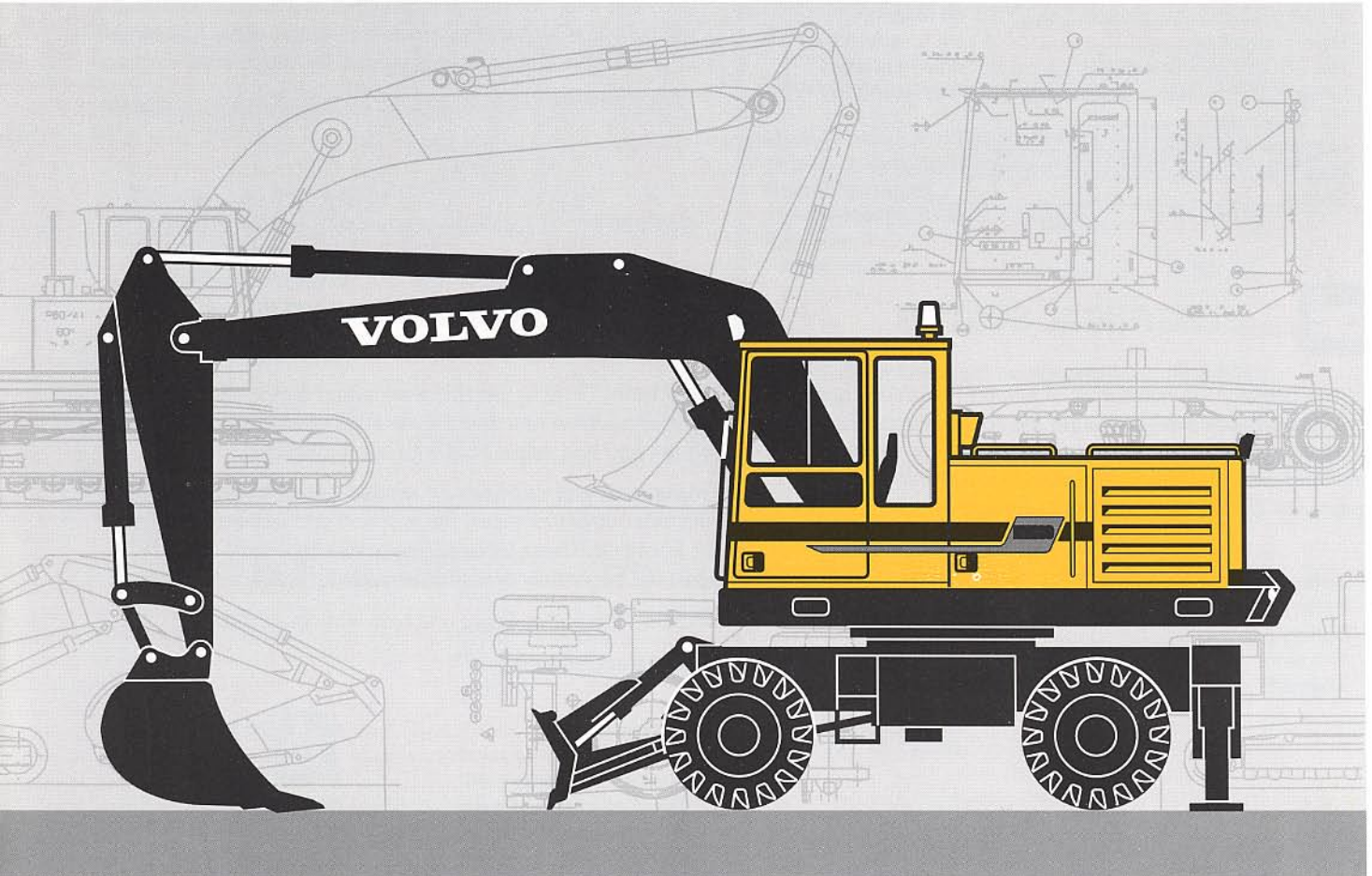


VOLVO EXCAVATOR

EW200



- **Engine Power:**
110 kW (150 hp)
- **Operating Weight:**
16,0 – 18,0 t
- **Buckets:**
690 – 1 250 l
- Low-emission, turbo-charged Volvo diesel engine with direct injection and intercooler
- Three-circuit multilevel priority hydraulic system
- COS = Capacity Optimized System – all three pumps for the digging movements
- Mode selector and hydraulic pump regulation (PSC) Pressure Sensing Control
- Care cab
 - computerized monitoring system
 - ergonomic environment
 - low sound level
 - filtered air
- Rugged digging equipment with spherical steel bearings
- Prepared for a number of optional items of equipment
- Individually operated outriggers and dozer blade
- Four travel speeds –
Max. 30 km/h

VOLVO



ENGINE

The engine is a low-emission, turbocharged, 4-stroke diesel engine with intercooler, specially developed for excavator use. The machine can work at low engine speeds, contributing to good fuel economy, low sound level, less wear and longer life.

Air filter: 3-stage

Auto Idling: Reduces the engine speed to an idling speed when levers and pedals are not activated.

Make	Volvo
Model	TD 63 KHE
Power output at	30 r/s 1 800 rpm
Net (ISO 9249 / DIN 6271)	107 kW (145 hp)
Gross (SAE J1349)	110 kW (150 hp)
No. of cylinders	6
Displacement, total	5,48 l
Bore	98,43 mm
Stroke	120 mm



ELECTRICAL SYSTEM

Micro processor for monitoring of engine / hydraulic system. High capacity and well protected electrical system. Printed, circuit board based electric central with clearly arranged fuses and relays. Central prepared for connecting optional equipment. Battery disconnecter standard.

Voltage	24 V
Battery	4 x 12 V
Battery capacity	120 Ah
Alternator	28 V / 55 A
Alternator rating	1 540 W



SLEWING SYSTEM

The superstructure is slewed by a axial piston motor through a servo released slew holding brake, into the slew gear giving torque to the inner tooth race of the slew ring.

Slew, start to stop*	
90° turn	5,0 s
180° turn	7,0 s
Slew speed	7,9 r/min

* Empty bucket – extended equipment



SERVICE REFILL CAPACITIES

Fuel tank	290 l
Fuel pump capacity	60 l/min
Hydraulic system, total	320 l
Diesel engine oil	22 l
Cooling system (incl. glycol)	32 l
Slew gearbox	16,5 l
Travel gearbox	4,2 l



UNDERCARRIAGE

Drive train: One big variable axial-piston motor on the the mid-mounted two-step Power Shift gearbox gives power to front and rear axles, both with hub reductions.

Framework and support: All-welded robust torsion box frame with two outriggers on on the rear end and a dozer blade on the front end. These three supports can by choice be operated separately or simultaneously for quick repositioning.

Wheels: Alternative single and twin wheels available.

Front axle: Oscillating $\pm 7^\circ$.

Twin wheels	10.00–20 PR14
Max. tractive force (brutto)	114 kN
Max. tractive force (net)	91 kN
Travel speed, road travel	30,0 km/h
Travel speed, site travel	7,0 km/h
Turning radius, front wheels	8,0 m



BRAKES

Brake system corresponds to ISO 3450.

Travel brakes: servo-hydraulically manoeuvred self-adjusting wet multidiscs in two separate brake circuits.

Parking brake: of drum type mounted on the gearbox, spring applied and pressure released.

Digging brake: without play is obtained through the same drum brake system.

Security system: the 2-circuit travel brakes are supplied with two accumulators in the event of failure in the service brake system.



CARE CAB

Operator's cab with a supporting frame structure. Large panes for good all round visibility. The upper front pane can be pushed up into the ceiling. Sliding side window in the cab door.

Heater and defroster: Pressurized and filtered cab air is supplied by a 3-speed fan underneath the operator's seat. The air passes through the cab heater and can be distributed via 14 nozzles. Prepared for Air Conditioning.

Operator's seat: Electrically heated operator's seat with adjustable suspension and headrest. The fore / aft position, height and angle of the seat are adjustable, as is the lumbar support. Individually adjustable armrests and control levers.

Acoustics: Approved according to Directive 86/662/EEC.

Exterior noise (ISO 6 395)	
Average value L_{WA} (sound power level)	103 dB(A)
Operator's position (ISO 6 396)	
with the door closed	
L_{pA} (sound pressure level)	76 dB(A)



GROUND PRESSURE

Machine with **4,65 m monobloc boom**, 2,4 m dipper arm, 145 kg quickfit, 825 l bucket and 2 600 kg counterweight.

Operating weight	
incl. outriggers and dozer blade	17 350 kg
Axle load	
Front axle	7 950 kg
Rear axle	9 400 kg

Machine with **5,2 m monobloc boom**, 2,4 m dipper arm, 145 kg quickfit, 950 l bucket and 2 600 kg counterweight.

Operating weight	
incl. dozer blade (excl. outriggers)	17 500 kg
Axle load	
Front axle	7 700 kg
Rear axle	9 800 kg

Machine with **5,1 m 2-piece boom**, 2,4 m dipper arm, 145 kg quickfit, 900 l bucket and 2 600 kg counterweight.

Operating weight	
incl. dozer blade (excl. outriggers)	18 000 kg
Axle load	
Front axle	7 600 kg
Rear axle	10 400 kg

Operating weight	
(excl. dozer blade and outriggers)	17 400 kg
Axle load	
Front axle	6 750 kg
Rear axle	10 650 kg



HYDRAULIC SYSTEM

3-circuit hydraulic system all-servo controlled.

Pumps: P1 is a pressure controlled variable pump with priority to slew circuit. P2 and P3 are power- and pressure controlled variable pumps to the boom, dipper arm, bucket and travel circuits. Hydraulically controlled pump regulation for highest power output.

Mode selector: Three working modes:
HLD = Power Boost (Heavy Lift Device)
ECO = Economy
CAP = Capacity

Powerboost (HLD) is temporarily selectable 10 sec. even in Economy and Capacity mode.

Valve system: Boom, dipper arm and bucket are operated by dual main valves to obtain best combination of precision manoeuvrability and minimized fuel consumption.

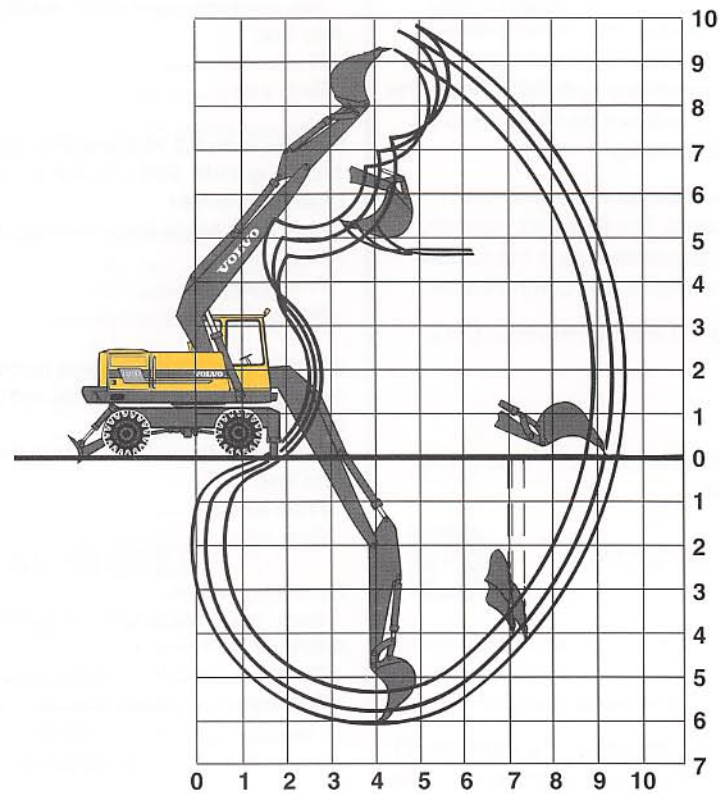
Float position: Boom cylinder equipped with floating position valve for improved comfort and increased digging speed.

Security: Hose rupture valve on boom cylinder are standard.

Pump P1	
Max. pressure	28 MPa
Max. flow	64 l/min
Pumps P2 and P3	
Max. pressure	26 MPa
Power boost (HLD)	30 MPa
Max. flow	2 x 114 l/min
Servo pump	
Pressure	6,5 MPa
Flow	18 l/min
Steering pump	
Pressure	14 MPa
Flow	29 l/min

DIGGING RANGES

Monobloc boom 4,65 m and dipper arm 2,0 m / 2,4 m / 2,8 m



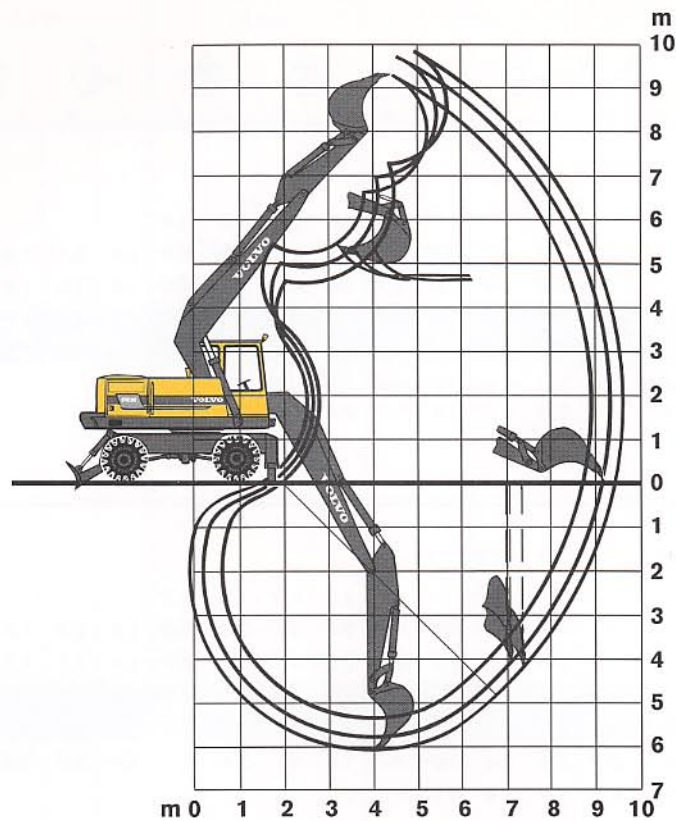
Monobloc boom	m	4,65	4,65	4,65
Dipper arm	m	2,0	2,4	2,8
Max. reach	m	8,5	8,9	9,2
Max. reach at ground level	m	8,3	8,7	9,0
Max. digging depth	m	5,0	5,4	5,7
Max. height ground				
– tooth tip	m	9,1	9,5	9,7
Max. dumping height	m	6,2	6,6	6,9
Max. practical dumping height	m	4,2	4,1	4,2
Practical digging depth for a material				
with a 45° angle of repose	m	4,1	4,4	4,6
Max. vertical digging depth	m	3,6	4,1	4,2
Min. front slew radius	m	3,1	3,3	3,4

Digging forces with quickfit and 725 l bucket:				
Breakout force	kN	126	126	126
Teraout force	kN	94	84	75

Max. permitted buckets for quickfit:				
GP-bucket 1,5 t/m ³	l	1 250	1 140	1 040
GP-bucket 1,8 t/m ³	l	1 090	990	910
RB-bucket 1,8 t/m ³	l	1 030	940	860
RB-bucket 2,0 t/m ³	l	950	860	790

DIGGING RANGES

Monobloc boom 5,2 m and dipper arm 2,0 m / 2,4 m / 2,8 m



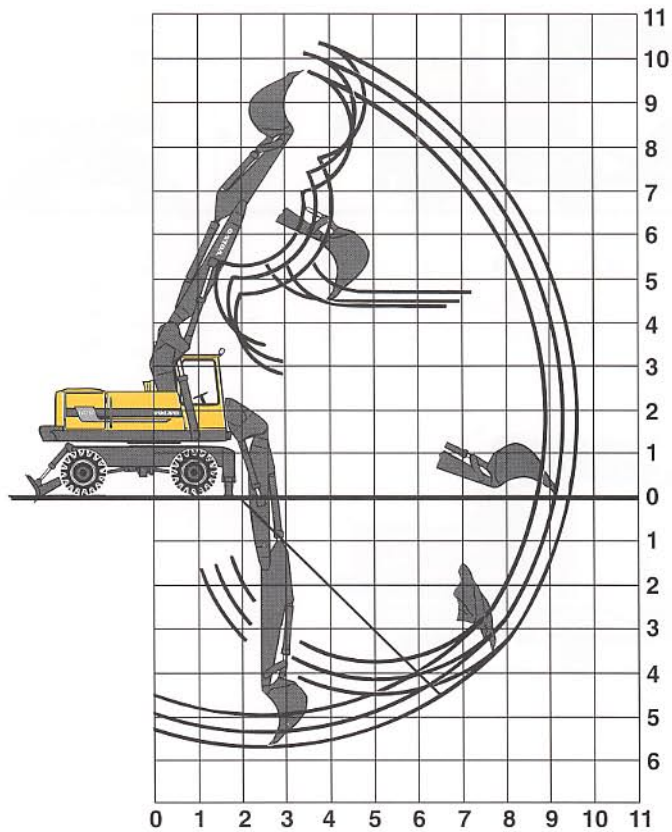
Monobloc boom	m	5,2	5,2	5,2
Dipper arm	m	2,0	2,4	2,8
Max. reach	m	9,1	9,4	9,7
Max. reach at ground level	m	8,9	9,2	9,5
Max. digging depth	m	5,6	5,8	6,1
Max. height ground				
– tooth tip	m	9,4	9,7	9,9
Max. dumping height	m	6,5	6,9	7,3
Max. practical dumping height	m	4,6	4,6	4,6
Practical digging depth for a material				
with a 45° angle of repose	m	4,5	4,7	4,9
Max. vertical digging depth	m	3,8	4,2	4,3
Min. front slew radius	m	3,3	3,5	3,5

Digging forces with quickfit and 725 l bucket:				
Breakout force	kN	126	126	126
Teraout force	kN	94	84	75

Max. permitted buckets for quickfit:				
GP-bucket 1,5 t/m ³	l	1 070	980	910
GP-bucket 1,8 t/m ³	l	930	850	790
RB-bucket 1,8 t/m ³	l	890	810	750
RB-bucket 2,0 t/m ³	l	820	750	700

DIGGING RANGES

2-piece boom 5,1 m and dipper arm 2,0 m / 2,4 m / 2,8 m

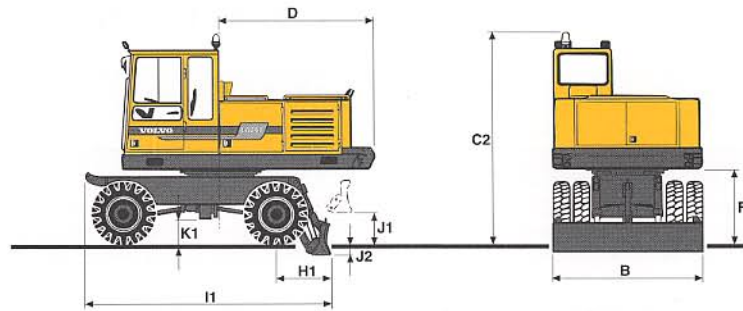
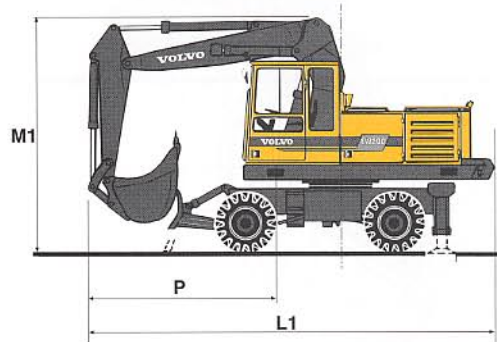
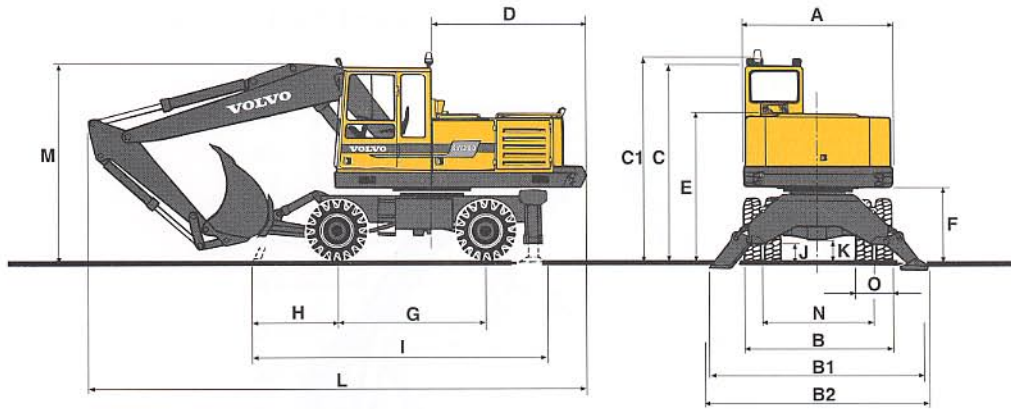


2-piece boom	m	5,1	5,1	5,1
Dipper arm	m	2,0	2,4	2,8
Max. reach	m	9,0	9,3	9,6
Max. reach at ground level	m	8,8	9,1	9,4
Max. digging depth	m	5,3	5,5	5,8
Max. height ground				
– tooth tip	m	9,8	10,1	10,3
Max. dumping height	m	6,8	7,6	7,7
Max. practical dumping height	m	4,3	4,4	4,7
Practical digging depth for a material				
with a 45° angle of repose	m	4,2	4,4	4,6
Max. vertical digging depth	m	3,1	3,4	3,6
Min. front slew radius	m	3,2	3,5	3,6

Digging forces with quickfit and 725 l bucket:				
Breakout force	kN	126	126	126
Teraout force	kN	94	84	75



Max. permitted buckets for quickfit:				
GP-bucket 1,5 t/m ³	l	1 080	990	910
GP-bucket 1,8 t/m ³	l	940	860	790
RB-bucket 1,8 t/m ³	l	890	810	750
RB-bucket 2,0 t/m ³	l	820	750	690

DIMENSIONS



		Boom	Dipper arm
A:	2 490 mm	4,65 m	2,0 m
B:	2 500 mm	4,65 m	2,8 m
B1:	3 690 mm	5,20 m	2,8 m
B2:	3 750 mm		
		L1: 6 860 mm	2,0 m
C:	3 220 mm	L1: 6 970 mm	2,4 m and 2,8 m
C1:	3 360 mm		
C2:	3 490 mm	M: 3 500 mm	2,0 m
D:	2 600 mm	M: 3 800 mm	2,8 m
E:	2 410 mm	M: 3 700 mm	2,8 m
F:	1 180 mm		
		M1: 3 990 mm	2,0 m and 2,4 m
G:	2 500 mm	M1: 4 300 mm	2,8 m
H:	1 240 mm		
H1:	980 mm (support blade rear)	N: 1 910 mm	
I:	4 750 mm	O: 590 mm	
I1:	4 010 mm	P: 3 190 mm	2,0 m
		P: 3 300 mm	2,4 m and 2,8 m
J:	330 mm		
J1:	530 mm		
J2:	170 mm		
K:	360 mm		
K1:	430 mm		

LIFTING CAPACITY (At the quickfit lifting hook without bucket. Unit: tonne = 1 000kg)



 Across under-carriage  Along under-carriage	Lifting point related to ground level m	Reach from machine center																Max. m					
		3,0 m				4,5 m				6,0 m				7,5 m					Max. reach				
		u	d	u	d	u	d	u	d	u	d	u	d	u	d	u	d		u	d	u	d	
4,65 m Monobloc boom 2,4 m Dipper arm Quickfit Outriggers and dozer blade 2 600 kg Counterweight	7,5 m																						
	6,0 m								2,8	3,6*	2,8	3,6*						2,2	2,5*	2,2	2,5*	6,8	
	4,5 m					4,2	4,3*	4,1	4,3*	2,7	3,9*	2,7	3,9*					1,8	2,5*	1,8	2,5*	7,6	
	3,0 m					3,9	5,7*	3,8	5,7*	2,6	4,5*	2,5	4,5*	1,9	3,1*	1,8	3,1*	1,6	2,6*	1,6	2,6*	8,0	
	1,5 m					3,5	6,7	3,4	7,0*	2,4	4,3	2,3	5,0*	1,7	3,1	1,7	4,1*	1,5	2,3*	1,5	2,3*	8,1	
	0,0 m					3,4	6,5	3,3	7,3*	2,3	4,2	2,2	5,3*	1,7	3,1	1,7	4,1*	1,6	2,9	1,6	3,0*	7,8	
	-1,5 m	6,3			6,0					3,4	6,5	3,3	6,9*	2,3	4,2	2,2	5,0*			1,8	3,0*	1,8	3,0*
-3,0 m	6,4			6,1					3,4	5,5*	3,4	5,5*	2,4	3,6*	2,3	3,6*			2,3	3,1*	2,3	3,1*	6,1
4,65 m Monobloc boom 2,8 m Dipper arm Quickfit Outriggers and dozer blade 2 600 kg Counterweight	7,5 m																						
	6,0 m									2,5	3,2*	2,7	3,2*					1,8	2,4*	1,9	2,4*	7,2	
	4,5 m					3,8	3,8*	3,8*	3,8*	2,4	3,6*	2,6	3,6*	1,6	3,3	1,8	3,5*	1,4	2,1*	1,5	2,1*	8,0	
	3,0 m					3,5	5,2*	3,7	5,2*	2,3	4,2*	2,4	4,2*	1,6	3,2	1,7	3,7*	1,3	2,0*	1,4	2,0*	8,4	
	1,5 m					3,1	6,6*	3,3	6,6*	2,1	4,3	2,2	4,8*	1,5	3,1	1,6	4,0*	1,2	1,8*	1,3	1,8*	8,5	
	0,0 m	5,1	6,0*	5,4	6,0*	2,9	6,5	3,1	7,2*	2,0	4,2	2,1	5,2*	1,4	3,0	1,5	4,1*	1,3	2,4*	1,4	2,4*	8,2	
	-1,5 m	5,3	10,2*	5,5	10,2*	2,9	6,4	3,0	7,0*	1,9	4,1	2,1	5,1*	1,4	3,0	1,5	3,6*	1,4	2,8*	1,5	2,8*	7,6	
-3,0 m	5,4	8,8*	5,7	8,8*	2,9	5,9*	3,1	5,9*	2,0	4,2	2,1	4,2*					1,8	2,9*	1,9	2,9*	6,6		
5,2 m Monobloc boom 2,4 m Dipper arm Quickfit Outriggers and dozer blade 2 600 kg Counterweight	7,5 m									2,5	3,3*	2,6	3,3*					2,3	3,0*	2,5	3,0*	6,2	
	6,0 m									2,5	3,2*	2,6	3,2*					1,7	3,1*	1,8	3,1*	7,4	
	4,5 m					3,7	4,3*	3,9	4,3*	2,4	3,6*	2,5	3,6*	1,6	3,2	1,7	3,3*	1,4	2,6*	1,5	2,6*	8,2	
	3,0 m					3,2	5,7*	3,4	5,7*	2,2	4,3*	2,3	4,3*	1,5	3,1	1,6	3,6*	1,2	2,6	1,3	3,1*	8,5	
	1,5 m					2,9	6,4	3,1	6,8*	2,0	4,2	2,1	4,8*	1,4	3,0	1,6	3,9*	1,2	2,5	1,3	3,0*	8,6	
	0,0 m					2,8	6,3	3,0	7,1*	1,9	4,1	2,0	5,1*	1,4	3,0	1,5	4,0*	1,2	2,5	1,3	2,8*	8,4	
	-1,5 m	5,2	7,1*	5,5	7,1*	2,8	6,3	3,0	6,8*	1,8	4,0	2,0	5,0*	1,4	3,0	1,5	3,8*	1,3	2,8	1,4	3,4*	7,8	
-3,0 m	5,3	8,3*	5,6	8,3*	2,8	5,8*	3,0	5,8*	1,9	4,1	2,0	4,2*					1,6	3,4*	1,8	3,4*	6,8		
5,2 m Monobloc boom 2,8 m Dipper arm Quickfit Outriggers and dozer blade 2 600 kg Counterweight	7,5 m									2,6	2,9*	2,7	2,9*					2,0	2,7*	2,2	2,7*	6,7	
	6,0 m									2,5	2,9*	2,7	2,9*	1,7	3,0*	1,8	3,0*	1,5	2,3*	1,6	2,3*	7,9	
	4,5 m					3,7	3,8*	3,8*	3,8*	2,4	3,4*	2,5	3,4*	1,6	3,1*	1,7	3,1*	1,2	2,2*	1,3	2,2*	8,6	
	3,0 m					3,3	5,2*	3,5	5,2*	2,2	4,0*	2,3	4,0*	1,5	3,1	1,6	3,4*	1,1	2,4	1,2	2,5*	8,9	
	1,5 m					2,9	6,5	3,1	6,6*	2,0	4,2	2,1	4,6*	1,4	3,0	1,5	3,7*	1,0	2,3	1,1	2,4*	9,0	
	0,0 m					2,7	6,3	2,9	7,1*	1,8	4,1	2,0	5,0*	1,3	2,9	1,5	3,9*	1,1	2,3*	1,2	2,3*	8,8	
	-1,5 m	5,1	6,8*	5,3	6,8*	2,7	6,2	2,9	6,9*	1,8	4,0	1,9	5,0*	1,3	2,9	1,4	3,8*	1,2	2,6	1,3	3,0*	8,2	
-3,0 m	5,2	8,9*	5,4	8,9*	2,7	6,1*	2,9	6,1*	1,8	4,0	2,0	4,5*					1,4	3,1	1,5	3,2*	7,3		
-4,5 m					2,9	4,2*	3,1	4,2*										2,2	3,1*	2,4	3,1*	5,5	

Note: For lift capacity including bucket, simply subtract actual weight of bucket from the above values.

* Load capacity limited by machine's hydraulic lifting capacity.

The above values have been calculated in compliance with ISO standard 10 567. They do not exceed 87 % of hydraulic lifting capacity or 75 % of tipping load with the machine on firm, level ground. Working pressure with HLD = 30 MPa (300 bar)

LIFTING CAPACITY (At the quickfit lifting hook without bucket. Unit: tonne = 1 000kg)

 Across under-carriage  Along under-carriage	Lifting point related to ground level m	Reach from machine center																Max. m				
		3,0 m				4,5 m				6,0 m				7,5 m					Max. reach			
		u	d	u	d	u	d	u	d	u	d	u	d	u	d	u	d		u	d	u	d
5,1 m 2-piece boom 2,4 m dipper arm Quickfit Outriggers and dozer blade Counterweight 2 600 kg	7,5 m									2,7	4,0*	2,6	4,0*					2,6	3,5*	2,5	3,5*	6,1
	6,0 m									2,7	4,1*	2,7	4,1*					1,8	2,9*	1,8	2,9*	7,4
	4,5 m					4,1	5,5*	4,0	5,5*	2,6	4,4*	2,5	4,4*	1,8	3,2	1,7	3,8*	1,5	2,8	1,5	3,2*	8,1
	3,0 m					3,5	6,5*	3,4	6,5*	2,4	4,4	2,3	4,8*	1,7	3,1	1,7	3,9*	1,3	2,5	1,3	3,0*	8,5
	1,5 m					3,2	6,4	3,1	7,0*	2,2	4,1	2,1	5,1*	1,6	3,0	1,6	3,9*	1,3	2,4	1,3	2,6*	8,6
	0,0 m					3,1	6,2	3,0	6,8*	2,1	4,0	2,0	5,0*	1,5	2,9	1,5	3,8*	1,3	2,6	1,3	3,1*	8,3
-1,5 m					3,1	5,8*	3,0	5,8*	2,1	4,0	2,0	4,3*	1,6	3,0	1,5	3,0*	1,5	2,7*	1,5	2,7*	7,7	
5,1 m 2-piece boom 2,8 m Dipper arm Quickfit Outriggers and dozer blade Counterweight 2 600 kg	7,5 m									2,5	3,9*	2,6	3,9*					2,0	3,2*	2,1	3,2*	6,6
	6,0 m									2,5	3,9*	2,6	3,9*	1,6	3,3	1,7	3,6*	1,4	2,8*	1,6	2,8*	7,8
	4,5 m					3,7	4,3*	3,8	4,3*	2,3	4,2*	2,5	4,2*	1,6	3,2	1,7	3,6*	1,2	2,6	1,3	2,7*	8,5
	3,0 m					3,2	6,1*	3,4	6,1*	2,1	4,4	2,2	4,6*	1,5	3,1	1,6	3,8*	1,0	2,3	1,1	2,4*	8,9
	1,5 m					2,8	6,4	3,0	6,9*	1,9	4,1	2,0	5,0*	1,3	3,0	1,5	3,9*	1,0	2,3	1,1	2,9*	8,9
	0,0 m					2,6	6,2	2,8	6,8*	1,8	4,0	1,9	5,0*	1,3	2,9	1,4	3,8*	1,0	2,4	1,1	2,9*	8,7
-1,5 m	4,8	6,2*	5,1	6,2*	2,6	6,0*	2,8	6,0*	1,7	3,9	1,9	4,5*	1,3	2,9	1,4	3,3*	1,1	2,5*	1,2	2,5*	8,2	
5,1 m 2-piece boom 2,4 m Dipper arm Quickfit Support blade rear Counterweight 2 600 kg	7,5 m									2,7	2,7	2,3	4,0*					2,6	2,6	2,2	3,5*	6,1
	6,0 m									2,7	2,8	2,4	4,1*					1,8	1,8	1,6	3,0*	7,4
	4,5 m					4,1	4,1*	3,5	5,5*	2,6	2,6	2,2	4,4*	1,8	1,8	1,5	3,3	1,5	1,5	1,3	2,8	8,1
	3,0 m					3,5	3,6	3,0	6,5*	2,4	2,4	2,0	4,4	1,7	1,7	1,4	3,2	1,3	1,4	1,1	2,6	8,5
	1,5 m					3,2	3,2	2,7	6,5	2,2	2,2	1,8	4,2	1,6	1,6	1,3	3,0	1,3	1,3	1,1	2,5	8,6
	0,0 m					3,1	3,1	2,6	6,4	2,1	2,1	1,7	4,1	1,5	1,6	1,3	3,0	1,3	1,4	1,1	2,6	8,3
-1,5 m					3,1	3,2	2,6	5,8*	2,1	2,1	1,7	4,1	1,6	1,6	1,3	3,0*	1,5	1,5	1,3	2,7*	7,7	
5,1 m 2-piece boom 2,8 m Dipper arm Quickfit Support blade rear Counterweight 2 600 kg	7,5 m									2,4	2,8	2,4	3,9*					1,9	2,3	1,9	3,2*	6,6
	6,0 m									2,4	2,8	2,3	3,9*	1,5	1,8	1,5	3,3	1,4	1,7	1,4	2,8*	7,8
	4,5 m					3,6	4,2	3,5	4,3*	2,2	2,7	2,2	4,2*	1,5	1,8	1,5	3,3	1,1	1,4	1,1	2,6	8,5
	3,0 m					3,1	3,7	3,0	6,1*	2,0	2,4	2,0	4,5	1,4	1,7	1,4	3,1	1,0	1,2	1,0	2,4	8,9
	1,5 m					2,7	3,3	2,6	6,5	1,8	2,2	1,8	4,2	1,3	1,6	1,3	3,0	1,0	1,2	0,9	2,3	8,9
	0,0 m					2,5	3,1	2,4	6,3	1,7	2,1	1,6	4,0	1,2	1,5	1,2	2,9	1,0	1,2	1,0	2,4	8,7
-1,5 m	4,6	5,9	4,4	6,2*	2,5	3,1	2,4	6,0*	1,6	2,0	1,6	4,0	1,2	1,5	1,2	2,9	1,1	1,4	1,1	2,5*	8,2	

Note: For lift capacity including bucket, simply subtract actual weight of bucket from the above values.

* Load capacity limited by machine's hydraulic lifting capacity.

The above values have been calculated in compliance with ISO standard 10 567. They do not exceed 87 % of hydraulic lifting capacity or 75 % of tipping load with the machine on firm, level ground. Working pressure with HLD = 30 MPa (300 bar)

STANDARD EQUIPMENT

Engine and Electrical System

Computerized controlled monitoring system
 Battery disconnecter and fuel shut-off cock
 Auto idling
 3-stage air filter with indicator
 Hour meter
 Tachometer
 Fuel level gauge
 Temperature gauge for coolant and hydraulic oil
 Electric preheating coil
 24 V electrical system

Undercarriage

4-wheel drive
 Oscillating front axle $\pm 7^\circ$
 Axles with hub reduction
 2-circuit travel brakes

Safety and Comfort

Safety bar to prevent accidental actuation via levers and pedals
 Hose rupture valve on boom cylinder
 Hydraulically powered fuelling pump, 60 l/min
 Overload alarm
 Rotating warning beacon
 Working lights (halogen):
 3 front
 1 rear
 Interior lighting in cab, engine and fuel filling compartment
 Rear view mirrors,
 3 exterior
 1 interior
 Cab heating and filtered air intake
 Ergonomic, electrically heated operator's seat
 Adjustable steering wheel
 Cab skylight
 Sliding side window in the cab door
 Emergency exit through rear window

Tinted windows (clear front)
 Interior sun visor
 Upper and lower windscreen wipers with intermittent function
 Windscreen washer
 Horn

Hydraulics

Float position
 3 variable axial piston pumps
 Mode selector, 3 steps
 Power boost (HLD)
 Dual main valve for the travel and equipment functions
 Standard filter cartridges for return, leak oil and breathing filter
 Swing-out oil cooler

Digging Equipment

Spherical steel link bearings in all large pivot points
 Electric end dampening on boom- and dipper arm cylinder
 Safety lifting hook
 Friction welded piston rod eyes

ALTERNATIVE EQUIPMENT

Undercarriage

Twin wheels
 10.00 - 20 PR14
 11.00 - 20 PR 16
 Solid tyres
 Single wheels
 Dozer blade in front, and two outriggers rear
 Dozer blade 2,5 m or 2,6 m
 Oscillating outriggers plates
 Support blade, rear

Superstructure

Counterweight 2 600 kg

Digging Equipment

Booms
 4,65 m monobloc
 5,1 m 2-piece
 5,2 m monobloc

Dipper arms

2,0 m
 2,4 m
 2,8 m

Buckets

Buckets for quickfit
 725 l
 825 l
 900 l

Hydraulic quickfit
 (weight: 145 kg)

OPTIONAL EQUIPMENT *(Standard on certain markets)*

Engine and Electrical System

Diesel driven engine and cab heater with digital timer
 Electric over speed protector
 Electric engine heater, 220 V
 Extra headlights on boom

Undercarriage

Tool box
 Mud guards
 Widening rings 2 x 50 mm
 Stone protection rings

Safety and Comfort

Protective net for windshield
 Protective bars for skylight (jFOPS 3 449 approved)
 Protective cab roof (FOGS ISO 10 262 approved)
 Fire extinguisher
 Seat belts
 Protection against overfilling fuel
 Extra circulation pump for the heating system
 Extra hose rupture valve on dipper arm/bucket cylinder
 Exterior sun visor
 Wheelknob
 Spark screen for dipper arm cylinder

Rear window jalousie
 Air conditioning
 Micro filter for cab
 Radio with tape player
 Cruise controller
 Tool kit

Hydraulics

Biodegradeable hydraulic oil
 Hydraulic equipment for:
 Slope bucket
 Roto-tilt
 Grab
 Hydraulic hammer
 Shears
 Crusher
 Jib
 Magnet
 Hydraulic Quickfit
 Installation of a 4th working pump
 Thermostat kit

VOLVO

**Volvo Construction
 Equipment Group**

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