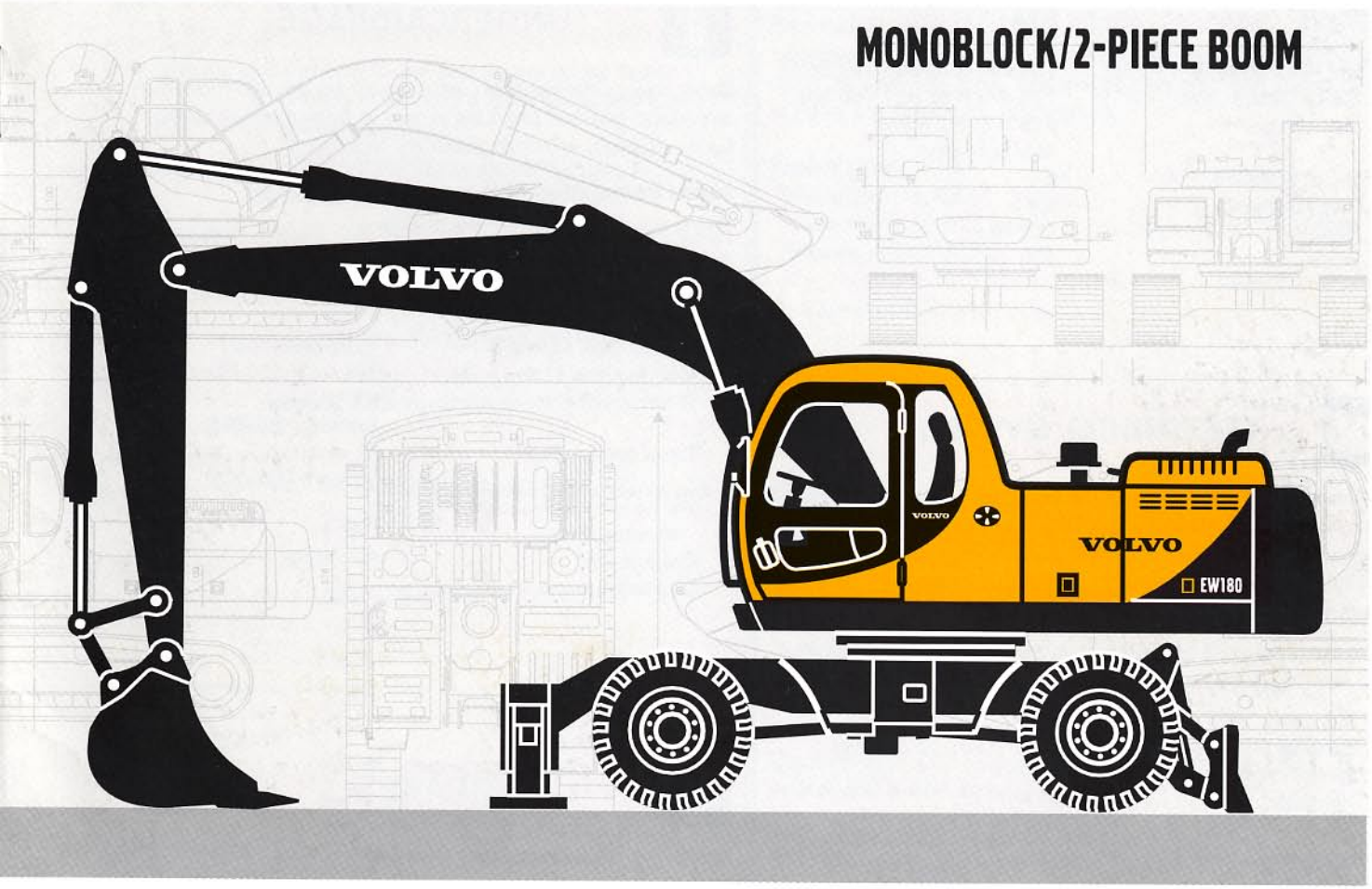
VOLVO EXCAVATOR

EW180

MONOBLOCK/2-PIECE BOOM



- **Engine power, gross: 119 kW (160 hp)**
- **Operating weight: 16,0 ~ 19,0 t**
- **Buckets (SAE) 760 ~ 940 l**

- Low-emission, turbocharged and aftercooled Cummins diesel engine with direct injection
- Integrated mode selection system and electronically controlled system (ACS)
- 2 variable displacement axial piston pumps. Independent and simultaneous movements of the digging equipment are controlled by the "Automatic sensing work mode".
- Cab
  - Computerized control and warning system
  - Ergonomic environment
  - Low sound level
  - Filtered air
  - Hydraulic dampening mounts
- The hydraulic dual brake system, with the negative actuation of the parking brake, onsures safety
- 2-piece boom available as optional equipment
- Prepared for a number of optional items

VOLVO

ENGINE

The engine is a low-emission, turbocharged, 4-stroke diesel engine with water cooling, direct injection and aftercooler, especially developed for excavator use.
The machine can work at any job site, contributing to good fuel economy, low sound level, less wear and a longer life.

Air Filter: 3-stage, includes pre-cleaner

Automatic Idling System: Reduces the engine speed to an idling speed when levers are not activated.

Make	CUMMINS
Model	B5.9-C
Power output at	32 r/s (1 900 rpm)
Net (ISO 9249/DIN 6271)	107 kW (145 ps / 143 hp)
Gross (SAE J1349)	119 kW (162 ps / 160 hp)
Max. torque	618 N·m (63 kg·m) at 1 500 rpm
No. of cylinders	6
Displacement	5,9 l
Bore	102 mm
Stroke	120 mm

ELECTRICAL SYSTEM

Well-protected electrical system with high capacity. Double lock harness plugs are waterproof to ensure secure connections and prevent corrosion. The relays and solenoid valves are shielded to prevent accidental damage or terminal contect. A master switch, is standard.

ACS system, providing integrated mode selection functions and self-diagnostic mode, is standard.

Voltage	24 V
Batteries	2 x 12 V
Battery capacity	150 Ah
Alternator	24 V / 50 A

SERVICE REFILL CAPACITIES

Fuel tank	295 l
Hydraulic system, total	340 l
Hydraulic tank	200 l
Engine oil	24 l
Engine coolant	26,5 l
Slew reduction unit	6,0 l
Transmission	3,8 l
Axle (Differential)	17 l
Axle (Hub)	3 l

SLEW SYSTEM

The superstructure is slewed by the means of an axial piston motor and a planetary reduction unit. Automatic slew holding brake and anti-rebound valve are standard.

Max. slew speed	12,3 rpm

UNDERCARRIAGE

Drive train: One variable piston motor on the mid-mounted two-stage gearbox provides power to front and rear axles, both equipped with hub planetary reductions.

Lower frame: All-welded torsion box frame.

Tires: Single or double tires available.

Axle: Full floating with planetary gears

Steering: Hydraulic actuated, open center, non reaction type

Double tires, standard	10,00-20PR14
Max tractive effort	104,5 kN (10,7 ton)
Travel speed, 1st	8,6 km/h 5,6 km/h (StVZO)
Travel speed, 2nd	32 km/h 20 km/h (StVZO)
Min. turning radius, center of outer wheel	7,05 m
Gradeability	33° (63 %)
Oscillating angle, front axle	± 8°

BRAKES

Brake system corresponds ISO 3450

Service brakes consist of a dual circuit hydraulic system with multi wet discs

Parking brake of multi disc type, with negative actuation, is activated in the transmission by hydraulic control.

Auxiliary brake: Either the front brake or rear brake system can be used in the event of a failure in either of the service brake systems.

Working brake: The service brake is activated as the working brake by locking the latch type foot pedal.

HYDRAULIC SYSTEM

The hydraulic system, named "Automatic Sensing Work Mode", is designed for high productivity, high digging capacity, high maneuvering precision and good fuel economy. The summation system, boom, arm and slew priority along with boom and arm regeneration are provided for optimum performance.

The following important functions are included in the system:

Summation system: combining the flow of both hydraulic pumps to ensure quick cycle times and high productivity.

Boom priority: gives priority to the boom operation for faster raising when loading or deep excavation.

Arm priority: gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging.

Slew priority: supplies priority to the slew operation for faster slew simultaneous operations.

Regeneration system: prevents cavitation and provides flow to other movements during simultaneous operations for maximum productivity.

Power boost: All digging and lifting forces are increased.

Holding valves: Boom and arm holding valves prevent the digging equipment from creeping.

Main pump

Type ..... 2 x variable displacement axial piston pumps
Maximum flow ... 2 x 200 l/min

Pilot pump

Type ..... Gear pump
Maximum flow ... 18 l/min
Steering pump ... Gear pump
Brake pump ..... Gear pump

Hydraulic motors

Travel ..... Variable displacement axial piston motor
Slew ..... Fixed displacement axial piston motor with mechanical brake

Relief valve setting

Attachment ..... 31,4 / 34,3 Mpa (320/350 kg/cm²)
Travel circuit ..... 31,4 Mpa (320 kg/cm²)
Steering circuit ... 14,7 Mpa (150 kg/cm²)
Slew circuit ..... 26,5 Mpa (270 kg/cm²)
Pilot circuit ..... 3,9 Mpa (40 kg/cm²)

Hydraulic cylinders

Monoblock boom 2
bore x stroke ..... ø115 x 1 165 mm
1st boom of 2-piece boom 2
bore x stroke ..... ø120 x 920 mm
2nd boom of 2-piece boom 1
bore x stroke ..... ø160 x 810 mm
Arm 1
bore x stroke ..... ø120 x 1 495 mm
Bucket 1
bore x stroke ..... ø115 x 990 mm
Dozer blade, front or rear 2
bore x stroke ..... ø120 x 245 mm
Outriggers, front or rear 2
bore x stroke ..... ø130 x 380 mm

CAB

The operator cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels, these along with a sound absorbing lining provide low noise levels. The cab has exellent all-round visibility. The front windshield can slide up into the ceiling and the lower front glass can be removed.

Integrated air-conditioning and heating system:
The pressurized and filtered cab air is supplied by a 4-speed fan. The air is distributed via 8 vents.

Ergonomic operator's seat: The adjustable seat and control consoles move independently to accommodate the operator well. The seat has eight different adjustments and a seat belt to meet any operator's requirement.

Sound Level:

Sound level in cab
according to ISO 6396 ..... LpA 77 dB(A)
External sound level
according to ISO 6395 ..... LwA 102 dB(A)
(Directive 2000/14/EC)

WEIGHT AND AXLE LOADS

Machine with 5,2 m monoblock boom, 2,6 m arm, 780 l bucket and 2 900 kg counterweight.

Machine weight
incl. outriggers and dozer blade ..... 17 690 kg

Machine with 4,97 m 2-piece boom, 2,3 m arm, 780 l bucket and 2 900 kg counterweight.

Machine weight
incl. outriggers and dozer blade ..... 18 500 kg

Machine with 4,97 m 2-piece boom, 2,6 m arm, Quick fit and 2 900 kg counterweight.

Machine weight
incl. outriggers and dozer blade ..... 19 000 kg

BUCKET & ARM COMBINATION

Note: 1. Bucket size based on SAE-J296, heaped material with a 1:1 angle of repose
2. Front designated as end with steer axle.
3. "Max. permitted sizes" are for guidance only, not available from factory.

• Max. permitted sizes **for direct fit buckets** with 2 900 kg counterweight

Support condition		Description	Unit	5,2 m monoblock boom		4,97 m 2-piece boom	
Front	Rear			2,6 m arm	3,1 m arm	2,3 m arm	2,6 m arm
		GP bucket 1,5 t/m³	l	1 450	1 325	1 625	1 525
		GP bucket 1,8 t/m³	l	1 250	1 150	1 425	1 325
		GP bucket 2,0 t/m³	l	1 150	1 075	1 300	1 225
		GP bucket 1,5 t/m³	l	1 650	1 500	1 825	1 725
		GP bucket 1,8 t/m³	l	1 425	1 325	1 600	1 525
		GP bucket 2,0 t/m³	l	1 325	1 200	1 475	1 400
		GP bucket 1,5 t/m³	l	1 075	1 000	1 225	1 150
		GP bucket 1,8 t/m³	l	950	875	1 075	1 000
		GP bucket 2,0 t/m³	l	875	800	1 000	925
		GP bucket 1,5 t/m³	l	1 450	1 325	–	–
		GP bucket 1,8 t/m³	l	1 250	1 150	–	–
		GP bucket 2,0 t/m³	l	1 175	1 075	–	–
		GP bucket 1,5 t/m³	l	1 250	1 125	1 400	1 325
		GP bucket 1,8 t/m³	l	1 075	1 000	1 225	1 150
		GP bucket 2,0 t/m³	l	1 000	925	1 125	1 075

• Max. permitted sizes **for quick fit buckets** with 2 900 kg counterweight

Support condition		Description	Unit	5,2 m monoblock boom		4,97 m 2-piece boom	
Front	Rear			2,6 m arm	3,1 m arm	2,3 m arm	2,6 m arm
		GP bucket 1,5 t/m³	l	1 375	1 250	1 550	1 475
		GP bucket 1,8 t/m³	l	1 200	1 100	1 350	1 275
		GP bucket 2,0 t/m³	l	1 125	1 025	1 250	1 175
		GP bucket 1,5 t/m³	l	1 575	1 450	1 775	1 675
		GP bucket 1,8 t/m³	l	1 375	1 250	1 550	1 450
		GP bucket 2,0 t/m³	l	1 275	1 175	1 425	1 350
		GP bucket 1,5 t/m³	l	1 025	925	1 175	1 100
		GP bucket 1,8 t/m³	l	900	825	1 025	950
		GP bucket 2,0 t/m³	l	825	750	950	875
		GP bucket 1,5 t/m³	l	1 375	1 275	–	–
		GP bucket 1,8 t/m³	l	1 200	1 100	–	–
		GP bucket 2,0 t/m³	l	1 125	1 025	–	–
		GP bucket 1,5 t/m³	l	1 175	1 075	1 350	1 250
		GP bucket 1,8 t/m³	l	1 025	950	1 175	1 100
		GP bucket 2,0 t/m³	l	950	875	1 075	1 025

BUCKET & ARM COMBINATION

• **Volvo K bucket** (straight side) and 5,2 m monoblock boom

Bucket		Narrow bucket	Standard bucket	Reinforced bucket	Wide bucket
Bucket capacity (SAE / CECE)		580 / 500 l	760 / 650 l	760 / 650 l	940 / 800 l
Bucket width (with/without side cutter)		905 / 795 mm	1 000 / 990 mm	1 100 / 990 mm	1 300 / 1 190 mm
Weight (with side cutter)		482 kg	545 kg	610 kg	605 kg
No. of teeth		4	5	5	5
Arm: 2,6 m (3,1 m)		◎(◎)	◎(◎)	◎(◎)	◎(◎)
		◎(◎)	◎(◎)	◎(◎)	◎(◎)
		◎(◎)	◎(○)	◎(○)	□(□)
		◎(◎)	◎(◎)	◎(◎)	◎(◎)
		◎(◎)	◎(◎)	◎(◎)	○(□)

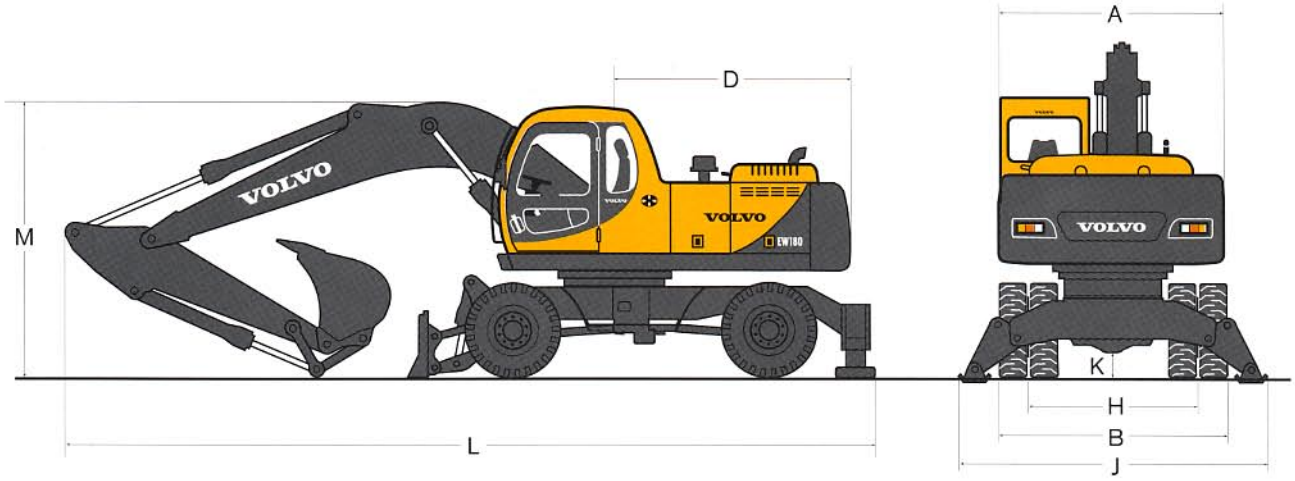
• **Volvo GP bucket** (curved side) and 5,2 m monoblock boom

Bucket		Direct fit - GP bucket			Quick fit - GP bucket	
Bucket capacity (SAE / CECE)		550 / 500 l	780 / 710 l	920 / 830 l	630 / 570 l	780 / 710 l
Cutting width		770 mm	1 000 mm	1 140 mm	850 mm	1 000 mm
Weight		465 kg	567 kg	618 kg	480 kg	545 kg
No. of teeth		4	5	5	4	5
Arm: 2,6 m (3,1 m)		◎(◎)	◎(◎)	◎(○)	◎(◎)	◎(◎)
		◎(◎)	◎(◎)	◎(◎)	◎(◎)	◎(◎)
		◎(◎)	○(□)	□(△)	◎(◎)	□(□)
		◎(◎)	◎(◎)	◎(◎)	◎(◎)	◎(◎)
		◎(◎)	◎(○)	○(□)	◎(◎)	◎(○)

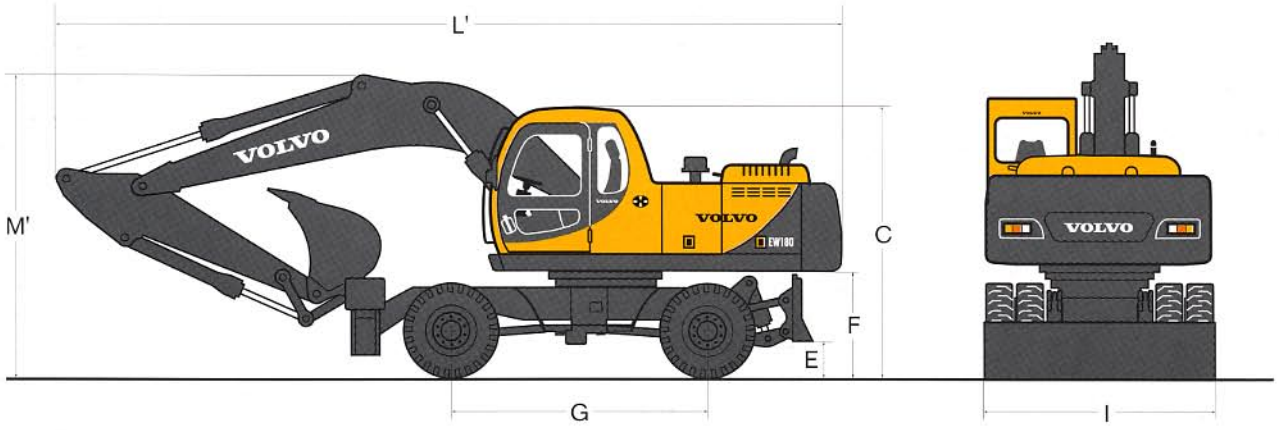
◎ : Applicable for material density up to 2,0 t/m³
○ : Applicable for material density up to 1,8 t/m³
□ : Applicable for material density up to 1,5 t/m³
△ : Applicable for material density up to 1,2 t/m³
– : Not usable

DIMENSIONS

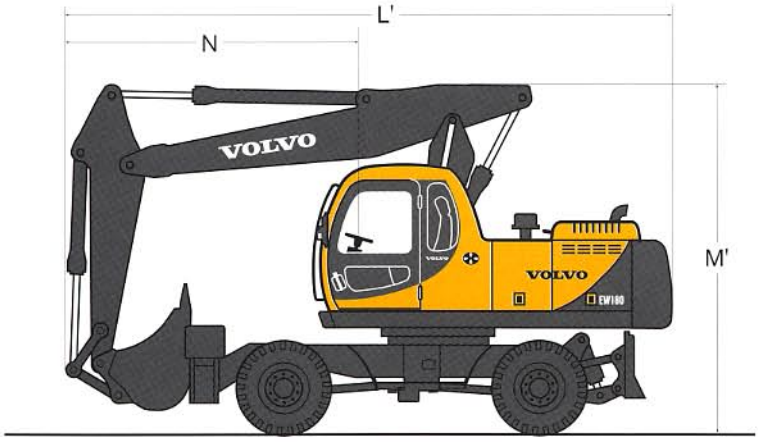
- Transport



- Travel (Monoblock boom)



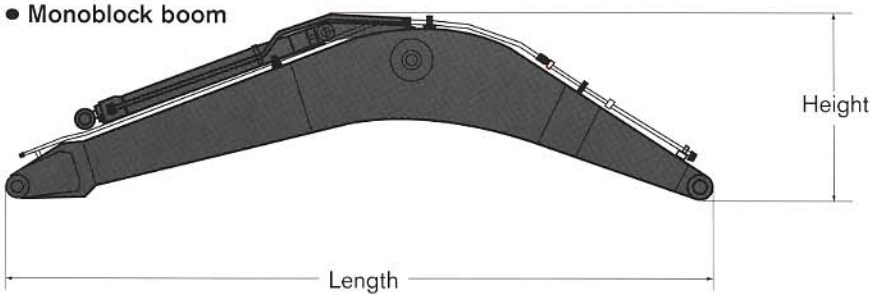
- Travel (2-piece boom)



DIMENSIONS

Description	Unit	5,2 m monoblock boom		4,97 m 2-piece boom	
		2,6 m arm	3,1 m arm	2,3 m arm	2,6 m arm
A. Overall width of upper structure	mm	2 460	2 460	2 460	2 460
B. Overall width	mm	2 495	2 495	2 495	2 495
C. Overall height of cab	mm	3 090	3 090	3 090	3 090
D. Tail slew radius	mm	2 600	2 600	2 600	2 600
E. Dozer blade clearance	mm	400	400	400	400
F. Counterweight clearance	mm	1 250	1 250	1 250	1 250
G. Wheel base	mm	2 800	2 800	2 800	2 800
H. Tread	mm	1 874	1 874	1 874	1 874
I. Dozer blade width, front or rear	mm	2 495	2 495	2 495	2 495
J. Outrigger width, down front or rear	mm	3 390	3 390	3 390	3 390
K. Min. ground clearance	mm	320	320	320	320
L. Overall length	mm	9 160	9 205	8 990	8 980
L'. Overall length	mm	8 950	8 830	6 900	6 890
M. Overall height of boom	mm	3 100	3 460	3 340	3 380
M'. Overall height of boom	mm	3 750	3 950	3 995	4 100
N. Front overhang	mm	–	–	3 455	3 470

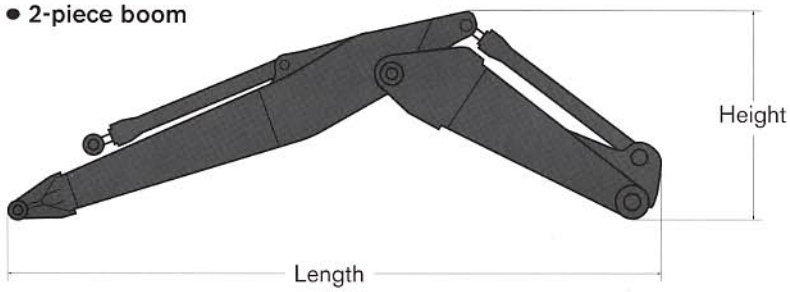
- **Monoblock boom**



Description	5,2 m
Length	5 400 mm
Height	1 625 mm
Width	564 mm
Weight	1 320 kg

* Includes cylinder, piping and pin

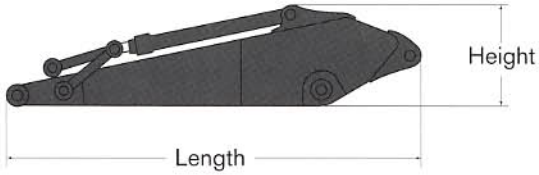
- **2-piece boom**



Description	4,97 m
Length	5 010 mm
Height	1 350 mm
Width	564 mm
Weight	1 630 kg

* Includes cylinders, piping and pins

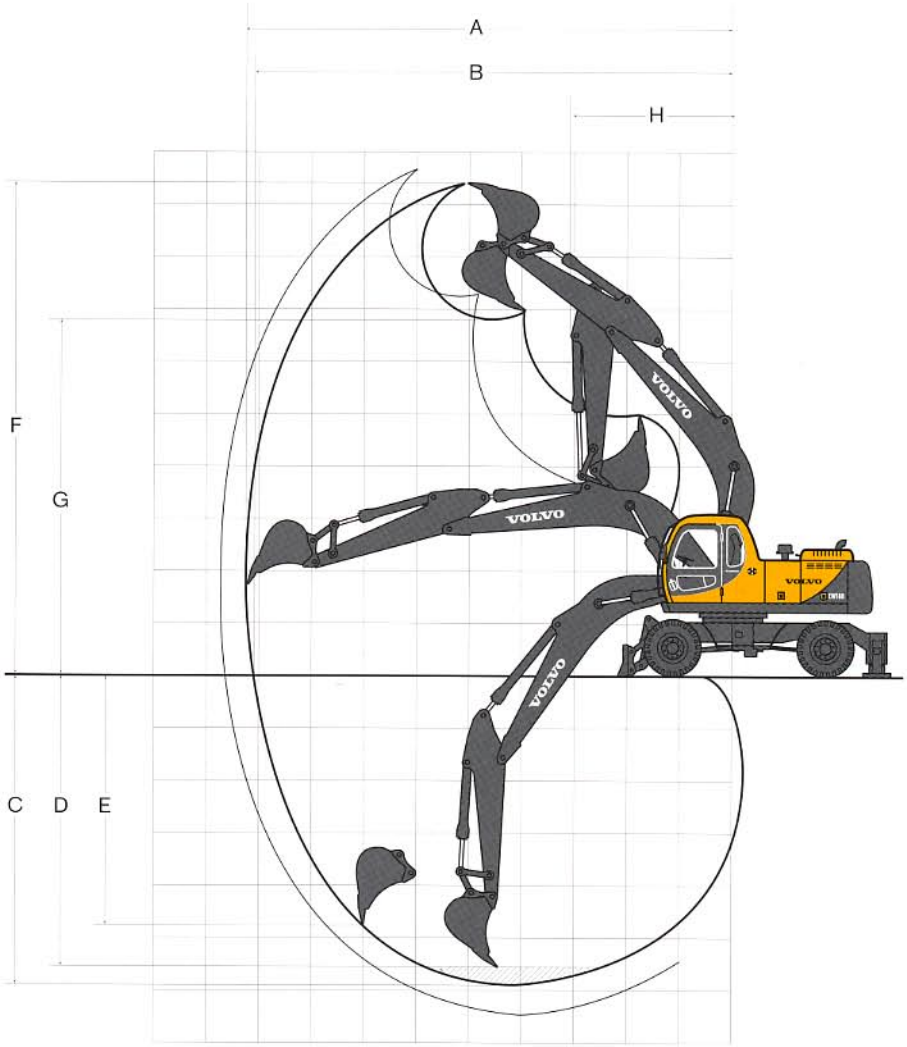
- **Arm**



Description	2,3 m	2,6 m	3,1 m
Length	3 260 mm	3 560 mm	4 070 mm
Height	870 mm	870 mm	870 mm
Width	304 mm	304 mm	304 mm
Weight	650 kg	685 kg	760 kg

* Includes cylinder, linkage and pins

WORKING RANGES & DIGGING FORCES

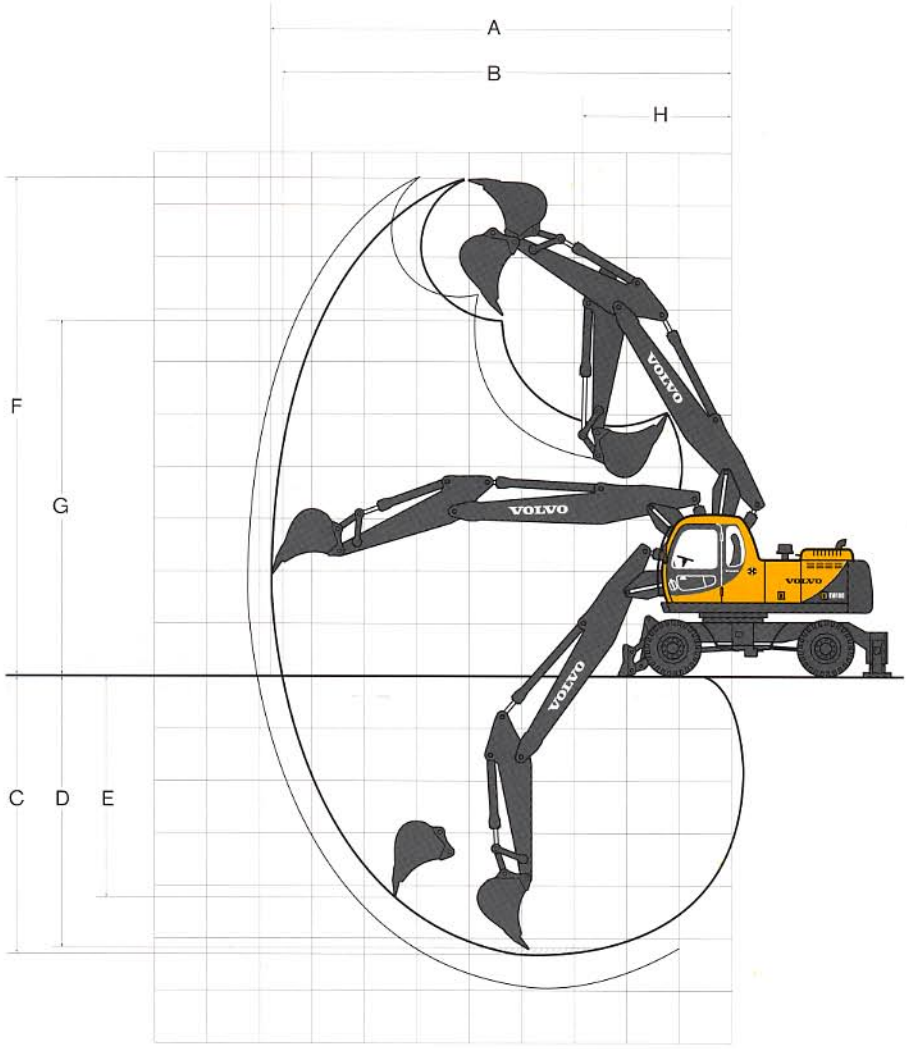


• **5,2 m monoblock boom with direct fit bucket:**

Description	Unit	2,6 m arm	3,1 m arm
A. Max. digging reach	mm	9 170	9 600
B. Max. digging reach on ground	mm	8 960	9 400
C. Max. digging depth	mm	5 900	6 400
D. Max. digging depth	mm	5 680	6 200
E. Max. vertical wall digging depth	mm	4 790	5 120
F. Max. cutting height	mm	9 420	9 590
G. Max. dumping height	mm	6 680	6 870
H. Min. front slew radius	mm	3 080	3 080

Digging forces with direct fit bucket:		Unit	2,6 m arm	3,1 m arm
Bucket tip radius		mm	1 420	1 420
Breakout force-bucket (Normal / Power boost)	SAE	kN	103,5 / 113,2	103,5 / 113,2
Breakout force-bucket (Normal / Power boost)	ISO	kN	114,6 / 125,4	114,6 / 125,4
Tearout force-arm (Normal / Power boost)	SAE	kN	78,6 / 85,9	69,7 / 76,2
Tearout force-arm (Normal / Power boost)	ISO	kN	80,3 / 87,9	71,2 / 77,9
Rotation angle, bucket		deg	177	177

WORKING RANGES & DIGGING FORCES



• **4,97 m 2-piece boom with direct fit bucket:**

Description	Unit	2,3 m arm	2,6 m arm
A. Max. digging reach	mm	8 760	9 170
B. Max. digging reach on ground	mm	8 540	8 960
C. Max. digging depth	mm	5 260	5 900
D. Max. digging depth	mm	5 160	5 680
E. Max. vertical wall digging depth	mm	4 200	4 790
F. Max. cutting height	mm	9 610	9 420
G. Max. dumping height	mm	6 800	6 680
H. Min. front slew radius	mm	2 860	3 080

Digging forces with direct fit bucket:		Unit	2,3 m arm	2,6 m arm
Bucket tip radius		mm	1 420	1 420
Breakout force-bucket (Normal / Power boost)	SAE	kN	103,5 / 113,2	103,5 / 113,2
Breakout force-bucket (Normal / Power boost)	ISO	kN	114,6 / 125,4	114,6 / 125,4
Tearout force-arm (Normal / Power boost)	SAE	kN	85,1 / 93,0	78,6 / 85,9
Tearout force-arm (Normal / Power boost)	ISO	kN	87,0 / 95,2	80,3 / 87,9
Rotation angle, bucket		deg	177	177

LIFTING CAPACITY (At the arm end without bucket)

Note: For lift capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick fit from the following values.

EW180

		Lifting hook related to ground level	3,0 m		4,5 m		6,0 m		7,5 m		Max. reach		
			Along undercarriage	Across undercarriage	Along undercarriage	Across undercarriage	Along undercarriage	Across undercarriage	Along undercarriage	Across undercarriage	Along undercarriage	Across undercarriage	Max. mm
Monoblock boom 5,2 m + Arm 2,6 m	 Front Rear	6,0 m kg					*3 850	*3 850			*3 560	*3 560	6 540
		4,5 m kg			*4 460	*4 460	*4 160	*4 160			*3 480	3 250	7 290
		3,0 m kg			*6 020	*6 020	*4 850	4 280	*4 440	3 050	*3 560	2 940	7 660
		1,5 m kg			*7 590	6 230	*5 620	4 110	*4 780	2 980	*3 830	2 850	7 730
		0 m kg	*5 790	*5 790	*8 560	6 030	*6 220	3 990			*4 360	2 940	7 490
		-1,5 m kg	*10 380	*10 380	*8 820	5 980	*6 450	3 960			*5 370	3 270	6 920
		-3,0 m kg	*12 260	12 000	*8 310	6 050					*6 000	4 110	5 910
	 Front Rear	6,0 m kg					*3 850	*3 850			*3 560	*3 560	6 540
		4,5 m kg			*4 460	*4 460	*4 160	*4 160			*3 480	*3 480	7 290
		3,0 m kg			*6 020	*6 020	*4 850	*4 850	*4 440	3 460	*3 560	3 340	7 660
		1,5 m kg			*7 590	7 210	*5 620	4 690	*4 780	3 390	*3 830	3 240	7 730
		0 m kg	*5 790	*5 790	*8 560	7 000	*6 220	4 570			*4 360	3 340	7 490
		-1,5 m kg	*10 380	*10 380	*8 820	6 950	*6 450	4 530			*5 370	3 720	6 920
		-3,0 m kg	*12 260	*12 260	*8 310	7 020					*6 000	4 700	5 910
	 Front Rear	6,0 m kg					*3 850	*3 850			*3 560	*3 560	6 540
		4,5 m kg			*4 460	*4 460	*4 160	*4 160			*3 480	*3 480	7 290
		3,0 m kg			*6 020	*6 020	*4 850	*4 850	*4 440	3 460	*3 560	3 340	7 660
		1,5 m kg			*7 590	7 210	*5 620	4 690	*4 780	3 390	*3 830	3 240	7 730
		0 m kg	*5 790	*5 790	*8 560	7 000	*6 220	4 570			*4 360	3 340	7 490
		-1,5 m kg	*10 380	*10 380	*8 820	6 950	*6 450	4 530			*5 370	3 720	6 920
		-3,0 m kg	*12 260	*12 260	*8 310	7 020					*6 000	4 700	5 910
Monoblock boom 5,2 m + Arm 3,1 m	 Front Rear	6,0 m kg					*2 510	*2 510			*2 400	*2 400	7 040
		4,5 m kg					*2 880	*2 880	*2 920	2 730	*2 370	*2 370	7 740
		3,0 m kg	*6 910	*6 910	*4 410	*4 410	*3 550	*3 550	*3 200	2 670	*2 470	2 310	8 100
		1,5 m kg	*5 130	*5 130	*5 920	*5 920	*4 310	3 770	*3 590	2 590	*2 700	2 230	8 160
		0 m kg	*5 980	*5 980	*6 980	5 690	*4 940	3 620	*3 920	2 530	*3 130	2 300	7 940
		-1,5 m kg	*9 160	*9 160	*7 430	5 590	*5 280	3 560			*3 910	2 560	7 400
		-3,0 m kg	*11 120	*11 120	*7 240	5 630	*5 110	3 580			*4 570	3 200	6 470
	 Front Rear	6,0 m kg					*2 510	*2 510			*2 400	*2 400	7 040
		4,5 m kg					*2 880	*2 880	*2 920	*2 920	*2 370	*2 370	7 740
		3,0 m kg	*6 910	*6 910	*4 410	*4 410	*3 550	*3 550	*3 200	3 090	*2 470	*2 470	8 100
		1,5 m kg	*5 130	*5 130	*5 920	*5 920	*4 310	*4 310	*3 590	3 000	*2 700	2 590	8 160
		0 m kg	*5 980	*5 980	*6 980	6 670	*4 940	4 200	*3 920	2 930	*3 130	2 670	7 940
		-1,5 m kg	*9 160	*9 160	*7 430	6 560	*5 280	4 130			*3 910	2 980	7 400
		-3,0 m kg	*11 120	*11 120	*7 240	6 600	*5 110	4 160			*4 570	3 710	6 470
	 Front Rear	6,0 m kg					*2 510	*2 510			*2 400	2 120	7 040
		4,5 m kg					*2 880	*2 880	*2 920	1 850	*2 370	1 710	7 740
		3,0 m kg	*6 910	*6 910	*4 410	4 400	*3 550	2 720	*3 200	1 790	*2 470	1 510	8 100
		1,5 m kg	*5 130	*5 130	*5 920	4 020	*4 310	2 550	*3 590	1 710	*2 700	1 440	8 160
		0 m kg	*5 980	*5 980	*6 980	3 780	*4 940	2 410	*3 920	1 650	*3 130	1 490	7 940
		-1,5 m kg	*9 160	7 100	*7 430	3 690	*5 280	2 350			*3 910	1 670	7 400
		-3,0 m kg	*11 120	7 230	*7 240	3 720	*5 110	2 380			*4 570	2 120	6 470
	 Front Rear	6,0 m kg					*3 320	*3 320			*2 870	*2 870	7 040
		4,5 m kg					*3 710	*3 710	*3 580	3 540	*2 820	*2 820	7 740
		3,0 m kg	*8 090	*8 090	*5 370	*5 370	*4 440	*4 440	*4 090	3 470	*2 900	*2 900	8 100
		1,5 m kg	*5 700	*5 700	*7 050	*7 050	*5 290	4 700	*4 510	3 370	*3 110	2 970	8 160
		0 m kg	*6 520	*6 520	*8 240	6 990	*5 990	4 550	*4 880	3 300	*3 510	3 050	7 940
		-1,5 m kg	*9 720	*9 720	*8 740	6 890	*6 360	4 480			*4 250	3 340	7 400
		-3,0 m kg	*12 820	*12 820	*8 520	6 920	*6 180	4 510			*5 580	4 070	6 470

Notes: 1. Machine in "Fine Mode-F" (Power Boost), for lifting capacities.
2. The above loads are in compliance with SAE and ISO Hydraulic Excavator Lifting Capacity Standards.
3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

LIFTING CAPACITY (At the arm end without bucket)

Note: For lift capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick fit from the following values.

EW180

Along undercarriage / Across undercarriage	Lifting hook related to ground level	3,0 m		4,5 m		6,0 m		7,5 m		Max. reach		
												Max. mm
2-piece boom 4,97 m + Arm 2,3 m	7,5 m kg			*4 000	*4 000					*4 170	*4 170	4 630
	6,0 m kg			*3 590	*3 590	*4 250	*4 250			*3 910	*3 910	6 050
	4,5 m kg	*5 090	*5 090	*4 470	*4 470	*4 370	*4 370			*3 720	3 680	6 850
	3,0 m kg			*6 130	*6 130	*5 070	4 420			*3 740	3 300	7 250
	1,5 m kg			*7 910	6 450	*5 960	4 260			*3 960	3 200	7 320
	0 m kg	*6 120	*6 120	*9 200	6 260	*6 750	4 160			*4 440	3 310	7 070
	-1,5 m kg	*12 230	12 220	*9 830	6 210	*7 220	4 120			*5 420	3 740	6 460
	7,5 m kg			*4 000	*4 000					*4 170	*4 170	4 630
	6,0 m kg			*3 590	*3 590	*4 250	*4 250			*3 910	*3 910	6 050
	4,5 m kg	*5 090	*5 090	*4 470	*4 470	*4 370	*4 370			*3 720	*3 720	6 850
	3,0 m kg			*6 130	*6 130	*5 070	5 010			*3 740	3 740	7 250
	1,5 m kg			*7 910	7 450	*5 960	4 850			*3 960	3 630	7 320
	0 m kg	*6 120	*6 120	*9 200	7 250	*6 750	4 740			*4 440	3 760	7 070
	-1,5 m kg	*12 230	*12 230	*9 830	7 200	*7 220	4 710			*5 420	4 260	6 460
	7,5 m kg			*4 000	*4 000					*4 170	*4 170	4 630
	6,0 m kg			*3 590	*3 590	*4 250	3 340			*3 910	3 290	6 050
	4,5 m kg	*5 090	*5 090	*4 470	*4 470	*4 370	3 310			*3 720	2 650	6 850
	3,0 m kg			*6 130	4 810	*5 070	3 170			*3 740	2 370	7 250
	1,5 m kg			*7 910	4 490	*5 960	3 030			*3 960	2 270	7 320
	0 m kg	*6 120	*6 120	*9 200	4 310	*6 750	2 920			*4 440	2 340	7 070
	-1,5 m kg	*12 230	7 850	*9 830	4 270	6 940	2 900			*5 420	2 640	6 460
2-piece boom 4,97 m + Arm 2,6 m	7,5 m kg			*3 360	*3 360					*3 880	*3 880	5 080
	6,0 m kg			*3 160	*3 160	*3 840	*3 840			*3 380	*3 380	6 390
	4,5 m kg			*4 060	*4 060	*4 070	*4 070			*3 210	*3 210	7 160
	3,0 m kg			*5 710	*5 710	*4 800	4 430	*3 580	3 150	*3 230	3 120	7 540
	1,5 m kg			*7 560	6 490	*5 730	4 270	*4 320	3 090	*3 410	3 020	7 610
	0 m kg	*6 470	*6 470	*8 960	6 260	*6 580	4 140			*3 790	3 110	7 370
	-1,5 m kg	*11 370	*11 370	*9 730	6 190	*7 140	4 100			*4 560	3 470	6 780
	7,5 m kg			*3 360	*3 360					*3 880	*3 880	5 080
	6,0 m kg			*3 160	*3 160	*3 840	*3 840			*3 380	*3 380	6 390
	4,5 m kg			*4 060	*4 060	*4 070	*4 070			*3 210	*3 210	7 160
	3,0 m kg			*5 710	*5 710	*4 800	*4 800	*3 580	3 570	*3 230	*3 230	7 540
	1,5 m kg			*7 560	7 490	*5 730	4 860	*4 320	3 500	*3 410	*3 410	7 610
	0 m kg	*6 470	*6 470	*8 960	7 260	*6 580	4 740			*3 790	3 540	7 370
	-1,5 m kg	*11 370	*11 370	*9 730	7 180	*7 140	4 680			*4 560	3 960	6 780
	7,5 m kg			*3 360	*3 360					*3 880	*3 880	5 080
	6,0 m kg			*3 160	*3 160	*3 840	3 400			*3 380	3 030	6 390
	4,5 m kg			*4 060	*4 060	*4 070	3 330			*3 210	2 480	7 160
	3,0 m kg			*5 710	4 860	*4 800	3 190	*3 580	2 250	*3 230	2 230	7 540
	1,5 m kg			*7 560	4 520	*5 730	3 030	*4 320	2 190	*3 410	2 140	7 610
	0 m kg	*6 470	*6 470	*8 960	4 320	*6 580	2 920			*3 790	2 200	7 370
	-1,5 m kg	*11 370	7 810	*9 730	4 250	6 910	2 870			*4 560	2 450	6 780

Notes:
1. Machine in "Fine Mode-F" (Power Boost), for lifting capacities.
2. The above loads are in compliance with SAE and ISO Hydraulic Excavator Lifting Capacity Standards.
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STANDARD EQUIPMENT

Engine
Low-emission engine with air heater, complying with EPA (Environment Protection Association, USA) emission standards
2-stage air filter with indicator
Air pre-cleaner
Alternator, 50 A
Electric engine shut-off
Fuel filter and water separator
Fuel filler pump: 35 l/min

Electric / Electronic control system
Advanced control system (ACS)
Integrated mode selection system
Self-diagnostic system
Machine status indication
Engine speed sensing power control
Automatic idling system
One-touch power boost
Safety stop/start function
Adjustable monitor
Master disconnect switch
Engine restart prevention circuit
Powerful halogen lights:
- Frame mounted 2
- Boom mounted 2

Batteries, 2 x 12 V / 150 Ah
Start motor, 24 V / 7,5 kW
Air conditioner and heater
Rotating warning beacon

Hydraulic system
Automatic sensing work mode
- Summation system
- Boom priority
- Arm priority
- Slew priority

Boom and arm flow regeneration
Slew anti-rebound valve
Boom and arm holding valves
Multi-stage filtering system
Cylinder cushions
Cylinder contamination seals
Auxiliary hydraulic valve
Hydraulic oil, ISO VG 46

Superstructure
Access way with handrail
Tool storage box, locking
Punched metal anti-slip plates
Counterweight, 2 900 kg

Cab and interior
Hydraulic dampening cab mounts
Tiltable and telescopic steering column
Adjustable operator seat and control console
Flexible antenna
Hydraulic safety lock lever
Cab, all-weather sound suppressed, includes:
- Ashtray
- Door locks
- Floor mat
- Horn
- Large storage area
- Pull-up type front window
- Removable lower windshield
- Seat belt
- Safety glass
- Clear tinted roof hatch
- Windshield wiper with intermittent feature
- Stereo cassette radio (AM/FM)

Rain shield, front
Sun shield, front

ALTERNATIVE EQUIPMENT

Hydraulic system
Pilot-operated wrist control joysticks
- Semi-long joysticks
- Control joysticks, with 3 switches ea.
- Control joysticks, with 5 switches ea.

Cab and interior
Fabric seat
Fabric seat, with heater
Fabric seat, with heater and air suspension

Digging equipment
Boom: 5,2 m monoblock
4,97 m 2-piece
Arm: 2,3 / 2,6 / 3,1 m

Undercarriage
Single tires, 18,00 x 22,5
Double tires, 10,00-20PR14
Stone protection rings
Front equipment: dozer blade, outriggers, clamshell rest, 4 outriggers
Rear equipment: dozer blade, outriggers

OPTIONAL EQUIPMENT (Standard in certain markets)

Engine
Alternator, 70 A
Block and oil pan heater, 120 V, 240 V
Fuel warmer
Tropical kit

Electric control system
Extra work lights: 4
- Cab-mounted 3, (front 2, rear 1)
- Counterweight-mounted 1

Hydraulic system
Hydraulic piping
- Hammer & shear for monoblock boom
  1 pump flow / 2 pump flow
  Extra piping for rotator/slope
  Pump flow control
- Rotate/slope

Pump flow control for hammer
Volvo hydraulic quick-fit, S1 size
Hydraulic oil, ISO VG 32
Hydraulic oil, ISO VG 68

Superstructure
Low noise kit

Cab and interior
Cab mounted falling object protective structures (FOPS)
Steel roof hatch
Safety net for front window
Anti-vandalism kit
Sliding rear window

Service
Hand lamp
Spare parts
Tool kit

VOLVO

Construction Equipment

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English, global
KOR