

Standard Equipment/Optional Equipment

Standard Equipment

General:

Overall width (reach legs) 1270 mm/1140 mm (N-version)
 Linde Load Control for lift/lower, reach, tilt and side shift
 Linde twin accelerator pedals
 Comprehensive digital instrument display
 Sealed, maintenance-free AC 6,5 kW drive & 14 kW lift motor
 Linde rheological 180° electric steering
 Linde Digital Control System (LDC) for smooth, precise electronic control of all traction and hydraulic functions
 Polyurethane drive and load wheels tyres

New Standard Features:

Variable energy saving/performance parameter modes (Economy, Efficiency, Performance) for individual applications
 Resiliently mounted operator's compartment
 Fully adjustable air suspension seat with auto adjust for operator's weight
 Integral and adjustable control console
 Generous storage compartments
 Lift height indicator above free lift
 Key switch, or alternatively PIN code access

Mast:

Torsion-resistant fixed clearview triplex mast with lift heights between 5760 mm and 8255 mm (R 14/16 HD)
 Tilting fork carriage and integral side shift
 Fork length 1150 mm

Safety:

Monitoring system stops truck in the event of traction, steering or lift failure
 Seat actuated traction interlock
 Linde Curve Assist
 Four independent braking systems (Regenerative and counter current braking, holding brake control with automatic parking brake and all-wheel brake system)
 Automatic slowdown at end of reach travel and at max. lift
 Automatic creep speed above 8500 mm lift
 Emergency Isolator
 Battery lock with creep speed interlock
 Electrical and hydraulic overload protection
 Protective polycarbonate screen between panel and mast
 Electric horn

Optional Equipment

Fixed clear view triplex masts with lift heights from 4400 mm up to 11500 mm
 Side shift centering
 Horizontal fork leveling
 Fork soft landing
 Alternative fork lengths
 Fork extensions
 Load backrest
 Single axis joysticks for each hydraulic function
 Single accelerator pedal, automotive layout with left foot interlock
 360° steering (single accelerator pedal only)
 Reverse steering
 Lift height pre-selector *
 PVC covered seat
 Heated seat
 Cold store protection to - 30°C *
 Cold store cab (not available with narrow chassis) *
 Ambient cab (not available with narrow chassis) *
 High Vision armoured glass roof
 Draught protection door *
 Protection frame
 Steel mesh profile or polycarbonate insert for overhead guard
 Profiled overhead guard for drive-in racking *

Side guidance wheels
 Load wheel protection
 Advanced colour TFT display *
 Mast mounted CCTV camera system
 Vision system, combined cameras on overhead guard and mast camera, split screen image *
 Ventilator underneath overhead guard for driver comfort
 Radio Data Terminal bracket
 Option bar
 Interior light
 Auxiliary 12 V power socket
 LED working lamps
 Rotating/flashing beacon
 Blue Spot™ safety light
 LFM Linde Fleet management
 Audible traction alarm
 Additional hydraulic circuit for attachments*
 Battery on rollers
 Battery roller stand
 Alternative colour schemes

Other options available on request
 * Availability to be advised



Electric Reach Trucks
 Capacity 1400 - 2000 kg
 R 14, R 16, R 20 / HD / N

Series 1120

Linde Material Handling



Safety

With four independent braking systems, fail to safe dual circuitry and an impressive range of protective features for the operator, a safe and efficient working environment is assured.

Performance

Powerful AC traction and lift motors combined with the renowned Linde intelligent controller to deliver seamless, energy efficient performance for optimum productivity. Fixed clear view triplex masts with integrated sideshift as standard ensure smooth, highly efficient storage and retrieval cycles.

Comfort

A world first with the operator's work station resiliently mounted to the base chassis to give unsurpassed levels of operator comfort. A fully adjustable air suspension ergonomic seat and integral control console with fingertip joystick control of hydraulics and a compact steering wheel. The unique Linde rheological electric steering system enables effortless operation and assured manoeuvring and travelling. In this superb, stress-free working environment the operator is motivated and fully focused on the task.

Features

Superb working environment

→ Outstanding comfort and functionality in the unique, resiliently mounted work station with an air suspension comfort seat, fully adjustable to the operator's personal preferences
 → Integral, adjustable control console incorporating all controls
 → Linde Load Control: precise, effortless fingertip control of all mast movements
 → High Vision armoured glass overhead guard top panel available as an option



Linde twin accelerator pedals

→ Seamless and effortless forward/reverse selection provides outstanding traction control and places minimal demands on operator
 → Left foot is safely protected within the chassis contours
 → Operator is able to maintain high efficiency and productivity levels



Precision

→ Assured and seamless manoeuvring with unique Linde twin accelerator pedals
 → Precision load handling with Linde Load Control
 → Highly responsive and progressive electric rheological steering
 → Digital instrument display for instant readout of truck status
 → Integral and adjustable operator's control console

Manoeuvrability

→ A short wheelbase, with compact chassis dimensions and smooth, electric rheological steering ensures easy and efficient manoeuvring together with straight line travelling
 → Adjustable steering torque to suit operator's personal preferences
 → Excellent all-round visibility of load and surrounding environment



Batteries

→ Capacities to suit every application: 360 Ah to 930 Ah
 → Rapid and simple battery change either with lift-out or battery on rollers

Stability

→ Chassis designed and built for maximum strength and durability
 → Heavy-duty design and components enhance the inherent low centre of gravity for optimum stability and high residual capacities
 → Linde Curve Assist for safe cornering

Linde clear view mast

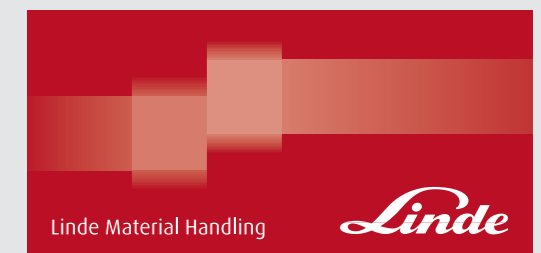
→ Torsion-resistant fixed clear view triplex fixed mast
 → Two cylinder configuration for optimum visibility
 → Hydraulic hoses reeved through the mast to enhance visibility



Servicing

→ Sealed, maintenance-free AC traction, lift and steer motors
 → Configurable Linde Digital Control system (LDC) incorporates diagnostic technology
 → Easy service access
 → Up to 1000 operating hours between services

Linde Material Handling GmbH, Postfach 10 01 36, 63701 Aschaffenburg, Germany
 Phone +49.6021.99-0, Fax +49.6021.99-1570, www.linde-mh.com, info@linde-mh.com



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.

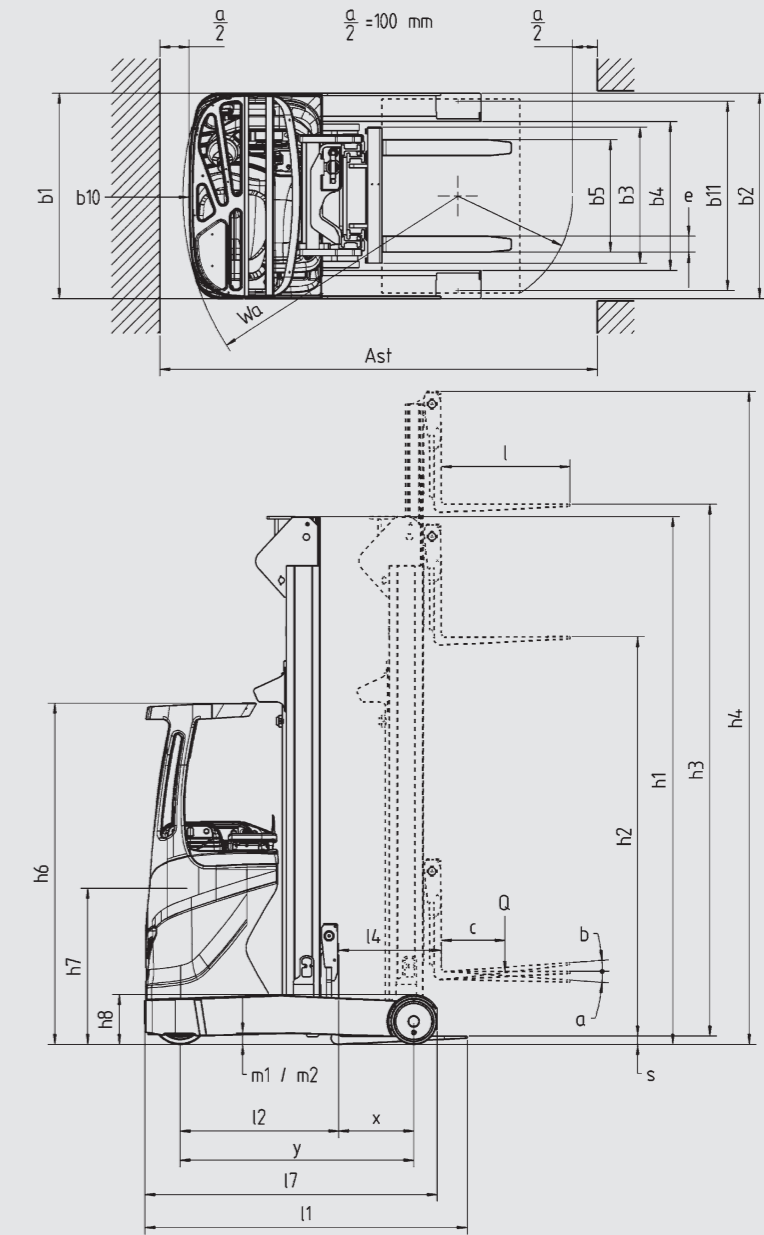
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Technical Data according to VDI 2198

Characteristics	LINDE											
	1.1	1.2	R14	R14HD	R14N	R16	R16HD	R16N	R20	R20HD	R20N	
1.2 Model designation												
1.2a Series			1120-00	1120-00	1120-00	1120-00	1120-00	1120-00	1120-00	1120-00	1120-00	
1.3 Power unit			Battery	Battery	Battery	Battery	Battery	Battery	Battery	Battery	Battery	
1.4 Operation			Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat	
1.5 Load capacity	Q (t)		1.4	1.4	1.4	1.6	1.6	1.6	2.0	2.0	2.0	
1.6 Load centre	c (mm)		600 / 500	600 / 500	600 / 500	600 / 500	600 / 500	600 / 500	600 / 500	600 / 500	600 / 500	
1.8 Axle centre to fork face	x (mm)		399	275	401	466	347	396	347	419	259	
1.9 Wheelbase	y (mm)		1381	1381	1453	1453	1453	1525	1525	1669	1525	
Weights	2.1 Service weight	(kg)	3065	3735	3080	3075	3955	3080	4380	5135	4235	
	2.2 Axle load without load, front/rear	(kg)	1940 / 1125	2090 / 1645	1920 / 1160	1995 / 1080	2330 / 1625	1920 / 1160	2540 / 1840	2945 / 2190	2280 / 1955	
	2.4 Axle load, fork outreached, with load, front/rear	(kg)	665 / 3800	810 / 4325	706 / 3774	745 / 3930	815 / 4740	600 / 4080	695 / 5685	1020 / 6115	645 / 5590	
2.5 Axle load, fork retracted, with load, front/rear	(kg)	1736 / 2729	1761 / 3374	1728 / 2752	1847 / 2828	2051 / 3504	1695 / 2985	2208 / 4172	2728 / 4407	1833 / 4402		
Wheels/Tyres	3.1 Tyres rubber, SE, pneumatic, polyurethane		Polyurethane	Polyurethane	Polyurethane	Polyurethane	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	Ø 360 x 130	Ø 360 x 130	Ø 360 x 130	Ø 360 x 130	Ø 360 x 130	
	3.3 Tyre size, rear		Ø 285 x 100	Ø 285 x 100	Ø 285 x 100	Ø 285 x 100	Ø 285 x 100	Ø 285 x 100	Ø 350 x 100	Ø 350 x 100	Ø 350 x 100	
3.5 Wheels, number front/rear (x = driven)		1x / 2	1x / 2	1x / 2	1x / 2	1x / 2	1x / 2	1x / 2	1x / 2	1x / 2		
3.6 Track width, front	b10 (mm)		0	0	0	0	0	0	0	0		
3.7 Track width, rear	b11 (mm)		1167	1167	1037	1167	1037	1167	1167	1167		
Dimensions	4.1 Mast/fork carriage tilt, forward/backward	a/b (°)	2.0 / 4.0	2.0 / 4.0	2.0 / 4.0	2.0 / 4.0	2.0 / 4.0	2.0 / 4.0	2.0 / 4.0	2.0 / 4.0	2.0 / 4.0	
	4.2 Height of mast, lowered	h1 (mm)	2485	3180	2485	2485	3430	2485	3655	4930	3655	
	4.3 Free lift	h2 (mm)	1636	2051	1636	1636	2301	1636	2776	3800	2776	
	4.4 Lift	h3 (mm)	5760	7555	5760	5760	8255	5760	8955	11455	8955	
	4.5 Height of mast, extended	h4 (mm)	6649	8301	6649	6649	9001	6649	9701	12201	9701	
	4.7 Height of overhead guard (cabin)	h6 (mm)	2110	2110	2110	2110	2110	2110	2110	2110	2110	
	4.8 Height of seat/stand-on platform	h7 (mm)	910 - 1040	910 - 1040	910 - 1040	910 - 1040	910 - 1040	910 - 1040	910 - 1040	910 - 1040	910 - 1040	
	4.19 Overall length	l1 (mm)	2351	2403	2421	2356	2403	2426	2475	2547	2563	
	4.20 Length to fork face	l2 (mm)	1201	1253	1273	1206	1253	1278	1325	1397	1413	
	4.21 Overall width	b1/b2 (mm)	1270	1270	1140	1270	1270	1140	1270	1270	1140	
	4.22 Fork dimensions	s/e/l (mm)	40 x 80 x 1150	45 x 100 x 1150	40 x 80 x 1150	45 x 100 x 1150	45 x 100 x 1150	45 x 100 x 1150	45 x 100 x 1150	45 x 100 x 1150	45 x 100 x 1150	
	4.23 Fork carriage to ISO 2328, class/type A, B		2A	2A	2A	2A	2A	2A	2A	2A	2A	
	4.24 Width of fork carriage	b3 (mm)	830	830	830	830	830	830	830	830	830	
	4.25 Fork spread, min/max	b5 (mm)	296 / 690	316 / 710	316 / 520	296 / 690	316 / 710	316 / 520	316 / 710	316 / 710	316 / 520	
	4.26 Width between reach legs	b4 (mm)	920	920	790	920	920	790	920	920	790	
4.28 Reach travel	l4 (mm)	585	465	587	657	537	587	567	639	479		
4.31 Ground clearance, below mast	m1 (mm)	75	75	75	75	75	75	75	75	75		
4.32 Ground clearance, centre of wheelbase	m2 (mm)	70	70	70	70	70	70	70	65	70		
4.33 Aisle width with pallet 1000 x 1200 across forks	Ast (mm)	2689 ¹⁾	2781 ¹⁾	2738 ¹⁾	2713 ¹⁾	2797 ¹⁾	2741 ¹⁾	2865 ¹⁾	2950 ¹⁾	2913 ¹⁾		
4.34 Aisle width with pallet 800 x 1200 along forks	Ast (mm)	2735 ¹⁾	2848 ¹⁾	2784 ¹⁾	2746 ¹⁾	2852 ¹⁾	2788 ¹⁾	2920 ¹⁾	2992 ¹⁾	2982 ¹⁾		
4.35 Turning radius	Wa (mm)	1640	1640	1690	1710	1710	1690	1778	1915	1760		
4.37 Length of chassis	l7 (mm)	1737	1737	1819	1817	1817	1819	1922	2066	1924		
Performance	5.1 Travel speed, with/without load	(km/h)	14 / 14 ²⁾³⁾	14 / 14 ²⁾³⁾	14 / 14 ²⁾³⁾	14 / 14 ²⁾³⁾	14 / 14 ²⁾³⁾	14 / 14 ²⁾³⁾	14 / 14 ²⁾³⁾	14 / 14 ²⁾³⁾	14 / 14 ²⁾³⁾	
	5.2 Lifting speed, with/without load	(m/s)	0.55 / 0.7	0.45 / 0.65	0.55 / 0.7	0.45 / 0.7	0.45 / 0.65	0.45 / 0.7	0.45 / 0.65	0.45 / 0.65	0.44 / 0.52	
	5.3 Lowering speed, with/without load	(m/s)	0.55 / 0.55	0.55 / 0.4	0.55 / 0.55	0.55 / 0.55	0.55 / 0.4	0.55 / 0.55	0.55 / 0.4	0.55 / 0.4	0.55 / 0.52	
	5.4 Reach speed, with/without load	(m/s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
	5.8 Maximum climbing ability, with/without load	(%)	10.0 / 10.0	10.0 / 10.0	10.0 / 10.0	10.0 / 10.0	10.0 / 10.0	10.0 / 10.0	10.0 / 10.0	10.0 / 10.0	10.0 / 10.0	
5.9 Acceleration time, with/without load	(s)	3.8 / 3.6	3.8 / 3.6	3.8 / 3.6	3.8 / 3.6	3.8 / 3.6	3.8 / 3.6	3.8 / 3.6	3.8 / 3.6	3.8 / 3.6		
5.10 Service brake		hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.		
Drive	6.1 Drive motor, 60 minute rating	(kW)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	
	6.2 Lift motor rating at S3 15%	(kW)	14	14	14	14	14	14	14	14	14	
	6.3 Battery according to DIN 43531/35/36 A,B,C,no		43 531 / C	43 531 / C	43 531 / B	43 531 / C	43 531 / C	43 531 / B	43 531 / C	43 531 / C	43 531 / B	
	6.4 Battery voltage/rated capacity (5h)	(V/Ah)	48 / 420 ⁴⁾	48 / 560 ⁴⁾	48 / 420 ⁴⁾	48 / 420 ⁴⁾	48 / 560 ⁴⁾	48 / 420 ⁴⁾	48 / 700 ⁴⁾	48 / 840 ⁴⁾	48 / 700 ⁴⁾	
	6.5 Battery weight (± 5%)	(kg)	750	939	746	750	939	746	1119	1306	1119	
6.6 Power consumption according to VDI cycle	(kWh/h)	upon request	upon request	upon request	upon request	upon request	upon request	upon request	upon request	upon request		
Others	8.2 Operating pressure for attachments	(bar)	200	200	200	200	200	200	200	200	200	
	8.3 Oil flow for attachments	(l/min)	10	10	10	10	10	10	10	10	10	
	8.4 Noise level at operator's ear	(dB(A))	63	63	63	63	63	63	64	64	64	

1) Including a 200 mm (min.) operating aisle clearance.
2) forward; backward

3) Depending on performance setting
4) Alternative batteries may alter l1, Ast and service weight.



Triplex clearview fixed masts with tilting carriage (2° forward, 4° back) and integrated sideshift (80 mm each side)
R 14 and R 14 N

	h3	4660	5160	5760	6260	6660	6960	7260	7560	7960	8260	8560	-	-	-
Lift	h3	4660	5160	5760	6260	6660	6960	7260	7560	7960	8260	8560	-	-	-
Free lift	h2	1286	1436	1636	1811	1936	2061	2161	2261	2411	2581	2681	-	-	-
Height of mast, lowered	h1	2135	2285	2485	2660	2785	2910	3010	3110	3260	3430	3530	-	-	-
Height of mast, extended	h4	5549	6049	6649	7149	7549	7849	8149	8449	8849	9149	9449	-	-	-

R 16 and R 16 N

	h3	4660	5160	5760	6260	6660	6960	7260	7560	7960	8260	8560	-	-	-
Lift	h3	4660	5160	5760	6260	6660	6960	7260	7560	7960	8260	8560	-	-	-
Free lift	h2	1286	1436	1636	1811	1936	2061	2161	2261	2411	2581	2681	-	-	-
Height of mast, lowered	h1	2135	2285	2485	2660	2785	2910	3010	3110	3260	3430	3530	-	-	-
Height of mast, extended	h4	5549	6049	6649	7149	7549	7849	8149	8449	8849	9149	9449	-	-	-

The following lifts are available within the parameters indicated for the models shown:
R 14 HD: 4355 - 9500 mm, R 16 HD: 4355 - 11500 mm, R 20: 4355 - 11500 mm, R 20 N: 4355 - 9500 mm

	h3	4355	4655	5155	5755	6355	6655	6955	7255	7555	7955	8255	8555	8955	9155
Lift	h3	4355	4655	5155	5755	6355	6655	6955	7255	7555	7955	8255	8555	8955	9155
Free lift	h2	1001	1101	1251	1451	1651	1751	1851	1951	2051	2201	2301	2401	2526	2601
Height of mast, lowered	h1	2130	2230	2380	2580	2780	2880	2980	3080	3180	3330	3430	3530	3655	3730
Height of mast, extended	h4	5101	5401	5901	6501	7101	7401	7701	8001	8301	8701	9001	9301	9701	9901

R 14 HD: 4355 - 9500 mm, R 16 HD: 4355 - 11500 mm, R 20: 4355 - 11500 mm, R 20 N: 4355 - 9500 mm

	h3	9455	9655	9955	10155	10455	10655	10955	11155	11455	-	-	-	-
Lift	h3	9455	9655	9955	10155	10455	10655	10955	11155	11455	-	-	-	-
Free lift	h2	2701	2751	2901	3026	3176	3301	3476	3601	3801	-	-	-	-
Height of mast, lowered	h1	3830	3880	4030	4155	4305	4430	4605	4730	4930	-	-	-	-
Height of mast, extended	h4	10201	10401	10701	10901	11201	11401	11701	11901	12201	-	-	-	-

Alternative lift heights are available on request.
Lift height = h3 + s