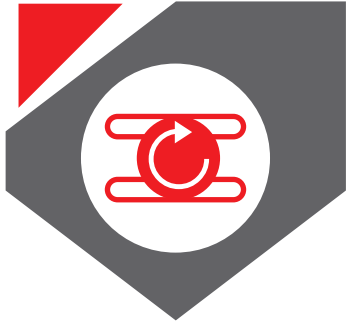


## Mini-excavator ViO10-2A

Operating weight: 1220 kg

Arm digging force: 570 kgf

Bucket digging force: 1400 kgf



## > COMPACTNESS

### ViO10-2A

Here's the shape for simple and efficient work in confined spaces. The ViO10-2A is a tenacious worker for narrow spots such as housing foundations, indoor renovation, pipe laying and landscaping.



#### Design principles

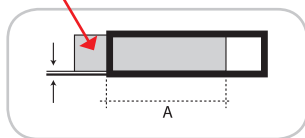
The ViO10-2A is a real Zero Tail Swing machine:

- > Extended undercarriage, neither the counterweight nor the front part of the upper frame exceed the width of the crawlers.
- > Retracted undercarriage, the rear of the machine only exceeds 85 mm.
- > Front swing radius with boom swing: 1080 mm.
- > Rear swing radius: only 650 mm.
- > Width of the machine reduced to 830 mm when the undercarriage is retracted.

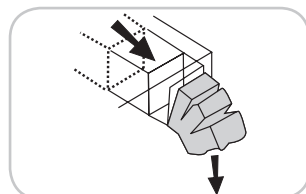
#### Extendable undercarriage of unique conception

- > Reduced clearance between the sliding parts: no soil build-up during the extension of undercarriage.
- > High reliability over a long-term period.
- > The ViO10-2A is extremely stable due to the use of an extended undercarriage and good weight distribution.

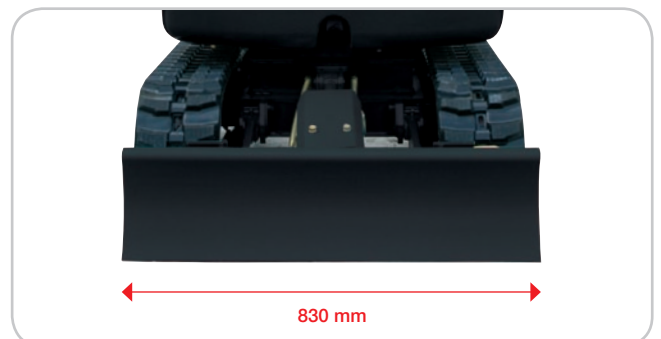
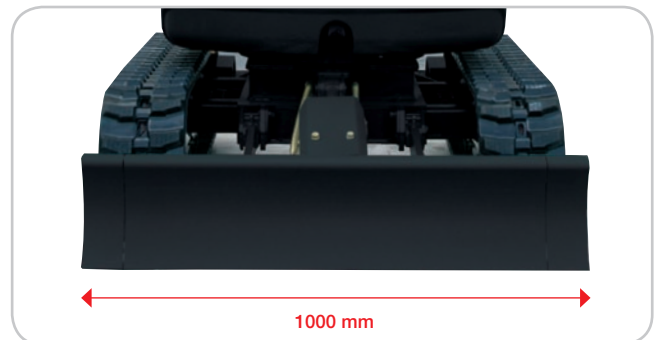
Sliding parts



Small play due to long overlap (A)



Clogged mud is easily pushed out



#### Simple folding extendable blade

- > The hinged blade extensions are permanently fixed on the blade.
- > No tools are necessary to change quickly the position.
- > No risk to lose the blade extensions.

# > HIGH PERFORMANCE

## ViO10-2A



Combining long experience and unrivalled expertise, YANMAR's technology ensures environmental performance and high efficiency.



### A new-generation Yanmar "TNV" (Totally New Value) engine



- > Fully compliant with European norm 97/68/EC (exhaust emissions) and the latest American norms, EPA Stage II.
- > Low speed - increased life.

- > Less vibration.
- > Use of a Yanmar engine 3 cylinders and an hydraulic system using a variable flow double piston pump: high productivity.
- > High digging forces for such a machine.

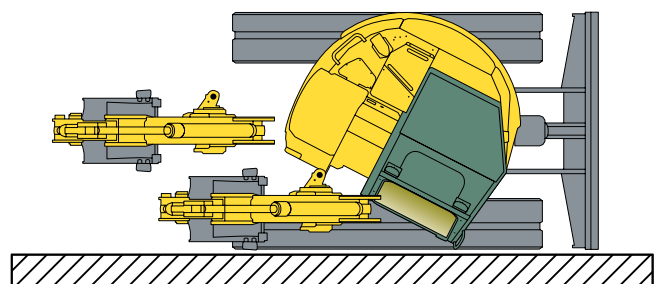
### Working equipment

- > Dual or single-action auxiliary circuit to add various accessories (swivelling ditch cleaning buckets).
- > Lifting of the machine on one point thanks to a hook on the top of the boom.



### Advantages for the user

- > Easy access in narrow areas.
- > Possibility to work along a wall.
- > The ViO concept allows the operator to work without paying attention to the rear of the machine: safety and productivity.
- > Machine perfectly adapted for restoration of houses.
- > Easy use, even for unexperienced users.





## > COMFORT & SAFETY

### ViO10-2A

The many easy to use features include the comfortable seat with retractable seatbelt, sensitive lever controls, a footrest, and uncomplicated lever arrangement.

#### Ergonomic pilot system

- > Progressive hydraulic pilot system for more precision.
- > Separate pedals for the 3<sup>rd</sup> circuit (PTO) and boom swing: possibility of combined movements.
- > Both pedals are fitted with solid protections made from steel that can be folded sideways.
- > Access to operating position on both sides.



PTO pedal and boom pedal fitted with foldable protections in order to avoid unwanted movements.

#### ROPS protective frame

- > Roll Over Protective Structure.
- > Can be folded rearwards, allowing the machine to travel under low overhead heights.

#### Safety for the operator

- > Retractable seat belt.
- > Safety lever to lock the main functions of the machine.
- > Safety bar on the front part of the machine.
- > Large cast iron counterweight to protect the rear of the machine.
- > Working lamp on the boom.

Access to operating position on both sides

Progressive hydraulic pilots  
Safety bar



Large cast iron counterweight



# > RELIABILITY & ACCESSIBILITY

## ViO10-2A



Simple maintenance structure for fast and easy access wherever it's needed.



### Easy access to maintenance points

- > A large engine bonnet allows quick access for main components.
- > Left side protection in steel easily removable (access to filter).



- > Perfect protection on blade cylinder.



- > Hydraulic hoses pass in the center of the upper frame: perfect protection and no twisting.



- > Careful routing of hydraulic pipes and hoses.



- > Perfect protection on boom cylinder.



# > TECHNICAL SPECIFICATIONS

## ViO10-2A

### Engine

Yanmar diesel 3 cylinders .....3TNV70-WBVB  
 Rated output (DIN 6270B) .....9.2 kw/12.5 HP/2000 rpm  
 Displacement .....854 cm<sup>3</sup>  
 Max. torque..... 52 N.m./1600 rpm

### Hydraulic circuit

System capacity ..... 14.3 l  
 Max. pressure .....210 bar  
 Variable flow dual piston pump ..... 2 x 11 l/mn

### Performances

Travelling speed.....2.1 km/h  
 Swing speed .....10 rpm  
 Digging force (arm/bucket) .....570/1400 kgf  
 Boom swing (L/R).....50°/90°  
 Ground pressure .....0.26 kg/cm<sup>2</sup>  
 Grade ability ..... 30°  
 Shoe width.....180 mm  
 Ground clearance.....140 mm  
 Blade (width x height) .....830/1000 x 220 mm



### Miscellaneous


Fuel tank ..... 12 l  
 Cooling system.....2.5 l  
 Transport dimensions (L x w x h)..... 3040 x 1000 x 1420 mm  
 Noise level LwA (2000/14/EC & 2005/88/EC) ..... 88 dBA

### Optional equipment

- > Special paint
- > Standard buckets
- > Ditch cleaning buckets

- > Swivelling buckets
- > Hydraulic hammers

PTO	Theoretical data at 2000 rpm	
	Pressure	Oil flow
	0 ~ 210 bar	22 ~ 13 l/mn
	0 ~ 210 bar	22 ~ 13 l/mn

 > The oil flow reduces as the pressure increases.



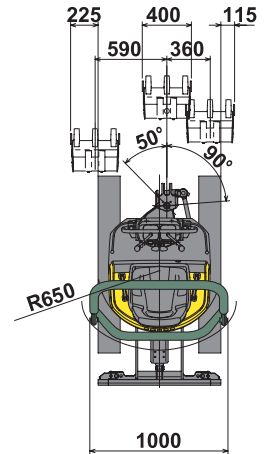
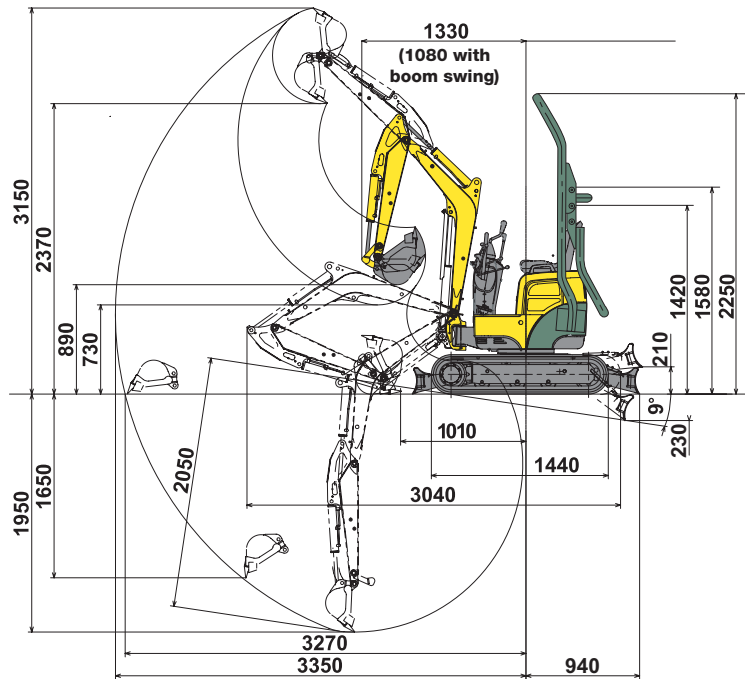
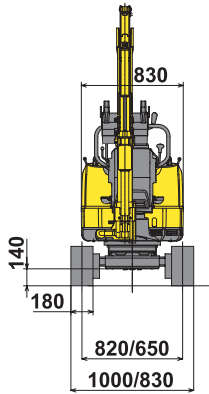
# TECHNICAL SPECIFICATIONS

## ViO10-2A



Operating weight +-2% (EC Norms):  
> 1220 kg

Transport weight +-2% (EC Norms):  
> 1145 kg



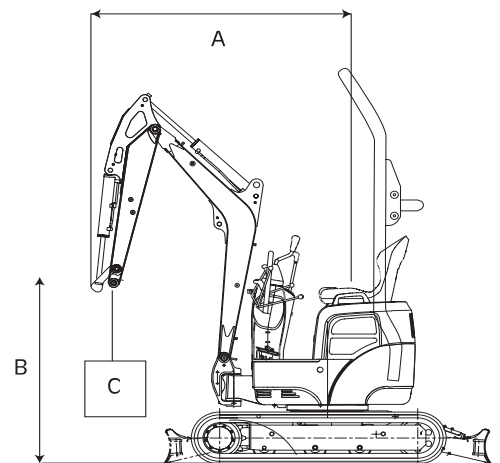
Subject to any technical modifications.  
Dimensions given in mm with standard Yanmar bucket.

Blade on ground

A	Maxi			2.5 m			2.0 m			1.5 m			C
	N	W		N	W		N	W		N	W		
2.0	*185	115	*185	*185	120	*190	*185	145	*185	-	-	-	C
1.5	125	95	230	155	120	*205	*205	165	*205	-	-	-	
1.0	115	90	*230	145	115	*240	200	160	*270	*380	255	*370	
0.5	110	85	*245	145	100	*270	195	150	*345	305	210	*550	
0	115	85	*260	140	100	*305	185	140	*385	275	205	*600	
-0.5	125	90	*280	145	105	*305	180	135	395	260	210	615	

Machine with rubber crawlers, bucket of 20 kg (400 mm).

A: Overhang from rotational axis (m).  
B: Height of hooking point (m).  
C: Safe working load (kg).  
N: Retracted undercarriage.  
W: Extended undercarriage.



Blade above ground

A	Maxi			2.5 m			2.0 m			1.5 m			C
	N	W		N	W		N	W		N	W		
2.0	*185	110	*185	*185	120	*190	*185	145	*185	-	-	-	C
1.5	125	90	160	155	115	*205	205	160	*205	-	-	-	
1.0	115	85	145	145	110	180	200	155	*265	380	245	*365	
0.5	110	80	130	145	100	170	195	145	230	305	200	355	
0	115	80	140	135	100	175	185	140	230	270	200	335	
-0.5	125	90	155	140	100	165	175	130	215	260	200	330	

Tipping load, rating over front

Tipping load, rating over side 90°

The data contained in these tables represent the lifting capacity in accordance with ISO standard 10567. They correspond to 75% of the maximum static tipping load or 87% of the hydraulic lifting power. Datas marked \* are the hydraulic limits of the lifting power.



## Call for Yanmar solutions

