



# PEDESTRIAN POWER PALLET TRUCKS

**NPP16-20N3(R)(E)**

1.2 - 2.0 TONS



# IDEAL FOR EFFICIENT LOADING, UNLOADING AND SHUTTLE APPLICATIONS

TAKING MOST OF THE LEGWORK OUT OF PEDESTRIAN PALLET HANDLING, THE NPP RANGE IS IDEAL FOR BOTH HORIZONTAL MOVEMENTS AND VEHICLE LOADING/UNLOADING. ITS INDUSTRY-LEADING PERFORMANCE INSPIRES CONFIDENCE AND BOOSTS PRODUCTIVITY IN ANY APPLICATION.



The NPP16N3 is an ideal all-round machine for light handling applications and is small enough to be used on a mezzanine floor or transported in the back of a goods vehicle. The NPP18N3 and NPP20N3 add greater capacity for heavier loads and more intensive work.



The NPP20N3R is equipped with a foldable platform for occasional use when driving over longer distances. The spacious platform of the NPP20N3R, with suspension for a comfortable ride, is easy to get on and off, and also offers good ground clearance.



The NPP20N3E is equipped with lifting forks (730mm height) that offer an ergonomic position for loading and unloading items with minimal physical strain.

## LOWER COST OF OWNERSHIP

- ✓ Sturdy chassis construction and endurance-tested forks provide enhanced robustness and durability even in the toughest conditions.
- ✓ Sealed chassis and waterproof electrics resist moisture, dirt and corrosion - increasing uptime, cutting maintenance costs and prolonging truck life.
- ✓ Easy access to critical truck components allows faster fault diagnosis and speedier maintenance, reducing downtime still further.
- ✓ Integrated drive and lift system features fewer components than previous models, reducing scope for breakdown.
- ✓ Closed battery compartment with steel cover protects battery against impacts, postponing costly battery replacement.
- ✓ Standard battery sizes allow interchangeability with other brands.

# UNMATCHED PRODUCTIVITY

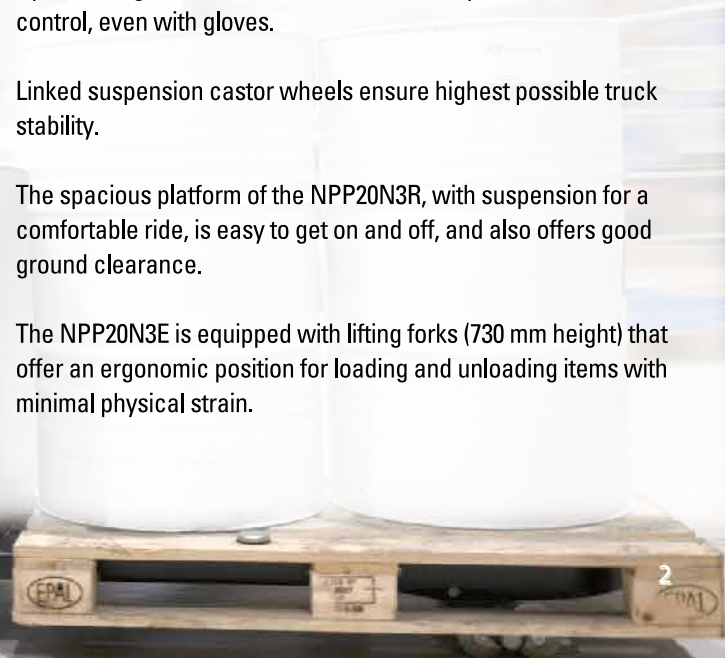
- ✓ Standard LCD display offers clear information on truck and battery condition.
- ✓ Ergonomic tiller arm helps keep operators fresh with comfortable controls.
- ✓ Increased maximum lift height suits even steep ramps and loading docks, making this an ideal truck for both horizontal pallet movements and vehicle loading/unloading.
- ✓ Advanced AC programmable controller lets users prioritise between faster performance and smoother handling, ensuring the most appropriate settings for the job.
- ✓ Rounded fork tips make for accurate and effortless pallet entry, speeding up handling cycles and preventing pallet or load damage.
- ✓ Distance of the fork support wheels from the rear frame has been optimised for increased stability.
- ✓ The NPP20N3R, with a maximum speed of 6 km/h, is equipped with a foldable platform for occasional use when driving over longer distances.



# SAFETY AND ERGONOMICS



- ✓ Latest tiller arm design permits comfortable operating position with optimum hand protection.
- ✓ Super-quiet oil-filled transmission helps keep noise levels low.
- ✓ Optional large lift and lower levers allow easy, one-handed control, even with gloves.
- ✓ Linked suspension castor wheels ensure highest possible truck stability.
- ✓ The spacious platform of the NPP20N3R, with suspension for a comfortable ride, is easy to get on and off, and also offers good ground clearance.
- ✓ The NPP20N3E is equipped with lifting forks (730 mm height) that offer an ergonomic position for loading and unloading items with minimal physical strain.



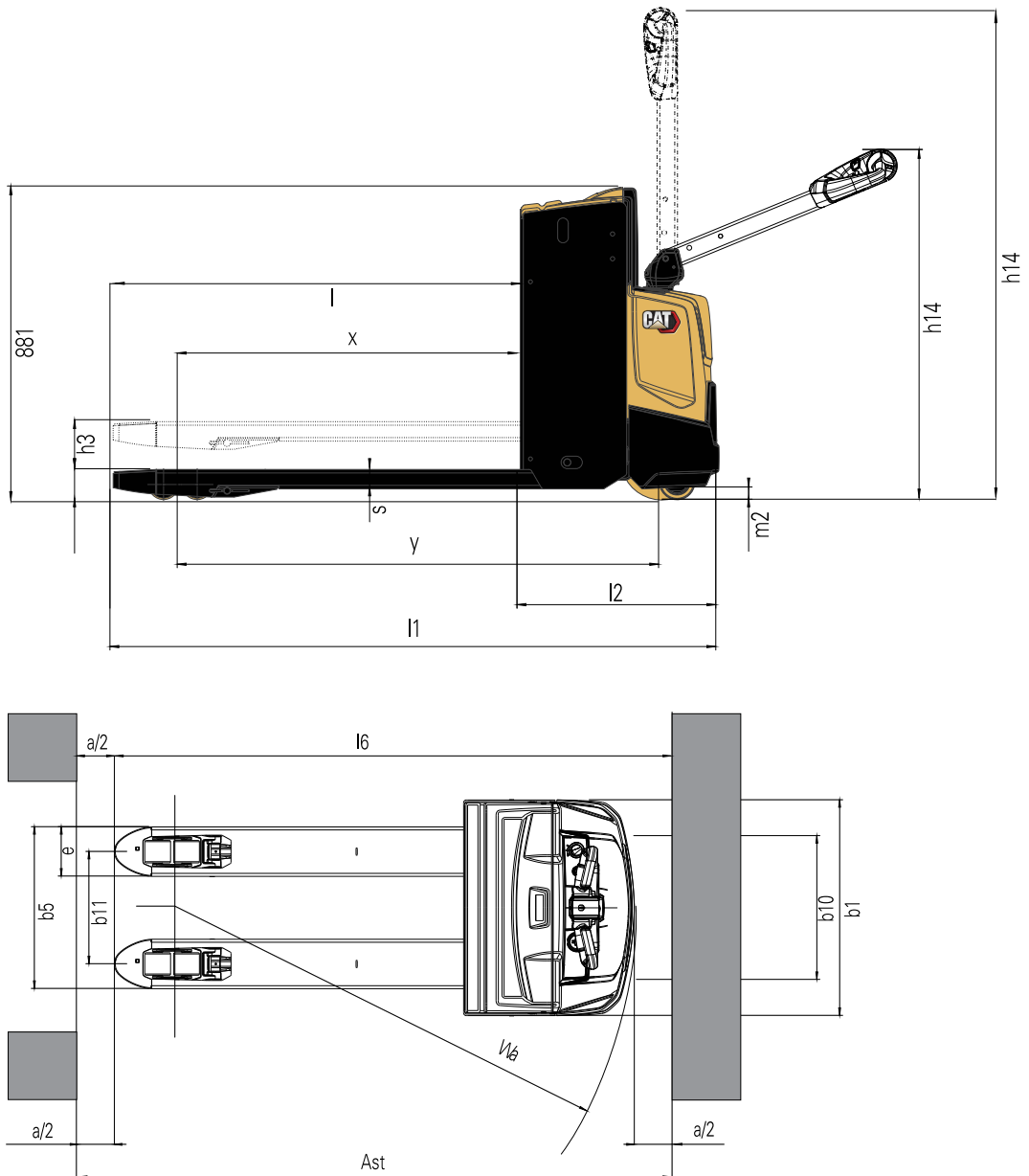
# SPECIFICATIONS

Characteristics		
1.1	Manufacturer	
1.2	Manufacturer's model designation	
1.3	Power source	
1.4	Operator type	
1.5	Load capacity	Q (kg)
1.6	Load centre distance	c (mm)
1.7	Load wheel axle to fork face (forks lowered)	x (mm)
1.8	Wheelbase	y (mm)
Weight		
2.1	Truck weight without load, with maximum battery weight	kg
2.2	Axle loadings with nominal load & maximum battery weight, drive / load side	kg
2.3	Axle loadings without load & with maximum battery weight, drive / load side	kg
Wheels, Drive Train		
3.1	Tyres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side	
3.2	Tyre dimensions, drive side	(mm)
3.3	Tyre dimensions, load side	(mm)
3.4	Castor wheel dimensions (diameter x width)	(mm)
3.5	Number of wheels, load / drive side (x = driven)	
3.6	Track width (centre of tyres), drive side	b10 (mm)
3.7	Track width (centre of tyres), load side	b11 (mm)
Dimensions		
4.1	Height	h1 (mm)
4.2	Free lift	h2 (mm)
4.3	Lift height	h3 (mm)
4.4	Height with mast extended	h4 (mm)
4.5	Initial lift	h5 (mm)
4.6	Seat or stand height	h7 (mm)
4.7	Height of tiller arm / steering console (min/max)	h14 (mm)
4.8	Fork height, fully lowered	h13 (mm)
4.9	Overall length	l1 (mm)
4.10	Length to fork face	l2 (mm)
4.11	Overall width	b1/b2 (mm)
4.12	Fork dimensions (thickness, width, length)	s / e / l (mm)
4.13	Outside width over forks (minimum / maximum)	b5 (mm)
4.14	Ground clearance at centre of wheelbase, (forks lowered)	m2 (mm)
4.15	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast (mm)
4.16	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast (mm)
4.17	Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise	Ast3 (mm)
4.18	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast (mm)
4.19	Turning radius	Wa (mm)
Performance		
5.1	Travel speed, with / without load	km / h
5.2	Lifting speed, with / without load	m / s
5.3	Lowering speed, with / without load	m / s
5.4	Gradeability, with / without load	%
5.5	Acceleration time (10 metres) with / without load	s
5.6	Service brakes (mechanical / hydraulic / electric / pneumatic)	
Electric motors		
6.1	Drive motor capacity (60 min. short duty)	kW
6.2	Lift motor output at 15% duty factor	kW
6.3	Battery to DIN	
6.4	Battery voltage/capacity at 5-hour discharge	V / Ah
6.5	Battery weight	kg
6.6	Energy consumption according to EN16796	kWh / h
Miscellaneous		
7.1	Type of drive control	
7.2	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)
7.3	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)
7.4	Whole-body vibration (EN 13 059:2002)	
7.5	Hand-arm vibration (EN 13 059:2002)	

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

Cat® Lift Trucks NPP16N3	Cat Lift Trucks NPP18N3
Battery	Battery
Pedestrian	Pedestrian
1600	1800
600	600
960	960
1360	1425
430	500
745 / 1290	805 / 1495
340 / 90	380 / 120
Vul / Vul	Vul / Vul
230 x 70	230 x 70
85 x 90	85 x 75
100 x 40	100 x 40
2 + 1x / 2	2 + 1 x / 4
480	480
375	375
-	-
-	-
135	135
-	-
-	-
-	-
865 / 1420	865 / 1420
85	85
1650	1710
500	560
720	720
55 / 165 / 1150	55 / 165 / 1150
540	540
30	30
2339	2475
-	-
-	-
2176	2281
1510	1551
6.0 / 6.0	6.0 / 6.0
0.035 / 0.045	0.030 / 0.035
0.05 / 0.05	0.06 / 0.042
10.0 / 20.0	10.0 / 20.0
Electric	Electric
1.0	1.0
0.8	0.8
-	-
24 / 150	24 / 250
150	210
0.23	0.26
Stepless	Stepless
-	-
62 / 69 / 0	62 / 69 / 0
-	-
< 2.5	< 2.5

## NPP16/18/20N3



### NPP16/18/20N3

$$Ast = Wa - x + l6 + 200$$

Ast = Working aisle width

Wa = Turning radius

a = Safety clearance (200 mm)

l6 = Pallet length

#### Cat Lift Trucks

##### NPP20N3

Battery

Pedestrian

2000

600

960

1425

500

840 / 1660

380 / 120

Vul / Vul

230 x 70

85 x 75

100 x 40

2 + 1 x / 4

480

375

-

-

135

-

-

865 / 1420

85

1710

560

720

55 / 165 / 1150

540

30

2472

-

-

2281

1551

6.0 / 6.0

0.04 / 0.05

0.05 / 0.06

10.0 / 20.0

Electric

1.0

1.2

-

24 / 250 - 375<sup>1)</sup>

210

0.26

Stepless

-

65 / 67 / 0

-

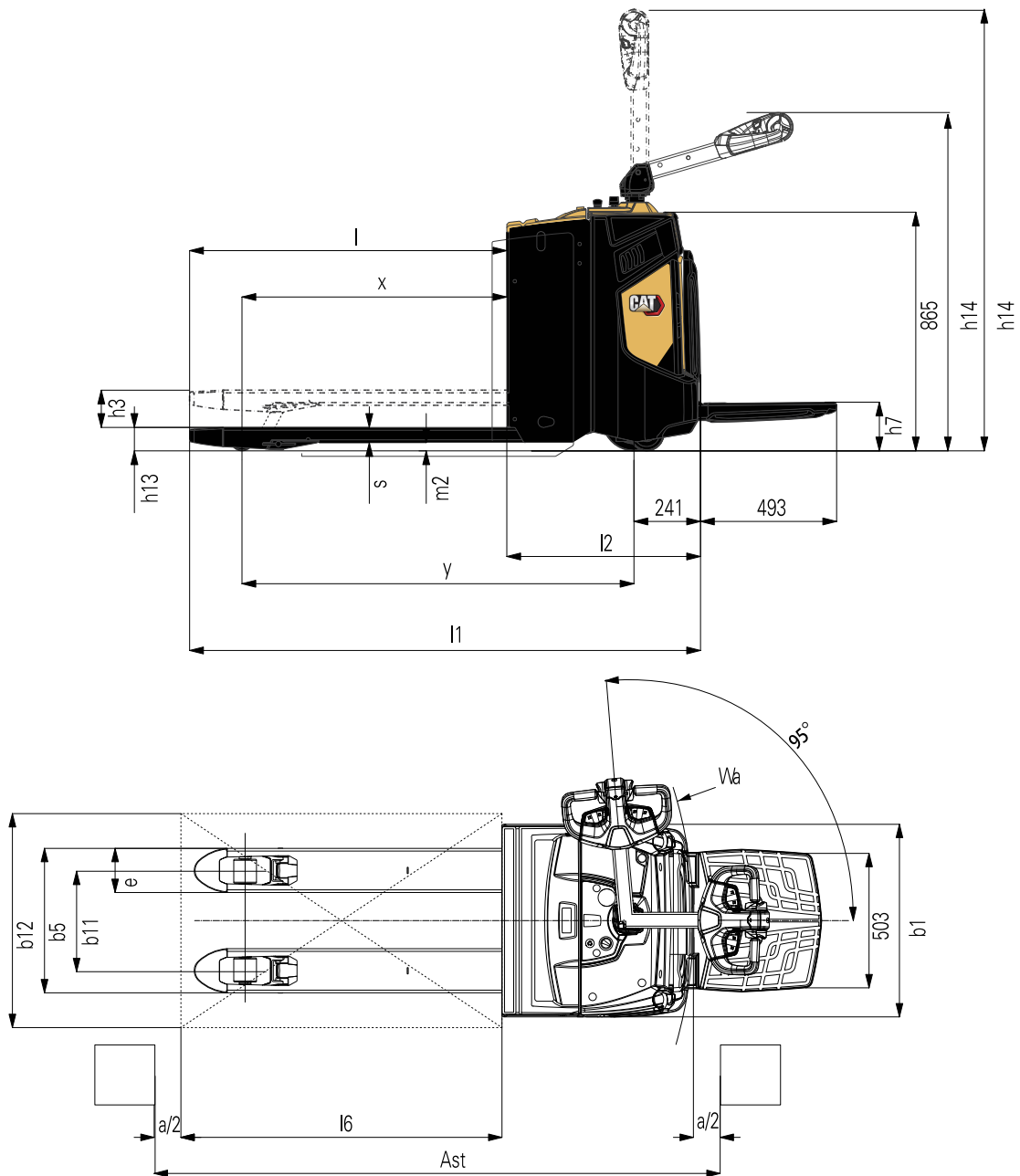
< 2.5

# SPECIFICATIONS

Characteristics			Cat Lift Trucks NPP20N3R		
1.1	Manufacturer		Battery		
1.2	Manufacturer's model designation		Pedestrian / Stand-on		
1.3	Power source		2000		
1.4	Operator type		600		
1.5	Load capacity	Q (kg)	960		
1.6	Load centre distance	c (mm)	1420		
1.7	Load wheel axle to fork face (forks lowered)	x (mm)			
1.8	Wheelbase	y (mm)			
Weight					
2.1	Truck weight without load, with maximum battery weight	kg	640		
2.2	Axle loadings with nominal load & maximum battery weight, drive / load side	kg	950 / 1710		
2.3	Axle loadings without load & with maximum battery weight, drive / load side	kg	505 / 135		
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 75		
3.4	Castor wheel dimensions (diameter x width)	(mm)	125 x 55		
3.5	Number of wheels, load / drive side (x = driven)		2 + 1 x / 4		
3.6	Track width (centre of tyres), drive side	b10 (mm)	480		
3.7	Track width (centre of tyres), load side	b11 (mm)	375		
Dimensions					
4.1	Lift height	h3 (mm)	135		
4.2	Initial lift	h5 (mm)	-		
4.3	Seat or stand height	h7 (mm)	-		
4.4	Height of tiller arm / steering console (min/max)	h14 (mm)	1155 / 1550		
4.5	Fork height, fully lowered	h13 (mm)	85		
4.6	Overall length	l1 (mm)	1850 / 2345		
4.7	Length to fork face	l2 (mm)	700 / 1195		
4.8	Overall width	b1/b2 (mm)	720		
4.9	Fork dimensions (thickness, width, length)	s / e / l (mm)	50 / 165 / 1150		
4.10	Outside width over forks (minimum / maximum)	b5 (mm)	540		
4.11	Ground clearance at centre of wheelbase, (forks lowered)	m2 (mm)	30		
4.12	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast (mm)	2504 / 2984		
4.13	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast (mm)	2416 / 2896		
4.14	Turning radius	Wa (mm)	1680 / 2160		
Performance					
5.1	Travel speed, with / without load	km / h	6.0 / 6.0		
5.2	Lifting speed, with / without load	m / s	0.04 / 0.04		
5.3	Lowering speed, with / without load	m / s	0.05 / 0.06		
5.4	Gradeability, with / without load	%	9.0 / 20.0		
5.5	Service brakes (mechanical / hydraulic / electric / pneumatic)		Electric		
Electric motors					
6.1	Drive motor capacity (60 min. short duty)	kW	1.0		
6.2	Lift motor output at 15% duty factor	kW	1.2		
6.3	Battery voltage/capacity at 5-hour discharge	V / Ah	24 / 250 - 375 <sup>1)</sup>		
6.4	Battery weight	kg	212-294		
Miscellaneous					
7.1	Type of drive control		Stepless		
7.2	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)	60		
7.3	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)	63/65		
7.4	Whole-body vibration (EN 13 059:2002)		0.9		
7.5	Hand-arm vibration (EN 13 059:2002)		< 2.5		

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

## NPP20N3R



### NPP20N3R: with folding platform

$$Ast = Wa - x + l6 + 200$$

Ast = Working aisle width

Wa = Turning radius

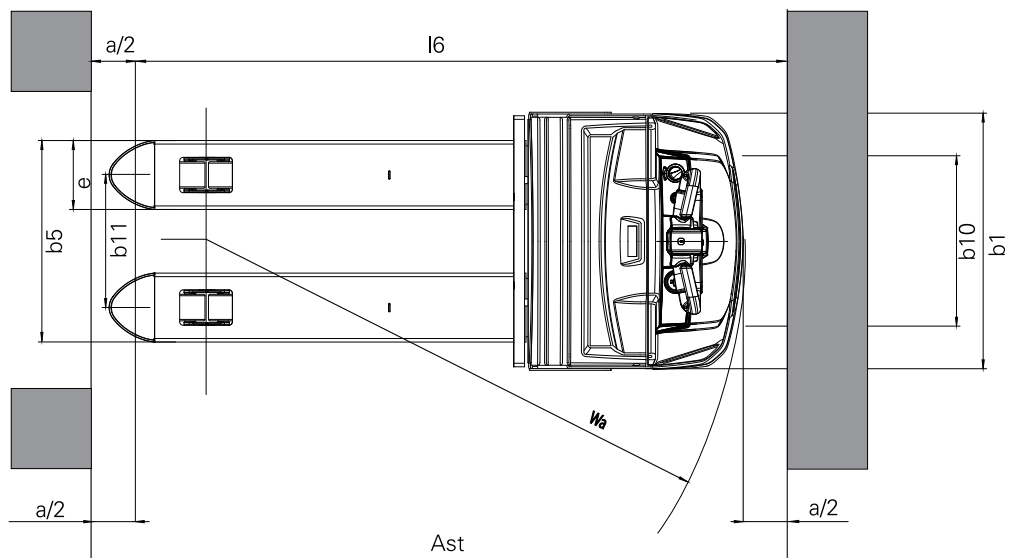
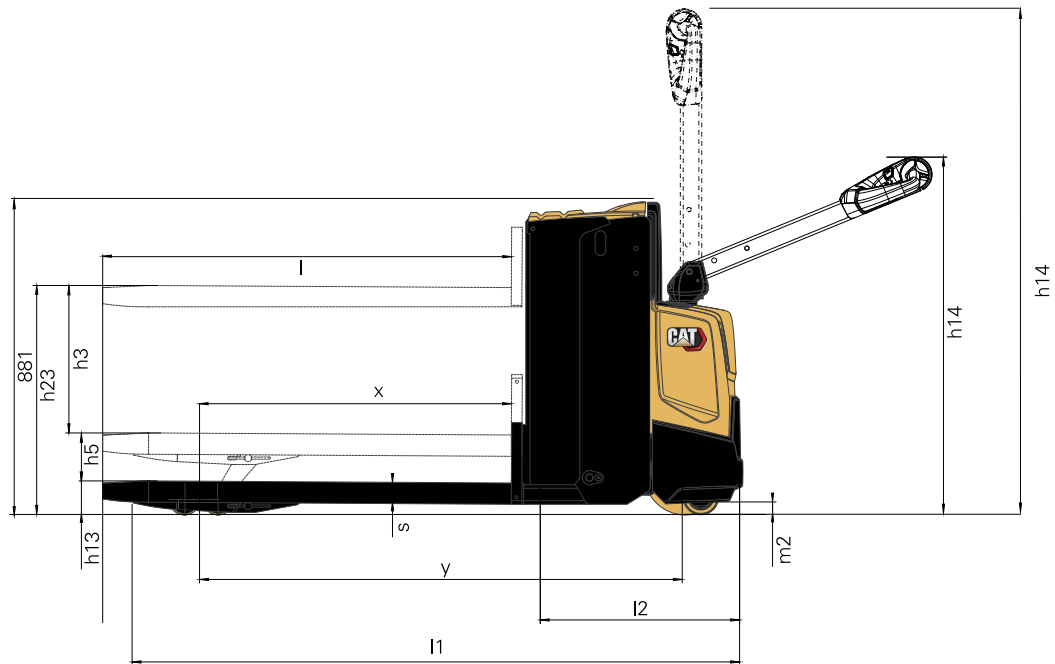
a = Safety clearance (200mm)

l6 = Pallet length

# SPECIFICATIONS

Characteristics			Cat Lift Trucks		
			NPP20N3E		
1.1	Manufacturer		Battery		
1.2	Manufacturer's model designation		Pedestrian		
1.3	Power source		2000 / 700		
1.4	Operator type		600		
1.5	Load capacity	Q (kg)	890		
1.6	Load centre distance	c (mm)	1425		
1.7	Load wheel axle to fork face (forks lowered)	x (mm)			
1.8	Wheelbase	y (mm)			
Weight					
2.1	Truck weight without load, with maximum battery weight	kg	585		
2.2	Axle loadings with nominal load & maximum battery weight, drive / load side	kg	435 / 150		
2.3	Axle loadings without load & with maximum battery weight, drive / load side	kg	420 / 160		
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 75		
3.4	Castor wheel dimensions (diameter x width)	(mm)	100 x 40		
3.5	Number of wheels, load / drive side (x = driven)		2 + 1 x / 4		
3.6	Track width (centre of tyres), drive side	b10 (mm)	480		
3.7	Track width (centre of tyres), load side	b11 (mm)	375		
Dimensions					
4.1	Lift height	h3 (mm)	135 / 645		
4.2	Initial lift	h5 (mm)	-		
4.3	Seat or stand height	h7 (mm)	-		
4.4	Height of tiller arm / steering console (min/max)	h14 (mm)	865 / 1420		
4.5	Fork height, fully lowered	h13 (mm)	85		
4.6	Overall length	l1 (mm)	1780		
4.7	Length to fork face	l2 (mm)	630		
4.8	Overall width	b1/b2 (mm)	720		
4.9	Fork dimensions (thickness, width, length)	s / e / l (mm)	59 / 184 / 1150		
4.10	Outside width over forks (minimum / maximum)	b5 (mm)	570		
4.11	Ground clearance at centre of wheelbase, (forks lowered)	m2 (mm)	30		
4.12	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast (mm)	2365		
4.13	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast (mm)	2275		
4.14	Turning radius	Wa (mm)	1560		
Performance					
5.1	Travel speed, with / without load	km / h	6.0 / 6.0		
5.2	Lifting speed, with / without load	m / s	0.11 / 0.14		
5.3	Lowering speed, with / without load	m / s	0.13 / 0.12		
5.4	Gradeability, with / without load	%	9.0 / 20.0		
5.5	Service brakes (mechanical / hydraulic / electric / pneumatic)		Electric		
Electric motors					
6.1	Drive motor capacity (60 min. short duty)	kW	1.0		
6.2	Lift motor output at 15% duty factor	kW	1.2		
6.3	Battery to DIN		-		
6.4	Battery voltage/capacity at 5-hour discharge	V / Ah	24 / 150		
6.5	Battery weight	kg	151		
Miscellaneous					
7.1	Type of drive control		Stepless		
7.2	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)	64		
7.3	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)	66/70		
7.4	Whole-body vibration (EN 13 059:2002)		-		
7.5	Hand-arm vibration (EN 13 059:2002)		< 2.5		

## NPP20N2E



### NPP20N3E: with lifting forks

$$Ast = Wa - x + l6 + 200$$

Ast = Working aisle width

Wa = Turning radius

a = Safety clearance (200mm)

l6 = Pallet length

# STANDARD EQUIPMENT AND OPTIONS

NPP16N3	
<b>GENERAL</b>	
LED battery discharge indicator, no hour meter	●
Micro-computer incl. hour meter and battery indicator with cut out	–
PIN code login 99 codes	–
PIN code login 4 codes	○
Offset tiller arm	–
Chill store design, down to -10°C, with rust-protected axles	–
Speed regulated lifting and proportional valve for lowering, controlled by rocker switch on tiller head	–
Electric on/off valve for lifting and lowering, controlled by rocker switch on tiller head	●
Polyurethane drive wheel or rubber	–
Initial lift	–
Single or tandem load wheels Polyurethane	●
<b>ENVIRONMENT</b>	
Cold store design, 0°C to -35°C	○
Hot operating condition modification, >30°C	○
<b>DRIVE AND LIFT CONTROLS</b>	
Tiller up drive	●
<b>WHEEL OPTIONS</b>	
Polyurethane traction and load wheels	●
Power friction traction wheel	○
Tandem Polyurethane load wheels	○
Single Polyurethane load wheels	○
Non-marking drive wheel	–
Anti-static drive wheel	–
<b>OTHER OPTIONS</b>	
Rubber foot protection	–
Diselectric band	–
Key switch	●
Capacity 2000kg on straddles	–
Piezo buzzer instead of standard horn	–
Load backrest	○
Pallet entry and exit rollers	○
Special RAL colour	○
Inbuilt charger 30A	○
Sideways battery change, 250Ah and 375Ah battery only	–
Battery changing device	–
Accessory rack	○
Working light	○
Multi function display	–
Battery creep	–
Battery level audible warning	–
Service alarm	–
Automatic log off	–
Revert to low speed at log off	–

● Standard    ○ Option

NPP18N3	NPP20N3	NPP20N3R	NPP20N3E
●	●	●	●
-	-	-	-
-	-	-	-
○	○	○	○
-	-	-	-
-	-	-	-
-	-	-	-
●	●	●	●
-	-	-	-
-	-	-	-
●	●	●	●
○	○	○	○
○	○	○	○
●	●	●	●
●	●	●	●
○	○	○	○
●	●	●	●
●	●	●	●
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
●	●	●	●
-	-	-	-
-	-	-	-
○	○	○	○
○	○	○	○
○	○	○	○
○	○	○	○
○	○	○	-
○	○	○	-
○	○	○	○
○	○	○	○
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-





Cat Lift Trucks offer a complete range of durable lift trucks, from gasoline, LPG, diesel-powered and electric counterbalance lift trucks to warehouse equipment designed to handle your toughest applications. We know you demand uncompromising quality from lift trucks that maximize uptime and get the job done efficiently. Our rugged machines deliver day after day by providing you with all the life-cycle cost of ownership benefits you've come to expect from Cat Lift Trucks.

**LET'S DO THE WORK.™**



© 2022 Caterpillar. All Rights Reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

FCAT0199 (11/2022) Printed in Singapore

