

VOLVO EXCAVATORS

EC380D, EC480D

38-56 t 292-360 hp



VOLVO EC380D, EC480D IN DETAIL.

Engine

The latest generation, Volvo engine Tier 4i (Stage IIIB) emissions compliant diesel engine fully meets the demands of the latest, emissions regulations. Featuring Volvo Advanced Combustion Technology (V-ACT), it is designed to deliver superior performance and fuel efficiency. The engine uses precise, highpressure fuel injectors, turbo charger and air-to-air intercooler, and electronic engine controls to optimize machine performance.

Air Filter: 3-stage with precleaner.

Automatic Idling System: Reduces engine speed to idle when the levers and pedals are not activated resulting in less fuel consumption and low cab noise levels.

EC380D

Engine Tier 4i (Stage IIIB)	Volvo	D13H
Max power at	r/s / r/min	28 / 1 700
Net, ISO 9249/SAE J1349	kW / hp	208 / 283
Gross, ISO 14396/SAE J1995	kW / hp	215 / 292
Max torque at	Nm / r/min	1 580 / 1 300
No. of cylinders		6
Displacement	l	12.8
Bore	mm	131
Stroke	mm	158

EC480D

Engine Tier 4i (Stage IIIB)	Volvo	D13H
Max power at	r/s / r/min	30 / 1 800
Net, ISO 9249/SAE J1349	kW / hp	256 / 348
Gross, ISO 14396/SAE J1995	kW / hp	265 / 360
Max torque at	Nm / r/min	1 800 / 1 400
No. of cylinders		6
Displacement	l	12.8
Bore	mm	131
Stroke	mm	158

Electrical system

High-capacity electrical system that is well protected. Waterproof double-lock harness plugs are used to secure corrosion-free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard.

Contronics provides advanced monitoring of machine functions and important diagnostic information.

	EC380D	EC480D
Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	200
Alternator	V / Ah	28 / 80

Swing system

The swing system uses an axial piston motors, driving a planetary gearbox for maximum torque. An automatic holding brake and anti-rebound valve are standard.

Max. slew speed	r/min	10.2	8.8
Max. slew torque	kNm	130.5	166.3

Drive

Each track is powered by an automatic two-speed shift travel motor. The track brakes are multi-disc, spring-applied and hydraulic released. The travel motor, brake and planetary gears are well protected within the track frame.

Max. drawbar pull	kN	276.5	333
Max. travel speed	km/h	3.4/5.5	3.1/5.2
Gradeability	°	35	35

Undercarriage

The undercarriage has a robust X-shaped frame. Greased and sealed track chains are standard.

Track pads		2 x 50	2 x 52
Link pitch	mm	215.9	215.9
Shoe width, triple grouser	mm	600/700/ 800/900	600/700/ 800/900
Shoe width, double grouser	mm	600	600
Bottom rollers		2 x 9	2 x 9
Top rollers		2 x 2	2 x 2

Hydraulic system

The hydraulic system, also known as the "Automatic Sensing Work Mode," is designed for high-productivity, high-digging capacity, high-maneuvering precision and excellent fuel economy. The summation system, boom, arm and swing priority along with boom and arm regeneration provides optimum performance. The following important functions are included in the system:

- Summation system: Combines the flow of both hydraulic pumps to a single function to ensure quick cycle times and high productivity.
- Boom priority: Gives priority to the boom operation for faster raising when loading or performing deep excavations.
- Arm priority: Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging.
- Swing priority: Gives priority to swing functions for faster 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.

	EC380D	EC480D
Main pump, Type 2 x variable displacement axial piston pumps		
Maximum flow l/min	2 x 300	2 x 358

Hydraulic motors

	EC380D	EC480D
Travel: Variable displacement axial piston motor with mechanical brake		
Slew: Fixed displacement axial piston motor with mechanical brake		
Relief valve setting		
Implement MPa	32.4/35.3	32.4/35.3
Travel circuit MPa	35.3	32.4
Slew circuit MPa	27.9	25.8
Pilot circuit MPa	3.9	3.9

Hydraulic cylinders

	EC380D	EC480D
Mono boom	2	2
Bore x Stroke ø x mm	160 x 1 530	165 x 1 590
Arm	1	1
Bore x Stroke ø x mm	175 x 1 700	190 x 1 850
Bucket	1	1
Bore x Stroke ø x mm	145 x 1 285	165 x 1 335
ME Bucket	1	1
Bore x Stroke ø x mm	160 x 1 250	175 x 1 335

Service refill capacities

Fuel tank		620	685
Hydraulic system, total		500	525
Hydraulic tank		220	270
Engine oil		42	42
Engine coolant		60	60
Slew reduction unit		6.5	2 x 6
Travel reduction unit		2 x 6.8	2 x 8

Cab

Integrated air-conditioning and heating system:
The pressurized and filtered cab air is supplied by an automatically-controlled fan. The air is distributed throughout the cab from 14 vents.
Ergonomic operator's seat: The adjustable seat and joystick console move independently to accommodate the operator. The seat has nine different adjustments plus a seat belt for the operator's comfort and safety.

Sound Level

	EC380D	EC480D
Sound level in cab according to ISO 6396		
LpA dB(A)	71	71

External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC) and 474-1:2006 +A1:2009

	EC380D	EC480D
LwA dB(A)	105	106

SPECIFICATIONS.

VOLVO BUCKETS

Loose soil, re-handling material or abrasive rock; excavators and attachments work hand in hand to move almost any type of material. Volvo's experience together with excavator and attachment technology ensures a reduction in cycle times, increased productivity and lower fuel costs through higher breakout forces and quicker bucket fill times.

The efficiency of any type of excavation depends upon the selection of the right bucket therefore a broad bucket offering available from the same retailer as your excavator means the machine can be easily adjusted to operate in any conditions.

As the technology and experience in design for both Volvo's attachments and excavators stems from the same origin, availing from another service like Volvo's aftermarket support ensures the machine is running harder for longer.



(GP) General purpose bucket

Designed for digging and re-handling soft to medium materials e.g. soils with low wear characteristics. The GP bucket has anti-abrasive side cutters, a hardened lip plate and self-sharpening bucket teeth.

(HD) Heavy-duty bucket

Intended for digging in dense materials such as hard packed clay and gravel. The HD bucket has heavier overall fabrication with a thicker side cutting edge and hardened plating on all critical ground-engaging areas.

(RK) Rock bucket

Together with harder and thicker plating on all critical leading edges the rock bucket provides digging performance in soils with a high degree of rock content and well blasted rock. On the EC700B the option of a D-edge is available, for ease of penetration when rock handling.

(ES) Extreme service bucket

Available for the EC700 and provides additional wear protection for use in high impact or wearing applications. Inner protection and D edge as standard.

(FD) Fixed ditching bucket

A wide face, round profile and drain holes make the FD bucket ideal for ditch cleaning or removal of other soft material. An inner stiffener and optional bolt-on cutting edge bolster performance.

VOLVO TOOTH SYSTEM



Self-Sharpening Tooth System Cuts Through the Toughest Jobs

Volvo perfects the excavator bucket's point of attack with a robust tooth system that delivers performance and long life. Cast and tempered from a high-strength alloy, Volvo teeth resist stress and deliver optimum penetration in hard or abrasive material. An innovative design lessens internal wear between tooth and adapter — and makes it easy to change teeth.

LOCKING DEVICE

Patinated vertical locking device. The steel pin with flexible lock retainer tightly secures the tooth to the adapter. Smart design transfers working stresses away from the locking device, saving wear on the steel pin and extending pin life. Self-sharpening Volvo teeth are designed for a small penetration area, which reduces stress and wear at the point of contact.

GPE

Self-sharpening general-purpose tooth with good penetration and long service life.

AMRE

Self-sharpening tooth resists wear in rock and other abrasive materials.

PPE

Pick-point excavator tooth delivers maximum penetration in hard clay or frozen ground.

SNE

Spade nose tooth is designed for finishing work such as leveling, grading, cleaning & backfilling.

TPE

Twin pick point with sharp, dual-point profile is ideal for compact or frozen ground.

Wear Cap & BL Adapter

The wear cap protects the adapter from unnecessary wear.

BL: 11/2 bottom leg adapter for welding to both sides of the cutting edge

MAXIMUM PERMITTED BUCKETS

		EC380DL with 7 000 kg counterweight				EC380DNL with 7 000 kg counterweight					
Boom	m	6.2 ME		6.45 HD		6.2 ME		6.45 HD			
Arm	m	2.6	2.6	3.2 HD	3.9	2.6	2.6	3.2 HD	3.9		
Max. bucket		liter	liter	liter	liter	liter	liter	liter	liter		
GP bucket 1.5 t/m ³	2 775	2 775	2 550	2 300	2 450	2 325	2 125	1 925			
GP bucket 1.8 t/m ³	2 450	2 450	2 250	2 050	2 175	2 075	1 900	1 700			
HD bucket 1.8 t/m ³	2 325	2 325	2 125	1 925	2 050	1 950	1 800	1 625			
HD bucket 2.0 t/m ³	2 175	2 175	2 000	1 800	1 925	1 825	1 675	1 500			
• EC380DL with direct fit bucket					• EC380DNL with direct fit bucket						
GP bucket 1.5 t/m ³	2 600	2 600	2 350	2 125	2 325	2 200	2 025	1 800			
GP bucket 1.8 t/m ³	2 300	2 300	2 100	1 875	2 075	1 950	1 800	1 600			
HD bucket 1.8 t/m ³	2 175	2 175	1 975	1 775	1 950	1 850	1 700	1 525			
HD bucket 2.0 t/m ³	2 025	2 025	1 850	1 675	1 825	1 725	1 575	1 400			
• EC380DL with quick coupler bucket					• EC380DNL with quick coupler bucket						
EC480DL fixed undercarriage with 9 750kg counterweight											
Boom	m	7.0 GP/HD						6.5 ME			
Arm	m	G3.9	G4.8	H2.55	H3.35		M2.55				
Max. bucket		liter	liter	liter	liter		liter				
GP bucket 1.5 t/m ³	2 750		2 450	3 300	2 950		3 500				
GP bucket 1.8 t/m ³	2 450		2 175	2 925	2 600		3 100				
HD bucket 1.8 t/m ³	2 300		2 050	2 775	2 475		2 925				
HD bucket 2.0 t/m ³	2 150		1 925	2 600	2 300		2 750				
• EC480DL with direct fit bucket											
GP bucket 1.5 t/m ³	2 575		2 275	3 125	2 750		3 325				
GP bucket 1.8 t/m ³	2 275		2 025	2 775	2 450		2 950				
HD bucket 1.8 t/m ³	2 150		1 900	2 625	2 325		2 775				
HD bucket 2.0 t/m ³	2 000		1 775	2 450	2 150		2 600				
• EC480DL with S3 quick coupler bucket											
GP bucket 1.5 t/m ³	2 400		2 100	2 950	2 600		3 150				
GP bucket 1.8 t/m ³	2 125		1 875	2 625	2 300		2 800				
HD bucket 1.8 t/m ³	2 025		1 775	2 475	2 175		2 650				
HD bucket 2.0 t/m ³	1 875		1 650	2 300	2 025		2 450				
• EC480DL with U quick coupler bucket											
EC480D retractable undercarriage with 9 750kg counterweight											
Boom	m	7.0 GP/HD						6.5 ME			
Arm	m	G3.9	G4.8	H2.55	H3.35		M2.55				
Max. bucket		liter	liter	liter	liter		liter				
GP bucket 1.5 t/m ³	2 975		2 625	3 525	3 150		3 800				
GP bucket 1.8 t/m ³	2 625		2 325	3 125	2 800		3 375				
HD bucket 1.8 t/m ³	2 500		2 200	2 950	2 650		3 175				
HD bucket 2.0 t/m ³	2 325		2 050	2 750	2 475		2 975				
• EC480D MVW with direct fit bucket											
GP bucket 1.5 t/m ³	2 775		2 450	3 325	2 975		3 625				
GP bucket 1.8 t/m ³	2 475		2 175	2 950	2 625		3 200				
HD bucket 1.8 t/m ³	2 325		2 050	2 800	2 500		3 025				
HD bucket 2.0 t/m ³	2 175		1 900	2 600	2 325		2 825				
• EC480D MVW with S3 quick coupler bucket											
GP bucket 1.5 t/m ³	2 625		2 275	3 175	2 800		3 450				
GP bucket 1.8 t/m ³	2 325		2 025	2 800	2 475		3 050				
HD bucket 1.8 t/m ³	2 200		1 900	2 650	2 350		2 900				
HD bucket 2.0 t/m ³	2 050		1 775	2 475	2 200		2 700				
• EC480D MVW with U quick coupler bucket											

Note: 1. Bucket size based on ISO 7451, heaped material with a 1:1 angle of repose.
2. "Max permitted sizes" are for reference only and are not necessarily available from the factory.

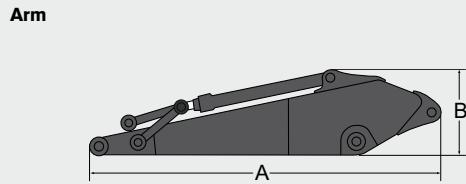
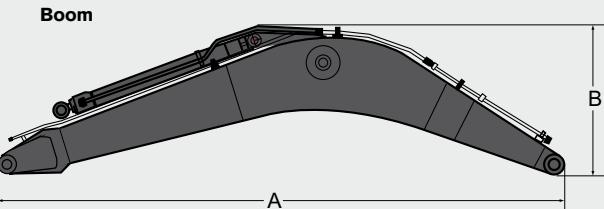
SPECIFICATIONS.

MACHINE WEIGHTS AND GROUND PRESSURE

EC380D									
Description	Shoe width		Operating weight		Ground pressure		Operating weight	Ground pressure	
Triple grouser	600 mm		38 300 kg		68.6 kPa		38 040 kg		68.1 kPa
	700 mm		38 790 kg		59.8 kPa		38 530 kg		59.8 kPa
	800 mm		39 220 kg		53.0 kPa		38 960 kg		53.0 kPa
Double grouser	900 mm		39 660 kg		48.1 kPa		39 400 kg		47.1 kPa
	600 mm		38 460 kg		69.6 kPa		38 200 kg		68.6 kPa
EC380D with LC undercarriage, 6.45 m boom, 3.2 m arm, 1 460 kg bucket, 7 000 kg counterweight					EC380D with NLC undercarriage, 6.45 m boom, 3.2 m arm, 1 460 kg bucket, 7 000 kg counterweight				

EC480D with FIXED undercarriage					EC480D with RETRACTABLE undercarriage		
	600 mm	48 600 kg	84.6 kPa	49 700 kg	86.5 kPa		
Triple grouser	700 mm	49 100 kg	73.7 kPa	50 200 kg	74.5 kPa		
	800 mm	49 600 kg	64.6 kPa	50 700 kg	66.6 kPa		
	900 mm	50 200 kg	58.7 kPa	51 200 kg	59.6 kPa		
Double grouser	600 mm	48 700 kg	84.6 kPa	49 800 kg	86.5 kPa		
EC480DL with FIXED undercarriage, 7.0 m boom, 3.35 m arm, 2 020 kg bucket, 9 750 kg counterweight					EC480DL with RETRACTABLE undercarriage, 7.0 m boom, 3.35 m arm, 2 020 kg bucket, 9 750 kg counterweight		

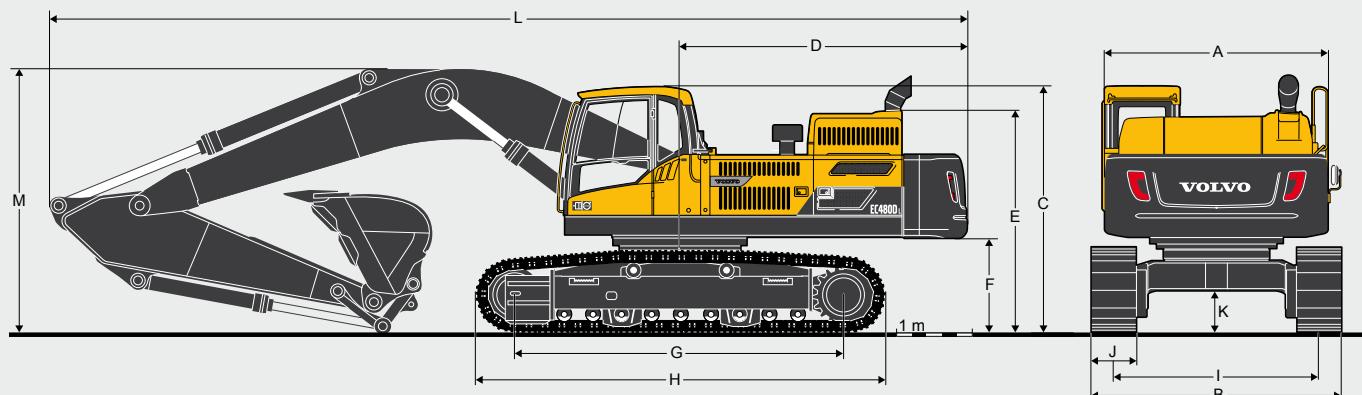
DIMENSIONS



Boom	Unit	EC380D		EC480D		Arm Description	Unit	EC380D				EC480D			
		mono	mono	mono	mono			2.6	3.2 HD	3.9	2.55	3.35 HD	3.90	4.80	
Boom	m	6.2 ME	6.45 HD	6.5 ME	7.0 HD	Arm	m	2.6	3.2 HD	3.9	2.55	3.35 HD	3.90	4.80	
A	mm	6 460	6 700	6 750	7 250	A	mm	3 780	4 360	5 080	3 770	4 590	5 140	6 100	
B	mm	1 740	1 800	2 000	1 840	B	mm	1 145	1 146	1 140	1 235	1 235	1 240	1 250	
Width	mm	820	820	960	960	Width	mm	560	560	560	600	600	600	600	
Weight	kg	3 353	3 346	4 127	4 176	Weight	kg	2 049	2 180	2 300	2 331	2 579	2 582	2 726	

* Includes arm cylinder, piping and pin

* Includes bucket cylinder, linkage and pin

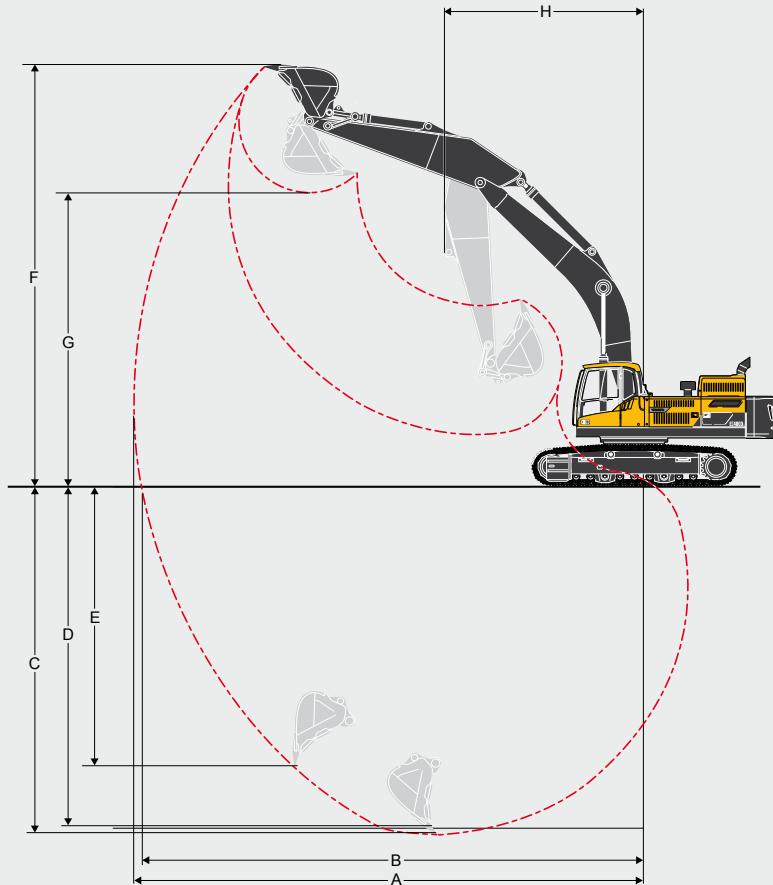


Description	Unit	EC380DL				EC380DNL					
		6.2	6.45	6.2	6.45	6.2	6.45	6.2	6.45		
Boom	m	6.2	6.45	6.2	6.45	6.2	6.45	6.2	6.45		
Arm	m	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6		
A. Overall width of upper structure	mm	2 990	2 990	2 990	2 990	2 990	2 990	2 990	2 990		
B. Overall width	mm	3 340	3 340	3 340	3 340	2 990	2 990	2 990	2 990		
C. Overall height of cab	mm	3 197	3 197	3 197	3 197	3 197	3 197	3 197	3 197		
D. Tail swing radius	mm	3 560	3 560	3 560	3 560	3 560	3 560	3 560	3 560		
E. Overall height of engine hood	mm	2 860	2 860	2 860	2 860	2 860	2 860	2 860	2 860		
F. Counterweight clearance *	mm	1 210	1 210	1 210	1 210	1 210	1 210	1 210	1 210		
G. Tumbler length	mm	4 240	4 240	4 240	4 240	4 240	4 240	4 240	4 240		
H. Track length	mm	5 180	5 180	5 180	5 180	5 180	5 180	5 180	5 180		
I. Track gauge	mm	2 740	2 740	2 740	2 740	2 390	2 390	2 390	2 390		
J. Shoe width	mm	600	600	600	600	600	600	600	600		
K. Min. ground clearance *	mm	500	500	500	500	500	500	500	500		
L. Overall length	mm	11 080	11 330	11 240	11 290	11 080	11 330	11 240	11 290		
M. Overall height of boom	mm	3 700	3 580	3 350	3 590	3 700	3 580	3 350	3 590		
Description	Unit	EC480DL fixed undercarriage				EC480DL retractable undercarriage					
Boom	m	6.5	7.0	6.5	7.0	6.5	7.0	6.5	7.0		
Arm	m	2.55	2.55	3.35	3.9	4.8	2.55	2.55	3.35	3.9	4.8
A. Overall width of upper structure	mm	2 990	2 990	2 990	2 990	2 990	2 990	2 990	2 990	2 990	2 990
B. Overall width (extended)	mm	3 440	3 440	3 440	3 440	3 440	3 590	3 590	3 590	3 590	3 590
Overall width (retracted)	mm	-	-	-	-	-	3 090	3 090	3 090	3 090	3 090
C. Overall height of cab	mm	3 257	3 257	3 257	3 257	3 257	3 370	3 370	3 370	3 370	3 370
D. Tail swing radius	mm	3 800	3 800	3 800	3 800	3 800	3 800	3 800	3 800	3 800	3 800
E. Overall height of engine hood	mm	2 910	2 910	2 910	2 910	2 910	3 020	3 020	3 020	3 020	3 020
F. Counterweight clearance *	mm	1 275	1 275	1 275	1 275	1 275	1 385	1 385	1 385	1 385	1 385
G. Tumbler length	mm	4 370	4 370	4 370	4 370	4 370	4 370	4 370	4 370	4 370	4 370
H. Track length	mm	5 370	5 370	5 370	5 370	5 370	5 370	5 370	5 370	5 370	5 370
I. Track gauge (retracted)	mm	2 740	2 740	2 740	2 740	2 740	2 390	2 390	2 390	2 390	2 390
Track gauge (extended)	mm	-	-	-	-	-	2 890	2 890	2 890	2 890	2 890
J. Shoe width	mm	700	700	700	700	700	700	700	700	700	700
K. Min. ground clearance *	mm	550	550	550	550	550	746	746	746	746	746
L. Overall length	mm	11 630	12 130	12 140	12 140	12 010	11 630	12 130	12 140	12 140	12 010
M. Overall height of boom	mm	3 770	3 630	3 650	3 690	4 650	3 800	3 770	3 790	3 830	4 790

* Without shoe grouser

SPECIFICATIONS.

WORKING RANGES



Description	Unit	EC380D			
Boom	m	6.2		6.45	
Arm	m	2.6	2.6	3.2	3.9
A. Max. digging reach	mm	10 440	10 550	11 070	11 710
B. Max. digging reach on ground	mm	10 210	10 330	10 860	11 520
C. Max. digging depth	mm	6 740	6 850	7 450	8 150
D. Max. digging depth (2.44 m level)	mm	6 560	6 650	7 270	8 000
E. Max. vertical wall digging depth	mm	5 260	5 430	5 870	6 500
F. Max. cutting height	mm	10 070	10 170	10 340	10 610
G. Max. dumping height	mm	6 810	7 090	7 280	7 560
H. Min. front slew radius	mm	4 120	4 320	4 280	4 300
Digging forces with direct fit bucket					
Bucket radius	mm	1 810	1 623	1 623	1 623
	SAE J1179	kN	214.5	198	198
Breakout force - bucket (Normal/Power boost)	SAE J1179	kN	234.5	215.0	215.0
	ISO 6015	kN	243.4	221.7	221.7
	ISO 6015	kN	265.4	242.7	242.7
	SAE J1179	kN	187.7	195.9	161.9
Tearout force - dipper arm (Normal/Power boost)	SAE J1179	kN	205.7	212.9	176.9
	ISO 6015	kN	193.9	201.1	166.0
	ISO 6015	kN	211.9	219.1	181.0
Rotation angle, bucket	°	164	177	177	177

WORKING RANGES

Description	Unit	EC480D *						EC480D, mechanically retractable width **				
Boom	m	6.5ME		7.0		6.5ME		7.0				
Arm	m	2.55	2.55	3.35	3.9	4.8	2.55	2.55	3.35	3.9	4.8	
A. Max. digging reach	mm	10 930	11 340	12 040	12 530	13 260	10 930	11 340	12 040	12 530	13 260	
B. Max. digging reach on ground	mm	10 680	11 110	11 810	12 320	13 060	10 660	11 090	11 790	12 300	13 040	
C. Max. digging depth	mm	6 580	6 920	7 720	8 270	9 170	6 470	6 810	7 610	8 160	9 060	
D. Max. digging depth (2.44 m level)	mm	6 410	6 750	7 570	8 140	9 050	6 300	6 640	7 460	8 030	8 940	
E. Max. vertical wall digging depth	mm	6 100	6 270	7 110	7 570	8 020	5 880	6 160	7 000	7 460	7 910	
F. Max. cutting height	mm	10 600	10 860	11 010	11 190	11 130	10 710	10 970	11 130	11 300	11 240	
G. Max. dumping height	mm	6 970	7 420	7 640	7 820	7 850	7 080	7 530	7 750	7 930	7 960	
H. Min. front slew radius	mm	4 780	5 170	5 090	5 050	5 100	4 780	5 170	5 090	5 050	5 100	
Digging forces with direct fit bucket												
Bucket radius	mm	1 923	1 810	1 810	1 810	1 810	1 923	1 810	1 810	1 810	1 810	
	SAE J1179	kN	252.9	229.6	229.6	229.6	229.6	253	230	230	230	230
Breakout force - bucket (Normal/Power boost)	SAE J1179	kN	285.1	260.9	260.9	260.9	260.9	285	261	261	261	261
	ISO 6015	kN	275.3	251.2	251.2	251.2	251.2	275	251	251	251	251
	ISO 6015	kN	310.6	284.4	284.4	284.4	284.4	311	284	284	284	284
	SAE J1179	kN	224.5	231.6	196.1	175.9	159.7	225	232	196	176	160
Tearout force - bucket (Normal/Power boost)	SAE J1179	kN	231.6	238.6	201.2	179.0	162.8	232	239	201	179	163
	ISO 6015	kN	244.1	252.2	214.9	191.6	174.4	244	252	215	192	174
	ISO 6015	kN	253.1	260.2	219.9	195.6	177.5	253	260	220	196	178
Rotation angle, bucket	°	169	183	183	183	183	169	183	183	183	183	

* FIXED UNDERCARRIAGE, Machine with pin-on bucket

** RETRACTABLE UNDERCARRIAGE, Machine with pin-on bucket

Bucket spec. for Working Range

- For ME Boom : VGP60 2600L VTS (Bucket tip radius : 1948.40mm)

- For STD Boom : KGP46 2060L KTS (Bucket tip radius : 1847.01mm)

EXPLANATION OF LIFTING CAPACITY TABLES

Example: • EC380DNLC

Lifting capacity at the arm end without bucket.

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

	Lifting hook related to ground level	Along undercarriage 3.0 m	Across	Along undercarriage 4.5 m	Across	Along undercarriage 6.0 m	Across	Along undercarriage 7.5 m	Across	Along undercarriage 9.0 m	Across	Along undercarriage Max. reach	Max. mm
Boom: 6.2 m + Arm: 2.6 m + Shoe: 600 mm + CWT: 7 050 kg	7.5 m kg	-	-	-	-	*10 730	9 890	-	-	-	-	*10 940	8 140
	6.0 m kg	-	-	-	-	*11 270	9 690	*10 800	6 730	-	-	10 530	6 430
	4.5 m kg	-	-	*15 950	14 330	*12 740	9 270	10 850	6 580	-	-	9 200	5 580
	3.0 m kg	-	-	*19 950	13 190	*14 580	8 780	10 590	6 340	-	-	8 570	5 160
	1.5 m kg	-	-	*22 520	12 470	14 570	8 370	10 340	6 130	-	-	8 420	5 030
	0 m kg	-	-	*23 070	12 230	14 290	8 130	10 180	5 990	-	-	8 720	5 170
	-1.5 m kg	*17 930	*17 930	*22 250	12 240	14 220	8 080	10 170	5 970	-	-	9 610	5 680
	-3.0 m kg	*26 840	24 630	*20 070	12 440	14 370	8 200	-	-	-	-	11 660	6 830
	-4.5 m kg	-	-	*15 500	12 900	-	-	-	-	-	-	*12 300	9 850
													5 439

Notes: 1. Machine in "Fine Mode-F" (Power Boost) for lifting capacities.

2. The above loads are in compliance with SAE J1097 and ISO 10567 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.

EQUIPMENT.

STANDARD EQUIPMENT

	EC380D	EC480D
Engine		
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets Tier 4i EU (Stage IIIB) requirements	•	•
Air filter with indicator	•	•
Air intake heater	•	•
Cyclone pre-cleaner	•	•
Electric engine shut-off	•	•
Fuel filter and water separator	•	•
Fuel filler pump: 50 l/min, with automatic shut-off	•	•
Alternator, 80 A	•	•
Electric/Electronic control system		
Contronics	•	•
- Advanced mode control system	•	•
- Self-diagnostic system	•	•
Machine status indication	•	•
Engine speed sensing power control	•	•
Automatic idling system	•	•
One-touch power boost	•	•
Safety stop/start function	•	•
Adjustable LCD color monitor	•	•
Master electrical disconnect switch	•	•
Engine restart prevention circuit	•	•
High-capacity halogen lights:	•	•
Frame-mounted 2	•	•
Boom-mounted 2	•	•
Batteries, 2 x 12 V / 200 Ah	•	•
Start motor, 24 V / 7 kW	•	•
Hydraulic system		
Hose rupture valve: boom	•	•
Overload warning device	•	•
Automatic sensing hydraulic system	•	•
2-pump flow bucket circuit	•	•
Summation system	•	•
Boom priority	•	•
Arm priority	•	•
Swing priority	•	•
Boom, arm and bucket regeneration valves	•	•
Swing anti-rebound valves	•	•
Boom and arm holding valves	•	•
Multi-stage filtering system	•	•
Cylinder cushioning	•	•
Cylinder contamination seals	•	•
Auxiliary hydraulic valve	•	•
Automatic two-speed travel motors	•	•
Hydraulic oil, ISO VG 46	•	•
Frame		
Access way with handrail	•	•
Tool storage area	•	•
Punched metal anti-slip plates	•	•
Undercover (heavy-duty)	•	•
Cab and interior		
ROPS (ISO12117-2) certified cab	•	•
Silicon oil and rubber mounts with spring	•	•
Travel pedals and hand levers	•	•
Adjustable operator seat and joystick control console	•	•
Control joysticks with 4 switches each	•	•
Heater & air-conditioner, automatic	•	•

	EC380D	EC480D
Flexible antenna		
AM/FM stereo with CD player and MP3 input	•	•
Hydraulic safety lock lever	•	•
Cab, all-weather sound suppressed, includes:	•	•
Cup holders	•	•
Door locks	•	•
Tinted glass	•	•
Floor mat	•	•
Horn	•	•
Large storage area	•	•
Pull-up type front window	•	•
Removable lower windshield	•	•
Seat belt	•	•
Safety glass	•	•
Sun screens, front, roof, rear	•	•
Rain shield	•	•
Windshield wiper with intermittent feature	•	•
Rear view camera	•	•
Master key	•	•
Undercarriage		
Undercover (heavy-duty)	•	•
Hydraulic track adjusters	•	•
Greased and sealed track link	•	•
Track Guard	•	•
Track shoes		
600 mm with triple grousers	•	•
700 mm with triple grousers		•
Digging equipment		
Boom: 6.45 m HD	•	•
Boom: 7.0 m HD		•
Arm: 3.2 m HD	•	•
Arm: 3.35 m HD		•
Manual centralized lubrication	•	•
OPTIONAL EQUIPMENT		
	EC380D	EC480D
Engine		
Block heater: 120 V, 240 V	•	•
Oil bath pre-cleaner	•	•
Diesel coolant heater, 10 kW	•	•
Water separator with heater	•	•
Auto engine shutdown	•	•
Electric		
Extra work lights:	•	•
Cab-mounted 3	•	•
Boom-mounted 2	•	•
Counterweight-mounted 1	•	•
Travel alarm	•	•
Anti-theft system	•	•
Rotating warning beacon	•	•
Hydraulic system		
Hose rupture valve: arm	•	•
Boom float function	•	•
Hydraulic piping:	•	•
Work tool management system (up to 20 programmable memories)	•	•
Hammer & shear, 1 and 2 pump flow	•	•
Hammer & shear: variable flow and pressure pre-setting	•	•

OPTIONAL EQUIPMENT

	EC380D	EC480D
Additional return filter	•	•
Slope & rotator	•	•
Grapple	•	•
Oil leak (drain) line	•	•
Quick coupler piping	•	•
Volvo hydraulic quick coupler S3	•	•
Volvo hydraulic quick coupler U36	•	•
Volvo hydraulic quick coupler U46	•	•
Hydraulic oil, ISO VG 32	•	•
Hydraulic oil, ISO VG 46	•	•
Hydraulic oil, ISO VG 68	•	•
Hydraulic oil, biodegradable 46	•	•
Hydraulic oil, longlife oil 32	•	•
Hydraulic oil, longlife oil 46	•	•
Hydraulic oil, longlife oil 68	•	•
Frame		
Hydraulic removable counterweight	•	
Full height counterweight: 6 500 kg, 7 000 kg, 7 550 kg		•
Full height counterweight: 8 450 kg, 9 050 kg, 9 750 kg	•	
Cab and interior		
Fabric seat with heater	•	•
Fabric seat with heater and air suspension	•	•
Pilot control pattern change	•	•
Opening top hatch	•	•
Falling object guard (FOG)	•	•
Frame-mounted	•	•
Cab-mounted	•	•
Cab-mounted falling object protective structure (FOPS)	•	•
Smoker kit (ashtray and lighter)	•	•
Safety net for front window	•	•
Lower wiper with intermittent control	•	•
Anti-vandalism kit	•	•
Specific key	•	•
Undercarriage		
Full track guard	•	•
Mechanically retractable width track gauge		•
Track shoes		
Track shoes		
600/700/800/900 mm with triple grousers	•	•
Track shoes 600 mm with double grousers	•	•
Digging equipment		
Boom: 6.2 m ME	•	
Boom: 6.5 m ME		•
Arm: 2.6 m, 3.9 m	•	
Arm: 2.55 m, 3.9 m, 4.8 m		•
Linkage with lifting eye	•	•
Service		
Tool kit, daily maintenance	•	•
Tool kit, full scale	•	•
Automatic lubrication system	•	•

SELECTION OF VOLVO OPTIONAL EQUIPMENT



VOLVO CONSTRUCTION EQUIPMENT



Volvo Construction Equipment is different. Our machines are designed, built and supported in a different way. That difference comes from an engineering heritage of over 175 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share.

The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo.

Not all products are available in all markets. Under our policy of continuous 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.

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