# SPECIFICATIONS HX85A

Stage V Engine Installed

ENGINE		
Maker / Mode	el	YANMAR / 4TNV98C-PHYB
Туре		4 cylinder, water cooled, 4-cycle, direct injection, electronic controlled diesel engine
Rated flywheel SAE	J1995 (gross)	66.9 HP (49.9 kW) at 2,400 rpm
horse power	J1349 (net)	65.1 HP (48.5 kW) at 2,400 rpm
Max. torque		235 N·m (173 lbf·ft) at 1,560 rpm
Bore×Stroke		3.86" × 4.33" (98 × 110 mm)
Piston displac	ement	3,319 cc (203 cu in)
Batteries		2 × 12 V × 100 Ah
Starting moto	or	12 V × 3.0 kW
Alternator		12 V × 100 Amp

#### **HYDRAULIC SYSTEM**

#### **MAIN PUMP**

Туре	Variable displacement piston pump
Max. flow	38.04 GPM (144 lpm)
Sub-pump for pilot circuit (Gear pump)	4.3 gpm (16 lpm)

\*Cross-sensing and fuel saving pump system.

#### **AUXILIARY PRESSURE**

Flow	13 - 26 gpm / (50 - 100 lpm)	
Pressure	2,611 psi / (180 bar)	
Flow	10 - 15 gpm / (38 - 57 lpm)	
Pressure	4,062 psi / (280 bar)	
	Pressure Flow	

#### **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	4,062 PSI
Travel circuits	4,062 PSI
Swing circuit	3,553 PSI
Pilot circuit	507 PSI
Service valve	Installed

#### **HYDRAULIC CYLINDERS**

	Boom: 4.7" × 34" (1-120×865 mm)
	Arm: 3.9" × 34.3" (1-100×870 mm)
No. of cylinder	Bucket: 3.5" × 27.0" (1-90×685 mm)
bore × stroke	Boom swing : 4.3" × 27.8" (1-110×707 mm)
	Dozer blade (STD): 4.3" × 7.5" (1-110×190 mm)  Dozer blade (Angle): 5.5" × 7.1" (1-140×180 mm)  Angle dozer blade: 2.8" × 18.1" (1.100×461 mm)

#### **NOISE LEVEL (CAB)**

#### **NOSIE LEVELS (DYNAMIC VALVE)**

NOSIL LEVELS (D'INAIVIIC VALVE)	
LwA	99 dB
LpA	76 dB

TRAVEL SYSTEM		
Drive method		Fully hydrostatic type
Drive motor		Axial piston motor, in-shoe design
Reduction syst	em	Planetary reduction gear
Max. drawbar	pull	14,110 lbf (6,400 kgf)
Max. travel	Steel track & Road Liner	2.9 mph (4.6 km/hr) / 1.7 mph (2.8 km/hr)
speed (high / low)	Rubber track	3.2 mph (5.1 km/hr) / 1.9 mph (3.1 km/hr)
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		
	US gal	liter
Fuel tank	30.4	115.0
Engine coolant	2.9	11.0
Engine oil	2.7	10.2
Final drive (each)	0.3	1.2
Hydraulic tank	15.8	60.0
Hydraulic system	31.7	120.0

#### 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 rubber track.

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

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

Operating weight, including 11' 8" (3,550 mm) mono boom, 8' 11" (2,100 mm) Long Arm, SAE heaped 0.25 m³ (0.33 yd³) digging bucket, lubricant, coolant, hydraulic tank, fuel tank, 2,535 lb (1,1150 kg), Quick Coupler, Rubber Track, Operator 165 lbs (75 kg).

#### **OPERATING WEIGHT**

Operating weight	Rubber (450)	20,390 lb (9,250 kg)
Ground Pressure	Rubber (450)	5.83 PSI (0.41 kg/cm²)

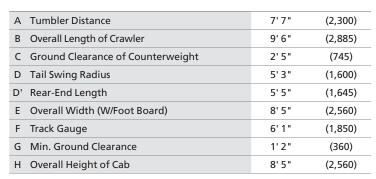
## SPECIFICATIONS **HX85**A

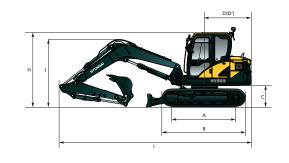
EU Stage V Engine Installed

#### **HX85A DIMENSIONS**

Init: ft·in (

12' 10" (3.92m), 11' 8" (3.55m) boom and 5' 9" (1.75m), 6' 11" (2.1 m) arm

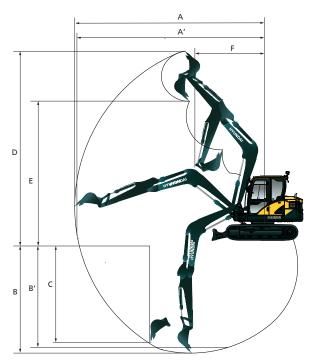






	ft∙in	(mm)	ft∙in	(mm)
Boom Length	11' 8"	(3,550)	11'8"	(3,550)
Arm Length	5' 9"	(1,750)	6' 11"	(2,100)
I Overall Length	21' 7"	(6,585)	21' 10"	(6,655)
J Overall Height of Boom	7' 2"	(2,175)	8' 1"	(2,465)
K Track Shoe Width	Stee	l Track	Rubbe	r Track
	18"	(450)	18"	(450)

HX85A WORKING RANGE		Unit: ft·in (mm)
Boom length		8'' 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)



HX85A DIGGING FORCE					
Arm	Length	mm (ft.in)	1750 (5' 9")	2100 (6' 11")	
AIIII	Weight	kg (lb)	167 (368)	194 (428)	
		kN	53.0(58.7)	53.0(58.7)	
	SAE	kgf	5,401.0(5,979.7)	5,401.0(5,979.7)	
Bucket		lbf	11,907.2(13,183.0)	11,907.2(13,183.0)	
Digging Force		kN	61.6(68.3)	61.6(68.3)	
	ISO	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)	
		kN	35.7(39.5)	35.7(39.5)	
	SAE	kgf	4,042.0(4,475.0)	3,639.5(4,029.5)	
Arm		lbf	8,911.0(9,865.8)	8,023.8(8,883.5)	
Crowd Force		kN	41.4(45.9)	37.1(41.1)	
	ISO	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

Bucket: .25 m<sup>3</sup> (.33 yd<sup>3</sup>) SAE heaped

### **Lifting Capacity**

Boom: 3.55 m (11' 8")

Arm: 1.75 m (5' 9")

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

Rating over front 🏺

Shoe 450 mm (18") triple grouser,

Rating over side or 360 degree

		Lift-point radius							At max. reach			
Lift-point height m (ft)		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
				<b>P</b>				<b>P</b>				m (ft)
4.5 m	kg					*1,890	1,780			*1,910	1,490	5.01
14.8 ft	lb					*4,170	3,920			*4,210	3,280	(16.4)
3.0 m	kg			*2,940	*2,940	*2,130	1,730			*1,820	1,160	5.80
9.8 ft	lb			*6,480	*6,480	*4,700	3,810			*4,010	2,560	(19.0)
1.5 m	kg					*2,620	1,630	*1,970	1,070	*1,920	1,060	6.06
4.9 ft	lb					*5,780	3,590	*4,340	2,360	*4,230	2,340	(19.9)
Ground	kg			*3,580	2,820	*2,870	1,560			*2,010	1,080	5.87
Line	lb			*7,890	6,220	*6,330	3,440			*4,430	2,380	(19.3)
-1.5 m	kg	*3,870	*3,870	*4,230	2,840	*2,600	1,560			*2,040	1,290	5.18
-4.9 ft	lb	*8,530	*8,530	*9,330	6,260	*5,730	3,440			*4,500	2,840	(17.0)
-3.0 m	kg			*2,330	*2,330					*1,770	*1,770	3.60
-9.8 ft	lb			*5,140	*5,140					*3,900	*3,900	(11.8)

#### NOTES:

- 1. Lifting capacities are based on ISO 10567.
- 2. Lifting capacity of the HX 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 bucket pivot mounting pin on the arm (without bucket mass).
- 4. (\*) indicates load limited by hydraulic capacity.



ENGINE	STD	OPT
YANMAR 4TNV98C Engine	•	
HYDRAULIC SYSTEM		
INTELLIGENT POWER CONTROL (IPC)		
Engine Auto Idle	•	
Engine Auto Shutdown with Smart Key		•
Load Sensing Hydraulic	•	
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 ROPS(ISO 12117-2)	•	
Cabin FOPS (ISO 10262 Level )	•	
Cabin TOPS (ISO 12117)	•	
Cabin Light (Normal / LED)	•	
Cabin Front Window Rain Guard		•
Cabin Roof-Steel Cover		•
Door and Cab Locks, One Key	•	
Electric Horn	•	
Lockable Door	•	
Mechanical Suspension Seat With Heater	•	
Pilot-Operated Slidable Joystick	•	
Radio / USB Player	•	
Safety Glass Windows	•	
Sliding Fold-In Front Window	•	
Sliding side window	•	
Storage Compartment & Ashtray	•	
Sun Visor	•	
Windshield Wiper	•	
AUTOMATIC CLIMATE CONTROL		
Air Conditioner & 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	•	
Hyd. oil temperature	•	
Low battery	•	
SEAT		
Mechanical Suspension with Heater	•	
CABIN FOPS (ISO 10262) LEVEL 1  EOCS (Falling Object Protective Structures)		
FOGS (Falling-Object Protective Structures)	•	
CABIN ROPS(ISO 12117-2)  ROPS (Roll Over Protective Structure)		
ROPS (Roll Over Protective Structure)  CABIN TOPS (ISO 12117)		
TOPS (Tip-Over Protective Structure)	•	
1015 (hp Over Hotecuve Structure)	_	

SAFETY	STD	OPT
Arm holding system		•
Automatic swing brake	•	
Battery master switch	•	
Beacon lamp (Normal / LED)		•
Boom holding system		•
Outside rearview mirror	•	
Rearview camera		•
Rear work lamp (Normal / 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 (Normal)		
Travel alarm		
OTHER SPECS		
Accumulator for lowering work equipment	•	
Additional Counterweight		•
Batteries (2 x 12V x 100 AH)	•	
Double-acting piping kit (breaker/thumb)	•	
Hi-MATE (Remote Management System)	•	
Pattern change valve (2 patterns)	•	
Quick coupler piping	•	
Quick coupler	•	
Rotating Piping Kit	•	
Thumb		•
Travel Speed Auto Shift Down	•	
Tool kit	•	
BOOMS		
11' 8" (3.55m)	•	
12' 10 3/8" (3.92m) 2 Piece Boom		•
ARMS		
5'9" (1.75m)		•
5'9" (1.75m) Arm with Thumb		•
6' 11" (2.10m)		•
6' 11" (2.10m) Arm w/ Thumb Bracket	•	
BUCKET		
29" X 0.37 yd³	•	
UNDERCARRIAGE		
Dozer Blade	•	
4 Way Angle Dozer Blade		•
TRACK SHOES		
Rubber track (450 mm, 18")	•	
Rubber PAD (450 mm, 18")		•
Triple grouser shoes (450 mm, 18")		•
Triple grouser shoes (600 mm, 24")		•
	-	

- \* 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.
- $\mbox{\ensuremath{\star}}$  All imperial measurements rounded off to the nearest pound or inch.



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