



**YANMAR**

# SV86-7 2PB

MIDI-EXCAVATOR



**Operating weight (rubber Crawlers/steel Crawlers)**

8 985 kg/9 005 kg

**Engine**

4TNV98CT-VBV2

**Net power**

48.0 kW/65.3 HP at 1 800 min<sup>-1</sup>

**Digging force (short arm/long arm)**

39.6 KN/-

**Digging force (bucket)**

61.3 KN

# YOUR ALLY IN PRECISION AND COMPACTNESS



## COMPACTNESS

The SV86-7 2PB packs power in a small package. With just 2290 mm overall width and weighing between 8 985 kg and 9 005 kg, this excavator delivers stability and top performance for tough jobs.



## SIMPLE OPERATION

Intuitively arranged levers, switches, and pedals enable precise maneuvering and unique machine management. The 7" color display simplifies adjustment of machine settings and monitoring of machine data.



## SAFETY FIRST

Safety is paramount in the SV86-7 2PB, evidenced by ROPS, TOPS, and FOPS Level I certifications. Standard features, such as disengageable driving alarm and reverse/side view camera, as well as optional extras like amber LED beacon, seatbelt sensor with green LED, or surround-view camera, enhance driver and surroundings protection.



## LATEST TECHNOLOGY

The SV86-7 2PB features a fuel-efficient Yanmar 4-cylinder turbo diesel engine, compliant with EU Stage V emissions standards. As far as the hydraulics are concerned, the integration of Yanmar's advanced ViPPS2i hydraulic system improves the efficiency.



## SPACIOUS AND COMFORTABLE CAB

Our SV86-7 2PB has the widest cab in its class, with large glass surfaces, excellent all-round visibility and many other features to ensure a comfortable working environment.



## MAXIMUM FLEXIBILITY

With the unique Yanmar design of a top mounted cylinder, the SV86-7 2PB offers unreached lifting capacity at minimum dimensions, which makes it perfect for a huge range of applications.



## MINIMISED OPERATING COSTS

The SV86-7 2PB excels with its productivity, compact design, and low fuel consumption, resulting in favorable operating costs. Additionally, standard features like idle shutdown and automatic engine shutdown enhance operational efficiency and cost-effectiveness.

# UNMATCHED OPERATOR COMFORT



The SV86-7 2PB cab has been designed to accommodate the driver's requirements. The ergonomic design of the workspace is comfortable and clearly structured, ensuring greater productivity during the long days on the jobsite. The outstanding all-round visibility and clever design guarantee fatigue-free working and maximum safety.

## COMFORTABLE AND SAFE CAB

Step into the spacious and inviting cab of the SV86-7 2PB and experience true comfort and safety. Designed with ample legroom and expansive glass surfaces, the cab offers exceptional visibility for confident operation.

Intuitively arranged controls, an air-suspended seat, automatic air conditioning, and adjustable armrests ensure maximum comfort for operators, enhancing productivity and overall work atmosphere.

In the SV86-7 2PB, every detail is meticulously crafted to provide operators with an outstanding work environment, making it the ideal choice for demanding jobs.

## ALL NEW DISPLAY

- + 7" colour display
- + Simple and clear menu navigation
- + Jog dial for simple menu operation
- + Clear keypad for standard functions
- + 5 storage slots for different attachments
- + Setting & saving of the oil flow for up to 3 auxiliary hydraulic circuits



## MORE OPERATOR HIGHLIGHTS

- + Fully opening windscreen
- + Smooth-running windscreen kinematics
- + USB and 12 V socket
- + MP3-capable radio with USB connection (option)
- + Storage space and bottle holder
- + Air conditioning filter
- + Automatic ceiling light

# EVEN MORE ADAPTABILITY AND EFFICIENCY WITH THE TWO-PIECE-BOOM



## EXCEPTIONAL LIFTING CAPACITY

Thanks to the two-piece-boom design, the load can be moved closer to the center of the machine, offering the ideal conditions to work on heavy lifting jobs such as pipe laying or lifting of heavy cable rolls.

## HIGH EFFICIENCY

Since the two-piece-boom allows a large covering of the working area, less travelling of the machine is needed, which is a tremendous advantage. In the end, it means less damage to the ground and less “dead” time. In other words, a clean and quick solution.

## EXTREME COMPACTNESS

The SV86-7 2PB allows digging closer to the machine and offers greater vertical and horizontal excavation capabilities in trenches.. Additionally, its compact design minimizes the space required around the machine, enhancing efficiency and maneuverability across various worksite conditions.

## OUTSTANDING FLEXIBILITY

The versatility of the SV86-7 2PB offers a wide range of possible applications : higher reach for demolition, loading of bigger trucks... and much more! On top of that, its smaller transport dimensions make it possible to access any jobsite!



# THE UNIQUE TWO-PIECE-BOOM DESIGN FROM YANMAR

YANMAR OFFERS A VERY SPECIFIC TYPE OF TWO-PIECE ARTICULATED BOOM FOR THIS MACHINE CATEGORY ON THE MARKET, WHICH OFFERS MANY ADVANTAGES.

## SINGLE TOP MOUNTED ARTICULATION CYLINDER

The SV86-7 2PB features a single top-mounted articulation cylinder. This particularity - which is unique in its size class - provides numerous advantages to the machine operator:

- + Less weight for a better lifting capacity.
- + A reduced number of parts for more reliability.
- + Less greasing needed for minimized maintenance costs and time saving.
- + Better protection against damage.



# OUTSTANDING PERFORMANCE

Yanmar's expertise in compact equipment design ensures the SV86-7 2PB delivers impressive performance with minimal environmental impact. This versatile model offers power, flexibility, and precision to maximize productivity on the job site. Standard features like the floating blade position and pressure limiter for the hammer circuit, along with optional functions, provide maximum flexibility for various applications regardless of terrain or conditions.

## MAXI FUNCTIONS, MIDI FORMAT

With impressive breakout forces of 61.3 kN (bucket) and 39.6 kN (dipper arm), the SV86-7 2PB consistently surpasses expectations for an 8-tonne short-tail excavator. Its robust 48 kW engine delivers high working speeds and powerful movements while maintaining ultra-low noise emissions. Ideal for challenging projects, especially in confined and residential areas.

## EFFICIENT VIPPS2I-HYDRAULIC SYSTEM

The SV86-7 2PB maximizes productivity with Yanmar's ViPPS2i® hydraulic system, ensuring smooth and coordinated movements. This system, proven across various Yanmar models, features a variable flow axial piston pump, gear pump, and central main control valve for enhanced efficiency, comfort, and safety. Combined with the reliable Yanmar 4-cylinder diesel engine, it creates an unbeatable team ready for any task.

## LATEST GENERATION ENGINE

The SV86-7 features Yanmar's Stage V compliant 4TNV98CT engine, renowned for its environmental efficiency. With a displacement of 3,318 cm<sup>3</sup>, it delivers 283 Nm of torque at 1,365 rpm and 48.0 kW of power. Equipped with EGR and DPF, it ensures low emissions while an exclusive regeneration system prevents blockages, minimizing downtime.



# REMARKABLE STABILITY

Experience the SV86-7 2PB, featuring Yanmar's innovative VICTAS® system, which combines optimized tread and asymmetrical tracks for unrivaled stability. This pioneering solution minimizes track deformation, reduces vibrations, and ensures quieter operation, setting new standards for performance. Alongside VICTAS®, the excavator boasts a large counterweight, excellent weight distribution, and a low center of gravity, enhancing stability beyond conventional machines in its weight class while delivering impressive lifting capabilities.

# SIMPLE AND EFFECTIVE MAINTENANCE

## EASY TO CLEAN

At Yanmar, operator convenience is at the core of our design philosophy, ensuring that maintenance tasks are as straightforward as possible. This is why we have paid attention to both the simplicity of daily maintenance and the longevity of the parts, leading to minimised maintenance work and extended service life of the individual components. The radiator area and the battery are easily accessible from the ground through a large flap and are easy to clean.



## EASY ACCESS

The rear and side covers with their wide openings allow easy access for daily maintenance. The main engine components (as well as hydraulic and air filters) are easily accessible. The top cover on the right-hand side provides access to the fuel tank, refuelling pump and hydraulic fluid refill points. Opening the entire right-hand side provides direct access to the main control valve, battery, water separator and radiator, as well as the air filter.



# 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)

## Short arm, additional counterweight

### Blade up

A	Max.		6 m		5 m		4 m		3 m	
5 m	1 872	1 991	-	-	1 889	2 018	2 787	2 770	-	-
4 m	1 495	1 603	-	-	1 930	2 076	2 771	2 891	2 636	2 699
3 m	1 335	1 406	1 396	1 478	1 892	2 018	2 701	2 885	-	-
2 m	1 240	1 308	1 376	1 433	1 804	1 885	2 487	2 630	-	-
1 m	1 213	1 274	1 323	1 393	1 701	1 817	2 280	2 450	-	-
0 m	1 246	1 320	1 296	1 384	1 650	1 752	2 212	2 355	-	-
-1 m	1 302	1 327	-	-	1 641	1 745	2 208	2 366	3 041	3 204
-2 m	777	801	-	-	1 206	1 236	1 838	1 892	1 981	2 097

## Short arm, additional counterweight

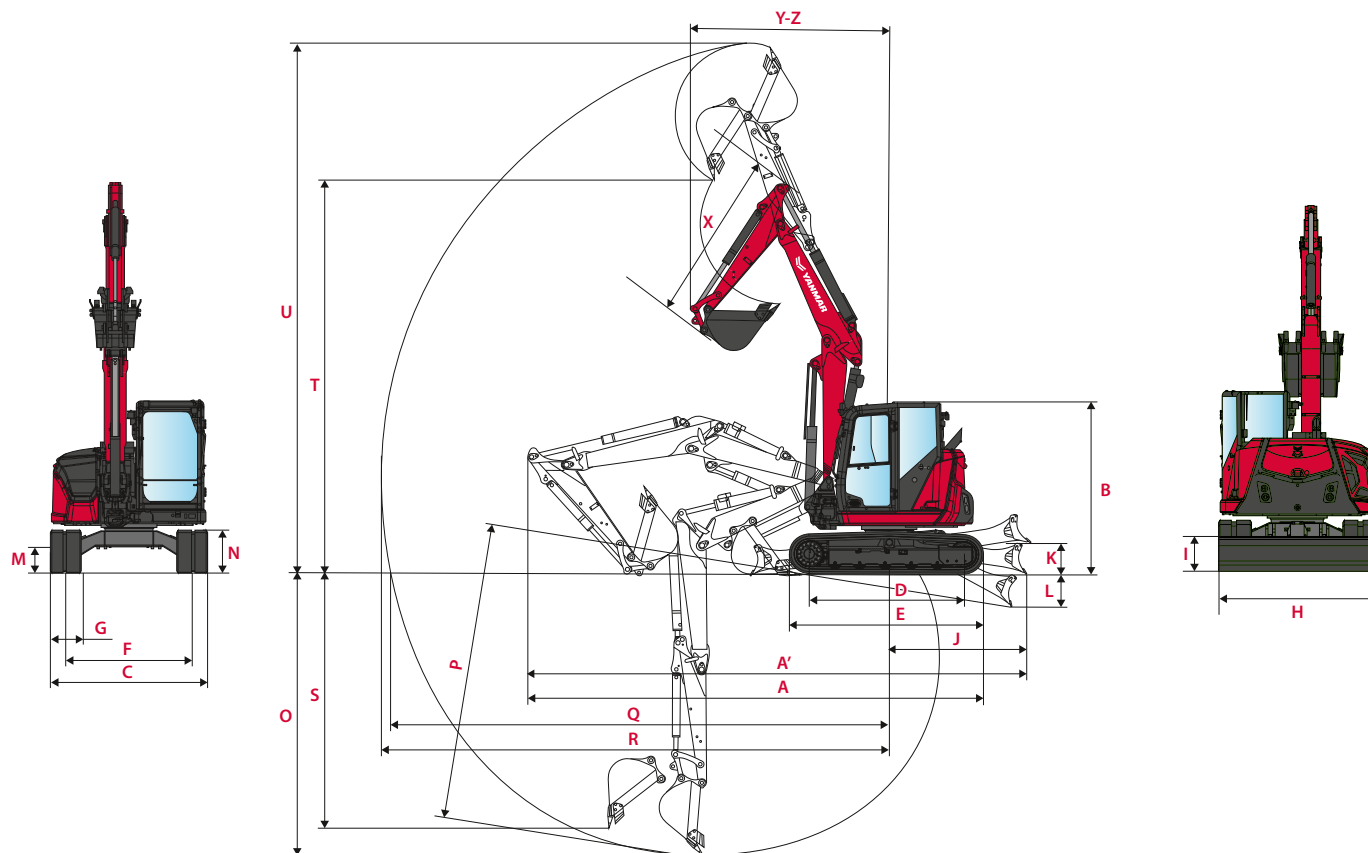
### Blade down

A	Max.		6 m		5 m		4 m		3 m	
5 m	1 889	2 560	-	-	1 923	2 563	2 796	2 815	-	-
4 m	1 508	2 276	-	-	1 940	2 489	2 782	2 945	2 597	2 658
3 m	1 342	2 121	1 406	2 170	1 902	2 561	2 718	3 257	-	-
2 m	1 250	1 974	1 379	2 180	1 811	2 695	2 501	3 587	-	-
1 m	1 212	1 795	1 321	2 097	1 722	2 715	2 300	3 564	-	-
0 m	1 257	1 592	1 304	1 879	1 661	2 566	2 236	3 342	-	-
-1 m	1 294	1 304	-	-	1 651	2 139	2 222	2 767	3 026	3 154
-2 m	765	796	-	-	1 202	1 215	1 826	1 895	1 971	2 079

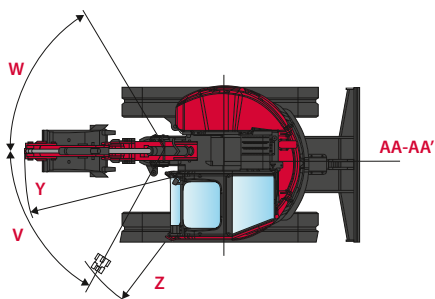
[ The data in this table represents the lifting force in accordance with the ISO 10567 standard. They do not include the bucket weight, and correspond to 75% of the maximum static tipping load and 87% of the hydraulic lifting force. ]



# DIMENSIONS



<b>A</b> Overall length	6780 mm	<b>H</b> Overall blade width	2290 mm
<b>A'</b> Overall length with blade at the back	7290 mm	<b>I</b> Overall blade height	450 mm
<b>B</b> Overall height	2540 mm	<b>J</b> Blade distance	1990 mm
<b>C</b> Overall width	2290 mm	<b>K</b> Max. lifting height above the ground	460 mm
<b>D</b> Length of track on ground	2290 mm	<b>L</b> Max. lowering depth from the ground	480 mm
<b>E</b> Undercarriage length	2870 mm	<b>M</b> Min. ground clearance	370 mm
<b>F</b> Lane	1890 mm	<b>N</b> Min. ground clearance under counterweight	665 mm
<b>G</b> Track width	450 mm		



<b>O</b> Max. digging depth - Blade lifted	4120 mm	<b>V</b> Boom swinging base to left	60°
<b>P</b> Max. digging depth - Blade lowered	4370 mm	<b>W</b> Boom swinging base to right	60°
<b>Q</b> Max. digging reach on ground	7300 mm	<b>X</b> Arm length	1650 mm
<b>R</b> Max. digging reach	7440 mm	<b>Y</b> Front turning radius	2920 mm
<b>S</b> Max. vertical wall	3670 mm	<b>Z</b> Front turning radius with boom swing	2480 mm
<b>T</b> Max. unloading height	5770 mm	<b>AA</b> Rear turning radius	1265 mm
<b>U</b> Max. cutting height	7810 mm	<b>AA'</b> Rear turning radius with additional counterweight	1265 mm

# SPECIFICATIONS

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

	Transport weight	Operating weight	Ground pressure
With rubber tracks	8910 kg	8985 kg	0.401 kg/cm <sup>2</sup>
With steel tracks (+20 kg)	8930 kg	9005 kg	0.404 kg/cm <sup>2</sup>

400 kg weight is applied as standard with 2PB specification.


## [ ENGINE ]

Type	4TNV98CT-VBV2
Regulation	EC NRMM STAGE V
Fuel	Diesel
Net power	48.0 kW/65.3 HP at 1800 min <sup>-1</sup>
Gross power	50.0 kW/68.0 HP at 1800 min <sup>-1</sup>
Displacement	3.318 l
Maximum torque	283-308 N-m
Cooling	Water-cooling
Starter	12V - 3kW
Battery	12V - 100Ah(for 20 hours)
Alternator	12V - 80A

## [ HYDRAULIC SYSTEM ]

Maximum pressure	275 bars
1 piston pump with variable flow	118.1 l/min
1 piston pump with variable flow	118.1 l/min
1 gear pump for pilot line	18 l/min

## [ AUXILIARY LINES ]

AUX	Theoretical data at 1800 rpm		 Oil flow decreases as the pressure increase.
	Pressure	Oil flow	
1	0 - 245 bars	65 - 100 l/min	
2	0 - 245 bars	50 - 70 l/min	
3	0 - 245 bars	50 - 60 l/min	

## [ PERFORMANCE ]

Travel speed with rubber crawler (low/high)	2.5/4.8 km/h
Travel speed with steel crawler (low/high)	2.3/4.5 km/h
Rotation speed	9.0 min <sup>-1</sup>
Digging force (short arm / long arm)	39.6 KN/-
Digging force (bucket)	61.3 KN
Traction force	62.0 kN
Gradability	25°
Noise level (2000/14/CE & 2005/88/CE)	LwA:97.5 dBA ; LpAg:73 dBA

## [ PERFORMANCE ]

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

## [ CAPACITIES ]

Fuel tank	115 l
Coolant	13.5 l
Engine oil	11.2 l
Hydraulic circuit (including hydraulic tank)	118 l
Hydraulic tank	60 l

## [ 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: **3 000 hours** ] [ Change particle filter: **9 000 hours** ]

# EQUIPMENT

## [ STANDARD EQUIPMENT ]

### PERFORMANCE

EU Stage V diesel engine -Diesel particulate filter (DPF) | Direct injection | Common rail system | EGR Electrical control system | Engine control unit (ECU) | Water separator | Power and Eco modes | Auto-idle and automatic engine shutdown | ViPPS2i hydraulic system (progressive 2-stage pump system) | 2 additional hydraulic circuits with proportional control -Flow rate adjustable on the display | 5 storage slots for attachments settings | Electronic control of the hydraulic pumps | 2-speed automatic transmission | External hydraulic oil indicator | Floating position for the blade | Additional counterweight.

### OPERATING COMFORT

7" colour display | Cab mounted on viscoelastic silent blocks | Automatic air conditioning | Adjustable reclining seat with fabric covers, air suspension and headrest | Adjustable wrist rest | Footrests | Wide drive pedals | Windscreen with 2 fully extendible sections | Roof window | Sun visor | Windscreen wiper | Windscreen washer system | Automatic ceiling light | USB and 12 V socket | Storage compartments | Compartment for mobile phone | Cup holder.

### SAFETY AND DURABILITY

Handrails | Safety lever | Safety belt with retractor | Evacuation hammer | Lashing points | Rear and side camera | Horn | Drive alarm that can be switched off | 1 LED headlight integrated in the boom | 2 LED headlights on the front of the cab | Asymmetrical VICTAS crawlers | Two-piece blade cylinder supply hose | Safety valves for lifting operations and overload warning.

### MISCELLANEOUS INFORMATION

Electric refuelling pump with automatic switch-off | Fuel gauge | Blade cylinder and boom cylinder protection | Hose protection with abrasion-resistant cover | Cathaphoresis-treated steel parts | Lockable covers | Toolbox | Tool kit | Grease gun.

## [ OPTIONAL EQUIPMENT ]

### PERFORMANCE

Safety valve for bucket cylinder | Proportional 3rd hydraulic auxiliary circuit | Pipework for Powertilt | Grapple circuit | Leak oil line | High-pressure line for hydraulic quick coupler system | Quick coupler | Steel tracks | Screw-on rubber plates for steel tracks | Bio-oil filling.

### OPERATING COMFORT

Premium seat cover | Vinyl seat | MP3-radio with USB ports.

### SAFETY AND DURABILITY

Automatic central lubrication system | SmartAssistRemote | 270°camera system | Driving alarm -Cry of lynx (can be switched off or not) | 1 LED rear headlight and amber rotating beacon | Battery cut-off switch | Anti-theft device with password and/or coded key.

### MISCELLANEOUS INFORMATION

Customized paint finish.

## [ ATTACHMENTS ]

To maximise the versatility of your midi excavator, we offer a range of factory-fitted attachments. The Yanmar range includes selected mechanical and hydraulic quick couplers, Powertilt, backhoe buckets, ditch cleaning buckets, ripper teeth and crushers.



**YANMAR**



Yanmar Compact Equipment EMEA

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