



YANMAR

SV100-2

MIDI-EXCAVATOR



Operating weight

9 625 kg

Engine

4TNV98CT-VBV with DPF

Net power

51,7 kW (70,3 HP) at 2 100 rpm

Digging force (short arm/long arm)

45,8 kN/38,8 kN

Digging force (bucket)

68,5 kN

COMPACTNESS AND PERFORMANCE COMBINED





COMPACT DESIGN

Designed to excel in even the most challenging conditions, the SV100-2 combines the compact dimensions of a midi-excavator with the class-leading performance of a much larger machine. With a width of just 2,320mm, the 9.6-tonne excavator offers rock-solid stability and impressive power – the perfect partner for a wide range of applications, including urban renewal and grading.



NEXT-GENERATION ENGINE

Powered by Yanmar's state-of-the-art 4TNV98CT four-cylinder turbocharged diesel engine, the SV100-2 is fuel efficient, environmentally friendly and fully compliant with EU Stage V emissions legislation (thanks to a cooled EGR and DPF as standard). Direct injection and common rail technology maximise engine performance, while auto-idle (available as an optional extra) provides even greater control for the operator.



INNOVATIVE HYDRAULICS

Featuring Yanmar's ViPPS hydraulic system, which cumulates the flow of separate hydraulic pumps to deliver the perfect balance of speed, power and balance, the SV100-2 guarantees smooth and simultaneous operation – even while moving.



EASY OPERATION

Thanks to intuitive, ergonomically placed levers, operators benefit from precise movement and unmatched machine management. All the main controls are located on the joysticks for maximum productivity and easy operation.



CLASS-LEADING SAFETY

As with all Yanmar models, safety has been prioritised throughout the development of the SV100-2, which achieves ROPS, TOPS and FOPS Level I certification for both canopy and cabin. Additional safety features include a high-visibility orange seatbelt and LED work lights as standard. Optional extras include FOPS Level II protection and a flashing LED beacon.



COMFORTABLE CABIN

To ensure maximum operator comfort and on-site productivity, the SV100-2 features the widest (and most spacious) cabin in its class. Embracing Yanmar's 'Universal Design' principles, operators benefit from increased leg room, improved ergonomics, air suspension, a wide range of new instrumentation.



LOW COST OF OWNERSHIP

The perfect blend of productivity and compactness, the SV100-2 boasts low fuel consumption, long service life and easy maintenance access. Collectively, this ensures a highly affordable total cost of ownership.

POWER, PRODUCTIVE AND COMPACT



The perfect pairing of next-generation technology and intricate design innovation, the SV100-2 delivers the performance of a large excavator while enjoying the space-saving benefits of a far more compact model. Designed with the operator firmly in mind, the SV100-2 seamlessly blends power, versatility, comfort and reliability.

UNMATCHED STABILITY

Featuring Yanmar's patented VICTAS® system, which increases support surface dimensions and tracking through the use of asymmetric crawlers, the SV100-2 offers truly class-leading stability. Unique in the marketplace, the innovative system reduces track degradation, minimises vibration and makes displacements quieter.

Alongside VICTAS® technology, the use of a large counterweight and excellent weight distribution provides superior stability to more conventional machines in the same weight class – as well as hugely impressive lifting capabilities.



OUTSTANDING PERFORMANCE

Thanks to Yanmar's unmatched expertise in the design and development of compact equipment, the adoption of state-of-the-art technology ensures that the SV100-2 delivers impressive performance with minimal impact on the environment. Combining power, flexibility and precision, the impressive model offers the versatility you need to maximise on-site productivity, regardless of terrain, conditions or application flexibility – be it excavating, grading, demolition or backfilling.

MAXI FEATURES, MIDI FORMAT

With a breakout force of 68.5kN (bucket) and 45.8kN (boom), the SV100-2 delivers over and above expectations for a 10-tonne excavator with short tail swing. Capable of achieving a dig depth of 4,570mm (3,870mm against a vertical wall) and an excellent traction force, the class-leading model is perfect for carrying out major work – including pipe laying, excavation or clearing large areas.

POWERFUL VIPPS HYDRAULIC CIRCUIT

The SV100-2 is equipped with a progressive three pump hydraulic system with aggregated power regulation. Featuring a double piston pump with variable flow, gear pump and multiple combination directional control valve, pumps engage automatically depending on the operation being performed, providing greater ease of use for the operator.

The combination of the pump flows not only increase work speed and productivity, but also enables smooth and simultaneous operation – even when moving.

HYDRAULIC REGULATION BASED ON ENGINE SPEED

Thanks to an all-new electronic hydraulic pump regulator, flow rate can be adjusted in-line with engine performance. Engine power can therefore be optimised, ensuring maximum productivity for the operator.

FLEXIBILITY, ACCURACY AND VERSATILITY

The SV100-2 is equipped, as standard, with two auxiliary circuits featuring proportional control (controlled via the joystick) with adjustment using potentiometers. The proportional control adapts the flow of oil to the use and the needs of each attachment, allowing the operator to benefit from intricate control.



- 1** Right joystick: proportional control of the first auxiliary circuit (hammer).
- 2** Left joystick: proportional control of the second auxiliary circuit (grapples, rotation).
- 3** Button at the bottom of the right joystick and red light indicates the constant flow.
- 4** Two potentiometers to adjust the oil flow.

SETTING THE STANDARDS



Combining impressive power with intricate precision, the SV100-2 adopts state-of-the-art technologies to deliver over and above expectations. Flexible, versatile and designed with the operator in mind, it's the perfect job site partner.

NEXT GENERATION ENGINE

Designed to minimise environmental impact, the SV100-2 adopts Yanmar's globally-acclaimed Stage-V compliant 4TNV98CT engine. The result of significant progress in low-carbon vehicle operation, the engine features cooled exhaust gas recirculation (EGR) technology and a diesel particulate filter (DPF) as standard to minimise nitrous oxide (NOX) and particulate matter (PM) emissions. To further improve efficiencies, an exclusive regeneration system prevents clogging and unnecessary cleaning downtime.

MINIMUM EMISSIONS, MAXIMUM FUEL EFFICIENCY

The ECU manages RPM according to torque demand, which optimises the engine load – thus reducing fuel consumption and improving productivity. When duty cycles require low power or minimal movement, Yanmar's Eco Mode technology controls the engine speed to reduce operating costs. Auto-idle technology switches the engine to idle if the operating levers are left untouched for more than four seconds, which reduces fuel consumption and limits engine wear.

CLASS-LEADING POWER

With a displacement of 3,318 liters, the SV100-2 delivers 53.7kW / 283Nm torque at 1,365 RPM. This provides exceptional lifting and carrying performance, while also minimising noise levels for the operator.



ROBUST AND RELIABLE



Designed with reliability in mind, the SV100-2 is robust, durable and capable of delivering demanding work – even in the toughest conditions and most challenging terrains. The structure of the undercarriage, alongside heavy-duty steel covers, effectively protects the chassis against daily damage and minimises unnecessary downtime. Hoses come as standard with abrasion-resistant sleeves, while their position on the top of the boom further reduces the risk of torsion.

The blade and boom cylinders are also protected by steel plates, which have been cataphoresis treated to prevent paint corrosion, while form stringers prevent the accumulation of soil and reduce internal track wear.

BETTER CONTROL, GREATER PRODUCTIVITY

The SV100-2 is equipped as standard with a state-of-the-art digital interface that provides real-time updates on machine status. Integrated into the right-hand console, the 3.3" screen provides excellent visibility in bright sunlight or at night. Allowing the operator to manage working time, daily maintenance operations and programme interventions, it flags important data (such as fuel level and engine oil/coolant temperatures) and stores important events. It also warns the operator in the instance of a malfunction, such as insufficient battery charge, abnormal oil pressure or a clogged air filter.



COMFORT, SPACE AND ERGONOMIC DESIGN



The SV100-2 cab has been designed to maximise operator comfort. Spacious and relaxing, the work environment ergonomics help to maintain productivity during long days on site. Increased visibility and clever design minimises fatigue and maximises safety.

SPACIOUS CABIN

Thanks to impressive legroom and a wide entrance, the SV100-2 cab feels large and comfortable – perfect for easy access, easy exit and maximum comfort while operating.

AIR SUSPENSION SEAT

Fitted with air suspension and a headrest as standard, the wide seat is fully-adjustable. It allows operators to find their perfect working position, while reducing shocks and vibrations.

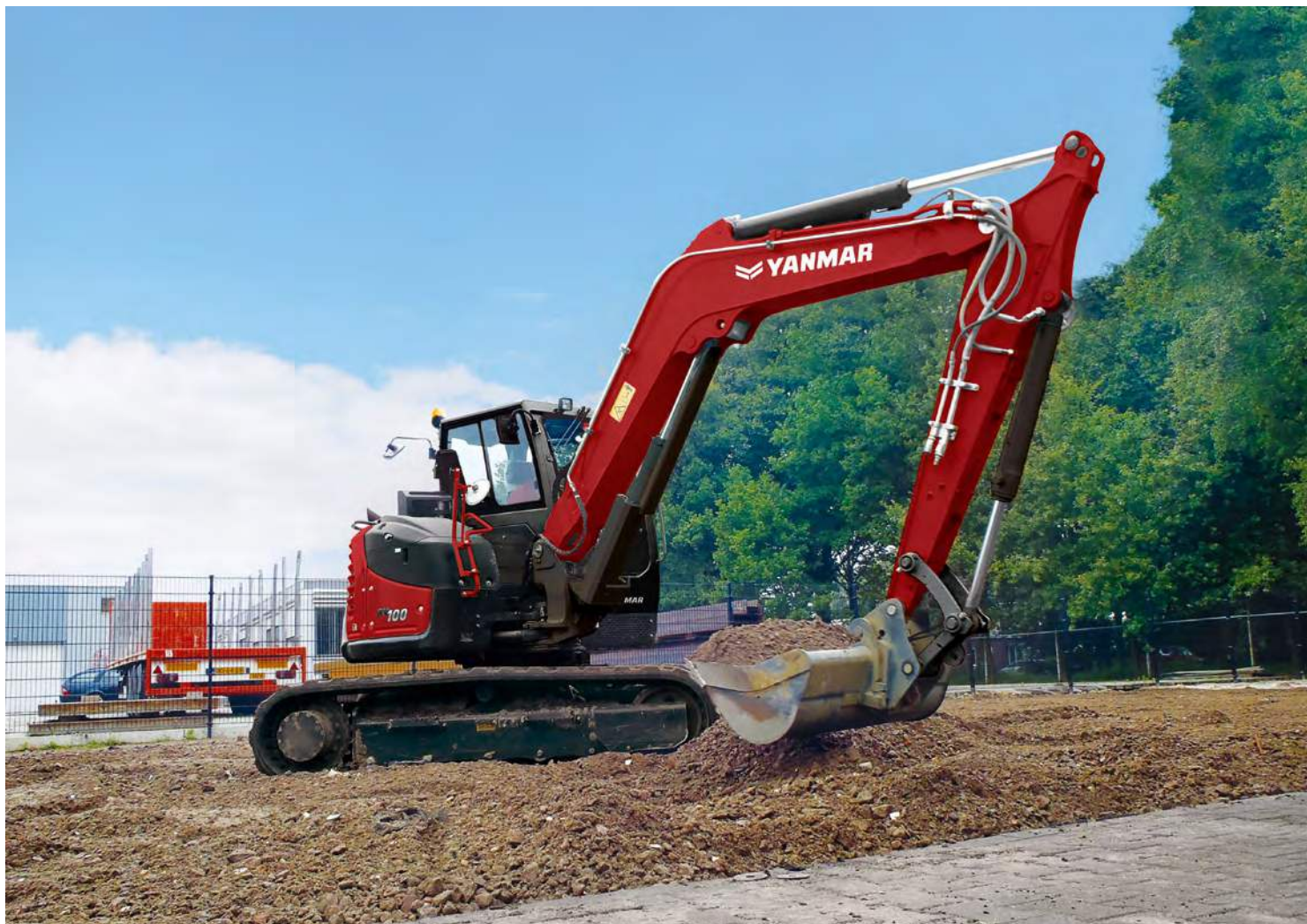
IMPROVED AIR CONDITIONING

The SV100-2 air conditioning can work at a comfortable temperature whatever the weather. Vents are placed 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 windshield.

- + Radio with USB port
- + Numerous storage spaces and bottle holder
- + Air conditioning filter
- + Automatic ceiling light
- + Two 12-volt sockets
- + Toolbox



EASE OF USE



EXCELLENT ERGONOMICS

Designed to ensure a safe and comfortable operating position, as well as maximise productivity on site (particularly on long days and in challenging conditions), significant attention to detail has been given to the cab architecture. The wrist supports are fully adjustable, while the wide travel pedals and hydraulic control levers are easy to use. Ideally located, the control levers offer exceptional movement precision.

AUTOMATIC 2ND SPEED

The SV100-2 features an automatic second speed for long displacements, while a power switch keeps the machine in first gear for challenging situations (slopes, counter-rotations, etc).

360° VISIBILITY

Large cabin windows and the low-profile hood shape provides the operator with excellent 360° visibility for safe and efficient operation. The front windshield is fully retractable, as are the windows on the right-hand side. Exceptional visibility not only ensures safety on site, but also reduces the risk of accidental damage – especially in tight spaces or congested job sites.

OPTIMUM VISIBILITY DURING LOADING

Thanks to the transparency of the roof, the operator benefits from full control of the bucket during loading or demolition operations.

PANORAMIC VISION

With five different rear and side mirrors, the operator has complete panoramic vision of the surrounding work area from the comfort of their seat – an important feature to maximise safety and productivity.



SAFETY ON SITE

Yanmar is committed to maximising the safety of operators and other site staff working with or around the machine. As such, the SV100-2 is equipped with numerous features to maximise its safety credentials.

COMPLETE PROTECTION

The cab has been designed to maximise operator safety and confidence. Rigid and ROPS-compliant, the cab offers unparalleled protection in the event of a roll-over. Confirming to FOPS I standard for protective structures against falling objects, the SV100-2 can also be equipped with a FOPS II guard (added extra).

IMPRESSIVE VISIBILITY

Featuring three LED lights as standard (positioned in the inner part of the boom and at the front of the cabin), operators can work effectively through the night. The LED technology ensures minimal energy consumption and increased battery life. An optional beacon and additional LED headlight can be added to the rear of the cab for even better visibility.

- + Safety lever to access the cockpit
- + Orange seat belt with retractor
- + Emergency engine stop
- + Anchor points for transport
- + Engine air cooling evacuation facing up
- + Evacuation hammer



SIMPLE AND EFFECTIVE MAINTENANCE



EASY CLEANING

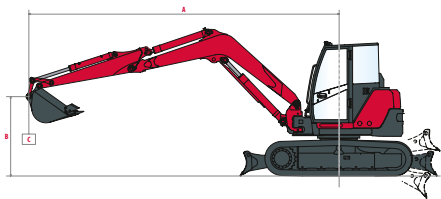
To minimise maintenance and maximise the lifespan of individual components, significant thought has been given to both daily maintenance simplicity and longevity of parts. For example, the corrugated radiator wall is designed to prevent crushing, while the cabin carpet is easy to clean. Furthermore, the air conditioning filter is located within the cabin itself (making cleaning or replacing the unit simple).

EASY ACCESS

The rear and side covers have large openings for easy access to daily maintenance check points. The main engine components (as well as the hydraulic filter and the air filter) can be easily reached via the back cover, while the right covers provide access to the radiator, battery, fuel tank and hydraulic filling points. The fan and air conditioning system belts are easy to adjust. Inside the cabin, the panel beneath the seat and the removable floor make accessing relays, fuses and other components located under the cab simple.



LIFTING CAPACITY



Tipping load, rating over front



Tipping load, rating over side 90°

A: Overhang from rotational axis (m)

B: Height of hooking point (m)

C: Safe working load (kg)

Short arm, standard counterweight

A	Blade down								Blade up							
	Max.		5,0 m		4,0 m		3,0 m		Max.		5,0 m		4,0 m		3,0 m	
5,0 m	1 820	1 830	--	--	1 710	1 730	--	--	1 820	1 790	--	--	1 710	1 710	--	--
4,0 m	1 380	1 800	1 780	1 790	1 820	1 810	--	--	1 360	1 750	1 780	1 760	1 810	1 780	--	--
3,0 m	1 200	1 830	1 560	1 930	2 150	2 190	2 660	2 740	1 150	1 370	1 560	1 890	2 170	1 280	2 640	2 690
2,0 m	1 100	1 860	1 480	2 150	2 030	2 670	3 150	3 840	1 080	1 260	1 490	1 760	2 030	2 620	3 080	3 810
1,0 m	1 080	1 920	1 430	2 370	1 930	3 090	2 920	4 470	1 050	1 230	1 420	1 690	1 920	2 320	2 790	3 410
0,0 m	1 120	1 980	1 370	2 470	1 850	3 270	2 790	4 590	1 080	1 240	1 400	1 650	1 850	2 230	2 630	3 280
-1,0 m	1 210	2 030	1 370	2 400	1 820	3 160	2 940	4 320	1 220	1 400	1 380	1 650	1 830	2 250	2 780	3 430
-2,0 m	1 490	1 980	--	--	1 870	2 880	2 720	3 700	1 420	1 680	--	--	1 710	2 200	2 750	3 750

Long arm, standard counterweight

A	Blade down								Blade up							
	Max.		5,0 m		4,0 m		3,0 m		Max.		5,0 m		4,0 m		3,0 m	
5,0 m	1 680	1 680	1 620	1 620	--	--	--	--	1 680	1 680	1 620	1 620	--	--	--	--
4,0 m	1 190	1 690	1 610	1 610	--	--	--	--	1 180	1 380	1 610	1 610	--	--	--	--
3,0 m	1 070	1 720	1 560	1 800	1 980	1 980	--	--	1 060	1 220	1 540	1 800	1 980	1 980	--	--
2,0 m	990	1 740	1 520	2 040	2 110	2 460	3 480	3 480	990	1 170	1 500	1 730	2 100	2 440	3 480	3 480
1,0 m	980	1 780	1 470	2 290	2 020	2 970	2 920	4 290	960	1 150	1 440	1 710	1 980	2 440	2 910	3 610
0,0 m	1 010	1 820	1 360	2 430	1 850	3 170	2 710	4 500	980	1 180	1 360	1 610	1 840	2 280	2 680	3 360
-1,0 m	1 080	1 890	1 370	2 470	1 860	3 250	2 770	4 460	1 070	1 270	1 350	1 610	1 830	2 210	2 700	3 300
-2,0 m	1 250	1 860	1 340	2 150	1 800	2 900	2 840	3 950	1 250	1 480	1 330	1 640	1 790	2 210	2 780	3 370

Short arm, additional counterweight

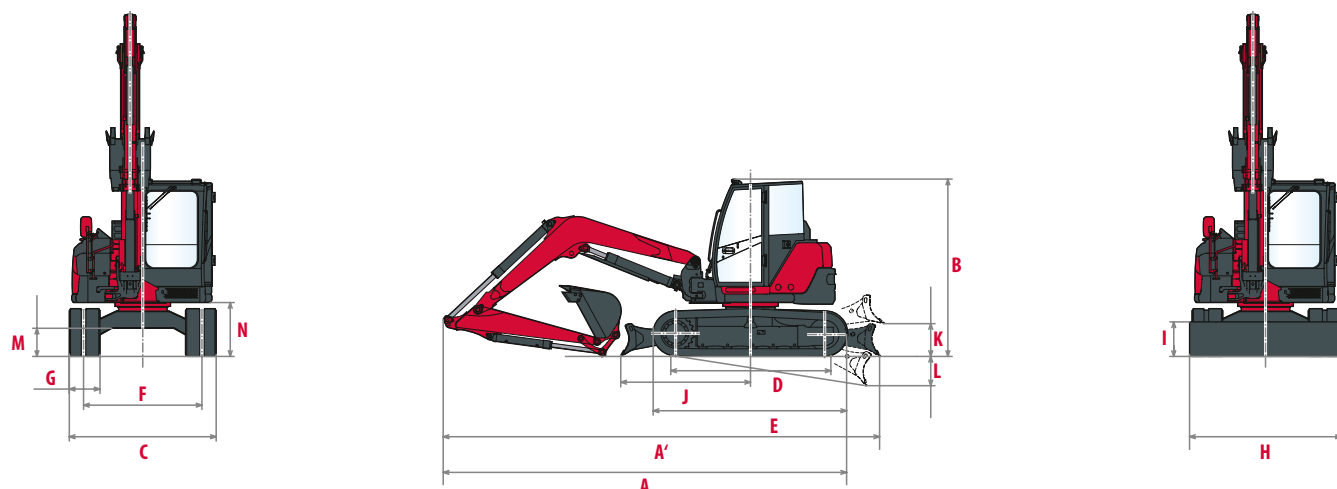
A	Blade down								Blade up							
	Max.		5,0 m		4,0 m		3,0 m		Max.		5,0 m		4,0 m		3,0 m	
5,0 m	1 820	1 830	--	--	1 710	1 730	--	--	1 820	1 790	--	--	1 710	1 710	--	--
4,0 m	1 530	1 800	1 780	1 790	1 820	1 810	--	--	1 510	1 750	1 780	1 760	1 810	1 780	--	--
3,0 m	1 330	1 830	1 730	1 930	2 150	2 190	2 660	2 740	1 290	1 370	1 730	1 890	2 170	2 180	2 640	2 690
2,0 m	1 230	1 860	1 650	2 150	2 250	2 670	3 490	3 840	1 200	1 260	1 650	1 960	2 250	2 620	3 410	3 810
1,0 m	1 210	1 920	1 600	1 370	2 150	3 090	3 250	4 470	1 180	1 230	1 590	1 890	2 150	2 580	3 130	3 820
0,0 m	1 250	1 980	1 540	2 470	2 080	3 270	3 120	4 590	1 220	1 240	1 560	1 840	2 070	2 500	2 960	3 700
-1,0 m	1 360	2 030	1 540	2 400	2 200	3 160	3 270	4 320	1 360	1 400	1 550	1 840	2 060	2 510	3 110	3 840
-2,0 m	1 660	1 980	--	--	2 090	2 880	3 060	3 700	1 590	1 680	--	--	1 940	2 470	3 090	3 750

Long arm, additional counterweight

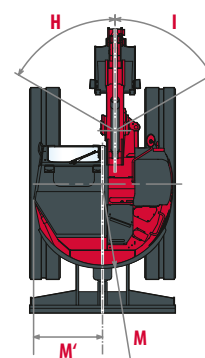
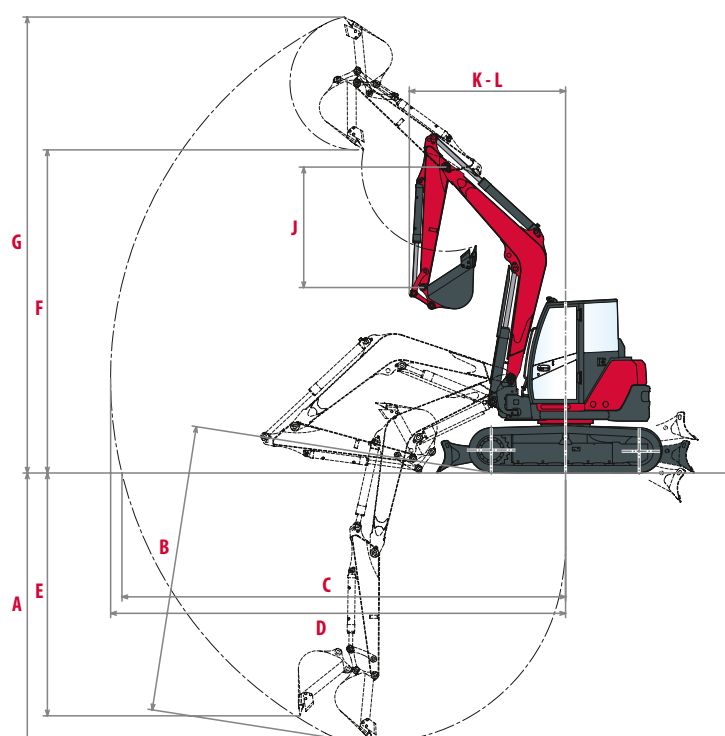
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	Max.		5,0 m		4,0 m		3,0 m		Max.		5,0 m		4,0 m		3,0 m	
5,0 m	1 680	1 680	1 620	1 620	--	--	--	--	1 680	1 680	1 620	1 620	--	--	--	--
4,0 m	1 330	1 690	1 610	1 610	--	--	--	--	1 320	1 540	1 610	1 610	--	--	--	--
3,0 m	1 190	1 720	1 720	1 800	1 980	1 980	--	--	1 190	1 370	1 720	1 800	1 980	1 980	--	--
2,0 m	1 120	1 740	1 690	2 040	2 330	2 330	3 480	3 480	1 110	1 320	1 670	1 930	2 320	2 440	3 480	3 480
1,0 m	1 100	1 780	1 640	2 290	2 250	2 250	3 250	4 290	1 090	1 290	1 610	1 910	2 210	2 710	3 240	4 040
0,0 m	1 140	1 820	1 530	2 430	2 070	2 070	3 040	4 500	1 120	1 320	1 520	1 810	2 070	2 550	3 000	3 780
-1,0 m	1 220	1 890	1 540	2 470	1 780	1 780	3 100	4 460	1 200	1 430	1 520	1 810	2 050	2 480	3 030	3 720
-2,0 m	1 410	1 860	1 510	2 150	2 020	2 020	3 170	3 950	1 410	1 670	1 500	1 830	2 010	2 480	3 110	3 790

[The data contained in these tables represent the lifting capacity in accordance with ISO standard 10567. They don't include the weight of the bucket and correspond to 75% of the maximum static tipping load or 87% of the hydraulic lifting power.]

DIMENSIONS



A Overall length	6 390 mm / 6 450 mm	H Overall blade width	2 320 mm
A' Overall length with blade at the back	6 900 mm / 6 950 mm	I Overall blade height	520 mm
B Overall height	2 810 mm	J Blade distance	2 040 mm
C Overall width	2 320 mm	K Max. lifting height above the ground	520 mm
D Length of track on ground	2 370 mm	L Max. lowering depth from the ground	460 mm
E Undercarriage length	3 070 mm	M Min. ground clearance	450 mm
F Lane	1 870 mm	N Min. ground clearance under counterweight	820 mm
G Track width	485 mm		



A Max. digging depth - Blade lifted	4 290 mm / 4 640 mm	H Boom swinging base to left	60°
B Max. digging depth - Blade lowered	4 570 mm / 4 910 mm	I Boom swinging base to right	60°
C Max. digging reach on ground	7 060 mm / 7 400 mm	J Arm length	1 950 mm / 2 300 mm
D Max. digging reach	7 240 mm / 7 570 mm	K Front turning radius	2 480 mm / 2 550 mm
E Max. vertical wall	3 870 mm / 4 210 mm	L Front turning radius with boom swing	2 110 mm / 2 180 mm
F Max. unloading height	5 140 mm / 5 300 mm	M Rear turning radius	1 330 mm
G Max. cutting height	7 260 mm / 7 500 mm	M' Rear turning radius with additional counterweight	1 470 mm

Short arm / Long arm.

SPECIFICATIONS

[WEIGHT +/- 2% (EU-STANDARD)]

	Transport weight	Operating weight	Ground pressure
With rubber tracks	9 550 kg	9 625 kg	0,38 / 0,39 kg/cm ²
With steel tracks (+ 50 kg)	9 600 kg	9 675 kg	0,38 / 0,39 kg/cm ²
With additional counterweight (+ 400 kg)	9 950 kg	10 025 kg	-

[ENGINE]


Type	4TNV98CT-VBV with DPF
Regulation	Stage V
Fuel	Diesel
Net power	51.7 kW (70.3 HP) at 2100 rpm
Gross power	53.7 kW (73 HP) at 2100 rpm
Displacement	3 318 cm ³
Maximum torque	283 - 308 N.m (at 1365 rpm)
Cooling	Water-cooling
Starter	12 V - 3 kW
Battery	12 V - 92 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 piston pump with variable flow	57,5 l/min
1 gear pump for pilot line	20 l/min

[AUXILIARY LINES]

PTO	Theoretical data at 2100 rpm	
	Pressure	Oil flow
1 way	0 - 245 bar	130 - 25 l/min
2 ways	0 - 245 bar	75 - 22 l/min

 Oil flow decreases as the pressure increase.

[PERFORMANCE]

Travel speed with rubber crawler (low / high)	2,5 / 4,4 km/h
Travel speed with steel crawler (low / high)	2,2 / 4,0 km/h
Rotation speed	9,1 rpm
Digging force (short arm / long arm)	45,8 kN / 38,8 kN
Digging force (bucket)	68,5 kN
Traction force	75,5 kN
Gradability	30°
Noise level (2000 / 14 / CE & 2005 / 88 / CE)	Lwa: 98 dBA / LpA : 72 dBA

[UNDERCARRIAGE]

Number of top rollers	1
Number of bottom rollers	5
Track tensioning system	Grease pump

[CAPACITIES]

Fuel tank	115 liters
Coolant	10,6 liters
Engine oil	11,2 liters
Hydraulic circuit (including hydraulic tank)	115 liters
Hydraulic tank	60 liters

[MAINTENANCE FREQUENCY]

Change engine oil and filter: 500 hours | Change fuel filter: 500 hours | Change hydraulic oil filter: 500 hours | Change hydraulic oil: 1 000 hours | Change cooling fluid: 2 000 hours | Clean particulate filter: 1 000 hours | Change particle filter: 9 000 hours.

EQUIPMENTS

[STANDARD EQUIPMENT]

PERFORMANCE

Diesel EU Stage V engine with Diesel Particulate Filter (DPF) | Direct Injection | Common Rail System | EGR Electrical Control System | Engine Control Unit (ECU) | Water Separator | Eco Mode | Auto-Idle System (auto deceleration) | Throttle using potentiometer | VIPPS Hydraulic system (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.

COMFORT & EASE OF USE

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.

SAFETY & DURABILITY

Handrails | Safety lever | Seat belt with retractor | Evacuation hammer | Anchor points | 5 mirrors | Horn | Travel beep | 1 LED light integrated into the boom | 2 LED lamps on the front of the cab | Asymmetric VICTAS tracks | 4 anchor points | Blade cylinder supply hose into two parts.

MISCELLANEOUS

Electric refueling 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 | Cathaphoresis treated steel parts | Locking Covers | Toolbox | Toolkit | Grease pump.

[OPTIONAL EQUIPMENT]

PERFORMANCE

Long arm | Safety valves for lifting + overload warning | Proportional 1st and 2nd auxiliary hydraulic circuit lines to arm end | Grapple circuit | High pressure line for hydraulic quick coupler | Quick couplings.

COMFORT & EASE OF USE

Premium skai covered, adjustable and reclining seat with high backrest.

SAFETY & DURABILITY

Additional counterweight | Centralized greasing | Anti-theft (key/keyboard) | SmartAssist Remote | FOPS II protection grid.

MISCELLANEOUS

Special paint.

[ATTACHMENTS]

We offer a range of factory fitted attachments to maximize the versatility of your midi excavator. Yanmar offers selected mechanical and hydraulic quick couplers, powertilt, digging buckets, ditch cleaning buckets, rippers and breakers.



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Yanmar Compact Equipment EMEA

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