

# Product Information: Crawler Excavator

## R 924

Litronic®

### Generation

8

### Engine

173 HP / 129 kW

Tier 4 Final

### Operating Weight

24,500 kg / 54,015 lb

### Bucket Capacity

0.55 – 1.65 m<sup>3</sup> / 0.72 – 2.16 yd<sup>3</sup>



# LIEBHERR



# Experience the Progress

## R 924

### Safety

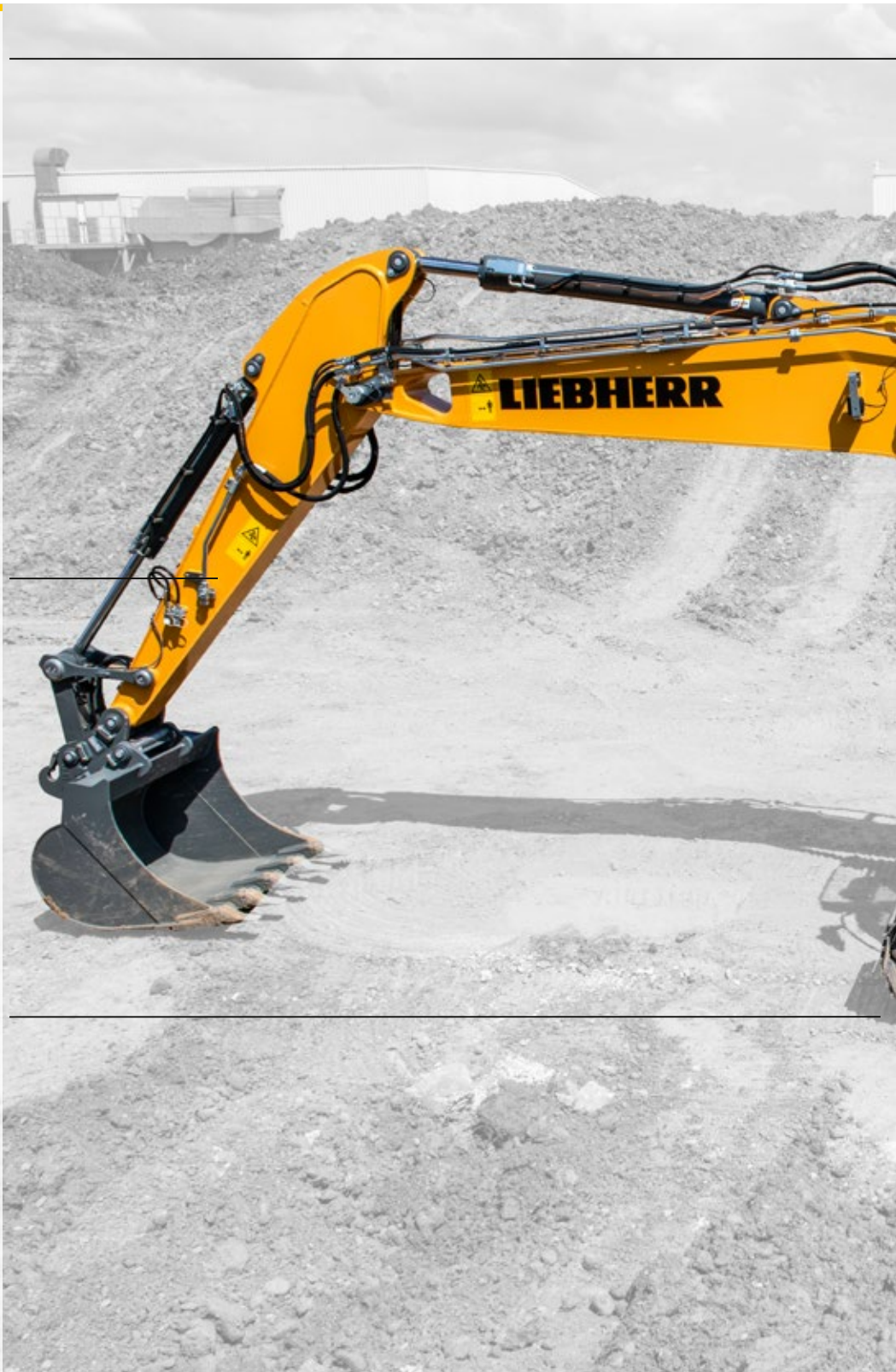
- Panoramic visibility with no obstructions and camera on the rear and the right side equipment for enhanced safety
- Lifiable console for easy and safe access to cab
- ROPS-certified cab structure: rollover protection
- Emergency exit via the rear cab window
- Right window and windshield in laminated and tinted glass

### Equipment

- Large choice of types and sizes of equipment
- Safety check valves for hoist and stick cylinders
- Guaranteed maintenance thanks to automatic centralised lubrication system (option)

### Undercarriage

- Robust, reliable X-frame undercarriage, easy to secure thanks to its integrated eyelets
- Easy maintenance
- Maintenance-free travel gear and track rollers with lifetime lubrication
- Extra storage as an option







### Comfort

- Spacious, air-conditioned work space
- Airsprung seat with vertical and horizontal suspension
- Easy-to-use high resolution 7" colour touchscreen
- Completely retractable front cab window
- New LED lighting as standard

### Engine

- New engine that conforms with the US EPA Tier 4 Final exhaust emissions standard
- Automatic idle-stop

### Maintenance

- Innovative servicing concept, with service points accessible from ground level
- New concept for lateral access to uppercarriage and large maintenance platform
- Engine oil, hydraulic oil, fuel and urea (diesel exhaust fluid) levels visible on the display

# Technical Data



## Engine

<b>Rating</b>	
per SAE J1349	173 HP (129 kW) at 1,800 rpm
per ISO 9249	175 HP (129 kW) at 1,800 rpm
<b>Torque</b>	682 Nm at 1,400 rpm / <b>503 lbf ft at 1,400 rpm</b>
<b>Model</b>	D924 A7-04 – FPT motor designed for Liebherr
<b>Type</b>	4 cylinder in-line
Bore	104 mm / <b>4.1 in</b>
Stroke	132 mm / <b>5.2 in</b>
Displacement	4.5 l / <b>275 in³</b>
<b>Engine operation</b>	4-stroke diesel Common-Rail Turbo-charged and after-cooler
<b>Exhaust gas treatment</b>	Tier 4 Final DOC + SCR Passive regeneration by thermo management
<b>Cooling system</b>	Water-cooled and oil cooler, after-cooled and fuel cooled
<b>Air cleaner</b>	Dry-type air cleaner with pre-cleaner
<b>Fuel tank</b>	400 l / <b>106 gal</b>
<b>Urea tank</b>	46 l / <b>12 gal</b>
<b>Electrical system</b>	
Voltage	24 V
Batteries	2 x 135 Ah/ 12 V
Alternator	Three-phase current 28 V/ 140 A
Engine idling	Sensor controlled



## Hydraulic Controls

<b>Power distribution</b>	Via control valves, simultaneous and independent actuation of undercarriage, swing drive and equipment
<b>Electric servo circuit</b>	Electro-hydraulic control
Equipment and swing	Proportional via joystick levers
Travel	– Proportional control via foot pedals or removable levers – Automatic or manual speed adjustment
<b>Additional functions</b>	Proportional regulation via foot pedals or mini-joystick



## Hydraulic System

<b>Hydraulic system</b>	Positive Control hydraulic system. Demand-based, double independent pump flows Features high system dynamics and sensitivity provided by integrated system controlling
<b>Hydraulic pump</b>	
For equipment and travel drive	Liebherr, variable displacement, swashplate double pump
Max. flow	2 x 210 l/min. / <b>2 x 55 gpm</b>
Max. pressure	380 bar / <b>5,511 psi</b>
<b>Pump management</b>	Electronic management synchronous to the control block. Open circuit for the rotation
<b>Hydraulic tank</b>	155 l / <b>41 gal</b>
<b>Hydraulic system</b>	max. 320 l / <b>max. 85 gal</b>
<b>Hydraulic oil filter</b>	1 main return filter with integrated partial micro filtration (10 µm / <b>1,250 mesh</b> )
<b>Cooling system</b>	Compact cooler, consisting of a water cooler, sand-wiched with hydraulic oil cooler and fuel and after-cooler cores and hydrostatically driven fan
<b>MODE selection</b>	Adjustment of engine and hydraulic performance via a mode pre-selector to match application, e.g. for especially economical and environmentally friendly operation or for maximum digging performance and heavy-duty jobs
<b>Engine speed and performance setting</b>	Stepless adjustment of engine output and hydraulic power via engine speed



## Swing Drive

<b>Drive</b>	Liebherr swashplate motor with integrated brake valve and torque control
<b>Transmission</b>	Liebherr compact planetary reduction gears
<b>Swing ring</b>	Liebherr, sealed race ball bearing swing ring, internal teeth
<b>Swing speed</b>	0 – 12.9 rpm stepless
<b>Swing torque</b>	74.3 kNm / <b>54,801 lbf ft</b>
<b>Holding brake</b>	Wet multi-disc (spring applied, pressure released)



## Operator's Cab

<b>Cab</b>	ROPS safety cab structure (roll-over protection system according to ISO 12117-2:2008) with windscreen, totally or partially retractable (only upper part), under cab roof, LED work headlights integrated in the ceiling, a door with a sliding window (can be opened on both sides), large storing box and several stowing possibilities, shock-absorbing suspension, laminated right hand side and roof windows, all windows tinted, separate extendible window shades for the sunroof window and windscreen, cigarette lighter and 24 V plug, 12 V plug, cup holder, mobile phone storage net
<b>Operator's seat</b>	Liebherr-Comfort seat, airsprung with automatic weight adjustment, vertical and longitudinal seat damping including consoles and joysticks. Seat and armrests adjustable separately and in combination (adjustable in width, height and inclination), seat heating as standard
<b>Arm consoles</b>	Oscillating consoles with seat, tiltable console left
<b>Operation and displays</b>	Large high-resolution operating unit, intuitive, color display with touchscreen, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption, machine and attachment parameters
<b>Air-conditioning</b>	Automatic air-conditioning, recirculated air function, fast de-icing and demisting at the press of a button, air vents can be operated via a menu. Recirculated air and fresh air filters can be easily replaced and are accessible from the outside. Heating-cooling unit, designed for extreme outside temperatures, sensors for solar radiation, inside and outside temperatures
<b>Noise emission</b>	
ISO 6396	$L_{pA}$ (inside cab) = 70 dB(A)
2000/14/EC	$L_{WA}$ (surround noise) = 103 dB(A)



## Undercarriage

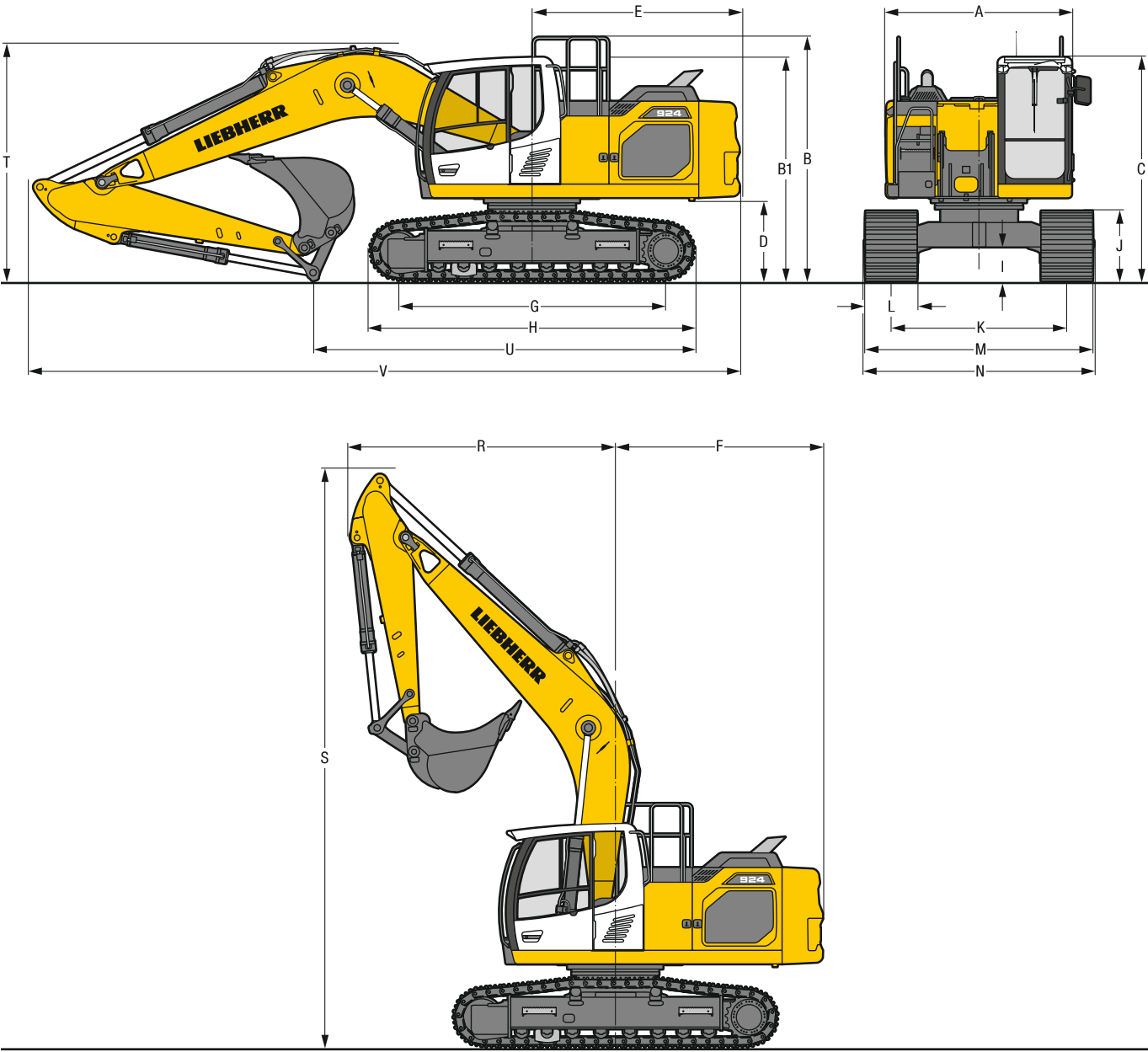
<b>LC</b>	Gauge 2,390 mm / <b>7'10"</b>
<b>Drive</b>	Liebherr swashplate motor with brake valves on both sides
<b>Transmission</b>	Liebherr planetary reduction gear
<b>Maximum travel speed</b>	Low range 3.1 km/h / <b>1.9 mph</b> High range 5.9 km/h / <b>3.7 mph</b>
<b>Drawbar pull on crawler</b>	236 kN / <b>53,060 lbf</b>
<b>Track components</b>	B60, D6C, maintenance-free
<b>Track rollers/Carrier rollers</b>	8/2
<b>Tracks</b>	Sealed and greased
<b>Track pads</b>	Triple grouser
<b>Holding brake</b>	Wet multi-disc (spring applied, pressure released)
<b>Brake valves</b>	Integrated into travel motor
<b>Lashing eyes</b>	Integrated



## Equipment

<b>Type</b>	Combination of resistant steel plates and cast steel components
<b>Hydraulic cylinders</b>	Liebherr cylinders with seal and guidance systems
<b>Bearings</b>	Sealed, low maintenance
<b>Lubrication</b>	Liebherr central lubrication system
<b>Hydraulic connections</b>	Pipes and hoses equipped with SAE split-flange connections
<b>Buckets</b>	Standard equipped with Liebherr tooth system

# Dimensions



	LC	mm/ft in
<b>A</b>	Uppercarriage width	2,545**/ 8' 4"***
<b>B</b>	Uppercarriage height	3,335 /10'11"
<b>B1</b>	Uppercarriage height (handrails folded)	3,060 /10'
<b>C</b>	Cab height	3,060 /10'
<b>D</b>	Counterweight ground clearance	1,100 / 3' 7"
<b>E</b>	Rear-end length	2,830 / 9' 3"
<b>F</b>	Tail swing radius	2,880 / 9' 5"
<b>G</b>	Wheelbase	3,640 /11'11"
<b>H</b>	Undercarriage length	4,435 /14' 7"
<b>I</b>	Undercarriage ground clearance	485 / 1' 7"
<b>J</b>	Track height	960 / 3' 2"
<b>K</b>	Track gauge	2,390 / 7'10"
<b>L</b>	Track pad width	600/ 24" 700 / 28" 800 / 31" 900 / 35"
<b>M</b>	Width over tracks	2,990/9'10" 3,090 /10' 2" 3,190 /10' 6" 3,290 /10'10"
<b>N</b>	Width over steps	2,925/9' 7" 3,125*/10' 3"*** 3,125*/10' 3"*** 3,225* /10' 7"***

\* width with removable steps

\*\* without door stop device and spacer

	Stick length m/ft in	Mono boom 5.70 m/18'8" mm/ft in
<b>R</b>	Front swing radius	2.50/ 8'2" 3,650/12'
		2.90/ 9'6" 3,650/12'
		3.50/11'6" 3,600/11'10"
<b>S</b>	Height with boom up	7,900/25'11"
<b>T</b>	Boom height	2.50/ 8'2" 3,250/10' 8"
		2.90/ 9'6" 3,250/10' 8"
		3.50/11'6" 3,150/10' 4"
<b>U</b>	Length on ground	2.50/ 8'2" 6,200/20' 4"
		2.90/ 9'6" 5,900/19' 4"
		3.50/11'6" 4,450/14' 7"
<b>V</b>	Overall length	9,700/31'10"

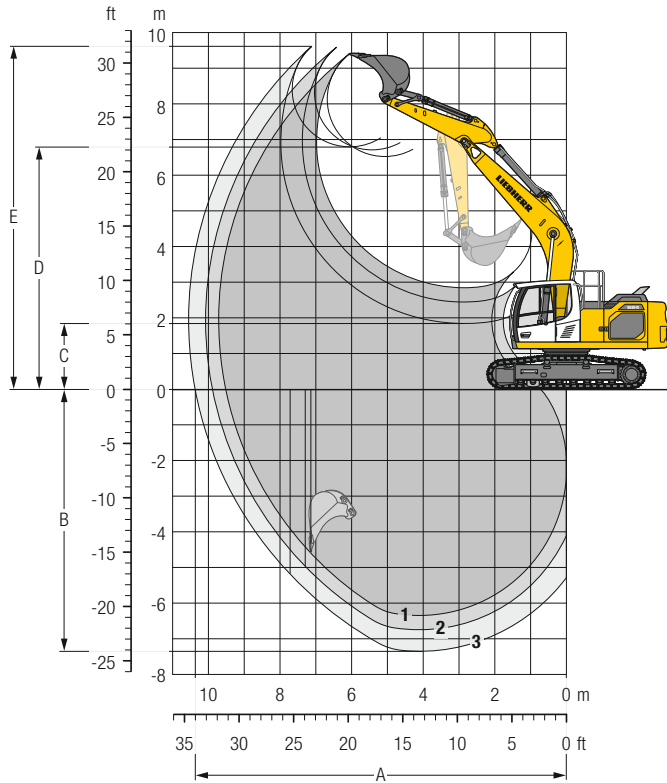
## Transport Dimensions

### removable elements dismantled

	Stick m/ft in	Mono boom 5.70 m/18'8" mm/ft in
Pad width		600/ 24" 700/ 28" 800/ 31" 900/ 35"
Transport width		2,990/9'10" 3,125/10' 3" 3,190/10' 6" 3,290/10'10"
Transport length		9,700/31'10"
Transport height	2.50/ 8'2"	3,250/10' 8"
	2.90/ 9'6"	3,250/10' 8"
	3.50/11'6"	3,150/10' 4"

# Backhoe Bucket

with Mono Boom 5.70 m/18'8" and Counterweight 5.0 t/11,020 lb



## Digging Envelope

without quick coupler	1	2	3
Stick length	m/ft in 2.50/ 8' 2"	2.90/ 9'6"	3.50/11'6"
A Max. reach at ground level	m/ft in 9.51/ 31' 2"	9.89/ 32'5"	10.37/ 34'
B Max. digging depth	m/ft in 6.35/ 20'10"	6.75/ 22'2"	7.35/ 24'1"
C Min. dumping height	m/ft in 2.85/ 9' 4"	2.45/ 8'	1.85/ 6'1"
D Max. dumping height	m/ft in 6.53/ 21' 5"	6.71/ 22'	6.80/ 22'4"
E Max. cutting height	m/ft in 9.40/ 30'10"	9.59/ 31'6"	9.61/ 31'6"

## Forces

without quick coupler	1	2	3
Max. digging force (ISO 6015)	kN/lbf 135/ 30,350	122/ 27,430	106/ 23,830
Max. breakout force (ISO 6015)	kN/lbf 173/ 38,890	173/ 38,890	173/ 38,890
Max. digging force (SAE J1179)	kN/lbf 129/ 29,000	117/ 26,300	103/ 23,160
Max. breakout force (SAE J1179)	kN/lbf 151/ 33,950	151/ 33,950	151/ 33,950

## Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 5.0 t/11,020 lb, mono boom 5.70 m/18'8", stick 2.90 m/9'6" and bucket 1.25 m³/1.63 yd³ (890 kg/1,960 lb).

Undercarriage	LC			
Pad width	mm/in 600/ 24"	700/ 28"	800/ 31"	900/ 35"
Weight	kg/lb 23,600/ 52,030	23,850/ 52,580	24,250/ 53,460	24,550/ 54,120
Ground pressure	kg/cm²/psi 0.50/ 7.1	0.44/ 6.3	0.39/ 5.5	0.35/ 5.0

## Buckets Machine stability per ISO 10567\* (75% of tipping capacity)

					LC-Undercarriage (with track pads 800 mm/31")					
					Stick length (m/ft in)					
					without quick coupler			with quick coupler		
					2.50 8'2"	2.90 9'6"	3.50 11'6"	2.50 8'2"	2.90 9'6"	3.50 11'6"
STD <sup>1)</sup>	Cutting width	Capacity ISO 7451	Weight <sup>3)</sup>	Weight <sup>4)</sup>						
	mm	m³	kg	kg						
	in	yd³	lb	lb						
	1,050	0.95	700	710	▲	▲	▲	▲	▲	▲
	41"	1.24	1,540	1,570	▲	▲	▲	▲	▲	▲
	1,250	1.15	810	830	▲	▲	▲	▲	▲	▲
	49"	1.50	1,790	1,830	▲	▲	▲	▲	▲	▲
	1,250	1.25	890	910	▲	▲	■	▲	▲	■
	49"	1.63	1,960	2,010	▲	▲	■	▲	▲	■
	1,400	1.35	850	880	▲	■	▲	▲	■	▲
HD <sup>2)</sup>	55"	1.77	1,870	1,940	▲	■	▲	▲	■	▲
	1,400	1.50	950	980	■	▲	■	■	▲	△
	55"	1.96	2,090	2,160	■	▲	■	■	▲	△
	1,500	1.65	1,020	1,030	▲	■	△	▲	■	△
	59"	2.16	2,250	2,270	▲	■	△	▲	■	△
	1,050	0.95	790	800	▲	▲	▲	▲	▲	▲
	41"	1.24	1,740	1,760	▲	▲	▲	▲	▲	▲
	1,250	1.15	910	940	▲	▲	▲	▲	▲	■
	49"	1.50	2,010	2,070	▲	▲	▲	▲	▲	■
	1,250	1.25	1,010	1,030	▲	▲	▲	▲	■	▲
	49"	1.63	2,230	2,270	▲	▲	▲	▲	■	▲
	1,400	1.35	970	990	▲	■	▲	■	▲	■
	55"	1.77	2,140	2,180	▲	■	▲	■	▲	■
	1,400	1.50	1,090	1,120	■	▲	■	▲	■	△
	55"	1.96	2,400	2,470	■	▲	■	▲	■	△
	1,500	1.65	1,160	1,160	▲	■	△	■	△	△
	59"	2.16	2,560	2,560	▲	■	△	■	△	△

\* Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

<sup>1)</sup> Standard bucket with teeth Z 40 <sup>2)</sup> HD bucket with teeth Z 40 <sup>3)</sup> Bucket for direct mounting <sup>4)</sup> Bucket for mounting to quick coupler

Other buckets available upon request












Max. material weight ▲ = ≤ 2.0 t/m³/3,400 lb/yd³, ■ = ≤ 1.8 t/m³/3,000 lb/yd³, ▲ = ≤ 1.65 t/m³/2,800 lb/yd³, ■ = ≤ 1.5 t/m³/2,500 lb/yd³, △ = ≤ 1.2 t/m³/2,000 lb/yd³














# Lift Capacities

with Mono Boom 5.70 m / 18'8", Counterweight 5.0 t / 11,020 lb and Track Pads 800 mm / 31"












## Stick 2.50 m / 8'2"





Under-carriage		3.0 m 10 ft		4.5 m 15 ft		6.0 m 20 ft		7.5 m 25 ft				m ft in
												
LC	7.5 m t									6.0*	6.0*	5.8
	25 ft lb									13,3*	13,3*	18'7"
	6.0 m t					6.0	6.1*			4.7	5.6*	7.0
	20 ft lb					13,0	13,3*			10,6	12,3*	22'7"
	4.5 m t			7.8*	7.8*	5.8	6.7*	4.2	6.1	4.0	5.5*	7.7
	15 ft lb			16,9*	16,9*	12,6	14,5*	8,9	12,5*	8,9	12,1*	25'1"
	3.0 m t			8.4	10.0*	5.6	7.6*	4.0	6.0	3.7	5.4	8.0
	10 ft lb			18,1	21,5*	12,0	16,5*	8,7	12,9	8,1	12,0	26'4"
	1.5 m t			7.9	11.7*	5.3	8.2	3.9	5.9	3.5	5.3	8.1
	5 ft lb			17,0	25,3*	11,5	17,6	8,5	12,7	7,8	11,6	26'6"
	0 m t			7.7	12.4*	5.2	8.0	3.8	5.8	3.6	5.4	7.9
	0 ft lb			16,5	26,9	11,1	17,2	8,3	12,5	8,0	12,0	25'10"
	-1.5 m t	12.0*	12.0*	7.6	12.2*	5.1	7.9			4.0	6.0	7.3
	-5 ft lb	27,3*	27,3*	16,4	26,5*	11,1	17,1			8,8	13,2	24'
	-3.0 m t	15.0	15.4*	7.7	11.1*	5.2	8.0			4.8	7.4	6.4
	-10 ft lb	32,2	33,4*	16,7	24,0*	11,3	17,3			10,7	16,4	20'10"
	-4.5 m t			8.1	8.2*					7.4	7.5*	4.8
	-15 ft lb			17,2*	17,2*					16,5*	16,5*	15'5"

## Stick 2.90 m / 9'6"

Under-carriage		3.0 m 10 ft		4.5 m 15 ft		6.0 m 20 ft		7.5 m 25 ft				m ft in
												
LC	7.5 m t					5.6*	5.6*			5.0*	5.0*	6.3
	25 ft lb					11,8*	11,8*			11,1*	11,1*	20'4"
	6.0 m t					5.6*	5.6*			4.3	4.7*	7.4
	20 ft lb					12,2*	12,2*			9,7	10,4*	24'
	4.5 m t			7.1*	7.1*	5.9	6.2*	4.2	5.8*	3.7	4.6*	8.1
	15 ft lb			15,4*	15,4*	12,7	13,5*	8,9	12,8*	8,2	10,2*	26'4"
	3.0 m t			8.5	9.3*	5.6	7.2*	4.0	6.0	3.4	4.8*	8.4
	10 ft lb			18,3	20,0*	12,0	15,6*	8,7	12,9	7,5	10,5*	27'6"
	1.5 m t			7.9	11.2*	5.3	8.1	3.9	5.8	3.3	4.9	8.5
	5 ft lb			17,0	24,2*	11,4	17,5	8,4	12,6	7,2	10,8	27'8"
	0 m t	6.1*	6.1*	7.6	12.2*	5.1	7.9	3.8	5.7	3.3	5.0	8.2
	0 ft lb	14,1*	14,1*	16,4	26,5*	11,0	17,1	8,2	12,4	7,4	11,1	27'
	-1.5 m t	11.3*	11.3*	7.5	12.3*	5.0	7.8			3.6	5.5	7.7
	-5 ft lb	25,7*	25,7*	16,2	26,6	10,9	16,9			8,0	12,1	25'4"
	-3.0 m t	14.8	16.3*	7.6	11.5*	5.1	7.9			4.3	6.6	6.8
	-10 ft lb	31,6	35,3*	16,4	24,8*	11,0	17,0			9,6	14,6	22'4"
	-4.5 m t	12.9*	12.9*	7.9	9.2*					6.1	7.3*	5.4
	-15 ft lb	27,7*	27,7*	17,0	19,7*					13,8	16,2*	17'6"

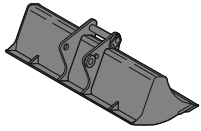
## Stick 3.50 m / 11'6"

Under-carriage		3.0 m 10 ft		4.5 m 15 ft		6.0 m 20 ft		7.5 m 25 ft				m ft in
												
LC	7.5 m t									3.9*	3.9*	6.9
	25 ft lb									8,6*	8,6*	22'4"
	6.0 m t					4.3	4.8*	3.7*	3.7*	3.7*	3.7*	7.9
	20 ft lb					9,2	9,7*	8,1*	8,1*	8,1*	8,1*	25'10"
	4.5 m t					5.5*	5.5*	4.2	5.3*	3.4	3.7*	8.5
	15 ft lb					12,1*	12,1*	9,0	11,5*	7,5	8,1*	27'11"
	3.0 m t	12.8*	12.8*	8.2*	8.2*	5.6	6.6*	4.0	5.8*	3.1	3.8*	8.9
	10 ft lb	27,2*	27,2*	17,8*	17,8*	12,1	14,3*	8,7	12,6*	6,8	8,4*	29'1"
	1.5 m t	6.7*	6.7*	8.0	10.4*	5.3	7.7*	3.9	5.8	3.0	4.1*	8.9
	5 ft lb	15,9*	15,9*	17,2	22,5*	11,5	16,7*	8,3	12,6	6,6	9,0*	29'4"
	0 m t	7.8*	7.8*	7.6	11.8*	5.1	7.9	3.7	5.7	3.0	4.6*	8.7
	0 ft lb	17,7*	17,7*	16,3	25,5*	10,9	17,0	8,1	12,3	6,7	10,1*	28'7"
	-1.5 m t	11.2*	11.2*	7.4	12.2*	5.0	7.8	3.7	5.6	3.2	4.9	8.2
	-5 ft lb	25,3*	25,3*	16,0	26,4	10,7	16,7	7,9	12,1	7,2	10,9	27'
	-3.0 m t	14.4	16.2*	7.4	11.8*	4.9	7.8			3.8	5.7	7.4
	-10 ft lb	30,9	36,7*	16,0	25,5*	10,7	16,7			8,3	12,7	24'2"
	-4.5 m t	14.7*	14.7*	7.6	10.3*	5.1	7.4*			5.0	7.2*	6.1
	-15 ft lb	31,5*	31,5*	16,4	22,0*					11,2	15,8*	19'10"

 Height  Can be slewed through 360°  In longitudinal position of undercarriage  Max. reach \* Limited by hydr. capacity

The load values are quoted in tons (t) / lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 800 mm / 31" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Without bucket cylinder, link and lever the lift capacities will increase by 325 kg / 720 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

# Available Attachments



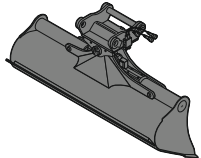
## Rigid Ditch Cleaning Bucket

### GRL 90, for direct mounting

Cutting width	mm/in	1,500/59"	2,000/79"	2,010/79"	2,400/95"			
Capacity	m³/yd³	0.50/0.65	0.70/0.92	0.85/1.11	0.85/1.11			
Weight	kg/lb	400/880	500/1,100	530/1,170	580/1,280			

### GRL 90, for mounting to quick coupler SWA 48

Cutting width	mm/in	1,500/59"	1,500/59"	2,000/79"	2,000/79"	2,000/79"	2,400/95"	2,400/95"
Capacity	m³/yd³	0.50/0.65	0.95/1.24	0.70/0.92	1.20/1.57	1.25/1.63	0.85/1.11	1.15/1.50
Weight	kg/lb	430/950	560/1,240	400/880	640/1,410	600/1,320	600/1,320	650/1,430



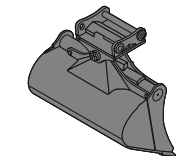
## Ditch Cleaning Bucket

### GRL 90, 2 x 50° tiltable, for direct mounting

Cutting width	mm/in	1,600/63"	2,000/79"	2,000/79"	2,000/79"	2,200/87"	2,400/95"	2,800/110"			
Capacity	m³/yd³	0.80/1.05	0.50/0.65	0.70/0.92	1.00/1.31	1.15/1.50	0.85/1.11	1.45/1.90			
Weight	kg/lb	798/1,760	686/1,510	819/1,810	883/1,950	920/2,030	885/1,950	1,009/2,220			

### GRL 90, 2 x 50° tiltable, for mounting to quick coupler SWA 48

Cutting width	mm/in	1,600/63"	2,000/79"	2,000/79"	2,000/79"	2,200/87"	2,200/87"	2,200/87"	2,400/95"	2,400/95"	2,800/110"
Capacity	m³/yd³	0.80/1.05	0.50/0.65	0.70/0.92	1.00/1.31	0.80/1.05	1.15/1.50	1.40/1.83	0.85/1.11	1.25/1.63	1.85/2.42
Weight	kg/lb	850/1,870	690/1,520	880/1,940	940/2,070	880/1,940	980/2,160	1,000/2,210	890/1,960	1,000/2,210	1,088/2,400



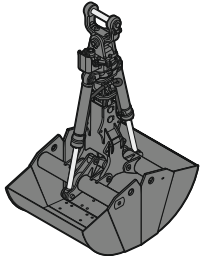
## Tilt Bucket

### SL 90, 2 x 50° tiltable, for direct mounting

Cutting width	mm/in	1,600/63"	1,600/63"	1,600/63"							
Capacity	m³/yd³	0.80/1.05	1.00/1.31	1.35/1.77							
Weight	kg/lb	768/1,690	820/1,810	918/2,020							

### SL 90, 2 x 50° tiltable, for mounting to quick coupler SWA 48

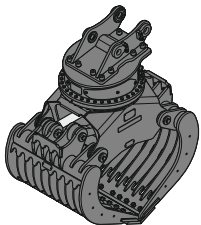
Cutting width	mm/in	1,500/59"	1,600/63"	1,600/63"	1,600/63"	1,600/63"	1,600/63"	1,600/63"	1,600/63"	1,600/63"	1,600/63"
Capacity	m³/yd³	1.20/1.57	0.80/1.05	1.00/1.31	1.35/1.77	1.55/2.03	0.80/1.05	1.00/1.31	1.35/1.77	1.55/2.03	
Weight	kg/lb	970/2,140	820/1,810	890/1,960	970/2,140	1,035/2,280	820/1,810	1,006/2,220	1,184/2,610	1,550/3,420	
HD-version							X	X	X	X	



## Clamshells

### GM 20C, earthmoving shell, for mounting to quick coupler SWA 48 (exists for direct mounting)

Cutting width	mm/in	600/24"	800/31"	1,000/39"	1,200/47"
Capacity	m³/yd³	0.45/0.59	0.60/0.78	0.75/0.98	0.90/1.18
Weight	kg/lb	575/1,270	625/1,380	700/1,540	765/1,690



## Sorting Grab

ribbed

perforated

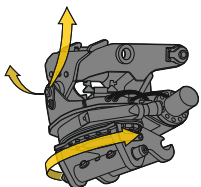
stone tong

### SG 30, for direct mounting

Cutting width	mm/in	1,000/39"	1,150/45"	1,000/39"	1,150/45"	1,020/40"
Capacity	m³/yd³	0.75/0.98	0.90/1.18	0.85/1.11	1.00/1.31	0.85/1.11
Weight	kg/lb	1,510/3,330	1,590/3,510	1,490/3,290	1,570/3,460	1,765/3,890

### SG 30, for mounting to quick coupler SWA 48

Cutting width	mm/in	1,000/39"	1,150/45"	1,000/39"	1,150/45"	1,020/40"
Capacity	m³/yd³	0.75/0.98	0.90/1.18	0.85/1.11	1.00/1.31	0.85/1.11
Weight	kg/lb	1,510/3,330	1,590/3,510	1,490/3,290	1,570/3,460	1,765/3,890



## Tiltrotator

### LH-TR 25, for mounting to quick coupler SWA 48

Weight	kg/lb	720/1,590
Rotation		360°
Tilt		2 x 50°

# Serial Equipment

## Undercarriage

Lashing eyes
Sprocket with dirt ejector
Track and carrier rollers, sealed and lifetime-lubricated

## Uppercarriage

Access platforms without protruding parts
Anti-skid surfaces
Automatic swing brake lock
DEF tank filling indicator
DEF tank lockable access hatch
Engine coolant level, visible from the cab
Engine hood with gas spring opening
Filters accessible from ground level
Handrails
Hydraulic oil level, visible from ground level
Lockable fuel tank cap
Lockable service doors
Lockable storage and accessories compartment
Lockable storage box
Main switch, electric, with timer
Main switch, manual, lockable
Protection grid on radiator fan
Safe uppercarriage side access platform
Sound insulation
Swing drive gearbox oil level, visible from the cab
Swing-out radiators
Windshield washer fluid tank, accessible from ground level

## Hydraulic System

Filter with integrated fine filters
Hydraulic pressure measuring ports
Liebherr Positive Control system with 2 independent circuits
Magnetic rod
Pressure accumulator for controlled lowering of equipment with engine turned off

## Engine

Air filter with automatic dust ejector
Automatic engine idling / speed increase, controlled via joystick sensors
Common-Rail injection system
Exhaust gas after-treatment system – DOC + SCR
Fixed geometry turbocharger
Fuel fine filter
Fuel pre-filter and water separator
Fuel priming pump
Intercooler
Power Pack US EPA Tier 4 Final
Stepless adjustable engine speed

## Operator's Cab

7" multifunction color touchscreen
Air conditioning, automatic, tri-zone, controlled via display
Armrests adjustable in width, height and inclination
Bottle holder
Cab air filters housing, accessible from ground level
Cab door sliding windows
Cigarette lighter
Coat hook
DEF consumption on touchscreen
DEF level on touchscreen
Electric socket in cabin (12 V)
Electric socket in cabin (24 V)
Emergency hammer
Engine oil level on touchscreen
Fuel consumption on touchscreen
Fuel level on touchscreen
Hydraulic oil level on touchscreen
Interior lighting
Laminated right hand side window
LIDAT Plus (Liebherr data transfer system)*
Mechanical hour meters, visible from ground level
Mobile phone storage net
Movement priority between swing and boom, adjustable via touchscreen
Movement priority for stick-in, adjustable via touchscreen
Rain hood over front window opening
Rearview mirror
Rear view monitoring camera
Rear window emergency exit
Right hand side view monitoring camera
Roll-down sun blinds for windshield and roof window
ROPS safety cab structure (ISO 12117-2)
Rubber floor mat, fixed on floor and removable
Storage box
Storage nets
Storage spaces
Swing braking torque adjustable via touchscreen
Tilttable console left
Tinted windows
Visco-elastic damping
Windscreen wiper and washer
Work mode selector

## Equipment

Boom cylinders regeneration
Pipe fracture safety valve for stick cylinder
Pipe fracture safety valves for boom cylinders
Pivot points made of cast steel
SAE split flanges on high pressure lines
Stick cylinder regeneration

\* optionally extendable after one year



# Equipment Standard/Option

## Undercarriage

Chain guide 1 piece	•
Chain guide 3 pieces	+
Reinforced cover and base plate for undercarriage center section	+
Special painting	+
Standard cover plate for undercarriage center section	•
Steps	+
Steps wide	•
Track pads triple grouser 600 mm/ <b>24"</b> / 700 mm/ <b>28"</b> / 900 mm/ <b>35"</b>	+
Track pads triple grouser 800 mm/ <b>31"</b>	•
Track pads triple grouser reinforced 600 mm/ <b>24"</b> / 700 mm/ <b>28"</b>	+
Tracks, sealed and greased, with track pads	•
Tracks, sealed and greased, with track pads, reinforced	+
Undercarriage LC	+
Undercarriage storage compartment	+

## Uppercarriage

Air pre-filter with cyclonic dust trap	+
Boxing ring	+
Centralized lubrication system (automatic)	•
Centralized lubrication system (manual)	+
Counterweight standard 5.0 t/ <b>11,020 lb</b>	•
Electric socket on uppercarriage (24 V)	+
Extended tool set including tool box	+
Fuel anti-theft protection	+
Headlight on uppercarriage, front left, LED+, 1 piece, protection included	+ <sup>1)</sup>
Headlight on uppercarriage, front right, LED, 1 piece, protection included	• <sup>1)</sup>
Headlight on uppercarriage, front right, LED+, 1 piece, protection included	+ <sup>1)</sup>
Headlight on uppercarriage, lateral left, LED+, 1 piece	+ <sup>1)</sup>
Headlight on uppercarriage, lateral right, LED+, 1 piece	+ <sup>1)</sup>
Headlights on uppercarriage, rear, LED+, 2 pieces	+ <sup>1)</sup>
Lighting for tank area	+ <sup>1)</sup>
Lighting for uppercarriage access	+ <sup>1)</sup>
Pre-heating system for fuel	+
Radiator fine mesh protection grid	+
Reflective warning stickers	+
Reversible fan drive	+
Rotating beacons on uppercarriage, rear, LED, 2 pieces	+
Skyview 360°	+
Special painting	+
Tank refilling pump fuel	+
Tool set including storage case	•

## Hydraulic System

Bypass filter for hydraulic oil	+
Liebherr hydraulic oil	•
Liebherr hydraulic oil, adapted for extreme climate conditions	+
Liebherr hydraulic oil, biodegradable	+

## Engine

Automatic engine shutdown after idling	+
Engine shut-down with overrun	+
Lighting for engine compartment	+ <sup>1)</sup>

## Operator's Cab

3" seat belt with retractor, orange color	•
4-points seat belt	+
Acoustic travel alarm deactivatable	+
Auxiliary heater programmable	+
Bottom windscreen wiper	+
Cool box (12 V)	+
Dark tinted windows	+

• = Standard, + = Option

<sup>1)</sup> Equipment not individually available, but only as predefined lighting packages  
Non-exhaustive list, please contact us for further information.

## Operator's Cab

Electrically adjustable and heated outside rear-view mirrors	+
Electronic immobilizer	+
Emergency stop in cab	+
FGPS front guard	+
Filter for hydraulic hammer return flow	+
Fire extinguisher	+
First-aid box	+
Footrest	+
FOPS top guard	+
Handrests elevated for joysticks	+
Headlights on cab, front, LED, 2 pieces	• <sup>1)</sup>
Headlights on cab, front, LED+, 2 pieces	+ <sup>1)</sup>
Headlights on cab roof, front, LED+, 2 pieces	+ <sup>1)</sup>
High pressure circuit switchable on pedals or mini-joystick	+
High pressure circuit with Tool Control (20 attachment adjustments on display)	+
Impact resistant one-piece windscreen	+
Impact resistant roof window	+
Integral protection guard	+
Laminated roof window	•
Lightbar on cabin	+
Luminosity control (LED+ headlights)	+ <sup>1)</sup>
Medium pressure circuit	+
Mini-joysticks proportional	•
Movement restriction for boom	+
Movement restriction for stick	+
Operator seat Comfort	•
Operator seat Premium	+
Overload warning system	+
Preparation for machine guidance system	+
Preparation for tiltrotator	+
Preparation for weighing system	+
Radio Comfort	+
Radio pre-installation	•
Retractable laminated two-piece windscreen	•
Roof sun shield	+
Roof window wiper	+
Rotating beacon on cabin, LED, 1 piece	+
Seat belt reminder	+
Shortcut button on joystick configurable	•
Special painting	+
Sun visor	+
Switch between high pressure and bucket cylinder controls	+
Windscreen bottom protection grid	+

## Equipment

Bucket cylinder rod protection	+
Centralized lubrication extended for connecting link	+
Floating boom	+
Grapple hydraulic lines (bucket cylinder inactive)	+
Headlight guard on boom, right	+
Headlight guards on boom, right and left	+
Headlight on boom, left, LED+, 1 piece	+ <sup>1)</sup>
Headlight on boom, right, LED, 1 piece	• <sup>1)</sup>
Headlight on boom, right, LED+, 1 piece	+ <sup>1)</sup>
Headlight on stick, bottom, LED+, 1 piece	+ <sup>1)</sup>
Liebherr bucket range	+
Liebherr tooth system	+
LIKUFIX electric signal plug	+
LIKUFIX for quick coupler SWA 48 hydraulic	+
Load holding valve for bucket cylinder	+
Lubrication hoses protection on stick	+
Mono boom 5.70 m/ <b>18'8"</b>	+
Quick coupler SWA 48 hydraulic	+
Quick coupler SWA 48 mechanical	+
Special painting	+
Stick 2.50 m/ <b>8'2"</b>	+
Stick 2.90 m/ <b>9'6"</b>	+
Stick 3.50 m/ <b>11'6"</b>	+
Stick bottom protection	+
Tool Management	+

Options and/or special equipments, supplied by vendors other than Liebherr, are only to be installed with the knowledge and approval of Liebherr in order to retain warranty.