

HX90A SPECIFICATIONS

ENGINE

Model	YANMAR 4TNV98C-PHYB		
Emissions certification	Tier 4 Final		
Type	4-cylinder, water-cooled, 4-cycle, direct-injection, electronically controlled diesel engine		
Rated power	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	173 lbf-ft (235 Nm) at 1,560 rpm		
Bore × stroke	3.86" × 4.33" (98 × 110 mm)		
Piston displacement	203 in ³ (3,319 cm ³)		
Batteries	2 × 12 V × 100 Ah		
Starting motor	12 V × 3.0 kW		
Alternator	12 V × 100 A		

HYDRAULIC SYSTEM

MAIN PUMP

Type	Variable-displacement piston pump
Max. flow	38.04 gpm (144 ℓ/min)
Sub-pump for pilot circuit (gear pump)	4.3 gpm (16 ℓ/min)

* Cross-sensing and fuel-saving pump system.

AUXILIARY PRESSURE

4 Way	Aux flow	32 gpm (120 ℓ/min)
	Pressure	3,980 psi (274 bar)
Rotating	Flow	10–15 gpm (38–57 ℓ/min)
	Pressure	4,062 psi (280 bar)

HYDRAULIC MOTORS

Travel	2-speed axial piston motor with counter balance valve and parking brake
Swing	Axial piston motor with automatic brake

RELIEF VALVE SETTING

Implement circuits	psi (bar)	4,062 (280)
Travel circuits		4,062 (280)
Swing circuit		3,553 (250)
Pilot circuit		507 (35)
Service valve		Installed

HYDRAULIC CYLINDERS

No. of cylinders – bore × stroke	Boom	1 – 4.7" × 34" (120 × 865 mm)
	Arm	1 – 3.9" × 34" (100 × 860 mm)
	Bucket	1 – 3.5" × 27.0" (90 × 685 mm)
	Boom swing	1 – 4.3" × 27.8" (110 × 707 mm)
	Dozer blade (STD)	1 – 4.3" × 7.5" (1110 × 190 mm)
	Dozer blade (angle)	1 – 5.5" × 7.1" (140 × 180 mm)
	Angle dozer blade	1 – 3.9" × 18.1" (100 × 461 mm)

NOISE LEVEL (CAB)

DYNAMIC VALUE

LwA	99 dB
LpA	76 dB

TRAVEL SYSTEM

Drive method	Fully hydrostatic type	
Drive motor	Axial piston motor, in-shoe design	
Reduction system	Planetary reduction gear	
Max. drawbar pull	14,110 lbf (6,400 kgf)	
Max. travel speed (high / low)	Steel track & Road Liner	2.9 mph (4.6 km/h) / 1.7 mph (2.8 km/h)
	Rubber track	3.2 mph (5.1 km/h) / 1.9 mph (3.1 km/h)
Gradeability	35° (70%)	
Parking brake	Multi wet disc	

CONTROL

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 rpm

COOLANT & LUBRICANT CAPACITY

Fuel tank	30.4 (115.0)
Engine coolant	3.4 (13.0)
Engine oil	2.8 (10.5)
Final drive (each)	0.3 (1.1)
Hydraulic tank	12.3 (56.0)
Hydraulic system	23.9 (109.0)

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 track.

Center frame	X-leg type
Track frame	Pentagonal box type
No. of cored bars on each side	75
No. of upper rollers on each side	1
No. of lower rollers on each side	5

OPERATING WEIGHT (APPROXIMATE)

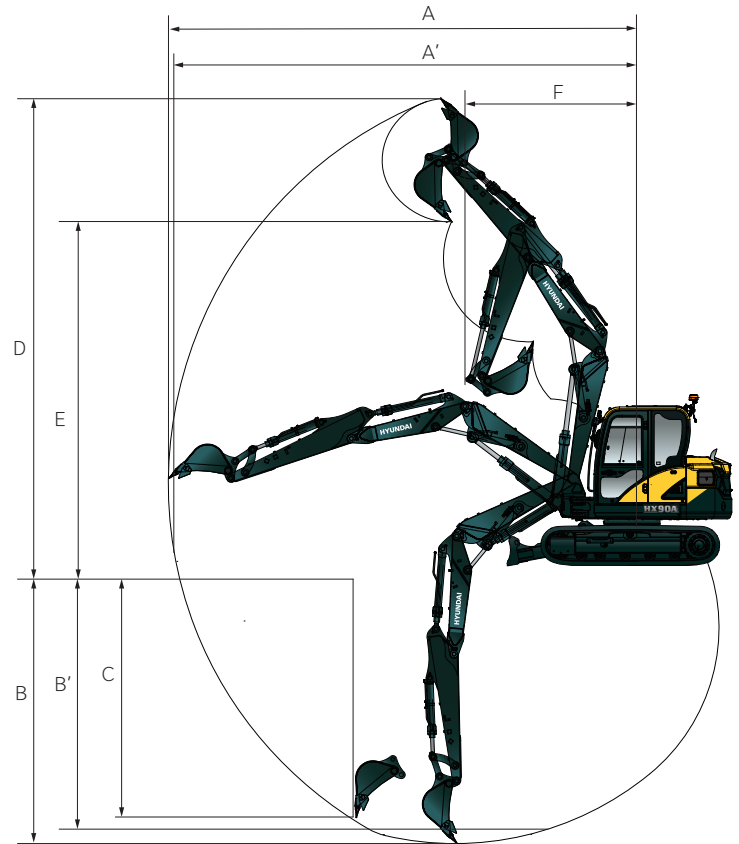
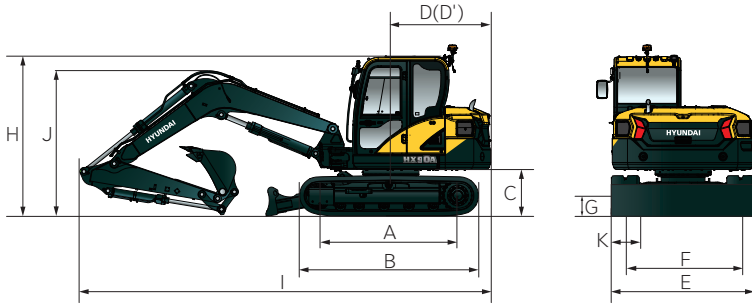
Operating weight, including 11' 8" (3,550 mm) mono boom, 6' 11" (2,100 mm) long arm, SAE heaped 0.37 yd³ (0.28 m³) digging bucket, lubricant, coolant, hydraulic tank, fuel tank, add CWT, quick coupler, rubber track, operator 165 lbs (75 kg).

OPERATING WEIGHT

Operating weight	20,040 lb (9,090 kg)
Ground Pressure	5.5 psi (0.39 kg/cm ²)

HX90A

DIMENSIONS AND WORKING RANGE



DIMENSIONS Unit: ft in (mm)

11' 8" (3,550) mono boom and 6' 11" (2,100) long arm

A	Tumbler distance	7' 7" (2,300)
B	Overall length of crawler	9' 6" (2,885)
C	Ground clearance of counterweight	2' 5" (745)
D	Tail swing radius	5' 3" (1,600)
D'	Rear-end length	5' 5" (1,645)
E	Overall width (w/foot board)	8' 5" (2,560)
F	Track gauge	6' 1" (1,850)
G	Min. Ground clearance	1' 2" (360)
H	Overall height of cab	8' 5" (2,560)
	Boom length	11' 8" (3,550)

DIMENSIONS	STANDARD ARM	LONG ARM
Arm length	5' 9" (1,750)	6' 11" (2,100)
I Overall length	21' 7" (6,585)	21' 10" (6,655)
J Overall height of boom	7' 2" (2,175)	8' 1" (2,465)
K Track shoe width	18" (450)	

WORKING RANGE STANDARD ARM LONG ARM

Boom length	11' 8" (3,550)	
Arm length	5' 9" (1,750)	6' 11" (2,100)
A Max. digging reach	23' 3" (7,090)	24' 4" (7,420)
A' Max. digging reach on ground	22' 9" (6,940)	23' 11" (7,280)
B Max. digging depth	14' 1" (4,290)	15' 3" (4,640)
B' Max. digging depth (8' level)	12' 11" (3,930)	14' 2" (4,320)
C Max. vertical wall digging depth	12' 0" (3,660)	13' 2" (4,010)
D Max. digging height	22' 11" (6,980)	23' 9" (7,230)
E Max. dumping height	16' 3" (4,950)	17' 0" (5,190)
F Min. swing radius	8' 3" (2,515)	8' 11" (2,715)

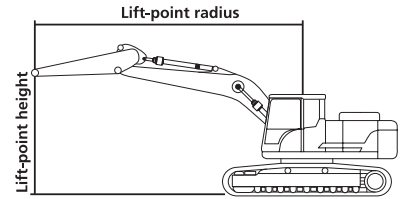
DIGGING FORCE

Arm	Length	ft in (mm)	5' 9" (1750)	6' 11" (2100)
	Weight	lb (kg)	368 (167)	428 (194)
Bucket Digging Force	SAE	kN	52.9 (58.5)	53.0 (58.7)
		kgf	5,401.0 (5,979.7)	5,401.0 (5,979.7)
		lbf	11,907.2 (13,183.0)	11,907.2 (13,183.0)
	ISO	kN	61.6 (68.3)	61.6 (68.3)
		kgf	6,289.9 (6,957.2)	6,289.9 (6,957.2)
		lbf	13,853.7 (1,5338.0)	13,853.7 (1,5338.0)
Arm Crowd Force	SAE	kN	39.7 (43.9)	35.7 (39.5)
		kgf	4,042.0 (4,475.0)	3,639.5 (4,029.5)
		lbf	8,911.0 (9,865.8)	8,023.8 (8,883.5)
	ISO	kN	41.4 (45.9)	37.1 (41.1)
		kgf	4,221.6 (4,674.0)	3,782.4 (4,187.7)
	lbf	9,307.1 (10,304.3)	8,338.8 (9,232.3)	

Note : Arm weight includes bucket cylinder, linkage, and pin

HX90A

LIFTING CAPACITY



LIFTING CAPACITY

Boom: 11' 8" (3,550 mm)

Arm: 6' 11" (2,100 mm)

Bucket: without

Shoe 18" (450 mm) rubber track

Dozer: down

Counterweight: 2,760 lb (1,250 kg)

Capacities based on North American standard configuration in accordance with ISO condition 2 standard.

Rating over front

Rating over side or 360 degrees

Lift-point height ft (mm)	Lift-point radius								At max. reach			
	4.9 ft (1,500 mm)		9.8 ft (3,000 mm)		14.8 ft (4,500 mm)		19.7 ft (6,000 mm)		Capacity		Reach	
											ft (mm)	
19.7 (6,000)	lb									*4,670	*4,670	12.7 (3,880)
	kg									*2,120	*2,120	
14.8 (4,500)	lb					*4,060	*4,060			*4,040	3,330	17.8 (5,430)
	kg					*1,840	*1,840			*1,830	1,510	
9.8 (3,000)	lb			*6,000	*6,000	*4,740	4,390	*4,300	2,800	*3,860	2,690	20.2 (6,150)
	kg			*2,720	*2,720	*2,150	1,990	*1,950	1,270	*1,750	1,220	
4.9 (1,500)	lb					*6,040	4,170	*4,630	2,730	*4,060	2,490	21.0 (6,390)
	kg					*2,740	1,890	*2,100	1,240	*1,840	1,130	
0.0 (0.0)	lb			*8,200	7,190	*6,900	3,970	*4,780	2,670	*4,540	2,540	20.4 (6,210)
	kg			*3,720	3,260	*3,130	1,800	*2,170	1,210	*2,060	1,150	
-4.9 (-1,500)	lb	*7,250	*7,250	*10,960	7,190	*6,590	3,920			*4,670	2,950	18.2 (5,560)
	kg	*3,290	*3,290	*4,490	3,260	*2,990	1,780			*2,120	1,340	
-9.8 (-3,000)	lb			*7,230	*7,230					*4,450	*4,450	13.7 (4,160)
	kg			*3,280	*3,280					*2,020	*2,020	

NOTES:

- Lifting capacities are based on ISO 10567.
- Lifting capacities of the HX-A series do not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
- The lift-point is the bucket pivot mounting pin on the arm (without bucket mass).
- (*) indicates load limited by hydraulic capacity.



HX90A

STANDARD AND OPTIONAL EQUIPMENT

ENGINE	
YANMAR 4TNV98C-PHYB engine	●
Engine auto idle	●
HYDRAULIC SYSTEM	
Load-sensing hydraulics	●
CAB & INTERIOR	
ISO STANDARD CABIN	
12 V power outlet (24 V DC to 12 V DC converter)	●
All-weather steel cab with 360° visibility	●
Cabin front window rain guard	○
Cabin roof steel cover	○
Door and cabin locks, one key	●
Electric horn	●
Lockable door	●
Pilot-operated slidable joystick	●
Push start with key fob	○
Radio / USB player	●
Safety-glass windows	●
Sliding fold-in front window	●
Sliding side window	●
Storage compartment and ashtray	●
Sun visor	●
Windshield wiper	●
AUTOMATIC CLIMATE CONTROL	
Air conditioner and heater	●
Defroster	●
Starting aid (air grid heater) for cold weather	●
CENTRALIZED MONITORING	
Air filter sensor	●
Engine coolant temperature	●
Engine coolant temperature gauge	●
Engine oil pressure	●
Engine speed	●
Fuel level	●
Fuel level gauge	●
Fuel prefilter	●
Hydraulic oil temperature	●
Low battery	●
SEAT	
Mechanical suspension with heater	●
CABIN FOPS (ISO 10262) LEVEL 1	
FOGS (Falling-Object Guard Structure)	●
CABIN ROPS (ISO 12117-2)	
ROPS (Roll Over Protective Structure)	●
CABIN TOPS (ISO 12117)	
TOPS (Tip-Over Protective Structure)	●

SAFETY

Arm holding system	○
Automatic swing brake	●
Battery master switch	●
Beacon lamp (LED)	○
Boom holding system	○
Outside rearview mirror	●
Rearview camera	○
Rear work lamp (halogen / LED)	○
Safety lock valve for arm cylinder	○
Safety lock valve for boom cylinder with overload warning device	●
Three front working lights (LED)	○
Three front working lights (halogen)	●
Travel alarm	●

OTHER SPECS

Accumulator for lowering work equipment	●
Additional counterweight	●
Custom paint	○
Batteries (2 × 12 V × 100 Ah)	●
Double-acting piping (breaker/thumb)	●
Hi MATE—mobile (4G) type	●
Pattern change valve (2 patterns)	●
Quick coupler piping	●
Quick coupler	●
Rotating piping	●
Thumb	○
Travel speed auto shift down	●

BOOMS

11' 8" (3,550 mm) mono boom	●
12' 10" (3,920 mm) 2-piece boom	○

ARMS

5' 9" (1,750 mm) arm with thumb bracket	○
6' 11" (2,100 mm) arm with thumb bracket	●

BUCKET

29" × 0.37 yd ³	●
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UNDERCARRIAGE

Dozer blade	●
4-way angle dozer blade	○

TRACK SHOES

Rubber track 18" (450 mm)	●
Road liner track 18" (450 mm)	○
Steel track 18" (450 mm)	○
Steel track 24" (600 mm)	○

* 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.

