

## Specifications

### ENGINE

Model	Mitsubishi S3L2		
Type	4 Cycle. In line, water cooled Diesel		
Rated flywheel horse power			
SAE	J1995 (gross)	24.7 HP ( 18.4kW)	at 2,300rpm
	J1349 (net)	23.1 HP ( 17.2kW)	at 2,300rpm
DIN	627 1/1 (gross)	25.0 PS ( 18.4kW)	at 2,300rpm
	627 1/1 (net)	23.4 PS ( 17.2kW)	at 2,300rpm
Max. torque	8.0 kgf-m(58 lbf-ft) at 1,800 rpm		
Bore x stroke	78mm x 92mm (3.07" x 3.62")		
Piston displacement	1,318cc (80.4 in <sup>3</sup> )		
Batteries	12V - 80AH		
Starting motor	12V - 1.7kW		
Alternator	12V - 50A		

### HYDRAULIC SYSTEM

Main pumps	
Type	Variable displacement piston pumps
Rated flow	2 x 27.6 + 19.6 L/min
Sub-pump for pilot circuit	Gear pump
Hydraulic motors	
Travel	Two speed axial piston motor with counter balance valve and parking brake
Swing	Axial piston motor with automatic brake
Relief valve setting	
Implement circuits	220 Kg/cm <sup>2</sup> (3,130 psi)
Travel circuit	220 Kg/cm <sup>2</sup> (3,130 psi)
Swing circuit	175 Kg/cm <sup>2</sup> (2,490 psi)
Pilot circuit	30 Kg/cm <sup>2</sup> (430 psi)
Service valve	Installed

### HYDRAULIC CYLINDER

No. of cylinder - bore x stroke	
Boom	75 x 565 mm (3.0" x 22.2")
Arm	70 x 500 mm (2.8" x 19.7")
Bucket	60 X 420 mm (2.4" x 16.5")
Boom swing	75 X 400 mm (3.0" x 15.7")
Dozer blade	85 X 140 mm (3.3" x 5.5")

### NOISE LEVEL(CAB)

Noise Levels (dynamic value)	
LwA	94dB
LpA	75dB

### COOLANT & LUBRICANT CAPACITY

(refilling)	liter	US gal	UK gal
Fuel tank	38	10.0	8.4
Engine coolant	4.2	1.1	0.9
Engine oil	5.9	1.6	1.3
Hydraulic tank	32	8.5	7.0

### TRAVEL LEVERS

Traveling and steering : Two levers with pedals.

### CONTROL LEVERS

Type	
Pilot control	Two joysticks with one safety lever (LH): Swing and arm, (RH): Boom and bucket with horn (ISO)
Engine throttle	Mechanical, cable type

### SWING SYSTEM

Swing motor	Axial piston motor
Swing reduction	Planetary gear reduction
Swing circuit lubrication	Grease - bathed
Swing brake	Wet disc
Swing speed	9 rpm

### DRIVES & BRAKES

Max. travel speed(high) / (low)	4.4km / 2.4km (2.7mph) / (1.5mph)
Maximum traction force	2.4ton
Maximum gradeability	30°
Parking brake	Wet disc

### DIGGING FORCE(ISO)

Bucket	2,050 kgf	
	20.1 kN	
Arm	4,520 lbf	
	1,120mm(3' 8")	1,350mm(4' 5")
	1,400 kgf	1,265 kgf
	13.7 kN	12.4 kN
	3,090 lbf	2,790 lbf

### WEIGHT(APPROXIMATE)

Operating weight, including 2,030 mm (6' 8") boom, 1,120 mm (3' 8") arm, SAE heaped 0.08 m<sup>3</sup> (0.1 yd<sup>3</sup>) excavator bucket, lubricant, coolant, full fuel tank, hydraulic tank and the standard equipment.

Shoe Width	Rubber shoe 300 mm (12")	
Operating Weight	Cabin	2,880 Kg (6,350lb)
	Canopy	2,730 Kg (6,020lb)
Ground Pressure	Cabin	0.29 kg / cm <sup>2</sup> (4.12psi)
	Canopy	0.27 kg / cm <sup>2</sup> (3.84psi)

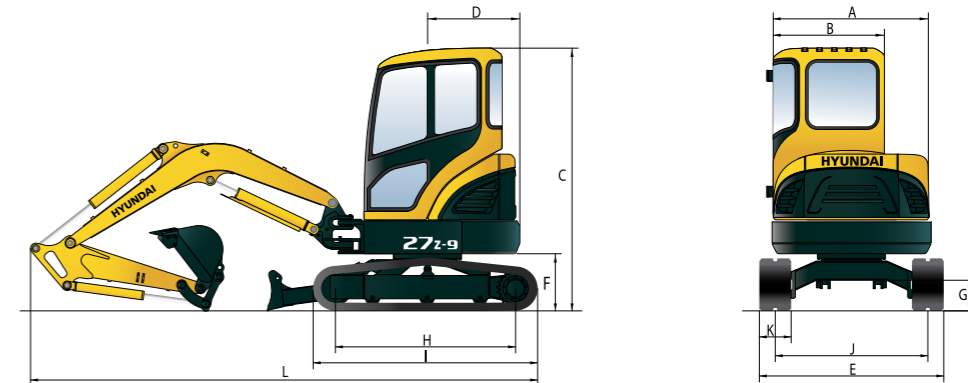
### UNDERCARRIAGE

X-leg type center frame is integrally welded with reinforced box-section track frames. The undercarriage includes lubricated rollers, track adjusters with shock absorbing springs and sprockets, and rubber shoes.

Center frame	X-leg type
Track frame	Pentagonal box type
No. of carrier roller on each side	1
No. of track roller on each side	3

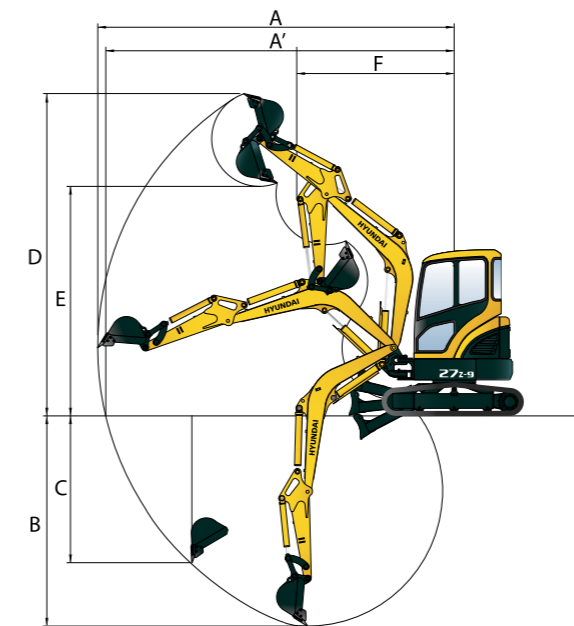
## Dimensions & Working Range

### R27Z-9 DIMENSIONS



		mm (ft-in)			
A	Overall width of upper structure	1,485 (4' 10")	G	Ground clearance	290 (0' 11")
B	Overall width of cab	1,050 (3' 5")	H	Tumbler distance	1,550 (5' 1")
C	Overall height of cab	2,500 (8' 2")	I	Track length	1,970 (6' 6")
D	Tail swing radius	775 (2' 7")	J	Track gauge	1,250 (4' 1")
E	Overall width	1,550 (5' 1")	K	Track shoe width	300 (0' 12")
F	Clearance under counterweight	540 (1' 9")	L	Overall length	4,180 (13' 9")
				Overall length (with long arm)	4,220 (13' 10")

### R27Z-9 WORKING RANGE



		mm (ft-in)	
Boom length	2,030 (6' 8")		
Arm length	1,120 (3' 8")	1,350 (4' 5")	
A	Max. digging reach	4,650 (15' 3")	4,860 (15' 11")
A'	Max. digging reach at ground	4,515 (14' 10")	4,735 (15' 6")
B	Max. digging depth	2,500 (8' 2")	2,720 (8' 11")
C	Max. vertical wall digging depth	2,085 (6' 10")	2,310 (7' 7")
D	Max. digging height	4,270 (14' 0")	4,405 (14' 5")
E	Max. dumping height	2,890 (9' 6")	3,030 (9' 11")
F	Min. swing radius	2,055 (6' 9")	2,090 (6' 10")