

S STANDARD EQUIPMENT

- Air conditioner with defroster
- Alternator, 35 Ampere, 24 V
- Anti-slip plates
- Auto-Decel
- Automatic de-airation system for fuel line
- Automatic engine warm-up system
- Batteries, 110 Ah/2 x 12 V
- Boom holding valve
- Cab, OPG top guard level 1
- Counterweight
- Dry type air cleaner, double element
- Electric horn
- EMMS monitoring system
- Engine, Komatsu SAA6D107E-1
- Engine overheat prevention system
- Fan guard structure
- Hydraulic track adjusters (each side)
- Multi-function color monitor
- Power maximizing system
- PPC hydraulic control system
- Radiator and oil cooler dust proof net
- Rear reflector
- Rearview mirrors, RH, LH, rear, sidewise
- Starting motor, 4.5 kW/24 V x 1
- Suction fan
- Track guiding guard, center section
- Track roller
 - PC228US-3E0, 7 each side
 - PC228USLC-3E0, 9 each side
- Track shoe
 - PC228US-3E0, 600 mm 24" triple grouser
 - PC228USLC-3E0, 700 mm 28" triple grouser
- Travel alarm
- Working light, 3 (boom and cab)
- Working mode selection system

***** OPTIONAL EQUIPMENT

- Alternator, 60 Ampere, 24 V
- Arms
 - 2925 mm 9'7" arm assembly
- Batteries, large capacity
- Boom, 5700 mm 18'8"
- Cab accessories
 - Rain visor
 - Sun visor
- Cab front guard
 - Full height guard
 - Half height guard
- Heater with defroster
- Long lubricating intervals for work equipment bushing (500 hours) except bucket pin bushings
- Seat belt, retractable
- Seat, suspension
- Service valve
- Shoes, triple grouser
 - PC228US-3E0: 700 mm 28", 800 mm 31.5"
 - PC228USLC-3E0: 600 mm 24", 800 mm 31.5"
- Track frame undercover
- Track roller guards (full length)

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PC228US-3E0
PC228USLC-3E0

HORSEPOWER

Gross:116 kW 155 HP @ 2000 rpm

Net:110 kW 148 HP @ 2000 rpm

OPERATING WEIGHT

PC228US-3E0:21900–22530 kg

48,280–49,670 lb

PC228USLC-3E0:22630–23180 kg

49,890–51,100 lb

ecot3

PC
228US



Photo may include optional equipment.

HYDRAULIC EXCAVATOR

WALK-AROUND

HORSEPOWER
 Gross: 116 kW 155 HP @ 2000 rpm
 Net: 110 kW 148 HP @ 2000 rpm

OPERATING WEIGHT
 PC228US-3E0: 21900 – 22530 kg
 48,280 – 49,670 lb
 PC228USLC-3E0: 22630 – 23180 kg
 49,890 – 51,100 lb

BUCKET CAPACITY
 0.50 – 0.93 m³
 0.65 – 1.22 yd³

Komatsu's PC228US-3E0 Series Hydraulic Excavators have a short tail swing profile, designed specifically for work in confined areas. By reducing tail swing, the PC228US-3E0 can work in areas where conventional profile excavators would pose a safety risk.

Ecology and Economy Features

● Low Emission Engine

A powerful, turbocharged and air-to-air aftercooled Komatsu SAA6D107E-1 provides **110 kW** 148 HP. This engine meets EPA Tier 3 and EU stage 3A emissions regulations, without sacrificing power or machine productivity.

- Economy mode improves fuel consumption.

● Low Operation Noise

The dynamic noise is reduced compared with the PC228US-3, realizing a low noise operation.

See page 4.

Safety Operation

- Excellent safety and operability in tight quarters with small tail swing radius design
- Short protrusion of front and rear portion of the upper structure from the track at swing thanks to its round profile
- Small road width occupation for the work

See page 7.

Safety Features

- Anti-slip plates for safe work on machine
- Safety enhancement with large side-view, sidewise, and rear mirrors added.

See page 9.

Productivity Features

● Wide Working Ranges

Job sites that require a long upper reach, such as demolition and slope cutting also benefit from the increased digging and dumping ranges of the PC228US-3E0.

● High Mobility

- Large drawbar pull and steering force display its ability when operating on a slope.
- Excellent mobility with automatic three-travel speed.

● High Stability

The PC228US-3E0 offers exceptional lifting capacity and high stability with a large counterweight that requires no additional clearance.

See page 5.

Excellent Reliability and Durability

- High rigidity work equipment
- Sturdy frame structure
- Reliable Komatsu manufactured major components
- Highly reliable electronic devices

See page 12.



Larger Comfortable Cab

- Low noise design cab with viscous cab mounting
- Sliding convex door facilitates easy entrance in confined areas.
- Large cab meets ISO working space standards.

See page 8.

Multi-function Color Monitor

- Four working modes designed to match engine speed, pump delivery and system pressure.
- Power mode for maximum production/power
- Breaker mode for optimum engine rpm, hydraulic flow, and pressure
- Economy mode for lower fuel consumption and noise
- Lifting mode for high lifting capacity

See page 11.

Easy Maintenance

- Long replacement interval of engine oil, engine oil filter, and hydraulic filter
- Remote mounted engine oil filter and fuel drain valve for easy access
- Equipped with the fuel pre-filter as standard (with water separator)
- Side-by-side cooling function enables only the cooling unit to be attached and detached.
- Equipped with the EMMS monitoring system.

See page 10.

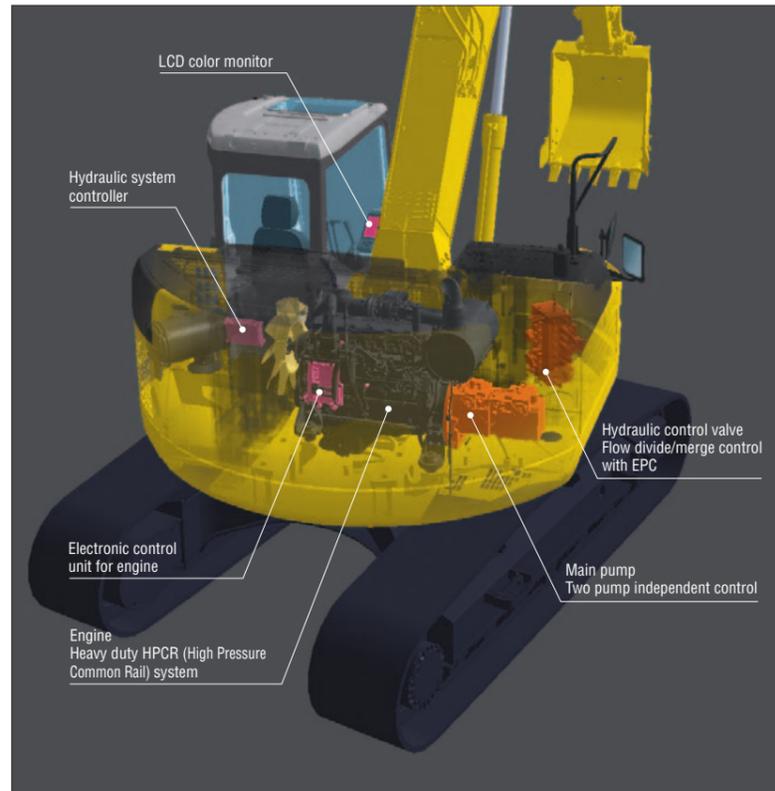
Photo is PC228USLC-3E0. Photo may include optional equipment.

PRODUCTIVITY & ECOLOGY FEATURES

Komatsu Technology

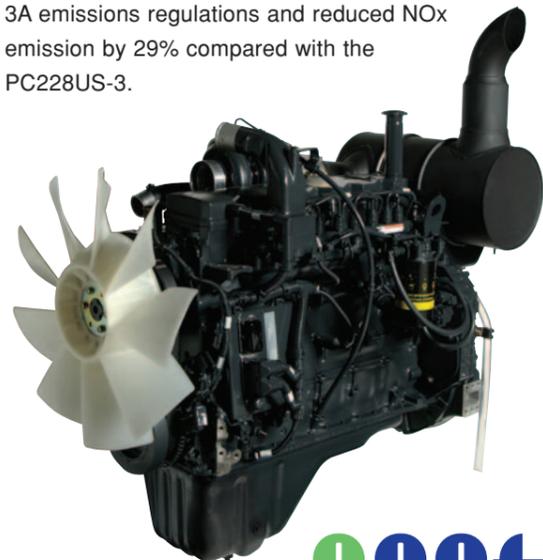


Komatsu develops and produces all major components, such as engines, electronics and hydraulic components, in house. With this "Komatsu Technology," and adding customer feedback, Komatsu is achieving great advancements in technology. To achieve both high levels of productivity and economical performance, Komatsu has developed the main components with a total control system. The result is a new generation of high performance and environment-friendly excavators.



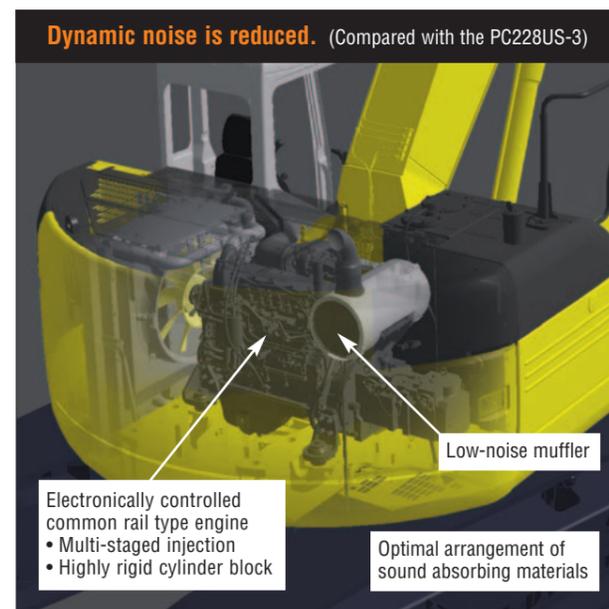
Low Emission Engine

Komatsu SAA6D107E-1 meets EPA, Tier 3 and EU stage 3A emissions regulations and reduced NOx emission by 29% compared with the PC228US-3.



Low Operation Noise

Enables a low noise operation using the low-noise engine and methods to cut noise at source.



Large Digging Force

The machine has a digging force equal to that of PC200-8. Furthermore, the operator can increase the power by 8% using single-touch power increase function when requiring an extra power.

Excellent Travel Performance

With large drawbar pull and automatic gearshift function that changes the travel speed between Hi and Lo speed at the optimum shift point according to the load, the machine can travel over the sever job site. The machine can also travel quickly and speedy and comfortably travel while making a turn.



High Stability

The PC228US-3E0 offers exceptional lifting capacity and high stability with a large counterweight that requires no additional clearance.



Working Mode Selection

The PC228US-3E0 excavator is equipped with four working modes (P, E, L and B mode). Each mode is designed to match engine speed, pump speed, and system pressure with the current application. This provides the flexibility to match equipment performance to the job at hand.

Working Mode	Application	Advantage
P	Power mode	<ul style="list-style-type: none"> Maximum production/power Fast cycle time
E	Economy mode	<ul style="list-style-type: none"> Excellent fuel economy
L	Lifting mode	<ul style="list-style-type: none"> Hydraulic pressure is increased by 7%
B	Breaker mode	<ul style="list-style-type: none"> Optimum engine rpm, hydraulic flow for breaker operation



Economy Mode

Economy mode is environmentally friendly. Fuel consumption is reduced 14% (compared with PC228US-3 Active mode).

Lifting Mode

When the lifting mode is selected, lifting capacity is increased 7% by raising hydraulic pressure.

Breaker Mode

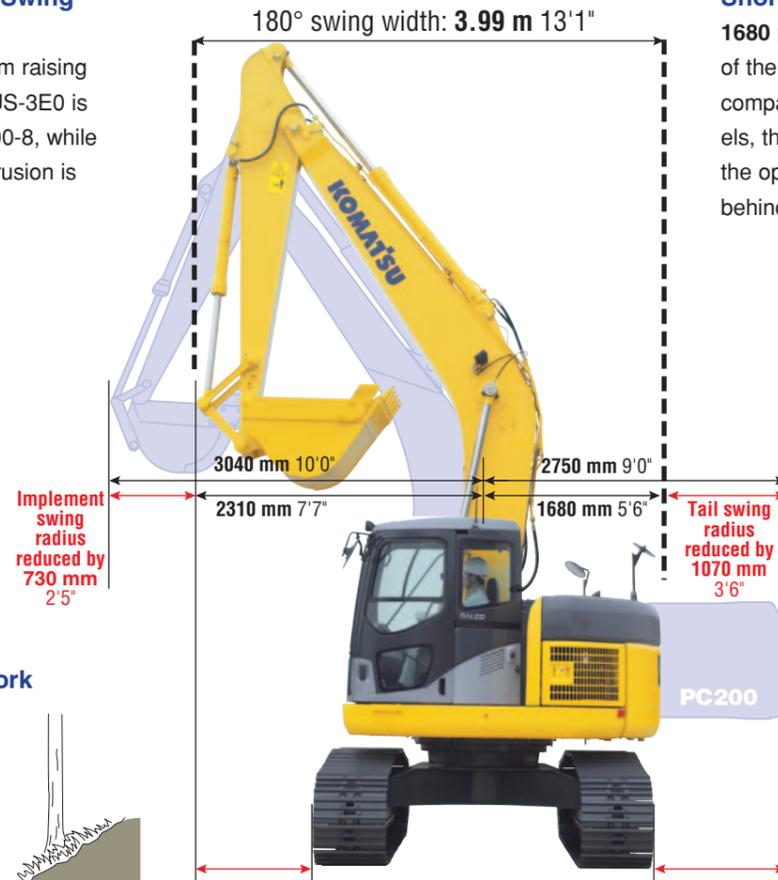
Flow can be adjusted from the cab to match various attachment requirements.

SAFETY OPERATION FEATURES

Safety Operation with Small Tail Swing Even in Confined Areas

Short Implement Swing Radius:

2310 mm 7'7"—Boom raising angle of the PC228US-3E0 is larger than the PC200-8, while front implement protrusion is lessened.



Short Tail Swing Radius:

1680 mm 5'6"—Because the tail of the PC228US-3E0 is more compact than conventional models, the PC228US-3E0 reduces the operator's need to check behind him for movement.

Logging Road Work



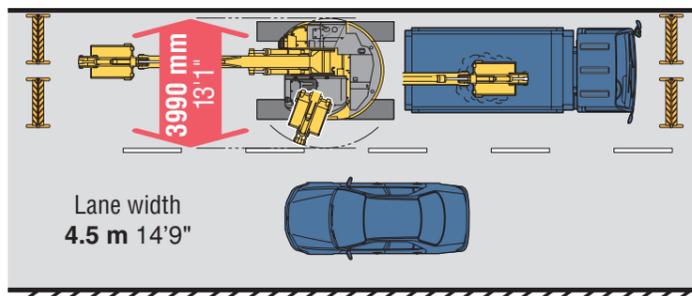
Protrusion from track:

PC228US	910 mm 3'0"
PC228USLC	770 mm 2'6"
PC200	1640 mm 5'5"

Protrusion from track:

PC228US	280 mm 11.0"
PC228USLC	140 mm 5.5"
PC200	1350 mm 4'5"

Road and Bridge Work



Versatile Application with Compact Machine Body and Wide Working Range

Max. digging height	10700 mm 35'1"
Max. digging depth	6620 mm 21'9"
Max. digging reach	9875 mm 32'5"



Roadwork

When performing a roadwork, protrusion of the machine to the unoccupied lane is kept minimum since the rear portion of the upper structure protrudes slightly from the track at swing. This allows a dump truck to be positioned closer to the track of the machine. The operator is able to load materials efficiently onto the front of the dump body at ease since ample dumping reach is assured for the loading. Large working space is not required for the machine.

Logging and forest roadwork

Since the protrusion of the rear portion of the upper structure is kept minimum, there is less possibility of the counterweight hitting against a tree or a slope, allowing the operator to operate the machine at ease. Furthermore, large digging height facilitates a slope finishing work large drawbar pull assures smooth and powerful traveling even on rough terrain.

Demolition

The machine needs less working space and can perform efficient demolition work since it has large and ample digging height.

Round Profile of Both Front and Rear Portion of the Upper Structure for Safer Operation

Komatsu hydraulic excavators with small tail swing radius design adopt the round profile for both left and right corners of the front portion of the upper structure as well as its rear portion that features less protrusion from the track at swing. The round profile design contributes to the prevention of contact accident at swing and allows the machine to work in tight quarters or job sites where there are some obstacles.



WORKING ENVIRONMENT

PC228US-3E0 cab interior is spacious and provides a comfortable working environment...

Large Comfortable Cab

Multi-Position Controls

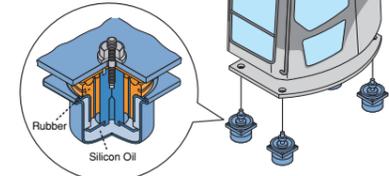
The multi-position, PPC (pressure proportional control) levers allow the operator to work in comfort while maintaining precise control. A double-slide mechanism allows the seat and controllers to move together or independently, allowing the operator to position the seat and controllers for maximum productivity and comfort.

Low Cab Noise

Cab is highly rigid and has excellent sound absorption ability. Thorough improvement of noise source reduction and use of low noise engine, hydraulic equipment, and air conditioner allows this machine to generate a low level of noise.

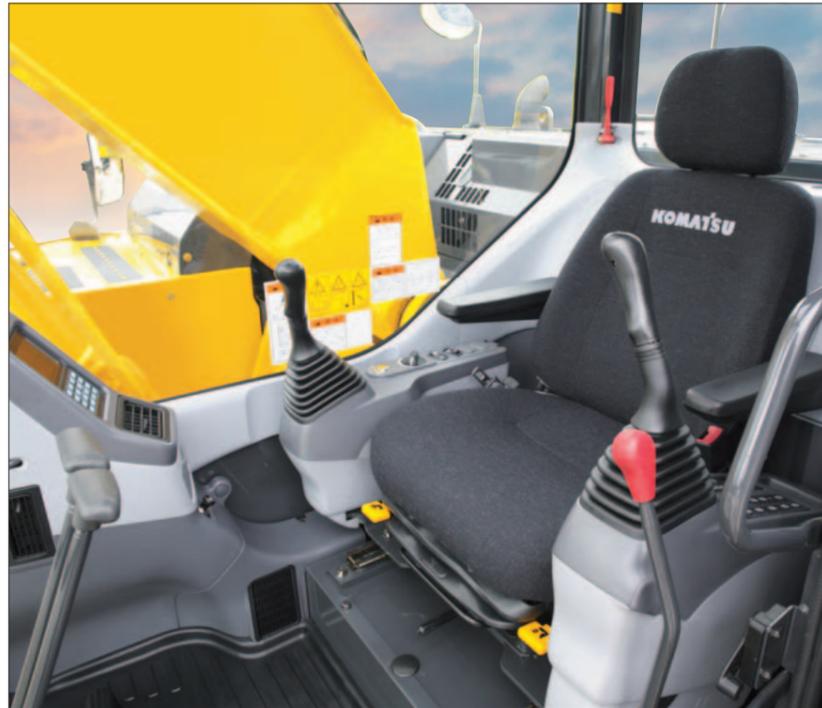
Comfortable Ride with Multi-layer Viscous Cab Mounts

Multi-layer viscous mounts are adopted for cab mount system. The cab mount system absorbs shocks and aids vibration reduction to provide comfortable ride.



Pressurized Cab

Optional air conditioner, air filter and a higher internal air pressure (+3.0 mm Aq +0.1"Aq) prevent external dust from entering the cab.



Roomy Cab that Meets ISO Operator Space Standard

The cab meets ISO operator space standard and provides a large operator with ample operation space. The cab has wide doorway for easy getting on/off.



Large Capacity Air Conditioner

A 6,900 kcal air conditioner is utilized. The bi-level control function keeps the operator's head and feet cool and warm respectively. This improved air flow function keeps the inside of the cab comfortable throughout the year. Defroster function keeps cab glass clear.

Sliding Convex Door

The sliding convex door facilitates easy entrance in confined areas while reducing the danger of being damaged on roadways because the door does not protrude when open. The cab also features a sliding window on the door.

Easy Pull-up Type Front Window

The front window with lightweight sash frame can be pulled up easily. The window pulled up can be locked up at the cab top with a single-touch.



Safety Features

Sturdy Cab Protects the Operator from Falling Objects

Fully press mold cab meets the ISO head guard standard of OPG top guard level 1. The cab is produced by means of press integral molding and has a strengthened frame structure with improved total rigidity, featuring excellent durability and impact resistance. Combined with the adoption of inertia-reel seat belt, the cab protects the operator from falling objects.



Inertia-reel Seat Belt

Easy-to-use inertia-reel seat belt is employed. The belt supports the operator in case of an emergency.



Tempered and Tinted Glass

Tempered and tinted glass that meets occupational safety and health regulations is used for cab windows. The glass features high strength and blocks ultraviolet rays.

Emergency Escape Hammer

The cab is equipped with an emergency escape hammer to be used for breaking the rear window glass in case of an emergency.

Start-to-travel Alarm

An alarm is installed as a standard equipment to give other workers a warning that the machine will start to travel.

Pump/engine Room Partition

Pump/engine room partition prevents oil from spraying on the engine if a hydraulic hose should burst.

Anti-slip Plates

Highly durable anti-slip plates maintain superior traction performance for the long term.



Lock Lever

Locks the hydraulic system to prevent unintentional movement. Neutral start function allows machine to be started only in lock position.



Large Side-view, Rear, and Sidewise Mirrors

Enlarged left-side mirror and addition of rear and side mirror allow the PC228US-3E0 to meet the new ISO visibility requirements.



Wide Visibility

The right side window pillar has been removed and the rear pillar reshaped to provide better visibility.



Openable Skylight

Provides upper visibility.



MAINTENANCE FEATURES

Easy Maintenance

Komatsu designed the PC228US-3E0 to have easy service access. We know by doing this, routine maintenance and servicing are less likely to be skipped, which can mean a reduction in costly downtime later on. Here are some of the many service features found on the PC228US-3E0:

Optimum Maintenance Layout

Effortless access to engine-related maintenance items such as oil filter, oil dipstick, coolant reserve tank, fuel filter, and air cleaner.

Left rear side cover

1. Cooling water reserve tank
2. Air cleaner
3. Battery
4. Tool box
5. Grease gun holder

Right rear side cover

6. Fuel pre-filter
7. Engine oil filter*
8. Oil filler for PTO*
9. Fuel drain valve*

Right front side cover

10. Windshield washer tank

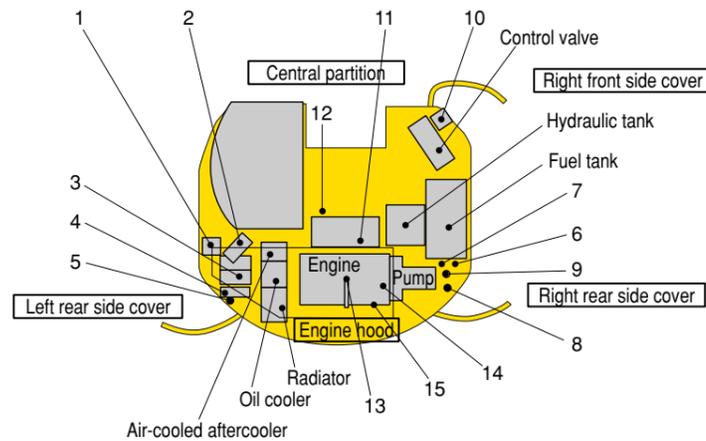
Central partition

11. Oil level check pipe for machinery
12. Oil filler for machinery

Opening/Closing of engine hood

13. Engine oil check pipe
14. Engine oil filler
15. Fuel filter

*Remote maintenance items



Easy Radiator Cleaning

Since radiator and oil cooler are arranged side-by-side, it is easy to clean, remove and install them.



Equipped with the Fuel Pre-filter (with Water Separator)

Removes water and contaminants in the fuel to prevent fuel problems.



Washable Floor

The PC228US-3E0's floor is easy to keep clean. The gently inclined surface has a flanged floormat and drainage holes to facilitate runoff.



Maintenance Costs Reduced

Long Replacement Interval of Hydraulic Oil and Filter/Engine Oil and Filter

High performance filters are used in the hydraulic circuit and engine. Longer hydraulic oil, hydraulic oil filter, engine oil and engine oil filter element replacement intervals significantly reduce maintenance costs.



- Engine oil & engine oil filter every 500 hours
- Hydraulic oil every 5000 hours
- Hydraulic oil filter every 1000 hours

Long Work Equipment Greasing Interval (optional)

High quality BMRC bushings and resin shims are optionally available for work equipment pins excluding bucket, extending greasing interval to 500 hours (except bucket pin bushings).

LCD Multi-function Color Monitor



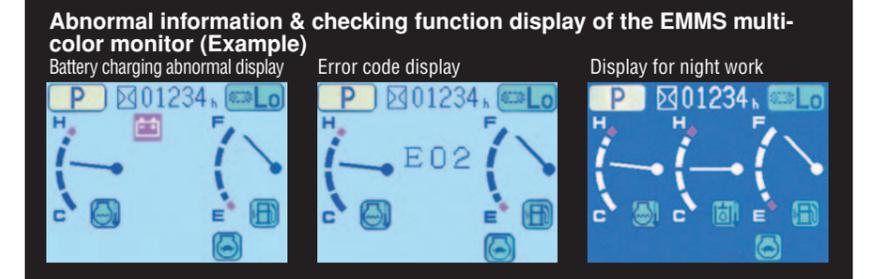
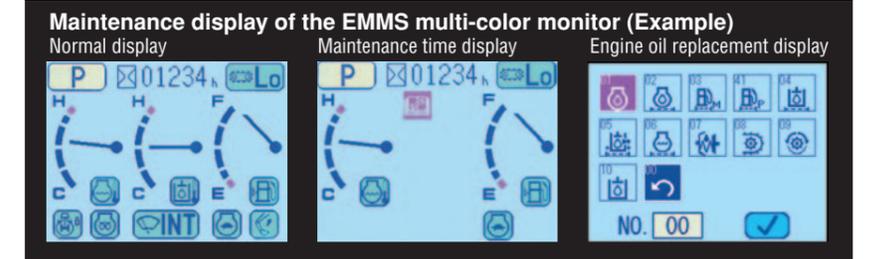
- Indicators**
- 1 Working mode
 - 2 Service meter
 - 3 Travel speed
 - 4 Engine water temperature gauge
 - 5 Hydraulic oil temperature gauge
 - 6 Fuel gauge
 - 7 Swing parking brake
 - 8 Preheater
 - 9 Wiper
 - 10 Auto-decelerator
 - 11 Power Max.
- Switches**
- 1 Power mode
 - 2 Economy mode
 - 3 Lifting mode
 - 4 Breaker mode
 - 5 Buzzer cancel
 - 6 Selector switch
 - 7 Auto-decelerator
 - 8 Travel speed selection
 - 9 Screen adjustment switch
 - 10 Maintenance mode
 - 11 Wiper
 - 12 Windshield washer
 - 13 Input control switches

Self-diagnostic Monitor

The PC228US-3E0 features the most advanced diagnostics system in the industry. The Komatsu exclusive system identifies maintenance items, reduces diagnostic times, indicates oil and filter replacement hours and displays error codes.

Continuous Machine Monitoring System

When turning starting switch ON, Check-before-starting item and caution items appear on the liquid crystal panel. If abnormalities are found, a warning lamp blinks and a warning buzzer sounds. The continuous machine condition checks help prevent the development of serious problems and allows the operator to concentrate on the controls.



Abnormally Display with Code

When an error occurs during operation, a user code is displayed. When an important user code is displayed, a caution lamp blinks and a warning buzzer sounds to prevent the development of serious problems.

Oil Maintenance Function

When machine exceeds oil or filter replacement time, the oil maintenance monitor lights to inform operator.

Trouble Data Memory Function

Monitor stores abnormalities for effective troubleshooting.

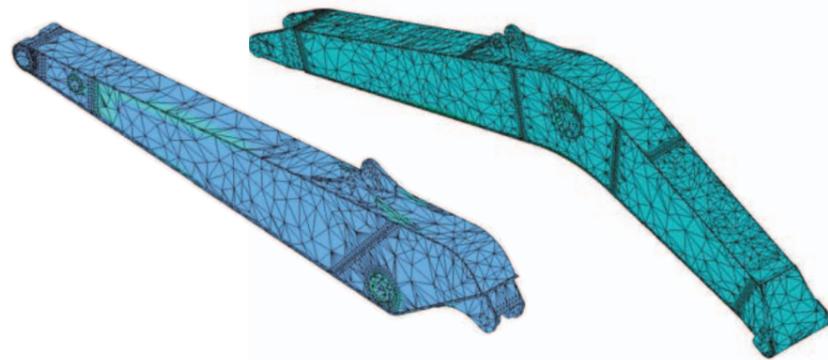


Equipment Management Monitoring System

RELIABILITY FEATURES

High Rigidity Work Equipment

Boom and arms are constructed of thick plates of high tensile strength steel. In addition, these structures are designed with large cross-sectional areas and generous use of castings. The result is working attachments that exhibit long term durability and high resistance to bending and torsional stress.



Sturdy Frame Structure

The revolving frame, center frame and undercarriage are designed by using the most advanced three-dimensional CAD and FEM analysis technology.

Reliable Components

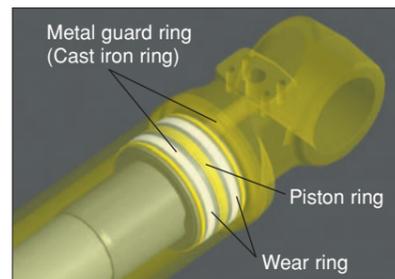
All of the major machine components, such as engine, hydraulic pumps, hydraulic motors and control valves are exclusively designed and manufactured by Komatsu.

Highly Reliable Electronic Devices

Exclusively designed electronic devices have passed severe testing.

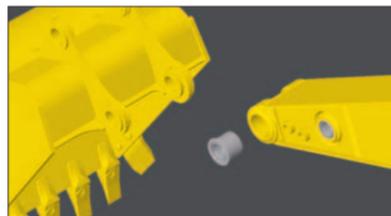
- Controller
- Sensors
- Connectors
- Heat resistant wiring

Metal Guard Rings Protect all the Hydraulic Cylinders and Improve Reliability.



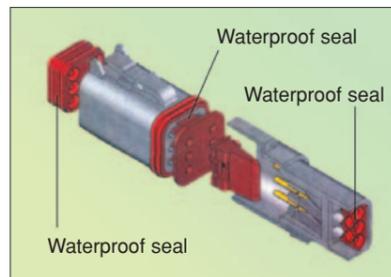
Durable Arm Tip Bushing

The end face of arm tip bushing provides high resistance to seizure and wear.



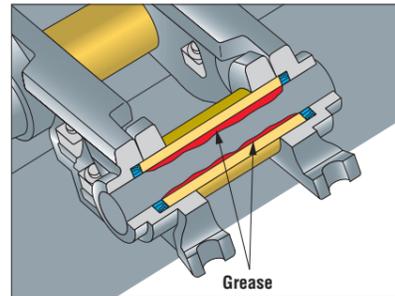
DT-type Connectors

DT-type connectors seal tight and have higher reliability.



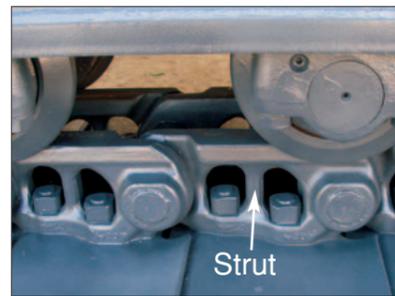
Grease Sealed Track

PC228US-3E0 uses grease sealed tracks for extended undercarriage life.



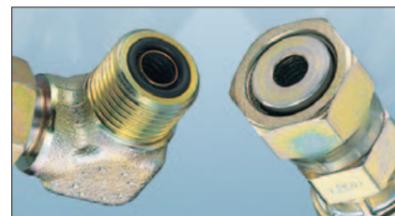
Track Link with Strut

PC228US-3E0 uses track links with strut, providing superb durability.



O-ring Face Seal

The hydraulic hose seal method has been changed from a conventional taper seal to an O-ring seal. This provides improved sealing performance.



SPECIFICATIONS



ENGINE

Model Komatsu SAA6D107E-1
 Type Water-cooled, 4-cycle, direct injection
 Aspiration Turbocharged, aftercooled
 Number of cylinders 6
 Bore **107 mm** 4.21"
 Stroke **124 mm** 4.88"
 Piston displacement **6.69 ltr** 408 in³
 Horsepower:
 SAE J1995 Gross **116 kW** 155 HP
 ISO 9249 / SAE J1349 Net **110 kW** 148 HP
 Rated rpm 2000 rpm
 Fan drive method for radiator cooling Mechanical
 Governor All-speed control, electronic
 Meets EPA Tier 3 and EU stage 3A



HYDRAULICS

Type HydraMind (Hydraulic Mechanical Intelligence New Design) system, closed-center system with load sensing valves and pressure compensated valves
 Number of selectable working modes 4
 Main pump:
 Type Variable displacement piston type
 Pumps for Boom, arm, bucket, swing, and travel circuits
 Maximum flow **428 ltr/min** 113 U.S. gal/min
 Supply for control circuit Self-reducing valve
 Hydraulic motors:
 Travel 2 x axial piston motor with parking brake
 Swing 1 x axial piston motor with swing holding brake
 Relief valve setting:
 Implement circuits **37.3 MPa** 355 kgf/cm² 5,050 psi
 Travel circuit **37.3 MPa** 380 kgf/cm² 5,400 psi
 Swing circuit **28.4 MPa** 290 kgf/cm² 4,120 psi
 Pilot circuit **3.2 MPa** 33 kgf/cm² 470 psi
 Hydraulic cylinders:
 (Number of cylinders – bore x stroke x rod diameter)
 Boom **2–120 mm x 1385 mm x 85 mm** 4.7" x 54.5" x 3.3"
 Arm **1–135 mm x 1490 mm x 95 mm** 5.3" x 58.7" x 3.7"
 Bucket: **1–115 mm x 1120 mm x 80 mm** 4.5" x 44.1" x 3.2"



DRIVES AND BRAKES

Steering control Two levers with pedals
 Drive method Hydrostatic
 Maximum drawbar pull **202 kN** 20600 kg 45,410 lb
 Gradeability 70%, 35°
 Maximum travel speed: High **5.5 km/h** 3.4 mph
 (Auto-Shift) Mid **4.1 km/h** 2.5 mph
 (Auto-Shift) Low **3.0 km/h** 1.9 mph
 Service brake Hydraulic lock
 Parking brake Mechanical disc brake



SWING SYSTEM

Drive method Hydrostatic
 Swing reduction Planetary double reduction
 Swing circle lubrication Grease-bathed
 Service brake Hydraulic lock
 Holding brake/Swing lock Mechanical disc brake
 Swing speed 11.0 rpm



UNDERCARRIAGE

Center frame X-frame
 Track frame Box-section
 Seal of track Sealed track
 Track adjuster Hydraulic
 Number of shoes (each side):
 PC228US-3E0 45
 PC228USLC-3E0 49
 Number of carrier rollers 2 each side
 Number of track rollers (each side):
 PC228US-3E0 7
 PC228USLC-3E0 9



COOLANT AND LUBRICANT CAPACITY (REFILLING)

Fuel tank **320 ltr** 84.5 U.S. gal
 Coolant **21.0 ltr** 5.5 U.S. gal
 Engine **23.1 ltr** 6.1 U.S. gal
 Final drive, each side **5.2 ltr** 1.4 U.S. gal
 Swing drive **7.1 ltr** 1.9 U.S. gal
 Hydraulic tank **126 ltr** 33.3 U.S. gal



OPERATING WEIGHT (APPROXIMATE)

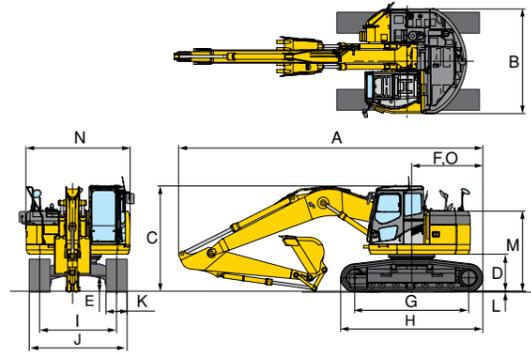
Operating weight including **5700 mm** 18'8" one-piece boom, **2925 mm** 9'7" arm, SAE heaped **0.80 m³** 1.05 yd³ backhoe bucket, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

Shoes	PC228US-3E0		PC228USLC-3E0	
	Operating Weight	Ground Pressure	Operating Weight	Ground Pressure
600 mm 24"	21900 kg 48,280 lb	50.0 kPa 0.51 kgf/cm ² 7.25 psi	22630 kg 49,890 lb	47 kPa 0.48 kgf/cm ² 6.83 psi
700 mm 28"	22280 kg 49,120 lb	43.1 kPa 0.44 kgf/cm ² 6.26 psi	22900 kg 50,490 lb	40.2 kPa 0.41 kgf/cm ² 5.83 psi
800 mm 31.5"	22530 kg 49,670 lb	38.2 kPa 0.39 kgf/cm ² 5.55 psi	23180 kg 51,100 lb	36 kPa 0.37 kgf/cm ² 5.26 psi

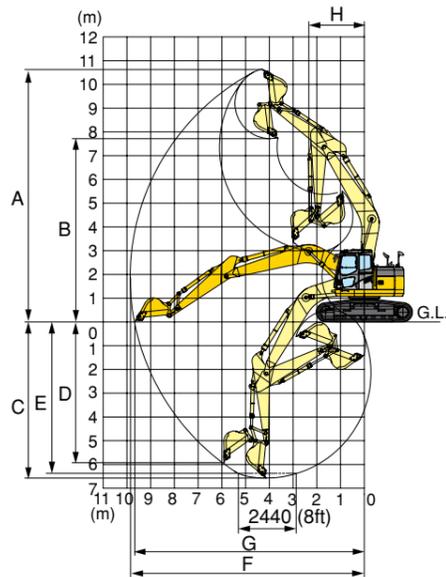
DIMENSIONS

	PC228US-3E0	PC228USLC-3E0
Arm	2925 mm 9'7"	2925 mm 9'7"
A Overall length	8700 mm 28'7"	8890 mm 29'2"
B Overall width	2980 mm 9'9"	3080 mm 10'1"
C Overall height (to top of cab)*	3035 mm 9'11"	3035 mm 9'11"
D Ground clearance, counterweight*	1060 mm 3'6"	1060 mm 3'6"
E Minimum Ground clearance	440 mm 1'5"	440 mm 1'5"
F Tail swing radius	1680 mm 5'6"	1680 mm 5'6"
G Length of track on ground	3275 mm 10'9"	3655 mm 12'0"
H Track length	4070 mm 13'4"	4450 mm 14'7"
I Track gauge	2200 mm 7'3"	2380 mm 7'10"
J Width of crawler	2800 mm 9'2"	3080 mm 10'1"
K Shoe width	600 mm 23'6"	700 mm 27'6"
L Grouser height	26 mm 1"	26 mm 1"
M Machine cab height*	2285 mm 7'6"	2285 mm 7'6"
N Upper structure width	2980 mm 9'9"	2980 mm 9'9"
O Distance, swing center to rear end	1680 mm 5'6"	1680 mm 5'6"

* Excluding grouser height



WORKING RANGE



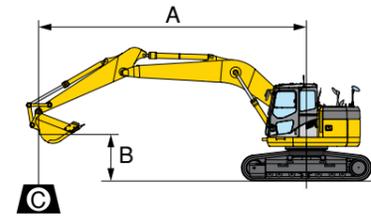
Arm	2925 mm 9'7"
A Max. digging height	10700 mm 35'1"
B Max. dumping height	7825 mm 25'8"
C Max. digging depth	6620 mm 21'9"
D Max. vertical wall digging depth	5980 mm 19'7"
E Max. digging depth of cut for 8' level	6370 mm 20'11"
F Max. digging reach	9875 mm 32'5"
G Max. digging reach at ground level	9700 mm 31'10"
H Min. swing radius	2310 mm 7'7"
SAE rating Bucket digging force at power max.	138 kN 14100 kgf/31,080 lb
Arm crowd force at power max.	101 kN 10300 kgf/22,710 lb
ISO rating Bucket digging force at power max.	149 kN 15200 kgf/33,510 lb
Arm crowd force at power max.	108 kN 11000 kgf/24,250 lb

BACKHOE BUCKET, ARM, AND BOOM COMBINATION

Bucket Capacity (heaped)		Width		Weight	Number of Teeth	Arm Length
SAE, PCSA	CECE	Without Side Cutters	With Side Cutters	With Side Cutters		2.93 m 9'7"
0.50 m ³ 0.65 yd ³	0.45 m ³ 0.59 yd ³	750 mm 29.5"	875 mm 34.4"	478 kg 1,050 lb	3	○
0.80 m ³ 1.05 yd ³	0.70 m ³ 0.92 yd ³	1045 mm 41.1"	1170 mm 46.1"	635 kg 1,400 lb	5	○
0.93 m ³ 1.22 yd ³	0.80 m ³ 1.05 yd ³	1200 mm 47.2"	1325 mm 52.2"	696 kg 1,530 lb	5	□

○: General purpose use, density up to 1.8 ton/m³ 1.52 U.S. ton/yd³
 □: General purpose use, density up to 1.5 ton/m³ 1.26 U.S. ton/yd³

LIFTING CAPACITY WITH LIFTING MODE

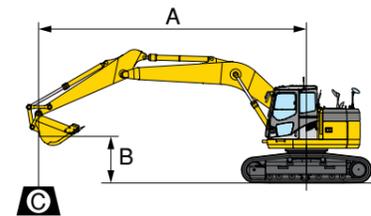


A: Reach from swing center
 B: Bucket hook height
 C: Lifting capacity
 Cf: Rating over front
 Cs: Rating over side
 ●: Rating at maximum reach

Conditions:
 ● 5700 mm 18'8" one-piece boom
 ● 0.8 m³ 1.05 yd³ SAE heaped bucket
 ● Shoe width:
 —PC228US-3E0 600 mm 24" triple grouser

PC228US-3E0		Arm: 2925 mm 9'7"		Bucket: 0.8 m ³ 1.05 yd ³ SAE heaped		Shoe: 600 mm 24" triple grouser							
B	A	● MAX		7.5 m 24'		6.0 m 19'		4.5 m 14'		3.0 m 9'		1.5 m 4'	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
6.0 m 19'		*2750 kg *6,000 lb	2350 kg 5,200 lb			*4300 kg *9,500 lb	3700 kg 8,200 lb						
4.5 m 14'		*2750 kg *6,100 lb	1900 kg 4,200 lb	3850 kg 8,500 lb	2300 kg 5,100 lb	*4900 kg *10,800 lb	3550 kg 7,800 lb	*5450 kg *12,100 lb	*5450 kg *12,100 lb				
3.0 m 9'		*2900 kg *6,400 lb	1700 kg 3,700 lb	3700 kg 8,200 lb	2200 kg 4,800 lb	5450 kg 12,000 lb	3300 kg 7,300 lb	*7450 kg *16,400 lb	5300 kg 11,700 lb	*11750 kg *26,000 lb	10250 kg 22,600 lb		
1.5 m 4'		2850 kg 6,300 lb	1600 kg 3,500 lb	3600 kg 7,900 lb	2050 kg 4,500 lb	5200 kg 11,400 lb	3050 kg 6,700 lb	8300 kg 18,300 lb	4750 kg 10,500 lb	*6800 kg *15,000 lb	*6800 kg *15,000 lb		
0 m 0'		2900 kg 6,400 lb	1600 kg 3,600 lb	3500 kg 7,700 lb	1950 kg 4,300 lb	4950 kg 10,900 lb	2850 kg 6,300 lb	7900 kg 17,400 lb	4450 kg 9,800 lb	*7950 kg *17,500 lb	*7950 kg *17,500 lb	*7100 kg *15,700 lb	*7100 kg *15,700 lb
-1.5 m -4'		3200 kg 7,000 lb	1800 kg 3,900 lb	3450 kg 7,600 lb	1950 kg 4,300 lb	4850 kg 10,700 lb	2750 kg 6,100 lb	7750 kg 17,100 lb	4300 kg 9,500 lb	*11300 kg *24,900 lb	8500 kg 18,700 lb	*10850 kg *23,900 lb	*10850 kg *23,900 lb
-3.0 m -9'		3850 kg 8,400 lb	2150 kg 4,800 lb			4900 kg 10,800 lb	2750 kg 6,100 lb	7800 kg 17,200 lb	4350 kg 9,600 lb	*15600 kg *34,500 lb	8700 kg 19,100 lb		
-4.5 m -14'		5500 kg 12,100 lb	3150 kg 7,000 lb					8050 kg 17,700 lb	4550 kg 10,000 lb	*13200 kg *29,100 lb	9050 kg 19,900 lb		

* Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE Standard No. J/ISO10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.



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:
 ● 5700 mm 18'8" one-piece boom
 ● 0.8 m³ 1.05 yd³ SAE heaped bucket
 ● Shoe width:
 —PC228USLC-3E0 700 mm 28" triple grouser

PC228USLC-3E0		Arm: 2925 mm 9'7"		Bucket: 0.8 m ³ 1.05 yd ³ SAE heaped		Shoe: 700 mm 28" triple grouser							
B	A	● MAX		7.5 m 24'		6.0 m 19'		4.5 m 14'		3.0 m 9'		1.5 m 4'	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
6.0 m 19'		*2750 kg *6,000 lb	*2750 kg *6,000 lb			*4300 kg *9,500 lb	*4300 kg *9,500 lb						
4.5 m 14'		*2750 kg *6,100 lb	2350 kg 5,100 lb	*4650 kg *10,300 lb	2750 kg 6,100 lb	*4900 kg *10,800 lb	4150 kg 9,200 lb	*5450 kg *12,100 lb	*5450 kg *12,100 lb				
3.0 m 9'		*2900 kg *6,400 lb	2100 kg 4,600 lb	4700 kg 10,300 lb	2650 kg 5,800 lb	*5850 kg *12,900 lb	3900 kg 8,600 lb	*7450 kg *16,400 lb	6250 kg 13,800 lb	*11750 kg *26,000 lb	*11750 kg *26,000 lb		
1.5 m 4'		*3200 kg *7,100 lb	2000 kg 4,400 lb	4550 kg 10,000 lb	2500 kg 5,600 lb	6550 kg 14,500 lb	3650 kg 8,100 lb	*9400 kg *20,700 lb	5700 kg 12,500 lb	*6800 kg *15,000 lb	*6800 kg *15,000 lb		
0 m 0'		*3700 kg *8,200 lb	2000 kg 4,400 lb	4450 kg 9,800 lb	2400 kg 5,300 lb	6350 kg 14,000 lb	3450 kg 7,600 lb	10250 kg 22,600 lb	5350 kg 11,800 lb	*7950 kg *17,500 lb	*7950 kg *17,500 lb		
-1.5 m -4'		4100 kg 9,000 lb	2200 kg 4,900 lb	4400 kg 9,700 lb	2350 kg 5,200 lb	6250 kg 13,700 lb	3350 kg 7,400 lb	10100 kg 22,300 lb	5250 kg 11,600 lb	*11300 kg *24,900 lb	10450 kg 23,100 lb	*7100 kg *15,700 lb	*7100 kg *15,700 lb
-3.0 m -9'		4900 kg 10,800 lb	2650 kg 5,900 lb			6250 kg 13,800 lb	3350 kg 7,400 lb	10150 kg 22,400 lb	5300 kg 11,700 lb	*10650 kg *23,500 lb	10650 kg 23,500 lb	*10850 kg *23,900 lb	*10850 kg *23,900 lb
-4.5 m -14'		*6900 kg *15,200 lb	3850 kg 8,400 lb					*9150 kg *20,200 lb	5500 kg 12,100 lb	*13200 kg *29,100 lb	11050 kg 24,300 lb		

* Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE Standard No. J/ISO10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.