

Technical data



Diesel engine

Rating	
per SAE J1349	121 HP (90 kW) at 1,800 rpm
per ISO 9249	122 HP (90 kW) at 1,800 rpm
Torque	550 Nm at 1,600 rpm / 406 lbf ft at 1,600 rpm
Model	Deutz TCD3.6L4
Type	4 cylinder in-line
Bore/Stroke	98/120 mm / 3.9/4.7 in
Displacement	3.6 l / 220 in³
Engine operation	4-stroke diesel Common-Rail injection system Turbo-charged and after-cooler Reduced emissions
Air cleaner	Dry-type air cleaner with pre-cleaner, primary and safety elements
Engine idling	Sensor controlled
Electrical system	
Voltage	24 V
Batteries	2 x 145 Ah / 12 V
Alternator	Three-phase current 28 V / 140 A
Tier 4 Final	
Harmful emissions values	In accordance with 40CFR1039 (EPA) / 13CCR (CARB)
Emission control	Deutz DOC + DPF + SCR technology
Fuel tank	169 l / 45 gal
Urea tank	20 l / 5 gal



Cooling system

Diesel engine	Water-cooled Compact cooling system comprising cooling unit for water, hydraulic oil and charge air with stepless, thermostatically controlled fan, retractable thermostatic fan for radiator cleaning
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Hydraulic controls

Power distribution	Via control valves with integrated safety valves, simultaneous and independent actuation of undercarriage, swing drive and equipment
Servo circuit	
Equipment and swing	With electro-hydraulic pilot control and proportional joystick levers
Travel	Electro-proportional via foot pedal
Additional functions	Via switch or electro-proportional foot pedals
Proportional control	Proportionally acting transmitters on the joysticks for additional hydraulic functions



Hydraulic system

Hydraulic pump	
For equipment and travel drive	Liebherr axial piston variable displacement pump
Max. flow	300 l/min. / 79 gpm
Max. pressure	350 bar / 5,076 psi
Hydraulic pump regulation and control	Liebherr-Synchron-Comfort-system (LSC) with electronic engine speed sensing regulation, pressure and flow compensation, torque controlled swing drive priority
Hydraulic tank	93.4 l / 24.6 gal
Hydraulic system	max. 230 l / max. 61 gal
Filtration	1 main return filter with integrated partial micro filtration (5 µm / 2,500 mesh)
MODE selection	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
S (Sensitive)	Mode for precision work and lifting through very sensitive movements
E (Eco)	Mode for especially economical and environmentally friendly operation
P (Power)	Mode for high performance with low fuel consumption
P* (Power-Plus)	Mode for highest performance and for very heavy duty applications, suitable for continuous operation
Engine speed and performance setting	Stepless adjustment of engine output and hydraulic power via engine speed
Additional function	Tool Control: 20 pre-adjustable pump flows and pressures for add-on attachments



Swing drive

Drive	Liebherr axial piston motor with integrated brake valve and torque control
Transmission	Liebherr compact planetary reduction gears
Swing ring	Liebherr, sealed race ball bearing swing ring, internal teeth
Swing speed	0-10.0 rpm stepless
Swing torque	54 kNm / 39,828 lbf ft
Holding brake	Wet multi-disc (spring applied, pressure released)
Additional function	Positioning swing brake automatic



Cab

Cab	ROPS safety cab structure (roll-over protection system) with individual windscreens or featuring a slide-in subpart under the ceiling, headlights integrated in the ceiling, a door with a sliding window, large stowing and depositing possibilities, shock-absorbing suspension, sound damping insulating, laminated safety glass, separate window shades for the sunroof window and windscreen
Operator's seat Comfort	Air cushioned operator's seat with 3D-adjustable armrests, headrest, lap belt, seat heater (2-stage), adjustable seat cushion inclination and length, lockable horizontal suspension, automatic weight adjustment, pneumatic low frequency suspension, adjustable suspension stiffness, pneumatic lumbar vertebrae support and passive seat climatization with active coal
Operator's seat Premium (Option)	In addition to operator's seat Comfort: active electronic weight adjustment (automatic readjustment) and active seat climatization with active coal and ventilator
Arm consoles	Joysticks with control consoles attached to the seat, folding left control console
Operation and displays	Large high-resolution operating unit, intuitive, color display with touchscreen, haptic feedback, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption, machine and attachment parameters, separate display for rear view and side view monitoring
Air-conditioning	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 (country-dependent)



Undercarriage

LC	Gauge 2,000 mm / 6'7"
Drive	Liebherr axial piston motor
Transmission	Liebherr compact planetary reduction gear
Maximum travel speed	3.1 km/h / 1.9 mph low range 6.9 km/h / 4.3 mph high range
Drawbar pull on crawler	151 kN / 33,950 lbf
Track components	B4, maintenance-free
Track rollers / Carrier rollers	7 / 2
Tracks	Sealed and greased
Track pads	Triple grouser
Holding brake	Wet multi-disc (spring applied, pressure released)
Brake valves	Integrated into travel motor
Lashing eyes	Integrated



Equipment

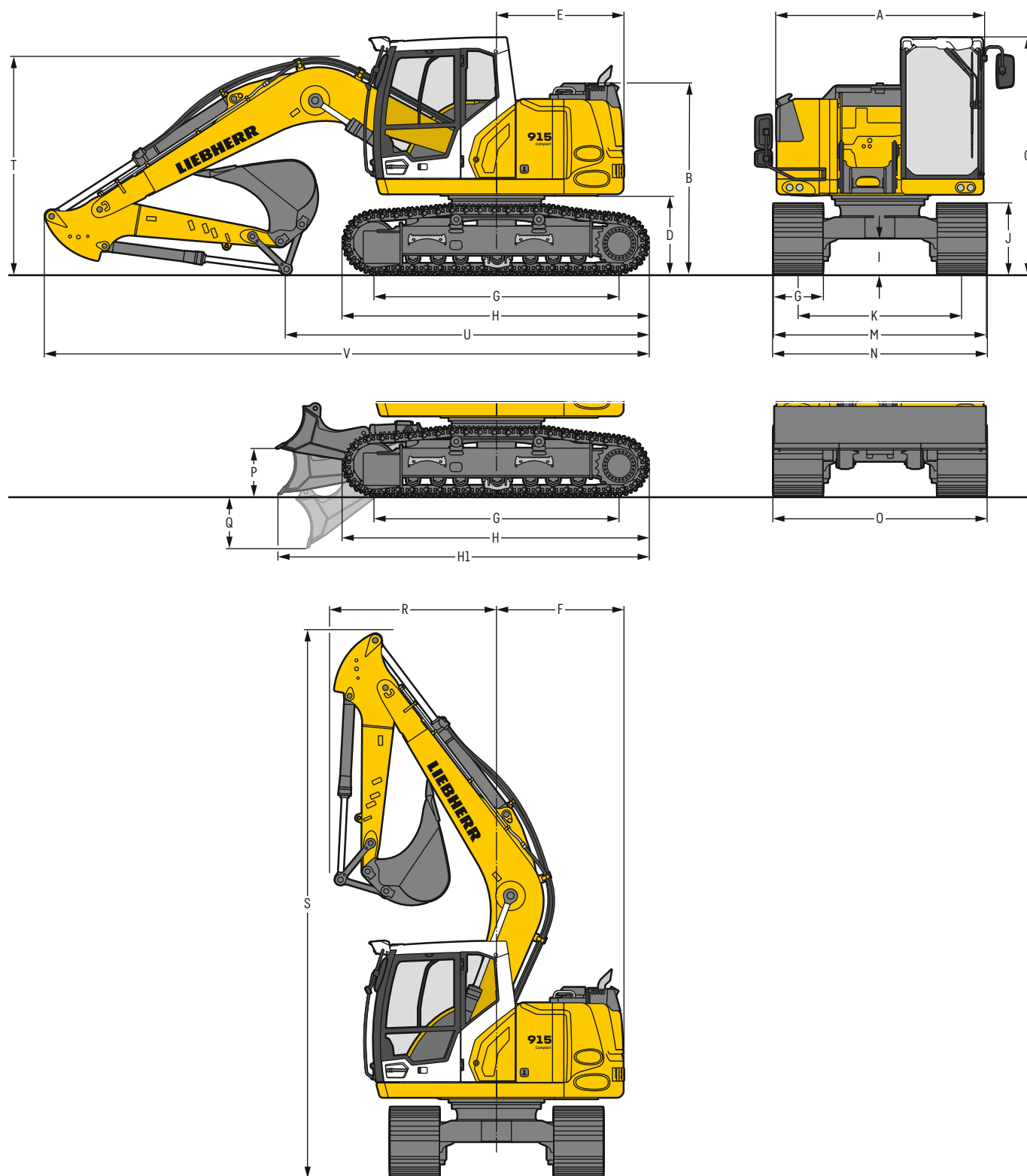
Type	High-strength steel plates at highly-stressed points for the toughest requirements. Complex and stable mountings of equipment and cylinders
Hydraulic cylinders	Liebherr cylinders with seal and guidance systems
Bearings	Sealed, low maintenance



Complete machine

Lubrication	Liebherr central lubrication system for uppercarriage and equipment
Noise emission	
ISO 6396	70 dB(A) = L _{pA} (inside cab)
2000/14/EC	101 dB(A) = L _{WA} (surround noise)

Dimensions



		LC				mm / ft in				LC with blade	mm / ft in			
A	Uppercarriage width					2,525	/	8'	3"		2,525	/	8'	3"
B	Uppercarriage height					2,330	/	7'	8"		2,330	/	7'	8"
C	Cab height					2,895	/	9'	6"		2,895	/	9'	6"
D	Counterweight ground clearance					960	/	3'	2"		960	/	3'	2"
E	Rear-end length					1,550	/	5'	1"		1,550	/	5'	1"
F	Tail swing radius					1,550	/	5'	1"		1,550	/	5'	1"
G	Wheelbase					3,000	/	9'	10"		3,000	/	9'	10"
H	Undercarriage length					3,740	/	12'	3"		3,740	/	12'	3"
H1	Undercarriage length with blade					-					4,525	/	14'	10"
I	Undercarriage ground clearance					435	/	1'	5"		330	/	1'	1"
J	Track height					860	/	2'	10"		860	/	2'	10"
K	Track gauge					2,000	/	6'	7"		2,000	/	6'	7"
L	Track pad width					500	/	20"			500	/	20"	
M	Width over tracks					2,500	/	8'	2"		2,500	/	8'	2"
N	Width over steps					2,500	/	8'	2"		2,500	/	8'	2"
O	Blade width					-					2,500	/	8'	2"
P	Max. blade height					-					580	/	1'	11"
Q	Max. blade depth					-					630	/	2'	1"

¹¹ width with removable steps

		Stick length	Mono boom 4.60 m / 15'1"	
		m / ft in	direct mounting	mm / ft in
R	Front swing radius	2.25 / 7'5"	2,050 / 6' 9"	
		2.45 / 8'	2,050 / 6' 9"	
		2.65 / 8'8"	2,050 / 6' 9"	
S	Height with boom up		6,700 / 22'	
T	Boom height	2.25 / 7'5"	2,700 / 8'10"	
		2.45 / 8'	2,750 / 9'	
		2.65 / 8'8"	2,750 / 9'	
U	Length on ground	2.25 / 7'5"	4,450 / 14' 7"	
		2.45 / 8'	4,250 / 13'11"	
		2.65 / 8'8"	4,100 / 13' 5"	
V	Overall length		7,450 / 24' 5"	
	Bucket		0.50 m³ / 0.65 yd³	

Transport dimensions

removable elements disassembled

	Mono boom 4.60 m / 15'1"			
	mm / ft in			
Pad width	500 / 20"	600 / 24"	700 / 28"	850 / 34"
Transport width	2,525 / 8' 3"	2,600 / 8' 6"	2,700 / 8'10"	2,850 / 9' 4"

	Undercarriage	LC	LC with blade
		mm / ft in	mm / ft in
Transport length		7,450 / 24'5"	8,250 / 27'1"
Transport height		2,895 / 9'6"	
Bucket		0.50 m³ / 0.65 yd³	