

DEPENDABLE PRODUCTIVITY

SPECIFICATIONS PEDESTRIAN AND FOLDING PLATFORM STACKER TRUCKS 24V, 1.0 - 1.6 TONNES

PAT

CAT

NSP12N3I NSP14N3I **NSP16N3I** NSP10N3R NSP12N3R NSP14N3R **NSP16N3R** NSP12N3IR NSP14N3IR NSP16N3IR **NSP16N3S** NSP16N3SR

NSP10N3

NSP12N3

NSP14N3

NSP16N3



YOUR PERFECT SHORT SHUTTLE PARTNER

THIS RANGE OF STACKERS, INCORPORATING ALL THE LATEST TECHNOLOGY, IS DESIGNED FOR SHORT SHUTTLE APPLICATIONS AND STACKING UP TO 5.4 METRES. WITH A WIDE CHOICE OF PEDESTRIAN AND FOLD-DOWN PLATFORM MODELS, YOU WILL FIND A RELIABLE AND PRODUCTIVE WORKHORSE FOR ANY WAREHOUSE.





Energy-saving programmable drive options, robust construction and high resistance to water and dirt reduce running costs and boost productivity. Maintenance needs are minimised by an integrated drive and lift system, with fewer components, and quick access to all major truck parts. Smooth and precise control characteristics and a comfortable operating position, with a user-friendly tiller arm and excellent visibility through the mast, ensure a satisfying user experience. Height-adjustable castor wheels and high-strength masts help to maximise stability.

Models with a small fold-down platform are available at 1.0, 1.2, 1.4 and 1.6 tonne capacities to take the legwork out of longer distances.

LOWER COST OF OWNERSHIP

- Latest AC technology keeps energy consumption and maintenance costs to bare minimum.
- Sturdy chassis construction and endurance-tested forks provide enhanced robustness and reliability even in the toughest conditions.
- Closed 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, squeezing downtime still further.
- Integrated drive and lift system features fewer components than previous models, reducing scope for breakdown.
- Closed compartment with steel cover protects battery against impact, postponing costly battery replacement.
- Standard battery size allows interchangeability with other brands.

UNMATCHED PRODUCTIVITY

- AC motor results in very precise drive control, making life easier for truck operators.
- Standard multifunctional (LCD) display offers clear information on truck and battery condition.
- Class-leading, patented, ergonomic *emPower* tiller head helps keep operators fresh with comfortable, easy-to-use controls.
- Z-tiller arm / offset arm is available for loading in tight spaces such as lorries.
- Excellent drive and traction characteristics suit intensive work over short and medium distances.
- Distance of the load wheels from the rear frame has been optimised for increased stability.
- Advanced programmable controller lets users prioritise between faster performance and smoother handling with lower energy consumption, prolonging shift life.
- Rounded fork tips make for accurate and effortless pallet entry, speeding up handling cycles and preventing pallet or load damage.
- Truck can be driven with tiller arm in vertical position (tiller up drive) in ultra-lowspeed 'tortoise' mode to maximise manoeuvrability in tight spaces.
- Narrower truck body makes handling operations in confined areas much easier.
- NSP10-16N3/N3I/N3S models feature an offset tiller arm so the operator can walk alongside, clear of the truck, for convenience and safety.
- N3R models feature fold-down driver platform that prevents operator fatigue over longer distances.
- N3R models' folding platform stays down when lowered, saving time when operators go to remount.
- NSP16N3 and N3R models fitted with the optional side stabilisers achieve impressively greater lifting capacity at higher stacking heights even compared to stackers with heavier rated capacities.

- N3I initial lift models let operator raise mast and forks, increasing ground clearance to protect truck and load when working on ramps.
- N3I initial lift models can carry two pallets simultaneously using the initial lift on the support forks.
- N3S straddle models allow wider loads and closed, bottom-boarded pallets to be handled with ease, using forged forks to lift straight from the floor.

SAFETY AND ERGONOMICS

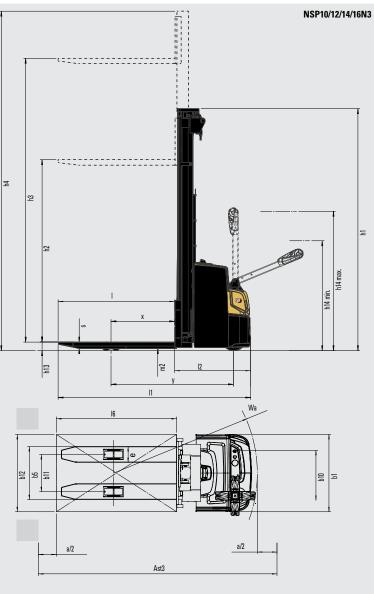
- Latest tiller arm design permits comfortable operating position with optimum hand protection.
- Large lift/lower rocker buttons are part of a unique, patented tiller head design with optimum distance between hand and controls, allowing easy one-handed operation even when wearing gloves.
- High-strength masts reduce load movement to a minimum.
- Slim mast profiles and careful hydraulic hose arrangements make for excellent forward visibility.
- Super-quiet oil-filled transmission helps keep noise levels low.
- Height-adjustable castor wheel eliminates play and raises load stability.
- Speed-regulated lifting and a proportional valve for lowering are standard on all models to provide precise, smooth, safe and productive handling.



STANDARD EQUIPMENT AND OPTIONS

	NSP10N3(R)	NSP12N3(I)	NSP14N3(I)	NSP16N3(I)	NSP12N3(I)R	NSP14N3(I)R	NSP16N3(I)R	NSP16N3S	NSP16N3SR
GENERAL									
Multifunctional display, including hour meter and BDI		•	•	•	•	•	•	•	•
Key switch entry	•	•	•	•	•	•	•	•	•
PIN code login 5 codes	0	0	0	0	0	0	0	0	0
Offset tiller arm (not available for R models)	•	•	•	•	•	•	•	•	•
Speed-regulated lifting and proportional valve for lowering, controlled by rocker switch on tiller head	•	•	•	•	•	•	•	•	•
Initial lift (standard for I models only)	-	•	•	•	•	•	•	_	_
Adjustable width between straddle load legs; 900mm - 1300mm	_	-	-	-	-	-	-	•	•
Sideways battery change (250Ah battery only)	-	0	0	0	0	0	0	0	0
Battery changing trolley, for 2 batteries (lead-acid)	_	0	0	0	0	0	0	0	0
Li-ion batteries	0	0	0	0	0	0	0	0	0
ENVIRONMENT									
Continuous use, +5°C to +25°C	•	•	•	•	•	•	•	•	•
Cold store design, 0°C to -35°C	0	0	0	0	0	0	0	0	0
DRIVE AND LIFT CONTROLS									
Hydraulic side stabilisers for enhanced residual capacity (not available for I models)	-	-	_	0	-	_	0	_	_
Centred steering position, with Z-shaped tiller arm (not available for R models)	0	0	0	0	0	0	0	0	0
Tiller up drive	•	•	•	•	•	•	•	•	•
WHEEL OPTIONS									
Vulkollan® drive wheel	•	•	•	•	•	•	•	•	•
Power friction traction wheel	0	0	0	0	0	0	0	0	0
Single load wheels Vulkollan®	•	•	_	-	•	_	-	_	_
Tandem load wheels Vulkollan®	0	0	•	•	0	•	•	•	•
OTHER OPTIONS									
Speed reduction 0.5km/h above 1000mm lift, duplex and triplex masts without free lift	_	0	0	0	0	0	0	0	0
Speed reduction 0.5km/h above free lift, duplex and triplex masts with free lift	-	0	0	0	0	0	0	0	0
Built-in charger 30A, for lead-acid batteries	0	0	0	0	0	0	0	0	0
Special RAL colour	0	0	0	0	0	0	0	0	0
Load backrest, 1300mm	0	0	0	0	0	0	0	0	0
Accessory rack	0	0	0	0	0	0	0	0	0
List bracket / writing desk, A4 size	0	0	0	0	0	0	0	0	0
Computer rack, 10-16" size	0	0	0	0	0	0	0	0	0

	Characteristics						
1.1	Manufacturer			Cat Lift Trucks	Cat Lift Trucks	Cat Lift Trucks	Cat Lift Trucks
1.2	Manufacturer's model designation			NSP10N3	NSP12N3	NSP14N3	NSP16N3
1.3	Power source			Battery	Battery	Battery	Battery
1.4	Operator type			Pedestrian	Pedestrian	Pedestrian	Pedestrian
1.5	Load capacity	۵	(kg)	1000	1200	1400	1600
1.6	Load centre distance	С	(mm)	600	600	600	600
1.8	Load wheel axle to fork face (forks lowered)	х	(mm)	700	750	750	750
1.9	Wheelbase	y	(mm)	1215	1330 1)	1330	1330 2)
1.0	Weight			1210	1000	1000	1000
2.1b	Truck weight without load, with maximum battery weight		kg	730	1020	1020	1095
2.2	Axle loadings with nominal load & maximum battery weight, drive / load side		kg	612 / 1128	810 / 1410	845 / 1580	930 / 1171
2.3	Axle loadings without load & with maximum battery weight, drive / load side		kg	534 / 196	730 / 295	730 / 295	790 / 311
	Wheels. Drive Train		5				
3.1	Tyres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side			Vul / Vul	Vul / Vul	Vul / Vul	Vul / Vul
3.2	Tyre dimensions, drive side		(mm)	230 x 70	230 x 70	230 x 70	230 x 70
3.3	Tyre dimensions, load side		(mm)	85 x 90	85 x 90	85 x 75	85 x 75
3.4	Castor wheel dimensions (diameter x width)		(mm)	125 x 60	125 x 60	125 x 60	125 x 60
3.5	Number of wheels, load / drive side (x = driven)		. ,	2 / 1x + 1	2/1x+1	4/1x+1	4/1x+1
3.6	Track width (centre of tyres), drive side	b10	(mm)	515	515	515	515
3.7	Track width (centre of tyres), load side	b11	(mm)	385	385	385	385
0.7	Dimensions		()	000	000	000	000
4.2b	Height	h1	(mm)	see tables	see tables	see tables	see tables
4.3	Free lift	h2	(mm)	see tables	see tables	see tables	see tables
4.4	Lift height	h3	(mm)	see tables	see tables	see tables	see tables
4.4	Height with mast extended	h4	(mm)	see tables		see tables	
4.5	Initial lift	h5	(mm)	see tables	see tables	see tables	see tables
4.0	Height of tiller arm / steering console (min/max)	h14	(mm)	865 / 1420	865 / 1420	865 / 1420	865 / 1420
	Fork height, fully lowered	h13	(mm)	90		90	
4.15 4.19		11	(mm)	1835	90 1900 ¹⁾	1900	90 1900 ²⁾
	Overall length	12	(mm)				750 2)
4.20	Length to fork face	b1/b2	(mm)	685 800	7501)	750 800	
4.21	Overall width	s/e/l	(mm)		800		800
4.22	Fork dimensions (thickness, width, length)	b3		56 / 186 / 1150	56 / 186 / 1150	56 / 186 / 1150	56 / 186 / 1150
4.24	Fork carriage width		(mm)	750	750	750	750
4.25	Outside width over forks (minimum / maximum)	b5	(mm)	570	570	570	570
4.26	Inner width of support legs	b4	(mm)	-	-	-	-
4.32	Ground clearance at centre of wheelbase, (forks lowered)	m2	(mm)	20	20	20	20
4.33c	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast	(mm)	2329	2422 1)	2422	2422 ²⁾
4.33d	Working aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast3	(mm)	1958	2022 1)	2022	2022 ²⁾
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)	2298	2374 1)	2374	2374 ²⁾
4.34d	Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast3	(mm)	2158	2222 ¹⁾	2222	2222 ²⁾
4.35	Turning radius	Wa	(mm)	1458	1572 ¹⁾	1572	1572 ²⁾
	Performance						
5.1	Travel speed, with / without load		km / h	6.0 / 6.0	6.0 / 6.0	6.0 / 6.0	6.0 / 6.0
5.2	Lifting speed, with / without load		m/s	0.15 / 0.30	0.16 / 0.33	0.14 / 0.33	0.15 / 0.32
5.3	Lowering speed, with / without load		m/s	0.29 / 0.32	0.46 / 0.35	0.45 / 0.35	0.43 / 0.34
5.7	Gradeability, with / without load		%				
5.8	Maximum gradeability with / without load		%	8 / 15	8 / 15	8 / 15	8 / 15
5.9	Acceleration time (10 metres) with / without load		S				
5.10	Service brakes (mechanical / hydraulic / electric / pneumatic)			Electric	Electric	Electric	Electric
	Electric motors						
6.1	Drive motor capacity (60 min. short duty)		kW	1.0	1.0	1.0	1.0
6.2	Lift motor output at 15% duty factor		kW	2.2	2.2	2.2	3.2
6.3	Battery to DIN						
6.4	Battery voltage/capacity at 5-hour discharge		V / Ah	24 / 150	24 / 150 - 250 5)	24 / 250	24 / 250 - 375 5)
6.5	Battery weight		kg	151	151 - 212	212	212 - 288
6.6a	Energy consumption according to EN16796	k	Wh/h	0.46	0.76	0.77	0.77
	Miscellaneous						
8.1	Type of drive control			Stepless	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)	64.8	64.1	64.1	64.1
	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)				
	Whole-body vibration (EN 13 059:2002)			-	-	-	



- 1. With the 150 Ah battery this dimension decreases by 64 mm
- 2. With the 375 Ah battery this dimension increases by 72 mm
- 3. Forged forks hooked on FEM2A fork carriage
- 4. In-field adjustable width of wide straddle support legs
- With the larger batteries several dimensions increase (see notes #1-2)

- Ast = Working aisle width
- Ast3 = Working aisle width (b12 <1000mm)
- Ast = Wa + $\sqrt{(16 x)^2 + (b12/2)^2}$ + a
- Ast3 = Wa + I6 x + a

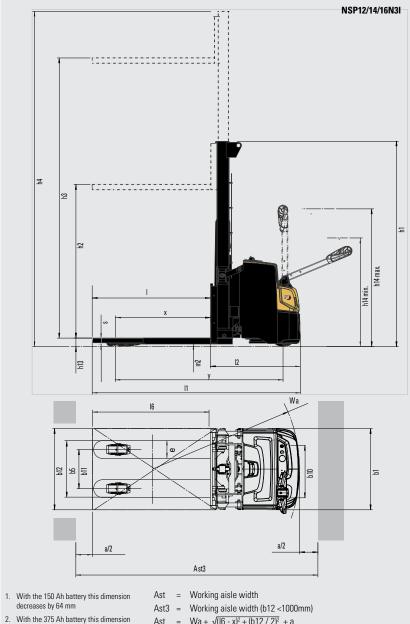
16

х

а

- Wa = Turning radius
 - = Pallet length (800 or 1000mm)
 - = Load wheel axle to fork face
- b12 = Pallet width (1200 mm)
 - = Safety clearance = 2 x 100mm

1 Municipate Control Control <thcontro< th=""> Control <thcont< th=""><th></th><th>Characteristics</th><th></th><th></th><th></th><th></th><th></th></thcont<></thcontro<>		Characteristics					
12 Nearborn (book display) NPP K201 NPP K201 <td>11</td> <td></td> <td></td> <td></td> <td>Cat Lift Trucks</td> <td>Cat Lift Trucks</td> <td>Cat Lift Trucks</td>	11				Cat Lift Trucks	Cat Lift Trucks	Cat Lift Trucks
10 Proteo Same Partial Same Same Same Same Same Same Same Same	_						
14Openating ignPredicationPredicationPredicationPredication15Load prover diverges0010010010010016Load prover diverges80080080080080080017Load prover diverges9010010010010018Load prover diverges9010010010010018Load prover diverges910010010010010018Adversardes withoward and a mean battery weight, the / faid side-510010010010010018Adversardes withoward and a mean battery weight, the / faid side-510010	_	-					
10 1000 1	1.4	Operator type					Pedestrian
13 13 130 130 130 130 1300 <td>1.5</td> <td></td> <td>Q</td> <td>(kg)</td> <td></td> <td>1400</td> <td>1600</td>	1.5		Q	(kg)		1400	1600
10 Windstate y	1.6	Load centre distance	С	(mm)	600	600	600
Even intervention Inc. Inc. <td>1.8</td> <td>Load wheel axle to fork face (forks lowered)</td> <td>х</td> <td>(mm)</td> <td>925</td> <td>925</td> <td>925</td>	1.8	Load wheel axle to fork face (forks lowered)	х	(mm)	925	925	925
210 Tack weight weithout facts with maximum battry weight, fiver / load side Hop 1005 1005 1005 1005 23 Alter loadings without facts with maximum battry weight, fiver / load side Hop 700 / 131 700 / 312 105 / 7300 126 / 7300 1	1.9	Wheelbase	у	(mm)	1610	1610	1610 ²⁾
22 Adv bindings with moming load # meanma hattery winght, diver /load side big 1000 / 1220 1010 / 1320 1026 / 1531 Waters, Drive Taxe, Mark without, Bark With /load side Park Mark With Taxe Mark Mark With Mark Mark Mark Mark Mark Mark Mark Mark		Weight					
22All backgroups when to all with maximum battry weight, dive / load is780 / 312780 / 312880 / 32131Tyre if maximum battry weight, dive / load isNotNot / NotNot / Not / N	2.1b			-	1095	1095	1171
Heads. Drive Trans. Heads. Drive Trans. Heads. Drive Trans. Heads. Drive Trans. Heads. Hea	2.2					1105 / 1390	1205 / 1561
11 Torse FI – Rover Thene, who – Wold – We – Molecular, R – Rober of ive / Load vice Wu / Wu Wu / Wu Wu / Wu Wu / Wu 31 Tyre dimensions, food side Gents	2.3	5		kg	780 / 315	780 / 312	840 / 328
32 For dimensions, down side 200 x 70 200 x 70 200 x 70 31 The dimensions, both side 66 % 90 65 x 75							
31 For dimensions, boat solo 695 - 90 655 - 75 85 - 75 32 Deate week dimensions dimensions within 600 27 / 1 × -1 4 / 1 × -1 4 / 1 × -1 33 Minther of wheek, load of dime side (x - drimen) 000 27 / 1 × -1 4 / 1 × -1 4 / 1 × -1 34 Teck weich (carter of tyres), load side 011 (mm) 305 325 325 35 Minther of wheek, load of dime side (x - drimen) 101 (mm) 305 325 325 36 Magint Carter of tyres), load side 101 (mm) 305 325 325 37 Treak with (carter of tyres), load side 101 (mm) 326 325 325 38 Magint With mast stateded 101 (mm) 386 tables see tables 326 326 326 326 326 326 326 326 326 326 326 326 326 326 326 326 3265 326 326	-			(
14 Cattor when dimension (dameter x welf) 105 r.60. 106 r.60. 100	_						
315 Number of wheeks, load drive asks (k - drive) 4/1k+1 4/1k+1 4/1k+1 36 Nack width (centre of tyre), load aske b11 (m) 37 Tack width (centre of tyre), load aske b11 (m) 38 Free int 10 (m) 335 335 335 38 Free int 10 (m) 335 585 515 38 Free int 10 (m) 335 335 335 38 Free int 10 (m) 336 see tables see tables 38 Free int 10 10 10 10 10 39 Instant (m) 10 10 10 10 10 39 Free intits 10 10 10 10 10 39 Instant (m) 10 10 10 10 10 39 Instant (m) 10 10 10 10 10 39 Instant (m) 10 10 10 10 10 30 Instant (m) 10 10 10 10 10 30 Instant (m) 10 10 10 10 10 <							
310Tack width learner dyneal, load side101101155515515327Track width learner dyneal, load side111100385385385428Hegitk tensire dyneal, load side12110100100100100429Hegitk tensire dyneal, load side1211010010010010010043Hegitk tensire dyneal13110100110 <td>_</td> <td></td> <td></td> <td>(11111)</td> <td></td> <td></td> <td></td>	_			(11111)			
17 Tack width leaster of tyres), load cale 111 110 386 385 385 Termination 111 (mm) 386 386 386 386 Termination 12 (mm) 386 <t< td=""><td></td><td></td><td>b10</td><td>(mm)</td><td></td><td></td><td></td></t<>			b10	(mm)			
Interseited		· · ·					
12.0 Height 11 10.11 Sea tables S	3.7		DIT	(min)	303	303	303
4.3 Twe lift 100 100 see tables se	4 2h		h1	(mm)	see tables	see tables	see tables
4.4 Lift height Hindight with meat autended Ma (mm) see tables see table		-					
4.5 leight with mast extended M from see tables see tables see tables 4.6 Inital fith h5 from 110 110 110 4.5 frok height, fully lowered h13 from 885 1200 805/1220 4.15 fork height, fully lowered h13 from 800 90 90 4.20 longth to fix faco 2 from 855 855 855* 4.21 fork carriage width b16 from 800 800 800 4.22 fork carriage width wort fork fitnimum / maximum) b15 from 55/186/1150 55/170 57/120 <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	_						
46 Initial iff 110 110 110 110 49 Height of tilleram / steering console (min/max) h14 mm 865 / 1420 867 / 1400 10 10 10 10 100 10 100 10 100 10 100 100 100 100 100 100 100 1200 / 70 100 1200 / 70 100	_	5					
4.9 stepint of tilles ann / steering console (min/max) h14 (mn) 985 / 1420 985 / 1420 985 / 1420 4.15 Fork height, fully lowered h13 (mn) 90 90 90 4.19 Overall length 11 (mn) 80 90 90 4.20 Length to fork face 12 (mn) 800 800 800 4.20 Length to fork face 12 (mn) 800 800 800 4.21 fork dimensions (finknass, with, length) 50 (mn) 56 / 186 / 1150 56 / 186 / 1150 56 / 186 / 1150 4.24 Kork carriage with Assistion (minium / maximum) 150 (mn) 750 750 750 4.25 Outside with of support lags Outside with (Ast) with 100 x 1200 mp pallets, load crossives, platform up/down Asti< <mm< th=""> 2653 2653 2653 2653 2653 4.340 Working asle with (Ast) with 000 x 1200 mp pallets, load lengthwise, platform up/down Asti<mm< th=""> 2123 2123 2233 2233 2233 2233</mm<></mm<>	_	-					
4.15 mchr hight, fully lowerd h13 mml 90 90 4.19 Overall length 11 mml 2010 2010 2010 4.19 Overall width 10 mml 2010 2010 2010 2010 4.21 Overall width 10 10 855 855 855 4.22 Pot dimension thickness, width, length) 51 10 55 185 185 56 185 36 36 36 36 36 36 36 36 36 36 36 36 36 36 36 36 36 36 36			h14	(mm)			
4.19 Denrall ength 11 mmn 2010 2010 2010 2010 ³ 4.20 Length to fix face 2 mmn 885 885 885 ³ 4.21 Lowall width Dh/2 MM 885 885 885 ³ 4.22 fork dimensions (finkness, width, length) 5 / e/ 1 fmn 55 / 186 / 1150 56 / 186 / 1150 56 / 186 / 1150 56 / 186 / 1150 56 / 186 / 1150 56 / 186 / 1150 56 / 186 / 1150 56 / 186 / 1150 574 546 / 10	_		h13	(mm)	90		
420 length to fix face 855 855 855 421 loweral width 1b/b2 (mm) 800 800 800 422 fork carriage width (hength) 5/ f/l (mm) 800 800 800 424 fork carriage width over fork finnimum / maximum) 63 (mm) 750 750 750 425 Outside width over fork finnimum / maximum) 64 (mm) 750 750 750 426 Ionar width over fork finnimum / maximum) 64 (mm) 750 750 750 427 Gorand clarance at centre of wheelbase, forks sovered) A4 (mm) 20 20 20 438 Working aisle width (A43) with 1000 x 1200 mm pallets, load conswise, platform up/down A41 710 2123 2123 2123 2233 438 Working aisle width (A43) with 800 x 1200 mm pallets, load lengthwise, platform up/down A41 mm 2533 2533 2533 2533 2533 2533 2533 2533 2533 2533 2533 2533 25	_		1	(mm)	2010		2010 2)
4.22 Fork dimensions (thickness, width, length) \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	4.20	-	12	(mm)	855	855	855 ²⁾
4.24 Fork carriage width b3 mm 750 750 750 4.25 Outside width ever forks [minimur, maximum) b5 fmm 570 570 570 4.26 Inter width of support legs b4 fmm 20 20 20 4.32 Ground clearance at centre of wheelbase, forks lowered) m2 fmm 20 20 20 4.33 Working aisle width (Ast) with 1000 x 1200 mm pallets, load lengthwise Ast3 fmm 2123 212	4.21	Overall width	b1/b2	(mm)	800	800	800
425 Outside width over forks (minimum / maximum) b5 fmm 570 570 570 426 Inner width of support legs b4 (mm) - - - 428 Grund desarace at centre of wheelbase, (forks lowered) m2 (mm) 20 20 20 438 Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down Ast3 (mm) 2653	4.22	Fork dimensions (thickness, width, length)	s/e/l	(mm)	56 / 186 / 1150	56 / 186 / 1150	56 / 186 / 1150
4.26 Inner width of support legs b4 (mm) 4.28 Forund clearance at centre of wheelbase, forks lowered) m2 (mm) 20 20 20 4.38 Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down Ast3 (mm) 2623 2623 2623 21233 1233 1014 013 <td>4.24</td> <td>Fork carriage width</td> <td>b3</td> <td>(mm)</td> <td>750</td> <td>750</td> <td>750</td>	4.24	Fork carriage width	b3	(mm)	750	750	750
4.22 Ground clearance at curre of wheelbase, (forks lowered) m2 (mm) A34 Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down Ast (mm) 2123 2123 2123 4.340 Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise Ast3 (mm) 2123 2233 2233 2233 2233 2233 2233 2233 2233 2233 2233 2233 2233 2233 2233 2233 2333 2533 2533 2533 2533 2533 2533 2533 2533	4.25	Outside width over forks (minimum / maximum)	b5	(mm)	570	570	570
4.330 Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down Ast (mm) 4.330 Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down Ast (mm) 4.340 Working aisle width (Ast) with 1000 x 1200 mm pallets, load lengthwise Ast (mm) 4.340 Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down Ast (mm) 4.340 Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down Ast (mm) 4.340 Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down Ast (mm) 4.340 Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down Ast (mm) 4.340 Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down Ast (mm) 5.31 Irravel speed, with / without load m/s 0.16 / 0.33 0.14 / 0.33 0.15 / 0.32 5.1 Travel speed, with / without load m /s 0.46 / 0.35 0.45 / 0.35 0.43 / 0.34 5.7 Gradeability, with / without load m /s s 1.1 1.0 1.0 1.0 <td< td=""><td>4.26</td><td>Inner width of support legs</td><td></td><td>(mm)</td><td>•</td><td>-</td><td></td></td<>	4.26	Inner width of support legs		(mm)	•	-	
4.33d Working aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise, platform up/down Ast3 (mm) 2123 2133 1040 104 104	4.32	Ground clearance at centre of wheelbase, (forks lowered)					
4.3a Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise Ast (mm) 4.34b Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down Ast (mm) 2533 0.16 / 0.33 0.14 / 0.33 0.15 / 0.32 0.45 / 0.35 0.45 / 0.35 0.45 / 0.35 0.45 / 0.35 0.45 / 0.35 0.45 / 0.35	4.33c						
4.34 Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise, platform up/down Ast (mm) 2533 2533 2533 2533 4.34 Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise, platform up/down Ast (mm) 2533 253 253 253 253 253 253 253 254 24					2123	2123	2123 2)
4.3dc Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down Ast (mm) 4.3dd Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down Ast3 (mm) 4.3d Vorking aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down Ast3 (mm) 1.3d Turning radius Wa (mm) 1848 1848 1848 4.3d Vorking aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down Ast3 (mm) 1848 1845 <t< td=""><td>_</td><td>5</td><td></td><td></td><td></td><td></td><td></td></t<>	_	5					
4.34d Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise, platform up/down Ast3 (mm) 2323 2323 2323 ³ 4.35 Turning radius Wa (mm) Wa (mm) 1848 1848 1848 ³¹ 5.1 Travel speed, with / without load km / h 6.0 / 6.0 6.0 / 6.0 6.0 / 6.0 5.1 Travel speed, with / without load m / s 0.16 / 0.33 0.14 / 0.33 0.15 / 0.32 5.3 Lowering speed, with / without load m / s 0.46 / 0.35 0.45 / 0.35 0.43 / 0.34 5.4 Maximum gradeability with / without load % 8 8 / 15 8 / 15 8 / 15 5.4 Baximum gradeability with / without load s s 5 0.16 / 0.33 0.14 / 0.33 0.15 / 0.32 5.4 Coeleration time (10 metrs) with / without load s s 8 / 15 8 / 15 8 / 15 5.10 Service brakes (mechanical / hydraulic / electric / pneumatic) s Electric Electric Electric Electric 6.1 Drive motor capacity (60 min. short duty) KW KW 1.0 1.0 1.0 1.0							
4.35 Turning radius Wa Integration Integration <thintegratis< th=""> Integratera Integrat</thintegratis<>	_						
Performance Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN12 053/2001 and EN1SO 4871	_						
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 m / s 5.7 Gradeability, with / without load % 5.8 Maximu gradeability with / without load % 5.9 Acceleration time (10 metres) with / without load s 5.10 Service brakes (mechanical / hydraulic / electric / pneumatic) s 5.10 Service brakes (mechanical / hydraulic / electric / pneumatic) s 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 voltage / capacity to EN16796 kWh / h 0.7 D.77 0.77 Miscellaneous S Stepless Stepless 10.7 Level of noise at the ear level of the driver according to EN 12 053 2001 and EN IS0 4871, drive/lift/idle LpAZ dB(A) 10.7.1 Level of noise at the ear level of th	4.35		vva	(mm)	1848	1848	1848 2)
52 Lifting speed, with / without load m / s 0.16 / 0.33 0.14 / 0.33 0.15 / 0.32 5.3 Lowering speed, with / without load m / s 0.46 / 0.35 0.45 / 0.35 0.43 / 0.34 5.7 Gradeability, with / without load % % 8 / 15 8 / 15 5.9 Acceleration time (10 metres) with / without load % 8 / 15 8 / 15 5.0 Service brakes (mechanical / hydraulic / electric / pneumatic) s 5 Electric Electric 5.10 Service brakes (mechanical / hydraulic / electric / pneumatic) kW 1.0 1.0 1.0 5.10 Service brakes (mechanical / hydraulic / electric / pneumatic) kW 2.2 2.2 3.2 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 2.2 2.2 3.2 6.3 Battery voltage/capacity at 5-hour discharge V / Ah 24 / 250 24 / 250 24 / 250 24 / 250 24 / 250 24 / 250 24 / 250 24	F 1			km / h	60/60	60/60	0.0/0.0
Investment Investm							
5.7 Gradeability, with / without load % 8/15 8/15 8/15 5.8 Maximum gradeability with / without load % 8/15 8/15 8/15 5.9 Acceleration time (10 metres) with / without load s 5 5 8/15 8/15 8/15 5.10 Service brakes (mechanical / hydraulic / electric / pneumatic) s Electric Electric Electric Electric motors Electric motor output at 15% duty factor kW 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 2.2 2.2 3.2 6.3 Battery to DIN - - - - 6.4 Battery voltage/capacity at 5-hour discharge V / Ah 24 / 250 24 / 250 24 / 250 24 / 250 24 / 250 24 / 250 24 / 250 24 / 250 24 / 250 24 / 250 24 / 250 24 / 250 21 / 2 .288 6.8 6.8 6.9 0.77 0.77 0.77 8.1 Type of drive control Stepless	_	51					
Base Maximum gradeability with / without load % 8 / 15 8 / 15 8 / 15 5.9 Acceleration time (10 metres) with / without load s <					0.407 0.33	0.437 0.33	0.437 0.34
5.9 Acceleration time (10 metres) with / without load s 5.10 Service brakes (mechanical / hydraulic / electric / pneumatic) Electric Electric Electric Electric 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 2.2 2.2 3.2 6.3 Battery to DIN KW 2.4 / 250 24 / 25	_			_	8 / 15	8/15	8/15
5.10 Service brakes (mechanical / hydraulic / electric / pneumatic) Electric Electric Electric 5.10 Drive motor capacity (60 min. short duty) MW 1.0 1.0 1.0 6.1 Drive motor capacity (60 min. short duty) MW 1.0 1.0 1.0 6.2 Lift motor output at 15% duty factor KW 1.0 1.0 1.0 6.3 Battery to DIN KW 2.2 2.2 3.2 6.4 Battery voltage/capacity at 5-hour discharge V / Ah 24 / 250 24 / 250 24 / 250 24 / 250 24 / 250 24 / 250 24 / 250 24 / 250 212 212 - 288 212 212 - 288 212 212 - 288 212 212 - 288 212 212 - 288 212 212 - 288 212 212 - 288 214 24 / 250 375 ^m 375	_				0710	0710	0710
Electric motors Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ Image: Constraint of the driver according to EN 12 053:2001 and	_			Ū	Flectric	Flectric	Flectric
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 2.2 2.2 3.2 6.3 Battery to DIN							
6.2 Lift motor output at 15% duty factor kW 2.2 2.2 3.2 6.3 Battery to DIN	6.1	Drive motor capacity (60 min. short duty)		kW	1.0	1.0	1.0
6.4 Battery voltage/capacity at 5-hour discharge V / Ah 24 / 250				kW			
6.5 Battery weight kg 212 212 212 221 <	6.3	Battery to DIN					
6.6a Energy consumption according to EN16796 kWh /h 0.76 0.77 0.77 Miscellaneous Stepless Stepless 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) 64.1 64.1 64.1 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) 64.1 64.1 64.1 10.7.2 Whole-body vibration (EN 13 059:2002) OF OF OF OF	6.4	Battery voltage/capacity at 5-hour discharge		V / Ah	24 / 250	24 / 250	24 / 250 - 375 5)
Miscellaneous Stepless Stepless Stepless 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) 64.1 64.1 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) 64.1 64.1 10.7.2 Whole-body vibration (EN 13 059:2002) dB (A) - -	6.5	Battery weight		kg	212	212	212 - 288
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) 64.1 64.1 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) 64.1 64.1 10.7.2 Whole-body vibration (EN 13 059:2002) Job 292:002 Job 292:002 Job 202:002	6.6a	Energy consumption according to EN16796	k	Wh/h	0.76	0.77	0.77
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) 64.1 64.1 64.1 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) 64.1 64.1 64.1 64.1 10.7.2 Whole-body vibration (EN 13 059:2002) dB (A) dB (A) dB (A) dB (A) dB (A)		Miscellaneous					
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) - -	8.1	Type of drive control			Stepless	Stepless	Stepless
10.7.2 Whole-body vibration (EN 13 059:2002)	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			64.1	64.1	64.1
	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)			
10.7.3 Hand-arm vibration (EN 13 059-2002) < 2.5 < 2.5 < 2.5							
	10.7.3	Hand-arm vibration (EN 13 059:2002)			< 2.5	< 2.5	< 2.5



- Ast = Wa + $\sqrt{(16 x)^2 + (b12/2)^2}$ + a
- Ast3 = Wa + I6 x + a

16

х

increases by 72 mm

carriage

#1-2)

support legs

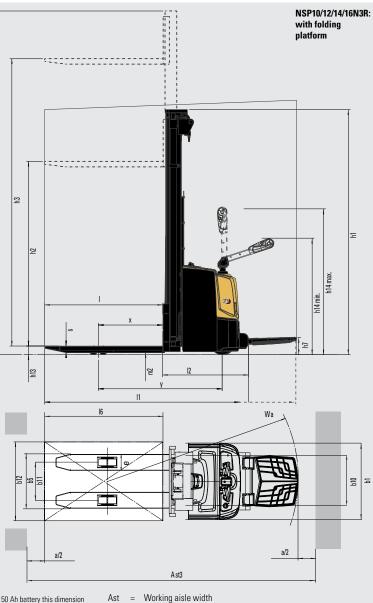
3. Forged forks hooked on FEM2A fork

5. With the larger batteries several dimensions increase (see notes

4. In-field adjustable width of wide straddle

- Wa = Turning radius
 - = Pallet length (800 or 1000mm)
 - = Load wheel axle to fork face
- b12 = Pallet width (1200 mm)
- a = Safety clearance = 2 x 100mm

1.1 M 1.2 M 1.3 Pc 1.4 Op 1.5 Lo 1.6 Lo 1.8 Lo 1.9 W 2.1b Tri 2.3 A> 2.3 A> 3.1 Ty 3.2 Ty 3.3 Ty 3.4 Ca 3.5 Nit. 3.6 Tri 3.7 Tri	characteristics Aanufacturer Aanufacturer's model designation wower source Uperator type oad capacity oad capacity oad centre distance oad wheel axle to fork face (forks lowered) Vheelbase Veight ruck weight without load, with maximum battery weight xule loadings with nominal load & maximum battery weight, drive / load side xule loadings without load & with maximum battery weight, drive / load side Yheels, Drive Train yre dimensions, drive side yre dimensions (diameter x width)	Q c x y	(kg) (mm) (mm) (mm) kg kg	1000 600 700 1215	Cat Lift Trucks NSP12N3R Battery Pedestrian / Stand-on 1200 600 750 1330 ¹⁾	Cat Lift Trucks NSP14N3R Battery Pedestrian / Stand-on 1400 600 750 1330	1600 600 750
1.2 M 1.3 Poi 1.4 Op 1.5 Lo 1.6 Lo 1.8 Lo 1.9 W 2.1b Tr 2.3 Ax 2.3 Ax 3.1 Ty 3.3 Ty 3.4 Ca 3.5 Nt 3.6 Tr 3.7 Tr	Manufacturer's model designation tower source Iperator type cad capacity cad capacity cad centre distance cad wheel axle to fork face (forks lowered) Wheelbase Veight Truck weight without load, with maximum battery weight, drive / load side with nominal load & maximum battery weight, drive / load side Wheels, Drive Train Verse: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side yre dimensions, load side	C X	(mm) (mm) (mm) kg kg	NSP10N3R Battery Pedestrian / Stand-on 1000 600 700 1215	NSP12N3R Battery Pedestrian / Stand-on 1200 600 750	NSP14N3R Battery Pedestrian / Stand-on 1400 600 750	NSP16N3R Battery Pedestrian / Stand-on 1600 600 750
1.3 Pcd 1.4 Op 1.5 Lo 1.6 Lo 1.8 Lo 1.9 W 2.1b Tr 2.2 Ax 2.3 Ax 3.1 Ty 3.2 Ty 3.3 Ty 3.4 Cc 3.5 Nkt 3.6 Tr	ower source Iperator type coad capacity coad capacity coad cherte distance coad wheel axle to fork face (forks lowered) Wheelbase Veight ruck weight without load, with maximum battery weight, with coadings with nominal load & maximum battery weight, drive / load side Wheels, Drive Train Veise: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side yre dimensions, load side	C X	(mm) (mm) (mm) kg kg	Battery Pedestrian / Stand-on 1000 600 700 1215	Battery Pedestrian / Stand-on 1200 600 750	Battery Pedestrian / Stand-on 1400 600 750	Battery Pedestrian / Stand-on 1600 600 750
1.4 Op 1.5 Lo 1.6 Lo 1.8 Lo 1.9 W 2.1b Tri 2.2 A> 2.2 A> 2.3 A> 3.1 Ty 3.2 Ty 3.3 Ty 3.4 Ca 3.5 Nic 3.6 Tri 3.7 Tri	Iperator type oad capacity oad centre distance oad wheel axle to fork face (forks lowered) Vheelbase Veight ruck weight without load, with maximum battery weight, drive / load side xle loadings with nominal load & maximum battery weight, drive / load side xle loadings without load & with maximum battery weight, drive / load side Vheels, Drive Train yres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side yre dimensions, drive side yre dimensions, load side	C X	(mm) (mm) (mm) kg kg	Pedestrian / Stand-on 1000 600 700 1215	Pedestrian / Stand-on 1200 600 750	Pedestrian / Stand-on 1400 600 750	Pedestrian / Stand-on 1600 600 750
1.5 L.0 1.6 La 1.8 La 1.9 W 2.1b Tr 2.2 Ax 2.3 Ax 3.4 W 3.1 Ty 3.2 Ty 3.4 Ca 3.5 Nu 3.6 Tr 3.7 Tr	oad capacity oad centre distance cad wheel axle to fork face (forks lowered) Vheelbase Veight Truck weight without load, with maximum battery weight, drive / load side xle loadings without load & with maximum battery weight, drive / load side xle loadings without load & with maximum battery weight, drive / load side Yheels, Drive Train Yree: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side yree dimensions, load side	C X	(mm) (mm) (mm) kg kg	1000 600 700 1215	1200 600 750	1400 600 750	1600 600 750
1.6 Lo 1.8 Lo 1.9 W 2.1b Tr 2.2 Ax 2.3 Ax W W 3.1 Ty 3.2 Ty 3.3 Ty 3.4 Cz 3.5 Nu 3.6 Tr 3.7 Tr	oad centre distance oad wheel axle to fork face (forks lowered) Vheelbase Veight ruck weight without load, with maximum battery weight xile loadings with ominal load & maximum battery weight, drive / load side xile loadings without load & with maximum battery weight, drive / load side Vheels, Drive Train Yres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side yre dimensions, drive side yre dimensions, load side	x	(mm) (mm) (mm) kg kg	600 700 1215	600 750	600 750	600 750
1.8 Lo 1.9 W 2.1b Tri 2.2 Ax 2.3 Ax 3.1 Ty 3.2 Ty 3.3 Ty 3.4 Ca 3.5 Nu 3.6 Tri 3.7 Tri	Vheelbase Veight Tuck weight without load, with maximum battery weight vale loadings with nominal load & maximum battery weight, drive / load side vale loadings without load & with maximum battery weight, drive / load side Vheels, Drive Train Vres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side vre dimensions, drive side vre dimensions, load side		(mm) (mm) kg kg	700 1215	750	750	750
1.9 W 2.1b Tri 2.2 Ax 2.3 Ax W W 3.1 Ty 3.2 Ty 3.3 Ty 3.4 Ca 3.5 Nit 3.6 Tri 3.7 Triangle	Vheelbase Veight Tuck weight without load, with maximum battery weight vale loadings with nominal load & maximum battery weight, drive / load side vale loadings without load & with maximum battery weight, drive / load side Vheels, Drive Train Vres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side vre dimensions, drive side vre dimensions, load side	У	kg kg	1215			
WW 2.1b Trrf 2.2 Ax 2.3 Ax W W 3.1 Ty 3.2 Ty 3.3 Ty 3.4 Ca 3.5 Nu 3.6 Tra 3.7 Tra	Veight ruck weight without load, with maximum battery weight vole loadings with nominal load & maximum battery weight, drive / load side vole loadings without load & with maximum battery weight, drive / load side Vheels, Drive Train yres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side yre dimensions, load side yre dimensions, load side		kg kg				1330 ²⁾
2.2 Ax 2.3 Ax 3.1 Ty 3.2 Ty 3.3 Ty 3.4 Ca 3.5 Nu 3.6 Tra 3.7 Tra	xle loadings with nominal load & maximum battery weight, drive / load side xle loadings without load & with maximum battery weight, drive / load side Yheels, Drive Train yres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side yre dimensions, drive side yre dimensions, load side		kg				
2.3 A2 W 3.1 Ty 3.2 Ty 3.3 Ty 3.4 Ca 3.5 Nu 3.6 Tra 3.7 Tra	xle loadings without load & with maximum battery weight, drive / load side Yheels, Drive Train yres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side yre dimensions, drive side yre dimensions, load side			860	1100	1100	1176
W 3.1 Ty 3.2 Ty 3.3 Ty 3.4 Ca 3.5 Nu 3.6 Tra 3.7 Tra	Vheels, Drive Train yres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side yre dimensions, drive side yre dimensions, load side		kg	715 / 1155	840 / 1400	860 / 1580	990 / 1795
3.1 Ty 3.2 Ty 3.3 Ty 3.4 Ca 3.5 Nu 3.6 Tra 3.7 Tra	yres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side yre dimensions, drive side yre dimensions, load side			640 / 220	860 / 320	740 / 295	860 / 320
3.2 Ty 3.3 Ty 3.4 Ca 3.5 Nu 3.6 Tra 3.7 Tra	yre dimensions, drive side yre dimensions, load side						
3.3 Ty 3.4 Ca 3.5 Nu 3.6 Tra 3.7 Tra	yre dimensions, load side			Vul / Vul	Vul / Vul	Vul / Vul	Vul / Vul
3.4 Ca 3.5 Nu 3.6 Tra 3.7 Tra			(mm)	230 x 70	230 x 70	230 x 70	230 x 70
3.5 Nu 3.6 Tra 3.7 Tra	astor wheel dimensions (diameter x width)		(mm)	85 x 90	85 x 90	85 x 75	85 x 75
3.6 Tra 3.7 Tra			(mm)	125 x 60	125 x 60	125 x 60	125 x 60
3.7 Tra	lumber of wheels, load / drive side (x = driven)			2 / 1x + 1	2 / 1x + 1	4 / 1x + 1	4 / 1x + 1
	rack width (centre of tyres), drive side	b10	(mm)	515	515	515	515
Di	rack width (centre of tyres), load side	b11	(mm)	385	385	385	385
	limensions						
4.2b He	leight	h1	(mm)	see tables	see tables	see tables	see tables
	ree lift	h2	(mm)	see tables	see tables	see tables	see tables
	ift height	h3	(mm)	see tables	see tables	see tables	see tables
	leight with mast extended	h4	(mm)	see tables	see tables	see tables	see tables
	leat- or stand height	h7	(mm)	175	175	175	175
	leight of tiller arm / steering console (min/max)	h14	(mm)	1155 / 1550	1155 / 1550	1155 / 1550	1155 / 1550
	ork height, fully lowered	h13	(mm)	90	90	90	90
	lverall length	11	(mm)	1955 / 2435	2020 / 2500 1)	2020 / 2500	2020 / 2500 2)
	ength to fork face	12	(mm)	805 / 1285	870 / 1350 ¹⁾	870 / 1350	870 / 1350 ²⁾
	lverall width	b1/b2	(mm)	800	800	800	800
	ork dimensions (thickness, width, length)	s/e/l	(mm)	56 / 186 / 1150	56 / 186 / 1150	56 / 186 / 1150	56 / 186 / 1150
	ork carriage width	b3	(mm)	750	750	750	750
)utside width over forks (minimum / maximum)	b5	(mm)	570	570	570	570
	nner width of support legs	b4	(mm)	-	-	-	-
	iround clearance at centre of wheelbase, (forks lowered)	m2	(mm)	20	20	20	20
	Vorking aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast Ast3	(mm)	2449 / 2929	2542 / 3022 1)	2542 / 3022	2542 / 3022 ²⁾
	Vorking aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast	(mm) (mm)	2078 / 2558	2142 / 2622 ¹⁾	2142 / 2622	2142 / 2622 ²⁾
	Vorking aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast3	(mm)				
	Vorking aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise	Ast	(mm)	2418 / 2898	2494 / 2974 ¹⁾	2494 / 2974	2494 / 2974 ²⁾
	Vorking aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast3	(mm)	2278 / 2758	2342 / 2822 1)	2342 / 2822	2342 / 2822 2)
	Vorking aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise, platform up/down urning radius	Wa	(mm)	1578 / 2058	1692 / 2172 ¹⁾	1692 / 2172	1692 / 2172 2)
	Performance	wwa	(11111)	13707 2030	103272172	103272172	1032/2172
	ravel speed, with / without load		km / h	6.0 / 6.0	6.0 / 6.0	6.0 / 6.0	6.0 / 6.0
	ifting speed, with / without load		m/s	0.15 / 0.30	0.16 / 0.33	0.14 / 0.33	0.15 / 0.32
	owering speed, with / without load		m/s	0.29 / 0.32	0.16 / 0.35	0.14 / 0.33	0.13 / 0.32
	adeability, with / without load		%	0.207 0.02	0.407 0.00	0.407 0.00	0.407 0.04
	Aaximum gradeability with / without load		%	8 / 15	8 / 15	8 / 15	8 / 15
	cceleration time (10 metres) with / without load		s	0710	0,10	0,10	0,10
	ervice brakes (mechanical / hydraulic / electric / pneumatic)			Electric	Electric	Electric	Electric
-	lectric motors						
	Irive motor capacity (60 min. short duty)		kW	1.0	1.0	1.0	1.0
	ift motor output at 15% duty factor		kW	2.2	2.2	2.2	3.2
	lattery to DIN						
	lattery voltage/capacity at 5-hour discharge		V / Ah	24 / 150	24 / 150 - 250 5)	24 / 250	24 / 250 - 375 5)
	lattery weight		kg	151	151 - 212	212	212 - 288
	nergy consumption according to EN16796	k	Wh/h	0.75	0.77	0.78	0.78
	Aiscellaneous						
	ype of drive control			Stepless	Stepless	Stepless	Stepless
	evel of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871 in work LpAZ		dB (A)	64.6	64.0	64.0	64.0
10.7.1 Le	evel 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)				
	Vhole-body vibration (EN 13 059:2002)			0.8	0.8	0.8	0.8
	land-arm vibration (EN 13 059:2002)			< 2.5	< 2.5	< 2.5	< 2.5



- 1. With the 150 Ah battery this dimension decreases by 64 mm
- 2. With the 375 Ah battery this dimension increases by 72 mm

첟

- 3. Forged forks hooked on FEM2A fork carriage
- 4. In-field adjustable width of wide straddle support legs
- 5. With the larger batteries several dimensions increase (see notes #1-2)

- Ast3 = Working aisle width (b12 <1000mm)
- Ast = Wa + $\sqrt{(16 x)^2 + (b12/2)^2}$ + a
- Ast3 = Wa + I6 x + a

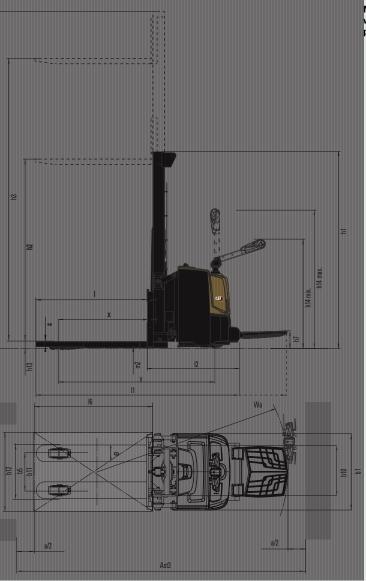
16

х

- Wa = Turning radius
 - = Pallet length (800 or 1000mm)
- = Load wheel axle to fork face
- b12 = Pallet width (1200 mm) а
 - = Safety clearance = 2 x 100mm

SPECIFICATIONS PEDESTRIAN AND FOLDING PLATFORM STACKER TRUCKS 24V, 1.0 - 1.6 TONNES

	Characteristics					
1.1	Manufacturer			Cat Lift Trucks	Cat Lift Trucks	Cat Lift Trucks
1.1	Manufacturer's model designation			NSP12N3IR	NSP14N3IR	NSP16N3IR
1.2	Power source			Battery	Battery	Battery
1.4	Operator type				Pedestrian / Stand-on	
1.4	Load capacity	Q	(kg)	1200	1400	1600
1.5	Load capacity	c	(mm)	600	600	600
1.0	Load wheel axle to fork face (forks lowered)	x	(mm)	925	925	925
1.0	Wheelbase	y	(mm)	1610	1610	1610 ²⁾
1.9	Wight	y	(11111)	1010	1010	1010-7
2.1b	Truck weight without load, with maximum battery weight		kg	1175	1175	1251
2.2	Axle loadings with nominal load & maximum battery weight		kg	1030 / 1350	1115 / 1460	1263 / 1588
2.2	Axle loadings with normal load & maximum battery weight, drive / load side		kg	840 / 335	840 / 335	903 / 348
2.3	Wheels, Drive Train		Ng	0407 333	0407 333	3037 340
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)	125 x 60	125 x 60	125 x 60
3.5	Number of wheels, load / drive side (x = driven)		()	2 / 1x + 1	4/1x+1	4/1x+1
3.6	Track width (centre of tyres), drive side	b10	(mm)	515	515	515
3.7	Track width (centre of tyres), load side	b11	(mm)	385	385	385
0.7	Dimensions			000	000	000
4.2b	Height	h1	(mm)	see tables	see tables	see tables
4.3	Free lift	h2	(mm)	see tables	see tables	see tables
4.4	Lift height	h3	(mm)	see tables	see tables	see tables
4.5	Height with mast extended	h4	(mm)	see tables	see tables	see tables
4.6	Initial lift	h5	(mm)	110	110	110
4.8	Seat- or stand height	h7	(mm)	175	175	175
4.9	Height of tiller arm / steering console (min/max)	h14	(mm)	1155 / 1550	1155 / 1550	1155 / 1550
4.15	Fork height, fully lowered	h13	(mm)	90	90	90
4.19	Overall length	11	(mm)	2125 / 2605	2125 / 2605	2125 / 2605 ²⁾
4.20	Length to fork face	12	(mm)	975 / 1455	975 / 1455	975 / 1455 2
4.21	Overall width	b1/b2	(mm)	800	800	800
4.22	Fork dimensions (thickness, width, length)	s/e/l	(mm)	56 / 186 / 1150	56 / 186 / 1150	56 / 186 / 1150
4.24	Fork carriage width	b3	(mm)	750	750	750
4.25	Outside width over forks (minimum / maximum)	b5	(mm)	570	570	570
4.26	Inner width of support legs	b4	(mm)	-	-	-
4.32	Ground clearance at centre of wheelbase, (forks lowered)	m2	(mm)	20	20	20
4.33c	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast	(mm)	2777 / 3257	2777 / 3257	2777 / 3257 2)
4.33d	Working aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast3	(mm)	2247 / 2727	2247 / 2727	2247 / 2727 2)
4.34a	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast	(mm)		LLAT T LTLT	224772727
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)	2657 / 3137	2657 / 3137	2657 / 3137 ²⁾
4.34d	Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast3	(mm)	2447 / 2927	2447 / 2927	2447 / 2927 2)
4.35	Turning radius	Wa	(mm)	1972 / 2452	1972 / 2452	1972 / 2452 ²⁾
4.00	Performance	nu	()	13727 2432	13727 2432	107272402
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	0.16 / 0.33	0.14 / 0.33	0.15 / 0.32
5.3	Lowering speed, with / without load		m/s	0.46 / 0.35	0.45 / 0.35	0.43 / 0.32
5.7	Gradeability, with / without load		%	0.407 0.00	0.437 0.33	0.437 0.34
5.8	Maximum gradeability with / without load		%	8 / 15	8 / 15	8 / 15
5.9	Acceleration time (10 metres) with / without load		S	0710	0710	0710
5.10	Service brakes (mechanical / hydraulic / electric / pneumatic)		-	Electric	Electric	Electric
0.10	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	2.2	2.2	3.2
6.3	Battery to DIN			2.2	2.2	0.2
6.4	Battery voltage/capacity at 5-hour discharge		V / Ah	24 / 250	24 / 250	24 / 250 - 375 5)
6.5	Battery weight		kg	212	247 230	212 - 288
6.6a	Energy consumption according to EN16796	L	wh/h	0.77	0.78	0.78
0.00	Miscellaneous	r		0.77	0.70	0.70
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)	64.0	64.0	64.0
10.7	Level of hoise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871 in Work LIAZ 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)	04.0	04.0	04.0
	Whole-body vibration (EN 13 059:2002)			0.8	0.8	0.8
	Hand-arm vibration (EN 13 059:2002)			< 2.5	< 2.5	< 2.5
L10.7.3	nanu-ann vioradull (EN-13-033.2002)			~ 2.3	~ 2.0	~ 2.3



- 1. With the 150 Ah battery this dimension decreases by 64 mm
- 2. With the 375 Ah battery this dimension increases by 72 mm
- 3. Forged forks hooked on FEM2A fork carriage
- 4. In-field adjustable width of wide straddle support legs
- With the larger batteries several dimensions increase (see notes #1-2)

- Ast = Working aisle width
- Ast3 = Working aisle width (b12 <1000mm)
- Ast = Wa + $\sqrt{(16 x)^2 + (b12/2)^2}$ + a
- Ast3 = Wa + I6 x + a
- Wa = Turning radius

16

х

- = Pallet length (800 or 1000mm)
- = Load wheel axle to fork face
- b12 = Pallet width (1200 mm)
- a = Safety clearance = 2 x 100mm

NSP12/14/16N3IR: with folding platform

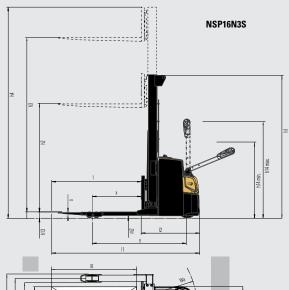
	Characteristics				
1.1	Manufacturer			Cat Lift Trucks	Cat Lift Trucks
1.2	Manufacturer's model designation			NSP16N3S	NSP16N3SR
1.3	Power source			Battery	Battery
1.4	Operator type			Pedestrian	Pedestrian / Stand-on
1.5	Load capacity	Q	(kg)	1600	1600
1.6	Load centre distance	С	(mm)	600	600
1.8	Load wheel axle to fork face (forks lowered)	х	(mm)	750	750
1.9	Wheelbase	у	(mm)	1395 ²⁾	1395 ²⁾
	Weight				
2.1b	Truck weight without load, with maximum battery weight		kg	1364	1516
2.2	Axle loadings with nominal load & maximum battery weight, drive / load side		kg	1106 / 1885	1246 / 1880
2.3	Axle loadings without load & with maximum battery weight, drive / load side		kg	953 / 411	1081 / 435
	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 60	125 x 60
3.5	Number of wheels, load / drive side (x = driven)			4 / 1x + 1	4 / 1x + 1
3.6	Track width (centre of tyres), drive side	b10	(mm)	515	515
3.7	Track width (centre of tyres), load side	b11	(mm)	1025-1425	1025-1425
	Dimensions	14			
4.2b	Height	h1	(mm)	see tables	see tables
4.3	Free lift	h2	(mm)	see tables	see tables
4.4	Lift height	h3	(mm)	see tables	see tables
4.5	Height with mast extended	h4	(mm)	see tables	see tables
4.6	Initial lift	h5	(mm)		
4.8	Seat- or stand height	h7	(mm)	-	175
4.9	Height of tiller arm / steering console (min/max)	h14	(mm)	865 / 1420	1155 / 1550
4.10	Height of support legs	h8	(mm)	84	84
4.15	Fork height, fully lowered	h13	(mm)	85	85
4.19	Overall length	11	(mm)	1965 ²⁾	2085 / 2565 2)
4.20	Length to fork face	12	(mm)	815 ²⁾	935 / 1415 ²⁾
4.21	Overall width	b1/b2	(mm)	800 / 1150 - 1550 4)	800 / 1150 - 1550 4)
4.22	Fork dimensions (thickness, width, length)	s/e/l b3	(mm)	40 / 100 / 1150 3)	40 / 100 / 1150 3)
4.24	Fork carriage width	b5	(mm)	980	980
4.25	Outside width over forks (minimum / maximum)		(mm)	260-900 ³⁾	260-900 ³⁾
4.26	Inner width of support legs	b4 m2	(mm)	900-1300 4)	900-1300 ⁴⁾
4.32	Ground clearance at centre of wheelbase, (forks lowered)	Ast	(mm) (mm)	20	20
4.33c	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down			2487 2)	2607 / 3087 ²⁾
4.33d	Working aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast3 Ast	(mm) (mm)	2087 2)	2207 / 2687 ²⁾
4.34a	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast3	(mm)		
4.34b 4.34c	Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise	Ast	(mm)	2439 ²⁾	2559 / 3039 ²⁾
4.340 4.34d	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast3	(mm)	2439	2407 / 2887 ²⁾
4.340	Turning radius	Wa	(mm)	1637 2)	1757 / 2237 2)
4.50	Performance	wa	(11111)	1037 -	1/5//223/**
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	0.15 / 0.32	0.15 / 0.32
5.3	Lowering speed, with / without load		m/s	0.43 / 0.34	0.13 / 0.32
5.7	Gradeability, with / without load		%	0.437 0.34	0.437 0.34
5.8	Maximum gradeability with / without load		%	8/15	8 / 15
5.9	Acceleration time (10 metres) with / without load		s	0713	0713
5.10	Service brakes (mechanical / hydraulic / electric / pneumatic)		3	Electric	Electric
3.10	Electric motors			Liouno	Liberio
6.1	Drive motor capacity (60 min. short duty)		kW	1.0	1.0
6.2	Lift motor output at 15% duty factor		kW	3.2	3.2
6.3	Battery to DIN			0.2	0.2
6.4	Battery voltage/capacity at 5-hour discharge		V / Ah	24 / 250 - 375 5)	24 / 250 - 375 5
6.5	Battery weight		kg	212 - 288	212 - 288
6.6a	Energy consumption according to EN16796	k	Wh/h	0.77	0.78
0.00	Miscellaneous	K		0.77	0.70
	Type of drive control			Stepless	Stepless
81	The or arrestering.		ID (A)		65.1
	Level of noise at the ear level of the driver according to EN 12.053:2001 and EN ISO 4871 in work I pA7		dR (A)	64.1	
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) dB (A)	64.1	05.1
8.1 10.7 10.7.1 10.7.2			dB (A) dB (A)	64.1	0.8

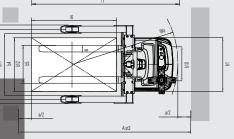
Ast = Working aisle width

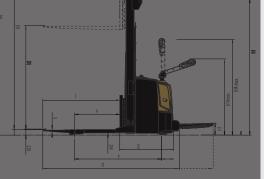
- Ast3 = Working aisle width (b12 <1000mm)
- Ast = Wa + $\sqrt{(16 x)^2 + (b12/2)^2}$ + a
- = Wa + I6 -x + a Ast3 Wa = Turning radius
- 16
 - = Pallet length (800 or 1000mm)
- = Load wheel axle to fork face х
- = Pallet width (1200 mm) b12
- = Safety clearance = 2 x 100mm а

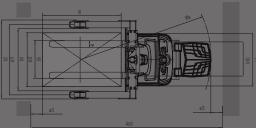
1. With the 150 Ah battery this dimension decreases by 64 mm

- 2. With the 375 Ah battery this dimension increases by 72 mm
- 3. Forged forks hooked on FEM2A fork carriage
- 4. In-field adjustable width of wide straddle support legs
- 5. With the larger batteries several dimensions increase (see notes #1-2)









NSP16N3SR: with folding platform

NSP10N3/10N3R									
Mast Type	h3+h13	h1	h4	h2+h13					
	mm	mm	mm	mm					
S	1500	1980	1980	1500					
D	2500	1775	3000	195					
	2900	1975	3400	195					
	3300	2175	3800	195					

	NSP12/14/16N3	/ NSP12/14	/16N3R	
Mast Type	h3+h13	h1	h4	h2+h13
	mm	mm	mm	mm
S	1500	1950	1950	1500
DS	2500	1835	3000	200
	2900	2035	3400	200
	3300	2235	3800	200
	3600	2385	4100	200
	4300	2735	4800	200
DEV	2500	1775	2940	1355
	2900	1975	3340	1555
	3300	2235	3800	1755
	3600	2385	4100	1905
	3700	2435	4200	1955
	4300	2735	4800	2255
TR	4100	1955	4640	-
	4300	2020	4840	-
	4700	2153	5240	-
	5400*	2385	5940	-
TREV	4100	1955	4640	1475
	4300	2020	4840	1540
	4700	2153	5240	1673
	5400*	2385	5940	1905

NSP12/14/16N3I / NSP12/14/16N3IR								
Mast Type	h3+h13	h1	h4	h2+h13				
	mm	mm	mm	mm				
S	1500	2055	2055	1505				
DS	2500	1940	3105	200				
	2900	2140	3505	200				
	3300	2340	3905	200				
	3600	2490	4205	200				
	4300	2840	4905	200				
DEV	2500	1940	3105	1360				
	2900	2140	3505	1560				
	3300	2340	3905	1760				
	3600	2490	4205	1910				
	3700	2540	4305	1960				
	4300	2840	4905	2260				
TR	4100	2060	4745	-				
	4300	2125	4945	-				
	4700	2260	5345	-				
	5400*	2490	6045	-				
TREV	4100	2060	4745	1480				
	4300	2125	4945	1545				
	4700	2260	5345	1673				
	5400*	2490	6045	1910				

	NSP16N3S	/ NSP16N3	SR	
Mast Type	h3+h13	h1	h4	h2+h13
	mm	mm	mm	mm
S	1500	2030	2030	1500
DS	2500	1915	3080	195
	2900	2115	3480	195
	3300	2315	3880	195
	3600	2465	4180	195
	4300	2815	4880	195
DEV	2500	1915	3080	1355
	2900	2115	3480	1555
	3300	2315	3880	1755
	3600	2465	4180	1905
	3700	2515	4280	1955
	4300	2815	4880	2255
TR	4100	2035	4720	-
	4300	2100	4920	-
	4700	2233	5320	-
	5400	2465	6020	-
TREV	4100	2035	4720	1475
	4300	2100	4920	1540
	4700	2233	5320	1753
	5400	2465	6020	1905

Mast Performance and Capacity

- = only NSP14-16N3R & NSP14-16N3(I)R
- = Simplex

*

S

- D = Duplex without free lift (middle cylinder)
- DS = Duplex without free lift (side cylinders)
- DEV = Duplex mast with free lift
- TR = Triplex without free lift
- TREV = Triplex mast with free lift
- h3+h13 = Lifting height
- h1 = Lowered mast height
- h4 = Raised mast height
- h2+h13 = Free lift

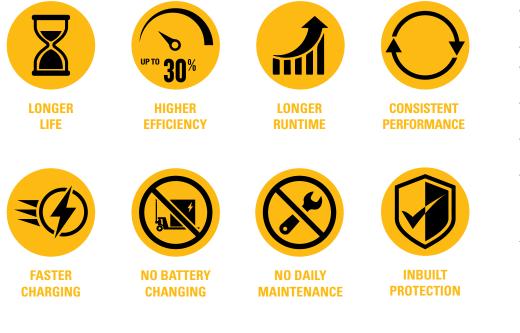


LI-ION BATTERIES

TIME TO SWITCH?

Lithium-ion (Li-ion) battery technology is available in the Cat® electric counterbalance and warehouse truck ranges. While lead-acid batteries remain a popular choice for our customers, and still have much to offer, they present various challenges which Li-ion can overcome.

Perhaps the most noticeable change when switching to Li-ion is the use of opportunity charging. Instead of exchanging batteries between shifts, you can simply plug into a fast charger during short breaks and keep the same battery going 24/7. This, together with other efficiency, environmental and safety benefits, makes Li-ion a very appealing alternative.





Cat Li-ion advantages over lead-acid

Li-ion is an investment which should be viewed against ongoing savings on energy, equipment, labour and downtime.

- Longer life 3 to 4 times lead-acid lifespan reduces overall battery investment
- Higher efficiency energy losses during charging and discharging are up to 30% lower, so electricity consumption is reduced
- Longer runtime thanks to more efficient battery performance and use of opportunity charges, which can be given at any time without damaging the battery or shortening its lifespan
- **Consistently high performance** with a more constant voltage curve maintains greater truck productivity, even toward the end of a shift
- Faster charging enables full charge in as little as 1 hour with the fastest chargers
- No battery changing fast opportunity charges 15 minutes for several hours of extra runtime enable continuous operation with just one battery and minimise the need to buy, store and maintain spares
- No daily maintenance the battery stays on board the truck for charging and there is no need for water top-ups or electrolyte checks
- No gas or acid spills avoids the space, equipment and running costs of a battery room and ventilation system
- Inbuilt protection intelligent battery management system (BMS) automatically prevents excessive discharge, charge, voltage and temperature, as well as virtually eliminating misuse

Batteries and chargers with different capacities are available. Your dealer will identify the best combination for your needs. You should also ask your dealer about optional 5-year warranties, subject to annual checkups, which give extra peace of mind.

info@catlifttruck.com | www.catlifttruck.com

WESC2548(02/25) © 2025 MLE B.V. (registration no. 33274459). 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 nermission

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 Cat lift trucks Dealer. Cat Lift Trucks follows a policy of continual product improvement. For this reason, some materials, options and specifications could change without notice.









WATCH VIDEOS

DOWNLOAD OUR APP