



YANMAR

MIDI-EXCAVATOR

SV100-2



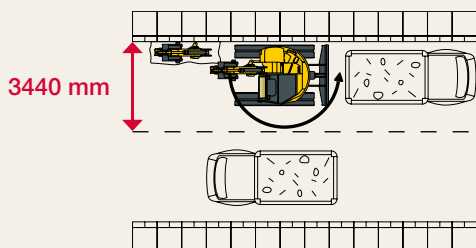
Engine	4TNV98CT-VBV
Net power	70,3 HP
Operating weight	9.625 kg
Digging force (bucket)	68,5 kN

AN UNMATCHED COMBINATION OF COMPACTNESS AND PERFORMANCE



Short tail swing of only **170 mm**

360° visibility



IDEAL FOR URBAN JOBSITES

The SV100-2 is particularly suited for work in urban areas: no need to block the two lanes of traffic.



A true concentrate of technology and innovation, the SV100-2 offers the performance of a large excavator while enjoying the benefits of a compact excavator. Designed to work effectively on a wide variety of sites, it combines compactness, power, versatility, comfort and reliability.



COMPACTNESS

Maximum stability and exceptional lifting forces

The SV100-2 is equipped with the VICTAS® system whose strength lies in the increase of the support surface and increase in tracking through the use of asymmetric crawlers. This system, patented by Yanmar, reduces track degradation, makes displacements quieter and reduces vibration. Associated with the use of a large counterweight and excellent weight distribution, it provides the same or even higher stability than conventional machines in the same weight class, as well as remarkable lifting capacities.

Dual axis position of the arm cylinder

When using a quick hitch, the dual position of the arm cylinder axis makes for scalable kinematics and prevents collisions with the boom while maintaining digging force.





WORK PERFORMANCE

Based on our unique experience and expertise, Yanmar technology ensures excellent performance while respecting the environment. The SV100-2 combines power, flexibility and precision. Its versatility makes it the ideal partner to improve your productivity, regardless of the work site complexity you are facing (excavation, grading, demolition, backfilling...).

OUTSTANDING PERFORMANCES FOR A MEDIUM EXCAVATOR OF THIS SIZE

Features of a large excavator in a compact format

The breakout forces of 68.5 kN at the bucket and 45.8 kN at the boom are exceptional for a 10 ton excavator with a very short tail swing. Associated with a digging depth of 4570 mm (3870 mm for vertical wall) and excellent traction force, they allow the SV100-2 to carry out major work such as laying pipes or excavation and clearing operations for large areas.

VIPPS® Hydraulic circuit (ViO progressive 3 pump system)

The SV100-2 is equipped with a hydraulic circuit with aggregated power regulation equipped with a double

piston pump with variable flow, a gear pump and a multiple combination directional control valve. Pumps engage automatically depending on the operation being performed, providing greater ease of use for the operator. On one hand, the combination of the pump flows can increase the work speed and on the other hand, the system allows smooth and simultaneous performance of all the operations, even while travel.

Regulation of hydraulic system based on engine speed

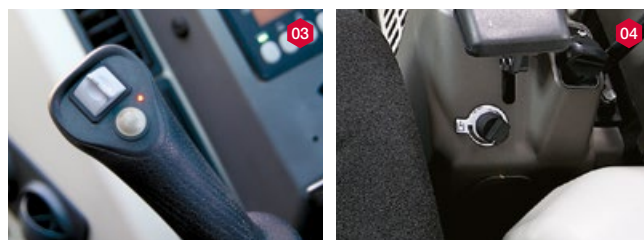
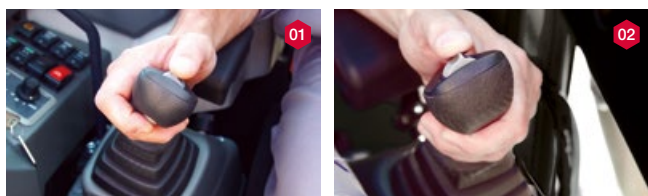
The new electronic hydraulic pump regulator adjusts its flow rate based on engine performance. Thus engine power is perfectly exploited and machine performance is optimized.

FLEXIBILITY, ACCURACY AND VERSATILITY

Adjustable proportional control of the auxiliary circuits

The SV100-2 is equipped in standard with two auxiliary circuits with proportional control on joystick with adjustment

using potentiometers. The proportional control adapts the flow of oil to the use and the needs of each attachment. The operator thus has a perfect control of accessories (reclining buckets, brush cutters, hydraulic hammers ...).



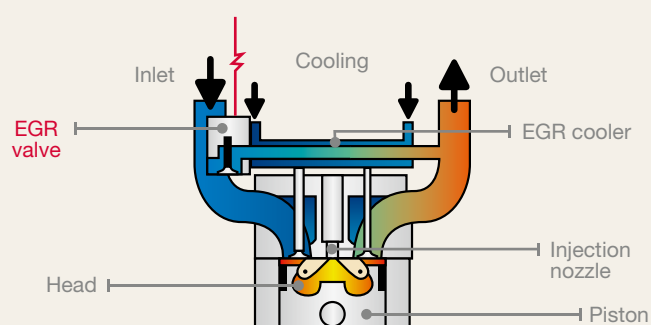
- 01 Right joystick : proportional control of the 1st auxiliary circuit (hammer).
- 02 Left joystick : proportional control of the 2nd auxiliary circuit (grapples, rotation).
- 03 Button at the bottom of the right joystick and red light : indicates the constant flow.
- 04 2 potentiometers enable to adjust the oil flow.

NEW POWERFUL AND ENVIRONMENTALLY FRIENDLY YANMAR ENGINE

Power and cleanliness

The SV100-2's new Yanmar diesel engine with direct injection has a net output of 51.7 kW (70.3 hp) and meets the Phase IIIB and Tier 4 emission standards. It is equipped with an electronic control unit and a common rail system that achieves an excellent power/consumption/noise ratio by electronic control of fuel injection.

A particulate filter traps particulate matter contained in exhaust gas and burns them during its automatic regeneration. Its operation without additives reduces maintenance costs.



ELECTRICAL CONTROL SYSTEM EGR

The exhaust gas is partially cooled and mixed with the incoming air in order to lower the oxygen concentration in the intake air. This system lowers the combustion temperature and reduces emissions of nitrogen oxides (NOx) while boosting fuel efficiency.

REDUCED FUEL CONSUMPTION

Auto-Idle

A self-deceleration mechanism (disconnectable) reduces engine speed when the SV100-2 does not work. When the control levers are not used for 4 seconds, the engine automatically drops to idle. When they are moved again, the engine returns to the previous speed. Environmental performance (noise and emissions) and fuel consumption are even more improved.

Eco Mode

The Eco mode effectively controls the motor speed, thus allowing a very low fuel consumption. Particularly useful when working require little power and low speed of movement (levelling a field using a ditching bucket ...), the Eco mode saves up to 17% less fuel, thereby reducing operating costs.



COMFORT

Designed to meet the operator needs, the SV100-2 cab is large and pleasant. The attention paid to the work environment and ergonomics makes you feel comfortable during long days on site. The increased visibility and a comfortable operator station allow the operator to be even more productive while reducing fatigue.

UNEQUALLED COMFORT FOR MORE EFFICIENCY

Large and comfortable cabin

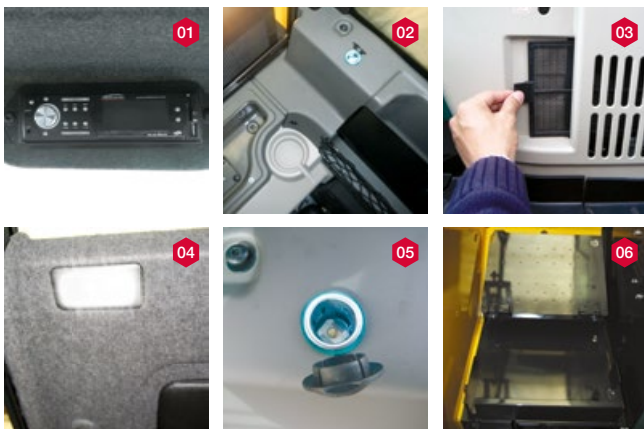
The SV100-2 cab interior is very spacious. The large legroom allows the operator to work comfortably for long hours. The entrance, which is also very large, provides easy cab access and exit.

Wide air suspension seat standard

The wide seat with headrest is fitted with a standard air suspension and can slide back and forth alone or simultaneously with the levers. It allows the operator to find an optimal working position depending on their size and girth while reducing shocks and vibrations.

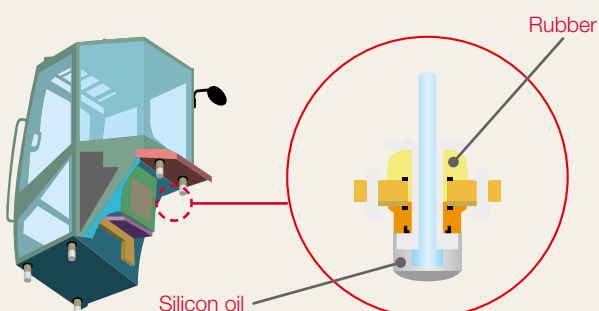
Improved air conditioning

The SV100-2 air conditioning can work at a comfortable temperature whatever the weather. Vents are placed so as to ensure a homogeneous temperature within the cabin. The air conditioning filter is inside the cabin and can be removed easily for cleaning or replacing. The defrost function ensures perfect demisting of the windscreen.



Standard equipments

- 01 Radio with USB port.
- 02 Numerous storage spaces and bottle holder.
- 03 Air conditioning filter.
- 04 Automatic ceiling.
- 05 Two 12-volt sockets.
- 06 Toolbox.



QUIET CABIN

The SV100-2 cab is mounted on an innovative and sophisticated silent block anti-vibration and noise-reduction system. The sound level reaching the operator is reduced (97 dB(A)). The 5 support points absorb even significant vibrations.



MANY FEATURES FOR IMPROVED EASE OF CONTROL

Perfect cockpit ergonomics

The architecture inside the SV100-2 cab has been studied to improve the operator driving position and to facilitate its work, particularly on the long and challenging work sites. The wrist supports are adjustable. The wide travel pedals and hydraulic control levers are fluid and easy to use. Ideally located, the control levers offer exceptional movement precision.

Automatic 2nd speed

The SV100-2 has an automatic second speed for long displacements. A power switch keeps the machine in 1st gear for difficult passages (slope, counter-rotation, etc...).

360° visibility for safe and efficient work

The large SV100-2 cabin windows and shape of the hoods provide the operator with excellent visibility around the

machine. The front windshield, divided into two parts, is fully retractable and the windows on the right side slide. The operator can easily communicate with other workers. The 360° visibility ensures optimum safety on the work site and makes work more efficient. It also reduces the risk of damaging the machine, especially in tight spaces or congested job sites.

Optimum visibility during loading operations

The front part of the roof is transparent and provides full control of the bucket to the operator during loading or demolition operations.

A panoramic vision for a better control of the work environment

The SV100-2 is equipped with 5 rear and side mirrors. The operator can control the work area as well as the area around the machine without moving from his seat.



Because one is more effective in a safe and secure environment, the safety of the operator and people working around the machine is one of our priorities. The SV100-2 is equipped with many facilities that enable to work with confidence.



SAFETY

A WORKING ENVIRONMENT THAT IS BOTH PRACTICAL AND SECURE

Cabin conform to ISO standards

The SV100-2 cab has been designed to increase operator safety and confidence. The use of a very rigid ROPS and strong resistance for the cab enhances operator safety in a roll-over. The cabin also conforms to the FOPS I standard for protective structures against falling objects. It can optionally be equipped with a FOPS II guard.

LED lighting: efficiency and low consumption

In order to work efficiently and accurately in darkness, the SV100-2 comes standard with 3 LED lights positioned in the inner part of the boom and at the front of the cabin. The LED technology provides a powerful light while reducing energy consumption and increasing the life of the battery. An optional beacon and additional LED headlight can be added to the rear of the cab.



Additional Equipment

- 01 Safety lever to access the cockpit.
- 02 Seat belt with retractor.
- 03 Emergency engine stop.
- 04 Anchor points for transport.
- 05 Engine air cooling evacuation facing up (protection of people and the surrounding plants).
- 06 Evacuation hammer.



RELIABILITY

THE RELIABILITY NEEDED FOR IMPROVED PRODUCTIVITY AND REDUCED OPERATING COSTS

All SV100-2 components were designed in order to make it reliable, durable and capable of performing demanding work. The structure of the undercarriage, as well as the steel covers, provides fool proof resistance for the chassis. The hoses are protected with abrasion-resistant sleeves. Their routing on the top of the boom and on the right side of the machine is particularly thought through to avoid the risk of torsion. The blade and boom cylinders are fully protected by steel plates. Cataphoresis treatment of the steel parts provides excellent resistance to corrosion for the paint. Form stringers prevent the accumulation of soil and reduce the internal track wear.



DIGITAL INTERFACE: FOR BETTER CONTROL OF THE MACHINE AND GREATER PRODUCTIVITY

The SV100-2 is equipped with a digital interface that informs the operator in real time on the status of his machine. Perfectly integrated into the right-hand console, the 3,3" screen provides excellent visibility in bright sunlight or at night. This interface allows you to manage working time, daily maintenance operations and to program interventions. It provides useful information on the operation of the machine, such as engine oil and coolant temperatures or fuel level and stores the important events. It also warns the operator in case of malfunctioning of the machine (insufficient battery charge, abnormal oil pressure, clogged air filter...).





MAINTENANCE

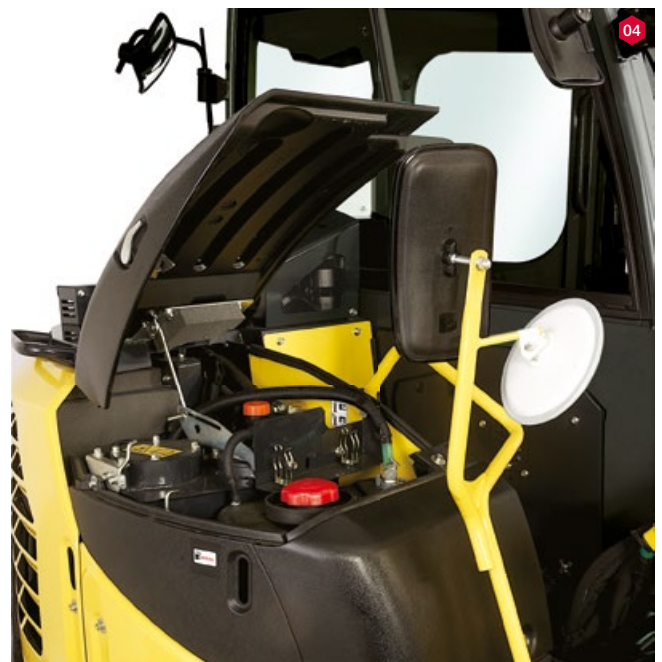
UNLIMITED ACCESS AND EASE OF MAINTENANCE TO REDUCE INSPECTION TIME AND MAINTENANCE

Easy cleaning

The SV100-2 is designed to minimize maintenance time of its various elements. The corrugated radiator wall is designed to prevent it from being crushed. The cabin carpet is easy to clean and air conditioning filter, positioned in the cabin, can be easily removed for cleaning or replacement.

Easy access

The rear and side covers are easy to open and have large openings for easy reach to daily check points. The engine elements as well as the hydraulic filter and the air filter are under the back cover. The right covers provide access to the radiator, battery, fuel tank and hydraulic filling points. The fan and air conditioner belts are easy to adjust. Inside the cabin, the panel beneath the seat and the removable floor make it very easy to access the relays, fuses and the components located under the cab.



- 01 Fan belt and alternator belt are accessible through a hatch to the right of the cabin.
- 02 Battery is protected by a metal plate behind the right back cover.
- 03 Electrical components are under the seat.
- 04 Access to the fuel tank and hydraulic filling points.



Our distributors provide you all the solutions you need: advice tailored to your situation, including full-service contracts, spare parts and maintenance.

> FINANCING

The **Y-Finance*** solutions guarantee the most competitive interest rates and help you determine the financing plan that best suits your needs.

* The offerings vary by country.

> WARRANTY

All new Yanmar excavators sold through our authorized network in Europe are protected for 12 months (or 1,000 hours, whichever comes first) by a manufacturer's warranty with an extension of 12 months (or 1,000 hours) for the drive train. We go further by proposing extended warranty contracts "Garantie PLUS" that offer various solutions for long-term coverage.

> PARTS

The original Yanmar parts are designed, tested and manufactured to ensure optimal quality and safety. By systematically using original spare parts, you can be sure to maintain the performance of your machine and avoid future costly repairs due to inadequate parts. You are sure that your machine is kept in perfect condition and you ensure a high resale value.

Original Yanmar parts can be delivered within 24 hours.

> MAINTENANCE

Proximity, speed, quality and reliability are constant concerns for Yanmar dealers. We are committed to your peace of mind and we are committed to your satisfaction. The network of authorized Yanmar repair sites is present in all European countries. You can always find nearby mechanics trained and qualified to care for your machine. Authorized repairers provide contracts and routine maintenance services, perform emergency repairs and provide you with advice adapted to your needs.



EQUIPMENT

STANDARD EQUIPMENT

Engine

- 4TNV98CT-VBV Yanmar diesel
- Meets Phase IIIB and Tier 4 standards
- Direct Injection
- Common Rail System
- EGR Electrical Control System
- Engine Control Unit (ECU)
- Particle filter with automatic regeneration (without additives)
- Water Separator
- Eco Mode
- Auto-Idle System (auto deceleration)
- Throttle using potentiometer

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Hydraulic system

- VIPPS Hydraulic system (ViO progressive 3 pump system)
- 2 auxiliary circuits with adjustable proportional control by potentiometer
- Electronic regulation of hydraulic pumps
- Automatic 2nd speed
- Filter on steering hydraulic circuit
- External hydraulic oil gauge

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Cabin

- LCD Interface
- Cabin mounted on viscoelastic silent blocks
- Air conditioning
- Adjustable and reclining seat with

fabric covers, air suspension and headrest

- Adjustable wrist support
- Foot rests
- Wide travel pedals
- Windshield with 2 fully retractable parts
- Sliding double right side window
- Transparent upper front part
- Visor
- Wipers
- Windshield washer
- Automatic ceiling lamp
- Radio with USB port
- 2 x 12V outlets
- Storage Boxes
- Secure document storage
- Cup Holder

+

Undercarriage

- Asymmetric VICTAS tracks
- 4 anchor points
- Blade cylinder supply hose into two parts

+

Safety

- Handrails
- Safety lever
- Seat belt with retractor
- Evacuation hammer
- Anchor points
- 5 mirrors
- Horn
- Travel beep

Lighting

- 1 LED light integrated into the boom
- 2 LED lamps on the front of the cab

+

Miscellaneous

- Electric refuelling pump with automatic stop
- Fuel gauge
- Double axis position of the arm cylinder
- Protection of the blade and boom cylinders
- Hoses protected by abrasion-resistant sleeves.
- Cataphoresis treated steel parts
- Locking Covers
- Toolbox
- Toolkit
- Grease pump

OPTIONAL EQUIPMENT

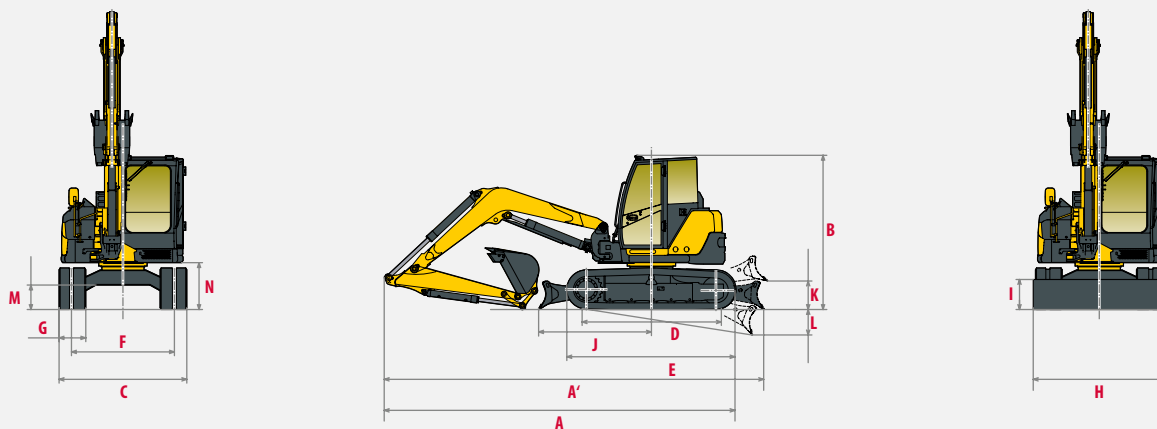
Special paint | Safety valves for lifting + overload warning | Long arm | Proportional 3rd and 4th hydraulic circuits lines to arm end | Proportional 3rd and 4th hydraulic circuits (prolongation 3rd circuit included) + ½ circuit | Line high pressure for hydraulic quick coupler | Quick couplings | Anti-theft (key/keyboard) | GPS Tracking | Centralised greasing | Additional counterweight | Skaï seat | LED rear light + flashing light | FOPSI protection grid

ACCESSORIES

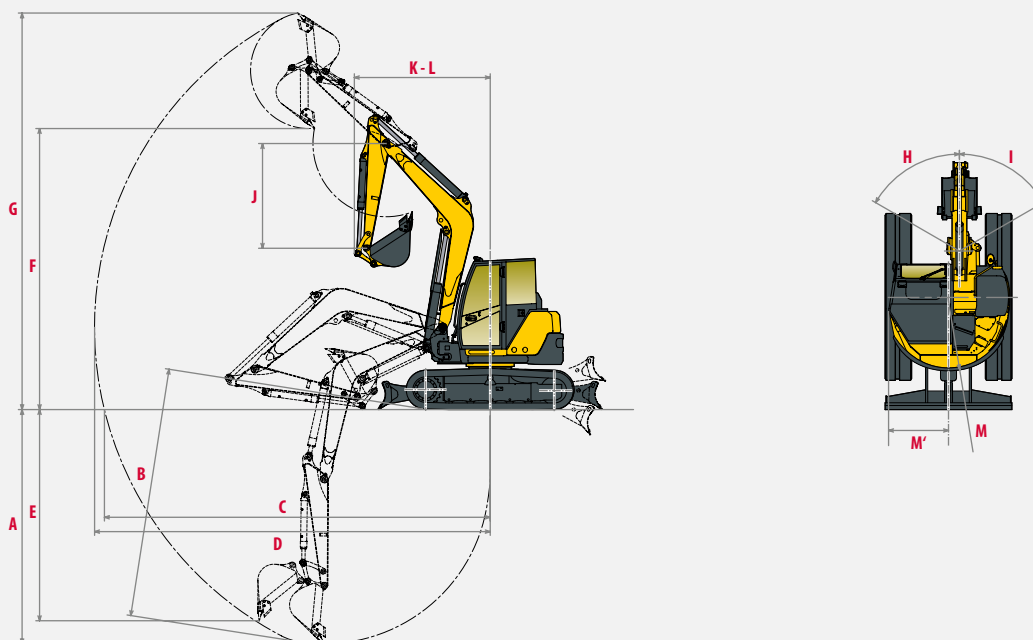
Yanmar gives you the accessories that fit your needs and match the safety standards in force in your country: mechanical quick coupler, hydraulic quick coupler, ditching bucket, swinging bucket, backhoe bucket, hydraulic hammer...



DIMENSIONS



A » Overall length	6390 / 6450* mm	H » Overall blade width	2320 mm
A' » Overall length with blade at the back	6900 / 6950* mm	I » Overall blade height	520 mm
B » Overall height	2810 mm	J » Blade distance	2040 mm
C » Overall width	2320 mm	K » Max. lifting height above the ground	520 mm
D » Length of track on ground	2370 mm	L » Max. lowering depth from the ground	460 mm
E » Undercarriage length	3070 mm	M » Minimum ground clearance	450 mm
F » Lane	1870 mm	N » Ground clearance under counterweight	820 mm
G » Track width	485 mm		



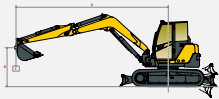
A » Max. digging depth - Blade lifted	4290 / 4640* mm	H » Boom swinging base to left	60°
B » Max. digging depth - Blade lowered	4570 / 4910* mm	I » Boom swinging base to right	60°
C » Max. digging reach on ground	7060 / 7400* mm	J » Arm length	1950 / 2300* mm
D » Max. digging reach	7240 / 7570* mm	K » Front boom swing	2480 / 2550* mm
E » Max vertical wall	3870 / 4210* mm	L » Front turning radius with boom swing	2110 / 2180* mm
F » Max. unloading height	5140 / 5300* mm	M » Rear swing radius	1330 mm
G » Max. cutting height	7260 / 7500* mm	M' » Rear swing radius with additional counterweight	1470 mm

*With long arm

Subject to technical modifications. Dimensions in mm with specific Yanmar bucket.



LIFTING FORCE



Tipping load, rating over front



Tipping load, rating over side 90°

Standard counterweight, standard arm

Blade on ground									Blade above ground							
A	Max		5 m		4 m		3 m		Max		5 m		4 m		3 m	
B																
5 m	1820	1830	-	-	1710	1730	-	-	1820	1790	-	-	1710	1710	-	-
4 m	1380	1800	1780	1790	1820	1810	-	-	1360	1750	1780	1760	1810	1780	-	-
3 m	1200	1830	1560	1930	2150	2190	2660	2740	1150	1370	1560	1890	2170	2180	2640	2690
2 m	1100	1860	1480	2150	2030	2670	3150	3840	1080	1260	1490	1760	2030	2620	3080	3810
1 m	1080	1920	1430	2370	1930	3090	2920	4470	1050	1230	1420	1690	1920	2320	2790	3410
0 m	1120	1980	1370	2470	1850	3270	2790	4590	1080	1240	1400	1650	1850	2230	2630	3280
-1 m	1210	2030	1370	2400	1820	3160	2940	4320	1220	1400	1380	1650	1830	2250	2780	3430
-2 m	1490	1980	-	-	1870	2880	2720	3700	1420	1680	-	-	1710	2200	2750	3750

Standard counterweight, long arm

Blade on ground									Blade above ground							
A	Max		5 m		4 m		3 m		Max		5 m		4 m		3 m	
B																
5 m	1680	1680	1620	1620	-	-	-	-	1680	1680	1620	1620	-	-	-	-
4 m	1190	1690	1610	1610	-	-	-	-	1180	1380	1610	1610	-	-	-	-
3 m	1070	1720	1560	1800	1980	1980	-	-	1060	1220	1540	1800	1980	1980	-	-
2 m	990	1740	1520	2040	2110	2460	3480	3480	990	1170	1500	1730	2100	2440	3480	3480
1 m	980	1780	1470	2290	2020	2970	2920	4290	960	1150	1440	1710	1980	2440	2910	3610
0 m	1010	1820	1360	2430	1850	3170	2710	4500	980	1180	1360	1610	1840	2280	2680	3360
-1 m	1080	1890	1370	2470	1860	3250	2770	4460	1070	1270	1350	1610	1830	2210	2700	3300
-2 m	1250	1860	1340	2150	1800	2900	2840	3950	1250	1480	1330	1640	1790	2210	2780	3370

Additional counterweight, standard arm

With rotolift *									Without rotolift							
Blade on ground				Blade above ground					Blade on ground				Blade above ground			
A	Max		5 m		4 m		3 m		Max		5 m		4 m		3 m	
B																
5 m	1570	1570	-	-	1470	1470	-	-	1820	1830	-	-	1710	1730	-	-
4 m	1320	1570	1550	1540	1540	1570	1570	-	1530	1800	1780	1790	1820	1810	-	-
3 m	1120	1580	1500	1540	1570	1570	-	-	1330	1830	1780	1760	1810	1780	-	-
2 m	1020	1580	1520	1520	1680	1640	1930	1930	1230	1830	1730	1730	1930	2150	2190	2660
1 m	1000	1610	1160	1440	1900	2040	2420	2370	1230	1860	1650	1650	2150	2250	2670	3490
0 m	1040	1610	1050	1440	1900	2040	2420	2370	1200	1860	1650	1650	2150	2250	2670	3410
-1 m	1150	1670	1020	1390	1830	2120	2840	2370	1210	1920	1600	1590	2370	2150	3090	3250
-2 m	1150	1780	1190	1330	1830	2150	2840	2370	1180	1920	1600	1590	2370	2150	3090	3130
									1250	1980	1540	1540	2470	2080	3270	3120
									1220	1980	1540	1560	2470	2070	2500	2960
									1360	2030	1540	1540	2400	2200	3160	3270
									1360	1980	1400	1550	1840	2060	2510	3110
									1660	1980	-	-	2090	2880	3060	3700
									1590	1680	-	-	1940	2470	3090	3750

Additional counterweight, long arm

Blade on ground									Blade above ground							
A	Max		5 m		4 m		3 m		Max		5 m		4 m		3 m	
B																
5 m	1680	1680	1620	1620	-	-	-	-	1680	1680	1620	1620	-	-	-	-
4 m	1330	1690	1610	1610	-	-	-	-	1320	1540	1610	1610	-	-	-	-
3 m	1190	1720	1720	1800	1980	1980	-	-	1190	1370	1720	1800	1980	1980	-	-
2 m	1120	1740	1690	2040	2330	2460	3480	3480	1110	1320	1670	1930	2320	2440	3480	3480
1 m	1100	1780	1640	2290	2250	2970	3250	4290	1090	1290	1610	1910	2210	2710	3240	4040
0 m	1140	1820	1530	2430	2070	3170	3040	4500	1120	1320	1520	1810	2070	2550	3000	3780
-1 m	1220	1890	1540	2470	1780	3250	3100	4460	1200	1430	1520	1810	2050	2480	3030	3720
-2 m	1410	1860	1510	2150	2020	2900	3170	3950	1410	1670	1500	1830	2010	2480	3110	3790

* Rotolift of 285 kg

The data in this table represents the lifting capacity in accordance with ISO 10567. They do not include the weight of the bucket and correspond to 75% of the maximum static tipping load or 87% of the hydraulic lifting capacity. Data marked with * are the hydraulic limits of the lifting force.



SPECIFICATIONS



WEIGHT +/- 2% (CE STANDARDS)

	Weight	Ground pressure
Operating weight (rubber tracks)	9625 kg	0.381 kg/cm ²
Transport weight (rubber tracks)	9550 kg	0.378 kg/cm ²
With steel tracks	+ 50 kg	0.39 kg/cm ²
With additional counterweight	+ 400 kg	0.396 kg/cm ²
With FOPS II protection	+ 100 kg	0.385 kg/cm ²



ENGINE

Type	4TNV98CT-VBV
Fuel	Diesel
Net Power	51.7 kW / 70.3 HP / 2100 rpm
Gross Power	53.7 kW / 73 HP / 2100 rpm
Displacement	3318 cm ³
Maximum torque	283 N.m. / 1365 rpm
Cooling	Liquid
Starter	3 kW
Battery	12 V - 115 Ah
Alternator	12 V - 80 A



HYDRAULIC SYSTEM

Maximum pressure	275 bar
1 double piston pump with variable flow	2 x 77.7 l/min
1 gear pump	53.2 l/min
1 gear pump for pilot line	20 l/min

PTO	Theoretical data at 2100 rpm	
	Pressure	Oil flow
	0 ~ 245 bar	130 ~ 60 l/min
	0 ~ 245 bar	130 ~ 60 l/min



Oil flow decreases as the pressure increases



PERFORMANCE

Travel speed	2.5 / 4.4 km/h (2.2 / 4.0 km/h with rubber crawlers)
Rotation speed	9.1 rpm
Digging force (arm)	45.8 kN (4670 kgf) / 40.9 kN (4170 kgf) with long arm
Digging force (bucket)	68.5 kN (6980 kgf)
Traction force	91.6 kN
Grade ability	30°
Noise level (2000/14/CE & 2005/88/CE)	97 dB(A) / 101 dB(A) (LwA)



UNDERCARRIAGE

Number of top rollers	1
Number of bottom rollers	5
Track tensioning system	Using grease pump



CAPACITIES

Fuel tank	115 l
Coolant	10.6 l
Engine oil	11.2 l
Hydraulic circuit	115 l
Hydraulic tank	60 l

MAINTENANCE FREQUENCY

Change engine oil and filter: **250 hours** | Change fuel filter: **500 hours** | Change hydraulic oil filter: **1000 hours** |
 Change hydraulic oil filter: **1000 hours** | Change cooling fluid: **1000 hours** | Clean particulate filter: **3000 hours** |
 Change particle filter: **9000 hours**



YANMAR



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Yanmar Construction Equipment Europe S.A.S.

25, rue de la Tambourine
52100 SAINT DIZIER – FRANCE
contact@yanmar.fr

www.yanmarconstruction.eu