



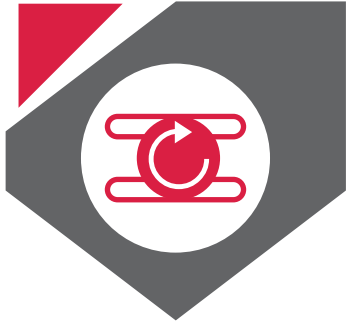
**YANMAR**

MINI-EXCAVATOR

**ViO17U**

1765 kg





## > COMPACTNESS

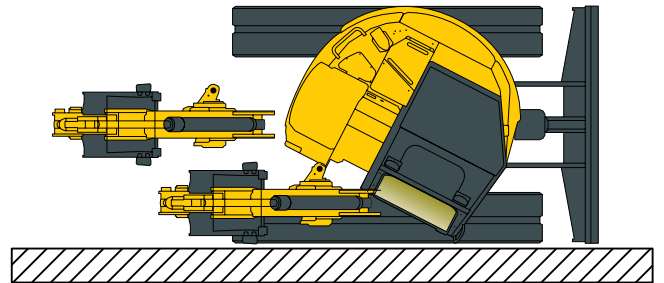
### ViO17U

The Universal ViO17 is a real Zero Tail Swing machine: neither the counterweight nor the front part of the upper frame exceed the width of the crawlers.



#### Design principles

- > No rear overhang.
- > Front swing radius with boom swing: 1380 mm.
- > Rear swing radius: 640 mm.
- > Width of the machine reduced to 950 mm.

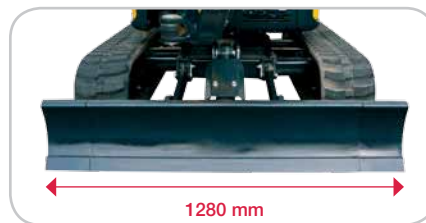


#### Advantages for the user

- > Possibility to work in narrow areas, where a conventional machine is not able to work.
- > Possibility to work along a wall.
- > No dead angle in the upper structure: maximum all-round visibility.
- > Safety and productivity for the operator.
- > Easier transport thanks to reduced width.
- > Operations are perfectly adapted to urban areas: the machine does not obstruct all lanes of traffic.



- > Retracted undercarriage to allow easier manoeuvre.



- > Extended undercarriage for better stability.

#### Variable undercarriage in width

- > The Universal ViO17 adapts itself according to the space available, due to its variable width from 950 to 1280 mm.
- > Extendable undercarriage of unique conception: clogged mud is easily pushed out thanks to sliding parts.

#### Simple folding extendable blade

- > Extensions are permanently on the blade.
- > No tools are necessary to install or uninstall them.
- > No risk to lose the blade extensions.





# > HIGH PERFORMANCE

## ViO17U

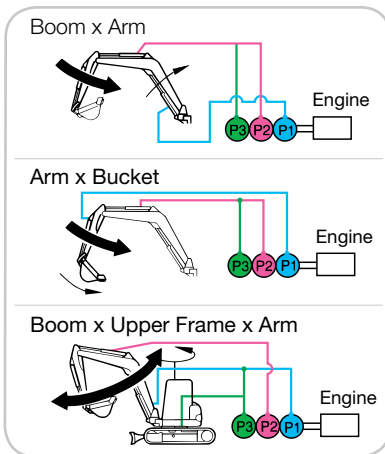


Combining long experience and unrivalled expertise, YANMAR's technology ensures environmental performance and high efficiency.

### « VIPPS® » hydraulic circuit (ViO Progressive 3 Pumps System)



Hydraulic circuit fitted with a variable-flow dual piston pump, a gear pump and a multiple combination directional control valve:



- > Increased working speed due to the cumulative pump capacities.
- > Smooth, simultaneous operation of all functions, even when travelling.



Dual or single-action auxiliary circuit to work with a variety of accessories

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



Improvement and modernisation of TNE series, which is already well-known for its "clean and quiet" profile:

- > Reduced emissions for an even cleaner engine.
- > Noise reduction for an even quieter engine.
- > Improved starting (warms up faster).

The engine 3TNV70-XBV meets Stage II emissions regulations of the European Commission (EC).



### Successful combination between the engine and the hydraulic system

- > Reduced fuel consumption.
- > Increased productivity.
- > Less exhaust fumes.

### Weight and dimensions allowing easy transport on a trailer or in an utility vehicle

- > Transport weight: 1690 kg.





## > COMFORT & SAFETY

### ViO17U

All-round comfort and convenience. The Universal ViO17 is equipped with many easy to use features for a more performing work.

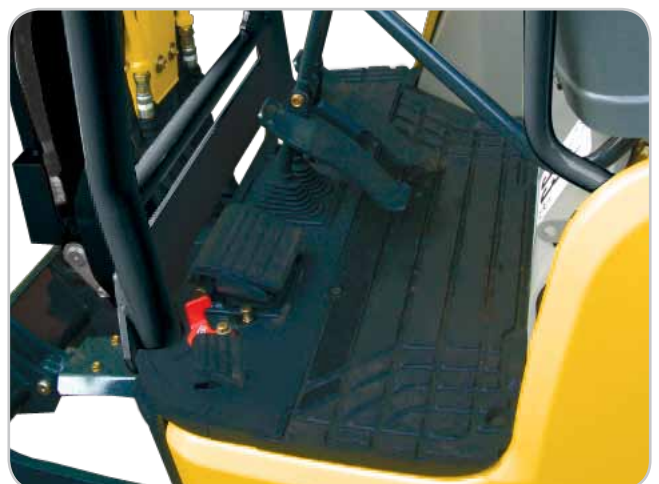
#### Maximum operator safety

- > Canopy and cabin meet the requirements of the strictest safety standards:
  - ROPS (Roll Over Protective Structure).
  - FOPS 1 (Falling Object Protective Structure).
  - TOPS (Tip-Over Protective Structure).
- > Large safety lever on access to control position: in the raised position it prevents all working movement and travel.



#### Spacious and ergonomic pilot system

- > Perfect position of joysticks, armrests and travel levers with pedals.
- > Separate pedals for using the auxiliary power take-off line and boom offset.
- > Comfortable, multi-adjustable seat.
- > Access possible from both sides.
- > Integrated working lamp.



# > RELIABILITY & ACCESSIBILITY

## ViO17U



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



Bucket, arm, boom and blade cylinders completely protected (rod and cylinder) by highly elastic steel plates to resist any possible shocks.



> The blade hydraulic cylinder is covered by a protective shield.

> Careful routing of hydraulic pipes in the center of the upper frame and on the boom: perfect protection.



> Large rear bonnet allowing access to all engine components and hydraulic pumps.



> Layout of the counterweight designed to protect the side panels against any possible shocks.



# > TECHNICAL SPECIFICATIONS

## Vi017U

### Engine

Yanmar Diesel 3 cylinders ..... 3TNV70-XBV  
 Rated Output ..... 10.1 kw / 13.7 HP / 2200 rpm  
 Displacement ..... 854 cm<sup>3</sup>  
 Max. torque ..... 47.8 ~ 52 N.m. / 1600 rpm

### Hydraulic circuit

System capacity ..... 26.5 l  
 Max. pressure ..... 210 / 170 bar  
 2 variable displacement piston pumps ..... 2 x 17.6 l/mn  
 1 gear pump ..... 1 x 13.2 l/mn

### Performances

Travelling speed ..... 2.1 / 4.3 km/h  
 Swing speed ..... 9.5 rpm  
 Digging force arm ..... 870 kgf  
 Digging force bucket ..... 1550 kgf  
 Grade ability ..... 30°

### Undercarriage

Ground pressure ..... 0.29 kg/cm<sup>2</sup>  
 Shoe width ..... 230 mm  
 Ground clearance ..... 175 mm  
 Blade (width x height) ..... 950 / 1280 x 255 mm

### Miscellaneous

Fuel tank ..... 20 l  
 Cooling system ..... 3.2 l  
 Transport dimensions (L x w x h) ..... 3450 x 950 x 2370 mm  
 Noise level (2000/14/EC & 2005/88/EC) ..... 93 dBA

### Optional equipments

- > Special paint
- > Prolongation of the 3<sup>rd</sup> circuit to arm end
- > Anti-theft device (with keyboard / with key)
- > Quick couplers on the 3<sup>rd</sup> circuit
- > Beacon light
- > Mechanical quick hitch
- > Standard, ditch cleaning and swivelling buckets
- > Hydraulic breaker

PTO	Theoretical data at 2200 rpm	
	Pressure	Oil flow
	0 ~ 210 bar	30.8 ~ 0 l/mn
	0 ~ 210 bar	30.8 ~ 0 l/mn

> The output reduces as the pressure increases.





# TECHNICAL SPECIFICATIONS

## ViO17U

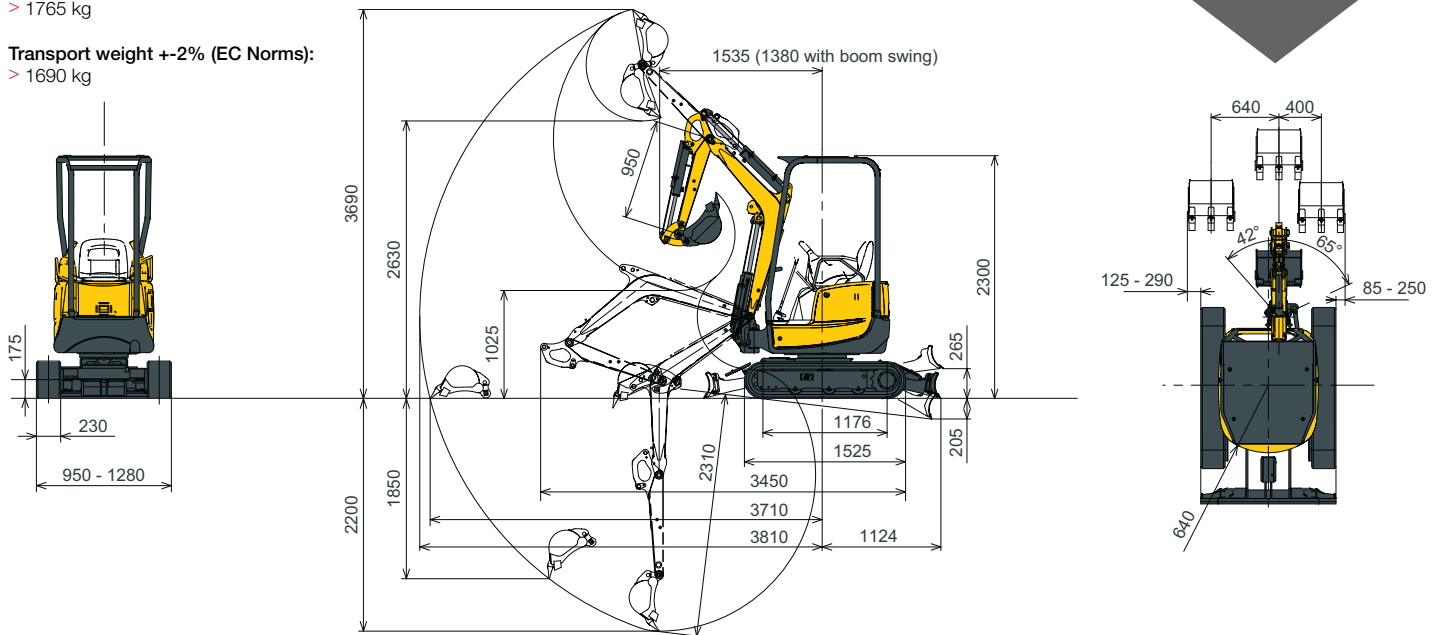


Operating weight +-2% (EC Norms):

> 1765 kg

Transport weight +-2% (EC Norms):

> 1690 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			
	W	N		W	N		W	N		
2.5	*330	180	*330	-	-	-	-	-	-	-
2.0	235	135	*335	*315	200	*305	-	-	-	*305
1.5	210	122	*345	*365	195	*365	*360	300	*420	-
1.0	195	110	*360	295	175	*445	435	255	*590	545
0.5	195	110	*370	295	170	*520	415	235	*735	500
0	200	110	*380	280	160	*550	390	220	*760	495
-0.5	220	130	*405	280	160	*540	395	235	*730	-
-1.0	260	150	*420	-	-	-	265	230	*675	-
-1.5	*390	240	*390	-	-	-	-	-	-	-

Machine with canopy, rubber crawlers, without bucket.

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			
	W	N		W	N		W	N		
2.5	285	170	275	-	-	-	-	-	-	-
2.0	230	135	220	*315	195	*315	-	-	-	*305
1.5	205	120	195	*365	190	*365	*420	295	*420	-
1.0	190	110	180	290	170	290	425	245	405	540
0.5	190	105	175	285	165	285	410	230	385	495
0	195	110	180	275	160	275	380	210	355	490
-0.5	220	120	205	270	155	270	380	230	350	-
-1.0	260	145	240	-	-	-	395	225	370	-
-1.5	*390	235	*390	-	-	-	-	-	-	-



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 don't include the weight of the bucket and correspond to 75 % of the maximum static tipping load or 87 % of the hydraulic lifting power. Data marked \* are the hydraulic limits of the lifting power.



**YANMAR**



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**Yanmar Construction Equipment Europe S.A.S.**

25, rue de la Tambourine  
52100 SAINT DIZIER – FRANCE  
contact@yanmar.fr

**[www.yanmarconstruction.eu](http://www.yanmarconstruction.eu)**