



Internal Combustion Engine Counterbalance Truck

H14 – H20 EVO

Capacity 1.4 t - 2.0 t | Series 391

Agile bundle of energy

- Compact dimensions for operation in tight corners
- Spacious, ergonomic workplace with outstanding visibility for maximum operating comfort
- Sturdy design for the most demanding applications in dusty environments or multi-shift operation
- Wide variety of models, comprehensive range of standard equipment, additional options and customer-specific solutions for maximum versatility
- Hydrostatic direct drive, Twin Pedal control and Linde Load Control ensure powerful, fast and precise power delivery
- Low fuel consumption, long service intervals and maintenance-free components ensure high availability and keep total cost of ownership as low as possible

STANDARD AND OPTIONAL EQUIPMENT

Model/Equipment		H14 - H20 D	H14 - H20 T	H16 - H20 CNG
Workplace	Ergonomic and safe truck access due to a low entry step and grab handle on A-pillar	●	●	●
	Innovative decoupling concept for lowest human vibrations	●	●	●
	Tilt adjustable steering column	○	○	○
	Container overhead guard: height 2133 mm	●	●	●
	Operator's seat - fast mechanical weight adjustment	●	●	●
	Additional seating options such as heating, air suspension, active seat ventilation, longitudinal suspension	○	○	○
	Swiveling operator's seat	○	○	○
	Antiglare display with fuel gauge, clock, hour meter and servicing information	●	●	●
	Display shows engine oil pressure, engine overheating, parking brake, audible warning signal for engine and hydraulic oil temperature, blocked intake filter and low fuel consumption	●	●	●
	Armoured glass top screen	○	○	○
	Radio, DAB+, MP3 Player incl. bluetooth hands-free equipment	○	○	○
	Doors with opening window	○	○	○
	Din A4 illuminated clipboard	○	○	○
	Warm water heater incl. demister/air conditioning	○	○	○
Drive and Brake System	Linde Hydrostatic Drive - for high productivity and low fuel consumption	●	●	●
	Deutz Diesel Engine EU 2016/1628 Stage 5*	●	—	—
	Deutz CNG Engine EU 2016/1628 Stage 5*	—	—	●
	Deutz LPG Engine EU 2016/1628 Stage 5*	—	●	—
	Volumetric LPG tank (36l/45l) including fill level indicator in the display	—	○	—
	LPG truck fitted with accurate ultrasonic fuel level indicator for exchange bottles	●	●	●
	Diesel particulate filter, oxidation catalysts, exhaust gas recirculation	●	—	—
	3-Way catalytic converter	—	●	●
	Engine air filter including safety elements	●	●	●
	Linde Engine Protection System (LEPS)- warning, speed reduction under critical engine conditions	●	●	●
	Hydraulic parking brake	●	●	●
	Oversized, variable displacement pump for lifting functions - reduces fuel consumption, noise and gaseous emissions	●	●	●
	High performance hydraulic filter concept, guarantees maximum oil purity and extends life of all hydraulic components	●	●	●
	Power settings - efficiency, economy or performance	○	○	○
Axles and Tyres	Super Elastic (SE) tyres	●	●	●
	Closed Shoulder tyres CS 20	○	○	○
	Pneumatic tyres	○	○	○
	Antistatic, non-marking tyres	○	○	○
	Anti-spray mudflaps front and rear	○	○	○
Mast	Top mounted tilt cylinders - including maintenance free bearings	●	●	●
	Best visibility through standard, duplex, triplex mast	●	●	●
	Electronically damped tilt stop	●	●	●
	Hydraulic accumulator protects fragile loads over rough ground	○	○	○
Attachment/ Forks	Reinforced Linde forks - easily adjustable and long life time	●	●	●
	Integral roller guided sideshift with full lift capacity	○	○	○
	Integral fork positioner "View" for high residual capacities and optimized visibility	○	○	○
Safety	Linde Curve Assist - automatic drive speed reduction when cornering	●	●	●
	Electric seat belt monitoring - visual and acoustic feedback	●	●	●
	Linde Load Assist - increased safety at high lift heights	●	●	●
	BlueSpot and TruckSpot - optical warning signal for pedestrians and operators	○	○	○
	Load weight indicator	○	○	○
	Linde Safety Pilot - load-dependent travel and lifting speed intervention plus additional functions	○	○	○
	Linde Safety Guard - truck to truck warning and truck to pedestrian warning	○	○	○
	Speed limitations (via switch, indoor-outdoor, load depending)	○	○	○
	High safety and stability ensured by Linde Protector Frame	●	●	●
Different lighting options truck lighting, working lamps, LED stripes, VertiLights	○	○	○	
Digitalisation	Data Transmission Online	○	○	○
	Data Transmission Wifi	○	○	○
	Linde connect:desk - local fleet management with different functional modules	○	○	○
	Linde connect:cloud - fleet management as a service (hosted version)	○	○	○
	Pre-Operation Check - individualisable daily check protocol for operational readiness	○	○	○
	Truck Call App - coordination of transport orders	○	○	○
Operation/ Load Handling	Twin pedal control - stepless acceleration and fast reversing	●	●	●
	Single pedal control - stepless acceleration	○	○	○
	Linde Load Control - central levers integrated into armrest for precise control of all hydraulic functions	●	●	●
	Individual Lever System	○	○	○

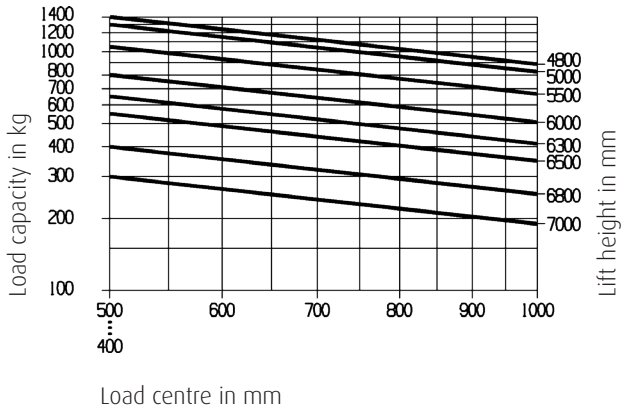
● Standard equipment

○ Optional equipment

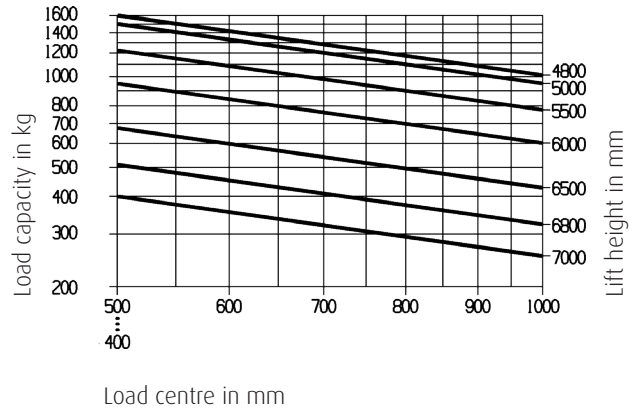
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LOAD CAPACITY DIAGRAM

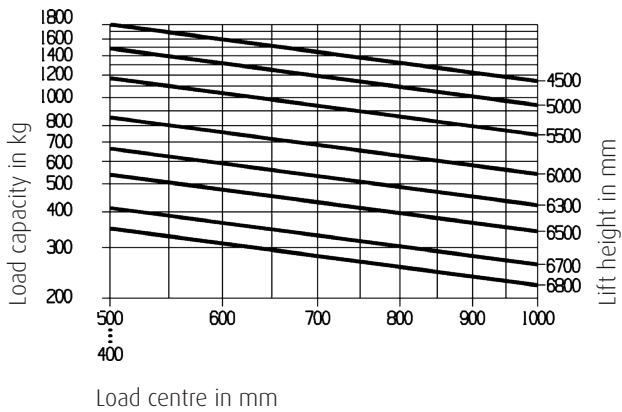
H14



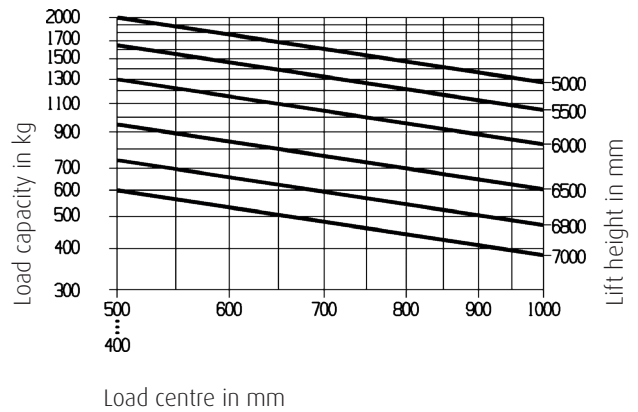
H16



H18



H20



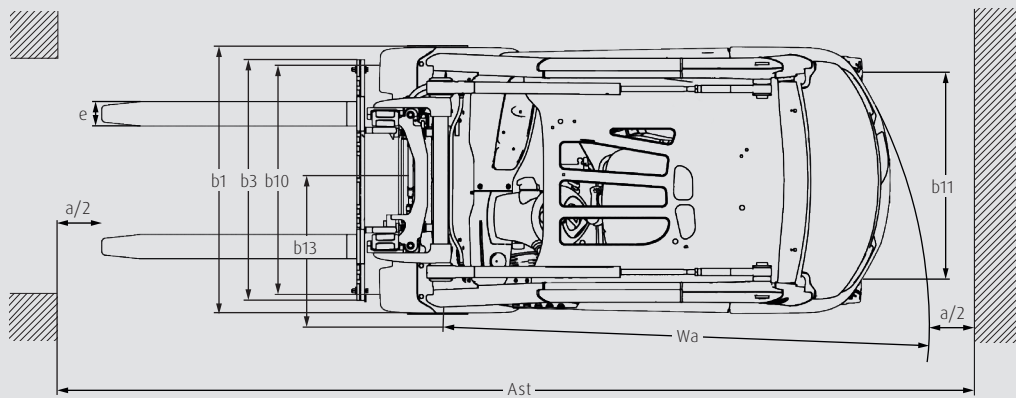
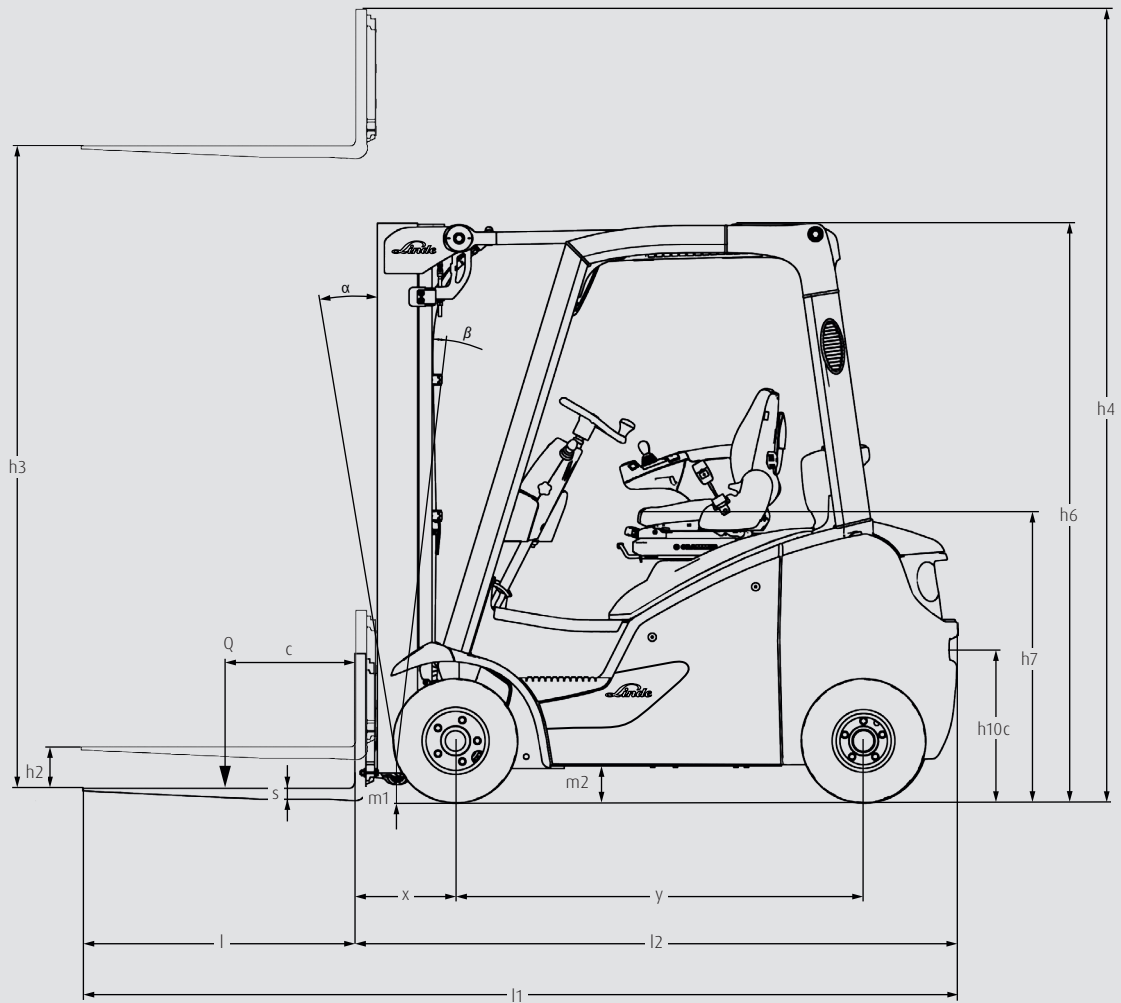
TECHNICAL DATA (According to VDI 2198)

Characteristics	1.1	Manufacturer		LINDE	LINDE	LINDE	LINDE
	1.2	Model		H14 D	H14 T	H16 D	H16 T
	1.2a	Series		391-02	391-02	391-02	391-02
	1.3	Power Unit		Diesel	LPG	Diesel	LPG
	1.4	Operation		Seat	Seat	Seat	Seat
	1.5	Load capacity/Load	Q (t)	1.4	1.4	1.6	1.6
	1.6	Load centre distance	c (mm)	500	500	500	500
	1.8	Axle centre to fork face	x (mm)	365	365	365	365
	1.9	Wheelbase	y (mm)	1600	1600	1600	1600
Weight	2.1	Service weight	kg	2600	2580	2745	2725
	2.2	Axle load with load, front/rear	kg	3497/503	3457/523	3815/530	3775/550
	2.3	Axle load without load, front/rear	kg	1340/1260	1300/1280	1350/1395	1310/1415
Wheels and Tyres	3.1	Tyres rubber, SE, pneumatic, polyurethane		SE	SE	SE	SE
	3.2	Tyre size, front		180/70-8 (18x7-8)	180/70-8 (18x7-8)	180/70-8 (18x7-8)	180/70-8 (18x7-8)
	3.3	Tyre size, rear		180/70-8 (18x7-8)	180/70-8 (18x7-8)	180/70-8 (18x7-8)	180/70-8 (18x7-8)
	3.5	Wheels, number front/rear (x = driven)		2x/2	2x/2	2x/2	2x/2
	3.6	Track width, front	b10 (mm)	930	930	930	930
	3.7	Track width, rear	b11 (mm)	873	873	873	873
Dimensions	4.1	Mast/fork carriage tilt, forward/backward	a/b (°)	6.0/9.0 ¹⁾	6.0/9.0 ¹⁾	5.0/8.0 ¹⁾	6.0/9.0 ¹⁾
	4.2	Height of mast, lowered	h1 (mm)	2197 ²⁾	2197 ²⁾	2197 ²⁾	2197 ²⁾
	4.3	Free lift	h2 (mm)	150	150	150	150
	4.4	Lift	h3 (mm)	3150	3150	3150	3150
	4.5	Height of mast, extended	h4 (mm)	3754	3754	3754	3754
	4.7	Height of overhead guard (cabin)	h6 (mm)	2123	2123	2123	2123
	4.8	Seat height relating to SIP/stand height	h7 (mm)	1067	1067	1067	1067
	4.12	Towing coupling height	h10 (mm)	530	530	530	530
	4.19	Overall length	l1 (mm)	3211	3212	3211	3222
	4.20	Length to fork face	l2 (mm)	2311	2312	2311	2322
	4.21	Overall width	b1/ b2 (mm)	1086	1086	1086	1086
	4.22	Fork dimensions DIN ISO 2331		40 × 80 × 900	40 × 80 × 900	40 × 80 × 900	40 × 80 × 900
	4.23	Fork carriage to ISO 2328, class/type A, B		2A	2A	2A	2A
	4.24	Width of fork carriage	b3 (mm)	980	980	980	980
	4.31	Ground clearance, below mast	m1 (mm)	94	94	93	93
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	120	120	119	119
	4.34.1	Aisle width for pallets 1000 × 1200 crossways	Ast (mm)	3686 ³⁾	3686 ³⁾	3686 ³⁾	3686 ³⁾
4.34.2	Aisle width with pallet 800 × 1200 along forks	Ast (mm)	3886 ³⁾	3886 ³⁾	3886 ³⁾	3886 ³⁾	
4.35	Turning radius	Wa (mm)	2121	2121	2121	2121	
4.36	Minimum pivoting point distance	b13 (mm)	600	600	600	600	
Performance	5.1	Travel speed, with/without load	km/h	20/20	20/20	20/20	20/20
	5.2	Lifting speed, with/without load	m/s	0.6/0.63	0.6/0.63	0.6/0.63	0.6/0.63
	5.3	Lowering speed, with/without load	m/s	0.57/0.57	0.57/0.57	0.57/0.57	0.57/0.57
	5.5	Tractive force, with/without load	N	12900/9800	12900/9800	12900/9900	12900/9900
	5.7	Climbing ability, with/without load	%	35.0/39.0	35.0/39.0	32.0/37.0	32.0/37.0
	5.9	Acceleration time, with/without load	s	4.9/4.3	4.8/4.2	5.1/4.5	5.0/4.3
	5.10	Service brake		hydrostatic	hydrostatic	hydrostatic	hydrostatic
Drive	7.1	Engine manufacturer/type		Deutz TD 2.2 L3	Deutz G 2.2 L3	Deutz TD 2.2 L3	Deutz G 2.2 L3
	7.2	Engine performance according to DIN ISO 1585	kW	30	30	30	30
	7.3	Rated speed	1/min	2200	2200	2200	2200
	7.4	Number of cylinders/ displacement	-/cm ³	3.0/2194.0	3.0/2194.0	3.0/2194.0	3.0/2194.0
	7.5	Fuel consumption according to DIN EN 16796	l/h	2.1	-	2.2	-
	7.5a	Fuel consumption according to DIN EN 16796	kg/h	-	1.7	-	2.0
	7.5b	Fuel consumption according to VDI cycle	m3/h	-	-	-	-
	7.5.1	CO ₂ equivalent according to EN 16796	kg/h	6.7	6.4	7	6.8
7.6	Turnover output according to VDI 2198	t/h	121.0	121.0	134.0	134.0	
7.7	Turnover efficiency according to VDI 2198	t/l	39	43.2	41.9	46.2	
Charac- teristics	8.1	Type of drive unit	-	hydrost./stepl.	hydrost./stepl.	hydrost./stepl.	hydrost./stepl.
Others	10.1	Operating pressure for attachments	bar	170	170	170	170
	10.2	Oil flow for attachments	l/min	38	38	38	38
	10.7	Sound pressure level LpAZ (at the driver's seat)	dB(A)	80	73	80	80
	10.8	Towing coupling, design/type, DIN 15 170		-	-	-	-
	11.2	Static stability		1.67	1.69	1.61	1.64

- Lift height and equipment can alter rear mast tilt angle
- With 150 mm free lift
- Including a 200 mm (min.) operating aisle clearance

- (H)= high quality, (L)= low quality
- Technical specifications for H16/18 on request

LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE
H16 CNG	H18 D	H18 T	H18 CNG	H20 D	H20 T	H20 CNG ⁵⁾	
391-02	391-02	391-02	391-02	391-02	391-02	391-02	391-02
CNG	Diesel	LPG	CNG	Diesel	LPG	CNG	CNG
Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat
1.6	1.8	1.8	1.8	2.0	2.0	2.0	2.0
500	500	500	500	500	500	500	500
365	370	370	370	374	374	374	374
1600	1600	1600	1600	1600	1600	1600	1600
2810	2920	2900	2985	3110	3090	3175	
3849/561	4139/581	4099/601	4173/612	4483/628	4443/648	4517/659	
1348/1426	1360/1560	1320/1580	1394/1591	1390/1720	1350/1740	1424/1751	
SE	SE	SE	SE	SE	SE	SE	SE
180/70-8 (18x7-8)	180/70-8 (18x7-8)	180/70-8 (18x7-8)	180/70-8 (18x7-8)	200/50-10	200/50-10	200/50-10	200/50-10
180/70-8 (18x7-8)	180/70-8 (18x7-8)	180/70-8 (18x7-8)	180/70-8 (18x7-8)	180/70-8 (18x7-8)	180/70-8 (18x7-8)	180/70-8 (18x7-8)	180/70-8 (18x7-8)
2x/2	2x/2	2x/2	2x/2	2x/2	2x/2	2x/2	2x/2
930	930	930	930	945	945	945	945
873	873	873	873	873	873	873	873
6.0/9.0 ¹⁾	6.0/9.0 ¹⁾	6.0/9.0 ¹⁾	6.0/9.0 ¹⁾	6.0/9.0 ¹⁾	6.0/9.0 ¹⁾	6.0/9.0 ¹⁾	6.0/9.0 ¹⁾
2197 ²⁾	2197 ²⁾	2197 ²⁾	2197 ²⁾	2198 ²⁾	2198 ²⁾	2198 ²⁾	2198 ²⁾
150	150	150	150	150	150	150	150
3150	3150	3150	3150	3150	3150	3150	3150
3754	3754	3754	3754	3755	3755	3755	3755
2123	2123	2123	2123	2123	2123	2123	2123
1067	1067	1067	1067	1067	1067	1067	1067
530	530	530	530	530	530	530	530
3222	3227	3227	3227	3231	3231	3231	3231
2322	2327	2327	2327	2331	2331	2331	2331
1086	1086	1086	1086	1152	1152	1152	1152
40 × 80 × 900	45 × 100 × 900	45 × 100 × 900	45 × 100 × 900	45 × 100 × 900	45 × 100 × 900	45 × 100 × 900	45 × 100 × 900
2A	2A	2A	2A	2A	2A	2A	2A
980	980	980	980	980	980	980	980
93	92	92	92	95	95	95	95
119	118	118	118	121	121	121	121
3686 ³⁾	3691 ³⁾	3691 ³⁾	3691 ³⁾	3695 ³⁾	3695 ³⁾	3695 ³⁾	3695 ³⁾
3886 ³⁾	3891 ³⁾	3891 ³⁾	3891 ³⁾	3895 ³⁾	3895 ³⁾	3895 ³⁾	3895 ³⁾
2121	2121	2121	2121	2121	2121	2121	2121
600	600	600	600	638	638	638	638
20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20
0.6/0.63	0.6/0.63	0.6/0.63	0.6/0.63	0.6/0.63	0.6/0.63	0.6/0.63	0.6/0.63
0.57/0.57	0.57/0.57	0.57/0.57	0.57/0.57	0.57/0.57	0.57/0.57	0.57/0.57	0.57/0.57
12900/9900	12900/10300	12900/10300	12900/10300	12900/10700	12900/10700	12900/10700	12900/10700
32.0/37.0	29.0/36.0	29.0/36.0	29.0/36.0	27.0/36.0	27.0/36.0	27.0/36.0	27.0/36.0
5.0/4.3	5.3/4.6	5.2/4.5	5.2/4.5	5.4/4.7	5.3/4.6	5.3/4.6	5.3/4.6
hydrostatic	hydrostatic	hydrostatic	hydrostatic	hydrostatic	hydrostatic	hydrostatic	hydrostatic
Deutz G 2.2 L3	Deutz TD 2.2 L3	Deutz G 2.2 L3	Deutz G 2.2 L3	Deutz TD 2.2 L3	Deutz G 2.2 L3	Deutz G 2.2 L3	Deutz G 2.2 L3
30	30	30	30	30	30	30	30
2200	2200	2200	2200	2200	2200	2200	2200
3.0/2194.0	3.0/2194.0	3.0/2194.0	3.0/2194.0	3.0/2194.0	3.0/2194.0	3.0/2194.0	3.0/2194.0
-	2.3	-	-	2.4	-	-	-
-	-	2.1	-	-	2.2	-	-
2.2 (H); 2.4 (L) ⁴⁾	-	-	2.3 (H); 2.5 (L) ⁴⁾	-	-	-	2.4 (H); 2.6 (L) ⁴⁾
6.9	7.3	7.1	7.2	7.6	7.5	7.5	7.5
134.0	148.0	148.0	148.0	160.0	160.0	160.0	160.0
41.9	44.8	49.3	44.8	45.7	51.6	47.1	47.1
hydrost./stepl.	hydrost./stepl.	hydrost./stepl.	hydrost./stepl.	hydrost./stepl.	hydrost./stepl.	hydrost./stepl.	hydrost./stepl.
170	170	170	170	170	170	170	170
38	38	38	38	38	38	38	38
80	80	80	80	80	80	80	80
-	-	-	-	-	-	-	-
1.65	1.59	1.61	1.63	1.57	1.59	1.60	1.60



MAST TABLES

STANDARD MAST (mm)

Series	1521					
Lift	h3: 3150		h3: 3380		h3: 4250	
Height measurements	h1: 2121	h2: 150	h1: 2471	h2: 150	h1: 2671	h2: 150
	h4: 3753		h4: 4453		h4: 4853	
Model						
H14	<input type="radio"/>		<input type="radio"/>		<input type="radio"/>	
H16	<input type="radio"/>		<input type="radio"/>		<input type="radio"/>	
H18	<input type="radio"/>		<input type="radio"/>		<input type="radio"/>	
H20	<input type="radio"/>		<input type="radio"/>		<input type="radio"/>	

DUPLEX MAST (mm)

Series	1521			
Lift	h3: 3145		h3: 3845	
Height measurements	h1: 2121	h2: 1518	h1: 2471	h2: 1868
	h4: 3747		h4: 4447	
Model				
H14	<input type="radio"/>		<input type="radio"/>	
H16	<input type="radio"/>		<input type="radio"/>	
H18	<input type="radio"/>		<input type="radio"/>	
H20	<input type="radio"/>		<input type="radio"/>	

TRIPLEX MAST (mm)

Series	1500 (optional - only if needed)			
Lift	h3: 4625		h3: 5475	
Height measurements	h1: 2121	h2: 1519	h1: 2471	h2: 1869
	h4: 5227		h4: 6077	
Model				
H14	<input type="radio"/>		<input type="radio"/>	
H16	<input type="radio"/>		<input type="radio"/>	
H18	<input type="radio"/>		<input type="radio"/>	
H20	<input type="radio"/>		<input type="radio"/>	

Optional equipment

h1: Height of mast, lowered **h2:** Free lift **h3:** Lift **h4:** Height of mast, extended

Figures for other equipments and triplex masts on request

CHARACTERISTICS



Linde Protector Frame

Safety

- Linde Protector Frame for the highest level of operator safety
- Particularly slim lift mast profile for optimum visibility
- Linde Curve Assist for reduced speed around corners, reducing the risk of the forklift truck tipping over
- Linde Engine Protection System for monitoring important engine operating parameters such as oil pressure, coolant level and temperature



Driver workplace

Ergonomics

- Spacious cabin with a large footwell, comfortable seat and automotive ambience for low-fatigue working
- Ergonomic configuration of all controls with adjustable armrest and seat for efficient, comfortable working
- Precise and sensitive control of all mast and lifting movements for effortless manoeuvring
- Operator's cab, mast and drive axle isolated from chassis for almost vibration and shock-free operation



Linde Load Control

Handling

- Hydrostatic direct drive for responsive, smooth and precise movement
- Durable diesel, LPG or natural gas engines ensure high torque and minimal fuel consumption
- Twin or single pedal control for efficient operation
- Linde Load Control for pin-point precision control of all mast functions



Easy service access

Service

- Maintenance-free mounting of axles and tilt cylinders for minimal downtime and operating costs
- Linde hydrostatic transmission reduces service costs, guarantees excellent availability and increases handling performance
- Easy access to maintenance components for fast servicing and increased truck availability
- Rapid diagnostics via laptop

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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