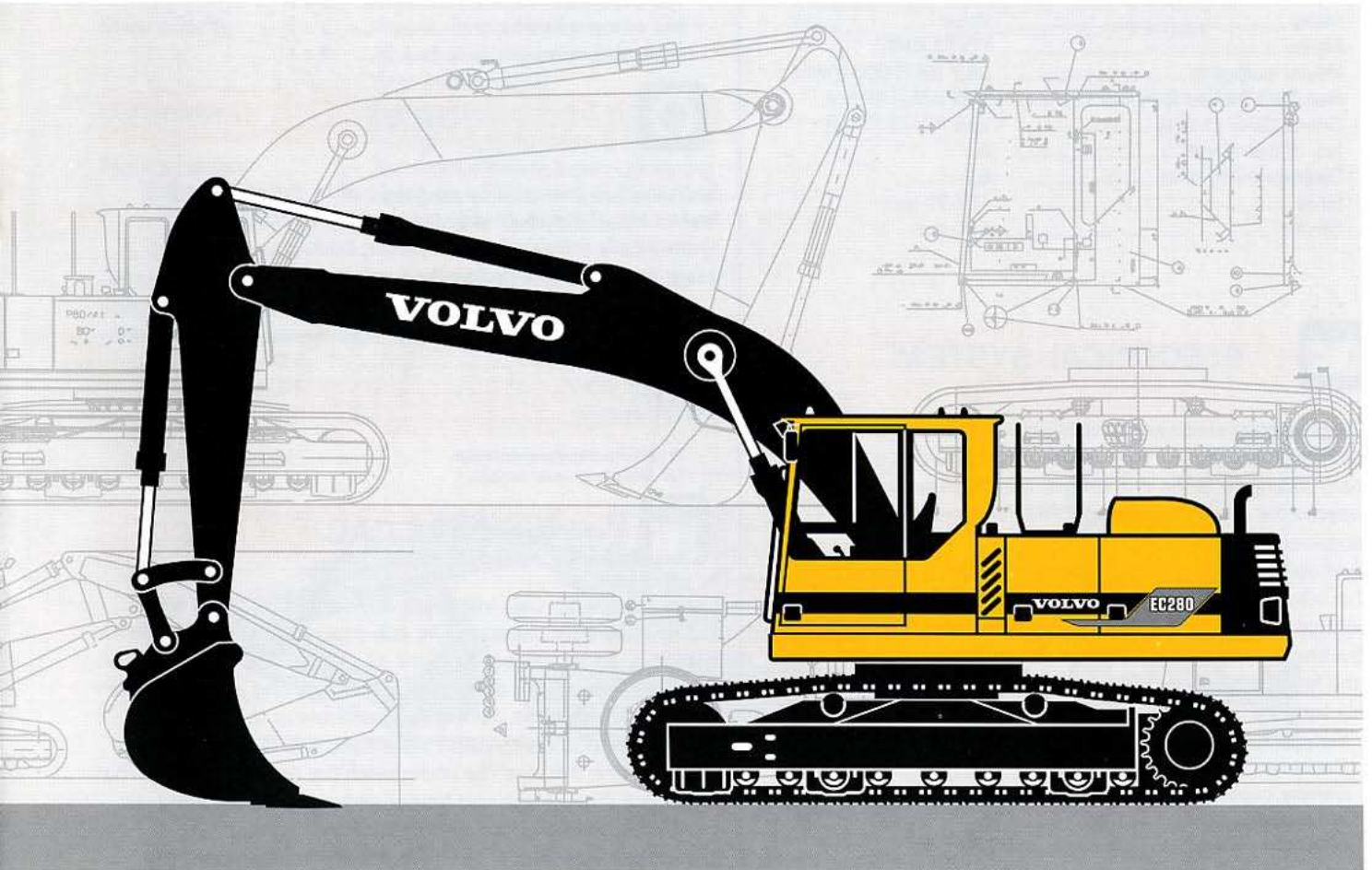


**VOLVO EXCAVATOR**

# EC280



- **Engine power, gross:**  
155 kW (211 hp)
- **Operating weight:**  
27,4– 30,2 t
- **Buckets:**  
900 – 2000 l
- Low-emission, turbocharged Volvo diesel engine with direct injection and intercooler
- Mode selector and electronically controlled Speed Sensing Control (SSC)
- 3 pumps in 3 circuits. Each movement of the digging equipment is prioritized by its own circuit, ensuring independent movements and good precision
- Care Cab
  - computerized monitoring system, Contronic E
  - ergonomic environment
  - low sound level
  - filtered air
- Rugged digging equipment with spherical steel bearings
- High lifting, breakout and tearout forces for tough digging conditions
- Long undercarriage for good stability
- Slew circuit in oil bath
- Prepared for a number of optional items of equipment
- Low transport dimensions
- High travel speed – 5,0 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. Daily checkup of oil and coolant levels etc. is done directly from the cab.

**Air filter:** 3-stage

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

Make .....	Volvo
Model .....	TD 73 KHE
Power output at .....	26,7 r/s (1600 r/min)
Net (ISO 9249 / DIN 6271) .....	145 kW (197 hp)
Gross (SAE J1349) .....	155 kW (211 hp)
No. of cylinders .....	6
Displacement, total .....	6,7 l
Bore .....	104,77 mm
Stroke .....	130 mm



## ELECTRICAL SYSTEM

Well-protected electrical system with high capacity. Electrical distribution box based on printed circuit boards contains clearly arranged fuses and relays. The distribution box is prepared for connection of optional equipment. Battery disconnecter is standard.

Advanced **Contronic E monitoring system**, offering exhaustive information on machine status and enabling the operator to seek specific information and make his own adjustments, is standard. Alarms are indicated on the display in the form of flashing lights, with supplementary information in plain text.

Voltage .....	24 V
Batteries .....	2 x 12 V
Battery capacity .....	140 Ah
Alternator .....	28 V / 55 A
Alternator rating .....	1 540 W



## SLEW SYSTEM

The superstructure is slewed by means of an axial piston motor and a planetary gearbox. Slew priority with 3 power positions. Automatic slew holding brake. The slew ring works in an oil bath.

Slew, start to stop*	
90° slew .....	5,5 s
180° slew .....	7,2 s
Slew speed .....	9,8 r/min

\* Empty bucket – extended equipment.



## SERVICE REFILL CAPACITIES

Fuel tank .....	550 l
Hydraulic system, total .....	405 l
Diesel engine oil .....	20 l
Cooling system incl. glycol .....	46 l
Slew ring .....	24 l



## UNDERCARRIAGE

Undercarriage with robust frame construction. Permanently lubricated rollers and front idlers. Three derailing shields are standard. The undercarriage is operated by means of rocker pedals.

**Undercarriage alternatives:** narrow/short or wide/long.

Track chain size .....	B6BS
No. of track shoes,	
narrow/short undercarriage .....	2 x 49
wide/long undercarriage .....	2 x 51
Track gauge .....	600 mm
alt. ....	500/700/800/900 mm
No. of bottom rollers .....	2 x 9
No. of top rollers .....	2 x 2
alt. skid rails .....	2 x 1



## DRIVE

Each track is powered by an axial piston motor. The track brakes are of the multi-disc type, spring-applied and hydraulically released. Travel motor, brakes and planetary gears are well protected in the track frame.

Max. tractive force .....	(1)	267 kN	(197)*
Max. tractive force .....	(2)	247 kN	(182)*
Max. travel speed .....		5,0 km/h	
Gradeability .....	(1)	46,3° (105 %)	
Gradeability .....	(2)	39,8° (83 %)	

(1) Narrow/short undercarriage.  
(2) Wide/long undercarriage.

\* Net tractive force



## CARE CAB

Easily accessible cab with wide door opening. Lined with sound-absorbent material. The cab mountings are vibration-inhibiting. Large glazed surfaces all around. The upper windshield pane can be slid up into the ceiling and the lower one can be removed. Sliding side window in the cab door.

**Cab 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.

**Ergonomic operator's seat:** Electrically heated operator's seat with lap belt, 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.

**Sound level:** Approved according to Directive 86/662/EEC.

Exterior noise (ISO 6395)	
mean value of $L_{wA}$ (sound power level)	107 dB(A)
Operator's position (ISO 6396)	
with the door closed	
mean value of $L_{pA}$ (sound pressure level)	74 dB(A)



## GROUND PRESSURE

Machine with narrow/short undercarriage and 5,8 m boom, 2,3 m dipper arm, 1 200 kg bucket and 5 200 kg counterweight.

Track gauge	Operating weight	Ground pressure
500 mm	27 400 / 28 200* kg	63,9 / 63,9* kPa
600 mm	27 800 / 28 600* kg	54,0 / 54,0* kPa
700 mm	28 200 / 29 000* kg	47,0 / 46,9* kPa
800 mm	28 600 / 29 400* kg	41,7 / 41,6* kPa
900 mm	29 000 / 29 800* kg	37,5 / 37,5* kPa

\* Machine with wide/long undercarriage.



## HYDRAULIC SYSTEM

The three-circuit hydraulic system, named "Excellence", is designed for high digging capacity, high manoeuvring precision and good fuel economy.

The three working pumps are power-controlled, and each can be directed to its own particular equipment movement for precision work. One pump is prioritized to the slew movement.

The following important functions are included in the system:

- Power Booster (HLD)** – All digging, lifting and tractive forces are increased
- Slew priority** – Power distribution between boom lift and slew movement to obtain best performance
- Decelerator** – Permits digging speed to be varied during a digging cycle (saves fuel)
- Float position** – For more efficient topsoil stripping and grab work and better operator comfort and fuel economy

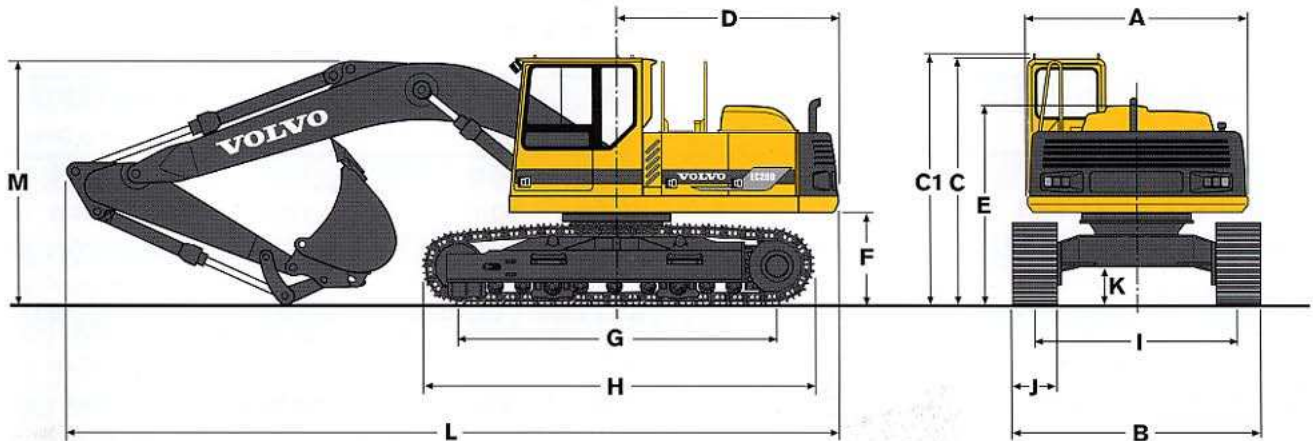
Automatic Decelerator and Speed Sensing Control are also included for optimum utilization of the engine. Hose rupture valves on the boom cylinders are standard.

Pump P1 (slew, bucket, optional equipment)  
 Max. pressure ..... 31 MPa  
 Max. flow ..... 174 l/min

Pumps P2 and P3 (boom, dipper arm, bucket, travel motors, optional equipment)  
 Max. pressure ..... 31 MPa  
 Max. pressure with HLD ..... 35 MPa  
 Max. flow ..... 2 x 204 l/min

Servo pump  
 Pressure ..... 6,5 MPa  
 Flow ..... 19 l/min

## DIMENSIONS



	Narrow/short	Wide/long		
A:	mm 2800	2800	M <sup>1)</sup> :	mm 3200/3130* (5,8 m boom, 2,3 m dipper arm)
B <sup>1)</sup> :	mm 2900 /3000/3100/3200		M <sup>1)</sup> :	mm 3210/3150* (5,8 m boom, 2,7 m dipper arm)
B <sup>2)</sup> :	mm 3100 /3200/3300/3400		M <sup>1)</sup> :	mm 3060/3060* (5,8 m boom, 3,2 m dipper arm)
C:	mm 3040	3100	M <sup>1)</sup> :	mm 3030 /3030* (5,8 m boom, 3,8 m dipper arm)
C1:	mm 3090	3150		
D:	mm 2790	2790	M <sup>1)</sup> :	mm 3210/3170* (6,4 m boom, 2,3 m dipper arm)
E:	mm 2370	2440	M <sup>1)</sup> :	mm 3230/3180* (6,4 m boom, 2,7 m dipper arm)
F:	mm 1095	1165	M <sup>1)</sup> :	mm 3150/3150* (6,4 m boom, 3,2 m dipper arm)
G:	mm 3900	4000	M <sup>1)</sup> :	mm 3170 /3170* (6,4 m boom, 3,8 m dipper arm)
H:	mm 4760	4930		
I:	mm 2400	2600	M <sup>2)</sup> :	mm 3230/3100* (5,8 m boom, 2,3 m dipper arm)
J:	mm 500 /600/700/800/900		M <sup>2)</sup> :	mm 3230/3150* (5,8 m boom, 2,7 m dipper arm)
K:	mm 487	470	M <sup>2)</sup> :	mm 3070/3070* (5,8 m boom, 3,2 m dipper arm)
			M <sup>2)</sup> :	mm 3020 /3020* (5,8 m boom, 3,8 m dipper arm)
L <sup>1)</sup> :	mm 9700 (5,8 m boom, 2,3/2,7/3,2/3,8 m dipper arm)			
L <sup>1)</sup> :	mm 10300 (6,4 m boom, 2,3/2,7/3,2/3,8 m dipper arm)		M <sup>2)</sup> :	mm 3240/3210* (6,4 m boom, 2,3 m dipper arm)
			M <sup>2)</sup> :	mm 3260/3220* (6,4 m boom, 2,7 m dipper arm)
L <sup>2)</sup> :	mm 9700 (5,8 m boom, 2,3/2,7/3,2/3,8 m dipper arm)		M <sup>2)</sup> :	mm 3200/3200* (6,4 m boom, 3,2 m dipper arm)
L <sup>2)</sup> :	mm 10300 (6,4 m boom, 2,3/2,7/3,2/3,8 m dipper arm)		M <sup>2)</sup> :	mm 3200 /3200* (6,4 m boom, 3,8 m dipper arm)

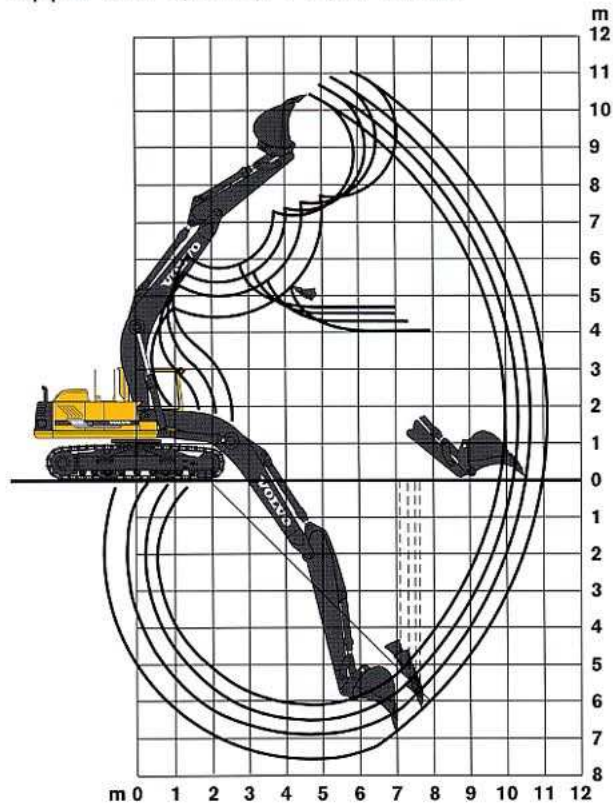
1) Narrow/short undercarriage

2) Wide/long undercarriage

\* Without bucket

## DIGGING RANGES

Monobloc boom 5,8 m and  
dipper arm 2,3 / 2,7 / 3,2 / 3,8 m



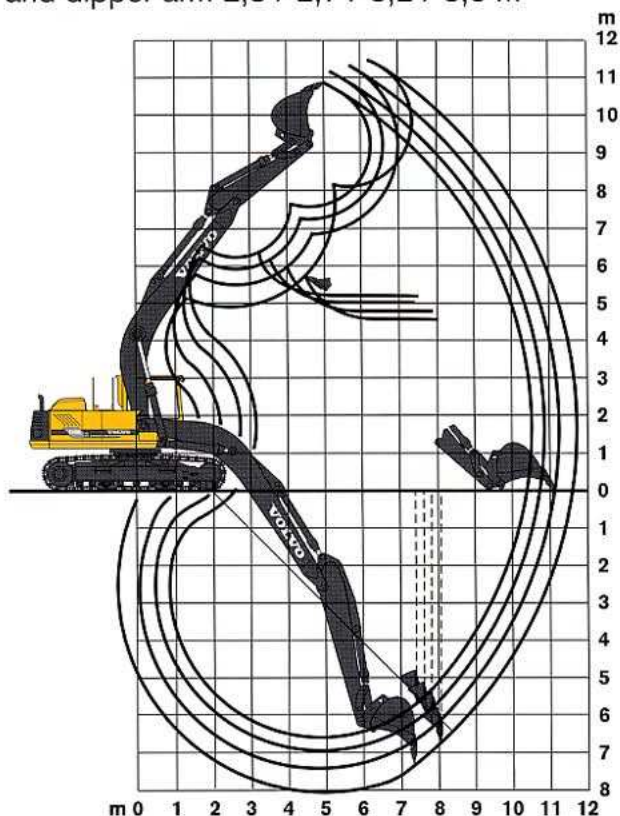
<b>Monobloc boom</b>	m	<b>5,8</b>	<b>5,8</b>	<b>5,8</b>	<b>5,8</b>
<b>Dipper arm</b>	m	<b>2,3</b>	<b>2,7</b>	<b>3,2</b>	<b>3,8</b>
Max. reach	m	9,9	10,2	10,6	11,1
Max. reach at ground level	m	9,8	10,1	10,5	11,0
Max. digging depth	m	6,0	6,5	7,0	7,5
Max. height ground – tooth tip	m	10,6	10,7	10,8	11,0
Max. dumping height	m	7,1	7,3	7,4	7,6
Max. practical dumping height	m	4,7	4,5	4,3	4,1
Practical digging depth for a material with a 45° angle of repose	m	5,1	5,3	5,6	5,9
Max. vertical digging depth	m	5,1	5,4	5,7	6,1
Min. front slew radius	m	3,1	3,0	3,0	2,9

<b>Digging forces with pin-on GP bucket:</b>					
Bucket radius	m	1,40	1,40	1,40	1,40
Breakout force	kN	181	181	181	181
Tearout force	kN	152	137	121	107
Rotation angle, bucket	°	175	175	175	175

Max. permitted <b>buckets</b> for quickfit / pin-on:		<b>Narrow</b> undercarriage			
		GP bucket 1,5 t/m <sup>3</sup>		1750 / 1840	1640 / 1730
GP bucket 1,8 t/m <sup>3</sup>		1540 / 1610	1440 / 1510	1330 / 1410	1190 / 1270
RB bucket 1,8 t/m <sup>3</sup>		1440 / 1510	1350 / 1420	1250 / 1320	1120 / 1190
RB bucket 2,0 t/m <sup>3</sup>		1340 / 1400	1260 / 1320	1160 / 1230	1040 / 1100
Max. permitted <b>buckets</b> for quickfit / pin-on:		<b>Wide</b> undercarriage			
		GP bucket 1,5 t/m <sup>3</sup>		1990 / 2070	1870 / 1950
GP bucket 1,8 t/m <sup>3</sup>		1740 / 1820	1640 / 1710	1520 / 1590	1360 / 1440
RB bucket 1,8 t/m <sup>3</sup>		1640 / 1710	1530 / 1600	1420 / 1490	1280 / 1350
RB bucket 2,0 t/m <sup>3</sup>		1520 / 1580	1420 / 1490	1320 / 1390	1180 / 1250

## DIGGING RANGES

Monobloc boom 6,4 m  
and dipper arm 2,3 / 2,7 / 3,2 / 3,8 m





Monobloc boom	m	6,4	6,4	6,4	6,4
Dipper arm	m	2,3	2,7	3,2	3,8
Max. reach	m	10,5	10,9	11,3	11,7
Max. reach at ground level	m	10,4	10,7	11,1	11,6
Max. digging depth	m	6,5	6,9	7,5	8,1
Max. height ground – tooth tip	m	11,0	11,2	11,2	11,4
Max. dumping height	m	7,6	7,8	7,9	8,1
Max. practical dumping height	m	5,1	5,0	4,8	4,5
Practical digging depth for a material with a 45° angle of repose	m	5,5	5,8	6,0	6,4
Max. vertical digging depth	m	5,6	6,0	6,3	6,7
Min. front slew radius	m	3,5	3,4	3,4	3,3

Digging forces with pin-on GP bucket:					
Bucket radius	m	1,40	1,40	1,40	1,40
Breakout force	kN	181	181	181	181
Tearout force	kN	152	137	121	107
Rotation angle, bucket	°	175	175	175	175

Max. permitted buckets for quickfit / pin-on:		Narrow undercarriage			
GP bucket 1,5 t/m <sup>3</sup>	l	1480 / 1570	1390 / 1480	1290 / 1370	1140 / 1230
GP bucket 1,8 t/m <sup>3</sup>	l	1300 / 1370	1220 / 1300	1130 / 1200	1000 / 1080
RB bucket 1,8 t/m <sup>3</sup>	l	1220 / 1290	1150 / 1220	1060 / 1130	940 / 1010
RB bucket 2,0 t/m <sup>3</sup>	l	1130 / 1200	1060 / 1130	980 / 1050	870 / 940
Max. permitted buckets for quickfit / pin-on:		Wide undercarriage			
GP bucket 1,5 t/m <sup>3</sup>	l	1700 / 1780	1600 / 1680	1480 / 1560	1320 / 1410
GP bucket 1,8 t/m <sup>3</sup>	l	1490 / 1560	1400 / 1480	1300 / 1370	1160 / 1240
RB bucket 1,8 t/m <sup>3</sup>	l	1400 / 1470	1320 / 1390	1220 / 1290	1090 / 1160
RB bucket 2,0 t/m <sup>3</sup>	l	1300 / 1360	1220 / 1290	1130 / 1190	1010 / 1080

## LIFTING CAPACITY (In dipper pin without bucket. Unit: 1000 kg.)



 Across undercarriage  Along undercarriage	Lifting hook related to ground level	Reach from machine centre																				
		1) = Narrow/short undercarriage 2) = Wide/long undercarriage																				
		3,0 m				4,5 m				6,0 m				7,5 m				Max. reach				
1)		2)		1)		2)		1)		2)		1)		2)		1)		2)		Max. m		
5,8 m mono-bloc boom 2,3 m dipper arm Track gauge 600 mm	6,0 m					9,4*	9,4*	9,4*	9,4*	6,5	7,2	8,5*	8,5*					5,2	5,8	6,9*	6,9*	6,9
	4,5 m					9,4	10,6	10,8*	10,8*	6,2	6,9	8,9*	8,9*	4,4	4,9	7,4	7,9	4,2	4,7	5,9*	5,9*	7,7
	3,0 m					8,6	9,7	12,9*	12,9*	5,8	6,5	9,7*	9,7*	4,3	4,8	7,2	7,7	3,8	4,3	5,8*	5,8*	8,1
	1,5 m					8,1	9,2	14,3*	14,3*	5,5	6,2	9,6	10,3	4,1	4,6	7,0	7,5	3,6	4,1	5,9*	5,9*	8,2
	0,0 m					7,9	9,0	14,2*	14,2*	5,3	6,0	9,4	10,1	4,0	4,5	6,9	7,4	3,7	4,2	6,3	6,7*	8,0
	-1,5 m	9,6*	9,6*	9,6*	9,6*	7,8	8,9	13,0*	13,0*	5,3	6,0	9,3	9,9*	4,0	4,5	6,9	7,4*	4,0	4,5	6,9	7,4*	7,5
	-3,0 m	13,4*	13,4*	13,4*	13,4*	7,9	9,0	10,8*	10,8*	5,4	6,1	8,2*	8,2*					4,8	5,4	6,9*	6,9*	6,6
5,8 m mono-bloc boom 2,7 m dipper arm Track gauge 600 mm	7,5 m									6,6	6,7*	6,7*	6,7*					6,1*	6,1*	6,1*	6,1*	6,1
	6,0 m									6,6	7,3	8,0*	8,0*					4,7	5,3	5,3*	5,3*	7,3
	4,5 m	13,8*	13,8*	13,8*	13,8*	9,6	10,2*	10,2*	10,2*	6,3	7,0	8,5*	8,5*	4,4	5,0	7,4	7,7*	4,0	4,5	5,2*	5,2*	8,0
	3,0 m					8,8	9,9	12,3*	12,3*	5,9	6,6	9,4*	9,4*	4,3	4,8	7,2	7,7	3,6	4,0	5,1*	5,1*	8,4
	1,5 m					8,2	9,3	14,0*	14,0*	5,5	6,3	9,7	10,2*	4,1	4,6	7,0	7,5	3,4	3,9	5,3*	5,3*	8,5
	0,0 m					7,8	9,0	14,3*	14,3*	5,3	6,0	9,4	10,1	4,0	4,5	6,8	7,3	3,5	3,9	6,0	6,1*	8,3
	-1,5 m	10,6*	10,6*	10,6*	10,6*	7,8	8,9	13,5*	13,5*	5,2	5,9	9,3	10,0	3,9	4,4	6,8	7,3	3,8	4,2	6,5	6,9	7,8
-3,0 m	15,0*	15,0*	15,0*	15,0*	7,8	8,9	11,6*	11,6*	5,3	6,0	8,8*	8,8*					4,4	4,9	6,9*	6,9*	7,0	
-4,5 m					8,1	8,1*	8,1*	8,1*										5,8*	5,8*	5,8*	5,8*	5,7
5,8 m mono-bloc boom 3,2 m dipper arm Track gauge 600 mm	7,5 m									6,4*	6,4*	6,4*	6,4*					4,2*	4,2*	4,2*	4,2*	6,7
	6,0 m									6,6	7,3*	7,3*	7,3*	4,6	5,1	5,2*	5,2*	4,4*	4,4*	4,4*	4,4*	7,7
	4,5 m					9,3*	9,3*	9,3*	9,3*	6,4	7,1	8,0*	8,0*	4,5	5,0	7,2*	7,2*	3,7	4,1	4,2*	4,2*	8,4
	3,0 m					9,1	10,2	11,5*	11,5*	6,0	6,7	9,0*	9,0*	4,3	4,8	7,2	7,6*	3,3	3,7	4,0*	4,0*	8,8
	1,5 m					8,3	9,4	13,5*	13,5*	5,6	6,3	9,8	9,9*	4,1	4,6	7,0	7,5	3,2	3,6	4,1*	4,1*	8,9
	0,0 m	6,7*	6,7*	6,7*	6,7*	7,9	9,0	14,3*	14,3*	5,3	6,0	9,5	10,2	3,9	4,5	6,8	7,3	3,2	3,6	4,8*	4,8*	8,7
	-1,5 m	11,3*	11,3*	11,3*	11,3*	7,7	8,8	13,8*	13,8*	5,2	5,9	9,3	10,0	3,9	4,4	6,7	7,2	3,4	3,9	6,0	6,2*	8,2
-3,0 m	14,9	16,8*	16,8*	16,8*	7,7	8,9	12,3*	12,3*	5,2	5,9	9,3	9,3*	3,9	4,4	6,7*	6,7*	3,9	4,4	6,7*	6,7*	7,5	
-4,5 m	12,4*	12,4*	12,4*	12,4*	7,9	9,1	9,5*	9,5*	5,4	6,1	6,8*	6,8*					5,2	5,8	6,4*	6,4*	6,2	
5,8 m mono-bloc boom 3,8 m dipper arm Track gauge 600 mm	6,0 m									6,2*	6,2*	6,2*	6,2*	4,7	5,2	5,2*	5,3*	3,2*	3,3*	3,2*	3,3*	8,3
	4,5 m									6,5	7,2*	7,2*	7,2*	4,5	5,1	6,4*	6,4*	3,3*	3,4*	3,3*	3,4*	8,9
	3,0 m	15,2*	15,5*	15,2*	15,5*	9,4	10,4*	10,3*	10,4*	6,1	6,8	8,3*	8,3*	4,3	4,9	7,1*	7,2*	3,0	3,2*	3,1*	3,2*	9,3
	1,5 m	9,3*	9,0*	9,3*	9,0*	8,6	9,7	12,6*	12,7*	5,7	6,4	9,4*	9,4*	4,1	4,6	7,1	7,5	2,9	3,3	3,8*	3,8*	9,3
	0,0 m	8,4*	8,5*	8,4*	8,5*	8,0	9,1	13,9*	14,0*	5,4	6,1	9,5	10,2*	3,9	4,4	6,8	7,3	2,9	3,3	3,9*	3,8*	9,2
	-1,5 m	11,2*	11,3*	11,2*	11,3*	7,7	8,8	14,0*	14,0*	5,2	5,9	9,3	10,0	3,8	4,3	6,7	7,2	3,1	3,5	4,3*	4,2*	8,8
	-3,0 m	14,7	15,8*	15,6*	15,8*	7,7	8,8	13,0*	12,9*	5,1	5,8	9,2	9,7*	3,8	4,3	6,7	7,2	3,4	4,0	5,2*	5,8*	8,1
-4,5 m	14,7*	14,5*	14,7*	14,5*	7,8	8,9	10,8	10,6*	5,2	5,9	8,0*	7,9*					4,3	4,9	6,4*	6,3*	6,9	

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

The above values have been calculated in compliance with ISO standard 10567. 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 = 35 MPa (350 bar/5080 psi)

## LIFTING CAPACITY (In dipper pin without bucket. Unit: 1000 kg.)

 Across undercarriage  Along undercarriage	Lifting hook related to ground level	Reach from machine centre																1) = Narrow/short undercarriage 2) = Wide/long undercarriage				
		3,0 m				4,5 m				6,0 m				7,5 m				Max. reach				
		1)	2)	1)	2)	1)	2)	1)	2)	1)	2)	1)	2)	1)	2)	1)	2)	1)	2)	1)	2)	Max. m
6,4 m mono-bloc boom 2,3 m dipper arm Track gauge 600 mm	7,5 m									6,6	7,3	7,8*	7,8*					5,7	6,4	7,7*	7,7*	6,5
	6,0 m					9,0*	9,0*	9,0*	9,0*	6,4	7,1	7,8*	7,8*	4,4	5,0	7,3*	7,3*	4,3	4,8	7,1*	7,1*	7,6
	4,5 m					9,0	10,1	10,8*	10,8*	6,0	6,7	8,5*	8,5*	4,3	4,8	7,2	7,4*	3,6	4,1	6,2	6,6	8,3
	3,0 m									5,5	6,2	9,4*	9,4*	4,1	4,6	7,0	7,5	3,3	3,7	5,6	6,0	8,7
	1,5 m									5,2	5,9	9,3	10,0	3,9	4,4	6,7	7,2	3,1	3,5	5,4	5,8	8,8
	0,0 m									5,0	5,7	9,1	9,7	3,8	4,3	6,6	7,1	3,2	3,6	5,5	5,9	8,6
	-1,5 m					7,4	8,6	12,5*	12,5*	4,9	5,6	9,0	9,7	3,7	4,2	6,6	7,0	3,4	3,8	5,9	6,3	8,2
	-3,0 m	12,6*	12,6*	12,6*	12,6*	7,5	8,6	10,8*	10,8*	5,0	5,7	8,6*	8,6*					3,9	4,4	6,3*	6,3*	7,4
-4,5 m					7,8	8,0*	8,0*	8,0*	5,3	5,8*	5,8*	5,8*					5,2	5,5*	5,5*	5,5*	6,1	
6,4 m mono-bloc boom 2,7 m dipper arm Track gauge 600 mm	7,5 m									6,7	7,2*	7,2*	7,2*					5,1	5,5*	5,5*	5,5*	7,0
	6,0 m									6,4	7,2	7,4*	7,4*	4,5	5,0	6,9*	6,9*	4,0	4,5	5,4*	5,4*	8,0
	4,5 m					9,2	10,1*	10,1*	10,1*	6,1	6,8	8,1*	8,1*	4,3	4,8	7,1*	7,1*	3,4	3,8	4,8*	4,8*	8,7
	3,0 m					8,3	9,4	12,4*	12,4*	5,6	6,3	9,1*	9,1*	4,1	4,6	7,0	7,5	3,1	3,5	5,3	5,4*	9,0
	1,5 m					7,6	8,7	10,1*	10,1*	5,2	5,9	9,3	9,9*	3,9	4,4	6,8	7,2	3,0	3,3	5,1	5,5	9,1
	0,0 m					7,4	8,5	11,4*	11,4*	5,0	5,7	9,1	9,8	3,7	4,2	6,6	7,1	3,0	3,4	5,2	5,6	8,9
	-1,5 m					7,4	8,5	13,0*	13,0*	4,9	5,6	9,0	9,7	3,7	4,2	6,5	7,0	3,2	3,6	5,5	5,9	8,5
	-3,0 m	13,8*	13,8*	13,8*	13,8*	7,4	8,5	11,4*	11,4*	4,9	5,6	8,9*	8,9*	3,7	4,2	6,6	6,8*	3,6	4,1	6,2*	6,2*	7,8
-4,5 m					7,6	8,7	8,9*	8,9*	5,1	5,8	6,8*	6,8*					4,6	5,2	5,7*	5,7*	6,6	
6,4 m mono-bloc boom 3,2 m dipper arm Track gauge 600 mm	9,0 m									4,8*	4,8*	4,8*	4,8*					4,8*	4,8*	4,8*	4,8*	6,0
	7,5 m									6,6*	6,6*	6,6*	6,6*	4,3*	4,3*	4,3*	4,3*	4,3	4,3*	4,3*	4,3*	7,5
	6,0 m									6,5	6,8*	6,8*	6,8*	4,5	5,1	6,4*	6,4*	3,7	4,1	4,4*	4,4*	8,4
	4,5 m					9,3*	9,3*	9,3*	9,3*	6,2	6,9	7,6*	7,6*	4,4	4,9	6,7*	6,7*	3,1	3,5	3,9*	3,9*	9,1
	3,0 m					8,5	9,7	11,6*	11,6*	5,7	6,4	8,7*	8,7*	4,1	4,6	7,0	7,2*	2,9	3,3	4,2*	4,2*	9,4
	1,5 m					7,7	8,9	13,4*	13,4*	5,3	6,0	9,4	9,6*	3,9	4,4	6,8	7,3	2,7	3,1	4,4*	4,4*	9,5
	0,0 m					7,4	8,5	13,9*	13,9*	5,0	5,7	9,1	9,8	3,7	4,2	6,6	7,1	2,8	3,1	4,9	5,2*	9,3
	-1,5 m	7,8*	7,8*	7,8*	7,8*	7,3	8,4	13,3*	13,3*	4,9	5,6	8,9	9,6	3,6	4,1	6,5	6,9	2,9	3,3	5,1	5,5	8,9
-3,0 m	13,2*	13,2*	13,2*	13,2*	7,3	8,4	12,1*	12,1*	4,8	5,5	8,9	9,3*	3,6	4,1	6,5	7,0	3,2	3,7	5,8	6,2	8,2	
-4,5 m	12,7*	12,7*	12,7*	12,7*	7,5	8,6	9,9*	9,9*	5,0	5,7	7,6*	7,6*					4,0	4,6	5,9*	5,9*	7,1	
6,4 m mono-bloc boom 3,8 m dipper arm Track gauge 600 mm	7,5 m													4,7	4,9*	4,8*	4,9*	3,3*	3,5*	3,3*	3,5*	8,1
	6,0 m													4,6	5,2	5,8*	5,8*	3,2*	3,3*	3,2*	3,3*	9,0
	4,5 m									6,4	7,0*	6,9*	7,0*	4,4	5,0	6,2*	6,2*	2,8	3,2*	3,1*	3,2*	9,6
	3,0 m					9,0	10,1	10,5*	10,6*	5,9	6,6	8,0*	8,1*	4,2	4,7	6,8*	6,8*	2,6	3,0	3,3*	3,4*	9,9
	1,5 m					8,0	9,1	12,6*	12,6*	5,4	6,1	9,1*	9,2*	3,9	4,4	6,8	7,3	2,5	2,8	3,4*	3,4*	10,0
	0,0 m	5,0*	5,1*	5,0*	5,1*	7,4	8,6	13,6*	13,6*	5,0	5,7	9,2	9,8*	3,7	4,2	6,6	7,1	2,5	2,9	4,1*	4,0*	9,8
	-1,5 m	8,1*	8,3*	8,1*	8,3*	7,2	8,3	13,5*	13,5*	4,8	5,5	8,9	9,6	3,6	4,1	6,4	6,9	2,6	3,0	4,7	4,6*	9,4
	-3,0 m	12,0*	12,2*	12,0*	12,2*	7,2	8,3	13,0*	12,5*	4,8	5,5	8,9	9,5*	3,5	4,0	6,4	6,9	2,9	3,3	5,1*	5,6	8,8
-4,5 m	14,3	14,5*	14,6*	14,5*	7,3	8,5	10,9*	10,7*	4,8	5,6	8,3*	8,2*	3,6	4,1	6,2*	6,1	3,4	4,0	5,8*	5,8	7,8	

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

The above values have been calculated in compliance with ISO standard 10567.  
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 = 35 MPa (350 bar/5080 psi)

## STANDARD EQUIPMENT

### Engine and electrical system

Contronic E – computerized monitoring and alarm system  
 Battery disconnecter and main fuel cock  
 Decelerator – electronic idling speed  
 Automatic idling speed  
 Electronically controlled pump regulation (SSC)  
 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 with 2 batteries  
 Well-protected electrical system based on printed circuit board  
 Water separating fuel filter

### Undercarriage

Slew ring in oil bath  
 Hydraulic track tensioner  
 Derailing shields, 3 per side  
 Eyes for towing and tying, 4 pcs

### Superstructure

Counterweight 5200 kg  
 Access way with ladder

### Safety and comfort

Safety bar to prevent accidental actuation via levers and pedals  
 Hose rupture valve on boom cylinder  
 Overload alarm  
 Working lights(halogen):  
 4 front, 1 rear  
 Interior lighting in cab and engine compartment  
 Rear-view mirrors: 1 interior, 3 exterior  
 Cab heating and filtered air intake  
 Ergonomic, electrically heated operator's seat with seat belt  
 Skylight of special plastic  
 Sliding side window in cab door  
 Emergency exit through rear window  
 Tinted window glass (clear front)  
 Interior sun visor  
 Upper and lower windscreen wipers with intermittent function  
 Windscreen washer

Electric horn  
 Silencer with spark arrester  
 Oil draining cock on the engine  
 Selectable slew holding brake automatics

### Hydraulic system

Float position on boom  
 3 variable axial piston pumps  
 Mode Selector  
 Power Boost (HLD)  
 Wrist type control levers with four switches each  
 Hydraulic cylinders with internal end dampening  
 Slew priority  
 Two speed travel motors with brake valves and brakes of multi-disc type  
 Return filter of full flow type 13 µm (abs), 2000 h exchange interval  
 Servo accumulator  
 Hydraulically driven, thermostatically controlled cooling fan for the hydraulic oil cooler

### Digging equipment

Spherical steel link bearings in all large pivot points  
 Safety lifting hook – 10 tons  
 Friction-welded piston rod eyes  
 Attachment points for extra hydraulics

## ALTERNATIVE EQUIPMENT

### Undercarriage

Narrow/short  
 Wide/long  
 Top rollers  
 Skid rails

### Track shoes

500/600/700/800/900 mm  
 track shoes with triple grousers and mud holes

### Digging equipment

**Booms**  
 5,8 m monobloc  
 6,4 m monobloc

### Dipper arms

2,3 m  
 2,7 m  
 3,2 m  
 3,8 m

### Buckets

Pin-on buckets and buckets for quickfit S2

General Purpose bucket (GP)	Rock bucket (RB)
1600 l	1400 l
1500 l	1300 l
1400 l	1200 l
1300 l	1100 l
1200 l	1000 l
1100 l	900 l
1000 l	

### Hydraulic quickfit S2

## OPTIONAL EQUIPMENT *(Standard on certain markets)*

### Engine and electrical system

Diesel-powered cab and engine heater with digital timer  
 Electric engine heater, 220 V  
 Protective net in front of the cooler  
 Alternator 80 A  
 Oil bath filter for improved filtering of the intake air  
 Coolant filter

### Undercarriage

Lockable storage box

### Safety and comfort

Protective net for windscreen  
 Protective bars for skylight (FOPS 3449-approved)

Protective cab roof (FOGS ISO 10262-approved)  
 Fire extinguisher  
 Rotating warning beacon  
 Extra headlights on boom  
 Hydraulically powered fuelling pump, 60 l/min with overfilling protection  
 Extra circulation pump for heating system – interval heating  
 Extra hose rupture valves – dipper arm cylinder  
 Exterior sun visor  
 Rear window jalousie  
 Air conditioning  
 Microfilter for cab  
 Food heater  
 Radio with tape player  
 Tool kit  
 Service walk  
 Travel alarm/Slewing alarm

### Hydraulic system

Biodegradable hydraulic oil  
 Hydraulic equipment for:  
 A. Slope bucket/rotator  
 B. Hammer/shears/grab/clam shell  
 C. Quickfit  
 D. Hand tool  
 E. Generator for lifting magnet (4th working pump)

*Under our policy of continuous product improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.*

# VOLVO

**Volvo Construction  
 Equipment Group**

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