

Diesel Forklift Trucks 5000, 6000, 7000 and 8000 kg

Linde



353

Introduction:

Developed with the aid of the latest design methods, these trucks offer the following outstanding features:

- Exceptional economy, due to minimised servicing costs and long service intervals.
- High productivity and low fuel consumption through the use of high-torque engines combined with hydrostatic transmission control systems.
- Outstanding environmental friendliness, arising from:
 - optimised engine designs in terms of exhaust gases and noise;
 - low noise levels for operator and surrounding environment alike.
- Ergonomically designed cab and controls, with:
 - Linde double pedal control system;
 - Linde central control lever;
 - operator's compartment insulated from vehicle itself.

Operator's compartment:

Optimised layout, based on the latest ergonomic principles. Considerably reduced vibration and noise, through insulating the operator's compartment and hydraulic components from the vehicle itself by means of shock absorbers. Seat adjustable to operator's height and weight, as well as being spring suspended and hydraulically damped. Linde double pedal control system offers accurate reversing

(lift, lower, tilt). Automatic adjustment of engine speed to the power output required for lifting and other functions. Driver's cab forms an integral unit with the driver's compartment and can be fitted with additional equipment up to fully enclosed cab configuration. Wide, clearly visible steps ensure safe mounting and dismounting.

Chassis:

Designed for maximum strength with the aid of computers (FEM). Enclosed all round to reduce noise and protect internally mounted sub-assemblies from damage.

Engine:

Water cooled, diesel engine, specially adapted for use with this series of trucks. High torque rating at low engine rpm not only reduces fuel consumption and noise levels but also prolongs durability. Smoke emissions from the diesel engine are exemplary below 2.5 Bosch under all operating conditions. Reduced exhaust emissions through compliance with Euro 1 standards for gases and particulates.

Automatic speed control:

The automatic engine speed control system, exclusive to Linde, ensures that the engine and hydrostatic system are constantly operating at the lowest possible rpm or pump output ratio, thus saving fuel and reducing emissions.

Transmission:

Hydrostatic transmission, made by Linde

provides sensitive, infinitely variable control of vehicle speed, while also serving as the operating braking system. The integral, trouble-free, multiple-disc brake acts only as a parking brake. Automatically engaged when engine switched off. Oil volume supplied by the hydrostatic pump is controlled by the engine revolutions and pump displacement angle is separated and directed to the two oil motors, thus eliminating the need for a differential and gear transmission.

Steering:

Hydrostatic system providing light operation, precise control and low steering effort (14 N), thus allowing a steering wheel of only 300 mm diameter.

Mast:

Overhead located tilt cylinders for smooth tilting and mast stabilisation. The LTS (Linde Torsion Support) with overhead guard function ensures torsional strength enabling easier working through reduced torsional swing of the mast resulting in longer working life. Outer and inner masts of the clear-view lifting assembly made of interleaved double-T-profiles. Two leaf-chains raise the fork carriage via the inner mast lifting cylinders.

Braking:

Integral multiple-disc parking brake automatically engaged when the engine is switched off. The hydrostatic transmission also acts as a wear-free parking brake.

LINDE		Forklift trucks		Data sheet for material handling equipment			
April 1997		Manufacturer's Data and Design Characteristics					
Characteristics	1.1	Manufacturer		Linde	Linde	Linde	
	1.2	Model designation		H 50 D	H 60 D	H 70 D	
	1.3	Power unit: battery, diesel, petrol, LP gas, mains power		Diesel	Diesel	Diesel	
	1.4	Operation: manual, pedestrian, stand-on, seated, order picker		Driver seated	Driver seated	Driver seated	
	1.5	Load capacity	Q (t)	5000	6000	7000	
	1.6	Load centre	C (mm)	600	600	600	
	1.8	Axle centre to fork face	x (mm)	590	590	600	
1.9	Wheelbase	y (mm)	2160	2160	2160		
Weight	2.1	Service weight	kg	8400	9300	10600	
	2.2	Axle load with load, front/rear	kg	11750 / 1650	13450 / 1850	15800 / 1800	
	2.3	Axle load without load, front/rear	kg	4050 / 4350	4150 / 5150	5000 / 5600	
Wheels and tyres	3.1	Tyres, front/rear (SE = CS superelastic, L = pneumatic)		L (SE) / L (SE)	L (SE) / L (SE)	L (SE) / L (SE)	
	3.2	Tyre size, front		300 – 15 / 18 PR ³⁾	355/65 – 15 / 24 PR ⁶⁾	8.25 – 15 / 18 PR ⁷⁾	
	3.3	Tyre size, rear		8.25 – 15 / 18 PR ⁴⁾	8.25 – 15 / 18 PR ⁴⁾	8.25 – 15 / 18 PR ⁴⁾	
	3.5	Wheels, number front/rear (x = driven)		2x (4x) / 2 ²⁾	2x (4x) / 2 ²⁾	4x (2x) ⁷⁾ / 2	
	3.6	Track width, front	b ₁₀ (mm)	1564 ⁵⁾	1564 ⁵⁾	1718 ⁵⁾	
	3.7	Track width, rear	b ₁₁ (mm)	1600	1600	1600	
Dimensions	4.1	Mast/fork carriage tilt, forward/backward	α/β (°)	6 / 10	6 / 10	6 / 10	
	4.2	Height of mast, lowered	h ₁ (mm)	2730 ¹⁾	2730 ¹⁾	2730 ¹⁾	
	4.3	Free lift	h ₂ (mm)	150	150	150	
	4.4	Lift	h ₃ (mm)	3550 ¹⁾	3550 ¹⁾	3150 ¹⁾	
	4.5	Height of mast, extended	h ₄ (mm)	4350 ¹⁾	4350 ¹⁾	4150 ¹⁾	
	4.7	Height of overhead guard (cabin)	h ₆ (mm)	2714	2714	2714	
	4.8	Height of seat/stand-on platform	h ₇ (mm)	1432	1432	1432	
	4.12	Towing coupling height	h ₁₀ (mm)	810	810	810	
	4.19	Overall length	l ₁ (mm)	4595	4595	4600	
	4.20	Length to fork face	l ₂ (mm)	3395	3395	3400	
	4.21	Overall width	b ₁ /b ₂ (mm)	1864 (2232) ²⁾	1918 (2232) ²⁾	2232 (1918) ⁷⁾	
	4.22	Fork dimensions	s/e/l (mm)	60 x 130 x 1200 ⁸⁾	60 x 130 x 1200 ⁸⁾	70 x 150 x 1200	
	4.23	Fork carriage to DIN 15 173, class/form A, B		4 A	4 A	4 A	
	4.24	Width of fork carriage	b ₃ (mm)	1800	1800	2180	
	4.31	Ground clearance, mast	m ₁ (mm)	202	202	202	
	4.32	Ground clearance, centre of wheelbase	m ₂ (mm)	245	250	245	
	4.33	Aisle width with pallets 1000x1200 across forks	A _{st} (mm)	4845	4845	4850	
	4.34	Aisle width with pallets 800x1200 along forks	A _{st} (mm)	5045	5045	5050	
4.35	Turning radius	W _a (mm)	3060	3060	3060		
4.36	Minimum between the centres of rotation distance	b ₁₃ (mm)	975	975	975		
Performance	5.1	Travel speed, with/without load	km/h	22 / 22	22 / 22	22 / 22	
	5.2	Lifting speed, with/without load	m/s	0.53 / 0.53	0.53 / 0.53	0.42 / 0.42	
	5.3	Lowering speed, with/without load	m/s	0.50 / 0.50	0.50 / 0.50	0.42 / 0.42	
	5.5	Tractive force, with/without load, 60 minute rating	N	61000 / 31000	57000 / 32000	58000 / 39000	
	5.7	Climbing ability, with/without load, 30 minute rating	%	45 / 28	35 / 27	29 / 28	
	5.9	Acceleration time, with/without load (first 10 m)	s	4.7 / 4.3	5.2 / 4.7	5.7 / 5.1	
5.10	Service brake		hydrostatic	hydrostatic	hydrostatic		
IC-engine	7.1	Manufacturer of engine / type		KHD / BF6M1012E	KHD / BF6M1012E	KHD / BF6M1012E	
	7.2	Engine rated power to ISO 1585	kW	85	85	85	
	7.3	Rated rpm	min ⁻¹	2200	2200	2200	
	7.4	Number of cylinders / Displac. ccm	cm ³	6 / 4800	6 / 4800	6 / 4800	
	7.5	Fuel consumption to VDI	l/h	5.3	5.6	5.9	
Others	8.1	Type of drive control		hydrostat./infin. variable	hydrostat./infin. variable	hydrostat./infin. variable	
	8.2	Working pressure for attachments	bar	260	260	260	
	8.3	Oil quantity for attachments	l/min	–	–	–	
	8.4	Mean noise level at driver's ear	dB (A)	78	78	78	
	8.5	Towing coupling, design/type DIN, no		–	–	–	
1) For alternative mast refer to page 3.				7) Optional 355/65 – 15/24 PR single tyres or superelastic t			
2) Figures in brackets refer to twin tyre configurations 8.25 – 15/18 PR.				8) Fork length "l" ≥ 2000 mm (H50), 1500 mm (H60); s-e =			
3) Optional 355/65 – 15/24 PR single tyres or twin tyres 8.25 – 15/18 PR or superelastic tyres.							
4) Optional 300 – 15/18 PR or superelastic tyres.							
5) 1564 mm with single tyres 355/65 – 15, 1718 mm with twin tyres 8.25 – 15.							
6) Optional twin tyres 8.25 – 15/18 PR or superelastic tyres.							

DFG

to VDI 3586

VDI 2198

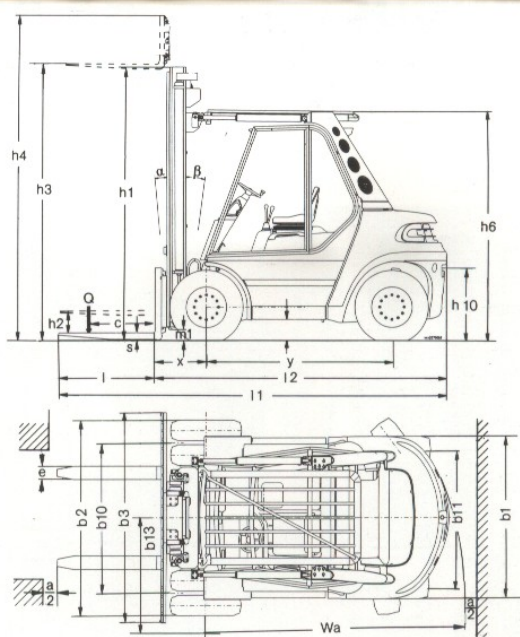
Registration note

Model types

Linde	Linde
H 80 D	H 80-900 D
Diesel	Diesel
Driver seated	Driver seated
8000	8000
600	900
600	630
2160	2510
11550	12400
17650 / 1900	18200 / 2200
5250 / 6300	5400 / 7000
L (SE) / L (SE)	L (SE) / L (SE)
8.25 - 15 / 18 PR	8.25 - 15 / 18 PR
300 - 15 / 18 PR	300 - 15 / 18 PR
4x / 2	4 / 2
1718	1718
1550	1550
6 / 10	6 / 10
2730 ¹⁾	2730
150	150
3150 ¹⁾	2750
4150 ¹⁾	4150
2714	2714
1432	1432
810	810
4605	5590
3405	3790
2232	2232
70 x 150 x 1200	70 x 200 x 1800
4 A	A
2180	2180
202	202
240	240
4855	5175
5055	5375
3060	3345
975	975
22 / 22	22 / 22
0.42 / 0.42	0.42 / 0.42
0.42 / 0.42	0.42 / 0.42
58000 / 41000	58000 / 42000
26 / 27	25 / 26
6.2 / 5.3	-
hydrostatic	hydrostatic
KHD / BF6M1012E	KHD / BF6M1012E
85	85
2200	2200
6 / 4800	6 / 4800
6.2	6.7
hydrostat./infin. variable	hydrostat./infin. variable
260	260
-	-
78	78
-	-

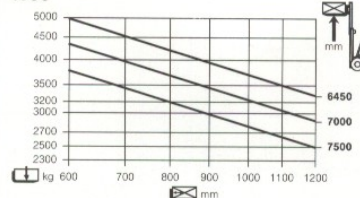
s on demand.

) x 150 mm.

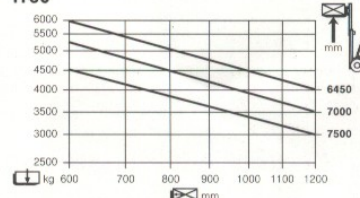


Lifting capacity diagrams:

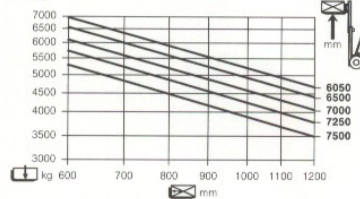
H50



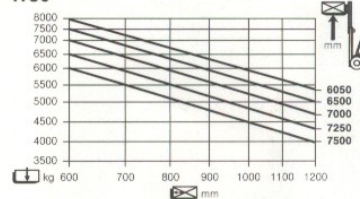
H60



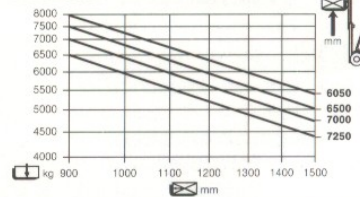
H70



H80



H80/900



Lifting capacity diagrams valid with SE-tyres.

Overall and lift heights H50, H60 (in mm)

Lift heights	h3	3550	3850	4150	4550	4850	5250	5650	6050	6450	6850
Overall heights, retracted (with 150 mm free lift - standard)	h1 #	2730	2880	3030	3230	3380	3580	3780	3980	4180	4380
Overall heights, extended	h4	4450	4750	5050	5450	5750	6150	6550	6950	7350	7750

Overall and lift heights H70, H80 (in mm)

Lift heights	h3	3150	3450	3750	4150	4450	4850	5250	5650	6050	6450
Overall heights, retracted (with 150 mm free lift - standard)	h1 #	2730	2880	3030	3230	3380	3580	3780	3980	4180	4380
Overall heights, extended	h4	4250	4550	4850	5250	5550	5950	6350	6750	7150	7550

Overall and lift heights H80/900 (in mm)

Lift heights	h3	2750	3050	3350	3750	4050	4450	4850	5250	5650	6050
Overall heights, retracted (with 150 mm free lift - standard)	h1 #	2730	2880	3030	3230	3380	3580	3780	3980	4180	4380
Overall heights, extended	h4	4150	4450	4750	5150	5450	5850	6250	6650	7050	7450

Width of fork carriage b1 1800 mm (H50, H60), 2180 mm (H70, H80, H80/900)

Fork lengths l 1000, 1100, 1200

Safety distance a 200