

We build a better future

Robex 27z-9

Equipped with Tier 3a engine



*Photo may include optional equipment.

Pleasure works

An operator, who takes pleasure in his work, does a better job. That is why we at Hyundai Heavy Industries do everything we can to make that happen. We merged operator preference, fast precision and lasting performance into a quality product. Hyundai's 9 series earthmoving equipment simply makes time fly, makes pleasure work!



*Photo may include optional equipment.

Machine Walk-Around

Robust Upper and Lower Frame

The structure of the upper frame is designed to absorb high stress and to resist inherent external influences. An X-type center frame and a reinforced box section track frame provide exceptional strength and longer service life to withstand tough working conditions.

Engine Technology

Powerful and reliable, Tier 3a certified, fuel efficient Mitsubishi S3L2 engine.
Electronically controlled, clean and efficient combustion.
Low noise / anti-restart function.

Control System

Control devices are well located for increased operator's comfort and a higher productivity. The operator can easily control the machine in any working condition.

Advanced Hydraulic System

Our new R27Z-9 is equipped with arm flow summation system, boom holding system and swing parking brake for smooth and fine control. Other integrated features are hydraulic damper in travel pedal, swing reducer lubrication by hydraulic oil and leak-free grease chamber of swing bearing.

Comfortable and High-Strength Cabin

The spacious cabin is ergonomically designed, with low noise level and high visibility. Canopy & cabin frame are complying with international standard TOPS, ROPS & FOPS, for maximum protection of the operator.

Operators' Convenience

R27Z-9 cabin equipped with suspension seat, foldable pedals and various storage space for advanced operator comfort. The monitoring system displays warning indicators, water temperature gauge, fuel gauge and hour meter to check the full status of the machine at a single glance.

Easy to Maintain

With open access of doors, covers and engine hoods, air cleaner and centralized grease fittings the machine is a pleasure to maintain.

Extended Life of Components

Long-life hydraulic filters, long-life hydraulic oil, long-lasting shims and long-lasting bushes are reducing operation costs.

Preference

An operator, who sets his machine to his needs, takes pleasure in his work. 9 Series respects operator preference with regards to comfort, ease-of-use and controllability.

Operators can fully customize their work environment and operating preferences to fit their individual needs.



*Photo may include optional equipment.



Dashboard

The dashboard of the R27Z-9 indicates the status of the machine like warnings of engine oil pressure, battery charge, engine coolant temperature and fuel gauges.

Comfortable Operating Cabin

In a 9 series cabin, you can adjust the seat, console and armrests to suit your preferred comfort level.

1. The pedals (travel - boom offset - attachment) are installed in a convenient position and can be folded in to gain extra foot space.
2. Different sizes of cup holders.
3. Operator's belongings can be stored in a lockable storage box under the seat.
4. Armrests to increase operator's comfort.
5. Slidable front window can be opened easily and is kept safely in open position (cabin Type)



Stressless

Work is stressful enough; your working environment should be stressless. Hyundai's 9 Series provides improved cabin interior, additional storage space and an advanced audio mobile phone feature to minimize the stress of the operator.

Operator Comfort

The left and right joysticks are ergonomically placed for convenient operation. The joysticks have enough space to install additional option switches. A safety lever is installed to prevent unexpected activation of the hydraulic attachments. When the safety lever is positioned upright, hydraulic functions are disengaged.



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



Precision

An operator, who feels his machine respond smoothly, takes pleasure in his work. 9 Series delivers fast precision by combining smoother hydraulics with wider view and less stress. Innovative hydraulic system technologies make the R27Z-9 excavator fast, smooth and easy to control.



*Photo may include optional equipment.



Offset Boom

With an offset function of the boom from 75° to the left side and 50° to the right side, the zero-tail machine is even more flexible to use on narrow jobsites.

Hydraulic System Improvements

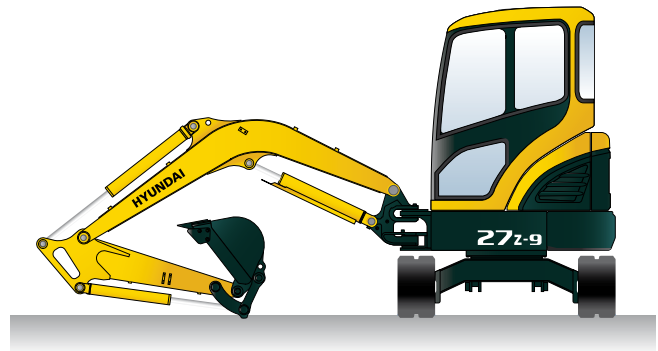
To achieve optimum precision, Hyundai redesigned the hydraulic system to provide the operator with super fine touch and top level controllability.

Newly improved features include arm flow summation system and boom holding system, in order to save energy, prevent against cavitation, increase speed and to avoid the drop of attachments in neutral condition.



Structural Strength

The 9 Series cabin structure is designed with slimmer but stronger tubing for more safety and better visibility. Low-stress and high strength steel is welded to form a strong and stable lower frame. Structural durability is analyzed and tested by FEM-analysis (Finite Elements Method) 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 3a certified, Mitsubishi S3L2 engine provides maximum power, reduced emissions, reliability and optimum fuel efficiency.

Profitability

An owner, who knows his machine saves money, takes pleasure in owning it. 9 Series excavators contribute to your business as a time, fuel, spare-part and cost saving earthmoving solution.



*Photo may include optional equipment.



Easy Maintenance Access

The R27Z-9 was built with accessibility in mind. All doors, covers and hoods are designed for full open accessibility. The R27Z-9 offers plenty of space to complete regular maintenance.



Easy to Change Air Cleaner

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



Extended Life of Components

By adopting long-life hydraulic filters (1000 hrs) and long-life hydraulic oil (5000 hrs) operation costs are reduced. Oil change intervals are extended to 250 operating hours because self-lubricating bushes and resin shims are applied.



Centralized Grease Fittings

Centralized grease fittings for faster and easier maintenance.



Cylinder Covers

Cylinders of boom and dozer blade are provided with covers for extra protection.

Specifications

ENGINE

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

HYDRAULIC SYSTEM

Main pump	
Type	Two variable displacement piston pumps + gear pump
Rated flow	2 x 27.6 + 19.6 lpm
Pilot pump	Gear pump 10.4 lpm
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 Kgf/cm ² (3,270 psi)
Travel circuit	220 Kgf/cm ² (3,270 psi)
Swing circuit	175 Kgf/cm ² (2,490 psi)
Pilot circuit	30 Kgf/cm ² (430 psi)
Service valve	Installed

HYDRAULIC CYLINDERS

No. of cylinder - bore x stroke	
Boom	1 - 75 x 565 mm
Arm	1 - 65 x 500 mm
Bucket	1 - 60 X 420 mm
Boom swing	1 - 75 X 400 mm
Dozer blade	1 - 85 X 140 mm

OPERATOR'S CAB

Noise Levels (dynamic value)	
Outside cabin - LwA	94 dB
Inside cabin - LpA	75 dB

COOLANT & LUBRICANT CAPACITY

(refilling)	liter	US gal	UK gal
Fuel tank	42	11.1	9.2
Engine coolant	4	1.32	1.1
Engine oil	5.9	1.56	1.3
Hydraulic tank	46	12.2	10.1

TRAVEL LEVERS

Traveling and steering: Two levers with foldable pedals.

HYDRAULIC CONTROLS

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	Multi wet disc
Swing speed	9 rpm

DRIVES & BRAKES

Max. travel speed (high/low)	4.4 km / 2.4 km (2.8 mph) / (1.6 mph)
Maximum traction force	2.4 ton
Maximum gradeability	30°
Parking brake	Multi wet discs

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 m³ (0.1 yd³) excavator bucket, lubricant, coolant, full fuel tank, hydraulic tank and the standard equipment.

Shoe Width	Rubber shoes 300 mm (12")	
Operating Weight	Cabin	2,880 Kg (6,350 lb)
	Canopy	2,730 Kg (6,020 lb)
Ground Pressure	Cabin	0.34 kg / cm ² (4.83 psi)
	Canopy	0.32 kg / cm ² (4.55 psi)

UNDERCARRIAGE

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

LIFTING CAPACITIES R27Z-9



Rating over-front



Rating over-side or 360 degree

Boom : 2.03 m (6' 8") / Arm : 1.12 m (3' 8") / Bucket : 0.08 m³ (0.1 yd³) SAE heaped / Dozer up : 300 mm (12") rubber track with 220kg (485 lb) counterweight

Load point height m (ft)		Load radius								At max. reach	
		2.0 m (5.0 ft)		2.5 m (10.0 ft)		3.0 m (10.0 ft)		3.5 m (10.0 ft)		Capacity	Reach
											m (ft)
3.5 m	kg									610	3.07
11.5 ft	lb									1340	(10.1)
3.0 m	kg					610	450			460	3.63
10.0 ft	lb					1340	990			1010	(11.9)
2.5 m	kg					610	450	460	340	380	3.99
8.2 ft	lb					1340	990	1010	750	840	(13.1)
2.0 m	kg			830	610	600	450	460	340	350	4.22
6.6 ft	lb			1830	1340	1320	990	1010	750	770	(13.8)
1.5 m	kg			800	590	590	440	460	340	320	4.35
5.0 ft	lb			1760	1300	1300	970	1010	750	710	(14.3)
1.0 m	kg			770	560	580	420	450	330	320	4.39
3.3 ft	lb			1700	1230	1280	930	990	730	710	(14.4)
0.5 m	kg			750	540	570	410	440	320	320	4.35
1.6 ft	lb			1650	1190	1260	900	970	710	710	(14.3)
Ground	kg	1080	750	740	530	560	400	440	320	330	4.22
Line	lb	2380	1650	1630	1170	1230	880	970	710	730	(13.8)
-0.5 m	kg	1080	750	740	530	550	400	440	320	360	4.00
-1.6 ft	lb	2380	1650	1630	1170	1210	880	970	710	790	(13.1)
-1.0 m	kg	1090	760	740	530	560	400			420	3.64
-3.3 ft	lb	2400	1680	1630	1170	1230	880			930	(11.9)
-1.5 m	kg	1110	780	760	550					550	3.09
-5.0 ft	lb	2450	1720	1680	1210					1210	(10.1)
-2.5 m	kg									570	3.06
-8.2 ft	lb									1260	(10.0)

Boom : 2.03 m (6' 8") / Arm : 1.12 m (3' 8") / Bucket : 0.08 m³ (0.1 yd³) SAE heaped / Dozer down : 300 mm (12") rubber track with 220kg (485 lb) counterweight

Load point height m (ft)		Load radius								At max. reach	
		2.0 m (5.0 ft)		2.5 m (10.0 ft)		3.0 m (10.0 ft)		3.5 m (10.0 ft)		Capacity	Reach
											m (ft)
3.5 m	kg									*670	3.07
11.5 ft	lb									*1480	(10.1)
3.0 m	kg					*760	480			*600	3.63
10.0 ft	lb					*1680	1060			*1320	(11.9)
2.5 m	kg					*970	490	*570	370	*570	3.99
8.2 ft	lb					*2140	1080	*1260	820	*1260	(13.1)
2.0 m	kg			*1270	650	*1170	480	*900	370	*570	4.22
6.6 ft	lb			*2800	1430	*2580	1060	*1980	820	*1260	(13.8)
1.5 m	kg			*2200	630	*1640	470	*1140	360	*570	4.35
5.0 ft	lb			*4850	1390	*3620	1040	*2510	790	*1260	(14.3)
1.0 m	kg			*2710	600	1880	450	1380	350	*600	4.39
3.3 ft	lb			*5970	1320	4140	990	3040	770	*1320	(14.4)
0.5 m	kg			2840	580	1860	440	1370	350	*630	4.35
1.6 ft	lb			6260	1280	4100	970	3020	770	*1390	(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
-1.6 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
-3.3 ft	lb	*6680	1810	*6060	1260	4080	970			*2090	(11.9)
-1.5 m	kg	*2850	840	*2040	590					*1320	3.09
-5.0 ft	lb	*6280	1850	*4500	1300					*2910	(10.1)
-2.5 m	kg									*1040	3.06
-8.2 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

· Canopy ROPS (ISO 3471)
FOPS (ISO 3449)
TOPS (ISO 12117)

· All-weather steel cab with
all-around visibility
· Safety glass windows
· Sliding fold-in front window
· Sliding side window

· Lockable door
· Accessory box & Ash-tray
· Centralized monitoring
· Gauges

Fuel level gauge
Engine coolant temperature gauge
· Warning lamps
Quick clamp
Engine oil pressure

Engine coolant temperature
Preheat engine
Low battery
Air cleaner clogging
Fuel empty
· Door and locks, one key fits all
· 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 shoes (300 mm; 12")
· Single acting piping (Breaker, etc)
· Double acting piping (Clamshell, etc)

OPTIONAL EQUIPMENT

ISO standard canopy

· Cabin ROPS (ISO 3471)
FOPS (ISO 3449)
TOPS (ISO 12117)

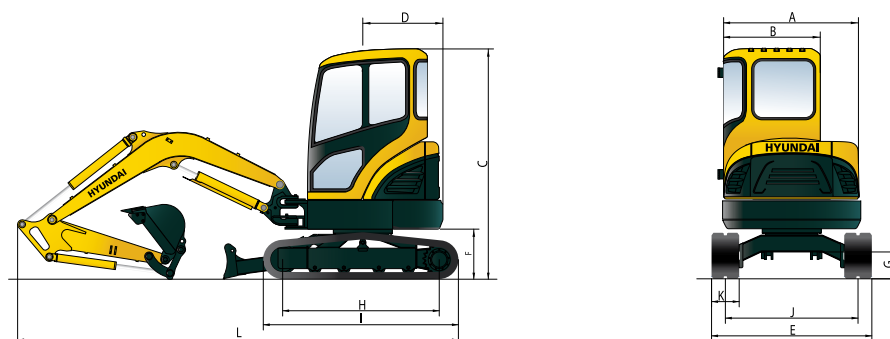
· Beacon lamp
· Accumulator, work
equipment lowering
· Travel alarm

· Quick coupler
· Tool kit
· Operator suit

· Heater & Defroster
· Lever Pattern Change Valve

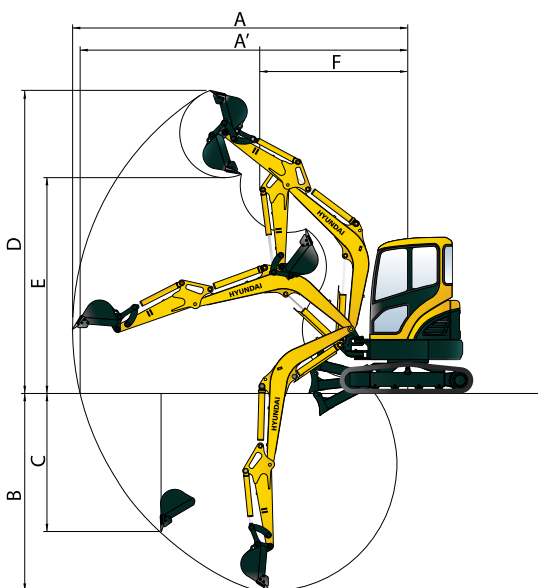
Dimensions & Working Ranges

R27Z-9 DIMENSIONS



ITEM	R27Z-9	ITEM	R27Z-9
(A) Overall width of upper structure	1,485 mm	(G) Ground clearance	290 mm
(B) Overall width of cab	1,050 mm	(H) Tumbler distance	1,550 mm
(C) Overall height of cab	2,500 mm	(I) Track length	1,970 mm
(D) Tail swing radius	775 mm	(J) Track gauge	1,250 mm
(E) Overall width	1,550 mm	(K) Track shoe width	300 mm
(F) Clearance under counterweight	540 mm	(L) Overall length	4,180 mm

R27Z-9 WORKING RANGES



Boom length	2,030 mm
Arm length	1,120 mm
(A) Max. digging reach	4,650 mm
(A') Max. digging reach at ground	4,515 mm
(B) Max. digging depth	2,500 mm
(C) Max. vertical wall digging depth	2,085 mm
(D) Max. digging height	4,270 mm
(E) Max. dumping height	2,890 mm
(F) Min. swing radius	2,055 mm

Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine may vary according to international standards. All imperial measurements rounded off to the nearest pound or inch.

PLEASE CONTACT

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CONSTRUCTION EQUIPMENT