



# PS12/16/20N

The range of stackers includes the wide list of models with capacity from 1200 kg to 2000 kg and lifting height up to 5500 mm.

## INTRODUCTION

The trucks designed to be used with high efficiency even during their multi-shift operation. The configuration of the trucks allows you to get more powerful and productive units thanks to its increased speed and different options of batteries, including Lithium solutions.



Powerful AC-drive unit from the global industry leaders: the AC driving motor designed and produced by Schabmüller comes together with the top quality ZF gearbox and it is equipped with Intorq electromagnetic brake. The drive unit can provide the drive speed up to 8 km/h. The use of top level quality drive wheels from German manufacturers Rader Vogel or Wicke helps to ensure the long life time of PU tires.



The integrated design of operator's platform and protective arms as well as totally new internal structure allows to ensure the smallest body length of the stackers and provide extremely low turning radius among competitors. Together with this, the suspension system for the platform helps to provide the high level of comfort to operators.



The use of apron with 8 mm thickness allows to ensure the robustness of chassis and its strength even in case of collision against objects. The strong battery cover made out of steel helps to provide a high level of strength for this part.



The driving controllers and steering controllers are manufactured by Zapi (Italy) - the leading European brand with long history in the industry, which provides extremely reliable and flexible solutions with high performance level of the control system.



The option of PIN-code panel access, which works not only with PIN-code but also with access cards (RFID), can significantly simplify the procedure of access limitation for the fleet which may be used by more than one operator. The option of built-in charger may help to simplify charging processes for the customers using the trucks not so intensively (without multi-shift operation connected with necessity of battery replacement)



Rema tiller delivers high level of ergonomics as well as reliability of control system. In addition, the tiller ensures a long life-time thanks to the contactless rocker switches designed for lifting/lowering function.



The model range can be equipped with the option of Electric Power Steering (EPS) which delivers precise and fast control for the position of steering wheel and has a high level of reliability as well as safety according to official standards.

## ADVANTAGES

- The new model range of short-tiller trucks introduced by Noblelift has combined all the experience gained by the manufacturer over past years. By using of the most advanced solutions and top level components, the new range is ready to provide the top level of performance to its users.
- During the design stage, several priorities and various details were considered and verified such as improvement of the service life and performance of our trucks, easy maintenance as well as confirmation of interchangeability of components not only within model range, but also with other ranges of Noblelift products.
- The experience of Noblelift shows that the use of top brand components from well-known suppliers not only helps to improve reliability, but also gain trust from our customers and put the products to new level. That is why nearly all key components used for the model range are coming from famous brands with rich experience in material handling industry.



## Mast table Ps12 16 20N

Designation	Lowered mast height h1 (mm)	Free lift height h2 (mm)	Lift height h3 (mm)	Extended mast height h4 (mm)	Lift+fork height h3+h13 (mm)
<b>PS12 N</b>					
<b>Two stage mast</b>	1958	—	2830	3380	2920
	2108	—	3130	3680	3220
	2308	—	3530	4080	3620
<b>Two stage mast FFL (Full-Free-Lift)</b>	1958	1410	2830	3380	2920
	2108	1560	3130	3680	3220
	2308	1760	3530	4080	3620
<b>PS16 N</b>					
<b>Two stage mast</b>	1958	—	2830	3380	2920
	2108	—	3130	3680	3220
	2308	—	3530	4080	3620
<b>Two stage mast FFL (Full-Free-Lift)</b>	1958	1410	2830	3380	2920
	2108	1560	3130	3680	3220
	2308	1760	3530	4080	3620
<b>Three stage mast</b>	2008	—	4230	4780	4320
	2108	—	4530	5080	4620
<b>Three stage mast FFL (Full-Free-Lift)</b>	1908	1320	3930	4480	4020
	2008	1420	4230	4780	4320
	2108	1520	4530	5080	4620
	2343	1756	5230	5780	5320
	2410	1800	5430	6110	5520
<b>PS20 N</b>					
<b>Two stage mast</b>	2078	—	2830	3500	2920
	2228	—	3130	3800	2920
	2428	—	3530	4200	3620
<b>Two stage mast FFL (Full-Free-Lift)</b>	1978	1310	2830	3300	2720
	2078	1410	2830	3500	2920
	2228	1560	3130	3800	3220
	2428	1760	3530	4200	3620
<b>Three stage mast</b>	2128	—	4230	4900	4320
	2228	—	4530	5200	4620
<b>Three stage mast FFL (Full-Free-Lift)</b>	1978	1310	3930	4600	4020
	2128	1420	4230	4900	4320
	2228	1520	4530	5200	4620



The option of side battery replacement allows customers to use the truck with multi-shift operation and not to waste time on complicated procedure of battery replacement through the top. With help of specially designed trolley, the batteries can be replaced fast and effortlessly.



The trucks can be equipped with the option of Aquamatic- the system of fast refilling of distilled water in lead-acid batteries. The 2-ton pallet truck can be optionally equipped with the battery under 3VBS standard, which helps to reduce the length of the original truck and makes it more compact (the standard battery is 2Pz5)



The model range can be equipped with Lithium batteries. The use of lithium solution from Noblift will allow you to enjoy benefits of Lithium technology such as Fast charging, Opportunity charging, Maintenance free, Environmental-friendly, Smart Diagnosis of battery status, Lower cost of Total Ownership with long service life.



The feature of proportional hydraulic control realized with help of solution from the top leading manufacturer of hydraulic solutions HPI allows to ensure precise positioning of forks during lifting and lowering as well as to provide smooth acceleration/deceleration of forks and gentle handling of fragile goods.

## Type sheet for industrial truck acc. to VDI 2198

1KG=2.2LB 1INCH=25.4MM

		PS 12N(3600)			PS 16N(5500)			PS 20N(4600)			
<b>Distinguishing mark</b>	1.2	Manufacturer's type designation									
	1.3	Power (battery ,diesel, petrol, gas, manual)			Battery						
	1.4	Operator type			Pedestrian						
	1.5	Load Capacity / rated load	Q(t)	1.2	1.6		2.0				
	1.6	Load centre distance	c(mm)		600						
	1.8	Load distance ,centre of drive axle to fork	x(mm)		647						
	1.9	Wheelbase	Y(mm)	1167	1215		1327				
	<b>Weight</b>	2.1	Service weight	kg	1080	1380		1620			
		2.2	Axle loading, laden front/rear	kg	860/1420	1040/1940		1210/2410			
2.3		Axle loading, unladen front/rear	kg	780/320	940/440		1090/540				
<b>Tires, chassis</b>	3.1	Tires		Polyurethane (PU)							
	3.2	Tire size, front	Øx w (mm)	230x70							
	3.3	Tire size, rear	Øx w (mm)	85x75							
	3.4	Additional wheels(dimensions)	Øx w (mm)	150x54							
	3.5	Wheels, number front/rear(x=driven wheels)		1x=1/4							
	3.6	Track, front	b10(mm)	510							
	3.7	Track, rear	b11 (mm)	390/505							
<b>Dimensions</b>	4.2	Lowered mast height	h1 (mm)	2308	2410		2228				
	4.3	Free Lift height	h2 (mm)	1760	1820		1520				
	4.4	Lift height(up to)	h3 (mm)	3530	5430		4530				
	4.5	Extended mast height	h4 (mm)	4088	6110		5208				
	4.9	Height of tiller in drive position min./ max.	h14(mm)		950/1350						
	4.15	Height, lowered	h13(mm)		90						
	4.19	Overall length	l1(mm)	1855 <sup>1)</sup>	1896 <sup>1)</sup>		2025 <sup>1)</sup>				
	4.20	Length to face of forks	l2(mm)	705 <sup>1)</sup>	746 <sup>1)</sup>		875 <sup>1)</sup>				
	4.21	Overall width	b1(mm)		790						
	4.22	Fork dimensions	s/e/l(mm)		60/180/1150						
	4.25	Distance between fork-arms	b5(mm)		570/685						
	4.32	Ground clearance, centre of wheelbase	m2(mm)		28		23				
	4.33	Aisle width for pallets 1000X1200 crossways	Ast(mm)	2285 <sup>1)</sup>	2325 <sup>1)</sup>		2455 <sup>1)</sup>				
	4.34	Aisle width for pallets 800X1200 lengthways	Astf(mm)	2250 <sup>1)</sup>	2290 <sup>1)</sup>		2420 <sup>1)</sup>				
	4.35	Turning radius	Wa(mm)	1380 <sup>1)</sup>	1420 <sup>1)</sup>		1550 <sup>1)</sup>				
<b>Performance data</b>	5.1	Travel speed, laden/ unladen	km/h	7.0/8.0	6.0/7.0		6.0/7.0				
	5.2	Lift speed, laden/ unladen	m/s	0.09/0.14	0.13/0.20		0.13/0.20				
	5.3	Lowering speed, laden/ unladen	m/s	0.25/0.20	0.28/0.23		0.28/0.23				
	5.8	Max. gradeability, laden/ unladen	%	6/12	6/12		6/10				
	5.10	Service brake		Electromagnetic							
<b>Electric- engine</b>	6.1	Drive motor rating S2 60min	kw	1.4	1.4		1.4				
	6.2	Lift motor rating at S3 10%	kw	1.5	3.2		3.2				
	6.3	Battery acc. to DIN 43531/35/36 A, B, C, no		2VBS	3VBS		3PZS				
	6.4	Battery voltage, nominal capacity K5	V/Ah	24/180	24/270		24/350				
	6.5	Battery weight	kg	175	230		288				
	6.6	Energy consumption acc: to VDI cycle	kWh/h	0.95	1.59		1.70				
<b>Additional data</b>	8.1	Type of drive control		AC- speed control							
	8.4	Sound level at driver's ear acc. to EN 12053	dB(A)	<70							

1)With compact platform: + 440 mm