



Electric Tow Tractor with Platform Capacity 3000 kg and 5000 kg P30C, P50C

Safety

The design of the tractor ensures that the operator remains well within the truck contours while driving. The ergonomic twin grip steering control incorporates a wrap-around hand guard and the front steel bumper ensure excellent safety for both operator and machine.

Performance

The P30C & P50C are compact tow tractors particularly suited to towing applications in narrow aisles. Due to their compact nature the operator has direct access to the towing attachment located at the rear. They share common components and are both powered by a 3 kW AC motor. The P30C and P50C can tow 3,000kg and 5,000kg respectively.

Comfort

The unique design of the operator's compartment offers a level of comfort previously unknown in the market. In addition to an adjustable back rest and console/steering control, these tow tractor provides a unique suspended and damped "U" shape platform. This links the 3 main point of contact between operator and machine: scoop seat, platform and console and provides a superior driving experience over long travel distances or uneven floors.

Linde Material Handling

Linde

Reliability

The robustness of the steering control, the strong towing mounting and the high quality steel chassis ensure reliable operation over long periods of time. Highly durable electronic components also contribute to increased truck life. Extensive testing in the heaviest applications confirm the tractors' reliability.

Service

Efficient in operation and highly cost effective. CAN bus connections enable all truck data to be accessed for service inspection. Service intervals of 1,000 operating hours ensure high uptime. Easy accessibility to all components and the use of maintenance free AC motors contribute to fast service times.

Technical data (according to VDI 2198)

		LINDE			
Characteristics	1.1	Manufacturer			
	1.2	Manufacturer's type designation	P30C	P50C	
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Battery	Battery	
	1.4	Operator type: hand, pedestrian, stand-on, seat-on, order-picker	Stand-on	Stand-On	
	1.5	Load capacity	Q (kg)	3000	5000
	1.7	Rated drawbar pull	F (N)	1800	1800
	1.9	Wheelbase	(± 5 mm) y (mm)	1049,5 ²⁾	1049,5 ²⁾
Weight	2.1	Dead weight	(± 10 %) kg	940 ¹⁾	940 ¹⁾
	2.3	Axle loading, unladen front/rear	(± 10 %) kg	584 / 436 ¹⁾	584 / 436 ¹⁾
Wheels and tyres	3.1	Tyres: Solid rubber (R), Superelastic (S), Polyurethane (P)		R+R	R+R
	3.2	Tyre size, front	Ø x 1mm	Ø 254x102	Ø 254x102
	3.3	Tyre size, rear	Ø x 1mm	2x Ø 250x80	2x Ø 250x80
	3.4	Auxiliary wheels size	Ø x 1mm	2x Ø 100x40	2x Ø 100x40
	3.5	Wheels, number front/rear (x = driven)		1x+2/2	1x+2/2
	3.6	Track width, front	(mm)	544	544
	3.7	Track width, rear	(mm)	675	675
Dimensions	4.8	Height of backrest, min/max	h7 (mm)	710/910 ⁴⁾	710/910 ⁴⁾
	4.9	Tiller height, travel position, min/max	h14 (mm)	1020/1120	1020/1120
	4.12	Tow coupling height: Single position, 3 positions	h10 (mm)	300, 290/345/400	300, 290/345/400
	4.19	Overall length	(± 5 mm) l1 (mm)	1500 ³⁾	1500 ³⁾
	4.21	Overall width	(± 5 mm) b1/b2 (mm)	790/-	790/-
	4.32	Ground clearance, centre wheelbase	(mini) m2 (mm)	40	40
	4.35	Turning radius	(mini) Wa (mm)	1230	1230
	4.36	Minimum pivoting point distance	b13 (mm)		
Performance	5.1	Travel speed, with/without load	(± 5 %) km/h	10/10	8/8
	5.5	Drawbar pull with/without load (60 minutes rating)	N	1800	1800
	5.6	Maximum drawbar pull with/without load (5 minutes rating)	N	4000	4000
	5.7	Climbing ability with/without load (30 minutes rating)	%	5/24	< 3/24
	5.8	Maximum climbing ability with/without load (5 minutes rating)	%	8/24	5/24
	5.9	Acceleration, with/without load	(sur 10m) s	6.74/4.58	6.55/4.58
	5.10	Service brake		Electromagnetic	Electromagnetic
Drive	6.1	Drive motor rating S2 60 min	kW	3	3
	6.3	Battery according to IEC		Spécial case ⁵⁾	Spécial case ⁵⁾
	6.4	Battery voltage/rated capacity (5h)	V/Ah	24/375	24/375
	6.5	Battery weight	(± 10 %) kg	295 ¹⁾	295 ¹⁾
	6.6	Power consumption according to Linde cycle	kW	2.348/3.407	2.348/3.407
	Other	8.1	Drive control		LAC
8.4		Sound level at the driver's ear according to DIN 12053	dB (A)	< 70	< 70
8.5		Tow coupling, design/type, DIN Standard		-	-

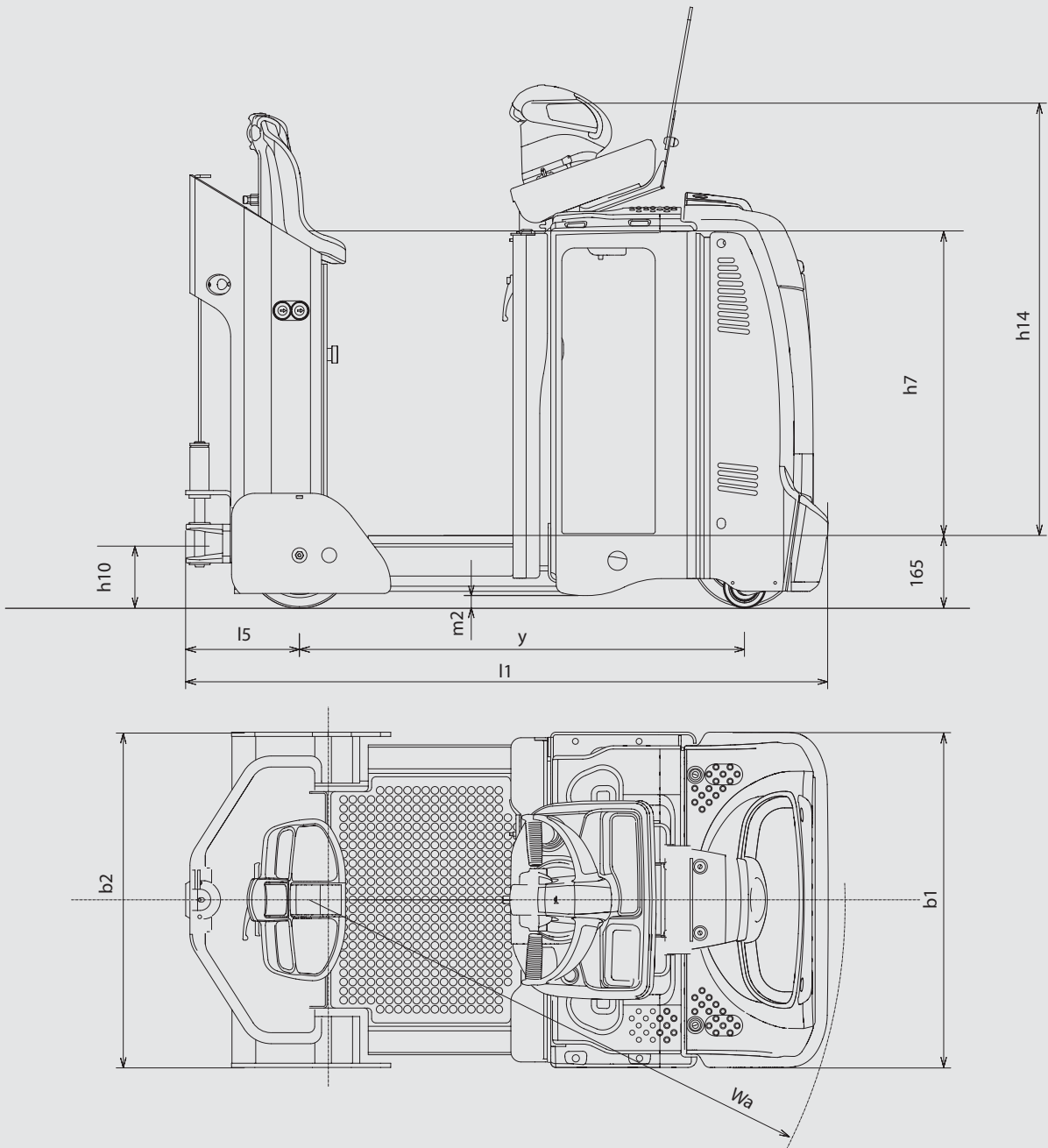
1) With battery item 6.5

2) with battery compartment 3 PzS side removal (+100 mm for 3 PzS vertical and 4 PzS side removal; +150 mm for 4 PzS vertical removal; +225 mm for 5 PzS vertical removal)

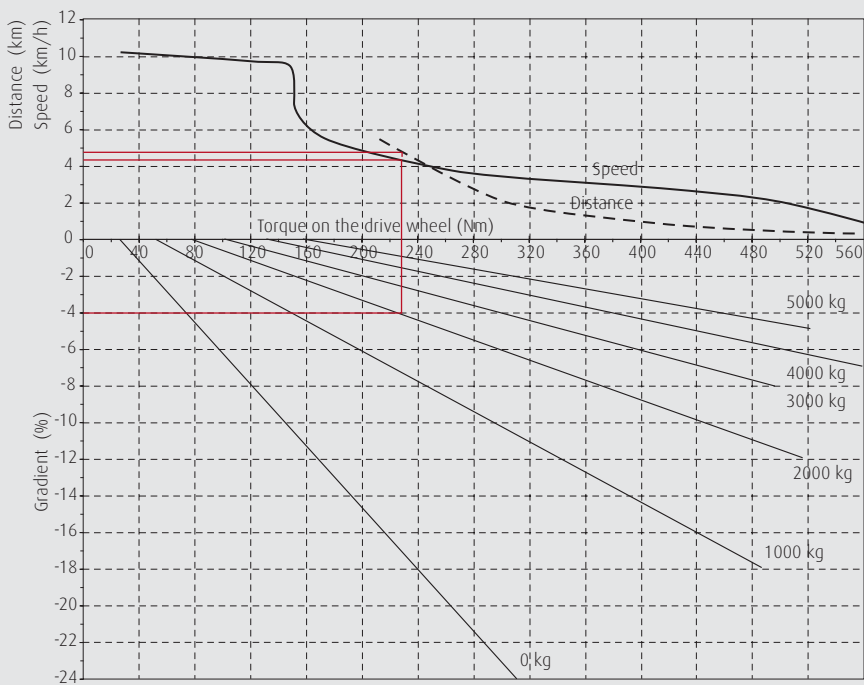
3) +10mm with hook

4) 100mm clearance (through a height adjustment handle) + 100mm (through a fixed adjustment behind the seat)

5) Special case for side battery change - DIN 43535 B for all vertical battery change



Example of application



The example shown illustrates	
A tractor towing	2 t load
Operating on a ramp of	4%
Maximum travelling speed reachable	4,3 km/h
Length of ramp	4,9 km



Equipment

Standard equipment

Safe, comfortable operator compartment with unique “U” shaped platform linking: scoop seat, platform and console
Power assisted steering with variable steering resistance
Positive steering (drive wheel) feedback
Automatic and adjustable speed reduction when cornering
3 kW AC motor (maintenance free)
Automatic electric braking
Electromagnetic emergency brake
Key switch or log-in PIN code
Dedicated work station (with storage compartments)
Removable storage compartment/bin under scoop seat
Fixed front clipboard

Adjustable scoop seat
Adjustable console and twin grip steering control
CAN bus technology
Multifunction backlit instrument display: Safety alarm, maintenance check indicator, battery charge level, hour meter
Cushion rubber drive and load wheels
Single position hook (300mm) or supplied with 4 mounting bolts for local fitting of towing device
Vertical battery change (3 or 4 PzS)
Horn
Protection to -10°C

Optional equipment

Manually operated hook with pull cable (300mm) or 3 position tow hook 290/345/400mm
Towing attachment control (Forward/backward)
Removable storage compartment/locker under the scoop seat
Support for data terminal, clipboard and barcode reader (Pack n°2)
Front and rear working lights (LED)
Flashing beacon

Polyurethane drive wheel & cushion rubber load wheels
Non-marking cushion rubber drive & load wheels
Wet grip drive wheel & cushion load wheels
Vertical battery change 5 PzS
Side battery change (3 or 4 PzS)
Fixed battery stand for side battery change (1 or 2 batteries)

Other options available on request

Features

Ultimate driving feeling

- The unique "U" shaped operator's compartment links : console – platform – scoop seat
- It is fully suspended leading to an exceptional driving feel
- Adjustable seat, console and steering control
- Ergonomic, robust chassis with enclosed and protected load wheels
- Wide platform access
- Low stepping height



Console and Linde twin grip steering control

- Ergonomically designed console incorporates steering control, clipboard, emergency isolator CAN bus plug and Linde Digital Information Display (hourmeter, battery discharge indicator, warning and information display)
- Adjustable in height, the console provide controls and instrumentation all within easy reach
- All main control functions integrated into one handle for operation by both or either hand
- Optimum protection for both hands

Storage / Equipments

- Standard removable compartment /bin under scoop seat with front and top access (Locker as an option)
- Wide storage compartment to store gloves, documents...
- Storage compartment on the console to store pencils, adhesive tape...
- Wide compartments under the console for wrapping paper...

Power steering

- Proportional, self centring, power-assisted steering for effortless, precise operation
- Adjustable steering resistance and positive steering feedback ensures the truck is always on track
- Automatic speed reduction when cornering

CAN bus connectivity

- Intelligent electronic management of all components for rapid and easy diagnosis
- All performance parameters can be accurately adjusted by the service technician to suit each individual application



Tow Hook options

- Different hooks available: Single position, 3 positions and manually operated hook with pull cable operated without leaving the work station
- Optional inching control on both sides enables easy and safe operation (Forward/backward)

AC Motor

- Powerful, smooth 3kW at 100% performance
- Moisture and dust-proof motor, maintenance-free
- No rollback on uphill starting
- Maximum speed of 10km/h, whether the truck is laden or unladen (8km/h for P50C)

A battery for every need

- Vertical battery change as standard (3 and 4PzS)
- Wide range of batteries from 375 Ah (3PzS) to 620 Ah (5PzS)
- Battery locking system for side change option secures battery in compartment and eases battery changing

Subject to modification in the interests of engineering progress. Illustrations and technical details non-binding for actual construction. All measurements subject to customary tolerances.

