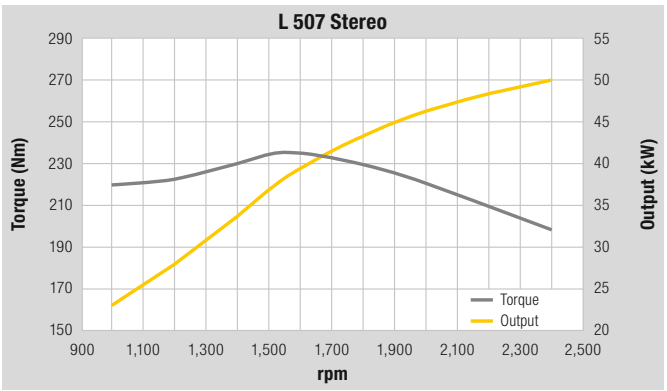
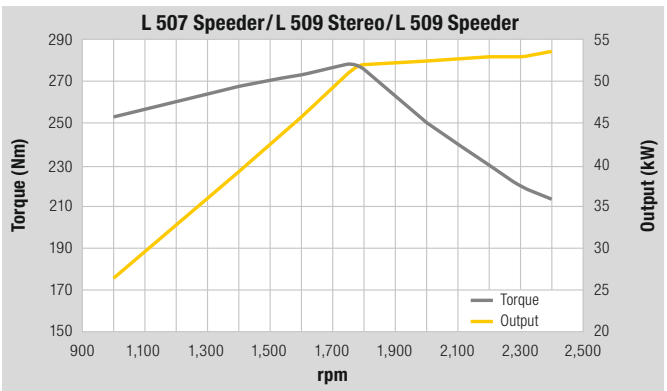
Technical Data

Engine

		L 507 Stereo	L 507 Speeder L 509 Stereo L 509 Speeder
Diesel engine		4TNV98C	4TNV98CT
Design		Water-cooled in-series diesel engine, exhaust after-treatment with a closed diesel particle filter system	Water-cooled turbocharged in-series diesel engine, exhaust after-treatment with a closed diesel particle filter system
Cylinder inline		4	4
Fuel injection process		Electronic Common Rail high-pressure injection	
Max. gross output to ISO 3046 and SAE J1995	kW/HP	50/68	54/73
	at RPM	2,400	2,400
Max. net output to ISO 9249 and SAE J1349	kW/HP	48/65	52/71
	at RPM	2,400	2,400
Rated output to ISO 14396	kW/HP	50/68	54/73
	at RPM	2,400	2,400
Max. net torque to ISO 9249 and SAE J1349	Nm	237	280
	at RPM	1,560	1,560
Displacement	litres	3.32	3.32
Bore/Stroke	mm	98/110	98/110
Air cleaner system		Dry type filter with main and safety element	
Electrical system			
Operating voltage	V	12	12
Capacity	Ah	100	100
Alternator	V/A	12/80	12/80
Starter	V/kW	12/3	12/3

The exhaust emissions are below the limits in stage IIIB/Tier 4f.





Driveline

		L 507 Stereo L 509 Stereo	L 507 Speeder L 509 Speeder
Hydrostatic driveline			
Design		Continuous, swash plate type variable flow pump and variable axial piston motor in closed loop circuit	2-speed automated gearbox, swash plate type variable flow pump and variable axial piston motor in closed loop circuit
Filtration		Suction return line filter for closed circuit	
Control		By travel and inching pedal. The inching pedal makes it possible to control the tractive and thrust forces steplessly at full engine speed. The Liebherr control lever is used to control forward and reverse travel	
Travel speed range		Speed range 1: 0 – 6 km/h Speed range 2: 0 – 20 km/h forward and reverse Speeds quoted apply with the tyres indicated as standard on loader model.	Speed range 1: 0 – 18 km/h Speed range 2: 0 – 38 km/h

Axles

		L 507 Stereo L 509 Stereo	L 507 Speeder L 509 Speeder
Four-wheel drive			
Front axle		Fixed	
Rear axle		Axle pivot steering, fixed	
Height of obstacles which can be driven over	mm	370 with all four wheels remaining in contact with the ground	370
Differentials		Automatic multi-disc limited slip differentials with 45 % locking action in both axles	100 % differential lock in front axle, manually engaged
Reduction gear		Planetary final drive in wheel hubs	
Track width		1,510 mm with tyres indicated as standard (L 507) 1,630 mm with tyres indicated as standard (L 509)	

Brakes

	L 507 Stereo L 509 Stereo	L 507 Speeder L 509 Speeder
Service brake	Wear-free service brake due to hydrostatic driveline, applied to all four wheels and addtional hydraulically activated drum brake	Wear-free service brake due to hydrostatic driveline, applied to all four wheels and addtional dual-circuit brake system, drum brake and wet multi-disc brake located in the front axle
Parking brake	Negative brake system on the drum brake	Negative brake system in the front axle acting on the wet multi-disc brakes

The braking system meets the requirements of the EC guidelines 71/320.

Steering

Design	Stereo steering system, hydraulic servo power steering. Central oscilating frame articulation with damper element in combination with rear-axle pivot steering	
Angle of articulation	30° to each side	
Angle of oscillation – centre-pivot steering	8° to each side	
Max. pressure bar	180	

Attachment Hydraulics

	L 507	L 509
Design	Gear pump to supply the hydraulic and steering systems (via priority valve)	
Cooling	Hydraulic oil cooling using thermostatically controlled fan	
Filtration	Suction return line filter in the hydraulic reservoir	
Control	Liebherr control lever, hydraulically operated, 3rd and 4th electrically, proportional control circuit	
Lift circuit	Lifting, neutral, lowering Float position controlled by Liebherr control lever with detent, automatic hoist kick out optional	
Tilt circuit	Tilt back, neutral, dump Automatic bucket return to dig optional	
Max. flow l/min.	70	93
Max. pressure bar	230	210

Attachment

	L 507	L 509
Geometry	Powerful Z-bar linkage with tilt cylinder, hydraulic quick hitch as standard	
Cycle time at nominal load	ZK	ZK
Lifting s	4.9	5.6
Dumping s	1.7	2.0
Lowering (empty) s	3.5	4.1

Operator's Cab

Design	Elastic mounted, noise-proof cab ROPS roll over protection per EN ISO 3471 / EN 474-1 FOPS falling objects protection per EN ISO 3449 / EN 474-1, Cat. II Operator's door with 180° opening angle with rigid window, fold-out window on right with 12° gap opener or 180° opening, single-pane safety glass ESG, heated rear window ESG, all windows are tinted
Liebherr operator's seat	5 way adjustable, vibration-damped operator's seat "Standard" (mechanically sprung, adjustable to operator's weight), Liebherr control lever mounted into the operator's seat as standard
Cab heating and ventilation	Fresh / recirculated air mode, cab heating via cooling water, arrangement of the air nozzles ensures quick defrosting and defogging of the windows, electrically heated rear window

Sound Level

		L 507	L 509
Sound pressure level to ISO 6396			
L_{pA} (inside cab)	dB(A)	70	70
Sound power level to 2000/14/EC			
L_{WA} (surround noise)	dB(A)	101	101

Capacities

	L 507 Stereo	L 507 Speeder	L 509 Stereo	L 509 Speeder
Fuel tank l	90	90	90	90
Engine oil (inclusive filter change) l	10.2	10.2	10.2	10.2
Travel gear / rear axle l	0.8	1.7	0.8	1.7
Coolant l	11	12	12	12
Front axle / differential l	5.2	5.2	7.4	7.4
Rear axle / differential l	4.7	4.7	6.8	6.8
Front axle / wheel hubs l	1.6	1.6	1.6	1.6
Rear axle / wheel hubs l	1.6	1.6	1.6	1.6
Hydraulic tank l	66	66	66	66
Hydraulic system, total l	102	102	102	102