Hyundai R60cr-9A

Specifications

ENGINE

MODEL			YANMAR 4TNV98C	
			Water-cooled, 4-cycle diesel	
Type			4 cylinders in line,	
			direct injection, low emission	
Rated		J1995 (gross)	64.7 HP (48.3 kW) at 2,200 rpm	
flywheel SA horsepower	SAE	J1349 (net)	63 HP (47.0 kW) at 2,200 rpm	
Max. torque			24 kgf·m (174 lbf·ft) at 1,560 rpm	
Bore X stroke	,		98 mm (3.86") x 110 mm (4.33")	
Piston displacement			3,319 cc (203 in ³)	
Battery			1 x 12 V x 100 Ah	
Starting motor			12 V - 3.0 kW	
Alternator			12 V - 80 Amp	

HYDRAULIC SYSTEM

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Туре	Variable displacement piston pumps + gear pump	
Max. flow	2 x 55 ℓ/min (14.5 gpm) + 36.6 ℓ/min (9.6 gpm) at 2,000 rpm	
Sub-pump for pilot circuit (Gear pump)	6.9 ℓ/min (2.4 gpm)	

CROSS-SENSING AND FUEL-SAVING PUMP SYSTEM

HYD	RΔ	Ш	ıc	N/I	าาต	าหร

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 ² (3,410 psi)
Travel circuit	220 kgf/cm ² (3,130 psi)
Swing circuit	220 kgf/cm ² (3,130 psi)
Pilot circuit	30 kgf/cm² (430 psi)
Service valve	Installed

HYDRAULIC CYLINDERS

	Boom: 1-110 x 715 mm (4.3" x 28.1")	
No. of cylinders	Arm: 1-85 x 840 mm (3.3" x 33.1")	
,	Bucket: 1-80 x 660 mm (3.1" x 26.0")	
bore X stroke	Boom swing: 1-95 x 519 mm (3.7" x 20.4")	
	Dozer blade: 1-110 x 224 mm (4.3" x 8.8")	

Net Power 63 hp (47 kW) at 2,200 rpm

Bucket Breakout Force (ISO) 4,170 kgf / 9,190 lbf

6,100 kg (13,450 lb) **Arm Digging Force** (ISO) 2,700 kgf / 5,950 lbf

Operating Weight

TRAVEL SYSTEM

Drive method	Full hydrostatic type	
Drive motor	Axial piston motor, in-shoe design	
Reduction system	Planetary reduction gear	
Max. drawbar pull	5,300 kgf (11,700 lbf)	
Max. travel speed (high) / (low)	4.0 km/hr (2.5 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	8.8 rpm	

COOLANT AND LUBRICANT CAPACITY

(Refilling)	liter	gal
Fuel tank	82.0	21.7
Engine coolant	11.0	2.9
Engine oil	11.6	3.1
Final drive (each)	1.2	0.3
Hydraulic tank	60.0	15.9
Hydraulic system	110.0	29.1

WEIGHT (APPROXIMATE)

Operating weight 6,100 kg (13,450 lb), including 2,900 mm (9' 6") boom, 1,480 mm (4' 10") arm, SAE heaped 0.18 m³ (0.24 yd³) excavator bucket, 400 mm (15.8") rubber track, lubricant, coolant, full fuel tank, hydraulic tank, 670 kg (1,480 lb) counterweight and the standard equipment.

Operating weight (cab)	6,100 kg (13,450 lb)
Ground pressure (cab)	0.35 kg/cm ² (4.98 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 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



R60CR-9A Lifting Capacity ISO Condition 2

Boom: 2.9 m (9' 6") / Arm: 1.48 m (4' 10") / Bucket: 0.18 m³ (0.24 yd²) SAE heaped / Dozer down / Counterweight 670 kg (1,480 lb)

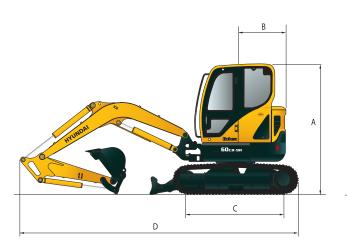
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Lift-po		2.0 m	(6.6 ft)	2.5 m	(8.2 ft)	3.0 m	(9.8 ft)		(11.5 ft)	4.0 m	(13.1 ft)	4.5 m	(14.8 ft)		(16.4 ft)	Сара	acity	Reach
heigh m (ft																		m(ft)
4.0 m	kg							*1,300	*1,300	*1,370	1,060					*1,200	990	4.15
13.1 ft	lb							*2,870	*2,870	*3,020	2,340					*2,650	2,190	(13.6)
3.0 m	kg							*1,440	1,300	*1,400	1,050	*1,380	870			*1,110	770	4.81
9.8 ft	lb							*3,180	2,870	*3,090	2,320	*3,050	1,910			*2,450	1,700	(15.8)
2.0 m	kg					*2,240	1,560	*1,860	1,240	*1,650	1,010	*1,510	840	*1,430	710	*1,120	680	5.13
6.6 ft	lb					*4,930	3,450	*4,110	2,720	*3,630	2,220	*3,340	1,860	*3,160	1,570	*2,470	1,500	(16.8)
1.0 m	kg					*2,950	1,450	*2,310	1,160	*1,930	960	*1,690	810	*1,520	690	*1,200	650	5.20
3.3 ft	lb					*6,510	3,190	*5,090	2,560	*4,250	2,120	*3,720	1,780	*3,350	1,530	*2,640	1,440	(17.1)
0.0 m	kg			*2,150	1,860	*3,150	1,400	*2,510	1,120	*2,080	930	*1,780	790	*1,540	680	*1,380	670	5.03
0.0 ft	lb			*4,750	4,100	*6,940	3,090	*5,530	2,470	*4,580	2,050	*3,920	1,730	*3,380	1,500	*3,050	1,480	(16.5)
-1.0 m	kg	*2,870	2,800	*3,690	1,870	*2,930	1,400	*2,390	1,110	*1,990	920	*1,640	780			*1,570	760	4.59
-3.3 ft	lb	*6,330	6,160	*8,140	4,120	*6,470	3,080	*5,270	2,450	*4,380	2,030	*3,610	1,730			*3,460	1,680	(15.1)
-2.0 m	kg	*3,590	2,850	*2,810	1,910	*2,270	1,430	*1,820	1,140							*1,570	1,040	3.75
-6.6 ft	Ιb	*7.920	6.290	*6.200	4.210	*5.010	3.150	*4.000	2.510							*3.460	2.280	(12.3)

Notes: 1. Lifting capacities are based on ISO 10567.

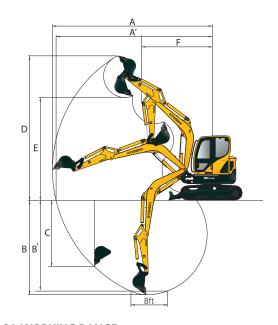
- 2. Lifting capacities of the 9A Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
- 3. The lift-point is a hook (standard equipment) located on the back of the bucket.
- 4. (*) indicates load limited by hydraulic capacity.

Dimensions & Working Range

R60CR-9A DIMENSIONS







R60CR-9A DIMENSIONS mm (ft-in)								
A Overall height of cab	2,550 (8' 4")	E Track shoe width	Steel	380 (1' 3")				
A Overall fleight of cab	2,330 (8 4)	E Track Shoe width	Rubber	400 (1' 4")				
B Tail swing radius	1,080 (3' 7")	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")				

Cap	acity	Wid	Weight	
SAE heaped	CECE heaped Without side cutters			
0.07 m ³ (0.09 yd ³)	0.06 m ³ (0.08 yd ³)	315 mm (12.4")	360 mm (14.2")	115 kg (255 lb)
0.18 m³ (0.24 yd³)	0.15 m³ (0.20 yd³)	670 mm (26.4")	740 mm (29.1")	170 kg (375 lb)

<u>R60</u>	OCR-9A WORKING RANGE	mm (ft·in)				
	Boom length	2,900 (9' 6")				
	Arm length	1,480 (4' 10")	1,900 (6' 3")			
Α	Max. digging reach	6,150 (20' 2")	6,480 (21' 3")			
A ¹	Max. digging reach on ground	6,010 (19' 9")	6,350 (20' 10")			
В	Max. digging depth	3,570 (11' 9")	3,990 (13' 1")			
B ¹	Max. digging depth (8 ft)	3,160 (10' 5")	3,620 (11' 11")			
С	Max. vertical wall digging depth	3,040 (9' 12")	3,360 (11' 0")			
D	Max. digging height	5,680 (18' 8")	5,850 (19' 2")			
Ε	Max. dumping height	3,930 (12' 11")	4,100 (13' 5")			
F	Min. swing radius	2,420 (7' 11")	2,510 (8' 3")			

STANDARD EQUIPMENT

ISO standard cabin

BUCKETS

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 and heater

Travel alarm

Quick coupler with piping

Centralized monitoring

• Engine speed

• Gauges

Fuel-level gauge

Engine coolant temperature gauge

• Warning Indicators

Fuel-level

Engine oil pressure

Engine coolant temperature

Hydraulic oil temperature

Low battery

Air cleaner clogging

Fuel prefilter

Rubber track shoes (400 mm / 1' 4")

Pattern-change lever

Additional counterweight (200 kg / 440 lb)

Door and cab locks, one key

Radio / USB player with remote control

Outside rearview mirror

Single-acting piping kit (breaker, etc)

Double-acting piping kit (clamshell, etc.)

Fully adjustable suspension seat with seat belt

Console box tilting system (LH)

Two front working lights

Electric horn

Battery (1 x 12 V x 100 Ah)

Battery master switch

12-volt power supply

Automatic swing brake Removable reservoir tank

Water separator, fuel line

Mono boom (2.9 m / 9' 6")

Arm (1.48 m / 4' 10")

Track rail guard

Starting aid (air grid heater) cold weather

Hyundai bucket (0.18 m³ / 0.24 yd³)

OPTIONAL EQUIPMENT

Beacon lamp Accumulator

Long arm (1.9 m / 6'3")

Tool kit

Cabin rear work lamp

Safety lock v/v for boom cylinder with overload warning

Safety lock v/v for arm cylinder Steel track shoes (380 mm / 14")

Rearview camera



www.hceamericas.com 6100 Atlantic Blvd., Norcross, GA 30071 TEL (678) 823 7777 FAX (678) 823 7778

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