

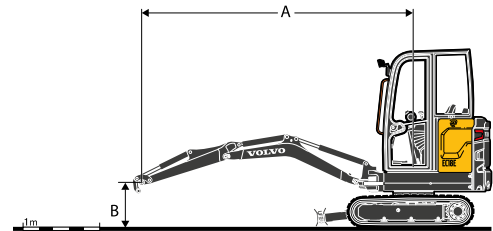
Volvo EC18E in detail

Engine		
Engine		D0.9A
Max. power at	r/min	2 300
Gross	kW	12
	hp	16.3
According to ISO 2534 / SAE J1995		
Max. torque	Nm	52
at engine speed	r/min	1 800
No. of cylinders		3
Displacement	cm ³	898
Bore	mm	72
Stroke	mm	73.6
Compression ratio		24
Electrical system		
Voltage	V	12
Battery	V	1 x 12
Battery capacity	Ah	42 - 70
Alternator	V/Ah	12/40
Swing system		
Max, slew speed	r/min	9.5
Max, slew torque	daNm	243
Undercarriage		
Bottom/top rollers per side		3 / 0
Track tension		By grease piston
Blade (width x height)	mm	1 340 x 230
Digging Performances		
Standard bucket width (blade, W/O side cutter)	mm	450
Standard bucket mass	kg	33
Standard bucket rated capacity	l	36
Bucket rotation	°	196
Bucket breakout force (ISO)	daN	1 290
Short arm tearout force (ISO)	daN	795
Long arm tearout force (ISO)	daN	695

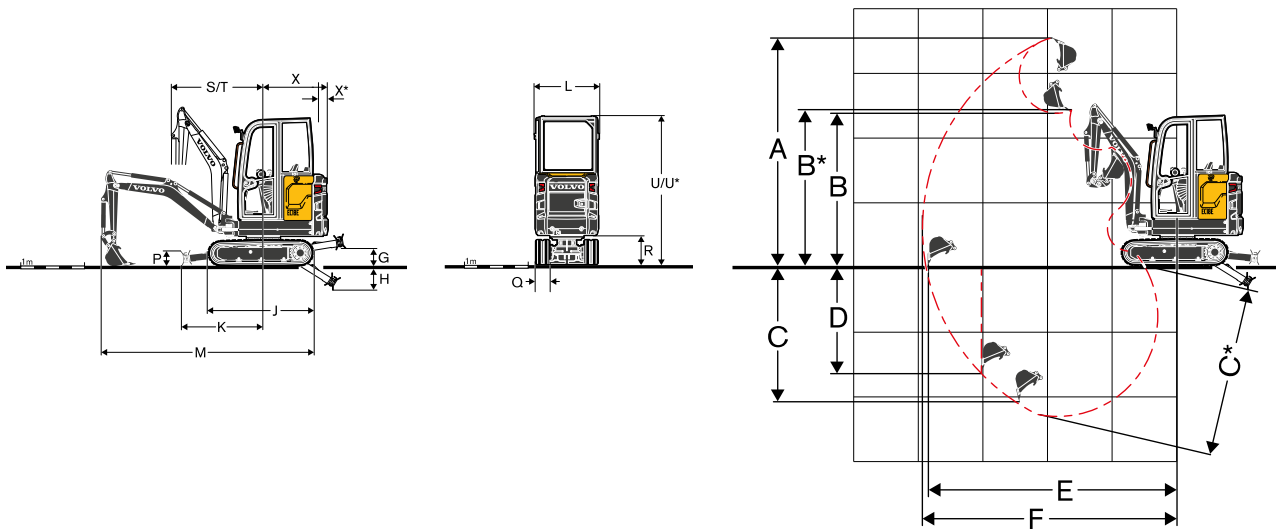
Weight and Ground Pressure		
Operating weight according to ISO 6016	kg	1 810
Ground pressure (cab)	kPa	28.4
Transport weight	kg	1 735
With rubber tracks	mm	230
With short arm	mm	950
With fuel tank capacity	%	100
With canopy	-kg	84
With long arm	+kg	4
With heavy counterweight	+kg	38
With steel tracks	+kg	78
Hydraulic system		
Pump type		Piston pump / Gear pump
Maximum system flow	l/min	48 / 34
Maximum flow for accessories	l/min	43 / 30
Maximum flow for 2nd accessory circuit (option)	l/min	23
Maximum operating pressure	MPa	17
Travel System		
Max, drawbar pull	daN	1 300
Max. travel speed low	km/h	1.8 / 2.5
Max. travel speed high	km/h	3.5 / 4.6
Gradeability	°	30
Service Refill		
Fuel tank	l	21
Hydraulic system, total	l	21
Hydraulic tank	l	15
Sound Level		
Interior sound level according to ISO 6396		
LpA	dB(A)	78
External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC) and 474-1:2006 +A1:200		
LwA	dB(A)	93

LIFTING CAPACITY EC18E

These capacities are given for a machine equipped with a cabin, rubber tracks and without a bucket or quick coupler. The below values are in compliance with ISO standard 10567. They do not exceed 75% of the tipping load or 87% of the hydraulic limit with the machine on firm level ground. Loads marked with an asterisk (*) are limited by machine's hydraulic lifting capacity rather than tipping load. Caution: In accordance with EN 474-5, the machine must be equipped to carry out handling operations. It is the operator's obligation to know and follow the applicable national and local safety regulations.



	Lifting point height (B) m		Lifting point radius (A)						Max. m
			2.0 m		3.0 m		Max reach		
Arm: 950mm + Dozer blade up	2	kg	-	-	-	-	278*	278*	2.95
	1	kg	448*	448*	292*	292*	263*	263*	3.32
	0	kg	542*	542*	294*	294*	247*	247*	3.28
	-1	kg	423*	423*	-	-	239*	239*	2.81
Arm: 950mm + Dozer blade down	2	kg	-	-	-	-	278*	278*	2.95
	1	kg	448*	448*	292*	292*	263*	263*	3.32
	0	kg	542*	542*	294*	294*	247*	247*	3.28
	-1	kg	423*	423*	-	-	239*	239*	2.81
Arm: 950mm + Dozer blade down + Heavy counterweight	2	kg	-	-	-	-	278*	278*	2.95
	1	kg	448*	448*	292*	292*	263*	263*	3.32
	0	kg	542*	542*	294*	294*	247*	247*	3.28
	-1	kg	423*	423*	-	-	239*	239*	2.81
Arm: 1 150mm + Dozer blade up	2	kg	-	-	241*	241*	245*	245*	3.17
	1	kg	373*	373*	276*	276*	240*	240*	3.52
	0	kg	548*	548*	297*	297*	228*	228*	3.48
	-1	kg	452*	452*	232*	232*	222*	222*	3.05
Arm: 1 150mm + Dozer blade down	2	kg	-	-	241*	241*	245*	245*	3.17
	1	kg	373*	373*	276*	276*	240*	240*	3.52
	0	kg	548*	548*	297*	297*	228*	228*	3.48
	-1	kg	452*	452*	232*	232*	222*	222*	3.05
Arm: 1 150mm + Dozer blade down + Heavy counterweight	2	kg	-	-	241*	241*	245*	245*	3.17
	1	kg	373*	373*	276*	276*	240*	240*	3.52
	0	kg	548*	548*	297*	297*	228*	228*	3.48
	-1	kg	452*	452*	232*	232*	222*	222*	3.05



DIMENSIONS

Description		Unit	EC18E	
Arm		mm	950	1150
A	Maximum cutting height	mm	3 439	3 582
B	Maximum dump height	mm	2 444	2 588
B*	Maximum bucket clearance	mm	2 482	2 625
C	Digging depth	mm	2 234	2 434
C*	Maximum digging depth	mm	2 500	2 700
D	Maximum vertical wall digging depth	mm	1 898	2 091
E	Maximum digging reach at ground level	mm	3 800	3 993
G	Highest position dozer blade	mm		
	Short blade	mm		225
	Long blade	mm		267
H	Lowest position dozer blade	mm		
	Short blade	mm		296
	Long blade	mm		386
J	Track length	mm		1 620
K	Dozer blade, maximum reach at ground level	mm		
	Short blade	mm		1 082
	Long blade	mm		1 272
L	Overall width with 230mm tracks	mm		
	Min	mm		995
	Max	mm		1 352
M	Overall length	mm	3 550	3 431
M*	Transport length (arm lowered)	mm		
	Short blade	mm	3 810	3 824
	Long blade	mm	4 000	4 014
P	Dozer blade height	mm		231
Q	Shoe width (rubber)	mm		230
Q(1)	Shoe width (steel)	mm		230
R	Ground clearance to superstructure	mm		456
S	Front slew radius	mm	1 455	1 476
T	Front slew radius with maximum offset	mm	1 181	1 184
U	Overall height cab	mm		2 334
U*	Overall height canopy	mm		2 298
X	Tail slew radius	mm		1 018
X*	Rear overhang (across tracks)	mm		342
β1	Maximum boom offset to the right	mm		419
β2	Maximum boom offset to the left	mm		525

(1) Option

ATTACHMENTS SPECIFICATIONS

	Unit	General Purpose buckets							Aggressive Cut buckets			Ditching buckets				Hydraulic breaker HB02 Low Noise
		200	250	300	400	450	500	600	350	550*	550	Fixed		Tilttable		
Quick Coupler type	mm											850	1 000	850	1 000	
Volvo mechanical (pin-on)	l	14	19	23	32	36	41	51	-	-	-	59	76	59	-	-
Lehnhoff® mechanical	l	-	-	23	32	-	41	-	-	-	-	59	76	59	-	-
Mechanical, symmetrical type	l	-	-	-	-	-	-	-	25	55	55	-	76	-	76	-

*with teeth

For more details, see Attachments catalogue