OPBM10P / OPBH12PH Series

Mid and High Level Order Pickers

1.2 tons



OPBM10P

OPBH12PH

Continuing improvement may lead to changes in these specifications.

● = Standard

▲ = Option

	OPBM10P	OPBH12PH
GENERAL		
Micro-computer incl. Hour meter and battery indicator	●	●
PIN code log in, 100 codes	●	●
Key switch entry	▲	▲
Display incl. Steering wheel indicator	●	●
Drive and lift controls on mast side	●	●
Operators presence sensor in floor	●	●
Cornering control	●	●
Two hand operation in guided aisles	●	●
Platform with Ergolift and fixed forks	●	●
Pro Access gates	●	●
Warning light	●	●
GUIDANCE		
Rail guidance	▲	▲
Wire guidance	▲	▲
DESCENDER DEVICE		
Descender device	●	●
High specification escape device	▲	▲
ENVIRONMENT		
Chill store design, with rust protected axles	●	●
Cold store design, 0C° to -35C°	▲	▲
DRIVE, LIFT CONTROLS		
On fork side	▲	▲
On fork and mast side	▲	▲
Extra buttons for ergolift (mast side)	▲	▲
COMPUTER EQUIPMENT		
Truck fleet management	▲	▲
Automatic log off	▲	▲
Service alarm	▲	▲
Battery creep speed	▲	▲
DRIVE AND LIFT STOP		
Drive stop	▲	▲
Lift stop with/without restart	▲	▲
SAFETY		
Finger guards toward mast	▲	▲
Gate interlock, <1200 mm platform height	▲	▲
Gate open audible warning, >415 mm platform lift	▲	▲
Prepared for Personal Protection System, PPS	▲	▲
End of aisle reduced speed options	▲	▲
OTHER		
Mini steering wheel	▲	▲
Light in cabin, for racks	▲	▲
Light in cabin, for interior	▲	▲
Radio with MP3	▲	▲
Converter 24-12 V, 8 A, 96 W outlet	▲	▲
12V DC power socket, Cigarette power outlet	▲	▲
Equipment holder, RAM system, Size C	▲	▲
Foldable driver's cushion	▲	▲
Converter 24-12V , 8 A, 96 W outlet	▲	▲
Comfort fan for driver	▲	▲
Extra storage in platform	▲	▲
Fire extinguisher	▲	▲



Easy battery release



Clear warning light



Optional folding driver's cushion



Easy access

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

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.

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