



## Diesel Forklift Trucks

Capacity 5000 – 8000 kg

H50, H60, H70, H80,

H80/900, H80/1100

SERIES 396

### Safety

With loads weighing up to 8,000 kg, safety takes first priority. The Linde Torsion Support proves very advantageous when swaying loads and dynamic forces have to be contended with. Up to 30% less mast distortion can be realised. An enormous advantage, even on higher liftheights.

### Performance

A truck designed to take care of the really tough tasks. Advanced engine and drive technology combined with the original Linde Load Control enables the operator to use the truck's vast potential to maximise productivity. Comfortable and precise fingertip control of all mast functions.

### Comfort

Man and machine are perfectly interfaced on these high-capacity forklifts. Designed to the most advanced ergonomic standards. An increased driver's cab with automobile-class ambience, comfortable seats with adjustable armrest up to pneumatic suspension: basics to fast, stress-free working.

### Reliability

50 years of permanent optimisation of the original Linde hydraulic system are combined with a robust industrial diesel engine with 87 kW output. The result is absolute reliability. The power unit with two maintenance-free displacement pumps for driving and lifting is designed for rugged applications. But more than that, it even makes working easier. The 3-way decoupling of the driver's cab, chassis and engine reliably reduces oscillation and vibration.

### Productivity

Effective and cost-efficient at work: The original Linde hydrostatic drive cost does away with gearshift, clutch, differential and drum brakes. As a result, servicing costs are low, truck uptime is high and productivity is enhanced.

Linde Material Handling

*Linde*

# Technical data

Characteristics	1.1	Manufacturer		LINDE	LINDE
	1.2	Model designation		<b>H 50D</b>	<b>H 60D</b>
	1.3	Power unit: battery, petrol, LP gas, mains power		Diesel	Diesel
	1.4	Operation: pedestrian, stand-on, seated, order picker		Seated	Seated
	1.5	Load capacity	Q (t)	5.0	6.0
	1.6	Load centre	c (mm)	600	600
	1.8	Axle centre to fork face	x (mm)	630	630
	1.9	Wheelbase	y (mm)	2160	2160
	Weight	2.1	Service weight	kg	10160
2.2		Axle load with load, front/rear	kg	12770/2390	14360/2040
2.3		Axle load without load, front/rear	kg	4925/5235	4940/5460
Wheels and tyres	3.1	Tyres, front/rear (SE = CS superelastic, L = pneumatic)		SE	SE
	3.2	Tyre size, front		355/65-15 <sup>2)</sup>	355/65-15 <sup>2)</sup>
	3.3	Tyre size, rear		8.25-15 <sup>2)</sup>	8.25-15 <sup>2)</sup>
	3.5	Wheels, rubber front/rear (x = driven)		2x/2	2x/2
	3.6	Track width, front	b10 (mm)	1594 <sup>4)</sup>	1594 <sup>4)</sup>
	3.7	Track width, rear	b11 (mm)	1600	1600
	Dimensions	4.1	Mast/fork carriage tilt, forward/backward	$\alpha/\beta$ (°)	5.0/9.0
4.2		Height of mast, lowered	h1 (mm)	2735 <sup>5)</sup>	2735 <sup>5)</sup>
4.3		Free lift	h2 (mm)	150	150
4.4		Lift	h3 (mm)	3550 <sup>1)</sup>	3550 <sup>1)</sup>
4.5		Height of mast, extended	h4 (mm)	4448 <sup>1)</sup>	4448 <sup>1)</sup>
4.7		Height of overhead guard (cabin)	h6 (mm)	2746	2746
4.8		Height of seat/stand-on platform	h7 (mm)	1503	1503
4.12		Towing coupling height	h10 (mm)	847	846
4.19		Overall length	l1 (mm)	4639	4639
4.20		Length to fork face	l2 (mm)	3439	3439
4.21		Overall width	b1/b2 (mm)	1900	1900
4.22		Fork dimensions	s/e/l (mm)	60 x 130 x 1200	60 x 130 x 1200
4.23		Fork carriage to DIN 15173, class/form A, B		4A	4A
4.24		Width of fork carriage	b3 (mm)	1800	1800
4.31		Ground clearance, mast	m1 (mm)	207	204
4.32		Ground clearance, centre of wheelbase	m2 (mm)	247	247
4.33		Aisle width with pallets 1200 x 1000 across forks	Ast (mm)	4890	4890
4.34		Aisle width with pallets 800 x 1200 along forks	Ast (mm)	5090	5090
4.35		Turning radius	Wa (mm)	3060	3060
4.36		Min. turning radius, front axle	b13 (mm)	975	975
Performance	5.1	Travel speed, with/without load	km/h	23/23	23/23
	5.2	Lifting speed, with/without load	m/s	0.53/0.53	0.53/0.53
	5.3	Lowering speed, with/without load	m/s	0.50/0.50	0.50/0.50
	5.5	Tractive force with/without load	N	35000/34000	38000/35000
	5.7	Climbing ability, with/without load	%	26/34	24/34
	5.9	Acceleration time, with/without load	s	5.1/4.7	5.6/5.1
	5.10	Service brake		hydrostatic	hydrostatic
IC-engine	7.1	Manufacturer of engine /type		Deutz TCD 2012 L04-2V	Deutz TCD 2012 L04-2V
	7.2	Engine rated power to ISO 1585	kW	87	87
	7.3	Rated rpm	min <sup>-1</sup>	2200	2200
	7.4	Number of cylinders/Displac. ccm	cm3	4/4038	4/4038
	7.5	Fuel consumption to VDI	l/h, kg/h	7.5	7.9
Others	8.1	Type of drive control		hydrostat. transmission	hydrostat. transmission
	8.2	Working pressure for attachments	bar	265	265
	8.3	Oil quantity for attachments	l/min	70	70
	8.4	Mean noise level at driver' ear	dB(A)	77	77
	8.5	Towing coupling, design/type		similar to DIN 15170-H	similar to DIN 15170-H

1) For alternative mast refer to table page 3

5) With 150 mm free lift

2) Further tyres on demand

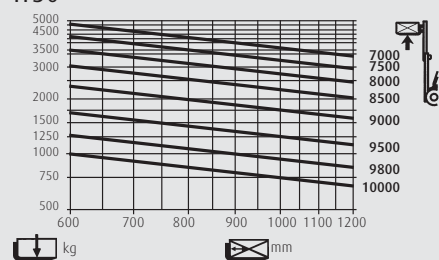
3) Figures in brackets refer to twin tyre configuration 8.25 - 15/18 PR

4) 1748 mm with twin tyres 8.25 - 15

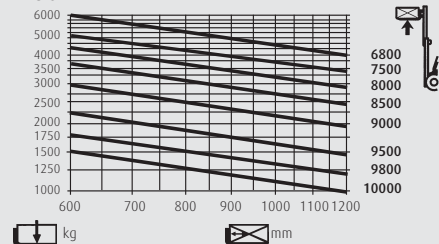
LINDE	LINDE	LINDE	LINDE
<b>H70D</b>	<b>H80D</b>	<b>H80D/900</b>	<b>H80D/1100</b>
Diesel	Diesel	Diesel	Diesel
Seated	Seated	Seated	Seated
7.0	8.0	8.0	8.0
600	600	900	1100
640	640	670	670
2160	2160	2510	2810
11720	12520	14070	14920
16265/2455	17930/2590	19785/2285	20580/2340
5245/6475	5340/7180	6780/7290	7540/7380
SE-Zw	SE-Zw	SE-Zw	SE-Zw
8.25-15 <sup>2)</sup>	8.25-15 <sup>2)</sup>	8.25-15 <sup>2)</sup>	315/70-15 <sup>2)</sup>
8.25-15 <sup>2)</sup>	315/70-15 <sup>2)</sup>	315/70-15 <sup>2)</sup>	315/70-15 <sup>2)</sup>
4x/2	4x/2	4x/2	4x/2
1742 <sup>4)</sup>	1742 <sup>4)</sup>	1742 <sup>4)</sup>	1752 <sup>4)</sup>
1600	1550	1550	1550
5.0/9.0	5.0/9.0	5.0/9.0	5.0/9.0
2738 <sup>1)5)</sup>	2738 <sup>1)5)</sup>	2735 <sup>1)5)</sup>	2738 <sup>1)5)</sup>
150	150	150	150
3150 <sup>1)</sup>	3150 <sup>1)</sup>	2750 <sup>1)</sup>	2750 <sup>1)</sup>
4245 <sup>1)</sup>	4244 <sup>1)</sup>	4144 <sup>1)</sup>	4146 <sup>1)</sup>
2745	2746	2746	2747
1503	1504	1503	1505
841	845	845	844
4649	4649	5629	6329
3449	3449	3829	4129
2232	2232	2232	2300
70 x 150 x 1200	70 x 150 x 1200	70 x 200 x 1800	70 x 200 x 2200
4A	4A	4A	4A
1800	2180	2180	2180
207	204	201	208
246	245	246	247
4900	4900	5215	5505
5100	5100	5415	5705
3060	3060	3345	3635
975	975	975	975
23/23	23/23	23/23	23/23
0.54/0.51	0.54/0.51	0.54/0.51	0.54/0.51
0.56/0.48	0.56/0.48	0.56/0.48	0.56/0.48
45000/41000	50000/42000	51000/46000	54000/50000
24/33	25/36	24/34	25/34
6.1/5.5	6.5/5.7	6.6/5.8	6.7/5.9
hydrostatic	hydrostatic	hydrostatic	hydrostatic
Deutz TCD 2012 L04-2V	Deutz TCD 2012 L04-2V	Deutz TCD 2012 L04-2V	Deutz TCD 2012 L04-2V
87	87	87	87
2200	2200	2200	2200
4/4038	4/4038	4/4038	4/4038
8.4	8.9	9.6	10.1
hydrostat. transmission	hydrostat. transmission	hydrostat. transmission	hydrostat. transmission
265	265	265	265
70	70	70	70
77	77	77	77
similar to DIN 15170-H	similar to DIN 15170-H	similar to DIN 15170-H	similar to DIN 15170-H

## Lifting capacity diagrams

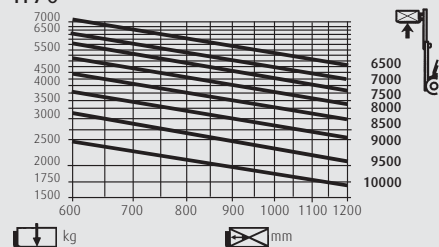
### H50



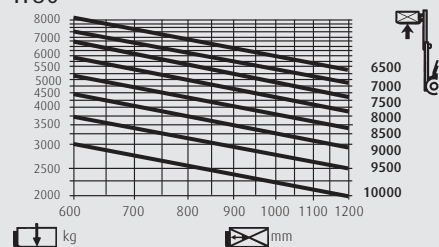
### H60



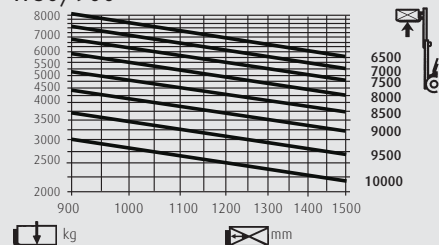
### H70



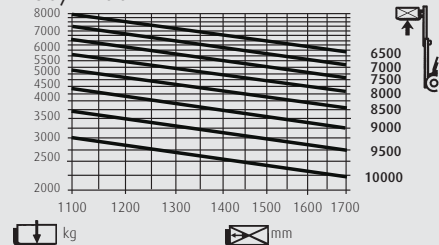
### H80



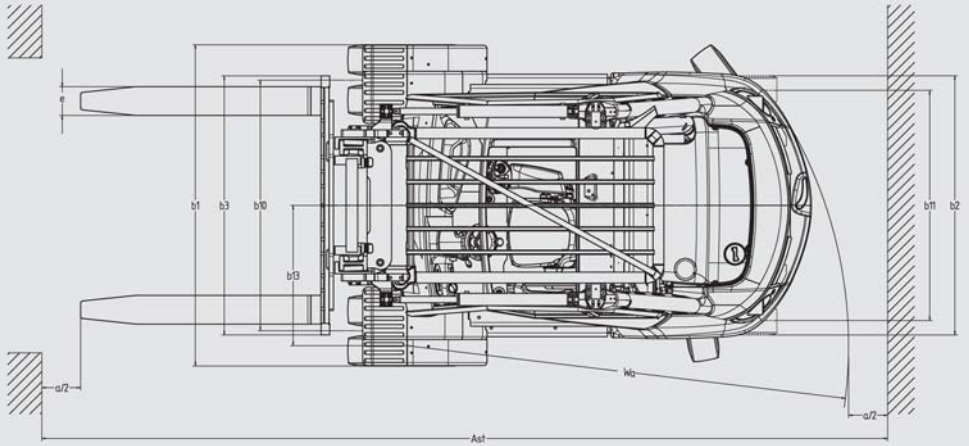
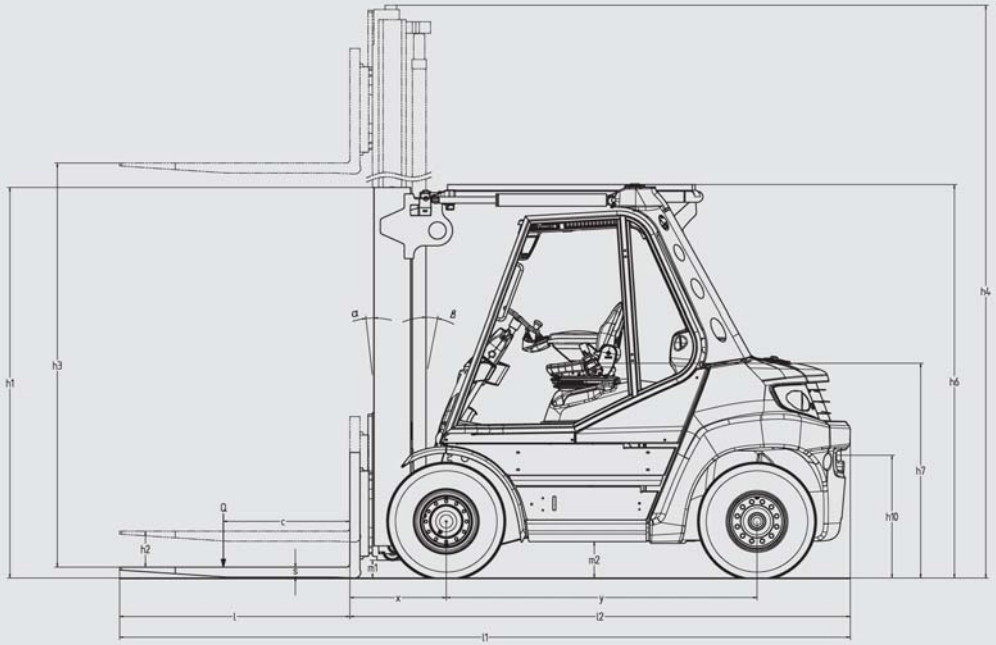
### H80/900



### H80/1100



Carrying capacity diagrams valid with SE-tyres.



Safety distance a = 200 mm

**Overall and lift heights H 50, H 60 (in mm)**

Lift	<b>h3</b>	3550	4150	4550	5250	6050
Overall heights, forks lowered (with 150 mm freelifit-Standard)	<b>h1 #</b>	2730	3030	3230	3580	3980
Overall heights at max. lift with 4 rollers fork carriage	<b>h4</b>	4440	5040	5440	6140	6940
Overall heights at max. lift with 6/8 rollers fork carriage	<b>h4</b>	4640	5240	5640	6340	7140

**Overall and lift heights H 70, H 80 (in mm)**

Lift	<b>h3</b>	3150	3750	4150	4850	5650
Overall heights, forks lowered (with 150 mm freelifit-Standard)	<b>h1 #</b>	2730	3030	3230	3580	3980
Overall heights at max. lift with 4 rollers fork carriage	<b>h4</b>	4240	4840	5240	5940	6740
Overall heights at max. lift with 8 rollers fork carriage	<b>h4</b>	4540	5140	5540	6240	7040

**Overall and lift heights H 80/900, H 80/1100 (in mm)**

Lift	<b>h3</b>	2750	3350	3750	4450	5250
Overall heights, forks lowered (with 150 mm freelifit-Standard)	<b>h1 #</b>	2730	3030	3230	3580	3980
Overall heights at max. lift with 8 rollers fork carriage	<b>h4</b>	4140	4740	5140	5840	6640

# Standard and optional equipment

## Standard equipment

Turbocharged direct-injection 4,0l DEUTZ diesel engine with intercooler and 87 kW

Precise response twin drive pedals

Linde Load Control integrated in armrest

Hydraulic suspension comfort-class seat with extensive range of adjustment

Adjustable-angle steering wheel

Low effort, responsive and virtually play-free hydrostatic steering with on-demand power assist

High safety and stability thanks to Linde Torsion Support

Variable displacement pump for driving and lifting to reduce consumption

High performance hydraulic filter concept, preserves maximum oil purity and extends life of all hydraulic components

Glare-free display including fuel gauge, hour meter and service information

Control lights on display for engine oil pressure, engine overheating, parking brake, audible warning signal for engine and hydraulic oil temperature, blocked air intake filter and low fuel level

Plenty of storage space

Interior light

Superelastic tyres

### Standard mast

Lift height h3 = 3,550 mm (H50, H60),

Lift height h3 = 3,150 mm (H70, H80),

Lift height h3 = 2,750 mm (H80/900, H80/1100)

### Fork carriage

Width b3 = 1,800 mm (H50, H60, H70),

Width b3 = 2,180 mm (H80, H80/900),

Width b3 = 2,400 mm (H80/1100)

### Forks

Length l = 1,200 mm (H50 – H80),

Length l = 1,800 mm (H80/900),

Length l = 2,200 mm (H80/1100)

## Options

Single drive pedal with direction selector positioned on armrest

Standard masts

3,550 to 8,850 mm lift (H50, H60)

3,150 to 8,850 mm lift (H70, H80)

2,750 to 8,850 mm lift (H80/900, H80/1100)

Triplex masts (full free lift) available 09/2008

Several load backrests

Several fork carriages

Several fork lengths

One or two or three or four additional hydraulic circuits for all mast types

Overhead guard can be upgraded to full cabine with roof, front and rear screens and doors

Wiper-washers for front, rear and roof screens

Roof blind, clipboard, additional interior lighting, height-adjusting steering column

Seats providing additional comfort (lumbar support, seat heater, air suspension) and adjustments

Swivel seat 17°

Cab heater with integral pollen filter

Air conditioning

Radio with CD/MP3/SD-cards and speakers

Truck lighting, work lights

Audible reversing alarm, flashing beacon and rotating beacon

RTA (Road Traffic Association)

Several Mirrors

Several tyres

LFM (Linde Forkliftdata Management)

Integral diesel particle filter with charge status indicator on display

Custom paintwork

Foundry version

Other options available on request

# Features

## Original Linde hydrostatic drive

- Responsive, smooth and precise driving
- No clutch, differential or drum brakes; hydrostatic drive assumes function of service brake
- Robust drive system, well proven in severest duty
- Low maintenance costs and long life



## Linde clear-view mast

- Superb visibility
- Full load capacity up to maximum lift height
- Exceptional residual capacity

## Linde twin drive pedals

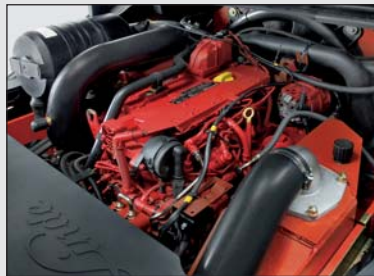
- Quick change of forward/reverse direction without changing feet on pedals
- Short pedal stroke
- No leg fatigue
- Increased productivity

## Linde Load Control

- Accurate, safe load handling
- Effortless fingertip control of all mast functions
- Traction and lift functions completely separate

## Linde Truck Control

- Reliable electronic controller
- High dependability resulting from redundant monitoring systems
- Automatic control of engine speed as function of load
- Casing totally enclosed for protection from dust and dirt



## Linde operator compartment

- Designed to advanced ergonomic standards
- Spacious cab with automobile equivalent legroom
- Excellent visibility of load and surroundings due to slim-line mast sections and increased cabin width
- Cushioned drive unit and driver's cab reduces road shocks

## High-economy engine technology

- Industrial DEUTZ Diesel engine incorporating most advanced technology
- High torque
- Low fuel consumption
- Low engine-out emissions

## Linde Torsion Support

- Reduction of mast distortion up to ca. 30% thanks to Linde Torsion Support
- Minimized loading and wear of truck frame and mast
- Safety bonus: Lever action makes possible significantly increased residual capacity at high lifts

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