



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 motors
Linde rheological 180° electric steering with tactile feedback
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 modes (Economy, Efficiency, Performance) for individual applications
Resiliently mounted operator's compartment
Fully adjustable air suspension seat with auto adjustment for operator's weight
Integral, adjustable control console
Generous storage compartments
Lift height indicator above free lift zone
Key switch, or alternatively PIN code access

Mast:

Torsion-resistant fixed clear view triplex mast
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
Lift height related travel speed reduction
Emergency isolator
Battery lock with creep speed interlock
Electrical and hydraulic overload protection
Protective polycarbonate screen between console and mast
Electric horn

Optional Equipment

Fixed clear view triplex masts with lift heights from 4355 mm to 12955 mm
Side shift centering
Horizontal fork leveling
Soft landing of forks
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
Leather reinforced seat squab
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, split screen image *
Fan 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 1000 - 2500 kg R 10 - R 25 / HD / N / W

Series 1120

Safety

With four independent braking systems, fail-to-safe dual circuitry and an impressive range of operator protection features, 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 sees the operator's work station resiliently mounted to the base chassis isolating the operator from shocks and vibrations. An ergonomic, fully adjustable air suspension seat and integral control console housing the fingertip joystick hydraulic levers together with a compact steering wheel gives unsurpassed levels of operator comfort. 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 can fully focus on the task.



Reliability

Durability and reliability are key elements in delivering cost effective supply chain solutions. Linde reach trucks benefit from the experience of over 50 years working in heavy industrial and commercial applications. All key components are designed and manufactured in-house to achieve these objectives. High residual capacities also result from this knowledge.

Productivity

The outstanding Linde Performance range of reach trucks is designed to provide consistently high productivity by ensuring the optimum intuitive working interface between the operator and the truck. This interface combines with the unique Linde design and performance features to deliver the lowest cost per pallet handled.

Features

Superb working environment

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

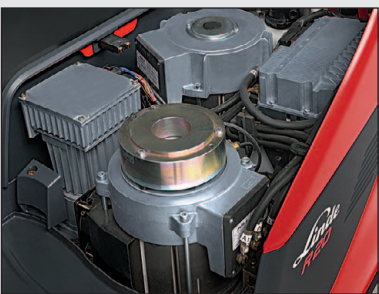


Linde twin accelerator pedals

- Seamless and effortless forward/reverse selection provides outstanding traction control and places minimal demands on operator
- His left foot is safely protected within the chassis contours
- The operator is able to maintain high levels of efficiency and productivity

Manoeuvrability

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



Precision

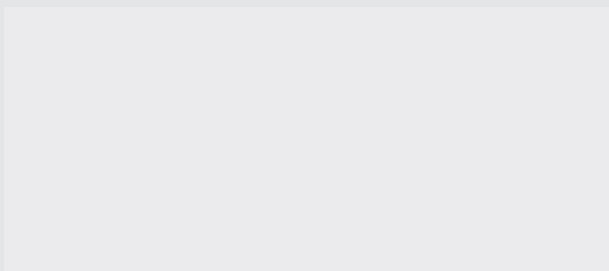
- Confident, seamless manoeuvring with unique Linde twin accelerator pedals
- High precision load handling with Linde Load Control
- Highly responsive and progressive electric rheological steering
- Digital instrument display for instant readout of truck status
- Integral, adjustable operator's control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

Batteries

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

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



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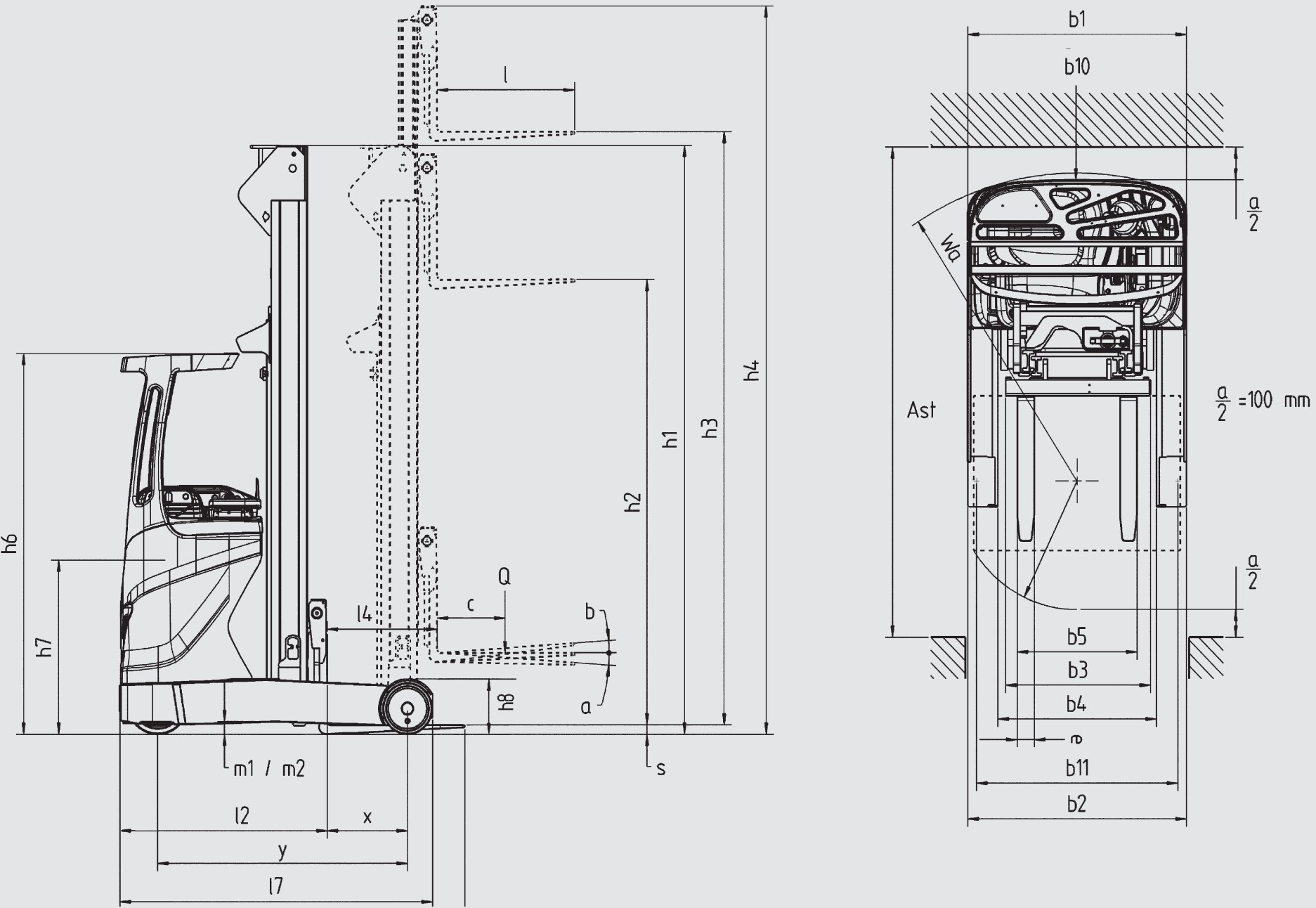
Subject to modification in the interest of progress. Illustrations and technical details could include options and not binding for actual constructions. All dimensions subject to usual tolerances.

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Technical Data according to VDI 2198

Characteristics	1.1	Manufacturer		LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE
	1.2	Model designation		R10N	R12N	R14	R14HD	R14N	R16	R16HD	R16N	R20	R20HD	R20N	R20W-1470	R20W-1670	R25
	1.2a	Series		1120-00	1120-00	1120-00	1120-00	1120-00	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	Battery	Battery	Battery	Battery	Battery
	1.4	Operation		Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat
Weights	1.5	Load capacity/Load	Q (t)	1.0	1.2	1.4	1.4	1.4	1.6	1.6	1.6	2.0	2.0	2.0	2.0	2.0	2.5
	1.6	Load centre	c (mm)	600 / 500	600 / 500	600 / 500	600 / 500	600 / 500	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)	223	223	399	275	401	466	347	396	347	419	259	347	347	419
	1.9	Wheelbase	y (mm)	1275	1275	1381	1381	1453	1453	1453	1453	1525	1669	1525	1525	1525	1669
	2.1	Service weight	(kg)	3050 ¹⁾	3050 ¹⁾	3065 ¹⁾	3735 ¹⁾	3080 ¹⁾	3075 ¹⁾	3955 ¹⁾	3080 ¹⁾	4380 ¹⁾	5135 ¹⁾	4235 ¹⁾	4465 ¹⁾	4515 ¹⁾	5135 ¹⁾
Wheels / Tyres	2.3	Axle load without load, front/rear	(kg)	1760 / 1290	1760 / 1290	1940 / 1125	2090 / 1645	1920 / 1160	1995 / 1080	2330 / 1625	1920 / 1160	2540 / 1840	2945 / 2190	2280 / 1955	2600 / 1865	2640 / 1875	2945 / 2190
	2.4	Axle load, fork outreached, with load, front/rear	(kg)	600 / 3450	477 / 3773	665 / 3800	810 / 4325	706 / 3774	745 / 3930	815 / 4740	600 / 4080	695 / 5685	1020 / 6115	645 / 5590	755 / 5710	795 / 5720	765 / 6870
	2.5	Axle load, fork retracted, with load, front/rear	(kg)	1464 / 2586	1405 / 2845	1736 / 2729	1761 / 3374	1728 / 2752	1847 / 2828	2051 / 3504	1695 / 2985	2208 / 4172	2728 / 4407	1833 / 4402	2268 / 4197	2308 / 4207	2674 / 4961
	3.1	Tyres rubber, SE, pneumatic, polyurethane		Polyurethane	Polyurethane	Polyurethane	Polyurethane	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 140	Ø 360 x 140	Ø 360 x 140	Ø 360 x 140	Ø 360 x 140	Ø 360 x 140
Dimensions	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 285 x 100	Ø 285 x 100	Ø 350 x 100	Ø 350 x 100	Ø 350 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	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	0	0	0	0	0	0
	3.7	Track width, rear	b11 (mm)	1037	1037	1167	1167	1037	1167	1167	1037	1167	1167	1037	1367	1567	1167
	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	2.0 / 4.0	2.0 / 4.0	2.0 / 4.0	2.0 / 4.0	2.0 / 4.0
Performance	4.2	Height of mast, lowered	h1 (mm)	2485	2485	2485	3180	2485	2485	2485	2485	3655	4930	3655	3655	3655	4930
	4.3	Free lift	h2 (mm)	1636	1636	1636	2051	1636	1636	1636	2301	1636	2776	3800	2776	2776	3800
	4.4	Lift	h3 (mm)	5760	5760	5760	7555	5760	5760	5760	8255	5760	8955	11455	8955	8955	11455
	4.5	Height of mast, extended	h4 (mm)	6649	6649	6649	8301	6649	6649	6649	9001	6649	9701	12201	9701	9701	12201
	4.7	Height of overhead guard (cabin)	h6 (mm)	2110 ²⁾	2110 ²⁾	2110 ²⁾	2110 ²⁾	2110 ²⁾	2110 ²⁾	2110 ²⁾	2110 ²⁾	2110 ²⁾	2110 ²⁾	2110 ²⁾	2110 ²⁾	2110 ²⁾	2110 ²⁾
Drive	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	910 - 1040	910 - 1040	910 - 1040	910 - 1040	910 - 1040
	4.10	Height of reach legs	h8 (mm)	307.5	307.5	307.5	307.5	307.5	307.5	307.5	307.5	372.5	372.5	372.5	372.5	372.5	372.5
	4.19	Overall length	l1 (mm)	2423 ¹⁾	2423 ¹⁾	2351 ¹⁾	2475 ¹⁾	2423 ¹⁾	2356 ¹⁾	2475 ¹⁾	2428 ¹⁾	2547 ¹⁾	2619 ¹⁾	2635 ¹⁾	2547 ¹⁾	2547 ¹⁾	2619 ¹⁾
	4.20	Length to fork face	l2 (mm)	1273	1273	1201	1325	1273	1206	1325	1278	1397	1469	1485	1397	1397	1469
	4.21	Overall width	b1/b2 (mm)	1140	1140	1270	1270	1140	1270	1270	1140	1270	1270	1140	1470	1670	1270
Others	4.22	Fork dimensions	s/e/l (mm)	40 x 80 x 1150	40 x 80 x 1150	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	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	2A	2A	2A	2A	2A
	4.24	Width of fork carriage	b3 (mm)	830	830	830	830	830	830	830	830	830	830	830	830	830	830
	4.25	Fork spread, min/max	b5 (mm)	316 / 600	316 / 600	296 / 690	316 / 710	316 / 600	296 / 690	316 / 710	316 / 600	316 / 710	316 / 710	316 / 600	316 / 710	316 / 710	316 / 710
	4.26	Width between reach legs	b4 (mm)	790	790	920	920	790	920	920	790	920	920	790	1120	1320	920
Performance	4.28	Reach travel	l4 (mm)	409	409	585	465	587	657	537	587	567	639	479	567	567	639
	4.31	Ground clearance, below mast	m1 (mm)	75	75	75	75	75	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	70	70	65	70	70	70	65
	4.33	Aisle width with pallet 1000 x 1200 across forks	Ast (mm)	2702 ^{1) 3) 4)}	2702 ^{1) 3) 4)}	2689 ^{1) 3) 4)}	2781 ^{1) 3) 4)}	2738 ^{1) 3) 4)}	2713 ^{1) 3) 4)}	2797 ^{1) 3) 4)}	2741 ^{1) 3) 4)}	2865 ^{1) 3) 4)}	2950 ^{1) 3) 4)}	2913 ^{1) 3) 4)}	2897 ^{1) 3) 4)}	2937 ^{1) 3) 4)}	2950 ^{1) 3) 4)}
	4.34	Aisle width with pallet 800 x 1200 along forks	Ast (mm)	2776 ^{1) 3) 4)}	2776 ^{1) 3) 4)}	2735 ^{1) 3) 4)}	2848 ^{1) 3) 4)}	2784 ^{1) 3) 4)}	2746 ^{1) 3) 4)}	2852 ^{1) 3) 4)}	2788 ^{1) 3) 4)}	2920 ^{1) 3) 4)}	2992 ^{1) 3) 4)}	2982 ^{1) 3) 4)}	2952 ^{1) 3) 4)}	2992 ^{1) 3) 4)}	2992 ^{1) 3) 4)}
Performance	4.35	Turning radius	Wa (mm)	1520 ³⁾	1520 ³⁾	1640 ³⁾	1640 ³⁾	1690 ³⁾	1710 ³⁾	1710 ³⁾	1690 ³⁾	1778 ³⁾	1915 ³⁾	1760 ³⁾	1810 ³⁾	1850 ³⁾	1915 ³⁾
	4.37	Length of chassis	l7 (mm)	1641	1641	1737	1737	1819	1817	1817	1819	1922	2066	1924	1922	1922	2066
	5.1	Travel speed, with/without load	(km/h)	14 / 14 ^{4) 7)}	14 / 14 ^{4) 7)}	14 / 14 ^{4) 7)}	14 / 14 ^{4) 7)}	14 / 14 ^{4) 7)}	14 / 14 ^{4) 7)}	14 / 14 ^{4) 7)}	14 / 14 ^{4) 7)}	14 / 14 ^{4) 7)}	14 / 14 ^{4) 7)}	14 / 14 ^{4) 7)}	14 / 14 ^{4) 7)}	14 / 14 ^{4) 7)}	14 / 14 ^{4) 7)}
	5.2	Lifting speed, with/without load	(m/s)	0.57 / 0.7	0.55 / 0.7	0.53 / 0.7	0.55 / 0.66	0.53 / 0.7	0.51 / 0.7	0.52 / 0.66	0.51 / 0.7	0.46 / 0.66	0.46 / 0.66	0.43 / 0.52	0.46 / 0.66	0.46 / 0.66	0.39 / 0.66
	5.3	Lowering speed, with/without load	(m/s)	0.58 / 0.47	0.56 / 0.47	0.53 / 0.47	0.55 / 0.44	0.53 / 0.47	0.47 / 0.47	0.55 / 0.44	0.47 / 0.47	0.55 / 0.44	0.55 / 0.44	0.55 / 0.44	0.55 / 0.44	0.55 / 0.44	0.55 / 0.44
Drive	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	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	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)	4.7 / 4.6	4.7 / 4.6	4.7 / 4.6	4.8 / 4.7	4.7 / 4.6	4.8 / 4.7	4.9 / 4.7	4.8 / 4.6	5.1 / 4.7	5.3 / 4.8	5.1 / 4.7	5.2 / 4.7	5.2 / 4.7	5.4 / 4.8
	5.10	Service brake		hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.
	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	6.5	6.5	6.5	6.5	6.5
Others	6.2	Lift motor, rating at 53 15%	(kW)	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	6.3	Battery according to DIN 43531/35/36 A,B,C,no		43 531 / B	43 531 / B	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	43 531 / C	43 531 / C	43 531 / C
	6.4	Battery voltage/rated capacity (Sh)	(V/Ah)	48 / 420/465 ¹⁾	48 / 420/465 ¹⁾	48 / 420/465 ¹⁾	48 / 560/620 ¹⁾	48 / 420/465 ¹⁾	48 / 420/465 ¹⁾	48 / 560/620 ¹⁾	48 / 420/465 ¹⁾	48 / 700/775 ¹⁾	48 / 840/930 ¹⁾	48 / 700/775 ¹⁾	48 / 700/775 ¹⁾	48 / 700/775 ¹⁾	48 / 840/930 ¹⁾
	6.5	Battery weight (± 5%)	(kg)	746	746	750	939	746	750	939	746	1119	1306	1119	1119	1119	1306
	6.6	Power consumption according to VDI cycle	(kWh/h)	upon request	upon request	3.49	upon request	upon request	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	200	200	200	200	200
	8.3	Oil flow for attachments	(l/min)	10	10	10	10	10	10	10	10	10					

1) Alternative batteries may alter l1, Ast and service weight.
2) With Cabin + 95 mm
3) Including a 200 mm (min.) operating aisle clearance.
4) Some truck specification require a reach-back restriction. Please note information in Linde
World mast table.
5) Attention, with cabin increased turning radius (Wa) due to required fender.
6) forward; backward
7) Depending on performance setting



Triplex clearview fixed masts with tilting carriage (2° forward, 4° back) and integrated sideshift (80 mm each side)															
R 10 N, R 12 N, R 14 N and R 14															
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	2511	2636	-	-	-
Height of mast, lowered	h1	2135	2285	2485	2660	2785	2910	3010	3110	3260	3360	3485	-	-	-
Height of mast, extended	h4	5549	6049	6649	7149	7549	7849	8149	8449	8849	9149	9449	-	-	-
R 16 and R 16 N															
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	2511	2636	-	-	-
Height of mast, lowered	h1	2135	2285	2485	2660	2785	2910	3010	3110	3260	3360	3485	-	-	-
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 - 9455 mm, R 16 HD: 4355 - 11455 mm, R 20: 4355 - 11455 mm, R 20 HD: 4355 - 12955 mm, R 20 N: 4355 - 9455 mm, R 25: 4355 - 7955 mm															
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 - 9455 mm, R 16 HD: 4355 - 11455 mm, R 20: 4355 - 11455 mm, R 20 HD: 4355 - 12955 mm, R 20 N: 4355 - 9455 mm, R 25: 4355 - 7955 mm															
Lift	h3	9455	9655	9955	10155	10455	10655	10955	11155	11455	11755	11955	12255	12455	12955
Free lift	h2	2701	2751	2901	3026	3176	3301	3476	3601	3801	3975	4100	4300	4425	4800
Height of mast, lowered	h1	3830	3880	4030	4155	4305	4430	4605	4730	4930	5150	5230	5430	5555	5930
Height of mast, extended	h4	10201	10401	10701	10901	11201	11401	11701	11901	12201	12501	12701	13001	13201	13701
Alternative lift heights are available on request. Lift height = h3 + s															