

We build a better future

# Robex 35z-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.

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## Machine Walk-Around

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### 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 / EU stage IIIa certified, fuel efficient Yanmar 3TNV88 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. A safety lever on the left side console is installed to prevent exiting the cabin with active hydraulic control levers.

### Advanced Hydraulic System

The hydraulic system of the R35Z-9 is designed for fast operation combined with high controllability.

### 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

R35Z-9 cabin equipped with a 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.



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## Dashboard

The dashboard of the R35Z-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 and additional storage space 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 R35Z-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

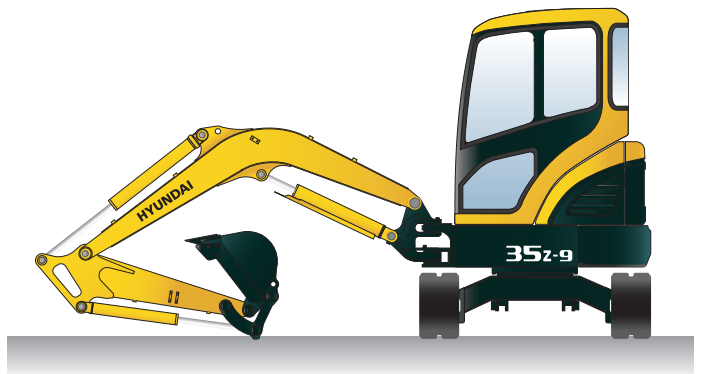
To achieve optimum precision, Hyundai redesigned the hydraulic system to provide the operator with super fine touch and top level controllability.

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

R35Z-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.



## Yanmar 3TNV88

Tier 3a / EU stage IIIa certified, Yanmar 3TNV88 engine provides maximum power, reduced emissions, reliability and optimum fuel efficiency.

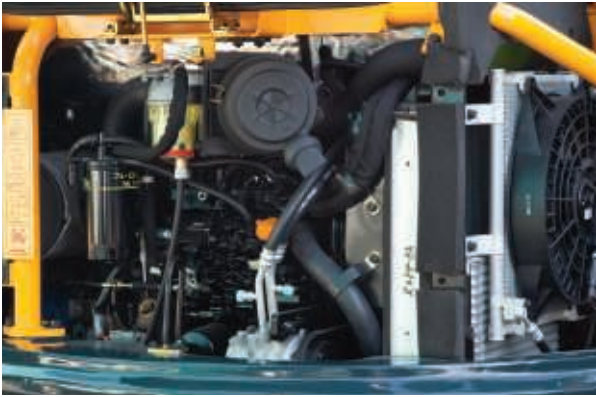
# Profitability

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.



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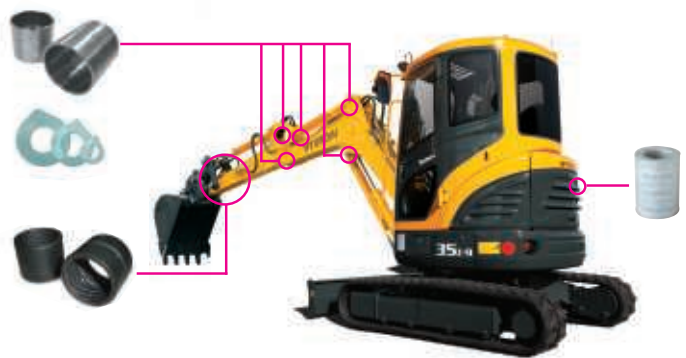
## Easy Maintenance Access

The R35Z-9 was built with accessibility in mind. All doors, covers and hoods are designed for full open accessibility. The R35Z-9 offers plenty of space to complete regular maintenance.



## Easy to Change Air Cleaner

The R35Z-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 and self-lubricating bushes and resin shims are applied.



## Centralized Grease Fittings

Centralized grease fittings for faster and easier maintenance.

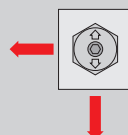


## Lever Pattern Change Valve (option)

Joystick control pattern can be changed easily through a pattern change valve (2 different patterns).



## Selector Valve for Single or Double Acting Piping



Lever direction  
Vertical : Single acting piping (Breaker)  
Horizontal : Double acting piping (clamshell)

# Specifications

## ENGINE

MODEL		YANMAR 3TNV88
Type		Water cooled, 4 cycle Diesel, 3-Cylinders in line, direct injection and low emission
Rated flywheel horse power		
SAE	J1995 (gross)	27.3 HP ( 20.4 kW) at 2,200rpm
	J1349 (net)	26.5 HP ( 19.8 kW) at 2,200rpm
DIN	627 1/1 (gross)	27.7 PS ( 20.4 kW) at 2,200rpm
	627 1/1 (net)	26.9 PS ( 19.8 kW) at 2,200rpm
Max. torque		10.9 kgf.m (79 lbf.ft) at 1,100 rpm
Bore x stroke		88 mm x 90 mm (3.5" x 3.5")
Piston displacement		1,642cc (100 in³)
Batteries		12V - 80 AH
Starting motor		12V - 2.3 kW
Alternator		12V - 55 Amp

## HYDRAULIC SYSTEM

Main pump	
Type	Two variable displacement piston pumps + gear pump
Rated flow	2 x 38.5 + 23.5 ℓ/min
Pilot pump	Gear pump 11.2 ℓ/min
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	230 Kg/cm² (3,270 psi)
Travel circuit	230 Kg/cm² (3,270 psi)
Swing circuit	230 Kg/cm² (3,270 psi)
Pilot circuit	30 Kg/cm² (430 psi)
Service valve	Installed

## HYDRAULIC CYLINDERS

No. of cylinder - bore x stroke	
Boom	1 - 85 x 540 mm (3.3" x 21.3")
Arm	1 - 80 x 585 mm (3.1" x 23.0")
Bucket	1 - 70 X 510 mm (2.8" x 20.1")
Boom swing	1 - 80 X 400 mm (3.1" x 15.7")
Dozer blade	1 - 95 X 152 mm (3.7" x 6.0")

## 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	5	1.32	1.1
Engine oil	6.7	1.77	1.5
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	9.5 rpm

## DRIVES & BRAKES

Max. travel speed (high / low)	4.5 km (2.8 mph) / 2.5 km (1.6 mph)
Maximum traction force	3.1 ton
Maximum gradeability	30°
Parking brake	Multi wet discs

## DIGGING FORCE (ISO)

Bucket	3,200 kgf
	31.4 kN
	7,050 lbf
Arm	1,990 kgf
	19.5 kN
	4,390 lbf

## WEIGHT (APPROXIMATE)

Operating weight, including 2,500 mm (8’ 2”) boom; 1,300 mm (4’ 3”) arm, SAE heaped 0.11 m³ (0.14 yd³) excavator bucket, lubricant, coolant, full fuel tank, hydraulic tank and the standard equipment.

Shoe Width		Rubber 300 mm (12")	Steel 300 mm (12")
Operating Weight	Cabin	3,650 Kg (8,050 lb)	3,750 Kg (8,270 lb)
	Canopy	3,500 Kg (7,720 lb)	3,600 Kg (7,940 lb)
Ground Pressure	Cabin	0.34 kg/cm² (4.83 psi)	0.34 kg/cm² (4.83 psi)
	Canopy	0.32 kg/cm² (4.55 psi)	0.33 kg/cm² (4.69 psi)

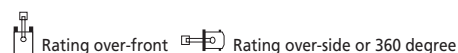
## UNDERCARRIAGE

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	4



## LIFTING CAPACITIES R35Z-9



Boom : 2.50 m (8' 2") / Arm : 1.30 m (4' 3") / Bucket : 0.11 m<sup>3</sup> (0.14 yd<sup>3</sup>) SAE heaped / Dozer up : 300 mm (12") rubber track

Load point height m (ft)		Load radius								At max. reach		
		1.0 m (3 ft)		2.0 m (7 ft)		3.0 m (10 ft)		4.0 m (13 ft)		Capacity		Reach
												m (ft)
4.0 m	kg									600	510	3.94
13 ft	lb									1320	1120	(12.9)
3.0 m	kg							560	470	420	360	4.74
10 ft	lb							1230	1040	930	790	(15.6)
2.0 m	kg					890	750	540	460	360	300	5.11
7 ft	lb					1960	1650	1190	1010	790	660	(16.8)
1.0 m	kg					830	690	520	440	340	290	5.18
3 ft	lb					1830	1520	1150	970	750	640	(17.0)
Ground Line	kg			1570	1260	790	650	500	420	360	300	4.98
	lb			3460	2780	1740	1430	1100	930	790	660	(16.3)
-1.0 m	kg	*2100	*2100	1590	1270	780	650	500	420	440	370	4.45
-3 ft	lb	*4630	*4630	3510	2800	1720	1430	1100	930	970	820	(14.6)
-2.0 m	kg			1630	1310	810	670					
-7 ft	lb			3590	2890	1790	1480					

Boom : 2.50 m (8' 2") / Arm : 1.30 m (4' 3") / Bucket : 0.11 m<sup>3</sup> (0.14 yd<sup>3</sup>) SAE heaped / Dozer down : 300 mm (12") rubber track

Load point height m (ft)		Load radius								At max. reach		
		1.0 m (3 ft)		2.0 m (7 ft)		3.0 m (10 ft)		4.0 m (13 ft)		Capacity		Reach
												m (ft)
4.0 m	kg									*700	510	3.94
13 ft	lb									*1540	1120	(12.9)
3.0 m	kg							*760	470	*630	360	4.74
10 ft	lb							*1680	1040	*1390	790	(15.6)
2.0 m	kg					*1780	750	1410	460	*620	300	5.11
7 ft	lb					*3920	1650	3110	1010	*1370	660	(16.8)
1.0 m	kg					2400	690	1380	440	*650	290	5.18
3 ft	lb					5290	1520	3040	970	*1430	640	(17.0)
Ground Line	kg			*1730	1260	2340	650	1360	420	*740	300	4.98
	lb			*3810	2780	5160	1430	3000	930	*1630	660	(16.3)
-1.0 m	kg	*2100	*2100	*2850	1270	2330	650	1350	420	*920	370	4.45
-3 ft	lb	*4630	*4630	*6280	2800	5140	1430	2980	930	*2030	820	(14.6)
-2.0 m	kg			*3540	1310	*2050	670					
-7 ft	lb			*7800	2890	*4520	1480					

- Lifting capacity is based on SAE J1097, ISO 10567.
- 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.
- The load point is a hook located on the back of the bucket.
- (\*) indicates the load limited by hydraulic capacity.

## STANDARD EQUIPMENT

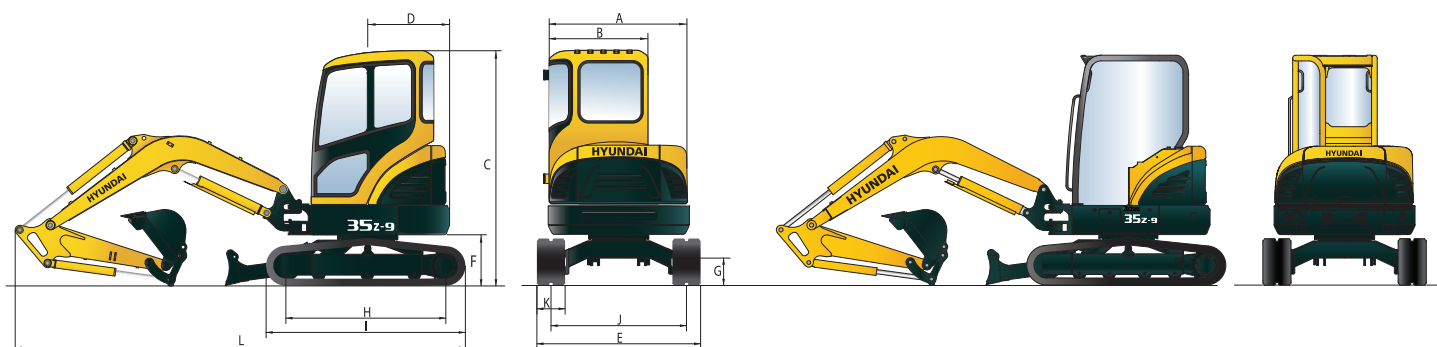
ISO standard cabin	· Lockable door	Engine coolant temperature	· Console box tilting system (LH.)	· Arm (1.3 m; 4' 3")
· Cabin ROPS (ISO 3471)	· Accessory box	Preheat engine	· Two front working lights	· Rubber shoes (300 mm; 12")
· FOPS (ISO 3449)	· Centralized monitoring	Low battery	· Electric horn	· Single acting piping (Breaker, etc)
· TOPS (ISO 12117)	· Gauges	Air cleaner clogging	· Battery (1 x 12 V x 80 AH)	· Double acting piping (Clamshell, etc)
· All-weather steel cab with all-around visibility	· Fuel level gauge	Fuel empty	· Battery master switch	
· Safety glass windows	· Engine coolant temperature gauge	· Door and locks, one key fits all	· Automatic swing brake	
· Sliding fold-in front window	· Warning lamps	· Mechanical suspension seat with seat belt	· Removable reservoir tank	
· Sliding side window	· Quick clamp	· Radio / USB player	· Water separator, fuel line	
	· Engine oil pressure		· Mono boom (2,5 m; 8' 2")	

## OPTIONAL EQUIPMENT

ISO standard canopy	· Beacon lamp	· Quick coupler	· Lever Pattern Change Valve
· Canopy ROPS (ISO 3471)	· Accumulator, work equipment lowering	· Tool kit	· Steel shoes (300 mm; 12")
· FOPS (ISO 3449)		· Operator suit	· Air-conditioner
· TOPS (ISO 12117)	· Travel alarm	· Heater & Defroster	

# Dimensions & Working Ranges

## R35Z-9 DIMENSIONS



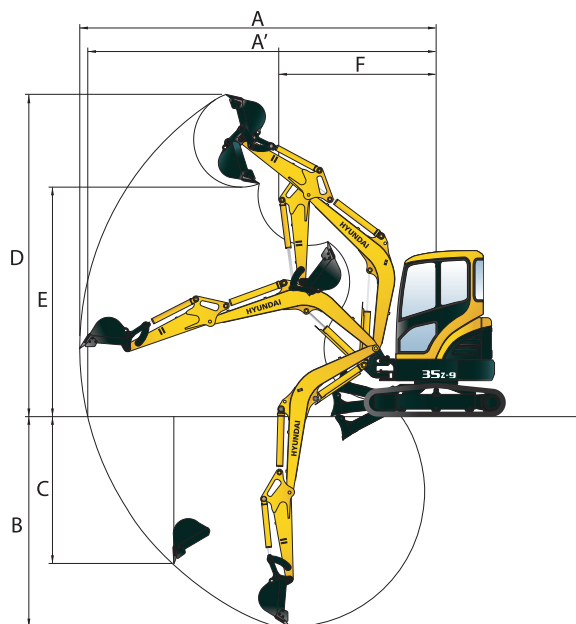
mm (ft · in)

<b>A</b>	Overall width of upper structure	1500 (4' 11")
<b>B</b>	Overall width of cabin	1050 (3' 5")
<b>C</b>	Overall height of cabin	2500 (8' 2")
<b>D</b>	Tail swing radius	870 (2' 10")
<b>E</b>	Overall width	1740 (5' 9")
<b>F</b>	Clearance under counterweight	540 (1' 9")

<b>G</b>	Ground clearance	290 (0' 11")
<b>H</b>	Tumbler distance	1700 (5' 7")
<b>I</b>	Track length	2130 (6' 12")
<b>J</b>	Track gauge	1440 (4' 9")
<b>K</b>	Track shoe width	300 (0' 12")
<b>L</b>	Overall length	4790 (15' 9")

## R35Z-9 WORKING RANGES

mm (ft · in)



	Boom length	2500 (8' 2")
	Arm length	1300 (4' 3")
<b>A</b>	Max. digging reach	5360 (17' 7")
<b>A'</b>	Max. digging reach at ground	5240 (17' 2")
<b>B</b>	Max. digging depth	3150 (10' 4")
<b>C</b>	Max. vertical wall digging depth	2190 (7' 2")
<b>D</b>	Max. digging height	4830 (15' 10")
<b>E</b>	Max. dumping height	3450 (11' 4")
<b>F</b>	Min. front swing radius	2350 (7' 9")

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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