

VOLVO EXCAVATORS

EW180B



VOLVO

Tradition and innovation in perfect harmony

The new generation of Volvo wheeled excavators is a logical development of earlier models. At the same time, it's a whole new machine, where well-proven design solutions and new technology meet. Perfect harmony between tradition and innovation has resulted in an excavator that stands in a class of its own. Featuring Volvo's own new engines, refined hydraulics and a wide variety of new solutions, the new generation wheeled excavators are just as good at lifting and operating as they are at digging. A complete machine that's perfect for any job – both on and off the road.



Innovation at every turn

When we designed the EW180B, we examined every component of our excavators to determine how to maximize comfort, reliability, productivity, and serviceability. And we focused on a few key areas to make it happen. The result is a new Volvo-designed engine that's reliable and powerful, built to perfectly match hydraulic output levels for maximum productivity. A hydraulic system that's both tough and intelligent, designed to respond to the slightest operator command. A cab with a full range of operator conveniences and comfort help to make the work day as smooth as possible. Features throughout the machine have been designed to simplify routine maintenance, for more uptime to get the job done.

At your service

Take a look at the wide variety of innovations we added to the EW180B. Remember that every Volvo excavator is backed by complete customer support from the worldwide network of Volvo dealers and their service and parts organizations.

Specifications EW180B

Engine: Volvo D6D EAE2
Rated power at: 32 r/s (1900 r/min)
SAE J1995, gross: 119 kW (160 hp)
ISO 9249,
SAE J1349, net: 112 kW (150 hp)

Breakout force: 111,2 kN
25,020 lb
Bucket: 0.42–1.10 m³
0.55–1.44 yd³
Maximum digging reach: 9.7 m
31'10"

Maximum digging depth: 6.4 m
21'0"
Maximum travel speed: 35 km/h
21.7 mph
Operating weight: 17.7–19.8 t
39,030 ~ 43,660 lb



Outstanding performance



We've designed an engine with optimal productivity

One of the greatest improvements on the new excavators are the new Volvo in-house produced six-cylinder low-emission engines. Using vast experience and well-proven technology, we've designed an engine with optimal productivity that goes beyond all known environmental requirements, with less sound and lower fuel consumption than the predecessors. Our engines are extremely fuel efficient, and this means minimized hazardous emissions without any power loss. Since the engines are matched to the hydraulics, it's possible to operate at low engine speeds and still maintain quick movement of the digging equipment.

The new engine, the advanced hydraulics and the outstanding digging geometry combine to make the EW180B excavator perfect in a wide range of applications. It's a complete excavator, just as good at lifting and traveling as it is at digging. Excellent off-road mobility and on-road capacity allow you to maintain higher average speed, fast travel between different work sites.

Excellent maneuverability, even at low engine speeds

Volvo's advanced hydraulic system has been further refined for the new generation's excavators, making the new machines extremely smooth and maneuverable. The hydraulics pump oil to the functions only when it's needed, and all power is concentrated to the activated function. The operator has complete control of the machine and attachment, giving a feeling of being one with the machine.

The system is designed and built using proven and highly reliable components – optimized for Volvo – enabling simultaneous activation of several movements and giving the operator safe control of both load and attachment. This provides excellent maneuverability, even at low engine speeds. We dare say that it's the best hydraulic system on the market. With Volvo's unique float mode, production increases while reducing fuel consumption and wear.

High average speed guarantees high productivity

The excavators feature world class digging and lifting forces. An engine with high torque drives the hydraulic system, delivering both high working pressure and high flow. High forces and quick movements combined with outstanding maneuverability guarantee high productivity.

Just as good at lifting high as it is at digging deep

With two different digging booms, a wide range of stick lengths and attachments, there's a solution to all needs. Rugged booms and sticks are dimensioned for the most extreme stresses. And, with Volvo's tried-and-tested hydraulic quick-coupler, you can change attachments without leaving the cab. Unbeatable flexibility that generates productivity. The unique boom geometry also delivers higher lift and very good dumping height, and that means faster work cycles. These new excavators are just as good at lifting high, as they are at digging really deep.

Engine

New turbocharged, air-to-air intercooled six-cylinder, low emission, Volvo engine built specifically for use in Volvo excavators, easily meets EPA Tier 2 requirements.

The electronically controlled fuel injection provides quick response, lower fuel consumption and faster work cycles.

High engine output gives top class performance.

Three-step air cleaner increases the engine lifetime and lower operating cost.

Auto idling system reduces noise and fuel consumption.

Hydraulics

State-of-the-art hydraulic system gives you excellent maneuverability with minimal power losses.

One-touch power boost for increase in digging and lifting forces.

Durable, aluminium core oil-cooler with an electronically controlled hydrostatic fan is located separately from radiator for easy access to clean.

High versatility for extra hydraulic equipment.

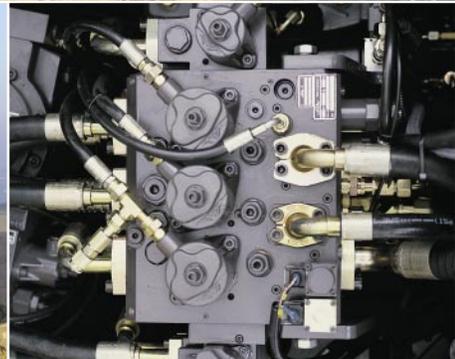
Optional boom float position – featured by Volvo since 1968.

Digging equipment

Booms and sticks built to withstand extreme stress and provide long, reliable lifetime.

Excellent digging and lifting capacities.

A wide selection of booms and sticks gives you a solution for every need.



Complete control

Technical solutions must always be introduced on human terms. It's the operator who should be in command of the machine, not the opposite. That's why our new excavators are equipped with new advanced technology that always gives the operator complete control. Volvo's mode selector allows the operator to select a working mode, so that the machine adapts to the current operating techniques and operating conditions. The new MDU - Machine Display Unit - provides the operator with all relevant information about machine status in a simple and logical manner.

Make your own mode pre-setting

The customer mode, allowing machine performance to be set to the operator's own operating conditions and operating technique. In a very simple way, the hydraulic oil flow and engine speed can be set individually.

The new MDU - Machine Display Unit - provides the operator with all relevant information about machine status in a simple and logical manner. In this way, the operator can concentrate on operating and the job. Coolant temperature and fuel level are highly visible at a glance, and it's just as easy to get information on engine speed and the selected mode, as well as engine hours and system voltage. Warning lights and an audible alarm signal alert the operator in case of a malfunction.

Go as slow as you desire

The power shift transmission allows the operator to shift between low and high speed range on the move. The transmission has three separate maximum speeds, one of which is a 2.4 mph creep speed. However, sometimes road construction and grading jobs require even slower speeds. That's why the function now is adjustable. The



operator can go as slow as desired, depending on the job that needs to be done.

A truly stable performer

The outriggers and the dozer blade give the already rugged and well-balanced machine extra stability. The outriggers spread is almost 13'. Still, the outriggers are no problem in off-road operations. They're simply folded in close to the machine. The dozer blade makes the machine a truly stable performer. Sometimes, the machine operates in inaccessible areas

and rough ground conditions that require high flexibility and all-round capability. With Volvo's excavators, you can choose to run all supports simultaneously or with separate movements, in any combination. In some situations, it might be impossible to use the outriggers. That's why it's possible to select drum brakes as an option, ensuring stable digging without play in the axles, even without outriggers.

Electrical/Electronic system

New instrument panel, combined with Machine Display Unit (MDU) enables even faster operating status checks and greater work efficiencies.

New mode selector switch with customer mode setting for the preferred machine performance.

Well protected and easily accessible distribution box for fuses and relays.

Undercarriage

High travel speed and tractive force with good ground clearance enabling excellent on-road and off-road mobility.

Rugged design of the outriggers and the dozer blade - wide outrigger spread.

Independently or simultaneously operated undercarriage supports.



More compact on the outside, more spacious on the inside

Function is a part of every detail in the new machines, which the new design clearly shows. The EW180B is more compact than the predecessor, for easier operation and more efficient work in urban environments and narrow streets. Excellent boom lifting height and short tail radius makes it possible to both swing and turn the machine around, even in rather tight areas. The cab is slightly more square than before, simply because this makes the cab more spacious on the inside. There's lots of room for your feet, as well as a practical lunchbox compartment and ample space for any personal items you may want on long shifts.



A good work environment is not an option

During development of the new machines, we've worked hard to make the cab as operator-friendly as possible. There's good reason for that; a good work environment is not an option when caring for operator comfort and operating pleasure. And only a comfortable operator does a better job.

The cab is equipped with a new ergonomic operator's seat, with multiple adjustment functions for optimal individual comfort. Even the cab's lever consoles have vertical adjustment. The electronic climate control system always ensures a comfortable cab environment. In short, the new machines offer a safe and comfortable work environment to be enjoyed, even during those long shifts.

A cab with a view

Good comfort and high safety require good visibility all around the machine, in all weather and operating conditions. Visibility in the new cab has been improved. The strong, yet narrow cab pillars give the operator a safe workplace, significant reduction of "blind spots" on both sides and excellent forward visibility on the work site. The front windshields of tinted safety glass are designed without mouldings, giving a clear view in the digging direction without blinding glare from intense sunlight.

Perfect co-ordination between operator and machine

Even the smallest parts in the machines are designed for perfect co-ordination between operator and machine, making work effective and comfortable at the same time. The operator should have a comfortable operating environment, and it should be possible to really use all of the machine's functions and features. The machine responds immediately to the operator's commands, pedals and levers react consequently and distinctly to every movement. Instruments are easy to read and controls are within easy reach, ergonomically and logically placed to make work as operator-friendly and smooth as possible. You, the operator, have full control of both machine and attachment in all jobs, even the toughest applications, making it possible for you to work long effective shifts without getting tired.

Cab

Ergonomically-designed cab provides greater operator comfort for higher operator efficiency and productivity.

Improved visibility for safer and more efficient operation.

Increased cooling and heating capacity, with Electronic Climate Control (ECC) and thirteen vents.

Very low cab noise level.

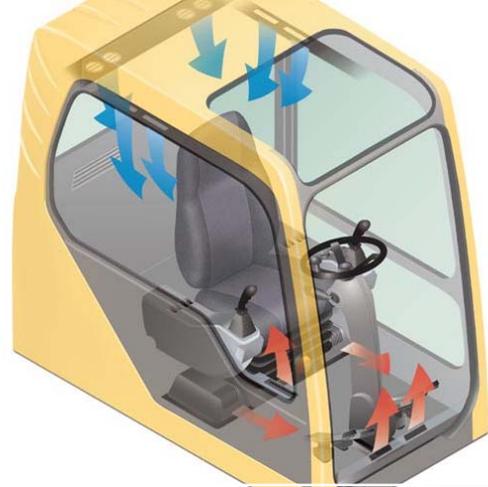
Supported by gas springs, the upper front pane is very easy to slide up.

High quality comfortable seat with nine different adjustments.

Superstructure

Compact tail swing radius and low machine profile.

Large side view rear mirror enhancing visibility and safety for both driving and working.



Care – down to the last detail

Volvo wheeled excavators are designed and built using the most advanced systems and technology available in the world today. Nothing has been left to chance. But, technology has not been allowed to stand above all. Instead, we've focused on operating safety and care – care of the machine, the environment and, most of all, the operator.

Easiest and safest workday possible

A wide range of ergonomic details and ingenious solutions, along with longitudinal mounting of the engine in the machine, mean easy service and routine maintenance from ground level. For service points higher up, the machine has the market's widest and safest platforms with anti-slip steps. Behind the cab on the middle of the machine, there is a spacious platform with lots of room to work. All these features encourage and facilitate the important service work, and give the operator the easiest and safest workday possible.

When it comes to safety, Volvo is in a class of its own

When it comes to operator safety and machine safety, Volvo is in a class of its own. An excavator must be able to handle tough work and withstand high stresses. It's important that traveling is safe, and this is something we've worked hard on for the new generation of excavators. The highly visible hydraulic safety bar in front of the left control console enables the operator to easily enter or leave the

machine without activating any machine functions.

Volvo excavators feature a unique travel lock. By turning a switch, you lock the entire superstructure to the undercarriage and, at the same, all hydraulic functions are blocked. This prevents accidental movement of the digging equipment, swing or the undercarriage's support functions when traveling on a public road. In addition, the operator in a Volvo can lock the oscillating axle simply by using the service brake. It can also be locked manually.

Automatic speed retardation gives you peace of mind

Even when running downhill at full throttle, the safety feature retards the machine speed and prevents it from overspeeding.

This results in less use of the service brake and gives the operator great peace of mind and safety. Should the machine run out of diesel fuel, there's an emergency system that always allows steering and braking. With the installed accumulators, the brakes in the new machines always provide reliable braking.



Serviceability

- On-ground maintenance of engine.
- Spacious service walkway with self-cleaning anti-slip steps.
- Large, easy-to-open doors and hoods with locks.
- Centralized and on-ground lubrication for digging equipment and swing bearing.
- Centralized hydraulic pressure check points.

Environment and Safety

- Low emission engines, meeting EPA Tier 2 emissions standard.
- Low noise hydraulic pumps and hydraulic driven, oil cooler fan.
- Optional bio-degradable hydraulic oil.
- Highly visible hydraulic safety lock with tilting console box.

Safe and easy superstructure alignment to undercarriage for traveling.

Automatic front axle lock on applying the digging brake.

Automatic retardation of downhill speed.

Optional front window safety net, FOPS and FOG.



The EW180B in detail

Engine

The engine is a low-emission, turbocharged, 4-stroke diesel engine with water cooling, direct injection and charged air cooler that meets EPA Tier 2 requirements. The engine has been developed especially for excavator use, providing good fuel economy, low noise levels and a long service life.

Air Filter: 3-stage

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 level.

Engine.....	Volvo D6D EAE2
Rated power at.....	32 r/s 1,900 r/min
Gross SAE J1995	119 kW 160 hp
Net ISO 9249/SAE J1349	112 kW 150 hp
Maximum torque at 1 450 rpm.....	663 N.m 489 lb ft
No. of cylinders	6
Displacement, total	5.7 l 348 cu.in
Bore	98 mm 3.86"
Stroke	126 mm 4.96"

Electrical system

Contronics, provides advanced monitoring of machine function and important diagnostic information. High capacity and well protected electrical system. Centrally located fuse and relay box using clearly arranged printed circuit board mounted, for easy access, behind the cab. A master switch is standard.

Voltage.....	24 V
Battery.....	2 x 12 V
Battery capacity.....	140 Ah
Alternator	28 V /80 A

Cab

The operator's 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 excellent all-round visibility. The front windshield can easily slide up into the ceiling, and the lower front glass can be removed and stored in the door.

Integrated air conditioning and heating system:
The pressurized and filtered cab air is supplied by an automatically controlled fan. The air is distributed via 13 vents.

Ergonomic operator's seat: The adjustable seat and joystick consoles move independently to accommodate the operator. The seat has nine different adjustments and a seat belt to meet any operator's comfort and safety.

Sound Level:

Sound level in cab according to ISO 6396	72 LpA dB(A)
External sound level according to ISO 6395	103 LwA dB(A)
(Directive 2000/14/EC)	

Undercarriage

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

Framework: All-welded robust torsion box frame.

Wheels: Alternative single and twin wheels available.

Front axle: Robust excavator axle with automatic or operator controlled front axle oscillation lock. Oscillating $\pm 9^\circ$ (with mudguards $\pm 7^\circ$).

Twin wheels.....	10.00–20	
Maximum tractive force (net).....	95 kN	21,380 lb
Travel speeds		
on road	35.0 km/h	21.7 mph
off road	7.8 km/h	4.8 mph
creep speed	3.8 km/h	2.4 mph
System pressure	36 MPa	5,220 psi

Brakes

Service brakes: servo-hydraulically maneuvered, self-adjusting wet multidiscs in two separate brake circuits.

Parking brake: negative wet disc in gear housing, spring applied and pressure released.

Digging brake: use travel brakes via mechanical travel pedal lock system.

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

Weights

Machine with 5.2 m (17'1") monoblock boom, 2.45 m (8'2") stick, quickfit S1, 630 kg (1,390 lb) / 830 l (1.09 yd³) bucket.
* Machine with 5.25 m (17'3") 2-piece boom.

Total machine weight, including dozer blade front and outriggers rear.....	19,200 kg	42,340 lb
	19,800 kg	43,660 lb
Total machine weight including dozer blade rear, only	17,700 kg	39,030 lb
	18,300 kg	40,350 lb

Service refill capacities

Fuel tank.....	300 l	79 gal
Hydraulic system, total	320 l	85 gal
Hydraulic tank	190 l	50 gal
Engine oil.....	25 l	7 gal
Engine coolant	22 l	6 gal
Transmission.....	2.9 l	0.8 gal
Axle housing		
Front axle	8.5 l	2.2 gal
Rear axle	12.0 l	3.2 gal
Final drive		
Wet disc type	2.0 l	0.5 gal
Drum type	1.8 l	0.5 gal

Hydraulic system

Closed-center load-sensing hydraulic system with pressure compensated valves. Load independence of movements. Flow sharing feature, combined with a high flow electronically controlled pump (power regulation). The system gives superior maneuverability and fast movements, for optimal working result and economy.

The following working modes are included in the system:

Parking mode (P):

Parking position for optimal safety.

Travel mode (T):

Engine speed is controlled by travel pedal stroke for low fuel consumption and noise. Work equipment are not able to move at this mode for optimal safety.

Working mode (W):

Full working flow with adjustable engine rpm for normal working and best speed utilization.

Customer mode (C):

Operator can set proper oil flow in accordance with job conditions.

Power Boost:

All digging and lifting forces are increased.

Hydraulic pumps:

Main pump

Type

low noise axial piston pump

Maximum flow

355 l/min **94 gpm**

Brake + steering pump

Type

low noise gear pump

Maximum flow

32 l/min **8.5 gpm**

Hydraulic oil cooling fan + servo pump

Type

gear pump

Maximum flow

47 l/min **12.4 gpm**

System Pressure

Maximum pressure.....

32 MPa **4,640 psi**

Maximum pressure with

Power Boost.....

36 MPa **5,220 psi**

Servo pressure

3.5 MPa **510 psi**

Swing system

The superstructure is swung by the means of an axial piston motor with a planetary reduction gear.

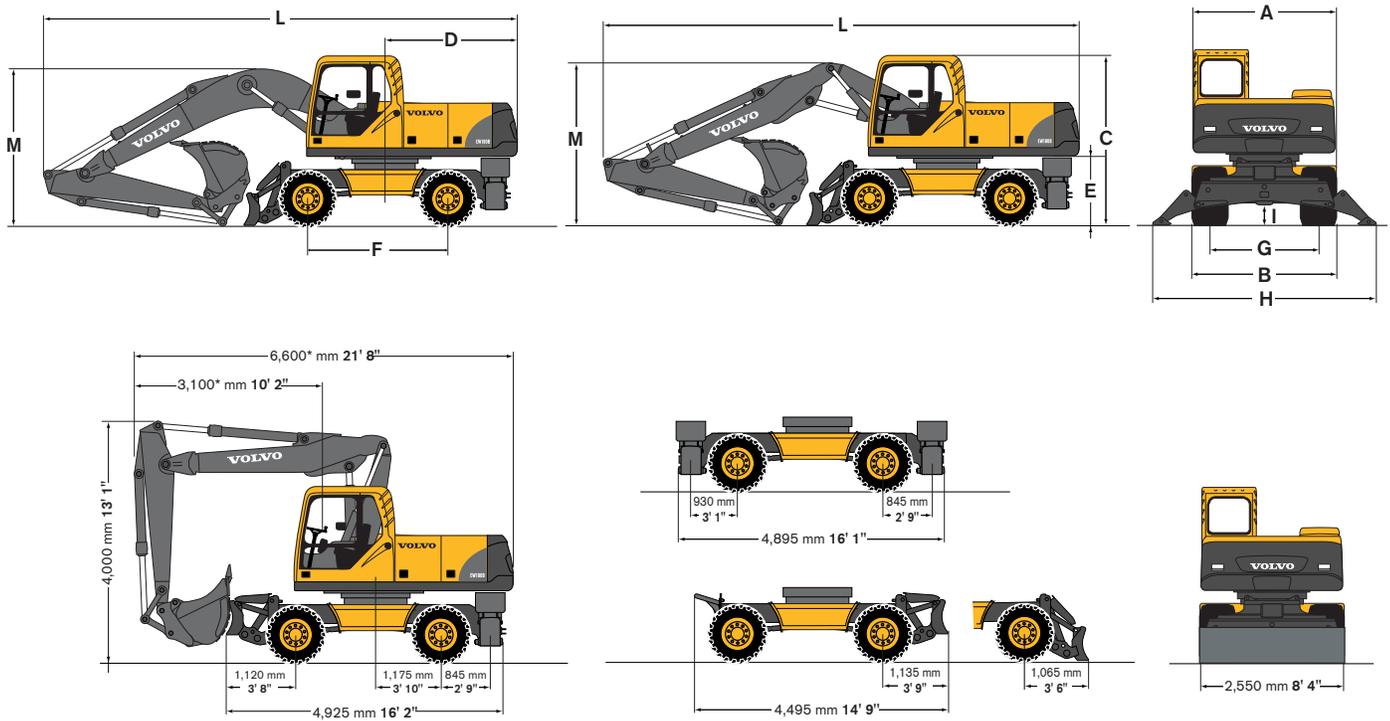
Automatic swing holding brake and anti-rebound valve are standard.

Maximum swing speed.....

9.5 rpm

Specifications

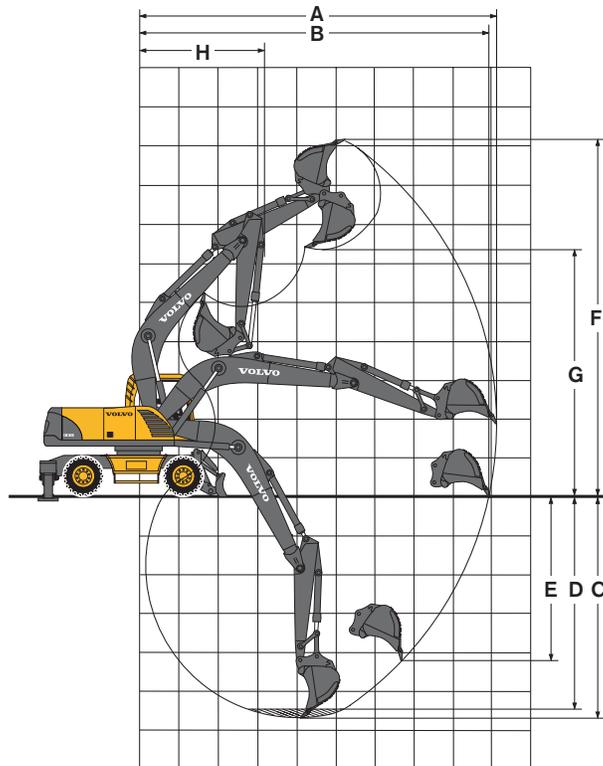
Dimensions



* Travel position with 2.45 m (8'0") stick

Description	Unit	5.2 m (17'1") Monoblock Boom			5.25 m (17'3") 2-Piece Boom		
		2.45	2.6	3.0	2.45	2.6	3.0
A. Overall width of superstructure	mm, ft-in	2,500	8'2"		2,500	8'2"	
B. Overall width	mm, ft-in	2,550	8'4"		2,550	8'4"	
C. Overall height of cab	mm, ft-in	3,120	10'3"		3,120	10'3"	
D. Tail swing radius	mm, ft-in	2,445	8'0"		2,445	8'0"	
E. Counterweight clearance	mm, ft-in	1,290	4'3"		1,290	4'3"	
F. Wheel base	mm, ft-in	2,600	8'6"		2,600	8'6"	
G. Tread	mm, ft-in	1,925	6'4"		1,925	6'4"	
H. Outrigger width, down (front or rear)	mm, ft-in	3,960	13'0"		3,960	13'0"	
I. Minimum ground clearance	mm, ft-in	370	1'3"		370	1'3"	
Stick length:	m	2.45	2.6	3.0	2.45	2.6	3.0
	ft-in	8'0"	8'6"	9'10"	8'0"	8'6"	9'10"
L. Overall length	mm	8,690	8,785	8,520	8,795	8,785	8,810
	ft-in	28'6"	28'10"	27'11"	28'10"	28'10"	28'11"
M. Overall height of boom	mm	2,960	3,300	4,000	3,075	3,050	3,480
	ft-in	9'9"	10'10"	13'1"	10'1"	10'0"	11'5"

Working Ranges & Digging Forces



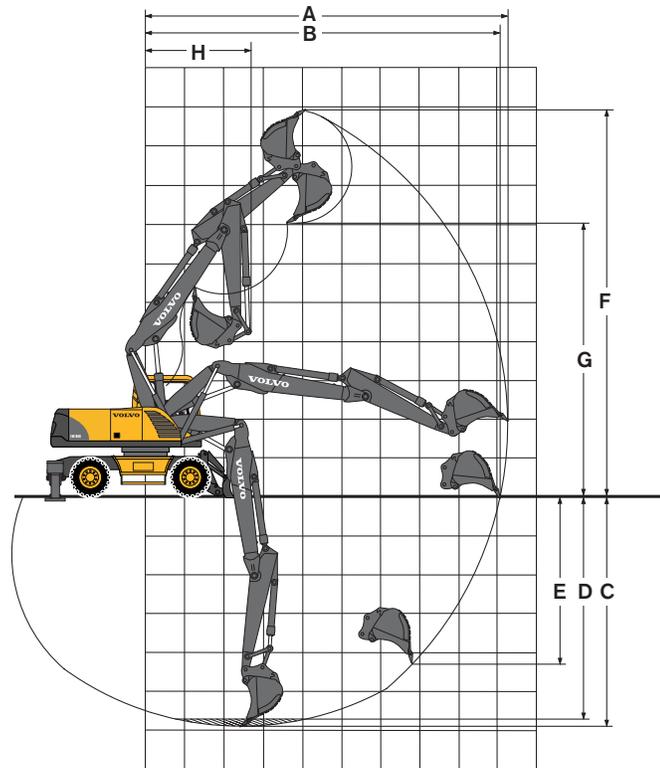
Monoblock Boom	m, ft-in	5.2	17'1"	5.2	17'1"	5.2	17'1"
Stick	m, ft-in	2.45	8'0"	2.6	8'0"	3.0	9'10"
A. Max. digging reach	m, ft-in	9.2	30'2"	9.3	30'6"	9.6	31'6"
B. Max. digging reach at ground level	m, ft-in	9.0	29'6"	9.1	29'10"	9.4	30'10"
C. Max. digging depth	m, ft-in	5.7	18'8"	5.8	19'0"	6.2	20'4"
D. Max. digging depth (2,440 mm, 8' level)	m, ft-in	5.5	18'1"	5.6	18'4"	6.0	19'8"
E. Max. vertical wall digging depth	m, ft-in	4.2	13'9"	4.3	14'1"	4.8	15'9"
F. Max. cutting height	m, ft-in	9.1	29'10"	9.1	29'10"	9.2	30'2"
G. Max. dumping height	m, ft-in	6.4	21'0"	6.4	21'0"	6.6	21'8"
H. Min. front swing radius	m, ft-in	3.2	10'6"	3.2	10'6"	3.2	10'6"

Digging Forces with direct fit bucket:							
Bucket radius	mm, in	1,420	56"	1,420	56"	1,420	56"
Breakout force (SAE/ISO)	kN	111.2/122.9		111.2/122.9		111.2/122.9	
	lb	25,020/27,650		25,020/27,650		25,020/27,650	
Tearout force (SAE/ISO)	kN	101.0/102.6		97.1/98.5		88.1/89.2	
	lb	22,730/23,090		21,850/22,160		19,820/20,070	
Rotation angle, bucket	deg	187°		187°		187°	

Maximum permitted sizes for quick fit buckets:							
GP-bucket (1.5 t/m ³ 2,530 lb/yd ³)	l, yd ³	950	1.24	925	1.21	775	1.01
GP-bucket (1.8 t/m ³ 3,030 lb/yd ³)	l, yd ³	850	1.21	825	1.08	675	0.88

Maximum permitted sizes for direct fit buckets:							
GP-bucket (1.5 t/m ³ 2,530 lb/yd ³)	l, yd ³	1,025	1.34	1,000	1.31	850	1.11
GP-bucket (1.8 t/m ³ 3,030 lb/yd ³)	l, yd ³	925	1.21	875	1.14	750	0.98

Note: 1. Bucket size based on SAE-J296, heaped material with a 1:1 angle of repose.
2. "Maximum permitted sizes" are for reference only and are not necessarily available from the factory.



2-Piece Boom	m, ft-in	5.25	17'3"	5.25	17'3"	5.25	17'1"
Stick	m, ft-in	2.45	8'0"	2.6	8'6"	3.0	9'10"
A. Max. digging reach	m, ft-in	9.3	30'6"	9.4	30'10"	9.7	31'10"
B. Max. digging reach at ground level	m, ft-in	9.1	29'10"	9.2	30'2"	9.5	31'2"
C. Max. digging depth	m, ft-in	5.9	19'4"	6.0	19'8"	6.4	21'0"
D. Max. digging depth (2,440 mm, 8' level)	m, ft-in	5.8	19'0"	5.9	19'4"	6.3	20'8"
E. Max. vertical wall digging depth	m, ft-in	4.2	13'9"	4.3	14'1"	4.7	15'5"
F. Max. cutting height	m, ft-in	9.9	32'6"	10.0	32'10"	10.1	33'2"
G. Max. dumping height	m, ft-in	7.0	23'0"	7.1	23'4"	7.3	23'11"
H. Min. front swing radius	m, ft-in	2.6	8'6"	2.6	8'6"	2.6	8'6"

Digging Forces with direct fit bucket:							
Bucket radius	mm, in	1,420	56"	1,420	56"	1,420	56"
Breakout force (SAE/ISO)	kN	111.2/122.9		111.2/122.9		111.2/122.9	
	lb	25,020/27,650		25,020/27,650		25,020/27,650	
Tearout force (SAE/ISO)	kN	101.0/102.6		97.1/98.5		88.1/89.2	
	lb	22,730/23,090		21,850/22,160		19,820/20,070	
Rotation angle, bucket	deg	187°		187°		187°	

Maximum permitted sizes for quick fit buckets:							
GP-bucket (1.5 t/m ³ 2,530 lb/yd³)	l, yd ³	900	1.18	875	1.14	725	0.95
GP-bucket (1.8 t/m ³ 3,030 lb/yd³)	l, yd ³	800	1.05	775	1.01	650	0.85

Maximum permitted sizes for direct fit buckets:							
GP-bucket (1.5 t/m ³ 2,530 lb/yd³)	l, yd ³	975	1.28	950	1.24	800	1.05
GP-bucket (1.8 t/m ³ 3,030 lb/yd³)	l, yd ³	875	1.14	850	1.11	700	0.92

Note: 1. Bucket size based on SAE-J296, 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.

Lifting Capacity

At the stick end, without bucket. Unit: 1 000 kg

For lifting capacity including bucket, simply subtract actual weight of bucket from the following values.

 Across under-carriage  Along under-carriage	Lifting hook related to ground level	Reach from machine centre																u = support up		d = support down		Max. m
		1.5 m, 5'		3.0 m, 10'		4.5 m, 15'		6.0 m, 20'		7.5 m, 25'		Max. reach										
		u	d	u	d	u	d	u	d	u	d	u	d	u	d	u	d	u	d			
Monoblock boom 5.2 m, 17'1"	7.5 m 25'																3.3*	3.3*	3.3*	3.3*	5.7	
	6.0 m 20'																7.360*	7.360*	7.360*	7.360*	18.44	
	4.5 m 15'																4.2	4.4*	4.4*	4.4*	5.1	
	3.0 m 10'																9.690	9.880*	9.880*	9.880*	16.13	
	1.5 m 5'																2.8	4.0*	4.0*	4.0*	6.4	
	0.0 m 0'																6.380	8.800*	8.800*	8.800*	20.86	
	-1.5 m -5'																2.3	3.9*	3.2	3.9*	7.2	
	-3.0 m -10'																5.120	8.560*	7.190	8.560*	23.57	
	-4.5 m -15'																2.1	4.0*	2.9	4.0*	7.6	
	-6.0 m -20'																4.540	8.820*	6.430	8.820*	24.95	
Monoblock boom 5.2 m, 17'1"	7.5 m 25'																3.3*	3.3*	3.3*	3.3*	5.7	
	6.0 m 20'																7.360*	7.360*	7.360*	7.360*	18.44	
	4.5 m 15'																4.0	4.1*	4.1*	4.1*	5.3	
	3.0 m 10'																9.100*	9.100*	9.100*	9.100*	16.77	
	1.5 m 5'																6.140	8.160*	8.160*	8.160*	21.35	
	0.0 m 0'																2.2	3.6*	3.1	3.6*	7.3	
	-1.5 m -5'																4.960	7.980*	6.970	7.980*	24.00	
	-3.0 m -10'																2.0	3.7*	2.8	3.7*	7.7	
	-4.5 m -15'																4.400	8.230*	6.240	8.230*	25.36	
	-6.0 m -20'																1.9	4.0	2.7	4.0*	7.8	
Monoblock boom 5.2 m, 17'1"	7.5 m 25'																3.3*	3.3*	3.3*	3.3*	5.7	
	6.0 m 20'																7.360*	7.360*	7.360*	7.360*	18.44	
	4.5 m 15'																4.0	4.1*	4.1*	4.1*	5.3	
	3.0 m 10'																9.100*	9.100*	9.100*	9.100*	16.77	
	1.5 m 5'																6.140	8.160*	8.160*	8.160*	21.35	
	0.0 m 0'																2.2	3.6*	3.1	3.6*	7.3	
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	-4.5 m -15'																4.400	8.230*	6.240	8.230*	25.36	
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	6.0 m 20'																7.360*	7.360*	7.360*	7.360*	18.44	
	4.5 m 15'																4.0	4.1*	4.1*	4.1*	5.3	
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	-6.0 m -20'																1.9	4.0	2.7	4.0*	7.8	
Monoblock boom 5.																						

STANDARD EQUIPMENT

Engine

Turbocharged, 6-cylinder Volvo diesel engine with water cooling, direct injection and charged air cooler that meets EPA Tier 2 emission requirements
Air intake heater
Electric engine shut-off
Fuel filter and water separator
Aluminium core radiator
Protective net for radiator and hydraulic cooler

Electric/Electronic control system

Contronics – computerized monitoring and diagnostic system
Master switch
Automatic idling system
One-touch power boost
Adjustable monitor
Engine restart prevention circuit
Safety stop/start function
Travel alarm
High capacity halogen lamps
– Frame-mounted 2
– Cab-mounted 2
– Boom-mounted 2
Alternator, 80 A
Batteries, 2 x 12 V/140 Ah
Start motor, 24 V/4.8 kW

Undercarriage

Twin tires 10.00–20 PR16
2-speed power transmission plus creep speed

Travel speed 21.7 mph (35 km/h)
Oscillating front axle $\pm 9^\circ$
2-circuit travel brakes
Maintenance-free propeller shafts
Stone protection rings
Front dozer blade and rear outriggers
Tool box, left hand side

Superstructure

Counterweight, 3,220 kg, **7,100 lb**
Service walkway with anti-slip grating
Centralized lubricating point for swing bearing
Switch to align superstructure to undercarriage

Cab and interior

Electronic climate control (ECC)
Hydraulic dampening cab mounts
Adjustable operator seat and joystick control console
Adjustable steering wheel column
Flexible antenna
Hydraulic safety lock lever
Control joystick, with five switches each
Cab, all-weather sound suppressed, includes:
– Fabric seat, with heater and air suspension
– Ashtray
– Cup holder
– Lighter
– Door locks
– Tinted safety glass
– Floor mat
– Horn

– Large storage area
– Pull-up type front window
– Removable lower windshield
– Seat belt
– Front rain shield
– Windshield wiper with intermittent feature
– Stereo-Radio with cassette
Sun blinds, front, rear and roof
Anti-vandalism kit assembly preparation
Master ignition key

Hydraulic system

Load-sensing hydraulic system
Hammer/shear piping
Separate hammer return oil line
Quick coupler piping
Cylinder cushioning
Cylinder contamination seals
Return filter of full flow type 2000 h exchange interval
Pressure relief system (servo accumulator)
Thermostatically controlled cooling fan
Hydraulic oil, ISO VG46
Hose rupture valve for boom
Pump flow control for hammer
Two step pressure settings for attachments
Shut-off cocks for hammer/shear and return line piping

Digging equipment

Monoblock, 5.2 m, **17'1"**
Stick, 2.6 m, **8'6"**
Attachment points for extra hydraulics
Centralized lubrication point

OPTIONAL EQUIPMENT

(Standard in certain markets)

Engine

Diesel-powered cab and engine heater with digital timer
Electric engine heater, 110V
Tropical cooling kit
Fuel filler pump: 50l/min, **13 gpm** with automatic shut-off

Electric/Electronic control system

Rotating warning beacon
Electrical floor switch for hammer
Extra work lights:
– Service walkway 1 and counterweight 1

Undercarriage

Single tire 18R-19.5
Mudguards, front/rear
Tool box, right hand side
Rear dozer blade and front outriggers
4 outriggers
Rear axle with drumbrake (playfree)

Cab and interior

Fabric seat
Heater and air-conditioner, manual
Falling object guard (FOG)
Cab mounted falling object protective structure (FOPS)
Safety net for front window
Lower wiper
Anti-vandalism kit
Anti-theft protection
Cruise control in max. speed

Hydraulic system

Hose rupture valve for boom and stick
Float position on boom
Hydraulic oil, ISO VG 32
Hydraulic oil, ISO VG 68
Hydraulic oil, biodegradable 46
Complete hydraulics for slope bucket/rotator
Complete hydraulics for 2-piece boom
Pilot pattern change

Hydraulic quickfit

Hydraulic quickfit, S1

Digging equipment

Boom

2-piece boom, 5.25 m, **17'3"**

Sticks

2.45 m, **8'0"**
3.0 m, **9'10"**
3.2 m, **10'6"** material handling stick

Attachments

Ripper, S1
Hammer holder, S1
Grab holder, S1

Service

Tool kit



Volvo Construction Equipment is different. It's designed, built and supported in a different way. That difference comes from our 170-year engineering heritage. 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. And we're proud of what makes Volvo different – **More care. Built In.**



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