

# Hyundai R55-9A

## Specifications

**Net Power** 65.1 hp  
(48.5 kW) at 2,400 rpm

**Bucket Breakout Force**  
(ISO) 4,330 kgf / 9,550 lbf

**Operating Weight (Cab)**  
5,750 kg (12,570 lb)

**Arm Digging Force**  
(ISO) 3,260 kgf / 7,190 lbf

### ENGINE

MODEL	YANMAR 4TNV98C		
Type	Water-cooled, 4-cycle diesel 4 cylinders in line, direct injection, low emission		
Rated flywheel horsepower	SAE	J1995 (gross)	66.9 HP (49.9 kW) at 2,400 rpm
		J1349 (net)	65.1 HP (48.5 kW) at 2,400 rpm
Max. torque	24 kgf·m (173.6 lbf·ft) at 1,560 rpm		
Bore X stroke	98 mm (3.85") x 110 mm (4.33")		
Piston displacement	3,319 cc (203 in <sup>3</sup> )		
Battery	1 x 12 V x 100 Ah		
Starting motor	12 V - 3.0 kW		
Alternator	12 V - 60 Amp		

### HYDRAULIC SYSTEM

MAIN PUMP	
Type	Two variable displacement piston pumps + gear pump
Max. flow	2 X 57.8 ℓ/min (15.3 gpm) pumps + 38.4 ℓ/min (10.1 gpm) at 2,100 rpm
Sub-pump for pilot circuit (Gear pump)	9.5 ℓ/min (2.5 gpm)

### 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	240 kgf/cm <sup>2</sup> (3,410 psi)
Travel circuit	220 kgf/cm <sup>2</sup> (3,130 psi)
Swing circuit	220 kgf/cm <sup>2</sup> (3,130 psi)
Pilot circuit	30 kgf/cm <sup>2</sup> (430 psi)
Service valve	Installed

### HYDRAULIC CYLINDERS

No. of cylinder bore X stroke	Boom: 1-110 x 715 mm (4.3" x 28.1")
	Arm: 1-90 x 850 mm (3.5" x 33.5")
	Bucket: 1-80 x 660 mm (3.1" x 26.0")
	Boom swing: 1-95 x 527 mm (3.7" x 20.7")
	Dozer blade: 110 x 219 mm (4.3" x 8.8")

### TRAVEL SYSTEM

Drive method	Full hydrostatic type
Drive motor	Axial piston motor, in-shoe design
Reduction system	2-stage planetary
Max. drawbar pull	5,300 kgf (11,700 lbf)
Max. travel speed (high) / (low)	4.2 km/hr (2.6 mph) / 2.2 km/hr (1.4 mph)
Gradeability	35° (70%)
Parking brake	Multi-wet disc

### CONTROLS

Pilot-pressure-operated joysticks and pedals with detachable lever provide almost effortless and fatigueless operation.

Pilot control	Two joysticks with one safety lever (LH): Arm swing, Boom swing (RH): Boom and bucket (ISO)
Traveling and steering	Two levers with pedals
Engine throttle	Electric, dial type

### SWING SYSTEM

Swing motor	Axial piston motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease-bathed
Swing brake	Multi wet disc
Swing speed	9.1 rpm

### COOLANT AND LUBRICANT CAPACITY

(Refilling)	liter	gal
Fuel tank	120.0	31.7
Engine coolant	9.5	2.5
Engine oil	11.6	3.1
Swing device - gear oil	1.5	0.4
Final drive (each)	1.2	0.3
Hydraulic tank	70.0	18.5
Hydraulic system	120.0	31.7

### WEIGHT (APPROXIMATE)

Operating weight, including 3,000 mm (9' 10") boom, 1,600 mm (5' 3") arm, SAE heaped 0.18 m<sup>3</sup> (0.24 yd<sup>3</sup>) digging bucket, 400 mm (15.6") rubber track, lubricant, coolant, full fuel tank, hydraulic tank, 335 kg (740 lb) counterweight and the standard equipment.

Operating weight (cab)	5,750 kg (12,570 lb)
Ground pressure (cab)	0.33 kg/cm <sup>2</sup> (4.69 psi)

### UNDERCARRIAGE

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

Center frame	X - leg type
Track frame	Pentagonal box type
No. of track shoes on each side	40
No. of upper rollers on each side	1
No. of lower rollers on each side	5



Rating over front



Rating over side or 360 degree

## R55-9A Lifting Capacity ISO Condition 2

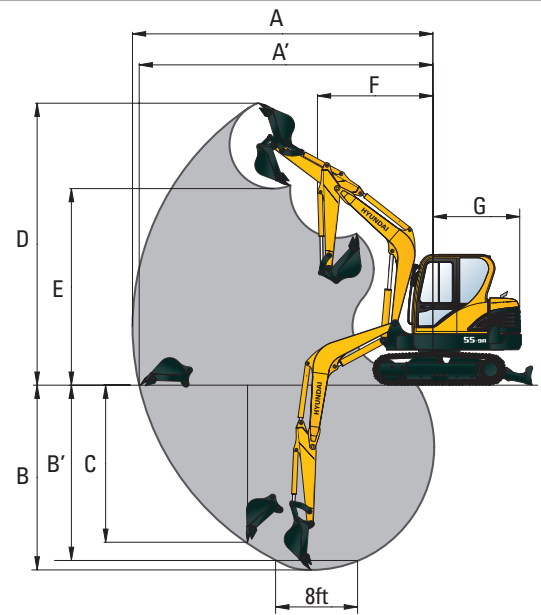
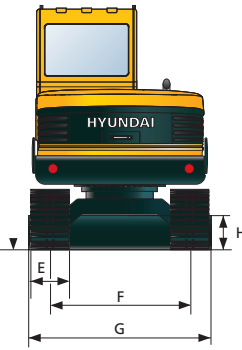
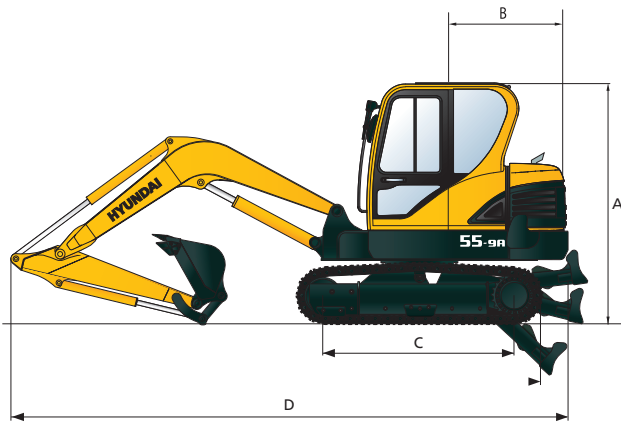
Boom: 3.0 m (9' 10") / Arm: 1.6 m (5' 3") / Bucket: 0.18 m<sup>3</sup> (0.24 yd<sup>3</sup>) SAE heaped / Dozer down / Rubber track: 400 mm (16") / Counterweight 335 kg (740 lb)

Lift-point height m (ft)		Lift-point radius								At max. reach		
		2.0 m (6.6 ft)		3.0 m (9.8 ft)		4.0 m (13.1 ft)		5.0 m (16.4 ft)		Capacity	Reach	
												m(ft)
4.0 m	kg					*1,240	1,090			*1,290	980	4.26
13.1 ft	lb					*2,730	2,410			*2,840	2,160	(14.0)
3.0 m	kg					*1,290	1,080			*1,260	780	4.87
9.8 ft	lb					*2,840	2,380			*2,780	1,720	(16.0)
2.0 m	kg			*1,980	1,600	*1,520	1,040	*1,340	730	*1,270	690	5.17
6.6 ft	lb			*4,370	3,530	*3,340	2,280	*2,950	1,620	*2,800	1,530	(17.0)
1.0 m	kg			*2,620	1,480	*1,780	990	*1,430	710	*1,360	660	5.24
3.3 ft	lb			*5,780	3,270	*3,920	2,170	*3,150	1,570	*3,000	1,460	(17.2)
0.0 m	kg			*2,880	1,420	*1,940	950	*1,470	700	*1,440	680	5.08
0.0 ft	lb			*6,340	3,140	*4,280	2,090	*3,240	1,540	*3,170	1,500	(16.7)
-1.0 m	kg	*3,100	2,760	*2,780	1,410	*1,910	940			*1,500	760	4.66
-3.3 ft	lb	*6,830	6,070	*6,120	3,120	*4,200	2,070			*3,310	1,690	(15.3)
-2.0 m	kg	*3,630	2,810	*2,300	1,440					*1,550	1,000	3.89
-6.6 ft	lb	*8,000	6,190	*5,080	3,170					*3,410	2,200	(12.8)

- Notes:
- Lifting capacities are based on ISO 10567.
  - Lifting capacities of the 9A Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
  - The lift-point is a hook (standard equipment) located on the back of the bucket.
  - (\*) indicates load limited by hydraulic capacity.

# Dimensions & Working Range

## R55-9A DIMENSIONS



### R55-9A DIMENSIONS

			mm (ft-in)
A Overall height of cab	2,550 (8' 4")	E Track shoe width	Steel 380 (1' 3")
			Rubber 400 (1' 4")
B Tail swing radius	1,650 (5' 5")	F Track gauge	1,600 (5' 3")
C Tumbler distance	1,990 (6' 6")	G Overall width	2,000 (6' 7")
D Overall length	5,600 (18' 4")	H Ground clearance	380 (1' 3")

### BUCKETS

Capacity		Width		Weight
SAE heaped	CECE heaped	Without side cutters	With side cutters	
0.07 m <sup>3</sup> (0.09 yd <sup>3</sup> )	0.06 m <sup>3</sup> (0.08 yd <sup>3</sup> )	315 mm (12.4")	360 mm (14.2")	115 kg (255 lb)
0.18 m <sup>3</sup> (0.24 yd <sup>3</sup> )	0.15 m <sup>3</sup> (0.20 yd <sup>3</sup> )	670 mm (26.4")	740 mm (29.1")	170 kg (375 lb)

### R55-9A WORKING RANGE

	mm (ft-in)	
Boom length	3,000 (9' 10")	
Arm length	1,600 (5' 3")	1,900 (6' 3")
A Max. digging reach	6,150 (20' 2")	6,400 (20' 1")
A <sup>1</sup> Max. digging reach on ground	6,010 (19' 9")	6,270 (20' 7")
B Max. digging depth	3,820 (12' 6")	4,060 (13' 4")
B <sup>1</sup> Max. digging depth (8 ft)	3,420 (11' 3")	3,700 (12' 2")
C Max. vertical wall digging depth	3,200 (10' 6")	3,460 (11' 4")
D Max. digging height	5,780 (18' 12")	5,920 (19' 5")
E Max. dumping height	4,050 (13' 3")	4,180 (13' 9")
F Min. swing radius	2,350 (7' 9")	2,360 (7' 9")
G Tail swing radius	1,650 (5' 5")	1,650 (5' 5")

## STANDARD EQUIPMENT

### ISO standard cabin

- Cabin TOPS ISO 12117 (ROPS ISO 12117-2) FOG ISO 10262 Level I (FOPS ISO 3449 Level I)
- All-weather steel cab with all-around visibility
- Safety glass windows
- Rise-up type windshield wiper
- Sliding fold-in front window
- Sliding side window
- Lockable door
- Accessory box and ashtray

### Air-conditioner & heater

- Radio / USB player with remote control
- Single-acting piping kit (breaker, etc)
- Double-acting piping kit (clamshell, etc)

### Centralized monitoring

- Engine speed
- Gauges
  - Fuel level gauge
  - Engine coolant temperature gauge
- Warning
  - Fuel level
  - Engine oil pressure
  - Engine coolant temperature
  - Hydraulic oil temperature
  - Low battery
  - Air cleaner closing

### Door and cab locks, universal key

- Two outside rear view mirrors
- Travel alarm
- Quick coupler (dual lock) and piping
- Rubber track shoes (400 mm / 16")

### Fully adjustable suspension seat with seat belt

- Console box tilting system (LH)
- Four front working lights
- Electric horn
- Battery (1 x 12 V x 100 Ah)
- Battery master switch
- 12-volt power supply
- Removable clean out screen for radiator
- Automatic swing brake
- Removable reservoir tank
- Water separator, fuel line
- Mono boom (3.0 m / 9' 10")
- Arm (1.6 m / 5' 3")
- Track rail guard
- Starting aid (air grid heater) cold weather
- Viscous fan clutch
- Hyundai bucket (0.18 m<sup>3</sup> / 0.24 yd<sup>3</sup>)

## OPTIONAL EQUIPMENT

- Fuel filler pump (35ℓ/min, 9.2 gpm)
- Beacon lamp
- Accumulator

- Long arm (1.9 m / 6'3")
- Tool kit
- Cabin front, rear work lamp
- Steel Track shoes with rubber pad (400 mm / 16")

- Safety lock valve for boom cylinder with overload warning
- Safety Lock valve for arm cylinder
- Rear view camera
- Steel track shoes (380 mm / 15")



www.hceamericas.com

6100 Atlantic Blvd., Norcross, GA 30071

TEL (678) 823 7777 FAX (678) 823 7778