



YANMAR

MIDI EXCAVATOR

SV120



Operating weight	11 300 kg
Engine power	85 kW (116 CV)
Bucket capacity	149 - 477 l
Digging force (bucket)	81,5 kN
Digging force (arm)	61 kN

SUPPORTING YOUR SUCCESS



COMPACTNESS

The SV120 makes no compromise between performance and compactness. This 12-ton machine offers the same comfort and work precision as a large midi excavator. It has all the advantages of a compact model with a small radius of rotation, making it the perfect machine for downtown construction, road construction or material handling. Yanmar's experience allows to provides you an efficient and intuitive machine, easy to use and in which you can work on the most diverse sites.



ENGINE

Complies with EU Phase III B / EPA Tier 4 final standards, guaranteeing reduced fuel consumption and emissions.



QUALITY OF COMPONENTS

Components developed in Europe and renowned for their excellent quality. The design and performance of the components make it possible to carry out heavy construction tasks and ensure a long service life.



HIGH PERFORMANCE

Improvement of the components of the powerline (hydraulic, distributing engine, pump): not to have to choose between power and compactness. The Yanmar customers can so make heavy tasks of construction site in narrow spaces.





EASY MAINTENANCE

Every component associated with the maintenance of the machine is designed to be the simplest possible and facilitate the maintenance. The filling tank can be realized easily thanks to a service door easily accessible. Hood opens smoothly thanks to cylinders. The main organs of the machine are accessible quickly. Trapdoor of maintenance can be opened without tools.



CAB

Designed to ensure maximum comfort and productivity for the operator, the booths are equipped with a damping system for noise and vibration. They are ROPS / FOPS certified.



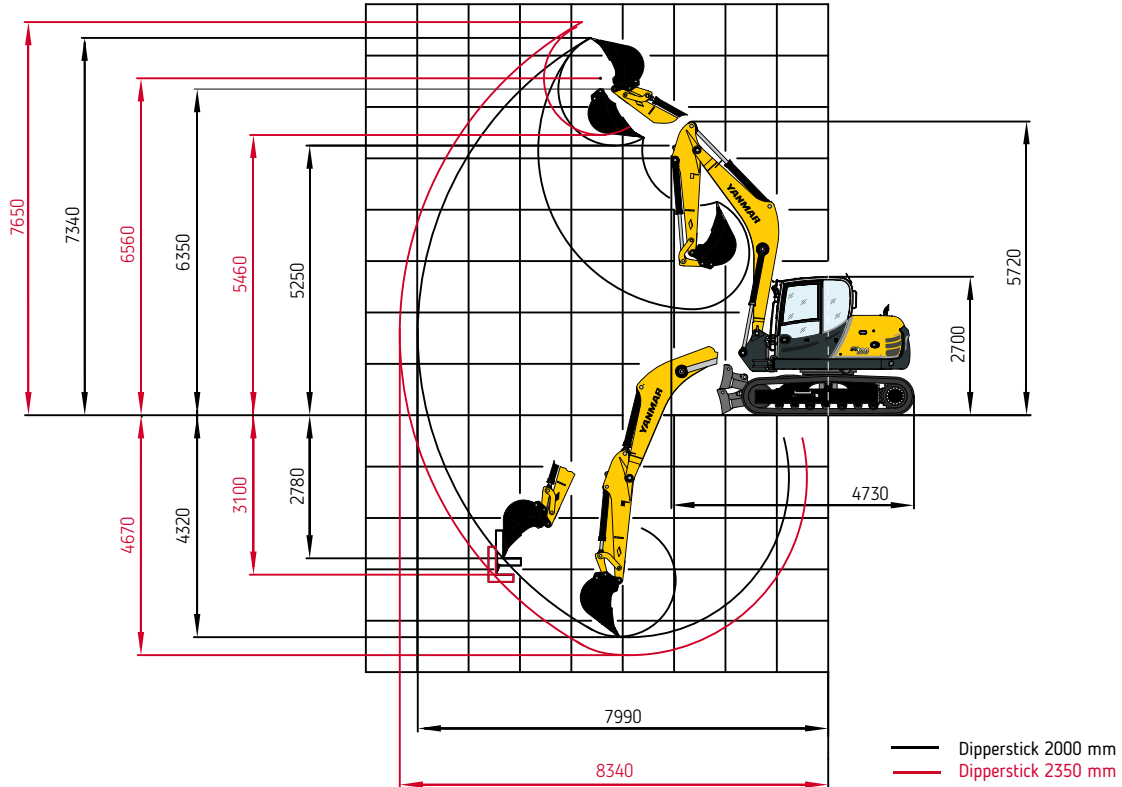
EASY TO USE

The front axle is pivoted in an electrically proportional manner. Various additional functions are integrated directly to movements with exceptional precision.

SPECIFICATIONS



WORKING RANGES & DIMENSIONS: MONOBLOC BOOM



LIFTING CAPACITIES

Height	Load radius from center of ring gear										
	3,0 m		4,0 m		5,0 m		6,0 m		6,6 m		
Dipperstick 2000 mm	End	Side	End	Side	End	Side	End	Side	End	Side	
Monobloc boom											
3,0 m	S	-	-	3,20	3,00	2,60	1,90	2,40	1,40	2,20	1,10
	T	-	-	2,90	2,50	2,10	1,80	1,70	1,30	1,30	1,00
1,5 m	S	-	-	5,40	2,40	3,50	1,80	2,80	1,30	2,50	1,00
	T	-	-	3,00	2,20	2,10	1,60	1,60	1,20	1,20	1,00
0 m	S	7,40	4,10	5,60	2,30	4,00	1,60	2,70	1,30	2,70	1,10
	T	5,70	4,00	2,80	2,10	2,00	1,50	1,50	1,10	1,20	1,00
-0,9 m	S	-	-	5,80	2,30	4,00	1,60	3,10	1,30	2,90	1,20
	T	-	-	2,90	2,10	2,00	1,50	1,50	1,20	1,40	1,10

All values in tons (t) were determined acc. to ISO 10567 and include a stability factor of 1.33 or 87% of the hydraulic lifting capacity. All values were determined with quick-attach system but without bucket. In case of mounted-on work attachments, the deadweights of the work attachments must be deducted from the permissible operating loads. Working equipment: Rubber crawlers.

Abbreviations: S = Supported by blade, T = Traveling

DIMENSIONS

Fig. 1:
Working envelope

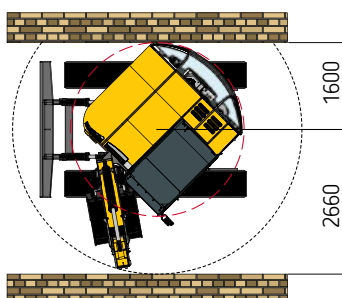
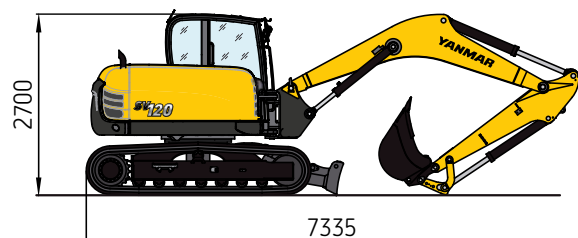


Fig. 2:
Transport position

Monobloc boom



PROVISIONAL

SPECIFICATIONS

[ENGINE]

Manufacturer, model	Deutz, TCD 3.6 L4
Type	4-cylinder turbo diesel engine with intercooler, EU Stage III B / Tier4i
Combustion	4-stroke cycle, Common Rail injection
Displacement	3 600 cm ³
Net power rating at 2000 rpm (ISO 9249)	2 000 min ⁻¹ 85 kW (116 CV)
Torque	400 Nm at 1600 min ⁻¹
Cooling system	Water

[ELECTRICAL SYSTEM]

Nominal voltage	12 V
Battery	12 V / 135 Ah
Generator	14 V / 95 Ah
Starter	12 V / 4,0 kW

[TRANSMISSION]

Hydrostatic travel drive with planetary reduction gears on sprocket drives. Multi-disc brake acting as parking brake, automatically bled. 2-stage variable displacement motor, full power shift.

2 speed ranges:	Travel speed, forward and reverse	0-2,7 / 5,4 km/h
	Gradeability	60 %
Drawbar pull 1st/2 nd speed range	8 358 / 4 253 daN	

[UNDERCARRIAGE]

Maintenance-friendly B4 track-type undercarriage with triple grouser plates or rubber crawlers. Idler suspension with hydraulic crawler-chain tensioning

Width rubber crawlers / steel crawlers	500 / max. 800 mm
Total length (sprocket - idler)	2 628 / 2 608 mm
Total length (undercarriage)	3 345 mm

[DOZER BLADE]

Independent of drive train, sensitive control via separate hand lever.

Width x height	2 500 x 510 mm
Dozer cut below ground	400 mm
Dozer lift above ground	500 mm
Slope angle	35 °

[STEERING]

Independent individual control of crawler chains, also counterwise. Sensitive control provided by pilot operated hand levers combined with foot pedals. Full drawbar pull even at shifts in direction.

[SWING SYSTEM]

Hydrostatic drive with 2-stage planetary gear and axial piston fixed displacement motor, also acts as wear-resistant brake. In addition, spring-loaded multi-disc brake acting as parking brake

Swing speed

[KNICKMATIK®]

Lateral parallel adjustment of boom arrangement at full dig depth.

Angle of articulation / lateral adjustment left	65° / 855 mm
Angle of articulation / lateral adjustment right	56° / 995 mm

[FLUID CAPACITIES]

Fuel tank	240 l
Hydraulic system (incl. tank)	230 l

[OPERATING DATA, STANDARD EQUIPMENT]

Operating weight (two-piece articulated boom "TPA") acc. to ISO 6016	11 300 kg
Undercarriage (steel crawlers) 500 mm	+310 kg
Transport dimensions: Monobloc boom / TPA boom (L x H)	6 820 x 2 700 mm
Total width with dozer blade	2 500 mm
Total height (top of cab)	2 870 mm
Ground clearance	420 mm
Uppercarriage tailswing	1 600 mm
Uppercarriage frontswing	2 660 mm
Working envelope 180°	4 260 mm
Working envelope 360°	5 320 mm
Digging force (bucket) acc. to ISO 6015	81,5 kN
Digging force (arm) acc. to ISO 6015	61 kN
Ground pressure (rubber crawlers)	0,40 daN / cm ²
Ground pressure (steel crawlers)	0,41 daN / cm ²

SPECIFICATIONS



[HYDRAULIC SYSTEM]

Working hydraulics: Axial-piston variable displacement pump with load sensing, coupled with a load-independent flow distribution (LUDV).

Simultaneous, independent control of all movements. Sensitive maneuvers irrespective of loads.

Max. pump capacity 190 l/min

Working pressure, max. 350 bar

The thermostatically controlled oil circuit ensures that the oil temperature is promptly reached and avoids overheating. Hydraulically actuated reversible fan. Return filter installed in oil tank allows for eco-friendly replacement of filter elements.

Dual gear pump for all positioning movements, pivoting of uppercarriage and for hydrostatic fan.

Pump capacity, max 76 + 38 l / min

Working pressure, max. 230 bar

Control circuit for work attachments (proportionally operated): Pump capacity, adjustable up to max. 20 - 100 l/min

Working pressure, max. 350 bar

Two servo-assisted joystick controls (ISO) for excavator operations.

[CAB]

Spacious, sound-insulated full-vision steel cab (ROPS certified). Sliding window in cab door. Safety glass windows, thermo windows tinted in green. Skylight thermo window, bronze tinted. Panoramic rear window. Front window supported by pneumatic springs, lockable for ventilation and slidable under cab roof. Windshield washer system. Storage compartment. Preparation for radio installation. Left-hand outside rear-view mirror.

Cab heating with front window defroster by coolant heat exchanger with stepless fan. Fresh air and recirculating air filters.

Operator's seat MSG 85 (comfort version), hydraulic damping, extra-high backrest, tilt-adjustable armrests, longitudinal-horizontal suspension, mechanical lumbar support. Lap belt.

Instrument panel on the right-hand side of the operator's seat with visual & acoustic warning device, hour-meter and safety module. Working floodlights Halogen H-3.

Sound level values in compliance with EC-directives.

[ACCESSORIES]

Yanmar gives you the accessories that fit your needs and match the safety standards in force in your country: mechanical quick coupler, hydraulic quick coupler, ditching buckets, swinging buckets, backhoe bucket, hydraulic hammer...

[OPTIONAL EQUIPMENT]

BOOM OPTIONS

TPA boom, with dipperstick 1850 mm | TPA boom, with dipperstick 2350 mm

CRAWLER CHAIN OPTIONS

Rubber crawler track, 500 mm wide | Rubber-coated steel crawler chain 'Roadliner', 500 mm wide | Steel crawlers up to 800 mm wide

OPTIONAL SUPPORT/DOZER SYSTEMS

Front dozer blade, extra-long version

HYDRAULIC SYSTEM

Second control circuit (e.g. for sorting grab) Biodegradable hydraulic oil / ester-based HLP 68 (Panolin) | Open return Float position dozer blade | Fingertip' control incl. second additional control circuit on left joystick | Fingertip' control incl. third additional control circuit on left joystick | Conversion from ISO controls to SAE controls

DIESELMOTOR

Diesel particulate filter

CAB

Lighting package: 1 double beam working floodlight - cab-mounted rear center, 1 working floodlight cab-mounted - front right | FOPS - skylight guard | Additional boom-mounted working floodlight | Radio set installation kit | Yellow beacon | Sliding window on right-hand side

DRIVER'S STAND

Operator's seat MSG 95 (premium version), air damping, extra-high backrest and tilt-adjustable armrests, longitudinal-horizontal suspension, seat and backrest heating, pneumatic lumbar support | Klimatronic Thermoelectric cooler

OTHER OPTIONAL EQUIPMENT

Additional rear weight 480 kg | Anti-theft device (immobilizer) | Quick-attach system, mechanical, type MS08 | Quick-attach system, hydraulic, type HS08 | Hydraulic installation for quick-attach system | Electrical refueling pump | Engine-independent diesel heater with fresh air circulation and timer | Working floodlight, boom-mounted | Special coating / adhesive films | Further optional equipment available on request



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