



## Order Picker

# V MODULAR | V MODULAR B

Capacity 1.2 t | Capacity 1.0 t | Series 5214

### Modular sky climber

- Powerful vertical order picker for use in high-bay warehouse
- Picking heights up to 14.5 m (V modular B: 7.8 m) and load capacity up to 1.2 t (V modular B: 1.0 t)
- Available in two versions: With walk-on pallet or for order picking from the closed cabin
- Modular design with numerous options to optimally tailor the vehicle to on-site requirements
- Two triplex mast variants: with free lift and low overall height or without free lift for faster lifting

# TECHNICAL DATA (According to VDI 2198)

	Characteristics									
	1.1	1.2	1.2a	1.3	1.4	1.5	1.6	1.8	1.9	
	Manufacturer		Linde	Linde	Linde	Linde	Linde	Linde	Linde	
	Manufacturer's type designation		V-modular 48V Standard mast <sup>1)</sup>	V-modular 48V Triplex mast <sup>1)</sup>	V-modular 48V Triplex mast <sup>1)</sup>	V modular B 24V Standard mast	V modular B 48V Standard mast	V modular B 48V Standard mast	V modular B 48V Standard mast	
	Series		5214-00	5214-00	5214-00	5214-00	5214-00	5214-00	5214-00	
	Power unit		Battery	Battery	Battery	Battery	Battery	Battery	Battery	
	Operation		Order Picker	Order Picker	Order Picker	Order Picker	Order Picker	Order Picker	Order Picker	
	Load capacity/Load	Q (t)	1.2	1.2	1.2	1	1	1	1	
	Load centre distance	c (mm)	400	400	400	600	600	400	400	
	Axle centre to fork face	x (mm)	345	455	455	353	353	353	353	
	Wheelbase	y (mm)	1628	1844	1844	1340	1448	1448	1448	
		Weights								
	Service weight	(kg)	4626	5673	5996	3300	3766	3878	3878	
	Axle load with load, front/rear	(kg)	1877/3949	2283/4590	2389/4806	1016/3284	1303/3463	1513/3365	1513/3365	
	Axle load without load, front/rear	(kg)	2472/2154	2864/2809	2993/3002	1752/1548	1984/1782	2056/1822	2056/1822	
		Wheels/Tyres								
	Tyres rubber, SE, pneumatic, polyurethane		Polyurethane	Polyurethane	Polyurethane	polyurethane	polyurethane	polyurethane	polyurethane	
	Tyre size, front		Ø 360 × 130	Ø 360 × 130	Ø 360 × 130	360/130	360/130	360/130	360/130	
	Tyre size, rear		Ø 180 × 156	Ø 180 × 156	Ø 180 × 156	180/156	180/156	180/156	180/156	
	Wheels, number front/rear (x = driven)		1x/2	1x/2	1x/2	1x/2	1x/2	1x/2	1x/2	
	Track width, front	b10 (mm)	0	0	0	0	0	0	0	
	Track width, rear	b11 (mm)	994	1394	1394	900	1400	1400	1400	
		Dimensions								
	Height of mast, lowered	h1 (mm)	5400	4700	5400	2900	3400	3900	3900	
	Free lift	h2 (mm)	-	4050	-	0	0	0	0	
	Lift height	h3 (mm)	8525	11160	12660	4550	5000	6000	6000	
	Height, mast extended	h4 (mm)	10815	13450	14950	6834	7284	8284	8284	
	Height to top of overhead guard	h6 (mm)	2290	2290	2290	2284	2284	2284	2284	
	Height of seat/stand-on platform	h7 (mm)	240	240	240	233	233	233	233	
	Supplementary lift	h9 (mm)	740	740	740	800	800	800	800	
	Platform height, raised	h12 (mm)	8765	11400	12900	4783	5233	6233	6233	
	Fork height lowered	h13 (mm)	65	65	65	65	65	65	65	
	Overall length	l1 (mm)	3099	3386	3386	3138	3288	2888	2888	
	Length to fork face	l2 (mm)	2299	2586	2586	1938	2088	2088	2088	
	Overall width	b1/b2 (mm)	1080/1180	1080/1580	1080/1580	1080/1080	1080/1580	1080/1580	1080/1580	
	Fork dimensions	s/e/l (mm)	60/120/800	60/120/800	60/120/800	60/120/1200	60/120/1200	60/120/800	60/120/800	
	Fork carriage to ISO 2328, class/type A, B	(mm)	no	no	no	Special	Special	Special	Special	
	Width of fork carriage	b3 (mm)	740	740	740	660	660	740	740	
	Fork spread, min/max	b5 (mm)	640/640	640/640	640/640	560/560	560/560	640/640	640/640	
	Width over side guide rollers	b6 (mm)	1375	1815	1815	-	1815	1815	1815	
	Ground clearance beneath mast, laden	m1 (mm)	50	50	50	50	50	50	50	
	Ground clearance, centre of wheelbase	m2 (mm)	50	50	50	50	50	50	50	
	Aisle width with pallet 800 × 1200 along forks	Ast (mm)	1380	1820	1820	-	1820	1820	1820	
	Turning radius	Wa (mm)	2071	2316	2316	1585	1958	1958	1958	
	Transfer aisle width (min.)	Au (mm)	3564	3907	3907	3389	3762	3458	3458	
		Performance								
	Travel speed, with/without load	(km/h)	11.0/11.0	13.0/13.0	13.0/13.0	9.0/9.0	10.0/10.0	10.0/10.0	10.0/10.0	
	Lift speed, with/without load	(m/s)	0.31/0.36 (0.41/0.42) <sup>3)</sup>	0.28/0.35 (0.48/0.50) <sup>3)</sup>	0.29/0.35 (0.40/0.40) <sup>3)</sup>	0.27/0.30	0.36/0.36 (0.50/0.50) <sup>3)</sup>	0.36/0.36 (0.50/0.50) <sup>3)</sup>	0.36/0.36 (0.50/0.50) <sup>3)</sup>	
	Lowering speed, with/without load	(m/s)	0.32/0.32 (0.45/0.45) <sup>3)</sup>	0.32/0.32 (0.45/0.45) <sup>3)</sup>	0.32/0.32 (0.45/0.45) <sup>3)</sup>	0.28/0.28	0.32/0.32 (0.45/0.45) <sup>3)</sup>	0.32/0.32 (0.45/0.45) <sup>3)</sup>	0.32/0.32 (0.45/0.45) <sup>3)</sup>	
	Reach speed, with/without load	(m/s)	-	-	-	-	-	-	-	
	Acceleration time, with/without load	(s)	6/6	6/6	6/6	7/7	6/6	6/6	6/6	
	Service brake		"Regenerative /Mechanic"	"Regenerative /Mechanic"	"Regenerative /Mechanic"	Regenerative	Regenerative	Regenerative	Regenerative	
		Drive								
	Drive motor, 60-minute rating	(kW)	6.5	6.5	6.5	4.0	6.5	6.5	6.5	
	Lift motor, rating at S3 15 %	(kW)	13	13	13	7.6	13	13	13	
	Battery voltage/rated capacity (5 h)	(V/Ah)	48/620	48/930	48/930	24/840	48/620	48/620	48/620	
	Battery weight (±5 %)	(kg)	933	1309	1309	687	933	933	933	
		Others								
	Type of drive control		Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	
	Noise level at operator's ear	dB (A)	64	64	64	64	64	64	64	

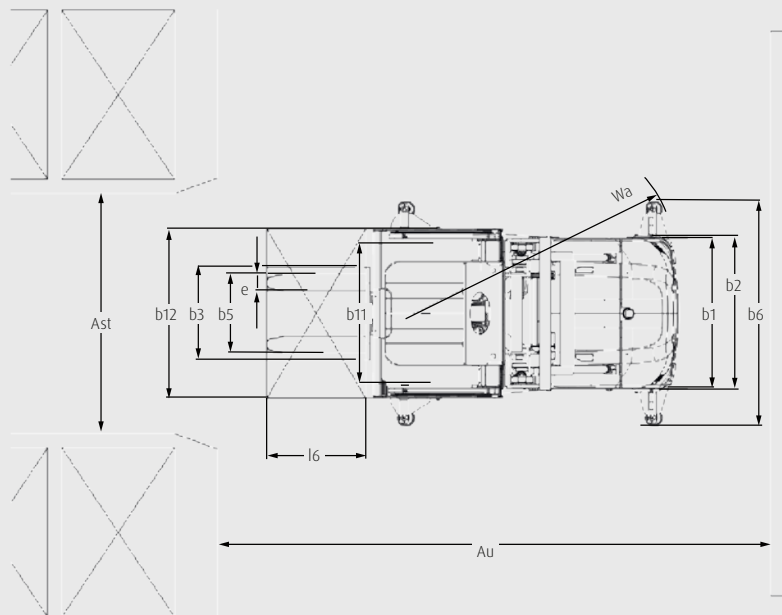
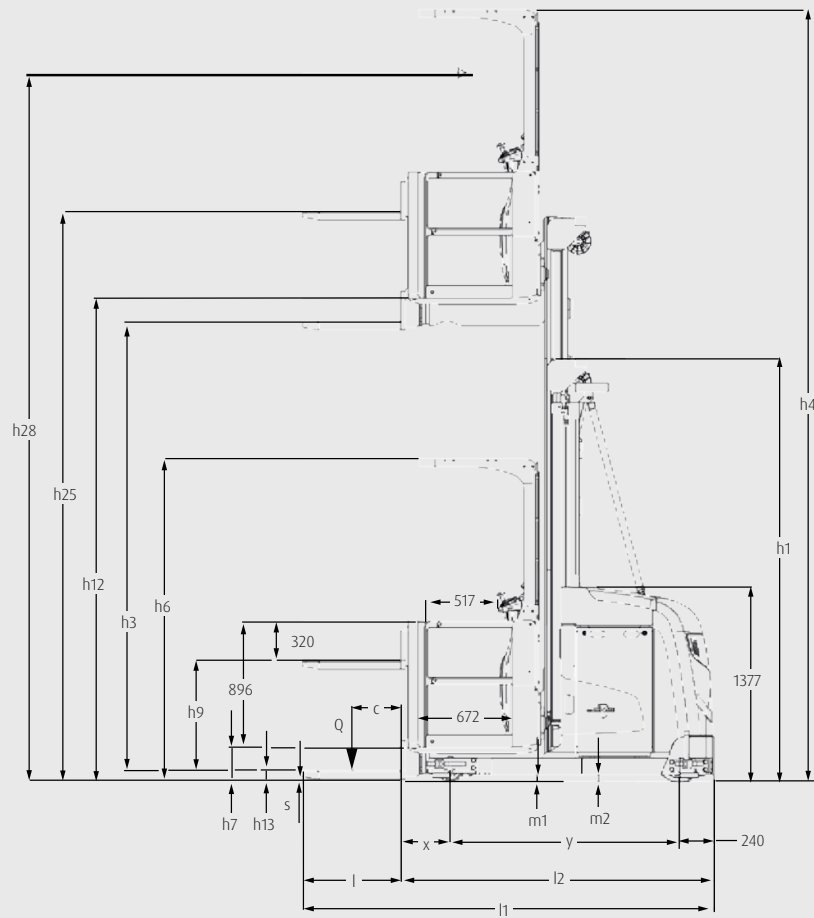
1) Exemplary configuration based on a modular trucksystem.

Please contact your local sales department for an individual truck configuration

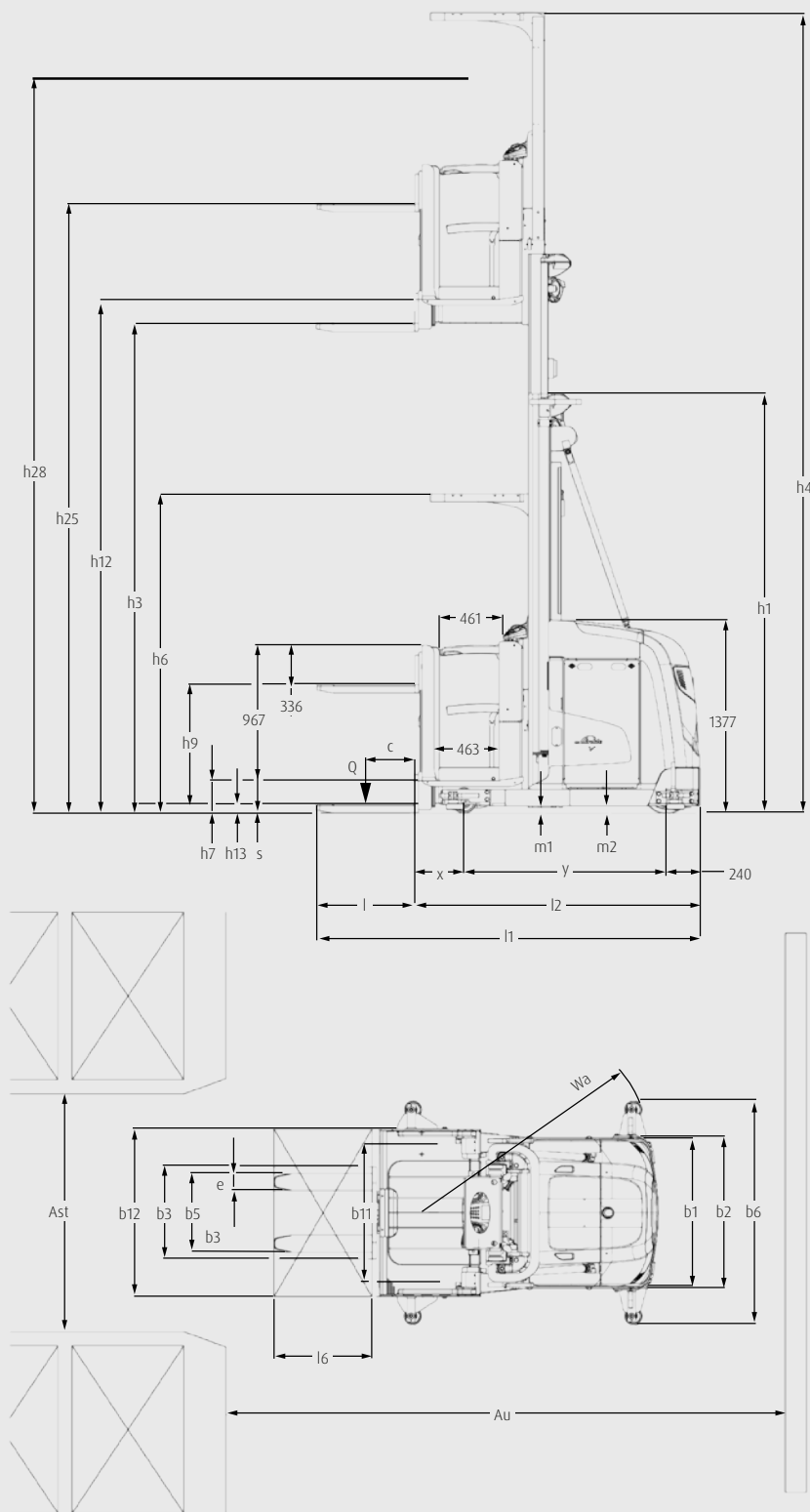
2) Figures with battery, see line 6.4/6.5

3) Figures in parenthesis for optional „Heavy“

# V MODULAR



# V MODULAR B



# V MODULAR - OUR HIGH PERFORMER - PICKING AT GRIPPING HEIGHTS OF UP TO 14.5 M

## MODULAR SKY CLIMBER

The V modular vertical order picker reaches gripping heights of up to 14.5 metres and has a load capacity of up to 1,200 kilograms, depending on the model. The vibration-damped cabin, the low entry height and the ergonomic parapet height relieve the driver and make order picking easier.

High lift and travel speeds ensure maximum picking performance. Linde offers the V modular in two versions: In the version with auxiliary lift, the operator picks from the cab onto the pallet in front, which is always positioned at an ergonomic height.

The version with an open cab to the front allows the operator to enter the securely fixed walk-on pallet and pick the goods from there. Thanks to the modular design, the V modular can be precisely adapted to the requirements on site. Users can choose between different chassis widths, battery sizes, mast variants and cabin designs.



## V MODULAR B - POWERFUL ENTRY-LEVEL MODEL



### AIMING HIGH WITH EASE

The V modular B vertical order picker is a powerful truck for medium order picking heights of up to 7.8 meters and load capacity of up to 1,000 kilograms. The series combines the best of the Linde order picker product family, uniting performance and cost efficiency. The spacious operator's cab offers the driver a comfortable workplace.

In addition to the lower entry height compared to competitor trucks, the cab is decoupled from the chassis. Vibrations and impacts are only transmitted to the operator in a damped manner.

As a result, the V modular B enables ergonomic and safe working and protects the operator from injury. The vertical order picker achieves a maximum lift speed of 0.4 m/s and a travel speed of up to 11 km/h, which additionally contributes to higher picking performance. Thanks to the modular truck concept, customers can adapt the order picker precisely to their individual requirements and, for example, choose between a 24 V and 48 V motor depending on their power needs.

# MAST TABLES

## V MODULAR

### STANDARD MAST (in mm)

Series	5214									
Lift	h3: 2825		h3: 3225		h3: 4125		h3: 5125		h3: 5725	
Height measurements	h1: 2250	h4: 5115*	h1: 2450	h4: 5515*	h1: 2900	h4: 6415*	h1: 3400	h4: 7415*	h1: 3900	h4: 8015*
	h9: 740	h12: 3065	h9: 740	h12: 4025	h9: 740	h12: 4925	h9: 740	h12: 5925	h9: 740	h12: 6525
	h24: 3565	h25: 3630	h24: 3965	h25: 4030	h24: 4865	h25: 4930	h24: 5865	h25: 5930	h24: 6465	h25: 6530
	h28: 4665		h28: 5065		h28: 5965		h28: 6965		h28: 7565	
Model										
V modular	<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>	

Series	5214					
Lift	h3: 6725		h3: 7725		h3: 8525	
Height measurements	h1: 4400	h4: 9015*	h1: 4900	h4: 10015*	h1: 5400	h4: 10815*
	h9: 740	h12: 7520	h9: 740	h12: 8520	h9: 740	h12: 9325
	h24: 7465	h25: 7530	h24: 8465	h25: 8530	h24: 9265	h25: 9330
	h28: 8565		h28: 9565		h28: 10365	
Model						
V modular	<input type="radio"/>		<input type="radio"/>		<input type="radio"/>	

### TRIPLEX MAST WITHOUT FREE LIFT (in mm)

Series	5214									
Lift	h3: 7160		h3: 8660		h3: 9960		h3: 11160		h3: 12660	
Height measurements	h1: 3300	h4: 9490*	h1: 3800	h4: 10990*	h1: 4350	h4: 12290*	h1: 4800	h4: 13490*	h1: 5400	h4: 14990*
	h9: 740	h12: 7400	h9: 740	h12: 8900	h9: 740	h12: 10200	h9: 740	h12: 11400	h9: 740	h12: 12900
	h24: 7900	h25: 7965	h24: 9400	h25: 9465	h24: 10700	h25: 10765	h24: 11900	h25: 11965	h24: 13400	h25: 13465
	h28: 9000		h28: 10500		h28: 11800		h28: 13000		h28: 14500	
Model										
V modular	<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>	

### TRIPLEX MAST WITH FREE LIFT (in mm)

Series	5214													
Lift	h3: 4410		h3: 5010		h3: 6360		h3: 7160		h3: 8660		h3: 9960		h3: 11160	
Height measurements	h1: 2250	h2: 1600	h1: 2450	h2: 1800	h1: 2900	h2: 2250	h1: 3200	h2: 2250	h1: 3700	h2: 3050	h1: 4200	h2: 3550	h1: 4700	h2: 4050
	h4: 6700*	h9: 740	h4: 7300*	h9: 740	h4: 8650*	h9: 740	h4: 9450*	h9: 740	h4: 10950*	h9: 740	h4: 12250*	h9: 740	h4: 13450*	h9: 740
	h12: 4650	h24: 5150	h12: 5250	h24: 5750	h12: 6600	h24: 7100	h12: 7400	h24: 7900	h12: 8900	h24: 9400	h12: 10200	h24: 10700	h12: 11400	h24: 11900
	h25: 5215	h28: 6250	h25: 5815	h28: 6850	h25: 7165	h28: 8200	h25: 7965	h28: 9000	h25: 9465	h28: 10500	h25: 10765	h28: 11800	h25: 11965	h28: 13000
Model														
V modular	<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>	

Optional equipment

\*OHG 2000mm

## V MODULAR B

### STANDARD MAST (in mm)

Series	5214									
Lift	h3: 3250		h3: 3550		h3: 4550		h3: 5000		h3: 6000	
Height measurements	h1: 2250	h4: 5534*	h1: 2400	h4: 5834*	h1: 2900	h4: 6834*	h1: 3400	h4: 7284*	h1: 3900	h4: 8284*
	h9: 800	h12: 3483	h9: 800	h12: 3783	h9: 800	h12: 4783	h9: 800	h12: 5233	h9: 800	h12: 6233
	h24: 4050	h25: 4115	h24: 4350	h25: 4415	h24: 5350	h25: 5415	h24: 5800	h25: 5865	h24: 6800	h25: 6865
	h28: 5083		h28: 5383		h28: 6383		h28: 6833		h28: 7833	
Model										
V modular B	<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>	

Optional equipment

\*OHG 2000mm

**h1:** Height of mast, lowered  
**h4:** Height of mast, extended  
**h24:** Total lift height (h3 + h9)  
**h28:** Picking height (h12 + 1600 mm)

**h2:** Free lift  
**h9:** Auxiliary lift  
**h25:** Total lift height from ground  
 (h3 + h9 + h13)

**h3:** Lift  
**h12:** Platform height, raised

# STANDARD AND OPTIONAL EQUIPMENT

	Model/Equipment	V modular	V modular B
Safety	Automatic reduction in travel speed with platform raised (LSC 3.0)	●	●
	All traction and lift functions interlocked through foot switch and sensors, ensuring two-handed operation	●	●
	Linde curve control for safe cornering	●	●
	Side barriers with gas struts and safety interlocks	●	●
	Warning light	○	○
	Alternative speed reduction and end of aisle stop interlocks	○	○
	Aisle Safety Assist for individual safety interlocks for each aisle	○	–
	Lift and traction cut-outs	○	○
	Touchless anti-collision sensor for lifting	○	○
	LSC for speed reduction with weight and load-dependent speed profiles for lifting and driving; weight-measuring sensor	○	–
Load wheel brakes for increased safety in an emergency	○	○	
Digitalisation	Data Transmission Online	○	○
	Data Transmission Wifi	○	○
	Linde connect:desk an – Provides fleet utilisation and availability data	○	○
	Linde connect:cloud Basic Package Customer – provides core fleet management features for end customers	○	○
	Linde connect:cloud Basic Package Network – provides core fleet management features for network partners	○	○
Online Diagnosis Tool	○	○	
Environment	Mechanical aisle guidance	○	○
	Inductive aisle guidance	○	○
	Cold store version	○	○
	Antistatic guide rollers and wheels	○	○
Workplace	Mast or load-side controls	○	○
	Suspension-mounted cab to absorb shocks and vibration	●	●
	Soft rubber mat isolates operator from shocks and vibration	●	●
	Storage compartments, pen holders and space for bottles, cans or tools integrated into cab interior	●	●
	Colour graphic display with lift height indicator, speedometer, hourmeter, steer wheel position indicator and battery status	●	–
	Very low step height for easy on/off access	●	●
	Steering knob	●	●
	Alternative cabin widths (900 mm – 1800 mm)	○	–
	Alternative cabin widths (1000 mm – 1500 mm)	–	○
	Tilting barriers	○	○
	Rearview mirror	○	○
	LED cabin working light with two-step illumination	○	○
	Fan on overhead guard included in mirror module	○	○
	Steering wheel	○	○
	Macrolon cover for overhead guard	○	○
	Attachment base for writing pads/terminals/other equipment	○	○
Overhead guard: 2200 mm height for greater comfort	○	○	
Mast/Forks	Triplex mast with and without free lift function	○	–
	Different fork lengths	○	○
	Carriage for adjustable forks	○	○
	Walk-on platform	○	○
	Pallet clamp for US and Chep pallet	○	–
	Mast soft end stops for lifting/lowering	●	●
Throughput	Durable polyurethane wheels	●	●
	Lift height preselection	○	–
	Regenerative electric braking through the drive motor for optimum use of energy	●	●
	Battery discharge indicator with lift cutout	●	●
	Automatic Lowering of suppl. lift	○	–
	10 different chassis, 880 mm – 1580 mm to suit every application	○	–
	6 different chassis, 1080 mm – 1580 mm to suit every application	–	○
	Supplementary lift 750 mm for easy order picking	○	–
	Supplementary lift 800 mm for easy order picking	–	○
	Buttons for supplementary lift on load side for easy handling	○	○
	Truck prepared for data terminal, printer, scanner installation	○	○
Semi-automatic navigation system	○	–	
Different drive and lift motors available	○	○	

● Standard equipment      ○ Optional equipment      – Not available

# CHARACTERISTICS



Red warning lines for safe operation

## Safety

- Sensor-monitored controls and dead man's switch ensure maximum safety during vehicle operation
- Electrically monitored side barriers for safe working with the cabin raised
- Optimised mast visibility allows better view of load and vehicle surroundings.
- Mobile personal safety equipment (PSE) detects people or obstacles on the driveway and stops the vehicle within the narrow aisle
- Linde System Control assistance system calculates residual load capacity and prevents overloading
- Optional Red Warning Lines for better visibility in poorly lit aisles
- Easily accessible emergency lowering valve for emergencies at greater working heights



Ergonomic control

## Ergonomics

- Wide cabin entrance and low entry height for effortless access to the vehicle
- Soft floor mat to absorb vibrations and protect the operator from physical stress
- Spaciously designed driver's cabin for maximum freedom of movement and comfortable working
- Patented Ergo roller for muscle relief
- Ergonomic control panel that can be mounted on the mast side, load side or both sides
- Colour display for a perfect overview of all relevant information (time, speed, lifting height, etc.)
- Newly designed storage option on the mast side including preparation for USB connection, foil holder or waste bin
- Optional tilt barrier for safe and comfortable picking from the rack



Optional walk-on pallet

## Performance

- Picking height up to 14.5 m (V modular B: 7.8 m) for efficient order picking in very high racking levels
- Top speed of 13 km/h for fast travel
- Optional triplex mast without free lift for higher lifting speeds
- Two vehicle variants: With walk-on pallet or for order picking from the enclosed cabin
- Redesigned chassis and improved load arms for greater stability and manoeuvrability
- High residual capacity for maximum goods handling even at great heights



Easy access for maintenance

## Service

- Maintenance-free electric motor for maximum vehicle availability and low service costs
- Enclosed drive and lift motors for optimum protection against dust and dirt
- Easy access to all relevant components thanks to service-friendly design
- CAN bus connection for easy access to all vehicle data via diagnostic connector

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

Linde Material Handling

*Linde*