

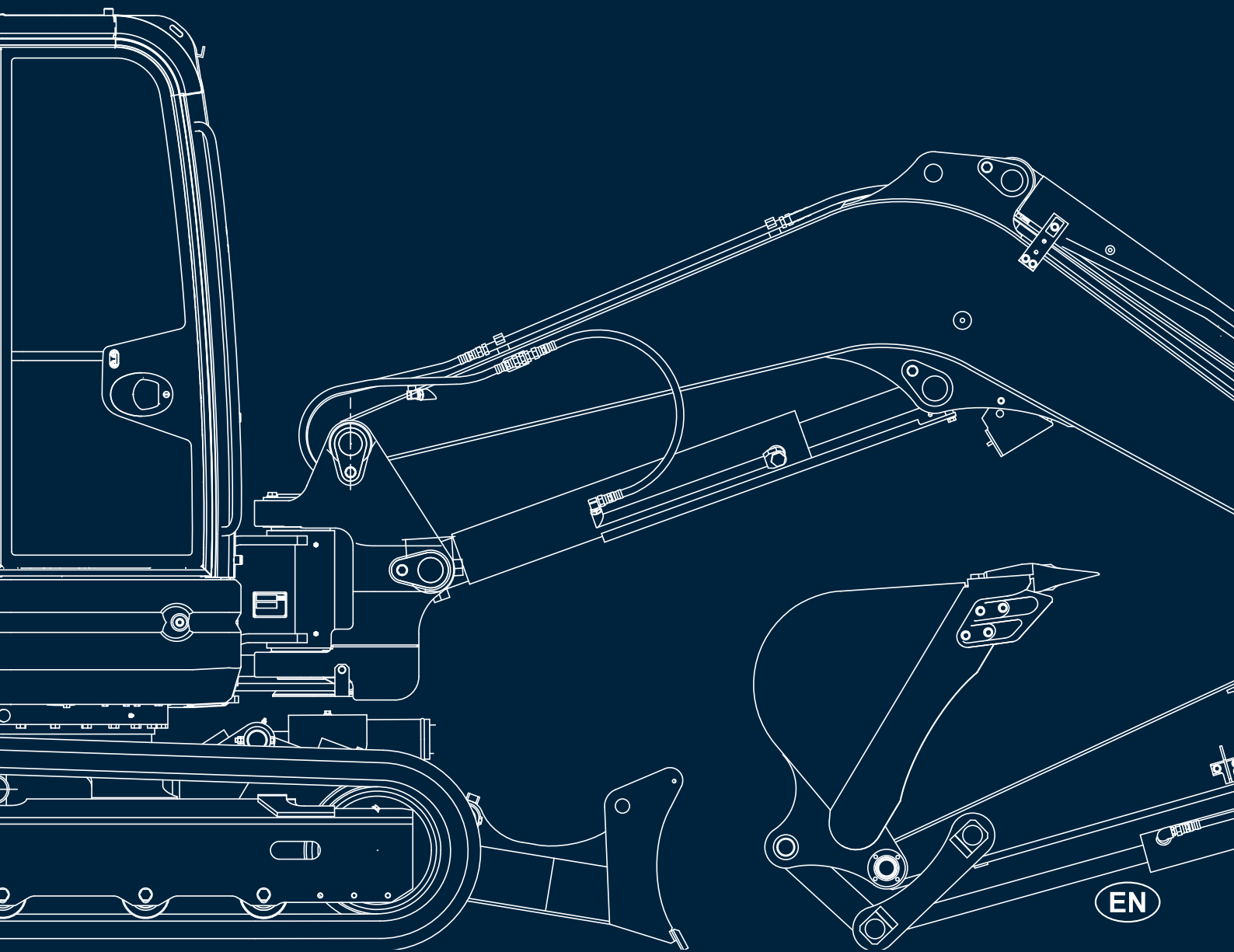
KATO IMER

THINK GLOBAL, ACT LOCAL

MINI EXCAVATORS

2.7 / 8.5 TONS

HD27V5
HD33V5
HD37V5
HD50V5
HD60V5
HD85V5



EN

UNIFIED DESIGN

UNIFICATION OF SERIES HDV5 MODELS

Enhanced stability, stage V engines, optional auxiliary lines.

The new HDV5 series features first class operation with very high digging performance. Maximum reliability with top quality components. Improved maintenance with optimised layout of components. In addition to the first auxiliary line supplied as standard, two additional auxiliary lines can be supplied as optionals (the second with proportional control). The new X layout undercarriage imparts greater rigidity and stability to the machine.



Unified design for series V5 models

- Interchangeability and uniformity of replacement parts
- Components lay-out unification
- Same cab for all HDV5 models, from HD27V5 to HD85V5
- Well-balanced design for advanced operation and high stability

DEVELOPMENT/CONCEPT

OBJECTIVE

offer better performance
with a simple structure

- Enhanced operator safety
- ROPS/FOPS conformity
- Controls lock system
- Comfortable space in the cab
- Spacious and comfortable operator position
- Simple, stable and powerful operations
- Well balanced design to ensure high performance and stability
- Lower maintenance costs
- Simplified design for longer lifetime
- Easier maintenance
- Reduced fuel consumption

RECYCLED MATERIALS



All construction materials, sheet steel, cast iron and plastic, are 97% recyclable.

Safer, more comfortable operator position

New canopy design to improve FOPS performance and assist water run-off.



The two-position sunshade is available as an optional.



ENHANCED OPERATOR SAFETY

Safe boarding and alighting

When the lever is raised and the locking system is functioning, all operations are inhibited.

Engine start in safe conditions

The engine can be started only when the lock lever is raised. The starting system removes the risk of inadvertent operations.

Safety with stationary machine

Auto-parking brake is applied when the lock lever is raised.



STOP BUTTON AND INDICATOR LIGHT FOR ALL MODELS (EXCEPT HD27V5).

CAB AND INSTRUMENTS

Same cab from HD27V5 to HD85V5
with ROPS tested to 8 tons

New canopy design, improved FOPS performance, assisted water run-off.
Shorter grab handle to minimise the risk of breakage due to impact with obstacles.
Improved visibility and rearview mirrors supplied as standard.



HOLDER FOR LOWER WINDOW



IMPROVED VISIBILITY WITH REARVIEW
MIRRORS SUPPLIED AS STANDARD



Spring mounted bucket seat
Seat with optional fabric upholstery

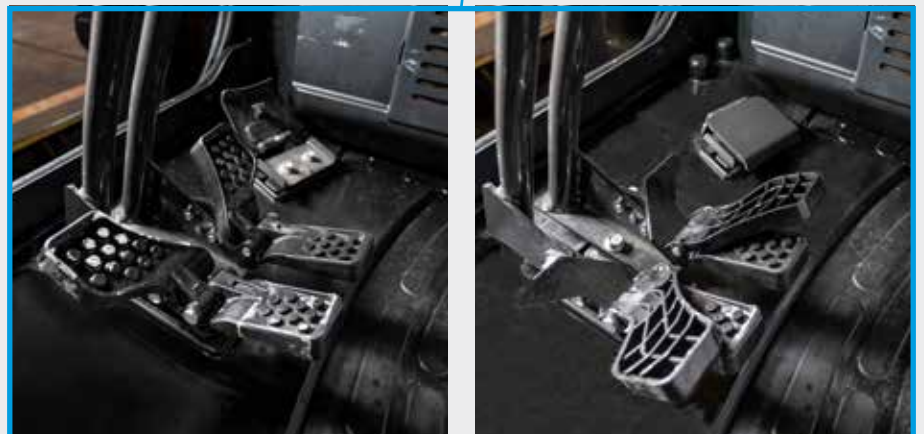
+20%
LEG ROOM



AIR CONDITIONER

PEDALS

The larger cab means more comfort and less stress. The compact pedals design gives more leg room.

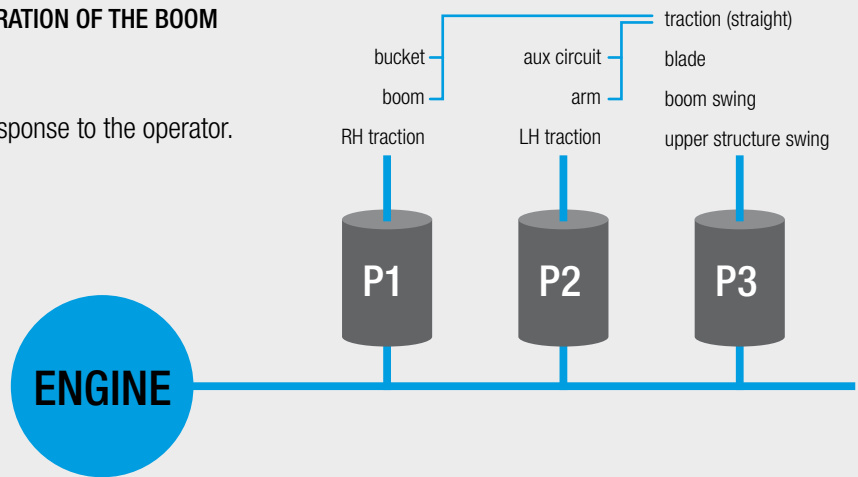


HIGH DIGGING POWER AND FAST RESPONSE

3 PUMPS ARE USED FOR INDEPENDENT OPERATION OF THE BOOM AND ARM AND FOR SWING MOVEMENTS.

(P1 & P2 are variable displacement types)

Operations are agile, fast and powerful in response to the operator.



OPTIONAL AUXILIARY SYSTEM

In addition to the first auxiliary hydraulic circuit (standard), there are two additional optional hydraulic circuits, which allow the use of multiple attachments such as hydraulic breaker, shear, hydraulic clamps, augers, adjustable and multifunction buckets. The boom swing pedal has two functions: swinging and control of the second auxiliary line, after preselection.

The second auxiliary line can be operated with a proportional type control. No restrictions for combined installation of the load holding valve with the 3 auxiliary lines.

HDV5 series machines are equipped with a reinforced boom.



HYDRAULIC SYSTEM

Precise sizing of the hydraulic system makes it possible to develop bucket digging force of 21.0 kN (2140 kgf) in model HD27V5; 29.1 kN (2970 kgf) in models HD33V5 and HD37V5; 31 kN (3160 kgf) in model HD50V5; 41.2 kN (4200 kgf) in model HD60V5; and 55.0 kN (5610 kgf) in model HD85V5.

PROTECTION OF COMPONENTS

The hydraulic lines are routed at the top of the boom and inside the arm with the hoses protected with metal spiral and burst-proof sheaths. Boom and blade cylinder guards.



INSTRUMENTATION DESIGNED FOR THE OPERATOR

The new instrumentation is designed in compliance with the principles of ergonomics and operator comfort.

The manual controls are all on the right-hand side: all operations, except boom rotation, can be carried out manually. The front monitor of the latest generation facilitates greater control by the operator during work. The servo-assisted joystick controls ensure the utmost precision during all operations.



ANTI-BURST VALVE KIT (OPTIONAL)

The transfective LCD touch screen is an integral part of the load lifting kit, allowing optimal reading also in bright light conditions and in direct sunlight.

The screen provides various information: engine monitoring, load sensing, diagnostic system, pressure data, maximum load exceeded alarm.

The load indicator can be enabled/disabled for boom cylinder lifting operations and their calibration.

The kit is equipped with a load holding system.



EASY READ MONITOR

The monitor is located on the right hand side and it allows operations to be monitored during the work. The new angle provides enhanced visibility for the operator. New design.

The electrical power socket and cigar lighter is located on the rear of the display.

Ergonomic joystick 2nd AUX LINE PROPORTIONAL CONTROL (OPTIONAL)

The auxiliary hydraulic system is controlled by the "roller" lever which allows precision movements with fingertip control; the left-hand button provides continuous operation.

Lock system

The lock system operates when the safety lever is raised; all operations are inhibited and the parking brake is engaged.

Ergonomic joystick Proportional command - 1st auxiliary system (std.)

All operations are controlled by a pivot valve for low effort manoeuvres.

The joystick lever allows precise and proportional control.

The joystick RH button provides continuous operation.

NEW DISPLAY (HD33V5-HD37V5) managed by Can Bus with diagnostics

Blade lever with two-speed button

2nd auxiliary system selector (opt.), 3rd auxiliary system selector (opt.)

Flashing light control button



STRUCTURE

LOWERED CENTRE OF MASS, BALANCE AND STABILITY

The new HDV5 series machines are designed to guarantee the utmost stability. Digging, lifting and loading operations can be carried out in absolute safety.

OPTIMAL WEIGHT DISTRIBUTION

The large size undercarriage combined with perfect weight distribution make for exceptional stability, superior to that of conventional machines in the same category. The machine is stable also in particularly critical conditions and on soft ground. The large size blade cylinder is well protected against impact and damage.

BOOM POSITION

The boom position, which is offset with respect to the slewing table, increases the operator's visibility of the digging position.

SHEET STEEL COVERS

Robust and compact structure with new design



SINGLE SWING PIN



NEW LED WORKING LAMP INCORPORATED IN THE BOOM

REINFORCED BLADE

The upper reinforced box-section part ensures greater impact resistance; blade contact with ground has been increased.

ROBUST UNDERCARRIAGE

Steel crawler shoes available

TRAVEL AND SLEWING GEAR MOTORS

The travel gear motors have integrated disc brakes that lock the crawler shoes safely, also on the edge of an excavation or on a slope.





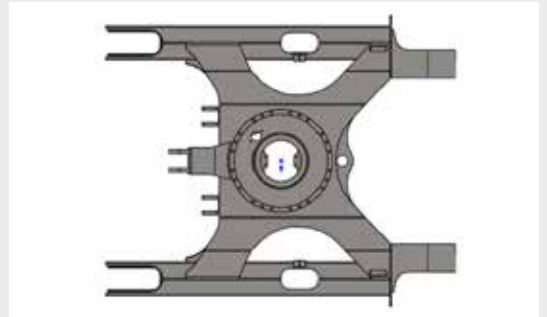
NEW X-LAYOUT UNDERCARRIAGE

Models HD27V5, HD33V5, HD50V5, HD60V5 and HD85V5 use the more rigid and stronger undercarriage with an X-layout structure.

Model HD37V5 has an extendible 1550 - 1800 mm variable width undercarriage.

The centre of mass of HDV5 machines is 20 mm lower, imparting greater stability and perfect balance. The crawler shoes pre-tensioning system is oversized, the position of the track rollers has been improved and the guide roller has been positioned further back.

New transport anchorage points have been created.



The crawler shoes pre-tensioning system is oversized and the guide roller has been positioned further back

REDUCED MAINTENANCE COSTS

TOTAL ACCESSIBILITY

Large covers allow access to the engine and control valve, filters and radiator for inspection and maintenance requirements.

All the maintenance points are concentrated under the side cover, including hydraulic oil and radiator fluid level checking and filling and battery inspection.

Models in the HDV5 series are equipped with a hydraulic oil reservoir air bleed valve, water sedimentation filter and an additional hydraulic oil cooler to prevent overheating caused by continuous operation.



EASY-TO-REACH FILTERS

The large size covers of the HDV5 series allow easy and fast access for routine and unscheduled maintenance.

Large size openable covers

The filters are positioned to allow easy replacement



The radiator and oil cooler are positioned in a side-by-side configuration, allowing easier cleaning

Improved access to the control valve



LARGE ENGINE COMPARTMENT HOOD

Access to the engine compartment is provided by a large hood at the rear of the machine.



SIDE-BY-SIDE COOLER

The side-by-side cooler is positioned to facilitate cleaning operations.



EASY REFUELLING



HD27V5

MINI EXCAVATOR, BIG PERFORMANCE

KATO has developed the HD27V5 mini excavator, equipping it with a KUBOTA D1305-E4B engine which, with its 1261 cc displacement, has a rated output of 17.6 kW at 2400 rpm with top-of-class performance. The operating weight of model HD27V5 is 2725 kg in the cabbed version and 2575 kg in the version with canopy. The standard configuration features a 1550 mm front blade and a 500 mm bucket.



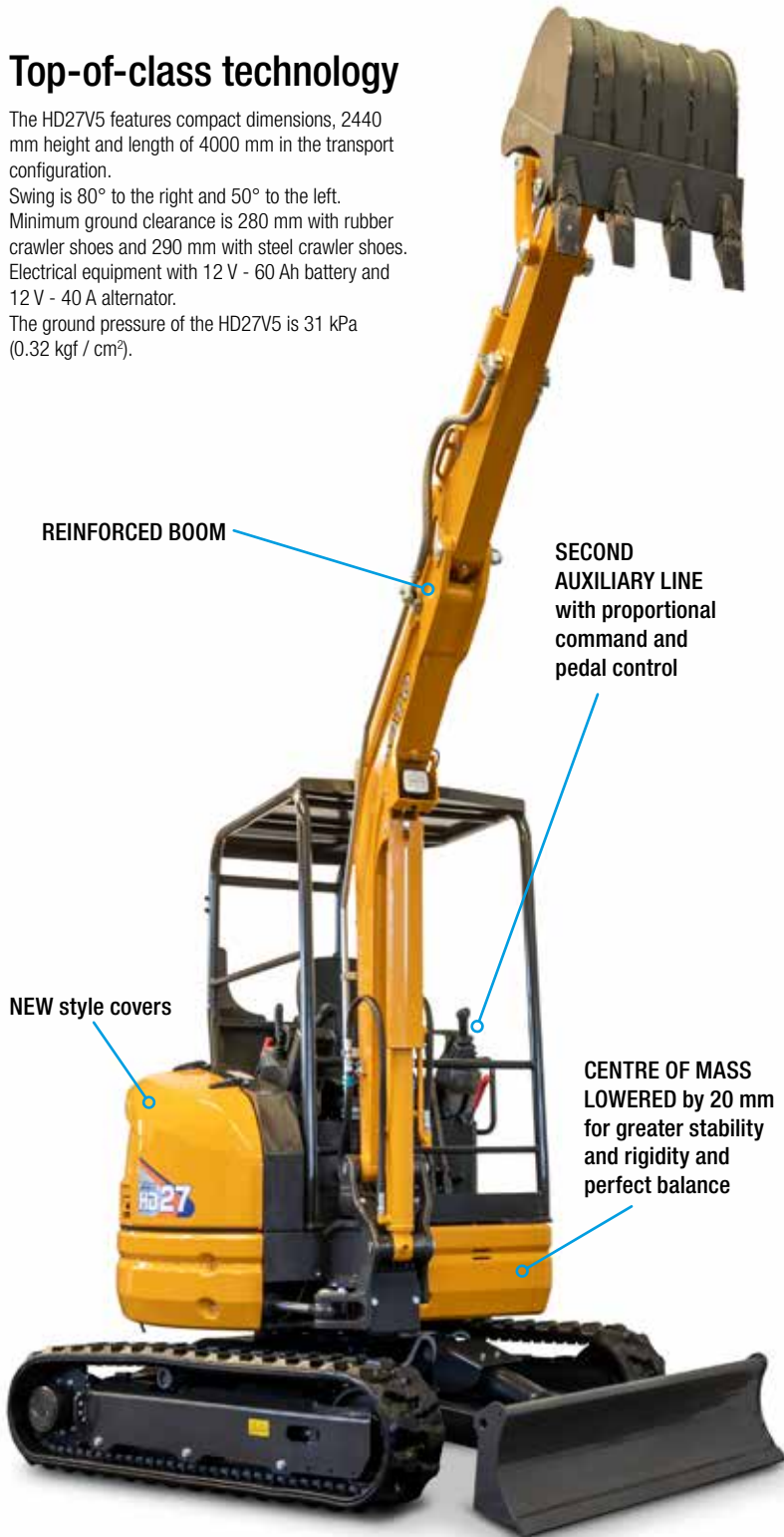
MINI EXCAVATORS 2.7 / 8.5 TONS

Top-of-class technology

The HD27V5 features compact dimensions, 2440 mm height and length of 4000 mm in the transport configuration.

Swing is 80° to the right and 50° to the left. Minimum ground clearance is 280 mm with rubber crawler shoes and 290 mm with steel crawler shoes. Electrical equipment with 12 V - 60 Ah battery and 12 V - 40 A alternator.

The ground pressure of the HD27V5 is 31 kPa (0.32 kgf / cm²).



REINFORCED BOOM

SECOND
AUXILIARY LINE
with proportional
command and
pedal control

NEW style covers

CENTRE OF MASS
LOWERED by 20 mm
for greater stability
and rigidity and
perfect balance

KATO HD27V5 ON THE MOVE

The dual travel speed reaches a maximum of 4.4 km / h, and maximum gradeability is 30°. Swing speed is 9 min⁻¹.

TECHNICAL DATA

| | |
|--|-------------------------------|
| Engine | KUBOTA D1305-E4B |
| No. of cylinders / displacement | 3 / 1261 cc |
| Rated output | 17.6 kW / 2400 rpm |
| Machine weight (with rubber crawler shoes) | 2500 / 2650 kg (canopy / cab) |
| Operating weight (with rubber crawler shoes) | 2575 / 2725 kg (canopy / cab) |
| Max. digging depth | 2440 mm |
| Minimum swing radius | 2030 / 775 mm (front / rear) |
| Bucket digging force | 2140 kgf |
| Standard bucket width | 500 mm |
| Standard bucket capacity | 0.08 m ³ |



17.6 KW KUBOTA ENGINE

1261 cc water-cooled 4-stroke engine, 3 cylinders with 78 x 88 mm bore x stroke. Compact, lightweight and straightforward. High torque and power, fuel consumption is 272 g/kW-h. Minimal emissions and easy maintenance with reduced service and running costs.



BOOM AND BUCKET

The arm of the HD27V5 is 1100 mm in length and the boom is 2000 mm. The optional arm is 1400 mm in length.

HYDRAULIC SYSTEM

All machine operations are controlled with joysticks. The hydraulic system is composed of three pumps: 2 x 28.8 l / min + 1 x 19.2 l / min for a pressure of 21.6 MPa (220 kgf / cm²).

HD33V5

TECHNOLOGY AND POWER

The HD33V5 mini excavator is equipped with a KUBOTA 3TNV88F engine which, with displacement of 1642 cc, has a rated output of 17.2 kW at 2200 rpm with top-of-class performance.

The operating weight of model HD33V5 is 3245 kg in the cabbed version and 3095 kg in the version with canopy. The standard configuration features a 1550 mm front blade and a 550 mm bucket.



MINI EXCAVATORS 2.7 / 8.5 TONS

Top level technology and performance

Height of the HD33V5 is 2460 mm and length is 4460 mm in the transport configuration.

Swing is 80° to the right and 50° to the left. Minimum ground clearance is 290 mm.

Electrical equipment with a 12 V - 60 Ah battery and 12 V - 40 A alternator. The HD33V5 has ground pressure of 28 kPa (0.29 kgf / cm²).



YANMAR 17.2 KW 3TNV88F ENGINE

1642 cc water-cooled 4-stroke engine, 3 cylinders with 88 x 90 mm bore x stroke. Compact, lightweight and straightforward. High torque and power, fuel consumption is 238 g/kW-h. Minimal emissions and easy maintenance with reduced service and running costs.



BOOM AND BUCKET

The arm of the HD33V5 is 1200 mm in length and the boom is 2250 mm.

The 1500 mm long arm is available as an optional.



HYDRAULIC SYSTEM

All machine operations are controlled with joysticks. The hydraulic system is composed of three pumps: 2 x 37.4 l / min + 1 x 23.1 l / min for a pressure of 24.5 MPa (250 kgf / cm²).

KATO HD33V5 ON THE MOVE

The dual travel speed reaches a maximum of 4.7 km / h, and maximum gradeability is 30°. Swing speed is 9 min⁻¹.



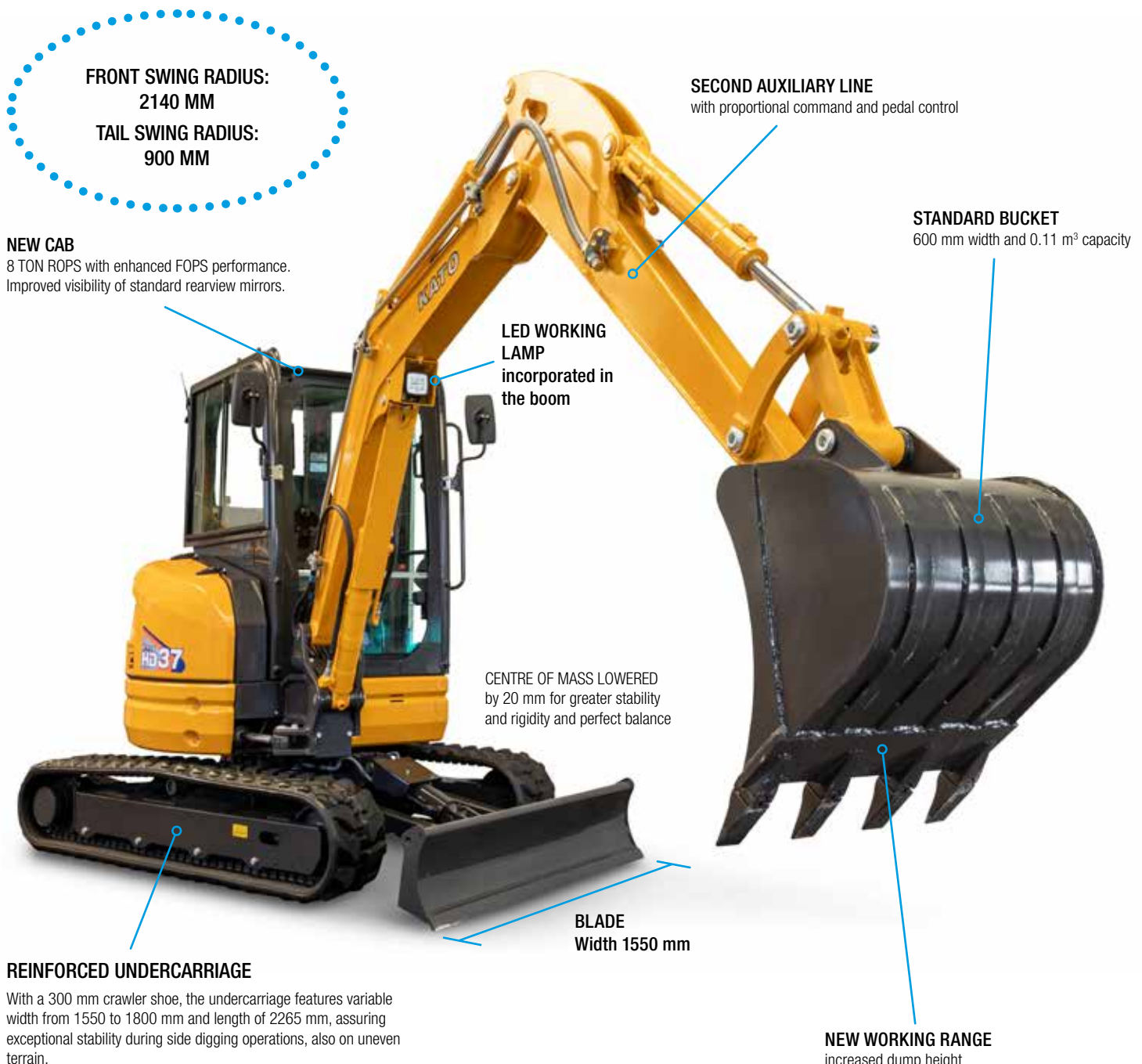
TECHNICAL DATA

| | |
|--|-------------------------------|
| Engine | Yanmar 3TNV88F |
| No. of cylinders / displacement | 3 / 1642 cc direct injection |
| Rated output | 17.2 kW / 2200 rpm |
| Machine weight (with rubber crawler shoes) | 3020 / 3170 kg (canopy / cab) |
| Operating weight (with rubber crawler shoes) | 3095 / 3245 kg (canopy / cab) |
| Max. digging depth | 2700 mm |
| Minimum swing radius | 2030 / 795 mm (front / rear) |
| Bucket digging force | 2970 kgf |
| Standard bucket width | 550 mm |
| Standard bucket capacity | 0.09 m ³ |

HD37V5

STRENGTH AND STABILITY

KATO has developed the HD37V5 mini excavator equipped with a Yanmar 3TNV88F direct injection engine with displacement of 1642 cc, which delivers a rated output of 17.2 kW at 2200 rpm. The operating weight of model HD37V5 is 3675 kg in the cabbed version and 3525 kg in the version with canopy. The standard configuration features a 1550 mm dozer blade and a 600 mm bucket. The 1550-1800 mm variable undercarriage, unique in its category, significantly increases stability during side digging, allowing work to be performed also under particularly difficult conditions.



MINI EXCAVATORS 2.7 / 8.5 TONS

Top-of-class technology

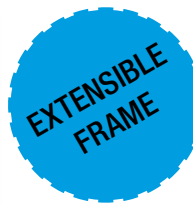
The HD37V5 features compact dimensions: 2460 mm height and length of 4750 mm in the transport configuration.

Swing is 80° to the right and 50° to the left. Minimum ground clearance is 250 mm.

Electrical equipment with a 12 V - 60 Ah battery and 12 V - 40 A alternator. The HD37V5 has ground pressure of 29 kPa (0.30 kgf / cm²).



1550 mm



1800 mm

VARIABLE GAUGE UNDERCARRIAGE

Thanks to the 1550 - 1800 mm extensible lower frame, the HD37V5 greatly increases stability during side digging and lifting operations, even on exceptionally uneven terrain.



YANMAR 17.2 KW ENGINE

1642 cc 4-stroke water cooled engine, 3 cylinders with 88 x 90 mm bore x stroke. Compact, lightweight and straightforward. High torque and power, fuel consumption is 238 g/kW-h. Minimal emissions and easy maintenance with reduced service and running costs.

KATO HD37V5 ON THE MOVE

The dual travel speed reaches a maximum of 4.7 km / h, and maximum gradeability is 30°. Swing speed is 9 min⁻¹.

HYDRAULIC SYSTEM

All machine operations are controlled with joysticks.

The hydraulic system is composed of three pumps: 2 x 37.4 l / min + 1 x 23.1 l / min for a pressure of 24.5 MPa (250 kgf / cm²).

REINFORCED BOOM

The arm of the HD37V5 is 1280 mm in length and the boom is 2420 mm. The 1580 mm long arm is available as an optional.



NEW DISPLAY
managed by Can Bus
with diagnostics

TECHNICAL DATA

| | |
|--|-------------------------------|
| Engine | Yanmar 3TNV88F |
| No. of cylinders / displacement | 3 / 1642 cc direct injection |
| Rated output | 17.2 kW / 2200 rpm |
| Machine weight (with rubber crawler shoes) | 3450 / 3600 kg (canopy / cab) |
| Operating weight (with rubber crawler shoes) | 3525 / 3675 kg (canopy / cab) |
| Max. digging depth | 3060 mm |
| Minimum swing radius | 2140 / 900 mm (front / rear) |
| Bucket digging force | 2970 kgf |
| Standard bucket width | 600 mm |
| Standard bucket capacity | 0.11 m ³ |

HD50V5

COMFORT AND RELIABILITY

The powerful HD50V5 mini excavator equipped with a direct injection Kubota 2434 cc engine, which delivers a rated output of 32.4 kW at 2400 rpm.

The operating weight of model HD50V5 is 4875 kg in the cabbed version.

The standard configuration features a 1990 mm dozer blade and a 600 mm bucket.





Technology, innovation and power

The HD50V5 features height of 2580 mm (Cab) and length of 5290 mm in the transport configuration. Swing is 80° to the right and 50° to the left. Minimum ground clearance is 300 mm. Electrical equipment with 12 V - 64 Ah battery and 12 V - 40 A alternator. The ground pressure of the HD50V5 is 27 kPa (0.28 kgf / cm²).



KATO HD50V5 ON THE MOVE

The dual travel speed reaches a maximum of 4.6 km / h, and maximum gradeability is 30°. Swing speed is 9.3 min⁻¹.

HYDRAULIC SYSTEM

All machine operations are controlled with joysticks. The hydraulic system is composed of three pumps: 2 x 60 l / min + 1 x 44.2 l / min for a pressure of 24.5 MPa (250 kgf / cm²).

KUBOTA 32.4 KW ENGINE

2434 cc 4-stroke engine, water cooled. Compact, lightweight and straightforward. High torque and power, fuel consumption is 238 g/kW-h. Minimal emissions and easy maintenance with reduced service and running costs.

BOOM AND BUCKET

The arm of the HD50V5 is 1350 mm in length and the boom is 2700 mm. The 1600 mm long boom and 1850 mm super long boom are available as optional equipment.



TECHNICAL DATA

| | |
|---------------------------------|---|
| Engine | Kubota V2403-CR-E5B |
| No. of cylinders / displacement | 4 / 2434 cc direct injection |
| Rated output | 32.4 kW / 2400 rpm |
| Machine weight (with cab) | 4800 / 4840 kg (rubber shoes / steel shoes) |
| Operating weight (with cab) | 4875 / 4915 kg (rubber shoes / steel shoes) |
| Max. digging depth | 3330 mm |
| Minimum swing radius | 2330 / 995 mm (front / rear) |
| Bucket digging force | 3160 kgf |
| Standard bucket width | 600 mm |
| Standard bucket capacity | 0.14 m ³ |

HD60V5

PERFORMANCE CHARACTERISTICS TYPICAL OF A LARGE EXCAVATOR

The powerful HD60V5 mini excavator equipped with a direct injection Kubota 2434 cc engine, which delivers a rated output of 32.4 kW at 2400 rpm.

The operating weight of model HD60V5 is 5595 kg in the cabbed version.

The standard configuration features a 1990 mm dozer blade and a 700 mm bucket.

REINFORCED BOOM

The boom of the HD60V5 is 1600 mm in length and the boom is 2900 mm.

The 1850 mm long boom is available as an optional.

FRONT SWING RADIUS:

2450 MM

TAIL SWING RADIUS:

1120 MM



STANDARD BUCKET

700 mm width and 0.18 m³ capacity

NEW X-LAYOUT UNDERCARRIAGE
STRUCTURE

MINI EXCAVATORS 2.7 / 8.5 TONS



KUBOTA 32.4 KW ENGINE

2434 cc 4-stroke water cooled engine. Compact, lightweight and straightforward. High torque and power, fuel consumption is 238 g/kW-h. Minimal emissions and easy maintenance with reduced service and running costs.



HYDRAULIC SYSTEM

All machine operations are controlled with joysticks. The hydraulic system is composed of three pumps: 2 x 60 l / min + 1 x 44.2 l / min for a pressure of 24.5 MPa (250 kgf / cm²).



Controlled power

The HD60V5 features height of 2580 mm (Cab) and length of 5510 mm in the transport configuration. Swing is 80° to the right and 50° to the left. Minimum ground clearance is 300 mm. Electrical equipment with 12 V - 64 Ah battery and 12 V - 40 A alternator. The ground pressure of the HD60V5 is 31 kPa (0.32 kgf / cm²).

KATO HD60V5 ON THE MOVE

The travel system has two speeds 2.9 / 4.6 km / h, with gradeability of 30°. Swing speed is 9.3 min⁻¹.



TECHNICAL DATA

| | |
|---------------------------------|---|
| Engine | Kubota V2403-CR-E5B |
| No. of cylinders / displacement | 4 / 2434 cc direct injection |
| Rated output | 32.4 kW / 2400 rpm |
| Machine weight (with cab) | 5520 / 5560 kg (rubber shoes / steel shoes) |
| Operating weight (with cab) | 5595 / 5635 kg (rubber shoes / steel shoes) |
| Max. digging depth | 3800 mm |
| Minimum swing radius | 2450 / 1120 mm (front / rear) |
| Bucket digging force | 4200 kgf |
| Standard bucket width | 700 mm |
| Standard bucket capacity | 0.18 m ³ |

HD85V5

MIDI EXCAVATOR TOP-OF-THE-RANGE

Robust and comfortable, model HD85V5 reaches a digging depth of 4020 mm with bucket digging force of 55 kN (5610 kgf). The Yanmar 3318 cc direct injection engine delivers a rated output of 42.7 kW at 2100 rpm.

The operating weight of model HD85V5 is 8515 kg in the version with ROPS.

The standard configuration features a 2200 mm dozer blade and a 760 mm bucket.

FRONT SWING RADIUS:
2640 MM
TAIL SWING RADIUS:
1450 MM



LED WORKING LAMP
incorporated
in the boom

STANDARD BUCKET
760 mm width and 0.25 m³
capacity

**X-LAYOUT UNDERCARRIAGE
STRUCTURE**

BLADE
Width 2200 mm

MINI EXCAVATORS 2.7 / 8.5 TONS

Optimal weight distribution

The HD85V5 features generous dimensions with height of 2660 mm and length of 6100 mm in the transport configuration.

The minimum ground clearance is 350 mm and ground pressure is 41 kPa (0.418 kgf / cm²).



HIGH CAPACITY TANK

Excellent operational autonomy thanks to the 110 litre fuel tank



YANMAR 3318 CC ENGINE

4-stroke water-cooled engine with a rated output of 42.7 kW at 2100 rpm. High torque and power, fuel consumption is 236 g/kW-h. Minimal emissions and easy maintenance with reduced service and running costs.



KATO HD85V5 ON THE MOVE

The travel system has two speeds 2.5 / 4.4 km / h, with gradeability of 30°. Swing speed is 9 min⁻¹.



HYDRAULIC SYSTEM

All machine operations are controlled by joysticks. The hydraulic system is composed of three pumps: 2 x 75.6 l / min + 54.2 l / min for a pressure of 24.5 MPa (250 kgf / cm²).

TECHNICAL DATA

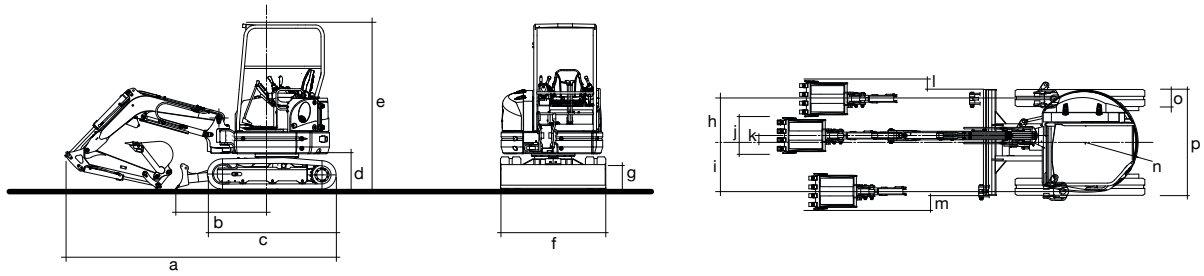
| | |
|---------------------------------|---|
| Engine | Yanmar 4TNV98-C |
| No. of cylinders / displacement | 4 / 3318 cc direct injection |
| Rated output | 42.7 kW / 2100 rpm |
| Machine weight (with cab) | 8440 / 8490 kg (rubber shoes / steel shoes) |
| Operating weight (with cab) | 8515 / 8565 kg (rubber shoes / steel shoes) |
| Max. digging depth | 4020 mm |
| Minimum swing radius | 2640 / 1450 mm (front / rear) |
| Bucket digging force | 5610 kgf |
| Standard bucket width | 760 mm |
| Standard bucket capacity | 0.25 m ³ |

features

| | HD27V5 | HD33V5 | HD37V5 |
|---|---------------------------------------|---------------------------------------|---------------------------------------|
| GENERAL SPECIFICATIONS | | | |
| Standard bucket capacity (ISO) | 0.08 m ³ | 0.09 m ³ | 0.11 m ³ |
| Standard bucket width | 500 mm | 550 mm | 600 mm |
| Machine weight RS / SS* Canopy | 2500 / 2630 kg | 3020 / 3070 kg | 3450 / 3500 kg |
| Machine weight RS / SS* Cab | 2650 / 2780 kg | 3170 / 3220 kg | 3600 / 3650 kg |
| Operating weight RS / SS* Canopy | 2575 / 2705 kg | 3095 / 3145 kg | 3525 / 3575 kg |
| Operating weight RS / SS* Cab | 2725 / 2855 kg | 3245 / 3295 kg | 3675 / 3725 kg |
| Ground pressure | 31 kPa (0.32 kgf / cm ²) | 28 kPa (0.29 kgf / cm ²) | 29 kPa (0.30 kgf / cm ²) |
| *RS/SS Rubber Shoes/Steel Shoes | | | |
| ENGINE | | | |
| Model | Kubota D1305-E4B | Yanmar 3TNV88F | Yanmar 3TNV88F |
| No. of cylinders and displacement | 3 / 1261 cc | 3 / 1642 cc direct injection | 3 / 1642 cc direct injection |
| Bore x stroke | 78 x 88 mm | 88 x 90 mm | 88 x 90 mm |
| Rated output (ISO 1585) | 17.6 kW (23.9 hp) at 2400 rpm | 17.2 kW (23.4 hp) at 2200 rpm | 17.2 kW (23.4 hp) at 2200 rpm |
| Fuel Consumption | 272 g / kWh | 238 g / kWh | 238 g / kWh |
| Engine oil pan capacity | 5.7 l (Maximum level) | 6.7 l (Maximum level) | 6.7 l (Maximum level) |
| DIMENSIONS | | | |
| Length | 4000 mm | 4460 mm | 4750 mm |
| Canopy/Cab Height | 2440 mm / 2470 mm | 2460 mm / 2490 mm | 2460 mm / 2490 mm |
| Width | 1550 mm | 1550 mm | 1550-1800 mm |
| Undercarriage length | 1900 mm | 2100 mm | 2265 mm |
| Undercarriage width | 1550 mm | 1550 mm | 1550-1800 mm |
| Distance between drive sprocket and front idler | 1470 mm | 1650 mm | 1815 mm |
| Shoes width | 250 mm | 300 mm | 300 mm |
| Minimum ground clearance | 280 mm | 290 mm | 250 mm |
| BUCKET PERFORMANCE | | | |
| Maximum digging radius | 4560 mm | 4880 mm | 5210 mm |
| Max. digging depth | 2440 mm | 2700 mm | 3060 mm |
| Maximum height of cutting edge | 4220 mm | 4670 mm | 4990 mm |
| Maximum dumping height | 2900 mm | 3320 mm | 3460 mm |
| Maximum vertical wall | 1840 mm | 2320 mm | 2570 mm |
| SLEWING SYSTEM | | | |
| Travel speed | 2.5 / 4.4 km / h | 2.7 / 4.7 km / h | 2.7 / 4.7 km / h |
| Gradeability | 30° | 30° | 30° |
| Swing speed | 9 min ⁻¹ | 9 min ⁻¹ | 9 min ⁻¹ |
| Bucket digging force | 21 kN (2140 kgf) | 29.1 kN (2970 kgf) | 29.1 kN (2970 kgf) |
| CAPACITIES | | | |
| Fuel tank capacity | 42 l | 42 l | 42 l |
| Hydraulic reservoir capacity | 33 l | 33 l | 33 l |
| Hydraulic circuit total capacity | 50 l | 50 l | 50 l |
| ELECTRICAL SYSTEM | | | |
| Battery | 12 V - 60 Ah | 12 V - 60 Ah | 12 V - 60 Ah |
| Alternator | 12 V - 40 A | 12 V - 40 A | 12 V - 40 A |
| Governor | IC type | IC type | IC type |
| Starter motor | 12 V - 1.2 kW | 12 V - 1.7 kW | 12 V - 1.7 kW |
| ARM SWING SYSTEM | | | |
| Minimum front swing radius | 2030 mm | 2030 mm | 2140 mm |
| Standard arm length | 1100 mm | 1200 mm | 1280 mm |
| Main boom length | 2000 mm | 2250 mm | 2420 mm |
| Rear swing minimum radius | 775 mm | 795 mm | 900 mm |
| Right-hand swing | 80° | 80° | 80° |
| Left-hand swing | 50° | 50° | 50° |
| HYDRAULIC SYSTEM | | | |
| Pressure | 21.6 MPa (220 kgf / cm ²) | 24.5 MPa (250 kgf / cm ²) | 24.5 MPa (250 kgf / cm ²) |
| Pumps maximum delivery | 28.8 x 2 + 19.2 l / min | 37.4 x 2 + 23.1 l / min | 37.4 x 2 + 23.1 l / min |
| Control system | joystick | joystick | joystick |
| Number of pumps | 3 | 3 | 3 |
| BLADE | | | |
| Width | 1550 mm | 1550 mm | 1550 mm |
| Height | 370 mm | 370 mm | 370 mm |
| Upward movement (distance from ground) | 345 mm | 370 mm | 370 mm |
| Maximum downward movement | 430 mm | 455 mm | 445 mm |
| OTHER DATA | | | |
| Sound power level LWA (2000/14/EC) | 94 dB | 94 dB | 94 dB |

| | HD50V5 | HD60V5 | HD85V5 |
|---|---------------------------------------|---------------------------------------|---|
| GENERAL SPECIFICATIONS | | | |
| Standard bucket capacity (ISO) | 0.14 m ³ | 0.18 m ³ | 0.25 m ³ |
| Standard bucket width | 600 mm | 700 mm | 760 mm |
| Machine weight RS / SS* Canopy | 4650 / 4690 kg | 5370 / 5410 kg | - |
| Machine weight RS / SS* Cab | 4800 / 4840 kg | 5520 / 5560 kg | 8440 / 8490 kg (standard boom) 8470 / 8520 kg (with long boom) |
| Operating weight RS / SS* Canopy | 4725 / 4765 kg | 5445 / 5485 kg | - |
| Operating weight RS / SS* Cab | 4875 / 4915 kg | 5595 / 5635 kg | 8515 / 8565 kg (standard boom) 8545 / 8595 kg (with long boom) |
| Ground pressure | 27 kPa (0.28 kgf / cm ²) | 31 kPa (0.32 kgf / cm ²) | 41 kPa (0.418 kgf / cm ²) |
| *RS/SS Rubber Shoes/Steel Shoes | | | |
| ENGINE | | | |
| Model | Kubota V2403-CR-E5B | Kubota V2403-CR-E5B | Yanmar 4TNV98-C |
| No. of cylinders and displacement | 4 / 2434 cc direct injection | 4 / 2434 cc direct injection | 4 / 3318 cc direct injection |
| Bore x stroke | 87 x 102.4 mm | 87 x 102.4 mm | 98 x 110 mm |
| Rated output (ISO 1585) | 32.4 kW (44.1 hp) at 2400 rpm | 32.4 kW (44.1 hp) at 2400 rpm | 42.7 kW (58.1 hp) at 2100 rpm |
| Fuel Consumption | 238 g / kWh | 238 g / kWh | 236 g / kWh |
| Engine oil pan capacity | 9.7 l (Maximum level) | 9.7 l (Maximum level) | 10.2 l (Maximum level) |
| DIMENSIONS | | | |
| Length | 5290 mm | 5510 mm | 6100 mm |
| Canopy/Cab Height | 2550 mm / 2580 mm | 2550 mm / 2580 mm | - / 2660 mm |
| Width | 1990 mm | 1990 mm | 2200 mm |
| Undercarriage length | 2500 mm | 2500 mm | 2730 mm |
| Undercarriage width | 1990 mm | 1990 mm | 2200 mm |
| Distance between drive sprocket and front idler | 1970 mm | 1970 mm | 2155 mm |
| Shoes width | 400 mm | 400 mm | 450 mm |
| Minimum ground clearance | 300 mm | 300 mm | 350 mm |
| BUCKET PERFORMANCE | | | |
| Maximum digging radius | 5760 mm | 6200 mm | 6830 mm |
| Max. digging depth | 3330 mm | 3800 mm | 4020 mm |
| Maximum height of cutting edge | 5380 mm | 5710 mm | 6700 mm |
| Maximum dumping height | 3720 mm | 4050 mm | 4700 mm |
| Maximum vertical wall | 2520 mm | 2980 mm | 3170 mm |
| SLEWING SYSTEM | | | |
| Travel speed | 2.9 / 4.6 km / h | 2.9 / 4.6 km / h | 2.5 / 4.4 km / h |
| Gradeability | 30° | 30° | 30° |
| Swing speed | 9.3 min ⁻¹ | 9.3 min ⁻¹ | 9 min ⁻¹ |
| Bucket digging force | 31 kN (3160 kgf) | 41.2 kN (4200 kgf) | 55 kN (5610 kgf) |
| CAPACITIES | | | |
| Fuel tank capacity | 66 l | 66 l | 110 l |
| Hydraulic reservoir capacity | 56 l | 56 l | 75 l |
| Hydraulic circuit total capacity | 75 l | 75 l | 125 l |
| ELECTRICAL SYSTEM | | | |
| Battery | 12 V - 64 Ah | 12 V - 64 Ah | 12 V - 72 Ah |
| Alternator | 12 V - 40 A | 12 V - 40 A | 12 V - 40 A |
| Governor | IC type | IC type | IC type |
| Starter motor | 12 V - 2.0 kW | 12 V - 2.0 kW | 12 V - 3.0 kW |
| ARM SWING SYSTEM | | | |
| Minimum front swing radius | 2330 mm | 2450 mm | 2640 mm |
| Standard arm length | 1350 mm | 1600 mm | 1780 mm |
| Main boom length | 2700 mm | 2900 mm | 3150 mm |
| Rear swing minimum radius | 995 mm | 1120 mm | 1450 mm |
| Right-hand swing | 80° | 80° | 80° |
| Left-hand swing | 50° | 50° | 50° |
| HYDRAULIC SYSTEM | | | |
| Pressure | 24.5 MPa (250 kgf / cm ²) | 24.5 MPa (250 kgf / cm ²) | 24.5 MPa (250 kgf / cm ²) |
| Pumps maximum delivery | 60 x 2 + 44.2 l / min | 60 x 2 + 44.2 l / min | 75.6 x 2 + 54.2 l / min |
| Control system | joystick | joystick | joystick |
| Number of pumps | 3 | 3 | 3 |
| BLADE | | | |
| Width | 1990 mm | 1990 mm | 2200 mm |
| Height | 390 mm | 390 mm | 500 mm |
| Upward movement (distance from ground) | 465 mm | 465 mm | 420 mm |
| Maximum downward movement | 435 mm | 435 mm | 440 mm |
| OTHER DATA | | | |
| Sound power level LWA (2000/14/EC) | 97 dB | 97 dB | 98 dB |

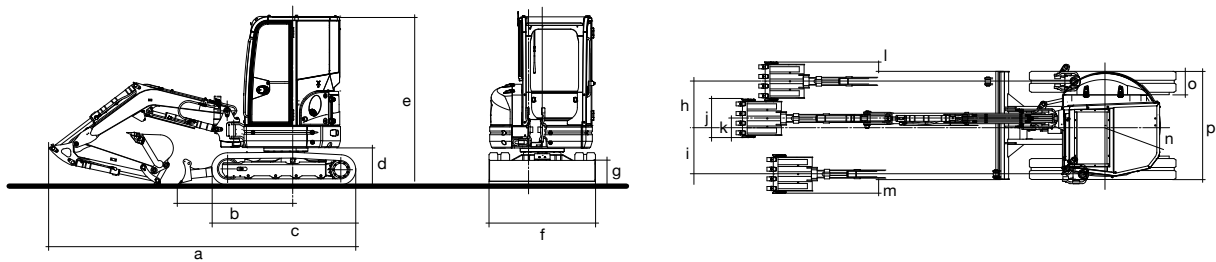
HD27V5



DIMENSIONS (mm)

| a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p |
|------|------|------|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 4000 | 1490 | 1900 | 520 | 2440 | 1550 | 370 | 640 | 720 | 500 | 100 | 125 | 195 | 775 | 250 | 1550 |

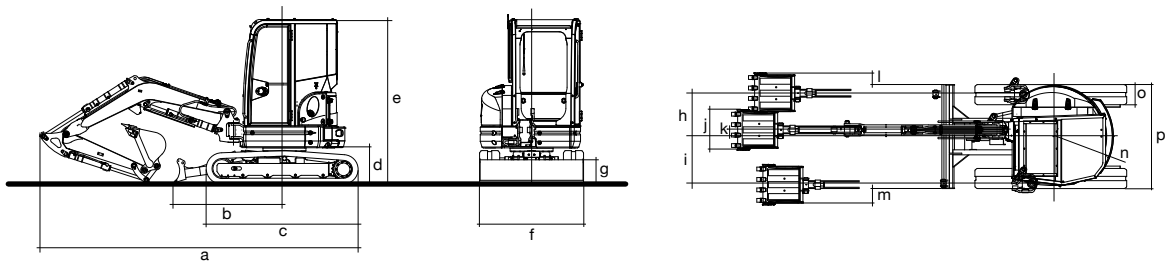
HD33V5



DIMENSIONS (mm)

| a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p |
|------|------|------|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 4460 | 1550 | 2100 | 540 | 2490 | 1550 | 370 | 635 | 700 | 550 | 100 | 135 | 200 | 795 | 300 | 1550 |

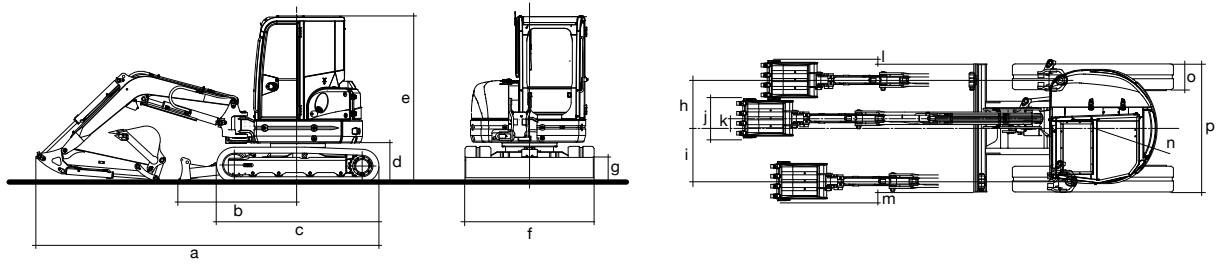
HD37V5



DIMENSIONS (mm)

| a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p |
|------|------|------|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| 4750 | 1660 | 2265 | 540 | 2490 | 1550 | 370 | 650 | 720 | 600 | 100 | 175 | 245 | 900 | 300 | 1550-1800 |

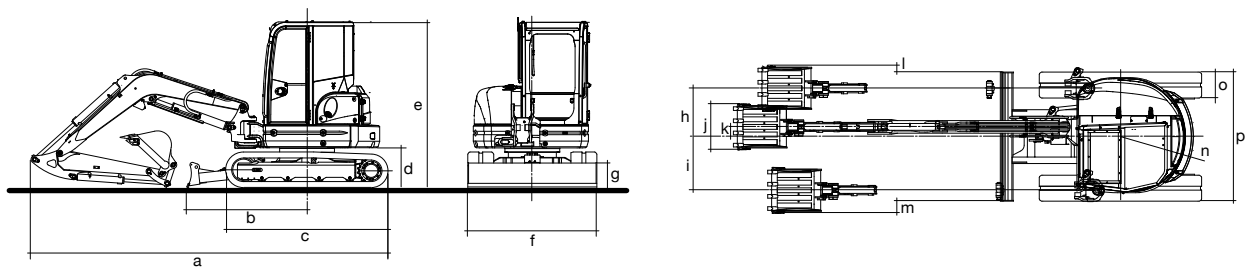
HD50V5



DIMENSIONS (mm)

| a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p |
|------|------|------|-----|------|------|-----|-----|-----|-----|-----|----|-----|-----|-----|------|
| 5290 | 1840 | 2500 | 610 | 2580 | 1990 | 390 | 750 | 830 | 600 | 150 | 55 | 135 | 995 | 400 | 1990 |

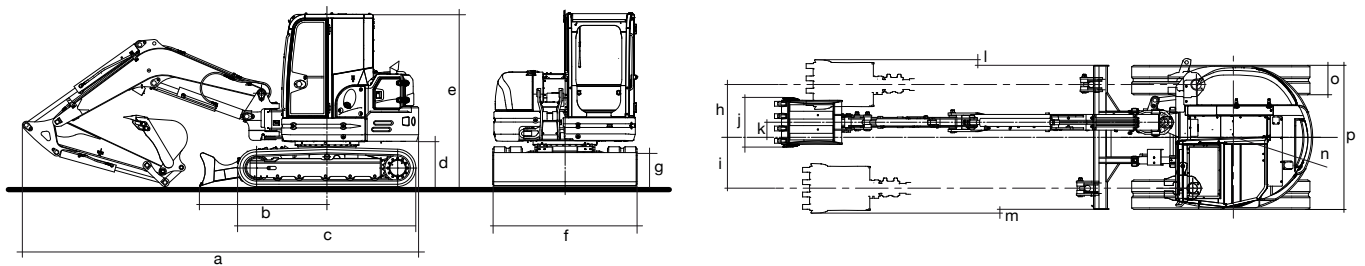
HD60V5



DIMENSIONS (mm)

| a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p |
|------|------|------|-----|------|------|-----|-----|-----|-----|-----|-----|-----|------|-----|------|
| 5510 | 1840 | 2500 | 610 | 2580 | 1990 | 390 | 750 | 830 | 700 | 150 | 105 | 185 | 1120 | 400 | 1990 |

HD85V5



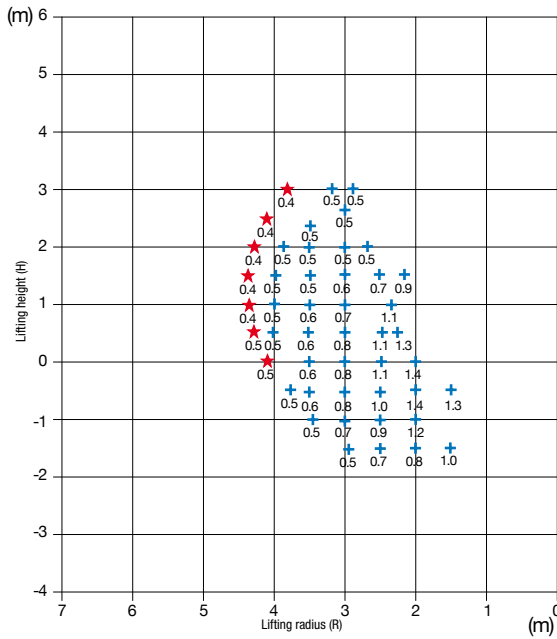
DIMENSIONS (mm)

| a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p |
|------|------|------|-----|------|------|-----|-----|-----|-----|-----|----|----|------|-----|------|
| 6100 | 1950 | 2730 | 690 | 2660 | 2200 | 500 | 810 | 780 | 760 | 230 | 90 | 60 | 1450 | 450 | 2200 |

Lifting capacity

HD27V5

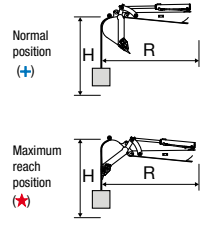
Front lifting, with blade on the ground, with standard arm



Side lifting with standard arm

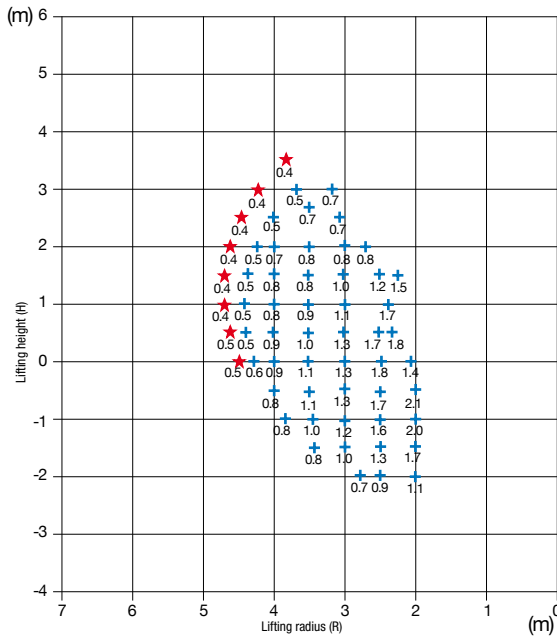


Unit of measurement: tons
 + : standard lifting position
 ★ : Maximum lifting radius

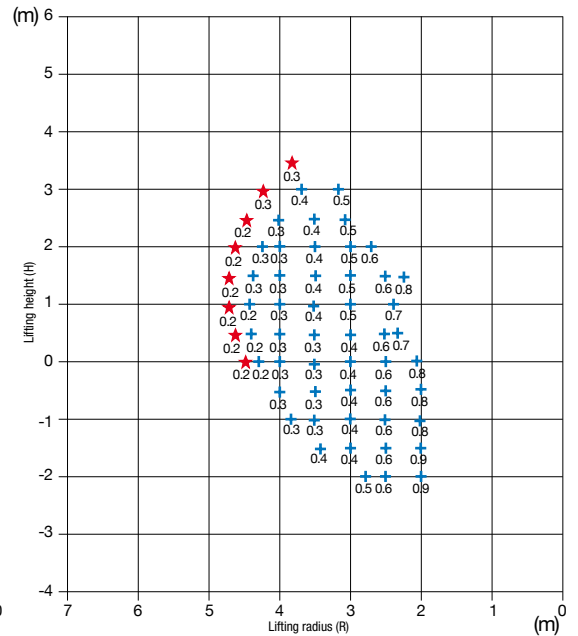


HD33V5

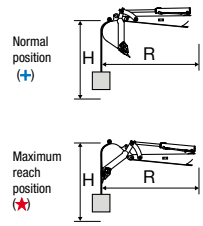
Front lifting, with blade on the ground, with standard arm



Side lifting with standard arm



Unit of measurement: tons
 + : standard lifting position
 ★ : Maximum lifting radius



HD37V5

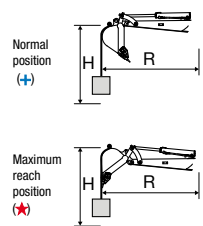
Front lifting, with blade on the ground, with standard arm



Side lifting, spanner contracted, with standard arm

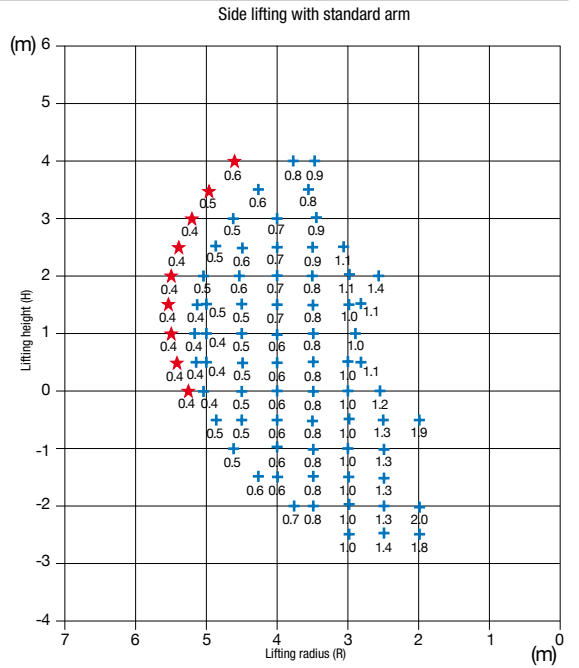
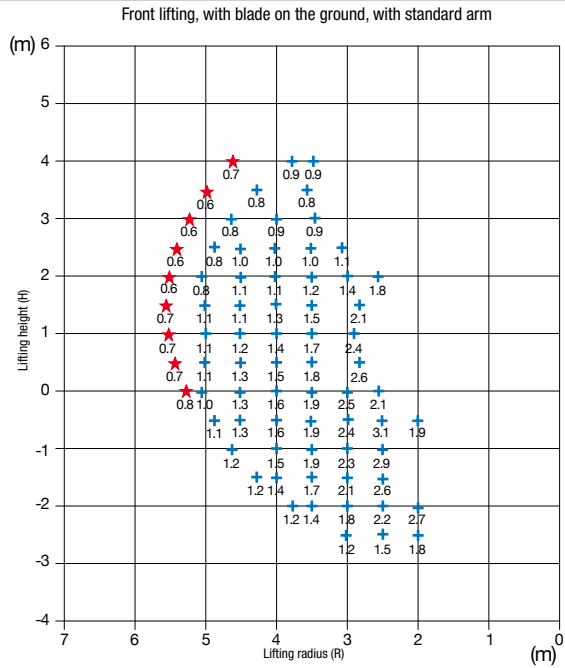
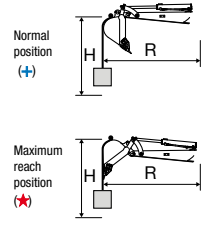


Unit of measurement: tons
 + : standard lifting position
 ★ : Maximum lifting radius



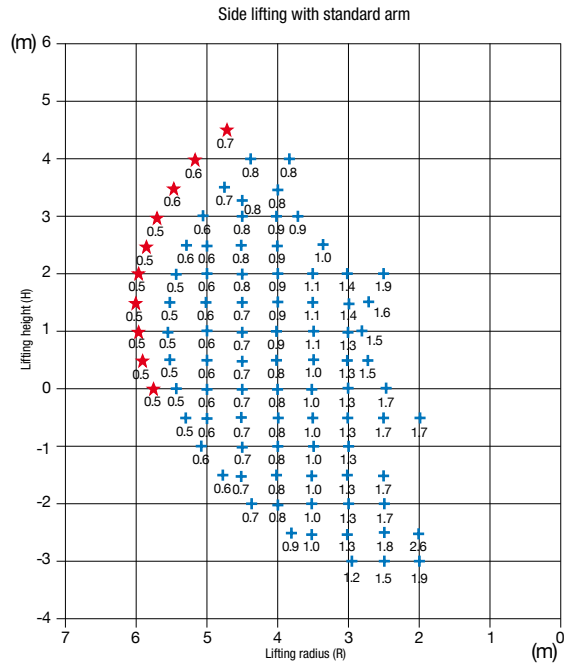
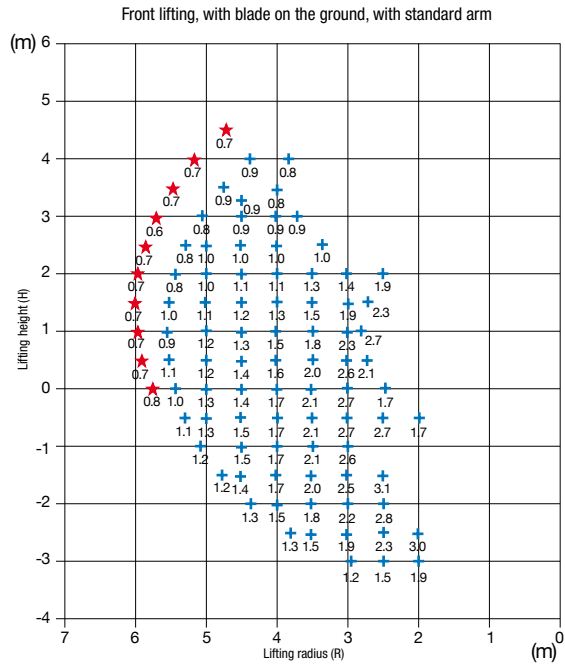
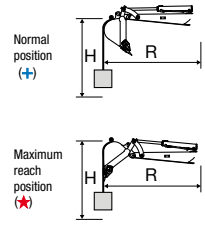
HD50V5

Unit of measurement: tons
 + : standard lifting position
 ★ : Maximum lifting radius



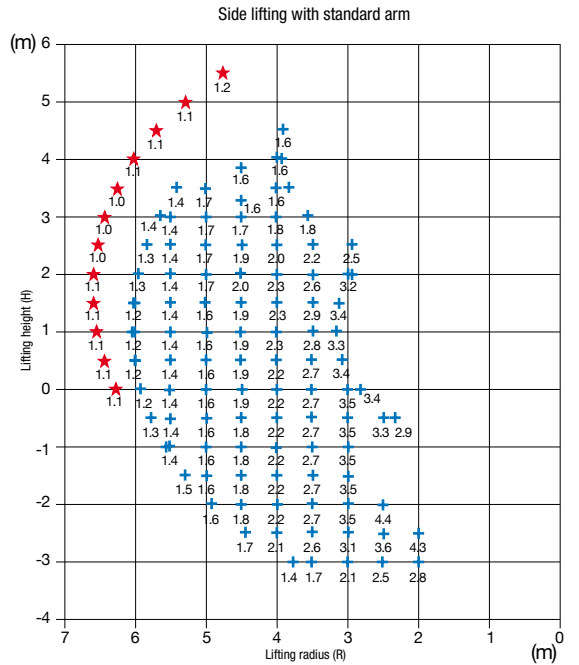
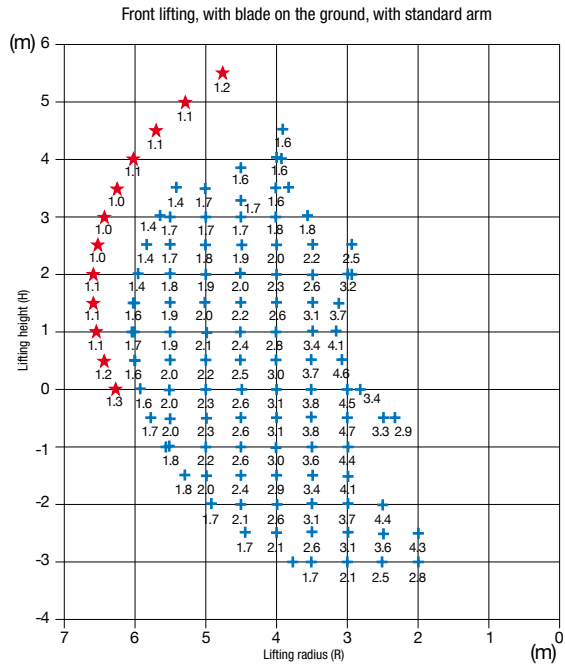
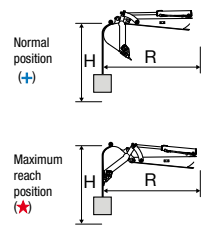
HD60V5

Unit of measurement: tons
 + : standard lifting position
 ★ : Maximum lifting radius



HD85V5

Unit of measurement: tons
 + : standard lifting position
 ★ : Maximum lifting radius

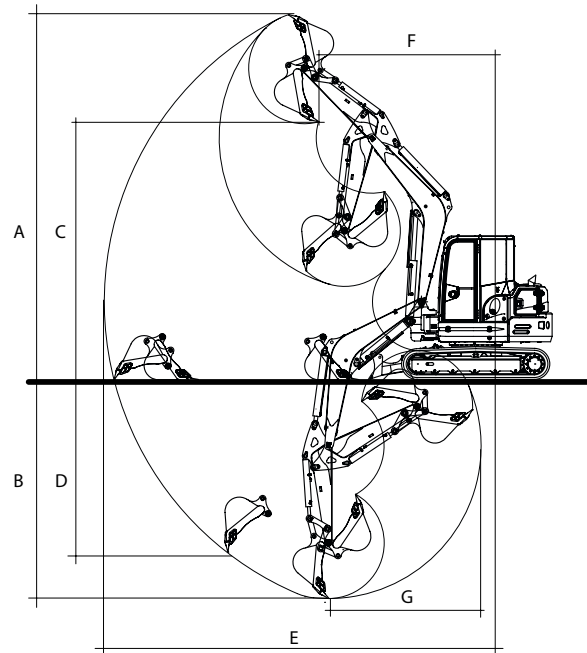


Equipment

| | HD27V5 | HD33V5 | HD37V5 | HD50V5 | HD60V5 | HD85V5 |
|---|--------------|--------------|---------------------|--------------|--------------|--------------|
| SUPPORT FRAME | | | | | | |
| Rubber shoes (width mm) | 250 | 300 | 300 | 400 | 400 | 450 |
| Attachment points for lifting-anchoring-towing and lubrication of the swing cylinder foot | std | std | std | std | std | std |
| Variable gauge undercarriage (mm) - Backfill blade | - | - | 1550-1800 1550 | - | - | - |
| Steel shoes (width mm) | 250 opt | 300 opt | 300 opt | 400 opt | 400 opt | 450 opt |
| ENGINE | | | | | | |
| Two-phase dry air filter with visual clogging indicator | std | std | std | std | std | std |
| Electric pre-heating device | std | std | std | std | std | std |
| Fuel water separator | std | std | std | std | std | std |
| Fuel tank with drain plug | plastic | plastic | plastic | plastic | plastic | steel |
| Engine governor | std | std | std | std | std | std |
| Auto-Idle and Eco-Mode (reduced consumption) | - | std | std | std | std | std |
| ELECTRICAL SYSTEM | | | | | | |
| 12V battery and fusebox | std | std | std | std | std | std |
| DRIVING SEAT | | | | | | |
| Longitudinal adjustment bucket seat with vinyl upholstery | std | std | std | std | std | - |
| Fabric seat | opt | opt | opt | opt | opt | std |
| Non-slip rubber mat | std | std | std | std | std | std |
| Wrist support | std | std | std | std | std | std |
| Seatbelt | with reel | with reel | with reel | with reel | with reel | with reel |
| High speed control device | std | std | std | std | std | std |
| Travel control pedals | std | std | std | std | std | std |
| EQUIPMENT AND MONITORING DEVICES | | | | | | |
| Work lights on/off switch; axillary system control. | std | std | std | std | std | std |
| Aux. system proportional control button on joystick | std | std | std | std | std | std |
| Water temperature gauge | analogue | analogue | analogue | analogue | analogue | analogue |
| Fuel level control instrument | analogue | analogue | analogue | analogue | analogue | analogue |
| Hour meter | std | std | std | std | std | std |
| Warning light for: preheating, engine oil pressure, battery charge, water temperature | std | std | std | std | std | std |
| High speed indicator light | std | std | std | std | std | std |
| Engine alarm device in case of overheating or low oil pressure | std | std | std | std | std | std |
| Engine stop button and indicator light | - | std | std | std | std | std |
| Provision for flashing light control (Pushbutton) | std | std | std | - | - | - |
| CANOPY VERSION | | | | | | |
| FOPS - falling object protective structure | std | std | std | std | std | std |
| TOPS and ROPS - tipping and roll-over protective structure | std | std | std | std | std | std |
| CAB VERSION | | | | | | |
| TOPS / ROPS protection against tipping / rolling | std | std | std | std | std | std |
| FOPS head guard against falling objects | opt | opt | opt | opt | opt | opt |
| Heating with fan | std | std | std | std | std | std |
| Front upper sliding window under canopy | std | std | std | std | std | std |
| Removable lower front window | std | std | std | std | std | std |
| Right-hand side sliding window | std | std | std | std | std | std |
| Grab handles and full wide door handle to facilitate closing from the inside | std | std | std | std | std | std |
| Provision for radio | std | std | std | std | std | std |
| Front window wiper and washer | std | std | std | std | std | std |
| Rearview mirrors (right and left) kit for cab | std | std | std | std | std | std |
| Travel alarm | opt | opt | opt | opt | opt | opt |
| HYDRAULIC SYSTEM | | | | | | |
| ISO assisted hydraulic controls | std | std | std | std | std | std |
| Gear pump / variable flow rate (std) | std | std | std | std | std | std |
| Hydraulic boom swing control | pedal | pedal | pedal | pedal | pedal | pedal |
| Crawler width adjustment control | - | - | std | - | - | - |
| Working lamp positioned centrally on the boom | std | std | std | std | std | std |
| DIGGING AND MOVING EQUIPMENT | | | | | | |
| Boom (length in mm) | 2000 | 2250 | 2420 | 2700 | 2900 | 3150 |
| Arm (length in mm) | 1100 | 1200 | 1280 | 1350 | 1600 | 1780 |
| Long arm (length in mm) | +300mm (opt) | +300mm (opt) | +300mm (opt) | +250mm (opt) | +250mm (opt) | +300mm (opt) |
| Super long arm (length in mm) | - | - | - | +500mm (opt) | - | - |
| Boom hydraulic swinging angle (RH/LH) | 80°/50° | 80°/50° | 80°/50° | 80°/50° | 80°/50° | 80°/50° |
| Stroke limit cushioning on boom cylinder | std | std | std | std | std | std |
| Stroke limit cushioning on arm cylinder | std | std | std | std | std | std |
| Rapid attachment of mechanical accessories | opt | opt | opt | opt | opt | opt |
| Buckets in various sizes | opt | opt | opt | opt | opt | opt |
| Loads handling device | opt | opt | opt | opt | opt | opt |
| HYDRAULIC CIRCUITS FOR ACCESSORIES | | | | | | |
| Hydraulic circuit for breaker with direct return to reservoir for double-acting accessories | std | std | std | std | std | std |
| 2nd hydraulic circuit for double-acting accessories | opt | opt | opt | opt | opt | opt |
| 3rd hydraulic circuit for double-acting accessories | opt | opt | opt | opt | opt | opt |
| SAFETY AND COMFORT | | | | | | |
| Operating and travel controls lock out to enable the operator to exit | std | std | std | std | std | std |
| Single key for ignition, fuel filler cap and cover locks | std | std | std | std | std | std |
| Fuel tank filler cap with lock and mesh strainer | std | std | std | std | std | std |
| Emergency escape hammer in cab | std | std | std | std | std | std |
| Upper structure automatic brake | std | std | std | std | std | std |
| Boom cylinder anti-drift system | std | std | std | std | std | std |
| Horn | std | std | std | std | std | std |
| Cab air conditioning | - | opt | opt | opt | opt | std |
| Internal rear counter weight | - | std | opt | - | - | - |
| External rear counter weight | - | opt | std | opt | - | std |

working range

the drawing is generic and provided exclusively for illustrative purposes



| | HD27V5 | HD33V5 | HD37V5 | HD50V5 | HD60V5 | HD85V5 |
|---|-----------------|-----------------|-----------------|--------------------------|-----------------|-----------------|
| A Maximum digging height | 4220 / 4410* mm | 4670 / 4870* mm | 4990 / 5180* mm | 5380 / 5470* / 5610** mm | 5710 / 5860* mm | 6700 / 6920* mm |
| B Maximum digging depth (without blade) | 2440 / 2740* mm | 2700 / 2970* mm | 3060 / 3330* mm | 3330 / 3580* / 3830** mm | 3800 / 4040* mm | 4020 / 4320* mm |
| C Maximum dumping height | 2900 / 3090* mm | 3320 / 3510* mm | 3460 / 3660* mm | 3720 / 3820* / 3960** mm | 4050 / 4200* mm | 4700 / 4910* mm |
| D Maximum vertical digging depth | 1840 / 2120* mm | 2320 / 2610* mm | 2570 / 2800* mm | 2520 / 2690* / 2930** mm | 2980 / 3220* mm | 3170 / 3460* mm |
| E Maximum digging radius | 4560 / 4840* mm | 4880 / 5160* mm | 5210 / 5490* mm | 5760 / 5970* / 6200** mm | 6200 / 6440* mm | 6830 / 7110* mm |
| F Front minimum swing radius | 2030 / 2090* mm | 2030 / 2100* mm | 2140 / 2200* mm | 2330 / 2420* / 2460** mm | 2450 / 2470* mm | 2640 / 2720* mm |
| at right arm swing | 1740 / 1790* mm | 1770 / 1840* mm | 1840 / 1910* mm | 2010 / 2100* / 2130** mm | 2120 / 2130* mm | 2150 / 2240* mm |
| G Maximum digging depth radius | 1930 / 1930* mm | 2130 / 2130* mm | 2070 / 2180* mm | 2230 / 2140* / 2120** mm | 1960 / 2250* mm | 2710 / 2710* mm |

* with long arm
** super long arm





Download the latest version
of this catalogue.

Official **App**



KATO IMER SpA
53037 San Gimignano (SI) Loc. Cusona - Italy
Tel.: +39 0577 951 21 - Fax: +39 0577 982 400
info@katoimer.com | www.katoimer.com