

## Standard and optional equipment

### Standard equipment

#### General

Hydrostatic power steering  
Dual axis, fingertip hydraulic control joystick  
Linde twin accelerator pedals  
Full suspension PVC seat  
Superelastic tyres  
Comprehensive instrument display  
Linde digital electronic control  
2 x 4.0 kW shunt wound drive motors  
9.0 kW pump motor  
Tilting operator's compartment  
Fork length 1000 mm  
Clearview standard mast lift 3050 mm

#### Batteries and chargers

48 V batteries, from 400 Ah to 775 Ah capacity depending on model and application  
Wide selection of chargers available to suit application

#### Electronics

Linde Digital Control system (LDC) incorporating CAN bus technology

#### Safety

Three independent braking systems  
Emergency circuit isolator  
Handbrake interlock for gradient start without roll back  
Electric horn  
Electrical and hydraulic overload protection  
Overhead guard  
Seat belt

### Options

Standard mast lifts to 4850 mm (all models)  
Duplex mast lifts to 3770 mm (all models), 4170 mm (E 14, E 16 C, E 18 C)  
Triplex mast lifts to 6220 mm (all models)  
Single accelerator pedal layout with direction selector  
Individual hydraulic control joysticks  
Fabric covered seat  
Super-comfort seat with heater and backrest extension  
Integral sideshift  
Load backrest extension  
Additional hydraulics

Truck lighting/flashing amber beacon/working lamps  
Overhead guard with:  
Polycarbonate top screen  
Front and rear screens, wipers and top screen  
Cab heater and screen demister  
Full cab with hinged doors  
Alternative tyre types and configurations  
Alternative fork lengths  
Audible reversing alarm  
Alternative colour schemes



## Electric Counterbalance Trucks Capacity 1400 kg – 2000 kg E 14, E 16 C, E 16, E 18 C, E 16 P, E 18 P, E 20 P

SERIES 335-02

Linde Material Handling

Linde

#### Introduction

This versatile series of compact models, available in both three- and four-wheeled configurations, is highly manoeuvrable and designed for efficient and economic handling duties in a wide range of tasks including loading/unloading, storage/retrieval, block stacking and rapid load transfer.

#### Performance

The Linde drive concept employing advanced Linde control technology translates the powerful output of the twin drive motors into seamless productivity. A comprehensive selection of batteries ensures each truck can be precisely matched to the demands of individual applications.

#### Operator comfort

A perfect interface between operator and truck has been achieved with the Linde ergonomic design concept. Spacious cab, comfort-class seat with adjustable armrest and intuitive control layout promotes optimum performance.

#### Durability

Linde electric forklifts are constructed to undertake sustained heavy-duty tasks in their stride. The modular robot-welded chassis is designed for maximum strength and durability. The rugged construction and components ensure long life and durability.

#### Maximum uptime and productivity

Efficiency at work, efficiency in servicing. With productive uptime ratios of up to 1000 hours between services and a computerised diagnostic system, maintenance intervals are minimal, operating costs are reduced and maximum productivity is achieved. All the truck's performance parameters can be configured to match individual application requirements.

## Features

#### Manoeuvrability

→ Linde hydrostatic power steering, together with either close-coupled rear steer wheels or the unique combi axle plus twin drive motors, combine to provide exceptional manoeuvrability in confined areas

#### Linde twin accelerator pedals

→ Assured manoeuvring with Linde twin accelerator pedals  
→ Effortless forward/reverse selection places minimal demands on operator  
→ Operator is able to maintain high efficiency and productivity levels

#### Linde Load Control

→ Safe and precise load handling  
→ Effortless fingertip joystick control  
→ The joysticks are integrated in the adjustable armrest

#### The Linde clearview mast

→ Excellent visibility through the clearview mast is enhanced by slim mast profiles  
→ Sealed for life angled rollers for optimum alignment and minimum friction provide smooth lifting and lowering  
→ Safe, precise load handling

#### Robust chassis

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

#### High performance drive technology

→ Twin drive motors form the rugged front axle  
→ High torque characteristics for operational flexibility  
→ Impressive gradient performance  
→ Responsive tractive power



#### Designed around the operator

→ Spacious cab with easy access, a comfort-class seat and an intuitive control layout  
→ Hydrostatic power steering for effortless manoeuvring  
→ Excellent visibility of load and surrounding environment  
→ Digital instrument display for instant read-out of truck status



#### Linde combi axle or close-coupled three wheeled configuration

→ The combi axle provides high manoeuvrability and assured stability on uneven surfaces  
→ The close-coupled steer axle of the three wheel configuration version offers effortless manoeuvrability and versatility when working in areas where space is at a premium



#### Maximum uptime

→ Easy service access via the tilting cab  
→ Tilting cab enables efficient and rapid battery checking/changing routines  
→ All performance parameters can be configured to match the application  
→ The Linde digital control system incorporates diagnostic technology for fast servicing schedules  
→ Up to 1000 operating hours between services

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Linde Material Handling

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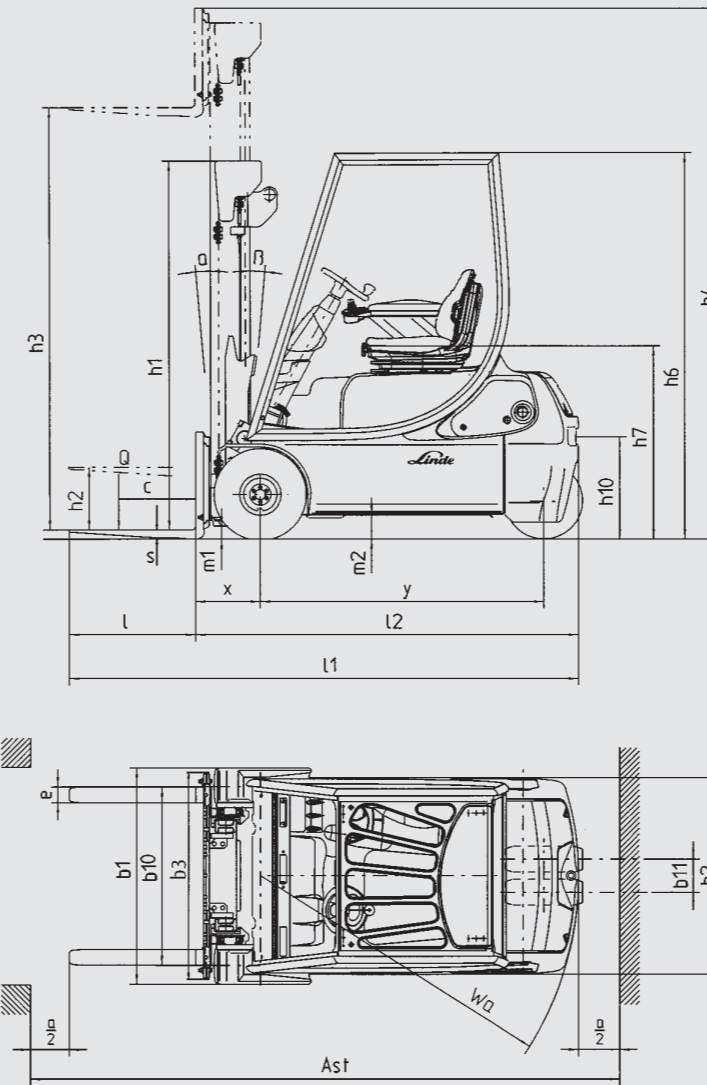
The manufacturer reserves the right to alter specifications without notice. Illustrations and technical details non-binding for actual construction. All measurements subject to customary tolerances.

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# Technical data

		LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE
Characteristics	1.1	Manufacturer	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE
	1.2	Model designation	<b>E 14</b>	<b>E 16 C</b>	<b>E 16</b>	<b>E 18 C</b>	<b>E 16 P</b>	<b>E 18 P</b>
	1.3	Power unit: battery, diesel, petrol, LP gas, mains power	Battery	Battery	Battery	Battery	Battery	Battery
	1.4	Operation: manual, pedestrian, stand-on, seated, order picker	Seated	Seated	Seated	Seated	Seated	Seated
	1.5	Load capacity	Q (kg)	1400	1600	1600	1800	1600
Weight	1.6	Load centre	c (mm)	500	500	500	500	500
	1.8	Axle centre to fork face	x (mm)	330	330	330	335	330
	1.9	Wheelbase	y (mm)	1230 <sup>1)</sup>	1336 <sup>1)</sup>	1375 <sup>1)</sup>	1444 <sup>1)</sup>	1383 <sup>1)</sup>
	2.1	Service weight	kg	2865	2995	3200	3160	3200
	2.2	Axle load with load, front/rear	kg	3690/575 <sup>1)</sup>	4055/540 <sup>1)</sup>	4200/600 <sup>1)</sup>	4440/520 <sup>1)</sup>	4210/590 <sup>1)</sup>
Wheels and tyres	2.3	Axle load without load, front/rear	kg	1345/1520 <sup>1)</sup>	1465/1530 <sup>1)</sup>	1550/1650 <sup>1)</sup>	1600/1560 <sup>1)</sup>	1640/1660 <sup>1)</sup>
	3.1	Tyres, front/rear (SE = superelastic, P = pneumatic)	SE (P)/SE (P)	SE (P)/SE (P)	SE (P)/SE (P)	SE/SE	SE (P)/SE (P)	SE/SE
	3.2	Tyre size, front		18 x 7 - 8	18 x 7 - 8	18 x 7 - 8	200/50 - 10	18 x 7 - 8
	3.3	Tyre size, rear		15 x 4 1/2 - 8	15 x 4 1/2 - 8	15 x 4 1/2 - 8	15 x 4 1/2 - 8	16 x 6 - 8
	3.5	Wheels, number front / rear (x = driven)		2x/2	2x/2	2x/2	2x/2	2x/2
Dimensions	3.6	Track width, front	b10 (mm)	910	910	910	910	910
	3.7	Track width, rear	b11 (mm)	168	168	168	168	168
	4.1	Mast/fork carriage tilt, forward/backward	α/β (°)	4.8/7.5	4.8/7.5	4.8/7.0	4.8/7.5	4.5/7.0
	4.2	Height of mast, lowered	h1 (mm)	2100 <sup>4)</sup>	2100 <sup>4)</sup>	2100 <sup>4)</sup>	2100 <sup>4)</sup>	2100 <sup>4)</sup>
	4.3	Free lift	h2 (mm)	150	150	150	150	150
	4.4	Lift	h3 (mm)	3050 <sup>2)</sup>	3050 <sup>2)</sup>	3050 <sup>2)</sup>	3050 <sup>2)</sup>	3050 <sup>2)</sup>
	4.5	Height of mast, extended	h4 (mm)	3658 <sup>2)</sup>	3658 <sup>2)</sup>	3658 <sup>2)</sup>	3658 <sup>2)</sup>	3658 <sup>2)</sup>
	4.7	Height of overhead guard (cab)	h6 (mm)	1970 <sup>3)</sup>	1970 <sup>3)</sup>	2075 <sup>3)</sup>	1970 <sup>3)</sup>	2075 <sup>3)</sup>
	4.8	Height of seat/stand-on platform	h7 (mm)	927	927	1032	927	1032
	4.12	Tow coupling height	h10 (mm)	510	510	595	510	570
	4.19	Overall length	l1 (mm)	2788 <sup>1)</sup>	2845 <sup>1)</sup>	2891 <sup>1)</sup>	2958 <sup>1)</sup>	2948 <sup>1)</sup>
	4.20	Length to fork face	l2 (mm)	1788 <sup>1)</sup>	1845 <sup>1)</sup>	1891 <sup>1)</sup>	1958 <sup>1)</sup>	1948 <sup>1)</sup>
	4.21	Overall width	b1 / b2 (mm)	1083	1083	1083	1155	1083
	4.22	Fork dimensions	s/e/l (mm)	40 x 80 x 1000	40 x 80 x 1000	40 x 80 x 1000	45 x 100 x 1000	40 x 80 x 1000
	4.23	Fork carriage to DIN 15173, class/form A, B		2A	2A	2A	2A	2A
	4.24	Width of fork carriage	b3 (mm)	1040	1040	1040	1040	1040
	4.31	Ground clearance, mast	m1 (mm)	79	78	77	84	77
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	114	113	113	119	113
	4.33	Aisle width, pallet 1000 x 1200 across forks	Ast (mm)	3114 <sup>1)</sup>	3171 <sup>1)</sup>	3212 <sup>1)</sup>	3289 <sup>1)</sup>	3274 <sup>1)</sup>
	4.34	Aisle width, pallet 800 x 1200 along forks	Ast (mm)	3236 <sup>1)</sup>	3293 <sup>1)</sup>	3334 <sup>1)</sup>	3411 <sup>1)</sup>	3396 <sup>1)</sup>
4.35	Turning radius	Wa (mm)	1455 <sup>1)</sup>	1512 <sup>1)</sup>	1553 <sup>1)</sup>	1625 <sup>1)</sup>	1615 <sup>1)</sup>	
4.36	Minimum pivot point distance	b13 (mm)	0	0	0	0	0	
Performance	5.1	Travel speed, with/without load	km/h	14.6/15.3	14.4/15.3	14.5/15.5	14.2/15.2	14.5/15.4
	5.2	Lifting speed, with/without load	m/s	0.38/0.55	0.37/0.55	0.37/0.55	0.35/0.55	0.37/0.55
	5.3	Lowering speed, with/without load	m/s	0.55/0.51	0.56/0.52	0.56/0.52	0.57/0.53	0.56/0.52
	5.5	Tractive force, with/without load, 60 minute rating	N	1945/2190	1885/2170	1878/2160	1815/2130	1878/2160
	5.6	Maximum tractive force, with/without load	N	7060/7305	7000/7285	6998/7275	6930/7250	6992/7275
	5.7	Climbing ability, with/without load	%	6/9.9	5.5/9.4	5.4/9.2	4.9/8.7	5.4/9.2
	5.8	Maximum climbing ability, with/without load, 5 min	%	17.1/26.9	15.7/25.6	15.1/25.1	14.3/23.7	15.1/25.1
	5.9	Acceleration, with/without load (first 10 m)	s	4.8/4.3	4.8/4.4	4.9/4.6	4.9/4.5	4.8/4.3
	5.10	Service brake		Hydraulic/electric	Hydraulic/electric	Hydraulic/electric	Hydraulic/electric	Hydraulic/electric
	Drive	6.1	Drive motor, 60 minute rating	kW	2 x 4	2 x 4	2 x 4	2 x 4
6.2		Lift motor, 15% rating	kW	9.0	9.0	9.0	9.0	9.0
6.3		Battery to DIN		43531A	43531A	43531A	43531A	43531A
6.4		Battery voltage/rated capacity (5 h)	V/Ah	48/440 <sup>3)</sup>	48/550 <sup>3)</sup>	48/700 <sup>3)</sup>	48/660 <sup>3)</sup>	48/700 <sup>3)</sup>
6.5		Battery weight (± 5%)	kg	708	856	1118	1015	1118
6.6		Power consumption to VDI cycle	kWh/h	-	-	-	-	-
Other	8.1	Type of drive control		Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	8.2	Working pressure for attachments	bar	180	200	200	220	200
	8.3	Oil flow for attachment	l/min	20 <sup>4)</sup>	20 <sup>4)</sup>	20 <sup>4)</sup>	20 <sup>4)</sup>	20 <sup>4)</sup>
	8.4	Noise level at operator's ear	dB (A)	68	68	68	68	68
	8.5	Towing coupling, design/type		-	-	-	-	-

1) At 0° tilt angle  
 2) For additional mast heights refer to page 3  
 3) Optional other battery capacities available  
 4) With 150mm free lift  
 5) With lights (3) and (4) 16 x 6 - 8/10 PR  
 6) At 80% rated pressure



Standard mast	E14/E16C/E18C	E14 to E20P					
Lift	<b>h3</b>	2850	3050	3250	3850	4250	4850
Height of mast, lowered <sup>6)</sup>	<b>h1</b>	2000	2100	2200	2500	2700	3000
Height of mast, extended	<b>h4</b>	3458	3658	3858	4458	4858	5458
Free lift	<b>h2</b>	150	150	150	150	150	150

Duplex mast	E14/E16C/E18C	E14 to E20P			
Lift	<b>h3</b>	2770	3070	3770	4170
Height of mast, lowered	<b>h1</b>	1925	2075	2425	2625
Height of mast, extended	<b>h4</b>	3378	3678	4378	4778
Free lift	<b>h2</b>	1318	1468	1818	2018

Triplex mast	E14/E16C/E18C	E14 to E20P				
Lift	<b>h3</b>	4020	4470	5470	5920	6220
Height of mast, lowered	<b>h1</b>	1925	2075	2475	2625	2725
Height of mast, extended	<b>h4</b>	4628	5078	6078	6528	6828
Free lift	<b>h2</b>	1318	1468	1868	2018	2118

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



Lifting capacity diagrams

