PS12/16/20N

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

INTRODUCTION

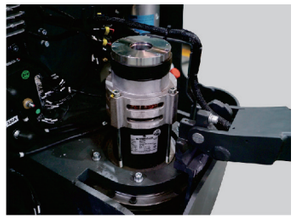
The truck designed to be used with high efficienty even during their multi-shift operation. The configuration of the truck allows you to get more powerful and productive units thanks to its increased speed and different options of batteries, including Lithium solutions.

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.

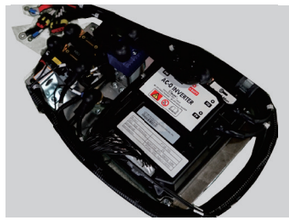
- During the design stage, several priorities and various details were considered and verified such as improvement of the service life and performance of our trucks, easy maintenance as well as confirmation of interchangeability of components not only within model range, but also with other ranges of 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 a 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.



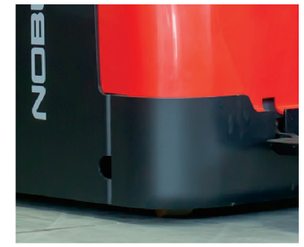
Powerful AC-drive unit from the global industry leaders: the AC driving motor designed and produced by Schabmuller comes together with the top quality ZF gearbox and it is equipped with Intorq electromagnetic brake. The drive unit can provide the drive speed up to 8 km/h.The use of top level quality 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.



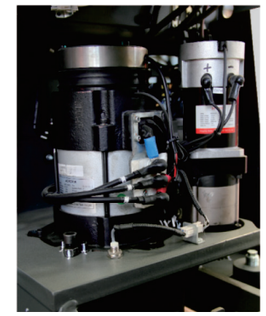
The driving controllers and steering controllers are manufactured by Zapi (Italy) - the leading European brand with long history in the industry, which provides extremely reliable and flexible solutions with high performance level of the control system.

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 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 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.

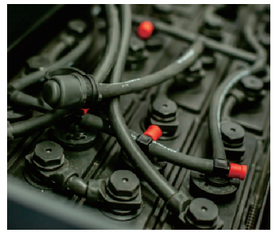


The model range can be equipped with the option of Electric Power Steering (EPS) which delivers precise and fast control for the position of steering wheel and has a high level of reliability as well as safety according to official standards.

Mast table PS12N/16N/20N

Designation	Lowered mast height h_1(mm)	Free lift height h_2(mm)	Lift height h_3(mm)	Extended mast height h_4(mm)
PS12N				
Two-stage mast	1958 2108 2308	/ / /	2830 3130 3530	3380 3680 4080
Two-stage mast FFL (Full-Free-Lift)	1958 2108 2308	1410 1560 1760	2830 3130 3530	3380 3680 4080
Three stage mast FFL (Full-Free-Lift)	1998 2008 2108	1320 1420 1520	3930 4230 4530	4480 4780 5080
PS16N				
Two stage mast	1958 2108 2308	/ / /	2830 3130 3530	3380 3680 4080
Two stage mast FFL (Full-Free-Lift)	1958 2108 2308	1410 1560 1760	2830 3130 3530	3380 3680 4080
Three stage mast	2008 2108	/ /	4230 4530	4780 5080
Three stage mast FFL (Full-Free-Lift)	1908 2008 2108 2343	1320 1420 1520 1756	3930 4230 4530 5230	4480 4780 5080 5780
PS20N				
Two stage mast	2078 2228 2428	/ / /	2830 3130 3530	3500 3800 4200
Two stage mast FFL (Full-Free-Lift)	1978 2078 2228 2428	1310 1410 1560 1760	2630 2830 3130 3530	3300 3500 3800 4200
Three stage mast	2128 2228	/ /	4230 4530	4900 5200
Three stage mast FFL (Full-Free-Lift)	1978 2128 2228	1310 1420 1520	3930 4230 4530	4600 4900 5200

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 make it more compact (the standard battery is 2PzS).

The model range can be equipped with Lithium batteries. The use of lithium solution from Noblelift 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.

Type sheet for industrial truck acc. to VDI 2198 1KG=2.2LB 1INCH=25.4MM

Distinguishing mark	1.2	Manufacturer`s type designation		PS12N(3600)	PS16N(5500)	PS20N(4600)
	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
Weight	2.1	Service weight	kg	1080	1380	1620
	2.2	Axle loading, laden front/rear	kg	830/1420	990/1940	1160/2410
	2.3	Axle loading, unladen front/rear	kg	750/300	890/440	1040/540
Tires, chassis	3.1	Tires			Polyurethane(PU)	
	3.2	Tire size,front	Φxw (mm)		Φ230×70	
	3.3	Tire size,rear	Φxw (mm)		Φ84×70	
	3.4	Additional wheels(dimensions)	Φxw (mm)		Φ150×54	
	3.5	Wheels,number front/rear(x=driven wheels)			1x + 1 / 4	
	3.6	Tread, front	b_{10} (mm)		510	
	3.7	Tread, rear	b_{11} (mm)		390/505	
Dimensions	4.2	Lowered mast height	h_1 (mm)	2308	2410	2228
	4.3	Free Lift height	h_2 (mm)	1760	1820	1520
	4.4	Lift height	h_3 (mm)	3530	5430	4530
	4.5	Extended mast height	h_4 (mm)	4088	6110	5208
	4.9	Height of tiller in drive position min./ max.	h_{14} (mm)		950/1350	
	4.15	Height, lowered	h_{13} (mm)		90	
	4.19	Overall length	l_1 (mm)	1855[1)]	1896[1)]	2025[1)]
	4.20	Length to face of forks	l_2 (mm)	705[1)]	746[1)]	875[1)]
	4.21	Overall width	b_1 (mm)		790	
	4.22	Fork dimensions	s/e/l (mm)		60 / 180 / 1150	
	4.25	Distance between fork-arms	b_5 (mm)		570 /685	
	4.32	Ground clearance, centre of wheelbase	m_2 (mm)	28	28	23
	4.33	Aisle width for pallets 1000X1200 crossways	Ast (mm)	2285[1)]	2325[1)]	2455[1)]
	4.34	Aisle width for pallets 800X1200 lengthways	Ast (mm)	2250[1)]	2290[1)]	2420[1)]
	4.35	Turning radius	Wa (mm)	1380[1)]	1420[1)]	1550[1)]
Performance data	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	
Electric- engine	6.1	Drive motor rating S2 60min	kW		1.4	
	6.2	Lift motor rating at S3 4.5%	kW	1.5/3.2	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	24/160-180	240/210-270	24/270-350
	6.5	Battery weight +/-5%	kg	155-175	185-235	235-285
	6.6	Energy consumption acc: to VDI cycle	kWh/h	0.95	1.34	1.70
Additional data	8.1	Type of drive control			AC- speed control	
	8.4	Sound level at driver`s ear acc. to EN 12053	dB(A)		<69	

1) with compact platform:+440mm