



Åkerman EC150

Monobloc- / 2-piece boom



- **Engine Power:**
82 kW (112 hp)
- **Operating Weight:**
14,6 – 15,7 t
- **Buckets:**
160 – 700 l
- *Direct injection, turbocharged diesel engine*
- *Åkerman three-circuit hydraulic system with pump regulation PSC.
(PSC = Pressure Sensing Control)*
- **Comfort cab**
 - computerized control and warning system
 - ergonomic environment
 - low sound level
 - filtered air
- *Highest flexibility for extra equipment/hydraulics*
- *Hydraulic quickfit*
- *Long undercarriage and heavy counterweight for high stability*
- *High crawler speed – 5,2 km/h*

ÅKERMAN

ENGINE



The engine is a turbocharged, 4-stroke diesel engine with intercooler, water cooling and direct injection.

Model		VME TD 40 KC
Net output at	r/s (r/min)	36,7 (2200)
ISO 3046 / DIN 6271*	kW (hp)	82 (112)
No. of cylinders		4
Displacement, total	l	4,0
Bore	mm	100
Stroke	mm	127

* Fan excluded

UNDERCARRIAGE



Heavy duty box designed body with solid slew ring support.

Track chain size		B4
No. of track shoes		2 x 47
Track width	mm	600
alt.	mm	750, 900
No. of bottom rollers		2 x 8
Skid rail		2 x 1

ELECTRIC SYSTEM



Micro processor for monitoring of engine/hydraulic system. High capacity and well protected electric system. Printed circuit board based electric central with clearly arranged fuses and relays. Central prepared for connection optional equipment. Battery disconnecter.

Voltage	V	24
Battery	V	4 x 12
Battery capacity	Ah	120
Alternator	V/A	28/60
Alternator rating	W	1680

CAB



Operator's cab with a supporting frame structure. Large panes for all round good visibility. The upper front pane can be pushed up in the ceiling, and the lower one can be removed. Sliding window in the cab door.

Heater and defroster: Pressurized and filtered cab. A 3-speed fan provides efficient heating and defrosting through 14 outlets. Prepared for Air Conditioning.

Operator's seat: Adjustable suspension operator's seat with heating coils, headrest, individually adjustable armrests and hand controls.

Sound level: Approved according to 86/662/EEC.

DRIVE TRAIN



Each track is powered by a two-step axial piston hydraulic motor. The track brakes are of multidisc type and are spring applied and hydraulically released.

Max. tractive force	kN	147
Max. travel speed	km/h	5,2
Gradeability, continuously	° (%)	48,7 (114)

SERVICE REFILL CAPACITIES



Fuel tank	l	225
Fuel pump capacity	l/min	90
Hydraulic system, total	l	220
Diesel engine	l	8,1
Cooling system (incl. glycol)	l	35,0
Slew gearbox	l	15,0

SLEWING SYSTEM



The superstructure is slewed by an axial piston motor through a servo released slew brake, into the two-step slew gear giving torque to the inner tooth race of the slew ring.

Slew, start to stop*			
90° turn	s		5,6
180° turn	s		7,5

* Empty bucket and extended equipment.

HYDRAULIC SYSTEM



Åkerman 3-circuit system all-servo controlled.

Pumps: P1 is a fixed axial piston pump to slew circuit. P2 /P3 is a dual power controlled variable pump.

Mode selector: Two travel modes:

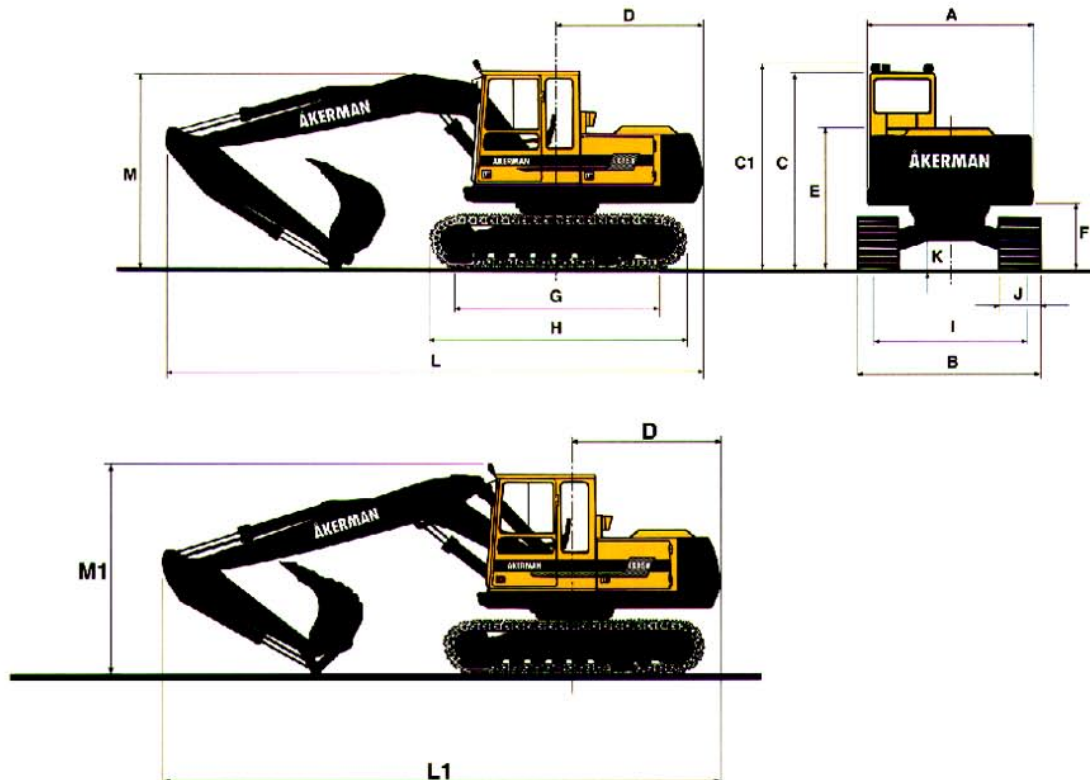
ECO = Travel

CAP = Digging and travel

Valve system: Boom is operated by dual main valves to obtain best combination of precision manoeuvrability and minimized fuel consumption. Boom function equipped with floating position for improved comfort and increased digging speed. Security hose rupture valve on the boom cylinder.

Pump P1			
Max. pressure	MPa		31
Max. flow	l/min		46
Pumps P2 and P3			
Max. pressure	MPa		30
Max. flow	l/min		2 x 81
Servo pump			
Pressure	MPa		6,5
Flow	l/min		23

DIMENSIONS

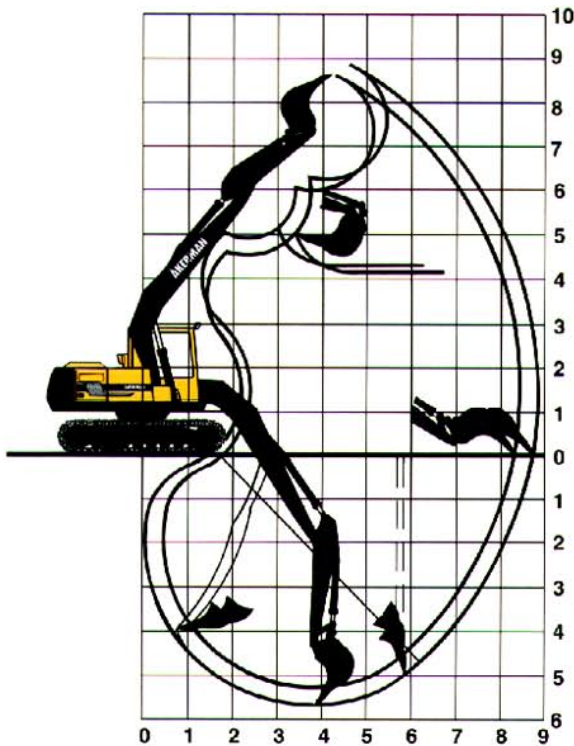


A:	mm	2430
B:	mm	2700/2850/3000
C:	mm	2900
C1:	mm	3040
D:	mm	2170
E:	mm	2080
F:	mm	970
G:	mm	3030
H:	mm	3790

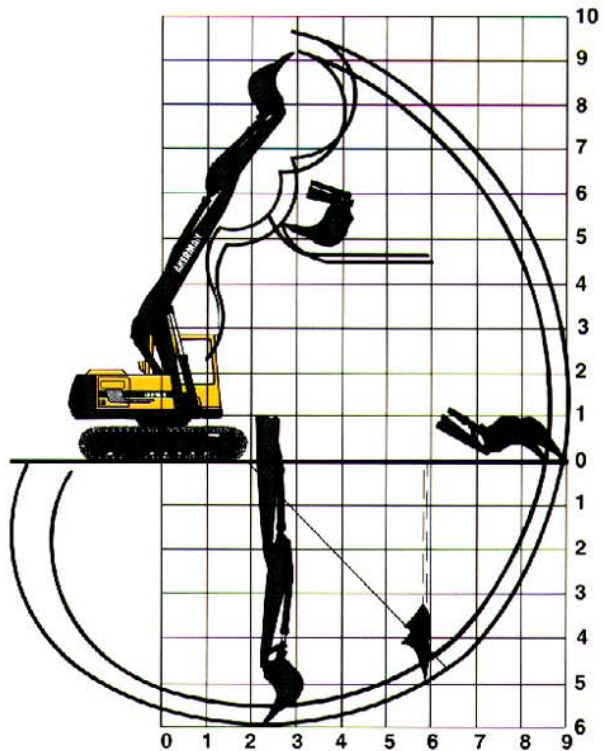
I:	mm	2240
J:	mm	600/750/900
K:	mm	450
L:	mm	8000
L1:	mm	8060 (2,0 m arm)
L1:	mm	8020 (2,4 m arm)
M:	mm	3040
M1:	mm	3040

WORKING RANGES

4,9 m monobloc boom



5,0 m 2-piece boom



Monobloc boom	m	4,9	4,9		
2-piece boom	m			5,0	5,0
Dipper arm	m	2,0	2,4	2,0	2,4
Max. reach	m	8,5	8,9	8,6	8,9
Max. reach at ground level	m	8,3	8,7	8,4	8,8
Max. digging depth	m	5,3	5,7	5,5	5,9
Max. height, ground – tooth tip	m	8,6	8,9	9,3	9,6
Max. dumping height	m	5,9	6,2	6,6	6,9
Max. practical dumping height	m	4,3	4,2	4,7	4,5
Practical digging depth at a repose of material of 45°	m	4,3	4,7	4,4	4,7
Max. vertical digging depth	m	4,6	4,9	4,3	4,8
Min. slewing radius in front	m	3,0	3,1	2,6	2,8

DIGGING FORCE

Bucket digging force*	kN	86
Dipper arm force*	kN	63

* HD-bucket, 700 l SAE, and 2,0 m dipper arm.

BUCKET COMBINATIONS

BUCKETS for quickfit	Volume SAE l	Cutting width mm	Weight kg	Suitable for 4,9 m boom and arm		Suitable for 5,0 m 2-piece boom and arm	
				2,0 m	2,4 m	2,0 m	2,4 m
Backhoe buckets 1,8 t/m ³	500	930	390	•	•	•	•
	600	1000	450	•	•	•	•
	700	1070	490	•		•	
Articulated slope bucket 1,5 t/m ³	450	1400	500	•	•	•	•
	480	2000	520	•	•	•	•
Cable bucket	160	400	270	•	•	•	•
	170	490	235	•	•	•	•
	290	600	320	•	•	•	•

WEIGHT AND GROUND PRESSURE



Machine with 4,9 m monobloc boom, 2,0 m dipper arm, quickfit, 700 l bucket and counterweight 2 500 kg.

Machine with 5,0 m 2-piece boom, 2,0 m dipper arm, quickfit, 700 l bucket and counterweight 2 500 kg.

Track shoes	Operating weight				Ground pressure			
600 mm	14 600 kg	15 000 kg (2-piece boom)		36,1 kPa	37,2 kPa (2-piece boom)			
750 mm	15 000 kg	15 400 kg (2-piece boom)		29,6 kPa	30,4 kPa (2-piece boom)			
900 mm	15 300 kg	15 700 kg (2-piece boom)		25,2 kPa	26,0 kPa (2-piece boom)			

STABILITY AND LIFTING CAPACITIES

In the lifting hook without bucket. Unit 1 000 kg.

Across carriage Along carriage	Lifting hook related to ground level	Reach from machine center																		
		3,0 m		4,5 m		6,0 m		7,5 m		Max. reach		Max. m								
Monobloc boom - 4,9 m 2,0 m arm Quickfit 600 mm track shoes	6,0 m																			
	4,5 m			5,25	2,94	7,79	2,94	3,40	2,65	4,95	2,65	2,78	2,60	4,07	2,60	6,8				
	3,0 m			4,89	3,63	7,36	3,63	3,26	2,95	4,79	2,95	2,39	2,62	3,51	2,62	7,4				
	1,5 m			4,57	4,46	7,01	4,46	3,11	3,25	4,62	3,25	2,29	2,69	3,38	2,69	7,5				
	0,0 m			4,44	4,78	6,87	4,78	3,01	3,44	4,51	3,44	2,29	2,73	3,40	2,73	7,4				
	-1,5 m	8,36	6,72	14,3	6,72	4,42	4,61	6,84	4,61	2,99	3,37	4,49	3,37	2,56	2,84	3,80	2,84	6,8		
-3,0 m	8,39	5,56	14,2	5,56	4,49	3,90	6,91	3,90					3,21	2,79	4,80	2,79	5,8			
Monobloc boom - 4,9 m 2,4 m arm Quickfit 600 mm track shoes	6,0 m							3,49	2,35	5,07	2,35			3,12	2,43	4,54	2,43	6,4		
	4,5 m			5,27	2,65	7,84	2,65	3,43	2,44	4,99	2,44			2,49	2,40	3,64	2,40	7,3		
	3,0 m			4,98	3,37	7,48	3,37	3,28	2,77	4,82	2,77	2,34	2,49	3,44	2,49	2,20	2,40	3,24	2,40	7,8
	1,5 m			4,62	4,23	7,08	4,23	3,12	3,12	4,64	3,12	2,28	2,62	3,37	2,62	2,10	2,50	3,12	2,50	7,9
	0,0 m			4,43	4,71	6,87	4,71	3,00	3,37	4,51	3,37	2,22	2,67	3,31	2,67	2,11	2,55	3,14	2,55	7,8
	-1,5 m	8,23	7,04	14,1	7,04	4,39	4,67	6,82	4,67	2,96	3,40	4,46	3,40			2,30	2,61	3,43	2,61	7,3
-3,0 m	8,31	6,03	14,1	6,03	4,43	4,15	6,87	4,15	3,01	2,94	4,52	2,94			2,78	2,56	4,16	2,56	6,4	
2-piece boom - 5,0 m 2,0 m arm Quickfit 600 mm track shoes	6,0 m			5,58	3,45	8,26	3,45							3,56	3,14	5,22	3,14	5,9		
	4,5 m	10,1	5,09	16,4	5,09	5,32	3,78	7,92	3,78	3,42	3,11	5,01	3,11			2,71	2,86	3,99	2,86	6,9
	3,0 m			4,89	4,27	7,41	4,27	3,25	3,28	4,81	3,28	2,31	2,62	3,43	2,62	2,31	2,62	3,43	2,62	7,5
	1,5 m			4,50	4,69	6,99	4,69	3,07	3,39	4,61	3,39	2,24	2,64	3,35	2,64	2,20	2,59	3,29	2,59	7,6
	0,0 m			4,33	4,54	6,80	4,54	2,94	3,32	4,48	3,32	2,19	2,40	3,30	2,40	2,19	2,40	3,30	2,40	7,5
	-1,5 m	8,14	4,91	14,1	4,91	4,30	3,91	6,76	3,91	2,90	2,88	4,43	2,88			2,44	2,23	3,68	2,23	6,9
-3,0 m																				

Tipping load*

Hydr. lifting capacities**

* Regardless of the hydraulic lifting capacity of the machine.

** Regardless of the stability of the machine.

Working pressure = 30 MPa (300 bar)

STANDARD EQUIPMENT

<p>Engine and electrical system Computer controlled monitoring system Battery disconnecter and main fuel tap 3-step air filter: precyclone main filter safety filter with electronic service indicator Hour meter Cold start aid Revs counter Fuel meter Temperature meter for cooling fluid and hydraulic oil 24 volt electrical system with 4 standard batteries Cranked exhaust pipe</p> <p>Undercarriage Skid rails Tripple grousers 600 mm track shoes with mud holes Hydraulic track adjuster Derailing shields, 2 pcs/side</p>	<p>Superstructure Counterweight 2500 kg</p> <p>Safety and Comfort Cab heating with 14 outlets Filtered air intake Cab skylight Tinted windows (clear front) Emergency exit through rear window Ergonomically designed and adjustable operator's seat, with heating coils Internal sunvisor Rear view mirrors, 2 exterior 1 interior Lights: 4 working lights, front, halogen 1 working light, rear, halogen Instrument lighting Illuminated cab, engine compartment and fuel filling compartment</p>	<p>Safety bar for control levers Double intermittent windscreen wipers Windscreen washers Hydraulic refuelling pump, 90 l/min Compressor horn Hose rupture valve on boom cylinder Overload indicator Radio console</p> <p>Hydraulics One dual power controlled axial piston working pump One fixed axial piston pump to slew circuit Mode selector, 2 steps Standard filter cartridges for return, leak oil and breathing filter Float position on boom Hydraulic equipment for quickfit</p>	<p>Equipment 4,9 m monobloc boom 2,0 m dipper arm Hydraulic quickfit End dampening on dipper and bucket cylinders Security lifting hook Friction welded piston rod eyes</p>
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OPTIONAL EQUIPMENT *(Standard on certain markets)*

<p>Engine and Electrical System Electric over speed protector Rear lights Volvo diesel driven engine and cab heater, with digital timer Immersion heater, 220 V Exhaust ejector Oil bath precleaner for inlet air</p> <p>Undercarriage 750/900 mm track shoes Dozer blade, front</p>	<p>Safety and Comfort Protective grid for front pane/roof pane Fire extinguisher Seat belts Rotating beacon Exterior glare shields Rear window jalousie Air conditioning Micro filter for the cab Extra circulation pump for the heating system Radio and cassette player Extra hose rupture valves Level control at refuelling</p>	<p>Hydraulics Biologically degradable oil Hydraulic equipment for: slope bucket grab hydraulic hammer 2-piece boom</p>	<p>Equipment 5,0 m 2-piece boom 2,4 m dipper arm Extra headlights on the boom Hammer plate Grab holder Ripper tooth Various buckets</p>
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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.

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