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# L 538 Speeder

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## LIEBHERR

Wheel loader



**Generation**  
8

**Diesel engine**  
Tier 4f

**Tipping load**  
20,725 lb – 21,825 lb

# Technical data

## Diesel engine

<b>Diesel engine</b>	6068HB551	
Design	Water-cooled turbocharged in-series engine with cooled exhaust gas recirculation	
Cylinder inline	6	
Fuel injection process	Electronic Common Rail high-pressure injection	
Output to	kW / HP	181/242
ISO 9249 - SAE J1349	at RPM	2,000
Rated output to		
ISO 14396 / ECE-R.120	kW / HP	168 / 225
Nominal speed	at RPM	2,200
Max. torque to	lb ft	715
ISO 14396	at RPM	1,600
Displacement	in <sup>3</sup>	415
Displacement	liters	6.8
Bore / Stroke	in	4.17" / 5.0"
<b>Tier 4f</b>		
Harmful emissions values	In accordance with EPA 40 CFR part 1039 and CARB 13 CCR section 2423	
Emission control	SCR technology and closed diesel particle filter system	
<b>Air cleaner system</b>	Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display	
<b>Electrical system</b>		
Operating voltage	V	24
Battery	Ah	2 x 135
Alternator	V / A	24 / 100
Starter	V / HP	24 / 10.5

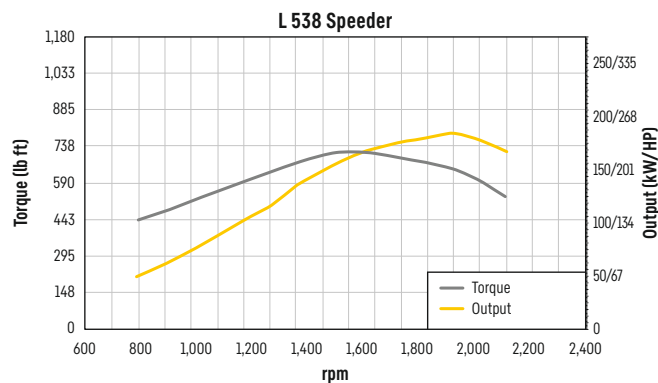
## Driveline

<b>Continuous hydrostatic driveline</b>		
Design	Swash plate type variable flow pump and two variable axial piston motors in closed loop circuit and axle transfer case. Direction of travel is reversed by changing the flow-direction of the variable-displacement pump	
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	
<b>Travel speed range</b>	Speed range 1	0 - 5.0 mph
	Speed range A1 - 2	0 - 9.9 mph
	Speed range A1 - 3	0 - 24.9 mph
	forward and reverse	
	Speeds quoted apply with the tires indicated as standard on loader model.	

## Brakes

<b>Wear-free service brake</b>	Self-locking of the hydrostatic driveline (acting on all four wheels) and additional pump-accumulator brake system with wet multi-disc brakes located in the differential housing (two separate brake circuits)
<b>Parking brake</b>	Electro-hydraulically actuated spring-loaded disc brake system on the front axle

The braking system meets the requirements of the ISO 3450.



## Axles

<b>Four-wheel drive</b>	
<b>Front axle</b>	Fixed
<b>Rear axle</b>	Center pivot, with 10° oscillating angle to each side
Height of obstacles which can be driven over	ft in 1'7"
	with all four wheels remaining in contact with the ground
<b>Differentials</b>	Automatic limited-slip differentials with 45 % locking action in both axles
<b>Reduction gear</b>	Planetary final drive in wheel hubs
<b>Track width</b>	6'3" with all types of tires

## Steering

<b>Design</b>	"Load-sensing" swash plate type variable flow pump with pressure cut-off and flow control. Central pivot with two double-acting steering cylinders
<b>Angle of articulation</b>	40° to each side
<b>Emergency steering</b>	Electro-hydraulic emergency steering system

## Attachment hydraulics

<b>Design</b>	"Load-sensing" variable axial piston pump with output and flow control, and pressure cut-off in the control block
<b>Cooling</b>	Hydraulic oil cooling using thermostatically controlled fan and oil cooler
<b>Filtration</b>	Return line filter in the hydraulic reservoir
<b>Control</b>	Liebherr control lever, electro-hydraulically operated
<b>Lifting function</b>	Lifting, neutral, lowering Auto lifting and lowering using Liebherr control lever, float position using Liebherr control lever
<b>Tilt function</b>	Tilt back, neutral, dump Automatic bucket return-to-dig for tilting in and out using Liebherr control lever
<b>Max. flow</b>	gpm 53
<b>Max. pressure</b>	psi 5,076

## Attachment

<b>Geometry</b>	Powerful, optimized z-bar kinematics with one tilt cylinder, optional hydraulic quick coupler
<b>Bearings</b>	Sealed
<b>Cycle time at nominal load</b>	ZK
Lifting	s 5.5
Dumping	s 1.9
Lowering (empty)	s 4.9

## Operator's cab

<b>Design</b>	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 Driver's cab door with 105° opening angle and opening window with 5° gap opener or 170° opening, right side sliding side window, front windscreen made of laminated safety glass, green tinted as standard, side panels with single-pane safety glass ESG, green tinted, heated rear window ESG. Continuously adjustable steering column
<b>Liebherr operator's seat</b>	6 way adjustable, vibration-damped operator's seat "Comfort" with seat, depth and incline adjustment as standard (air-cushioned with seat heating adjustable to operator's weight), Liebherr control lever mounted into the operator's seat as standard
<b>Cab heating and ventilation</b>	2-level air control, cooling water heating, defroster and air conditioning via manual nozzle position or electronic valve control for head and front area, as well as electronic fresh / recirculated air control, electrically heated rear window, filter system with pre-filter, fresh air filter and recirculated air filter, easily replaced, air condition / automatic air conditioning system with new improved cooling output optional
<b>Vibration emissions</b>	
Hand / arm vibrations	≤ 2.5 ft/s <sup>2</sup> , according with ISO 5349-1:2001
Whole-body vibrations	≤ 0.5 ft/s <sup>2</sup> , complies with technical report ISO/TR 25398:2006
<b>Measuring inaccuracy</b>	According with standard EN 12096:1997

## Sound level

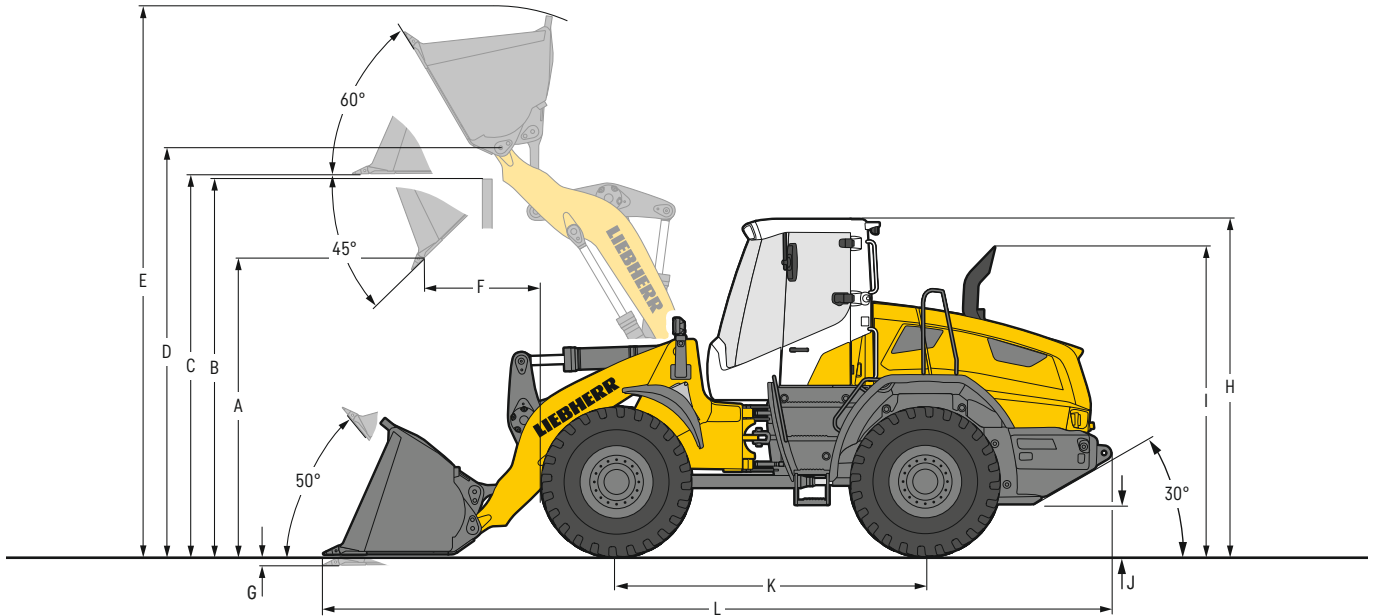
<b>Sound pressure level to ISO 6396</b>		
L <sub>PA</sub> (inside cab)	dB(A)	69
<b>Sound power level to 2000/14/EG</b>		
L <sub>WA</sub> (surround noise)	dB(A)	104

## Capacities

<b>Fuel tank (plastic design)</b>	gal	54.2
<b>Fuel tank (steel version, optional)</b>	gal	54.2
<b>DEF tank</b>	gal	5.3
<b>Engine oil (inclusive filter change)</b>	gal	6.2
<b>Transmission</b>	gal	0.7
<b>Coolant</b>	gal	7
<b>Front axle / wheel hubs</b>	gal	5 / 0.92
<b>Rear axle / wheel hubs</b>	gal	5 / 0.92
<b>Hydraulic tank</b>	gal	25
<b>Hydraulic system, total</b>	gal	47.6

# Dimensions

## Loading bucket



### Loading bucket

	ZK	ZK-QH
Geometry	T	T
Cutting tools	T	T
Lift arm length	ft in 8'8"	8'8"
Bucket capacity according to ISO 7546**	yd <sup>3</sup> 3.4	3.1
Specific material density	lb/yd <sup>3</sup> 3,034	3,034
Bucket width	ft in 8'11"	8'3"
A Dumping height at max. lift height and 45° discharge	ft in 9'9"	9'3"
B Dump-over height	ft in 11'7"	11'7"
C Max. height of bucket bottom	ft in 12'2"	12'2"
D Max. height of bucket pivot point	ft in 13'1"	13'1"
E Max. operating height	ft in 17'3"	17'8"
F Reach at max. lift height and 45° discharge	ft in 3'7"	3'12"
G Digging depth	ft in 4"	4"
H Height above operator's cab <sup>1)</sup>	ft in 10'8"	10'8"
I Height above exhaust	ft in 9'8"	9'8"
J Ground clearance	ft in 1'5"	1'5"
K Wheelbase	ft in 9'11"	9'11"
L Overall length	ft in 25'	25'7"
Turning circle radius over outside bucket edge	ft in 20'2"	20'
Breakout force (SAE)	lbf 28,100	28,855
Tipping load, straight*	lb 25,355	23,590
Tipping load, fully articulated*	lb 21,825	20,725
Operating weight*	lb 32,740	33,510
Tyre size	20.5R25 L3	

\* The figures shown include the above tires, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tires and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

\*\* Actual bucket capacity may be approx. 10 % larger than the calculation according to ISO 7546 standard. The degree to which the bucket can be filled depends on the material - see page 11.

<sup>1)</sup> With the optional "comfort safety door (can be opened 180°)", the "H" value increases by 5" when door is open.

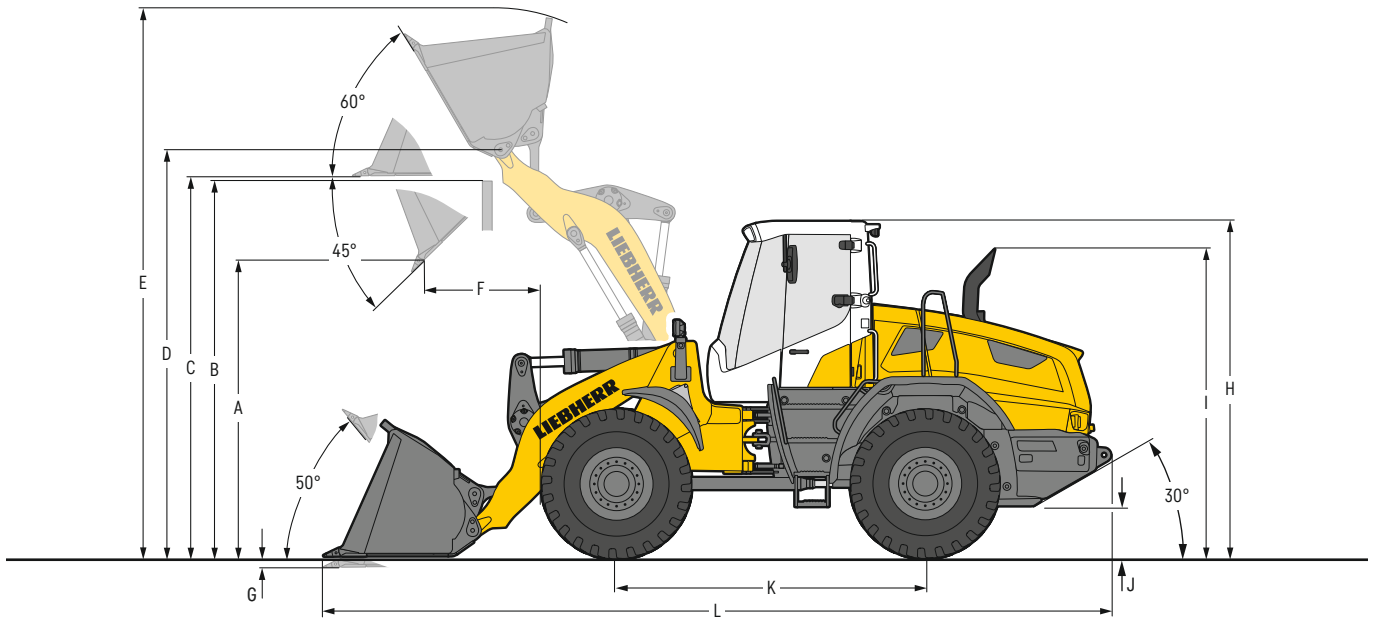
ZK = Z-bar linkage

ZK-QC = Z-bar linkage incl. quick coupler

T = Welded-on tooth holder with add-on teeth

# Dimensions

## High lift arm/standard bucket



### Loading bucket

Geometry		ZK	ZK-QH
Cutting tools		T	T
Lift arm length	ft in	9'10"	9'10"
Bucket capacity according to ISO 7546**	yd <sup>3</sup>	3.1	2.9
Specific material density	lb/yd <sup>3</sup>	2,697	2,697
Bucket width	ft in	8'3"	8'3"
A Dumping height at max. lift height and 45° discharge	ft in	11'6"	11'2"
B Dump-over height	ft in	13'4"	13'4"
C Max. height of bucket bottom	ft in	13'12"	13'12"
D Max. height of bucket pivot point	ft in	14'10"	14'10"
E Max. operating height	ft in	19'1"	19'3"
F Reach at max. lift height and 45° discharge	ft in	3'1"	3'4"
G Digging depth	ft in	5"	5"
H Height above operator's cab <sup>1)</sup>	ft in	10'8"	10'8"
I Height above exhaust	ft in	9'8"	9'8"
J Ground clearance	ft in	1'5"	1'5"
K Wheelbase	ft in	9'11"	9'11"
L Overall length	ft in	26'6"	26'11"
Turning circle radius over outside bucket edge	ft in	20'6"	20'8"
Breakout force (SAE)	lbf	29,225	26,980
Tipping load, straight*	lb	21,165	19,620
Tipping load, fully articulated*	lb	18,080	16,755
Operating weight*	lb	32,980	33,863
Tyre size		20.5R25 L3	

\* The figures shown include the above tires, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tires and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

\*\* Actual bucket capacity may be approx. 10% larger than the calculation according to ISO 7546 standard. The degree to which the bucket can be filled depends on the material - see page 11.

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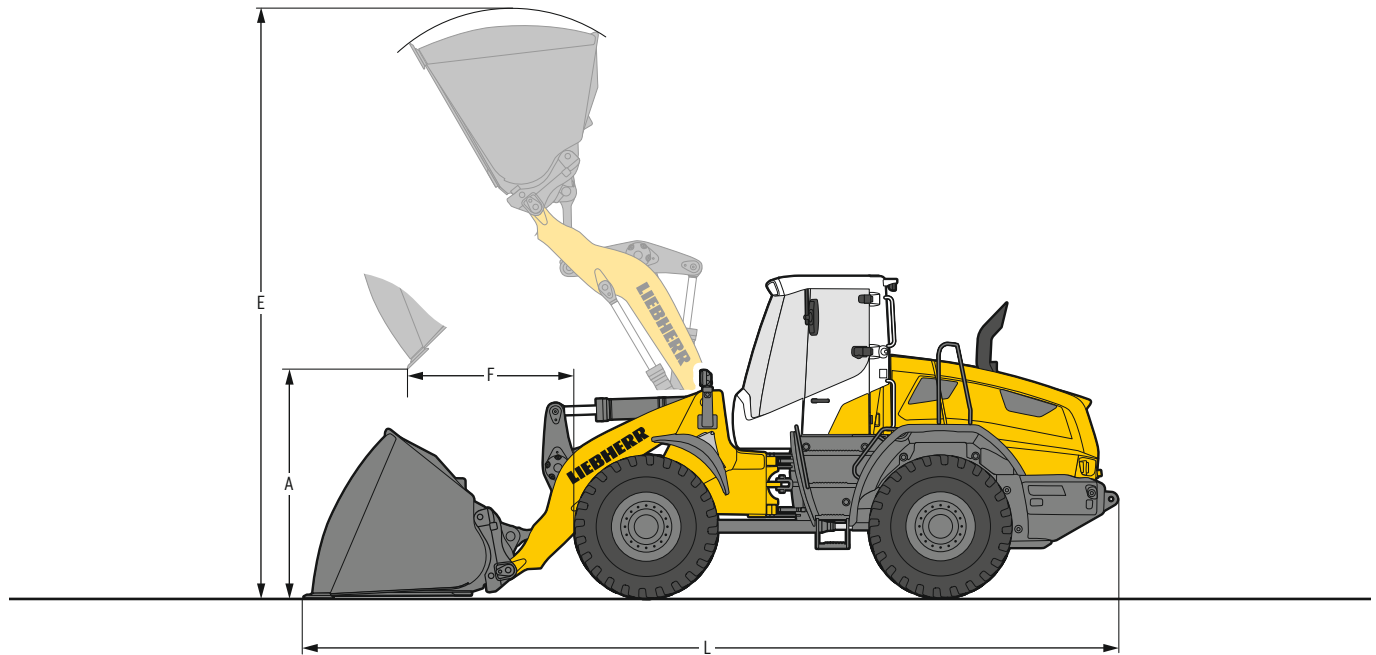
ZK = Z-bar linkage

ZK-QH = Z-bar linkage incl. quick hitch

T = Welded-on tooth holder with add-on teeth

# Attachment

## Light material bucket



### Heavy material density

Geometry		ZK	ZK-QH
Cutting tools		BOCE	BOCE
Bucket capacity	yd <sup>3</sup>	5.2	5.2
Specific material density	lb/yd <sup>3</sup>	1,770	1,686
Bucket width	ft in	8'10"	8'10"
A Dumping height at max. lift height	ft in	8'6"	8'3"
E Max. operating height	ft in	18'1"	18'5"
F Reach at maximum lift height	ft in	4'8"	4'11"
L Overall length	ft in	26'2"	26'6"
Tipping load, straight*	lb	24,030	22,710
Tipping load, fully articulated*	lb	20,505	19,620
Operating weight*	lb	33,290	34,215
Tyre size		20.5R25 L3	



### Light material density

Geometry		ZK-QH
Cutting tools		BOCE
Bucket capacity	yd <sup>3</sup>	8.5
Specific material density	lb/yd <sup>3</sup>	843
Bucket width	ft in	8'10"
A Dumping height at max. lift height	ft in	7'2"
E Max. operating height	ft in	19'11"
F Reach at maximum lift height	ft in	6'
L Overall length	ft in	28'1"
Tipping load, straight*	lb	21,605
Tipping load, fully articulated*	lb	18,520
Operating weight*	lb	35,100
Tyre size		20.5R25 L3

\* The figures shown include the above tires, all lubricants, a full fuel tank, the ROPS /FOPS cab and the operator. Different tires and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

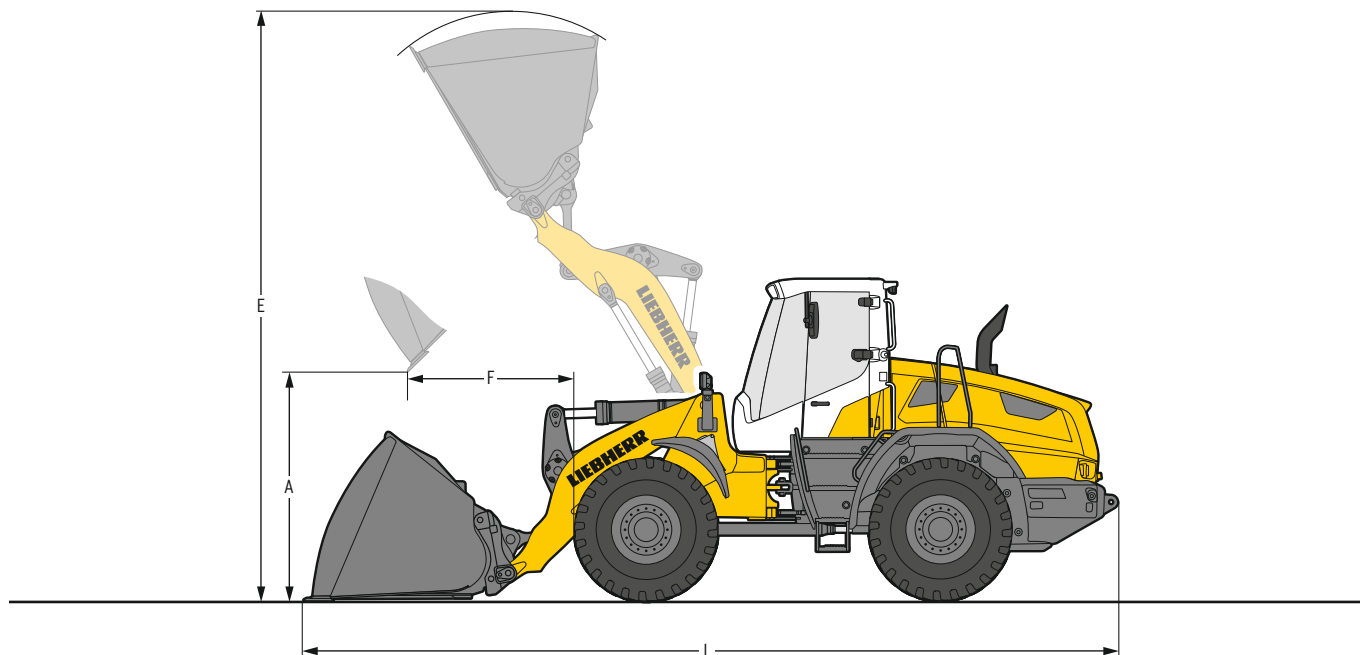
ZK = Z-bar linkage

ZK-QH = Z-bar linkage incl. quick hitch

BOCE = Bolt-on cutting edge

# Attachment

## High lift arm/light material bucket



### Heavy material density

Geometry		ZK	ZK-QH
Cutting tools		BOCE	BOCE
Bucket capacity	yd <sup>3</sup>	5.2	5.2
Specific material density	lb/yd <sup>3</sup>	1,433	1,348
Bucket width	ft in	8'10"	8'10"
A Dumping height at max. lift height	ft in	10'3"	10'
E Max. operating height	ft in	19'11"	20'3"
F Reach at maximum lift height	ft in	4'2"	4'5"
L Overall length	ft in	27'7"	27'12"
Tipping load, straight*	lb	22,270	21,165
Tipping load, fully articulated*	lb	18,960	17,860
Operating weight*	lb	34,725	35,495
Tyre size		20.5R25 L3	



### Light material density

Geometry		ZK-QH
Cutting tools		BOCE
Bucket capacity	yd <sup>3</sup>	8.5
Specific material density	lb/yd <sup>3</sup>	843
Bucket width	ft in	8'10"
A Dumping height at max. lift height	ft in	9'4"
E Max. operating height	ft in	21'2"
F Reach at maximum lift height	ft in	5'1"
L Overall length	ft in	28'12"
Tipping load, straight*	lb	20,945
Tipping load, fully articulated*	lb	17,635
Operating weight*	lb	35,825
Tyre size		20.5R25 L3

\* The figures shown include the above tires, all lubricants, a full fuel tank, the ROPS /FOPS cab and the operator. Different tires and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

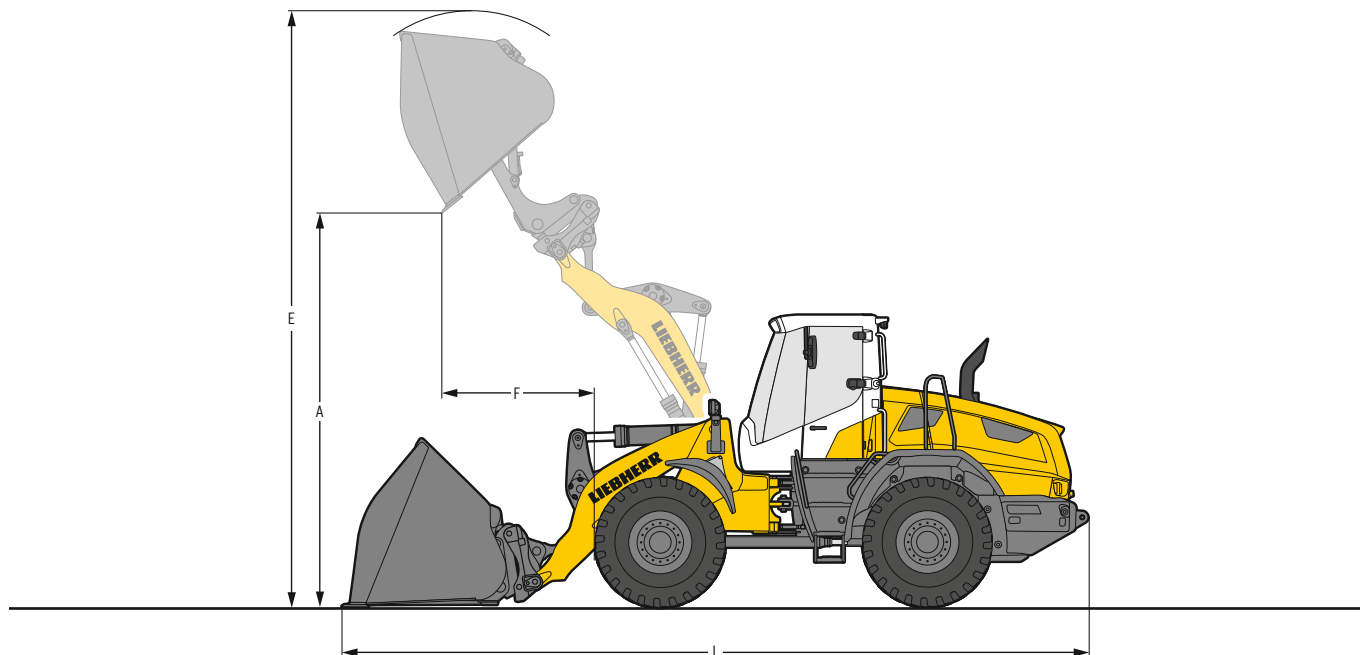
ZK = Z-bar linkage

ZK-QH = Z-bar linkage incl. quick hitch

BOCE = Bolt-on cutting edge

# Attachment

## High-Dump bucket



### Heavy material density

Geometry		ZK	ZK-QH
Cutting tools		BOCE	BOCE
Bucket capacity	yd <sup>3</sup>	5.2	5.2
Specific material density	lb/yd <sup>3</sup>	1,854	1,770
Bucket width	ft in	8'10"	8'10"
A Dumping height at max. lift height	ft in	14'11"	15'4"
E Max. operating height	ft in	20'10"	21'6"
F Reach at maximum lift height	ft in	4'8"	4'10"
L Overall length	ft in	26'5"	26'8"
Tipping load, straight*	lb	22,265	21,165
Tipping load, fully articulated*	lb	18,960	17,855
Operating weight*	lb	34,725	35,495
Tyre size		20.5R25 L3	



### Light material density

Geometry		ZK-QH
Cutting tools		BOCE
Bucket capacity	yd <sup>3</sup>	7.2
Specific material density	lb/yd <sup>3</sup>	843
Bucket width	ft in	8'10"
A Dumping height at max. lift height	ft in	14'5"
E Max. operating height	ft in	22'8"
F Reach at maximum lift height	ft in	5'9"
L Overall length	ft in	27'11"
Tipping load, straight*	lb	20,945
Tipping load, fully articulated*	lb	17,635
Operating weight*	lb	35,825
Tyre size		20.5R25 L3

\* The figures shown include the above tires, all lubricants, a full fuel tank, the ROPS /FOPS cab and the operator. Different tires and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

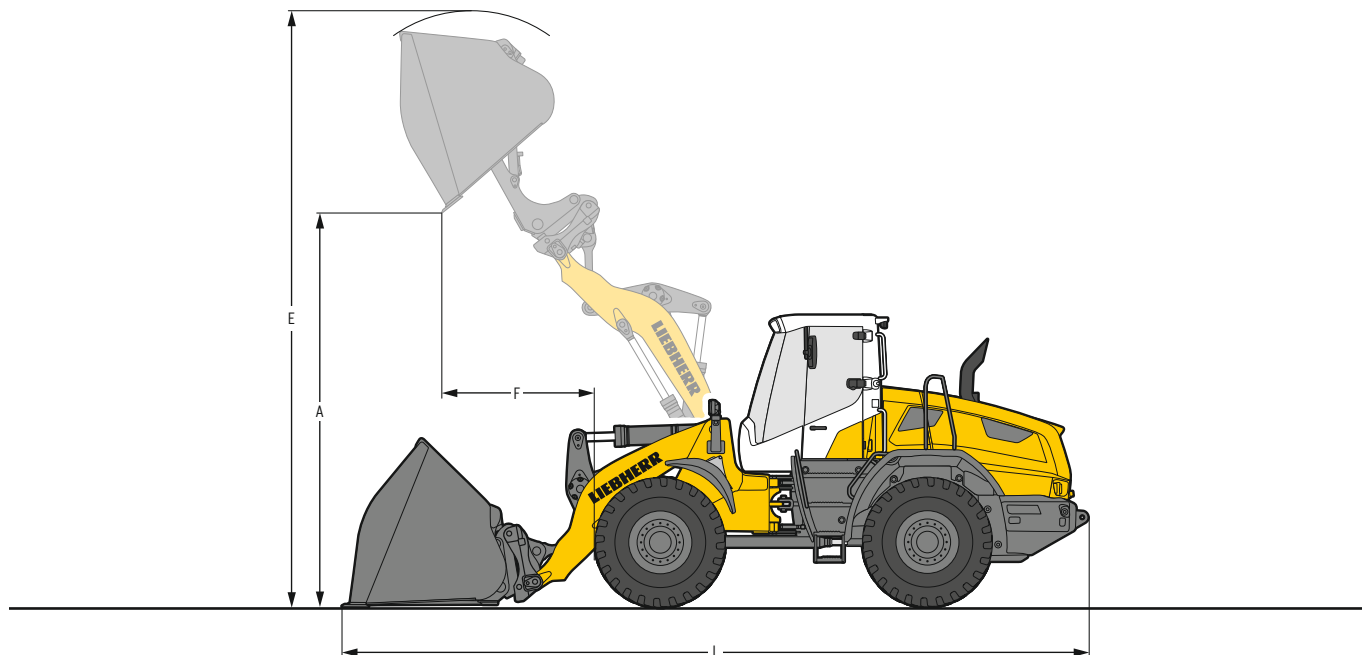
ZK = Z-bar linkage

ZK-QH = Z-bar linkage incl. quick hitch

BOCE = Bolt-on cutting edge

# Attachment

## High lift arm/high dump bucket



### Heavy material density

Geometry		ZK	ZK-QH
Cutting tools		BOCE	BOCE
Bucket capacity	yd <sup>3</sup>	5.2	5.2
Specific material density	lb/yd <sup>3</sup>	1,433	1,348
Bucket width	ft in	8'10"	8'10"
A Dumping height at max. lift height	ft in	16'8"	17'2"
E Max. operating height	ft in	22'8"	23'3"
F Reach at maximum lift height	ft in	4'3"	4'4"
L Overall length	ft in	27'10"	28'2"
Tipping load, straight*	lb	18,300	17,195
Tipping load, fully articulated*	lb	15,430	14,330
Operating weight*	lb	35,165	35,935
Tyre size		20.5R25 L3	



### Light material density

Geometry		ZK-QH
Cutting tools		BOCE
Bucket capacity	yd <sup>3</sup>	6.5
Specific material density	lb/yd <sup>3</sup>	843
Bucket width	ft in	8'10"
A Dumping height at max. lift height	ft in	16'5"
E Max. operating height	ft in	23'11"
F Reach at maximum lift height	ft in	4'11"
L Overall length	ft in	28'11"
Tipping load, straight*	lb	17,195
Tipping load, fully articulated*	lb	14,330
Operating weight*	lb	36,045
Tyre size		20.5R25 L3

\* The figures shown include the above tires, all lubricants, a full fuel tank, the ROPS /FOPS cab and the operator. Different tires and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

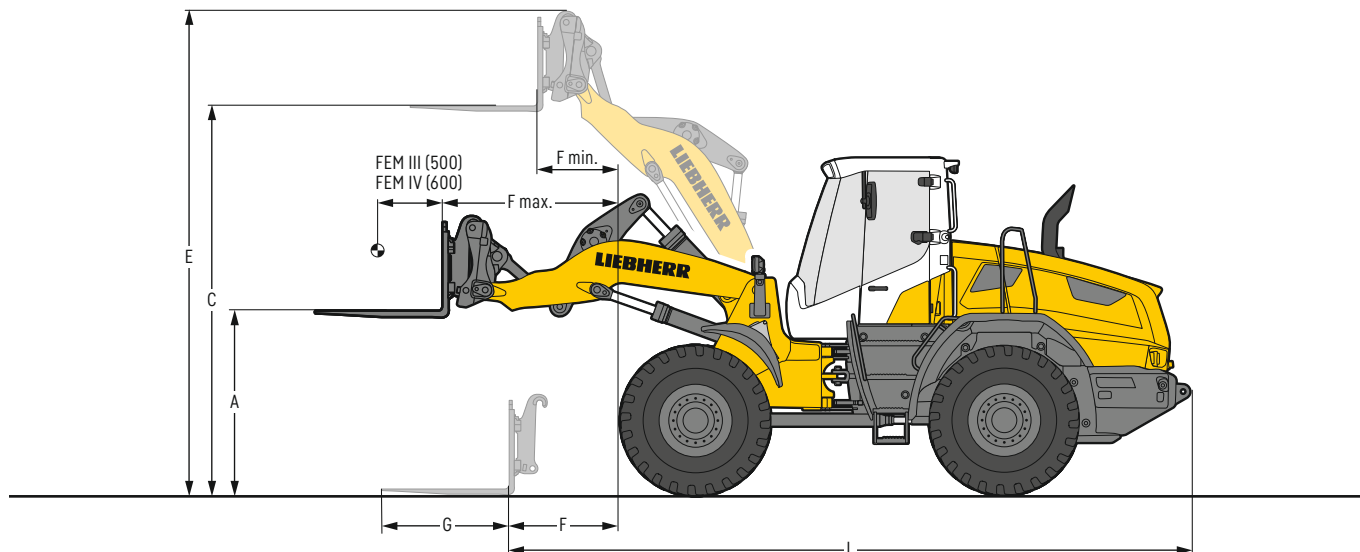
ZK = Z-bar linkage

ZK-QH = Z-bar linkage incl. quick hitch

BOCE = Bolt-on cutting edge

# Attachment

## Fork carrier and fork



### Fork carrier and fork

		STD	HL	STD	HL
Fork		FEM III	FEM III	FEM IV	FEM IV
Geometry		ZK-QC	ZK-QC	ZK-QC	ZK-QC
Lift arm length	ft in	8'8"	9'10"	8'8"	9'10"
A Lifting height at max. reach	ft in	5'10"	5'10"	5'9"	5'9"
C Max. lifting height	ft in	12'5"	14'2"	12'3"	14'
E Max. operating height	ft in	15'5"	17'3"	15'7"	17'4"
F Reach at loading position	ft in	3'6"	4'11"	3'7"	5'
F max. Max. reach	ft in	5'7"	6'9"	5'7"	6'8"
F min. Reach at max. lifting height	ft in	2'7"	2'2"	2'6"	2'1"
G Fork length	ft in	3'11"	3'11"	4'11"	4'11"
L Length - basic machine	ft in	21'11"	23'4"	21'12"	23'5"
Tipping load, straight*	lb	18,300	15,765	17,420	14,990
Tipping load, fully articulated*	lb	15,850	13,560	14,950	12,745
Recommended payload for uneven ground = 60% of tipping load, articulated <sup>1)</sup>	lb	9,480	8,050	8,820	7,605
Recommended payload for smooth surfaces = 80% of tipping load, articulated <sup>1)</sup>	lb	11,025	10,805	11,905	10,140
Operating weight*	lb	32,365	32,785	32,895	33,355
Tyre size		20.5R25 L3		20.5R25 L3	

\* The figures shown include the above tires, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tires and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

<sup>1)</sup> According to EN 474-3

STD = Standard lift arm length

HL = High Lift

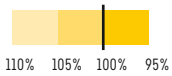
ZK-QH = Z-bar linkage incl. quick hitch

# Bucket selection

## L 538 Speeder

Lift arm	Bucket	Material density (lb/yd³)									
		674	1,011	1,348	1,686	2,023	2,360	2,697	3,034	3,371	
ZK	GPB 3.4 yd³							3.8			3.4
	GPB 3.7 yd³						4.1				3.7
	LMB 5.2 yd³				5.8						5.2
	HDB 4.6 yd³				5.1						4.6
ZK-QC	GPB 3.1 yd³							3.4			3.1
	LMB 5.2 yd³				5.8						5.2
	LMB 8.5 yd³	8.5									
	HDB 4.6 yd³				5.1						4.6
	HDB 7.9 yd³	7.9									
ZK-HL	GPB 3.1 yd³							3.4			3.1
	LMB 5.2 yd³				5.8						5.2
	HDB 4.6 yd³				5.1						4.6
ZK-QC-HL	GPB 2.9 yd³							3.1			2.9
	LMB 5.2 yd³				5.8						5.2
	LMB 7.2 yd³	7.2									
	HDB 4.6 yd³				5.1						4.6
	HDB 6.5 yd³	6.5									

## Bucket filling factor



## Lift arm

<b>ZK</b>	Z-bar linkage, standard lift arm length
<b>ZK-QH</b>	Z-bar linkage incl. quick coupler, standard lift arm length
<b>ZK-HL</b>	Z-bar linkage, High Lift
<b>ZK-QH-HL</b>	Z-bar linkage incl. quick coupler, High Lift

## Bucket

<b>GPB</b>	General purpose bucket (Excavation bucket)
<b>LMB</b>	Light material bucket
<b>HDB</b>	High-dump bucket

# Tipping load



## What is tipping load?

Load at center of gravity of working equipment, so that the wheel loader just begins to tip over the front axle. This is the most unfavourable static-load position for the wheel loader. Lifting arms horizontal, wheel loader fully articulated at center pivot.

## Pay load.

The pay load must not exceed 50% of the tipping load when articulated. This is equivalent to a static stability-margin factor of 2.0.

## Bucket capacity.

The bucket volume is determined from the pay load.

$$\text{Pay load} = \frac{\text{Tipping load, articulated}}{2}$$

$$\text{Bucket capacity} = \frac{\text{Pay load (t)}}{\text{Specific bulk weight of material (t/m}^3\text{)}}$$

## Bulk material densities and bucket filling factors

		lb/yd <sup>3</sup>	%			lb/yd <sup>3</sup>	%			lb/yd <sup>3</sup>	%
Gravel	moist	3,203	105	Earth	dry	2,191	115	Glass waste	broken	2,360	100
	dry	2,697	105		wet excavated	2,697	110		solid	1,686	100
	crushed stone	2,528	100	Topsoil		1,854	110	Compost	dry	1,348	105
Sand	dry	2,528	105	Basalt		3,287	100		wet	1,686	110
	wet	3,203	110	Granite		3,034	95	Wood chips / Saw dust		843	110
Gravel and Sand	dry	2,865	105	Sandstone		2,697	100	Paper	shredded / loose	1,011	110
	wet	3,371	100	Slate		2,950	100		recovered paper / cardboard	1,686	110
Sand / Clay		2,697	110	Bauxite		2,360	100	Coal	heavy material density	2,023	110
Clay	natural	2,697	110	Limestone		2,697	100		light material density	1,517	110
	dry	2,360	110	Gypsum	broken	3,034	100	Waste	domestic waste	843	100
Clay / Gravel	dry	2,360	110	Coke		843	110		bulky waste	1,686	100
	wet	2,697	100	Slag	broken	3,034	100				

# Tires



## Tyre types

	Size and tread code		Change of operating weight lb	Width over tires ft in	Change in vertical dimensions* ft in	Use
<b>L 538 Speeder</b>						
Bridgestone	20.5R25 VJT	L3	37	8'2"	0.31"	Bulk material (firm ground conditions)
Continental	20.5R25 EM-Master	L3	344	8'2"	1.02"	Bulk material (firm ground conditions)
Goodyear	20.5R25 TL-3A+	L3	344	8'2"	0.43"	Sand, Gravel, Earthworks, Clay (all ground conditions)
Goodyear	20.5R25 RT-3B	L3	24	8'2"	0.63"	Gravel (all ground conditions)
Michelin	20.5R25 XTLA	L2	- 267	8'3"	- 0.28"	Gravel, Earthworks, Clay (all ground conditions)
Michelin	20.5R25 XHA2	L3	0	8'2"	0"	Sand, Gravel (all ground conditions)
Michelin	620/70R26 CereXBib 2		- 802	8'7"	0.43"	Green area (agricultural tractor)
Michelin	620/75R26 MegaXBib		- 701	8'6"	2.68"	Green area (agricultural tractor)
Michelin	750/65R26 MegaXBib		- 49	9'4"	3.19"	Green area (agricultural tractor)
Mitas	750/65R26 SFT		- 137	9'5"	2.99"	Green area (agricultural tractor)
Nokian	20.5R25 Hakkapeliitta	L2	- 251	8'2"	0.24"	Winter tires, Gravel, Asphalt (all ground conditions)
Trelleborg	620/75R26 TM2000		- 337	8'8"	2.83"	Green area (agricultural tractor)

\* The stated values are theoretical and may deviate in practice.

Before operating the vehicle with tyre foam filling or tyre protection chains, please discuss this with the Liebherr-Werk Bischofshofen GmbH.

# The Liebherr wheel loaders





## Wheel loader

		L 538 Speeder
Tipping load	lb	21,825
Bucket capacity	yd <sup>3</sup>	3.4
Operating weight	lb	32,740
Engine output	kW / HP	168/225



04.22

# Equipment

 <b>Basic wheel loader</b>	<b>L 538</b>
Tow hitch	●
Automatic engine shutdown (after 5 minutes at idle speed < 1,000 rpm)	+
Automatic central lubrication system Liebherr	+
Electr. equipment for sweeper (socket for sweeper)	+
Electronic tractive force regulation for difficult ground conditions	●
Exhaust tail pipe in stainless steel	+
Travel light (with additional headlights) on front section halogen	+
Travel light (with additional headlights) on front section LED	+
Travel light on front section - halogen	●
Travel light on front section - LED	+
Ride control	+
Fire extinguisher 13 lb	+
Fluff trap for radiator	+
External jump starter equipment	+
Speed limiter 12.4 mph	+
Plastic diesel exhaust fluid tank	●
Integrated tyre pressure monitoring system	+
Rear license panel light	+
Combined inching-braking system	●
Mudguard in plastic design	●
Steel fuel tank	+
Fuel pre-filter	●
Fuel pre-filter with pre-heating	+
Large-mesh radiator	+
Cooling water pre-heating 230 V	+
Adjustable plastic mudguard	+
Multi-disc limited slip differentials in both axles	●
Liebherr biodegradable hydraulic oil	+
Reversible fan drive	+
Automatic delayed engine stop (5 min.)	+
Plastic wheel case flare	+
Steel design adjustable wheel case flare	+
SCR technology incl. diesel particle filter	●
Auxiliary heater (Additional heating with engine preheating)	+
Air pre-cleaner TOP AIR	+
Toolbox with toolkit	+
Liebherr weighing system with "Truck Payload Assist" (cannot be certified as a regulated weights and measure device)	+

 <b>Equipment</b>	<b>L 538</b>
1st hydraulic additional function on the front incl. lines	+
1st and 2nd hydraulic additional function on the front incl. lines	+
Working hydraulics lockout	●
Continuous mode, additional function	+
Pressure relief for hydraulic additional function	●
Stroke limit damping	+
Fork carrier and pallet forks	+
High-dump bucket	+
Automatic lift arm position and lowering programmable	●
Lift arms 8'8"	●
Lift arms 9'10"	+
Hydraulic quick hitch	+
Hydraulic quick hitch LIKUFIX	+
Hydraulic quick change device preparation LIKUFIX	+
Sweeper mode	+
Adjustable tipping speed	●
Tilt cylinder protection	+
Light material bucket	+
Pipe break protection (lift and tilt cylinders)	+
Automatic return high dump bucket	+
Bucket tilt assistant	+
Bucket bearing seal (standard)	●
Bucket return-to-dig (automatic and programmable)	●
Bucket return-to-dig via button	+
Float position	●
Visualisation of the equipment position	●

# Equipment

 Operator's cab	L 538	 Operator's cab	L 538
2-in-1 steering	+	Emergency steering pump	●
Adapter plate for additional fastening on the multi-function rail	●	Premiumdisplay (Touchscreen), with height adjustment and tilting function	●
Adaptive working lighting	+	Radio "Comfort" (DAB+ / USB / AUX / BLUETOOTH / handsfree set)	+
Exterior mirror, electrical adjustable, with heating	+	Radio "Standard"	+
Exterior mirrors, folding and heated	+	Preparation for radio installation	+
Folding exterior mirror	●	Amber beacon swiveling LED	+
Hinged window (left)	+	Headlights activation (on the cab) for reverse travel	+
Access assistance to facilitate cleaning windscreen	●	Soundproof ROPS / FOPS cab	●
Operation with multi-lever control	+	Wipe and wash system	●
Operating hour meter (mechanic)	+	Windscreen wiper single-sweep function with button	+
Electronical theft protection with code	+	Headlights rear, triple design, LED	+
Electronical theft protection with key	+	Headlights rear, single design, halogen	+
Automatic driver identification	+	Headlights rear, single design, LED	+
Manual driver identification	+	Headlights rear, double design, halogen	+
"Comfort" operator's seat with "Comfort integrated" pneumatic suspension Grammer (with seat heating and 3-point belt)	+	Headlights rear, double design, LED	+
"Comfort" operator's seat with "Comfort integrated" pneumatic suspension Grammer (with seat heating and 4-point belt)	+	Headlights front, double design, halogen	●
"Comfort" operator's seat with "Comfort integrated" pneumatic suspension Grammer (with seat heating)	●	Headlights front, double design, LED	+
"Premium" operator's seat with low frequency suspension - with seat air conditioning, seat heating and head rest - Grammer	+	Headlights activation for reverse travel (on the cab)	+
Particle filter F7	●	Sliding window right	●
Fire extinguisher in cab 4 lb	+	Slipcover for operator seat	+
Radio unit installation (preparation)	+	Beacon activation in reverse travel	+
V <sub>max</sub> speed limit adjustable via button on control unit	●	Sunblind rear	+
Speed limit & fixed speed	+	Sunblind front	+
Seat belt warning device (visual) - green warning flashlight on cab	+	Power socket 12 V	●
Rear window heated electrically	●	USB charging port	+
Button-operated horn via right button	+	First aid kit	●
Interior mirror left	●	Preparation for protective ventilation device	+
Joystick steering	+	Preparation for dust filtrating device	+
Joystick steering only	+	Wide angle mirror	+
Floor mat	●	Cigarette lighter	●
Clothes hook	●		
Air conditioning system	+		
Automatic air conditioning system	+		
Comfort safety door (open through 180°)	+		
Head rest	+		
Cool box	+		
Steering column height-adjustable	+		
Steering column folding	●		
LiDAT hardware	●		
Liebherr control lever with mini-joystick	+		
Liebherr control lever with buttons	●		
Multifunctional rail, right	●		



## Safety

	L 538
Active personnel detection at the rear	+
Main battery switch (lockable)	+
Roof camera for front area monitoring	+
Standard parking brake	●
Custom paintwork	+
Back-up alarm (acoustical)	+
Reversing alarm LED warning flashlight (visual) (adjustable to 0 - constant - reverse travel)	+
Rear space monitoring with camera	●
Skyview 360°	+

- = Standard
- + = Option
- = not available

Further information can be found in the brochure "Assistance systems for wheel loaders" or you can find here:



Here you can download our wheel loader brochures:



