Fast, efficient pallet transport... delivered in comfort

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 controls and a comfortably seated operator, the PBSN promises constant productivity through the longest of shifts.

A low-maintenance AC drive motor, long service interval and rapid access to all

Frame and body

- 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.

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

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





PBS20N Series

Sit-on Power Pallet

AC Power • 2.0 tonnes

| 1.01 Manufacturer (abreviation) | | Characteristics | | | |
|--|--------|--|-------|----------|-------------|
| PRS20N Battery Battery Battery Battery Battery Operator type; pedestrian, (operator)-standing, -seated O (tq) 2000 Operator type; pedestrian, (operator)-standing, -seated O (tq) 2000 Al load capacity O (alc) Al load centre C (mm) 961 Operator type; pedestrian, (operator)-standing, -seated C (mm) 961 Operator type; pedestrian, (operator)-standing, -seated C (mm) 961 Operator type; pedestrian, (operator)-standing, -seated C (mm) 961 Operator type; pedestrian, -seated Valght Tuck weight with nominal load & battery Tuck weight with nominal load & battery Tuck weight with nominal load & battery Tuck weight with nominal load & battery, drive/load side kg 2955 Ade loadings with nominal load & battery, drive/load side kg 2207/35 Operator type; per | 1.01 | | | | Mitsubishi |
| Battery Bower source: (battery, diesel, LP gas, petrol) | | , | | | |
| Departor type: pedestrian, (operator)-standing, -seated C | 1.03 | Power source: (battery, diesel, LP gas, petrol) | | | |
| Laed capacity | 1.04 | , , , , , , | | | Sit-on |
| 1.06 | - | | Q | (ka) | |
| Lack Wheel axis to fork face (forks lowered) x (mm) 961 | | ' ' | C | | |
| Wheelbase | | | | , , | |
| Weight Weight with nominal load & battery kg 2955 | | , , | | ` ' | |
| 2017 Truck weight with nominal load & battery, drive/load side kg 220735 | 1100 | Weight | , | | 1011 |
| Axle loadings with nominal load & battery, drive/load side Axle loadings without load & with battery, drive/load side Vineas prive Train Vireas prive Train Sasx75 Tyre dimensions, front 250x100 250x100 | 2.01 | _ · | | kg | 2955 |
| Able loadings without load & with battery, drive/load side Wul/Vul | 2.02 | Axle loadings with nominal load & battery, drive/load side | | | |
| Wheels, Drive Train Wul/Vul 3.01 Tyres: P=Polyurethan, PT=Power Thane, Vul=Vulkollan, drive/load side Vul/Vul 3.02 Tyre dimensions, front 85x75 3.03 Tyre dimensions (diameter x width) 150x48 3.05 Number of wheels, front/rear (x=driven) 1x+2/4 3.06 Track width (centre of tyres), load side b10 (mm) 354-514 3.07 Track width (centre of tyres), drive side b11 (mm) 685 Dimensions b11 (mm) 685 4.02 Height with mast lowered (see tables) h1 (mm) 1335 4.01 Lift height, fully lowered (see tables) h3 (mm) 200 4.08 Seat height or platform height h7 (mm) 400 4.15 Fork height, fully lowered h13 (mm) 85 4.19 Overall ellength h1 (mm) 2100 4.20 Length to fork face (includes fork thickness) 12 (mm) 950 4.21 Overall width b1/b2 (mm) 00/165/1150 4.22 Fork dimensions (thickness, width, length) 5 / e / 1 (mm) | 2.03 | , , , , , , , , , , , , , , , , , , , | | _ | |
| Tyre dimensions, front 25x75 25x0x100 15x42 / 4 15x42 / | | 9 2 | | <u> </u> | 220/100 |
| Tyre dimensions, front 25x75 25x0x100 15x42 / 4 15x42 / | 3.01 | Tyres: P=Polyurethan, PT=Power Thane, Vul=Vulkollan, drive/load side | | | Vul/Vul |
| Castor wheel dimensions (diameter x width) 150x48 1x+2 / 4 | 3.02 | Tyre dimensions, front | | | 85x75 |
| Castor wheel dimensions (diameter x width) 150x48 1x+2 / 4 | 3.03 | Tyre dimensions, rear | | | 250x100 |
| 1x+2 / 4 3.06 Track width (centre of tyres), load side | 3.04 | Castor wheel dimensions (diameter x width) | | | 150x48 |
| Track width (centre of tyres), load side | 3.05 | Number of wheels, front/rear (x=driven) | | | 1x+2 / 4 |
| Track width (centre of tyres), drive side b11 (mm) 685 | 3.06 | | b10 | (mm) | |
| Dimensions Height with mast lowered (see tables) | 3.07 | Track width (centre of tyres), drive side | b11 | (mm) | |
| Lift height (see tables) | | | | , | |
| Lift height (see tables) | 4.02 | Height with mast lowered (see tables) | h1 | (mm) | 1335 |
| 4.08 Seat height or platform height h7 (mm) 400 | 4.04 | | h3 | (mm) | |
| A.15 | 4.08 | | h7 | (mm) | 400 |
| Length to fork face (includes fork thickness) 12 (mm) 950 | 4.15 | Fork height, fully lowered | h13 | (mm) | |
| Length to fork face (includes fork thickness) 12 (mm) 950 | 4.19 | Overall length | 11 | (mm) | 2100 |
| Fork dimensions (thickness, width, length) S / e / 1 (mm) 50/165/1150 | 4.20 | | 12 | (mm) | |
| 4.25 Outside width over forks (minimum/maximum) 4.32 Ground clearance at centre of wheelbase, with load (forks lowered) 4.33 Working aisle width (Ast) with 1000 x1200 mm pallets, load crosswise 4.33/a Working aisle width (Ast) with 1000 x1200 mm pallets, load crosswise 4.34/a Working aisle width (Ast) with 800 x1200 mm pallets, load lengthwise 4.34/a Working aisle width (Ast) with 800 x1200 mm pallets, load lengthwise 4.34/b Working aisle width (Ast) with 800 x1200 mm pallets, load lengthwise 4.34/b Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise 4.35 Turning circle radius Performance 5.01 Travel speed, with/without load 5.02 Lifting speed, with/without load 5.03 Lowering speed, with/without load 6.04 Lowering speed, with/without load 6.05 Service brakes (mechanical/hydraulic/electric/pneumatic) Electric motors 6.01 Lift motor capacity (60 min. short duty) 6.02 Lift motor capacity (60 min. short duty) 6.03 Battery woltage/capacity at 5-hour discharge 6.04 Battery voltage/capacity at 5-hour discharge 6.05 Battery weight 7 Type of drive control 8.01 Type of drive control 8 Stepless | 4.21 | Overall width | b1/b2 | (mm) | 1050 |
| 4.32 Ground clearance at centre of wheelbase, with load (forks lowered) 4.33/a Working aisle width (Ast) with 1000 x1200 mm pallets, load crosswise 4.33/b Working aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise 4.34/a Working aisle width (Ast3) with 1000 x 1200 mm pallets, load lengthwise 4.34/a Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise 4.34/b Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise 4.35 Turning circle radius Performance Travel speed, with/without load 5.01 Lifting speed, with/without load 5.02 Lifting speed, with/without load 6.03 Lowering speed, with/without load 6.04 Service brakes (mechanical/hydraulic/electric/pneumatic) Electric motors 6.01 Drive motor capacity (60 min. short duty) 6.02 Lift motor output at 15% duty factor 6.04 Battery voltage/capacity at 5-hour discharge 6.05 Battery weight Nat (mm) 2596 Ast (mm) 2189 Ast3 (mm) 2189 Ast3 (mm) 2189 Ast3 (mm) 2389 Ast (mm) 2489 Ast (mm) 2389 Ast (mm) 2489 Ast (mm) 2389 Ast (mm) 2489 Ast (mm) 248 Ast (mm) 2489 Ast (mm) 248 Ast (mm) | 4.22 | Fork dimensions (thickness, width, length) | s/e/I | (mm) | 50/165/1150 |
| 4.32 Ground clearance at centre of wheelbase, with load (forks lowered) 4.33/a Working aisle width (Ast) with 1000 x1200 mm pallets, load crosswise 4.33/b Working aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise 4.34/a Working aisle width (Ast3) with 800 x1200 mm pallets, load lengthwise 4.34/b Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise 4.34/b Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise 4.35 Turning circle radius Performance Travel speed, with/without load 5.02 Lifting speed, with/without load 5.03 Lowering speed, with/without load 5.07 Gradeability, with/without load 5.08 Service brakes (mechanical/hydraulic/electric/pneumatic) Electric motors Drive motor capacity (60 min. short duty) 6.01 Drive motor capacity at 5-hour discharge 6.02 Lift motor output at 15% duty factor 6.03 Battery weight Niscellaneous 8.01 Type of drive control Stepless | 4.25 | Outside width over forks (minimum/maximum) | b5 | (mm) | 520-680 |
| 4.33/b Working aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise 4.34/a Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise 4.34/b Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise 4.35 Turning circle radius Performance 5.01 Travel speed, with/without load 5.02 Lifting speed, with/without load 6.03 Lowering speed, with/without load 7.50 Service brakes (mechanical/hydraulic/electric/pneumatic) Electric motors 6.01 Drive motor capacity (60 min. short duty) 6.02 Lift motor output at 15% duty factor 6.04 Battery voltage/capacity at 5-hour discharge 8.01 Type of drive control Stepless Nat (mm) 2189 Ast (mm) 228 Ast (mm) 2389 Wa (mm) 1950 Performance Nat (mm) 2189 Ast (mm) 2616 As | 4.32 | Ground clearance at centre of wheelbase, with load (forks lowered) | m2 | (mm) | 35 |
| 4.34/a Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise Ast (mm) 2389 4.35 Turning circle radius Wa (mm) 1950 Performance 5.01 Travel speed, with/without load Km/h 8/11 5.02 Lifting speed, with/without load m/s 0.03/0.04 Lowering speed, with/without load m/s 0.07/0.02 Gradeability, with/without load m/s 6/15 Service brakes (mechanical/hydraulic/electric/pneumatic) Electric motors 6.01 Drive motor capacity (60 min. short duty) Lift motor output at 15% duty factor kW 1.2 Battery voltage/capacity at 5-hour discharge Wiscellaneous Type of drive control Stepless | 4.33/a | Working aisle width (Ast) with 1000 x1200 mm pallets, load crosswise | Ast | (mm) | |
| 4.34/b Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise | 4.33/b | Working aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise | Ast3 | (mm) | 2189 |
| August Turning circle radius Wa (mm) 1950 | 4.34/a | Working aisle width (Ast) with 800 x1200 mm pallets, load lengthwise | Ast | (mm) | 2616 |
| Performance 5.01 Travel speed, with/without load km/h 8/11 5.02 Lifting speed, with/without load m/s 0.03/0.04 5.03 Lowering speed, with/without load m/s 0.07/0.02 5.07 Gradeability, with/without load % 6/15 5.10 Service brakes (mechanical/hydraulic/electric/pneumatic) Electric Electric motors 6.01 Drive motor capacity (60 min. short duty) kW 2.2 6.02 Lift motor output at 15% duty factor kW 1.2 6.04 Battery voltage/capacity at 5-hour discharge V /Ah 24/375-465 6.05 Battery weight kg 305/395 Miscellaneous Type of drive control Stepless | 4.34/b | Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise | Ast3 | (mm) | 2389 |
| 5.01 Travel speed, with/without load km/h 5.02 Lifting speed, with/without load m/s 5.03 Lowering speed, with/without load m/s 5.07 Gradeability, with/without load % 6/15 5.10 Service brakes (mechanical/hydraulic/electric/pneumatic) Electric Electric motors 6.01 Drive motor capacity (60 min. short duty) kW 2.2 Lift motor output at 15% duty factor kW 1.2 Battery voltage/capacity at 5-hour discharge V / /Ah 24/375-465 6.05 Battery weight kg 305/395 Miscellaneous Type of drive control Stepless | 4.35 | Turning circle radius | Wa | (mm) | 1950 |
| Lifting speed, with/without load m/s 0.03/0.04 Lowering speed, with/without load m/s 0.07/0.02 Gradeability, with/without load % 6/15 Service brakes (mechanical/hydraulic/electric/pneumatic) Electric Electric motors 6.01 Drive motor capacity (60 min. short duty) kW 2.2 Lift motor output at 15% duty factor kW 1.2 Battery voltage/capacity at 5-hour discharge V / /Ah 24/375-465 Battery weight kg 305/395 Miscellaneous Type of drive control Stepless | | Performance | | | |
| 5.03 Lowering speed, with/without load m/s 0.07/0.02 5.07 Gradeability, with/without load % 6/15 5.10 Service brakes (mechanical/hydraulic/electric/pneumatic) Electric Electric motors 6.01 Drive motor capacity (60 min. short duty) kW 2.2 6.02 Lift motor output at 15% duty factor kW 1.2 6.04 Battery voltage/capacity at 5-hour discharge V /Ah 24/375-465 6.05 Battery weight kg 305/395 Miscellaneous 8.01 Type of drive control Stepless | 5.01 | Travel speed, with/without load | | km/h | 8/11 |
| Gradeability, with/without load Service brakes (mechanical/hydraulic/electric/pneumatic) Electric motors 6.01 Drive motor capacity (60 min. short duty) 6.02 Lift motor output at 15% duty factor 6.04 Battery voltage/capacity at 5-hour discharge 6.05 Battery weight 6.06 Battery weight 7 ype of drive control Stepless | 5.02 | Lifting speed, with/without load | | m/s | 0.03/0.04 |
| Service brakes (mechanical/hydraulic/electric/pneumatic) Electric motors 6.01 Drive motor capacity (60 min. short duty) 6.02 Lift motor output at 15% duty factor 6.04 Battery voltage/capacity at 5-hour discharge 6.05 Battery weight Miscellaneous Type of drive control Electric KW 2.2 kW 1.2 24/375-465 kg 305/395 Stepless | 5.03 | Lowering speed, with/without load | | m/s | 0.07/0.02 |
| Electric motors | 5.07 | Gradeability, with/without load | | % | 6/15 |
| 6.01 Drive motor capacity (60 min. short duty) kW 2.2 6.02 Lift motor output at 15% duty factor kW 1.2 6.04 Battery voltage/capacity at 5-hour discharge V /Ah 24/375-465 6.05 Battery weight kg 305/395 Miscellaneous 8.01 Type of drive control Stepless | 5.10 | Service brakes (mechanical/hydraulic/electric/pneumatic) | | | Electric |
| 6.02 Lift motor output at 15% duty factor kW 1.2 6.04 Battery voltage/capacity at 5-hour discharge V /Ah 24/375-465 6.05 Battery weight kg 305/395 Miscellaneous 8.01 Type of drive control Stepless | | Electric motors | | | |
| 6.04 Battery voltage/capacity at 5-hour discharge V /Ah 24/375-465 6.05 Battery weight kg 305/395 Miscellaneous 8.01 Type of drive control Stepless | 6.01 | Drive motor capacity (60 min. short duty) | | kW | 2.2 |
| 6.05 Battery weight kg 305/395 Miscellaneous 8.01 Type of drive control Stepless | 6.02 | , | | | 1.2 |
| Miscellaneous 8.01 Type of drive control Stepless | 6.04 | Battery voltage/capacity at 5-hour discharge | | V /Ah | 24/375-465 |
| 8.01 Type of drive control Stepless | 6.05 | Battery weight | | kg | 305/395 |
| | | Miscellaneous | | | |
| 8.04 Noise level, mean value at operator's ear dB(A) 66 | 8.01 | Type of drive control | | | Stepless |
| | 8.04 | Noise level, mean value at operator's ear | | dB(A) | 66 |

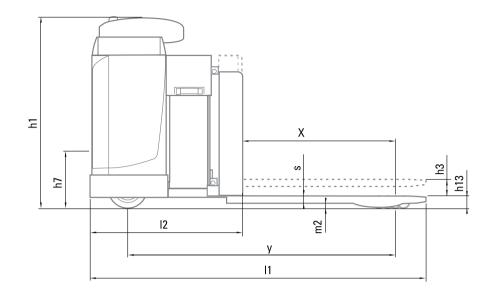
Continuing improvement may lead to changes in these specifications.

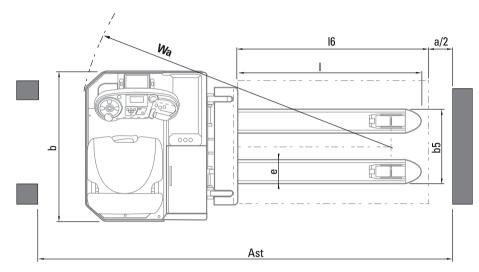




Fully adjustable seat

'Fly-by-wire' steering







Swing-open service access



Ergonomic operator compartment



PIN code start-up

Ast = Working aisle width

Ast3 = Working aisle width (b12 \leq 1000 mm)

Ast = Wa + $\sqrt{(16 - x)^2 + (b12/2)^2 + a}$

Ast3 = Wa + I6 + a

Wa = Turning radius

I6 = 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)





Powerful AC motor



Comprehensive LCD display



Rounded fork tips

Brakes

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

Hydraulics

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

Electrical and control systems

- Large battery compartment accommodates high-capacity batteries (up to 500 Ah).
- PIN code start-up with driver-specific settings is included as standard to prevent unauthorised or inappropriate use.
- Programmable controller adjusts acceleration, travel speed and braking to suit the application and operator – for great versatility.
- 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 environment and controls

- Ergonomic operator compartment 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.

Other features

- Swing-open seat allows quick and easy entry to all areas for checks and maintenance.
- Long service interval reduces cost of ownership and increases uptime.

Options

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

reliabilityis **everything**

Developed for outstanding performance and genuine value for money, the awardwinning* range of Mitsubishi forklift trucks and warehouse equipment is built to a higher specification to maximize productivity and ensure utter reliability... whatever the application.

It's what you'd expect from one of the world's largest corporations whose companies are at the leading edge of technologies where performance, quality and dependability can never be compromised.

It means that, from a single safe source, we can meet 98% of all handling requirements, supplied to you via a range of competitive finance options including outright purchase, rental or leasing. So your local dealer can advise you on precisely the right product for your application... and your budget.

Moreover, because we understand how much you depend on your Mitsubishi forklift truck, we deliver the highest levels of customer support.

Through a network of carefully selected dealerships, we provide quality maintenance and customer care programmes including a choice of warranties that give complete peace of mind. Every dealership holds extensive stocks of manufacturer-approved parts, backed by a central store that holds literally millions of items constantly in stock and achieves a first-pick fulfilled rate of 97%. So your truck can be fixed first time, virtually every time.









* Mitsubishi Forklift Trucks has won four separate Fork Lift Truck Association Annual Awards for Excellence covering the areas of Ergonomics, the Environment and Innovation.





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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 distributor of Mitsubishi forfilt trucks. Missubishi follows a policy of continual product improvement. For this reason, some materials, options and productions could charge without performance.