MITSUBISHI FORKLIFT TRUCKS

POWER PALLET TRUCKS

SIT-ON
PBS20N Series

STAND-ON
PBR20N Series

Ready to Perform
To Your Applications

www.mitforklift.com.sg

FMIT0156 (01/19)

PRESENTED BY :

2.0 TON

Note: 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 Mitsubishi forklift truck dealers. Mitsubishi Forklift Trucks follows a policy of continual product improvement. For this reason, some materials, options and specifications could change without notice.

MITSUBISHI FORKLIFT TRUCKS

Mitsubishi PBR20N Series

Powerful, Ergonomic, & Easy to Service

The PBR20N is especially designed for horizontal transport of loads up to 2.0 ton, across the longer distances in your warehouse.

Stand-on

Designed for Maximum Productiviy

Powerful AC drive motor and state-of-the-art electronics guarantee high productivity with quick acceleration, strong regenerative braking and a high driving speed even with nominal load. Each function can be programmed separately to the application needs and the operator's preference.

- *Ergonomic, functional steering console for precise and comfortable manoeuvring.*
- *A narrow overall chassis width and a fully electronic steering system with limitless 360º steering make the PBR20N highly manoeuvrable.*

The ergonomic layout of the controls on the console contributes to smooth and easy operation. The comfortable operator's compartment has a cushioned back-rest and suspended floor, an arm rest is optional.

- *Standard console display includes warning lights, drive direction indicator, hour meter and battery charge indicator.*
- *Rounded fork tips ensure smooth pallet handling.*

The design of the PBR20N allows easy access to all the main components for fast service and maintenance. The controller with a tilting panel with gas spring for easy battery maintenance built-in diagnostics helps to reduce down time to minimum.

Broad selection of options

- Cold store modifications
- Built-in battery charger
- Wide variety of fork dimensions
- Pallet entry and exit rollers
- Fork extensions 1450 – 2100 mm
- Adjustable arm rest
- Choice of drive wheels
- Inverted steering direction

Mitsubishi PBS20N Series

Fast, Efficient, Pallet Transport

For efficient transport of goods over longer distances, look no further than the strong, fast, controllable PBS20N sit-on powered pallet truck. With effortless, precise steering, ergonomic controlls and a comfortably seated operator, the PBSN promises constant productivity through the longest of shifts.

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.*

STEERING SYSTEM

- *360º electronic 'fly-by-wire' steering offers precise turning with minimal effort, even at high speeds.*
- *Progressive steering allows easy manoeuvring at low speeds and steady control when moving fast.*

HYDRAULICS

- *Smooth hydraulics ensure jolt-free fork movement for careful handling of loads.*

BRAKES

- *Regenerative braking gives effective control, reduced brake wear and longer shift life.*

Electrical and Control Systems

- **Large battery compartment** accomodates high-capacity batteries (up to 500 Ah).
- **PIN code start-up** with driver-specific settings is included as standard to prevent unauthorised or inppropriate use.
- **Programmable controller** adjusts acceleration, travel speed and braking to suit the application and operator – for great versatiltiy.
- **Battery roller system** is fitted as standard for rapid exchanges.
- **Battery discharge indicator and lift cut-out** are provided for battery protection.
- **Automatic, stepless speed reduction system** assures safe, controlled cornering.

Operator's Compartment

- **Ergonomic operator comparment** with adjustable armrest and carefully positioned controls reduces driver fatigue and increases precision.
- **Full-suspension, fully adjustable seat** with optional hip restraints and belt keeps driver safe and comfortable through the longest of shifts.
- **Load weight indicator** is specified as standard to avoid exceeding safe capacity.
- **Clear LCD display** keeps operator and service engineer fully informed – helping to avoid damage and encourage maintenance.
- **User-friendly operator menu** gives easy-to-follow instructions and allows operator to tune truck to own preference.
- **Robust chassis** offers exceptional durability and driver protection.
- **High-visibility design** maximises view of fork tips and working area.
- **High stability** is ensured by low centre of gravity and use of two castor wheels – next to the drive wheel – in addition to the two load wheels.

Forks

- Rounded fork tips ensure smooth pallet entry/exit and make it easier to enter the pallet at an angle.

Sit-on

Options

- Wide variety of fork dimensions
- Customer name/logo/artwork on side panels
- Pallet entry and exit rollers
- Cold store modifications (class III, -35°C)
- Increased capacity – to 2.5 tonnes
- Overhead guard
- List bracket or PC support
- Key switch instead of start/stop button

MITSUBISHI FORKLIFT TRUCKS

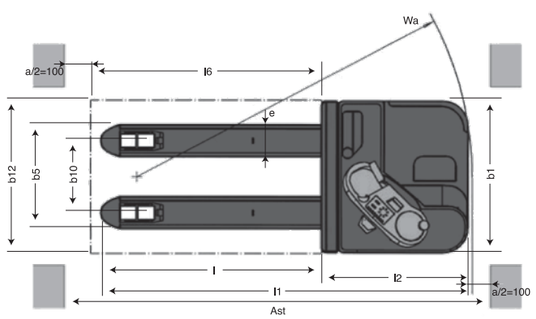
SPECIFICATIONS

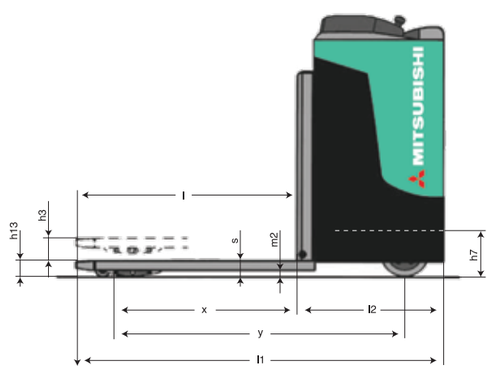
PBR20N

Characteristics				
1	Manufacturer (abbreviation)			Mitsubishi
2	Manufacturer's model designation			PBR20N
3	Power source: (battery, diesel, LP gas, petrol)			Battery
4	Operator type: pedestrian, (operator)-standing, -seated			Stand-on
5	Load capacity	Q	(kg)	2000
6	Load centre distance	c	(mm)	600
7	Load wheel axle to fork face (forks lowered)	x	(mm)	961
8	Wheelbase	y	(mm)	1525
Weight				
9	Truck weight with nominal load & maximum battery weight		kg	2880
10	Axle loadings with nominal load & maximum battery weight, drive/load side		kg	1800 / 1080
11	Axle loadings without load & with maximum battery weight, drive/load side		kg	220 / 660
Wheels, Drive Train				
12	Tyres: PT=Power Thane, Vul=Vulkollan, drive/load side			Vul/Vul
13	Tyre dimensions, drive side			250 x 100
14	Tyre dimensions, load side			85 x 75
15	Castor wheel dimensions (diameter x width)			150 x 48
16	Number of wheels, drive/load side (x=driven)			1x + 1/4
17	Track width (centre of tyres), drive side	b10	(mm)	375-495
18	Track width (centre of tyres), load side	b11	(mm)	457
Dimensions				
19	Lift height (see tables)	h3	(mm)	200
20	Seat- or stand height	h7	(mm)	239
21	Height of tiller arm / steering console (min./max.)	h14		1365
22	Fork height, fully lowered	h13	(mm)	85
23	Overall length	l1	(mm)	1915
24	Length to fork face (includes fork thickness)	l2	(mm)	763
25	Overall width	b1/b2	(mm)	790
26	Fork dimensions (thickness, width, length)	s /e / l	(mm)	50/165/1150
27	Outside width over forks (minimum/maximum)	b5	(mm)	540-680
28	Ground clearance at centre of wheelbase (forks lowered)	m2	(mm)	35
29a	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise	Ast	(mm)	2396
29b	Working aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise	Ast3	(mm)	1989
30a	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast	(mm)	2416
30b	Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise	As3	(mm)	2189
31	Turning circle radius	Wa	(mm)	1750
Performance				
32	Travel speed, with/without load		km/h	8/11
33	Lifting speed, with/without load		m/s	0.03/0.04
34	Lowering speed, with/without load		m/s	0.07/0.02
35	Gradeability, with/without load		%	6/15
36	Service brakes (mechanical/hydraulic/electric/pneumatic)			Electric
Electric motors				
37	Drive motor capacity (60 min. short duty)		kW	2.2
38	Lift motor output at 15% duty factor		kW	1.2
39	Battery voltage/capacity at 5-hour discharge		V/Ah	24/375-465
40	Battery weight		kg	280-355
Miscellaneous				
41	Type of drive control			Stepless
42	Noise level, mean value at operator's ear (EN 12053)		dB(A)	67

Continuing improvement may lead to changes in these specifications.

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





PBS20N

Characteristics				
1	Manufacturer (abbreviation)			Mitsubishi
2	Manufacturer's model designation			PBS20N
3	Power source: (battery, diesel, LP gas, petrol)			Battery
4	Operator type: pedestrian, (operator)-standing, -seated			Sit-on
5	Load capacity	Q	(kg)	2000
6	At load centre	c	(mm)	600
7	Load wheel axle to fork face (forks lowered)	x	(mm)	961
8	Wheelbase	y	(mm)	1674
Weight				
9	Truck weight with nominal load & battery		kg	2955
10	Axle loadings with nominal load & battery, drive/load side		kg	1125/1830
11	Axle loadings without load & with battery, drive/load side		kg	735/220
Wheels, Drive Train				
12	Tyres: P=Polyurethan, PT=Power Thane, Vul=Vulkollan, drive/load side			Vul/Vul
13	Tyre dimensions, front			85 x 75
14	Tyre dimensions, rear			250 x 100
15	Castor wheel dimensions (diameter x width)			150 x 48
16	Number of wheels, front/rear (x=driven)			1x + 2/4
17	Track width (centre of tyres), load side	b10	(mm)	354-514
18	Track width (centre of tyres), drive side	b11	(mm)	685
Dimensions				
19	Height with mast lowered (see tables)	h1	(mm)	1335
20	Lift height (see tables)	h3	(mm)	115
21	Seat height or platform height	h7	(mm)	400
22	Fork height, fully lowered	h13	(mm)	85
23	Overall length	l1	(mm)	2100
24	Length to fork face (includes fork thickness)	l2	(mm)	950
25	Overall width	b1/b2	(mm)	1050
26	Fork dimensions (thickness, width, length)	s /e / l	(mm)	50/165/1150
27	Outside width over forks (minimum/maximum)	b5	(mm)	520-680
28	Ground clearance at centre of wheelbase, with load (forks lowered)	m2	(mm)	35
29a	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise	Ast	(mm)	2751
29b	Working aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise	Ast3	(mm)	2189
30a	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast	(mm)	2616
30b	Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise	As3	(mm)	2389
31	Turning circle radius	Wa	(mm)	1950
Performance				
32	Travel speed, with/without load		km/h	8/11
33	Lifting speed, with/without load		m/s	0.03/0.04
34	Lowering speed, with/without load		m/s	0.07/0.02
35	Gradeability, with/without load		%	6/15
36	Service brakes (mechanical/hydraulic/electric/pneumatic)			Electric
Electric motors				
37	Drive motor capacity (60 min. short duty)		kW	2.2
38	Lift motor output at 15% duty factor		kW	1.2
39	Battery voltage/capacity at 5-hour discharge		V/Ah	24/375-465
40	Battery weight		kg	305/395
Miscellaneous				
41	Type of drive control			Stepless
42	Noise level, mean value at operator's ear		dB(A)	66

Continuing improvement may lead to changes in these specifications.

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

l6 = Pallet length
x = Load wheel axle to fork face
b12 = Pallet width
a = safety clearance = 2 x 100 mm

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)