

SANY SY50U – 5.3T Mini Excavator



TECHNICAL SPECIFICATIONS

SY50U

ENGINE

Model	Yanmar 4TNV88-PSY
Type	Water-cooled, 4 cylinder, with common rail and DPF
Exhaust emissions	Stage V
Rated power	29.1 kW / 2400 rpm
Max. torque	144.9 Nm / 1500 rpm
Displacement	2.181 cc/m
Batteries	1 x 12 V / 80 Ah

HYDRAULIC SYSTEM

Main pump	1 x variable-piston-pump with load-sensing control
Max. flow	110 l/min
Travel motor	2 speed axial piston motor with planetary reducer and automatic clutch-brake
Swing motor	Axial piston motor with planetary reducer and automatic holding brake

SERVICE REFILL CAPACITIES

Fuel tank	78 l
Engine coolant	4.2 l
Engine oil	7.4 l
Drive (per side)	0.9 l
Hydraulic system	80 l
Hydraulic oil tank	92 l

PERFORMANCE

Swing speed	10 r/min
Max. travel speed	High 4 km/h, Slow 2.7 km/h
Max. travel force	40.7 kN
Gradeability	35°
Bucket capacity	0.152 m³
Grapple capacity	0.72 kg/cm²
Bucket digging force ISO	22.5 kN
Arm digging force ISO	22.8 kN

OPERATING MASS

SY50U	5700 kg
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UNDER AND UPPER STRUCTURE

Booms length	2700 mm
Arm length	1500 mm
Batteries	1
Top rollers	4
Reduction device	Planetary gear reducer driven by an axial piston motor, automatic hydraulic released slewing brake

RELIEF VALVE SETTINGS

Implement circuit	245 bar
Swing circuit	191 bar
Travel circuit	240 bar
Pilot pressure	25 bar

LIFTING CAPACITIES OF LOWER DOZER BLADE

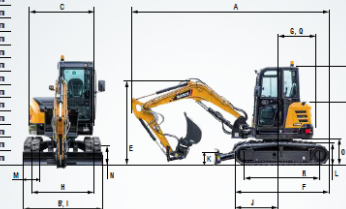
Load point height	Radius				Digging reach
	2.0 m / 6.6 ft	2.0 m / 6.6 ft	4.0 m / 13.1 ft	5.0 m / 16.4 ft	Maximal
4.0 m / 13.1 ft	kg				1085 / 845
12.1 ft / 3.7 m	kg				2087 / 1858
2.0 m / 6.6 ft	kg	1050 / 815			855
9.8 ft / 3.0 m	kg	2310 / 1787			1441
2.0 m / 6.6 ft	kg	1545 / 1180	1190 / 790		1055 / 580
6.6 ft / 2.0 m	kg	2398 / 2618 / 2418 / 1728			2321 / 1278
1.0 m / 3.3 ft	kg	2020 / 1110 / 1365 / 780 / 1090 / 560			1079 / 555
3.3 ft / 1.0 m	kg	4444 / 2442 / 2602 / 1672 / 2376 / 1232			2365 / 1221
Ground	kg	2165 / 1075 / 1445 / 735			1100 / 575
100 lb	lb	4762 / 2365 / 3178 / 1617			2420 / 1265
-1.0 m / 3.3 ft	kg	2729 / 2080 / 1875 / 1075 / 1225 / 735			1110 / 655
-3.3 ft / -1.0 m	kg	6017 / 4480 / 4245 / 2365 / 2915 / 1617			2442 / 1441
-2.0 m / 6.6 ft	kg	2129 / 2050 / 1270 / 1100			1040 / 905
-6.6 ft / -2.0 m	kg	4697 / 4310 / 3014 / 2420			2288 / 1991

LIFTING CAPACITIES OF UPPER DOZER BLADE

Load point height	Radius				Digging reach
	2.0 m / 6.6 ft	2.0 m / 6.6 ft	4.0 m / 13.1 ft	5.0 m / 16.4 ft	Maximal
4.0 m / 13.1 ft	kg				1025 / 845
12.1 ft / 3.7 m	kg				2255 / 1858
2.0 m / 6.6 ft	kg	985 / 815			790 / 655
9.8 ft / 3.0 m	kg	2167 / 1787			1729 / 1441
2.0 m / 6.6 ft	kg	1485 / 1190 / 1460 / 790			790 / 580
6.6 ft / 2.0 m	kg	2267 / 2618 / 2112 / 1728			2440 / 1278
1.0 m / 3.3 ft	kg	1400 / 1110 / 1325 / 760 / 1090 / 560			870 / 555
3.3 ft / 1.0 m	kg	2900 / 2442 / 2635 / 1672 / 1494 / 1232			1495 / 1221
Ground	kg	1780 / 1075 / 985 / 735			790 / 575
100 lb	lb	2892 / 2365 / 1991 / 1617			1540 / 1265
-1.0 m / 3.3 ft	kg	2729 / 2080 / 1365 / 1075 / 900 / 735			890 / 655
-3.3 ft / -1.0 m	kg	6017 / 4480 / 2891 / 2365 / 1980 / 1617			1760 / 1441
-2.0 m / 6.6 ft	kg	2129 / 2050 / 1270 / 1100			1040 / 905
-6.6 ft / -2.0 m	kg	4697 / 4310 / 3014 / 2420			2288 / 1991

DIMENSIONS (TRANSPORT)

A. Transport length	5280 mm
B. Transport width	1960 mm
C. Superstructure width	1760 mm
D. Height over cabin TOP	2520 mm
E. Height of boom - transport	2080 mm
F. Overall length of crawler	2510 mm
G. Tail length	880 mm
H. Track gauge	1560 mm
I. Undercarriage width (blade)	1960 mm
J. Horizontal distance to blade	1760 mm
K. Blade height	240 mm
L. Track height	610 mm
M. Track pads width	400 mm
N. Min. ground clearance	225 mm
O. Counterweight clearance	675 mm
P. Engine cover height	1660 mm
Q. Tail swing radius	890 mm
R. Center distance of tumbler	1970 mm



WORKING AREA

A. Max. digging reach	5880 mm
B. Max. digging depth	2420 mm
C. Max. digging height	6460 mm
D. Max. dumping height	4155 mm
E. Min. dumping height	1410 mm
F. Max. vertical digging depth	2480 mm
G. Overall height over arm by min. swing radius	4155 mm
H. Swing radius by max. boom swing (L)	2260 mm
Swing radius by max. boom swing (R)	2080 mm
I. Max. clearance when blade up	420 mm
J. Max. depth of blade down	405 mm
K. Offset boom (L)	765 mm
Offset boom (R)	710 mm
Max. boom-swing angle (L)	84°
Max. boom-swing angle (R)	84°



Attachments:
Civil Spec
Hydraulic tilt hitch
GP Bucket Pack (300-450-600-1200M)
Ripper