VOLVO EXCAVATOR

EW160



- Engine power, gross: 89 kW (121 hp)
- Operating weight excl. grapple:
 14,0 - 15,8 t
- Max. height with removable raised cab:
 3710 mm - 4610 mm
- Low emission, turbocharged, diesel engine with direct injection and intercooler

- Load sensing hydraulic system
- Care cab
- computerized control and warning system
- ergonomic environment
- low sound level73 db(A)
- filtered air
- Removable raised platform in varying heights of 600 - 1500 mm

- Individually operated outriggers and dozer blade
- High versatility for extra equipment / hydraulics
- High travel speed 30,0 km/h



SPECIFICATIONS

Data with rais	ed cab (+1000 mm /+ 430 kg)	Monobloc Boom	2-Piece Boom					
Operating weig	ght excl. grapple with blade/outriggers	15,270	15,610					
Operating weight excl. grapple with 4 outriggers		15,530	15,860					
Engine	Model	TD40 KGE	TD40 KGE					
	Output: Net	88 kW / 120 hp	88 kW / 120 hp					
	Gross	89 kW / 121 hp	89 kW / 121 hp					
	Fuel tank capacity	250 l	250 l					
Hydraulic System	Hydraulic max. pressure	32 MPa	32 MPa					
	Hydraulic max. pressure with Power boost	36 MPa	36 MPa					
	Max. flow	235 l/min	235 l/min					
	Servo pump pressure	3,5 MPa	3,5 MPa					
	Servo pump flow	15 l/min	15 l/min					
Performance	Slew speed	10 rpm	10 rpm					
	Max. tractive effort	105 kN	105 kN					
	Travel speed : road	30 km/h	30 km/h					
	: site	8 km/h	8 km/h					
	Creep speed	4 km/h	4 km/h					
	Turning radius	6,8 m	6,8 m					
Electrics	Voltage	24 V	24 V					
	Battery	2 x 12 V	2 x 12 V					
	Battery capacity	100 Ah	100 Ah					
	Alternator	28 V / 55 A	28 V / 55 A					

LIFTING CAPACITY (At the quickfit lifting hook/dipper pin, without bucket. Unit: 1 000 kg.)

Across under-	Lifting hook							Reac	each from machine centre							u =	u = support up d = support down						
carriage Along	related to ground				4,5 m				6,0 m				7,5 m				Max. reach						
under- carriage	level														Max.								
5,0 m monobloc boom 3,0 m dipper arm for grab Outriggers and support blade	6,0 m 4,5 m 3,0 m 1,5 m 0,0 m -1,5 m -3,0 m	6,1 5,1 5,1 5,2	8,0* 5,6* 8,8* 11,0	7,5 5,6* 6,5 *6,6	8,0* 5,6* 8,8* 11,0	3,4 3,1 2,9 2,9	5,4* 5,7 5,5 5,4 5,4	4,1 3,8 3,6 3,5 3,6	5,4* 6,9* 7,8* 8,0 7,5*	2,4 2,4 2,2 2,1 2,0 2,0 2,0	3,7* 4,0 3,8 3,7 3,6 3,5 3,5	2,9 2,8 2,7 2,6 2,5 2,4 2,4	3,7* 4,0* 4,5* 5,2 5,1 5,0 5,0	1,6 1,6 1,5 1,5	2,7* 2,7 2,6 2,6	2,0 1,9 1,9	2,7* 3,8 3,7 3,6	1,9 1,6 1,5 1,4 1,4 1,6	2,6* 2,7* 2,5 2,4 2,5 2,7 3,3	2,3 2,0 1,8 1,7 1,7 1,9 2,3	2,6* 2,7* 2,6* 2,7* 2,9* 3,8 4,7	6,8 7,5 7,9 8,0 7,8 7,2 6,3	
5,0 m monobloc boom 3,0 m dipper arm for grab Outriggers front and rear	6,0 m 4,5 m 3,0 m 1,5 m 0,0 m -1,5 m -3,0 m	6,5 5,5 5,5 5,6	8,0* 5,6* 8,8* 11,0*	8,0* 5,6* 7,3 7,3	8,0* 5,6* 8,8* 11,0*	3,6 3,3 3,2 3,1 3,1	5,4* 6,9* 7,5 7,4 7,5*	4,5 4,3 4,1 4,0 4,0	5,4* 6,9* 7,8* 8,0* 7,5*	2,6 2,5 2,4 2,3 2,2 2,1 2,1	3,7* 4,0* 4,5* 4,9 4,8 4,7 4,7	3,2 3,1 3,0 2,9 2,8 2,7 2,7	3,7* 4,0* 4,5* 5,2* 5,6 5,5 5,5	1,8 1,7 1,7 1,6	2,7* 3,6 3,5 3,4	2,2 2,2 2,1 2,1	2,7* 4,0* 4,1 4,0	2,1 1,8 1,6 1,5 1,5 1,7 2,0	2,6* 2,7* 2,6* 2,7* 2,9* 3,6 4,4	2,6* 2,2 2,0 1,9 2,0 2,2 2,6	2,6* 2,7* 2,6* 2,7* 2,9* 3,9* 4,8*	6,8 7,5 7,9 8,0 7,8 7,2 6,3	
5,1 m 2-piece boom 3,0 m dipper arm Outriggers and support blade	6,0 m 4,5 m 3,0 m 1,5 m 0,0 m -1,5 m -3,0 m	5,0 5,0	6,7* 10,3*	6,4 6,4	6,7* 10,3*	3,6 3,3 3,0 2,8 2,8 2,8	4,0* 5,7* 5,6 5,4 5,3 5,4	4,0* 4,1 3,7 3,5 3,5 3,5	2,4 4,0* 5,7* 7,0* 7,8* 7,8* 7,1*	3,8* 2,3 2,2 2,1 1,9 1,9	2,9 4,0 3,8 3,6 3,5 3,5 3,5	3,8* 2,8 2,7 2,5 2,4 2,4 2,4	4,1* 4,7* 5,2 5,0 5,0 5,0	1,6 1,6 1,5 1,4 1,4	2,8 2,7 2,6 2,6 2,6	1,9 1,9 1,8 1,8	1,8 3,7* 3,8 3,7 3,6 3,4*	3,1 1,5 1,4 1,3 1,3 1,4 1,8	2,2 2,6 2,4 2,3 2,3 2,6 3,2	3,2* 1,9 1,7 1,6 1,6 1,8 2,2	7,0 3,1* 3,0* 3,0* 3,1* 3,4* 4,4*	7,7 8,1 8,2 8,0 7,5 6,5	
5,1 m 2-piece boom 3,0 m dipper arm Outriggers front and rear	6,0 m 4,5 m 3,0 m 1,5 m 0,0 m -1,5 m -3,0 m	5,4 5,4	6,7* 10,3*	6,7* 7,2	6,7* 10,3*	3,9 3,6 3,3 3,1 3,0 3,0	4,0* 5,7* 7,0* 7,5 7,4 7,1*	4,0* 4,5 4,2 4,0 3,9 3,9	4,0* 5,7* 7,0* 7,8* 7,8* 7,1*	2,6 2,5 2,4 2,2 2,1 2,1 2,1	3,8* 4,1* 4,7* 4,9 4,8 4,7 4,7	3,2 3,1 3,0 2,8 2,7 2,7 2,7	3,8* 4,1* 4,7* 5,3* 5,6 5,5 5,1*	1,7 1,7 1,6 1,6	3,6 3,6 3,5 3,4 3,4*	2,2 2,1 2,1 2,0 2,0	3,7* 4,2* 4,1 4,0 3,4*	2,0 1,6 1,5 1,4 1,4 1,6 1,9	3,2* 3,1* 3,0* 3,0* 3,1* 3,4* 4,2	2,5 2,1 1,9 1,8 1,9 2,0 2,5	3,2* 3,1* 3,0* 3,0* 3,1* 3,4* 4,4*	7,0 7,7 8,1 8,2 8,0 7,5 6,5	

^{*} Load capacity limited by machine's hydraulic lifting capacity.

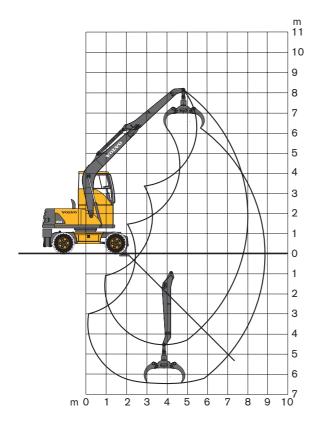
The above values have been calculated in compliance with ISO standard 10 567. They do not exceed 87 % of hydraulic lifting capacity or 75 % of tipping load, with the machine on firm, level ground.

Working pressure with Power Boost = 36 MPa (360 bar/5 221psi)

DIGGING RANGES

Monobloc boom 5.0 m and

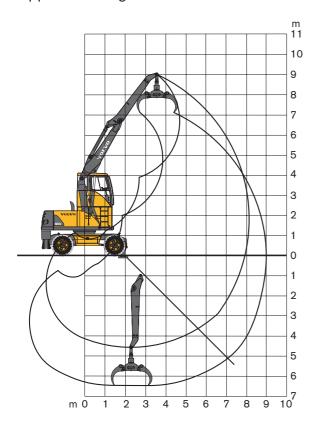
dipper arm for grab 3.0 m



Boom type	Monobloc					
Boom length	m	5,0				
Dipper arm for grab	m	3,0				
Max. reach	m	8,1				
Max. reach at ground level	m	7,8				
Max. digging depth	m	4,6				
Max. height ground – pin	m	8,1				
Min. front slew radius	m	3,2				

^{*} Max. reach depends on grapple type and link. Stated values are for dipper pin position.

2-piece boom 5.1 m and dipper arm for grab 3.0 m



Boom type	2-piece				
Boom length	m	5,1			
Dipper arm for grab	m	3,0*			
Max. reach	m	8,2			
Max. reach at ground level	m	8,0			
Max. digging depth	m	4,6			
Max. height ground – pin	m	9,0			
Min. front slew radius	m	2,9			

^{*} Max. reach depends on grapple type and link. Stated values are for dipper pin position.

STANDARD EQUIPMENT

Engine and electrical system

Contronic – computerized monitoring and alarm system Battery disconnector Electronical idling speed Electronically controlled pump regulation (SSC) 3-stage air filter with indicator Hour meter Tachometer Fuel level gauge Electric preheating coil 24 V electrical system Well-protected electrical system Water separating fuel filter 2 working lights on the cab

Undercarriage

4-wheel drive
Oscillating front axle ±9°
Axles with hub reduction
2-circuit travel brakes

Superstructure

Counterweight 3 250 kg

Safety and comfort

Safety bar to prevent accidental actuation via levers and pedals Interior lighting in cab 2 exterior rear-view mirrors Ergonomic, operator's seat with seat belt Cab heating Filtered air intake Skylight of special plastic Sliding side window in cab door Interior sun visor Tinted window glass Upper windscreen wiper with intermittent function Windscreen washer Horn

Hydraulic system

Variable axial-piston pump
Mode Selector
with 3 different modes
Power Boost
Wrist type control levers with
four switches each
Hydraulic cylinders with internal
end dampening
Variable motor with pressure

control
Return filter of full flow type
1000 h exchange interval

Pressure relief system
(Servo accumulator)
Thermostatically controlled cooling fan
Hydraulic equipment for:
A. Slope bucket/rotator

B. Grab/clam shell

Digging equipment

Attachment points for extra hydraulics

Environment

Sound pressure level (L_{pA}): **73 dB(A)**Sound power level (L_{wA}): **99 dB(A)**

Approved acc. EEC guidelines: 84/532 EEC

79/113 EEC 86/662 EEC

German environmental certification «low noise» RAL-UZ53

ALTERNATIVE EQUIPMENT

Undercarriage

Twin wheels 10.00–20
Twin wheels 10.00–20 solid
Single wheels 18R-19.5
Single wheels 600/40-22,5
Dozer blade in front, and two outriggers rear
Support blade, rear
4 outriggers
Grab bucket holder

Digging equipment

Glasscrusher hammer

Oil draining cock on the engine

Automatic slew holding brake

Silencer

5,0 m monobloc 5,1 m 2-piece boom

Dipper arms

3,0 m dipper arm for grab

Cabin

Removable raised platform in varying heights of 600 - 1500 mm

OPTIONAL EQUIPMENT (Standard on certain markets)

Engine and electrical system

Diesel-powered cab and engine heater with digital timer
Electric engine heater (220 V)
Auto idling
Extra headlights on boom
1 working light rear (halogen)
Protective net in front of the cooler
Alternator 80 A
Coolant filter
Extra fuel filter

Undercarriage

Stone protection rings Mud guards Tool box Rear axle with limited slip Rear axle with drum brake Rear axle with limited slip and drum brake

Safety and comfort

Protective net for windscreen
Protective cab roof
(FOGS ISO 10 262-approved)
Hose rupture valve on boom
cylinder incl. overload alarm

Extra hose rupture valve – dipper arm cylinder

Rotating warning beacon
Electrically powered fuelling pump,
30 l/min, with overfilling protection
Ergonomic, electrically heated
operator's seat with seat belt
Ergonomic, electrically heated
operator's seat with air

suspension and seat belt
Sun visor, rear window and
skylight

Lower windscreen wiper with intermittent function

Air conditioning
Radio with tape player

Tool kit Travel alarm Cruise control

Hydraulic system

Float position on boom Biodegradable hydraulic oil

Under our policy of continuous product 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.

