

# 30z-9AK

With Tier 4 Final Engine installed

**MOVING YOU FURTHER** 



## **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.

Moving you further!





### **Machine Walk-Around**

### **Engine Technology**

Proven, reliable, fuel efficient, low emission and low noise Kubota Tier 4 final.

### **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.

### **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 R30Z-9AK is designed for fast operation combined with high controllability.

#### **Comfortable and Durable 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.

### **Operator Convenience**

The R30Z-9AK features a suspension seat, 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**

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.

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\*Photo may include optional equipment.

## **PRECISION**

Innovative hydraulic system technologies make the 9A series excavator fast, smooth and easy to control.





### **Boom Swing**

The R30Z-9AK'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.



## Auto Shift Traveling System

During high-speed traveling, travel motor speed decreases automatically when subjected to heavy load, and resumes when the load reduces.



### Dozer Blade

Large dozer blade provides added versatility, work efficiency and stability for the job.



## Zero-tail Swing

R30Z-9AK'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.



## Lever Pattern Change Valve

Joystick control pattern can be changed easily through a pattern change valve.

## **PERFORMANCE**

9A series is designed for maximum performance to keep the operator working productively





### Cylinder Covers

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



## Structural Strength

The R30Z-9AK 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.

### Kubota D1305

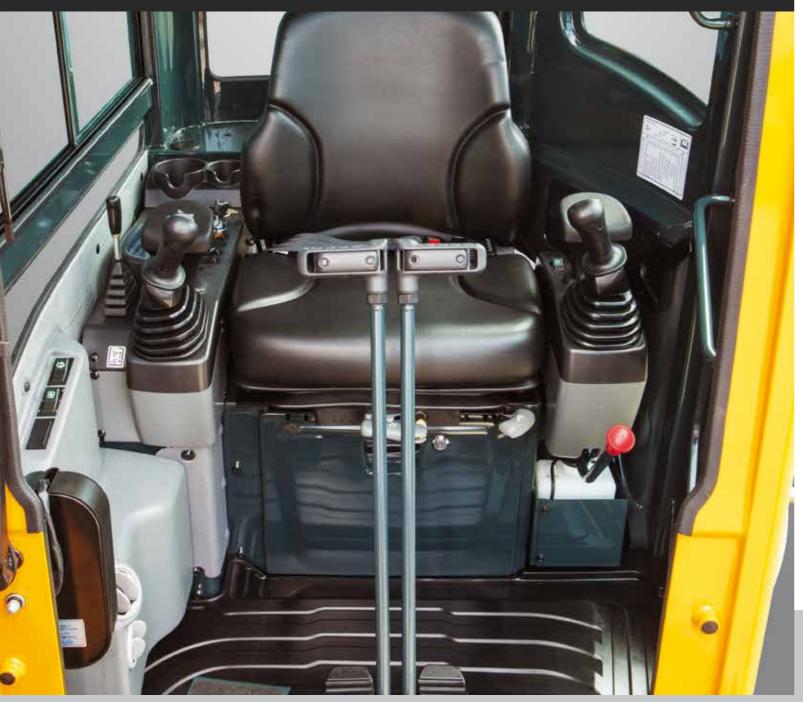
Emissions: The most compact multi-cylinder liquid cooled industrial diesel engines comply with EPA Tier 4 Emission regulations without additional After Treatment Tools. This engine meets standards over the NRTC and NTE requirements.

Lower Noise Level: The half-float valve cover and MoS<sub>2</sub> coated piston reduce noise levels and vibration.



## **PREFERENCE**

An operator, who sets his machine to his needs, takes pleasure in his work. Operators can fully customize their work environment and operating preferences to fit their individual needs.



\*Photo may include optional equipment.



### Monitor

The monitoring system of the R30Z-9AK provides the operator with machine status information, including: engine oil pressure lamp, battery charge lamp, engine coolant temperature and a fuel gauge.

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

- 1. All pedals are for additional floor space. Foot rest, attachment pedal, 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 wrist 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)





The left and right joysticks are ergonomically placed for convenient operation. The joysticks

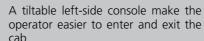
### Stressless

Work is stressful enough; your working environment should be stressless. Hyundai's R30Z-9AK provides improved cabin interior and additional storage space to minimize the stress of the operator.

## **Operator Comfort**

hydraulic functions are disengaged.







## **PROFITABILITY**

9A series machines are designed to maximize profitability through improved fuel efficiency, enhanced service features and long-lasting components.



\*Photo may include optional equipment.



### Easy to Change Air Cleaner

The R30Z-9AK is equipped with a durable plastic air cleaner, designed for easy maintenance.



## Selector Valve for Single or Double Acting Piping

Double Acting Pipe located on front of the Fuel Tank for easy to access and control.



Lever direction Vertical : Single acting piping (Breaker)

Horizontal : Double acting piping (clamshell)



## Centralized Grease Fittings

Centralized grease fittings for faster and easier maintenance.



## Easy Maintenance Access

The R30Z-9AK was built with accessibility in mind. All doors, covers and hoods are designed for full open accessibility. The R30Z-9AK offers plenty of space to complete regular maintenance.



## Proportional Auxiliary Hydraulic System

- Opt: Proportional Control Switch for better speed control
- Enlarge the Operation Convenience



### Long-Life Components

9A series excavators were designed with bushings designed for long-life lube intervals (250 hrs) & polymer shims (wear resistant, noise reducing), long-life hydraulic filters (1,000hrs), long-life hydraulic oil (5,000hrs), more efficient cooling systems and integrated preheating systems which extend service intervals, minimize operating costs and reduce machine down time.

## **Specifications R30Z-9AK**

### **ENGINE**

MODEL		KUBOTA D1305		
Туре		4 Cycle Diesel engine, in line, water cooled		
Rated flywheel horse power				
SAE	J1995 (gross)	18.5 kW (24.9 HP) / 2,350 rpm		
SAE	J1349 (net)	17.3 kW (23.2 HP) / 2,350 rpm		
DIN	6271/1 (gross)	18.5 kW (25.2 PS) / 2,350 rpm		
	6271/1 (net)	17.3 kW (23.5 PS) / 2,350 rpm		
Max. torque		8.3 kgf.m (60.17 lbf.ft) / 1,600 rpm		
Bore x stroke		78 mm x 88 mm (3.07" x 3.46")		
Piston displacement		1,261 cc (76.9 in <sup>3</sup> )		
Batteries		12 V - 58 Ah		
Starting motor		12 V - 1.4 kW		
Alternator		12 V - 40 A		

### **HYDRAULIC SYSTEM**

MAIN PUMP			
Type Variable displacement piston pum			
Max. flow	2 x 27.6 + 19.6 ℓ/min		
Sub-pump for pilot circuit	Gear pump		
Cross-sensing and fuel saving pump system			
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 <sup>2</sup> (3,130 psi)		
Travel circuit	220 Kgf/cm <sup>2</sup> (3,130 psi)		
Swing circuit	170 Kgf/cm <sup>2</sup> (2,420 psi)		
Pilot circuit	30 Kgf/cm <sup>2</sup> (430 psi)		
Service valve	Installed		

### **HYDRAULIC CYLINDERS**

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	95 x 140 mm (37" x 5.5")	

### **OPERATOR'S CAB**

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

### **COOLANT & LUBRICANT CAPACITY**

(Refilling)	liter	US gal	UK gal
Fuel tank	30	7.9	6.6
Engine coolant	5.0	1.1	0.9
Engine oil	5.7	1.6	1.3
Hydraulic tank	27	7.1	5.9

### TRAVEL LEVERS

Traveling and steering: Two levers with foldable pedals.

### HYDRAULIC CONTROLS

Туре	
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 bearing lubrication	Grease-bathed
Swing brake	Wet disc
Swing speed	9.1 rpm

### **DRIVES & BRAKES**

Max. travel speed (high) / (low)	4.3 km/h / 2.4 km/h ((2.7 mph) / (1.5 mph))
Maximum traction force	2.4 ton
Maximum gradeability	30°
Parking brake	Wet disc

### **DIGGING FORCE (ISO)**

	2,150 kgf
Bucket	20.1 kN
	4,520 lbf
	1,400 [1,265] kgf
Arm [Long Arm]	13.7 [12.4] kN
	3,090 [2,790] lbf

### **OPERATING WEIGHT (APPROXIMATE)**

Operating weight, including 2,030 mm (6'8") boom; 1,120 mm (3'8") arm; SAE heaped  $0.08~\text{m}^3$  ( $0.1~\text{yd}^3$ ) excavator bucket, lubricant, coolant, full fuel tank, full hydraulic tank and all standard equipments.

Shoe Width		Rubber shoe 300 mm (11.8")
Operating Weight	Cabin	3,005 Kg (6,625 lb)
Operating Weight	Canopy	2,895 Kg (6,382 lb)
	Quick coupler	+ 46 Kg (101 lb)
	canopy	- 110 Kg (243 lb)
Option Weight	additional counter weight	+ 130 Kg (287 lb)
Ground Pressure	Cabin	0.29 kg/cm <sup>2</sup> (4.12 psi)
Giodila Pressure	Canopy	0.27 kg/cm <sup>2</sup> (3.84 psi)

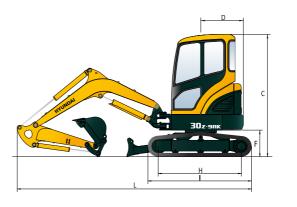
### UNDERCARRIAGE

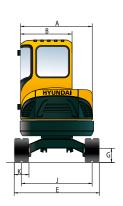
X-leg type center frame is integrally welded with reinforced box-section track frames. The undercarriage includes lubricated rollers, track adjusters with shock absorbing springs and sprockets and rubber shoes.

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 Ranges**

### **DIMENSIONS R30Z-9AK**





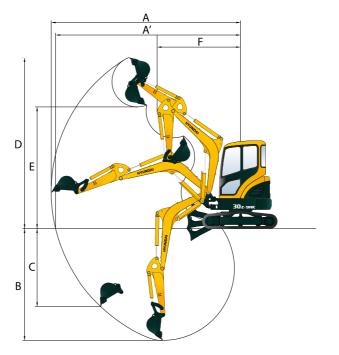
mm (ft · in)

290 (11")

1,550 (4' 11") 1,970 (6' 6") 1,250 (4' 1") 300 (1' 0") 4,180 (13' 9") 4,220 (13' 10")

Α	Overall width of upper structure	1,485 (4' 10")	G	Ground clearance
В	Overall width of cab	1,050 (3' 5")	Н	Tumbler distance
С	Overall height of cab	2,500 (8' 2")	ı	Track length
D	Tail swing radius - standard counterweight	775 (2' 7")	J	Track gauge
	Tail swing radius - additional counterweight	875 (2' 10")	K	Track shoe width
E	Overall width	1,550 (5' 1")	L	Overall length - Standard Arm
F	Clearance under counterweight	540 (1' 9")		Overall length - Long Arm

### **WORKING RANGES R30Z-9AK**



		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")
В	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. front swing radius	2,055 (6'9") *2,090 (6'10")

<sup>\*</sup> Long Arm

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#### STANDARD EQUIPMENT R30Z-9AK

Mono boom (1.945 m; 6' 5")
Arm (2.30 m; 6' 8")
Rubber crawler (300 mm; 10")
Single acting piping (Breaker, etc)
Double acting piping (Clamshell, etc)

#### ISO standard cabin ROPS (ISO 3471) Cabin FOPS (ISO 3449) FOG (ISO 10262 Level I) 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 Centralized monitoring Gauges Fuel level gauge Engine coolant temperature gauge Warning lamps Engine oil pressure Engine coolant temperature Preheat engine Low battery Air cleaner clogging Fuel empty Door and locks, one key fits all Radio / USB player 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

#### **OPTIONAL EQUIPMENT R30Z-9AK**

ISO standard canopy

Canopy ROPS (ISO 3471) FOPS (ISO 3449) FOG (ISO 10262 Level I) TOPS (ISO 12117)

Beacon lamp

Accumulator, work equipment lowering

Travel alarm

Quick coupler

Tool kit

Long arm (1.35 m; 4'5")

Heater & defroster

Lever pattern change valve

Additional counterweight

Proportional control suitor

Proportional control switch

**RCV** with Proportional Control Switch

**Rotation Piping** 

Boom & Arm Safety Lock Valve

- \* 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.

