





Mini-excavator



Vi035

Operating weight: 3565/3435 kg
Arm digging force: 1900 kgf
Bucket digging force: 2800 kgf

Yanmar, inventor of the ZTS m







Mini-excavator



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Zero Tail Swing

Design principles

- The ViO35 is a true 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: 1620 mm;
- rear swing radius: 775 mm;
- overall width of the machine reduced to 1550 mm.

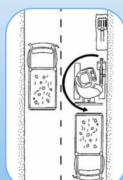


Yanmar, inventor of the ZTS m



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.
- Operations are perfectly adapted to urban areas: machine does not obstruct all lanes of traffic.



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.



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Comfort and safety

Spacious and ergonomic pilot system

- Perfect position of joysticks, armrests and travel levers with pedals.
- Comfortable, multi-adjustable seat : sliding seat, reclining backrest and weight.
- Access possible from both sides on the canopy version.
- Separate pedals for using the auxiliary power take-off line and swinging the boom. Sturdy covers which serve as footrests.









Cabin version

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

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 movements and travel
- Modern, user-friendly instrument panel, giving instant warning to the operator of any anomalies that may occur.



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Performance

Undercarriage

- The VICTAS® system (patented by Yanmar) consists in increasing the bearing surface by increasing the track path and using asymmetric crawlers:
 - increased lateral stability;
 - increased lifting capacity;
 - reduced ground damage;
 - reduced track wear;
 - quiet, vibration-free movement.
- The angular shape of the undercarriage makes it possible to eject earth and deposits of foreign matter.



Reliability and ad

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.





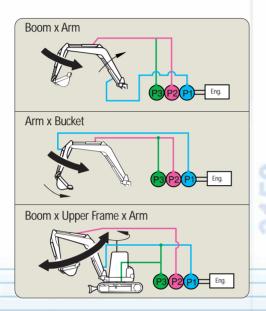






"VIPPS®" hydraulic circuit (ViO Progressive 3 Pumps System)

- 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.



Straight travelling

- The hydraulic system enables the operator to move the machine in a perfectly straight line, even when using other hydraulic circuits for other movements at the same time
- It is possible to fill a trench while travelling alongside it without risk of veering off course.

Environmentally friendly

- Combination of a high-performance Yanmar engine and the VIPPS® hydraulic system :
- increased productivity;
- reduced fuel consumption;
- less noise and pollution.

Auxiliary circuit (PTO)

 Dual or single-action auxiliary circuit to add various accessories: hydraulic rock breaker, swivelling ditch cleaning buckets, auger, etc.



accessibility

Miscellaneous protective devices

- Integrated working lamp :
 - reduces risk of damage;
 - provides better visibility at bottom of trenches.
- Hydraulic hoses pass inside the boom : perfect protection.
- Careful routing of hydraulic pipes and hoses on top of the boom.

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 control valve by removing side panel.









TECHNICAL SPEC

Engine

Yanmar Diesel 3 cylinders	3TNV82A-XBVA
Rated Output (DIN 6270B)	18.4 kw/25 HP/2500 rpm
Displacement	1331 cm ³
Max. torque	87.31 N.m./1500 rpm

Hydraulic circuit

System capacity	421
Max. pressure	206 bar
Variable flow dual piston pump	2 x 38.75 l/mn
1 gear pump	1 x 23.75 l/mn

Performances

2.7/4.6 km/h	Grade ability	30°
10 rpm	Shoe width	300 mm
1900/2800 kgf	Ground clearance	320 mm
50°/75°	Blade (width x height)	1550 x 370 mm
0.332/0.320 kg/cm ²		* cabin/canopy
	10 rpm 1900/2800 kgf 50°/75°	2.7/4.6 km/h Grade ability 10 rpm Shoe width 1900/2800 kgf Ground clearance 50°/75° Blade (width x height) 0.332/0.320 kg/cm²



Miscellaneous

Fuel tank	37 I
Cooling system	3.5 I
Transport dimensions (L x w x h)) x 2530 mm
Noise level LwA (2000/14/CE & 2005/88/CE)	94 dBA



Optional equipment

Special paint Bio Oil Long dipper arm (+ 300 mm) Arm extension (+ 500 mm) Safety device for loading Anti-theft device FOPS 2 protection bars on cab roof

PTO	Theoretical data						
FIU	Pressure	2500 rpm					
	0 ~ 206 bar	62.5 ~ 41.25 l/mn					
△ △	0 ~ 206 bar	62.5 ~ 41.25 l/mn					



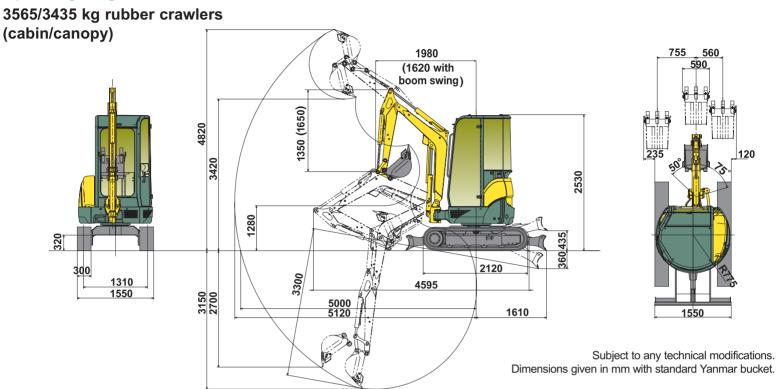


• The output reduces as the pressure increases.

IFICATIONS



Operating weight +-2%:



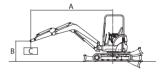
Blade	on	around	ł

A	Maxi		3.5	m	3.0) m	2.5 m		2.0 m		
В								J			
3.0	430	*660	530	*630	*590	*590	-	-	-	-	
2.0	340	*680	500	*740	*750	*750	*870	*870	-	-	
1.0	310	*730	460	*900	600	*1100	790	*1440	-	-	
0	300	*740	420	*980	560	*1240	720	*1570	-	-	С
- 1.0	380	*780	420	*900	570	*1180	720	*1420	1000	*1810	
- 1.5	480	*790	-		540	*960	730	*1270	1010	*1540	
- 2.0	630	*770	-	-	-	-	720	*920	-	-	

Machine with canopy, rubber crawlers, bucket of 89 kg (590 mm).

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

	Blade above ground										
A	Mi	axi	3.5 m		3.0	3.0 m		2.5 m		2.0 m	
В		J		J		J				H	
3.0	420	490	530	*630	*590	*590	-		-		
2.0	340	380	490	570	*750	*750	*870	*870	-		
1.0	310	350	450	530	600	680	780	910	-		
0	300	360	420	490	560	640	720	840	-		С
- 1.0	380	430	420	490	560	640	720	810	1000	1260	
- 1.5	480	520	-		540	620	730	850	1000	1200	
- 2.0	630	*770	-		-		720	*920	-		





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. Data marked * are the hydraulic limits of the lifting power.