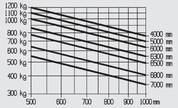
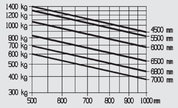
Load Capacity Diagrams

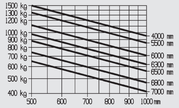
E12



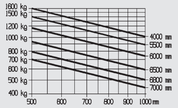
E14



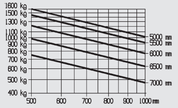
E15



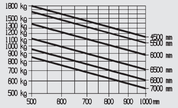
E16/E16C



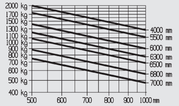
E16L/E16H



E18/E18L



E20L



Standard Equipment/Optional Equipment

Standard Equipment

Linde twin drive pedals to control forward/reverser travel and braking
Original Linde Load Control integrated in armrest
Hydraulic suspended seat with extensive range of adjustment
Hydrostatic power steering
Three wheel configuration with original Linde center-pivot axle for excellent manoeuvrability
Linde compact drive axle with maintanance free oil-bath disc brake
Famous Linde dual motor drive with 2 x 4,6 kW for 48 V models and 2 x 3,5 kW for the 24 V models
11 kW (48 V) maintanance free AC lift motor, 10 kW for 24 V models
Curve Assist for automatic, proportional speed adaption
Plenty of storage space for writing utensils, beverage cans ...
Anti-glare display with clock, hour meter, service information and accurate battery condition indicator
Standard truck fits into ISO container
Superelastic tyres

Battery capacity for low version (h6 = 1970 mm):
E16P = 48 V/575 Ah, E20PL = 48 V/690 Ah
Battery capacity for high version with increased battery capacity (h6 = 2130 mm):
E16PH = 48 V/700 Ah, E18PH = 48 V/700 Ah
E20PH = 48 V/700 Ah, E20PHL = 48 V/840 Ah

New STANDARD features for the EVO models:
New seat/armrest generation for outstanding ergonomics
Improved energy consumption
Enhanced tractive force and climbing ability
Self-activating parking brake
Individual drive dynamic mode providing perfect combination of performance and efficiency
Showing battery operating time by the minute
Dust and dirt protected Linde Load Control
Enlarged step-in for high models
New diagnostic plug for fast service access
Sensitive traction control for Linde dual motor drive

Optional Equipment

Single drive pedal with direction selector on armrest
Overhead guard can be upgrated to full cabin with roof, front-, rear screens and doors (also available with tinted glass)
Wiper-washers for front, rear and roof screens
Further seats with additional comfort and adjustments
Cab heater with integrated pollen filter
Radio with speakers
Sun screen, clipboard and interior light
Standard mast lifts up to 5650 mm
Duplex mast (full free lift) lifts up to 4145 mm
Triplex mast (full free lift) lifts up to 6075 mm
Single or double additional hydraulics for all mast types
Tilt cylinder- and roof protection
Integrated sideshift
Integrated fork positioner
Mirrors

Linde original Blue Spot
Road traffic specification
Load backrest
Swivelseat
12 V socket
Truck lighting, working lamps
Cold store protection
Custom paintwork
Linde Fleet Management (LFM)
Active ventilation while charging

Linde energy management
Customized horizontal and vertical battery change incl. NEW hydraulic battery shift
Built-in high frequency onboard charger for convenience and flexibility
Recirculation of electrolyte

Other options available on request

Electric Counterbalanced Trucks
Capacity 1200 - 2000 kg
E12 EVO®, E14 EVO®, E15 EVO®
E16 EVO®, E18 EVO®, E20 EVO®

386_02

Linde Material Handling

Safety

The protective overhead guard forms a strong and completely enclosed protective zone providing optimum structural integrity, safety and protection for the operator. The top mounted tilt cylinders provide seamless, smooth control of the tilt movements for excellent load stability in all operating conditions. This unique design also enables slimmer mast profiles to be fitted for outstanding visibility.

Performance

One would expect a high performance truck to have a high performance traction system – and that is exactly what the Linde compact drive axle and lift system delivers. Powerful motors and intelligent electronic control form an impressive power pack to deliver the highest levels of productivity.

Comfort

Consistently high levels of performance and efficiency for extended periods are only possible if the operator feels comfortable. The ergonomic layout of all the controls, the adjustability the armrest and seat, Linde Load Control, and twin accelerator pedals provide the best possible intuitive interface between the truck and the operator.

Reliability

An electric fork lift truck depends on reliable electronic systems. The Linde electronic control system provides a high level of reliability because of its dual circuit monitoring system and the sealed aluminium housing which provides total protection for the electronics from the ingress of dust and moisture.

Productivity

Effective in operation, efficient in reducing costs: the unique Linde energy management system ensures intelligent and economical consumption of energy. Energy can also be obtained quickly utilising the optional built-in charging unit or one of the five simple and rapid battery changing methods. The result: more uptime and increased productivity.

Features

Linde clearview mast design
- With top mounted tilt cylinders for seamless load control and stability
- Excellent view of load and surroundings through the robust yet slim mast profiles
- Nominal capacity retained to maximum lift heights
- High residual capacities in all applications
- Exceptionally stable

Linde hydrostatic power steering
- Minimal physical demands on the operator
- Compact ergonomically designed steering wheel
- Linde close coupled steer axle for outstanding manoeuvrability
- Less tyre stress

Linde twin accelerator control
- Seamless, rapid reversing without repositioning the feet
- Short pedal travel
- Fatigue-free working
- Increased throughput and performance

Linde Load Control
- Small tactile joystick integrated in an adjustable armrest
- Precise and effortless fingertip joystick control of all mast functions
- Safe and highly efficient load handling

Linde Dual Motor Drive
- Two powerful AC drive motors
- Seamless acceleration and variable torque characteristics
- Power moduls in DCB-technology for high performance and efficiency cooling

Linde operator's compartment
- Ergonomically designed for efficient, fatigue-free working
- Spacious operator's compartment with generous floor plate area
- Cushioned comfort – mast and drive axle are isolated from the chassis and cab by a unique resilient suspension system that absorbs shock loadings

Linde compact drive axle
- Twin drive design with high performance Linde AC technology
- Integrated AC lift motor
- Optimum energy efficiency
- Maintenance-free oil-bath disc brake
- Efficient power moduls housed in sealed unit for complete protection
- Short, energy saving power connections

Linde energy management
- Optimised energy consumption
- Accurate battery condition indicator
- Simple horizontal or vertical battery changing options
- Optional built-in high frequency charger for convenience and flexibility
- Record of battery usage

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

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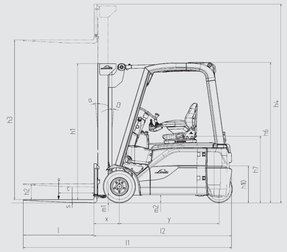
Linde Material Handling

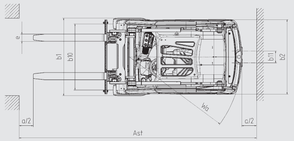
Please enter a print info

Technical Data according to VDI 2198

Characteristics	1.1	Manufacturer		LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE
	1.2	Model designation		**E12 (575Ah)**	**E15 (920Ah)**	**E14 (460Ah)**	**E16C (460Ah)**	**E16 (575Ah)**	**E16L (690Ah)**	**E16H (700Ah)**	**E18 (575Ah)**	**E18L (690Ah)**	**E20L (690Ah)**
	1.2a	Series		386-02	386-02	386-02	386-02	386-02	386-02	386-02	386-02	386-02	386-02
	1.3	Power unit		Battery	Battery	Battery	Battery	Battery	Battery	Battery	Battery	Battery	Battery
	1.4	Operation		Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat
	1.5	Load capacity	Q (t)	1.2	1.5	1.4	1.6	1.6	1.6	1.6	1.8	1.8	2.0
	1.6	Load centre	c (mm)	500	500	500	500	500	500	500	500	500	500
	1.8	Axle centre to fork face	x (mm)	365	365	365	365	365	365	365	370	370	374
	1.9	Wheelbase	y (mm)	1156 [1]	1301 [1]	1301 [1]	1301 [1]	1409 [1]	1517 [1]	1461 [1]	1409 [1]	1517 [1]	1517 [1]
Weights	2.1	Service weight	(kg)	2805 [2]	2985 [2]	2890 [2]	3095 [2]	3060 [2]	3075 [2]	3340 [2]	3295 [2]	3270 [2]	3335 [2]
	2.2	Axle load with load, front/rear	(kg)	3458 / 547	3912 / 573	3766 / 524	4099 / 596	4097 / 563	4112 / 563	4202 / 738	4466 / 629	4472 / 598	4787 / 548
	2.3	Axle load without load, front/rear	(kg)	1360 / 1445 [2]	1415 / 1570 [2]	1435 / 1455 [2]	1435 / 1660 [2]	1515 / 1545 [2]	1600 / 1475 [2]	1655 / 1685 [2]	1555 / 1740 [2]	1640 / 1630 [2]	1635 / 1700 [2]
Wheels/Tyres	3.1	Tyres rubber, SE, pneumatic, polyurethane		SE	SE	SE	SE	SE	SE	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)	180/70-8 (18x7-8)	180/70-8 (18x7-8)	180/70-8 (18x7-8)	200/50-10	200/50-10	200/50-10
	3.3	Tyre size, rear		15x4 1/2-8	15x4 1/2-8	15x4 1/2-8	15x4 1/2-8	15x4 1/2-8	15x4 1/2-8	140/55-9	140/55-9	140/55-9	140/55-9
	3.5	Wheels, number front/rear (x = driven)		2x / 2	2x / 2	2x / 2	2x / 2	2x / 2	2x / 2	2x / 2	2x / 2	2x / 2	2x / 2
	3.6	Track width, front	b10 (mm)	930	930	930	930	930	930	930	965	965	965
	3.7	Track width, rear	b11 (mm)	168	168	168	168	168	168	172	172	172	172
Dimensions	4.1	Mast/fork carriage tilt, forward/backward	a/b (°)	5.0 / 7.0	5.0 / 7.0	5.0 / 7.0	5.0 / 7.0	5.0 / 7.0	5.0 / 7.0	5.0 / 7.0	5.0 / 7.0	5.0 / 7.0	5.0 / 7.0
	4.2	Height of mast, lowered	h1 (mm)	2019	2019	2019	2019	2019	2019	2194	2019	2019	2019
	4.3	Free lift	h2 (mm)	150	150	150	150	150	150	150	150	150	150
	4.4	Lift	h3 (mm)	2800	2800	2800	2800	2800	2800	3150	2800	2800	2800
	4.5	Height of mast, extended	h4 (mm)	3401	3401	3401	3401	3401	3401	3751	3401	3401	3401
	4.7	Height of overhead guard (cabin)	h6 (mm)	1970	1970	1970	1970	1970	1970	2130	1970	1970	1970
	4.8	Height of seat/stand on platform	h7 (mm)	908	908	908	908	908	908	1065	908	908	908
	4.12	Towing coupling height	h10 (mm)	510	510	510	510	510	510	594	510	510	510
	4.19	Overall length	l1 (mm)	2601	2746	2746	2766	2854	2962	2906	2879	2967	2971
	4.20	Length to fork face	l2 (mm)	1701	1846	1846	1866	1954	2062	2006	1979	2067	2071
	4.21	Overall width	b1/b2 (mm)	1090 / 1050	1090 / 1050	1090 / 1050	1090 / 1050	1090 / 1050	1090 / 1050	1090 / 1050	1172 / 1050	1172 / 1050	1172 / 1050
	4.22	Fork dimensions	s/e/l (mm)	40 x 80 x 900	40 x 80 x 900	40 x 80 x 900	40 x 80 x 900	40 x 80 x 900	40 x 80 x 900	40 x 80 x 900	45 x 100 x 900	45 x 100 x 900	45 x 100 x 900
	4.23	Fork carriage to ISO 2328, class/type A, B		2A	2A	2A	2A	2A	2A	2A	2A	2A	2A
	4.24	Width of fork carriage	b3 (mm)	980	980	980	980	980	980	980	980	980	980
	4.31	Ground clearance, below mast	m1 (mm)	89	89	89	89	92	97	97	97	97	97
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	96	96	96	96	96	96	96	96	96	96
	4.33	Aisle width with pallet 1000 x 1200 across forks	Ast (mm)	3040 [3]	3177 [3]	3177 [3]	3196 [3]	3281 [3]	3389 [3]	3332 [3]	3305 [3]	3394 [3]	3397 [3]
	4.34	Aisle width with pallet 800 x 1200 along forks	Ast (mm)	3164 [3]	3301 [3]	3301 [3]	3320 [3]	3405 [3]	3513 [3]	3456 [3]	3429 [3]	3518 [3]	3522 [3]
	4.35	Turning radius	Wa (mm)	1349	1486	1486	1505	1590	1698	1641	1609	1698	1698
	4.36	Minimum pivoting point distance	b13 (mm)	0	0	0	0	0	0	0	0	0	0
Performance	5.1	Travel speed, with/without load	(km/h)	12.5 / 13.5	12.5 / 13.5	16 / 16	16 / 16	16 / 16	16 / 16	16 / 16	16 / 16	16 / 16	16 / 16
	5.2	Lifting speed, with/without load	(m/s)	0.3 / 0.5	0.3 / 0.5	0.4 / 0.6	0.4 / 0.6	0.4 / 0.6	0.4 / 0.6	0.4 / 0.6	0.4 / 0.6	0.4 / 0.6	0.4 / 0.6
	5.3	Lowering speed, with/without load	(m/s)	0.58 / 0.47	0.58 / 0.47	0.58 / 0.47	0.58 / 0.47	0.6 / 0.55	0.58 / 0.47	0.58 / 0.47	0.58 / 0.47	0.58 / 0.47	0.58 / 0.47
	5.5	Tractive force, with/without load	(N)	2400 / 2400	2400 / 2400	2300 / 2300	2300 / 2300	2300 / 2300	2300 / 2300	2300 / 2300	2300 / 2300	2300 / 2300	2300 / 2300
	5.6	Maximum tractive force, with/without load	(N)	7500 / 7500	7500 / 7500	11000 / 11000	11000 / 11000	11000 / 11000	11000 / 11000	11000 / 11000	11000 / 11000	11000 / 11000	11000 / 11000
	5.7	Climbing ability, with/without load	(%)	7.7 / 11.4	7.1 / 10.9	7.3 / 11.0	6.7 / 10.3	6.8 / 10.4	6.8 / 10.4	6.6 / 9.9	6.2 / 9.6	6.2 / 9.6	6.2 / 9.7
	5.8	Maximum climbing ability, with/without load	(%)	19.4 / 28.3	17.3 / 26.5	27.1 / 42.1	24.6 / 38.9	24.8 / 39.4	24.7 / 39.2	23.3 / 35.6	22.6 / 36.2	22.7 / 36.5	21.5 / 35.7
	5.9	Acceleration time, with/without load	(s)	5.8 / 5.0	5.8 / 5.0	4.5 / 3.8	4.5 / 3.8	4.5 / 3.8	4.5 / 3.8	4.5 / 3.8	4.5 / 3.8	4.5 / 3.8	4.5 / 3.8
	5.10	Service brake		hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.
Drive	6.1	Drive motor, 60 minute rating	(kW)	2x 3.5	2x 3.5	2x 4.6	2x 4.6	2x 4.6	2x 4.6	2x 4.6	2x 4.6	2x 4.6	2x 5
	6.2	Lift motor, rating at S3 15%	(kW)	5	5	10	10	10	10	10	10	10	11
	6.3	Battery according to DIN 43531/35/36 A,B,C,no		43 535 / A	43 535 / A	43 531 / A	43 531 / A	43 531 / A	43 531 / A	43 531 / A	43 531 / A	43 531 / A	43 531 / A
	6.4	Battery voltage/rated capacity (5h)	(V/Ah)	24 / 575/625	24 / 920/1000	48 / 460/500	48 / 460/500	48 / 575/625	48 / 690/750	48 / 700/775	48 / 575/625	48 / 690/750	48 / 690/750
	6.5	Battery weight (± 5%)	(kg)	445	676	708	708	856	1013	1118	856	1013	1013
	6.6	Power consumption according to VDI cycle	(kWh/h)	3.9	3.9	4.4	4.6	4.6	4.7	4.8	4.8	5.1	5.3
Others	8.1	Type of drive control		Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless
	8.2	Operating pressure for attachments	(bar)	170	190	180	170	170	170	170	170	170	170
	8.3	Oil flow for attachments	(l/min)	32	32	32	32	32	32	32	32	32	32
	8.4	Noise level at operator's ear	(dB(A))	< 65	< 65	< 65	< 65	< 65	< 65	< 65	< 65	< 65	< 65

1) Mast in vertical position
2) Figures with battery, see line 6.4/6.5.
3) Including a 200 mm (min.) operating aisle clearance.





Standard mast (in mm)		E12/E14/E15/E16/E18 E16L/E18L/E20L				E16H			
Lift	**h3**	2800	3150	3850	4250	3150	3850	4250
Overall height, retracted (to 150 mm free lift)	**h1**	2021	2196	2546	2746	2196	2546	2746
Overall height extended	**h4**	3363	3713	4453	4813	3713	4453	4813

Duplex mast (in mm)		E12/E14/E15/E16/E18 E16L/E18L/E20L				E16H		
Lift	**h3**	2795	3145	3845	-	3145	3845	-
Overall height, retracted	**h1**	1946	2121	2471	-	2121	2471	-
Overall height, extended	**h4**	3377	3727	4427	-	3727	4427	-
Special free lift	**h2**	1343	1518	1868	-	1518	1868	-

Triplex mast (in mm)		E12/E14/E15/E16/E18 E16L/E18L/E20L				E16H		
Lift	**h3**	4100	4625	5475	-	4625	5475	-
Overall height, retracted	**h1**	1946	2121	2471	-	2121	2471	-
Overall height, extended	**h4**	4702	5227	6077	-	5227	6077	-
Special free lift	**h2**	1344	1519	1781	-	1519	1781	-

Other lift heights on request
Minimum lift height does not apply to tall vehicle