



Electric Tow Tractor 270 Lbs. dbp (drawbar pull)

P250

SERIES 127

Linde Material Handling



Safety

The heavy duty chassis and cab module provide assured protection for the operator while three independent braking systems deliver responsive stopping power for all situations including automatic speed control descending gradients. A low center of gravity ensures outstanding stability.

Performance

With a nominal towing capacity of 25.0 tonne and unladen traction speed of 25 km/h the P 250 offers flexible high performance which is optimized by the Linde digital AC control system that provides precise, energy saving control of acceleration and speed for high productivity. The curved front screen and profiled chassis ensures excellent manoeuvrability.

Comfort

A low step facilitates access to spacious operator's cabin where the automotive layout of the pedals, direction lever, steering wheel and controls, together with a fully adjustable suspension seat provides a comfortable and fatigue-free working environment. Cab suspension dampers and a spring damped suspension system front and rear ensures superb levels of

Reliability

Designed for intensive heavy duty applications the rugged, robot-welded chassis is constructed from heavy section steel plate for optimum torsional stiffness and rounded corners for high resistance to impacts. All key components are protected within the chassis while electronic components are housed in sealed aluminium enclosures for assured reliability and long life.

Productivity

Two powerful, high torque 10 kW AC drive motors provide impressive pulling power for a variety of intensive applications. The energy saving Linde AC digital controller combined with excellent manoeuvrability and an intuitive interface between the operator and tractor, translates that power into versatile, seamless performance and high productivity.

Standard and optional equipment

Standard equipment

General

Four wheel configuration
Pneumatic tires
Tractor without cab
Left or right hand drive steering position
Adjustable steering column
Comprehensive integrated display
Single pedal accelerator and direction lever
Full suspension PVC driver's seat
Non-suspension PVC passenger seat
Hydrostatic power steering
Dual circuit hydraulic disc brakes on all four wheels
Integrated in drive axle with no differential required
Superb traction with anti-slip control
Reduced power to inner wheel during cornering
High-torque flexibility and performance
Standard color scheme – vermilion and charcoal grey

Electronics

80 V circuit
2 x 10 kW maintenance free AC drive motors
Advanced Linde AC digital controller
Precise control of speed and acceleration
Highly efficient energy saving system
Programmable performance parameters

Batteries and chargers

P 250 SWB – 80 V, 400 to 560 Ah to IEC
P 250 LWB – 80 V, 600 to 840 Ah to IEC
Easy vertical lift out battery change
A range of chargers is available to suit application and main supply requirements

Safety

Three independent braking systems
Hydraulic disc brakes (front) external disc brakes (rear)
Regenerative electric braking as accelerator pedal is released
Superb regenerative braking control on gradients
Electric push-button parking brake
Keyswitch
Emergency circuit isolator
Fail-to-safe circuitry
Traction isolated by seatswitch and/or parking brake
Electrical overload protection
Comprehensive warning lights
Electric horn
Full road lighting
Excellent all-round visibility
Driver's cab with safety glass

Optional equipment

Cab without doors
Cab with sliding or hinged doors
Rear lights mounted high at rear of cab
Flashing or rotating beacon on cab
Reverse warning beeper
Contoured solid (super elastic) tires
Towing couplings:
– Automatic single position, front and/or rear
– Automatic single position, remote, rear
– Multi-position, front and/or rear

Fabric covered seats
Electric heater and defogger
Heated seats
Full suspension passenger seat
Alternative color scheme
Front and rear screen wipers/washers
Two exterior mirrors
Interior mirror
Interior light
Remote inching control

Other options available on request.



Technical Data

May 2008

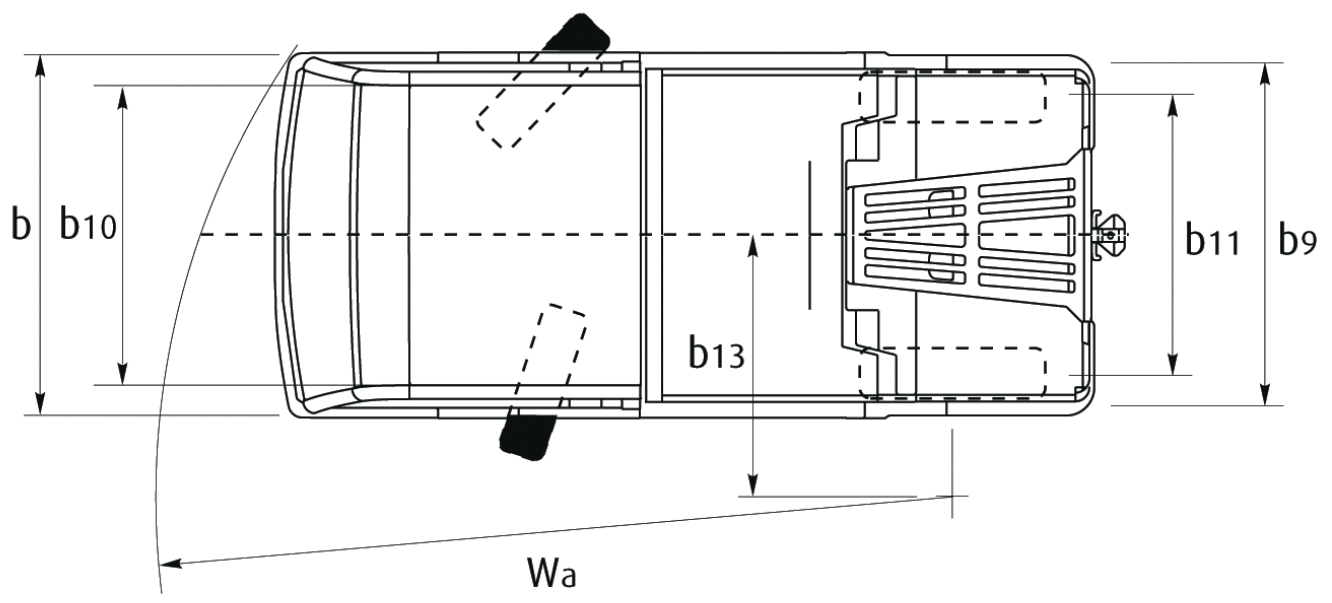
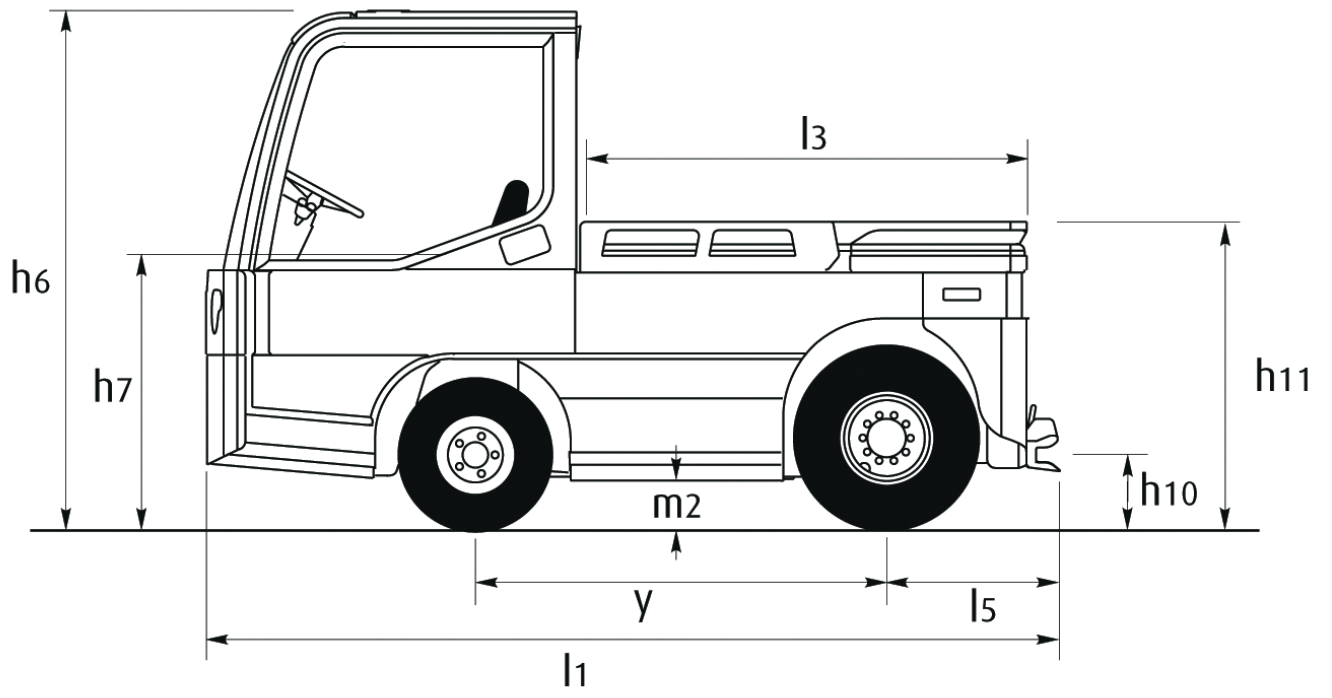
SERIES 127 P250 (SWB)

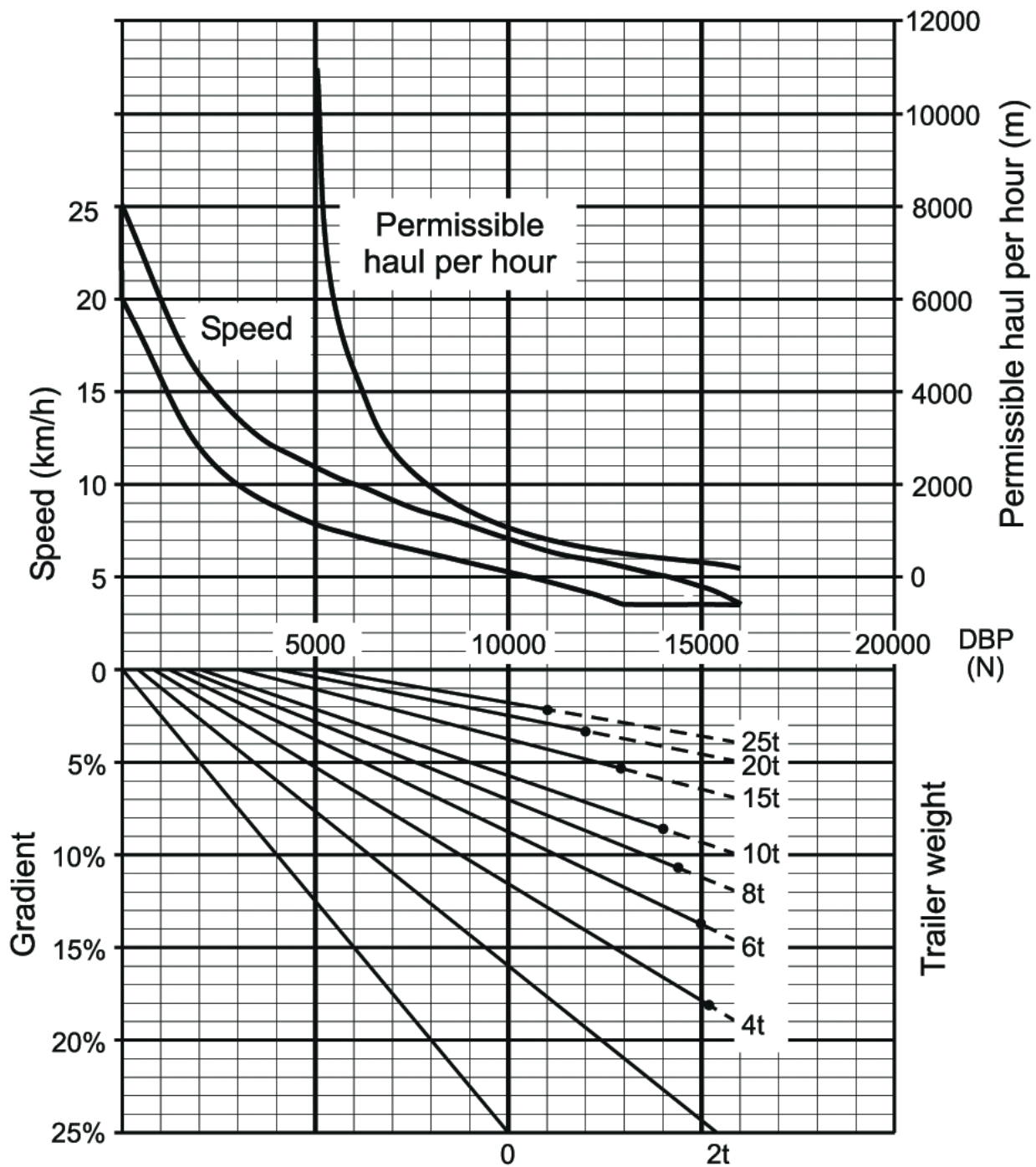
Characteristics	1.1	Manufacturer		Linde
	1.2	Model designation		P 250 (SWB)
	1.3	Power unit: battery, diesel, petrol, LP gas, mains power		Battery
	1.4	Operation: manual, pedestrian, stand-on, seated, order picker		Seated
	1.5	Towed load capacity	Q (t)	25 ¹⁾
	1.7	Rated drawbar pull	F (N)	5000 ¹⁾
	1.9	Wheelbase	y (mm)	1465
Weight	2.1	Service weight	kg	3800
	2.2	Axle load with load, front/rear	kg	2000/2100
	2.3	Axle load without load, front/rear	kg	1900/1900
Wheels and tyres	3.1	Tyres, front/rear (SE = CS superelastic, P = pneumatic)		P/P ²⁾
	3.2	Tyre size, front		6.00 R9
	3.3	Tyre size, rear		7.00 R12
	3.5	Wheels, number front/rear (x = driven)		2/2x
	3.6	Track width, front	b10 (mm)	1080
	3.7	Track width, rear	b11 (mm)	1020
	Dimensions	4.7	Height of overhead guard (cabin)	h6 (mm)
4.8		Height of seat/stand-on platform	h7 (mm)	745
4.12		Towing coupling height	h10 (mm)	240, 295, 350, 405
4.13		Platform height, without load	h11 (mm)	1000
4.16		Loading platform, length	l3 (mm)	1520
4.17		Rear overhang	l5 (mm)	615
4.18		Loading platform, width	b9 (mm)	1170 (1120 at rear)
4.19		Overall length	l1 (mm)	3045
4.21		Overall width	b1 (mm)	1300
4.32		Ground clearance, centre of wheelbase	m2 (mm)	150
4.35		Turning radius	Wa (mm)	2830
4.36		Minimum pivoting point distance	b13 (mm)	935
Performance		5.1	Travel speed, with/without rated drawbar pull	km/h
	5.5	Drawbar pull at 60 minute rating	N	5000
	5.6	Maximum drawbar pull (on level ground)	N	16000 ¹⁾
	5.7	Climbing ability with/without load, 30 minute rating	%	See graph
	5.8	Maximum climbing ability, with/without load, 5 minute rating	%	See graph
	5.10	Service brake		Hydraulic/electric
Drive	6.1	Drive motor, 60 minute rating	kW	2x10
	6.3	Battery according to DIN 43531/35/36 A, B, C, no		DIN 43536A
	6.4	Battery voltage/rated capacity (5h)	V/Ah	80/560
	6.5	Battery weight (± 0,5 %)	kg	1558
	6.6	Power consumption according to VDI cycle	kWh/h	³⁾
	Other	8.1	Type of drive control	
8.4		Noise level at operator's ear	dB (A)	³⁾
8.5		Tow coupling, design/type, DIN		³⁾
<p>¹⁾ Based on level, dry surface with rolling resistance of 200 N/t. Refer to graph opposite for specific operating conditions and when the application involves inclines or ramps.</p> <p>²⁾ Contoured solid (superelastic) tyres are available.</p> <p>³⁾ Refer to manufacturer for figures.</p>				

Technical Data

May 2008 SERIES 127 P250 (LWB)

Characteristics	1.1	Manufacturer		Linde
	1.2	Model designation		P 250 (LWB)
	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	Towed load capacity	Q (t)	25 ¹⁾
	1.7	Rated drawbar pull	F (N)	5000 ¹⁾
	1.9	Wheelbase	y (mm)	1900
Weight	2.1	Service weight	kg	4800
	2.2	Axle load with load, front/rear	kg	2600/2500
	2.3	Axle load without load, front/rear	kg	2500/2300
Wheels and tyres	3.1	Tyres, front/rear (SE = CS superelastic, P = pneumatic)		P/P ²⁾
	3.2	Tyre size, front		6.00 R9
	3.3	Tyre size, rear		7.00 R12
	3.5	Wheels, number front/rear (x = driven)		2/2x
	3.6	Track width, front	b10 (mm)	1080
	3.7	Track width, rear	b11 (mm)	1020
Dimensions	4.7	Height of overhead guard (cabin)	h6 (mm)	1820
	4.8	Height of seat/stand-on platform	h7 (mm)	745
	4.12	Towing coupling height	h10 (mm)	240, 295, 350, 405
	4.13	Platform height, without load	h11 (mm)	1000
	4.16	Loading platform, length	l3 (mm)	1955
	4.17	Rear overhang	l5 (mm)	615
	4.18	Loading platform, width	b9 (mm)	1170 (1120 at rear)
	4.19	Overall length	l1 (mm)	3480
	4.21	Overall width	b1 (mm)	1300
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	150
	4.35	Turning radius	Wa (mm)	3280
	4.36	Minimum pivoting point distance	b13 (mm)	1095
	Performance	5.1	Travel speed, with/without rated drawbar pull	km/h
5.5		Drawbar pull at 60 minute rating	N	5000
5.6		Maximum drawbar pull (on level ground)	N	16000 ¹⁾
5.7		Climbing ability with/without load, 30 minute rating	%	See graph
5.8		Maximum climbing ability, with/without load, 5 minute rating	%	See graph
5.10		Service brake		Hydraulic/electric
Drive	6.1	Drive motor, 60 minute rating	kW	2x10
	6.3	Battery according to DIN 43531/35/36 A, B, C, no		DIN 43536A
	6.4	Battery voltage/rated capacity (5h)	V/Ah	80/840
	6.5	Battery weight (± 0,5%)	kg	2178
	6.6	Power consumption according to VDI cycle	kWh/h	³⁾
	Other	8.1	Type of drive control	
8.4		Noise level at operator's ear	dB (A)	³⁾
8.5		Tow coupling, design/type, DIN		³⁾





Load/gradient combinations shown by full line can be restarted from stationary on the gradient..

The permissible haul per hour is the total distance traveled, including the return journey and any downhill gradients.

It is recommended that braked trailers are used for trailer loads exceeding 2.5 tonne and for all trailer loads where gradient is involved.

Features

Chassis

- Long and short wheelbase versions
- Robot welded heavy gauge steel plate
- Maximum torsional resistance and rigidity
- High impact protection for operator and components
- Low profile chassis for all-round visibility



Ergonomics

- Ergonomic automotive pedal and control layout
- Spacious leg and headroom
- Storage space for documents, pens and beverage holder
- Excellent all-round visibility
- Clear view to rear tow coupling

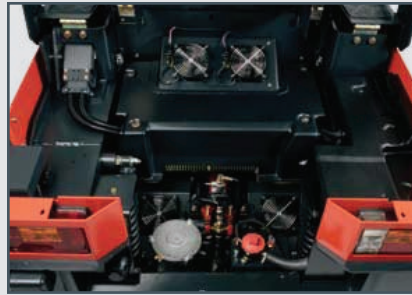
Operator's compartment

- Low step access to spacious cabin
- Sliding or hinged cabin doors
- Fully adjustable comfort-class operator's seat
- Cabin isolated from chassis by hydraulic dampers
- Multi-function instrument display



Steering

- Hydrostatic power steering
- Effortless manoeuvrability
- Adjustable steering column
- Large lock-to-lock angle



Braking

- Three independent braking systems
- Electric push-button parking brake
- Hydraulic disc brakes (front) external disc brakes (rear)
- Regenerative electric braking as accelerator pedal is released
- Superb regenerative braking control on gradients



Tow coupling

- Automatic rear towing coupling as standard
- Optional remote automatic and multi-position couplings
- Front and rear towing coupling options
- Stand-off inching control as standard

Drive units

- Two 10 kW maintenance-free AC drive motors
- Integrated in drive axle with no differential required
- Superb traction with anti-slip control
- Reduced power to inner wheel during cornering
- High-torque flexibility and performance

Serviceability

- Hinged rear platform cover
- Easy access for maintenance and battery
- CAN bus diagnostic facility for reduced service intervals
- Multi-function instrument display assists scheduled maintenance planning
- Maintenance-free AC drive technology

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ANSI: Standard truck meets all applicable mandatory requirements of ANSI/T150F B56.1 standards for powered industrial trucks.
NOTE: Performance data may vary due to motor and system efficiency tolerances. The performance depicted represents nominal values obtained under typical operating conditions. Metric dimensions are in millimeters unless otherwise specified. All metric dimensions are not direct equivalents due to rounding data. The descriptions and specifications included on this data sheet were in effect at the time of printing. Linde Material Handling North America Corporation reserves the right to make improvements and changes in specification or design without notice and without incurring obligation. Please check with your authorized Linde dealer for information on possible updates or revisions.

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