



YANMAR

MIDI EXCAVATOR



SV60



Operating weight	5 635 kg
Engine gross power	33.4 kW / 44.8 HP at 2200 rpm
Digging force (arm)	27.3 kN
Digging force (bucket)	41.9 kN

Welcome into the Yanmar business class



COMPACTNESS

The SV60 has been designed to meet all your requirements and this while executing the most complicated jobs. Compact and lightweight, this 5.6 t machine has a working envelope of only 3565 mm. Its stability and power enable it to work effectively regardless of the difficulty of your jobsite. The SV60 is intended for a wide range of applications such as urban renewal, grading or landscaping.



POWERFUL YANMAR ENGINE

Latest version of Yanmar TNV engines: turbocharged 4-cylinder engine with direct injection to improve performance, fuel consumption and emission levels. Auto-deceleration and Eco-mode are available in standard.



VIPPS HYDRAULIC SYSTEM

The SV60 is equipped with a ViPPS hydraulic system which cumulates the flow of separate pumps in order to obtain the optimal combination in terms of speed, power, smoothness and balance to allow smooth and simultaneous performance of all the operations, even while traveling.



EXCELLENT STABILITY

Robust X-frame design of the undercarriage, ideal weight distribution, short rear overhang: impressive level of stability.



HIGH PERFORMANCE

High performance of the powerline components (engine, hydraulic pump, control valve): this will allow Yanmar customers to perform heavy-duty jobs in confined spaces.





SPACIOUS AND COMFORTABLE CABINE

The SV60 benefits from the widest cabin of its category and a special attention has been paid to the design of the operator station: increased leg room, Yanmar "Universal Design" for an enhanced comfort and productivity. New electronic instrumentation, improved ergonomics, air suspension seat and rearview camera in standard.



EASY OPERATION

Control levers ideally placed for exceptional movement precision. All the main commands are located on the joysticks for a maximum manoeuvrability and productivity.



BEST COMPONENTS

Developed in Japan with renowned components for top quality. Design and performance of the components made for long service life.



EASE OF MAINTENANCE

5 hoods or openings which allow easy access for components maintenance. Fast and easy daily checks or servicing.

COMPACTNESS

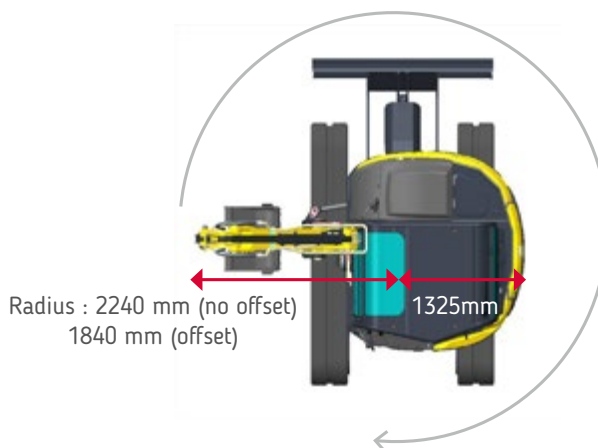
A true concentrate of technology and innovation, the SV60 offers the performance of a midi-excavator while enjoying the benefits of a compact excavator. Designed to work effectively on a wide variety of sites, it combines compactness, power, versatility, comfort and reliability.

WORKING ENVELOPPE 360°

Diameter : 4480 mm (no offset) / 3680 mm (offset)

IDEAL FOR URBAN JOBSITES

The SV60 benefits from a very short rear overhang and a minimal front turning radius (only 2240 mm). Thanks to this unique design, this 5.6 t machine has a very compact working envelope of only 3565 mm. The SV60 is particularly suited for work in urban areas: no need to block the two lanes of traffic.



STABILITY

MAXIMUM STABILITY

AND EXCEPTIONAL LIFTING FORCES

The SV60 benefits from an undercarriage with a unique design which is associated with the use of a large counterweight and excellent weight distribution, in order to provide an unmatched stability for this weight class and remarkable lifting capacities. The SV60 carries loads of 1 ton up to 5.10 m at 1.25 m high. In option, an additional counterweight (+ 200 kg) improves even more the lifting performances of the machine.



UNIQUE UNDERCARRIAGE

The X-shaped box-section structure of the undercarriage provides excellent torsional stiffness. The frame is designed for maximum durability. All the components of the undercarriage have been designed to increase the durability and the service life of the machine and reduce its Total Cost of Ownership.



PERFORMANCE

Based on unique experience and expertise, Yanmar technology ensures excellent performance while respecting the environment. The SV60 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 (earth moving, landscaping, grading, demolition...).



NEW GENERATION ELECTRONICALLY CONTROLLED YANMAR ENGINE

With an output of 33.4 kW at 2200 rpm, Yanmar's 4TNV84T-ZMBVA engine is the result of our continuous efforts to achieve technological advances in fuel consumption and emissions. With the SV60, Yanmar gives priority to the environment and to fuel savings:

- + An ECU manages the RPM according to the torque, optimizing the engine load. This enables to save fuel while increasing the productivity of the machines.
- + An Auto-Deceleration system (in standard) further reduces fuel consumption by enabling the engine to drop back to idle if the operator doesn't touch the operating levers for 4 seconds.
- + An Eco-Mode (in standard) effectively controls the motor speed which is reduced by 300 rpm, thus allowing a very low fuel consumption.



TRANSMISSION

The SV60 benefits also from a drive motor developing 10% more torque, improving cycle times and productivity, especially in levelling applications. Standard equipment also includes the new "automatic 2-speed" drive motors which shift automatically up and down (in second speed) depending upon the effort required. The operator is automatically provided with the best solution in terms of speed or pushing force, making operation easier and improving the operator comfort.

VIPPS HYDRAULIC SYSTEM (ViO PROGRESSIVE 3 PUMP SYSTEM)

The SV60 is equipped with a ViPPS (ViO Progressive 3 Pump System) hydraulic system. This hydraulic system main characteristic is the use of 4 hydraulic pumps, 2 variable displacement pumps and 2 gear pumps, (including one for joysticks) in order to deliver a total flow of as much as 139.4 l/min. To complete the system, Yanmar is using a control valve based on the ViPPS principle, which cumulates the flow of separate pumps in order to obtain the optimal combination in terms of speed, power, smoothness and balance. The ViPPS system allows smooth and simultaneous performance of all the operations, even while traveling in order to have the ultimate working tool.



EASE OF USE

ADJUSTABLE PROPORTIONAL CONTROL OF THE AUXILIARY CIRCUITS

Standard equipment of the SV60 includes an auxiliary hydraulic circuit. It is operated via a proportional control located on the joystick which adapt the flow and the direction of the oil flow. Additionally the circuit has an easy-to-operate potentiometer which adjusts the oil flow to the optimal requirement for each and every attachment.

- 1 Control of the 1st auxiliary hydraulic circuit
- 2 Flow adjustment via potentiometer of the 1st auxiliary circuit
- 3 Control of the 2nd auxiliary hydraulic circuit
- 4 Flow adjustment via potentiometer of the 2nd auxiliary circuit
- 5 Engine power controlled electronically by a potentiometer
- 6 Travel speed switch on the blade lever



SPACIOUS AND COMFORTABLE CABIN



VOLUME XXL

The volume of the cabin is comparable to the one of an 8t machine, offering up to 41% more space compared to its main competitors. The large leg room enables the operator to be perfectly seated and to have the freedom of movement necessary to work efficiently and comfortably.

The travel pedals are foldable and have been designed for a perfect ergonomics.



CONTROL PANEL

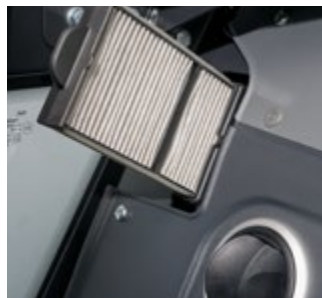
Putting the operator in the center of its design initiatives, Yanmar developed the "Universal Design" concept: all controls are easily accessible and grouped on the right side of the operator.

- 1 Wipers
- 2 Lights switch
- 3 Eco-Mode
- 4 Auto-Deceleration system
- 5 Beacon light
- 6 Overload warning
- 7 Quick hitch



AIR CIRCULATION

The SV60 has an air-conditioning that can work at a pleasant temperature in extreme weather conditions. The 7 vents are placed to ensure a uniform temperature within the cabin and ensure a perfect window demisting.



The air filters are easily accessible for an improved maintenance.



AIR SUSPENSION SEAT

The SV60 is equipped in standard with an air suspended seat to offer an optimal comfort for a machine in this weight class. Fully adjustable and with a standard headrest, it reduces body tension and fatigue.



The roof window of the SV60 is protected by a fully integrated sunshade for a maximum comfort.



STORAGE SPACES

The SV60 offers many storage possibilities conveniently placed: cup and bottle holder, utility box, phone tray, document storage... and even one dedicated place for a lunchbox behind the seat! The operator has all his personal effects within reach.

OPTIMAL SAFETY

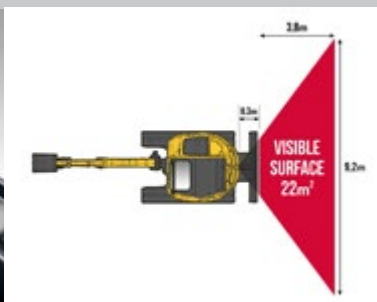
The structure of the SV60 cabin has been designed to meet the ROPS (Roll-Over Protective Structure) certification as well as the FOPS (Falling Object Protective Structure) level 1. As an optional equipment, the SV60 can be equipped with a FOPS2 protection (front and top guard).



ALL-AROUND VISIBILITY

The SV60 design provides an ergonomic environment, excellent visibility and exceptional safety. The shape of the cabin gives the operator an optimal 360° visibility in order to improve the safety on the jobsite and to make work more efficient. The roof window offers a perfect visibility during loading and unloading operations.

The SV60 is equipped with three mirrors to help the operator control the work area without moving from his seat.



REARVIEW CAMERA

The SV60 is equipped in standard with a rearview camera with a wide LCD 7" screen which ensures a perfect safety on the jobsites and an improved driving comfort to the operator. This camera is waterproof, offers night vision and has an integrated heating for a top durability. Easy to use, it offers many different settings, a mirror mode and even the possibility to connect a second side camera.



ACCESSIBILITY

The SV60 benefits from the largest cabin entrance in the market. This additional passage makes the entrance and the exit easier and improves significantly the operator's comfort and safety.



Entrance and exit are even more facilitated by 3 handrails ① ② ③ which are ideally designed and positioned to fit the operator's posture and grip position.

A large footstep with anti-slip system also upgrades the accessibility to the machine and the safety of the operator.



RELIABILITY

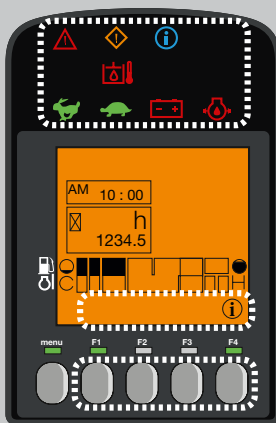
The SV60 has been developed in Japan and uses only premium components. Quality and reliability are the main drivers of our product development.

The structure of the undercarriage, as well as the steel covers provide an optimal protection and longer service life. Furthermore, a lot of care has been paid to the hose routing on the working equipment. These measures enhance the service life and reduce downtime of the machine.



THE BEST PROTECTION ON THE MARKET

The SV60 benefits from a unique and complete protection of all its cylinders. All cylinder tubes and rods are protected by a spring type steel plate, which reduces drastically the Total Cost of Ownership of the machine.



DIGITAL INTERFACE

The SV60 is equipped with a digital interface which informs the operator in real time about the status of his machine. Perfectly integrated into the right-hand console, the 3.3" screen provides excellent visibility. The interface provides the customer with useful information through LED lamps, or indications about important elements like fuel consumption, fuel gauge, coolant temperature gauge, etc... The interface assists the customer for maintenance intervals and to program such interventions. It also works as a diagnostic tool in case of malfunction by sending an error code and an information icon on the display.

MAINTENANCE

EASY ACCESS

Daily maintenance has to be performed easily. The engine hood has a wide opening, enabling an easy access to all major elements from the ground: air filter, compressor, battery, fuses and relays, fuel tank, hydraulic oil tank, engine oil dipstick...

LONG SERVICE INTERVALS

The SV60 is designed for working, and therefore its service intervals are reduced to a minimum.



EQUIPMENT



[STANDARD EQUIPMENT]

PERFORMANCE

4TNV84T Yanmar diesel | Direct Injection | Engine Control Unit (ECU) | Eco-Mode | Auto-Deceleration System | VIPPS Hydraulic system (ViO Progressive 3 Pump System) | 3rd hydraulic circuit to arm end with adjustable proportional control by potentiometer | Automatic 2nd speed | External hydraulic oil gauge | 1 LED light integrated into the boom

COMFORT

LCD interface | Adjustable and reclining seat with fabric covers, air suspension and headrest | Rearview camera with its associated screen | Heating | Adjustable wrist support | Foot rests | Wide travel pedals | Windshield with 2 fully retractable parts | Sliding double right-side window | Transparent upper front part | Integrated sunshades | Wipers | Windshield washer | Automatic ceiling lamp | 1 x 12V outlet | Storage boxes

SAFETY AND DURABILITY

Handrails | Safety lever | Seat belt with retractor | Evacuation hammer | Anchor points | 3 mirrors | Horn | Blade cylinder supply hose into two parts | Complete protection of the cylinders (bucket, boom, arm and blade) | Hoses protected by abrasion resistant sleeves | Lockable covers | Electric refuelling pump

MISCELLANEOUS

Fuel gauge | Toolbox | Toolkit | Grease pump

[OPTIONAL EQUIPMENT]

EQUIPMENT AND PERFORMANCE

Steel crawlers | Pads for steel crawlers | Long arm (+290 mm) | Additional counterweight (+200 kg) | 4th hydraulic circuit with adjustable proportional control by potentiometer | Clamshell bucket circuit | Quick hitch line 150 bar | Quick couplers | Bio oil | 2 LED lights at the front of the cabin | 1 LED beacon fixed or with magnetic base | Kit 1 rear LED light + 1 beacon fixed | Improved fuel filtration

COMFORT AND EASE OF USE

Air conditioning | Adjustable and reclining seat with ski covers, air suspension and headrest | Seat cover | Radio bluetooth | Documentation box | Central greasing

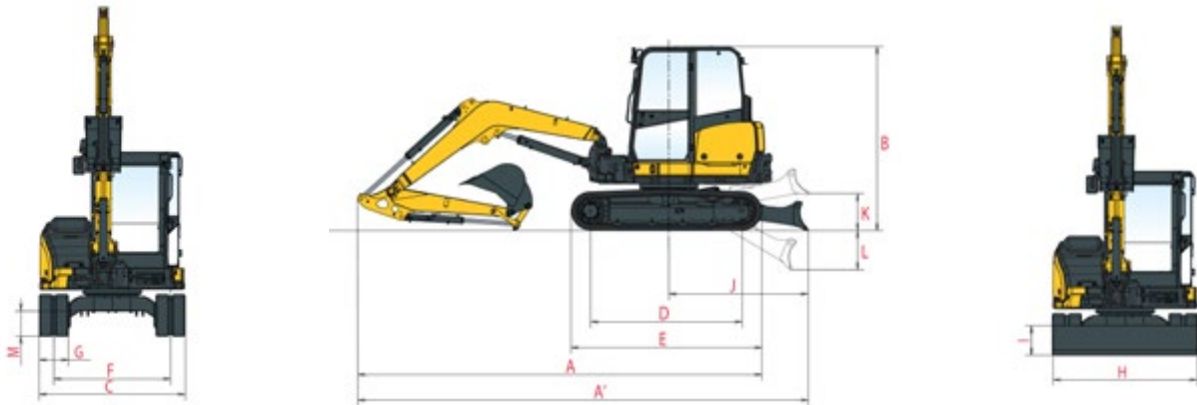
SECURITY AND DURABILITY

Safety valves for lifting + overload warning | FOPS 2 protection (front + top guard) | Anti-theft device (key/keyboard) | GPS Tracking | Travel alarm | Removable battery cut-off switch

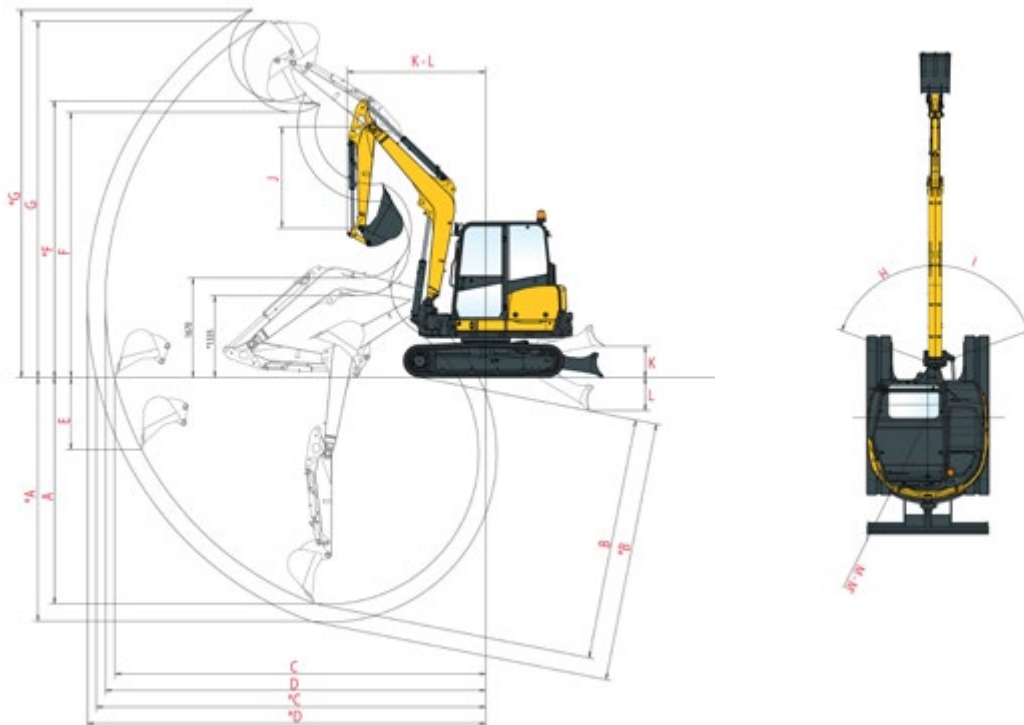
[ATTACHMENTS]

Yanmar gives you the attachment that fit your needs and match the safety standards in force in your country: mechanical quick coupler, hydraulic quick coupler, powertilt, standard, grading or symmetric buckets, hydraulic breaker, tiltrotators...

DIMENSIONS



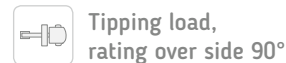
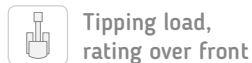
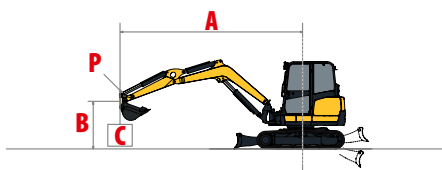
A Overall length	5 595 / 5 675* mm	G Track width	400 mm
A' Overall length with blade at the back	6 155 / 6 235* mm	H Overall blade width	1 970 mm
B Overall height	2 540 mm	I Overall blade height	400 mm
C Overall width	1 990 mm	J Blade distance	1 890 mm
D Length of track on ground	2 070 mm	K Max. lifting height above the ground	510 mm
E Undercarriage length	2 500 mm	L Max. lowering depth from the ground	535 mm
F Lane	1 590 mm	M Minimum ground clearance	345 mm



A Max. digging depth - Blade lifted	3 650 / 3 945* mm	H Boom swinging base to left	70°
B Max. digging depth - Blade lowered	3 910 / 4 200* mm	I Boom swinging base to right	70°
C Max. digging reach on ground	5 990 / 6 265* mm	J Arm length	1 650 / 1 940* mm
D Max. digging reach	6 135 / 6 410* mm	K Front turning radius	2 240 mm
E Max. vertical wall	1 165 mm	L Front turning radius with boom swing	1 840 mm
F Max. unloading height	4 280 / 4 460* mm	M Rear turning radius	1 325 mm
G Max. cutting height	5 720 / 5 900* mm	M' Rear turning radius with additional counterweight	1 405 mm

* with long arm

LIFTING FORCE



Cabin, short arm, standard counterweight																						
Blade on ground										Blade above ground												
A	(A=)	Max.		5 m		4 m		3 m		2 m		(A=)	Max.		5 m		4 m		3 m		2 m	
B																						
4 m	4370	*1090	*1090	-	-	-	-	-	-	-	-	4370	*1090	*1090	-	-	-	-	-	-	-	-
3 m	4975	840	*1110	-	-	-	-	-	-	-	-	4975	790	865	-	-	-	-	-	-	-	-
2 m	5275	710	*1125	780	*1155	1080	*1300	*1770	*1770	-	-	5275	685	760	765	840	1080	*1300	*1770	*1770	-	-
1 m	5335	670	*1160	750	*1235	1020	*1560	1510	*2290	-	-	5335	665	745	745	815	1020	1125	1490	1690	-	-
0 m	5165	695	*1210	735	*1270	1010	*1685	1480	*2470	2260	*3165	5165	695	775	725	800	1015	1070	1475	1595	2260	2530
-1 m	4735	810	*1225	-	-	995	*1625	1445	*2305	2490	*3265	4735	805	845	-	-	985	1060	1430	1575	2500	2005
-2 m	3930	1005	*1200	-	-	-	-	1475	*1830	*2390	*2390	3930	995	1065	-	-	-	-	1470	1610	*2390	*2390

Cabin, short arm, additional counterweight																						
Blade on ground										Blade above ground												
A	(A=)	Max.		5 m		4 m		3 m		2 m		(A=)	Max.		5 m		4 m		3 m		2 m	
B																						
4 m	4370	*1090	*1090	-	-	-	-	-	-	-	-	4370	*1090	*1090	-	-	-	-	-	-	-	-
3 m	4975	915	*1110	-	-	-	-	-	-	-	-	4975	870	945	-	-	-	-	-	-	-	-
2 m	5275	780	*1125	860	*1155	1185	*1300	*1770	*1770	-	-	5275	760	840	845	925	1180	*1300	*1770	*1770	-	-
1 m	5335	745	*1160	825	*1235	1120	*1560	1660	*2290	-	-	5335	740	820	825	900	1120	1240	1640	1855	-	-
0 m	5165	770	*1210	815	*1270	1115	*1685	1630	*2470	2545	*3165	5165	770	855	800	885	1120	1180	1625	1765	2545	2865
-1 m	4735	890	*1225	-	-	1100	*1625	1595	*2305	2775	*3265	4735	885	935	-	-	1090	1170	1580	1740	2780	2340
-2 m	3930	1110	*1200	-	-	-	-	1625	*1830	*2390	*2390	3930	1100	1180	-	-	-	-	1620	1780	*2390	*2390

Cabin, long arm, standard counterweight																						
Blade on ground										Blade above ground												
A	(A=)	Max.		5 m		4 m		3 m		2 m		(A=)	Max.		5 m		4 m		3 m		2 m	
B																						
4 m	4710	*990	*990	-	-	-	-	-	-	-	-	4710	*990	*990	-	-	-	-	-	-	-	-
3 m	5265	710	*1005	790	*970	-	-	-	-	-	-	5265	700	785	775	*970	-	-	-	-	-	-
2 m	5545	645	*1020	760	*1070	*1200	*1200	-	-	-	-	5545	630	715	755	835	*1200	*1200	-	-	-	-
1 m	5605	615	*1050	730	*1170	1015	*1470	1490	*2130	-	-	5605	610	670	725	805	990	1105	1460	1690	-	-
0 m	5445	625	*1110	715	*1245	1005	*1655	1475	*2405	2330	*3250	5445	625	690	705	780	970	1065	1420	1580	2240	2540
-1 m	5045	705	*1135	-	-	960	*1625	1415	*2330	2335	*3270	5045	695	760	-	-	945	1040	1395	1580	2250	2775
-2 m	4315	870	*1150	-	-	955	*1355	1380	*1990	2350	*2830	4315	865	940	-	-	930	1080	1355	1610	2335	*2830

Cabin, long arm, additional counterweight																						
Blade on ground										Blade above ground												
A	(A=)	Max.		5 m		4 m		3 m		2 m		(A=)	Max.		5 m		4 m		3 m		2 m	
B																						
4 m	4710	*990	*990	-	-	-	-	-	-	-	-	4710	*990	*990	-	-	-	-	-	-	-	-
3 m	5265	785	*1005	870	*970	-	-	-	-	-	-	5265	775	865	850	*970	-	-	-	-	-	-
2 m	5545	710	*1020	835	*1070	*1200	*1200	-	-	-	-	5545	700	785	830	920	*1200	*1200	-	-	-	-
1 m	5605	685	*1050	805	*1170	1115	*1470	1640	*2130	-	-	5605	680	745	800	890	1095	1215	1610	1855	-	-
0 m	5445	695	*1110	790	*1245	1110	*1655	1625	*2405	2615	*3250	5445	695	765	780	865	1070	1175	1570	1745	2525	2875
-1 m	5045	780	*1135	-	-	1065	*1625	1565	*2330	2620	*3270	5045	770	845	-	-	1050	1150	1545	1750	2535	3110
-2 m	4315	960	*1150	-	-	1060	*1355	1530	*1990	2635	*2830	4315	955	1045	-	-	1035	1195	1505	1775	2620	*2830

[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 of the 87% of the hydraulic lifting capacity. Data marked with * are the hydraulic limits of the lifting force.]

SPECIFICATIONS

[WEIGHT +/- 2% (EN STANDARDS)]

	Weight	Ground pressure (operating weight)
Operating weight (Rubber tracks / Cabin)	5 635 kg	0,313 kgf/cm ²
Transport weight (Rubber tracks / Cabin)	5 560 kg	0,309 kgf/cm ²
Operating weight (Steel tracks / Cabin)	5 665 kg	0,319 kgf/cm ²
Transport weight (Steel tracks / Cabin)	5 590 kg	0,315 kgf/cm ²
With additional counterweight	+ 200 kg	-
With FOPS II protection	+ 98 kg	-

[ENGINE]

Type	4TNV84T-ZMBVA
Fuel	Diesel
Net Power	32.6 kW (at 2 200 rpm)
Gross Power	33.4 kW (at 2 200 rpm)
Displacement	1.995 l
Maximum torque	150 - 163 N.m (at 1 700 rpm)
Cooling	Water cooling
Starter	12 V - 2.3 kW
Battery	12 V - 100 Ah
Alternator	12 V - 80 A

[HYDRAULIC SYSTEM]

Maximum pressure	245 bars
1 double piston pump with variable flow	2 x 45.8 l.min ⁻¹
1 gear pump	37 l.min ⁻¹
1 gear pump for pilot line	10.8 l.min ⁻¹

PTO	Theoretical data at 2 200 rpm	
	Pressure (bar)	Flow (l.min ⁻¹)
2 ways	0 - 245	37 - 82.8
1 way	0 - 245	37 - 82.8



Oil flow decreases as the pressure increases

[PERFORMANCE]

Travel speed [low / high]	2.2 / 4.7 km/h
Rotation speed	10 rpm
Digging force [long arm / short arm]	24.8 / 27.3 kN
Digging force [bucket]	41.9 kN
Gradability	30°
Noise Level (2000/14/CE&2005/88/CE)	Lwag: 95 dBA ; Lpag: 79 dBA

[UNDERCARRIAGE]

Number of top rollers	1
Number of bottom rollers	4
Track tensioning system	Grease adjuster

[CAPACITIES]

Fuel tank	100 l
Coolant	7.1 l
Engine oil	7.4 l
Hydraulic circuit	74 l
Hydraulic tank	38 l

MAINTENANCE FREQUENCY

[Change engine oil and filter: **50 hours (1st) / 500 hours (2nd)**] [Change fuel filter: **500 hours**] [Change hydraulic oil filter: **1000 hours / 1 year**] [Change hydraulic oil return filter: **50 hours (1st) / 500 hours (2nd)**] [Change cooling fluid: **2000 hours or 2 years**]



YANMAR



BIS Maszyny Budowlane Sp. z o.o.

**Pruszcz Gdański, 83-000
ul. Nowowiejskiego 24A
tel. 662 392 222**

**Reda, 84-240
ul. Obwodowa 52
tel. 602 228 400**

www.bis-bau.pl

Yanmar Construction Equipment Europe
25, rue de la Tambourine, 52100 SAINT-DIZIER
France

ycee-contact@yanmar.com

www.yanmarconstruction.eu

