



YANMAR

TRUE ZERO TAIL SWING EXCAVATOR

Vi082

[Gross] 42.4kW (56.9hp)



YANMAR urban excavators redefining performance

Yanmar construction equipment is built on robust technological foundations developed throughout our long history and harnessed to create industry leading products.

Our ViO Series excavators raise the bar even higher, delivering enhanced efficiency, safety, and usability, while pushing the boundaries of environmental performance.

Enjoy more efficiency, smoothness, and comfort than ever before, with equipment that is also environmentally conscious. This series represents the very pinnacle of excavator technology - experience it for yourself.





* Pictures shown are for illustration purpose only. * The images shown here are for promotional purposes.
* The image may differ from the actual model on sale. * The machine in the picture is equipped with optional parts.
* Be sure to wear the seat-belt when operating the excavator. * Ground the bucket when leaving the operator's seat.
* Work in accordance with the relevant laws when operating the excavator.

Details of Vi082

Features

Advanced 8t class excavator
in the Mini-Concept family

The boom cylinder guard prevents
damage caused by contact.

►Page 10

A spacious cabin

►Page 11

Compliance with international
safety standards.
ROPS¹/OPG top guard (level I)
compliant cabin + retractable
seatbelt provided as standard part.

►Page 10

Boom swing provided as
a standard part,
allowing you to work up
close to structures.

►Page 9

Boom light is installed inside
the structure to protect it
from damage

►Page 10



External engine shut-off switch to stop the
engine in case of emergency

►Page 10



Back-mirror provided as a standard part for checking the rear side of the excavator.

►Page 10



The right hood can be opened without using any tools, thus allowing easy checking and cleaning of parts.

►Page 12

The Pressed Steel hood is sturdy and allows easy access for repairs.

►Page 10

True Zero Tail Swing allows a smooth swing even in confined spaces.

►Page 9

Underside protector reduces hood damage.

►Page 10

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*1 ROPS: Roll-Over Protective Structure(A structure to protect the operator wearing a seat belt, in case the machine rolls over)

An engine is powerful and good for people and environment.



Engine model
4TNV98C

Engine output (Gross)

42.4 kW

Compliant with EPA Tier 4 standards

* Picture of engine shown for illustration purpose only.

● A much cleaner gas emission

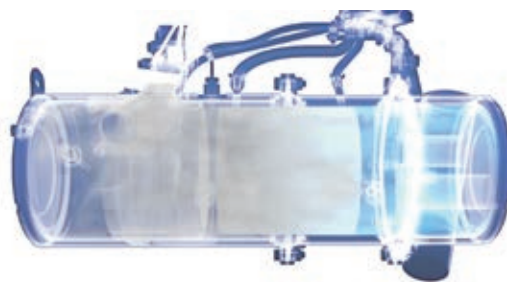


A comparison between the non-road 2006 standard to 2014 standards of machines with engine output more than 19kW, less than 37kW

① DIESEL PARTICULATE FILTER (DPF)

collect PM※(SOOT)

※1



The minuscule amount of PM in the emissions gas is captured by the Diesel Particulate Filter (DPF), preventing its escape into the atmosphere and resulting in unparalleled environmental performance.

Three unique, automated regeneration technologies inhibit the development of soot.

Self regeneration

Assisted regeneration

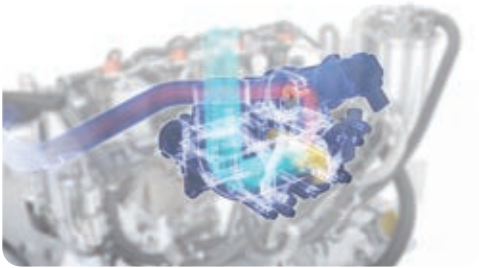
Reset regeneration

Regenerate automatically while working

* A manual regeneration may be necessary depending on work conditions.

2 Cooled-EGR

Reduced Nox emissions by Exhaust Gas Recirculation



An Exhaust Gas Recirculation (EGR) system partially cools the exhaust gas and mixes it with suction air and circulates it within the cylinder. This process lowers the burning temperature inside the cylinder and decreases nitric oxide (NOx). The EGR valve controls the circulating amount of EGR depending on the density of the intake oxygen which reacts to the suction temperature and altitude. It allows a stable combustion control of fuel in every working conditions.

3 4 Direct fuel injection system

Achieve low emission with high burning efficiency



In 1980, YANMAR was one of the first companies to implement direct injection combustion into its small diesel engines. Since then, YANMAR has used its in-house FIE parts manufacturing process to further develop its unique direct injection combustion technology that boasts low emissions, increased fuel economy and high power output. Tier 4 takes this technology to its limit in pursuit of optimal fuel injection for minimal particulate matter (PM) in the exhaust gas.

4 COMMON RAIL SYSTEM

Control fuel injection with a electric control



The Tier 4 engine uses a fully electronically controlled common rail and fuel injection system. At ignition, the system instantaneously collects and analyzes information such as the outside temperature and altitude (the oxygen concentration in the atmosphere), engine load conditions and DPF temperature for precise control of the fuel injection timing, fuel quantity and number of injection times for combustion control at millisecond intervals, in turn reducing the PM and NOx emissions.

Eco-mode function

Reduces fuel consumption by reducing the maximum engine speed by approximately 10%.



Auto deceleration

If the operation lever stays in neutral for more than 4 seconds, the engine speed will automatically change to low idle.



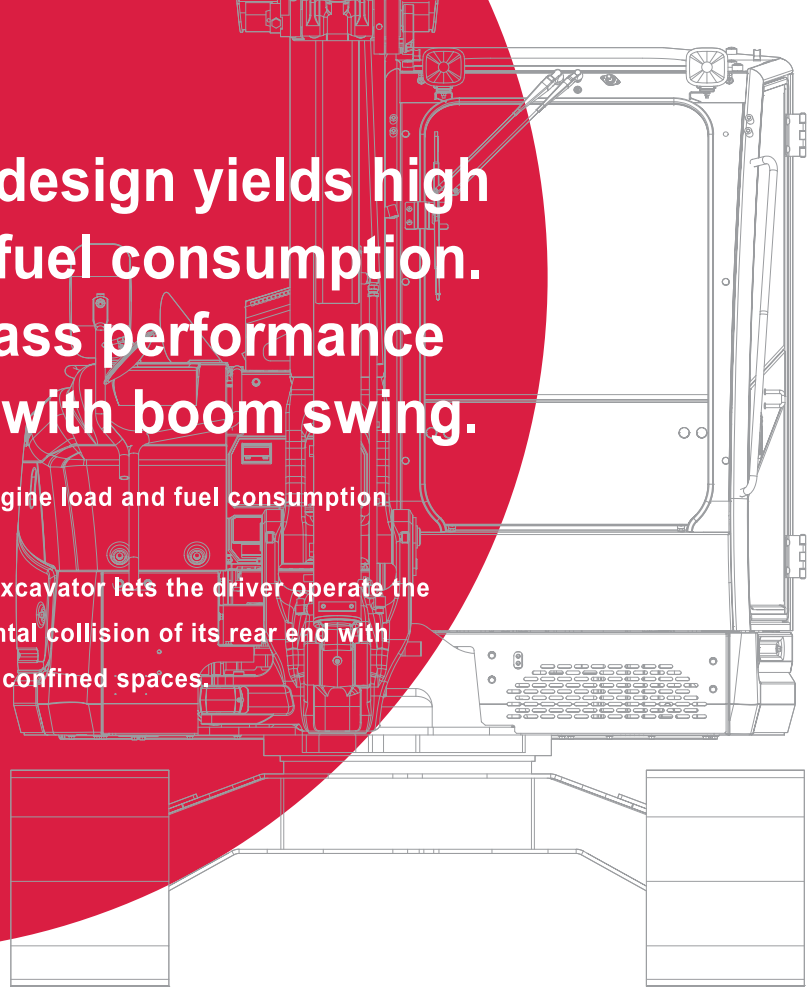
The engine speed will automatically revert to the original speed once the operation lever is moved.

*1. Diesel Particulate Filter (DPF) refers to the removal of particulate matter contained in exhaust emissions. *2. Soot and other particulate matter
*3. Manual regeneration may also be required according to on-site and usage conditions.
• Use YANMAR genuine specialized oil for common rail engines equipped with a YANMAR DPF.

YANMAR's unique design yields high efficiency and low fuel consumption. A ViO series top-class performance machine equipped with boom swing.

New hydraulic system ViPPS2i reduces engine load and fuel consumption while making the machine highly efficient.

The true Zero Tail Swing of this 8 t class excavator lets the driver operate the machinery without worrying about accidental collision of its rear end with the nearby objects, even when working in confined spaces.



ViO Progressive Pump System 2pump independent

Equipped with new hydraulic system (ViPPS2i) Industry first in 8 t class (2-pump independent load-sensing system).

- Hydraulic fluid flow is controlled according to load, mitigating the load placed on the engine

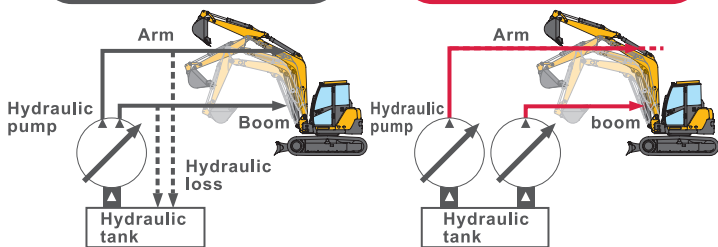
- Realizing high efficiency and low fuel consumption

● Conventional model

● Vi082

Conventional hydraulic system

New hydraulic system

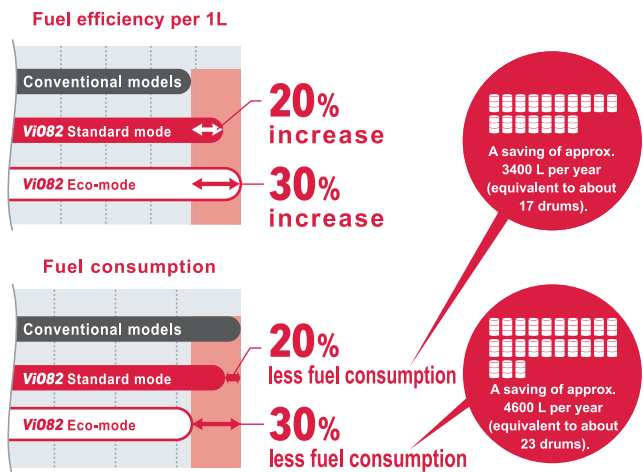


Always supplies the maximum amount of fluid possible, meaning that superfluous fluid is returned to the tank.

The two independent pumps controlled individually according to the load supply only the required quantity of hydraulic fluid to the required part.

Thanks to the optimal flow control, there is no loss of hydraulic pressure even during combined operations of arm and boom.

Fuel efficiency per Liter and fuel consumption in comparison to conventional models



* Based on measurement methods used by Yanmar.

The flat body of the excavator ensures work efficiency and safety.

A flat back takes care of safety, stability, and work efficiency during swing operations when performing work on various types of sites. Equipped with a standard boom swing, the excavator is perfect for ditch excavation along walls and works efficiently in confined spaces as well.

The rear of the cabin does not protrude, ensuring smooth and safe turns.

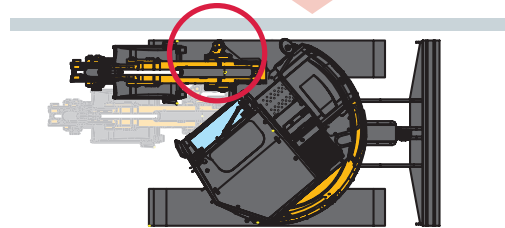
● True Zero Tail Swing

Works efficiently and can be operated without worrying about the tail swing. The excavator body stays within the machine width. This helps reduce the operator's efforts and work time.

● Excellent turning ability in the front

During gutter excavation, boom swings remain within the width of the machine from the boom bracket downwards.

No overhang



Blade width
2260 mm
(7'5")

Equipped with a standard 8t class boom swing.

All swing you to dig right next to walls.

● Boom swing

The excavator is equipped with a standard boom swing. As the boom can swing up to 60 degrees on both sides, the excavator faces the work area when digging a ditch, thus increasing the work efficiency.

Min. swing radius
2470 mm
(8'1")

Min. boom swing radius
2130 mm
(6'12")

Tail swing radius
1135 mm
(3'9")

Track width
2270 mm
(7'5")



※without Quick Coupler

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* The machine in the picture is equipped with optional parts. * Ground the bucket when leaving the operator's seat.

Creates an agreeable work space for maximum operating comfort

● **Boom cylinder guard**

● **Equipped with standard ROPS*1/OPG*2 top guard (level I) compliant cabin + retractable seatbelt.**



● **Top guard**

The operator's cab is fitted with the standard ISO-compliant OPG top guard (level II) to protect the operator's head from falling objects.



● **Durable Steel hood**

Adopt a hood made of steel plate with excellent durability and easy to repair when damaged.



● **Underside protector**

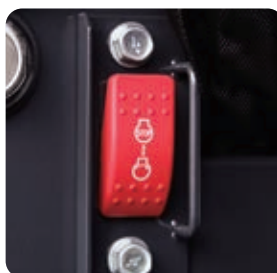
Made the cover thicker to strengthen the bonnet cover and decrease damage.



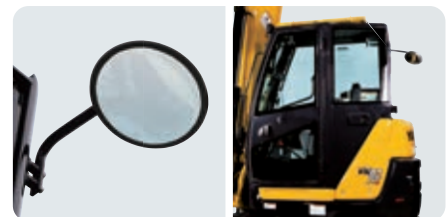
● **Cabin light + boom light**

● **External engine shut-off switch**

In an emergency, this switch immediately stops the engine with one-touch.



● **The cabin design offers superb rear visibility and the standard back mirror further improves on this**



Provides a sufficient visibility of the area near the rear end of the excavator, ensuring safety even during repeated forward or backward movement of the excavator.





● Eco mode switch



● Auto deceleration switch



● Two-speed automatic



● Double slide seat and retractable seat belt

The position of the lever and seat can be adjusted to achieve maximum driving comfort. A retractable, hence, easy-to-fix seat belt.*3

● Storage space



● Wrist control levers + adjustable arm rests.

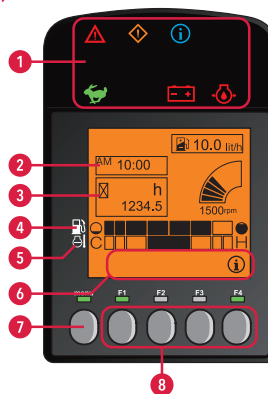
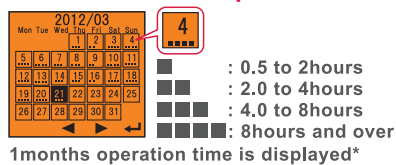
Wrist control lever are easy to grasp, and arm rests can be repositioned to meet the operator's preferences and work posture, reducing fatigue even after long hours of operation.



① The large LCD display includes an LED backlight, that makes it enable for the operator to easily check information in the low light conditions.

Easy to find out essential information related to operational status and errors, by an easy to read monitor, LED indicator lamps and buzzer.

LCD monitor sample screen



① LED lamp blinks when displaying warning and information.

⚠ Warning lamp

⚠ Caution lamp

i Information lamp

🚗 High speed travel lamp

🔋 Battery charge lamp

🛢 Engine oil pressure lamp

⌚ Clock

🕒 Hour meter

📊 Fuel gauge

🌡 Water temperature meter

📶 F1-F4 lights

👉 Switch to select menus/main menu

👉 F1-F4 perform the operation displayed in guidance

② Air recirculation type air conditioner

Maintains a comfortable temperature inside the cab by optimal air flow and intake of fresh outside air.



● A multitude of convenient functions and features to raise your work efficiency.



Front window washer



Accelerator dial



Evacuation hammer



Radio antenna + Connection harness



External power outlet



Ashtray



Cup holder

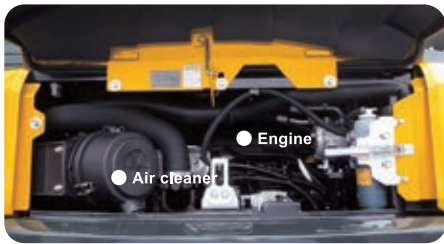
*1. ROPS (Roll Over Protective Structure) A structure to protect the operator wearing a seat belt, in case the machine rolls over.

*2. OPG top guard (level I) (Operator Protective Guards) A structure to protect the operator from falling objects.

* The machine in the picture is equipped with optional parts. * Ground the bucket when leaving the operator's seat.

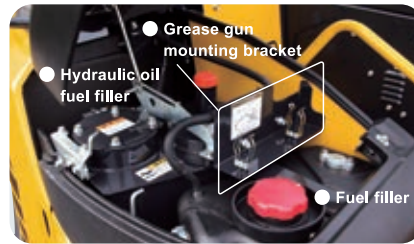
Easy access for efficient maintenance.

● Rear hood



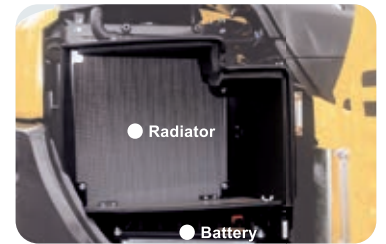
Can be removed without tools, making inspection/maintenance of the engine area and air cleaner simple.

● Front cover (right)



Allows an easy supply of fuel and hydraulic fluid, cleaning of the rear part of the radiator, and lubrication of parts with a grease gun.

● Right hood



No tools are needed to open the right-hand hood, making battery inspections and cleaning the radiator an easy task.



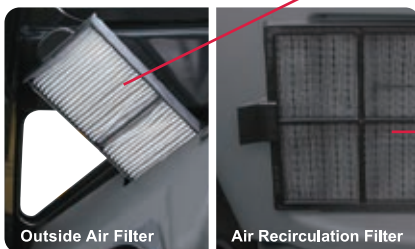
● Inspection window for fan belt and A/C belt



Large inspection window for easy access.



● Cab air conditioner filter



Can be removed, cleaned, and replaced without using any tools.



● Tool compartment



Can be used for storing teeth bars, etc.

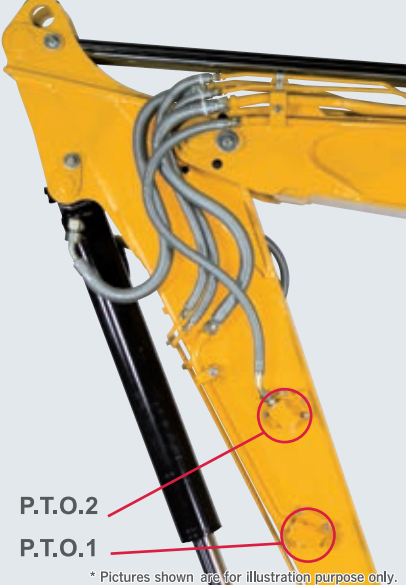
A wide variety of functions for various types of sites and work.

*These functions differ depending on the region, Please contact your YANMAR dealer for further information.

● P.T.O. specification

Model using P.T.O.1 (VAE) [with flow regulation]
Supports various types of attachments.

Model using P.T.O.2 (VAE) [with flow regulation]
Supports the attachments requiring a dual control system not supported by P.T.O.1.




P.T.O.1
P.T.O.2

* Pictures shown are for illustration purpose only.


P.T.O.1 switch
Move the switch horizontally to operate the attachments connected to P.T.O.1 circuit.




P.T.O.2 switch
Move the switch horizontally to operate the attachments connected to P.T.O.2 circuit.



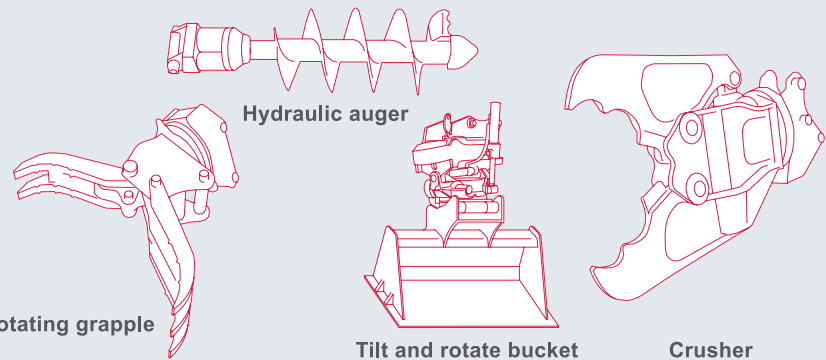
Both P.T.O.1 and P.T.O.2 allow flow regulation by turning the dial.





* [Models using P.T.O.]VAE : Attachment pipe on the arm end

Important attachments



Rotating grapple Hydraulic auger Tilt and rotate bucket Crusher

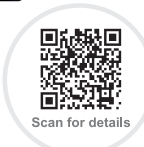
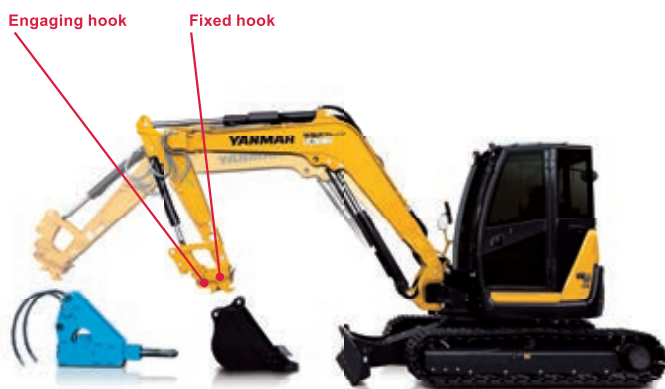
● Increased weight







● Pattern change valve (2way/4way)



● Hydraulic quick coupler makes changing attachments quick and easy.


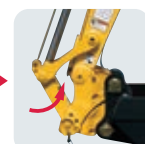



● Unattach bucket

Place the bucket on the ground. Pull out the safety lock pin. Turn the switch to Remove. Raise the arm to detach.

● Attach bucket


Hang the fixed hook. Level the bucket. Turn the switch to Attach. Insert the safety lock pin and fasten.

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SMARTASSIST
Remote

Providing services that keep you on track. **SMARTASSIST Remote**



* Separate application required (free)

● Efficient use of machinery thanks to remote monitoring

Our construction equipment is equipped with GPS and communication terminals, allowing you to manage location information via the communication system. The system also lets YANMAR remotely monitor your machine, allowing us to keep on top of maintenance intervals, quickly identify machine trouble, and provide appropriate services and support at all times.



● Providing peace of mind, supporting your business



The Unsung Heroes Who Build Our Towns And Cities

You build the infrastructure and the foundations in our towns and cities.
Transforming the places where we stand today, into dreams of tomorrow.
You are the unsung hero.

The YANMAR mission is to provide machines and services that allow you to reach your full potential.

Built tough and with comfort in mind,
YANMAR construction equipment will help you get the job done with ease, regardless of the worksite.
When we make machines, we are dedicated to enabling you to perform at your best all of the time.

One example of this is our innovative True Zero Tail Swing Excavators that set the standard for safety and reliability, enabling operators to perform at their best in tight quarters.

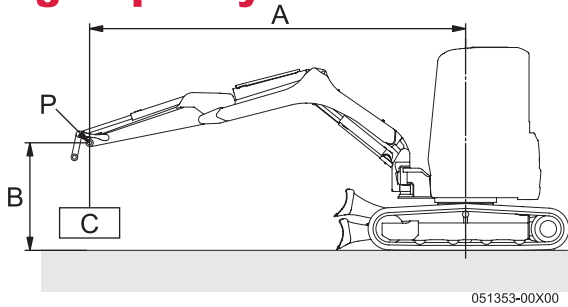
YANMAR also manufactured the first compact diesel engines
and today we continue to make diesel engines ranging from 4 to 4,800 kW.

Equipped with advanced engines and hydraulic systems, our construction equipment delivers better fuel economy, increased productivity and enhanced operation.

YANMAR is the driving force behind the unsung hero.

BEST PERFORMANCE BY YOUR SIDE

Lifting Capacity



- With;
- Cabin
- Rubber Crawler
- Without; Quick coupler and Bucket
- A : Reach from swing center line [m<in.>]
- B : Load point height [m<in.>]
- C : Lifting load [kg<lbs.>]
- P : Load point
- : Rating over front
- : Rating over side or 180 degrees

Loads shown in table include weight of standard bucket [195 kg<430 lbs.>] and quick coupler [130kg<287 lbs.>].

Blade on ground

Unit : kg <lbs.>

A [m<in.>]	Max.		5.0<196.9>		4.0<157.1>		3.0<118.1>	
B [m<in.>]								
5.0<196.9>	1800 <*3970>	1380 <3040>	-	-	1760 <*3880>	1750 <*3860>	-	-
4.0<157.5>	1690 <*3730>	1160 <2560>	1690 <*3730>	1260 <2780>	1760 <*3880>	1740 <*3840>	-	-
3.0<118.1>	1730 <*3810>	980 <2160>	1780 <*3920>	1240 <2730>	2080 <*4590>	2030 <*4480>	2640 <*5820>	2670 <*5890>
2.0<78.7>	1670 <*3680>	890 <1960>	1950 <*4300>	1180 <2600>	2440 <*5380>	1680 <3700>	3310 <*7300>	2340 <5160>
1.0<39.4>	1680 <*3700>	890 <1960>	2090 <*4610>	1150 <2540>	2750 <*6060>	1580 <3480>	3670 <*8090>	2090 <4610>
0<0>	1690 <*3730>	910 <2010>	2110 <*4650>	1100 <2430>	2830 <*6240>	1560 <3440>	3850 <*8490>	2210 <4870>
-1.0<-39.4>	1660 <*3660>	1000 <2200>	1990 <*4390>	1110 <2450>	2640 <*5820>	1530 <3370>	3620 <*7980>	2280 <5030>
-2.0<-78.7>	1500 <*3310>	1220 <2690>	-	-	2200 <*4850>	1590 <3510>	2990 <*6950>	2410 <5310>

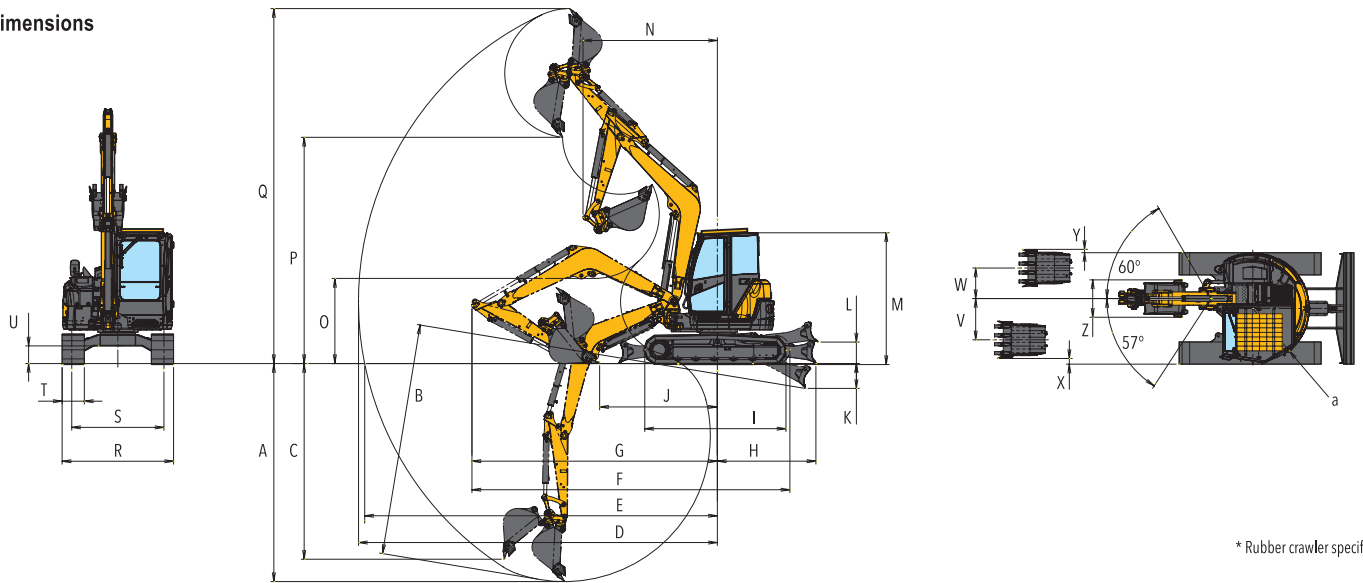
Blade above ground

A [m<in.>]	Max.		5.0<196.9>		4.0<157.1>		3.0<118.1>	
B [m<in.>]								
5.0<196.9>	1760 <*3880>	1380 <3040>	-	-	1710 <*3770>	1750 <*3860>	-	-
4.0<157.5>	1230 <2710>	1160 <2560>	1370 <3020>	1260 <2780>	1690 <*3730>	1740 <*3840>	-	-
3.0<118.1>	1050 <2310>	980 <2160>	1350 <2980>	1240 <2730>	2020 <*4450>	2030 <*4480>	2580 <*5690>	2670 <*5890>
2.0<78.7>	950 <2090>	890 <1960>	1280 <2820>	1180 <2600>	1780 <3920>	1680 <3700>	2990 <*6590>	2340 <5160>
1.0<39.4>	930 <2050>	890 <1960>	1220 <2690>	1150 <2540>	1700 <3750>	1580 <3480>	2240 <4940>	2090 <4610>
0<0>	960 <2120>	910 <2010>	1200 <2650>	1100 <2430>	1650 <3640>	1560 <3440>	2380 <5250>	2210 <4870>
-1.0<-39.4>	1050 <2310>	1000 <2200>	1190 <2620>	1110 <2450>	1630 <3590>	1530 <3370>	2490 <5490>	2280 <5030>
-2.0<-78.7>	1260 <2780>	1220 <2690>	-	-	1680 <3700>	1590 <3510>	2570 <5670>	2410 <5310>

Note :

The lifting load with the asterisk (*) mark is limited by hydraulic lifting capacity rather than tipping. The lifting capacity shown in the above list is based on the ISO Standard No. 10567 and represents either 87 % of hydraulic lifting capacity or 75 % of tipping load, which is smaller.

● Dimensions



* Rubber crawler specification

Unit : mm (ft-in)

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	a		
ViO82	Quick Coupler	4400 (14'5")	4680 (15'4")	3940 (12'11")	7280 (23'11")	7140 (23'5")	6460 (21'2")	4970 (16'4")			2380 (7'9")				2710 (8'11") R2730 (7'9") at boom swing	1750 (5'7")	4620 (15'2")	7230 (23'9")												
Cabin	without Quick Coupler	4150 (13'7")	4440 (14'7")	3900 (12'6")	6960 (22'10")	6820 (22'5")	6410 (21'0")	4930 (16'2")	1990 (6'6")	2890 (9'6")	2270 (7'5")	480 (1'7")	460 (1'6")	2750 (9')	2470 (8'1") R2130 (6'12") at boom swing	1940 (6'4")	4680 (15'4")	6790 (22'3")	2270 (7'5")	1870 (6'2")	450 (1'6")	390 (1'3")	840 (2'9")	620 (2'0")	120 (0'5")	60 (0'2")	750 (2'6")	1135 (3'9")		

Specifications

Model		ViO82					
Spec		Cab. rubber crawler		Cab. steel crawler			
Type		Quick coupler	without Quick coupler	Quick coupler	without Quick coupler		
Operating Weight		kg(lbs)		8380 (18474)	8220 (18122)	8440 (18607)	8280 (18254)
Engine		Type	Vertical four cylinder water-cooled direct injection diesel engine				
		Model	YANMAR 4TNV98C-WBV1				
		Rated Output	kW(hp)/ min-1				
		Maximum output at high idle speed	kW(hp)/ min-1				
Performance		Bucket capacity, standard (ISO heaped)	cu.m(cu.ft)				
		Max Digging Force	kN(lbf)		50.4 (11330) / 37.2 (8683)		
		Traveling Speed, High/Low	km / h(MPH)		5.0(3.1) / 2.5(1.6)		
		Swing Speed	RPM		9.4		
		Boom Swing Angle, (L / R)	degrees		57 / 60		
		Gradability	degrees		30		
Ground Contact Pressure		kPa(PSI)	36.5(5.29)	35.8(5.19)	37.0(5.37)	36.3(5.26)	
Hydraulic System		Pump Capacity	L / min(GPM)				
		Main Relief Set Pressure	MPa(PSI)				
Blade		Width	mm(ft-in)				
Dimensions		Stroke, raise / lower from G.L.	mm(ft-in)		460 (1'6") / 480 (1'7")		
Fuel tank capacity		L (Gals)	115(30.4)				

Hydraulic P.T.O.

Model		ViO82			
		Output		L / min(GPM)	
Specification		MPa(PSI)		1900RPM	1200RPM
Combined flow, Double Actions		25.8(3742)		120(31.7)	75(19.8)

YANMAR CONSTRUCTION EQUIPMENT CO., LTD.

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