

SPECIFICATIONS

ENGINE

Model	Yanmar 3TNV88
Type	Water-cooled, 4-cycle, 3-cylinder direct injection type diesel engine
Rated power	
SAE J1349	22.3 kW (29.9 HP) at 2 500 min ⁻¹ (rpm)
DIN 6271	22.1 kW (30.0 PS) at 2 500 min ⁻¹ (rpm)
JIS D1005	22.3 kW (30.3 PS) at 2 500 min ⁻¹ (rpm)
Maximum Torque	105 N·m (11 kgf·m) at 1 500 min ⁻¹ (rpm)
Bore & Stroke	88 x 90 mm
Piston displacement	1.642 L
Battery	1 x 12 V, 55 Ah

HYDRAULIC SYSTEM

The proven 3-pump system and arm regenerative circuit have been improved to make combined operations and fine control easier and smoother.

Main pumps	Two variable displacement axial piston pumps
Maximum oil flow	2 x 40 L/min
Third pump	One gear pump
Maximum oil flow	26.3 L/min
Pilot pump	One gear pump
Maximum oil flow	11.3 L/min

RELIEF VALVE SETTINGS

Main pumps circuit	24.5 MPa
Third pump circuit	20.6 MPa
Pilot circuit	3.9 MPa

HYDRAULIC CYLINDERS

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom raise, arm roll-in and roll-out circuits to absorb shocks at stroke ends.

DIMENSIONS

	Quantity	Bore	Rod diameter	Stroke
Boom Canopy	1	80 mm	45 mm	579 mm
	1	85 mm	50 mm	576 mm
Boom Cabin	1	80 mm	45 mm	563 mm
	1	85 mm	50 mm	564 mm
Arm	1	70 mm	40 mm	546 mm
	1	75 mm	45 mm	597 mm
Bucket	1	65 mm	40 mm	435 mm
	1	65 mm	40 mm	435 mm
Boom swing	1	85 mm	45 mm	525 mm
	1	85 mm	45 mm	525 mm
Blade	1	85 mm	45 mm	135 mm
	1	95 mm	45 mm	140 mm

Figures in are data on the ZAXIS30U_s.

Figures in are data on the ZAXIS35U_s.

CONTROLS

Hydraulic pilot control levers for all operations.

FRONT ATTACHMENTS

BACKHOE BUCKETS

ISO 7451 capacity	Width		No. of teeth	Weight	Front Attachment			
	Without side cutters	With side cutters			ZAXIS30U _s		ZAXIS35U _s	
					1.17 m arm	1.52 m arm	1.32 m arm	1.72 m arm
0.055 m ³	300 mm	350 mm	3	60 kg	A	A	A	A
0.065 m ³	350 mm	400 mm	3	65 kg	A	A	A	A
0.08 m ³	400 mm	450 mm	3	67 kg	A	A	A	A
0.09 m ³	450 mm	500 mm	4	73 kg	A	A	A	A
0.10 m ³	500 mm	550 mm	4	76 kg	A	B	A	A
0.11 m ³	550 mm	600 mm	4	80 kg	B	C	A	B
0.13 m ³	600 mm	650 mm	4	84 kg	C	C	B	C
0.14 m ³	650 mm	700 mm	4	87 kg	-	-	C	-
0.15 m ³	700 mm	750 mm	4	89 kg	-	-	C	-
Arm crowd force					17.2 kN	14.7 kN	19.1 kN	17.2 kN
Bucket digging force					27.5 kN	27.5 kN	27.5 kN	27.5 kN

A: General digging B: Light-duty digging C: Loading

SWING MECHANISM

High-torque, axial piston motor with planetary reduction gear. Swing circle is single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type. Swing shockless valve built in swing motor absorbs shocks when stopping swing, ensuring smooth stops.

Swing speed	9.3 min ⁻¹ (9.3 rpm)
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UNDERCARRIAGE

TRACKS
Tractor-type undercarriage. Welded track frame using carefully selected materials. Side frame welded to track frame.

NUMBERS OF ROLLERS ON EACH SIDE

Upper roller	1
Lower rollers	4

TRAVEL DEVICE

Each track driven by a high-torque, 2-speed axial piston motor through planetary reduction gear, allowing counter-rotation of the tracks. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel, ensuring smooth stops.

Travel speeds (rubber shoes)	High: 0 - 4.5 km/h Low: 0 - 2.8 km/h
Travel speeds (grouser shoes)	High: 0 - 4.4 km/h Low: 0 - 2.7 km/h
Gradeability	30 degrees (58%) continuous

WEIGHTS AND GROUND PRESSURE

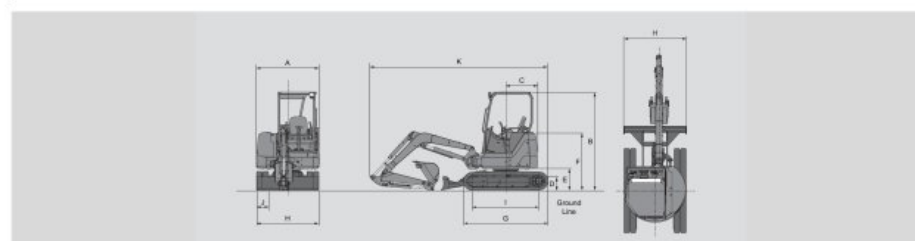
Equipped with ZAXIS30U_s: 1.17 m arm and 0.09 m³ (ISO 7451 capacity) bucket, ZAXIS35U_s: 1.32 m arm and 0.11 m³ (ISO 7451 capacity) bucket.

	ZAXIS30U _s		ZAXIS35U _s	
	Operating weight	Ground pressure	Operating weight	Ground pressure
Canopy version				
300 mm rubber shoes	3 070 kg	28 kPa	3 480 kg	31 kPa
300 mm grouser shoes	3 160 kg	29 kPa	3 570 kg	32 kPa
Cabin version				
300 mm rubber shoes	3 220 kg	29 kPa	3 630 kg	33 kPa
300 mm grouser shoes	3 310 kg	30 kPa	3 720 kg	34 kPa

SERVICE REFILL CAPACITIES

Fuel tank	40.0 liters
Engine coolant	6.0
Engine oil	7.2
Travel device (each side)	0.6
Hydraulic system	58.0
Hydraulic oil tank (Reference oil level)	35.0

DIMENSIONS

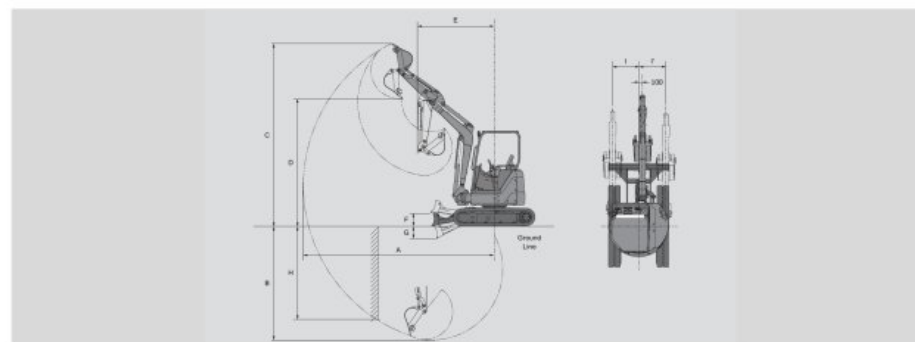


Note:
The illustration shows the ZAXIS30U_s canopy version equipped with 1.17 m arm and 300 mm rubber shoes. The canopy and cabin conform to ROPS (ISO 3471) and FOPS (ISO 10262, Level 1) requirements.

Unit: mm

	ZAXIS30U _s		ZAXIS35U _s	
	Canopy	Cabin	Canopy	Cabin
A Overall width	1 550		1 740	
B Overall height	2 460	2 500	2 460	2 500
C Rear-end swing radius (With extra counterweight)	775 (865)		870 (960)	
D Minimum ground clearance	290		290	
E Counterweight clearance	560		560	
F Engine cover height	1 420		1 420	
G Undercarriage length	2 100		2 100	
H Undercarriage width	1 550		1 740	
I Sprocket centre to idler centre	1 650		1 650	
J Track shoe width	300		300	
K Maximum transport length (With long arm)	4 450 (4 560)		4 650 (4 780)	

WORKING RANGES



Note:
The illustration shows the ZAXIS30U_s canopy version equipped with 0.09 m³ bucket, 1.52 m arm and 300 mm rubber shoes.

Unit: mm

	ZAXIS30U _s		ZAXIS35U _s	
	Canopy	Cabin	Canopy	Cabin
A Maximum digging reach	4 900 [5 170]		5 220 [5 530]	
B Maximum digging depth	2 830 [3 130]		3 060 [3 460]	
C Maximum cutting height	4 680 [4 720]	4 450 [4 480]	4 900 [5 010]	4 720 [4 820]
D Maximum dumping height	3 260 [3 340]	3 040 [3 130]	3 490 [3 600]	3 330 [3 430]
E Minimum swing radius (At maximum boom swing)	1 940 (1 580) [2 060 (1 660)]	2 140 (1 730) [2 170 (1 730)]	2 070 (1 670) [2 170 (1 730)]	2 230 (1 810) [2 290 (2 010)]
F Blade bottom highest position above ground	360		360	
G Blade bottom lowest position above ground	315		390	
H Maximum vertical wall	2 340 [2 460]		2 670 [3 020]	
I / F Offset distance (Maximum boom-swing angle)	L 605 (72°) / R 740 (62°)	L 605 (62°) / R 740 (62°)	L 605 (72°) / R 740 (62°)	L 605 (62°) / R 740 (62°)

The figure in [] shows the equipped with long arm.