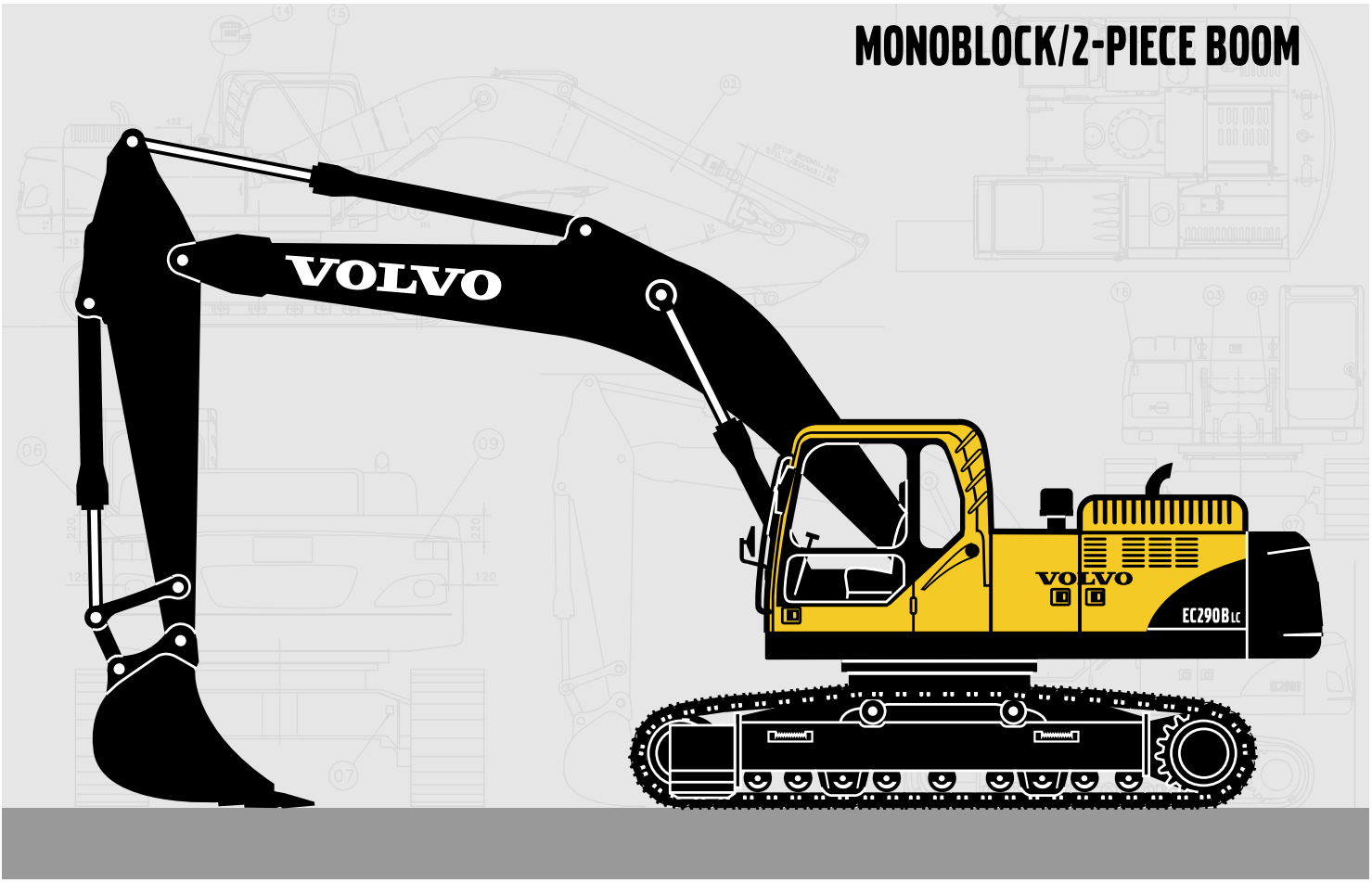
VOLVO EXCAVATOR

EC290B LC
EC290B NLC

MONOBLOCK/2-PIECE BOOM



- Engine power, gross: 153 kW (205 hp)
- Operating weight: LC: 28,6 ~ 29,9 t NLC: 28,4 ~ 29,7 t
- Buckets (SAE): 950 ~ 2 100 l

- Turbocharged VOLVO diesel engine with direct injection and charged air cooler meets EU Step 2 requirements

- Contronics, Volvo's advanced mode selection system and electronically controlled system
- 2 variable displacement axial piston pumps. Independent and simultaneous movements of the digging equipment are controlled by "Automatic Sensing Work Mode".
- Cab
  - Ergonomic environment for easier operator use
  - Low sound level
  - Filtered air
  - Hydraulic dampening mounts

- Strong digging equipment, produced by robotic welding
- High lifting, breakout and tearout forces for tough digging conditions
- Undercarriage
  - LC: Long undercarriage for excellent stability
  - NLC: Narrow width for easier transportation
- Auxiliary hydraulic valve is standard
- Prepared for a number of optional items

VOLVO

ENGINE

The engine is a turbocharged, 4-stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU Step 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, and pre-cleaner

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.

Low-Emission Engine:

Make	VOLVO
Model	D7D ECE2
Power output at	32 r/s (1 900 rpm)
Net (ISO 9249/ DIN 6271)	143 kW (195 ps / 192 hp)
Gross (SAE J1995)	153 kW (208 ps / 205 hp)
Max. torque	940 N·m at 1 400 rpm
No. of cylinders	6
Displacement	7,1 l
Bore	108 mm
Stroke	130 mm

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.

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

SERVICE REFILL CAPACITIES

Fuel tank	470 l
Hydraulic system, total	400 l
Hydraulic tank	195 l
Engine oil	32 l
Engine coolant	44 l
Slew reduction unit	11 l
Travel reduction unit	2 x 5,0 l

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. tractive effort	230,5 kN
Max. travel speed	3,3 / 5,2 km/h
Gradeability	35° (70%)

SLEW SYSTEM

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

Max. slew speed	10,2 rpm

UNDERCARRIAGE

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

LC

No. of track shoes	2 x 50
Link pitch	203 mm
Shoe width, triple grouser	600 / 700 / 800 / 900 mm
Shoe width, double grouser	700 mm
No. of bottom rollers	2 x 9
No. of top rollers	2 x 2

NLC

No. of track shoes	2 x 48
Link pitch	203 mm
Shoe width, triple grouser	600 / 700 / 800 / 900 mm
No. of bottom rollers	2 x 8
No. of top rollers	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 good fuel economy. The summation system, boom, arm and slew priority along with boom and arm regeneration provide optimum performance.

The following important functions are included in the system:

Summation system: Combines 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 performing 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: Gives priority to slew 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.

Power Max: All function speeds are increased.

Main pump:
- Type · · · · · · · · · · · · 2 x variable displacement axial piston pumps
- Maximum flow · · · 2 x 250 l/min

Pilot pump:
- Type · · · · · · · · · · · · Gear pump
- Maximum flow · · · 1 x 19 l/min

Hydraulic motors:
- Travel · · · · · · · · · · · Variable displacement axial piston motors
- Slew · · · · · · · · · · · · Fixed displacement axial piston motor with mechanical brake

Relief valve setting:
- Implement · · · · · · · 31,4 / 34,3 Mpa
- Travel circuit · · · · · 34,3 Mpa
- Slew circuit · · · · · 26,5 Mpa
- Pilot circuit · · · · · · 3,9 Mpa

Hydraulic cylinders:
- Monoblock boom · · · · · · · · · · · · · · · · · · 2
  - Bore x Stroke · · · · · · · · · · · · · · · · · · ø140 x 1 480 mm
- 1st boom of 2-piece boom · · · · · · · · · · 2
  - Bore x Stroke · · · · · · · · · · · · · · · · · · ø140 x 1 480 mm
- 2nd boom of 2-piece boom · · · · · · · · · 1
  - Bore x Stroke · · · · · · · · · · · · · · · · · · ø170 x 1 300 mm
- Arm · 1
  - Bore x Stroke · · · · · · · · · · · · · · · · · · ø150 x 1 745 mm
- Bucket · 1
  - Bore x Stroke · · · · · · · · · · · · · · · · · · ø140 x 1 140 mm

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 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 side door.

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 13 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 to for the operator's comfort and safety.

Sound Level:
- Sound level in cab
  - according to ISO 6396 · · · · · · · · · · · · · LpA 73 dB(A)
- External sound level
  - according to ISO 6395
  - and EU Directive 2000/14/EC · · · · · · · LwA 105 dB(A)

GROUND PRESSURE

● Long crawler machine with 6,2 m boom, 3,05 m arm, 1 240 l (975 kg) bucket and 5 800 kg counterweight.

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm	28 600 kg	53,9 kPa	3 190 mm
	700 mm	29 160 kg	47,1 kPa	3 290 mm
	800 mm	29 530 kg	42,2 kPa	3 390 mm
	900 mm	29 900 kg	38,2 kPa	3 490 mm
Double grouser	700 mm	29 160 kg	47,1 kPa	3 290 mm

● Narrow long crawler machine with 6,2 m boom, 3,05 m arm, 1 240 l (975 kg) bucket and 5 800 kg counterweight.

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm	28 400 kg	56,9 kPa	2 990 mm
	700 mm	28 960 kg	49,0 kPa	3 090 mm
	800 mm	29 310 kg	44,1 kPa	3 190 mm
	900 mm	29 670 kg	39,2 kPa	3 290 mm

MAX. PERMITTED BUCKETS

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.

- Max. permitted sizes for direct fit buckets:
  Long crawler machine with counterweight 5 800 kg

Description	Unit	6,2 m Boom		
		2,55 m Arm	3,05 m Arm	4,0 m Arm
GP bucket 1,5 t/m³	l	2 100	1 900	1 625
GP bucket 1,8 t/m³	l	1 825	1 650	1 425
RB bucket 1,8 t/m³	l	1 600	1 450	1 250
RB bucket 2,0 t/m³	l	1 500	1 350	1 150

- Max. permitted sizes for quick fit buckets:
  Long crawler machine with counterweight 5 800 kg

Description	Unit	6,2 m Boom		
		2,55 m Arm	3,05 m Arm	4,0 m Arm
GP bucket 1,5 t/m³	l	2 000	1 800	1 525
GP bucket 1,8 t/m³	l	1 750	1 575	1 325
RB bucket 1,8 t/m³	l	1 525	1 375	1 175
RB bucket 2,0 t/m³	l	1 425	1 275	1 075

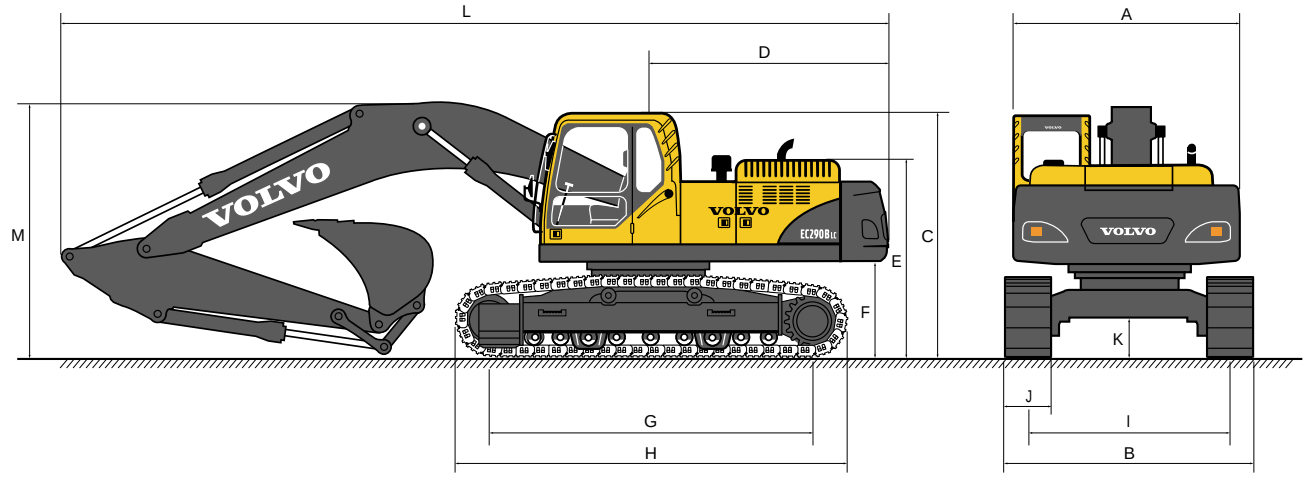
- Max. permitted sizes for direct fit buckets:
  Narrow long crawler machine with counterweight 5 800 kg

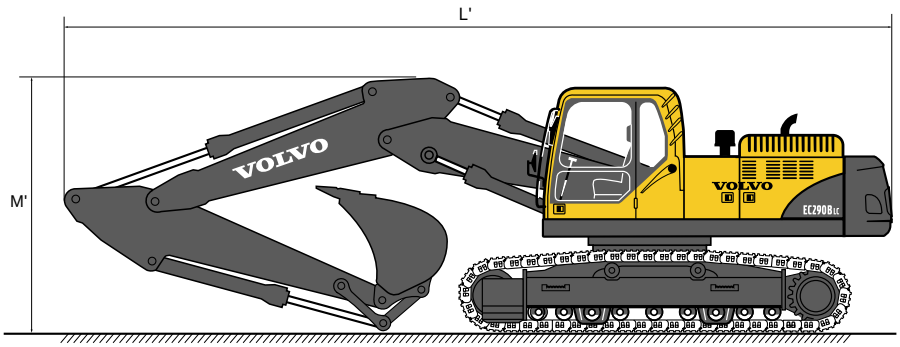
Description	Unit	6,2 m Boom		
		2,55 m Arm	3,05 m Arm	4,0 m Arm
GP bucket 1,5 t/m³	l	1 875	1 700	1 425
GP bucket 1,8 t/m³	l	1 625	1 475	1 250
RB bucket 1,8 t/m³	l	1 450	1 300	1 100
RB bucket 2,0 t/m³	l	1 325	1 200	1 025

- Max. permitted sizes for quick fit buckets:
  Narrow long crawler machine with counterweight 5 800 kg

Description	Unit	6,2 m Boom		
		2,55 m Arm	3,05 m Arm	4,0 m Arm
GP bucket 1,5 t/m³	l	1 775	1 600	1 325
GP bucket 1,8 t/m³	l	1 550	1 400	1 175
RB bucket 1,8 t/m³	l	1 375	1 225	1 025
RB bucket 2,0 t/m³	l	1 275	1 150	950

DIMENSIONS





- Long crawler machine

Description	Unit	6,2 m Boom		
		2,55 m Arm	3,05 m Arm	4,0 m Arm
A. Overall width of superstructure	mm	2 890	2 890	2 890
B. Overall width	mm	3 190	3 190	3 190
C. Overall height of cab	mm	3 030	3 030	3 030
D. Tail slew radius	mm	2 970	2 970	2 970
E. Overall height of engine hood	mm	2 450	2 450	2 450
F. Counterweight clearance *	mm	1 145	1 145	1 145
G. Tumbler length	mm	4 015	4 015	4 015
H. Track length	mm	4 870	4 870	4 870
I. Track gauge	mm	2 590	2 590	2 590
J. Shoe width	mm	600	600	600
K. Min. ground clearance *	mm	480	480	480
L. Overall length	mm	10 480	10 400	10 440
L'. Overall length	mm	10 480	10 430	10 400
M. Overall height of boom	mm	3 430	3 290	3 680
M'. Overall height of boom	mm	3 360	3 300	3 730

* Without shoe grouser

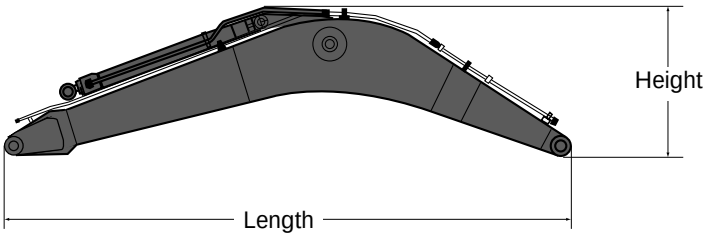
DIMENSIONS

● Narrow long crawler machine

Description	Unit	6,2 m Boom		
		2,55 m Arm	3,05 m Arm	4,0 m Arm
A. Overall width of superstructure	mm	2 890	2 890	2 890
B. Overall width	mm	2 990	2 990	2 990
C. Overall height of cab	mm	3 030	3 030	3 030
D. Tail slew radius	mm	2 970	2 970	2 970
E. Overall height of engine hood	mm	2 450	2 450	2 450
F. Counterweight clearance *	mm	1 145	1 145	1 145
G. Tumbler length	mm	3 810	3 810	3 810
H. Track length	mm	4 665	4 665	4 665
I. Track gauge	mm	2 390	2 390	2 390
J. Shoe width	mm	600	600	600
K. Min. ground clearance *	mm	480	480	480
L. Overall length	mm	10 480	10 400	10 440
L'. Overall length	mm	10 480	10 430	10 400
M. Overall height of boom	mm	3 430	3 290	3 680
M'. Overall height of boom	mm	3 360	3 300	3 730

* Without shoe grouser

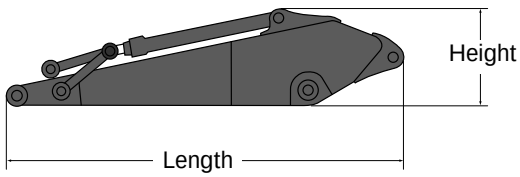
● Boom



Description	6,2 m	6,2 m 2-piece
Length	6 430 mm	6 430 mm
Height	1 680 mm	1 590 mm
Width	770 mm	770 mm
Weight	2 470 kg	2 960 kg

* Includes cylinder, pin and piping

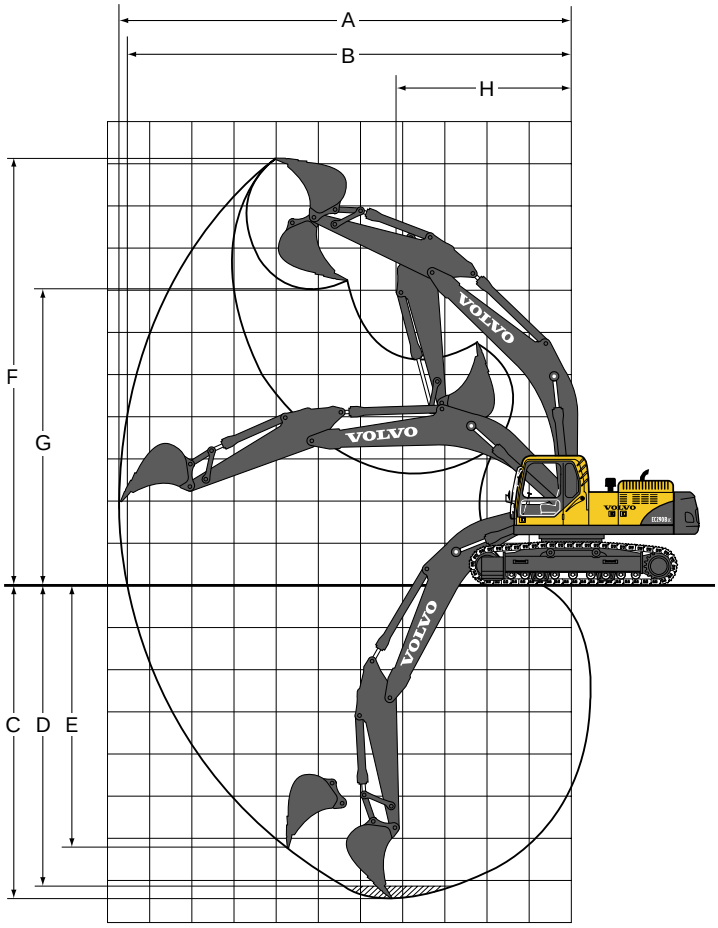
● Arm



Description	2,55 m	3,05 m	4,0 m
Length	3 710 mm	4 150 mm	5 100 mm
Height	1 010 mm	1 010 mm	1 070 mm
Width	545 mm	545 mm	545 mm
Weight	1 415 kg	1 490 kg	1 710 kg

* Includes cylinder, piping and linkage

WORKING RANGES & DIGGING FORCES



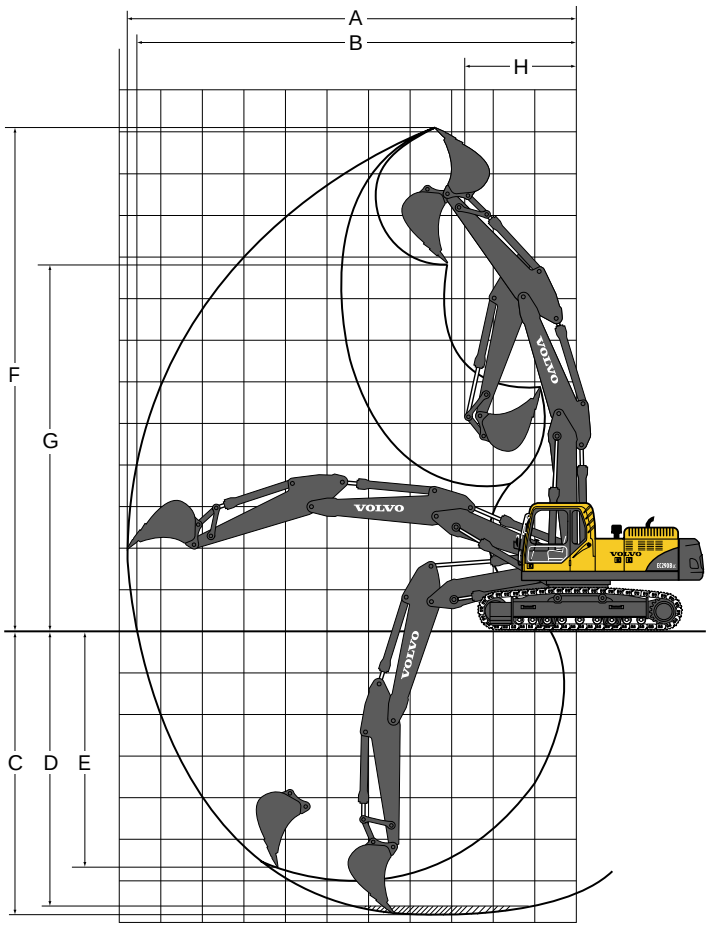
- 6,2 m monoblock boom with direct fit bucket

Description	Unit	6,2 m monoblock boom		
		2,55 m Arm	3,05 m Arm	4,0 m Arm
A. Max. digging reach	mm	10 160	10 690	11 570
B. Max. digging reach on ground	mm	9 950	10 490	11 400
C. Max. digging depth	mm	6 830	7 320	8 280
D. Max. digging depth	mm	6 590	7 140	8 130
E. Max. vertical wall digging depth	mm	5 440	6 200	7 110
F. Max. cutting height	mm	9 620	10 040	10 460
G. Max. dumping height	mm	6 690	7 050	7 470
H. Min. front slew radius	mm	4 220	4 180	4 280

- Digging forces with direct fit bucket

Description		Unit	6,2 m monoblock boom		
			2,55 m Arm	3,05 m Arm	4,0 m Arm
Bucket radius		mm	1 600	1 600	1 600
Breakout force – bucket (Normal / Power boost)	SAE	kN	157,8 / 172,6	157,8 / 172,6	157,8 / 172,6
Breakout force – bucket (Normal / Power boost)	ISO	kN	181,4 / 198,4	181,4 / 198,4	181,4 / 198,4
Tearout force – arm (Normal / Power boost)	SAE	kN	145,0 / 158,7	123,4 / 134,9	102,3 / 111,9
Tearout force – arm (Normal / Power boost)	ISO	kN	152,9 / 167,2	127,6 / 139,5	105,0 / 114,8
Rotation angle, bucket		deg	179	179	179

WORKING RANGES & DIGGING FORCES



- 6,2 m 2-piece boom with direct fit bucket

Description	Unit	6,2 m 2-piece boom		
		2,55 m Arm	3,05 m Arm	4,0 m Arm
A. Max. digging reach	mm	10 220	10 750	11 650
B. Max. digging reach on ground	mm	10 020	10 560	11 480
C. Max. digging depth	mm	6 200	6 720	7 660
D. Max. digging depth	mm	6 100	6 630	7 580
E. Max. vertical wall digging depth	mm	4 530	5 640	6 550
F. Max. cutting height	mm	11 550	12 050	12 790
G. Max. dumping height	mm	8 370	8 860	9 600
H. Min. front slew radius	mm	2 750	2 580	2 870

- Digging forces with direct fit bucket

Description		Unit	6,2 m 2-piece boom		
			2,55 m Arm	3,05 m Arm	4,0 m Arm
Bucket radius		mm	1 600	1 600	1 600
Breakout force – bucket (Normal / Power boost)	SAE	kN	157,8 / 172,6	157,8 / 172,6	157,8 / 172,6
Breakout force – bucket (Normal / Power boost)	ISO	kN	181,4 / 198,4	181,4 / 198,4	181,4 / 198,4
Tearout force – arm (Normal / Power boost)	SAE	kN	145,0 / 158,7	123,4 / 134,9	102,3 / 111,9
Tearout force – arm (Normal / Power boost)	ISO	kN	152,9 / 167,2	127,6 / 139,5	105,0 / 114,8
Rotation angle, bucket		deg	179	179	179

LIFTING CAPACITY (At the arm and without bucket)

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

EC290B LC

Across undercarriage / Along undercarriage	Lifting hook related to ground level		3,0 m		4,5 m		6,0 m		7,5 m		9,0 m		Max. reach		
															Max. mm
with 600 mm shoe 5 800 kg CWT boom 6,2 m + arm 2,55 m	6,0 m	kg					*7 670	*7 670	*7 490	5 420			*7 500	5 360	7 540
	4,5 m	kg			*10 800	*10 800	*8 710	7 500	*7 790	5 320			7 250	4 620	8 170
	3,0 m	kg			*13 800	10 730	*10 070	7 110	8 150	5 140			6 710	4 250	8 490
	1,5 m	kg			*15 850	10 130	11 180	6 780	7 960	4 970			6 560	4 120	8 540
	0 m	kg			*16 420	9 930	10 960	6 580	7 830	4 850			6 760	4 220	8 310
	-1,5 m	kg	*11 580	*11 580	*16 020	9 940	10 890	6 530	7 810	4 830			7 410	4 600	7 780
	-3,0 m	kg	*19 950	*19 950	*14 710	10 080	10 990	6 610					8 930	5 500	6 890
	-4,5 m	kg	*15 930	*15 930	*11 870	10 420							*9 540	7 860	5 460
with 600 mm shoe 5 800 kg CWT boom 6,2 m + arm 3,05 m	6,0 m	kg							*6 840	5 480			*5 540	4 740	8 140
	4,5 m	kg					*8 070	7 560	*7 290	5 340			*5 530	4 150	8 730
	3,0 m	kg			*12 730	10 920	*9 490	7 150	*8 000	5 140	*5 970	3 860	*5 710	3 840	9 030
	1,5 m	kg			*15 150	10 200	*10 830	6 780	7 940	4 940	6 030	3 780	5 960	3 730	9 070
	0 m	kg			*16 220	9 880	10 920	6 540	7 780	4 800			6 110	3 810	8 850
	-1,5 m	kg	*10 580	*10 580	*16 200	9 810	10 800	6 440	7 720	4 740			6 610	4 100	8 360
	-3,0 m	kg	*17 570	*17 570	*15 260	9 900	10 840	6 480	7 790	4 800			7 720	4 770	7 540
	-4,5 m	kg	*17 940	*17 940	*13 040	10 170	*9 540	6 690					*8 900	6 330	6 260
with 600 mm shoe 5 800 kg CWT boom 6,2 m + arm 4,0 m	6,0 m	kg							*5 740	5 620	*4 470	4 070	*3 980	3 960	9 120
	4,5 m	kg							*6 310	5 440	*5 970	4 000	*3 980	3 520	9 650
	3,0 m	kg			*10 570	*10 570	*8 260	7 320	*7 130	5 200	6 160	3 880	*4 090	3 280	9 920
	1,5 m	kg			*13 470	10 440	*9 800	6 860	7 970	4 950	6 020	3 750	*4 320	3 190	9 950
	0 m	kg	*6 540	*6 540	*15 330	9 860	10 910	6 510	7 740	4 740	5 890	3 640	*4 710	3 220	9 760
	-1,5 m	kg	*9 740	*9 740	*16 040	9 620	10 690	6 320	7 600	4 620	5 830	3 580	*5 370	3 410	9 320
	-3,0 m	kg	*14 200	*14 200	*15 780	9 600	10 630	6 270	7 570	4 590			6 250	3 840	8 590
	-4,5 m	kg	*20 790	19 740	*14 470	9 760	10 740	6 370	7 710	4 720			7 710	4 720	7 500
with 600 mm shoe 5 800 kg CWT 2-piece boom 6,2 m + arm 2,55 m	6,0 m	kg	*10 980	*10 980	*11 660	*11 660	*9 780	7 790	8 470	5 360			*8 050	5 210	7 620
	4,5 m	kg			*13 560	11 590	*10 540	7 440	8 350	5 250			7 130	4 480	8 240
	3,0 m	kg			*15 580	10 590	*11 410	7 020	8 130	5 060			6 610	4 120	8 560
	1,5 m	kg					11 140	6 660	7 930	4 880			6 460	4 000	8 600
	0 m	kg			*15 430	9 760	10 910	6 460	7 800	4 760			6 650	4 100	8 380
	-1,5 m	kg			*13 630	9 780	*10 700	6 410	7 790	4 750			7 300	4 470	7 860
	-3,0 m	kg			*10 780	9 960	*8 510	6 520					*6 600	5 350	6 970
	-4,5 m	kg													
with 600 mm shoe 5 800 kg CWT 2-piece boom 6,2 m + arm 3,05 m	6,0 m	kg			*8 740	*8 740	*9 180	7 910	*8 180	5 450			*5 570	4 620	8 210
	4,5 m	kg			*12 700	11 870	*10 060	7 540	8 410	5 300			*5 510	4 040	8 800
	3,0 m	kg			*14 900	10 840	*11 040	7 100	8 170	5 080	6 120	3 810	*5 650	3 740	9 090
	1,5 m	kg			*16 120	10 060	11 190	6 700	7 930	4 870	6 020	3 720	5 880	3 630	9 130
	0 m	kg			*15 850	9 720	10 890	6 440	7 770	4 720			6 030	3 710	8 920
	-1,5 m	kg	*9 830	*9 830	*14 430	9 670	10 780	6 340	7 700	4 660			6 530	4 000	8 430
	-3,0 m	kg			*11 950	9 790	*9 330	6 400	*6 640	4 750			*6 330	4 660	7 620
	-4,5 m	kg													
with 600 mm shoe 5 800 kg CWT 2-piece boom 6,2 m + arm 4,0 m	6,0 m	kg					*6 400	*6 400	*6 510	5 600	*4 810	4 020	*4 000	3 830	9 210
	4,5 m	kg	* 6 390	*6 390	*7 380	*7 380	*7 650	*7 650	*7 410	5 410	*6 150	3 950	*3 970	3 410	9 730
	3,0 m	kg			*13 310	11 330	*10 150	7 270	8 250	5 140	6 150	3 820	*4 050	3 170	10 000
	1,5 m	kg			*15 250	10 300	*11 140	6 770	7 950	4 870	5 990	3 680	*4 250	3 080	10 030
	0 m	kg	*5 840	*5 840	*15 920	9 680	10 870	6 400	7 710	4 650	5 870	3 560	*4 590	3 120	9 840
	-1,5 m	kg	*9 080	*9 080	*15 320	9 440	10 640	6 200	7 570	4 520	5 810	3 510	*5 170	3 310	9 400
	-3,0 m	kg	*13 610	*13 610	*13 610	9 440	*10 360	6 150	7 550	4 510			*5 970	3 720	8 680
	-4,5 m	kg			*10 620	9 640	*8 120	6 280	*5 490	4 660			*5 410	4 640	7 530

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.

LIFTING CAPACITY (At the arm and without bucket)

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

EC290B NLC

Across undercarriage / Along undercarriage	Lifting hook related to ground level		3,0 m		4,5 m		6,0 m		7,5 m		9,0 m		Max. reach		
															Max. mm
with 600 mm shoe 5 800 kg CWT boom 6,2 m + arm 2,55 m	6,0 m	kg					*7 670	7 060	*7 490	4 890			*7 500	4 840	7 540
	4,5 m	kg			*10 800	10 420	*8 710	6 750	7 620	4 790			6 620	4 150	8 170
	3,0 m	kg			*13 800	9 530	*10 070	6 370	7 430	4 610			6 120	3 800	8 490
	1,5 m	kg			*15 850	8 960	10 110	6 050	7 240	4 440			5 980	3 680	8 540
	0 m	kg			15 820	8 760	9 900	5 860	7 120	4 330			6 150	3 770	8 310
	-1,5 m	kg	*11 580	*11 580	15 830	8 770	9 830	5 800	7 090	4 310			6 740	4 110	7 780
	-3,0 m	kg	*19 950	17 600	*14 710	8 910	9 930	5 890					8 100	4 910	6 890
	-4,5 m	kg	*15 930	*15 930	*11 870	9 230							*9 540	7 010	5 460
with 600 mm shoe 5 800 kg CWT boom 6,2 m + arm 3,05 m	6,0 m	kg							*6 840	4 960			*5 540	4 280	8 140
	4,5 m	kg					*8 070	6 840	*7 290	4 820			*5 530	3 730	8 730
	3,0 m	kg			*12 730	9 740	*9 490	6 430	7 450	4 620	5 600	3 470	5 570	3 450	9 030
	1,5 m	kg			*15 150	9 050	10 150	6 070	7 240	4 430	5 500	3 380	5 440	3 340	9 070
	0 m	kg			15 800	8 730	9 880	5 830	7 080	4 290			5 570	3 400	8 850
	-1,5 m	kg	*10 580	*10 580	15 720	8 670	9 770	5 740	7 010	4 230			6 020	3 670	8 360
	-3,0 m	kg	*12 570	17 270	*15 260	8 760	9 800	5 770	7 090	4 290			7 030	4 260	7 540
	-4,5 m	kg	*17 940	17 740	*13 040	9 010	*9 540	5 980					*8 900	5 660	6 260
with 600 mm shoe 5 800 kg CWT boom 6,2 m + arm 4,0 m	6,0 m	kg							*5 740	5 090	*4 470	3 650	*3 980	3 550	9 120
	4,5 m	kg							*6 310	4 910	5 750	3 590	*3 980	3 150	9 650
	3,0 m	kg			*10 570	10 160	*8 260	6 570	*7 130	4 670	5 610	3 470	*4 090	2 920	9 920
	1,5 m	kg			*13 470	9 240	*9 800	6 120	7 240	4 420	5 470	3 340	*4 320	2 830	9 950
	0 m	kg	*6 540	*6 540	*15 330	8 690	9 850	5 780	7 020	4 220	5 350	3 230	*4 710	2 860	9 760
	-1,5 m	kg	*9 740	*9 740	15 490	8 450	9 630	5 590	6 880	4 100	5 290	3 170	5 040	3 030	9 320
	-3,0 m	kg	*14 200	*14 200	15 470	8 430	9 570	5 540	6 860	4 070			5 670	3 400	8 590
	-4,5 m	kg	*20 790	16 950	*14 470	8 590	9 680	5 640	6 990	4 190			6 990	4 190	7 500
with 600 mm shoe 5 800 kg CWT 2-piece boom 6,2 m + arm 2,55 m	6,0 m	kg	*10 980	*10 980	*11 660	11 200	*9 780	7 040	7 750	4 840			7 530	4 700	7 620
	4,5 m	kg			*13 560	10 380	*10 540	6 700	7 620	4 730			6 510	4 020	8 240
	3,0 m	kg			*15 580	9 410	10 480	6 290	7 410	4 540			6 020	3 690	8 560
	1,5 m	kg					10 080	5 940	7 210	4 360			5 880	3 570	8 600
	0 m	kg			*15 430	8 600	9 860	5 740	7 090	4 240			6 060	3 650	8 380
	-1,5 m	kg			*13 630	8 620	9 800	5 700	7 070	4 230			6 640	3 990	7 860
	-3,0 m	kg			*10 780	8 800	*8 510	5 800					*6 600	4 780	6 970
	-4,5 m	kg													
with 600 mm shoe 5 800 kg CWT 2-piece boom 6,2 m + arm 3,05 m	6,0 m	kg			*8 740	*8 740	*9 180	7 660	7 850	4 920			*5 570	4 160	8 210
	4,5 m	kg			*12 700	10 640	*10 060	6 800	7 680	4 770			*5 510	3 620	8 800
	3,0 m	kg			*14 900	9 650	10 580	6 360	7 450	4 560	5 580	3 400	5 480	3 340	9 090
	1,5 m	kg			*16 120	8 890	10 130	5 970	7 220	4 350	5 480	3 310	5 360	3 240	9 130
	0 m	kg			15 740	8 570	9 840	5 720	7 050	4 200			5 490	3 300	8 920
	-1,5 m	kg	*9 830	*9 830	*14 430	8 510	9 730	5 630	6 990	4 150			5 940	3 560	8 430
	-3,0 m	kg			*11 950	8 630	*9 330	5 680	*6 640	4 230			*6 330	4 150	7 620
	-4,5 m	kg													
with 600 mm shoe 5 800 kg CWT 2-piece boom 6,2 m + arm 4,0 m	6,0 m	kg					*6 400	*6 400	*6 510	5 070	*4 810	3 610	*4 000	3 430	9 210
	4,5 m	kg	*6 380	*6 390	*7 380	*7 380	*7 650	7 030	*7 410	4 880	5 750	3 540	*3 970	3 040	9 730
	3,0 m	kg			*13 310	10 110	*10 150	6 530	7 530	4 610	5 610	3 410	*4 050	2 820	10 000
	1,5 m	kg			*15 250	9 120	10 230	6 040	7 230	4 350	5 450	3 270	*4 250	2 730	10 030
	0 m	kg	*5 840	*5 840	15 720	8 520	9 810	5 680	6 990	4 130	5 330	3 160	*4 590	2 760	9 840
	-1,5 m	kg	*9 080	*9 080	*15 320	8 280	9 590	5 480	6 850	4 010	5 270	3 110	4 960	2 930	9 400
	-3,0 m	kg	*13 610	*13 610	*13 610	8 280	9 540	5 440	6 830	3 990			5 580	3 300	8 680
	-4,5 m	kg			*10 620	8 480	*8 120	5 560	*5 490	4 140			*5 410	4 120	7 530

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.

STANDARD EQUIPMENT

Engine
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU Step 2 requirements
3-stage air filter with indicator, and pre-cleaner
Air intake heater
Electric engine shut-off
Fuel filter and water separator
Fuel filler pump: 50 l/min with automatic shut-off
Coolant filter
Alternator, 80 A

Electric / Electronic control system
Contronics:
– Advanced mode control system
– Self-diagnostic system
Machine status indication
Engine speed sensing power control
"Power Max" mode system
Automatic idling system
One-touch power boost
Safety stop/start function
Adjustable monitor
Master switch
Engine restart prevention circuit
High capacity halogen lights:
– Frame mounted 2
– Boom mounted 4
Batteries, 2 x 12 V / 200 Ah
Start motor, 24 V / 4,8 kW

Hydraulic system
Automatic hydraulic system:
– Summation system
– Boom priority
– Arm priority
– Slew priority
Boom and arm regeneration valves
Slew anti-rebound valves
Boom and arm holding valves
Multi-stage filtering system
Cylinder cushioning
Cylinder contamination seals
Auxiliary hydraulic valve
Hose rupture valve: boom
Straight travel circuit
Automatic two-speed travel motors
Hydraulic oil, ISO VG 46

Superstructure
Access way with handrail
Tool storage area
Punched metal anti-slip plates
Undercover (heavy duty 4,5 mm)
Counterweight, 5 800 kg

Cab and interior
Heater & air-conditioner, automatic
Hydraulic dampening cab mounts
Adjustable operator seat and joystick control console
Flexible antenna
Hydraulic safety lock lever
Control joystick, with 5 switches each
Cab, all-weather sound suppressed, includes:
– Ashtray
– Cup holder
– Lighter
– Door locks
– Tinted glass
– Floor mat
– Horn
– Large storage area
– Pull-up type front window
– Removable lower windshield
– Seat belt
– Safety glass
– Windshield wiper with intermittent feature
– Stereo cassette radio
Anti-vandalism kit assembly preparation
Sun shield, front, roof, rear
Master ignition key

Undercarriage
Hydraulic track adjusters
Greased and sealed track chain
Track guards
Undercover (heavy duty 10 mm)

Service
Tool kit, daily maintenance

ALTERNATIVE EQUIPMENT

Cab and interior
Seat:
– Fabric seat
– Fabric seat, with heater
– Fabric seat, with heater and air suspension

Track shoes
600 / 700 / 800 / 900 mm track shoes with triple grousers
700 mm track shoe with double grouser

Digging equipment
Boom: 6,2 m monoblock
6,2 m 2-piece
Arm: 2,55 / 3,05 / 4,0 m

Undercarriage
LC (Long crawler)
NLC (Narrow long crawler)

OPTIONAL EQUIPMENT (Standard in certain markets)

Engine
Block heater, 240 V
Oil bath pre-cleaner
Diesel coolant heater
Tropical cooling kit

Electric
Extra lamps:
– Cab-mounted 3, (front 2, rear 1)
– Counterweight-mounted 1
Overload warning device
Rotating warning beacon
Travel alarm

Hydraulic system
Hose rupture valve: dipper arm
Hydraulic piping
– Hammer & shears:
1 pump or 2 pump flow
Pump flow control for hammer & shears
Additional return filter
Extra piping for slope & rotator
– Slope & rotator
– Grapple
– Oil leak (drain) line
– Quick fit piping
Volvo hydraulic quick-fit, S3 size
Hydraulic oil, ISO VG 32
Hydraulic oil, ISO VG 68
Hydraulic oil, biodegradable 32
Hydraulic oil, biodegradable 46
Boom floating function

Cab and interior
Falling object guard (FOG)
Cab mounted falling object protective structures (FOPS)
Rain shield, front
Sunlight protection, roof (steel)
Safety net for front window
Lower wiper
Anti-vandalism kit
Specific key

Undercarriage
Full track guards

Service
Tool kit, full scale

All products are not available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and designs without prior notice. The illustrations do not necessarily show the standard version of the machine.

VOLVO

Construction Equipment

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