

Technical data



Engine

Rating	
per SAE J1349	255 HP (190 kW) at 1,800 rpm
per ISO 9249	258 HP (190 kW) at 1,800 rpm
Torque	1,337 Nm at 1,350 rpm / 986 lbf ft at 1,350 rpm
Model	Liebherr D944 A7-24
Type	4 cylinder in-line
Bore	130 mm / 5.1 in
Stroke	150 mm / 5.9 in
Displacement	8.0 l / 488 in³
Engine operation	4-stroke diesel Common-Rail Turbo-charged and after-cooler
Exhaust gas treatment	Tier 4 Final DOC + SCR Passive regeneration by thermo management
Cooling system	Water-cooled and oil cooler, after-cooled and fuel cooled
Air cleaner	Dry-type air cleaner with pre-cleaner
Fuel tank	450 l / 119 gal
Urea tank	46 l / 12 gal
Electrical system	
Voltage	24 V
Batteries	2 x 180 Ah / 12 V
Alternator	Three-phase current 28 V / 140 A
Engine idling	Sensor controlled



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	Proportional via joystick levers
Travel	– Proportional control via foot pedals or removable levers – Speed pre-selection
Additional functions	Proportional regulation via foot pedals or mini-joystick



Hydraulic system

Hydraulic system	Positive Control hydraulic system. Demand-based, double independent pump flows Features high system dynamics and sensitivity provided by integrated system controlling
Hydraulic pump	
For equipment and travel drive	Liebherr, variable displacement, swashplate double pump
Max. flow	2 x 245 l/min. / 2 x 65 gpm
Max. pressure	380 bar / 5,511 psi
Pump management	Electronic pump management via the integrated system controlling (CAN-BUS) synchronous to the control block. Open circuit for the rotation
Hydraulic tank	290 l / 77 gal
Hydraulic system	max. 520 l / max. 137 gal
Hydraulic oil filter	1 main return filter with integrated partial micro filtration (10 µm / 1,250 mesh)
Cooling system	Compact cooler, consisting of a water cooler, with hydraulic oil cooler, gearbox oil cooler, fuel cooler and after-cooler cores and hydrostatically driven fan
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
Engine speed and performance setting	Stepless adjustment of engine output and hydraulic power via engine speed



Swing drive

Drive	Liebherr swashplate 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	106 kNm / 78,182 lbf ft
Holding brake	Wet multi-disc (spring applied, pressure released)



Cab

Cab	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 extensible window shades for the sunroof window and windscreen, cigarette lighter and 24 V plug, 12 V plug, cup holder
Operator's seat	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 length, height and inclination), seat heating as standard
Arm consoles	Oscillating consoles with seat, tiltable console left
Operation and displays	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
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
Noise emission	
ISO 6396	71 dB(A) = L _{PA} (inside cab)
2000/14/EC	105 dB(A) = L _{WA} (surround noise)



Undercarriage

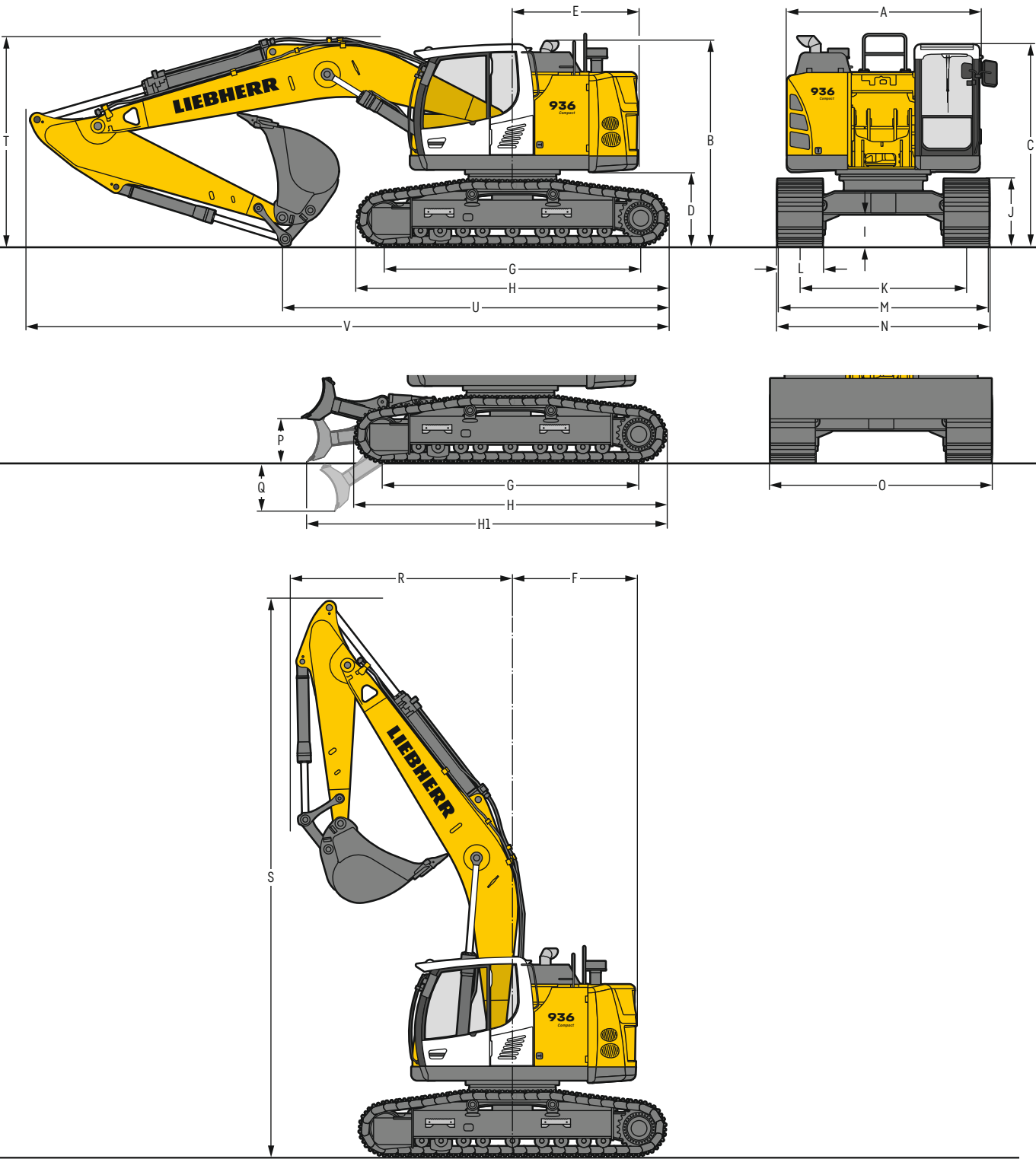
LC	Gauge 2,740 mm / 9'
Drive	Liebherr swashplate motor with brake valves on both sides
Transmission	Liebherr compact planetary reduction gear
Maximum travel speed	2.6 km/h / 1.6 mph low range 4.2 km/h / 2.6 mph high range
Drawbar pull on crawler	325 kN / 73,060 lbf
Track components	D7, maintenance-free
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
Lashing eyes	Integrated



Equipment

Hydraulic cylinders	Liebherr cylinders with seal and guidance systems
Bearings	Sealed, low maintenance
Lubrication	Liebherr central lubrication system

Dimensions



		LC				mm / ft in		LC with blade	mm / ft in	
A	Uppercarriage width					3,000**	/ 9'10"***		3,000**	/ 9'10"***
B	Uppercarriage height					3,200	/10' 6"		3,200	/10' 6"
C	Cab height					3,155	/10' 4"		3,155	/10' 4"
D	Counterweight ground clearance					1,160	/ 3'10"		1,160	/ 3'10"
E	Rear-end length					1,975	/ 6' 6"		1,975	/ 6' 6"
F	Tail swing radius					1,975	/ 6' 6"		1,975	/ 6' 6"
G	Wheelbase					3,990	/13' 1"		3,990	/13' 1"
H	Undercarriage length					4,845	/15'11"		4,845	/15'11"
H1	Undercarriage length with blade					-			5,600	/18' 4"
I	Undercarriage ground clearance					500	/ 1' 8"		500	/ 1' 8"
J	Track height					1,055	/ 3' 6"		1,055	/ 3' 6"
K	Track gauge					2,740	/ 9'		2,740	/ 9'
L	Track pad width					600 / 24"	700 / 28"	800 / 31"	900 / 35"	600 / 24"
M	Width over tracks					3,340 /10'11"	3,440 /11' 3"	3,540 /11' 7"	3,640 /11'11"	3,340 /10'11"
N	Width over steps					3,340 /10'11"	3,340 /10'11"	3,540* /11' 7"*	3,540* /11' 7"*	3,340 /10'11"
O	Blade width					-			3,350	/11'
P	Max. blade height					-			705	/ 2' 4"
Q	Max. blade depth					-			755	/ 2' 6"

* width with removable steps

** without door stop device and spacer

		Stick length	Mono boom 6.20 m / 20'4"			
		m / ft in	direct mounting			
			mm / ft in			
R	Front swing radius		3,500 /11' 6"			
S	Height with boom up		8,800 /28'10"			
T	Boom height	2.50 / 8'2"	3,200 /10' 6"			
		3.20 /10'6"	3,250 /10' 8"			
		3.70 /12'2"	3,150 /10' 4"			
U	Length on ground	2.50 / 8'2"	7,000 /23'			
		3.20 /10'6"	6,000 /19' 8"			
		3.70 /12'2"	5,300 /17' 5" / 5,200* /17'1"*			
V	Overall length		10,000 /32'10" / 10,800* / 35'5"*			
	Bucket		1.60 m³ / 2.09 yd³			

* with blade

Transport dimensions

removable elements disassembled

	Undercarriage	Mono boom 6.20 m / 20'4"			
		mm / ft in			
Pad width		600 / 24"	700 / 28"	800 / 31"	900 / 35"
Transport width	LC	3,340 /10'11"	3,440 /11' 3"	3,540 /11' 7"	3,640 /11'11"
	LC with blade	3,340 /10'11"	-	-	-

	Undercarriage / Stick	LC	LC with blade
	m / ft in	mm / ft in	mm / ft in
Transport length		10,000 /32'10"	10,800 /35'5"
Transport height	2.50 / 8'2"	3,200 /10'6"	
	3.20 /10'6"	3,250 /10'8"	
	3.70 /12'2"	3,200 /10'6"	
Bucket		1.60 m³ / 2.09 yd³	