Standard Equipment/Optional Equipment

Standard Equipment

New standard features
Wide product range: P 60+P 80 tractors, W 08 load transporter
Superb ergonomics and spacious operator's compartment
Efficiency power setting
Two stage travel speed selection
Generous storage compartments
Auxiliary power supply socket (12 V) in dashboard
Key switch, or alternatively PIN Code access
Resilient cushioning and swinging arm suspension on all three
wheels
Linde Curve Assist reduces speed in turns
General
Three wheel configuration for optimum manoeuvrability

Excellent stability Side battery exchange, 48V electrical system Single pedal accelerator and direction lever Adjustable PVC covered seat Pneumatic tyres 4.5 kW sealed AC drive motor Rear multi-position towing coupling

Standard colour scheme – vermillion and charcoal grey

Optional Equipment

Lighting systems (incandescent bulb or LED) Deluxe seat with mechanical suspension Deluxe Super Comfort seat with air suspension and heating Dead man footswitch Variable energy saving/performance parameter modes ('Economy', 'Efficiency', 'Performance') to suit individual applications Various towing couplings for rear and front (incl. extensions and electrical remote coupling) Metal front protection shield Rear protection grid (load transporter) Rail for rear platform transporter) Individual travel speed settings Audible warning in reverse Inching controls (forward & backwards) on both sides at rear of chassis

Front inching control (forward traction only) on both sides of the central chassis for order picking applications Front mounting bar for optional equipment such as mirrors, A4 clipboard, data terminals etc. Vertical pole at the rear for optional equipment such as flashing beacon, bin etc. Modular cabin versions (sun protection, roof+screens, flexi

Linde high frequency AC traction controller sealed against

Sealed and reverse polarity protected connectors ensure

Digital interactive display indicating battery discharge status, working hours, travel speed (km/h), Power setting adjustment, driving direction, indicators, and further

Regenerative electric braking as accelerator released

Gradient hold control & start assist without roll-back

Electrical overload protection for motor/controller

Self adjusting hydraulic drum brakes on all three wheels

Batteries and chargers

doors, full metal doors, cabin heating)

Electronics

Safety

the ingress of dust and moisture

excellent vibration proof contact

information for optional equipment

Four independent braking systems:

Constant speed on gradients

Emergency circuit isolator

Electric horn

temperature

Automatic electro-magnetic parking brake

Duplicated fail-to-safe electronic system

48V DIN batteries up to 375 Ah capacity Various optional changing methods including battery on Range of chargers to suit the battery and application Battery roller bed



Safety

Heavy-duty steel chassis and rugged upper structure with rounded profiles protects operator. Four independent braking systems provide effective braking in all situations. Emergency isolator, electric horn, duplicated fail-tosafe electronic circuits and excellent all-round visibility. Automatic, electro-magnetic parking brake.

Performance

A powerful 4.5 kW sealed AC drive motor for impressive pulling power and up to 20 km/h unladen speed. Latest energy efficient Linde electronic control delivers seamless travelling and manoeuvrability.

Comfort

Easy access and exit is ensured with ergonomic, non-slip steps and wide access openings on either side with smoothly curved profiles. The spacious angled foot well and generous legroom, adjustable seat, intuitive automotive control levers, adjustable steering wheel and ergonomic pedal layout provide an optimum working environment for every individual operator. Resilient mountings and swinging arm suspension on all three wheels.

Reliability

Linde Material Handling

A rugged, profiled steel chassis and impact resistant upper structures for maximum structural integrity and durability. Industrial standard mechanical and electrical components together with a heavy-duty drive axle and differential deliver continuous, reliable performance...

These outstanding ergonomic and performance design features result in a unique, intuitive interface between the operator and the tractor, to deliver consistently high efficiency and productivity ratios in a wide range of material handling applications.

Features

Chassis

- → Heavy duty, profiled chassis
- → Rugged, impact resistant top section
- → Durable carrying platform
- → Ergonomic rounded profile design
- → Resilient cushioning and swinging arm suspension system front & rear



Steering

- → Precise responsive steering
- → Large lock to lock angle
- → Adjustable steering column to suit
- every size of operator
- Precision travelling and manoeuvring

→ Rear multi-position towing coupling as

→ Optional types of front and rear towing

→ Optional automatic couplings

- → Four independent braking systems:
- → Regenerative electric braking
- → Self-adjusting hydraulic drum brakes on all wheels
- → Automatic electromagnetic parking brake
- → Automatic hill start (No roll-back)

- operators compartment
- → Spacious foot well and leg room
- → Automotive style intuitive control levers



- → Exceptionally energy efficient Linde digital controller
- → Smooth, precise control of travel and manoeuvring
- → Programmable performance parameters
- → 4.5 kW sealed AC drive motor delivers optimum versatility and efficiency

Operator's compartment

- → Superbly spacious and ergonomic
- → Non-slip step and wide access on both
- → Ergonomic, automotive pedal layout
- → Adjustable seat

Batteries and chargers

- → 48V DIN batteries up to 375 Ah capa-
- → Efficient and safe side changing design
- → Various optional changing methods including battery on rollers
- → Range of chargers to suit the battery and application

Serviceability

Towing couplings

standard

- → Easy service access to all key compo-
- → Extended uptime between scheduled services
- → Low maintenance design
- → Digital display assists charging and maintenance planning
- → Diagnostic computer port (CAN bus system)



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Technical Data according to VDI 2198

	1.1	Manufacturer		LINDE	LINDE	LINDE
Characteristics	1.2	Model designation		P60	P80	W08
	1.2a	Series		1191-00	1191-00	1191-00
	1.3	Power unit		Battery	Battery	Battery
	1.4	Operation		Seat	Seat	Seat
	1.5	Load capacity/Load	Q (t)	0.15 / 6.0 1)	0.15 / 8.01)	0.8 / 7.0
	1.7	Rated tractive force	F (N)	1200	1600	1400
	1.9	Wheelbase	y (mm)	1190 2)	1190 ²⁾	1795 ²⁾
jhts	2.1	Service weight	(kg)	1260 (1515) 3) 4)	1280 (1535) 3) 4)	1230 (1485) 3) 4)
Weights	2.3	Axle load without load, front/rear	(kg)	550 / 710 (662 / 853) 4)	560 / 720 (672 / 863) 4)	590 / 640 (750 / 735)
Wheels/Tyres	3.1	Tyres rubber, SE, pneumatic, polyurethane		Pneumatic	Pneumatic	SE
	3.2	Tyre size, front		4.00-8 / 6PR	4.00-8 / 6PR	125/75-8
	3.3	Tyre size, rear		4.00-8 / 6PR	4.00-8 / 6PR	125/75-8
	3.5	Wheels, number front/rear (x = driven)		1 / 2x	1 / 2x	1 / 2x
	3.6	Track width, front	b10 (mm)	O ²⁾	0 2)	O 2)
	3.7	Track width, rear	b11 (mm)	860 ²⁾	860 ²⁾	860 ²⁾
	4.7	Height of overhead guard (cabin)	h6 (mm)	2070 2)	2070 2)	2070 2)
	4.8	Height of seat/stand on platform	h7 (mm)	1020	1020	1055
	4.12	Towing coupling height	h10 (mm)	270, 325, 380 ²⁾	270, 325, 380 ²⁾	270, 325, 380 ²⁾
	4.13	Platform height, unladen	h11 (mm)	645	645	680
10	4.16	Loading platform, length	13 (mm)	520	520	1595
sion	4.17	Rear overhang		350	350	840
Dimensions	4.18	Loading platform, width	b9 (mm)	900 ²⁾	900 ²⁾	900 ²⁾
	4.19	Overall length		1830 ²⁾	1830 ²⁾	2955 ²⁾
	4.21	Overall width	b1/b2 (mm)	996 ²⁾	996 ²⁾	996 ²⁾
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	135 ⁵⁾	135 5)	135 5)
	4.35	Turning radius	Wa (mm)	1650 ⁶⁾	1650 ⁶⁾	2230 ⁶⁾
	4.36	Minimum pivoting point distance	b13 (mm)	600	600	600
Performance	5.1	Travel speed, with/without load	(km/h)	12 / 20	10 / 20	11 / 20
	5.5	Tractive force, with/without load	(N)	-	-	-
	5.6	Maximum tractive force, with/without load	(N)	-	-	-
	5.7	Climbing ability, with/without load	(%)	see performance graph	see performance graph	see performance graph
	5.8	Maximum climbing ability, with/without load	(%)	see performance graph	see performance graph	see performance graph
	5.10	Service brake		Electric/hydraulic	Electric/hydraulic	Electric/hydraulic
Drive	6.1	Drive motor, 60 minute rating	(kW)	4.5 (AC)	4.5 (AC)	4.5 (AC)
	6.3	Battery according to DIN 43531/35/36 A,B,C,no		43 531 / A	43 531 / A	43 531 / A
ā	6.4	Battery voltage/rated capacity (5h)	(V/Ah)	48 / 375	48 / 375	48 / 240 7)
	6.5	Battery weight (± 5%)	(kg)	560	560	394
Others	8.1	Type of drive control		Electronic/stepless	Electronic/stepless	Electronic/stepless
	8.4	Noise level at operator's ear	(dB(A))	60	60	60
	8.5	Towing coupling, design/type, DIN 15 170		see option list	see option list	see option list
	Refe	d on level, dry surface with rolling resistance of 2001 r to graph for specific operating conditions and when ves inclines or ramps.		5) (± 2 mm) 6) (± 20 mm) 7) With 48/375 Ah tra	vel speed is reduced	

1) Based on level, dry surface with rolling resistance of 200N/t.

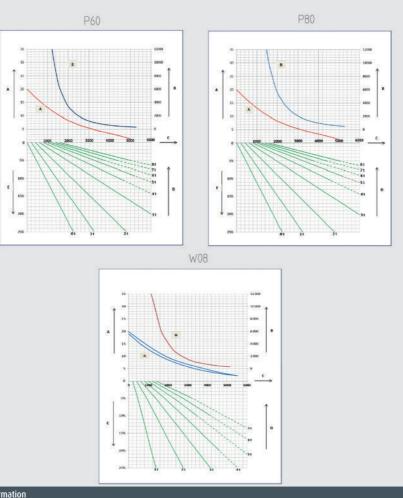
Refer to graph for specific operating conditions and when the application involves inclines or ramps.

2) (± 5 mm)

3) (± 10 kg)

4) Values for cabin in brackets

Performance charts



Speed (km/h)

Drawbar pull (N)

Gradient (%)

Permissiable hauls per hour (m)

Combined weight: trailer + load (t)

milativii						
The permissible haul per hour is the total distance travelled, including the return journey and any downhill						
gradients. It is recommended that braked trailers are used when trailer loads exceed 2.5 tonne and for all trailer						
oads where a gradient is involved. The solid lines indicate the load/gradient combinations where the tractor can						
start from stationary.						

