

PREMIA ES

PEDESTRIAN POWER PALLET AND DOUBLE PALLET TRUCKS

1.6 - 2.0 tonnes

DESIGNED TO EXCEL...
BUILT TO LAST

Developed for non-stop performance in the most challenging environments, PREMIA ES pedestrian power pallet trucks help you go the distance.

SPECIFICATIONS

PBP16N2	PBP16PD
PBP18N2	PBP20N2R
PBP20N2	PBP20N2E



WHEN
RELIABILITY IS
EVERYTHING...

PREMiA ES

PBP16 - 20N2(R)(E) & PBP16PD Series

PEDESTRIAN POWER PALLET AND DOUBLE PALLET TRUCKS

1.6 – 2.0 tonnes



PREMiA ES models have an exceptionally short chassis for working in very narrow aisles, allowing maximum storage density. It's market-leading lift height and linked castor wheels ensure stability when operating on ramps, loading docks and uneven surfaces.

The truck offers two operating modes*. ECO mode is suitable for new operators as it limits speed for smooth movement. PRO mode supports optimum performance and productivity. Operators can also travel safely and in comfort due to the large platform area.

Thanks to its sealed protective chassis and waterproof components (rated to IP54), PREMIA ES is unaffected by dirt, debris, dust and water, working dependably indoors or out with minimal maintenance.

FRAME AND BODY

- **Sealed chassis**
Internal components are protected against water, dirt, dust and debris, reducing downtime and servicing.*
- **Water-resistant design**
Water is kept away from key electrical parts for safety and longer part life.*
- **Two linked castor wheels**
In addition to the load wheels for added stability. Increases comfort for the driver and safety for the load.*
- **Low centre of gravity**
Operation is safer and more stable.

* Not available on PBP16PD

FORKS AND MAST

- **Robust forks**
Strong welded construction with rounded tips for effortless pallet entry.
- **Tapered forks**
Access to pallets in racks or block stacks is easier, quicker and safer.
- **Market-leading lift height of 220mm**
Ideal for handling on steep ramps, loading docks and uneven surfaces, even when using recycled pallets.*
- **Rising forks**
Loads are placed at Ergonomic height (maximum 735mm) to minimise physical strain when loading and unloading. (PBP20NE)

DRIVE

- **Powerful AC drive motor**
Excellent traction and ramp performance, smooth, quiet, controlled operation, extended shift length and lower maintenance requirements.*
- **Sealed transmission**
Shock-resistant, quiet and requires little maintenance.*

STEERING SYSTEM

- **State-of-the-art tiller arm**
Ergonomic design for comfortable driving.
- **Small turning circle**
Combine this with the compact chassis and operation is possible in tight areas allowing for optimised use of warehouse space.

BRAKES

- **Parking brake**
Automatically activated when necessary for extra safety on ramps.
- **Regenerative braking**
Extends shift life and gives effective control without brake wear.

ELECTRICAL AND CONTROL SYSTEMS

- **Programmable controller**
Acceleration, speed and braking can be adjusted to suit the application and operator's preferences.
- **On-board diagnostics and fault memory folder**
Speed up servicing and help prevent damage.
- **Battery discharge indicator**
Fitted as standard for battery protection and preventing deep discharge.



There is more information on PREMIA ES on mitforklift.com

For more extensive information please visit our website mitforklift.com



mft2.eu/premiaes

PREMIA ES

PBP16 - 20N2(R)(E) & PBP16PD Series

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OPERATOR COMPARTMENT AND CONTROLS

- **Creep speed function and tiller arm lock bypass**
Both help to maximise safety and control in confined spaces.
- **Unique crossbar design**
Tiller arm and operator's hand are protected.
- **Choice of two pre-set operating modes (ECO and PRO)**
Enabled via key switch to enhance safety, energy efficiency and productivity.*
- **PIN-code access**
Stops unauthorised truck use and keeps you aware of who's operating at all times. (PBP16PD)
- **Easy-to-operate tiller arm**
Its large buttons mean operators can focus on the task in hand and minimise mistakes.
- **Left-handed or right-handed controls**
The tiller arm's versatile design allows for operation from either side.*
- **Ergonomic rubber hand grips**
Handles are comfortable and easy to hold.*
- **Low to the ground**
Ground clearance is only 35mm so there is very low risk of foot trapping.
- **Spacious platform**
Suspended foldable platform allows operator to ride in safety and comfort. (PBP20N2R)

* Not available on PBP16PD

OTHER FEATURES

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



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VDI - PERFORMANCE & DIMENSIONS

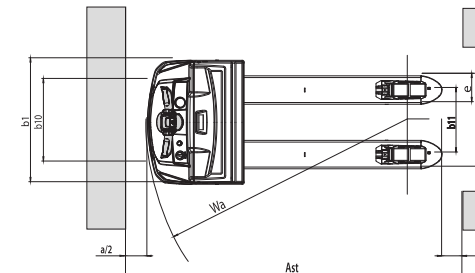
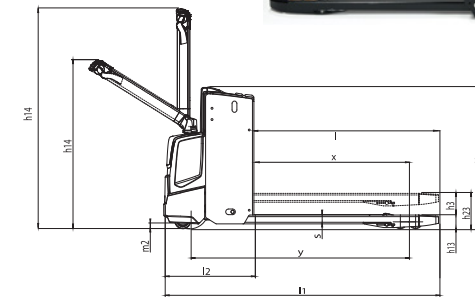
CHARACTERISTICS				Mitsubishi Forklift Trucks	Mitsubishi Forklift Trucks	Mitsubishi Forklift Trucks
1.1	Manufacturer			PBP16N2	PBP18N2	PBP20N2
1.2	Manufacturer's model designation			Battery	Battery	Battery
1.3	Power source			Pedestrian	Pedestrian	Pedestrian
1.4	Operator type					
1.5	Load capacity	Q	kg	1600	1800	2000
1.6	Load center distance	c	mm	600	600	600
1.8	Load wheel axle to fork face (forks lowered)	x	mm	960	960	960
1.9	Wheelbase	y	mm	1360	1424	1424
WEIGHT						
2.1	Truck weight without load, with maximum battery weight		kg	431	502	634
2.2	Axle loadings with nominal load & maximum battery weight, drive / load side		kg	635 / 1396	806 / 1496	864 / 1770
2.3	Axle loadings without load & with maximum battery weight, drive / load side		kg	332 / 99	381 / 121	475 / 159
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	230 x 70	230 x 70	230 x 70
3.3	Tyre dimensions, load side		mm	85 x 90	85 x 75	85 x 75
3.4	Castor wheel dimensions (diameter x width)		mm	100 x 40	100 x 40	100 x 40
3.5	Number of wheels, load / drive side (x = driven)			2 + 1x / 2	2 + 1x / 4	2 + 1x / 4
3.6	Track width (center of tyres), drive side	b10	mm	480	480	480
3.7	Track width (center of tyres), load side	b11	mm	355 / 375 / 495	355 / 375 / 495	355 / 375 / 495
DIMENSIONS						
4.2a	Height with mast lowered	h1	mm			
4.4	Lift height	h3	mm	135	135	135
4.5	Height with mast extended	h4	mm			
4.6	Initial lift	h5	mm	-	-	-
4.8	Seat- or stand height	h7	mm	-	-	-
4.9	Height of tiller arm / steering console (min./max.)	h14	mm	1050 / 1372	1050 / 1372	1050 / 1372
4.15	Fork height, fully lowered	h13	mm	85	85	85
4.19	Overall length	l1	mm	1648	1712	1712
4.20	Length to fork face	l2	mm	498	562	562
4.21	Overall width	b1/b2	mm	720	720	720
4.22	Fork dimensions (thickness, width, length)	s/e/l	mm	55 / 165 / 1150	55 / 165 / 1150	55 / 165 / 1150
4.25	Fork carriage width	b5	mm	520 / 540 / 660	520 / 540 / 660	520 / 540 / 660
4.32	Outside width over forks (minimum / maximum)	m2	mm	30	30	30
4.33c	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast	mm	1694	1758	1758
4.34a	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast	mm			
4.34b	Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise	Ast3	mm			
4.34c	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast	mm	1894	1958	1958
4.35	Turning radius	Wa	mm	1454	1518	1518
PERFORMANCE						
5.1	Travel speed, with / without load		km/h	6.0 / 6.0	6.0 / 6.0	6.0 / 6.0
5.2	Lifting speed, with / without load		m/s	0.035 / 0.045	0.035 / 0.045	0.04 / 0.06
5.3	Lowering speed, with / without load		m/s	0.05 / 0.05	0.05 / 0.05	0.05 / 0.05
5.7	Gradeability, with / without load		%	10.0 / 20.0	10.0 / 20.0	10.0 / 20.0
5.9	Acceleration time (10 metres) with / without load		s			
5.10	Service brakes (mechanical / hydraulic / electric / pneumatic)			Electric	Electric	Electric
ELECTRIC MOTORS						
6.1	Drive motor capacity (60 min. short duty)		kW	1.0	1.0	1.0
6.2	Lift motor output at 15% duty factor		kW	0.8	0.8	1.2
6.4	Battery voltage/capacity at 5-hour discharge		V/Ah	24 / 150	24 / 250	24 / 250 - 375 ¹⁾
6.5	Battery weight		kg	151	212	212-294
MISCELLANEOUS						
8.1	Type of drive control			Stepless	Stepless	Stepless
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)			
10.7.1	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)	62 / 69 / 0	62 / 69 / 0	65 / 67 / 0
10.7.2	Whole-body vibration (EN 13 059:2002)			-	-	-
10.7.3	Hand-arm vibration (EN 13 059:2002)			< 2.5	< 2.5	< 2.5

1) With 375Ah battery the l2 dimension increases 72mm

PREMIA ES PEDESTRIAN POWER PALLET TRUCKS

PBP16 / 18 / 20N2

1.6 – 2.0 tonnes



Ast = $Wa - x + l6 + a$
Ast = Working aisle width
Wa = Turning radius
a = Safety clearance (200 mm)
l6 = Pallet length

VDI - PERFORMANCE & DIMENSIONS

CHARACTERISTICS			
1.1	Manufacturer		Mitsubishi Forklift Trucks
1.2	Manufacturer's model designation		PBP16PD
1.3	Power source		Battery
1.4	Operator type		Pedestrian
1.5	Load capacity	Q	kg 1600 / 800 + 800
1.6	Load center distance	c	mm 600
1.8	Load wheel axle to fork face (forks lowered)	x	mm 990
1.9	Wheelbase	y	mm 1510
WEIGHT			
2.1	Truck weight without load, with maximum battery weight		kg 800
2.2	Axle loadings with nominal load & maximum battery weight, drive / load side		kg 990 / 1410
2.3	Axle loadings without load & with maximum battery weight, drive / load side		kg 590 / 210
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 230 x 70
3.3	Tyre dimensions, load side		mm 85 x 99
3.4	Castor wheel dimensions (diameter x width)		mm 140 x 60
3.5	Number of wheels, load / drive side (x = driven)		1 x + 1 / 4
3.6	Track width (center of tyres), drive side	b10	mm 382
3.7	Track width (center of tyres), load side	b11	mm 355
DIMENSIONS			
4.2a	Height with mast lowered	h1	mm 1400 / 1550
4.4	Lift height	h3	mm 1700 / 2000
4.5	Height with mast extended	h4	mm 2145 / 2445
4.6	Initial lift	h5	mm 120
4.8	Seat- or stand height	h7	mm
4.9	Height of tiller arm / steering console (min./max.)	h14	mm 913 / 1368
4.15	Fork height, fully lowered	h13	mm 90
4.19	Overall length	l1	mm 1864
4.20	Length to fork face	l2	mm 664
4.21	Overall width	b1/b2	mm 660
4.22	Fork dimensions (thickness, width, length)	s/e/l	mm 65 / 185 / 1200
4.25	Fork carriage width	b5	mm 540
4.32	Outside width over forks (minimum / maximum)	m2	mm 25
4.33c	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast	mm NA
4.34a	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast	mm 2532
4.34b	Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise	Ast3	mm 2290
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 1880
PERFORMANCE			
5.1	Travel speed, with / without load	km/h	5.6 / 6
5.2	Lifting speed, with / without load	m/s	0.10 / 0.20
5.3	Lowering speed, with / without load	m/s	0.12 / 0.12
5.7	Gradeability, with / without load	%	6 / 19
5.9	Acceleration time (10 metres) with / without load	s	7.94 / 6.76
5.10	Service brakes (mechanical / hydraulic / electric / pneumatic)		Electric
ELECTRIC MOTORS			
6.1	Drive motor capacity (60 min. short duty)	kW	1.3
6.2	Lift motor output at 15% duty factor	kW	2.35
6.4	Battery voltage/capacity at 5-hour discharge	V/Ah	24 / 150 - 230
6.5	Battery weight	kg	140 - 215
MISCELLANEOUS			
8.1	Type of drive control		Stepless
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)	
10.7.1	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)	
10.7.2	Whole-body vibration (EN 13 059:2002)		
10.7.3	Hand-arm vibration (EN 13 059:2002)		

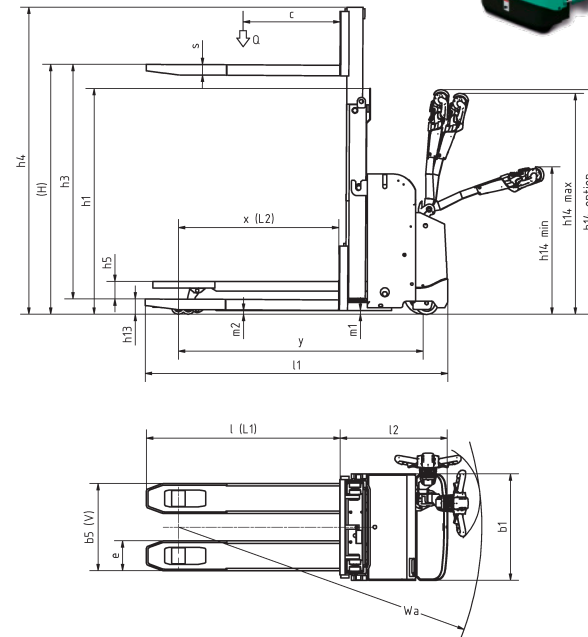
1) With 375Ah battery the l2 dimension increases 72mm

PREMIA ES

PEDESTRIAN DOUBLE PALLET TRUCK

PBP16PD

1.6 tonnes



Ast = Wa-x+l6+a
 Ast = Working aisle width
 Wa = Turning radius
 a = Safety clearance (200 mm)
 l6 = Pallet length

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

MAST TYPE	h3 + h13 mm	h1* mm	h2 + h13 mm
PBP16PD			
DUPLEX	1790	1400	NA
	2090	1550	NA

Mast Performance and Capacity

h1 = Height with mast lowered
 h2 = Standard free lift
 h3 = Lift height
 h4 = Height with mast raised
 h5 = Full free lift
 Q = Lifting capacity, rated load
 c = Load centre (distance)

* h1 closed mast height includes polycarbonate finger protection. Mast height excl. Finger protection is 1343mm / 1493mm.

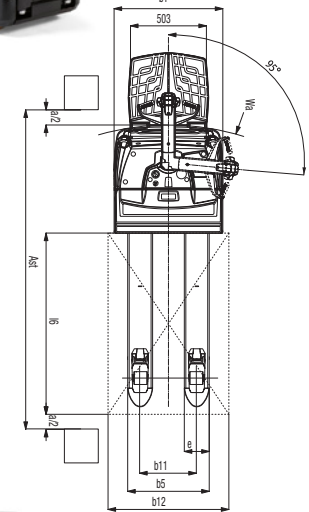
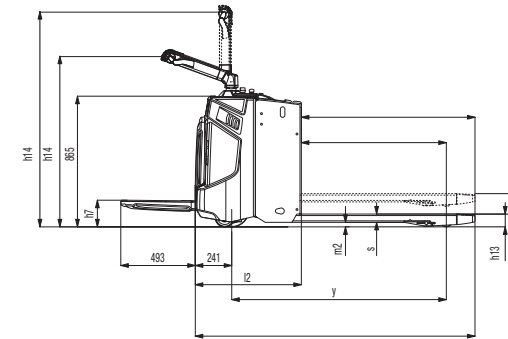
VDI - PERFORMANCE & DIMENSIONS

CHARACTERISTICS				Mitsubishi Forklift Trucks	Mitsubishi Forklift Trucks
1.1	Manufacturer			PBP20N2R	PBP20N2E
1.2	Manufacturer's model designation			Battery	Battery
1.3	Power source			Pedestrian	Pedestrian
1.4	Operator type			2000	2000 / 700
1.5	Load capacity	Q	kg	600	600
1.6	Load center distance	c	mm	960	875
1.8	Load wheel axle to fork face (forks lowered)	x	mm	1421	1509
1.9	Wheelbase	y	mm		
WEIGHT					
2.1	Truck weight without load, with maximum battery weight		kg	595	579
2.2	Axle loadings with nominal load & maximum battery weight, drive / load side		kg	890 / 1705	770 / 1809
2.3	Axle loadings without load & with maximum battery weight, drive / load side		kg	470 / 125	419 / 160
WHEELS, DRIVE TRAIN					
3.1	Tyres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side			Vul / Vul	Vul / Vul
3.2	Tyre dimensions, drive side		mm	230 x 70	230 x 70
3.3	Tyre dimensions, load side		mm	85 x 75	85 x 75
3.4	Castor wheel dimensions (diameter x width)		mm	125 x 55	100 x 40
3.5	Number of wheels, load / drive side (x = driven)			2 + 1 x / 4	2 + 1 x / 4
3.6	Track width (center of tyres), drive side	b10	mm	480	480
3.7	Track width (center of tyres), load side	b11	mm	375	375
DIMENSIONS					
4.2a	Height with mast lowered	h1	mm		
4.4	Lift height	h3	mm	135	735
4.5	Height with mast extended	h4	mm		
4.6	Initial lift	h5	mm	-	135
4.8	Seat- or stand height	h7	mm	172	-
4.9	Height of tiller arm / steering console (min./max.)	h14	mm	1180 / 1350	1050 / 1372
4.15	Fork height, fully lowered	h13	mm	85	90
4.19	Overall length	l1	mm	1854 / 2346	1780
4.20	Length to fork face	l2	mm	702 / 1195	653
4.21	Overall width	b1/b2	mm	720	720
4.22	Fork dimensions (thickness, width, length)	s/e/l	mm	50 / 165 / 1150	50 / 195 / 1150
4.25	Fork carriage width	b5	mm	540	570
4.32	Outside width over forks (minimum / maximum)	m2	mm	30	30
4.33c	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast	mm	1920 / 2400	1874
4.34a	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast	mm		
4.34b	Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise	Ast3	mm		
4.34c	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast	mm	2120 / 2600	2074
4.35	Turning radius	Wa	mm	1680 / 2160	1526
PERFORMANCE					
5.1	Travel speed, with / without load		km/h	6.0 / 6.0	6.0 / 6.0
5.2	Lifting speed, with / without load		m/s	0.03 / 0.05	0.11 / 0.14
5.3	Lowering speed, with / without load		m/s	0.07 / 0.08	0.13 / 0.12
5.7	Gradeability, with / without load		%	9.0 / 20.0	9.0 / 20.0
5.9	Acceleration time (10 metres) with / without load		s		
5.10	Service brakes (mechanical / hydraulic / electric / pneumatic)			Electric	Electric
ELECTRIC MOTORS					
6.1	Drive motor capacity (60 min. short duty)		kW	1.0	1.0
6.2	Lift motor output at 15% duty factor		kW	1.2	1.2
6.4	Battery voltage/capacity at 5-hour discharge		V/Ah	24 / 250 - 375 1)	24 / 150
6.5	Battery weight		kg	212-294	151
MISCELLANEOUS					
8.1	Type of drive control			Stepless	Stepless
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)		
10.7.1	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)	63 / 78 / 0	59 / 60 / 0
10.7.2	Whole-body vibration (EN 13 059:2002)			0.9	-
10.7.3	Hand-arm vibration (EN 13 059:2002)			< 2.5	< 2.5

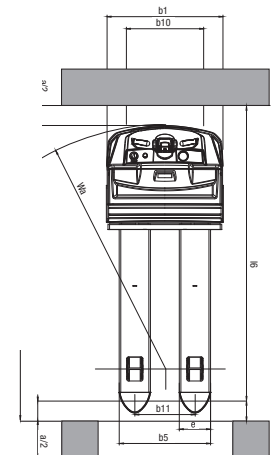
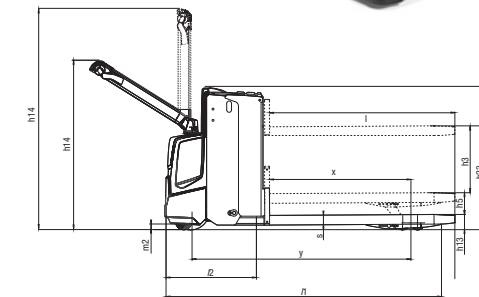
1) With 375Ah battery the l2 dimension increases 72mm

PREMIA ES PEDESTRIAN POWER PALLET TRUCKS PBP20N2R

WITH FOLDING PLATFORM
2.0 tonnes



PBP20N2E
WITH RISING FORKS
2.0 tonnes



Ast = Wa-x+l6+a
Ast = Working aisle width
Wa = Turning radius
a = Safety clearance (200 mm)
l6 = Pallet length

PREMIA ES

OPTIONAL LI-ION BATTERY SYSTEMS FOR THE PBP16PD MODEL

MAKE YOUR FORKLIFT (AND ITS FUEL) GO EVEN FURTHER



Tried, tested and proven in the field, lead-acid batteries have been the long-standing top 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, it 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 40 per cent more efficient than lead-acid counterparts. Plus, it's virtually error-proof, thanks to its ultra-low-maintenance design which prevent cell damage.



- **Exceptional, zero-emissions efficiency** 40% more efficient than lead-acid batteries and free from gases.
- **Ultra-low maintenance design** demands just a full charge each week to activate cell balancing, as well as an annual CSV export/update.
- **No space required** with no need for charging areas, there's no cost to set up and you can keep your profitable space just that: profitable.
- **Quick charge capabilities** mean that just 15 minutes is all your battery needs to keep your truck going a few more hours. (It only takes 1 to 2 hours to fully charge a completely discharged battery.)
- **Higher sustained voltage** ensures more consistent lifting and driving performance, which is particularly noticeable towards the end of a shift.
- **TriCOM Technology** delivers exceptionally high system efficiency (up to 97%).
- **Water-free design** With no water in the battery and no need to top up, there's no risk of operators damaging cells.
- **Active protection componentry** This continuously monitors the system, highlighting potential issues, including misuse.
- **Short circuit protection** is offered by system safeguards including: deep-discharge and overcharge protection, individual cell temperature and voltage monitoring.
- **On-the-go performance and monitoring** is possible thanks to the system's integrated monitoring system with easy-to-read display unit, as well as an opportunity charger on board.

Battery capacity, Ah	104
Charger capacity, A, 4 hour*	25

*Built-in charger

There is more information
on Li-ion
on mitforklift.com

For more extensive information
please visit our website
mitforklift.com



WHEN RELIABILITY IS EVERYTHING...



PREMIA THE NUMBER ONE

Number one for reliability... number one for productivity... whatever the conditions.

Compact, efficient and resilient, PREMIA powered pallet trucks meet every need.

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

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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