

Crawler Tractors

PR 746

Litronic®

Generation

8

Operating Weight

25,900–31,500 kg / 57,100–69,446 lb

Engine Output

SAE J1349 ISO 9249

190 kW/254 HP 190 kW/258 HP

Tier 4f Stage V



LIEBHERR

Technical Data



Engine

Liebherr Diesel engine	D 936 A7 Emission regulations according to 97/68/EC, 2004/26/EC stage V, EPA/CARB Tier 4f
Rated power (net)	
ISO 9249	190 kW/258 HP
SAE J1349	190 kW/254 HP
Maximum power (net)	
ISO 9249	210 kW/286 HP
SAE J1349	210 kW/281 HP
Rated speed	1,600 rpm
Displacement	10.5 l/641 in ³
Design	6 cylinder in-line engine, water-cooled, turbocharged, air-to-air intercooler
Injection system	Direct fuel injection, Common Rail, electronic control
Lubrication	Pressurised lube system, engine lubrication guaranteed for inclinations up to 45°, on all sides
Operating voltage	24 V
Alternator	140 A
Starter	7.8 kW/11 HP
Batteries	2 x 180 Ah/12 V
Air cleaner	Dry type air filter with vacuum indicator and automatic dust ejector, main and safety element
Cooling system	Combi radiator, comprising radiators for water and charge air. Hydrostatic fan drive.



Hydraulics

Hydraulic system	Load sensing (demand-controlled)
Pump type	Swash plate piston pump
Pump flow, max.	256 l/min. / 67.6 gpm / 56.3 Imp.gpm
Pressure limitation	260 bar / 3,770 psi
Control valve	2 segments, expandable to 4
Filter system	Return filter with magnetic rod in the hydraulic tank
Control	Single joystick for all blade functions



Travel Drive, Control

Transmission system	Infinitely variable hydrostatic travel drive, independent drive for each track
Travel speed*	Continuously variable
Speed range 1:	0 – 6.5 km/h/4.0 mph (forward & reverse)
Speed range 2:	0 – 8.5 km/h/5.3 mph (forward & reverse)
Speed range 3:	0 – 11.0 km/h/6.8 mph (forward & reverse)
	* Travel speed ranges can be set on the travel joystick (memory function)
Electronic system	The electronic system automatically adjusts travel speed and drawbar pull to match changing load conditions
Steering	Hydrostatic
Service brake	Hydrostatic (self-locking), wear-free
Parking brake	Multi-disc brake, wear-free, automatically applied with neutral joystick position
Cooling system	Separate oil cooler, hydraulic fan drive
Filter system	Micro cartridge filter in replenishing circuit
Final drive	Combination spur gear with planetary gear, double-sealed (duo cone seals) with temperature indicator
Control	Single proportional joystick for all travel and steering functions



Operator's Cab

Cab	Hydro-elastic mounted cab with positive pressure ventilation, can be tilted with hand pump 40° to the rear. With integrated ROPS Rollover Protective Structure (EN ISO 3471) and FOPS Falling Objects Protective Structure (EN ISO 3449)
Operator's seat	Air suspended comfort seat, fully adjustable
Monitoring	Touch screen: display of current machine information, automatic monitoring of operating conditions, individual setting of machine parameters

Undercarriage

	L	LGP
Design	Undercarriage with rigid bottom rollers	
Mounting	Via separate pivot shafts and equalizer bar	
Track chains	Lubricated, single-grouser shoes, tensioning via steel spring and grease tensioner	
Links, each side	41	44
Track rollers, each side	7	8
Carrier rollers, each side	2	2
Sprocket segments, each side	6	6
Track shoes, standard	610 mm/24"	812 mm/32"
Track shoes, optional	560 mm/22" 711 mm/28"	914 mm/36"

Sound Levels

Operator sound exposure ISO 6396	
L _{pA} (in the cab)	75 dB(A)
Exterior sound pressure 2000/14/EC	
L _{WA} (to the environment)	112 dB(A)

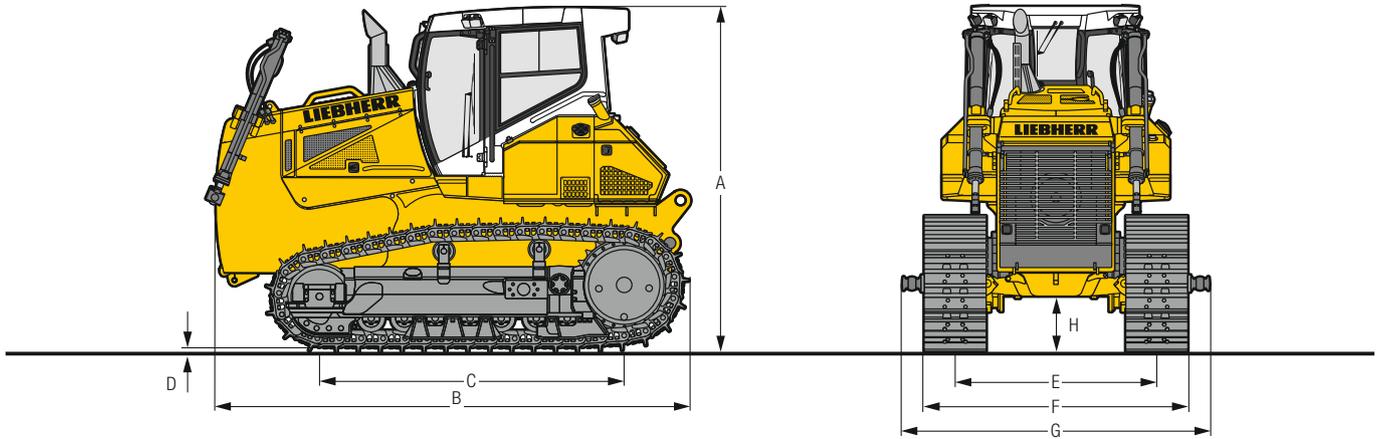
Refill Capacities

Fuel tank	505 l/133.3 gal/111.1 Imp.gal
Diesel Exhaust Fluid (DEF) tank	56.5 l/14.9 gal/12.4 Imp.gal
Cooling system	49 l/12.9 gal/10.8 Imp.gal
Engine oil, with filter	43 l/11.4 gal/9.5 Imp.gal
Splitter box	8.5 l/2.2 gal/1.9 Imp.gal
Hydraulic tank	112 l/29.6 gal/24.6 Imp.gal
Final drive L, each side	17 l/4.5 gal/3.7 Imp.gal
Final drive LGP, each side	18 l/4.8 gal/4.0 Imp.gal

Drawbar Pull

Max.	436 kN
at 1.5 km/h/0.9 mph	385 kN
at 3.0 km/h/1.9 mph	190 kN
at 6.0 km/h/3.7 mph	95 kN
at 9.0 km/h/5.6 mph	63 kN

Dimensions

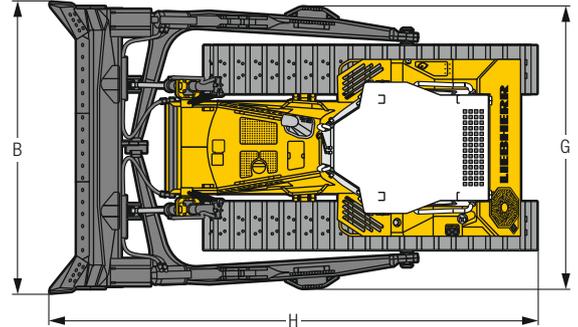
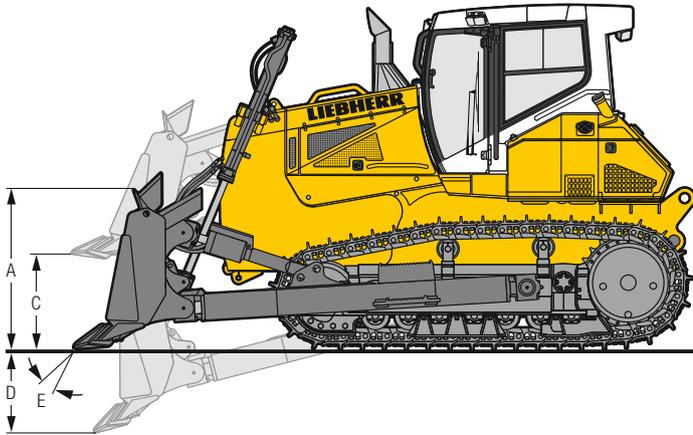


Dimensions

Undercarriage		L		LGP	
A Height over cab	mm	3,435		3,435	
	ft in	11'3"		11'3"	
B Overall length without attachments	mm	4,671		4,671	
	ft in	15'4"		15'4"	
C Length of track on ground	mm	2,999		3,323	
	ft in	9'10"		10'11"	
D Height of grousers	mm	71.5		71.5	
	ft in	2.81"		2.81"	
H Ground clearance	mm	551		551	
	ft in	1'10"		1'10"	
E Track gauge	mm	1,980		2,180	
	ft in	6'6"		7'2"	
G Width over trunnions	mm	3,000		3,600	
	ft in	9'10"		11'10"	
F Track shoes 560 mm / 22"	Width over tracks	mm / ft in	2,540 / 8'4"		-
	Tractor shipping weight ¹⁾	kg / lb	21,644 / 47,717		
F Track shoes 610 mm / 24"	Width over tracks	mm / ft in	2,590 / 8'6"		-
	Tractor shipping weight ¹⁾	kg / lb	21,998 / 48,497		
F Track shoes 711 mm / 28"	Width over tracks	mm / ft in	2,691 / 8'10"		-
	Tractor shipping weight ¹⁾	kg / lb	22,705 / 50,056		
F Track shoes 812 mm / 32"	Width over tracks	mm / ft in	-		2,992 / 9'10"
	Tractor shipping weight ¹⁾	kg / lb	-		22,769 / 50,197
F Track shoes 914 mm / 36"	Width over tracks	mm / ft in	-		3,094 / 10'2"
	Tractor shipping weight ¹⁾	kg / lb	-		23,344 / 51,465

¹⁾ Including coolant and lubricants, 20 % fuel, ROPS/FOPS cab.

Front Attachments



Semi-U Blade and Straight Blade

Undercarriage		Semi-U blade	Straight blade ²⁾
Blade capacity, ISO 9246		L	LGP
	m ³	7.20	6.00
	yd ³	9.42	7.85
A	Height of blade	1,544	1,320
	mm		
	ft in	5'1"	4'4"
B	Width of blade	3,690	4,518
	mm		
	ft in	12'1"	14'10"
C	Lifting height	1,315	1,256
	mm		
	ft in	4'1"	4'1"
D	Digging depth	444	539
	mm		
	ft in	1'5"	1'9"
E	Blade pitch adjustment	10°	10°
	Max. blade tilt		
	mm	462	466
	ft in	1'6"	1'6"
G	Width over push frame	3,443	4,034
	mm		
	ft in	11'4"	13'3"
H	Overall length	6,119	5,945
	mm		
	ft in	20'1"	19'6"
Track shoes 560 mm / 22"			
	Operating weight ¹⁾	kg / lb	25,886 / 57,069
	Ground pressure ¹⁾	kg/cm ² / psi	0.77 / 10.95
Track shoes 610 mm / 24"			
	Operating weight ¹⁾	kg / lb	26,240 / 57,849
	Ground pressure ¹⁾	kg/cm ² / psi	0.72 / 10.24
Track shoes 711 mm / 28"			
	Operating weight ¹⁾	kg / lb	26,947 / 59,408
	Ground pressure ¹⁾	kg/cm ² / psi	0.63 / 8.96
Track shoes 812 mm / 32"			
	Operating weight ¹⁾	kg / lb	–
	Ground pressure ¹⁾	kg/cm ² / psi	27,257 / 60,091
Track shoes 914 mm / 36"			
	Operating weight ¹⁾	kg / lb	–
	Ground pressure ¹⁾	kg/cm ² / psi	27,832 / 61,359
			0.46 / 6.54

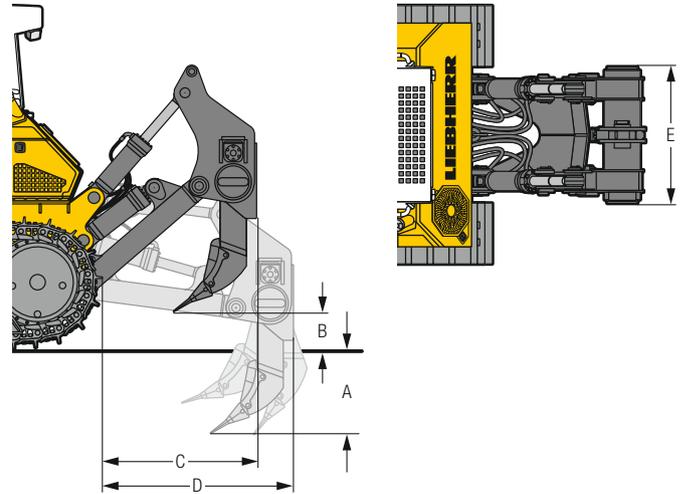
¹⁾ Including coolant and lubricants, 100% fuel, ROPS/FOPS cab, operator, semi-U or straight blade.

²⁾ Rear equipment or counterweight is recommended.

Rear Attachments

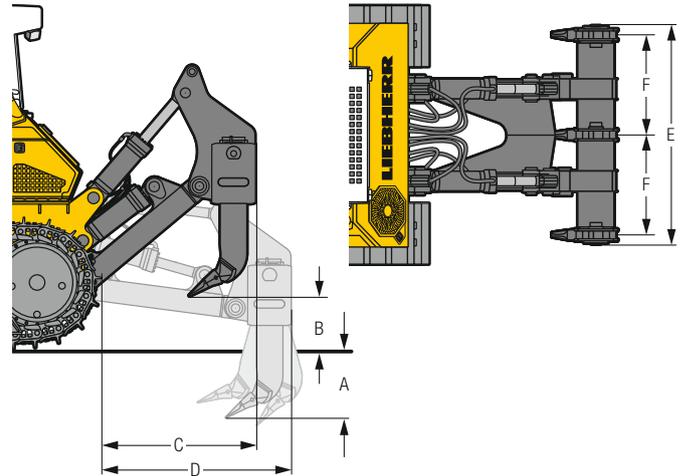
1-Shank Ripper

Parallelogram		hydraulic pitch adjustment	
A Ripping depth (max./min.)	mm	829/499	
	ft in	2'9" / 1'8"	
B Lifting height (max./min.)	mm	709/379	
	ft in	2'4" / 1'3"	
C Additional length, attachment raised	mm	1,509	
	ft in	4'11"	
D Additional length, attachment lowered	mm	1,876	
	ft in	6'2"	
E Overall beam width	mm	1,360	
	ft in	4'6"	
F Distance between shanks	mm	-	
	ft in	-	
Max. pitch adjustment		25°	
Weight	kg	2,730	
	lb	6,019	



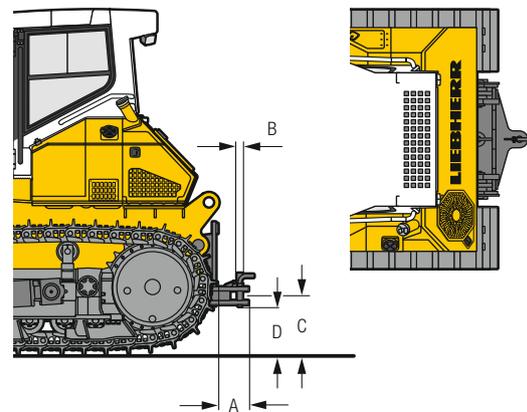
3-Shank Ripper

Parallelogram		standard	hydraulic pitch adjustment
A Ripping depth (max./min.)	mm	672/372	672/372
	ft in	2'2" / 1'3"	2'2" / 1'3"
B Lifting height (max./min.)	mm	830/532	836/536
	ft in	2'9" / 1'9"	2'5" / 1'9"
C Additional length, attachment raised	mm	1,511	1,494
	ft in	4'11"	4'11"
D Additional length, attachment lowered	mm	1,862	1,861
	ft in	6'1"	6'1"
E Overall beam width	mm	2,184	2,184
	ft in	7'2"	7'2"
F Distance between shanks	mm	1,000	1,000
	ft in	3'3"	3'3"
Max. pitch adjustment		-	25°
Weight	kg	3,323	3,334
	lb	7,326	7,350



Drawbar

		rigid
A Additional length	mm	469
	ft in	1'6"
B Socket pin diameter	mm	50
	ft in	1.97"
C Height of jaw	mm	598
	ft in	2'
D Ground clearance	mm	490
	ft in	1'7"
Jaw opening	mm	95
	ft in	3.74"
Weight	kg	431
	lb	950



Equipment



Base Machine

Additional handle on treadplate	•
Air filter with automatic dust ejector	•
Air filter, dry type, dual step, with pre-filter	•
Air pre-cleaner Sy-Klone	+
Air pre-cleaner Top Air	+
Auto Idle	+
Automatic blade stabilization + inclination control	•
Automatic engine shut-off	+
Battery compartment, lockable	•
Coal arrangement	+
Cold environment arrangement	+
Cooling fan, front hinged	•
Cooling fan, hydraulically driven	•
Cooling fan, rear hinged	•
Cooling fan, reversible	+
DEF tank lockable	•
Engine compartment doors, lockable	•
Engine compartment lighting	•
Forestry arrangement	+
Fuel pre-filter	•
Fuel pre-filter, with electric heater	+
Fuel water separator	•
Fuel water separator, with electric heater	+
Grade control ready kit	1)
Landfill arrangement	+
LiDAT – Data transmission system	•
Liebherr diesel engine emission stage V / Tier 4f	•
Liebherr hydraulic oil, biologically degradable	+
Radiator guard, hinged	•
Radiator, wide-meshed	•
Refuelling pump, electric	+
Spade with mounting bracket	+
Special paint scheme	+
Tool kit, basic	•
Tool kit, extended	+
Towing hitch rear	•
Towing lug front	•
Woodchip arrangement	+



Hydraulics System

Automatic lifting of the ripper into the parking position	•
Blade float function	•
Blade quick drop function	•
Blade shake feature	•
Electronic pilot control of the working hydraulics	•
Hydraulic kit for ripper	+
Hydraulic kit for winch	+
Load-Sensing control block and gear pump	•
Oil filter in hydraulic tank	•



Travel Drive

Emergency stop	•
Final drives planetary gear	•
Inching brake pedal	+
Load limit control, electronic	•
Machine-release switch	•
Parking brake, automatic	•
Seat contact switch	•
Travel control, 3 speed ranges	•
Travel drive joystick, detented	+
Travel drive joystick, proportional	•
Travel drive, hydrostatic	•



Operator's Cab

Access and exit step lighting	•
Armrests 3D adjustable	•
Automatic climate control	•
Cab heating	•
Coat hook	•
Dome light LED	•
Dust filter system pressurised	+
Extension of cab door footstep	+
Fire extinguisher	+
Foot support on front console	+
Joysticks, longitudinally adjustable	•
Noise-absorbing cab mounts	•
Operator's seat Comfort, air-suspended	•
Operator's seat Premium, air-suspended	+
Pressurised cab	•
Protective grid for rear window	+
Radio	+
Radio preparation kit	+
Rear-view camera	+
Rear-view mirror, inside	•
Rear-view mirrors, external	+
ROPS/FOPS integrated	•
Safety glass	•
Sliding window left	+
Sliding window right	+
Socket 12 V + 24 V	•
Storage nets	+
Stowage compartment, air-conditioned	•
Sun visor, front	+
Tiltable cab	•
Touch-controlled colour display	•
Warm water heating	+
Windshield washer system	•
Windshield wipers front, rear, doors, with intermittent function	•

• = Standard

+ = Option

1) on demand at your dealer

Equipment



Electrical System

1 additional working light on each lift cylinder	+
1 working light on each lift cylinder	•
2 additional working light on the cab, rear	+
2 batteries cold start	•
2 working lights on the cab, rear	•
4 working light on the cab, front	•
All working lights in LED version	+
Back-up alarm with broadband signal	+
Back-up alarm with broadband signal and visual	+
Back-up alarm, acoustic	+
Back-up alarm, acoustic and visual	+
Battery main switch	•
Battery main switch, lockable	+
Beacon	+
Horn	•
Immobiliser, electronic	+
On-board voltage 24 V	•

Undercarriage

Master link, two-piece	•
Sprocket segments with recesses	+
Sprocket segments, bolted	•
Track frame, closed	•
Track guard, full length	+
Track guide centre part	+
Track guide, front and rear	•
Track pads with mud holes	1)
Track shoes, moderate service	•
Tracks, oil-lubricated	•
Undercarriage L	+
Undercarriage LGP	+
Undercarriage with rigid bottom rollers	•



Attachments Front

Hydraulic pitch angle adjustment	+
Mechanical angle blade	+
Semi-U blade	+
Spill plate	+
Straight blade	+
Trash rack	+
U blade	1)
Wear plates on push frame	+
Wear plates on semi-U blade	+



Attachments Rear

Counterweight, rear (3,200 kg / 7,055 lb)	+
Drawbar rear, rigid	+
Mounting plate for third-party equipment	+
Ripper, 1 shank	+
Ripper, 3 shank	+
Winch	+

• = Standard
 + = Option
 1) on demand at your dealer

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.

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