

Standard Equipment/Optional Equipment

Standard Equipment

Operator's compartment

- 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
- LCD "comfort" display with keypad log-on, lift height indicator, speedometer, hourmeter, steer wheel position indicator, battery status and service codes
- Very low step on height for easy access
- Steering knob

Throughput

- Durable polyurethane wheels
- Regenerative electric braking through the drive motor for optimum use of energy
- Battery discharge indicator with lift cutout

Optional Equipment

Operators compartment

- Alternative cabin widths (900 mm – 1800 mm)
- Rearview mirror module (left/right) on load side or mast side including LED working lights
- LED cabin working light with two steps of illumination
- Fan in mirror module on overhead guard
- Steering wheel
- Macrolon cover for overhead guard
- Attachment base for writing pads/ Terminals / other individual mountings
- Radio preparation 12 V/50 W with two speakers and antenna
- Linde LFM data management system
- Overhead guard in 2200 mm height for more comfortable working

Throughput

- 10 different chassis, 880 mm – 1580 mm to suit application
- Supplementary lift 750 mm for easy order picking
- Buttons for supplementary lift on load side for easy handling
- Truck prepared for data terminal, printer, scanner installation
- Half automatic navigation system
- Different drive and lift motors available

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
- One lift and one traction cut off
- Warning light

Safety

- Alternative speed reduction and end of aisle stop functions
- Aisle safety assist for full variable safety functions in the warehouse
- Lift and traction cut offs
- Touchless anti-collision sensor for lifting
- LSC for speed reduction with weight and load depending speed profiles for lifting and driving; weight measuring sensor
- Load wheel brakes for increased safety at emergency stop

Mast / Forks

- Different fork lengths
- Carriage for adjustable forks
- Walk on platform
- Pallet clamb
- Soft end stops for lifting / lowering

Environment

- Mechanical aisle guidance
- Inductive aisle guidance
- Cold store version
- Antistatic guide rollers and wheels



Modular high level man-up order picker
Capacity up to 1200 kg
V

Series 5213

Safety

The V range truck is designed to guarantee the operator's safety in all conditions while driving, lifting and order picking. Its outstanding visibility through and to either side of the mast offers the highest level of security. The low cab step height increases safety, while the 2 integrated touch sensors at the control panel ensure two hands operation. The LSC monitors driving, lifting and steering movements and reduces them automatically, if needed.

Performance

Efficiency and high performance describe the V range order picker. It is capable of picking at heights up to 12000 mm. Its powerful AC drive units combine optimum performance with low energy consumption. Three different driving- and lifting systems allow the truck to exactly match the application. The tilting barriers increase productivity - the customer gets closer to the rack for deep pickings.

Comfort

Entering the V range truck onto the antivibration mat gives the operator the feeling of comfortable working from the first second. The wide variety of storage compartments via attachment bar and options means the truck can be equipped to every kind of order picking application. No matter

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if lifting or lowering with or without load, the V range truck always stops the cabin gently during the stroke process.

Reliability

Our expertise in designing and building material handling equipment is the guarantee that the V is a truck you can rely on. Thanks to easy maintenance, downtime is reduced and throughput is increased. The active cooling system ensures the highest availability even in extreme conditions.

Productivity

The unique modular system of the V-modular ensures that each truck can be tailored to match the application precisely in order to maximize its productivity at all times. Based on the latest ergonomic standards, the working environment and the controls allow the operator to maximise throughput.

Features

Modular concept

- Unique modular design allows the perfect specification for each individual application
- Combination of different lift motors, drive motors, chassis, masts, batteries, cabins, etc. to suit every application
- Two voltage variants provide the perfect solution to customers needs: 48V for high performance medium and heavy duty applications and 24V variant for low to medium duty applications

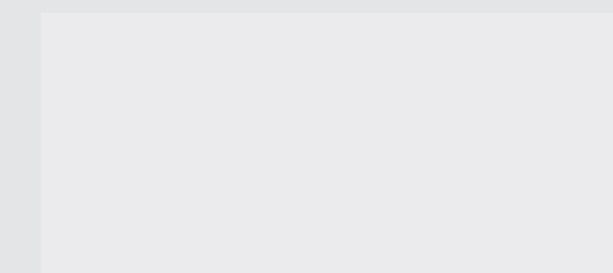
Variety of applications

- Forks mounted to the operators platform for working with walk on pallets, protected by a cage or secured by a pallet clamb
- Platform welded on the operators compartment for big picking goods
- Suppl. lift on operator platform. Pallet can be raised to most convenient working level for picking



High performance with intelligent systems

- Linde System Control (LSC) for stepless automatic adjustment of speed depending on steering angle, lift height and load weight (optional)
- Safe cornering with curve speed control as a standard
- Aisle safety assist for tailor-made aisles inside your warehouse, including lift or drive stops, speed reductions etc.



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Operators compartment

- Special designed side barriers for optimal order picking
- Deadman pedal hidden under suspension mat to avoid stumbling
- Platform is suspension mounted and has a floor designed to absorb shock and vibration
- Very spacious cabin due to integrated control panels for optimal freedom of movement

Control concept

- Control and display panel integrated are perfectly in the drivers field of view
- Standard LCD display informs the driver about all necessary informations
- Simple and ergonomic controls allow precise operation reducing driver fatigue and increasing throughput
- Simultaneous driving/lifting/lowering



Safety

- Automatic speed reduction when turning
- All traction and lift functions interlocked through deadman's pedal and 2 handed operation
- Emergency lowering under rear hood ready accessible in aisle

Steering

- Electric steering with defined centre position
- Easy and precise maneuvering by steering knob (optional steering wheel available)
- Steer angle monitoring ensures safe high-performance driving characteristics



Drive and lift

- The powerful and economical drive and lift units combine optimal performance with low energy consumption and low wear
- Latest MOSFET technology
- Rail guidance rollers or inductive guidance technology can be fitted to the truck for VNA working



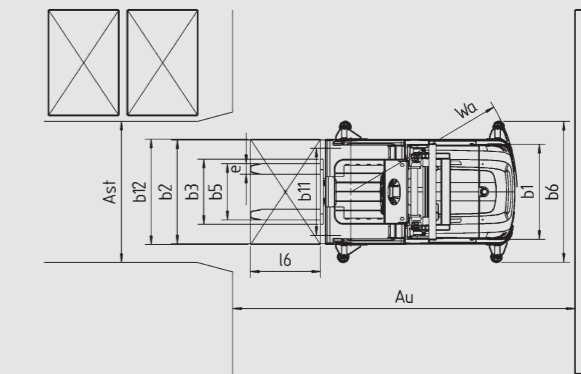
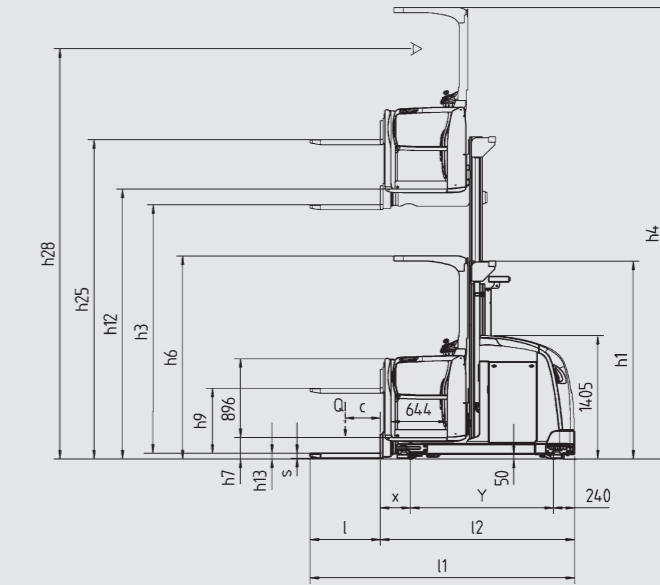
Subject to modification in the interest of progress. Illustrations and technical details could include options and not binding for actual constructions. All dimensions subject to usual tolerances.

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Technical Data according to VDI 2198

		LINDE					
		V 24V Example Standard mast ¹⁾	V 24V Example Triplex mast ¹⁾	V 48V Example Standard mast ¹⁾	V 48V Example Triplex mast ¹⁾		
Characteristics	1.1	Manufacturer	LINDE	LINDE	LINDE	LINDE	
	1.2	Model designation					
	1.2a	Series	5213	5213	5213	5213	
	1.3	Power unit	Battery	Battery	Battery	Battery	
	1.4	Operation	Order Picker	Order Picker	Order Picker	Order Picker	
	1.5	Load capacity	Q (t)	0.8	0.8	1.2	1.2
Weights	1.6	Load centre	c (mm)	600	600	400	400
	1.8	Axle centre to fork face	x (mm)	345	405	345	405
	1.9	Wheelbase	y (mm)	1394	1466	1503	1664
	2.1	Service weight	(kg)	3185 ²⁾	4302 ²⁾	4145 ²⁾	5498 ²⁾
	2.2	Axle load with load, front/rear	(kg)	1272 / 2713 ²⁾	1803 / 3299 ²⁾	1707 / 3638 ²⁾	2289 / 4409 ²⁾
	2.3	Axle load without load, front/rear	(kg)	1814 / 1371 ²⁾	2351 / 1951 ²⁾	2302 / 1843 ²⁾	2870 / 2628 ²⁾
Wheels/Tyres	3.1	Tyres rubber, SE, pneumatic, polyurethane	Polyurethane	Polyurethane	Polyurethane	Polyurethane	
	3.2	Tyre size, front	Ø 360 x 130	Ø 360 x 130	Ø 360 x 130	Ø 360 x 130	
	3.3	Tyre size, rear	Ø 180 x 156	Ø 180 x 156	Ø 180 x 156	Ø 180 x 156	
	3.5	Wheels, number front/rear (x = driven)	1x / 2	1x / 2	1x / 2	1x / 2	
	3.6	Track width, front	b10 (mm)	0	0	0	
	3.7	Track width, rear	b11 (mm)	695	895	995	1394
Dimensions	4.2	Height of mast, lowered	h1 (mm)	2900	3400	3900	4500
	4.3	Free lift	h2 (mm)	-	2750	-	3850
	4.4	Lift	h3 (mm)	4125	7160	5725	10160
	4.5	Height of mast, extended	h4 (mm)	6415	9450	8015	12450
	4.7	Height of overhead guard (cabin)	h6 (mm)	2290	2290	2290	2290
	4.8	Height of seat/stand on platform	h7 (mm)	240	240	240	240
	4.11	Supplementary lift	h9 (mm)	740	740	740	740
	4.14	Platform height, raised	h12 (mm)	4365	7400	5965	10400
	4.15	Height, lowered	h13 (mm)	65	65	65	65
	4.19	Overall length	l1 (mm)	3277	3536	3018	3294
	4.20	Length to fork face	l2 (mm)	2077	2336	2218	2494
	4.21	Overall width	b1/b2 (mm)	880 / 880	1080 / 1080	1080 / 1180	1080 / 1580
	4.22	Fork dimensions	s/e/l (mm)	55 x 120 x 1200	55 x 120 x 1200	55 x 120 x 800	55 x 120 x 800
	4.23	Fork carriage to ISO 2328, class/type A, B		no	no	no	no
	4.24	Width of fork carriage	b3 (mm)	660	660	740	740
	4.25	Fork spread, min/max	b5 (mm)	560 / 560	560 / 560	640 / 640	640 / 640
	4.27	Width over side guide rollers	b6 (mm)	-	1275	-	-
	4.31	Ground clearance, below mast	m1 (mm)	50	50	50	50
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	50	50	50	50
	4.34	Aisle width with pallet 800 x 1200 along forks	As1 (mm)	-	1280	1380	1820
4.35	Turning radius	Wa (mm)	1732	2034	1873	2089	
4.42	End aisle width, with/without load	Au (mm)	3528	3888	3866	4135	
Performance	5.1	Travel speed, with/without load	(km/h)	9 / 9	9 / 9	11 / 11	13 / 13
	5.2	Lifting speed, with/without load	(m/s)	0.27 / -	0.27 / -	0.36 / -	0.4 / -
	5.3	Lowering speed, with/without load	(m/s)	0.28 / 0.28	0.28 / 0.28	0.32 / 0.32 (0.35 / 0.35) ³⁾	0.32 / 0.32 (0.35 / 0.35) ³⁾
	5.9	Acceleration time, with/without load	(s)	8.0 / 8.0	8.0 / 8.0	8.0 / 8.0	8.0 / 8.0
	5.10	Service brake		Regenerative	Regenerative	Regenerative	Regenerative/Mechanic
	Drive	6.1	Drive motor, 60 minute rating	(kW)	4.5	4.5	6.5
6.2		Lift motor, rating at S3 15%	(kW)	7.6	7.6	11.5	13
6.3		Battery according to DIN 43531/35/36 A,B,C,no		43 535 B	43 535 B	43 535 B	43 535 B
6.4		Battery voltage/rated capacity (5h)	(V/Ah)	24 / 840	24 / 1120	48 / 620	48 / 930
6.5		Battery weight (+ 5%)	(kg)	687	883	933	1309
Others	8.1	Type of drive control		Microprocessor	Microprocessor	Microprocessor	Microprocessor
	8.4	Noise level at operator's ear	(dB(A))	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“



Telescopic mast with supplementary lift

Height of mast, lowered (h1)	Total lift height from ground h25 (h3+h9+h13)	Total lift height h24 (h3+h9)	Lift height w/o supplementary lift h3	Supplementary lift h9	Platform height h12 (h3+h7)	Picking height h28 (h12+1600)	Extended height h4
2250	3630	3565	2825	740	3065	4665	5115
2450	4030	3965	3225	740	3465	5065	5515
2900	4930	4865	4125	740	4365	5965	6415
3400	5930	5865	5125	740	5365	6965	7415
3900	6530	6465	5725	740	5965	7565	8015
4400	7530	7465	6725	740	6965	8565	9015
4900	8530	8465	7725	740	7965	9565	10015
5400	9330	9265	8525	740	8765	10365	10815

Triplex mast with supplementary lift

Height of mast, lowered (h1)	Total lift height from ground h25 (h3+h9+h13)	Total lift height h24 (h3+h9)	Lift height w/o supplementary lift h3	Free lift h2	Supplementary lift h9	Platform height h12 (h3+h7)	Picking height h28 (h12+1600)	Extended height h4
2250	5215	5150	4410	1600	740	4650	6250	6700
2450	5815	5750	5010	1800	740	5250	6850	7300
2900	7165	7100	6360	2250	740	6600	8200	8650
3400	7965	7900	7160	2750	740	7400	9000	9450
3900	9465	9400	8660	3250	740	8900	10500	10950
4500	10965	10900	10160	3850	740	10400	12000	12450