



Linde Material Handling

Linde



Order Picker

V

Capacity 1.2 t | Series 5213

Optimizing space

- Modular system for multi-level picking, adjustable to customer's individual tasks
- Available in two variants
- Picking heights up to 12 m (V modular B: 7.8 m)
- Lifting capacity up to 1.2 t (V modular B: 1.0 t)
- Linde System Control (LSC) adjusts vehicle performance automatically to requirements
- Ergonomic working area and precise, intuitive operation

TECHNICAL DATA (According to VDI 2198)

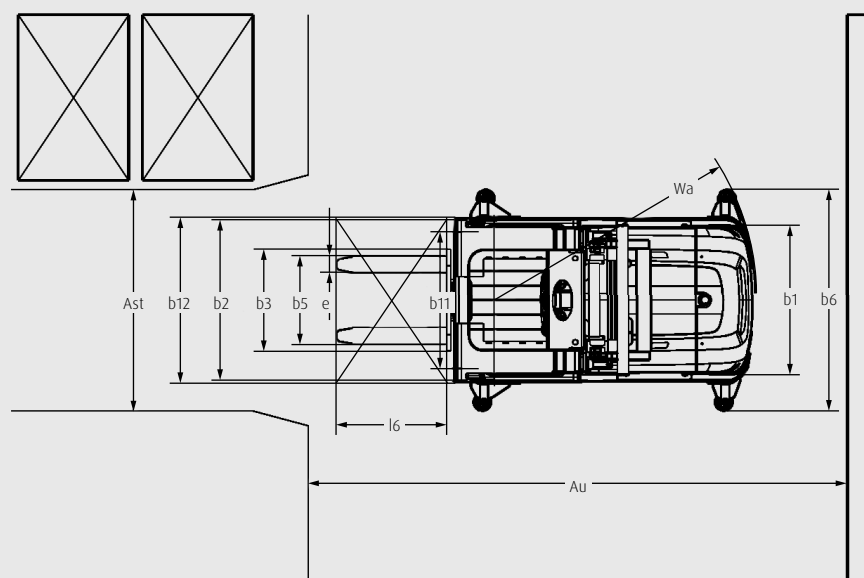
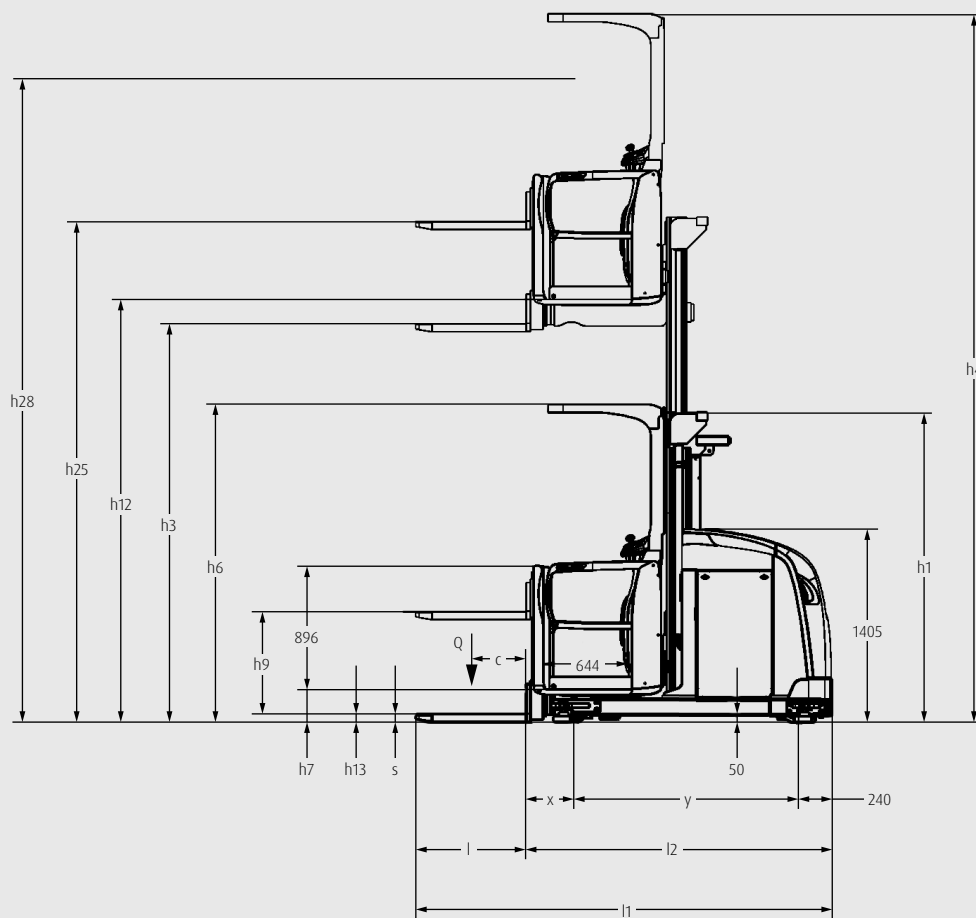
Characteristics	1.1	Manufacturer		LINDE	LINDE	LINDE	LINDE	LINDE
	1.2	Manufacturer's type designation		V modular B 24 V Standard mast ¹⁾	V modular B 48 V Standard mast ¹⁾	V modular 24 V Standard mast ¹⁾	V modular 48 V Standard mast ¹⁾	V modular 48 V Triplex mast ¹⁾
	1.2a	Series		5213-01	5213-01	5213-01	5213-01	5213-01
	1.3	Power unit		Battery	Battery	Battery	Battery	Battery
	1.4	Operation		Order Picker	Order Picker	Order Picker	Order Picker	Order Picker
	1.5	Load capacity/Load	Q (t)	1	1	0.8	1.2	1.2
	1.6	Load centre distance	c (mm)	400	400	600	400	400
	1.8	Axle centre to fork face	x (mm)	355	355	345	345	405
	1.9	Wheelbase	y (mm)	1307	1448	1487	1628	1844
Weights	2.1	Service weight	(kg)	2788 ²⁾	3288 ²⁾	3085 ²⁾	4150 ²⁾	5515 ²⁾
	2.3	Axle load with load, front/rear	(kg)	968/2820 ²⁾	1249/3039 ²⁾	1186/2699 ²⁾	1704/3646 ²⁾	2288/4427 ²⁾
	2.3	Axle load without load, front/rear	(kg)	1594/1194 ²⁾	1813/1475 ²⁾	1728/1357 ²⁾	2299/1851 ²⁾	2868/2646 ²⁾
Wheels/Tyres	3.1	Tyres rubber, SE, pneumatic, polyurethane		Polyurethane	Polyurethane	Polyurethane	Polyurethane	Polyurethane
	3.2	Tyre size, front		Ø 360/130	Ø 360/130	Ø 360 × 130	Ø 360 × 130	Ø 360 × 130
	3.3	Tyre size, rear		Ø 180/156	Ø 180/156	Ø 180 × 156	Ø 180 × 156	Ø 180 × 156
	3.5	Wheels, number front/rear (x = driven)		1x/2	1x/2	1x/2	1x/2	1x/2
	3.6	Track width, front	b10 (mm)	0	0	0	0	0
	3.7	Track width, rear	b11 (mm)	1000	1000	700	994	1394
	3.7	Track width, rear	b11 (mm)	1000	1000	700	994	1394
Dimensions	4.2	Height of mast, lowered	h1 (mm)	2900	3900	2900	3900	4500
	4.3	Free lift	h2 (mm)	0	0	0	0	3850
	4.4	Lift height	h3 (mm)	4550	6000	4125	5725	10160
	4.5	Height, mast extended	h4 (mm)	6834	8284	6415	8015	12450
	4.7	Height to top of overhead guard	h6 (mm)	2284	2284	2290	2290	2290
	4.8	Height of seat/stand on platform	h7 (mm)	233	233	240	240	240
	4.11	Supplementary lift	h9 (mm)	800	800	740	740	740
	4.14	Platform height, raised	h12 (mm)	4783	6233	4365	5965	10400
	4.15	Fork height lowered	h13 (mm)	65	65	65	65	65
	4.19	Overall length	l1 (mm)	2707	2929	3277	3099	3336
	4.20	Length to fork face	l2 (mm)	1907	2129	2077	2299	2536
	4.21	Overall width	b1/b2 (mm)	1180/1180	1180/1180	880/880	1180/1180	1580/1580
	4.22	Fork dimensions	s/e/l (mm)	60/120/1200	60/120/1200	60/120/1200	60/120/800	60/120/800
	4.23	Fork carriage to to ISO 2328, class/type A, B	(mm)	Special	Special	Special	Special	Special
	4.24	Width of fork carriage	b3 (mm)	660	740	660	740	740
	4.25	Fork spread, min/max	b5 (mm)	560/560	640/640	560/560	640/640	640/640
	4.27	Width over side guide rollers	b6 (mm)	-	1375	-	1375	1815
	4.31	Ground clearance beneath mast, laden	m1 (mm)	50	50	50	50	50
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	50	50	50	50	50
	4.34	Aisle width with pallet 800 × 1200 along forks	Ast (mm)	-	1380	-	1380	1820
	4.35	Turning radius	Wa (mm)	1552	1903	1732	2071	2316
	4.42	Transfer aisle width (min.)	Au (mm)	3054	3405	3528	3564	3862
Performance	5.1	Travel speed, with/without load	(km/h)	9.0/9.0	13.0/13.0	9/9	11/11	13/13
	5.2	Lift speed, with/without load	(m/s)	0.25/0.30	0.36/0.36 (0.40/0.40) ³⁾	0.25/0.30	0.34/0.36 (0.40/0.40) ³⁾	0.29/0.40
	5.3	Lowering speed, with/without load	(m/s)	0.28/0.28	0.32/0.32 (0.35/0.35) ³⁾	0.28/0.28	0.32/0.32 (0.35/0.35) ³⁾	0.35/0.35
	5.4	Reach speed, with/without load	(m/s)	-	-			
	5.9	Acceleration time, with/without load	(s)	7.0/7.0	6.0/6.0	7.0/7.0	6.0/6.0	6.0/6.0
	5.10	Service brake		Regenerative	Regenerative	Regenerative	Regenerative	Regenerative
Drive	6.1	Drive motor, 60 minute rating	(kW)	4.0	6.5	4.0	6.5	6.5
	6.2	Lift motor, rating at S3 15 %	(kW)	7.6	13	7.6	13	13
	6.4	Battery voltage/rated capacity (5 h)	(V/Ah)	24/840	48/620	24/840	48/620	48/930
	6.5	Battery weight (± 5 %)	(kg)	687	933	687	933	1309
Others	8.1	Type of drive control		Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	8.4	Noise level at operator's ear	dB (A)	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“



MAST TABLES

V MODULAR B

STANDARD MAST (in mm)

Series	5213									
Lift	h3: 3250		h3:3550		h3: 4550		h3: 5000		h3: 6000	
Height measurements	h1: 2250 h9: 800 h24: 4050 h28: 5083	h4: 5534* h12: 3483 h25: 4115	h1: 2400 h9: 800 h24: 4350 h28: 5383	h4: 5834* h12: 3783 h25: 4415	h1: 2900 h9: 800 h24: 5350 h28: 6383	h4: 6834* h12: 4783 h25: 5415	h1: 3400 h9: 800 h24: 5800 h28: 6833	h4: 7284* h12: 5233 h25: 5865	h1: 3900 h9: 800 h24: 6800 h28: 7833	h4: 8284* h12: 6233 h25: 6865
Model										
V modular B	○		○		○		○		○	

V MODULAR

STANDARD MAST (in mm)

Series	5213									
Lift	h3: 2825		h3: 3225		h3: 4125		h3: 5125		h3: 5725	
Height measurements	h1: 2250 h9: 740 h24: 3565 h28: 4665	h4: 5115* h12: 3065 h25: 3630	h1: 2450 h9: 740 h24: 3965 h28: 5065	h4: 5515* h12: 3465 h25: 4030	h1: 2900 h9: 740 h24: 4865 h28: 5965	h4: 6415* h12: 4365 h25: 4930	h1: 3400 h9: 740 h24: 5865 h28: 6965	h4: 7415* h12: 5365 h25: 5930	h1: 3900 h9: 740 h24: 6465 h28: 7565	h4: 8015* h12: 5965 h25: 6530
Model										
V modular	○		○		○		○		○	

Series						
Lift	h3: 6725		h3: 7725		h3: 8525	
Height measurements	h1: 4400 h9: 740 h24: 7465 h28: 8565	h4: 9015* h12: 6965 h25: 7530	h1: 4900 h9: 740 h24: 8465 h28: 9565	h4: 10015* h12: 7965 h25: 8530	h1: 5400 h9: 740 h24: 9265 h28: 10365	h4: 10815* h12: 8765 h25: 9330
Model						
V modular	○		○		○	

TRIPLEX MAST (in mm)

Series	5213											
Lift	h3: 4410		h3: 5010		h3: 6360		h3: 7160		h3: 8660		h3: 10160	
Height measurements	h1: 2250 h4: 6700* h12: 4650 h25: 5215	h2: 1600 h9: 740 h24: 5150 h28: 6250	h1: 2450 h4: 7300* h12: 5250 h25: 5815	h2: 1800 h9: 740 h24: 5750 h28: 6850	h1: 2900 h4: 8650* h12: 6600 h25: 7165	h2: 2250 h9: 740 h24: 7100 h28: 8200	h1: 3400 h4: 9450* h12: 7400 h25: 7965	h2: 2750 h9: 740 h24: 7900 h28: 9000	h1: 3900 h4: 10950* h12: 8900 h25: 9465	h2: 3250 h9: 740 h24: 9400 h28: 10500	h1: 4500 h4: 12450* h12: 10400 h25: 10965	h2: 3850 h9: 740 h24: 10900 h28: 12000
Model												
V modular	○		○		○		○		○		○	

○ 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 B	V modular
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 utilization 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	●	●
	LCD “comfort” display with keypad log-on, lift height indicator, speedometer, hourmeter, steer wheel position indicator, battery status and service codes	○	●
	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 module (left/ right) on load side or mast side including LED working lights	—	○
	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	○	○
	Radio preparation 12 V/50 W with two speakers and antenna	—	○
	Overhead guard: 2200 mm height for greater comfort	○	○
Mast/Forks	Different fork lengths	○	○
	Carriage for adjustable forks	○	○
	Walk on platform	○	○
	Pallet clamp	—	○
	Mast soft end stops for lifting/ lowering	●	●
Throughput	Durable polyurethane wheels	●	●
	Regenerative electric braking through the drive motor for optimum use of energy	●	●
	Battery discharge indicator with lift cutout	●	●
	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



Best visibility for safe operation



Ergonomic control



Rail guidance for VNA application



Easy access for maintenance

Safety

- Outstanding visibility through and to either side of the mast for highest level of safety when driving, lifting and picking
- Two integrated touch sensors on the control panel and dead man's switch in the footwell ensure two-handed operation in guided applications
- Linde System Control (LSC) monitors driving, lifting, and steering movements and adjusts their performance automatically if needed
- Linde Curve Assist provides automatic speed reduction when cornering
- Emergency lowering valve under rear cover, easily accessible even in narrow aisles
- Aisle safety assistant tailored for each aisle in the warehouse, including travel, lift, and lowering end stops to make collisions with ceilings or walls impossible (optional)

Ergonomics

- Low cab entry height and soft-sprung operator platform for a comfortable feel
- Antivibration floor mat for comfortable working conditions
- Many storage areas and equipment variants for individual use requirements
- Very spacious cabin due to integrated control panels for maximum freedom of movement
- End-position cushioning and soft landing of the cabin ensure comfortable working
- Easy and precise maneuvering by steering knob (optional steering wheel available)
- Steer angle monitoring ensures safe high-performance driving characteristics

Performance

- Picking at heights up to 12 m with a lift speed of 0.4 m/s and a travel speed of up to 13 km/h (V modular B: up to 7.8 m and 10.5 km/h)
- Powerful and energy-efficient AC drive units combine high lifting and travel speeds with low energy consumption and long life
- Truck available with rail guidance rollers or inductive wire guidance technology
- Three different driving and lifting options allow truck to exactly match the application
- Tilting barriers increase productivity – operator can get closer to the rack to pick loads from the back of the pallet

Service

- Easy access for maintenance of key components, reducing downtime and increasing throughput
- Maintenance-free travel and lifting motors are encapsulated, therefore completely protected from dust and dirt
- Active cooling system ensures maximum availability even in extreme conditions
- Combination of different lift motors, drive motors, chassis, masts, batteries, cabins, etc. for every application
- Two voltage variants provide perfect solution to customer's needs: 48 V for high performance in medium and heavy-duty applications and 24 V for low to medium duty applications

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:



Linde Material Handling GmbH
Carl-von-Linde-Platz | 63743 Aschaffenburg | Germany
Phone + 49 6021 99 0 | Fax + 49 6021 99 1570
www.linde-mh.com | info@linde-mh.com

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