

Crawler Excavator

R 934 C

Litronic®

Operating Weight:
32,600 – 33,500 kg

Engine Output:
150 kW / 203 HP

Stufe IIIA / Tier 3

Bucket Capacity:
1.65 – 2.00 m³



LIEBHERR

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Performance

Liebherr crawler excavators feature state-of-the-art technology and high-quality workmanship. The most important components of the drive system are all produced by Liebherr and are perfectly coordinated with one another. The engine generation, as further developed for the “C-series”, assures an effective power delivery, a high degree of efficiency, long life expectancy and complies with the emission standard IIIA/Tier 3.

Reliability

High demand for performance and quality is consequently converted into landmark solutions to achieve the highest level of dependability and reliability. Liebherr has over 50 years experience in the production of hydraulic excavators and has an unparalleled competence in design and know-how.

Comfort

In the operator's station, the operator can look forward to a comfortable workstation that is designed according to the most up-to-date ergonomically know-how. The standard climate control provides a pleasant working environment in all weather conditions.

Liebherr crawler excavators are particularly service-friendly: Maintenance work is simply and quickly accomplished due to well accessible service points.

Economy

Liebherr crawler excavators stand for maximum productivity. The sensitive excavator controls assure optimal efficiency in the interaction of excavator hydraulics and electronics. A wide selection of attachments and buckets with various dimensions provide the correct choice for every application.

Experience progress

R 934 C

Liebherr System Technology

- Key-components such as engine, hydraulic pumps and motors, swing and travel gear boxes as well as electronic elements are developed and produced by Liebherr
- Manufacturing centers for components located in Germany and Switzerland assure a maximum of quality

Attachment

- Steel casting elements at every pivot point for longer service life
- Two separate pins with casted bell housing for optimal stress-flow
- Innovative concept with latest steelworks
- Centralized lubrication points for reduced maintenance time and less downtime

Hydraulic System

- Additional 3rd pump for swing circuit assures highest priority on swing function and increases productivity
- The on demand hydrostatic fan drive takes off only the needed power to reduce fuel consumption

Undercarriage

- Combination of high-strength steel plates with steel castings for a smooth stress flow and longer life time
- Robust structures thanks to the X-shaped profile assure higher stability
- Integrated lashing eyes allow easy and safe transport (2x each in the front and rear)





ReGeneration Plus

- Quicker attachment lowering, less pressure loss and more safety
- Higher productivity due to optimization and consolidation of the functions "pressureless lowering", "regeneration" and "load holding valves"
- Less energy consumption for less fuel consumption

Cabin

- Standard air conditioning creates a pleasant operator environment
- Ergonomically designed seat assures comfortable working conditions
- Generously-sized windows for optimal visibility

Engine

- Electronic engine speed sensing control and maximum output at low engine speed for less fuel consumption
- Environmental friendly and conform with Stage IIIA/Tier 3 emission standard
- Developed and produced by Liebherr in Switzerland

Technical Data



Engine

Rating per ISO 9249	150 kW (203 HP) at 1,800 RPM
Torque	940 Nm at 1,100 RPM
Model	Liebherr D934L
Type	4 cylinder in-line
Bore	122 mm
Stroke	150 mm
Displacement	7.01 l
Engine operation	4-stroke diesel unit pump system turbo-charged and after-cooled reduced emissions
Exhaust gas treatment	emission standard stage IIIA/Tier 3 for applications at altitude higher than 3,000 m please contact your local dealer
Cooling system	water-cooled and integrated motor oil cooler
Air cleaner	dry-type air cleaner with pre-cleaner, primary and safety elements
Fuel tank	580 l
Electrical system	
Voltage	24 V
Batteries	2 x 180 Ah / 12 V
Starter	24 V / 6.6 kW
Alternator	28 V / 80 A
Engine idling	sensor controlled



Hydraulic Controls

Power distribution	via control valves in single block with integrated safety valves
Flow summation	to boom and stick
Closed-loop circuit	for uppercarriage swing drive
Servo circuit	
Attachment and swing	proportional via joystick levers
Travel	– with proportionally functioning foot pedals or adjusted with plugable levers – speed pre-selection
Additional functions	proportional regulation via foot pedals or joystick toggle switch



Hydraulic System

Hydraulic pump	two Liebherr variable flow, swashplate pumps
for attachment and travel drive	
Max. flow	2 x 245 l/min.
Max. pressure	350 bar
for swing drive	reversible, variable flow, swashplate pump, closed- loop circuit
Max. flow	149 l/min.
Max. pressure	350 bar
Pump regulation	electro-hydraulic with electronic engine speed sensing regulation, pressure compensation, flow compensa- tion
Hydraulic tank	340 l
Hydraulic system	550 l
Hydraulic oil filter	1 full flow filter in return line with integrated fine filter area (5 µm)
Cooling system	compact cooler, consisting of a water cooler, sand- wiched with hydraulic oil cooler and fuel and after-cooler cores and hydrostatically driven fan
MODE selection	adjustment of engine and hydraulic performance via a mode pre-selector to match application
ECO	for especially economical and environmentally friendly operation
POWER	for maximum digging power and heavy duty jobs
LIFT	for lifting
FINE	for precision work and lifting through very sensitive movements
RPM adjustment	stepless adjustment of engine output via RPM at each selected mode
Tool Control	10 preadjustable pump flows and pressures for add- on tools



Swing Drive

Drive	Liebherr swashplate motor with integrated brake valves
Transmission	Liebherr compact planetary reduction gear
Swing ring	Liebherr, sealed race ball bearing swing ring, internal teeth. Lubrication via a grease distributor and a grease nipple
Swing speed	0 – 8.2 RPM stepless
Swing torque	84 kNm
Holding brake	wet multi-disc (spring applied, pressure released)



Operator's Cab

Cab	built from deep drawn components, resiliently mounted, sound insulated, tinted windows, front window stores overhead, door with sliding window		
Operator's seat	shock-absorbing suspension, adjustable to operator's weight, 4-way adjustable seat		
Control system	integrated into adjustable seat consoles		
Operation and displays	menu driven query of current operating conditions. Automatic monitoring, display, warning (acoustical and optical signal) and saving machine malfunction data, for example, engine overheating, low engine oil pressure or low hydraulic oil level		
Air-conditioning	standard air conditioning, combined cooler/heater, additional dust filter in fresh air/recirculated		
Noise emission	ISO 6396	L_{pA} (inside cab)	= 80 dB(A)
	2000/14/EC	L_{WA} (surround noise)	= 105 dB(A)



Undercarriage

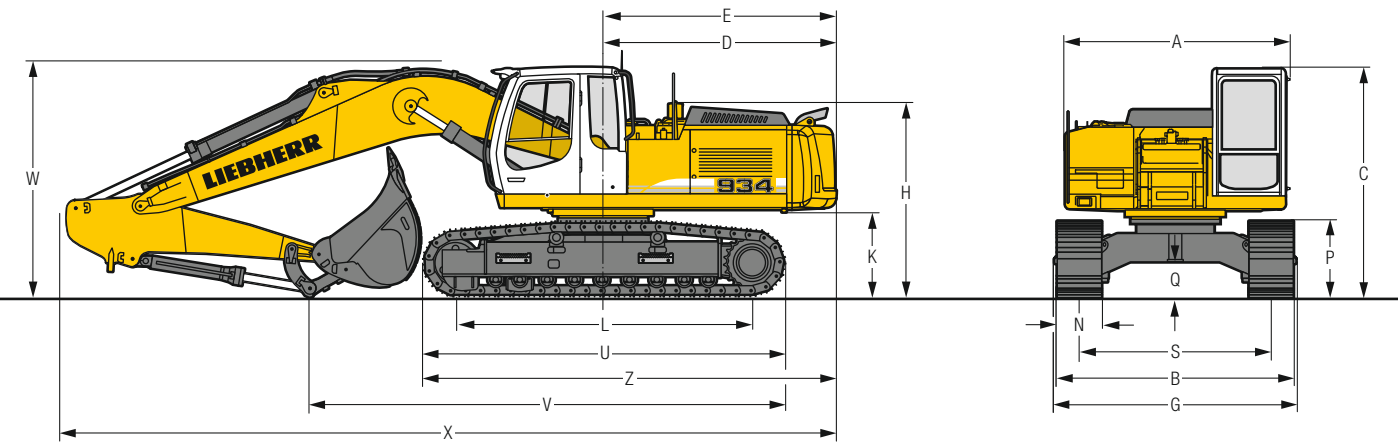
LC	heavy duty, wide gauge
Drive	Liebherr swashplate motors with integrated brake valves on both sides
Transmission	Liebherr compact planetary reduction gear
Maximum travel speed	low range 2.9 km/h high range 5.2 km/h
Net drawbar pull on crawler	243 kN
Track components	D7, maintenance-free for 600 mm and 750 mm pad width
Track rollers / Carrier rollers	9/2
Tracks	sealed and greased
Track pads	triple grouser
Holding brake	wet multi-disc (spring applied, pressure released)
Brake valves	integrated into travel motor



Attachment

Type	combination of resistant steel plates and cast steel components
Hydraulic cylinders	Liebherr cylinders with special seal-system, shock protection
Bearings	sealed, low maintenance
Lubrication	easy accessible centralised lubrication points for boom and stick
Hydraulic connections	pipes and hoses equipped with SAE split-flange connections
Bucket	standard equipped with 12 t lifting hook and Liebherr tooth system

Dimensions

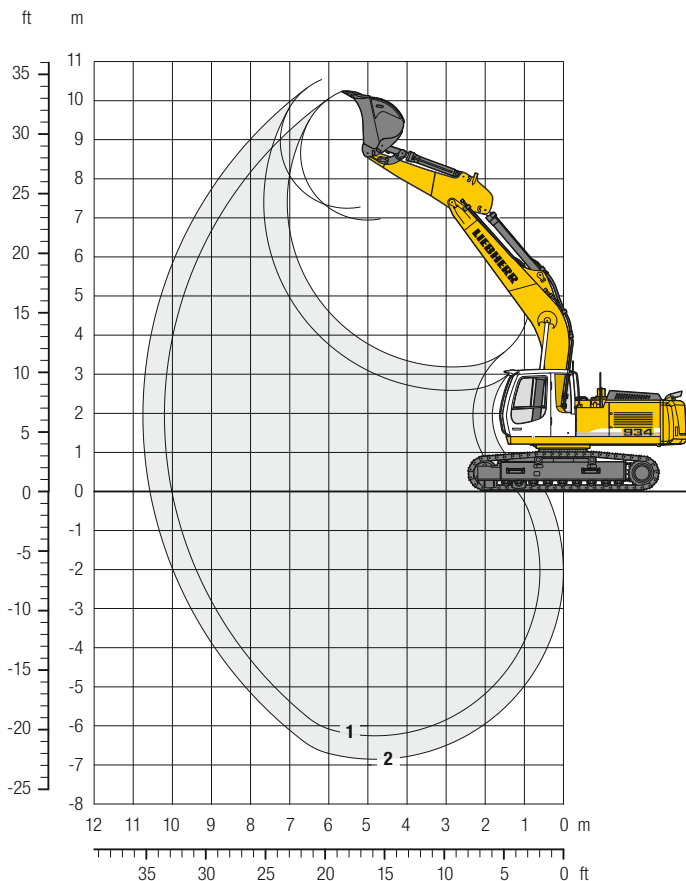


	mm	
A	3,050	
C	3,120	
D	3,145	
E	3,145	
H	2,650	
K	1,155	
L	4,000	
P	1,046	
Q	496	
S	2,590	
U	4,920	
N	600	750
B	3,190	3,340
G	3,176	3,476
Z	5,600	

	Stick length m	Mono boom 6.05 m	
		mm	
V	2.50	6,450	
	3.10	5,850	
W	2.50	3,150	
	3.10	3,250	
X	2.50	10,500	
	3.10	10,500	

Backhoe Bucket

with Mono Boom 6.05 m



Digging Envelope

		1	2
Stick length	m	2.50	3.10
Max. digging depth	m	6.25	6.85
Max. reach at ground level	m	10.00	10.55
Max. dumping height	m	6.95	7.25
Max. teeth height	m	10.25	10.55

Forces

		1	2
Digging force ISO	kN	138	132
Breakout force ISO	kN	160	160
Digging force SAE	kN	120	115
Breakout force SAE	kN	143	143

Max. breakout force with ripper bucket

251 kN

Operating Weight and Ground Pressure

The operating weight includes the basic machine with mono boom 6.05 m, stick 3.10 m and bucket 1.65 m³ (1,450 kg).

Undercarriage		LC
Pad width	mm	600 750
Weight	kg	32,600 33,500
Ground pressure	kg/cm ²	0.63 0.52

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

				LC-Undercarriage	
				Stick length (m)	
				2.50	3.10
STD ¹⁾	Cutting width	Capacity ISO 7451	Weight		
	mm	m ³	kg		
	1,450	1.65	1,230	▲	▲
	1,550	1.80	1,280	▲	■
	1,650	2.00	1,330	■	■
HD ²⁾	1,450	1.65	1,370	▲	▲
	1,550	1.80	1,430	▲	■
	1,650	2.00	1,500	■	■

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

¹⁾ STD bucket for direct mounting with teeth Z 50

²⁾ HD bucket for direct mounting with teeth Z 50


Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³, ■ = ≤ 1.8 t/m³, ■ = ≤ 1.5 t/m³


Lift Capacities

with Mono Boom 6.05 m

Stick 2.50 m

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
7.5	LC					7.4*	7.4*					5.8*	5.8*	6.3
6.0	LC					8.3*	8.3*					5.5*	5.5*	7.4
4.5	LC			11.4*	11.4*	8.4	9.1*	6.0	8.0*			5.3	5.5*	8.1
3.0	LC			11.9	13.9*	7.9	10.2*	5.8	8.5*			4.8	5.7*	8.4
1.5	LC			11.2	15.5*	7.5	11.1*	5.6	8.7			4.7	6.1*	8.5
0	LC			11.0	15.5*	7.3	11.4*	5.4	8.6			4.8	6.9*	8.3
-1.5	LC	11.2*	11.2*	11.0	14.6*	7.3	11.0*	5.4	8.5*			5.2	8.1*	7.7
-3.0	LC	16.1*	16.1*	11.2	12.6*	7.4	9.6*					6.2	8.0*	6.9
-4.5	LC			9.0*	9.0*							7.5*	7.5*	5.3

Stick 3.10 m

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
7.5	LC					7.0*	7.0*					4.5*	4.5*	7.1
6.0	LC					7.6*	7.6*	6.2	6.3*			4.3*	4.3*	8.0
4.5	LC			10.2*	10.2*	8.4*	8.4*	6.0	7.5*			4.2*	4.2*	8.7
3.0	LC			12.3	12.9*	8.1	9.6*	5.8	8.1*			4.4*	4.4*	9.0
1.5	LC			11.4	14.9*	7.6	10.7*	5.6	8.6*	4.3	5.0*	4.3	4.7*	9.0
0	LC	5.5*	5.5*	11.0	15.6*	7.3	11.3*	5.4	8.5			4.3	5.2*	8.8
-1.5	LC	10.5*	10.5*	10.9	15.1*	7.2	11.2*	5.3	8.4			4.6	6.1*	8.3
-3.0	LC	16.5*	16.5*	11.0	13.6*	7.2	10.3*	5.4	7.6*			5.4	7.6*	7.5
-4.5	LC	14.1*	14.1*	10.7*	10.7*	7.5	7.8*					7.1	7.3*	6.2

↑ 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) 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 600 mm 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 430 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity. According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

Standard Equipment

Undercarriage

- Chain guide 4 pieces
- Idler protection
- Track rollers, lifetime-lubricated
- Tracks, sealed and greased
- Two-stage travel motors

Uppercarriage

- Easy accessible centralised lubrication points
- Engine hood with gas spring opening
- Handrails
- Main switch for electric circuit
- Maintenance-free HD-batteries
- Non slip surfaces
- Sound insulation
- Storage space, lockable
- Swing brake lock, maintenance-free
- Tool kit



Hydraulic System

- Electronic pump regulation
- Filter with integrated fine filter area
- Liebherr hydraulic oil
- Pressure storage for controlled lowering of equipment with engine turned off
- Pressure test ports for hydraulic
- Shut-off valve between hydraulic tank and pumps
- Work mode selector



Engine

- Conform with stage IIIA/ Tier 3 emission standard
- Dry-type air cleaner with pre-cleaner and safety elements
- Engine idling, automatic, sensor-controlled
- Intercooler
- Turbo charger
- Unit pump system



Operator's Cab

- Automatic air conditioning with defroster
- Cigarette lighter and ashtray
- Coat hook
- Interior light
- Load bearing sectional profile structure, covered with deep-drawn panels
- Mechanical hour meters, readable from outside the cab
- MP3 radio with USB and SD-Card support
- Multifunction display
- Rain hood over front window opening
- Rearview mirrors
- Rear window emergency exit
- Right window made of one piece
- Roll-down sun blinds (front and roof windows)
- Roof window, right window and windshield with laminated safety glass
- Rubber floor mat
- Seat and consoles independently adjustable (4-way adjustable seat)
- Seat belt
- Sliding windows in cab door
- Storage bin
- Storage space
- Tinted windows
- Wiper / washer



Attachment

- Cylinders with shock absorber
- Easy accessible centralised lubrication points for boom and stick
- ReGeneration plus
- Safety check valves for hoist cylinders
- Sealed pivots / shaft seal between bucket and stick
- Working lights on boom

Non-exhaustive list, please contact us for further information.

Options

Undercarriage

Chain guide 1 piece or 2 pieces for D7 track pads
Reinforced cover and base plate for undercarriage centre section
Steps, wide version (for 750 mm track pads)
Track pads D7 750 mm triple grouser *
Travel drive protection

Uppercarriage

Arctic kit**
Rear mirror on counterweight and right side
Refuelling pump (electrical)
Winter kit**

Hydraulic System

Filter for hydraulic hammer return flow
High pressure circuit
Medium pressure circuit

Engine

Air pre-filter with dust trap
Engine cold starting aid
Pre-heating system for fuel

Operator's Cab

Acoustic travel alarm deactivatable
Additional headlights cab, front halogen, 2 pieces
Additional headlights cab, rear, halogen, 2 pieces
Air suspension operator seat with heating and head-rest
Amber beacon on cabin
Falling objects protection structure FOPS
Fire extinguisher
Front guard protection structure FGPS
GPS system
Rear view monitoring camera

Attachment

12 t lifting hook on bucket
Additional headlight on boom
Bottom protection for boom
Bottom protection for stick
Hydraulic lines for additional tools
Liebherr bucket range
Liebherr central lubrication system, fully-automatic
(except connecting link for bucket kinematics)
Liebherr quick coupler, hydraulic or mechanical
Overload warning device
Protection for piston rod, bucket cylinder
Tool Control, 10 tool adjustments selectable over the display

* = not suitable for hard rock or forestry application, ** = for more details please contact your local dealer
Non-exhaustive list, please contact us for further information.

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