YANMAR

Solutioneering Together

Mini-excavator ViO25

Operating weight: 2895 / 2670 kg
Arm digging force: 1500 kgf
Bucket digging force: 2500 kgf

Yanmar, inventor and leader

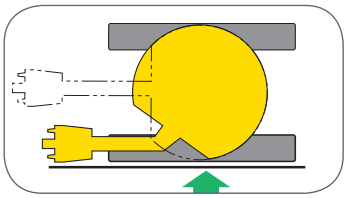
Zero Tail Swing

Design principles

- ViO25 is a real Zero Tail Swing machine: neither the counterweight nor the front part of the upper frame exceed the width of the crawlers.
- Compact dimensions:
  - front swing radius with boom swing: 1600 mm ;
  - rear swing radius: 725 mm ;
  - width of the machine reduced to 1450 mm.

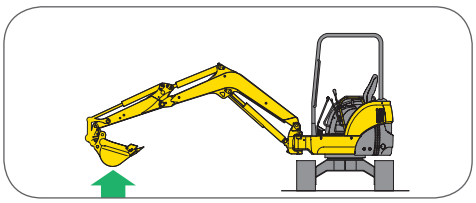
Advantages for the user

- 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 superb all-round visibility.
- Safety and productivity for the operator.
- Easier transport thanks to reduced width.



Excellent weight distribution

- The use of a large counterweight, asymmetric crawlers (VICTAS® system) and high tensile equipment allows:
  - equalled stability, even higher than that of a conventional machine of the same weight ;
  - increased lifting capacity.



Asymmetric crawlers (patented VICTAS® System)

- Increased foot print without the increase of machine width.
- Higher sideward stability and higher lift capacity.
- Noise and vibration free travel.
- Less ground damage.

r of the ZTS mini-excavators

Comfort and safety

Spacious and ergonomic pilot system

- Perfect position of joysticks, armrests and travel levers.
- Luxurious adjustable operators seat with headrest (forward and aft adjustment, backrest inclination adjustment, and weight adjustment).
- Canopy and cabin fully compliant to safety norms: ROPS (Roll Over Protective Structure), FOPS 1 (Falling Object Protective Structure) and TOPS (Tip-Over Protective Structure).
- Large safety lever on access to operating position: locks working movements and travel (in raised position).
- Battery isolator in standard.

Cabin version

- Windscreen in 2 parts, stored overhead. Sliding side windows.
- Wide access to the operating position.
- Defroster, heater, ventilation, inside lighting, windscreen washer.

Higher productivity for the operator

- Separate pedals for 3rd circuit and boom swing + forward and backward travelling possible with feet: possibility to combine various working movements and travelling.
- Single-action auxiliary circuit with pedal to add accessories (for example: hydraulic rock breaker, auger...).
- Second speed.
- Dual-action auxiliary circuit with the right joystick allowing a higher precision (for example: swivelling ditch cleaning bucket).

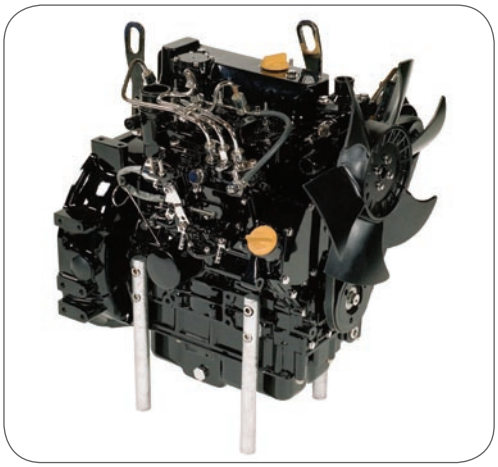
Yanmar, inventor and leader

Reliability and accessibility

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 new TNV series exceeds the most stringent emissions standards.



Easy access to maintenance points

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

- Daily check points gathered under the front bonnet (top up oil, water, diesel).

- Quick access to test points of all hydraulic circuits from the pilot system.

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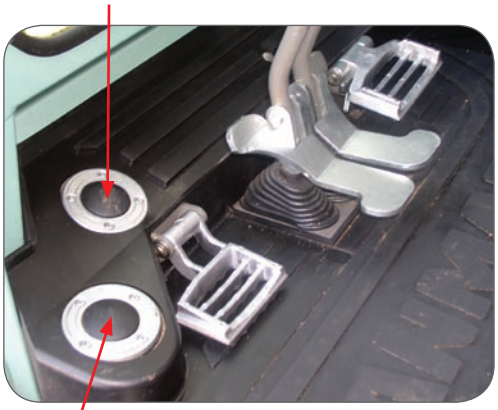
High performance

Hydraulic circuit Load-Sensing. Variable flow piston pump.

- Precise working movements.
- Simultaneous operations.
- Safety and productivity, particularly for operations requiring accuracy: grading.

Single-action auxiliary circuit with pedal

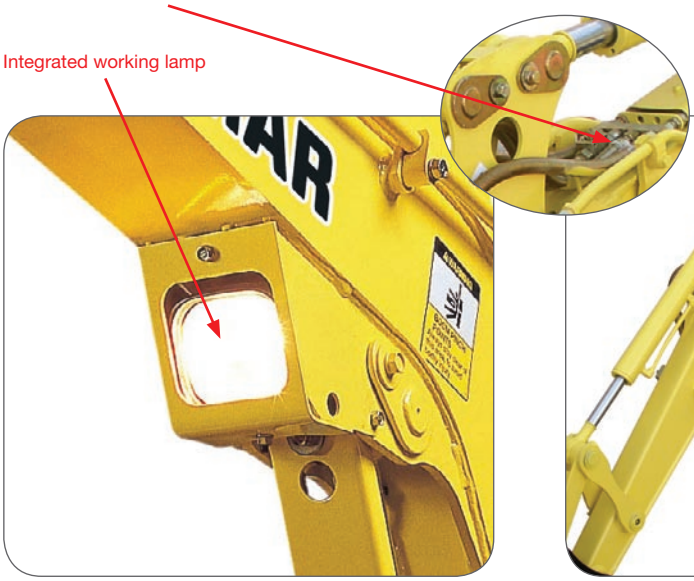


Second speed

Working equipment

- Standard auxiliary circuit (PTO) until arm end.
- Integrated working lamp.
- Clean routing of flexible hoses in and on the boom.
- Cylinder protection on boom.
- Stop valve of bucket cylinder.

Integrated working lamp



TECHNICAL SPECI

Engine

Yanmar Diesel 3 cylinders 3TNV76-NBVA
Rated Output (DIN 6270B) .....15.2 kw/20.7 HP/2500 rpm
Displacement.....1115 cm^3
Max. torque .....68.6 N.m./1800 rpm

Load-Sensing hydraulic circuit

System capacity.....24.5 l
Hydraulic tank capacity.....16 l
Max. pressure.....210 bar
Variable flow piston pump.....75 l/mn
Straight travelling .....
Direct return to hydraulic tank.....
Accumulator .....

Performances

Travelling speed* ..... 2.6/3.8 km/h
Swing speed..... 9.9 rpm
Digging force (arm/bucket).....1500/2500 kgf
Boom swing (L/R).....47°/75°
Ground pressure* ..... 0.31/0.30 kg/cm^2
Grade ability ..... 30°
Shoe width .....260 mm
Ground clearance.....320 mm
Blade (width x height).....1450 x 280 mm
*Cabin/Canopy

Miscellaneous

Fuel tank.....28.5 l
Cooling system.....2.9 l
Transport dimensions (L x w x h).....4435 x 1450 x 2528 mm
Noise Level LwA (2000/14/EC & 2005/88/EC) ..... 93/93 dBA*
* Cabine/Canopy

Optional equipment

Special paint
Bio oil
Anti-start system
Radio
Safety device for loading
Anti-theft device
Mechanical quick coupler
Long arm (+250 mm)
Hydraulic hammer

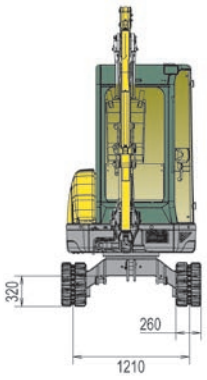
PTO	Theoretical data	
	Pressure	2500 rpm
	0 ~ 190 bar	51 ~ 20.5 l/mn
	0 ~ 190 bar	51 ~ 20.5 l/mn

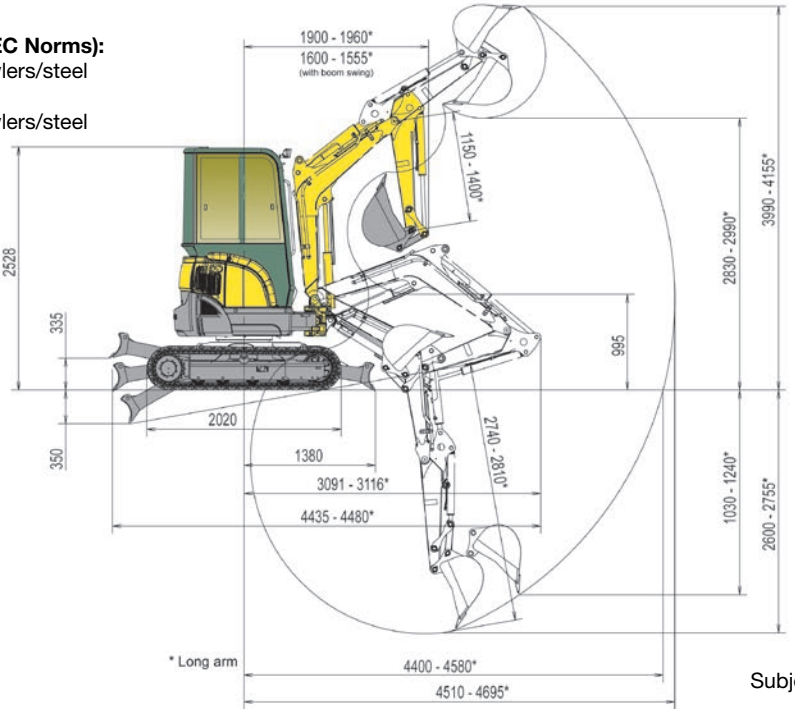
• The output reduces as the pressure increases.

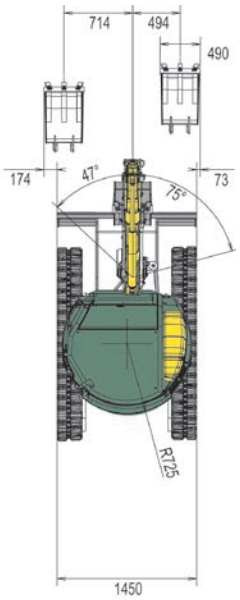
FICATIONS

Operating weight +-2% (EC Norms):
2670/2790 kg (rubber crawlers/steel crawlers with canopy)
2775/2895 kg (rubber crawlers/steel crawlers with cabin)

Transport weight +-2% (EC Norms):
2595/2715 kg (rubber crawlers/steel crawlers with canopy)
2700/2820 kg (rubber crawlers/steel crawlers with cabin)







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

Blade on ground

A	Maxi		3.0 m		2.5 m		2.0 m		
B									
3.0	395	*520	-	-	-	-	-	-	
2.5	320	*510	*450	*450	-	-	-	-	
2.0	275	*490	*510	*510	-	-	-	-	
1.0	250	*510	385	*655	530	*820	730	*1160	C
0	250	*525	380	*725	490	*920	680	*1310	
-1.0	340	*525	370	*620	490	*840	700	*1135	
-1.5	*480	*480	-	-	*600	*600	*830	*830	

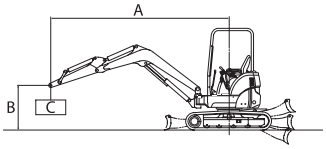
Blade above ground

A	Maxi		3.0 m		2.5 m		2.0 m		
B									
3.0	395	*490	-	-	-	-	-	-	
2.5	320	395	*450	*450	-	-	-	-	
2.0	275	335	*510	*510	-	-	-	-	
1.0	250	305	385	470	530	635	730	910	C
0	250	310	380	455	490	605	680	845	
-1.0	340	395	370	450	490	605	700	890	
-1.5	*480	*480	-	-	*600	*600	*830	*830	

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.

Machine with cab, rubber crawlers, bucket of 78 kg (400 mm).

A: Overhang from rotational axis (m).
B: Height of hooking point (m).
C: Safe working load (kg).
(- 4% with canopy).



Tipping load, rating over front

Tipping load, rating over side 90°

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Printed in France – Materials and specifications are subject to change from the manufacturer without notice – Please contact your local Yanmar Construction Equipment. Europe dealer for further information.

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