

Innovations For The Future

Eco & Tough



KATO

REGZM

FULLY HYDRAULIC EXCAVATOR

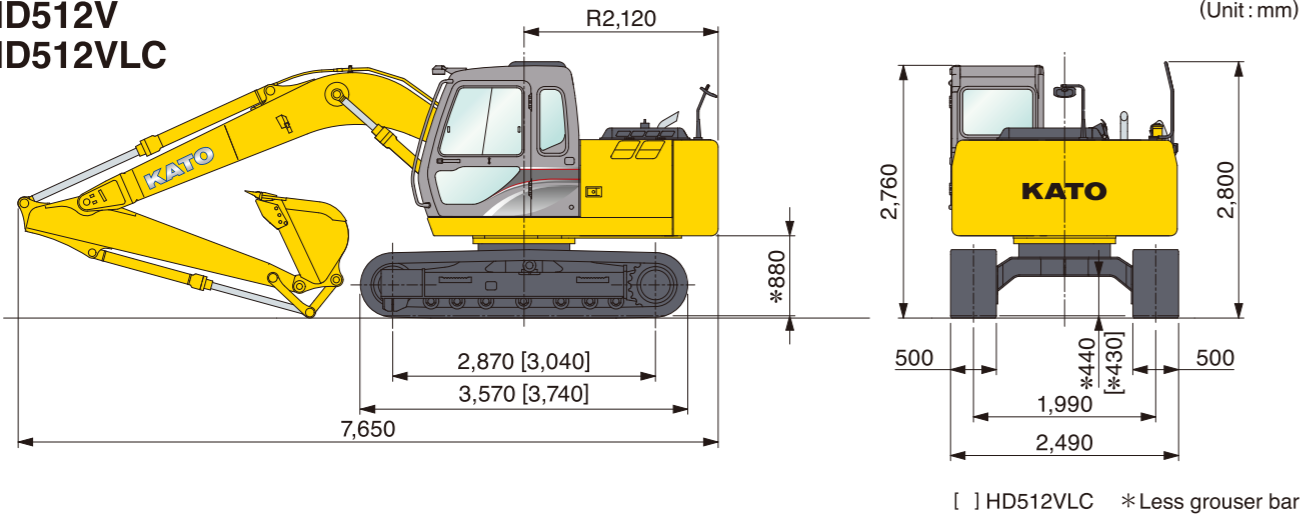
HD512v

Bucket capacity: 0.25m³-0.6m³(ISO)
 Engine output: 71.0kW / 2,000min⁻¹(ISO Net)
 Operating weight: 12,400kg (HD512V)
 12,800kg (HD512VLC)

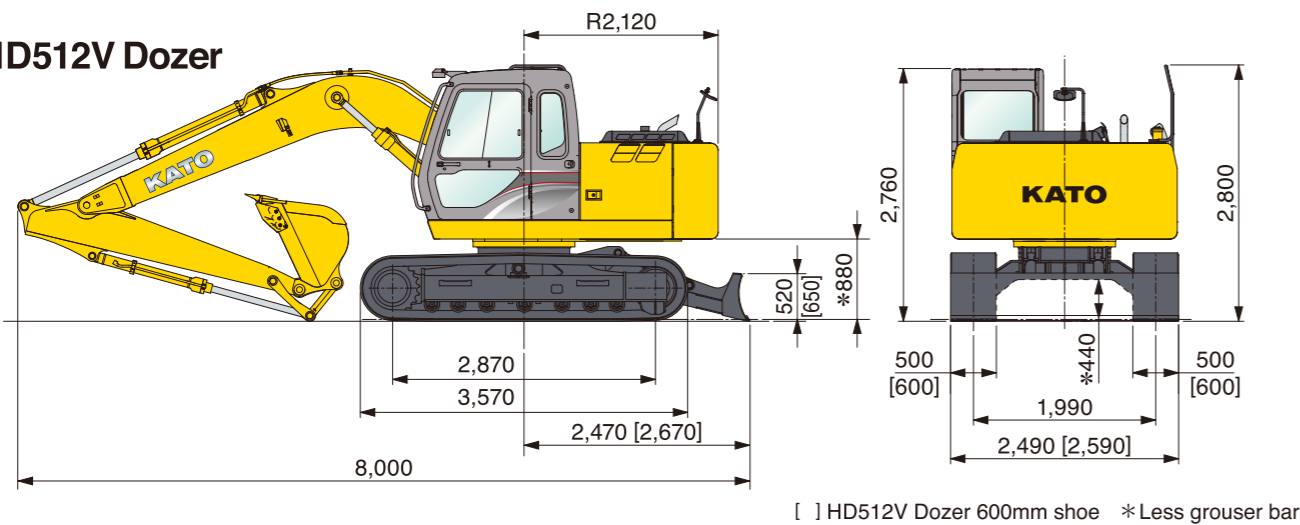
Dimensions

HD512V
HD512VLC

(Unit: mm)



HD512V Dozer



NOTE : Illustrations may include optional equipment. KATO products and specifications are subject to improvements and changes without notice.

Address inquiries to :

KATO

KATO WORKS CO.,LTD.

9-37, Higashi-ohi 1-chome, Shinagawa-ku, Tokyo 140-0011 Japan.

Tel. : Head Office Tokyo(03)3458-1111

Overseas Marketing Department Tokyo(03)3458-1115

Fax. : Tokyo(03)3458-1163

URL <http://www.kato-works.co.jp>



REGZM

HD512v

***It is a word of ACTIVE MACHINE
with 5 essential design features***

- User friendly design
- Environmentally cautious design
- Lower fuel consumption
- Powerful operation
- Robotic shape design



Powerful digging force

Maximum arm digging force: 68kN (6.9tf)
At the High Power mode: 71kN (7.2tf)
Maximum bucket digging force: 94kN (9.6tf)
At the High Power mode: 98kN (10.0tf)



● Heightened Skirt

● Boom strength: 26%Up

● Arm strength (Upper): 23%Up
 ● Arm strength (Bottom): 10%Up

● Traveling Frame strength: 40%Up

● Compared with previous model.



New Engine: ISUZU 4JJ1X

71kW / 2,000 min⁻¹ (2,999L) with DOHC4 valve, Intercooler, Turbo charger. High-pressurized common rail, Cooled EGR.



Easy Maintenance accesibility:

Parallel placed radiator, oil cooler, and intercoolers.



Remote located maintenance materials.

Technical Specifications

ENGINE

Model..... ISUZU 4JJ1X
 4 cycle intercooler turbo charged diesel engine
 Number of cylinders..... 4
 Bore & Stroke..... 95.4mm×104.9mm
 Total displacement..... 2,999 L
 Rated output..... 71.0kW/2,000min⁻¹ (ISO Net)
 Max. torque..... 379N·m/1,600min⁻¹ (ISO Net)
 Compression ratio..... 17.5:1
 Combustion system..... Direct injection
 Specific fuel consumption..... 213±11g/kW-hour
 Cooling system..... Pressurized water circulated by a centrifugal pump with thermostat
 Lubrication system..... Pressurized oil fed by a gear pump through full-flow and by-pass cartridge filter
 Starter..... Electric, 24V-4kW
 Generator..... Alternator, 24V-50A
 Fuel injection system..... Electric control common rail type
 Air cleaner..... Dry type filter

HYDRAULIC SYSTEM

Pumps..... Double variable piston pump and gear pump
 Max. discharge flow..... 2×121L/min
 Max. discharge pressure..... 31.4MPa
 Max. discharge pressure (travel circuit only)..... 32.8MPa
 Oil filtration..... Full-flow filter with replaceable element, a drain cartridge filter, a pilot line filter and suction strainer
 Control valves..... 3+4 section multiple control valves (with one free service circuit)
 Pilot pump..... Gear type
 Oil cooler..... Finned tube, forced ventilation
 Pressure relief valves..... Primary and secondary on each circuit

CAB & CONTROLS

Type..... All weather sound suppressed, 1,000mm wide pressed steel cab mounted on 6 point viscous mounting.
 Right hand levers..... Controls the boom & bucket

Inner right hand lever (with foot pedal)..... Controls the right hand track
 Inner left hand lever (with foot pedal)..... Controls the left hand track
 Left hand lever..... Controls the arm & swing
 Pilot control..... Travel, boom, arm, bucket and swing
 Engine throttle..... Electric "Accell dial"
 Meter & gauges..... Hour meter, water temperature and fuel level
 Working lights..... Provided on the boom left side and mounted on the frame
 Lubrication chart..... Inside of the left side cover

APC200

- Quick Selection of Working Modes
- P:** Professional Mode for heavy duty application (H Mode)
- A:** All-around Multi Purpose Mode for all application from precision work to heavy duty work by stroke of operation levers
- E:** ECO Mode for economical works
- Color monitor display with back up light
- Engine oil pressure
- Hydraulic oil filter
- Engine Preheater
- Hydraulic oil temperature
- Water temperature
- Water level
- Fuel level
- Battery charge
- APC monitor
- Calendar
- Intake air temp
- EGR sensor

BOOM, ARM & BUCKET

Boom cylinders..... Two, double acting
 Bore & Stroke..... 105mm×1,090mm
 Arm cylinder..... One, double acting
 Bore & Stroke..... 120mm×1,215mm
 Bucket cylinder..... One, double acting
 Bore & Stroke..... 95mm×995mm
 Lubrication..... Grease nipples, with centralized greasing for remote points
 Bucket digging force..... 94kN (High power)..... 98kN
 Arm digging force..... 68kN (High power)..... 71kN (High power can be used with STD arm)

SWING SYSTEM

Drive..... Axial piston motor with shockless valve and reduction gear.
 Brake..... A hydraulic brake that locks automatically when the swing control lever is in the neutral position and a mechanical parking brake which is applied when the safety lock lever is pulled backwards, the engine is turned off or the swing control lever is in the neutral position.
 Lubrication..... Completely housed and grease bathed
 Max. swing speed..... 12.5min⁻¹
 Tail swing radius..... 2,120mm
 Min. front swing radius..... 2,410mm

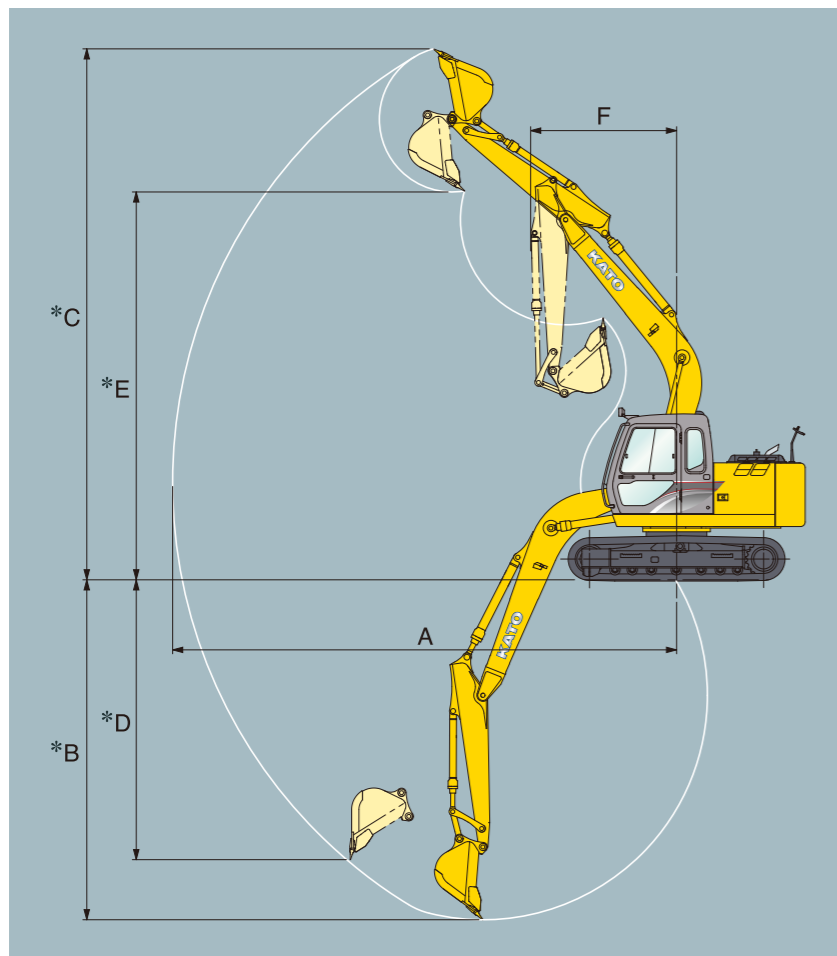
TRAVEL SYSTEM

Drive..... Independent axial piston motor with reduction for each side
 Brakes..... Independent disk parking brake for each side, applied automatically when the travel levers are in the neutral position.
 Track shoes..... 44 each side
 Track adjustment..... Grease cylinders with recoil springs
 Lubrication..... Sealed-for-life rollers and front idlers with floating seals
 Travel speed..... High 0~5.5km/h
 Low 0~3.1km/h
 Gradeability..... 70% (35°)
 Max. drawbar pull..... 111kN
 Ground clearance..... 440mm (less grouser bar)
 Track length..... 3,570mm

SERVICE DATA

Fuel tank..... 275 L
 Cooling system..... 19 L
 Engine oil..... 17.6 L
 Track drives..... 2×2.1 L
 Hydraulic oil tank (level)..... 77 L (system)..... 155 L
 In standard figure, with the 2.5m arm, 500mm grouser shoes and 0.50m³ (ISO), bucket.
 Operating weight..... 12,400kg
 Ground pressure..... 39kPa

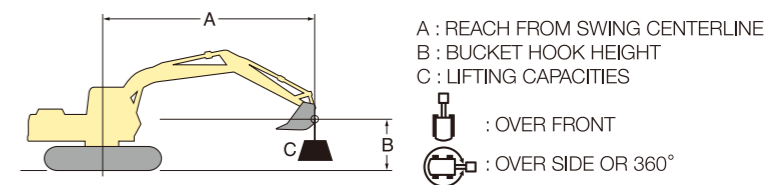
Working Ranges



Range	Arm	Unit : mm	
		STD (2.5m)	Long Arm (3.0m)
* A : Max. digging radius		8,310	8,780
* B : Max. digging depth		5,600	6,100
* C : Max. digging height		8,750	9,080
* D : Max. vertical wall		4,610	5,360
* E : Max. dumping height		6,390	6,720
F : Min. swing radius		2,410	2,480

*Less grouser bar.

Lifting Capacities



HD512V BOOM: 4.65m, ARM: 2.50m, BUCKET: 0.50m³ (415kg), SHOE WIDTH: 500mm, COUNTERWEIGHT: 2,300kg Unit:1,000kg

HD512V BOOM: 4.65m, ARM: 2.50m, BUCKET: 0.50m³ (415kg), SHOE WIDTH: 600mm, COUNTERWEIGHT: 2,300kg Unit:1,000kg

LOAD POINT HEIGHT B(m)	LIFT POINT RADIUS A(m)							AT MAXIMUM LIFT POINT RADIUS		
	2.00	3.00	4.00	5.00	6.00	7.00				
	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	m	
5.00										
4.00										
3.00										
2.00										
1.00										
0.00										
-1.00										
-2.00										
-3.00										
-4.00										

LOAD POINT HEIGHT B(m)	LIFT POINT RADIUS A(m)							AT MAXIMUM LIFT POINT RADIUS		
	2.00	3.00	4.00	5.00	6.00	7.00				
	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	m	
5.00										
4.00										
3.00										
2.00										
1.00										
0.00										
-1.00										
-2.00										
-3.00										
-4.00										

HD512V BOOM: 4.65m, ARM: 2.50m, BUCKET: 0.50m³ (415kg), SHOE WIDTH: 700mm, COUNTERWEIGHT: 2,300kg Unit:1,000kg

LOAD POINT HEIGHT B(m)	LIFT POINT RADIUS A(m)							AT MAXIMUM LIFT POINT RADIUS		
	2.00	3.00	4.00	5.00	6.00	7.00				
	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	m	
5.00										
4.00										
3.00										
2.00										
1.00										
0.00										
-1.00										
-2.00										
-3.00										
-4.00										

HD512VLC BOOM: 4.65m, ARM: 2.50m, BUCKET: 0.50m³ (415kg), SHOE WIDTH: 500mm, COUNTERWEIGHT: 2,300kg Unit:1,000kg

LOAD POINT HEIGHT B(m)	LIFT POINT RADIUS A(m)							AT MAXIMUM LIFT POINT RADIUS		
	2.00	3.00	4.00	5.00	6.00	7.00				
	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	m	
5.00										
4.00										
3.00										
2.00										
1.00										
0.00										
-1.00										
-2.00										
-3.00										
-4.00										

- NOTE: 1. Lifting capacities are based on ISO 10567.
 2. Lifting capacities shown do not exceed 87% of machine hydraulic capacity or 75% of minimum tipping load.
 3. Capacities marked with an asterisk(*) are limited by hydraulic capacities.
 4. Lifting capacities are based on machine standing on firm, uniform supporting surface. User must make allowances for job conditions such as soft or uneven ground.
 5. Lifting capacities shown should not be exceeded. Weight of all lifting accessories must be deducted from the above lifting capacities.
 6. Capacities apply only to the machine as originally manufactured and equipped by KATO WORKS CO., LTD.
 7. The operator should be fully acquainted with the Operation Manual before operating the machine.

Bucket

Type of bucket		Backhoe bucket						
Bucket capacity	m³, ISO	0.25	0.35	0.40	0.45	0.50	0.55	0.60
Bucket width	W/O side cutters, mm	540	695	785	875	910	1,000	1,090
	with side cutters, mm	630	785	875	965	1,000	1,090	1,180
Bucket weight	kg	290	340	370	380	420	440	460
Number of bucket teeth		3	4	4	4	5	5	5
Shape of bucket								
Standard boom +	Standard arm	●	●	●	●	●	▲	□
	Long arm	●	●	●	▲	●▲	×	×

●General purpose ▲Light work □Loading ○Usable ×Unusable —No setting *Usable only when 700mm shoe is fitted on. ●Yellow colored area means standard.

Track Shoes

Type of shoes		Grouser shoe			Flat shoe	Triangle shoe
Shoe width	mm	500	600	700	500	700
Overall width	mm	2,490	2,590	2,690	2,490	2,690
Ground pressure	kPa	39	33	29	40	29
Net weight change	kg	S.T.D	+180	+480	+420	+460

●Yellow colored area means standard.

Standard Equipment

- COLOR MONITOR DISPLAY (APC200)
- SEAT-BELT
- AUTOMATIC AIR CONDITIONER (PRESSURIZED)
- HOT & COOL BOX
- INTERMITTEND WINDSHIELD WIPER
- EMERGENCY EXIT REAR WINDOW
- AM/FM RADIO (2 SPEAKERS)
- 13 CM DUAL CORN SPEAKER X2
- CABIN LIGHT
- 3 STD WORKING LIGHTS (SLEWING TABLE-R, BOOM-L, CAB-L)
- REAR VIEW MIRROR-R
- REAR VIEW MIRROR-L
- TAIL VIEW MIRROR
- WORKING MODE SELECTOR (APC200)
- AUTO-SLOW, ONE TOUCH SLOW
- BOOM/ARM ANTI-DRIFT VALVE
- SLEWING ANTI-COUNTER ACTION
- AUTOMATIC PARKING BRAKE (SLEWING TABLE)
- AUTOMATIC PARKING BRAKE (TRAVELING)
- SERVICE PORT (1 SPOOL)
- ENTRY SYSTEM

Optional Equipment

- TRANSPARENT ROOF HATCH WITH SUN VISOR
- OPTIONAL WORKING LIGHT (BOOM-R)
- OPTIONAL WORKING LIGHT (CAB-R)
- UNDER COVER SLEWING TABLE (THICKER)
- 2 WAY OPTION PIPING (FOR CRUSHER & BREAKER)
- OPTION PIPING
- BOOSTING CIRCUIT FOR CRUSHER
- MULTI-LEVER
- WINDSHIELD HALF SIZE GUARD
- WINDSHIELD FULL SIZE GUARD
- CABIN HEAD GUARD
- ADDITIONAL ELECTRIC HORN
- ROOM FAN
- FLUSHER SLEWING
- ELECTRIC REFUELING PUMP
- FIRE EXTINGUISHER
- LOUD SPEAKER
- AIR CLEANER DOUBLE ELEMENT
- PRE-CLEANER
- HOSE RUPTURE VALVE (FOR BOOM CYLINDERS)
- TRACK GUARD (1 PCS EACH SIDE)
- TRACK GUARD (2 PCS EACH SIDE)
- TRACK GUARD (3 PCS EACH SIDE)
- TRAVELING MOTOR COVER (THICKER)
- COVER ON THE BOTTOM FACE OF TRAVELING FRAME
- OPTIONAL WEIGHT (+500kg)
- REAR VIEW CAMERA AND MONITOR