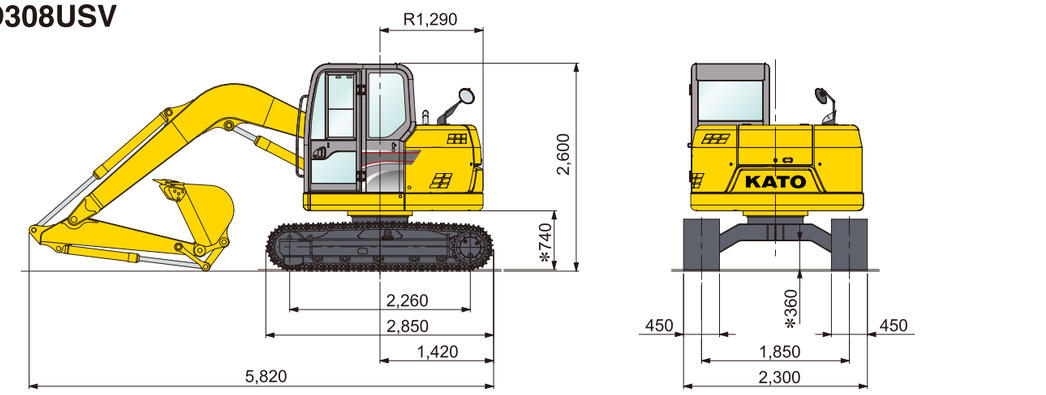
Innovations For The Future

Eco & Tough

Dimensions

HD308USV



*Less grouser bar

Address inquiries to :

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

ISO 9001 BUREAU VERITAS Certification

UKAS MANAGEMENT SYSTEMS

KATO

QUALITY & EXPERIENCE SINCE 1895

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KATO

REGZNM

FULLY HYDRAULIC EXCAVATOR

HD308USV

Bucket capacity: 0.12m³-0.34m³(ISO)
Engine output: 40.0kW / 2,000min⁻¹(ISO Net)
Operating weight: 7,300kg

REGZNM

HD308USV

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

- User friendly design
- Environmentally cautious design
- Lower fuel consumption
- Easy Maintenance
- Robotic shape design

Easier Maintenance

Maintenance accessibility is improved.
Gathered filters and parallel established radiator & oil cooler through Wide Opening Tail supports easy maintenance.

Improved Stability

Increased tail radius and new shaped counter weight improve stability.
Tail Slewing Radius: 1290mm
(With Optional Weight): 1370mm

Clearance for Feet

Compact established pedals & levers offers wider space for feet.

New APC (APC150)

Adoption of new APC system (APC150) offers easier operations and maintenance.

- Quick selection of working modes
- Color monitor display and Back-light at touch switches
- 12 maintenance information available

Technical Specifications

ENGINE

Model····· ISUZU 4LE2X 4 cycle intercooler turbo charged diesel engine
Number of cylinders····· 4
Bore & Stroke····· 85.0mm×96.0mm
Total displacement····· 2.179 L
Rated output····· 40.0kW/2,000min^{-1} (ISO Net)
Max. torque·····209N・m/1,500min^{-1} (ISO Net)
Compression ratio·····18.3:1
Combustion system····· Direct injection
Specific fuel consumption ····· 234±7g/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-3.2kW
Generator····· Alternator, 24V-50A
Governor····· Mechanical
Air cleaner····· Dry type filter

HYDRAULIC SYSTEM

Pumps·····Double variable piston pump and gear pump
Max. discharge flow····· 2×74.0L/min
Max. discharge pressure····· 29.4MPa
Max. discharge pressure (travel circuit only)····· 31.4MPa
Oil filtration··· Full-flow filter with replaceable element, a pilot line filter and suction strainer
Control valves·····5+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, cab mounted on 4 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 right front cover
Lubrication chart·····Inside of the right front side cover

APC150

- Quick Selection of Working Modes
  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 and air cleaner
- Fuel water level
- Calendar

BOOM, ARM AND BUCKET

Boom cylinders····· One, double acting
Bore & Stroke····· 105mm×960mm
Arm cylinder····· One, double acting
Bore & Stroke····· 95mm×920mm
Bucket cylinder····· One, double acting
Bore & Stroke····· 85mm×745mm
Lubrication····· Grease nipples, with centralized greasing for remote points
Bucket digging force··· 61.4kN (6,300kgf)
Arm digging force····· 42.2kN (4,300kgf)

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·····10.0min^{-1}
Tail swing radius····· 1,290mm
Min. front swing radius····· 1,630mm

TRAVEL SYSTEM

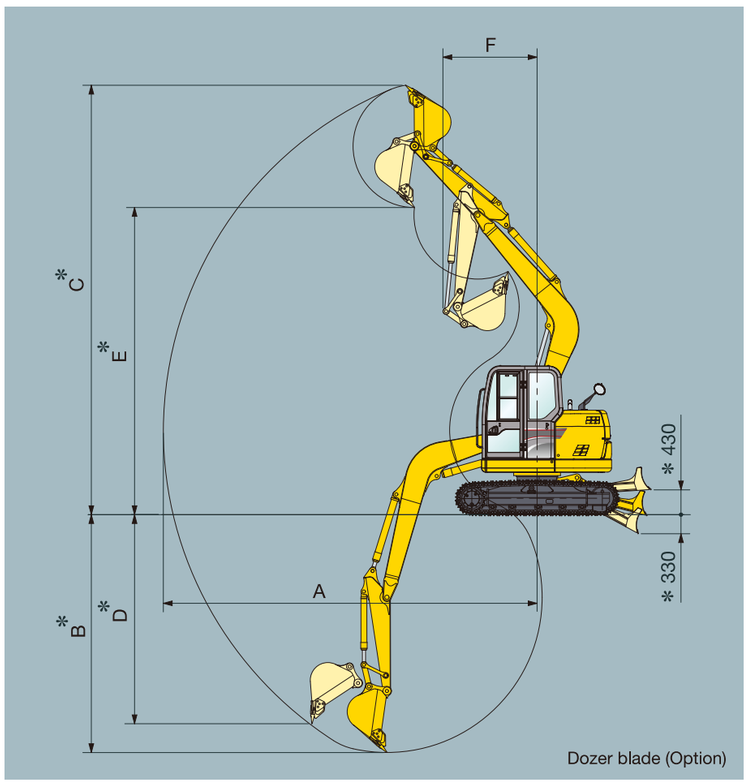
Drive····· Independent axial piston motor with reduction for each side
Brakes··· Independent disk parking brake for each side, applied automatically when the travel levers are in the neutral position.
Track shoes····· 39 each side

Track adjustment····· Grease cylinders with recoil springs
Lubrication··· Sealed-for-life rollers and front idlers with floating seals
Travel speed····· High 0~5.0km/h
Low 0~3.2km/h
Gradeability·····70% (35°)
Max. drawbar pull····· 66.9kN
Ground clearance····· 360mm
(less grouser bar)
Track length····· 2,850mm

SERVICE DATA

Fuel tank····· 120 L
Cooling system·····11 L
Engine oil····· 10.7 L
Track drives····· 2×1.3 L
Hydraulic oil tank
(level)····· 51 L
(system)····· 98 L
In standard figure, with the 1.62m arm, 450mm grouser shoes and 0.28m^3 (ISO), bucket.
Operating weight····· 7,300kg
Ground pressure····· 32kPa

Working Ranges



Unit : mm

Range \ Arm	STD (1.62m)	Long Arm (2.07m)
A : Max. digging radius	6,470	6,910
*B : Max. digging depth	4,120	4,570
*C : Max. digging height	7,430	7,800
*D : Max. vertical wall	3,620	4,140
*E : Max. dumping height	5,320	5,680
F : Min. swing radius	1,630	2,010

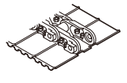
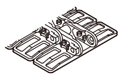
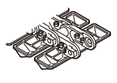
* Less grouser bar.

Bucket

Type of bucket		Backhoe bucket					Slope forming bucket
Bucket capacity	m^3, ISO	0.12	0.16	0.22	0.28	0.34	–
Bucket width	W/O side cutters, mm	370	440	555	650	770	1,400 × 800
	with side cutters, mm	480	555	670	770	890	
Bucket weight	kg	170	190	210	230	250	305
Number of bucket teeth		3	3	3	4	4	–
Shape of bucket							
Standard boom +	Standard arm	●	●	●	●	▲	●
	Long arm	●	●	●	▲	×	▲▲
	Extension arm	●	▲	×	×	×	

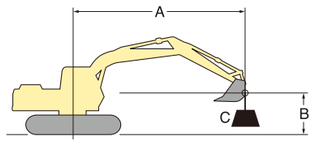
● General purpose ▲ Light work × Unusable ○ Yellow colored area means standard.

Track Shoes

Type of shoes		Pat crawler	Grouser shoe		Flat shoe	Triangle shoe	
							
Shoe width	mm	450	450	600	450	600	700
Overall width	mm	2,300	2.300	2,450	2,300	2,450	2,550
Ground pressure	kPa	32 (0.33)	32 (0.33)	25 (0.25)	34 (0.34)	25 (0.25)	22 (0.22)
Net weight change	kg	± 0	S.T.D	+120	+340	+260	+330

○ Yellow colored area means standard.

Lifting Capacities



A : REACH FROM SWING CENTERLINE
B : BUCKET HOOK HEIGHT
C : LIFTING CAPACITIES
: OVER FRONT
: OVER SIDE OR 360°

HD308USV BOOM: 3.83m, ARM: 1.62m, BUCKET: 0.28m^3 (230kg), SHOE WIDTH: 450mm, COUNTERWEIGHT: 1,060kg

Unit: 1,000kg

LOAD POINT HEIGHT B (m)	OUTREACH A (m) 2.00		3.00		4.00		5.00		RATING AT MAXIMUM REACH		
											m
5.00			*1.35	*1.35							
4.00			*1.56	*1.56	*1.48	*1.48					
3.00	*2.85	*2.85	*2.03	*2.03	*1.70	1.52	1.26	1.02	1.09	0.88	5.39
2.00			*2.64	2.28	1.77	1.43	1.22	0.98	1.00	0.80	5.58
1.00			2.68	2.10	1.68	1.34	1.17	0.94	0.97	0.78	5.58
0.00	*3.06	*3.06	2.58	2.01	1.62	1.29	1.14	0.91	1.01	0.80	5.40
-1.00	*3.10	*3.10	2.56	1.99	1.59	1.26	1.13	0.90	1.13	0.90	5.01
-2.00	*3.09	*3.09	2.59	2.02	1.61	1.28			1.42	1.13	4.36
-3.00	*3.20	*3.20	*2.24	2.11					*1.98	1.83	3.29

HD308USV BOOM: 3.83m, ARM: 2.07m, BUCKET: 0.22m^3 (210kg), SHOE WIDTH: 450mm, COUNTERWEIGHT: 1,060kg

Unit: 1,000kg

LOAD POINT HEIGHT B (m)	OUTREACH A (m) 2.00		3.00		4.00		5.00		6.00		RATING AT MAXIMUM REACH		
													m
6.00													
5.00					*1.18	*1.18							
4.00					*1.27	*1.27	*1.29	1.08					
3.00			*1.69	*1.69	*1.49	*1.49	1.29	1.05			0.94	0.76	5.89
2.00	*3.72	*3.72	*2.33	*2.33	*1.80	1.46	1.23	1.00	0.89	0.71	0.87	0.69	6.06
1.00	*2.53	*2.53	2.73	2.15	1.70	1.36	1.18	0.95	0.86	0.68	0.85	0.67	6.06
0.00	*2.92	*2.92	2.60	2.03	1.62	1.29	1.14	0.90			0.87	0.69	5.89
-1.00	*3.02	*3.02	2.54	1.98	1.58	1.25	1.11	0.88			0.95	0.75	5.54
-2.00	*3.07	*3.07	2.55	1.98	1.58	1.25					1.14	0.90	4.96
-3.00	*3.28	*3.28	2.61	2.04	1.63	1.30					1.60	1.27	4.06

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.

Standard Equipment

- COLOR MONITOR DISPLAY (APC150)
- SEAT-BELT
- AUTOMATIC AIR CONDITIONER (PRESSURIZED)
- INTERMITTED WINDSHIELD WIPER
- EMERGENCY ESCAPE HAMMER
- AM/FM RADIO (2 SPEAKERS)
- DUAL CORN SPEAKER X2
- CABIN LIGHT
- 3 STD WORKING LIGHTS (FRONT RIGHT SIDE, BOOM-L, CAB-L)
- TAIL VIEW MIRROR
- WORKING MODE SELECTOR (APC150)
- AUTO-SLOW, ONE TOUCH SLOW
- AUTOMATIC PARKING BRAKE (SLEWING TABLE)
- AUTOMATIC PARKING BRAKE (TRAVELING)
- SERVICE PORT (1 SPOOL)
- ENTRY SYSTEM

Optional Equipment

- OPTIONAL WORKING LIGHT (BOOM-R)
- OPTIONAL WORKING LIGHT (CAB-L)
- UNDER COVER SLEWING TABLE (THICKER)
- OPTION PIPING
- BOOSTING CIRCUIT FOR CRUSHER
- MULTI-LEVER
- WINDSHIELD HALF SIZE GUARD
- WINDSHIELD FULL SIZE GUARD
- CABIN GUARD
- REAR VIEW MIRROR-R
- REAR VIEW MIRROR-L
- ELECTRIC HORN
- FLUSHER SLEWING
- BUZZER TRAVELING
- ELECTRIC REFUELING PUMP
- FIRE EXTINGUISHER
- AIR CLEANER DOUBLE ELEMENT
- HIGH PERFORMANCE FUEL FILTER
- HOSE RUPTURE VALVE (FOR BOOM CYLINDERS)
- HOSE RUPTURE VALVE (FOR ARM CYLINDER)
- TRACK GUARD (1 PCS EACH SIDE)
- TRACK GUARD (2 PCS EACH SIDE)
- OPTIONAL WEIGHT (+500kg)