

YANMAR



# SV18



Operating weight (canopy / cabin)	1835 / 1975 kg
Engine	3TNV70
Digging force (arm)	7,4 kN
Digging force (bucket)	15,2 kN





#### **COMPACTNESS**

The SV18 has been designed to meet all your requirements, and this while executing the most complicated jobs. Compact and lightweight, it can easily be transported on a trailer. Its stability and power enable it to work effectively regardless of the difficulty of your jobsite. The SV18 is intended for a wide range of applications such as urban renewal, grading or landscaping.



#### YANMAR ENGINE

The YANMAR TNV engine has been designed to combine high power and cleaner emissions. With its sophisticated injection system, it meets the European Commission (EC) emission standards. Its quiet operation makes this engine friendly to people and the environment.



#### **BEST COMPONENTS**

Design and performance of the components made for heavy-duty job sites and long service life.



Simple maintenance structure for fast and easy access to all







### **CABIN**

The use of a ROPS structure for the cab guarantees the operator safety in a roll-over. The canopy and cab also conform to FOPS1 standards (concerning structures protecting against falling objects) and TOPS (Tip Over Protective Structure).



#### EASE OF USE

Ideally located, the second gear control knob (located on the blade lever) and the control levers offer exceptional movement precision. A proportional control auxiliary line allows a perfect mastery of the accessories



The SV18 cab interior architecture has been studied to improve the operator driving position and to facilitate his work, particularly on the long and challenging work sites.



## COMPACTNESS AND VERSATILITY

THE YANMAR SV 18 MINI EXCAVATOR WITH ULTRA-SHORT SWING RADIUS PROVIDES EASY ACCESS AND WORKS IN THE TIGHTEST SPOTS. IT PROVIDES A POWER AND AN EXCEPTIONAL PRODUCTIVITY WHICH, ASSOCIATED TO AN EXCELLENT STABILITY, ALLOW YOU TO WORK WITH CONFIDENCE IN ALL CIRCUMSTANCES.





## HIGH PERFORMANCE

Based on our unique experience and expertise, Yanmar technology ensures excellent performance while respecting the environment. The optimal combination of the SV18 excavation strengths and its work cycles assures exceptional productivity.



## FLOW-SHARING CLOSED-CENTER HYDRAULIC SYSTEM

The SV18 hydraulic circuit is characterized by the proportional distribution of the flow rates. The variable flow pump and the load sensing closed center circuit guarantee precision, flexibility, power and perfect simultaneity of movements. This system allows the operator to perform all movements with an excellent performance, regardless of the flow rate or the load.



Extended undercarriage: 1320 mm

## **EXTENDABLE UNDERCARRIAGE FOR MAXIMUM VERSATILITY**

The SV18 is equipped in standard with an extendable undercarriage for the uses soliciting a great versatility in terms of dimensions and stability.

The SV18 is fitted with articulated enlargers at the end of blade. Retractable, they remain fixed on the blade at all times.

The Yanmar extendable undercarriage is very easy to use: a switch selects the blade function or enlargement of the chassis and the blade lever actuates the selected function. The clearance between the chassis sliding parts is very reduced so that the earth cannot accumulate during the enlargement.



Retracted undercarriage: 980 mm

## **COMFORT**

### LARGE COMFORTABLE CABIN

The SV18 cab interior is very spacious for maximum freedom of movement. 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. The standard SV18 seat has a comfortable suspension with multiple adjustments and is equipped with a headrest to reduce operator stress and fatigue.

#### **EXCELLENT AIR CIRCULATION**

The SV18 has a heater that can work at a pleasant temperature in extreme weather conditions. The vents are placed to ensure a uniform temperature within the cabin and ensure a perfect window demisting.





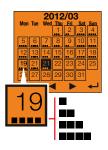
## **DIGITAL INTERFACE**

The SV18 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.







## **SAFETY**

Because one is more effective in a safe and secure environment, the safety of the operator and the people working around the machine is one of our priorities.



## **OPTIMUM VISIBILITY** FOR EFFICIENT AND SAFE WORK

The SV18 is equipped with 3 rear and side view mirrors. The operator can control the work area as well as the area around the machine without moving from his seat. In order to work efficiently and accurately in darkness, the SV18 comes with a standard LED light positioned in the lower part of the boom, where it is protected from shocks. The LED technology provides a powerful light while reducing energy consumption and increasing the life of the battery. A beacon and 3 additional LED lamps can optionally be added on the cab.

## MAINTENANCE AND RELIABILITY

The SV18 perfectly meets the reputation for quality and durability of the Yanmar machines. The excellent accessibility to components and speed of maintenance and cleaning operations allow achieving excellent levels of onsite availability.









## **DESIGNED TO LAST**

- + Structure of the chassis and durable steel covers provide foolproof resistance.
- + Large counterweight protects against possible shocks and friction against the walls.
- + Hoses protection with abrasion-resistant sleeves. Routing on the top of the boom and on the right side of the machine to avoid risk of torsion and limiting machine down time.
- + Form stringers prevents accumulation of soil and reduces internal track wear.

## **EASY MAINTENANCE**

The rear and side covers, the panel under the seat and the removable floor provide direct access to the service points to reduce the maintenance time and cost. The blade cylinder flexible is made of two parts for quick replacement in case of perforation.





## **EQUIPMENT**

## [ STANDARD EQUIPMENT ]

#### **PERFORMANCE**

3TNV70-VBVA2 Yanmar diesel | Meets EN-standards | Indirect injection | Water separator | LUDV Hydraulic circuit: flow sharing | 1 auxiliary circuit with proportional control | 2<sup>nd</sup> speed | Hydraulic oil gauge | 1 LED light integrated into the boom

#### **COMFORT**

LCD Interface | Heating | Adjustable and reclining seat with fabric covers and headrest | Adjustable wrist support | Foot rests | Windshield in 2 parts (retractable upper part) | Double sliding right side window | Transparent upper front part | Wipers | Windshield washer | Automatic ceiling lamp | 2 x 12V outlets | Storage boxes | Lockable document storage | Cup holder

#### SAFETY AND DURABILITY

Handrails | Safety lever | Safety belt | Hammer for evacuation | 3 mirrors | Horn | Extendable undercarriage | 4 anchor points (2 on the undercarriage, 2 on the blade) | Blade cylinder supply hose into two parts | Complete protection of the cylinders (arm, boom, blade) | Hoses protected by abrasion-resistant and projection-resistant sleeves | Cationic treatment of steel parts | Lockable engine bonnet and trapdoor of the fuel tank | System antidrop for trapdoor of the fuel tank

#### MISCELLANEOUS

Fuel gauge | Locking covers | Tool kit | Grease pump

## [ OPTIONAL EQUIPMENT ]

#### **EQUIPMENT AND PERFORMANCE**

Special paint | Quick couplings | Bio oil | 2 LED head lights on the front of the machine | 1 LED rear light + flashing LED light

#### COMFORT AND EASE OF USE

Skaï seat | Radio with USB plug and SD card player | Central greasing | Wide travel pedals

#### SAFETY AND DURABILITY

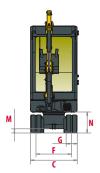
Safety valves for lifting | Anti-theft (key/keyboard) | GPS Tracking | Travel alarm

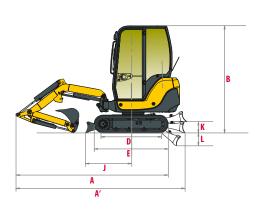
## [ ACCESSORIES ]

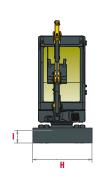
Yanmar gives you the accessories that fit your needs and match the safety standards in force in your country: mechanical quick coupler, hydraulic quick coupler, ditching bucket, swinging bucket, backhoe bucket, hydraulic hammer...



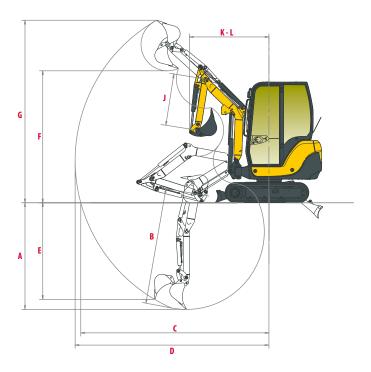
## **DIMENSIONS**

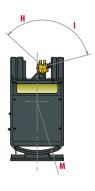






Α	Overall length	3660 mm	Н	Overall blade width	980 - 1320 ** mm
A'	Overall length with blade at the back	3775 mm	T	Overall blade height	230 mm
В	Overall height	2215 - 2280 * mm	J	Blade distance	1095 mm
C	Overall width	980 - 1320 ** mm	K	Max. lifting height above the ground	240 mm
D	Length of track on ground	1180 mm	L	Max. lowering depth from the ground	300 mm
Ε	Undercarriage length	1560 mm	М	Minimum ground clearance	160 mm
F	Lane	750 - 1090 ** mm	N	Ground clearance under counterweight	410 mm
G	Track width	230 mm			

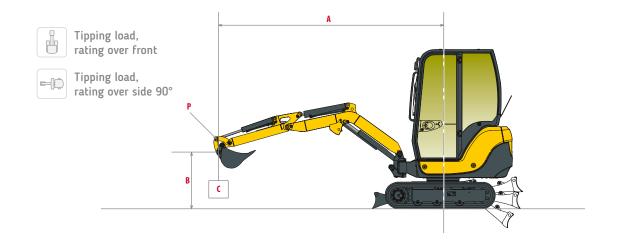




Α	Max. digging depth - Blade lifted	2420 mm	H Boom swinging base to left	40°
В	Max. digging depth - Blade lowered	2580 mm	I Boom swinging base to right	80°
С	Max. digging reach on ground	3950 mm	J Arm length	1160 mm
D	Max. digging reach	4040 mm	K Minimum front swing radius	1540 mm
Ε	Max vertical wall	2140 mm	L Minimum front swing radius with boom swing	1340 mm
F	Max. unloading height	2740 mm	M Rear swing radius	980 mm
G	Max. cutting height	3760 mm		

## LIFTING FORCE





	Cabin, standard arm																								
	Blade on ground												Blade above ground												
Α	Ma	ax.	3,5	m	3	m	2,5	m	2	m	1,5	m	М	ax	3,5	m	3	m	2,5	m	2	m	1,5	m	
В				4				4		J		J				J		4		4		H		J	
2,5 m	*280	*275	-	-	*265	*265	-	-	-	-	-	-	*275	*270	-	-	*265	*260	-	-	-	-	-	-	
2 m	*285	*285	-	-	*265	*265	*255	*245	-	-	-	-	*285	*275	-	-	*265	*260	*255	*220	-	-	-	-	
1,5 m	*290	*290	-	-	*290	*290	*310	*305	*360	*335	-	-	*290	*280	-	-	*295	*280	*310	*295	*360	*310	-	-	
1 m	*295	*295	-	-	*325	*320	*375	*365	*500	*475	-	-	*295	*295	-	-	*325	*305	*375	*350	*500	*455	-	-	_
0,5 m	*300	*305	-	-	*350	*350	*440	*430	*610	*600	-	-	*300	*295	-	-	*350	*330	*440	*410	*600	*560	-	-	١
0 m	*325	*325	-	-	*370	*370	*475	*465	*650	*645	*855	*800	*310	*310	-	-	*365	*365	*470	385	*610	*600	*840	*725	
-0,5 m	*325	*325	-	-	*375	*375	*470	*490	*680	*680	*920	*930	*325	*315	-	-	*350	*350	*400	355	*600	470	*780	*685	
-1 m	*335	*330	-	-	-	-	*450	*450	*585	*585	*825	*850	*340	*330	-	-	-	-	*440	*425	*590	480	*830	*915	
-1,5 m	*335	*340	-	-	-	-	-	-	*475	*495	*665	*640	*335	*345	-	-	-	-	-	-	*495	*495	*720	*775	

	Canopy, standard arm																								
	Blade on ground													Blade above ground											
Α	Ma	ax.	3,5	m	3	m	2,5	m	2	m	1,5	m	М	ax	3,5	m	3	m	2,5	m	2	m	1,5	m	
В				H				4		J		J		J		H		4		4		4			
3 m	*275	*280	-	-	-	-	-	-	-	-	-	-	*275	*270	-	-	-	-	-	-	-	-	-	-	
2,5 m	*275	*275	-	-	*265	*265	-	-	-	-	-	-	*275	*270	-	-	*265	*260	-	-	-	-	-	-	
2 m	*285	*285	-	-	*265	*265	*255	*245	-	-	-	-	*285	*275	-	-	*265	*260	*255	*220	-	-	-	-	
1,5 m	*290	*290	-	-	*290	*290	*310	*305	*360	*335	-	-	*290	*280	-	-	*295	*280	*310	*295	*360	*310	-	-	
1 m	*295	*295	-	-	*325	*320	*375	*365	*500	*475	-	-	*295	235	-	-	*325	*305	*375	*350	*500	*455	-	-	
0,5 m	*300	*305	-	-	*350	*350	*440	*430	*610	*600	-	-	*300	235	-	-	*350	*330	*440	*410	*600	*560	-	-	L
0 m	270	*325	-	-	*370	*370	*475	*465	560	*645	*855	*800	265	235	-	-	*365	275	*470	350	550	475	*840	*725	
-0,5 m	*325	*325	-	-	325	*375	405	*490	550	*680	*920	*930	*325	255	-	-	315	280	400	355	540	485	780	685	
-1 m	*335	*330	-	-	-	-	*450	*450	*625	*545	*825	*850	*340	280	-	-	-	-	*440	350	525	460	*830	*915	
-1,5 m	*335	*340	-	-	-	-	-	-	*475	*495	*665	*650	*335	*345	-	-	-	-	-	-	*495	*495	*720	*775	





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

	Can	ору	Cabin			
Operating weight (rubber tracks)	1835 kg	0,3 kg/cm <sup>2</sup>	1975 kg	0,33 kg/cm <sup>2</sup>		
Transport weight (rubber tracks)	1760 kg	0,29 kg/cm <sup>2</sup>	1900 kg	0,32 kg/cm <sup>2</sup>		

#### H

#### [ ENGINE ]

Туре	3TNV70-VBA2
Fuel	Diesel
Net Power	9,5 kW / 12,9 HP / 2100 rpm
Gross Power	9,9 kW / 13,5 HP / 2100 rpm
Displacement	854 cm³
Maximum torque	51,4 N.m. / 1500 rpm
Cooling	Liquid
Starter	1,4 kW
Battery	12 V - 45 Ah
Alternator	12 V - 40 A



#### [ HYDRAULIC SYSTEM ]

Maximum pressure	200 bars
1 piston pump with variable flow	48,3 l/min

DTO	Theoretical data at 2100 rpm										
PT0	Pressure	Oil flow									
	0 ~ 196 bars	45 ~ 20 l/min									
	0 ~ 196 bars	45 ~ 20 l/min									



Oil flow decreases as the pressure increases

## ★ [ PERFORMANCE ]

Travel speed	2,2 / 4,1 km/h
Rotation speed	10 rpm
Digging force (arm)	7,4 kN
Digging force (bucket)	15,2 kN
Traction force	17 kN
Grade ability	30°
Noise level (2000/14/CE & 2005/88/CE)	91 dB(A) / 79 dB(A)

#### [ UNDERCARRIAGE ]

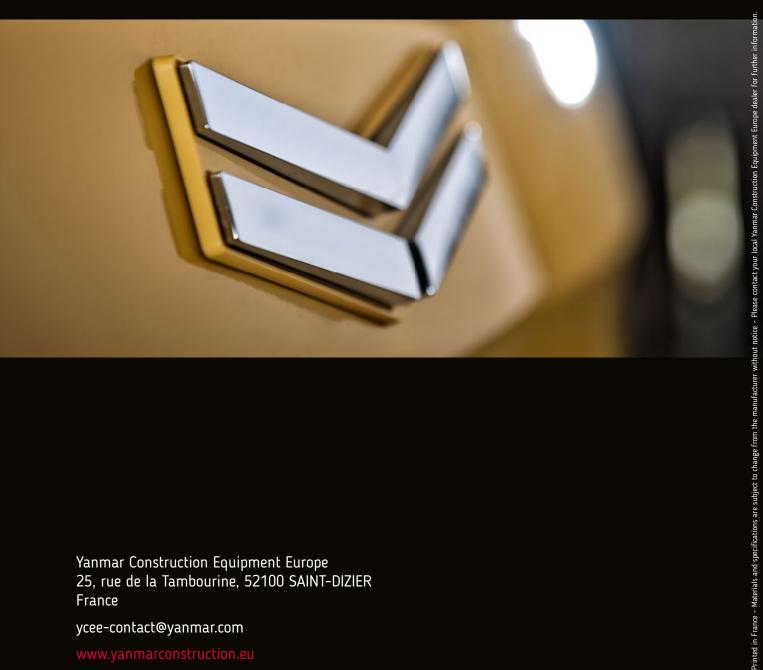
Number of bottom rollers	3
Track tensioning system	Using grease pump

## [ CAPACITIES ]

Fuel tank	24,5
Cooling system	3,2
Engine oil	2,8
Hydraulic system	28,5
Hydraulic tank	20

#### MAINTENANCE FREQUENCY





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

ycee-contact@yanmar.com