



Linde Material Handling

Linde

Reach Trucks

Ri14 – Ri18

Load capacity 1.4 t – 1.8 t | Series 1121

ION

Compact warehouse pro

- Powerful and efficient reach truck for standard applications
- Ideal for pallet storage, for use in block and rack storage systems and for internal material transport
- Compact design and Li-ION battery integrated (i) as standard ensure high manoeuvrability
- Load capacities of up to 1.8 tonnes and lift heights of up to 11 metres
- Ergonomic work station and a variety of safety features ensure comfort and safety for the operator
- Can be individually tailored to the customer's requirements thanks to a range of mast and equipment variants

TECHNICAL DATA (according to VDI 2198)

Characteristics	1.1	Manufacturer (abbreviation)		Linde MH	Linde MH	Linde MH	Linde MH	Linde MH
	1.2	Manufacturer's type designation		Ri14/1504	Ri16/1504	Ri14/1505	Ri16/1505	Ri18/1505
	1.2a	Series		1121-01	1121-01	1121-01	1121-01	1121-01
	1.3	Drive		Battery	Battery	Battery	Battery	Battery
	1.4	Operation		Seat	Seat	Seat	Seat	Seat
	1.5	Rated capacity/rated load	Q (t)	1.4	1.6	1.4	1.6	1.8
	1.6	Load centre distance	c (mm)	600/500	600/500	600/500	600/500	600/500
	1.8	Load distance, centre of drive axle to fork	x (mm)	272	373	266	367	439
	1.9	Wheelbase	y (mm)	1275	1381	1275	1381	1453
Weight	2.1	Service weight	kg	2959	3003	3384	3447	3632
	2.3	Axle loading, unladen front/rear	kg	1757/1202	1850/1153	1934/1450	2055/1392	2218/1414
	2.4	Axle loading, fork advanced, laden front/rear	kg	503/3856	475/4128	533/4251	504/4543	558/4874
	2.5	Axle loading, fork retracted, laden front/rear	kg	1397/2962	1587/3016	1567/3217	1785/3262	2019/3413
Tyres/chassis	3.1	Tyres: solid rubber, superelastic, 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 285 × 100	Ø 285 × 100	Ø 285 × 100	Ø 285 × 100	Ø 285 × 100
	3.5	Wheels, number front/rear (x = driven wheels)		1x/2	1x/2	1x/2	1x/2	1x/2
	3.7	Tread, rear	b11 (mm)	1167	1167	1167	1167	1167
	3.9	Wheels braked service brake, number		2	2	2	2	2
	3.10	Wheels braked parking brake		1	1	1	1	1
Dimensions	4.1	Mast/fork carriage tilt, forward/backwards	α/β (°)	2.0/4.0	2.0/4.0	2.0/4.0	2.0/4.0	2.0/4.0
	4.2	Mast height, lowered	h1 (mm)	2435	2435	3385	3385	3385
	4.3	Free lift	h2 (mm)	1775	1775	2725	2725	2725
	4.4	Lift	h3 (mm)	5720	5720	8570	8570	8570
	4.5	Mast height, extended	h4 (mm)	6275	6275	9186	9186	9186
	4.7	Height of overhead guard (cabin)	h6 (mm)	2245	2245	2245	2245	2245
	4.8	Seat height relating to SIP/stand height	h7 (mm)	1183/-	1183/-	1183/-	1183/-	1183/-
	4.10	Height of wheel arms	h8 (mm)	308	308	308	308	308
	4.19	Overall length	l1 (mm)	2365	2370	2371	2376	2376
	4.20	Length to fork face	l2 (mm)	1215	1220	1221	1226	1226
	4.21	Overall width	b1/b2 (mm)	1260/1270	1260/1270	1260/1270	1260/1270	1260/1270
	4.22	Fork dimensions DIN ISO 2331	s/e/l (mm)	40/80/1150	45/100/1150	40/80/1150	45/100/1150	45/100/1150
	4.23	Fork carriage ISO 2328, class/type A, B		2A	2A	2A	2A	2A
	4.24	Fork carriage width	b3 (mm)	770	770	770	770	770
	4.25	Fork spread	b5 (mm)	296/690	316/710	316/710	316/710	316/710
	4.26	Distance between wheel arms/loading surfaces	b4 (mm)	920	920	920	920	920
	4.28	Reach distance	l4 (mm)	457	564	451	558	630
	4.31	Ground clearance, laden, below mast	m1 (mm)	75	75	75	75	75
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	50	50	50	50	50
	4.34.1	Aisle width for pallets 1000 × 1200 crossways	Ast (mm)	2641 ^{1) 2)}	2664 ^{1) 2)}	2646 ^{1) 2)}	2668 ^{1) 2)}	2686 ^{1) 2)}
	4.34.2	Aisle width for pallets 800 × 1200 lengthways	Ast (mm)	2709 ^{1) 2)}	2715 ^{1) 2)}	2714 ^{1) 2)}	2720 ^{1) 2)}	2725 ^{1) 2)}
	4.35	Turning radius	Wa (mm)	1498	1596	1498	1596	1665
	4.37	Length across wheel arms	l7 (mm)	1633	1739	1633	1739	1811
Performance data	5.1	Travel speed, laden/unladen	km/h	13/13 ^{3) 4)}	13/13 ^{3) 4)}	11/11 (13/13) ^{3) 4)}	11/11 (13/13) ^{3) 4)}	11/11 (13/13) ^{3) 4)}
	5.1.1	Travel speed, laden/unladen, backwards	km/h	13/13 ^{3) 4)}	13/13 ^{3) 4)}	11/11 (13/13) ^{3) 4)}	11/11 (13/13) ^{3) 4)}	11/11 (13/13) ^{3) 4)}
	5.2	Lifting speed, laden/unladen	m/s	0.6/0.61	0.6/0.61	0.6/0.61 (0.67/0.69) ⁵⁾	0.6/0.61 (0.67/0.69) ⁵⁾	0.6/0.61 (0.67/0.69) ⁵⁾
	5.3	Lowering speed, laden/unladen	m/s	0.57/0.55	0.57/0.55	0.57/0.56	0.57/0.56	0.57/0.56
	5.4	Reaching speed, laden/unladen	m/s	0.17/0.17	0.17/0.17	0.17/0.17	0.17/0.17	0.17/0.17
	5.7	Gradeability, laden/unladen	%	10.0/10.0	10.0/10.0	10.0/10.0	10.0/10.0	10.0/10.0
	5.8	Max. gradeability, laden/unladen	%	10.0/10.0	10.0/10.0	10.0/10.0	10.0/10.0	10.0/10.0
	5.9	Acceleration time, laden/unladen	s	4.7/4.3 ⁴⁾	4.8/4.3 ⁴⁾	5.0/4.4 (4.8/4.1) ⁴⁾	4.9/4.4 (4.7/4.1) ⁴⁾	4.9/4.4 (4.8/4.2) ⁴⁾
	5.10	Service brake		hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.
	6.1	Drive motor rating S2 60 min	kW	5.7	5.7	5.7	5.7	5.7
Electric-engine	6.2	Lift motor rating at S3 15%	kW	12	12	12 (15) ⁵⁾	12 (15) ⁵⁾	12 (15) ⁵⁾
	6.3	Battery according to DIN 43531/35/36 A, B, C, no		Li-ION	Li-ION	Li-ION	Li-ION	Li-ION
	6.4	Battery voltage/nominal capacity K5	(V)/(Ah) o. kWh	(48)/(414)	(48)/(414)	(48)/(414)	(48)/(414)	(48)/(414)
	6.4.a	Battery energy content	kWh	21.5/17.2 ⁶⁾	21.5/17.2 ⁶⁾	21.5/17.2 ⁶⁾	21.5/17.2 ⁶⁾	21.5/17.2 ⁶⁾
	6.5	Battery weight (±5%)	kg	269	269	269	269	269
	6.6	Energy consumption according to DIN EN 16796	kWh/h	2.7 ⁷⁾	2.9 ⁷⁾	3 (2.6) ⁷⁾	3.5 (3) ⁷⁾	3.6 (3.2) ⁷⁾
	6.6.1	CO2 equivalent according to DIN EN 16796	kg/h	1.46 ⁴⁾	1.57 ⁴⁾	1.62 (1.4) ⁷⁾	1.89 (1.62) ⁷⁾	1.95 (1.73) ⁷⁾
	6.7	Turnover output according to VDI 2198	t/h	56 ⁴⁾	64 ⁴⁾	54 (57) ⁷⁾	60 (64) ⁷⁾	67 (71) ⁷⁾
	6.8	Turnover efficiency according to VDI 2198	t/kWh	19 ⁴⁾	20 ⁴⁾	16 (17) ⁷⁾	17 (18) ⁷⁾	18 (20) ⁷⁾
Additional data	10.7	Sound pressure level LpAz (at the operator's seat)	dB(A)	65	65	65	65	65

1) Including a 200 mm (min.) operating aisle clearance

2) Some truck specification require a reach-back restriction. Please note information in Linde World mast table

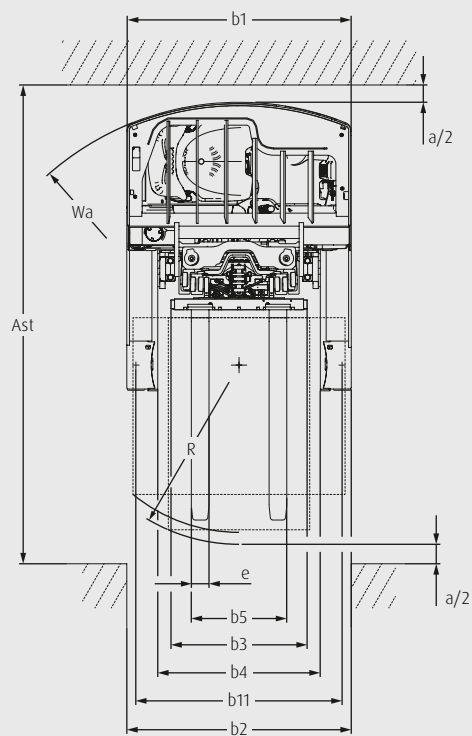
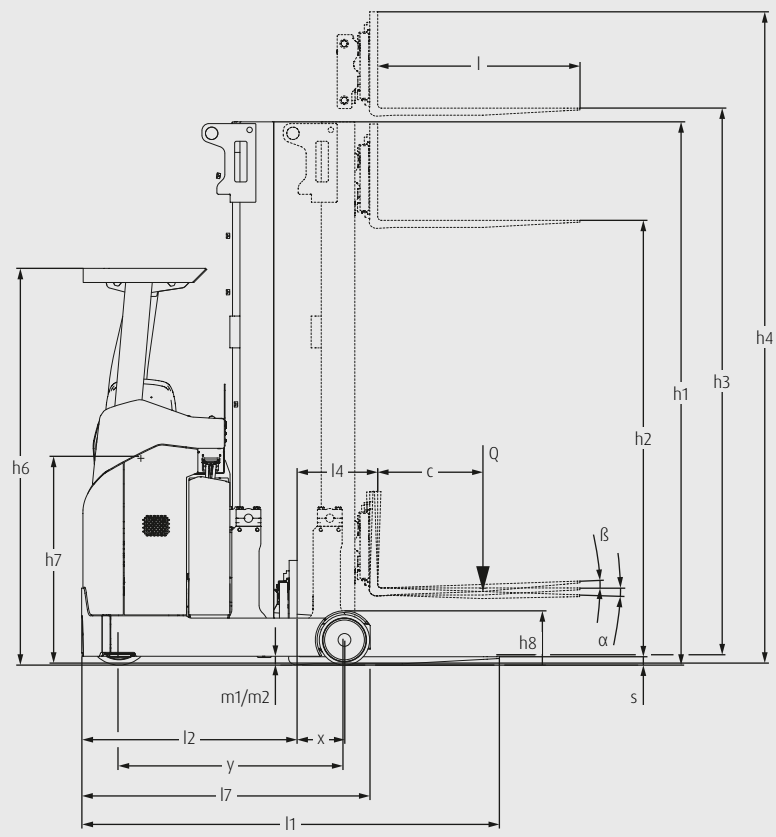
3) Depending on performance setting

4) With PowerDrive option

5) With PowerLift option

6) Installed/usable energy content

7) With option PowerDrive/PowerLift



MAST TABLES

TRIPLEX MASTS (in mm)

Series	1504							
Lift	h3: 4520	h3: 5270	h3: 5720	h3: 6170	h3: 7070	h3: 8270	h3: 8570	h3: 9020
Height measurements	h1: 2035 h2: 1375 h4: 5061	h1: 2285 h2: 1625 h4: 5811	h1: 2435 h2: 1775 h4: 6261	h1: 2585 h2: 1925 h4: 6711	h1: 2885 h2: 2225 h4: 7611	h1: 3285 h2: 2625 h4: 8811	h1: 3385 h2: 2725 h4: 9111	h1: 3535 h2: 2875 h4: 9561
Manufacturer's type designation								
RI14	○	○	○	○	○	○	○	○
RI16	○	○	○	○	○	○	○	○

Other masts available under request

Series	1505								
Lift	h3: 4595	h3: 5270	h3: 5795	h3: 6320	h3: 6695	h3: 7295	h3: 7595	h3: 7970	h3: 8270
Height measurements	h1: 2060 h2: 1400 h4: 5211	h1: 2285 h2: 1625 h4: 5886	h1: 2460 h2: 1800 h4: 6411	h1: 2635 h2: 1975 h4: 6936	h1: 2760 h2: 2100 h4: 7311	h1: 2960 h2: 2300 h4: 7911	h1: 3060 h2: 2400 h4: 8211	h1: 3185 h2: 2525 h4: 8586	h1: 3285 h2: 2625 h4: 8886
Manufacturer's type designation									
RI14	○	○	○	○	○	○	○	○	○
RI16	○	○	○	○	○	○	○	○	○
RI18	○	○	○	○	○	○	○	○	○

Series	1505							
Lift	h3: 8570	h3: 8870	h3: 9170	h3: 9470	h3: 9770	h3: 10070	h3: 10520	h3: 10970
Height measurements	h1: 3385 h2: 2725 h4: 9186	h1: 3485 h2: 2825 h4: 9486	h1: 3585 h2: 2925 h4: 9786	h1: 3685 h2: 3025 h4: 10086	h1: 3785 h2: 3125 h4: 10386	h1: 3885 h2: 3225 h4: 10686	h1: 4035 h2: 3375 h4: 11136	h1: 4185 h2: 3525 h4: 11525
Manufacturer's type designation								
RI14	○	○	○	○	○	○	○	—
RI16	○	○	○	○	○	○	○	○
RI18	○	○	○	○	○	○	○	○

Other masts available under request

○ Optional equipment

— Not available

h1: Mast height, lowered

h2: Free lift

h3: Lift

h4: Mast height, extended

STANDARD AND OPTIONAL EQUIPMENT

Manufacturer's type designation/equipment		Ri14	Ri16	Ri18
Safety	Linde Curve Assist	●	●	●
	Hydraulic overload protection	●	●	●
	Seat-actuated traction interlock	●	●	●
	Lift height related travel speed reduction	●	●	●
Service	Sealed, maintenance-free AC 5.7 kW drive and 12 or 15 kW lift motors	●	●	●
Digitalisation	Comprehensive digital instrument display	●	●	●
	myLinde fleet management	○	○	○
	Radio data terminal bracket	○	○	○
Operation/ load handling	180° electric steering	●	●	●
	Single axis joysticks	○	○	○
	Multi-function lever	○	○	○
	Lift height indicator above free lift zone	○	○	○
	PowerDrive to increase transport performance	○	○	○
	PowerLift to increase storing performance	○	○	○
	Lift height pre-selector	○	○	○
	Rack Protection Sensor	○	○	○
Environment	Cold store protection to -30°C	○	○	○
Electronics	Electric horn and emergency isolator	●	●	●
	Integrated Li-ION battery	●	●	●
	Linde Li-ION batteries and chargers	○	○	○
	Vision system, multiple cameras	○	○	○
Workplace	Linde twin accelerator pedals	●	●	●
	Resiliently mounted operator's compartment	●	●	●
	Adjustable steering wheel	●	●	●
	Single accelerator pedal	○	○	○
	Adjustable floor plate	○	○	○
	Heated seat	○	○	○
	Orange seat-belt	○	○	○
	High vision armoured glass roof	○	○	○
Mast	Tilting fork carriage and integral side shift	●	●	●
	Soft landing of forks	○	○	○
	Mast mounted CCTV camera system	○	○	○
Attachments and forks	Automatic side shifting centering	○	○	○
	Automatic horizontal fork leveling	○	○	○
	Green fork tips	○	○	○
	Additional hydraulic circuit for attachments	○	○	○
	Load backrest	○	○	○
Axles and tyres	Polyurethane drive wheel	●	●	●
	Extra grip drive wheel	○	○	○
	Polyurethane drive and load wheels	●	●	●
	Load wheel protection	○	○	○
Drive and brake system	Four independent braking systems. Regenerative and counter-current braking, holding brake control with automatic parking brake and all-wheel braking system	●	●	●
Lighting	LED working lights at overhead guard	○	○	○
	Rotating/flashing beacon	○	○	○
	BlueSpot/TruckSpot safety light	○	○	○
	Red Warning Lines	○	○	○

● Standard equipment

○ Optional equipment

CHARACTERISTICS



Armoured glass roof for optimal visibility

Safety

- Load wheel brakes (all-wheel braking system) as standard for short stopping distances, regardless of load weight or mast position
- Linde Curve Assist automatically adjusts the driving speed to the steering angle
- Optimised all-round visibility thanks to raised sitting position and improved workplace design
- Optional assistance systems like Linde Rack Protection Sensor and Linde Safety Guard
- Additional protection for the operator thanks to armoured glass roof and shoulder guard
- A range of warning and lighting options ensure increased visibility



Height-adjustable pedal plate for maximum comfort

Ergonomics

- Fully decoupled operator work station and sprung seat minimise vibrations
- Spacious operator work station provides ample storage space and room to move
- Individually adjustable components, such as steering wheel, seat and pedal plate (optionally adjustable), ensure optimal ease of use
- Ergonomically positioned and intuitive controls
- Wide, low-entry step with anti-slip surface ensures effortless operator access and exit



Effortless and efficient load handling

Handling

- Optional PowerLift and PowerDrive functions for increased lifting and driving speeds
- Short overall length enables precision manoeuvring in tight spaces
- Easy load handling thanks to Linde Load Control and dual pedal control
- Energy-efficient Li-ION batteries with flexible charging options and optional removable battery for multi-shift operation
- Modern 4.3-inch touch display shows all important truck information



Quick access to all service components

Service

- Sturdy design and maintenance-free components ensure maximum availability
- Easy access to all service-related components saves time during maintenance
- Integration into digital processes and modular design for maximum adaptability
- Innovative E&E architecture plus optional data transfer support remote maintenance and software updates
- Comprehensive, regional Linde MH service network for rapid support

Presented by:

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



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