



Engine	Yanmar 3TNV80F-SNLY, EU Stage V
Net Power	15.2 kW (20.4 hp / 20.7 ps)
Operating Weight	Cab 2,750 kg (6,063 lb) Canopy 2,680 kg (5,908 lb)
Bucket Capacity	0.08 m ³ (0.1 yd ³)

9027F^{ZTS} EXCAVATOR

TOUGH WORLD. TOUGH EQUIPMENT.

SPECIFICATIONS

Operating weight	Cab 2,750 kg (6,063 lb)
-------------------------	--------------------------------

Operating weight includes coolant, lubricants, full fuel tank, cab, standard shoes, boom, arm, bucket and operator 75 kg (165 lbs).

Bucket capacity	0.08 m³ (0.1 yd³)
------------------------	--

ENGINE

Description

Yanmar Tier 4F/EU Stage V, 3-cylinder straight four strokes, indirect injection.

Emission rating	EPA Tier 4F / EU Stage V
Engine manufacturer	Yanmar
Engine model	3TNV80F-SNLY
Aspiration	Natural
Charged air cooling	Aftercooler
Cooling fan drive	Direct
Displacement	1.267 L (0.33 gal)
Rated speed	2,500 rpm
Engine output - net	15.2 kW (20.4 hp / 20.7 ps)
Maximum torque	67.3 N·m (49.6 lbf·ft) @1,800 rpm
Bore × Stroke	80 × 84 mm (3.1" × 3.3")

UNDERCARRIAGE

Track shoe each side	41 mm (1.6" metal) / 80 mm (3.2" rubber)
Link pitch	101.6 mm (4" metal) / 52.5 mm (2.1" rubber)
Shoe width, triple grouser	300 mm (1')
Bottom rollers each side	3
Top rollers each side	1

SWING SYSTEM

Description

Planetary gear reduction driven by high torque axial piston motor, with oil disk brake. Swing parking brake resets within five seconds after swing pilot controls return to neutral

Swing speed	9.5 rpm
Swing torque	4,700 N·m (3,467 lbf·ft)

HYDRAULIC SYSTEM

Main pump

Type	Load-sensing variable pump
Maximum flow	86 L/min (23 gal/min)

Relief valve setting

Implement	21.6 MPa (3,133 psi)
Travel circuit	21.6 MPa (3,133 psi)
Slew circuit	16.7 MPa (2,422 psi)
Pilot circuit	3.5-3.9 MPa (508-566 psi)

Hydraulic cylinders

Boom Cylinder – Bore × Stroke	φ 70× 510 mm (2.8"×1' 8")
Arm Cylinder – Bore × Stroke	φ 70 × 482 mm (2.8"×1' 7")
Bucket Cylinder – Bore × Stroke	φ 65 ×382 mm (2.6"×1' 3")

ELECTRIC SYSTEM

System voltage	12 V
Batteries	12 V
Alternator	12 V - 40 A
Start motor	12 V - 1.4 kW (1.9 hp/ps)

SERVICE CAPACITIES

Fuel tank	27 L (7.1 gal)
Engine oil	4.4 L (1.2 gal)
Cooling system	5 L (1.3 gal)
Hydraulic reservoir	26 L (6.9 gal)
Hydraulic system total	40 L (10.6 gal)

SOUND PERFORMANCE

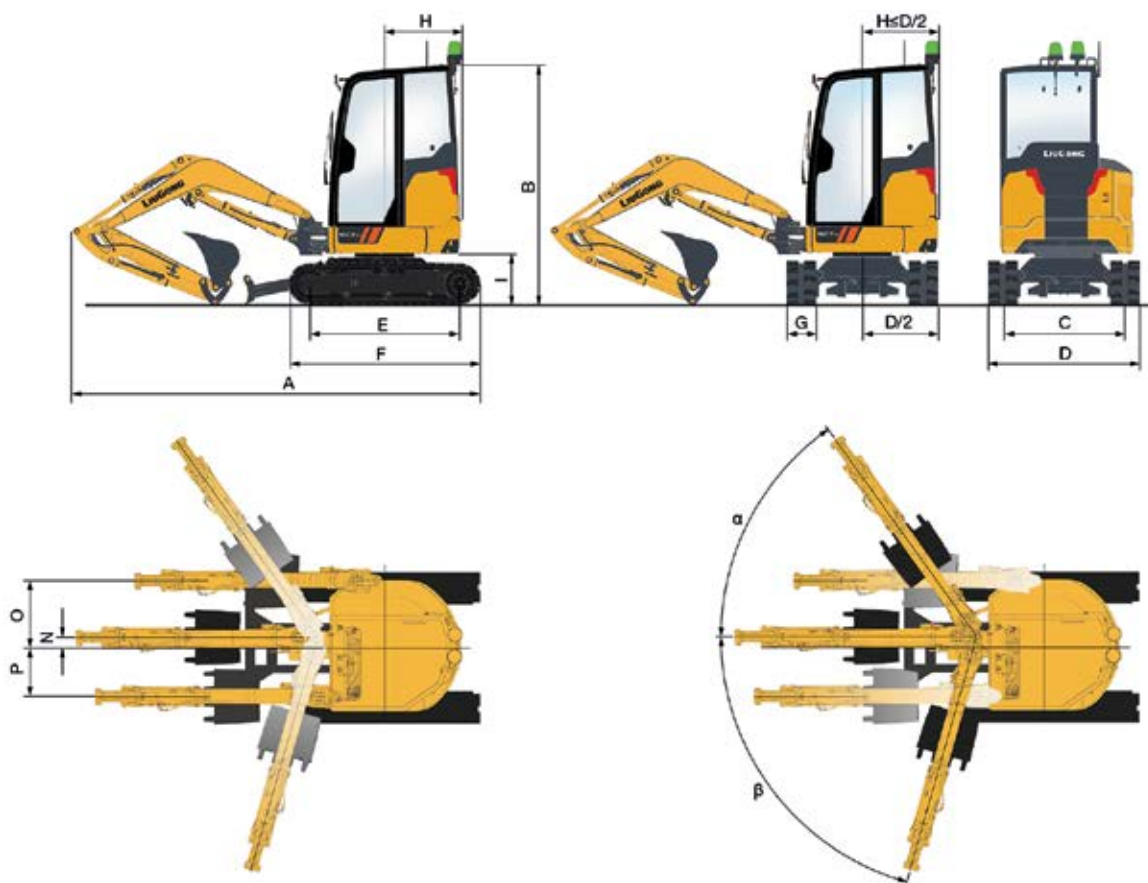
Interior Sound Power Level (ISO 6396)	79 dB(A)
Exterior Sound Power Level (ISO 6395)	93 dB(A)

DRIVE AND BRAKES

Description

Steering controlled by two hand levers with pedals.

Max. travel speed	High: 4.5 km/h (2.8 mph) Low: 2.7 km/h (1.7 mph)
Gradeability	30°
Max. drawbar pull	24.6 kN (5,530 lbf)



DIMENSIONS

Boom	2,080 mm (6'10")
Arm	1,300 mm (4'3")
A Shipping Length	4,160 mm (13'8")
B Shipping Height	2,450 mm (8')
C Track Gauge	1,250 mm (2'6")
D Undercarriage Width	1,550 mm (3'3")
E Length to Center of Rollers	1,540 mm (5'1")
F Track Length	1,953 mm (6'5")
G Track Shoe Width	300 mm (1')
H Tail Swing Radius	775 mm (2'7")
I Counterweight Ground Clearance	530 mm (1'9")
Overall Height of Cab	2,450 mm (5'4")
Min. Ground Clearance	295 mm (1')
Overall Width of Upper Structure	1,350 mm (4'5")
N Offset	110 mm (4")
O Maximum Boom Offset to the Right	694 mm (2'3")
P Maximum Boom Offset to the Left	498 mm (1'8")
α Maximum Boom Swing Angle to the Right	54.5°
β Maximum Boom Swing Angle to the Left	74°

ARM DIMENSIONS

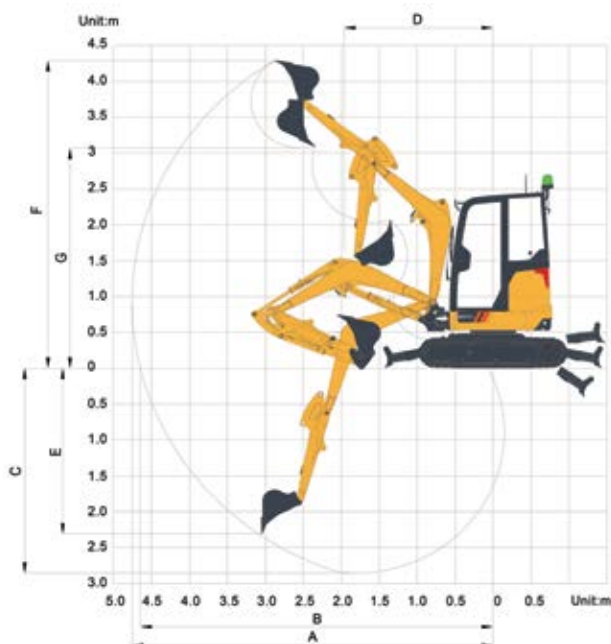
Description	
Arm	1,300 mm (4'3")
Length	1,603 mm (5'3")
Height	423 mm (1'5")
Width	202 mm (8")
Weight	99.4 kg (219 lb)

Includes cylinder, linkage and pin.

BOOM DIMENSIONS

Description	
Boom	2,080 mm (6'10")
Length	2,160 mm (7'1")
Height	730 mm (2'5")
Width	262 mm (10")
Weight	137.8 kg (304 lb)

Includes cylinder, piping and pin, excludes boom cylinder pin.



WORKING RANGE

Boom Length	2,080 mm (6'10")
Arm Length	1,300 mm (4'3")
A. Max. Digging Reach	4,757 mm (15'7")
B. Max. Digging Reach on Ground	4,648 mm (15'2")
C. Max. Digging Depth	2,857 mm (9'4")
D. Min. Front Swing Radius	1,965 mm (6'5")
E. Max. Vertical Wall Digging Depth	2,312 mm (7'7")
F. Max. Cutting Height	4,365 mm (14'3")
G. Max. Dumping Height	3,067 mm (10')
Max. Digging Depth, 2.44 m (8') level	2,386 mm (7'10")
Blade up	350 mm (1'2")
Blade down	400 mm (1'4")
Bucket Digging Force (ISO)	20 kN (4,496 lbf)
Arm Digging Force (ISO)	12 kN (2,698 lbf)
Bucket Capacity	0.08 m³ (0.1 yd³)
Bucket Tip Radius	662 mm (2'2")

MACHINE WEIGHTS & GROUND PRESSURE

Shoe width	Shoe type	Operating weight	Ground pressure	Overall width
		2,080 mm (6'10"), 1,300 mm (4'3") arm, 0.08 m³ (0.1 yd³) bucket, 315 kg (694 lb) counterweight		
300 mm (1')	Rubber	2,750 kg (6,063 lb)	26.4 kPa (3.8 psi)	1,550 mm (5'1")
	Metal	2,860 kg (6,305 lb)	27.5 kPa (4.0 psi)	1,550 mm (5'1")

BUCKET SELECTION GUIDE

Bucket Type	Capacity	Cutting Width	Weight	Teeth pcs	2,080 mm (6'10") Boom 1,300 mm (4'3") Arm
General Purpose	0.08 m³ (0.1 yd³)	567 mm (1'10")	61 kg (134 lbs)	4	A/B
	0.09 m³ (0.12 yd³)	1,000 mm (3'3")	65 kg (143 lbs)	0	A
	0.05 m³ (0.07 yd³)	400 mm (1'4")	45 kg (99 lbs)	3	B
	0.02 m³ (0.03 yd³)	234 mm (9")	39 kg (86 lbs)	2	B

The recommendations are given as a guide only, based on typical operation conditions. Bucket capacity based on ISO 7451, heaped material with a 1: 1 angle of repose.

Maximum material density:

- A. 1,200-1,300 kg/m³ (2,023-2,191 lb/yd³) : Coal, Caliche, Shale
- B. 1,400-1,600 kg/m³ (2,360-2,697 lb/yd³) : Wet earth and clay, limestone, sandstone
- C. 1,700-1,800 kg/m³ (2,865-3,034 lb/yd³) : Granite, wet sand, well blasted rock
- D. 1,900 kg/m³ (3,203 lb/yd³) : Wet mud, Iron ore
- NA. Not applicable



205 Midland Hwy. Epsom (Bendigo). 3551
 PH: 03 5445 6900
 Email: mail@mccullochs.com.au
 Web: www.mccullochs.com.au