

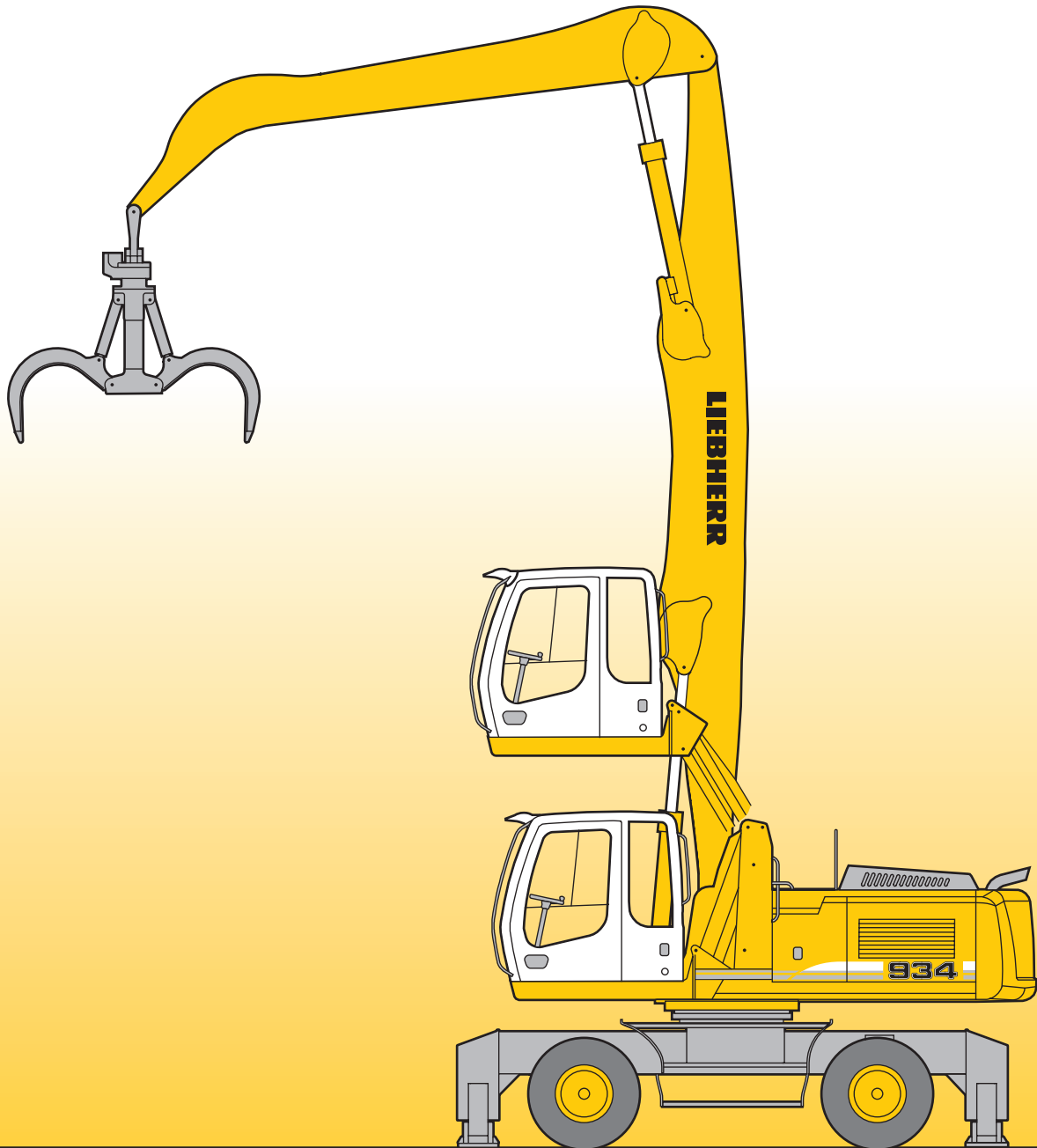
Technical Description Hydraulic Excavator

A 934 C
Litronic®

Machine for Industrial Applications

Operating Weight 36,0 - 36,9 t
Engine Output 150 kW (204 HP)

**NEU · NEW
NOUVEAU**



LIEBHERR

Technical Data



Engine

Rating per ISO 9249	150 kW (204 HP) at 1800 RPM
Model	Liebherr D 934 L according to Tier 3/level 3A
Type	4 cylinder in-line
Bore/Stroke	122/150 mm
Displacement	7,0 l
Engine operation	4-stroke diesel unit pump system turbo-charged and after-cooled reduced emissions
Cooling	water-cooled and integrated motor oil cooler
Air cleaner	dry-type air cleaner with pre-cleaner, primary and safety elements, automatic dust discharge
Fuel tank	580 l
Standard	sensor controlled engine idling
Electrical system	
Voltage	24 V
Batteries	2 x 170 Ah/12 V
Starter	24 V/6,6 kW
Alternator	three phase current 28 V/80 A



Hydraulic System

Hydraulic pump for attachment and travel drive	two Liebherr variable flow, swash plate pumps
Max. flow	2 x 245 l/min.
Max. pressure	350 bar
Pump regulation	electro-hydraulic with electronic engine speed sensing regulation, pressure compensation, flow compensation, automatic oil flow optimizer
Hydraulic pump for swing drive	reversible, variable flow, swash plate pump, closed-loop circuit
Max. flow	148 l/min.
Max. pressure	380 bar
Hydraulic tank	350 l
Hydraulic system	590 l
Hydraulic oil filter	2 full flow filters in return line with integrated fine filter area (5 µm)
Hydraulic oil cooler	compact cooler, consisting of a water cooler, sandwiched with hydraulic oil cooler and after-cooler cores and hydrostatically driven fan
MODE selection	adjustment of machine performance and the hydraulics via a mode 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
R.P.M. adjustment	stepless adjustment of engine output via the r.p.m. at each selected mode



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	proportional via foot pedal
Additional functions	via foot pedals or joystick push buttons



Swing Drive

Drive by	Liebherr swash plate motor with integrated brake valves
Transmission	Liebherr compact planetary reduction gear
Swing ring	Liebherr, sealed single race ball bearing swing ring, internal teeth
Swing speed	0–8,2 RPM stepless
Swing torque	84 kNm
Holding brake	wet multi-disc (spring applied, pressure released)
Option	pedal controlled positioning brake



Operator's Cab

Cab	resiliently mounted, sound insulated, tinted windows, front window stores overhead, door with sliding window
Operator's seat	fully adjustable, shockabsorbing suspension, adjustable to operator's weight and size, 6-way adjustable Liebherr seat
Joysticks	integrated into adjustable consoles
Monitoring	menu driven query of current operating conditions via the LCD display. Automatic monitoring, display, warning (acoustical and optical signal) and saving machine 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) = 74 dB(A)
2000/14/EC	L_{WA} (surround noise) = 104 dB(A)



Undercarriage

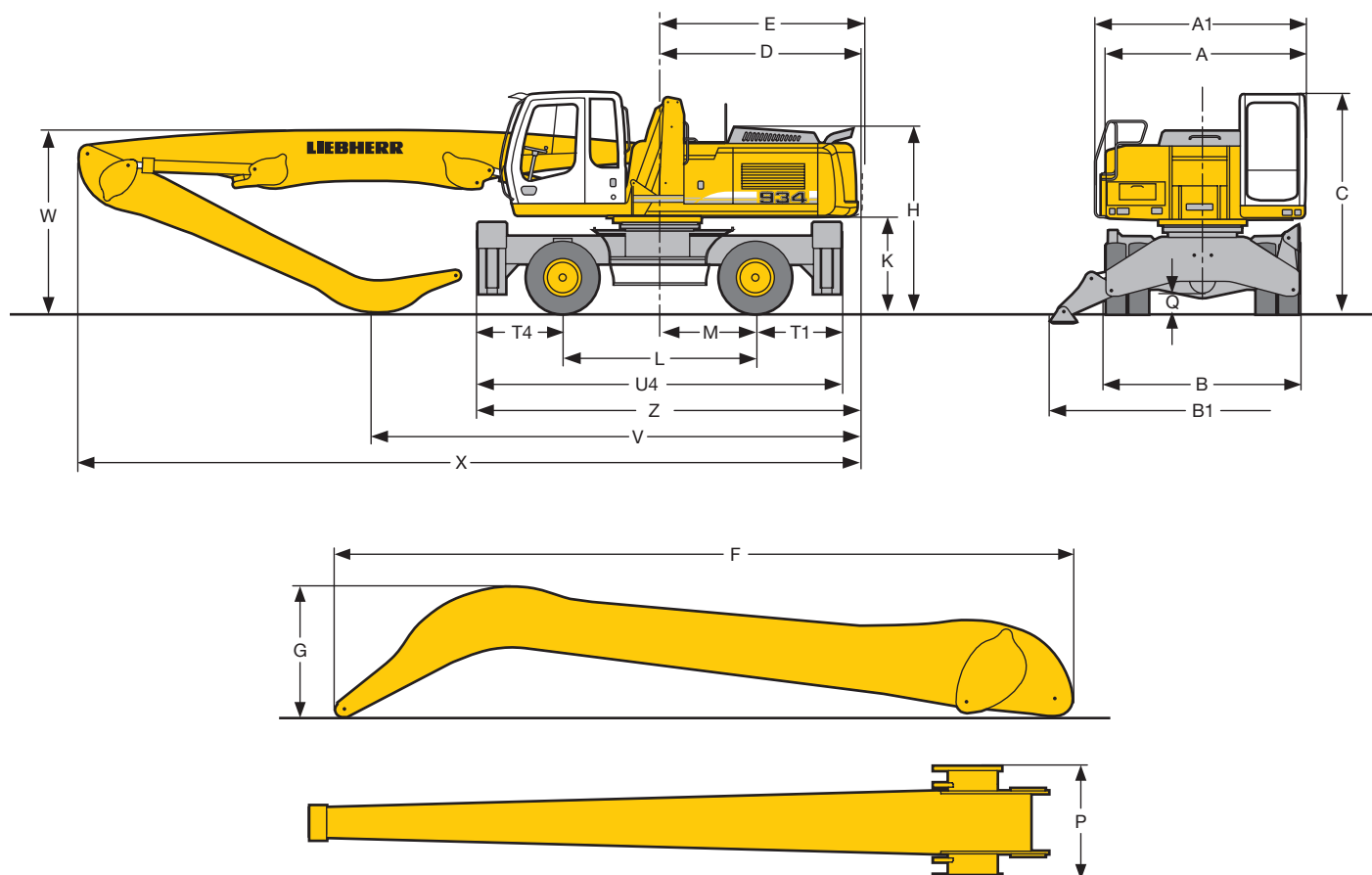
Drive	Liebherr variable flow swashplate motor with automatic brake valves
Transmission	oversized two speed power shift transmission with additional creeper speeds
Travel speed	0– 2,5 km/h (creeper speed) 0– 5,0 km/h (cross country) 0–10,0 km/h (creeper speed road) 0–20,0 km/h (road travel)
Axles	60 t excavator axles; automatic or operator controlled front axle oscillation lock
Parking brake	wet discs (spring applied – pressure released)
Stabilization	4-point outriggers



Attachment

Type	High-strength steel plates at highly-stressed points for the toughest requirements. Complex and stable mountings of attachment and cylinders. Unrivalled strength, even at high loads
Hydraulic cylinders	Liebherr cylinders with special seal system. Shock absorption
Pivots	sealed, low maintenance
Lubrication	Liebherr semi-automatic central lubrication system

Dimensions



	mm
A	3000
A1	3410
B	2990
B1	4700
C	3390
D	3095
E	3095
H	2840
K	1465
L	3000
M	1500
Q	255
T1	1310
T4	1310
U4	5620
Z	5905

E = Tail radius

Tires 12.00-20

Industrial-Type Straight Boom 7,60 m and Industrial-Type Stick			
	m	5,00	6,00
V	mm	7620	6800
W	mm	2950	3450
X	mm	11200	11200

Industrial-Type Straight Boom 8,60 m and Industrial-Type Stick			
	m	6,00	7,50
V	mm	7540	6440
W	mm	2950	4250
X	mm	12200	12100

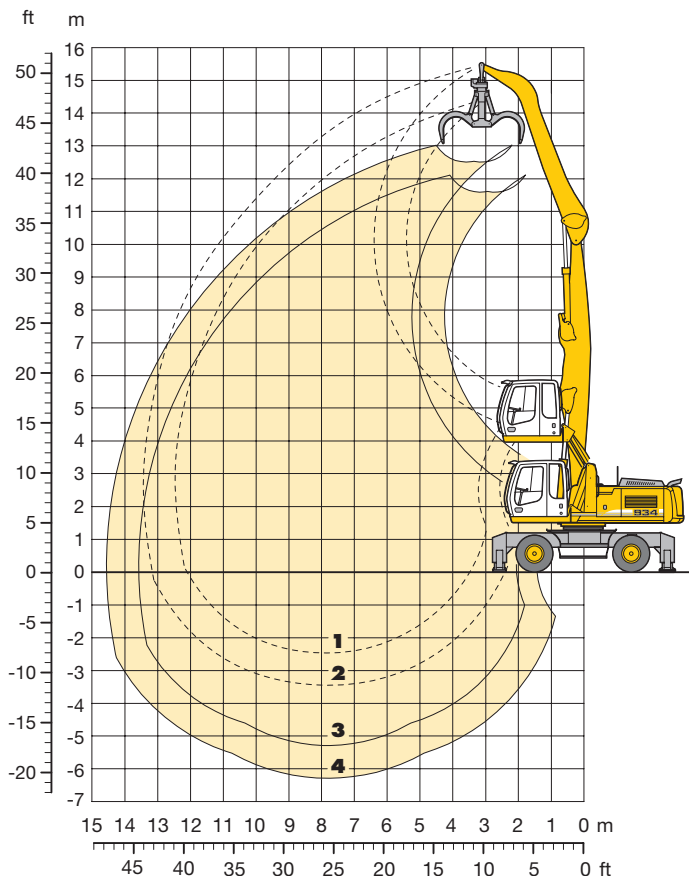
Industrial-Type Gooseneck Boom 8,60 m and Industrial-Type Stick			
	m	6,00	7,50
V	mm	—	6540
W	mm	3300	4850
X	mm	12150	12100

Industrial Stick		m	5,00	6,00	7,50
F		mm	5350	6350	7850
G		mm	1200	1250	1250
P		mm	1050	1050	1050

Dimensions are with attachment over steering axle

Industrial Attachment

with Industrial-Type Straight Boom 7,60 m



Attachment Envelope

Kinematic variants 3B Standard/2A

- 1 with industrial stick 5,00 m
- 2 with industrial stick 6,00 m
- 3 with industrial stick 5,00 m and grapple model 70 C
- 4 with industrial stick 6,00 m and grapple model 70 C

Operating Weight

Operating weight includes basic machine A 934 C Litronic with 4 point outriggers, hydraulic cab elevation, 8 solid tires plus spacer rings and industrial application with industrial-type straight boom 7,60 m.

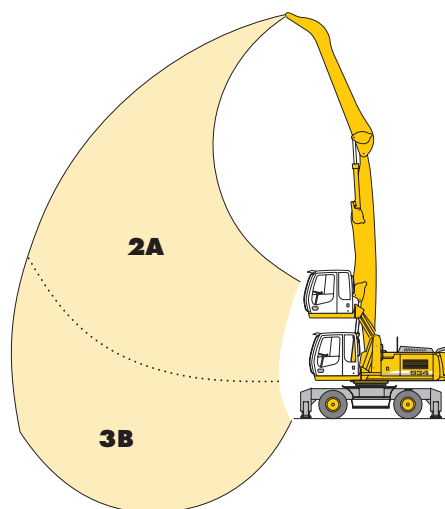
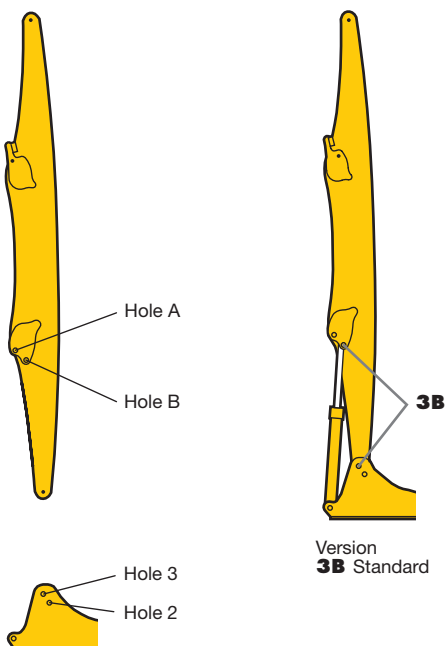
with grapple model 70 C/0,80 m ³ semi-closed tines	Weight
industrial stick 5,00 m	36000 kg
industrial stick 6,00 m	36200 kg

VarioLiftPlus

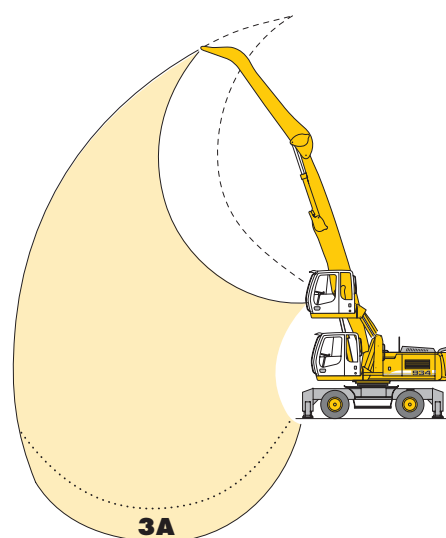
VarioLiftPlus: Variable boom mounting positions for optimised lift capacities

with **the same** working range

with a **different** working range



Kinematic Variant 3B Standard:
Increased lift capacities below ground level and when working at large outreach
Kinematic Variant 2A:
Increased lift capacities above ground level



Kinematic Variant 3A:
Altered range curve with additional reach depth, e.g. for unloading from ships

Lift Capacities

with Industrial-Type Straight Boom 7,60 m (Kinematic variant 3B Standard)

Industrial Stick 5,00 m

Height (m)	Undercarriage	Radius of load from centerline of machine (m)								
		3,0	4,5	6,0	7,5	9,0	10,5	12,0	13,5	15,0
16,5	Stabilizers raised 4 pt. outriggers down									
15,0	Stabilizers raised 4 pt. outriggers down									
13,5	Stabilizers raised 4 pt. outriggers down		10,8# (10,8#)							
12,0	Stabilizers raised 4 pt. outriggers down		10,8# (10,8#)	8,3# (8,3#) 8,3# (8,3#)	6,1 (7,7#) 7,7# (7,7#)					
10,5	Stabilizers raised 4 pt. outriggers down			8,0# (8,0#) 8,0# (8,0#)	6,3 (7,3#) 7,3# (7,3#)	4,6 (5,8) 6,9# (6,9#)				
9,0	Stabilizers raised 4 pt. outriggers down			8,0# (8,0#) 8,0# (8,0#)	6,3 (7,3#) 7,3# (7,3#)	4,6 (5,9) 6,7# (6,7#)	3,5 (4,4) 6,3# (6,3#)			
7,5	Stabilizers raised 4 pt. outriggers down			8,4# (8,4#) 8,4# (8,4#)	6,2 (7,5#) 7,5# (7,5#)	4,6 (5,8) 6,8# (6,8#)	3,5 (4,5) 6,3# (6,3#)			
6,0	Stabilizers raised 4 pt. outriggers down		11,3# (11,3#) 11,3# (11,3#)	8,3 (9,2#) 9,2# (9,2#)	5,9 (7,5) 7,9# (7,9#)	4,4 (5,6) 7,0# (7,0#)	3,4 (4,4) 6,4# (6,4#)			
4,5	Stabilizers raised 4 pt. outriggers down	20,4# (20,4#) 20,4# (20,4#)	11,7 (13,5#) 13,5# (13,5#)	7,7 (10,0) 10,3# (10,3#)	5,5 (7,1) 8,5# (8,5#)	4,2 (5,4) 7,4# (7,4#)	3,3 (4,3) 6,5# (6,5#)	2,6 (3,4) 5,5 (5,9#)		
3,0	Stabilizers raised 4 pt. outriggers down		10,3 (14,0) 15,7# (15,7#)	7,0 (9,2) 11,4# (11,4#)	5,2 (6,7) 9,1# (9,1#)	4,0 (5,2) 7,7# (7,7#)	3,2 (4,1) 6,6 (6,7#)	2,6 (3,4) 5,4 (5,9#)		
1,5	Stabilizers raised 4 pt. outriggers down		8,0# (8,0#) 8,0# (8,0#)	6,5 (8,6) 12,2# (12,2#)	4,9 (6,4) 9,6# (9,6#)	3,8 (5,0) 8,0# (8,0#)	3,1 (4,0) 6,5 (6,8#)	2,5 (3,3) 5,4 (5,8#)		
0	Stabilizers raised 4 pt. outriggers down		7,5# (7,5#) 7,5# (7,5#)	6,1 (8,3) 12,4# (12,4#)	4,6 (6,1) 9,8# (9,8#)	3,6 (4,8) 7,9 (8,0#)	3,0 (3,9) 6,4 (6,7#)	2,5 (3,3) 5,3 (5,6#)		
-1,5	Stabilizers raised 4 pt. outriggers down			6,0 (8,1) 12,0# (12,0#)	4,5 (6,0) 9,5# (9,5#)	3,6 (4,7) 7,8# (7,8#)	2,9 (3,9) 6,3 (6,4#)			
-3,0	Stabilizers raised 4 pt. outriggers down									
-4,5	Stabilizers raised 4 pt. outriggers down									
-6,0	Stabilizers raised 4 pt. outriggers down									

Industrial Stick 6,00 m

Height (m)	Undercarriage	Radius of load from centerline of machine (m)								
		3,0	4,5	6,0	7,5	9,0	10,5	12,0	13,5	15,0
16,5	Stabilizers raised 4 pt. outriggers down									
15,0	Stabilizers raised 4 pt. outriggers down									
13,5	Stabilizers raised 4 pt. outriggers down			8,0# (8,0#) 8,0# (8,0#)						
12,0	Stabilizers raised 4 pt. outriggers down			7,3# (7,3#) 7,3# (7,3#)	6,5 (6,8#) 6,8# (6,8#)	4,7 (5,9) 6,5# (6,5#)				
10,5	Stabilizers raised 4 pt. outriggers down				6,5# (6,5#) 6,5# (6,5#)	4,8 (6,1) 6,2# (6,2#)	3,6 (4,6) 5,8# (5,8#)			
9,0	Stabilizers raised 4 pt. outriggers down				6,5# (6,5#) 6,5# (6,5#)	4,8 (6,1) 6,1# (6,1#)	3,7 (4,6) 5,8# (5,8#)			
7,5	Stabilizers raised 4 pt. outriggers down			7,4# (7,4#) 7,4# (7,4#)	6,4 (6,8#) 6,8# (6,8#)	4,8 (6,0) 6,3# (6,3#)	3,6 (4,6) 5,8# (5,8#)	2,8 (3,6) 5,5# (5,5#)		
6,0	Stabilizers raised 4 pt. outriggers down			8,2# (8,2#) 8,2# (8,2#)	6,2 (7,3#) 7,3# (7,3#)	4,6 (5,8) 6,5# (6,5#)	3,5 (4,5) 6,0# (6,0#)	2,8 (3,6) 5,6# (5,6#)		
4,5	Stabilizers raised 4 pt. outriggers down	11,5# (11,5#) 11,5# (11,5#)	11,7# (11,7#) 11,7# (11,7#)	8,1 (9,3#) 9,3# (9,3#)	5,8 (7,4) 7,9# (7,9#)	4,4 (5,6) 6,9# (6,9#)	3,4 (4,4) 6,2# (6,2#)	2,7 (3,5) 5,6 (5,6#)		
3,0	Stabilizers raised 4 pt. outriggers down	7,8# (7,8#) 7,8# (7,8#)	11,1 (14,1#) 14,1# (14,1#)	7,4 (9,6) 10,6# (10,6#)	5,4 (6,9) 8,6# (8,6#)	4,1 (5,3) 7,3# (7,3#)	3,2 (4,2) 6,4# (6,4#)	2,6 (3,4) 5,5 (5,7#)		
1,5	Stabilizers raised 4 pt. outriggers down	2,5# (2,5#) 2,5# (2,5#)	9,8 (13,4#) 13,4# (13,4#)	6,7 (8,9) 11,6# (11,6#)	5,0 (6,5) 9,2# (9,2#)	3,9 (5,0) 7,7# (7,7#)	3,1 (4,0) 6,5 (6,8#)	2,5 (3,3) 5,4 (5,8#)		
0	Stabilizers raised 4 pt. outriggers down	3,2# (3,2#) 3,2# (3,2#)	8,6# (8,6#) 8,6# (8,6#)	6,2 (8,4) 12,2# (12,2#)	4,7 (6,2) 9,6# (9,6#)	3,7 (4,8) 7,9# (7,9#)	2,9 (3,9) 6,4 (6,7#)	2,4 (3,2) 5,3 (5,7#)		
-1,5	Stabilizers raised 4 pt. outriggers down		8,6# (8,6#) 8,6# (8,6#)	5,9 (8,1) 12,2# (12,2#)	4,5 (6,0) 9,6# (9,6#)	3,5 (4,7) 7,8 (7,9#)	2,9 (3,8) 6,3 (6,6#)	2,4 (3,2) 5,2 (5,5#)		
-3,0	Stabilizers raised 4 pt. outriggers down			5,8 (8,0) 11,6# (11,6#)	4,4 (5,9) 9,2# (9,2#)	3,5 (4,6) 7,5# (7,5#)				
-4,5	Stabilizers raised 4 pt. outriggers down									
-6,0	Stabilizers raised 4 pt. outriggers down									

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface with closed steering axle. Capacities shown in brackets are valid when the undercarriage is in longitudinal position and are established over the steering axle (travel position) with stabilizers raised, and over rigid axle with stabilizers down. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (#). Lift capacities do not include the weight of a grapple, clamshells, magnet or other lifting devices, which must be deducted from the above figures. Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

Lift Capacities

with Industrial-Type Straight Boom 7,60 m (Kinematic Variant 2A)

Industrial Stick 5,00 m

Height (m)	Undercarriage	Radius of load from centerline of machine (m)								
		3,0	4,5	6,0	7,5	9,0	10,5	12,0	13,5	15,0
16,5	Stabilizers raised 4 pt. outriggers down									
15,0	Stabilizers raised 4 pt. outriggers down									
13,5	Stabilizers raised 4 pt. outriggers down		10,4# (10,4#) 10,4# (10,4#)							
12,0	Stabilizers raised 4 pt. outriggers down			8,9 (10,4#) 10,4# (10,4#)	6,1 (7,4#) 7,4# (7,4#)					
10,5	Stabilizers raised 4 pt. outriggers down			9,1 (10,0#) 10,0# (10,0#)	6,3 (8,0) 8,6# (8,6#)	4,6 (5,8) 7,2# (7,2#)				
9,0	Stabilizers raised 4 pt. outriggers down			9,1 (10,0#) 10,0# (10,0#)	6,3 (8,0) 8,6# (8,6#)	4,7 (5,9) 7,5# (7,5#)				
7,5	Stabilizers raised 4 pt. outriggers down			8,8 (10,3#) 10,3# (10,3#)	6,2 (7,8) 8,7# (8,7#)	4,6 (5,8) 7,5# (7,5#)	3,5 (4,5) 6,6# (6,6#)			
6,0	Stabilizers raised 4 pt. outriggers down		13,1 (13,7#) 13,7# (13,7#)	8,4 (10,7) 10,8# (10,8#)	6,0 (7,6) 8,9# (8,9#)	4,5 (5,7) 7,6# (7,6#)	3,4 (4,4) 6,5# (6,5#)			
4,5	Stabilizers raised 4 pt. outriggers down	22,5 (22,5#) 22,5# (22,5#)	11,9 (15,0#) 15,0# (15,0#)	7,8 (10,1) 11,4# (11,4#)	5,6 (7,2) 9,2# (9,2#)	4,3 (5,5) 7,7# (7,7#)	3,3 (4,3) 6,5# (6,5#)	2,7 (3,5) 5,3# (5,3#)		
3,0	Stabilizers raised 4 pt. outriggers down		10,5 (14,3) 16,0# (16,0#)	7,2 (9,4) 11,8# (11,8#)	5,3 (6,8) 9,3# (9,3#)	4,1 (5,2) 7,7# (7,7#)	3,2 (4,2) 6,4# (6,4#)	2,6 (3,4) 5,1# (5,1#)		
1,5	Stabilizers raised 4 pt. outriggers down		9,2# (9,2#) 9,2# (9,2#)	6,6 (8,8) 11,7# (11,7#)	4,9 (6,5) 9,2# (9,2#)	3,9 (5,0) 7,5# (7,5#)	3,1 (4,1) 6,1# (6,1#)	2,5 (3,4) 4,7# (4,7#)		
0	Stabilizers raised 4 pt. outriggers down		8,0# (8,0#) 8,0# (8,0#)	6,2 (8,4) 10,8# (10,8#)	4,7 (6,2) 8,6# (8,6#)	3,7 (4,9) 6,9# (6,9#)	3,0 (4,0) 5,5# (5,5#)	2,5 (3,3) 3,9# (3,9#)		
-1,5	Stabilizers raised 4 pt. outriggers down		8,9# (8,9#) 8,9# (8,9#)	6,1 (8,2) 9,2# (9,2#)	4,6 (6,1) 7,5# (7,5#)	3,6 (4,8) 6,0# (6,0#)	3,0 (3,9) 4,6# (4,6#)			
-3,0	Stabilizers raised 4 pt. outriggers down									
-4,5	Stabilizers raised 4 pt. outriggers down									
-6,0	Stabilizers raised 4 pt. outriggers down									

Industrial Stick 6,00 m

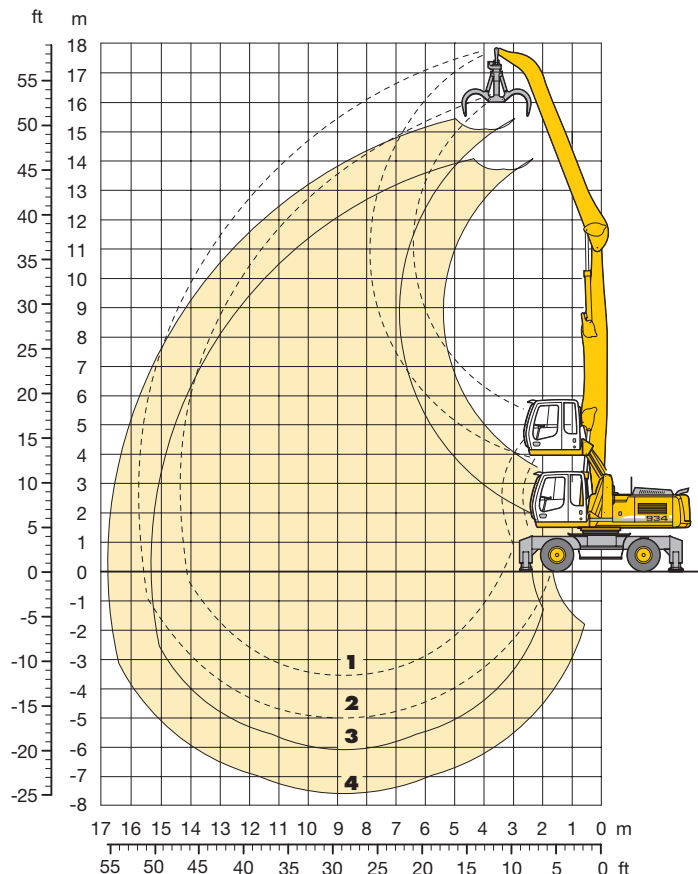
Height (m)	Undercarriage	Radius of load from centerline of machine (m)								
		3,0	4,5	6,0	7,5	9,0	10,5	12,0	13,5	15,0
16,5	Stabilizers raised 4 pt. outriggers down									
15,0	Stabilizers raised 4 pt. outriggers down									
13,5	Stabilizers raised 4 pt. outriggers down			8,8# (8,8#) 8,8# (8,8#)						
12,0	Stabilizers raised 4 pt. outriggers down			9,4 (9,5#) 9,5# (9,5#)	6,5 (8,1) 8,3# (8,3#)	4,7 (5,9) 5,9# (5,9#)				
10,5	Stabilizers raised 4 pt. outriggers down				6,6 (8,1#) 8,1# (8,1#)	4,8 (6,1) 7,2# (7,2#)				
9,0	Stabilizers raised 4 pt. outriggers down				6,6 (8,1#) 8,1# (8,1#)	4,9 (6,1) 7,2# (7,2#)	3,7 (4,6) 6,4# (6,4#)			
7,5	Stabilizers raised 4 pt. outriggers down			9,3 (9,6#) 9,6# (9,6#)	6,5 (8,1) 8,2# (8,2#)	4,8 (6,0) 7,2# (7,2#)	3,6 (4,6) 6,4# (6,4#)	2,8 (3,6) 5,6# (5,6#)		
6,0	Stabilizers raised 4 pt. outriggers down			8,9 (10,1#) 10,1# (10,1#)	6,2 (7,8) 8,5# (8,5#)	4,6 (5,9) 7,3# (7,3#)	3,6 (4,5) 6,4# (6,4#)	2,8 (3,6) 5,6# (5,6#)		
4,5	Stabilizers raised 4 pt. outriggers down	10,9# (10,9#) 10,9# (10,9#)	12,8 (13,9#) 13,9# (13,9#)	8,2 (10,6) 10,8# (10,8#)	5,9 (7,5) 8,9# (8,9#)	4,4 (5,6) 7,5# (7,5#)	3,4 (4,4) 6,4# (6,4#)	2,7 (3,5) 5,5# (5,5#)		
3,0	Stabilizers raised 4 pt. outriggers down	15,1# (15,1#) 15,1# (15,1#)	11,3 (15,2) 15,3# (15,3#)	7,5 (9,8) 11,4# (11,4#)	5,5 (7,0) 9,1# (9,1#)	4,2 (5,4) 7,6# (7,6#)	3,3 (4,2) 6,4# (6,4#)	2,6 (3,4) 5,4# (5,4#)		
1,5	Stabilizers raised 4 pt. outriggers down	2,9# (2,9#) 2,9# (2,9#)	10,0 (13,7) 15,9# (15,9#)	6,8 (9,0) 11,7# (11,7#)	5,1 (6,6) 9,2# (9,2#)	3,9 (5,1) 7,5# (7,5#)	3,1 (4,1) 6,3# (6,3#)	2,5 (3,3) 5,1# (5,1#)		
0	Stabilizers raised 4 pt. outriggers down	3,3# (3,3#) 3,3# (3,3#)	9,2 (9,5#) 9,5# (9,5#)	6,3 (8,5) 11,3# (11,3#)	4,7 (6,3) 8,9# (8,9#)	3,7 (4,9) 7,2# (7,2#)	3,0 (3,9) 5,9# (5,9#)	2,5 (3,3) 4,7# (4,7#)		
-1,5	Stabilizers raised 4 pt. outriggers down		8,8 (9,0#) 9,0# (9,0#)	6,0 (8,2) 10,2# (10,2#)	4,5 (6,1) 8,2# (8,2#)	3,6 (4,7) 6,6# (6,6#)	2,9 (3,9) 5,3# (5,3#)	2,4 (3,2) 3,9# (3,9#)		
-3,0	Stabilizers raised 4 pt. outriggers down			5,9 (8,1) 8,4# (8,4#)	4,4 (6,0) 6,9# (6,9#)	3,5 (4,7) 5,5# (5,5#)	2,9 (3,8) 4,2# (4,2#)			
-4,5	Stabilizers raised 4 pt. outriggers down									
-6,0	Stabilizers raised 4 pt. outriggers down									

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface with closed steering axle. Capacities shown in brackets are valid when the undercarriage is in longitudinal position and are established over the steering axle (travel position) with stabilizers raised, and over rigid axle with stabilizers down. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (#). Lift capacities do not include the weight of a grapple, clamshells, magnet or other lifting devices, which must be deducted from the above figures. Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

Industrial Attachment

with Industrial-Type Straight Boom 8,60 m



Attachment Envelope

Kinematic variants 3B Standard/2A

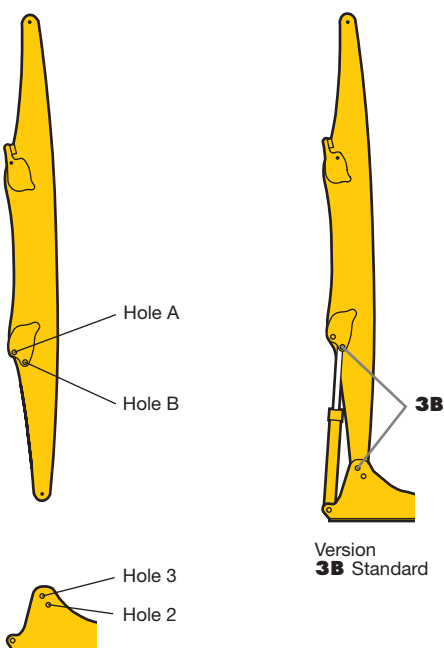
- 1 with industrial stick 6,00 m
- 2 with industrial stick 7,50 m
- 3 with industrial stick 6,00 m and grapple model 65
- 4 with industrial stick 7,50 m and grapple model 65

Operating Weight

Operating weight includes basic machine A 934 C Litronic with 4 point outriggers, hydraulic cab elevation, 8 solid tires plus spacer rings and industrial application with industrial-type straight boom 8,60 m.

with grapple model 65/0,60 m ³ semi-closed tines	Weight
industrial stick 6,00 m	36600 kg
industrial stick 7,50 m	36900 kg

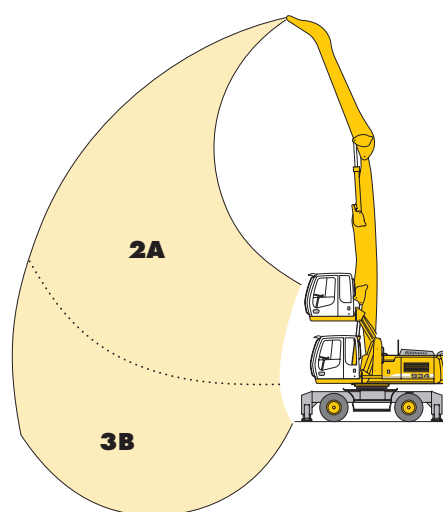
VarioLiftPlus



VarioLiftPlus: Variable boom mounting positions for optimised lift capacities

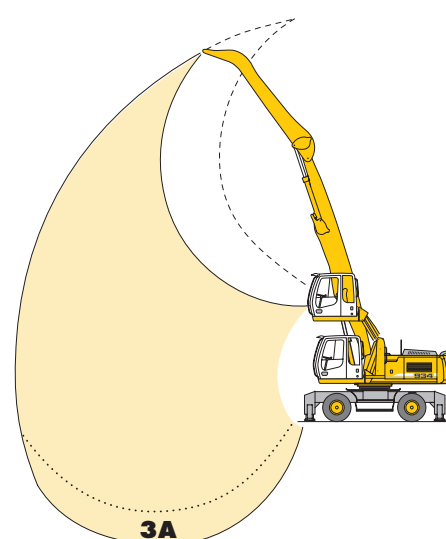
with **the same** working range

with a **different** working range



Kinematic Variant 3B Standard:
Increased lift capacities below ground level and when working at large outreach

Kinematic Variant 2A:
Increased lift capacities above ground level



Kinematic Variant 3A:
Altered range curve with additional reach depth, e.g. for unloading from ships

Lift Capacities

with Industrial-Type Straight Boom 8,60 m (Kinematic Variant 3B Standard)

Industrial Stick 6,00 m

Height (m)	Undercarriage	Radius of load from centerline of machine (m)								
		3,0	4,5	6,0	7,5	9,0	10,5	12,0	13,5	15,0
16,5	Stabilizers raised 4 pt. outriggers down									
15,0	Stabilizers raised 4 pt. outriggers down			8,2# (8,2#) 8,2# (8,2#)						
13,5	Stabilizers raised 4 pt. outriggers down			7,4# (7,4#) 7,4# (7,4#)	6,4 (6,6#) 6,6# (6,6#)	4,5 (5,8) 6,2# (6,2#)				
12,0	Stabilizers raised 4 pt. outriggers down				6,3# (6,3#) 6,3# (6,3#)	4,8 (5,9#) 5,9# (5,9#)	3,5 (4,5) 5,5# (5,5#)			
10,5	Stabilizers raised 4 pt. outriggers down				6,3# (6,3#) 6,3# (6,3#)	4,8 (5,8#) 5,8# (5,8#)	3,6 (4,6) 5,4# (5,4#)			
9,0	Stabilizers raised 4 pt. outriggers down			7,2# (7,2#) 7,2# (7,2#)	6,4# (6,4#) 6,4# (6,4#)	4,8 (5,8#) 5,8# (5,8#)	3,6 (4,6) 5,4# (5,4#)	2,7 (3,5) 5,0# (5,0#)		
7,5	Stabilizers raised 4 pt. outriggers down			7,7# (7,7#) 7,7# (7,7#)	6,2 (6,7#) 6,7# (6,7#)	4,6 (5,8) 6,0# (6,0#)	3,5 (4,5) 5,5# (5,5#)	2,7 (3,5) 5,0# (5,0#)		
6,0	Stabilizers raised 4 pt. outriggers down		10,6# (10,6#) 10,6# (10,6#)	8,3 (8,5#) 8,5# (8,5#)	5,8 (7,2#) 7,2# (7,2#)	4,3 (5,6) 6,3# (6,3#)	3,3 (4,3) 5,6# (5,6#)	2,6 (3,4) 5,1# (5,1#)	2,0 (2,7) 4,5 (4,7#)	
4,5	Stabilizers raised 4 pt. outriggers down	19,4# (19,4#) 19,4# (19,4#)	11,4 (12,6#) 12,6# (12,6#)	7,5 (9,5#) 9,5# (9,5#)	5,4 (7,0) 7,8# (7,8#)	4,0 (5,2) 6,6# (6,6#)	3,1 (4,1) 5,8# (5,8#)	2,5 (3,3) 5,2# (5,2#)	1,9 (2,7) 4,4 (4,7#)	
3,0	Stabilizers raised 4 pt. outriggers down		9,5 (10,6#) 10,6# (10,6#)	6,6 (8,8) 10,5# (10,5#)	4,8 (6,4) 8,4# (8,4#)	3,7 (4,9) 7,0# (7,0#)	2,9 (3,9) 6,0# (6,0#)	2,3 (3,1) 5,2 (5,3#)	1,9 (2,6) 4,3 (4,7#)	
1,5	Stabilizers raised 4 pt. outriggers down		4,7# (4,7#) 4,7# (4,7#)	5,8 (8,0) 11,2# (11,2#)	4,4 (5,9) 8,8# (8,8#)	3,4 (4,6) 7,3# (7,3#)	2,7 (3,7) 6,2 (6,2#)	2,2 (3,0) 5,1 (5,4#)	1,8 (2,5) 4,3 (4,7#)	
0	Stabilizers raised 4 pt. outriggers down		4,6# (4,6#) 4,6# (4,6#)	5,3 (7,5) 11,5# (11,5#)	4,0 (5,6) 9,0# (9,0#)	3,2 (4,4) 7,4# (7,4#)	2,6 (3,5) 6,0 (6,2#)	2,1 (2,9) 5,0 (5,4#)	1,8 (2,5) 4,2 (4,6#)	
-1,5	Stabilizers raised 4 pt. outriggers down		5,6# (5,6#) 5,6# (5,6#)	5,1 (7,2) 11,1# (11,1#)	3,8 (5,4) 8,9# (8,9#)	3,0 (4,2) 7,3 (7,3#)	2,5 (3,4) 5,9 (6,1#)	2,1 (2,9) 4,9 (5,2#)		
-3,0	Stabilizers raised 4 pt. outriggers down				3,8 (5,3) 8,5# (8,5#)	3,0 (4,1) 7,0# (7,0#)	2,4 (3,4) 5,8# (5,8#)			
-4,5	Stabilizers raised 4 pt. outriggers down									
-6,0	Stabilizers raised 4 pt. outriggers down									

Industrial Stick 7,50 m

Height (m)	Undercarriage	Radius of load from centerline of machine (m)								
		3,0	4,5	6,0	7,5	9,0	10,5	12,0	13,5	15,0
16,5	Stabilizers raised 4 pt. outriggers down			7,3# (7,3#) 7,3# (7,3#)						
15,0	Stabilizers raised 4 pt. outriggers down				6,0# (6,0#) 6,0# (6,0#)	4,8 (5,6#) 5,6# (5,6#)				
13,5	Stabilizers raised 4 pt. outriggers down				5,6# (5,6#) 5,6# (5,6#)	5,1 (5,2#) 5,2# (5,2#)	3,7 (4,7) 5,0# (5,0#)			
12,0	Stabilizers raised 4 pt. outriggers down					5,1# (5,1#) 5,1# (5,1#)	3,9 (4,8#) 4,8# (4,8#)	2,9 (3,7) 4,6# (4,6#)		
10,5	Stabilizers raised 4 pt. outriggers down					5,0# (5,0#) 5,0# (5,0#)	3,9 (4,7#) 4,7# (4,7#)	2,9 (3,8) 4,5# (4,5#)	2,2 (2,9) 4,1# (4,1#)	
9,0	Stabilizers raised 4 pt. outriggers down				5,5# (5,5#) 5,5# (5,5#)	5,1# (5,1#) 5,1# (5,1#)	3,8 (4,8#) 4,8# (4,8#)	2,9 (3,7) 4,5# (4,5#)	2,2 (2,9) 4,2# (4,2#)	
7,5	Stabilizers raised 4 pt. outriggers down				5,8# (5,8#) 5,8# (5,8#)	4,9 (5,3#) 5,3# (5,3#)	3,7 (4,7) 4,9# (4,9#)	2,8 (3,7) 4,5# (4,5#)	2,2 (2,9) 4,3# (4,3#)	1,6 (2,3) 3,7# (3,7#)
6,0	Stabilizers raised 4 pt. outriggers down			7,2# (7,2#) 7,2# (7,2#)	6,3# (6,3#) 6,3# (6,3#)	4,7 (5,6#) 5,6# (5,6#)	3,5 (4,5) 5,1# (5,1#)	2,7 (3,5) 4,7# (4,7#)	2,1 (2,8) 4,3# (4,3#)	1,6 (2,2) 3,8 (4,0#)
4,5	Stabilizers raised 4 pt. outriggers down		9,5# (9,5#) 9,5# (9,5#)	8,2# (8,2#) 8,2# (8,2#)	5,9 (6,9#) 6,9# (6,9#)	4,3 (5,6) 6,0# (6,0#)	3,3 (4,3) 5,3# (5,3#)	2,6 (3,4) 4,8# (4,8#)	2,0 (2,7) 4,4# (4,4#)	1,6 (2,2) 3,7 (4,0#)
3,0	Stabilizers raised 4 pt. outriggers down	19,1# (19,1#) 19,1# (19,1#)	11,2 (12,4#) 12,4# (12,4#)	7,3 (9,3#) 9,3# (9,3#)	5,3 (6,9) 7,5# (7,5#)	3,9 (5,2) 6,4# (6,4#)	3,0 (4,0) 5,6# (5,6#)	2,4 (3,2) 5,0# (5,0#)	1,9 (2,6) 4,4 (4,5#)	1,5 (2,1) 3,7 (4,0#)
1,5	Stabilizers raised 4 pt. outriggers down	2,2# (2,2#) 2,2# (2,2#)	9,3 (12,5#) 12,5# (12,5#)	6,3 (8,6) 10,3# (10,3#)	4,7 (6,2) 8,1# (8,1#)	3,6 (4,8) 6,8# (6,8#)	2,8 (3,8) 5,8# (5,8#)	2,2 (3,0) 5,1# (5,1#)	1,8 (2,5) 4,3 (4,5#)	1,4 (2,1) 3,6 (4,0#)
0	Stabilizers raised 4 pt. outriggers down	2,2# (2,2#) 2,2# (2,2#)	6,4# (6,4#) 6,4# (6,4#)	5,6 (7,7) 10,9# (10,9#)	4,2 (5,7) 8,6# (8,6#)	3,2 (4,4) 7,0# (7,0#)	2,6 (3,5) 6,0# (6,0#)	2,1 (2,9) 5,0 (5,2#)	1,7 (2,4) 4,2 (4,6#)	1,4 (2,0) 3,6 (4,0#)
-1,5	Stabilizers raised 4 pt. outriggers down	3,1# (3,1#) 3,1# (3,1#)	5,9# (5,9#) 5,9# (5,9#)	5,1 (7,2) 11,2# (11,2#)	3,8 (5,3) 8,7# (8,7#)	3,0 (4,2) 7,2# (7,2#)	2,4 (3,4) 5,8 (6,0#)	2,0 (2,8) 4,8 (5,2#)	1,6 (2,3) 4,1 (4,5#)	1,4 (2,0) 3,5 (3,7#)
-3,0	Stabilizers raised 4 pt. outriggers down		6,4# (6,4#) 6,4# (6,4#)	4,8 (6,9) 10,9# (10,9#)	3,6 (5,1) 8,6# (8,6#)	2,8 (4,0) 7,1# (7,1#)	2,3 (3,2) 5,7 (5,9#)	1,9 (2,7) 4,8 (5,0#)	1,6 (2,3) 4,0 (4,3#)	
-4,5	Stabilizers raised 4 pt. outriggers down			4,8 (6,9) 10,3# (10,3#)	3,5 (5,0) 8,2# (8,2#)	2,8 (3,9) 6,7# (6,7#)	2,2 (3,2) 5,6# (5,6#)			
-6,0	Stabilizers raised 4 pt. outriggers down									

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface with closed steering axle. Capacities shown in brackets are valid when the undercarriage is in longitudinal position and are established over the steering axle (travel position) with stabilizers raised, and over rigid axle with stabilizers down. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (#). Lift capacities do not include the weight of a grapple, clamshells, magnet or other lifting devices, which must be deducted from the above figures. Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

Lift Capacities

with Industrial-Type Straight Boom 8,60 m (Kinematic Variant 2A)

Industrial Stick 6,00 m

Height (m)	Undercarriage	Radius of load from centerline of machine (m)								
		3,0	4,5	6,0	7,5	9,0	10,5	12,0	13,5	15,0
16,5	Stabilizers raised 4 pt. outriggers down									
15,0	Stabilizers raised 4 pt. outriggers down			8,1# (8,1#) 8,1# (8,1#)						
13,5	Stabilizers raised 4 pt. outriggers down			9,4 (9,6#) 9,6# (9,6#)	6,4 (8,1) 8,1# (8,1#)					
12,0	Stabilizers raised 4 pt. outriggers down				6,6 (7,9#) 7,9# (7,9#)	4,8 (6,0) 6,9# (6,9#)				
10,5	Stabilizers raised 4 pt. outriggers down				6,7 (7,9#) 7,9# (7,9#)	4,8 (6,1) 6,9# (6,9#)	3,6 (4,6) 6,1# (6,1#)			
9,0	Stabilizers raised 4 pt. outriggers down				6,6 (7,9#) 7,9# (7,9#)	4,8 (6,0) 6,9# (6,9#)	3,6 (4,6) 6,0# (6,0#)	2,7 (3,5) 5,3# (5,3#)		
7,5	Stabilizers raised 4 pt. outriggers down			9,1 (9,7#) 9,7# (9,7#)	6,3 (8,0) 8,1# (8,1#)	4,6 (5,9) 7,0# (7,0#)	3,5 (4,5) 6,1# (6,1#)	2,7 (3,5) 5,3# (5,3#)		
6,0	Stabilizers raised 4 pt. outriggers down		12,7# (12,7#) 12,7# (12,7#)	8,4 (10,2#) 10,2# (10,2#)	5,9 (7,6) 8,4# (8,4#)	4,4 (5,6) 7,1# (7,1#)	3,4 (4,3) 6,1# (6,1#)	2,6 (3,4) 5,3# (5,3#)	2,0 (2,7) 4,5# (4,5#)	
4,5	Stabilizers raised 4 pt. outriggers down	21,7# (21,7#) 21,7# (21,7#)	11,7 (14,3#) 14,3# (14,3#)	7,6 (9,9) 10,8# (10,8#)	5,4 (7,1) 8,6# (8,6#)	4,1 (5,3) 7,2# (7,2#)	3,2 (4,2) 6,1# (6,1#)	2,5 (3,3) 5,2# (5,2#)	2,0 (2,7) 4,4# (4,4#)	
3,0	Stabilizers raised 4 pt. outriggers down		9,9 (13,6) 15,1# (15,1#)	6,7 (9,0) 11,1# (11,1#)	4,9 (6,5) 8,8# (8,8#)	3,8 (5,0) 7,2# (7,2#)	3,0 (3,9) 6,0# (6,0#)	2,4 (3,2) 5,1# (5,1#)	1,9 (2,6) 4,2# (4,2#)	
1,5	Stabilizers raised 4 pt. outriggers down		5,5# (5,5#) 5,5# (5,5#)	6,0 (8,2) 10,9# (10,9#)	4,5 (6,0) 8,6# (8,6#)	3,5 (4,7) 7,1# (7,1#)	2,8 (3,8) 5,9# (5,9#)	2,3 (3,1) 4,9# (4,9#)	1,8 (2,5) 3,9# (3,9#)	
0	Stabilizers raised 4 pt. outriggers down		4,9# (4,9#) 4,9# (4,9#)	5,5 (7,6) 10,2# (10,2#)	4,1 (5,7) 8,2# (8,2#)	3,3 (4,4) 6,7# (6,7#)	2,6 (3,6) 5,5# (5,5#)	2,2 (3,0) 4,5# (4,5#)	1,8 (2,5) 3,4# (3,4#)	
-1,5	Stabilizers raised 4 pt. outriggers down		5,7# (5,7#) 5,7# (5,7#)	5,2 (7,4) 8,8# (8,8#)	3,9 (5,4) 7,3# (7,3#)	3,1 (4,3) 6,0# (6,0#)	2,5 (3,5) 4,9# (4,9#)	2,1 (2,9) 3,9# (3,9#)		
-3,0	Stabilizers raised 4 pt. outriggers down			5,2 (7,0#) 7,0# (7,0#)	3,8 (5,4) 6,0# (6,0#)	3,0 (4,2) 5,0# (5,0#)	2,5 (3,4) 4,0# (4,0#)			
-4,5	Stabilizers raised 4 pt. outriggers down									
-6,0	Stabilizers raised 4 pt. outriggers down									

Industrial Stick 7,50 m

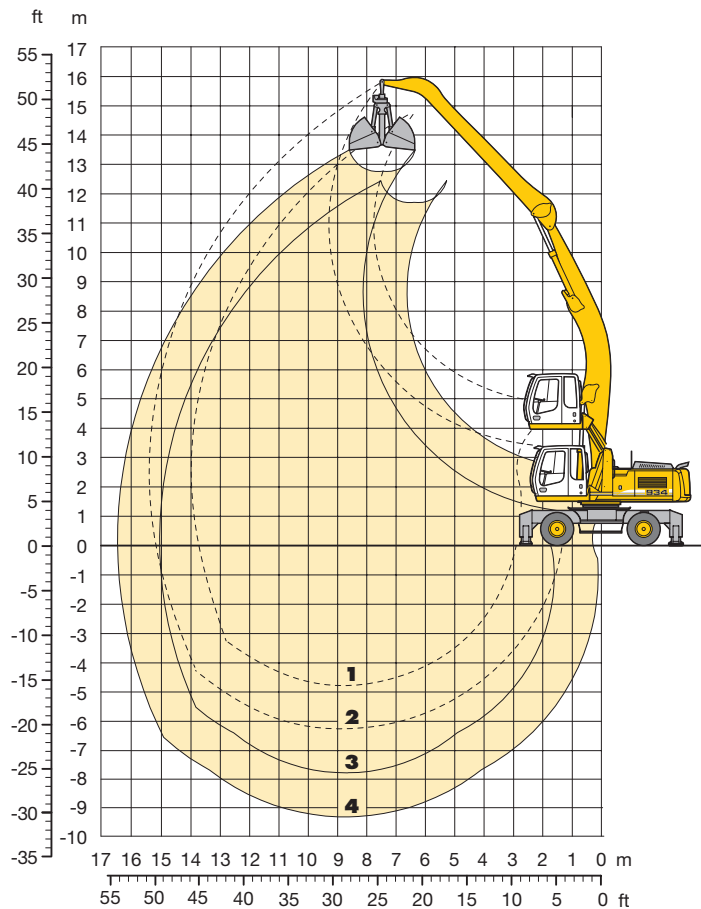
Height (m)	Undercarriage	Radius of load from centerline of machine (m)								
		3,0	4,5	6,0	7,5	9,0	10,5	12,0	13,5	15,0
16,5	Stabilizers raised 4 pt. outriggers down			7,0# (7,0#) 7,0# (7,0#)						
15,0	Stabilizers raised 4 pt. outriggers down				6,7 (7,0#) 7,0# (7,0#)	4,7 (5,3#) 5,3# (5,3#)				
13,5	Stabilizers raised 4 pt. outriggers down				7,0 (7,4#) 7,4# (7,4#)	5,1 (6,4) 6,5# (6,5#)	3,7 (4,7) 5,3# (5,3#)			
12,0	Stabilizers raised 4 pt. outriggers down					5,2 (6,4#) 6,4# (6,4#)	3,9 (4,9) 5,7# (5,7#)	2,8 (3,7) 4,8# (4,8#)		
10,5	Stabilizers raised 4 pt. outriggers down					5,2 (6,4#) 6,4# (6,4#)	3,9 (4,9) 5,7# (5,7#)	2,9 (3,8) 5,1# (5,1#)		
9,0	Stabilizers raised 4 pt. outriggers down					5,2 (6,4#) 6,4# (6,4#)	3,9 (4,9) 5,7# (5,7#)	2,9 (3,8) 5,1# (5,1#)	2,2 (2,9) 4,5# (4,5#)	
7,5	Stabilizers raised 4 pt. outriggers down				6,8 (7,5#) 7,5# (7,5#)	5,0 (6,3) 6,5# (6,5#)	3,7 (4,8) 5,7# (5,7#)	2,9 (3,7) 5,1# (5,1#)	2,2 (2,9) 4,5# (4,5#)	
6,0	Stabilizers raised 4 pt. outriggers down				6,5 (7,8#) 7,8# (7,8#)	4,7 (6,0) 6,7# (6,7#)	3,6 (4,6) 5,8# (5,8#)	2,7 (3,6) 5,1# (5,1#)	2,1 (2,8) 4,5# (4,5#)	1,6 (2,3) 3,8# (3,8#)
4,5	Stabilizers raised 4 pt. outriggers down		9,3# (9,3#) 9,3# (9,3#)	8,5 (9,9#) 9,9# (9,9#)	6,0 (7,6) 8,1# (8,1#)	4,4 (5,6) 6,8# (6,8#)	3,3 (4,3) 5,9# (5,9#)	2,6 (3,4) 5,1# (5,1#)	2,0 (2,7) 4,4# (4,4#)	1,6 (2,2) 3,7# (3,7#)
3,0	Stabilizers raised 4 pt. outriggers down	21,4# (21,4#) 21,4# (21,4#)	11,6 (14,1#) 14,1# (14,1#)	7,5 (9,8) 10,5# (10,5#)	5,4 (7,0) 8,4# (8,4#)	4,0 (5,2) 7,0# (7,0#)	3,1 (4,1) 5,9# (5,9#)	2,4 (3,3) 5,1# (5,1#)	1,9 (2,6) 4,4# (4,4#)	1,5 (2,2) 3,6# (3,6#)
1,5	Stabilizers raised 4 pt. outriggers down	2,7# (2,7#) 2,7# (2,7#)	9,6 (13,3) 14,8# (14,8#)	6,5 (8,8) 10,9# (10,9#)	4,8 (6,4) 8,5# (8,5#)	3,6 (4,9) 7,0# (7,0#)	2,9 (3,8) 5,9# (5,9#)	2,3 (3,1) 5,0# (5,0#)	1,8 (2,5) 4,2# (4,2#)	1,5 (2,1) 3,4# (3,4#)
0	Stabilizers raised 4 pt. outriggers down	2,4# (2,4#) 2,4# (2,4#)	7,1# (7,1#) 7,1# (7,1#)	5,7 (7,9) 10,7# (10,7#)	4,3 (5,8) 8,4# (8,4#)	3,3 (4,5) 6,8# (6,8#)	2,6 (3,6) 5,7# (5,7#)	2,1 (2,9) 4,8# (4,8#)	1,7 (2,4) 3,9# (3,9#)	1,4 (2,0) 3,0# (3,0#)
-1,5	Stabilizers raised 4 pt. outriggers down	3,1# (3,1#) 3,1# (3,1#)	6,3# (6,3#) 6,3# (6,3#)	5,2 (7,4) 9,9# (9,9#)	3,9 (5,4) 7,9# (7,9#)	3,1 (4,2) 6,5# (6,5#)	2,5 (3,4) 5,3# (5,3#)	2,0 (2,8) 4,4# (4,4#)	1,7 (2,4) 3,5# (3,5#)	1,4 (2,0) 2,4# (2,4#)
-3,0	Stabilizers raised 4 pt. outriggers down		6,6# (6,6#) 6,6# (6,6#)	4,9 (7,1) 8,6# (8,6#)	3,7 (5,2) 7,0# (7,0#)	2,9 (4,1) 5,8# (5,8#)	2,3 (3,3) 4,7# (4,7#)	1,9 (2,7) 3,8# (3,8#)	1,6 (2,3) 2,9# (2,9#)	
-4,5	Stabilizers raised 4 pt. outriggers down			4,9 (6,8#) 6,8# (6,8#)	3,6 (5,1) 5,8# (5,8#)	2,8 (4,0) 4,8# (4,8#)	2,3 (3,2) 3,8# (3,8#)			
-6,0	Stabilizers raised 4 pt. outriggers down									

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface with closed steering axle. Capacities shown in brackets are valid when the undercarriage is in longitudinal position and are established over the steering axle (travel position) with stabilizers raised, and over rigid axle with stabilizers down. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (#). Lift capacities do not include the weight of a grapple, clamshells, magnet or other lifting devices, which must be deducted from the above figures. Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

Industrial Attachment

with Industrial-Type Gooseneck Boom 8,60 m



Attachment Envelope

Kinematic variant 3D Standard

- 1 with industrial stick 6,00 m
- 2 with industrial stick 7,50 m
- 3 with industrial stick 6,00 m and clamshell model 20 B
- 4 with industrial stick 7,50 m and clamshell model 20 B

Operating Weight

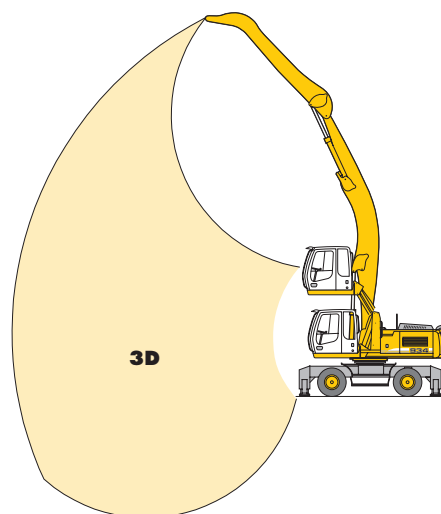
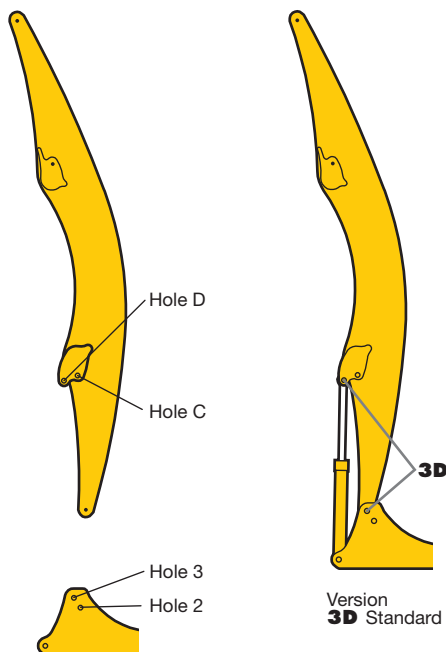
Operating weight includes basic machine A 934 C Litronic with 4 point outriggers, hydraulic cab elevation, 8 solid tires plus spacer rings and industrial application with industrial-type gooseneck boom 8,60 m.

with clamshell model 20 B/1,50 m ³ shells for loose material	Weight
industrial stick 6,00 m	36550 kg
industrial stick 7,50 m	36850 kg

VarioLiftPlus

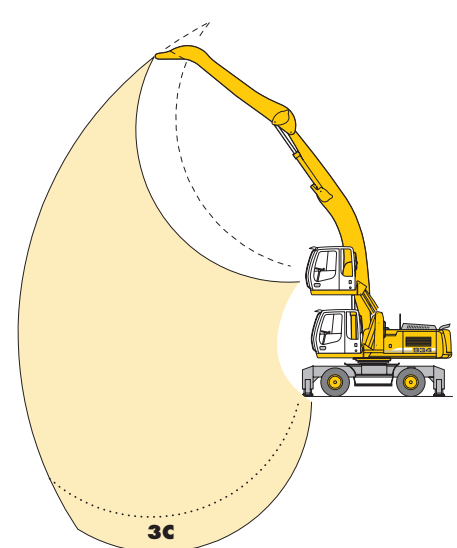
VarioLiftPlus: Variable boom mounting positions for optimised lift capacities

with a **different** working range



Kinematic Variant 3D Standard:

Increased lift capacities below ground level and when working at large outreach



Kinematic Variant 3C:

Altered range curve with additional reach depth, e.g. for unloading from ships

Lift Capacities

with Industrial-Type Gooseneck Boom 8,60 m (Kinematic Variant 3D Standard)

Industrial Stick 6,00 m

Height (m)	Undercarriage	Radius of load from centerline of machine (m)								
		3,0	4,5	6,0	7,5	9,0	10,5	12,0	13,5	15,0
16,5	Stabilizers raised 4 pt. outriggers down									
15,0	Stabilizers raised 4 pt. outriggers down									
13,5	Stabilizers raised 4 pt. outriggers down				6,1# (6,1#) 6,1# (6,1#)					
12,0	Stabilizers raised 4 pt. outriggers down					5,0 (5,5#) 5,5# (5,5#)				
10,5	Stabilizers raised 4 pt. outriggers down					5,0 (5,4#) 5,4# (5,4#)	3,7 (4,7) 5,1# (5,1#)			
9,0	Stabilizers raised 4 pt. outriggers down				5,9# (5,9#) 5,9# (5,9#)	4,9 (5,4#) 5,4# (5,4#)	3,7 (4,7) 5,1# (5,1#)	2,8 (3,6) 4,8# (4,8#)		
7,5	Stabilizers raised 4 pt. outriggers down				6,2# (6,2#) 6,2# (6,2#)	4,8 (5,6#) 5,6# (5,6#)	3,6 (4,6) 5,2# (5,2#)	2,8 (3,6) 4,8# (4,8#)		
6,0	Stabilizers raised 4 pt. outriggers down			7,9# (7,9#) 7,9# (7,9#)	6,1 (6,7#) 6,7# (6,7#)	4,5 (5,8) 5,9# (5,9#)	3,4 (4,4) 5,4# (5,4#)	2,7 (3,5) 4,9# (4,9#)		
4,5	Stabilizers raised 4 pt. outriggers down	18,1# (18,1#) 18,1# (18,1#)	11,8# (11,8#) 11,8# (11,8#)	7,8 (9,0#) 9,0# (9,0#)	5,6 (7,2) 7,4# (7,4#)	4,2 (5,4) 6,3# (6,3#)	3,2 (4,2) 5,6# (5,6#)	2,5 (3,4) 5,1# (5,1#)	2,0 (2,7) 4,5 (4,6#)	
3,0	Stabilizers raised 4 pt. outriggers down	2,1# (2,1#) 2,1# (2,1#)	9,9 (13,6) 14,0# (14,0#)	6,8 (9,1) 10,1# (10,1#)	5,0 (6,6) 8,0# (8,0#)	3,8 (5,1) 6,7# (6,7#)	3,0 (4,0) 5,8# (5,8#)	2,4 (3,2) 5,2# (5,2#)	1,9 (2,6) 4,4 (4,7#)	
1,5	Stabilizers raised 4 pt. outriggers down	1,8# (1,8#) 1,8# (1,8#)	7,2# (7,2#) 7,2# (7,2#)	6,0 (8,2) 10,9# (10,9#)	4,5 (6,1) 8,5# (8,5#)	3,5 (4,7) 7,1# (7,1#)	2,8 (3,8) 6,1# (6,1#)	2,3 (3,1) 5,2 (5,3#)	1,8 (2,5) 4,3 (4,7#)	
0	Stabilizers raised 4 pt. outriggers down	3,1# (3,1#) 3,1# (3,1#)	6,4# (6,4#) 6,4# (6,4#)	5,5 (7,6) 11,4# (11,4#)	4,1 (5,7) 8,9# (8,9#)	3,3 (4,4) 7,3# (7,3#)	2,6 (3,6) 6,1 (6,2#)	2,1 (3,0) 5,0 (5,4#)	1,8 (2,5) 4,2 (4,7#)	
-1,5	Stabilizers raised 4 pt. outriggers down		6,9# (6,9#) 6,9# (6,9#)	5,2 (7,3) 11,4# (11,4#)	3,9 (5,4) 9,0# (9,0#)	3,1 (4,3) 7,3# (7,3#)	2,5 (3,5) 5,9 (6,2#)	2,1 (2,9) 4,9 (5,3#)		
-3,0	Stabilizers raised 4 pt. outriggers down			5,1 (7,2) 10,9# (10,9#)	3,8 (5,3) 8,7# (8,7#)	3,0 (4,2) 7,2# (7,2#)	2,4 (3,4) 5,9 (6,0#)	2,0 (2,8) 4,9 (5,1#)		
-4,5	Stabilizers raised 4 pt. outriggers down				3,8 (5,3) 8,1# (8,1#)	3,0 (4,1) 6,7# (6,7#)				
-6,0	Stabilizers raised 4 pt. outriggers down									

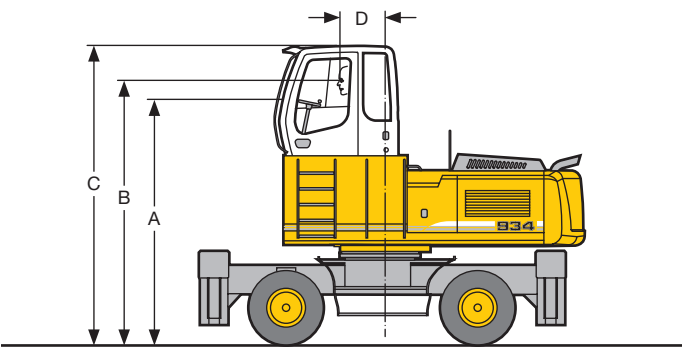
Industrial Stick 7,50 m

Height (m)	Undercarriage	Radius of load from centerline of machine (m)								
		3,0	4,5	6,0	7,5	9,0	10,5	12,0	13,5	15,0
16,5	Stabilizers raised 4 pt. outriggers down									
15,0	Stabilizers raised 4 pt. outriggers down									
13,5	Stabilizers raised 4 pt. outriggers down					4,8# (4,8#) 4,8# (4,8#)	3,9 (4,2#) 4,2# (4,2#)			
12,0	Stabilizers raised 4 pt. outriggers down						4,0 (4,4#) 4,4# (4,4#)			
10,5	Stabilizers raised 4 pt. outriggers down						4,0 (4,4#) 4,4# (4,4#)	3,0 (3,9) 4,2# (4,2#)		
9,0	Stabilizers raised 4 pt. outriggers down						4,0 (4,4#) 4,4# (4,4#)	3,0 (3,9) 4,2# (4,2#)	2,3 (3,0) 4,1# (4,1#)	
7,5	Stabilizers raised 4 pt. outriggers down					4,9# (4,9#) 4,9# (4,9#)	3,9 (4,6#) 4,6# (4,6#)	3,0 (3,8) 4,3# (4,3#)	2,3 (3,0) 4,1# (4,1#)	
6,0	Stabilizers raised 4 pt. outriggers down				5,8# (5,8#) 5,8# (5,8#)	4,9 (5,2#) 5,2# (5,2#)	3,7 (4,7) 4,8# (4,8#)	2,8 (3,7) 4,4# (4,4#)	2,2 (2,9) 4,1# (4,1#)	
4,5	Stabilizers raised 4 pt. outriggers down			7,5# (7,5#) 7,5# (7,5#)	6,1 (6,4#) 6,4# (6,4#)	4,5 (5,6#) 5,6# (5,6#)	3,4 (4,4) 5,0# (5,0#)	2,7 (3,5) 4,6# (4,6#)	2,1 (2,8) 4,2# (4,2#)	1,6 (2,2) 3,8 (3,9#)
3,0	Stabilizers raised 4 pt. outriggers down	17,9# (17,9#) 17,9# (17,9#)	11,6# (11,6#) 11,6# (11,6#)	7,6 (8,7#) 8,7# (8,7#)	5,5 (7,1) 7,1# (7,1#)	4,1 (5,3) 6,1# (6,1#)	3,2 (4,2) 5,3# (5,3#)	2,5 (3,3) 4,8# (4,8#)	2,0 (2,7) 4,3# (4,3#)	1,5 (2,2) 3,7 (4,0#)
1,5	Stabilizers raised 4 pt. outriggers down	4,6# (4,6#) 4,6# (4,6#)	9,6 (13,4) 13,6# (13,6#)	6,6 (8,8) 9,8# (9,8#)	4,8 (6,4) 7,8# (7,8#)	3,7 (4,9) 6,5# (6,5#)	2,9 (3,9) 5,6# (5,6#)	2,3 (3,1) 5,0# (5,0#)	1,8 (2,5) 4,3 (4,4#)	1,5 (2,1) 3,6 (4,0#)
0	Stabilizers raised 4 pt. outriggers down	3,9# (3,9#) 3,9# (3,9#)	8,2 (8,6#) 8,6# (8,6#)	5,8 (7,9) 10,6# (10,6#)	4,3 (5,9) 8,3# (8,3#)	3,3 (4,5) 6,8# (6,8#)	2,7 (3,6) 5,8# (5,8#)	2,1 (3,0) 5,0 (5,1#)	1,7 (2,4) 4,2 (4,5#)	1,4 (2,0) 3,6 (4,0#)
-1,5	Stabilizers raised 4 pt. outriggers down	4,3# (4,3#) 4,3# (4,3#)	7,4# (7,4#) 7,4# (7,4#)	5,2 (7,3) 11,0# (11,0#)	3,9 (5,4) 8,6# (8,6#)	3,1 (4,3) 7,1# (7,1#)	2,5 (3,4) 5,9 (6,0#)	2,0 (2,8) 4,9 (5,2#)	1,6 (2,3) 4,1 (4,5#)	
-3,0	Stabilizers raised 4 pt. outriggers down	5,0# (5,0#) 5,0# (5,0#)	7,2 (7,4#) 7,4# (7,4#)	4,9 (7,0) 11,0# (11,0#)	3,7 (5,2) 8,7# (8,7#)	2,9 (4,0) 7,1# (7,1#)	2,3 (3,3) 5,8 (6,0#)	1,9 (2,7) 4,8 (5,1#)	1,6 (2,3) 4,1 (4,4#)	
-4,5	Stabilizers raised 4 pt. outriggers down		7,1 (7,8#) 7,8# (7,8#)	4,8 (6,9) 10,6# (10,6#)	3,5 (5,0) 8,4# (8,4#)	2,8 (3,9) 6,9# (6,9#)	2,2 (3,2) 5,7 (5,8#)	1,9 (2,7) 4,7 (4,9#)	1,6 (2,3) 4,0# (4,0#)	
-6,0	Stabilizers raised 4 pt. outriggers down				3,5 (5,0) 7,9# (7,9#)	2,7 (3,9) 6,5# (6,5#)	2,2 (3,2) 5,4# (5,4#)			

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface with closed steering axle. Capacities shown in brackets are valid when the undercarriage is in longitudinal position and are established over the steering axle (travel position) with stabilizers raised, and over rigid axle with stabilizers down. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (#). Lift capacities do not include the weight of a grapple, clamshells, magnet or other lifting devices, which must be deducted from the above figures. Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

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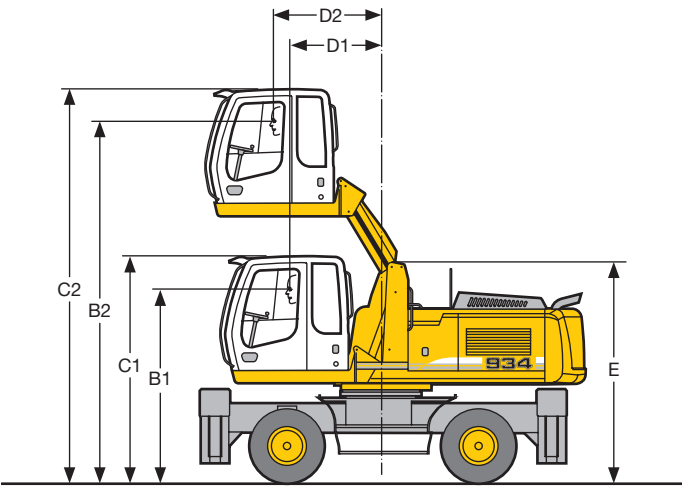
Choice of Cab Elevation and Cab Protection



Rigid Cab Elevation

Height	mm	800	1200	1500	2000
A	mm	3360	3760	4060	4560
B	mm	3700	4100	4400	4900
C	mm	4200	4600	4900	5400
D	mm	675	675	675	675

A rigid cab elevation has a fixed eye level height. For a lower transport height the shell of the cab can be removed. The overall height is then dimension A.
For additional protection of the operator a cab guard with or without screen cab guard and a front window screen are available.

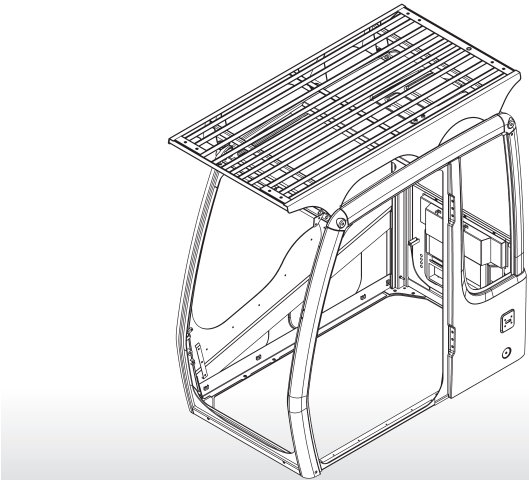


Hydraulic Cab Elevation (Parallelogram)

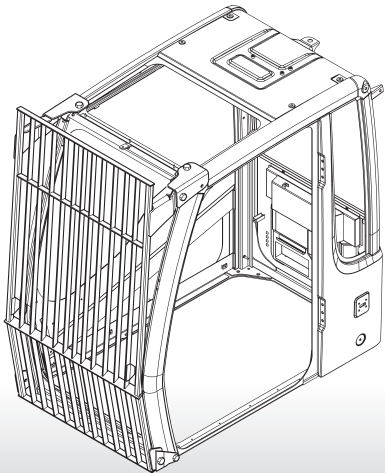
B1	2890 mm
B2	5390 mm
C1	3390 mm
C2	5890 mm
D1	1370 mm
D2	1615 mm
E	3305 mm

The parallelogram cab raiser allows the operator to choose his field of view between dimensions B1 and B2. For a transport height lower than C1 the shell of the cab can be removed. The overall height is then E.
As cab protection a front window screen can be installed.

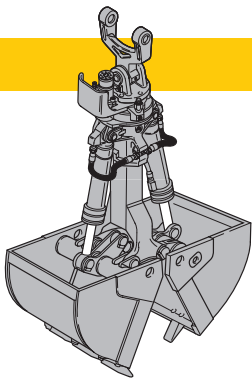
Grille above



Grilles in front



Variety of Tools

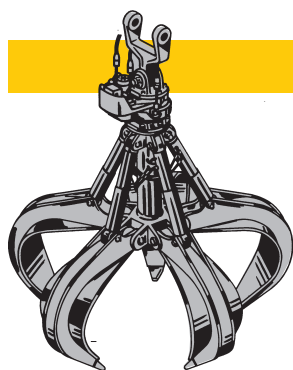


Shells for Loose Material

Clamshell Model 20 B

Shells for loose material with cutting edge (without teeth)

Cutting width of shells	mm	1000	1200	1600
Capacity	m ³	1,30	1,50	2,00
For loose material, specific weight up to	t/m ³	1,5	1,5	1,5
Total weight	kg	1310	1370	1520



Multiple Tine Grapples

open tines

semi-closed tines

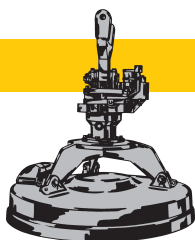
closed tines

Grapple Model 64 (4 tines)	Capacity	m ³	0,40	0,60	0,40	0,60	0,40	0,60
	Weight	kg	1050	1120	1260	1310	1260	1510
Grapple Model 65 (5 tines)	Capacity	m ³	0,40	0,60	0,40	0,60	0,40	0,60
	Weight	kg	1170	1260	1340	1480	1430	1600
Grapple Model 69 (4 tines)	Capacity	m ³	0,80	1,10	0,80	1,10	0,80	1,10
	Weight	kg	1180	1330	1450	1790	1780	1940
Grapple Model 70 C (5 tines)	Capacity	m ³	0,80	1,10	0,80	1,10	0,80	1,10
	Weight	kg	1500	1520	1710	1860	1900	1990



Crane Hook with Suspension

Max. load	t	12,5
Height with suspension	mm	1000
Total weight	kg	130



Electro Magnets with Suspension

Generator	kW	10	20
Dia of magnet	mm	1350	1500
Height with suspension	mm	1470	1520
Total weight	kg	1700	2340

For further information see "Attachment-Information – Liebherr Hydraulic Clamshells and Grapples". To operate a magnet the installation of a generator is required; please contact your Liebherr dealer or the factory for further information.

Equipment



Undercarriage

	s	o
Two circuit travel brake with accumulator	•	
Wide tires		
Travel motor protection		•
Clam travel bracket with outriggers/prop-up blade down on one side only		
Outrigger cylinder rod guards		•
Creeper speed electrically switchable from cab	•	
New tires	•	
Service free parking brake inside transmission	•	
Independent outrigger control		•
Choice of tires		•
Auto check valve directly on each stabilizer cylinder	•	
Proportional power steering	•	
Customized colors		•
Two lockable storage boxes	•	
Lockable storage box additional		
Two-speed power shift transmission	•	



Upper Carriage

	s	o
Electric fuel tank filler pump		•
Maintenance-free swing brake lock	•	
Handrails, Non slip surfaces	•	
Main switch for electric circuit	•	
Engine hood with lift help	•	
Pedal controlled positioning swing brake	•	
Reverse travel warning system		•
Sound insulation	•	
Customized colors		•
Pin lock upper/lower		
Maintenance-free HD-batteries	•	
Extended tool kit		•
Lockable tool box	•	
Tool kit	•	



Hydraulics

	s	o
Hydraulic tank shut-off valve	•	
Extra hydr. control for hydr. swivel		•
Pressure compensation	•	
Hook up for pressure checks	•	
Pressure storage for controlled lowering of attachments with engine turned off	•	
Filter with partial micro filtration (5 µm)	•	
Electronic pump regulation	•	
Stepless mode system (ECO)	•	
Flow compensation	•	
Four mixed modes, can also be adjusted	•	
Full flow micro filtration		•
Bio degradable hydraulic oil		•
Additional hydraulic circuits		•



Engine

	s	o
After-cooled	•	
Unit pump system		
Turbo charger	•	
Dry-type air cleaner w/pre-cleaner, main and safety element	•	
Air filter with automatic dust ejector	•	
Sensor controlled engine idling	•	
Engine cold starting aid		•



Operator's Cab

	s	o
Storage tray	•	
Displays for engine operating condition	•	
Mechanical hour meters, readable from outside the cab	•	
Roof hatch	•	
All-round adjustable roof vent		
6-way adjustable seat	•	
Airpressure operator seat with heating and head-rest		•
Seat and consoles independently adjustable	•	
Extinguisher		•
Removable customized foot mat	•	
Dome light	•	
Rigid or hydraulic cab elevation		•
Cab heater with defroster	•	
Cloth hook	•	
Air conditioning	•	
Electric cool box		•
Steering wheel adjustable	•	
Bullet proof window (fixed installation – can not be opened)		•
Stereo radio		•
Preparation for radio installation		•
Rain hood over front window opening	•	
Beacon		•
All tinted windows	•	
Door with sliding window	•	
Optical warning if outriggers are not fully retracted		•
Sun shade		•
Sun roller blind	•	
Auxiliary heating		•
Electronic drive away lock		•
Wiper/washer	•	
Cigarette lighter and ashtray	•	
Additional flood lights		•



Attachment

	s	o
Flood lights	•	
Hydr. lines for clam operation in stick	•	
Industrial-type gooseneck sticks with remote hydraulic pin puller		•
Sealed pivots	•	
Safety lift hook		•
Liebherr line of clams		•
Liebherr semi-automatic central lubrication system	•	
Liebherr fully-automatic central lubrication system		•
Likufix		•
Safety check valves on hoist cylinder, regenerative	•	
Safety check valves on stick cylinder, regenerative	•	
Hose quick connection	•	
Hydraulic or manual quick change tool adapter		•
Customized colors		•
Special buckets and other tools		•
Overload warning device		•
Two way valves for bucket/clam use		•
Locking of connections for clam operation		•
Cylinders with shock absorber	•	

S = Standard, O = Option

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

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