

Gross Power (SAE J1995)
16.2 HP at 2,400 rpm

Net Power (SAE J1349)
16.0 HP at 2,400 rpm

Bucket Capacity
0.04 m³

Operating Weight
1,855 kg / 4,089 lb

Robex **R18-9AK**



▲ HYUNDAI CONSTRUCTION EQUIPMENT

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PLEASE CONTACT



PRIDE AT WORK

Robex **R18-9AK**

Hyundai Construction Equipment 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!

Machine Walk-Around

Rugged Upper and Lower Frame

The upper frame is designed with an optimum structure to absorb high external stress. The reinforced box section's center frame and track frame provide exceptional strength and longer service life to withstand tough working conditions.

Compact Design

R18-9AK's compact design allows the operator to work in confined areas, like close to buildings on roadways, and in urban areas. R18-9AK's variable undercarriage provides easy and efficient operation in any limited space work environment.

Engine Technology

R18-9AK is powered by a proven and reliable Kubota D902 Engine, providing efficient fuel efficiency and reduced noise, compliant for new Stage V regulation.

Efficient Control System

Control devices are all conveniently located for improved comfort and productivity. A safety lever on the left-side console is designed to prevent exiting the cab while R18-9AK is in operation.

Advanced Hydraulic System

R18-9AK hydraulic system is precisely designed for fast operation with fine control capabilities.

Comfortable and Durable Cab

Cab frames meet international standards TOPS, FOPS ensuring operator's safety.

Extended Life of Components

R18-9AK reduces operating costs over time with long life hydraulic oil, shims and bushings.

Simple and Easy Maintenance

R18-9AK is equipped with wide opening covers and hoods for easy access and maintenance. Additional benefits include an easily serviceable air cleaner and centralized grease fittings.

Operator Convenience

The adjustable suspension seat, wrist rests, ergonomically designed joysticks, and abundant leg room help to reduce operator fatigue. An array of indicators and gauges are displayed on the monitor, keeping the operator informed about machine performance at all times. The monitoring system includes seven warning indicators as well as a water temperature gauge, fuel gauge, and hour meter.

Auto Shift Traveling System **NEW**

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



* Photo may include optional equipment.



PREFERENCE

R18-9AK offers an optimal work environment with a cab designed for comfort and sophistication. Operators can fully customize their work environment and operating preferences to fit their individual needs which will bring a unique controlling experience for all operators.



Comfortable Operating Cab

In a 9 Series cab you can easily adjust the seat and wrist rest settings to suit your preferred operating condition.



The foot rest, attachment pedal, left and right travel pedals and boom swing pedal are configured for convenient access.



Two cup holders are integrated into the right-hand console for storing large and small drinks.



The adjustable wrist rests provide additional comfort.



The control devices are ergonomically configured for higher production efficiency.

OLED Display & ESL (Engine Start Limit) Function

The OLED display is placed to show the following : hour meter, oil pressure, battery charge, engine coolant temperature, and fuel gauge. Engine Start Limit system requiring to enter password to start the machine has also been adopted.

Concentrated Controller Position

The left- and right-hand control levers are ergonomically located for convenient access. The pilot-operated hand levers are easily accessible for controlling the dozer blade and track extension. The easy-to-access control switches on the left-hand console improve operating comfort and productivity. Glow control function make machine suitable for cold weather.

The tiltable left-side console allows the operator easier access to the cab. The safety lock system is designed to prevent exiting the cab while R18-9AK is in operation. When the safety lever and left-side console are positioned upright, the hydraulic functions are disengaged.



Operator Comfort

An operator's work environment should be stress-free. R18-9AK's adjustable suspension seat, wrist rests, ergonomically designed joysticks and abundant space help reduce the stress of the operator.

KUBOTA D902

The 3 Cylinder, 4 Cycle, air cooled engine is built for power, reliability, economy and low emissions.

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 MoS2 coated piston reduce noise levels and vibration.



Boom Swing

R18-9AK's boom swing function is designed for efficient work in congested residential and urban areas. The boom can be offset to left or right within the operating range. (Left 60° / Right 60°)

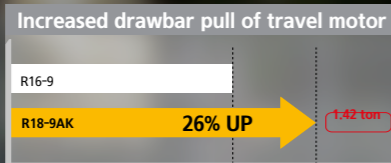


Improved Hydraulic System

Optimized matching between the joystick and main control valve improves the fine control and smoothness of operation. The arm flow summation system saves energy, reduces cavitation and increases speed. To improve safety and avoid boom drift, R18-9AK is equipped with an integrated boom holding system.

Improved Drawbar Pull

Travel performance can be increased by increasing drawbar pull on slopes & rough roads.



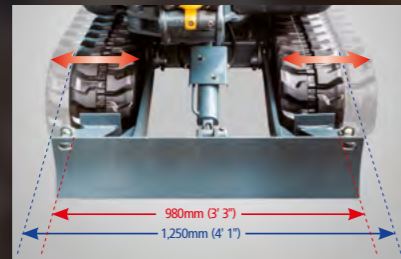
Structural Strength

R18-9AK's 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 using FEM (Finite Elements Method) analysis and long-term durability tests.



Variable Undercarriage

R18-9AK's track width is adjustable to between 980mm~1,250mm (3'3"~4'1"). The operator can easily adjust the blade size by removing the pin. Specially designed rubber-padded track shoes protect the road surface.



PRECISION AND PERFORMANCE

New technologies for improved precision and performance along with smooth and easy control.



Proportional Auxiliary Hydraulic System Option

Proportional control switch for better speed control and operational convenience.



Cylinder Covers

The standard boom cylinder cover and dozer cylinder cover provide additional protection.



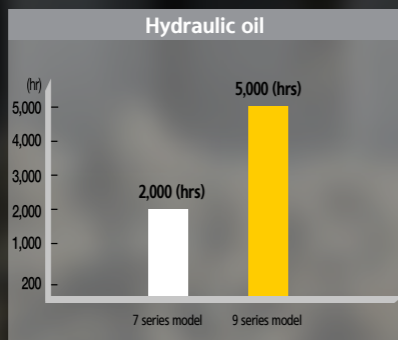
Easy Access

R18-9AK was designed with accessibility in mind. All covers and hoods are designed for complete open access. Regular service and maintenance is easy and convenient with R18-9AK.



Extended Life of Components

R18-9AK is fitted with bushings designed for extended lube intervals (250 hrs) & polymer shims (wear resistant, noise reducing), extended-life hydraulic filters (1,000hrs), long-life hydraulic oil (5,000hrs), more efficient cooling systems and integrated pre-heating systems in order to extend service intervals, minimize operating costs and reduce machine downtime.



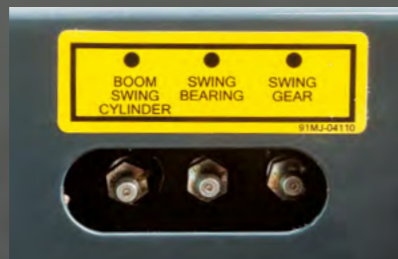
Easy Change Air Cleaner

R18-9AK is equipped with a durable plastic air cleaner designed for easy maintenance.



Centralized Grease Fittings

Centralized lubrication bank for faster, easier service and maintenance.



PROFITABILITY

R18-9AK is designed to maximize profitability with its improved efficiency, enhanced service features, and long-lasting components.



SPECIFICATIONS

ENGINE

Maker / Model	KUBOTA D902		
Type	4-cycle vertical overhead valve, diesel fuel		
Rated flywheel horse power	SAE	J1995 (gross)	16.2 hp at 2,400rpm (12.1kW at 2,400rpm)
		J1349 (net)	16.0 hp at 2,400rpm (11.9kW at 2,400rpm)
DIN		6271/1 (gross)	16.5 ps at 2,400rpm (12.1kW at 2,400rpm)
		6271/1 (net)	16.2 ps at 2,400rpm (11.9kW at 2,400rpm)
Max. torque	5.57 kgf-m (40.3 lbf-ft) at 1,800rpm		
Bore X stroke	72.0 x 73.6 (2.83" x 2.90")		
Piston displacement	898cc (54.80 cu-in.)		
Batteries	12V, 80AH		
Starting motor	12V-1.2kW		
Alternator	24V, 40A		

HYDRAULIC SYSTEM

MAIN PUMP

Type	Variable displacement piston pumps
Rated flow	2 x 18 + 10.8 l/min (2 x 4.8 + 2.9 US gpm / 2 x 4.0 + 2.4 UK gpm)
Sub-pump for pilot circuit	Gear pump

HYDRAULIC MOTORS

Travel	Two speed axial piston motor with counter balance valve
Swing	Axial piston motor with automatic brake

RELIEF VALVE SETTING

Implement circuits	210 kgf/cm ² (2,990 psi)
Travel circuits	210 kgf/cm ² (2,990 psi)
Swing circuit	200 kgf/cm ² (2840psi)
Pilot circuit	35 kgf/cm ² (498 psi)
Service valve	Installed

HYDRAULIC CYLINDER

NO. OF CYLINDER - BORE X STROKE

Boom	60 x 465mm (2.4" x 18.3")
Arm	60 x 400mm (2.4" x 15.7")
Bucket	55 x 345mm (2.2" x 13.6")
Boom swing	55 x 355mm (2.2" x 14.0")
Dozer blade	65 x 93mm (2.6" x 3.7")
Extension	50 x 290mm (2.0" x 11.4")

* Hyundai Bio Hydraulic Oil (HBHO) available

NOISE LEVEL

NOISE LEVELS (DYNAMIC VALUE)

LwA	93 dB
LpA	76 dB

COOLANT & LUBRICANT CAPACITY

Refilling	liter	US gal	UK gal
Fuel tank	21	5.5	4.6
Engine coolant	4.0	1.0	0.9
Engine oil	3.7	1.0	0.8
Hydraulic tank	20	5.3	4.4

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	Lubricated with drain oil
Swing speed	9.1 rpm
Swing Brake	wet disc

DRIVES & BRAKES

Max. travel speed(high) / (low)	3.9 km / 2.0 km (2.4 mph) / (1.2 mph)
Maximum traction force	1.42 ton
Maximum gradeability	30°
Parking brake (Option)	wet disc

DIGGING FORCE (ISO)

Bucket digging force	0.96m Arm	1.12m Arm
	1,540 kgf	1,540 kgf
Arm crowd force	15.1 kN	15.1 kN
	3,400 lbf	3,400 lbf
	960 kgf	870 kgf
	9.4 kN	8.5 kN
	2,120 lbf	1,920 lbf

OPERATING WEIGHT

Operating weight, including 1,800 mm (5' 11") boom, 960 mm (3' 2") arm, SAE heaped 0.04 m³ (0.05 yd³) excavator bucket, lubricant, coolant, full fuel tank, hydraulic tank, standard equipment, and operator, 75 kg (165 lb)

Shoe width	Rubber shoe 230 mm (9")
Operating weight (canopy)	1,855 kg (4,089 lb)
Ground pressure (canopy)	0.30 kg/cm ² (4.24 psi)
Operating weight (cabin)	1,995 kg (4,398 lb)
Ground pressure (cabin)	0.32 kg/cm ² (4.56 psi)

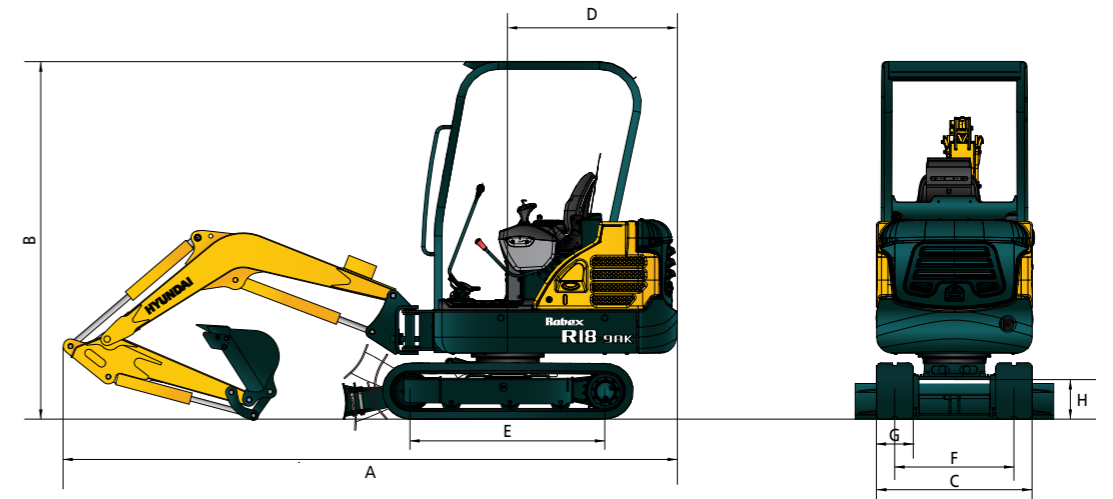
UNDERCARRIAGE

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

Track frame	Variable undercarriage
No. of track rollers on each side	3 EA

DIMENSIONS & WORKING RANGE

R18-9AK DIMENSIONS

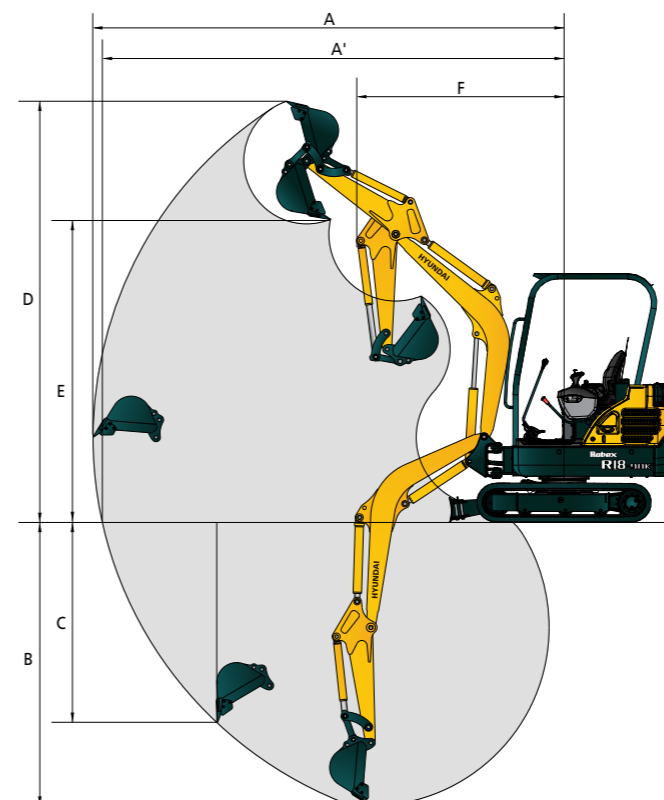


Unit : mm (ft. - in)

A Overall length	3,860[3,870] (12' 8"[12'8"])	E Tumbler distance	1,230 (4' 0")
B Overall height	2,300 (7' 7")	F Track gauge	750 ~ 1,040 (2' 6" ~ 3' 5")
C Overall width	980 ~ 1,270 (3' 3" ~ 4' 2")	G Track shoe width	230 (0' 9")
D Tail swing radius	1,065 (3' 6")	H Ground clearance	150 (0' 6")

[]:Long Arm

R18-9AK WORKING RANGE



Unit : mm (ft. - in)

Boom length	1,800 (5' 11")	
Arm length	960 (3' 2")	1,120 (3' 8")
A Max. digging reach	3,960 (12' 12")	4,110 (13' 6")
A' Max. digging reach on ground	3,870 (12' 8")	4,020 (13' 2")
B Max. digging depth	2,245 (7' 4")	2,405 (7' 11")
C Max. vertical wall digging depth	1,775 (5' 10")	1,930 (6' 4")
D Max. digging height	3,675 (12' 1")	3,785 (12' 5")
E Max. dumping height	2,575 (8' 5")	2,680 (8' 10")
F Min. swing radius	1,660 (5' 5")	1,695 (5' 7")

STANDARD / OPTION

STANDARD EQUIPMENT
ISO standard canopy
Canopy FOPS (ISO 10262)
Canopy TOPS (ISO 12117)
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
One key
Mechanical suspension seat with seat belt
Console box tilting system(LH.)
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
Mono boom (1.80 m, 5' 11")
Arm (0.96 m, 3' 2")
Rubber crawler (230mm, 9")
Single acting piping (Breaker, etc)
Double acting piping (Clamshell, etc)
Auto shift traveling system
Emergency stop switch
Tool box
Glow control

OPTIONAL EQUIPMENT
Tool kit
Operator suit
Lever pattern change valve
Cabin FOPS (ISO 10262)
Cabin TOPS (ISO 12117)
RCV with proportional control switch
Travel motor with parking brake
Heater
Long arm (1.12m, 3'8")
Hyundai Bio Hydraulic Oil (HBHO)
Cabin light
Beacon lamp
Casette radio
Quick coupler piping

- * 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.

MEMO

MEMO

MEMO