





Mini-excavator



Vi030

Operating weight: 3270/3140 kg
Arm digging force: 1800 kgf
Bucket digging force: 2800 kgf

Yanmar, inventor of the ZTS m







Mini-excavator



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Zero Tail Swing

Design principles

- The ViO30 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: 1550 mm;
 - rear swing radius: 765 mm;
 - overall width of the machine reduced to 1550 mm.

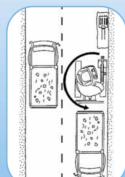


Yanmar, inventor of the ZTS m



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.





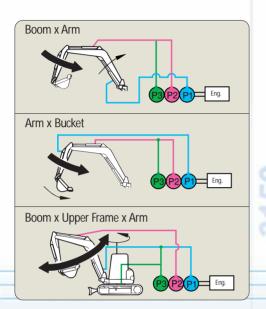






"VIPPS®" hydraulic circuit (ViO Progressive 3 Pumps System)

- 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.



ccessibility

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 21.25 l/mn

Performances

Travelling speed	2.7/4.6 km/h	Grade ability	30°
Swing speed	10 rpm	Shoe width	300 mm
Digging force (arm/bucket)	1800/2800 kgf	Ground clearance	320 mm
Boom swing (L/R)	50°/75°	Blade (width x height)	1550 x 370 mm
Ground pressure*	. 0.305/0.293 kg/cm ²		* cabin/canopy



Miscellaneous

Fuel tank	37 I
Cooling system	3.5 I
Transport dimensions (L x w x h)	4325 x 1550 x 2530 mm
Noise level LwA (2000/14/CE & 2005/88/	CE) 95 dBA



Optional equipment

Special paint Bio Oil Long dipper arm (+ 250 mm) Arm extension (+ 500 mm) Safety device for loading Anti-theft device FOPS 2 protection bars on cab roof

РТО	Theoretical data					
FIG	Pressure	2500 rpm				
	0 ~ 206 bar	60 ~ 38.75 l/mn				
(A) (A)	0 ~ 206 bar	60 ~ 38.75 l/mn				

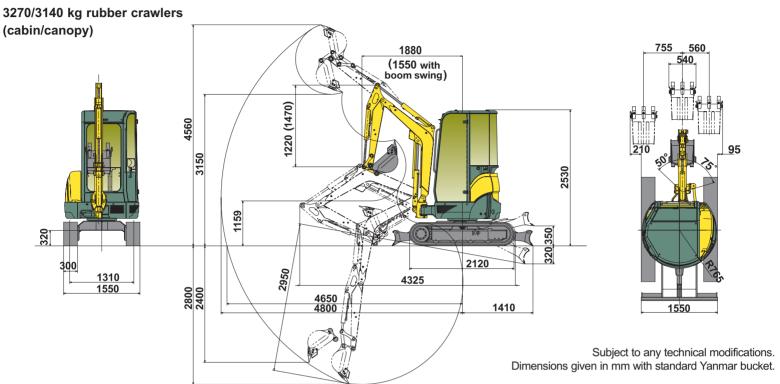




IFICATIONS



Operating weight +-2%:



Blade on ground									
А	Mi	axi	3.0	3.0 m		2.5 m		2.0 m	
В		J				G		G	
3.0	430	*680	*620	*620	-	-	-	-	
2.5	360	*700	540	*700	*660	*660	-	-	
2.0	330	*700	540	*770	730	*880	-	-	
1.0	290	*700	490	*1010	680	*1300	870	*1750	С
0	310	*750	490	*1140	630	*1450	910	*1960	
- 1.0	410	*750	480	*940	640	*1270	930	*1730	
- 1.5	520	*730	_	_	640	*960	940	*1310	

									_
Blade above ground									
A	Ma	axi	3.0	3.0 m		2.5 m		2.0 m	
В									
3.0	430	490	*620	*620	-	-	-	-	
2.5	360	430	540	*660	*660	*660		-	
2.0	330	390	540	630	720	*830		-	
1.0	290	350	490	580	680	790	870	1060	С
0	310	360	490	570	630	760	910	1090	
- 1.0	400	480	480	580	640	760	930	1130	
- 1.5	520	630	-	-	640	760	940	1090	

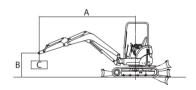
The data contained in these tables represent the lifting capacity in accordance with ISO standard 10567. They correspond to 75 % of the maximum static tipping load or 87 % of the hydraulic lifting power. Data marked * are the hydraulic limits of the lifting power.

Machine with canopy, rubber crawlers, bucket of 86 kg (540 mm).

A: Overhang from rotational axis (m).

B: Height of hooking point (m).

C : Safe working load (kg). (+ 4% with cab).



Tipping load, rating over front

Tipping load, rating over side 90°