

Specifications

HL780-9A

ENGINE

Maker/Model	CUMMINS QSX11.9	Bore x Stroke	130 mm x 150 mm
Type	Watercooled, 4-cycle, turbocharged, charge aircooled direct injection, electronic controlled diesel engine	Displacement	11.9 liters
Gross power	265 kW / 2,000 rpm	Compression ratio	16.6 : 1
Net power	262 kW / 2,000 rpm	Air cleaner	Dry, Two stages dual elements
Maximum torque	173 kg.m / 1,400 rpm	Alternator	24 V; 80 A
No. of cylinders	6	Battery	2 x 12 V, 220 Ah.
		Starting motor	24 V; 7.5 kW

※ This engine meets the EPA (Tier 4 interim) / EU(Stage III-B) Emission regulation.

TRANSMISSION

Torque converter type	3-elements, single-stage Double-phase	Travel speed	4 speed T/M	5 speed T/M with lock up clutch
Tire	29.5-25, L3	Forward	1st 6.1 km/h	6.1 km/h
			2nd 11.4 km/h	11.8 km/h
			3rd 17.9 km/h	18.3 km/h
			4th 36.0 km/h	26.6 km/h
			5th /	41.0 km/h
		Reverse	1st 6.1 km/h	6.1 km/h
			2nd 11.4 km/h	11.8 km/h
			3rd 24.8 km/h	26.6 km/h

AXLES

Drive system	Four-wheel drive system	Hub reduction	Planetary reduction at wheel end
Mount	Rigid front axle and oscillating rear axle	Reduction ratio	1 : 27.0
Rear axle oscillation	+/- 13° (total 26°)		

HYDRAULIC SYSTEM

Type	Load-sensing hydraulic system	Bucket Controls	Type	Electro-Hydraulic control system.
Pump	Variable axial piston pump 420 liters/min		Lift Circuit	The valve has four functions ; raise, hold, lower and float.
Control valve	3 spool (Bucket, Boom, Aux)		Tilt Circuit	The valve has three functions ; tilt back, hold and dump.
System pressure	280 kgf/cm ²			
		Cylinders		Type : Double acting Lift, bore x stroke 2-180 mm x 863 mm Tilt, bore x stroke 2-140 mm x 575 mm 2-140 mm x 570 mm
			HL780-9A HL780XTD-9A	
		Cycle Time		Raise : 6.1 sec Dump : 1.4 sec Lower : 4.1 sec Total : 11.6 sec

Specifications

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BRAKES

Service Brakes	Hydraulically actuated, wet disc brakes Self adjusting & wheel speed brake
Parking Brake	Spring-applied, hydraulically released
Emergency Brake	When brake oil pressure drops, parking brake applies automatically.

STEERING SYSTEM

Type	Load-sensing hydrostatic articulated steering	
Pump	Piston pump, 220 liters/min	
Relief Valve Setting	210 kg/cm ²	
Cylinder	Type Bore x Stroke	Double acting 105 mm x 480 mm
Steering Angle	40°	

SERVICE REFILL CAPACITIES

Fuel tank	450 liters
Cooling system	65 liters
Crankcase	43 liters
Transmission	43 liters

Front axle	58 liters
Rear axle	58 liters
Hydraulic tank	234 liters
Hydraulic system (including tank)	344 liters

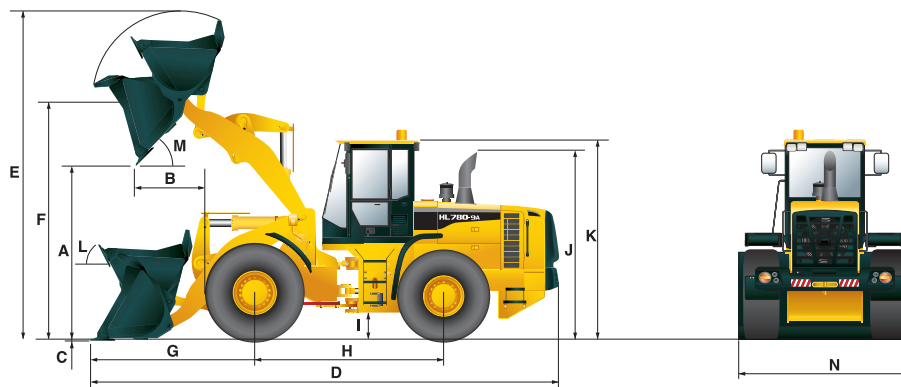
OVERVIEW

Description	UNIT	HL780-9A	HL780XTD-9A
Operating weight	kg	30,300	31,100
Bucket Capacity	Heaped	m ³	5.4
	Struck	m ³	4.6
Breakout force-bucket	kg	23,750	23,130
Tipping load	Straight	kg	23,960
	Full turn	kg	20,840

TIRES

Type	Radial tires
Standard	29.5-25, 22 PR, L3
Options include	26.5-25, 32 PR, L3 29.5-25, 28 PR, L3 29.5-25, 28 PR, L5 29.5 R25 XHA*

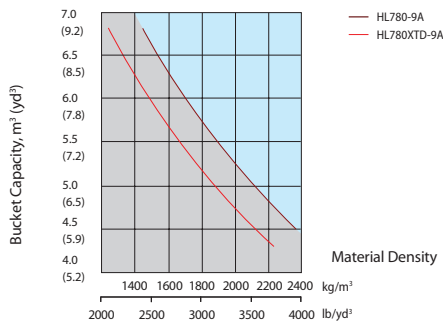
DIMENSIONS



Description	UNIT	HL780-9A	HL780XTD-9A
Bucket Type	General purpose bolt-on cutting edge		
A. Dumping clearance at max. height and 45° dump angle.	mm	3,300	3,670
B. Reach	full lift	mm	1,430
	7ft height	mm	2,150
C. Digging depth	mm	105	115
D. Overall length	bucket on ground	mm	9,630
	carry position	mm	9,545
E. Overall height (fully raised)	mm	6,295	6,670
F. Bucket pin at max. height	mm	4,560	4,935

Description	UNIT	HL780-9A	HL780XTD-9A
G. Front overhang	mm	3,200	3,575
H. Wheelbase	mm	3,700	3,700
I. Ground clearance	mm	495	495
J. Height over exhaust	mm	3,740	3,740
K. Height over cabin	mm	3,865	3,865
L. Max. Bucket roll back angle	ground	deg	42
	carry	deg	48
M. Max. Bucket dump angle	deg	47	47
Clearance circle	mm	14,970	15,310
N. Overall width	with bucket	mm	3,450
	without bucket	mm	3,220

BUCKET & TIRE SELECTION GUIDE



Description	Change in operating weight kg	Change in static tipping load-straight kg	Change in static tipping load-40° turn kg
26.5-25 32PR L3	-112	-90	-80
29.5-25 28PR L3	+352	+270	+240
29.5-25 28PR L5	+1,240	+960	+850
29.5 R25 XHA*	+500	+390	+340

STANDARD EQUIPMENT

Electrical system

- Alternator, 70A
- Alarms, audible and visual
 - air filter clogging
 - transmission error
 - alternator voltage
 - brake oil pressure
 - engine oil pressure
 - parking brake
 - fuel level
 - hydraulic oil temperature
 - coolant temperature
 - service brake oil pressure
- Alarm, back-up
- Batteries, 1315 CCA, 12V, (2)
- Gauges
 - engine coolant temperature
 - fuel level
 - hydraulic oil temperature
 - speedometer
 - transmission oil temperature
 - voltmeter
- Horn, electric
- Indicator lights
 - clutch cut-off
 - high beam
 - turn signal

- LCD Display
 - clock and fault code
 - operating hours counter
 - engine rpm
 - transmission gear range indicator
 - job time and distance
 - temperature (coolant, hydraulic oil, T/M oil)
- Lighting system
 - 1 LED dome lights
 - 2 stop and tail lights
 - 4 turn signals
 - brake lights (counterweight)
 - 2 head lights on front tower
 - 2 working lights on front roof
 - 2 working lights on grill
- Switches
 - clutch cut-off
 - hazard
 - Ignition key, start/stop switch
 - main lights (illumination and head lights)
 - parking
 - rear wiper & washer

- working light
- battery master switch
- pilot cut-off
- Starter, electric
- Heated rear view mirrors

Cabin

- Cabin, ROPS/FOPS (sound suppressed and pressurized) with :
 - cigar lighter & ashtray
 - coat hook
- Automatic climate control
 - air conditioner & heater
 - defroster
 - intermittent wiper and washer, front and rear
- Personal storage space:
 - console box
 - holder, can and cup
- Rear view mirrors (1 inside)
- Rear view mirrors (2 outside)
- 2" retractable seat belt & adjustable suspension seat with armrests
- Steering column, tilt and telescopic

- Steering wheel with knob
- Roller type sun visor (front window)
- Tinted safety glass
- Two doors
- Magazine pocket
- Pedals
 - one accelerator pedal
 - one brake pedal
- Radio/USB player (Bluetooth hands free)
- Rubber floor mat
- Wrist rest

Engine

- Engine, Cummins QSX11.9
 - low Emission Diesel, Tier 4 interim / EU Stage IIIB
- Fan guard
- 3 operating modes
 - power/standard/economy
- Fuel/water separator
- Fuel warmer
- Diesel Particulate Filter
- Direct air flow filter with precleaner
- Starting aid (air intake heater)

Power Train

- Service brake, enclosed wet-disc
- Differentials, Hydraulic lock - front, conventional - rear
- Parking brake
- Torque converter
- Transmission, F5 / R3 with lock-up Torque Converter computer-controlled, electronic soft shift, auto-shift and kick-down features included
- Transmission oil cooler

Hydraulics

- Automatic boom kickout
- Automatic bucket positioner
- Diagnostic pressure taps
- Hydraulic oil cooler
- Hydraulic system,
 - 3 spool, electro-Hydraulic Controls
- Steering, load-sensing
- Emergency steering system
- Ride control system

Others

- Articulation locking bar
- Counterweight, standard
- Doors and cabin, one key fits all
- Drawbar with pin
- Ergonomically located and slip resistant, left & right
 - handrails
 - ladders
 - platforms
 - steps
- Front and rear fenders
- Guards
 - bucket cylinder rod
 - crankcase
 - transmission
- License plate bracket
- Lift and tie-down hooks
- Loader linkage, sealed Z-bar design
- Cushioned steering stops
- Tires (29.5-25, 22PR, L3)
- Vandalism protection cap locks
- Wheel chock

OPTIONAL EQUIPMENT

- 24-volt to 12-volt DC converter
- Beacon light
- Auxiliary, 2 working lights on front roof (Xenon working lights)
- Auxiliary, 2 working lights on rear roof
- Cutting edge, bolt-on type
- Dual brake pedal

- Fire extinguisher
- High lift arrangement with additional counterweight, 552 kg (1,210 lb)
- Pallet forks
- Seat
 - 2" static seat belt & adjustable mechanical suspension (vinyl)

- 3" static seat belt & adjustable mechanical suspension
- 2" retractable seat belt & adjustable air suspension (heated)
- Tires :
 - 29.5 - 25, 28PR L3
 - 29.5 - 25, 28PR L5

- 26.5 - 25, 32PR L3
- 29.5 R25 XHA*
- Tooth, 2 pieces, bolt-on type
- Joystick-steering
- Roller type sun visor (rear window)
- License plate & lamp
- HI-Mate (Remote Management System)

- Rear view camera
- Marble application kit
- Heavy duty axle (Front, Rear)
- Axle cooling system
- Transmission, F4 / R3 without lock-up Torque Converter computer-controlled, electronic soft shift, auto-shift and kick-down features

- included
- Ignition key (Button type)
- Smart key engine start

* 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.

PLEASE CONTACT

