

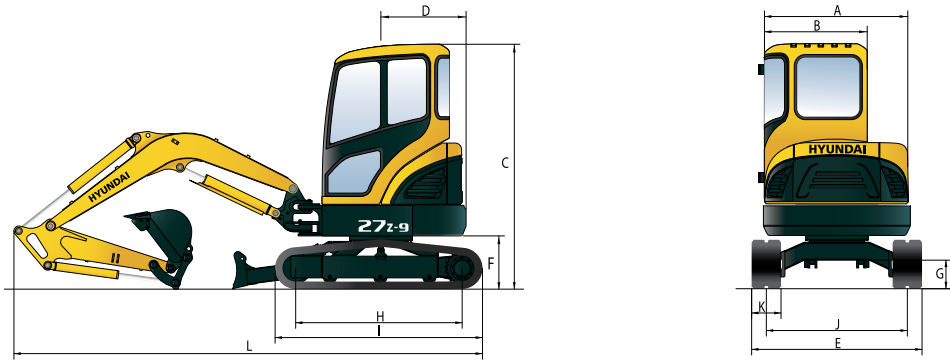
We build a better future

# Robex 27z-9

With Tier 4 Engine installed

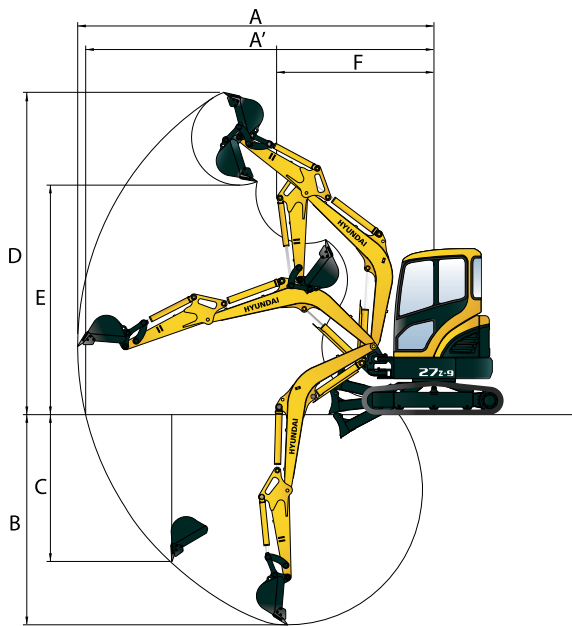
## Dimensions & Working Range

### 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")

### R27Z-9 WORKING RANGE



mm (ft-in)		
	Boom length	2,030 (6' 8")
	Arm length	1,120 (3' 8")
A	Max. digging reach	4,650 (15' 3")
A'	Max. digging reach at ground	4,515 (14' 10")
B	Max. digging depth	2,500 (8' 2")
C	Max. vertical wall digging depth	775 (2' 7")
D	Max. digging height	1,270 (4' 2")
E	Max. dumping height	2,890 (9' 6")
F	Min. swing radius	2,055 (6' 9")

\* Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine may vary according to International standards.  
 \* The photos may include attachments and optional equipment that are not available in your area.  
 \* Materials and specifications are subject to change without advance notice.  
 \* All imperial measurements rounded off to the nearest pound or inch.

PLEASE CONTACT

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\*Photo may include optional equipment.

**HYUNDAI**  
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# Pride at Work

Hyundai Heavy Industries strives to build state-of-the-art earthmoving equipment to give every operator maximum performance, more precision, versatile machine preferences, and proven quality. Take pride in your work with Hyundai!

## Robex 27z-9

### Machine Walk-Around

#### Rugged Upper and Lower Frame

The upper frame is designed for heavy duty to absorb high stress load on the job. X-leg center frame and reinforced box section track frame provide exceptional strength and longer service life to withstand tough working conditions.

#### Engine Technology

The R27Z-9 is powered by a proven and reliable, Tier 4 certified Mitsubishi S3L2. This engine provides efficient fuel combustion and reduced noise.

#### Efficient Control System

Control devices are all conveniently located for improved operator comfort and productivity. Safety lever on the left-side console is designed to prevent exiting the cabin while hydraulic controls are live.

#### Advanced Hydraulic System

The R27Z-9 hydraulic system is precision designed for fast operation with fine control capabilities.

#### Comfortable and Durable Cabin

The cabin is roomy and ergonomically designed, with reduced sound levels and good visibility. Both canopy and cabin style frames meet international standards TOPS, ROPS, FOPS ensuring operator's safety.

#### Operator Convenience

The R27Z-9 features a suspension seat, foldable pedals for added space and multiple storage compartments. The monitoring system includes seven warning indicators, water temperature gauge, fuel gauge and hour meter for productive, convenient operating.

#### Easy and Simple Maintenance

An adjustable suspension seat, arm rests, ergonomically designed joysticks and plenty of leg room help to reduce operator fatigue. A array of indicators and gauges are displayed on the monitor which keep the operator aware of machine performance at all times. The monitoring system includes seven warning indicators, water temperature gauge, fuel gauge and hour meter.

#### Extended Life of Components

The R27Z-9 reduces operating costs over time with long life hydraulic filters, hydraulic oil, shims and bushings.



\*Photo may include optional equipment.



# Preference

The R27Z-9 offers an operator an optimal work environment with a cabin designed for comfort and sophistication. Operating R27Z-9 is unique to every operator. Operators can fully customize their work environment and operating preferences to fit their individual needs.



\*Photo may include optional equipment.



## Monitoring

The monitoring system of the R27Z-9 provides the operator with machine status information, including: engine oil pressure, battery charge, engine coolant temperature and a fuel gauge.

## Comfortable Operating Cabin

In a 9 series cabin, you can easily adjust the seat and arm rest settings to best suit your preferred operating condition.

1. All pedals are foldable for additional floor space. Foot rest, adjustment pedals, left and right travel pedals and boom swing pedal are arranged for convenient access.
2. Two cup holders are integrated into the right console for large and small drink storage.
3. An additional storage box with key lock is accessible under the operator's seat.
4. Adjustable arm rests provide additional comfort.
5. A sliding fold-in front window is easily opened and safely stored in an open position to improve ventilation and visibility.(Cabin type only)



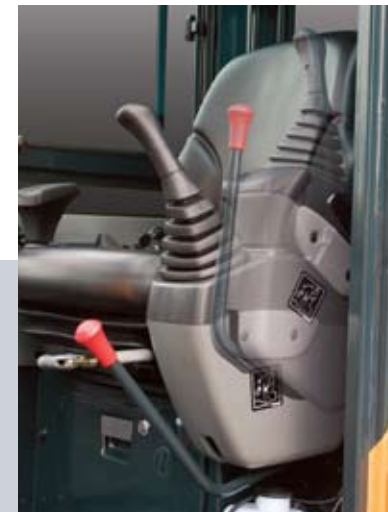
## Reduced Stress

An operator's work environment should be stress free. Hyundai's R27Z-9 compact excavator is designed for comfort, reduced sound and plenty of space to reduce stress on the operator.



## Operator Comfort

The left and right control levers are ergonomically located for convenient access. A safety lock system is designed to prevent exiting the cabin while hydraulic controls are live. When the safety lever and left side console are positioned upright, hydraulic functions are disengaged.



A tiltable left-side console make the operator easier to enter and exit the cab.





# Performance & Precision

New technologies designed to improve performance and precision, make the R27Z-9 smooth, fast and easy to control.



## Boom Swing

The R27Z-9's boom swing function is designed for efficient work in congested residential and urban areas. The boom can be offset left or right within an operating range.

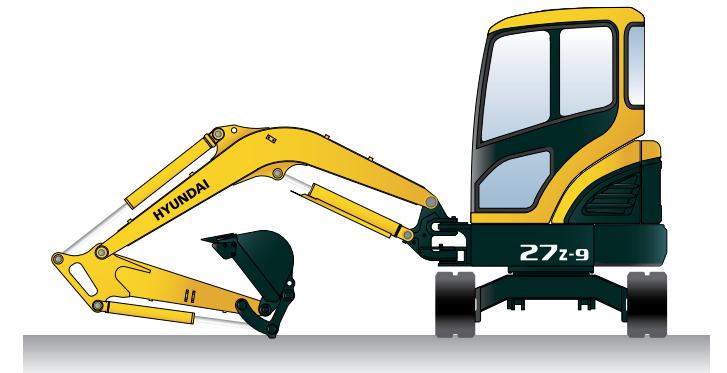
## Improved Hydraulic System

Optimized matching between the joystick and main control valve improves fine control and smoothness of operation. An arm flow summation system provides energy savings, reduced cavitation and increased speed. To improve safety and avoid boom drift the R27Z-9 is equipped with an integrated boom holding system.



## Structure Strength

The R27Z-9 cabin structure has been fitted with stronger but slimmer tubing for added safety and improved visibility. Low-stress, high strength steel is integrally welded to form a stronger, more durable upper and lower frame. Structural integrity was tested by way of FEM (Finite Elements Method) analysis and long-term durability tests.



## Zero-tail Swing

R27Z-9's short tail swing radius allows the operator work in confined areas like close to buildings on roadways, and in urban areas. This compact radius design provides easy and efficient operation in any limited space work environment.



## Mitsubishi S3L2

Tier 4 certified, Mitsubishi S3L2 engine provides maximum power, reliability, optimum fuel economy, and reduced emissions.

\*Photo may include optional equipment.



# Profitable

R27Z-9 is designed to maximize profitability through improved efficiencies, enhanced service features and longer life components.



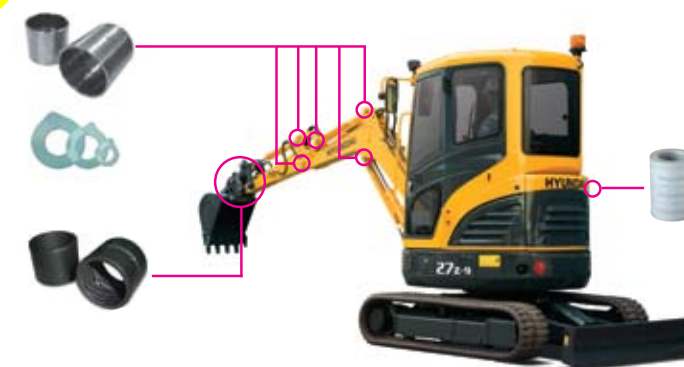
## Easy Access

The R27Z-9 was built with accessibility in mind. All doors, covers and hoods were built for complete open access. Regular service and maintenance is easy and convenient with the R27Z-9.



## Easy Change Air Cleaner

The R27Z-9 is equipped with a durable plastic air cleaner designed for easy maintenance.



## Extended Life Components

Reliability is improved and maintenance costs are reduced due to long-life hydraulic filters (1,000 hrs) and hydraulic oil (5,000 hrs). The addition of lubricated bushings and resin shims has extended lube intervals throughout the attachment to 250 hours.



## Centralized Grease Fittings

A centralized lubrication bank is available for faster, easier service and maintenance.



## Cylinder Covers

Standard boom and dozer cylinder covers provide added protection.

\*Photo may include optional equipment.

# 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 HP ( 18.4kW) at 2,300rpm
	627 1/1 (net)	23.1 HP ( 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 - 40A	

## HYDRAULIC SYSTEM

Main pumps		
Type	Two 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	65 x 500 mm (2.6" 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	

## 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
	4,520 lbf
Arm	1,400 kgf
	13.7 kN
	3,090 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 (11.8")	
Operating Weight	Cabin	2,880 kg (6,350lb)
	Canopy	2,730 kg (6,020 lb)
Ground Pressure	Cabin	0.27 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 center roller on each side	1	
No. of track roller on each side	3	

## LIFTING CAPACITIES R27Z-9

Boom : 2.03 m (6' 8") / Arm : 1.12 m (3' 8") / Bucket : 0.08 m<sup>3</sup> (0.1 yd<sup>3</sup>) SAE heaped / Dozer up : 300mm(12") rubber track with 220kg (485 lb) counterweight

Load point height m(ft)	Load radius								At max. reach		
	2.0 m(7 ft)		2.5 m(8 ft)		3.0 m(10 ft)		3.5 m(11 ft)		Capacity	Reach	
3.5 m	kg								610	460	3.07
11 ft	lb								1340	1010	(10.1)
3.0 m	kg					610	450		460	340	3.63
10 ft	lb					1340	990		1010	750	(11.9)
2.5 m	kg					610	450	460	340	380	3.99
8 ft	lb					1340	990	1010	750	840	(13.1)
2.0 m	kg					610	450	460	340	350	4.22
7 ft	lb					1340	990	1010	750	770	(13.8)
1.5 m	kg					800	590	460	340	320	4.35
5 ft	lb					1760	1300	1300	970	710	(14.3)
1.0 m	kg					760	560	420	450	330	4.39
3 ft	lb					1700	1230	1280	930	710	(14.4)
0.5 m	kg					750	540	410	440	320	4.35
2 ft	lb					1650	1190	1260	900	710	(14.3)
Ground	kg					740	530	400	440	320	4.22
Line	lb					1630	1170	1230	880	710	(13.8)
-0.5 m	kg					740	530	400	440	320	4.00
-2 ft	lb					1630	1170	1210	880	710	(13.1)
-1.0 m	kg					760	530	400	420	300	3.64
-3 ft	lb					1680	1230	1170	930	660	(11.9)
-1.5 m	kg					780	550	400	450	300	3.09
-5 ft	lb					1720	1260	1210	930	660	(10.1)
-2.5 m	kg								570	420	3.06
	lb								1260	930	(10.0)

Boom : 2.03 m (6' 8") / Arm : 1.12 m (3' 8") / Bucket : 0.08 m<sup>3</sup> (0.1 yd<sup>3</sup>) SAE heaped / Dozer down : 300mm(12") rubber track with 220kg (485 lb) counterweight

Load point height m(ft)	Load radius								At max. reach		
	2.0 m(7 ft)		2.5 m(8 ft)		3.0 m(10 ft)		3.5 m(11 ft)		Capacity	Reach	
3.5 m	kg								*670	490	3.07
11 ft	lb								*1480	1080	(10.1)
3.0 m	kg					*760	480		*600	360	3.63
10 ft	lb					*1680	1060		*1320	790	(11.9)
2.5 m	kg					*970	490	*570	*370	*570	3.99
8 ft	lb					*2140	1080	*1260	820	*1260	(13.1)
2.0 m	kg					*1270	650	*900	370	*570	4.22
7 ft	lb					*2800	1430	*1980	820	*1260	(13.8)
1.5 m	kg					*2200	630	*1140	360	*570	4.35
5 ft	lb					*4850	1390	*2510	790	*1260	(14.3)
1.0 m	kg					*2710	600	1880	450	1380	4.39
3 ft	lb					*5970	1320	4140	990	3040	(14.4)
0.5 m	kg					2840	580	1860	440	1370	4.35
2 ft	lb					6260	1280	4100	970	3020	(14.3)
Ground	kg	*1490	810	2820	570	1850	430	1360	340	*690	4.22
Line	lb	*3280	1790	6220	1260	4080	950	3000	750	*1520	(13.8)
-0.5 m	kg	*2090	810	2810	570	1840	430	*1070	340	*790	4.00
-2 ft	lb	*4610	1790	6190	1260	4060	950	*2360	750	*1740	(13.1)
-1.0 m	kg	*3030	820	*2750	570	1850	440			*950	3.64
-3 ft	lb	*6680	1810	*6060	1260	4080	970			*2090	(11.9)
-1.5 m	kg	*2850	840	*2040	590					*1320	3.09
-5 ft	lb	*6280	1850	*4500	1300					*2910	(10.1)
-2.5 m	kg									*1040	3.06
-8 ft	lb									*2290	(10.0)

1. Lifting capacity is based on SAE J1097, ISO 10567.

2. Lifting capacity of the Robex Series does not exceed 75% of the tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.

3. The load point is a hook located on the back of the bucket.

4. (\*) indicates the load limited by hydraulic capacity.

## STANDARD EQUIPMENT

ISO standard cabin -Cabin ROPS(ISO 3471) FOPS(ISO 3449) TOPS(ISO 12117)	-Lockable door -Accessory box -Centralized monitoring -Gauges -Fuel level gauge -Engine coolant temperature gauge -Warning -Quick clamp	Engine oil pressure Engine coolant temperature Preheat Low battery Air cleaner closing Fuel empty -Door and locks, one key -AM/FM radio and cassette -Mechanical suspension seat	with seat belt -Console box tilting system(LH.) -Two front working lights -Electric horn -Battery (1 x 12 V x 80 AH) -Battery master switch -Automatic swing brake -Removable reservoir tank -Water separator, fuel line	-Counterweight (220 kg, 485 lb) -Mono boom (2.03 m, 6' 8") -Arm (1.12 m, 3' 8") -Rubber crawler (300mm, 12") -Single acting piping (Breaker, etc) -Double acting piping (Clamshell, etc)
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## OPTIONAL EQUIPMENT

ISO standard canopy -Canopy ROPS(ISO 3471) FOPS(ISO 3449) TOPS(ISO 12117)	-Beacon lamp -Accumulator, work equipment lowering -Travel alarm	-Quick coupler -Tool kit -Operator suit	-Heater & Defroster -Lever pattern change valve
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