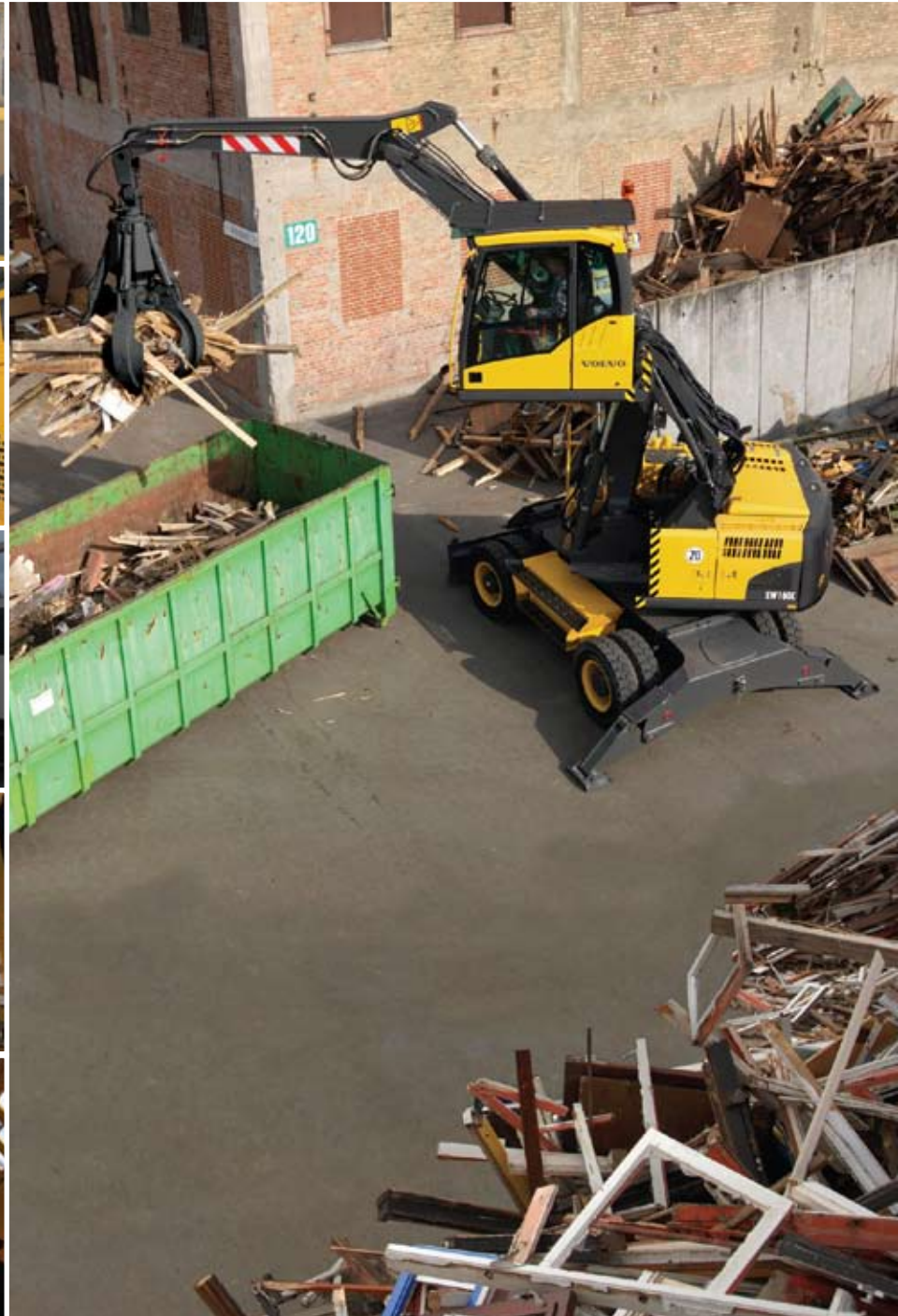


VOLVO WHEELED EXCAVATOR
EW160C
RECYCLING
OPTIONS

37,040 - 40,790 lb, 142 hp



MORE CARE. BUILT IN.



SPECIFICATIONS

Engine

The next-generation Volvo diesel engine uses Volvo Advanced Combustion Technology (V-ACT) to deliver lower emissions and maintain superior performance and fuel efficiency.

The EPA Tier 3 compliant engine uses precise, high-pressure fuel injectors, turbo charger and air to air intercooler, and electronic engine controls to optimize machine performance.

Engine	Volvo D6E EDE3	
Power out at	30.0 r/s	1,800 rpm
Gross (SAE J1995)	115 kW	154 hp
Net (ISO 9249, DIN 6271)	106 kW	142 hp
Max. torque at 1,350 rpm	730 Nm	538 lb. ft.
No. of cylinders	6	
Displacement	5.7 l	328 cu. in.
Bore	98 mm	3.86"
Stroke	126 mm	4.96"

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.

Voltage	24 V
Battery	2 x 12 V
Battery capacity	2 x 140 Ah
Alternator	28 V / 80 A
Alternator rating	2,240 W

Elevating Cab

Hydraulic elevating cab, raising the operator's line-of-sight to more than 5.0 m (16' 5").

Set your optimum height for any task to have a commanding view with a safe entry and egress of cab in its lowest setting.

Outstanding maneuverability and stability in congested recycling yards.

Easy maneuvering in small, densely filled, urban or inner-city indoor yards.

Cab features

New-design Volvo Care Cab with operator protective structure, large and roomy interior, more leg room and foot space. One way travel pedal with rocker switch control (F-N-R) on the right joystick. One-touch release for digging brake pedal.

Audio system with remote control. 3 cup holders, 3 outlets, independently adjustable joystick consoles. Excellent all-round visibility provided by maximized cab glass, transparent roof hatch, 2-piece sliding door window and longstroke, easy to adjust and narrow steering column.

The liftable front windshield can easily be stored in the inside roof space and clipped in position. The removable lower front glass can be stored in the side door pocket. Interior lighting consists of one reading light and one light with timer.

The pressurized and filtered cab air is supplied by a 14-vent climate-control system providing fast defrosting and high cooling and heating performance.

Viscous/spring mounted suspension cushions protect the operator from vibrations. Deluxe air-suspension seat with adjustable seat suspension, height, tilt, recline and forward-backward settings. Adjustable, easy to read 6.4" LCD color monitor provides real time information of machine functions and important diagnostic information and is switchable to rear view camera monitor (option).

Sound Level:

In cab, acc. to ISO 6396	70 LpA dB(A)
External, acc. to ISO 6395	101 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 or twin wheels available.

Front axle: Robust excavator axle with automatic or operator controlled front axle oscillation lock. Oscillating ± 9° (with mudguards ± 7°).

Twin wheels	10.00-20	
Max. tractive force (net)	99.5 kN	23,370 lb
Travel speed:		
on road	20.0 km/h	12.4 mph
off road	5.0 / 7.4 / 8.7 km/h	3.1 / 4.6 / 5.4 mph
creep	3.7 km/h	2.3 mph
Min. turning radius	7.3 m	24' 0"

Brakes

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

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

Digging brake: service brake with mechanical lock system.

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

Total machine weights

Machine with 5.0 m (16' 5") monoblock boom, 2.45 m (8' 0") dipper arm, quickfit S6, 530 kg (1,170 lb) / 750 l (0.98 yd³) bucket.

Total machine weights :
with elevating cab
16.8 -18.5 t, **37,040 - 40,790 lb**

Dozer blade front and outriggers rear
17,880 kg / 18,220* kg, **39,420 lb / 40,170* lb**

Dozer blade rear excl. outriggers
16,800 kg / 17,140* kg, **37,040 lb / 37,790* lb**

Front and rear outriggers
18,130 kg / 18,470* kg, **39,970 lb / 40,720* lb**

*Machine with 5.1 m (16' 9") 2-piece boom.

Service refill capacities

Fuel tank	250 l	66.0 gal
Hydraulic system, total	260 l	68.7 gal
Hydraulic tank	123 l	32.5 gal
Engine oil	25 l	6.6 gal
Engine coolant	27 l	7.1 gal
Transmission	2.5 l	0.7 gal
Axle differential:		
Front axle	9.5 l	2.5 gal
Rear axle	12.5 l	3.3 gal
Final drive, wet disc type	4 x 2.5 l	4 x 0.7 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.

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:

Max. flows:		
Main pump	243 l/min	64.2 gpm
(type low noise axial piston pump)		
Brake + steering pump	38.0 l/min	10.0 gpm
(type low noise gear pump)		
Servo pump	14.0 l/min	3.7 gpm
(type low noise gear pump)		
Hydraulic oil cooling fan + pilot pump		
(type gear pump)		
	49.0 l/min	12.9 gpm
Max. pressure:	32.5 / 36 MPa	
Implements	4,714 / 5,220 psi	
Travel system	36 MPa	5,220 psi
Pilot system	3.5 MPa	510 psi

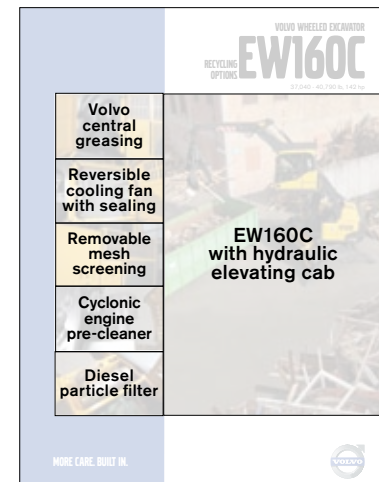
Swing system

The superstructure swings by the means of a radial piston motor without reduction gear.

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

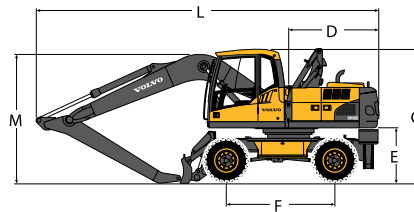
Max swing speed	10.0 rpm
Max. swing torque	49.6 kNm
	36,580 lb. ft.

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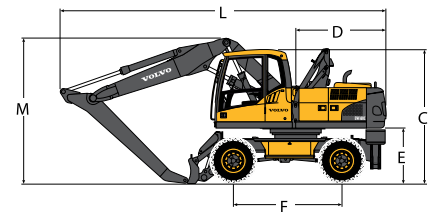


*May not be compliant in all markets.

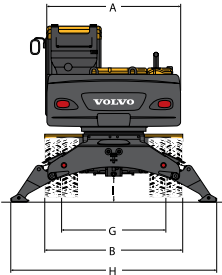
DIMENSIONS



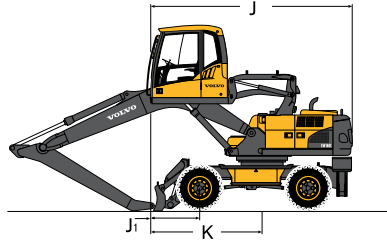
Elevated cab mono boom in transport position



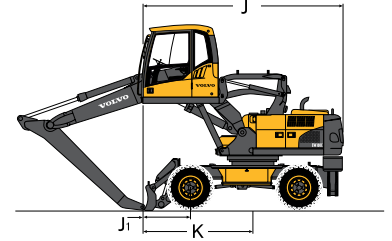
Elevated cab two piece boom in transport position



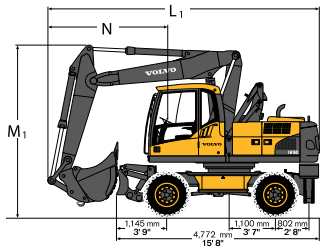
Elevated cab rear view; cab and outrigger down



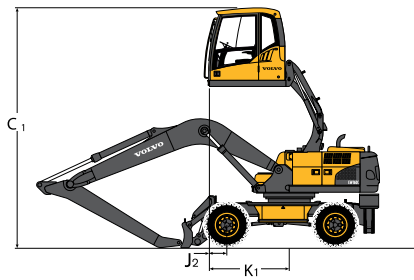
Elevated cab mono boom in maximum overhang position



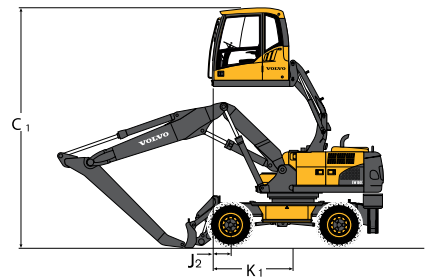
Elevated cab two piece boom in maximum overhang position



Driving position Elevated cab



Elevated cab mono boom in highest position



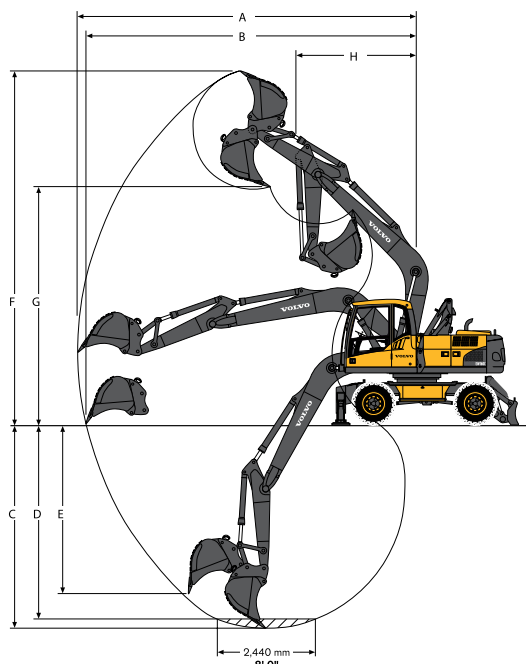
Elevated cab two piece boom in highest position

Description	Unit	5.0 m, 16' 5" monoblock boom	5.1 m, 16' 9" 2-piece boom
A. Overall width of superstructure	mm, ft-in	2,490, 8' 2"	2,490, 8' 2"
B. Overall width	mm, ft-in	2,540, 8' 4"	2,540, 8' 4"
C. Overall height of cab	mm, ft-in	3,140, 10' 4"	3,140, 10' 4"
C1. Overall height, cab at max. lifting height	mm, ft-in	5,600, 18' 5"	5,600, 18' 5"
D. Tail swing radius	mm, ft-in	2,260, 7' 5"	2,260, 7' 5"
E. Counterweight clearance	mm, ft-in	1,270, 4' 2"	1,270, 4' 2"
F. Wheel base	mm, ft-in	2,600, 8' 6"	2,600, 8' 6"
G. Tread	mm, ft-in	1,940, 6' 4"	1,940, 6' 4"
H. Outrigger width (front or rear)	mm, ft-in	3,920, 12' 10"	3,920, 12' 10"
I. Min. ground clearance	mm, ft-in	340, 1' 1"	340, 1' 1"
J. Front overhang of cab, max., length to tail	mm, ft-in	4,770, 15' 8"	4,770, 15' 8"
J1. Front overhang of cab, max.	mm, ft-in	1,150, 3' 9"	1,150, 3' 9"
J2. Front overhang of cab at max. lifting height	mm, ft-in	670, 2' 2"	670, 2' 2"
K. Front swing of cab at max. overhang	mm, ft-in	2,650, 8' 8"	2,650, 8' 8"
K1. Front swing of cab at max. lifting height	mm, ft-in	2,170, 7' 2"	2,170, 7' 2"

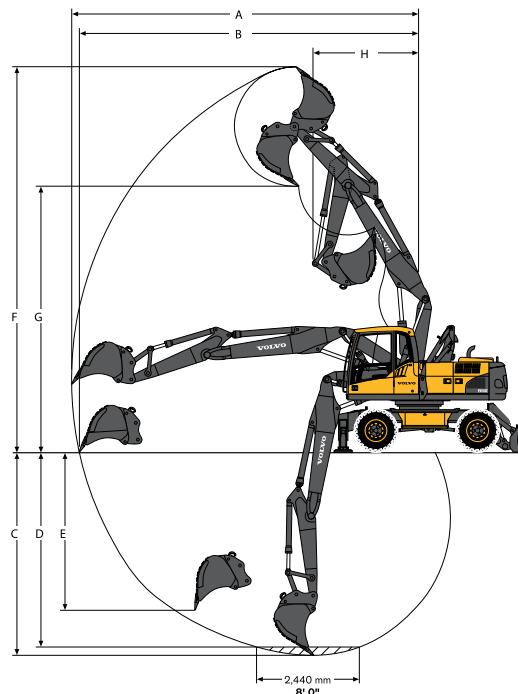
Description	Unit	5.0 m, 16' 5" monoblock boom, arm					5.1 m, 16' 9" 2-piece boom, arm				
		2.0 6' 7"	2.45 8' 1"	2.6 8' 6"	3.1 10' 2"	2.95* 9' 8"	2.0 6' 7"	2.45 8' 1"	2.6 8' 6"	3.1 10' 2"	2.95* 9' 8"
L. Overall length, transport position	mm ft-in	8,180 26' 10"	8,190 26' 11"	8,170 26' 10"	7,940 26' 1"	8,210* 26' 11"	8,300 27' 3"	8,310 27' 3"	8,290 27' 2"	8,100 26' 7"	8,300* 27' 3"
M. Overall height of boom, transport position	mm ft-in	2,960 9' 9"	3,190 10' 6"	3,270 10' 9"	3,640 11' 11"	3,155* 10' 4"	2,765 9' 1"	2,885 9' 6"	2,975 9' 9"	3,390 11' 2"	2,960* 9' 9"
L1. Overall length, driving position	mm ft-in						6,305 20' 8"	6,345 20' 10"	6,355 20' 10"	6,545** 21' 6"	6,000* 19' 8"
M1. Overall height of boom, driving position	mm ft-in						3,960 13' 0"	3,995 13' 1"	4,000 13' 2"	4,000** 13' 2"	3,950* 13' 0"
N. Front overhang	mm ft-in						3,125 10' 3"	3,165 10' 5"	3,175 10' 5"	3,360** 11' 0"	2,820* 9' 3"

*material handling arm, without clamshell bucket
** without bucket

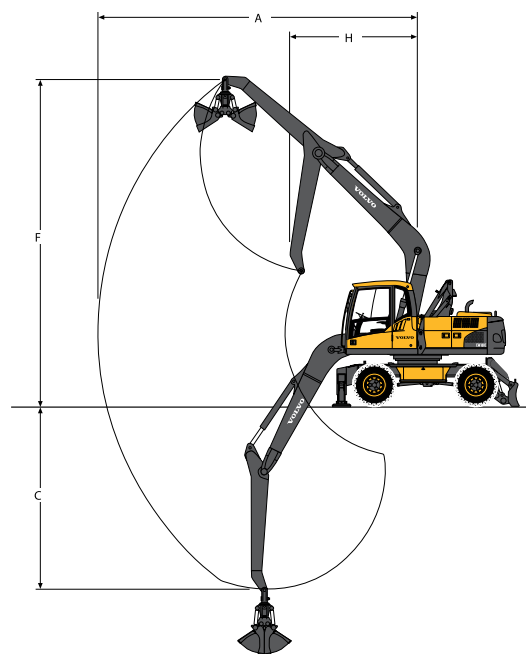
WORKING RANGES



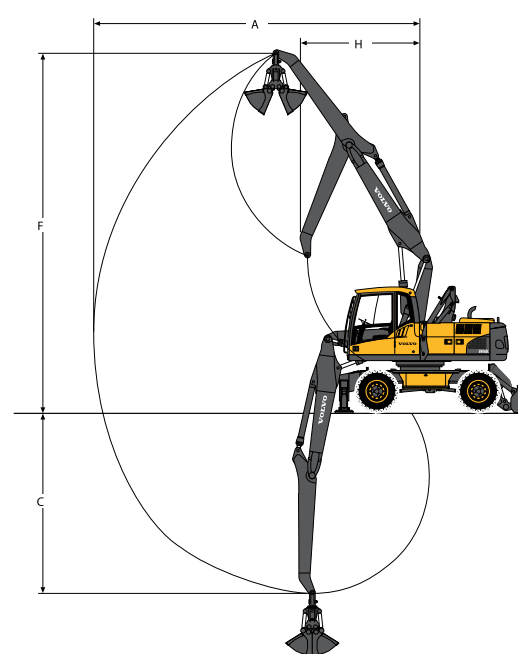
Monoblock boom 5.0 m, **16' 5"** and dipper arm
2.0 m, **6' 7"** / 2.45 m, **8' 1"** / 2.6 m, **8' 6"** / 3.1 m, **10' 2"**



2-piece boom 5.1 m, **16' 9"** and dipper arm
2.0 m, **6' 7"** / 2.45 m, **8' 1"** / 2.6 m, **8' 6"** / 3.1 m, **10' 2"**



Monoblock boom 5.0 m, **16' 5"** and MH arm 2.95 m, **9' 8"**



2-piece boom 5.1 m, **16' 9"** and MH arm 2.95 m, **9' 8"**

Description	Unit	5.0 m, 16' 5" monoblock boom, arm					5.1 m, 16' 9" 2-piece boom, arm				
	m	2.0	2.45	2.6	3.1	2.95*	2.0	2.45	2.6	3.1	2.95*
	ft-in	6' 7"	8' 1"	8' 6"	10' 2"	9' 8"	6' 7"	8' 1"	8' 6"	10' 2"	9' 8"
A. Max. digging reach	mm	8,590	9,010	9,160	9,630	8,050	8,730	9,160	9,300	9,780	8,190
	ft-in	28' 2"	29' 7"	30' 1"	31' 7"	26' 5"	28' 8"	30' 1"	30' 6"	32' 1"	26' 10"
B. Max. digging reach on ground	mm	8,390	8,820	8,970	9,460		8,530	8,970	9,120	9,610	
	ft-in	27' 6"	28' 11"	29' 5"	31' 0"		28' 0"	29' 5"	29' 11"	31' 6"	
C. Max. digging depth	mm	5,140	5,590	5,740	6,240	4,590	5,120	5,570	5,710	6,220	4,580
	ft-in	16' 10"	18' 4"	18' 10"	20' 6"	15' 1"	16' 10"	18' 3"	18' 9"	20' 5"	15' 0"
D. Max. digging depth (2,440 mm (8' 0") level)	mm	4,910	5,390	5,550	6,070		5,010	5,470	5,620	6,120	
	ft-in	16' 1"	17' 8"	18' 3"	19' 11"		16' 5"	17' 11"	18' 5"	20' 1"	
E. Max. vertical wall digging depth	mm	4,270	4,690	4,840	5,310		3,970	4,440	4,590	5,070	
	ft-in	14' 0"	15' 5"	15' 11"	17' 5"		13' 0"	14' 7"	15' 1"	16' 8"	
F. Max. cutting height	mm	8,850	9,110	9,200	9,480	8,090	9,670	10,000	10,110	10,480	9,000
	ft-in	29' 0"	29' 11"	30' 2"	31' 1"	26' 7"	31' 9"	32' 10"	33' 2"	34' 5"	29' 6"
G. Max. dumping height	mm	5,950	6,190	6,240	6,560		6,670	7,000	7,110	7,480	
	ft-in	19' 6"	20' 4"	20' 6"	21' 6"		21' 11"	23' 0"	23' 4"	24' 7"	
H. Min. front swing radius	mm	3,140	3,150	3,160	3,190	3,270	2,690	2,820	2,860	3,000	3,010
	ft-in	10' 4"	10' 4"	10' 5"	10' 6"	10' 9"	8' 10"	9' 3"	9' 5"	9' 10"	9' 11"

*material handling arm; dimensions measured at arm end

STANDARD EQUIPMENT

Engine

Turbocharged, 4 stroke Volvo diesel engine with water cooling, direct injection and charged air cooler that meets EPA Tier 3 emission requirements

Intake air pre-heater
Electric engine shut-off
Fuel filter and water separator
Aluminium core radiator

Electric/Electronic control system

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

Undercarriage

2-speed power transmission plus creep speed
Oscillating front axle $\pm 9^\circ$
2-circuit travel brakes
Maintenance-free propeller shafts

Superstructure

Counterweight, 3,200 kg, **7,055 lb**
Service walkway with anti-slip grating
Centralized lubricating point for swing bearing

Digging equipment

Attachment points for extra hydraulics
Centralized lubrication point

Cab and interior

Volvo Care Cab with openable PC roof hatch
Heater & air-conditioner, automatic
Hydraulic dampening cab mounts
Adjustable operator seat and joystick control console
Adjustable steering wheel
AM/FM stereo with CD player and MP3 input; includes flexible antenna
Hydraulic safety lock lever
Control joystick, with 5 switches each

Cab, all-weather sound suppressed, includes:

- Cup holder
- Door locks
- Safety glass, light tinted
- Floor mat
- Horn
- Large storage area
- Pull-up type front window
- Removable lower windshield
- Seat belt, 3 inch retractable
- Windshield wiper with washer and intermittent feature

Sun shield, front, roof, rear
Anti-vandalism kit assembly preparation
Master ignition key

Hydraulic system

Load sensing hydraulic system
Cylinder cushioning
Cylinder contamination seals
Return filter of full flow type 2,000 h exchange interval
Pressure relief system (servo accumulator)
Thermostatically controlled cooling fan
Hose rupture valve for boom
Hydraulic oil, ISO VG 46

OPTIONAL EQUIPMENT

Engine

Block heater, 120 V
Water separator with heater
Diesel coolant heater with digital timer
Reversible cooling fan
Removable mesh screening
Sealing of cooler compartment area
Dust net for radiator and oil cooler (on cooling compartment)
Diesel particle filter
Cyclonic engine pre-cleaner
Fuel filler pump 50 l/min, **13.2 gpm** with auto stop

Electric

Rotating beacon
Extra work lights:
– Service walkway 1 and counterweight 1
– Boom-mounted 2
– Cab front 2
Electric center passage
Rear view camera
CareTrack via satellite
Anti-theft system
Cruise control
Tilting and rotating attachment preparation

Hydraulic system

Hose rupture valve for dipper arm
Boom float function
Hydraulic oil, ISO VG 32
Hydraulic oil, ISO VG 68
Hydraulic oil, biodegradable 32
Hydraulic oil, biodegradable 46
Long life hydraulic oil 32
Long life hydraulic oil 46
Long life hydraulic oil 68

Hydraulic equipment for:

- Hammer / shear
- Slope bucket /rotator
- Grab/clam shell
- Quick fit
- Flow control
- Flow and pressure control
- Proportional control X1 or X3

Cab and interior

Hydraulic elevating cab, maximum lifting height 5.6 m, **18' 5"**
Proportional control joysticks
Falling object guard (FOG)
Rain shield, front
Sunlight protection, roof hatch (steel)
Safety net for front window
Lower wiper
Anti-vandalism kit
Ashtray
Lighter
Seat:
– Fabric seat, with heater
– Fabric seat, with heater and air suspension

Undercarriage

Twin pneumatic tires 10.00 – 20 / 11.00 – 20
Single tires 18R – 19.5 / 600 / 40-22.5
Sparewheel
Twin solid tires
Stone protection rings
Front dozer blade and rear outriggers
Rear dozer blade
4 outriggers
Mudguards, front/rear
Tool box, left side/right side
Travel speed 20 km/h, **12.4 mph**
Wide axle 2.75 m, **9' 0"**

Digging equipment

Boom height limiter system
Auto lubrication system
Booms:
5.0 m, **16' 5"** monoblock
5.1 m, **16' 9"** 2-piece boom
Dipper arms:
2.0 m, **6' 7"** / 2.45 m, **8' 1"**
2.6 m, **8' 6"** / 3.1 m, **10' 2"**
2.95 m, **9' 8"** MH arm
Buckets:
18" S6 - GP
18" XP - GP
36" S6 - GP
36" XP - GP

Hydraulic quick fit

S1 system
S6 system
Universal system

Service

Tool kit, daily maintenance
Tool kit, full scale

Standard and optional equipment may vary by market. Please consult your local Volvo dealer for details.



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. And we're proud of what makes Volvo different – **More care. Built in.**



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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