

Standard and optional equipment

Standard equipment

General

Three-wheel configuration
 Overall width (reach legs) 1250 mm
 Linde Load Control for lift/lower, reach, tilt and sideshift
 Linde twin accelerator pedals
 Full suspension fabric seat with electric lumbar support
 Comprehensive digital instrument display
 6.5 kW maintenance-free AC drive motor
 14 kW maintenance-free AC lift motor
 Polyurethane drive and load wheel tyres
 Self-adjusting service brakes
 Linde proportional 180° electric steering
 Clearview triplex mast lift 4655 mm (R 14 to R 20),
 6355 mm (R 14 HD & R 16 HD)
 Tilting carriage and integral sideshift
 Fork length 1150 mm
 Standard colour scheme - vermilion and charcoal grey

Batteries and chargers

48 V, 360 Ah to 700 Ah
 Wide selection of chargers available to suit application

Electronics

Linde Digital Control system (LDC) incorporating
 CAN bus technology

Optional equipment

Narrow chassis 1080 mm (R 14 N, R 16 N & R 20 N)
 Wide chassis 1400 mm/1600 mm (R 20)
 Triplex mast lifts to 8555 mm (R 14, R 14 HD & R 14 N),
 9455 mm (R 16, R 16 N & R 20 N), 11455 mm (R 16 HD & R 20)
 Single accelerator pedal, automotive layout with left foot
 interlock
 Alternative fork lengths
 Fork extensions
 Load backrest
 Single axis joysticks for all hydraulic functions
 Audible traction alarm
 360° steering (single accelerator pedal only)
 Seat heater
 PVC seat material
 Seat back extension
 Variable electronic drive unit brake
 Cold store protection to minus 30°C

Safety

Monitoring system stops truck in the event of
 traction, steering or lift failure
 Three independent braking systems
 All-wheel braking
 Emergency isolator
 Seat-actuated traction interlock
 Electric horn
 Automatic slowdown at maximum lift
 Automatic slowdown at end of reach travel
 Protective polycarbonate screen between control console
 and mast
 Battery locking interlock
 Electrical and hydraulic overload protection
 Overhead guard
 Automatic creep speed above 8500 mm lift

Mast

Torsion resistant fixed triplex clearview mast
 Tilting fork carriage
 Integral sideshift
 High residual capacities

Cold store cab (not with narrow chassis)
 Ambient cab (not with narrow chassis)
 Height pre-selector
 Height indicator
 PIN access
 LFM
 CCTV
 Working lamps/beacons
 Additional hydraulic circuit
 Mesh or polycarbonate protection on overhead guard
 Profiled overhead guard for drive-in racking
 Side guidance wheels
 Load wheel protection
 Battery on rollers
 Battery roller stand
 Alternative colour schemes

Other options available on request



Electric Reach Trucks
 Capacity 1400 kg – 2000 kg
 R 14 S, R 16 S, R 20 S *Active* SERIES 115-03

Linde Material Handling *Linde*

Safety

The Linde Active range has established itself as a leading performer in intensive narrow aisle storage and retrieval applications, with superb levels of operator comfort, safety and impressive productivity ratios.

Performance

The Linde Active drive and lift concept employing advanced Linde control technology translates the powerful output of the AC motors into seamless productivity. A comprehensive selection of batteries ensures that each truck is precisely matched to the demands of individual applications.

Comfort

A perfect interface between operator and truck has been achieved with the Linde ergonomic design concept, including spacious cab, comfort-class seat with lumbar support and intuitive layout of all controls. The operator's working environment ensures optimum performance.

Features

Superb working environment

→ Linde Load Control: Precise, effortless fingertip control of all mast movements
 → Ergonomic, full suspension comfort-class seat fully adjustable to the operator's personal preferences
 → Adjustable steering console

Manoeuvrability

→ A short wheelbase, compact chassis dimensions and smooth electric power steering ensure easy and efficient manoeuvring

Linde clearview mast

→ Torsion-resistant fixed triplex clearview mast
 → Hydraulic hoses are reeved through the mast to enhance visibility

Stability

→ Chassis designed and built for maximum strength and durability
 → Heavy-duty construction materials and components provide low centre of gravity for stability and high residual capacities

Linde twin accelerator pedals

→ Effortless forward/reverse selection places minimal demands on operator
 → Operator is able to maintain high efficiency and productivity levels



Precision

→ Assured manoeuvring with Linde twin accelerator pedals
 → Precision load handling with Linde Load Control
 → Responsive progressive and adjustable electric steering with essential 'road feel'
 → Digital instrument display for instant readout of truck status
 → Excellent visibility of load and surrounding environment



Batteries

→ Capacities to suit every type of application: 360 Ah to 700 Ah
 → Quick and easy battery change



Servicing

→ Maintenance-free AC traction and lift motors
 → Configurable Linde Digital Control system
 → Incorporates diagnostic technology
 → Easy service access
 → Up to 1000 operating hours between services

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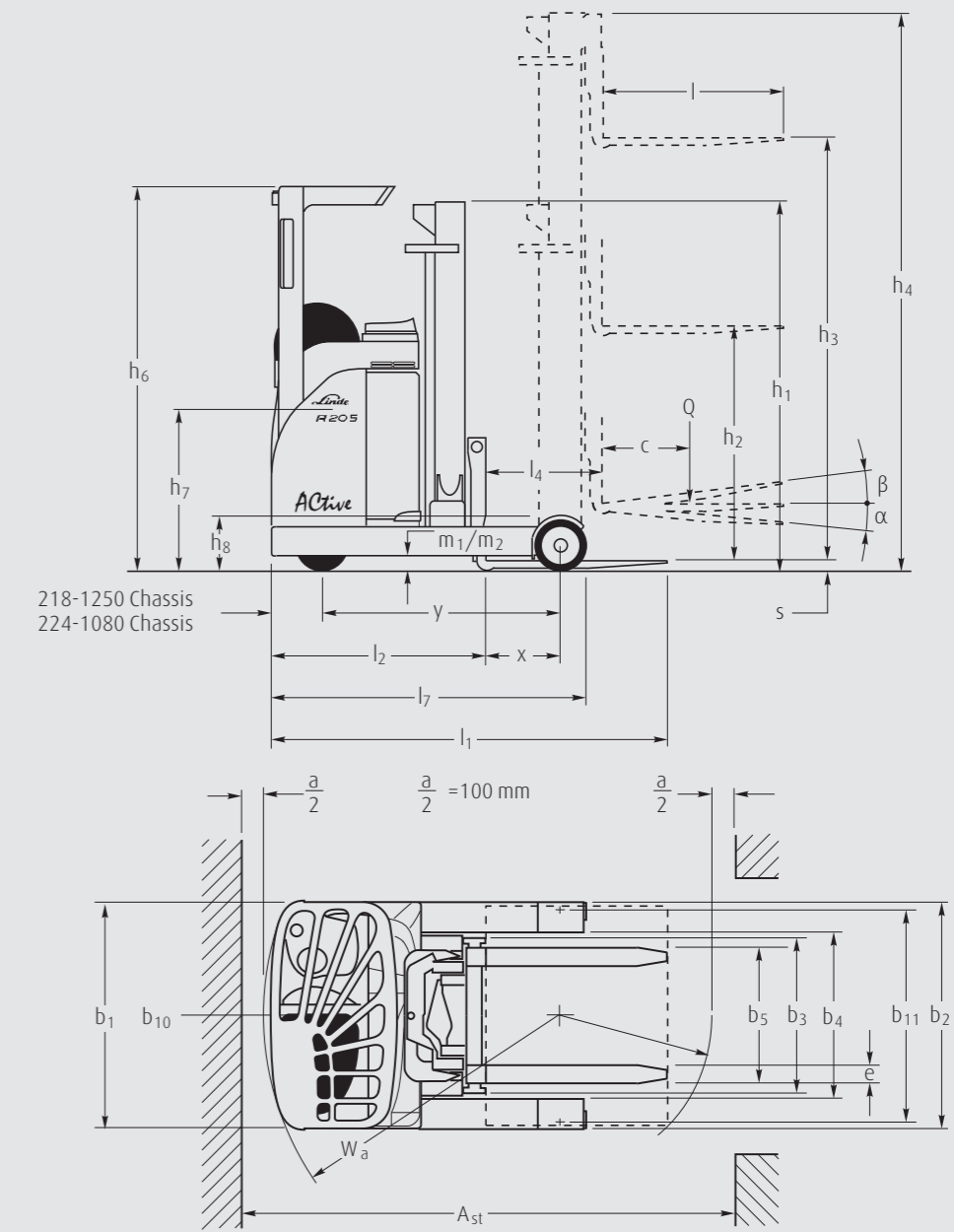
Technical data

Characteristics	LINDE									
	R14 ACtive	R14HD ACtive	R14N ACtive	R16 ACtive	R16HD ACtive	R16N ACtive	R20 ACtive	R20N ACtive	R20N ACtive	R20N ACtive
1.1 Manufacturer	LINDE									
1.2 Model designation	R14 ACtive									
1.3 Power unit: battery, diesel, petrol, LP gas, mains power	Battery									
1.4 Operation: manual, pedestrian, stand-on, seated, order picker	seated									
1.5 Load capacity	Q (kg)	1400 ³⁾	1400 ³⁾	1400 ³⁾	1600 ³⁾	1600 ³⁾	1600 ³⁾	2000 ³⁾	2000 ³⁾	2000 ³⁾
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)	311	270	346	416	380	346	475	385	385
1.9 Wheelbase	y (mm)	1275	1275	1385	1385	1385	1385	1520	1520	1520
2.1 Service weight	kg	2890 ⁴⁾	3020 ⁴⁾	2820 ⁴⁾	2940 ⁴⁾	3070 ⁴⁾	2820 ⁴⁾	3260 ⁴⁾	3100 ⁴⁾	3100 ⁴⁾
2.3 Axle load without load, front (drive)/rear (load)	kg	1800/1090 ⁴⁾	1830/1190 ⁴⁾	1760/1060 ⁴⁾	1900/1040 ⁴⁾	1995/1075 ⁴⁾	1760/1060 ⁴⁾	2120/1140 ⁴⁾	1840/1260 ⁴⁾	1840/1260 ⁴⁾
2.4 Axle load, fork outreached with load, front (drive)/rear (load)	kg	520/3770 ⁴⁾	500/3920 ⁴⁾	585/3635 ⁴⁾	520/4010 ⁴⁾	420/4250 ⁴⁾	465/3955 ⁴⁾	630/4630 ⁴⁾	600/4500 ⁴⁾	600/4500 ⁴⁾
2.5 Axle load, fork retracted with load, front (drive)/rear (load)	kg	1485/2805 ⁴⁾	1480/2940 ⁴⁾	1500/2720 ⁴⁾	1690/2850 ⁴⁾	1740/2930 ⁴⁾	1460/2960 ⁴⁾	1960/3300 ⁴⁾	1555/3545 ⁴⁾	1555/3545 ⁴⁾
3.1 Tyres, front (drive)/rear (load) C = cushion rubber, P = polyurethane	P/P	P/P	P/P	P/P	P/P	P/P	P/P	P/P	P/P	P/P
3.2 Tyre size, front (drive) wheel	mm	343 x 135	343 x 135	343 x 135	343 x 135	343 x 135	343 x 135	343 x 135	343 x 135	343 x 135
3.3 Tyre size, rear (load) wheel	mm	285 x 100	285 x 100	285 x 100	285 x 100	285 x 100	285 x 100	350 x 100	350 x 100	350 x 100
3.5 Wheels, number front (drive)/rear (load) (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 (drive)	b10 mm	0	0	0	0	0	0	0	0	0
3.7 Track width, rear (load)	b11 mm	1150	1150	980	1150	1150	980	1150	980	980
4.1 Mast/fork carriage tilt, forward/backward	α/β (°)	2/4	2/4	2/4	2/4	2/4	2/4	2/4	2/4	2/4
4.2 Height of mast, lowered	h1 (mm)	2110	2930	2110	2110	2930	2110	2476	2476	2476
4.3 Free lift	h2 (mm)	1261	2081	1261	1261	2081	1261	1627	1627	1627
4.4 Lift	h3 (mm)	4655 ⁵⁾	6355 ⁵⁾	4655 ⁵⁾	4655 ⁵⁾	6355 ⁵⁾	4655 ⁵⁾	6355 ⁵⁾	4655 ⁵⁾	4655 ⁵⁾
4.5 Height of mast, extended	h4 (mm)	5395	7139	5395	5395	7139	5395	7139	5395	5395
4.7 Height of overhead guard (cab)	h6 (mm)	2110	2110	2110	2110	2110	2110	2110	2110	2110
4.8 Height of seat, minimum/maximum	h7 (mm)	940/1030	940/1030	940/1030	940/1030	940/1030	940/1030	940/1030	940/1030	940/1030
4.10 Height of reach legs	h8 (mm)	310	310	310	310	310	310	373	373	373
4.19 Overall length	l1 (mm)	2334	2375	2415	2339	2375	2415	2411	2511	2511
4.20 Length to fork face	l2 (mm)	1184	1225	1265	1189	1225	1265	1261 ³⁾	1361 ³⁾	1361 ³⁾
4.21 Overall width	b1/b2 (mm)	1234/1250	1234/1250	1054/1080	1234/1250	1234/1250	1054/1080	1234/1250 ⁴⁾	1054/1080	1054/1080
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 DIN 15173, class/form 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, minimum/maximum	b5 (mm)	296/690	316/710	316/520	316/710	316/710	316/520	316/710	316/520	316/520
4.26 Width between reach legs	b4 (mm)	922	922	752	922	922	752	922	752	752
4.28 Reach travel	l4 (mm)	496	460	536	606	570	536	695	608	608
4.31 Ground clearance, mast	m1 (mm)	75	75	75	75	75	75	75	75	75
4.32 Ground clearance, centre of wheelbase	m2 (mm)	75	75	75	75	75	75	75	75	75
4.33 Aisle width, pallet 1000 x 1200 across forks	Ast (mm)	2655	2685	2710	2675	2705	2710	2770 ³⁾	2810 ³⁾	2810 ³⁾
4.34 Aisle width, pallet 800 x 1200 along forks	Ast (mm)	2715	2750	2765	2720	2765	2765	2805 ³⁾	2860 ³⁾	2860 ³⁾
4.35 Turning radius	Wa (mm)	1540	1540	1620	1640	1640	1620	1775	1750	1750
4.37 Length of chassis	l7 (mm)	1638	1638	1754	1748	1748	1754	1911	1921	1921
5.1 Travel speed, with/without load	km/h	13.5/13.5 ⁶⁾	13.5/13.5 ⁶⁾	13.5/13.5 ⁶⁾	13.5/13.5 ⁶⁾	13.5/13.5 ⁶⁾	13.5/13.5 ⁶⁾	13.5/13.5 ⁶⁾	13.5/13.5 ⁶⁾	13.5/13.5 ⁶⁾
5.2 Lifting speed, with/without load	m/s	0.42/0.66 ⁴⁾	0.36/0.51 ⁴⁾	0.42/0.66 ⁴⁾	0.40/0.66 ⁴⁾	0.35/0.51 ⁴⁾	0.40/0.66 ⁴⁾	0.32/0.51 ⁴⁾	0.33/0.51 ⁴⁾	0.33/0.51 ⁴⁾
5.3 Lowering speed, with/without load	m/s	0.55/0.45 ⁴⁾	0.55/0.45 ⁴⁾	0.55/0.45 ⁴⁾	0.55/0.45 ⁴⁾	0.55/0.45 ⁴⁾	0.55/0.45 ⁴⁾	0.55/0.45 ⁴⁾	0.55/0.45 ⁴⁾	0.55/0.45 ⁴⁾
5.4 Reach speed, with/without load	m/s	0.15/0.15 ⁴⁾	0.15/0.15 ⁴⁾	0.15/0.15 ⁴⁾	0.15/0.15 ⁴⁾	0.15/0.15 ⁴⁾	0.15/0.15 ⁴⁾	0.15/0.15 ⁴⁾	0.15/0.15 ⁴⁾	0.15/0.15 ⁴⁾
5.7 Climbing ability, with/without load, 30 minute rating	%	4.5/8.2	4.5/8.2	4.3/8	4.7/8.2	4.3/8	3.9/7.1	3.9/7.2	3.9/7.2	3.9/7.2
5.8 Maximum climbing ability, with/without load, 5 minute rating	%	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10
5.9 Acceleration time, with/without load	s	5.5/4.8 ⁷⁾	5.8/5 ⁷⁾	5.5/4.8 ⁷⁾	5.5/4.8 ⁷⁾	5.8/5 ⁷⁾	5.5/4.8 ⁷⁾	5.8/5 ⁷⁾	5.8/5 ⁷⁾	5.8/5 ⁷⁾
5.10 Service brake		Hydraulic/electric	Hydraulic/electric	Hydraulic/electric	Hydraulic/electric	Hydraulic/electric	Hydraulic/electric	Hydraulic/electric	Hydraulic/electric	Hydraulic/electric
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, 15% rating	kW	14	14	14	14	14	14	14	14	14
6.3 Battery to DIN/IEC		43531C/254-2	43531C/254-2	43531B/254-2	43531C/254-2	43531C/254-2	43531B/254-2	43531C/254-2	43531B/254-2	43531B/254-2
6.4 Battery voltage/rated capacity (5h)	V/Ah	48/420 ²⁾	48/420 ²⁾	48/420 ²⁾	48/420 ²⁾	48/420 ²⁾	48/420 ²⁾	48/560 ²⁾	48/560 ²⁾	48/560 ²⁾
6.5 Battery weight (± 5%)	kg	750	750	746	750	750	746	939	937	937
6.6 Power consumption to VDI cycle	kWh/h	7)	7)	7)	7)	7)	7)	7)	7)	7)
8.1 Type of drive control		Electronic/stepless	Electronic/stepless	Electronic/stepless	Electronic/stepless	Electronic/stepless	Electronic/stepless	Electronic/stepless	Electronic/stepless	Electronic/stepless
8.2 Working pressure for attachments	bar	200	200	200	200	200	200	200	200	200
8.3 Oil flow for attachments	l/min	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
8.4 Noise level at operator's ear	dB (A)	63 ⁸⁾	63 ⁸⁾	63	63 ⁸⁾	63 ⁸⁾	63	64 ⁸⁾	64	64

1) For all heights, see table
 2) Alternative batteries increase length to fork face and 90° stacking aisle widths
 3) Capacity may be reduced for high lifts
 4) Traction, lift, lower and reach speeds and weights may vary with alternative lift heights

5) Lifts 6355 mm and above increase length to fork face and 90° stacking aisle widths by 27 mm on R20 and R20N
 6) Alternative widths over reach legs of 1400 mm or 1600 mm are available for R20
 7) Refer to manufacturer for figures

8) Figure shown is without cab; 66 dB (A) when cab fitted
 9) Reduced speed and acceleration on request



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

R14 and R14N															
Lift	h3	4655	5155	5755	6255	6655	6955	7255	7555	7955	8255	8555	-	-	-
Free lift	h2	1261	1627	1627	2061	2061	2061	2527	2527	2527	2527	3061	-	-	-
Height of mast, lowered	h1	2110	2476	2476	2910	2910	2910	3376	3376	3376	3376	3910	-	-	-
Height of mast, extended	h4	5395	5895	6495	6995	7395	7695	7995	8295	8695	8995	9295	-	-	-
R16 and R16N															
Lift	h3	4655	5155	5755	6255	6655	6955	7255	7555	7955	8255	8555	8955	9155	9455
Free lift	h2	1261	1627	1627	2061	2061	2061	2527	2527	2527	2527	3061	3061	3061	3061
Height of mast, lowered	h1	2110	2476	2476	2910	2910	2910	3376	3376	3376	3376	3910	3910	3910	3910
Height of mast, extended	h4	5395	5895	6495	6995	7395	7695	7995	8295	8695	8995	9295	9695	9895	10195
The following lifts are available within the parameters indicated for the models shown:															
R14HD - 6355 to 8555 mm; R16HD - 6355 to 11455 mm; R20 - 4355 to 11455 mm; R20N - 4355 mm to 9455 mm															
Lift	h3	4355	4655	5155	5755	6355	6655	6955	7255	7555	7955	8255	8555	8955	9155
Free lift	h2	1261	1627	1627	2061	2081	2081	2581	2581	2581	2581	2581	3081	3081	3081
Height of mast, lowered	h1	2110	2476	2476	2910	2930	2930	3430	3430	3430	3430	3430	3930	3930	3930
Height of mast, extended	h4	5095	5395	5895	6495	7139	7439	7739	8039	8339	8739	9039	9339	9739	9939
Lift	h3	9455	9655	9955	10155	10455	10655	10955	11155	11455	-	-	-	-	-
Free lift	h2	3081	3081	3581	3581	3581	3581	4081	4081	4081	-	-	-	-	-
Height of mast, lowered	h1	3930	3930	4430	4430	4430	4430	4930	4930	4930	-	-	-	-	-
Height of mast, extended	h4	10239	10439	10739	10939	11239	11439	11739	11939	12239	-	-	-	-	-

Alternative lift heights available on request. Lift height = h3 + s + 10 mm