

ZW-5b series

HITACHI

Reliable solutions

ZW30

Tier 4 Final
Certified

25 hp 18.5 kW
Engine Output, Max, Gross
(ISO 14396)

24 hp 17.9 kW
Engine Output, Max, Net
(ISO 9249)

0.5 yd³ 0.4 m³
Bucket capacity

7,310 lbs 3,315 kg
Operating weight



SPECIFICATIONS

ENGINE

Gross power (ISO 14396)	25 HP/2,200 RPM (18.5 kW/2,200 RPM)
Net power (ISO 9249)	24 HP/2,200 RPM (17.9 kW/2,200 RPM)
Make/Model	Kubota D1703-M-DI diesel engine
Type	4-cycle, water-cooled, direct injection with turbocharger and air cooled intercooler
Fuel type	#2 Diesel (Requires ultra-low sulfur fuel.)
Fuel injection pump	Electronically controlled, common rail type
Governor	All speed electrical type
Cooling module type	Forced circulation type
Number of cylinders	3
Bore and stroke	3.4" x 3.6" (87mm x 92.4mm)
Total displacement	101 in ³ (1,647 liters)
Alternator	DC 12V-60A (0.72 kW)
Air cleaner	Dry type (double element)
Starter motor	DC 12V-2.7 HP (2.0 kW)
Battery	DC 12V-800 CCA (110 Ah), 2 units

TRANSMISSION

Transmission	Hydrostatic transmission (HST) automatically controls power and 2-speed Normal Mode	
Speeds: Forward	Low:	4.4 MPH (7.0 km/hr)
	Auto:	9.3 MPH (15.0 km/hr)
Speeds: Reverse	Low:	4.4 MPH (7.0 km/hr)
	Auto:	9.3 MPH (15.0 km/hr)

SYSTEMS REFILL CAPACITY

LOCATION	GALLONS	LITERS
Fuel tank (diesel fuel)	11.1	42
Engine lubricant (including oil pan)	1.5	5.6
Engine coolant	1.2	4.5
T/M	0.5	1.8
Axle (front/rear)	1.2/1.2	4.5/4.5
Hydraulic oil tank	7.1	27

HYDRAULIC AND STEERING SYSTEM

Steering type	Articulated frame steering. Hydraulic power steering unit	
Steering mechanism	Fully hydraulic direct acting Orbitroll power steering	
Lift (boom) cylinder	Two (2) double-acting piston type: 2.6" x 17.7" (65mm x 450mm)	
Tilt (bucket) cylinder	One (1) double-acting piston type: 2.6" x 14.3" (65mm x 364mm)	
Steering cylinder	One (1) double-acting piston type: 2.2" x 9" (55mm x 228mm)	
Main oil pump	9.2 GPM/2,988 PSI @ 2,000 RPM (34.9 LPM/20.6 MPa @ 2,200 RPM)	
HST charging pump	3.7 GPM/363 PSI @ 2,000 RPM (14.0 LPM/2.5 MPa @ 2,200 RPM)	
Relief valve set pressure	Loading	20.6 MPa (210 kgf/cm ²)/(2,987 psi)
HYDRAULIC CYCLE TIME* front end loading, Z bar linkage system		
Lifting time (at full load)	5.0 sec.	
Lowering time (empty)	3.0 sec.	
Bucket dumping time	1.0 sec.	
TOTAL	9.0 sec.	

* Measured in accordance with SAE J732C

AXLE SYSTEM

Drive system	4-wheel drive
Front and rear axle	Semi-floating type, fixed to the front frame, trunnion support
Tires	12.5/70-16 8PR (L2) Tubeless
Reduction and differential gear	Limited slip differential (LSD)
Final reduction gear	Inboard mounted, heavy duty planetary gear
Oscillation angle	Total 16 (+8, -8)°

BRAKE SYSTEM

Service brakes	Wet disc in reduction gear box
Parking/Emergency brake	Spring-applied, hydraulically-released wet disc

Remarks

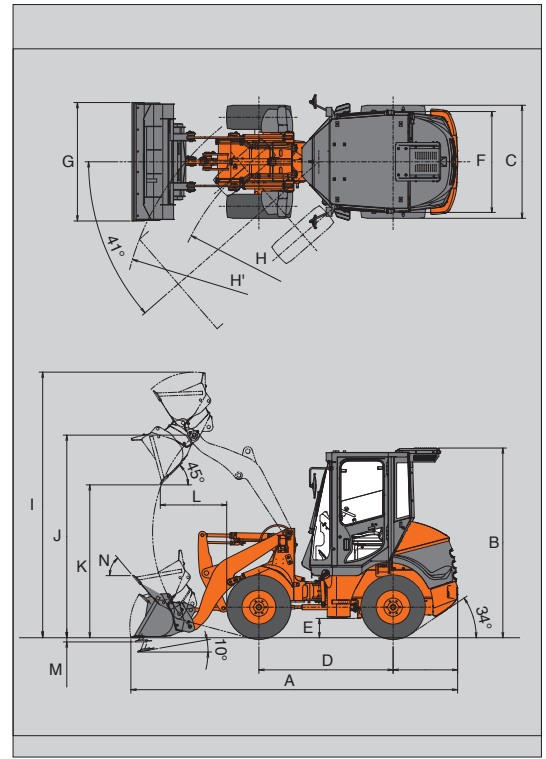
- Materials and specifications are subject to change without notice and without any obligation on the part of the manufacturer.
- This information, while believed to be completely reliable, is not to be taken as warranty for which we assume legal responsibility.
- Dumping clearance and reach are measured from bucket edge in accordance with SAE J732C.
- Counterweight should not be used with tire ballast.
- This specification sheet may contain attachments and optional equipment not available in your area.

Please contact your local HCMA dealer for additional information.

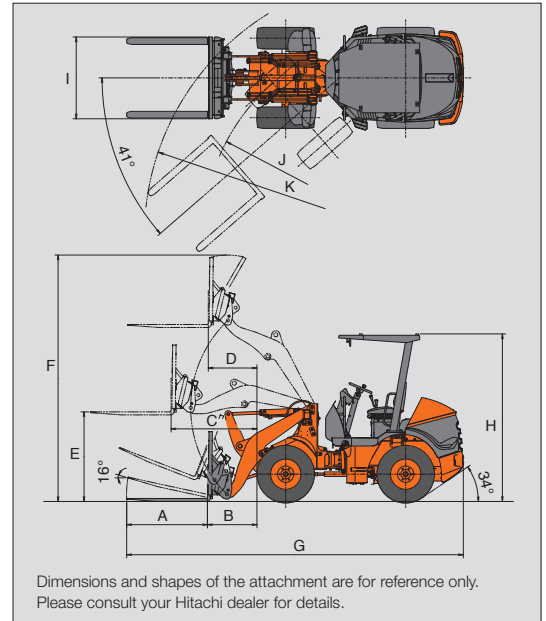
SPECIFICATIONS

DIMENSIONS & SPECIFICATIONS

Bucket type			Standard arm with quick-coupler	
			General purpose with bolt-on cutting edges	
			ROPS/FOPS cab	ROPS/FOPS canopy
Bucket capacity	ISO heaped	yd ³ (m ³)	0.52 (0.4)	
	ISO struck	yd ³ (m ³)	0.50 (0.38)	
A Overall length		ft (mm)	14'3" (4,335)	
B Overall height, bucket on ground (with ROPS/FOPS cab)		ft (mm)	8'3" (2,515)	8'2" (2,485)
C Width over tires		ft (mm)	4'11" (1,505)	
D Wheel base		ft (mm)	5'10" (1,780)	
E Ground clearance		in (mm)	10" (255)	
F Tread		ft (mm)	3'11" (1,180)	
G Bucket width		ft (mm)	5'2" (1,570)	
H Turning radius (centerline of outside tire)		ft (mm)	9'10" (3,005)	
H' Loader clearance radius, bucket in carry position		ft (mm)	11'10" (3,610)	
I Overall operating height		ft (mm)	11'7" (3,525)	
J Height to hinge pin, fully raised		ft (mm)	8'10" (2,685)	
K Dump clearance 45 degree, full height		ft (mm)	6'8" (2,025)	
L Reach, 45 degree dump, full height		ft (mm)	2'11" (880)	
M Digging depth (horizontal digging angle)		in (mm)	2" (55)	
N Max. roll back at carry position		deg	50	
Static tipping load*	Straight	lb (kg)	3,990 (1,810)	3,770 (1,710)
	Full turn	lb (kg)	3,330 (1,510)	3,110 (1,410)
Breakout force		lbf (kN)	4,630 (20.6)	
Operating weight**		lb (kg)	7,310 (3,315)	6,800 (3,085)



Fork type		ROPS/FOPS cab	ROPS/FOPS canopy
A Fork Tine Length	ft (mm)	3'11" (1,195)	
B Reach @ Ground Level	ft (mm)	2'5" (735)	
C Maximum Reach	ft (mm)	4'2" (1,275)	
D Reach @ MaxHinge Pin Height	ft (mm)	2'4" (720)	
E Fork Height @ Max Reach	ft (mm)	4'4" (1,330)	
F Fork Height @ MaxHinge Pin Height	ft (mm)	8'7" (2,625)	
Straight Tip Load with Level Arms and Fork (Load centered @24")	lb (kg)	2,760 (1,250)	2,540 (1,150)
Full Turn Tip Load with Level Arms and Fork (Load centered @24")	lb (kg)	2,320 (1,050)	2,090 (950)
Max Operating Load	lb (kg)	1,050 (475)	
Fork Attachment Weight	lb (kg)	360 (165)	
Operating Weight**	lb (kg)	7,270 (3,295)	6,760 (3,065)
G Overall Length	ft (mm)	16'5" (4,995)	
H Overall height, fork on ground (with ROPS/FOPS cab)	ft (mm)	8'2" (2,485)	8'3" (2,515)
I Fork width	ft (mm)	4' (1,215)	
J Turning radius	ft (mm)	9'10" (3,005)	
K Loader clearance radius, Fork in carry position	ft (mm)	12'9" (3,875)	



* Static tipping load and operating weight marked with** include 12.5/70-16-8PR (L2) tires (no ballast) with lubricants, coolant, full fuel tank and operator.

** Includes ROPS/FOPS weight

All dimensions, weight and performance data based on ISO 6746-1:1987, ISO 7131:1997 and ISO 7546:1983

BUCKET SELECTION GUIDE

General purpose bucket with bolt-on cutting edges	Bucket capacity yd ³ (m ³)	Material density lb/yd ³ (kg/m ³)					
		1,350 (800)	1,690 (1,000)	2,020 (1,200)	2,360 (1,400)	2,700 (1,600)	3,030 (1,800)
Standard lift with quick-coupler	0.52 (0.4)						

%=Bucket Fill Factor 110% 100% 95%

STANDARD EQUIPMENT

ENGINE

Air filter double elements
 Air intake
 Cold start aid, glow plugs
 Cup-type fuel pre-filter with water separator
 Engine oil filter, spin-on
 Kubota D1807-M-DI Tier 4 diesel

POWERTRAIN

Brake, parking
 Enclosed wet disc type
 Spring applied
 Hydraulic released
 Brakes, service
 Enclosed wet disc type
 Full hydraulic system
 Electrically controlled HST system
 Forward/reverse lever
 Limited slip differential (LSD) for both axles
 Travel mode selector switch (L-Auto)

HYDRAULIC SYSTEM

Bucket auto leveler (automatic return to dig control)
 Hydraulic filter, spin-on type
 Control lever
 Control lever lock
 For 3 hydraulic function control valve
 Single control lever & AUX lever for 3rd function
 Coupler, hydraulic hook type
 Lift arm float system

ELECTRICAL

Alternator, DC 12V-60A (0.72 kW)
 Battery, DC 12V/800 CCA (110 Ah)
 Battery disconnect cable
 Horn, electric
 Lights:
 2 Headlights (halogen)
 2 Stop/tail/turn lights (halogen)
 2 Turn signals (front) (halogen)
 1 Backup
 Working lights (LED for Cab only) 2 front, 2 rear

CAB

AM/FM Stereo radio with AUX input
 Air conditioner/heater/pressurizer
 Coat hook
 Cup holder
 Floor mat, sweep-out
 Seat, adjustable suspension, fabric (cab only)
 Seat, adjustable suspension, vinyl (canopy only)
 Seat belt, adjustable (3 inch)
 Sun visor

OTHERS

Articulation locking bar
 Counterweight
 Drawbar
 Fenders
 Linkage (Z-type, sealed w/HN bushings)
 Neutral safety start
 Quick coupler plumbing
 Rear grill, hinged
 Radiator, dust screen
 Radiator, side-by-side w/oil cooler

ALARMS, GAUGES, INDICATORS

Alarms (visual)	Battery discharge
	Brake oil level
	Engine coolant temperature
Gauges	Engine oil pressure
	Fuel gauge
Indicators	Engine coolant temperature
	Engine pre-heater, cold start
	Forward/reverse
	Hour meter
	Parking brake
	Turn signals w/4-way flashers
	Travel mode (L)
Working light, indicator (cab only)	





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Reliable solutions



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BUILT ON IT.

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