## Standard Equipment/Optional Equipment

#### Standard Equipment

Backlit multifunction display
Truck activated by entering unique PIN code or by ignition key
Safe operator compartment with cushioned full-suspension
platform
Workstation incorporating storage compartments
Clipboard
Adjustable backrest
Power-assisted steering, adjustable steering resistance
Self-centering steering
Automatic speed reduction on turns

#### AC drive motor Automatic braking on releasing butterfly switch Electromagnetic emergancy brake acting proportionally to the load weight Active castor wheels (on the five-point contact HP version) Cushion drive wheel Single or tandem polyurethane load wheels Electric horn Low temperature protection to -10°C

#### Optional Equipment

Other fork dimensions (length to 2900 mm)						
Drive wheel: polyurethane, cushion non-marking or wet grip						
Single or tandem greasable load wheels						
Inching button on each side (forward direction)						
Adjustable Linde control handlebars						
Load backrests						

Equipments on the pole Support for data terminal or barcode reader (centre) Data terminal on the bow (front) Battery on rollers for side change Cold store version to -35°C

Other options available on request.



Low-Level Order Picker

Capacity 2000 - 2400 kg

## Safety

Unique Linde twin-grip steering and chassis design ensure that no part of operator's body is exposed outside its contours at any time. Steel front shield and twin-grip hand guard provide additional protection. The front driving position affords optimum visibility for enhanced safety and efficiency.

#### Performance

The Linde drive system employing advanced control technology translates the powerful output of the maintenance-free AC traction and pump motors into seamless productivity. The 3 kW drive motor delivers full power to give 13% gradeability and safe starting on gradients without rollback. A wide range of batteries is available to match individual order picking applications.

#### Comfort

A perfect interface between operator and truck is assured with the new Linde N series design concept. The series incorporates the unique Linde twin-grip steering and control system for effortless travelling and manoeuvring. Truck functions are actuated by tactile, thumb operated dual controls intuitively grouped on the protected steering control head for ease of use by either hand. A low, cushioned platform and profiled scoop seat further enhance operator comfort.

#### Reliability

The new N series is constructed for consistent reliability in demanding applications.Its compact, robot-welded chassis ensures maximum structural integrity and durability. The rugged structure and components provide a low centre of gravity for excellent stability.

#### Service

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.

#### Features

#### Drive system

- → Four-point contact configuration for maximum stability (N 20)
- → Maximum speed 10 km/h laden, 12 km/h unladen
- → Automatic regenerative braking as traction butterfly is released to neutral or opposite direction of travel is selected
- → Electromagnetic braking initiated by the emergency stop button acts on the drive motor, proportional to the load carried



#### High-performance option (HP)

- → Five-point contact configuration for optimum stability (N 20 HP/N 24 HP)
- → Electronically controlled, hydraulically suspended active castor wheels automatically select optimum ratio between stability and traction for constant ground contact
- → Maximum speed 12 km/h laden and

# unladen

#### Comprehensive energy solutions

- → Vertical battery change as standard, optional side battery change left or
- → Wide range of batteries (low & high) from 270 Ah (3 PzS) to 620 Ah (4 PzS) → Battery locking system for side change
- option secures battery in compartment and assists the battery change

#### Linde twin-grip steering controller

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

#### CAN bus connectivity

- → Integrated CAN bus diagnostic system for faster analysis and shorter service
- → Performance parameters can be configured by the service technician to suit individual applications



#### Workstation

- → Wide, easy access from either side
- → Ergonomic and intuitive control layout
- → Generous storage compartments for shrink wrapping, pens, gloves, etc.
- → Digital instrument display
- → Padded, adjustable scoop seat provides additional comfort
- → A cushioned platform isolates operator from surface vibrations
- → Excellent all-round visibility



- → Powerful, high-torque 3 kW AC drive
- → Moisture and dust-proof maintenance-
- → 13% gradeability performance fully
- → Safe starting on gradients without rollback
- → Responsive acceleration to maximum speed within 5 metres



#### Power steering

- → Effortless, proportional electric power steering with positive feedback
- → Self centring steering for faster picking cycles
- → Automatic speed reduction when



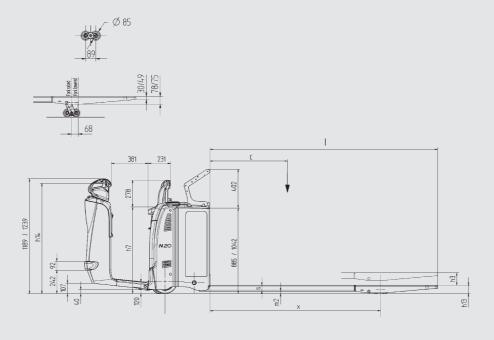
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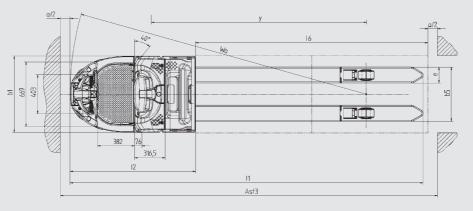
# Technical Data according to VDI 2198

	1.1	Manufacturer		LINDE	LINDE	LINDE	
	1.2	Model desgination		N20	N20HP	N24HP	
	1.2a	Series		132	132	132	
istics	1.3	Power unit		Battery	Battery	Battery	
acter	1.4	Operation		Order Picker	Order Picker	Order Picker	
Chara	1.5	Load capacity	Q (t)	2.0 1)	2.0 1)	2.4 1)	
	1.6	Load centre	c (mm)	1200	1200	600	
	1.8	Axle centre to fork face	x (mm)	1763 / 1702 <sup>2)</sup>	1763 / 1702 <sup>2)</sup>	963 / 902 2)	
	1.9	Wheelbase	y (mm)	2325 / 2264 3) 2)	2325 / 2264 3) 2)	1525 / 1464 <sup>3) 2)</sup>	
	2.1	Service weight	(kg)	1160	1160	1115	
	3.1	Tyres rubber, SE, pneumatic, polyurethane		V+P/P 4) 5)	V+P/P 4) 5)	V+P/P 4) 5)	
es	3.2	Tyre size, front		Ø 254 x 102	Ø 254 x 102	Ø 254 x 102	
7	3.3	Tyre size, rear		Ø 85 x 105	Ø 85 x 105	Ø 85 x 105	
Jeels	3.4	Auxiliary wheels (dimensions)		Ø 125 x 60	Ø 125 x 60	Ø 125 x 60	
Performance Dimensions	3.5	Wheels, number front/rear (x = driven)		1x + 1 / 2 (1 / 4) 6)	1x + 2 / 2 (1x + 2 / 4) 6)	1x + 2 / 2 (1x + 2 / 4)	
	3.6	Track width, front	b10 (mm)	544	544	544	
	4.4	Lift	h3 (mm)	120	120	120	
	4.8	Height of seat/stand on platform	h7 (mm)	900 / 1000	900 / 1000	900 / 1000	
	4.9	Height of tiller arm in operating position, min/max	h14 (mm)	1140 / 1190	1140 / 1190	1140 / 1190	
	4.15	Height, lowered	h13 (mm)	85	85	85	
SIOUS	4.19	Overall length	l1 (mm)	3747³)	3747³)	2547³)	
men:	4.20	Length to fork face	12 (mm)	1397³)	1397³)	1397³)	
5	4.21	Overall width	b1/b2 (mm)	790	790	790	
	4.22	Fork dimensions	s/e/l (mm)	60 x 166 x 2350	60 x 166 x 2350	60 x 166 x 1150	
	4.25	Fork spread, min/max	b5 (mm)	520	520	520	
	4.34e	Aisle width with load length 2400 mm	Ast (mm)	4110	4110		
	4.35	Turning radius	Wa (mm)	3158 / 3090 3) 2)	3158 / 3090 3) 2)	2358 / 2290 3) 2)	
	5.1	Travel speed, with/without load	(km/h)	10 / 12	12 / 12	12 / 12	
ון	5.2	Lifting speed, with/without load	(m/s)	0.031 / 0.039	0.031 / 0.039	0.031 / 0.039	
man	5.3	Lowering speed, with/without load	(m/s)	0.076 / 0.073	0.076 / 0.073	0.076 / 0.073	
	5.8	Maximum climbing ability, with/without load	(%)	6.0 / 17.0	8.0 / 17.0	-	
ĭ	5.9	Acceleration time, with/without load	(s)	1.4 / 1.0; 1.5 / 1.27	1.4 / 1.0; 1.5 / 1.2 7)		
	5.10	Service brake		Electro-magnetic	Electro-magnetic	Electro-magnetic	
	6.1	Drive motor, 60 minute rating	(kW)	3	3	3	
	6.2	Lift motor rating at S3 15%	(kW)	1	1	1.2	
IIIve	6.3	Battery according to DIN 43531/35/36 A,B,C,no		43 535 / B	43 535 / B	43 535 / B	
DC	6.4	Battery voltage/rated capacity (5h)	(V/Ah)	24 / 620	24 / 620	24 / 620	
	6.5	Battery weight (± 5%)	(kg)	485	485	485	
	6.6	Power consumption according to VDI cycle	(kWh/h)	0,48	0,48	0,48	
	8.1	Type of drive control		LAC	LAC	LAC	

2) lowered/raised 3) -100 mm = 3 PzS; ± 0 mm = 4 PzS; + 50 mm = 5 PzS 4) Drive Wheel Option: rubber non marking, Polyurethane and wet grip

6) Figures in parenthes7) forward; backward





AST = Wa - x + I6 + aSecurity distance a = 200 mm

	N 20				N 24			
+/- 5%	+/- 5% Forward		Backwards		Forward		Backwards	
	unladen	laden	unladen	laden	unladen	laden	unladen	laden
Version 4 points	12 km/h	10 km/h	10 km/h	10 km/h	-	-	-	-
Version 5 points	12 km/h	12 km/h	10 km/h	10 km/h	12 km/h	12 km/h	10 km/h	10 km/h

