# SPECIFICATIONS HX85A



**Net Power** 65 HP (48.5 kW) / 2,400 rpm

Standard Bucket  $0.37 \text{ yd}^3 (0.28 \text{ m}^3)$ 

Operating Weight 19,030 lb (8,630 kg)

ENGINE		
Maker / Model		YANMAR / 4TNV98C-PHYB
Emission Certifica	tion	Tier-4 final
Туре		4 cylinder, water cooled, 4-cycle, direct injection, electronic controlled diesel engine
Rated flywheel SAF	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 displaceme	ent	3,319 cc (203 cu in)
Batteries		2 × 12 V × 100 Ah
Starting motor		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**

2 1/2/2	Flow	13-26 gpm (50-100 lpm)
2 Way	Pressure	2,611 psi (180 bar)
Rotating	Flow	10-15 gpm (38-57 lpm)
Rotating	Pressure	4,062 psi (280 bar)

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

#### HYDRAULIC CYLINDERS

	Boom	4.7" × 34" (1–120 × 865 mm)
	Arm	3.9" × 34" (1-100 × 860 mm)
No. of	Bucket	3.5" × 27.0" (1–90 × 685 mm)
cylinder bore x	Boom swing	4.3" × 27.8" (1–110 × 707 mm)
stroke	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	3.9" × 18.1" (1-100 × 461 mm)

#### NOISE LEVEL (CAB)

#### NOSIE LEVELS (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	n	Planetary reduction gear
Max. drawbar pul	I	14,110 lbf (6,400 kgf)
Max. travel speed	Steel track & Road Liner	2.9 mph (4.6 km/hr) / 1.7 mph (2.8 km/hr)
(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	
Fueltank	30.4 gal (115.0 liters)
Engine coolant	3.4 gal (13.0 liters)
Engine oil	2.8 gal (10.5 liters)
Final drive (each)	0.3 gal (1.1 liters)
Hydraulic tank	12.3 gal (56.0 liters)
Hydraulic system	23.9 gal (109.0 liters)

#### 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 bar on each side	75 EA
No. of upper roller on each side	1EA
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  $0.37\,\mathrm{yd^3}$  ( $0.28\,\mathrm{m^3}$ ) digging bucket, lubricant, coolant, hydraulic tank, fuel tank, add CWT, Quick Coupler, Rubber Track, Operator 165 lbs (75 kg).

#### **OPERATING WEIGHT**

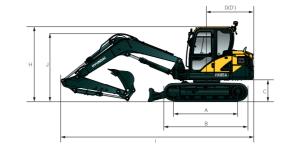
Operating weight	19,030 lb (8,630 kg)
Ground Pressure	5.44 PSI (0.38 kg/cm <sup>2</sup> )

## SPECIFICATIONS **HX85**A

### HX85A DIMENSIONS UNIT: ft·in (mm)

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

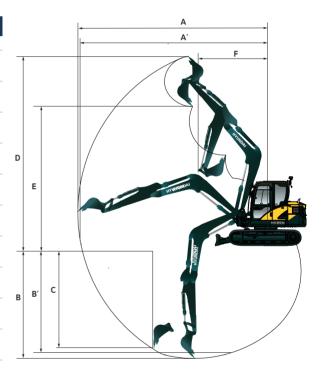
Α	Tumbler Distance	7' 7"	(2,300)
В	Overall Length of Crawler	9'6"	(2,885)
С	Ground Clearance of Counterweight	2' 5"	(745)
D	Tail Swing Radius	5' 3"	(1,600)
D'	Rear-End Length	5' 5"	(1,645)
Ε	Overall Width (W/Foot Board)	8' 5"	(2,560)
F	Track Gauge	6' 1"	(1,850)
G	Min. Ground Clearance	1' 2"	(360)
Н	Overall Height of Cab	8' 5"	(2,560)





Boom Length			11' 8"	(3,550)	
Arm Length		5' 9"	(1,750)	6' 11"	(2,100)
I Overall Lengt	h	21'7"	(6,585)	21' 10"	(6,655)
J Overall Heigh	t of Boom	7' 2"	(2,175)	8' 1"	(2,465)
V Tanala Class MA	:- - -	Steel Track Rubber Tr		r Track	
K Track Shoe W	latn —	18"	(450)	18"	(450)

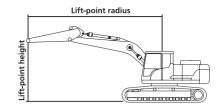
НХ	(85A WORKING RANGE			UNIT:	ft·in (mm)
	Boomlength		11'8''	(3,550)	
	Arm length	5' 9''	(1,750)	6' 11''	(2,100)
Α	Max. digging reach	23' 3"	(7,090)	24' 4''	(7,420)
A'	Max. digging reach on ground	22' 9''	(6,940)	23' 11''	(7,280)
В	Max. digging depth	14' 1''	(4,290)	15' 3''	(4,640)
B'	Max. digging depth (8' level)	12' 11"	(3,930)	14' 2''	(4,320)
С	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 DIGGIN	G FORCE					
Arm	Length	ft·in (mm)	5'9"	(1750)	6' 11"	(2100)
Arm	Weight	lb (kg)	368	(167)	428	(194)
		kN	52.9	(58.5)	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	39.7	(43.9)	35.7	(39.5)
	SAE	kgf	4,042.0	(4,475.0)	3,639.5	(4,029.5)
Arm Crowd		lbf	8,911.0	(9,865.8)	8,023.8	(8,883.5)
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

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#### 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: 2,210 lbs (1,150 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-poi	nt radius					At max. re	each	
Lift-point height ft (mm)		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		Rea	ach
		Ū				P						ft (n	nm)
10.7 (6.000)	lb									*4,250	*4,250	10.7 (	(2.000)
19.7 (6,000) –	kg									*1,930	*1,930	- 12.7 (	(3,880)
14.8 (4,500) -	lb					*3,660	*3,660			*3,590	3,150	170 (	E 420)
	kg					*1,660	*1,660			*1,630	1,430	17.8 (	(5,430)
9.8 (3,000) -	lb			*5,470	*5,470	*4,300	4,190	*3,880	2,670	*3,440	2,540	20.2 (	(6.1EO)
	kg			*2,480	*2,480	*1,950	1,900	*1,760	1,210	*1,560	1,150	20.2 (	(6,150)
	lb			*9,790	7,170	*5,470	3,950	*4,170	2,580	*3,640	2,340	- 21 (	(6.200)
4.9 (1,500) -	kg			*4,440	3,250	*2,480	1,790	*1,890	1,170	*1,650	1,060	21 (	(6,390)
0.0 (0.0) -	lb			*8,200	6,810	*6,240	3,770	*4,320	2,510	*4,100	2,400	20.4 (	(6.210)
	kg			*3,720	3,090	*2,830	1,710	*1,960	1,140	*1,860	1,090	- 20.4 (	(0,210)
	lb	*7,250	*7,250	*9,900	6,810	*5,930	3,730			*4,210	2,800	10.0 (	'E E60\
-4.9 (-1,500) –	kg	*3,290	*3,290	*4,490	3,090	*2,690	1,690			*1,910	1,270	18.2 (	(0,000)
	lb			*6,500	*6,500					*3,990	*3,990	12.7 (	(4160)
-9.8 (-3,000) -	kg			*2,950	*2,950					*1,810	*1,810	13.7 (4	(4,160)

#### 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 the bucket pivot mounting pin on the arm (without bucket mass).
- 4. (\*) indicates load limited by hydraulic capacity.



ENGINE	STD	OPT
YANMAR 4TNV98C-PHYB Engine	•	
Engine Auto Idle	•	
HYDRAULIC SYSTEM		
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 Front Window Rain Guard		•
Cabin Roof-Steel Cover		•
Door and Cab Locks, One Key	•	
Electric Horn	•	
Lockable Door	•	
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		
Airfiltersensor	•	
Engine coolant temperature	•	
Engine coolant temperature gauge	•	
Engine oil pressure	•	
Engine speed	•	
Fuel level	•	
Fuel level gauge	•	
Fuel prefilter	•	
Hydraulic oil temperature	•	
Lowbattery	•	
SEAT		
Mechanical Suspension with Heater	•	
CABIN FOPS (ISO 10262) LEVEL 1		
FOGS (Falling-Object Protective Structures)	•	
CABIN ROPS (ISO 12117-2)		
ROPS (Roll Over Protective Structure)	•	
CABIN TOPS (ISO 12117)		
TOPS (Tip-Over Protective Structure)	•	

SAFETY	STD	OP1
Arm holding system		•
Automatic swing brake	•	
Battery master switch	•	
Beacon lamp (LED)		•
Boom holding system		•
Outside rear view mirror	•	
Rear view 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	•	
Batteries (2 × 12 V × 100 AH)	•	
Double-acting piping (breaker/thumb)	•	
Hi-MATE (Remote Management System)	•	
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 <sup>3</sup>	•	
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.
- $^{\star}$  All imperial measurements rounded off to the nearest pound or inch.





