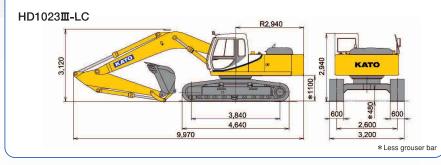
SUPEREXCEED HD1023I / HD1023I-LC



(Unit: mm)





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



Dimensions

KATO WORKS CO., LTD.

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

C01791 12.2003-4000(TG)1 Printed in Japan



Bucket capacity: 0.55m³ - 1.5m³(ISO) Engine output: 125kW/2,150mln⁻¹(ISO Net) Operating weight: 23,000kg (HD1023**I**)/ 23,600kg (HD1023**I**-LC)





Gentle with Nature, Gentle with you Try and Feel the New Epoch of Performance



Roomy and Comfortable Cabin

Auto air conditioner UV cut glass Ideal layout of each controlling gear Mono piece big & wide side window Anti-static-electricity fabric seat Wide range adjustable seating position

Powerful Engine

Max Output: 125kW/2150min⁻¹(ISO Net) with inter-cooler & turbo-charger

Low Noise Emission

 $102dB(A)^*$, sound power level

Low Engine Emission

Complying with the latest emission control

HD1023

Durable Cooling System

High performance radiator and aluminum oil cooler Easy access for cleaning.

Replacement Interval of Hydraulic Oil: 5,000 hours

*JIS Sound power level.

•Type K-version for demolition work

Type H-version for heavy duty work

SUPEREXCEED HD1023I / HD1023I-LC

Technical Specifications

ENGINE

Model ······Mitsubishi 6D34-TI	E2A, 4 cycle intercooler turbo charged diesel engine
Number of cylinders	
Bore & Stroke	104mm × 115mm
Total displacement	5.86 L
Rated output ······125kW	
	(ISO Net)
Max. torque 620N • m/1	600min ⁻¹ (63kgf+m/1,600rpm)
	(ISO Net)
Compression ratio	
Combustion system	Direct injection
Specific fuel consumption	225g/kW-hour (165g/PS-hour)
Cooling system ·····Pre	essurized water circulated by a
cer	ntrifugal pump with thermostat
Lubrication systemPre	essurized oil fed by a gear
pu	mp through full-flow and by-
	pass cartridge filter
Starter ·····	
	······Alternator, 24V-35A
Governor	
Air cleaner	·····Dry type filter

HYDRAULIC SYSTEM

PumpsDouble variable	e piston pump and gear pump
Max. discharge flow	2 × 247L/min
Max. discharge pressure	
Max. discharge pressure (trave	I circuit only) ·····
	32.9MPa (335kgf/cm ²)
Oil filtration Full-flow f	ilter with replaceable element,
a drain	cartridge filter, a pilot line filter
	and a suction strainer
Control valve5+4	section multiple control valve
	(with one free service circuit)
Pilot pump	····· Gear type
Oil cooler I	Finned tube, forced ventilation
Pressure relief valves	······ Primary and secondary
	on each circuit



4

IAB	 co	00	
	υU	nO	(L-)

Turno	•• All weather sound suppressed, 1,000mm
Type	
	wide pressed steel cab mounted on 6
	point viscourse mounting.
Right hand lever	Controls the boom & bucket
Inner right hand lever (with foot pedal) Controls the right
	hand track
Inner left hand lever (w	rith foot pedal) ······· Controls the left
	hand track
Left hand lever	······Controls the arm & swing
Pilot control	· Travel, boom, arm, bucket and swing
E se tra sub-se otra	

Engine throttle Electric "Accel dial" Meter & gauges Hour meter, water temperature and fuel level

Monitor display..... Engine oil pressure, engine oil filter, hydraulic oil filter, hydraulic oil temperature, water temperature, water level, fuel level, battery charge, APC monitor and air cleaner.

Indicator lamps ······ Caution lamp & Engine preheater indicator lamp Working lights ····· Provided on the boom left side and mounted on the frame

Lubrication chart Inside the tool box

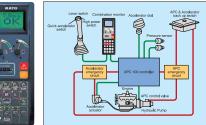


SWING SYSTEM

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 neu- tral 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 11.0min ⁻¹
Tail swing radius 2,940mm
Min. front swing radius 3,880mm

BOOM, ARM AND BUCKET

Boom cylinders Two, double acting
Bore & Stroke 140mm × 1,370mm
Arm cylinder ····· One, double acting
Bore & Stroke 150mm × 1,680mm
Bucket cylinder One, double acting
Bore & Stroke
Lubrication Grease nipples, with centralized
greasing for remote points
Bucket digging force 167kN (17,000kgf)
(High power) 174kN (17,800kgf)
Arm digging force 120kN (12,200kgf)
(High power)126kN (12,900kgf)
(High power can be used with STD arm and short arm)



Combination monitor APC" system

SERVICE DATA

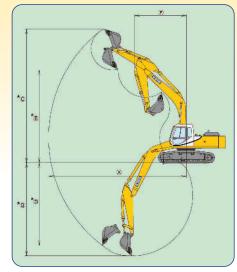
Fuel tank
Cooling system 23 L
Engine oil
Track drives
Swing drive 11.3 L
Hydraulic oil tank
(level)165 L
(system)290 L
In standard figure, with the 2.96m arm, 600mm grouser
shoes and 1.0m ³ (LC: 1.1m ³)(ISO) bucket.
Operating weight
23,600kg: HD1023III-LC
Ground pressure ·······50.0kPa (0.5kgf/cm ²): HD1023III
47.0kPa (0.48kgf/cm ²): HD1023III-LC

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
51 each side HD1023III-LC
Track adjustment Grease cylinders with recoil springs
LubricationSealed-for-life rollers and front idlers
with floating seals
Travel speed High 0~5.5km/h
Medium 0~3.9km/h
Low 0~2.7km/h
Gradeability
Max. drawbar pull 186.3kN (19,000kgf)
Ground clearance (less grouser bar) 480mm
Track length······ 4,260mm HD1023III
4,640mm HD1023III-LC



Working Ranges



			(Unit : mm)	
Super short Arm (1.9m)	Short Arm (2.47m)	STD Arm (2.96m)	Long Arm (3.95m)	
9,400	9,910	10,350	11,260	
5,950	6,520	7,010	8,010	
9,600	9,880	10,060	10,500	
5,100	5,750	6,250	7,190	
6,550	6,810	6,990	7,440	
4,160	4,010	3,880	3,800	
	(1.9m) 9,400 5,950 9,600 5,100 6,550	(1.9m) (2.47m) 9,400 9,910 5,950 6,520 9,600 9,880 5,100 5,750 6,550 6,810	(1,9m) (2,47m) (2,96m) 9,400 9,910 10,350 5,950 6,520 7,010 9,600 9,880 10,060 5,100 5,750 6,250 6,550 6,810 6,990	

* Less grouser bar.

Extension Arm 1.500mm

Bucket

Т	ype of bucket			В	ackhoe bucke		Dredging bucket	Slope form- ing bucket	Rock bucket	Ripper		
Bucket ca	pacity m ³ , I SO	0.55	0.8	1.0	1.1	1.3	1.4	1.5	0.65	-	0.7	-
Bucket	W/O side cutters, mm	800	950	1,170	1,220	1,400	1,490	1,580	2,400	2,000 ×	760	-
width	with side cutters, mm	915	1,065	1,285	1,335	1,515	-	-	45° 350	1,250	-	-
Bucket we	eight kg	580	725	865	875	950	950	1,030	770	990	1,080	450
Number o	f bucket teeth	4	4	5	5	5	5	5	2	-	5	1
Shape of		K.	Ì		1	Q			- Contraction of the second se		Ð	Ŷ
	short arm	•	•	•	٠	A	A		•	0	0	0
Standard	Standard arm	•	•	•	▲[●]			×	•	0	0	0
boom +	Long arm	•	•			×	×	×	A	0	×	×
	Extension arm	•		×	×	×	×	×	×	×	×	×

● General purpose ▲ Light work ◎ Rock digging □ Loading ○ Usable × Unusable []HD1023II-LC

Yellow colored area means standard.

Track Shoes

			Grouser shoe	Flat shoe	Triangle shoe	
Type of sho	95					
Shoe width mm	HD-1023 II	600	700	800	600	800
Shoe width min	HD-1023 II-LC	600	700	800	600	800
Overall width mm	HD-1023 II	2,990	3,090	3,190	2,990	3,190
Overall width 1111	HD-1023 II-LC	3,200	3,300	3,400	3,200	3,400
Ground pressure	HD-1023 II	50.0 (0.51)	43.0 (0.44)	38.0 (0.39)	52.0 (0.53)	39.5 (0.4)
kPa (kgf/cm ²)	HD-1023 III -LC	47.0 (0.48)	40.0 (0.41)	36.5 (0.37)	48.0 (0.49)	36.5 (0.37)
Net weight change kg	HD-1023 II	S.T.D	+280	+540	+720	+1,290
Net weight change kg	HD-1023 III -LC	S.T.D	+300	+590	+780	+1,400

Yellow colored area means standard.

SUPEREXCEED HD1023I / HD1023I-LC **Lifting Capacities**

A : REACH FROM SWING CENTERLINE B : BUCKET HOOK HEIGHT

C : LIFTING CAPACITIES ů : OVER FRONT

C

OVER SIDE OR 360°

Unit: 1,000kg

HD1023II 600mm Shoe, 5.87m Boom, 2.96m Arm, 1.0m³ Bucket (865kg)

LIFT		LIFT POINT RADIUS A(m)										AT MAXIMUM							
POINT	2.	00	3.	00	4.	00	5.	00	6.	00	7.	00	8.	00	9.	00	LIFT P	OINT R	ADIUS
HEIGHT B(m)	ĥ	O	ð	O	Ð	Ð	Ð	\mathbf{D}	ð	Ð	ŋ	O	ŋ	\mathbf{D}	٦	Ð	Ð	O	RADIUS (m)
7.00											* 4.14	* 4.14							
6.00											* 4.64	4.14	* 3.36	3.15			* 3.32	3.15	8.01
5.00									* 5.01	* 5.01	* 4.94	4.04	4.50	3.12			* 3.30	2.78	8.45
4.00							* 6.28	* 6.28	* 5.72	5.12	* 5.38	3.91	4.43	3.05			* 3.35	2.54	8.75
3.00			* 5.76	* 5.76	* 7.58	* 7.58	* 7.61	6.55	* 6.56	4.87	5.45	3.75	4.32	2.95			* 3.45	2.38	8.93
2.00			* 5.29	* 5.29	* 5.92	* 5.92	* 7.72	6.15	6.81	4.62	5.28	3.60	4.22	2.85	3.43	2.29	3.43	2.29	9.00
1.00			* 5.56	* 5.56	* 5.43	* 5.43	* 6.51	5.83	6.58	4.41	5.13	3.46	4.12	2.76			3.41	2.25	8.95
0.00			* 5.62	* 5.62	* 5.32	* 5.32	* 6.03	5.61	6.40	4.25	5.01	3.34	4.04	2.69			3.48	2.30	8.78
-1.00	* 6.32	* 6.32	* 5.52	* 5.52	* 5.30	* 5.30	* 5.87	5.49	6.29	4.15	4.93	3.27	4.00	2.65			3.64	2.41	8.50
-2.00	* 6.17	* 6.17	* 5.38	* 5.38	* 5.32	* 5.32	* 5.89	5.45	6.25	4.11	4.90	3.25	4.00	2.65			3.95	2.62	8.08
-3.00	* 5.63	* 5.63	* 5.29	* 5.29	* 5.41	* 5.41	* 6.09	5.48	6.27	4.14	4.94	3.28					4.46	2.97	7.50
-4.00	* 5.35	* 5.35	* 5.29	* 5.29	* 5.61	* 5.61	* 6.55	5.59	6.38	4.23							5.38	3.59	6.72
-5.00	* 5.28	* 5.28	* 5.47	* 5.47	* 6.09	* 6.09	* 7.72	5.80									7.24	4.84	5.66

HD1023II-LC 600mm Shoe, 5.87m Boom, 2.96m Arm, 1.1m³ Bucket (875kg)

HD1023 II -	HD1023II-LC 600mm Shoe, 5.87m Boom, 2.96m Arm, 1.1m ³ Bucket (875kg) Unit: 1,000kg						,000kg												
LIFT	FT LIFT POINT RADIUS A							A(m)							AT MAXIMUM				
POINT 2.00		3.00		4.00		5.00		6.00		7.00		8.00		9.00		LIFT POINT RADIUS			
HEIGHT B(m)	ĥ	0	н	ð	н	Q	Ц	O	Ч	O	Ч	0	3	0	Ц	O	Ч	O•	RADIUS (m)
7.00	U	<u> </u>	0	0	0	<u> </u>	U				* 4.14	* 4.14	0	-	0	0	U		(11)
6.00											* 4.65	4.64	* 3.35	* 3.35			* 3.31	* 3.31	8.01
5.00									* 5.00	* 5.00	* 4.93	4.55	* 4.93	3.53			* 3.29	3.16	8.45
4.00							* 6.27	* 6.27	* 5.71		* 5.38	4.41	* 5.20	3.46			* 3.34		8.75
3.00			* 5.75	* 5.75	* 7.57	* 7.57	* 7.61	7.40	* 6.55	5.50	* 5.92	4.25	5.13	3.36			* 3.45	2.73	8.93
2.00			* 5.29	* 5.29	* 5.91	* 5.91	* 7.71	6.99	* 7.43	5.25	6.28	4.09	5.02	3.26	* 3.62	2.63	* 3.62	2.63	9.00
1.00			* 5.56	* 5.56	* 5.42	* 5.42	* 6.50	* 6.50	7.89	5.03	6.12	3.95	4.92	3.17			* 3.88	2.61	8.95
0.00			* 5.62	* 5.62	* 5.31	* 5.31	* 6.02	* 6.02	7.70	4.87	6.00	3.83	4.84	3.10			4.17	2.66	8.78
-1.00		* 6.32		* 5.51	* 5.29	* 5.29	* 5.86	* 5.86	* 7.38	4.77	5.92	3.76	4.80	3.06			4.37	2.78	8.50
-2.00	* 6.17	* 6.17	* 5.37	* 5.37	* 5.32	* 5.32	* 5.88	* 5.88	* 7.38	4.73	5.89	3.74	4.80	3.06			4.73	3.02	8.08
-3.00	* 5.63	* 5.63		* 5.28	* 5.40	* 5.40	* 6.08	* 6.08	7.57	4.75	5.93	3.77					5.35	3.42	7.50
-4.00		* 5.34		* 5.28				6.42	7.68	4.85							6.44	4.12	6.72
-5.00	* 5.27	* 5.27	* 5.46	* 5.46	* 6.08	* 6.08	* 7.71	6.64									* 8.11	5.52	5.66

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 show 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 Ed	quipment	Optional Equipment					
New auto-slow · One-touch-slow Multi-mode display monitor Adjustable monitor alarm 2 service hour meter 3 traveling mode	Swing shockless valve Automatic swing parking brake Automatic swel parking brake One free service circuit for attachments Pear view mirror (right side) Track guard, 1 pc each side Front window washer (2 sprays)	 Tinted transparent hatch Seat belt Automatic climate control air conditioner Hot & cool box contained with AC Cabin heater Auto tuning AM/FM radio with clock 2 speaker stereo Working light (bel ft side) Working light (bel ft side) Working light (bel ft side) Cab access step Optional piping Cab front haft guard Cab head guard Electronic from Cabin fan Swing warning light 	Refueling pump Air cleaner, double elemer Low temperature spec Tool set Track guard, 3 pcs each si				

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