KOMATSU

PC390LC-11/PC390LCi-11

Hydraulic excavator

Net horsepower
257 HP (192 kW) @ 1,950 rpm

Operating weight
87,867–90,441 lbs. (39,856–41,023 kg)

Bucket capacity
0.89–2.91 yd^3 (0.68–2.22 m^3)

intelligent MACHINE CONTROL 2.0

Give your operators the power of advanced automation

Innovation

Performance

Efficiency

Command the latest technology with iMC 2.0

Empower your operators to work more efficiently than they ever could with conventional aftermarket machine guidance or manual operation. The PC390LCi-11 with intelligent Machine Control (iMC) offers the ability to work smart, from rough digging to finish grading. Incorporating a host of advanced, proprietary machine technology, iMC puts sophisticated, productivity-enhancing automation and cutting-edge job site design at your command.

- Semi-automatic for trenching, slope work and high -production applications
- Minimize over-excavation and make every pass count

Perform finish grading using only arm input

Your operators can finish grade quickly and accurately with a bucket angle hold control that automatically holds the bucket angle to the design surface during arm operation, enabling operators to perform finish grading using only arm input.

Auto tilt bucket control

Auto tilt bucket control assists the operator in aligning the bucket parallel with the slope so that finish grading can be accomplished without having to align the machine with the target surface.

Quick specs

- Weight: 87,867-90,441 lbs. (39,856-41,023 kg)
- Horsepower: 257 HP @ 1,950 rpm (192 kW @ 1,950 rpm)
- Bucket capacity: 0.89-2.91 yd^3 (0.68-2.22 m^3)


intelligent
MACHINE CONTROL
2.0


WARNING

Make every pass count

Improve your efficiency

iMC means fast excavation to finish grade.

Semi-automatic operation

New features such as bucket angle hold control provide high levels of accuracy and comfort.

Innovative

- Achieve highly accurate results with the iMC excavator's semi-automatic operation of work equipment
- Compact 10.4-in (26.4-cm) iMC monitor with increased memory capacity, processing speed and pinch-to-zoom capability

Integrated

- Operators can focus on moving material efficiently with a factory-installed 3D and guidance system designed for the machine – no more "bolt-on" components. The fully integrated package comes with stroke-sensing hydraulic cylinders, a multiple global navigation satellite system (multi-GNSS) and an inertial measurement unit (IMU) sensor
- Advance job site flexibility with multi-band UHF/915SS radio
- Fast, reliable job site connectivity with 4G LTE connectivity

Intelligent

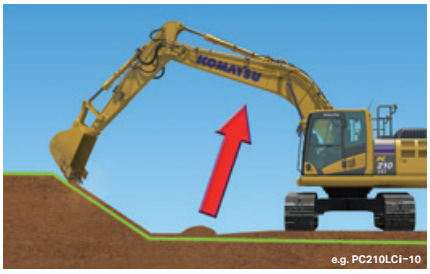
- Operators can minimize over-excavation and move material efficiently by semi-automatically tracing the target surface.
- Excellent ease of operation and bucket positioning with intelligent facing compass, light bar and sound guidance
- Outstanding efficiency, productivity and ease of operation with bucket angle hold control

Photo may include optional equipment.

intelligent Machine Control

Over-excavation and damage to the design surface are minimized with Komatsu's unique sensor package, which includes stroke-sensing hydraulic cylinders, an IMU sensor,and GNSS antennas. It utilizes 3D design data loaded in the control box to accurately check its position against the target. If the bucket hits the target surface, it is semi-automatically limited to minimize over-excavation.

If the operator turns off auto mode, the machine can be operated with highly accurate, responsive machine guidance, with the machine only providing indication guidance.



Auto grade assist

With the auto grade assist function, the operator moves the arm and the boom adjusts the bucket height automatically, tracing the target surface and minimizing digging too deep. This allows the operator to perform rough digging without worrying about the design surface and to perform fine digging by operating the arm lever only. The working range is extended by holding the lever to move the boom downward.

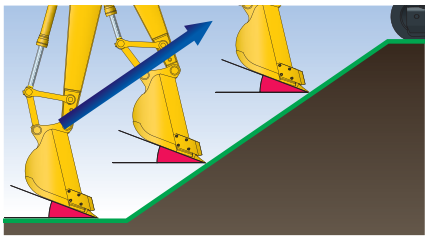
Auto stop control

During boom or bucket operation, the work equipment automatically stops when the bucket edge reaches the design surface, thus minimizing damage to the design surface.

Minimum distance control

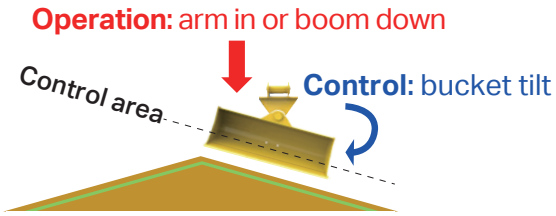
The intelligent Machine Control excavator controls the bucket by automatically selecting the point on the bucket closest to the target surface. Should the machine not be facing a sloped surface at a right angle, it will still follow the target surface and minimize digging below it.

intelligent Machine Control (iMC)



Bucket angle hold control

Operator sets desired bucket angle and the system automatically maintains bucket angle throughout the grading pass. Angle hold control increases ease of operation and improves final grading accuracy.



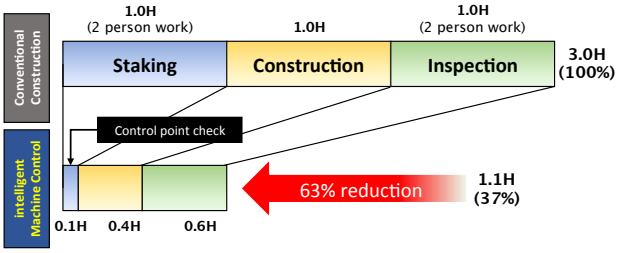
Auto tilt control

Automatically tilts bucket to design surface and returns it to horizontal to unload. Using auto tilt control with the existing minimum distance control and auto grade assist makes complex grading quicker and easier.

Improved construction efficiency

Staking, survey and final inspection (which are usually done manually), can be reduced with the intelligent Machine Control excavator by setting 3D design data on the control box. Also, use of the facing angle compass can minimize leveling work for the surface on which the machine sits. Even if the machine is inclined while working, the facing angle compass allows the operator to ensure that the machine is facing perpendicular to the target surface. The intelligent Machine Control technology allows the operator to improve work efficiency (i.e. shorter construction time) while minimizing over-excavating the target surface from rough digging to finish grading.

Comparison of construction time based on in-house test of excavation and grading slope surface*

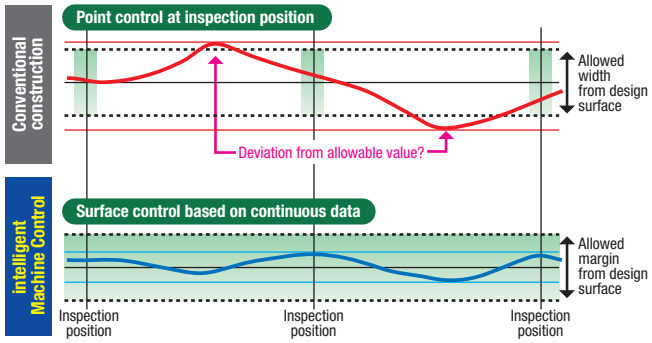


* When used by a qualified iMC operator, the Komatsu intelligent Machine Control system increases construction efficiency.
* The above data does not include design time or working data creation time. The above data is based on in-house construction tests, performed by Komatsu, whose conditions may differ from actual construction.

Improved work accuracy

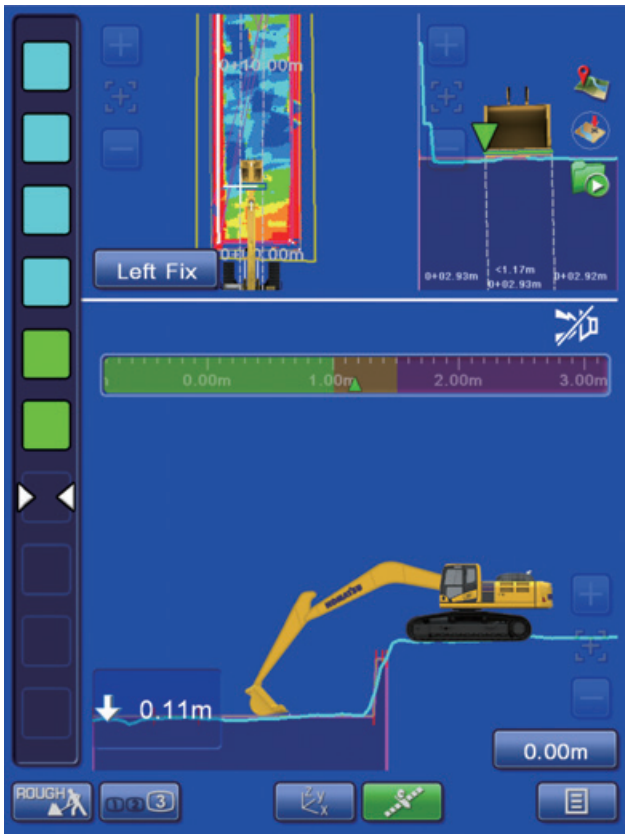
The bucket edge/tip position is instantly displayed on the control box, eliminating the wait time for display on the monitor during construction. The large and easy-to-view control box displays information clearly, aiding in highly accurate work. With manual operation and conventional machine guidance, finish grade quality and excavation accuracy depend heavily on the skill of the operator. With the intelligent Machine Control excavator, the bucket is automatically limited to follow the target grade without over-excavating.

Relationship between finished surface and allowable value



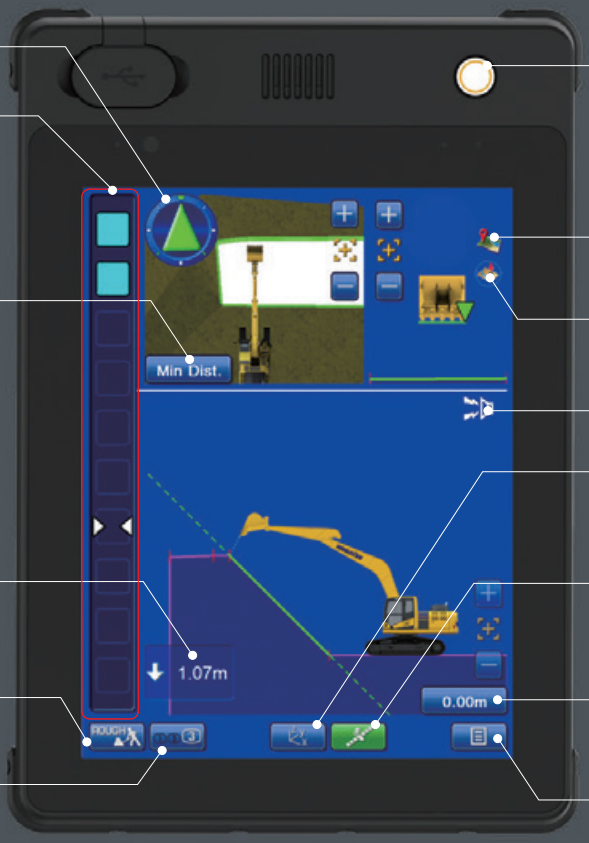
As-built surface mapping

Operator can display and check the as-built status and find where to cut and fill.



Control box

The monitor of the Komatsu intelligent Machine Control (control box) uses a compact 10.4-in (26.4-cm) screen for visibility and ease of use. The simple screen layout displays the necessary information in an easily understood fashion. Touch-screen icon interface instead of multi-step menu simplifies operation.



Facing angle compass

Light bar

Bucket edge position selection button
Used to select the bucket edge position (left/middle/right/minimum distance) to determine the distance from the design surface

Distance from design surface

Mode selection button
Driving, rough digging and fine digging modes

Screen selection button
Use to change the screen layout

Auto/manual switch

Pop-up map button
Displays a wide-area map

Edge position recording button

Sound guidance on/off

Bucket edge position check button

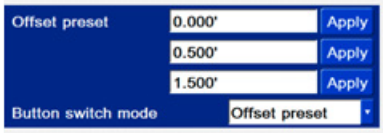
GNSS signal reception status check button
Used to check signal reception from the GNSS

Design surface offset
The design surface can be offset in the vertical direction

Main menu button
For various settings

Preset elevation offset quick button

Pre-determined offsets can be stored in the monitor to allow an operator to easily switch between preset grades.



Quick bucket swap button

Allows users to quickly swap between various buckets without having to enter main menu. This lessens the time a user takes to change out a bucket on the monitor.

Machine navigation

Facing angle compass

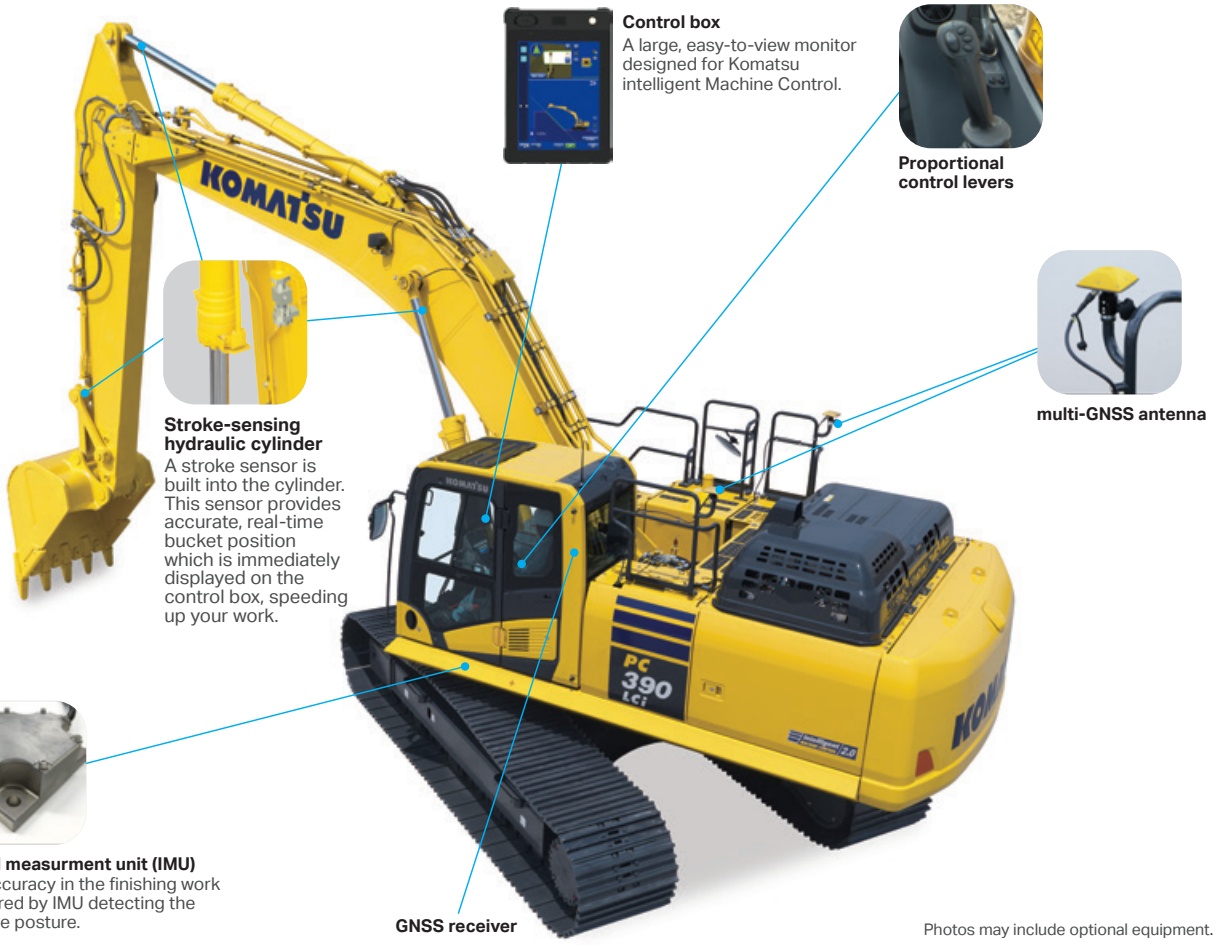
The orientation and color of the facing angle compass's arrow shows the operator the facing angle of the bucket edge relative to the target surface. This allows the bucket edge to be accurately positioned square with the target surface, which is useful when finishing slopes.

Enhanced operability of the machine control

Semi-auto/manual mode switching and design surface offset function can be operated with switches on the control levers.

intelligent Machine Control (iMC)

Factory-installed Komatsu intelligent Machine Control components



Control box
A large, easy-to-view monitor designed for Komatsu intelligent Machine Control.

Proportional control levers

multi-GNSS antenna

Stroke-sensing hydraulic cylinder
A stroke sensor is built into the cylinder. This sensor provides accurate, real-time bucket position which is immediately displayed on the control box, speeding up your work.

Inertial measurment unit (IMU)
High accuracy in the finishing work is secured by IMU detecting the machine posture.

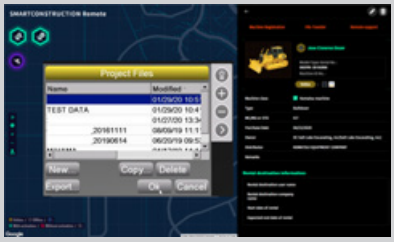
GNSS receiver

Photos may include optional equipment.

SMARTCONSTRUCTION
Remote

Customers can quickly send design files to intelligent machines and provide support to operators

Users can log in to Smart Construction Remote to locate machines by job site to upload or download design files at any time.



View the machine monitor to troubleshoot or add new files in the machine without the time requirements of traditional methods.

Capable of connecting to mixed-fleet customers.

View or navigate machine monitor live with operator.

Working smarter in every way

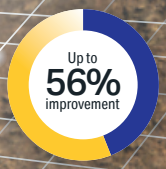
Benefits of iMC 2.0

Save money

Frees GPS dozer from need to achieve final grade so it can work elsewhere on the site.

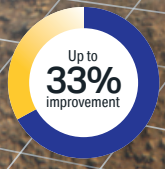
Save time

Reduce staking, grading and inspection with 3D design data and semi-automatic grading.



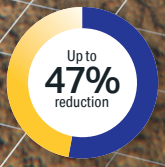
Less time grade checking

Monitor performance and stay on grade from the cab: operators spend time working, not grade checking.



Improve accuracy

Continuously monitor grade and semi-automatics to dig precisely to grade.



Reduce base aggregate

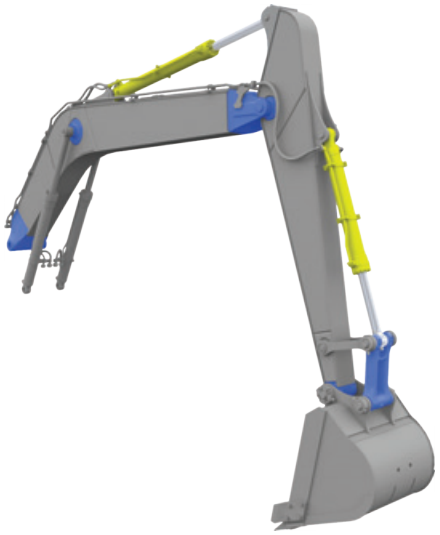
Greatly reduce over-digging and the amount of costly base aggregate needed for applications like utilities.

**All savings, improvements, and reductions are compared to traditional grading methods.*

Performance features

High-rigidity work equipment

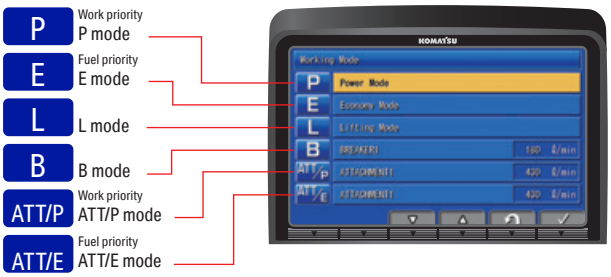
Designed for long-term durability and reliability, with booms and arms constructed with thick plates of high tensile-strength steel. In addition, these structures are designed with large cross-sectional areas and large one-piece castings in the boom foot, the boom tip and the arm tip. A standard HD boom design provides increased strength and reliability.



Working mode selection

The PC390LC/LCi-11 excavator is equipped with six working modes (P, E, L, B, ATT/P and ATT/E). Each mode is designed to match engine speed, pump flow and system pressure to the application. The PC390LC/LCi-11 features an attachment mode (ATT/E) that allows operators to run attachments while in economy mode.

Working mode	Application	Advantage
P	Power mode	• Maximum production/power • Fast cycle times
E	Economy mode	• Good cycle times • Better fuel economy
L	Lifting mode	• Increases hydraulic pressure
B	Breaker mode	• Optimum engine rpm, hydraulic flow
ATT/P	Attachment Power mode	• Optimum engine rpm, hydraulic flow, 2-way • Power mode
ATT/E	Attachment economy mode	• Optimum engine rpm, hydraulic flow, 2-way • Economy mode



Increased work efficiency

Functional digging force can be increased with use of the one-touch Power Max function (up to 8.5 seconds of operation).

Maximum arm crowd force (ISO)

16.3 t (160 kN) 17.4 t (171 kN) (with Power Max) 7% UP

Maximum bucket digging force (ISO)

21.7 t (213 kN) 23.2 t (228 kN) (with Power Max) 7% UP

Measured with Power Max function, 125 in (3,185 mm) arm and ISO rating

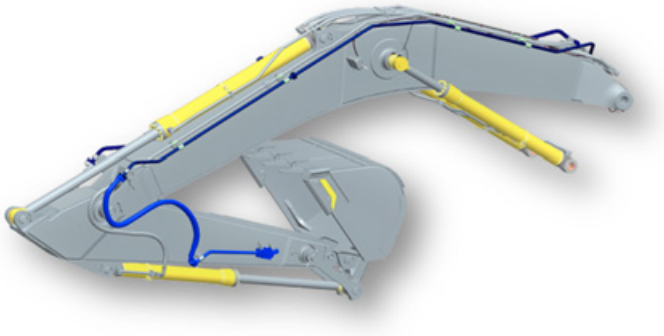
Komatsu-integrated attachment control (optional)

Factory-integrated auxiliary hydraulic attachment control with programmable pressure and flow settings for up to 15 different tools. Settings can be easily changed from the machine monitor, optimizing attachment control and performance. Proportional joysticks help expand versatility by giving the operator precise hydraulic attachment control.

*Not available on PC390LC-11

+1 Attachment piping (optional)

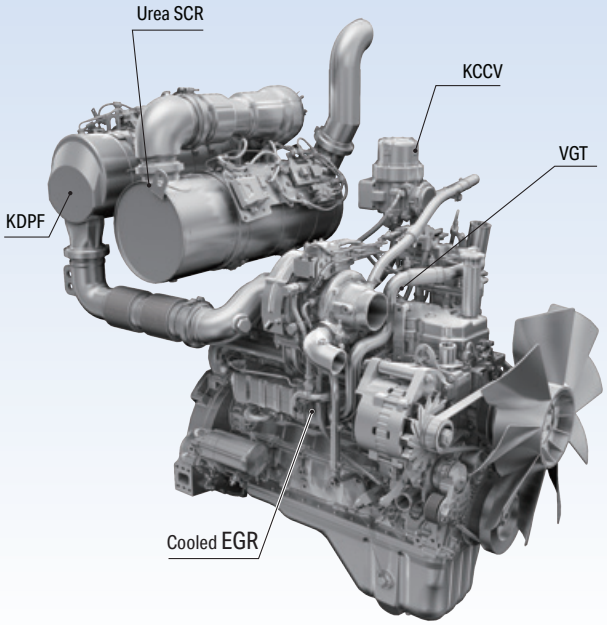
Factory-engineered auxiliary attachment circuit piping is designed and sized to work efficiently with the excavator's main hydraulic system. Constructed of large-diameter steel tubing with four bolt flange connections and robust mounting points, the auxiliary hydraulic piping is designed for durable, reliable use.



Komatsu innovative engine technology

Latest Tier 4 Final engine

The Komatsu SAA6D114E-6 engine is EPA Tier 4 Final emissions certified and provides exceptional performance and efficiency. Based on Komatsu proprietary technologies developed over many years, this new diesel engine reduces nitrogen oxide (NOx) by more than 80% when compared to Tier 4 interim levels. Through the in-house development and prodution of engines, electronics and hydraulic components, Komatsu has achieved great advancements in technology, providing high levels of performance and efficiency in virtually all applications.



Working environment

Photo may include optional equipment. PC210LCi-11 shown.

Comfortable working space

Wide, spacious cabin

The cabin includes a seat with reclining backrests and a pull-up lever to easily adjust seat height and tilt angle. You can set the appropriate operational posture of the armrest together with the console. Reclining the seat further enables you to place it into the fully flat state with the headrest attached.

Armrest with simple height adjustment function

The addition of a knob and a plunger to the armrest permits the height of the armrest to be easily adjusted without the use of tools.

Low vibration with cab damper mounting

Automatic climate control

Pressurized cab

Auxiliary input jack

Connecting a regular audio device to the auxiliary jack allows the operator to hear the sound from the speakers installed in the cab.

Standard equipment

Sliding window glass (left side)

ISO/BH pattern change valve

Remote intermittent wiper with windshield washer

Easy-to-access AC controls

Opening and closing skylight

Magazine box and cup holder

Defroster (conforms to the ISO standard)

One-touch storable front window lower glass

General features

ROPS cab structure

ISO 12117-2

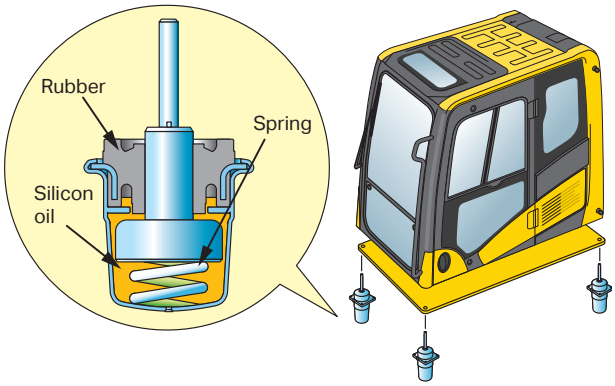
The machine is equipped with a ROPS cab that conforms to ISO 12117-2 for excavators as standard equipment. It also satisfies the requiremets for level 1 Operator Protective Guard (OPG) and top guard (ISO 10262).

Rearview monitoring system

A rearview monitoring system display has a rearview camera image that is continuously displayed together with the gauges and important vehicle information. This enables the operator to carry out work while easily cecking the surrounding area.

Low vibration with viscous cab mounts

The PC390LC/LCi-11 uses viscous mounts for the cab that incorporate a longer stroke and the addition of a spring. The cab damper mounting combined with a high-rigidity deck reduces vibration at the operator's seat.



General features

Secondary engine shutdown switch at base of seat to shutdown the engine

Left and right side handrails

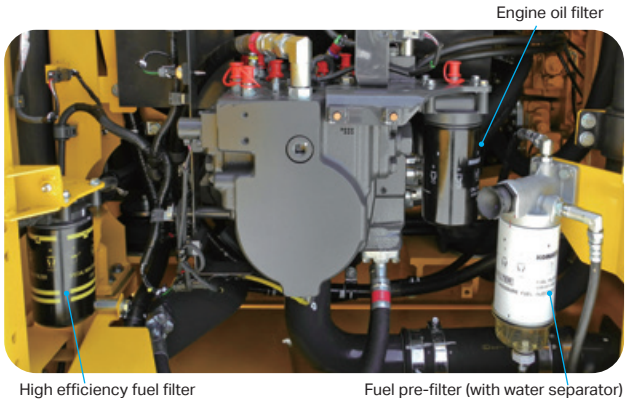
Seat belt caution indicator

- Lock lever
- Seat belt retractable
- Tempered and tinted glass
- Large mirrors
- Slip-resistant plates
- Thermal and fan guards
- Pump/engine room partition
- Travel alarm
- Large cab entrance step
- Large, easy-open hood for engine and aftertreatment access

Maintenance features

Centralized engine check points

Locations of the engine oil check and filters are integrated into one side to allow easy maintenance and service.



Tie-off points standard (ISO 14567)

When working in elevated positions on the boom and track frame tie-off points provide anchors for technician harness lanyards.

Easy cleaning of cooling unit

Fuel pre-filter with water separator

High-efficiency primary fuel filter

Easy access to engine oil filter, engine oil, drain valve, fuel drain valve and water separator drain valve

Easy-to-access air conditioner filter

Washable cab floormat

Sloping track frame

Utility space

PC390LC-11 shown.

Long-life oils, filters

High-performance filters are used in the hydraulic circuit and engine. By increasing the oil and filter replacement intervals, maintenance costs can be significantly reduced.

Engine oil and engine oil filter	every 500 hours
Hydraulic oil	every 5,000 hours
Hydraulic oil filter	every 1,000 hours

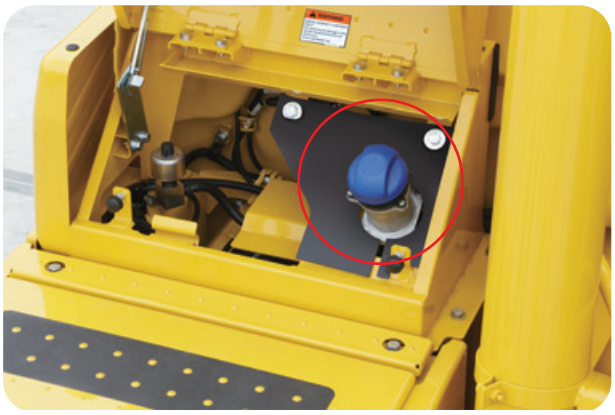
Hydraulic oil filter (ecology white element)

Large-capacity air cleaner

Comparable to that of larger machines, the larger air cleaner can extend air cleaner life during long-term operation, helping prevent early clogging and resulting power loss. A radial seal design improves reliability.

Diesel exhaust fluid (DEF) tank

A large tank volume extends operating time before refilling and is installed on the right front platform for easy access. DEF tank and pump are separated for improved service access.



Maintenance information

"Maintenance time caution lamp" display

When the remaining time to maintenance becomes less than 30 hours*, a maintenance time monitor appears. Pressing the F6 key switches the monitor to the maintenance screen.

* The setting can be changed within the range between 10 and 200 hours.

Maintenance screen

Manual stational regeneration

Under most conditions, active regeneration will occur automatically with no effect on machine operation. In case the operator needs to disable active regeneration or initiate a manual stationary regeneration, this can be easily accomplished through the monitor panel. A soot level indicator is displayed to show how much soot is trapped in the KDPF.

Soot level indicator

Aftertreatment device regeneration screen

Supports the DEF level and refill timing

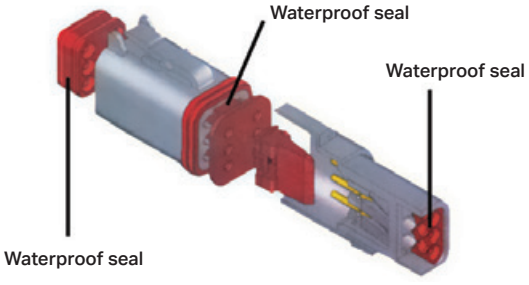
The DEF level gauge is displayed continuously on the right side of the monitor screen. In addition, when DEF level is low, DEF low-level guidance messages appear in pop-up displays to inform the operator in real time.

DEF level gauge

DEF low-level guidance

DT-type connectors

Sealed DT-type electrical connectors provide high reliability, water and dust resistance.



Komatsu helps you bring it all together

Get the most out of your fleet on My Komatsu

We've designed a portal that makes it easy to collect, visualize and monitor data for both Komatsu machines and other OEM machines. My Komatsu also gives you one easy source for accessing manuals and purchasing parts for your machines.

- Quickly collect, view and manage intuitive data displays in one location
- Help keep costs under control
- Benchmark machine performance and track fuel consumption
- Monitor for theft and unauthorized use
- Receive timely maintenance alerts

My Komatsu, our comprehensive portal, analyzes telematics data from your on-machine technology — Komtrax and Komtrax Plus, or from other OEMs — and displays it on easy-to-read dashboards. Now you can get the powerful analytics you need to manage your costs and enhance your fleet's efficiency without a complicated process or expensive third-party solutions.

Data
Telematics data is generated by on-machine technology.

Storage
Telematics data flows into data storage. ISO 15143-3 (AEMP 2.0) facilitates the extraction and raw data to your choice of databases.

Connection
Choose how you want to connect and view your data. Go to multiple systems, send to a third party, or easily connect it all through My Komatsu.

Analytics
My Komatsu connects telematics data from Komatsu and non-Komatsu equipment and creates powerful analytics dashboard views.

mykomatsu.komatsu

Connect your machines to Smart Construction to optimize your job sites

Your projects depend on robust data that is easily shared, replicated, updated and — most important of all — correct.

Take a step toward a digital transformation of your job sites with Komatsu's suite of Smart Construction solutions, where advanced automation and integrated technologies intersect to help you:

- Track costs of labor, machines and materials
- Receive real-time insights straight from the field
- Enhance workflow with fully integrated data
- Visualize your data for actionable results
- Quickly map your job site
- Attract and retain talent

Not sure where to begin? Komatsu-certified solution experts are available on the phone, online or at your job site to help you navigate and thrive along your digitalization journey.

komatsu.com/smart-construction

Komatsu maintenance and repair programs

Simplify the complexities of machine owning and operating costs and enhance the value of your equipment with Komatsu's tiered maintenance and repair offerings. Manage your active coverage programs through the My Komatsu customer interface and take advantage of attractive financing options.

- Solutions that fit your needs and ease your mind
- Fixed maintenance and repair costs for the life of the contract
- National coverage

Komatsu Care Complimentary

Complimentary maintenance

Our complimentary scheduled maintenance program for the first three years or 2,000 hours, whichever occurs first.

Komatsu Care Plus

Extended maintenance

A continuation of the Komatsu Care program. Along with regularly scheduled maintenance and national distributor coverage, you get a variety of added benefits.

Komatsu Care Plus II

Extended maintenance and repair

Everything in the Komatsu Care Plus program bundled with comprehensive repair coverage for qualifying repairs.

Komatsu Care Plus III

Extended maintenance, repair and consumables

A comprehensive program that simplifies your equipment's total cost of ownership with a fixed cost per hour for qualifying repairs and replacements.

Komatsu Care Advantage Warranty

Extended warranty

Protect your equipment in the event a covered component fails due to a defect in material or workmanship. Repairs are performed by Komatsu-trained experts using Komatsu genuine parts.

komatsu.com/maintenance-repair

Komatsu Financial

Financial services built for your business success.

komatsu.com/financing

Komatsu Genuine Parts

Engineered to help extend the life of your Komatsu machine. Now available on the My Komatsu parts store.

komatsu.com/parts

Komatsu training

Comprehensive training support — virtually, at our facility or where most convenient.

komatsu.com/training

General specification

Engine*

Model		Komatsu SAA6D114E-6*
Type		Water-cooled, 4-cycle, direct injection
Aspiration		Variable Geometry Turbocharger with air-to-air aftercooler and EGR
Number of cylinders		6
Bore x stroke		114 mm x 144.5 mm 4.49" x 5.69"
Piston displacement		8.85 L 540 in^3
Horsepower		
SAE J1995	Gross	202 kW 271 HP
ISO 9249 / SAE J1349	Net	192 kW 257 HP
	Rated rpm	1,950
Fan drive method for radiator cooling		Mechanical
Governor		All-speed control, electronic

*EPA Tier 4 Final emissions certified

Hydraulics

Type	HydrauMind (Hydraulic Mechanical Intelligence) system, closed-center system with load sensing valve and pressure compensated valves
Number of selectable working modes	6

Main pump

Type	Variable displacement axial piston type
Pumps for	Boom, arm, bucket, swing and travel circuits
Maximum flow	535 L/min 141.3 gal/min
Supply for control circuit	Self-reducing valve

Hydraulic motors

Travel	2 x axial piston motors with parking brake
Swing	1 x axial piston motor with swing holding brake

Relief valve setting

Implement circuits	37.3 MPa	380 kg/cm^2	5,400 psi
Travel circuit	37.3 MPa	380 kg/cm^2	5,400 psi
Swing circuit	27.9 MPa	285 kg/cm^2	4,050 psi
Pilot circuit	3.2 MPa	33 kg/cm^2	470 psi

Hydraulic cylinders (Number of cylinders – bore x stroke x rod diameter)

Boom	2–140 mm x 1480 mm x 100 mm	5.5" x 58.3" x 3.9"
Arm	1–160 mm x 1825 mm x 110 mm	6.3" x 71.9" x 4.3"
Bucket for 3.2 m 10'5" and 4.0 m 13'2" arms	1–140 mm x 1285 mm x 100 mm	5.5" x 50.6" x 3.9"
Bucket for 2.54 m 8'4" arm	1–150 mm x 1285 mm x 100 mm	5.9" x 50.6" x 4.3"

Drives and brakes

Steering control		Two levers with pedals
Drive method		Hydrostatic
Maximum drawbar pull		329 kN 33,510 kg 73,880 lbs.
Gradeability		70%, 35°
Maximum travel speed		
	High	4.3 km/h 2.7 mph
	Mid	3.5 km/h 2.2 mph
	Low	2.8 km/h 1.7 mph
Service brake		Hydraulic lock
Parking brake		Mechanical disc brake

Swing system

Drive method	Hydraulic motor
Swing reduction	Planetary gear
Swing circle lubrication	Grease-bathed
Service brake	Hydraulic lock
Holding brake/swing lock	Mechanical disc brake
Swing speed	9.5 rpm
Swing torque	11,386 kg•m 82,313 ft. lbs.

Undercarriage

Center frame	X-frame
Track frame	Box-section
Track type	Sealed
Track adjuster	Hydraulic
Number of shoes (each side)	49
Number of carrier rollers (each side)	2
Number of track rollers (each side)	8

Coolant and lubricant capacity (refilling)

Fuel tank	605 L	159.8 U.S. gal
Radiator	37 L	9.7 U.S. gal
Engine	39 L	10.2 U.S. gal
Final drive, each side	10.5 L	2.8 U.S. gal
Swing drive	14 L	3.7 U.S. gal
Hydraulic tank	188 L	49.7 U.S. gal
Diesel exhaust fluid (DEF) tank	39 L	10.3 U.S. gal

Sound performance

Exterior – ISO 6395	103 dB(A)
Operator – ISO 6396	71dB(A)

Operating weight (approximate)*

Operating weight includes 6,500 mm 21'3" one-piece HD boom, 3,185 mm 10'5" arm, SAE heaped 1.96 m^3 2.56 yd^3 bucket, rated capacity of lubricants, coolant, full fuel tank, operator and standard equipment.

Triple-grouser shoes	Operating weight	Ground pressure ISO 16754
700 mm 28"	39,856 kg 87,867 lbs.	0.61 kg/cm^2 8.61 psi
800 mm 31.5"	40,359 kg 88,976 lbs.	0.54 kg/cm^2 7.63 psi
900 mm 35.5"	40,796 kg 89,940 lbs.	0.48 kg/cm^2 6.86 psi

*See equipment page for option availability.

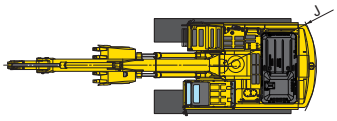
Component weights

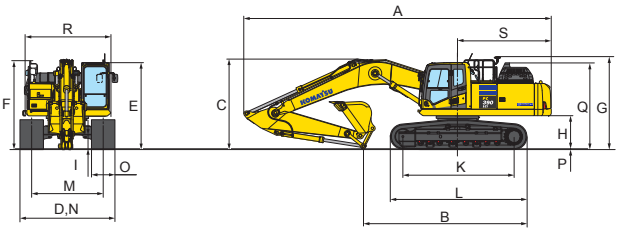
Arm including bucket cylinder and linkage		
3,185 mm 10'5" arm assembly	1,761 kg	3,882 lbs.
4,020 mm 13'2" arm assembly	1,988 kg	4,383 lbs.
One-piece HD boom including arm cylinder		
6,500 mm 21'3" boom assembly	3,135 kg	6,912 lbs.
Boom cylinders x 2	259 kg	571 lbs.
Counterweight	6,920 kg	15,255 lbs.

Dimensions

	Arm Length		3,185 mm	10'5"	4,020 mm	13'2"
A	Overall length		11,170 mm	36'8"	11230 mm	36'10"
B	Length on ground (transport)		7,530 mm	24'8"	5515 mm	18'1"
C	Overall height (to top of boom)*		3,420 mm	11'3"	3690 mm	12'1"
D	Overall width		3,640 mm	11'11"		
E	Overall height (to top of cab)*		3,262 mm	10'8"		
F	Overall height (to top of handrail)*		3,363 mm	11'0"		
G	Overall height (to top of GNSS antenna)*		3,420 mm	11'3"		
H	Ground clearance, counterweight		1,320 mm	4'4"		
I	Ground clearance, minimum		551 mm	1'10"		
J	Tail swing radius		3,445 mm	11'4"		
K	Track length on ground		4,350 mm	14'3"		
L	Track length		5,357 mm	17'7"		
M	Track gauge		2,740 mm	9'0"		
N	Width of crawler	700 mm 28" shoe	3,440 mm	11'2"		
		800 mm 31.5" shoe	3,540 mm	11'6"		
		900 mm 35.5" shoe	3,640 mm	11'11"		
O	Shoe width		900 mm	35.5"		
P	Grouser height		37 mm	1.5"		
Q	Machine height to top of engine cover		3,135 mm	10'3"		
R	Machine upper width**		3,145 mm	10'4"		
S	Distance, swing center to rear end		3,405 mm	11'2"		

*Including grouser height **Including handrail





Backhoe bucket, arm and boom combination

Bucket type	Bucket Capacity		Teeth	Width		Weight		Tip radius		6.5 m (21'3") Boom 3.2 m (10'5")	6.5 m (21'3") Boom 4.0 m (13'2")
Komatsu TL	0.93 m³	1.21 yd³	4	762 mm	30"	1,097 kg	2,418 lbs.	1674 mm	65.9"	●	●
	1.18 m³	1.54 yd³	4	914 mm	36"	1,198 kg	2,641 lbs.	1674 mm	65.9"	●	●
	1.44 m³	1.88 yd³	5	1,067 mm	42"	1,325 kg	2,921 lbs.	1674 mm	65.9"	●	●
	1.70 m³	2.22 yd³	5	1,219 mm	48"	1,426 kg	3,144 lbs.	1674 mm	65.9"	●	○
	1.96 m³	2.56 yd³	6	1,372 mm	54"	1,554 kg	3,425 lbs.	1674 mm	65.9"	○	□
	2.22 m³	2.91 yd³	6	1,524 mm	60"	1,554 kg	3,425 lbs.	1674 mm	65.9"	□	⊙
Komatsu HP	0.68 m³	0.89 yd³	3	610 mm	24"	1,022 kg	2,254 lbs.	1674 mm	65.9"	●	●
	0.93 m³	1.21 yd³	4	762 mm	30"	1,178 kg	2,598 lbs.	1674 mm	65.9"	●	●
	1.18 m³	1.54 yd³	4	914 mm	36"	1,358 kg	2,993 lbs.	1674 mm	65.9"	●	●
	1.44 m³	1.88 yd³	5	1,067 mm	42"	1,439 kg	3,173 lbs.	1674 mm	65.9"	●	●
	1.70 m³	2.22 yd³	5	1,219 mm	48"	1,555 kg	3,429 lbs.	1674 mm	65.9"	●	□
	1.96 m³	2.56 yd³	6	1,372 mm	54"	1,701 kg	3,750 lbs.	1674 mm	65.9"	□	⊙
	2.22 m³	2.91 yd³	6	1,524 mm	60"	1,554 kg	3,425 lbs.	1674 mm	65.9"	⊙	X
Komatsu HPS	0.68 m³	0.89 yd³	3	610 mm	24"	1,112 kg	2,451 lbs.	1674 mm	65.9"	●	●
	0.93 m³	1.21 yd³	4	762 mm	30"	1,294 kg	2,853 lbs.	1674 mm	65.9"	●	●
	1.18 m³	1.54 yd³	4	914 mm	36"	1,437 kg	3,167 lbs.	1674 mm	65.9"	●	●
	1.44 m³	1.88 yd³	5	1,067 mm	42"	1,607 kg	3,543 lbs.	1674 mm	65.9"	●	○
	1.70 m³	2.22 yd³	5	1,219 mm	48"	1,750 kg	3,857 lbs.	1674 mm	65.9"	○	□
	1.96 m³	2.56 yd³	6	1,372 mm	54"	1,921 kg	4,236 lbs.	1674 mm	65.9"	□	⊙
	2.22 m³	2.91 yd³	6	1,524 mm	60"	1,554 kg	3,425 lbs.	1674 mm	65.9"	⊙	X
Komatsu HPX	0.68 m³	0.89 yd³	3	610 mm	24"	1,239 kg	2,731 lbs.	1674 mm	65.9"	●	●
	0.93 m³	1.21 yd³	4	762 mm	30"	1,421 kg	3,133 lbs.	1674 mm	65.9"	●	●
	1.18 m³	1.54 yd³	4	914 mm	36"	1,564 kg	3,447 lbs.	1674 mm	65.9"	●	●
	1.44 m³	1.88 yd³	5	1,067 mm	42"	1,734 kg	3,823 lbs.	1674 mm	65.9"	●	○
	1.70 m³	2.22 yd³	5	1,219 mm	48"	1,877 kg	4,137 lbs.	1674 mm	65.9"	○	□
	1.96 m³	2.56 yd³	6	1,372 mm	54"	2,048 kg	4,516 lbs.	1674 mm	65.9"	□	⊙
	2.22 m³	2.91 yd³	6	1,524 mm	60"	1,554 kg	3,425 lbs.	1674 mm	65.9"	⊙	X

For best semi-automatic machine control performance, observe maximum attachment weights:

- 2,500 kg 5,511 lbs. maximum for 3,185 mm 10' 5" standard arm assembly
- 2,350 kg 5,180 lbs. maximum for 4,020 mm 13' 2" standard arm assembly

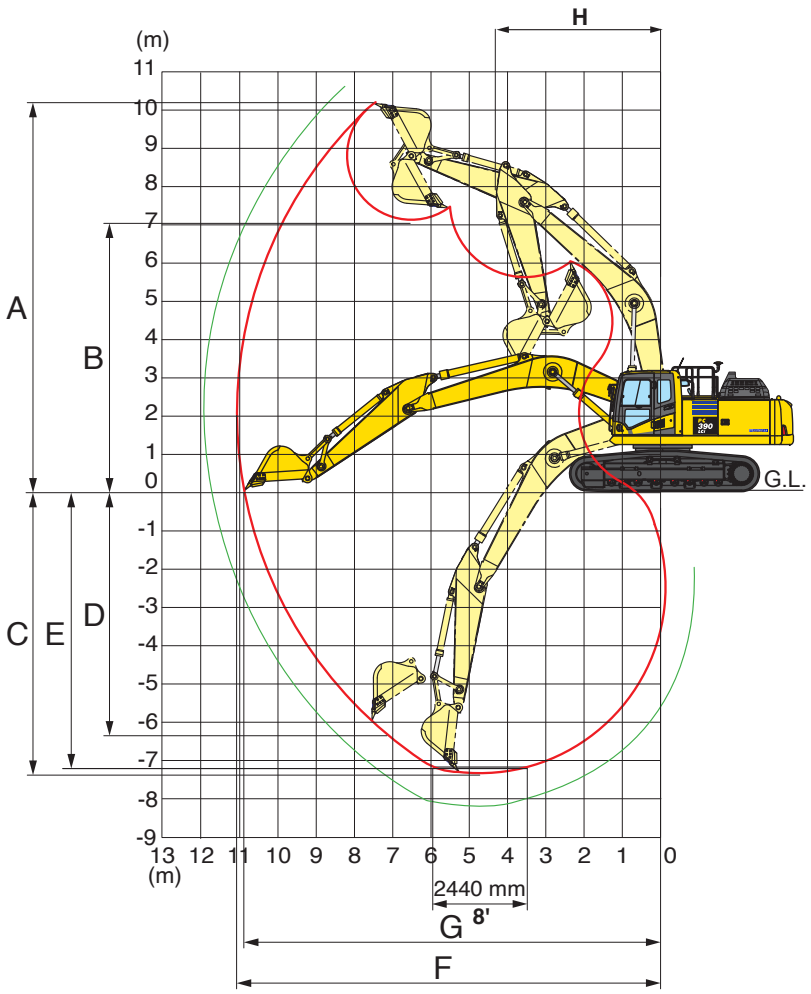
Exceeding recommended attachment weights may negatively impact performance and accuracy of semi-automatic function.

● - Used with material weights up to 3,500 lbs./yd³ - Quarry/rock/high abrasion applications
□ - Used with material weights up to 2,500 lbs./yd³ – General construction
○ - Used with material weights up to 3,000 lbs./yd³ – Tough digging applications
⊙ - Used with material weights up to 2,000 lbs./yd³ – Light materials applications
X - Not useable

Komatsu recommends the use of buckets sized to machine capacity. Buckets listed in the table above are sized appropriate to the specified material densities. Buckets exceeding recommended sizes may result in reduced performance.

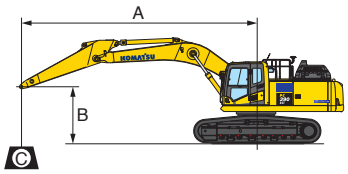
General specification

Working range



	Arm Length	3,185 mm	10'5"	4,020 mm	13'2"
A	Max. digging height	10,260 mm	33'7"	10,660 mm	35'0"
B	Max. dumping height	7,155 mm	23'6"	7,600 mm	24'11"
C	Max. digging depth	7,265 mm	23'10"	8,100 mm	26'7"
D	Max. vertical wall digging depth	6,235 mm	20'6"	7,145 mm	23'5"
E	Max. digging depth for 8' level bottom	7,100 mm	23'3"	7,975 mm	26'2"
F	Max. digging reach	11,100 mm	36'5"	11,895 mm	39'0"
G	Max. digging reach at ground level	10,870 mm	35'8"	11,705 mm	38'5"
H	Min. swing radius	4,310 mm	14'2"	4,320 mm	14'2"
SAE rating	Bucket digging force at power max	200 kN 20,400 kg / 44,970 lbs.		200 kN 20,400 kg / 44,970 lbs.	
	Arm crowd force at power max	165 kN 16,800 kg / 37,040 lbs.		139 kN 14,200 kg / 31,310 lbs.	
ISO rating	Bucket digging force at power max	228 kN 23,200 kg / 51,150 lbs.		227 kN 23,100 kg / 50,930 lbs.	
	Arm crowd force at power max	171 kN 17,400 kg / 38,360 lbs.		144 kN 14,700 kg / 32,410 lbs.	

Lifting capacity with lifting mode

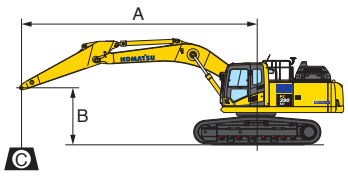


A: Reach from swing center
B: Bucket hook height
C: Lifting capacity
Cf: Rating over front
Cs: Rating over side
⊗ Rating at maximum reach

Conditions
- Boom length: 6,500 mm 21' 3" one-piece boom
- Bucket: None
- Lifting mode: On

Arm: 3,185 mm 10'5" Shoes: 800 mm 31.5" Unit: kg lbs.

A	3.0 m 10'		4.6 m 15'		6.1 m 20'		7.6 m 25'		9.1 m 30'		MAX	
B	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.6 m											* 7200	* 7200
25'											* 15900	* 15900
6.1 m							* 8900	8800			* 7000	* 7000
20'							* 19650	19450			* 15500	* 15500
4.6 m					* 10800	* 10800	* 9400	8650			* 7100	6650
15'					* 23850	* 23850	* 20750	19050			* 15650	14750
3.0 m			* 16350	* 16350	* 12150	11400	* 10050	8400	* 8800	6500	* 7400	6300
10'			* 36150	* 36150	* 26850	25200	* 22200	18550	* 19450	14400	* 16300	13900
1.5 m			* 18250	16350	* 13250	11000	* 10650	8150	* 9000	6400	* 7950	6200
5'			* 40250	36150	* 29250	24300	* 23450	18050	* 19850	14150	* 17550	13650
0 m			* 18500	16050	* 13750	10750	* 10900	8000	* 8900	6350	* 8850	6300
0'			* 40800	35350	* 30300	23700	* 24000	17700	* 19600	14000	* 19550	13950
-1.5 m	* 14150	* 14150	* 17600	15950	* 13400	10650	* 10550	7950			* 8900	6750
-5'	* 31250	* 31250	* 38850	35250	* 29600	23450	* 23350	17550			* 19700	14950
-3.0 m	* 20250	* 20250	* 15650	* 15650	* 12200	10700	* 9250	8000			* 8850	7750
-10'	* 44700	* 44700	* 34550	* 34550	* 26900	23600	* 20500	17650			* 19500	17050
-4.6 m	* 15250	* 15250	* 12250	* 12250	* 9300	* 9300					* 8250	* 8250
-15'	* 33600	* 33600	* 27000	* 27000	* 20500	* 20500					* 18250	* 18250



A: Reach from swing center
B: Bucket hook height
C: Lifting capacity
Cf: Rating over front
Cs: Rating over side
⊗ Rating at maximum reach

Conditions
- Boom length: 6,500 mm 21' 3" one-piece boom
- Bucket: None
- Lifting mode: On

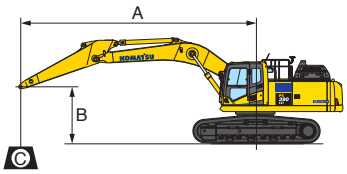
Arm: 3,185 mm 10'5" Shoes: 900 mm 35.5" Unit: kg lbs.

A	3.0 m 10'		4.6 m 15'		6.1 m 20'		7.6 m 25'		9.1 m 30'		MAX ⊗	
B	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.6 m											* 7200	* 7200
25'											* 15900	* 15900
6.1 m							* 8900	8900			* 7000	* 7000
20'							* 19650	19600			* 15500	* 15500
4.6 m					* 10800	* 10800	* 9400	8700			* 7100	6750
15'					* 23850	* 23850	* 20750	19250			* 15650	14900
3.0 m			* 16350	* 16350	* 12150	11550	* 10050	8500	* 8800	6600	* 7400	6350
10'			* 36150	* 36150	* 26850	25450	* 22200	18700	* 19450	14550	* 16300	14050
1.5 m			* 18250	16550	* 13250	11100	* 10650	8250	* 9000	6450	* 7950	6250
5'			* 40250	36500	* 29250	24550	* 23450	18200	* 19850	14300	* 17550	13800
0 m			* 18500	16200	* 13750	10850	* 10900	8100	* 8900	6400	* 8850	6400
0'			* 40800	35750	* 30300	23950	* 24000	17850	* 19600	14150	* 19550	14100
-1.5 m	* 14150	* 14150	* 17600	16150	* 13400	10750	* 10550	8000			* 8900	6850
-5'	* 31250	* 31250	* 38850	35600	* 29600	23700	* 23350	17700			* 19700	15100
-3.0 m	* 20250	* 20250	* 15650	* 15650	* 12200	10800	* 9250	8100			* 8850	7800
-10'	* 44700	* 44700	* 34550	* 34550	* 26900	23850	* 20500	17850			* 19500	17250
-4.6 m	* 15250	* 15250	* 12250	* 12250	* 9300	* 9300					* 8250	8250
-15'	* 33600	* 33600	* 27000	* 27000	* 20500	* 20500					* 18250	18250

*Asterisk indicates load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated load capacity does not exceed 87% of hydraulic lift capacity or 75% of tipping load. Total weight of bucket and/or installed attachments must be deducted from the capacities shown above. Lift capacity chart is based on machine located on a solid, level and uniform surface. Load ratings are at the arm bucket pin location, use of any attachment point in a different location to handle objects could affect excavator lift performance.

General specification

Lifting capacity with lifting mode

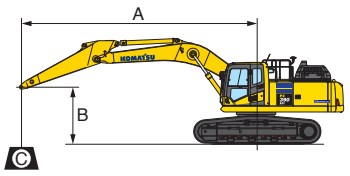


A: Reach from swing center
B: Bucket hook height
C: Lifting capacity
Cf: Rating over front
Cs: Rating over side
⊛ Rating at maximum reach

Conditions
- Boom length: 6,500 mm 21' 3" one-piece boom
- Bucket: None
- Lifting mode: On

Arm: 4,020 mm 13'2" Shoes: 800 mm 31.5" Unit: kg lbs.

A / B	3.0 m 10' Cf	3.0 m 10' Cs	4.6 m 15' Cf	4.6 m 15' Cs	6.1 m 20' Cf	6.1 m 20' Cs	7.6 m 25' Cf	7.6 m 25' Cs	9.1 m 30' Cf	9.1 m 30' Cs	MAX ⊛ Cf	MAX ⊛ Cs
7.6 m											* 5600	* 5600
25'											* 12350	* 12350
6.1 m							* 7900	* 7900	* 6700	6650	* 5450	* 5450
20'							* 17500	* 17500	* 14850	14700	* 12050	* 12050
4.6 m							* 8500	* 8500	* 7800	6600	* 5500	* 5500
15'							* 18750	* 18750	* 17300	14550	* 12100	* 12100
3.0 m			* 14450	* 14450	* 11050	* 11050	* 9250	8350	* 8200	6450	* 5650	5500
10'			* 31850	* 31850	* 24350	* 24350	* 20450	18400	* 18050	14200	* 12500	12100
1.5 m			* 16900	16350	* 12350	10900	* 10000	8050	* 8500	6250	* 6000	5350
5'			* 37250	36050	* 27250	24050	* 22000	17750	* 18800	13850	* 13200	11850
0 m	* 8550	* 8550	* 17950	15700	* 13200	10550	* 10450	7800	* 8700	6150	* 6550	5450
0'	* 18900	* 18900	* 39650	34650	* 29150	23300	* 23050	17250	* 19200	13550	* 14400	12050
-1.5 m	* 12750	* 12750	* 17800	15450	* 13300	10300	* 10500	7650	* 8500	6100	* 7400	5750
-5'	* 28150	* 28150	* 39250	34150	* 29350	22800	* 23150	16950	* 18700	13450	* 16350	12750
-3.0 m	* 18300	* 18300	* 16500	15500	* 12600	10300	* 9850	7650			* 7950	6400
-10'	* 40350	* 40350	* 36450	34200	* 27800	22750	* 21750	16900			* 17600	14150
-4.6 m	* 18650	* 18650	* 14000	* 14000	* 10750	10400	* 7900	7800			* 7750	7750
-15'	* 41150	* 41150	* 30900	* 30900	* 23750	22950	* 17400	17250			* 17100	17100



A: Reach from swing center
B: Bucket hook height
C: Lifting capacity
Cf: Rating over front
Cs: Rating over side
⊛ Rating at maximum reach

Conditions
- Boom length: 6,500 mm 21' 3" one-piece boom
- Bucket: None
- Lifting mode: On

Arm: 4,020 mm 13'2" Shoes: 800 mm 31.5" Unit: kg lbs.

A / B	3.0 m 10' Cf	3.0 m 10' Cs	4.6 m 15' Cf	4.6 m 15' Cs	6.1 m 20' Cf	6.1 m 20' Cs	7.6 m 25' Cf	7.6 m 25' Cs	9.1 m 30' Cf	9.1 m 30' Cs	MAX ⊛ Cf	MAX ⊛ Cs
7.6 m											* 5600	* 5600
25'											* 12350	* 12350
6.1 m							* 7900	* 7900	* 6700	6650	* 5450	* 5450
20'							* 17500	* 17500	* 14850	14700	* 12050	* 12050
4.6 m							* 8500	* 8500	* 7800	6600	* 5500	* 5500
15'							* 18750	* 18750	* 17300	14550	* 12100	* 12100
3.0 m			* 14450	* 14450	* 11050	* 11050	* 9250	8350	* 8200	6450	* 5650	5500
10'			* 31850	* 31850	* 24350	* 24350	* 20450	18400	* 18050	14200	* 12500	12100
1.5 m			* 16900	16350	* 12350	10900	* 10000	8050	* 8500	6250	* 6000	5350
5'			* 37250	36050	* 27250	24050	* 22000	17750	* 18800	13850	* 13200	11850
0 m	* 8550	* 8550	* 17950	15700	* 13200	10550	* 10450	7800	* 8700	6150	* 6550	5450
0'	* 18900	* 18900	* 39650	34650	* 29150	23300	* 23050	17250	* 19200	13550	* 14400	12050
-1.5 m	* 12750	* 12750	* 17800	15450	* 13300	10300	* 10500	7650	* 8500	6100	* 7400	5750
-5'	* 28150	* 28150	* 39250	34150	* 29350	22800	* 23150	16950	* 18700	13450	* 16350	12750
-3.0 m	* 18300	* 18300	* 16500	15500	* 12600	10300	* 9850	7650			* 7950	6400
-10'	* 40350	* 40350	* 36450	34200	* 27800	22750	* 21750	16900			* 17600	14150
-4.6 m	* 18650	* 18650	* 14000	* 14000	* 10750	10400	* 7900	7800			* 7750	7750
-15'	* 41150	* 41150	* 30900	* 30900	* 23750	22950	* 17400	17250			* 17100	17100

*Asterisk indicates load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated load capacity does not exceed 87% of hydraulic lift capacity or 75% of tipping load. Total weight of bucket and/or installed attachments must be deducted from the capacities shown above. Lift capacity chart is based on machine located on a solid, level and uniform surface. Load ratings are at the arm bucket pin location, use of any attachment point in a different location to handle objects could affect excavator lift performance.

Equipment

Cab	PC390LC	PC390LCi
ROPS cab (ISO12117-2)	●	●
High-back air suspension seat, with heat	●	●
Operator Protective Guard (OPG) Level 1 top guard	●	●
Large LCD high-resolution color monitor	●	●
Automatic climate control	●	●
Retractable seat belt (76 mm width) with indicator	●	●
Two 12 V accessory outlets	●	●
Rearview mirrors, right hand and left hand side	●	●
Rearview monitoring system (1 camera)	●	●
Travel alarm	●	●
Proportional joystick control levers	○	●
Operator identification system	●	●
Hydraulic lock lever	●	●
Skylight	●	●
Sunvisor	○	○
Rainvisor	○	○
Working lights, two additional cab mounted	○	○
Straight travel pedal	□	□

Engine	PC390LC	PC390LCi
Komatsu SAA6D114E-6 Tier 4 Final	●	●
Dry type air cleaner, double element	●	●
Fuel pre-filter with water separator	●	●
Fuel high efficiency filter	●	●
Automatic engine warmup system	●	●
Programmable auto idle shut down	●	●
Overheat prevention system	●	●
Turbocharger protection system	●	●

Hydraulic controls	PC390LC	PC390LCi
Pattern change control valve (ISO to BH control)	●	●
Working mode selection system (6 modes)	●	●
Dual pump, closed center load sensing system (CLSS)	●	●
Auto-deceleration system	●	●
Power Max function	●	●
Boom and arm holding valves	●	●
Two boom mode settings	●	●
Boom and arm +1 attach piping	○	○
One way/two way flow hyd control unit Variable pressure, return filter and accumulator	○	-
One way/two way flow hyd control unit Variable pressure and flow, return filter and accumulator	-	○

Technology	PC390LC	PC390LCi
Komtrax level 5.0	●	●
intelligent Machine Control	-	●
264 mm (10.4") IMC color monitor with USB	-	●
Multi-band UHF/915SS radio	-	●
Auto grade assist	-	●
Auto stop control	-	●
Minimum distance control	-	●
Bucket angle hold control	-	●
Provision for auto tilt control*	-	●
Komvision (4-camera system)	-	○□
IMU for auto tilt control	-	□
In field design - 2D simple surface	-	●

Electrical system	PC390LC	PC390LCi
Batteries, large capacity (2 x 12 volt)	●	●
Battery master disconnect switch with lockout tagout	●	●
Alternator (90 A, 24 V)	●	●
Starter motor (11 kW)	●	●
Secondary engine shut off switch	●	●
Working lights (1 front RH side/1 boom LH side)	●	●

Booms and arms	PC390LC	PC390LCi
6,500 mm (21'3") HD boom assembly	●	●
6,500 mm (21'3") HD boom assembly with +1 attach piping	○	○
3,185 mm (10'5") arm assembly	●	●
3,185 mm (10'5") arm assembly with +1 attach piping	○	○
4,020 mm (13'2") arm assembly	○	○
4,020 mm (13'2") arm assembly with +1 attach piping	○	-
Boom foot, boom nose, and arm end steel castings	●	●

Undercarriage and work equipment	PC390LC	PC390LCi
800 mm (31.5") triple grouser track shoes	●	●
900 mm (35") triple grouser track shoes	○	○
700 mm (28") triple grouser track shoes	○	○
8 track/2 carrier rollers (each side)	●	●
Hydraulic track adjusters (each side)	●	●
Track guiding guards, center section (each side)	●	●
Track roller guards, full length (each side)	○	○
Counterweight, 6,920 kg (15,255 lb)	●	●
Counterweight, 7,400 kg (16,315 lb)**	○	-
Object handling H-link	●	●
228 mm (9") track pitch	●	●

Guards and covers	PC390LC	PC390LCi
Revolving frame deck guards	●	●
Revolving frame undercovers	●	●
Track frame swivel guard	●	●
Pump/engine room partition	●	●
Turbocharger exhaust manifold cover	●	●
Dust net for radiator and hydraulic oil cooler	●	●
Slip-resistant foot plates	●	●
Tool-free access to engine and aftertreatment	●	●
Left and right side hand rails	●	●
Cab full front guard, OPG Level 1	○	○
Cab full front guard, OPG Level 2	○	○
Cab top guard, OPG Level 2	○	○
Revolving frame undercovers - heavy duty	○	○
Revolving frame undercovers - severe duty	○	○

Drive and brake system	PC390LC	PC390LCi
Three-speed travel with auto shift	●	●
Double reduction type final drive	●	●
Triple labyrinth final drive seals	●	●

*IMU for auto-tilt control required for operation

**With revolving frame reinforcements, Only available with super long fronts

For a complete list of available attachments, please contact your local Komatsu distributor.

Standard equipment	●
Optional equipment	○
Optional (field install)	□
Not applicable	-

KOMATSU

komatsu.com