



ORDER PICKER N20 LoL

CAPACITY 800 - 2000 KG | SERIES 132

Safety

Customized cutted forks for a safer pallet handling. Steel front shield and twin-grip hand guard provide additional protection. The front driving position affords optimum visibility for enhanced safety and efficiency.

Performance

Efficiency on the job is the truck's true strength powered by a 3kW AC motor, it rapidly accelerates to maximum speed (12km/h unladen). Four-point surface contact ensures high stability and the OptiLift® control ensures high precision and productivity in order picking and pallet handling applications.

Comfort

Free lift enabling a picking at optimal height. A perfect interface between operator and truck is assured with the N20 LoL design concept. The unique Linde twin-grip steering control system with all operating controls grouped on the twin-grip head, combines with a cushioned platform and profiled scoop seat to provide the operator with a superbly comfortable working environment.

Reliability

Consistent reliability in demanding applications is assured with the Linde N series. Its sturdy mast and compact, robot welded chassis ensures maximum structural integrity and durability. The rugged structure and components provide a low centre of gravity for excellent stability.

Productivity

Efficiency at work, efficiency in servicing. With uptime ratios of up to 1000 hours between services and a computerised diagnostic system, maintenance intervals are minimal and operating costs are reduced. Easy accessibility of all components and the maintenance free AC technology employed play an additional part in maximising uptime.

TECHNICAL DATA

ACCORDING TO VDI 2198

					Linde	Linde
					N20 LoL	N20 LoL + pallet clip
Characteristics	1.1	Manufacturer			Linde	Linde
	1.2	Model designation				
	1.3	Power unit			Battery	Battery
	1.4	Operation			Preparation	Preparation
	1.5	Load capacity (on load arms)		Q (kg)	800/2000 ¹⁾	800/2000 ¹⁾
	1.6	Load centre		c (mm)	600/1800	750/1850
	1.8	Axle centre to fork face	(± 5 mm)	x (mm)	1762 ²⁾	1862 ²⁾
	1.9	Wheelbase	(± 5 mm)	y (mm)	2451 ³⁾	2551 ³⁾
	Weights	2.1	Service weight (incl. battery item 6.5)	(± 10 %)	kg	1600 ⁴⁾
2.2		Axle load with load, front/rear	(± 10 %)	kg	1529/1671 ³⁾	1529/1671 ³⁾
2.3		Axle load without load, front/rear	(± 10 %)	kg	1120/480 ³⁾	1120/480 ³⁾
Wheels and tyres	3.1	Tyres			Rubber / Polyurethan	Rubber / Polyurethan
	3.2	Tyre size, front		Ø x 1 mm	254 x 102	254 x 102
	3.3	Tyre size, rear		Ø x 1 mm	2 x 85 x 60 ⁶⁾	2 x 85 x 60 ⁶⁾
	3.4	Auxiliary wheels (dimensions)		Ø x 1 mm	100 x 40	100 x 40
	3.5	Wheels, number front/rear (x = driven)			1x + 1/2 ⁸⁾	1x + 1/2 ⁸⁾
	3.6	Track width, front	(± 5 mm)	mm	470	470
	3.7	Track width, back	(± 5 mm)	mm	370	370
Dimensions	4.2	Height of mast, lowered		h ₁ (mm)	1315 ⁷⁾	1407 ⁷⁾
	4.3	Free lift		h ₂ (mm)	750 ⁷⁾	750 ⁷⁾
	4.4	Lift		h ₃ (mm)	750 ⁷⁾	750 ⁷⁾
	4.5	Height of mast, extended		h ₄ (mm)	1398 ⁷⁾	1490 ⁷⁾
	4.6	Initial lift	(± 5 mm)	h ₅ (mm)	125	125
	4.8	Height of seat	(mini/ maxi)	h ₇ (mm)	900/1000	900/1000
	4.9	Height of tiller arm in operating position, min/ max	(mini/ maxi)	h ₁₄ (mm)	1140/1190	1140/1190
	4.15	Fork height, lowered	(maxi)	h ₁₃ (mm)	95	95
	4.19	Overall length/(platform folded)	(± 5 mm)	l ₁ (mm)	3865 ⁵⁾	3965 ⁵⁾
	4.20	Length to fork face (platform low/high position)	(± 5 mm)	l ₂ (mm)	1504 ⁵⁾	1504 ⁵⁾
	4.21	Overall width	(± 5 mm)	b ₁ /b ₂ (mm)	790	790
	4.22	Fork dimensions		s/e/l (mm)	95 x 205 x 1200	95 x 205 x 1250
	4.23	Load arms dimensions		s/e/l (mm)	60 x 165 x 2350	60 x 165 x 2450
	4.24	Width of fork carriage	Mini/maxi (± 5 mm)	b ₃ (mm)	780	780
	4.25	Fork spread, min/ max	Mini/maxi (± 5 mm)	b ₅ (mm)	575	575
	4.26	Load arms spread, min/ max	Mini/maxi (± 5 mm)	b ₄ (mm)	535	535
	4.32	Ground clearance, centre of wheelbase		m ₂ (mm)	5	5
	4.33	Aisle width for pallets 1000x1200 along forks	(± 20 mm)	A ₃₁ (mm)	4278 ⁵⁾	4378 ⁵⁾
	4.34	Aisle width for pallets 800x1200 along forks	(± 20 mm)	A ₃₁ (mm)	4220 ⁵⁾	4320 ⁵⁾
	4.35	Turning radius	(± 20 mm)	W ₁ (mm)	3277 ⁵⁾	3377 ⁵⁾
Performance	5.1	Travel speed (forward), with/without load	(± 5 %)	km/h	10/12	10/12
		Travel speed (backwards), with/without load	(± 5 %)	km/h	8/8	8/8
	5.2	Lifting speed, with/without load	(± 10 %)	m/s	0.11/0.2	0.11/0.2
		Lifting speed (initial lift), with/without load	(± 10 %)	m/s	0.06/0.08	0.06/0.08
	5.3	Lowering speed, with/without load	(± 10 %)	m/s	0.3/0.3	0.3/0.3
		Lowering speed (initial lift), with/without load	(± 10 %)	m/s	0.07/0.07	0.07/0.07
	5.7	Climbing ability, with/without load (30 minutes rating)		%		
	5.8	Maximum climbing ability, with/without load (5 minutes rating)		%		
	5.9	Acceleration time, with/without load	(d = 10 m)	s		
	5.10	Service brake			electro-hydraulic	electro-hydraulic
Drive Unit	6.1	Drive motor, rating S ₂ 60 min		kW	3	3
	6.2	Lift motor, rating at S ₂ : 15 %		kW	1.7	1.7
		Lift motor, rating at S ₂ : 10 %		kW	2.1	2.1
	6.3	Battery type according to the norm DIN 43 531/35/36 A,B,C, no	(except Li-ION)		3PZS SL	3PZS SL
	6.4	Battery voltage/nominal capacity K5		V/ Ah	24/375	24/375
		Battery voltage/nominal capacity K5 (Li-ION 205 Ah)			23/205	23/205
		Battery voltage/nominal capacity K5 (Li-ION 410 Ah)			23/410	23/410
		Battery weight (3PZS SL)		kg	295	295
		Battery weight (Li ION 205Ah)	(± 10 %)	kg	312	312
		Battery weight (Li ION 410Ah)	(± 10 %)	kg	351	351
6.6	Battery consumption according to VDI cycle		kwh/ h	0.97	0.97	
Others	8.1	Type of drive control (AC Controller)			LAC	LAC
	8.4	Noise level at operator's ear according to DIN 12053	(± 5 dB(A))	dB (A)	< 70	< 70

¹⁾ In brackets: pallet truck capacity on load arms

²⁾ Load arms: up/ down position

³⁾ Weight according to line 2.1

⁴⁾ With battery line 6.5

⁵⁾ 3PZS frame side outlet (for 4PZS add 100 mm)

⁶⁾ In brackets: truck equipped with single Load Wheels

⁷⁾ 750 E mast for N20 LoL

⁸⁾ Single Load Wheels

STANDARD EQUIPMENT / OPTIONAL EQUIPMENT

STANDARD EQUIPMENT

Backlit multifunction display
Truck activated by unique pin or by ignition key
Safe operator compartment with cushioned full-suspension platform
Workstation incorporating storage compartments
Clipboard
Adjustable backrest
Power-assisted steering, with a proportional steering resistance
Self-centering
Positive steering (drive wheel) feedback
Automatic speed reduction when cornering
Linde OptiLift® Control
Handlebars
Tandem polyurethane load wheels
Mast safety screen (polycarbonate or mesh)
Electric horn
Protection -10° C
4 wheels contact points
Roller track chassis for side battery change

OPTIONAL EQUIPMENT

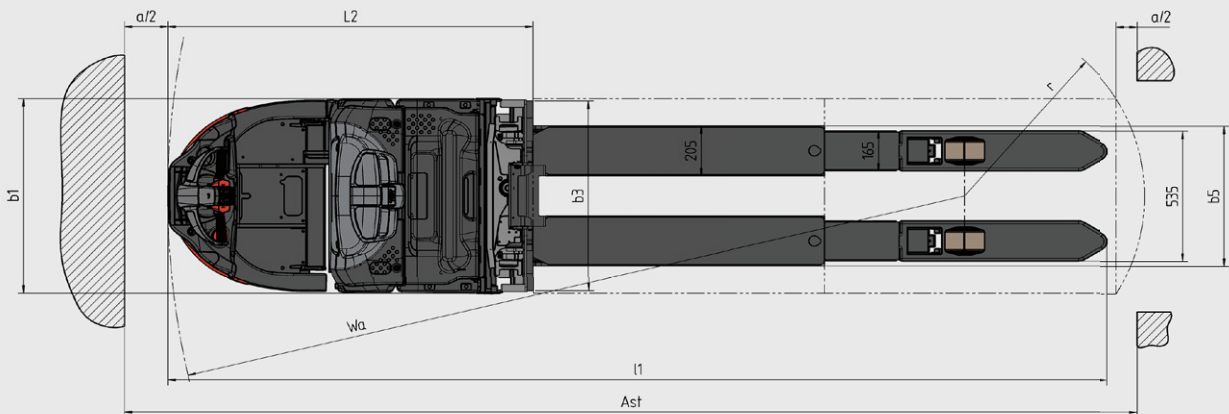
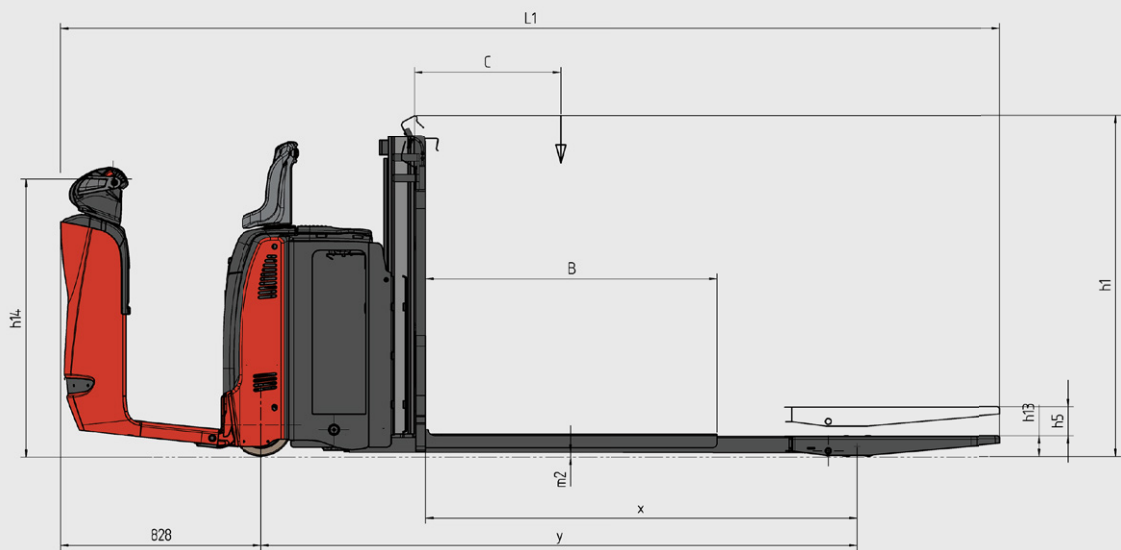
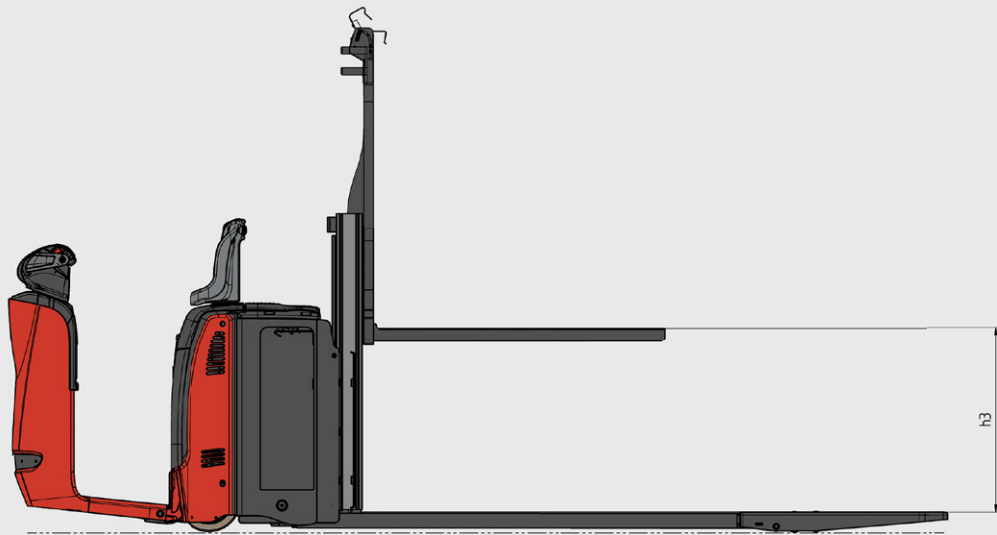
Various fork lengths, from 2350 mm to 2500 mm (width 535 mm; overhang 588 mm)
Various Simplex mast from 750 mm to 1612 mm lift height
Load backrest
Pallet locking system
Adjustable Linde control handlebars
Inching buttons forward/backward
Feet protection
Front bow (for computer terminal)
Support for data terminal on the bow (front)
Drive wheel: polyurethane, cushion non-marking or wet grip
Soft landing of forks carriage
Stop landing at 300 mm
Cold store protection -35° C (in/ out)
Speed reduction when the forks are lowered
Initial lift 125 mm with load leg capacity 2000 kg
Other options available on request

Linde Connected Solutions:

ac: access control (PIN or RFID Dual)
an: usage analysis and dt: crash detection
Data transfer Online
Data transfer WIFI
Bluetooth USB Stick

Li-ION technology:

4PzSL compartment: 4.5 kWh - 9 kWh (205 Ah - 410 Ah)
Li-ION charger:
24V-Charger v255: 4.5 kWh (full charging time 1 h 30 min) - 9.0 kWh (2 h 40 min)



N20 LoL	Mast type	750E	912E	1062E	1612E
h_3	Lift	750	912	1062	1612
$h_3 + h_{h3}$	Lift + fork height	840	1000	1150	1700
h_1	Height mast lowered	1320	1465	1515	2065
h_4	Height mast extended	1398	1465	1582	2132
h_2	Free lift	750	912	979	1545



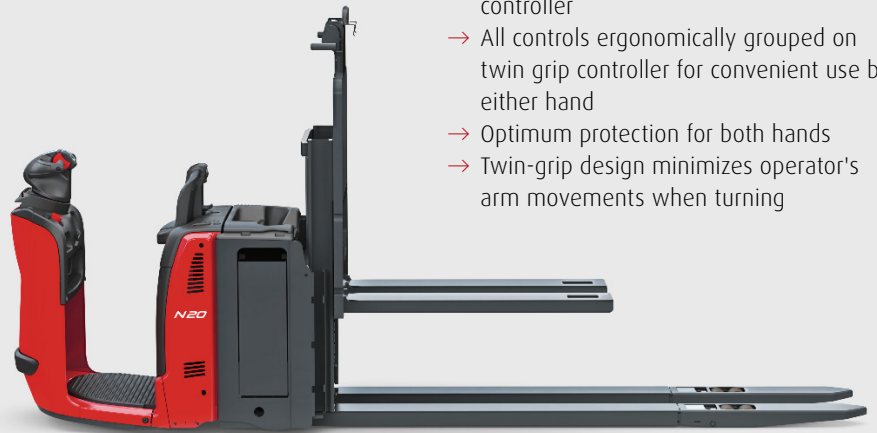
FEATURES

Driving system

- Four-point contact configuration for maximum stability
- Maximum speed 10 km/h laden, 12 km/h unladen
- Automatic regenerative braking as traction butterfly is released
- Responsive counter-current braking when opposite travel direction selected
- Electromagnetic braking on drive motor, actuated by deadman switch or emergency isolator is proportional to the load carried

Twin-grip handlebar

- Superbly functional twin-grip steering controller
- All controls ergonomically grouped on twin grip controller for convenient use by either hand
- Optimum protection for both hands
- Twin-grip design minimizes operator's arm movements when turning



Load arms

- Forklength dimension of 2350 mm enables to carry two Euro pallets lengthwise
- Initial lift of 125 mm for a better traction and enabling pallets carriage
- Special chassis design for maximum gradeability

Recovered forks

- Cutted forks tips for an easier pallet handling
- Forklength dimension of 1200 mm enables to carry one Euro pallet lengthwise
- Freelift enables to pick at operator's height



OptiLift®

- Located behind scoop seat
- The 60° OptiLift® control brings smoothness and precision and quiet in operation
- High performance, energy efficient, compact lift unit
- Capacity of 800kg on free lift and 2x1000kg on initial lift

AC motor

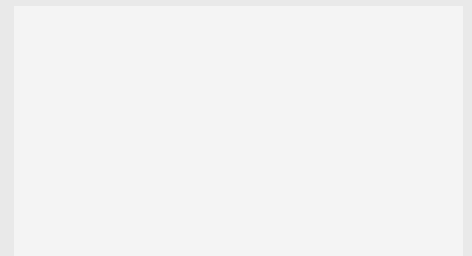
- Powerful, high-torque 3kW AC
- Drive motor
- Moisture and dust-proof maintenance-free motor 12% gradeability performance fully laden
- Safe starting on gradients without rollback
- Responsive acceleration to maximum speed within 5 meters
- Acceleration is adjustable to suit application

Pallet locking system

- Ergonomic system to lock/unlock the empty pallet for the next picking
- Two side handle and one central to lock the pallet according operator's position
- Side unlocking system for more efficiency

Subject to modification in the interest of progress. Illustrations and technical details could include options and not binding for actual constructions. All dimensions subject to usual tolerances.

Presented by:



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