



Sideloader
Capacity 3000 kg to 6000 kg
S30, S40, S50, S60

SERIES 316

Safety

Perfect load control and manoeuvrability in close surroundings is assured at all times. Linde achieves this by locating the cabin in the optimised, forward position to allow optimised direct visibility to the mast and forks and onto the load decks. The visibility around the machine from the operating position is optimised by the utilisation of generous glass panels to the front, rear and sides.

Performance

The finely tuned hydrostatic drive system delivers precision in operation balanced with optimised speed of performance. The step-less drive system ensures that acceleration through to top speed through the final drive axle provides smooth operation. The precise operation of the hydrostatic system enables accurate load engagement, therefore limiting impact shocks.

Comfort

The operator's cabin is mounted on the chassis using high-density rubber mounts. This ensures that drive and power train vibration, together with operational vibrations, are sup-



pressed, thus providing the operator with a comfortable working environment. The standard operator's seat is equipped with hydraulic damping for additional cushioning.

Reliability

The proven reputation of the hydrostatic drive system, together with the powerful high-torque diesel engine provides a highly efficient and reliable drive system. The mast and integrated fork carriage have been thoroughly tested for endurance and security in operation to ensure a long operational life.

Productivity

With the utilisation of the world-class hydrostatic drive system, speed and precision in operation is assured. The operational characteristics of the hydraulic drive system, and ergonomically placed operator controls ensure that minimum operator movement is required, thereby saving time and limiting fatigue.

Standard and optional equipment

Standard equipment

Cabin with front and rear washer wipers with heater	Steer axle with hydraulic drum brakes
Hydraulic suspension comfort-class seat with wide range of adjustment	Pneumatic tyres
Fixed angle steering wheel	On-demand hydrostatic power steering for fuel economy and easy and precise operation
Comprehensive instrumentation	High-performance hydraulic filter preserving maximum purity of oil for long life of all hydraulic components
Internal rear-view mirror	Standard clearview lift mast
Floor mat	Non hydraulic fork carriage
Full road lighting	Forks – 1200 mm long (S30 – S60) 1400 mm 1400 mm long (S30W – S60W)
Cummins B3.3 Tier 3, water cooled diesel engine	Deck width – 1220 mm (S30-S60) 1400 mm (S30W – S60W)
Engine intake air cleaner with integral safety element	Hydraulic deck tilt
Linde Hydrostatic transmission	Standard colour scheme vermilion and charcoal grey
Heavy-duty double hub reduction drive axle with internal disc brakes	

Options

Side opening cabin door	Fork spreading carriage
Audible warning reverse alarm	Carriage backrest extension
Safety lighting	Heavy-duty deck load guards
Double stage mast 1050 mm free lift	Radio with compact disc player and speakers
Duplex Full free lift mast	External mirrors
Heavy duty engine air filter	Flashing or rotating beacons
Exhaust purifier	Accumulator for hydraulic services
Spark arrestor	Alternative colour schemes
Additional hydraulic circuits	
Tilting carriage	
Vertically moving forks	Other options available on request

Technical data

Characteristics	1.1	Manufacturer		Linde	Linde	Linde
	1.2	Model designation		S 30	S 30 W	S 40
	1.3	Power unit: battery, diesel, LP gas, mains power		Diesel	Diesel	Diesel
	1.4	Operation: manual, pedestrian, stand-on, seated, order picker		Rider seated	Rider seated	Rider seated
	1.5	Load capacity	Q (kg)	3000	3000	4000
	1.6	Load centre	c (mm)	600	700	600
	1.8	Platform edge to load face	x (mm)	58	58	58
	1.9	Wheelbase	y (mm)	2450	2450	2450
	1.9	Wheelbase	y (mm)	2450	2450	2450
Weights	2.1	Service weight	kg	6220	6420	7060
	2.2	Axle load with load, front/rear	kg	4420 / 4800	4530 / 4890	5290 / 5770
	2.3	Axle load without load, front/rear	kg	2920 / 3300	3030 / 3390	3290 / 3770
Wheels/Tyres	3.1	Tyres, front/rear. SE = (superelastic), P = (pneumatic)		P / P	P / P	P / P
	3.2	Tyre size, front		7.50 x 15 / 14 PR	7.50 x 15 / 14 PR	7.50 x 15 / 14 PR
	3.3	Tyre size, rear		7.50 x 15 / 14 PR	7.50 x 15 / 14 PR	7.50 x 15 / 14 PR
	3.5	Wheels, number, front/rear (x = driven)		2 / 2x	2 / 2x	2 / 2x
	3.6	Track width, front	b10 (mm)	1648	1828	1648
	3.7	Track width, rear	b11 (mm)	1698	1828	1698
	3.7	Track width, rear	b11 (mm)	1698	1828	1698
Dimensions	4.1	Mast/fork carriage/truck tilt, forward/backward	α/β (°)	3.5 / 4	3 / 3.5	3.5 / 4
	4.2	Height of mast lowered	h1 (mm)	2730	2730	2730
	4.3	Free lift	h2 (mm)	150	150	150
	4.4	Lift	h3 (mm)	3550 ¹	3550 ¹	3550 ¹
	4.5	Height of mast extended	h4 (mm)	4450	4450	4450
	4.7	Height of overhead guard (cabin)	h6 (mm)	2510	2510	2510
	4.8	Height, operators seat/stand-on platform	h7 (mm)	1370	1370	1370
	4.12	Towing coupling height	h10 (mm)	520 ²	520 ²	520 ²
	4.13	Platform height, unladen	h11 (mm)	870	870	870
	4.17	Loading platform, length	l3 (mm)	1425	1425	1425
	4.18	Loading platform, width	b9 (mm)	1220	1400	1220
	4.19	Overall length	l1 (mm)	4150	4150	4150
	4.21	Overall width	b1/b2 (mm)	1975 / 1975	2155 / 2155	1975 / 1975
	4.22	Fork dimensions	s/e/l (mm)	50 x 120 x 1200	50 x 120 x 1400	50 x 120 x 1200
	4.23	Fork carriage to DIN 15173, class/form A, B		3A	3A	3A
	4.24	Width of fork carriage	b3 (mm)	1200	1200	1200
	4.25	Fork spread, minimum/maximum	b5 (mm)	260 / 1200	260 / 1200	260 / 1200
	4.26	Width between platform well width (Sideloader)	b4 (mm)	1300	1300	1300
	4.28	Reach travel	l4 (mm)	1270	1450	1270
	4.31	Ground clearance, mast	m1 (mm)	165	165	165
	4.30	Ground clearance, centre of wheelbase	m2 (mm)	225	225	225
	4.31	Aisle width with pallets 1000 x 1200 crosswise	Ast (mm)	2175	2355	2175
	4.32	Aisle width with pallets 800 x 1200 lengthwise	Ast (mm)	2175	2355	2175
	4.33	Turning radius	Wa (mm)	4020	4155	4020
	4.36	Minimum pivoting point distance	b13 (mm)	1310	1450	1310
	4.39	Aisle 90 deg. intersect	AST1 (mm)	3800	3955	3800
	4.39	Aisle 90 deg. intersect	AST1 (mm)	3800	3955	3800
Performance	5.1	Travel speed, with/without load	km/h	25 / 28	25 / 28	25 / 28
	5.2	Lift speed, with/without load	m/s	0.51 / 0.53	0.51 / 0.53	0.44 / 0.53
	5.3	Lowering speed, with/without load	m/s	0.50 / 0.40	0.50 / 0.40	0.50 / 0.40
	5.4	Reach speed, with/without load	m/s	0.22 / 0.22	0.22 / 0.22	0.22 / 0.22
	5.5	Tractive force, with/without load	kN	30	30	30
	5.7	Climbing ability, with/without load	%	22 / 22	22 / 22	22 / 22
	5.10	Service brake		Dry drum/Wet disc	Dry drum/Wet disc	Dry drum/Wet disc
	6.4	Battery voltage, rated capacity	V/Ah	1 x 12 / 105	1 x 12 / 105	1 x 12 / 105
IC-engine	7.1	Engine manufacturer/type		Cummins B3.3	Cummins B3.3	Cummins B3.3
	7.2	Engine performance according to ISO 1585	kW	63	63	63
	7.3	Rated speed	1/min	2600	2600	2600
	7.4	Number of cylinders/displacement	/ cm ³	4 / 3300	4 / 3300	4 / 3300
Others	8.1	Type of drive control		hydrostatic / infinit. Variable	hydrostatic / infinit. Variable	hydrostatic / infinit. Variable
	8.2	Working pressure for attachments	bar	190	190	190
	8.3	Oil flow for attachments	l/min	100	100	100
	8.4	Noise level, at operator's ear, Overhead guard/Cab	dB(A)	77	77	77
	8.5	Trailer coupling, design/type DIN	Ø (mm)	32 ²	32 ²	32 ²

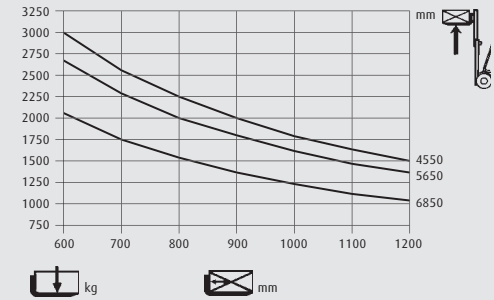
1) see mast tables

2) Optional

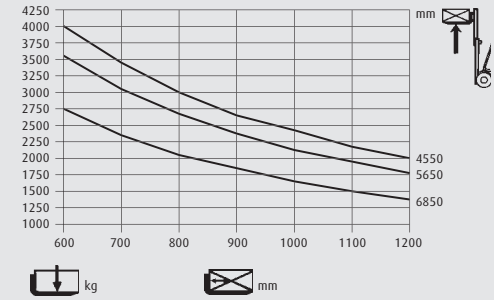
Linde	Linde	Linde	Linde	Linde
S 40 W	S 50	S 50 W	S 60	S 60 W
Diesel	Diesel	Diesel	Diesel	Diesel
Rider seated	Rider seated	Rider seated	Rider seated	Rider seated
4000	5000	5000	6000	6000
700	600	700	600	700
58	85	85	85	85
2450	2450	2450	2450	2450
7310	8600	8800	9080	9280
5480 / 5860	6650 / 6950	6760 / 7040	7450 / 7630	7560 / 7720
3480 / 3860	4150 / 4450	4260 / 4540	4450 / 4630	4560 / 4720
P / P	P / P	P / P	P / P	P / P
7.50 x 15 / 14 PR	8.25 x 15 / 14 PR	8.25 x 15 / 14 PR	300 x 15 / 18 PR	300 x 15 / 18 PR
7.50 x 15 / 14 PR	8.25 x 15 / 14 PR	8.25 x 15 / 14 PR	300 x 15 / 18 PR	300 x 15 / 18 PR
2 / 2x	2 / 2x	2 / 2x	2 / 2x	2 / 2x
1828	1648	1828	1648	1828
1828	1698	1828	1650	1780
3 / 3.5	3 / 5	4.5 / 4.5	3 / 5	4.5 / 4.5
2730	2730	2730	2730	2730
150	150	150	150	150
3550 ¹	3150 ¹	3150 ¹	3150 ¹	3150 ¹
4450	4250	4250	4250	4250
2510	2600	2600	2600	2600
1370	1460	1460	1460	1460
520 ²	610 ²	610 ²	610 ²	610 ²
870	960	960	960	960
1425	1425	1425	1425	1425
1400	1220	1400	1220	1400
4150	4150	4150	4150	4150
2155 / 2155	1975 / 1975	2155 / 2155	1975 / 1975	2170 / 2170
50 x 120 x 1400	60 x 130 x 1200	60 x 130 x 1400	60 x 130 x 1200	60 x 130 x 1400
3A	4A	4A	4A	4A
1200	1200	1200	1200	1200
260 / 1200	320 / 1200	320 / 1200	320 / 1200	320 / 1200
1300	1300	1300	1300	1300
1450	1295	1475	1295	1485
165	165	165	155	155
225	225	225	225	225
2355	2175	2355	2175	2355
2355	2175	2355	2175	2355
4155	4020	4155	4020	4155
1450	1310	1450	1310	1450
3955	3800	3955	3800	3955
25 / 28	25 / 28	25 / 28	25 / 28	25 / 28
0.44 / 0.53	0.40 / 0.41	0.40 / 0.41	0.39 / 0.41	0.39 / 0.41
0.50 / 0.40	0.48 / 0.36	0.48 / 0.36	0.48 / 0.36	0.48 / 0.36
0.22 / 0.22	0.22 / 0.22	0.22 / 0.22	0.22 / 0.22	0.22 / 0.22
30	30	30	30	30
22 / 22	22 / 22	22 / 22	22 / 22	22 / 22
Dry drum/Wet disc	Dry drum/Wet disc	Dry drum/Wet disc	Dry drum/Wet disc	Dry drum/Wet disc
1 x 12 / 105	1 x 12 / 105	1 x 12 / 105	1 x 12 / 105	1 x 12 / 105
Cummins B3.3	Cummins B3.3	Cummins B3.3	Cummins B3.3	Cummins B3.3
63	63	63	63	63
2600	2600	2600	2600	2600
4 / 3300	4 / 3300	4 / 3300	4 / 3300	4 / 3300
hydrostatic / infin- it. Variable	hydrostatic / infin- it. Variable	hydrostatic / infin- it. Variable	hydrostatic / infin- it. Variable	hydrostatic / infin- it. Variable
190	190	190	190	190
100	100	100	100	100
77	77	77	77	77
32 ²	32 ²	32 ²	32 ²	32 ²

Lifting capacity diagrams

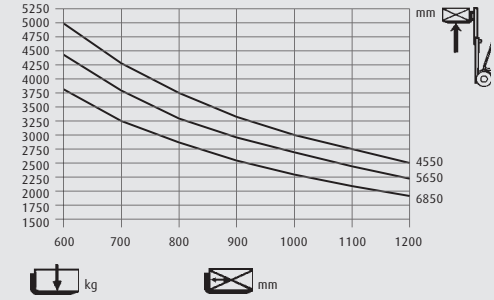
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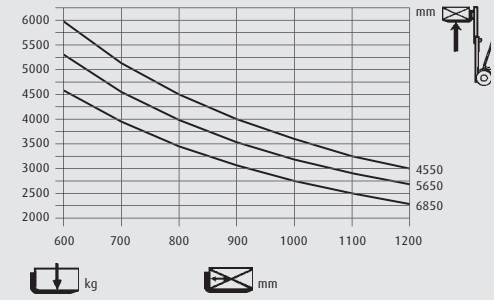
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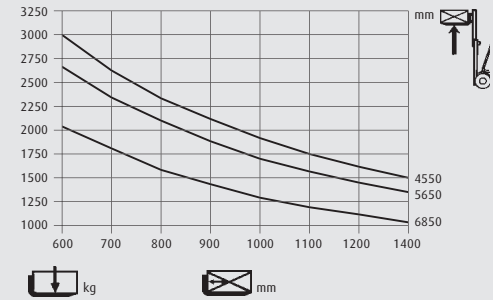
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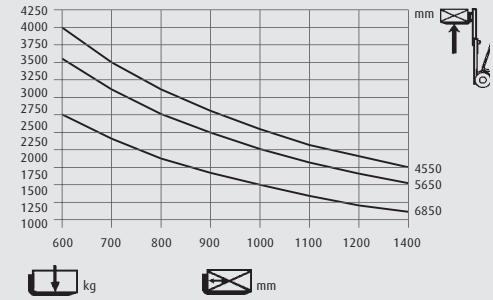
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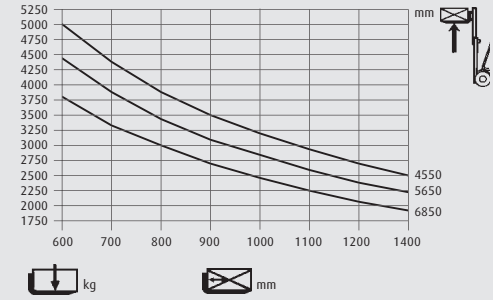
S 30 W



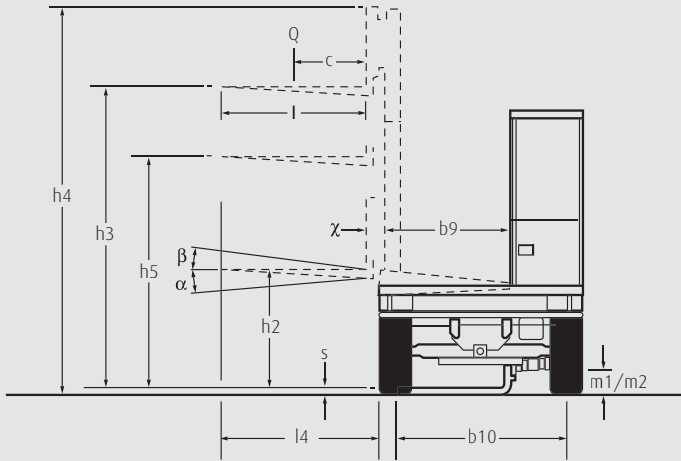
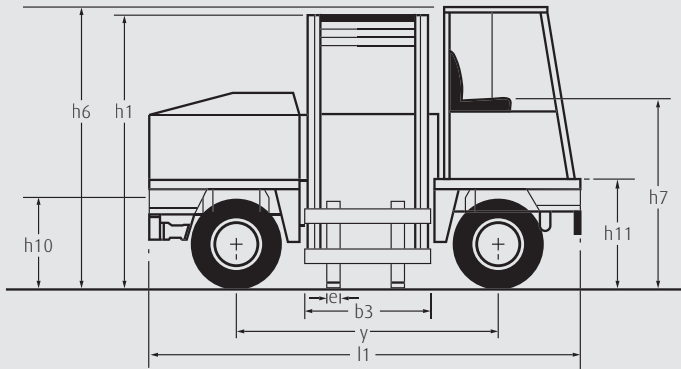
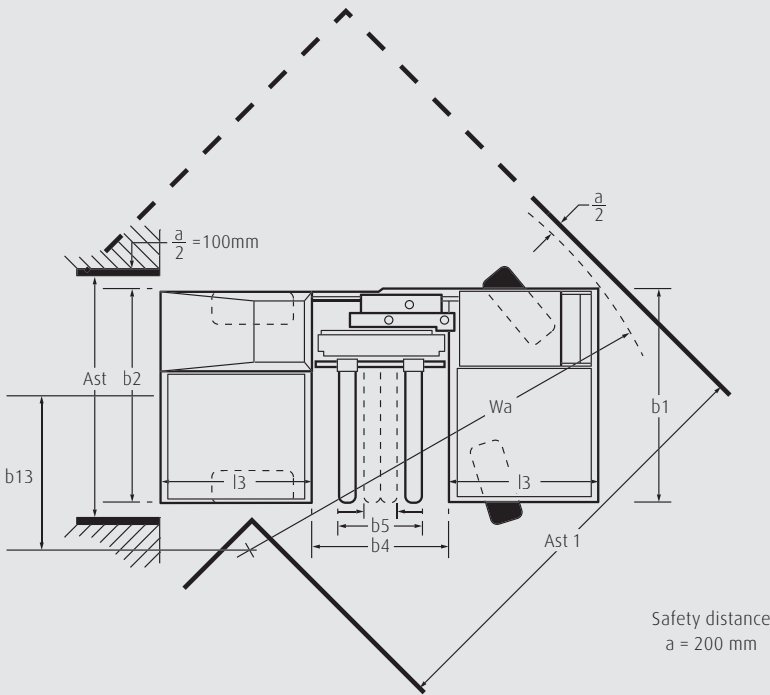
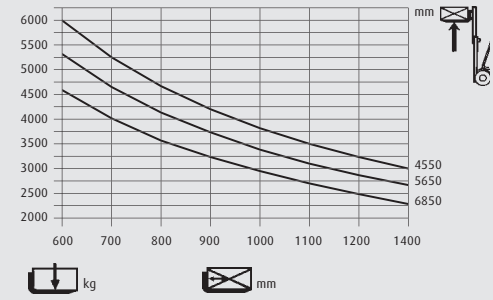
S 40 W



S 50 W



S 60 W



Standard Mast		S30, S30W, S40, S40W									
Lift height	h3	3550	3850	4150	4550	4850	5250	5650	6050	6450	6850
Lift height	h3+s	3600	3900	4200	4600	4900	5300	5700	6100	6500	6900
Normal free lift	h2	150	150	150	150	150	150	150	150	150	150
Height, mast lowered	h1	2730	2880	3030	3230	3380	3580	3780	3980	4180	4380
Height, mast extended	h4	4450	4750	5050	5450	5750	6150	6550	6950	7350	7750

Standard Mast		S50, S50W, S60, S60W									
Lift height	h3	3150	3450	3750	4150	4450	4850	5250	5650	6050	6450
Lift height S50, S50W, S60	h3+s	3210	3510	3810	4210	4510	4910	5310	5710	6110	6510
Lift height S60W	h3+s	3220	3520	3820	4220	4520	4920	5320	5720	6120	6520
Normal free lift	h2	150	150	150	150	150	150	150	150	150	150
Height, mast lowered	h1	2730	2880	3030	3230	3380	3580	3780	3980	4180	4380
Height, mast extended	h4	4250	4550	4850	5250	5550	5950	6350	6750	7150	7550

Features

Power

- A direct injection, water cooled diesel engine provides the power to match the output required for each model to ensure optimum performance.



Operators Compartment

- Forward positioned for optimised all-round visibility
- Impact tested loadguard
- Integrated overhead guard

Linde Free-sight Mast

- Optimised mast profiles for long load handling
- Cross cylinder traverse mechanism
- Cushion switch on traverse for slow-down final retraction

Load Controls

- Standard operators controls provide effortless operation
- At-hand individual hydraulic function controls
- Line-of-sight instrumentation

Modern powerfull engine

- Diesel engine stage III emissions
- 3-cylinder 3.3 ltr
- 63 kW rated at 2600 rpm



Hydrostatic transmission

- The Linde hydrostatic transmission system has no clutch, multiple clutch pack, no reversing gear and none of the maintenance and costs associated with these parts.
- The system is highly fuel efficient and excels in applications requiring smooth, precise handling and frequent travel direction changes

Deck widths

- There is a choice of either 1220 mm or 1400 mm deck width to meet individual customer requirements.
- The heavy section chequer plate deck has a tilt mechanism to facilitate easier, safer stacking, destacking and travelling
- Hydraulic deck tilt

Maintenance

- Thoughtful design, enabling easy access for routine maintenance procedures, results in maximum uptime ratios and therefore increased productivity and utilisation of the materials handling asset, for lower operating costs, and a faster return on investment

