

KOMATSU

PC170LC-11

EU Stage IV Engine

HYDRAULIC EXCAVATOR



PC170LC

ENGINE POWER

90 kW / 121 HP @ 2.100 rpm

OPERATING WEIGHT

17.500 - 18.670 kg

BUCKET CAPACITY

max. 0,94 m³

Walk-Around

PG170LG-11



Photo may display optional equipment or specifications not available in your area.

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INCREASED PRODUCTIVITY AND ENVIRONMENTAL PERFORMANCE

Powerful and Environmentally Friendly

- EU Stage IV engine
- Adjustable idle shutdown
- Komatsu fuel-saving technology
- Engine fan clutch
- Reduced wastage

First-Class Comfort

- Fully air-suspended operator station
- KomVision surround view system (option)
- Widescreen monitor with evolutionary interface
- Low noise levels
- Improved operator convenience

Maximized Efficiency

- Built-in versatility and superior productivity
- Enhanced engine management
- Lower hydraulic pressure loss
- Up to 6% higher productivity

Safety First

- Komatsu SpaceCab™
- Improved monitoring system
- Neutral position detection system
- Safe access, easy maintenance
- Falling Object Protection System (FOPS) level 1

Quality You Can Rely On

- Komatsu-quality components
- Extensive dealer support network
- Reliable and efficient

KOMTRAX™

- Komatsu Wireless Monitoring System
- 3G mobile communications
- Integrated communication antenna
- Increased operational data and fuel savings



A maintenance program
for Komatsu customers

Powerful and Environmentally Friendly



Higher productivity

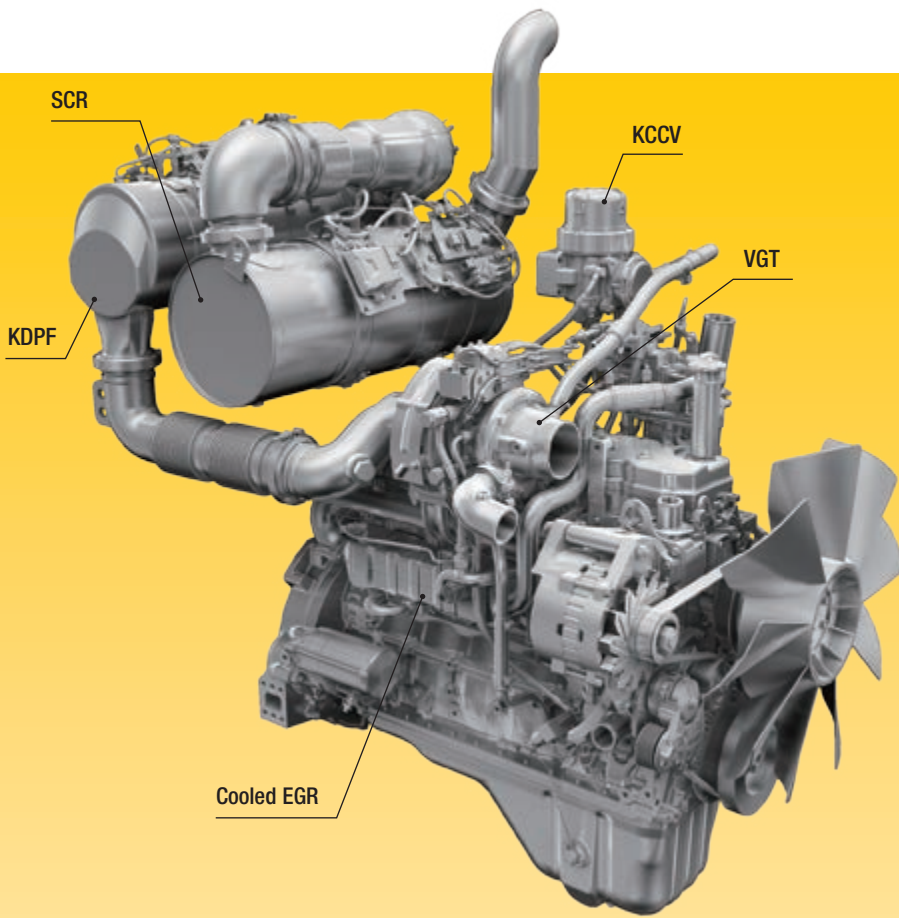
The PC170LC-11 is quick and precise. It features a powerful Komatsu EU Stage IV engine, Komatsu's Closed Center Load Sensing (CLSS) hydraulic system and first-class Komatsu comfort to provide a fast response and unrivalled productivity for its class (up to 6% higher compared with the previous model).

Komatsu fuel-saving technology

Engine management is enhanced. The variable speed matching of the engine and hydraulic pumps guarantee efficiency and precision during single and combined movements. Fuel consumption is lower by up to 2% vs. the industry best PC170LC-10.

Adjustable idle shutdown

The Komatsu auto idle shutdown automatically turns off the engine after it idles for a set period of time. This feature can easily be programmed from 5 to 60 minutes, to reduce unnecessary fuel consumption and exhaust emissions, and to lower operating costs. An Eco-gauge and the Eco guidance tips on the cab monitor further encourage efficient operations.



Komatsu EU Stage IV

The Komatsu EU Stage IV engine is productive, dependable and efficient. With ultra-low emissions, it provides a lower environmental impact and a superior performance to help reduce operating costs and lets the operator work in complete peace of mind.

Heavy-duty aftertreatment

The aftertreatment system combines a Komatsu Diesel Oxidation Catalyst (KDOC) and Selective Catalytic Reduction (SCR). The SCR injects the correct amount of AdBlue® into the system at the proper rate to break down NOx into water (H₂O) and non-toxic nitrogen gas (N₂).

Exhaust Gas Recirculation (EGR)

Cooled EGR is a technology well-proven in current Komatsu engines. The increased capacity of the EGR cooler now ensures very low NOx emissions and a better engine performance.

Komatsu Closed Crankcase Ventilation (KCCV)

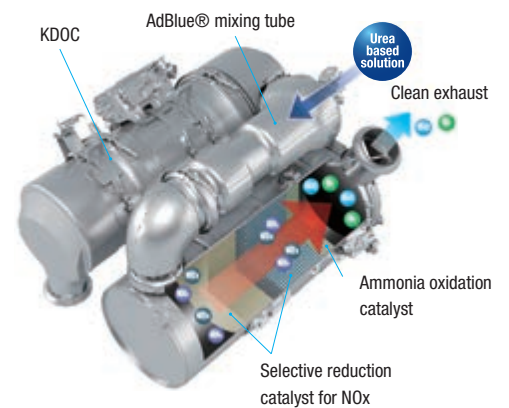
Crankcase emissions (blow-by gas) are passed through a CCV filter. The oil mist trapped in the filter is returned back to the crankcase while the filtered gas is returned to the air intake.

High-Pressure Common Rail (HPCR)

To achieve complete fuel burn and lower exhaust emissions, the heavy duty High-Pressure Common Rail fuel injection system is computer controlled to deliver a precise quantity of pressurised fuel into the redesigned engine combustion chamber by multiple injections.

Variable Geometry Turbo (VGT)

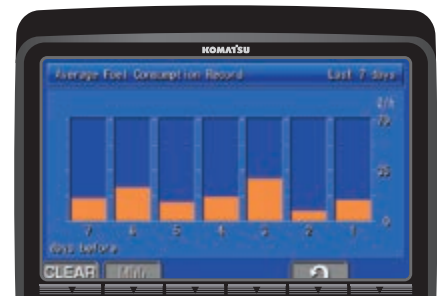
The VGT provides optimal airflow to the engine combustion chamber under all speed and load conditions. Exhaust gas is cleaner, fuel economy is improved while machine power and performance are maintained.



Eco-gauge, Eco guidance and fuel consumption gauge



ECO guidance record



Fuel consumption history

Total Versatility

Ideal for a wide range of applications

Powerful and precise, the Komatsu PC170LC-11 is equipped to efficiently carry out any task your business requires. On big sites or small, for digging, trenching, landscaping or site preparation, the Komatsu original equipment hydraulic system always ensures maximum productivity and control.

6 working modes

Power, Lifting, Breaker, Economy, Attachment Power and Attachment Economy modes are all available, ensuring that the PC170LC-11 delivers the power you need with minimised fuel usage. The Economy mode can be adjusted for an ideal balance between power and economy to match your work. The oil flow delivered to hydraulic attachments is adjustable directly on the class-leading wide screen monitor panel.

A wide choice of options

With a choice of arms and undercarriages, you can configure the PC170LC-11 to match specific demands for transport, working envelope or duty. Extra hydraulic arrangements are available for every boom and arm configuration, making sure that the machine always contributes strongly to your business.

High lift capacity

Along with its class leading compact size, the PC170LC-11 features an unrivalled lifting performance (up to 3% higher than the previous model). The combination of power, convenient dimensions and complete control makes the PC170LC-11 the first choice for heavy duty lifting applications or simple excavating tasks in narrow alleys, road-construction sites and for sewer-construction work.

Built-in versatility

A standard fit additional hydraulic circuit, controlled by a sliding joystick push button and a floor mounted pedal, gives the PC170LC-11 excellent versatility. Ten attachment memory settings are provided, with individually definable names. In combination with the standard-fit hydraulic quick coupler power circuit, changing working style is now even simpler. A second auxiliary hydraulic line is available for attachments which require extra hydraulic actuation.



PC170LC-11



First-Class Comfort

Increased comfort

In the wide Komatsu SpaceCab™, a standard air-suspended high-back seat, heated for improved comfort and with fully adjustable armrests, is the centre of a comfortable and low-fatigue working environment. High visibility and ergonomic controls further assist to maximise the operator's productivity.

Perfect operator convenience

In addition to the standard radio, the PC170LC-11 has an auxiliary input for connecting external devices and play music through the cab speakers. Two 12-volt power ports are also incorporated in the cab. Proportional controls are fitted as standard for safe and precise operation of attachments.

Low-noise design

Komatsu crawler excavators have very low external noise levels and are especially well-suited for work in confined spaces or urban areas. The optimal usage of sound insulation and of sound absorbing materials helps to make noise levels inside the cab comparable to those of an executive car.



Joysticks with proportional control button for attachments



Auxiliary input (MP3 jack) & cup holder



12 V and 24 V power supply

Information & Communication Technology



Lower operating costs

Komatsu ICT contributes to the reduction of operating costs by assisting to comfortably and efficiently manage operations. It raises the level of customer satisfaction and the competitive edge of our products.

Widescreen monitor

Conveniently customisable and with a choice of 26 languages, the wide-screen monitor with simple switches and multifunction keys gives fingertip access to a large range of functions and operating info. The rear camera view and an AdBlue® level gauge are now incorporated into the default main screen.

An evolutionary interface

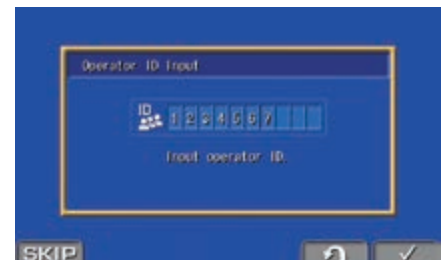
Helpful information is now easier than ever to find and understand with the upgraded monitor interface. An optimal main screen for the ongoing work can be selected simply by pressing the F3 key.



Quick view on the operation logs

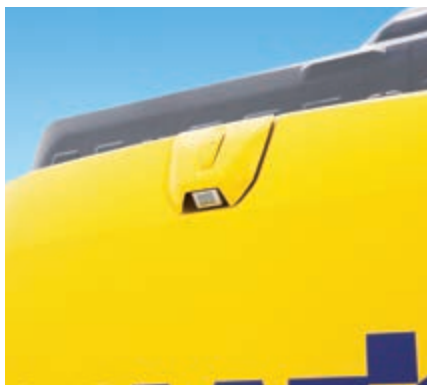


The rear-view camera can be displayed



Operator identification function

Safety First



Standard rear-view camera

Rear-view camera

A standard fitment camera gives you an exceptionally clear view of the rear work zone on the widescreen monitor panel. This low profile camera is integrated into the counterweight's shape and adjustable. On request, the KomVision system can be equipped.



Exceptional operator protection

Safe SpaceCab™

The cab is ROPS compliant with ISO 12117-2:2008. It has a tubular steel frame and provides very high shock absorbency, impact resistance and durability. The seat belt is designed to keep the operator in the safety zone of the cab in the event of a roll-over. Optionally it can be fitted with an ISO 10262 Level 2 Falling Object Protective System (FOPS) with openable front guard.



Hand rails and anti-slip plates

Safe maintenance

Thermal guards around high temperature areas of the engine, protected fan belt and pulleys, a pump/engine partition that prevents hydraulic oil from spraying onto the engine, a wide catwalk and exceptionally sturdy handrails: in Komatsu tradition, the highest safety level is provided for a fast and smooth maintenance.

Optimal jobsite safety

Safety features on the Komatsu PC170LC-11 comply with the latest industry standards and work in synergy to minimise risks to people in and around the machine. A neutral detection system for travel and work equipment levers increase jobsite safety, along with a seat belt caution indicator and an audible travel alarm. Highly durable anti-slip plates – with additional high friction covering – maintain long term traction performance.

KomVision (optional)

KomVision can display a bird's eye view representation of the machine on the standard monitor by using 4 cameras installed on the sides and rear of the machine.



Quality You Can Rely On

Komatsu-quality

With the latest computer techniques and a thorough test programme, Komatsu's global know-how produces equipment to meet your highest standards. All major components of the PC170LC-11 are designed and directly manufactured by Komatsu, and essential machine functions are perfectly matched for a highly reliable and productive excavator.

Rugged design

Maximum toughness and durability are the cornerstones of Komatsu's philosophy – along with safety and top class customer service. Single piece plates and castings are used in key areas of the machine's structure for good load distribution. Highly durable rubbing strips on the underside of the arm protect the structure against impact damage.

Extensive support network

The extensive Komatsu distribution and dealer network is standing by to help keep your fleet in optimum condition. Customised servicing packages are available, with express availability of spare parts, to make sure that your Komatsu equipment continues to perform at its peak.



Durable and reliable undercarriage design for maximum protection



Cast boom foot and single piece boom plates

Easy Maintenance



Optimum maintenance layout

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

Komatsu CARE™

Komatsu CARE™ is a maintenance program that comes as standard with your new Komatsu machine. It covers factory-scheduled maintenance, performed with Komatsu Genuine parts by Komatsu-trained technicians. Depending on your machine's engine, it also offers extended coverage of the Komatsu Diesel Particulate Filter (KDPF) or the Komatsu Diesel Oxidation Catalyst (KDOC), and of the Selective Catalytic Reduction (SCR). Please contact your local Komatsu distributor for terms and conditions.



Long-life oil filters

The Komatsu Genuine hydraulic oil filter uses high-performance filtering material for long replacement intervals, which significantly reduces maintenance costs.

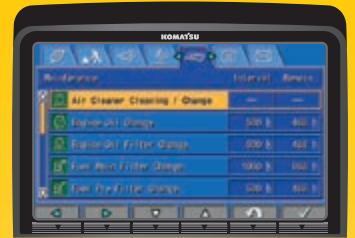


AdBlue® tank

For simple access, the AdBlue® tank is installed on the front stairway.

Flexible warranty

When you purchase Komatsu equipment, you gain access to a broad range of programmes and services that have been designed to help you get the most from your investment. For example, Komatsu's Flexible Warranty Programme provides a range of extended warranty options on the machine and its components. These can be chosen to meet your individual needs and activities. This programme is designed to help reduce total operating costs.



Basic maintenance screen



AdBlue® level and refill guidance



Standard water separator



KOMTRAX™

The way to higher productivity

KOMTRAX™ uses the latest wireless monitoring technology. Compatible on PC, smartphone or tablet, it delivers insightful and cost saving information about your fleet and equipment, and offers a wealth of information to facilitate peak machine performance. By creating a tightly integrated web of support it allows proactive and preventive maintenance and helps to efficiently run a business.



Knowledge

You get quick answers to basic and critical questions about your machines – what they're doing, when they did it, where they're located, how they can be used more efficiently and when they need to be serviced. Performance data is relayed by wireless communication technology (satellite, GPRS or 3G depending on model) from the machine to a computer and to the local Komatsu distributor – who's readily available for expert analysis and feedback.

Power

The detailed information that KOMTRAX™ puts at your fingertips 24 hours a day, 7 days a week gives the power to make better daily and long-term strategic decisions – at no extra cost. Problems can be anticipated, maintenance schedules customised, downtime minimised and machines kept where they belong: working on the jobsite.

Convenience

KOMTRAX™ enables convenient fleet management on the web, wherever you are. Data is analysed and packaged specifically for effortless and intuitive viewing in maps, lists, graphs and charts. You can foresee eventual maintenance issues and required spare parts, and troubleshoot a problem before Komatsu technicians arrive on site.



Specifications

ENGINE

Model	Komatsu SAA4D107E-3
Type	Common rail direct injection, water-cooled, emissionised, turbocharged, after-cooled diesel
Engine power	
at rated engine speed	2.100 rpm
ISO 14396	90 kW/121 HP
ISO 9249 (net engine power)	90 kW/121 HP
No. of cylinders	4
Bore × stroke	107 × 124 mm
Displacement	4,46 l
Air filter type	Double element type with monitor panel dust indicator and auto dust evacuator
Cooling	Suction type cooling fan with radiator fly screen

HYDRAULIC SYSTEM

Type	HydrauMind. Closed-centre system with load sensing and pressure compensation valves
Additional circuits	2 additional circuits with proportional control can be installed
Main pump	1 variable displacement piston pump supplying boom, arm, bucket, swing and travel circuits
Maximum pump flow	298 l/min
Relief valve settings	
Implement	380 kg/cm ²
Travel	380 kg/cm ²
Swing	295 kg/cm ²
Pilot circuit	33 kg/cm ²

SERVICE REFILL CAPACITIES

Fuel tank	300 l
Radiator	22 l
Engine oil	18 l
Swing drive	4,5 l
Hydraulic tank	121 l
Final drive (each side)	5,4 l
AdBlue® tank	29,6 l

OPERATING WEIGHT (APPR.)

	Mono boom	
	Operating weight	Ground pressure
Triple grouser shoes		
500 mm	17.500 kg	0,51 kg/cm ²
600 mm	17.700 kg	0,43 kg/cm ²
700 mm	17.900 kg	0,37 kg/cm ²
800 mm	18.100 kg	0,33 kg/cm ²

Operating weight, including specified work equipment, 2,6 m arm, 0,65 m³ bucket, operator, lubricant, coolant, full fuel tank and the standard equipment.

SWING SYSTEM

Type	Axial piston motor driving through planetary double reduction gearbox
Swing lock	Electrically actuated wet multidisc brake integrated into swing motor
Swing speed	0 - 12 rpm
Swing torque	45 kNm

DRIVES AND BRAKES

Steering control	2 levers with pedals giving full independent control of each track
Drive method	Hydrostatic
Gradeability	70%, 35°
Max. travel speeds	
Lo / Hi	3,0 / 5,5 km/h
Maximum drawbar pull	15.950 kg
Brake system	Hydraulically operated discs in each travel motor

UNDERCARRIAGE

Construction	X-frame centre section with box section track frames
Track assembly	
Type	Fully sealed
Shoes (each side)	44
Tension	Combined spring and hydraulic unit
Rollers	
Track rollers (each side)	7
Carrier rollers (each side)	2

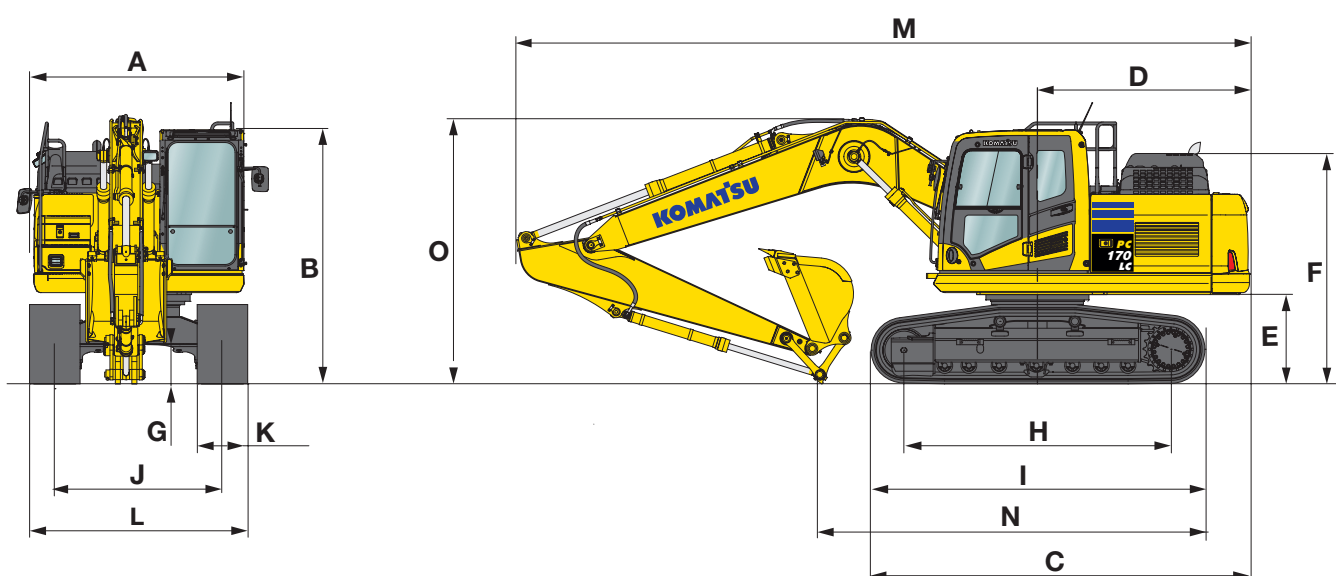
ENVIRONMENT

Engine emissions	Fully complies with EU Stage IV exhaust emission regulations
Noise levels	
LwA external	99 dB(A) (2000/14/EC Stage II)
LpA operator ear	68 dB(A) (ISO 6396 dynamic test)
Vibration levels (EN 12096:1997)	
Hand/arm	≤ 2,5 m/s ² (uncertainty K = 0,48 m/s ²)
Body	≤ 0,5 m/s ² (uncertainty K = 0,23 m/s ²)
Contains fluorinated greenhouse gas HFC-134a (GWP 1430). Quantity of gas 0,9 kg, CO ₂ equivalent 1,29 t	

Dimensions & Performance Figures

MACHINE DIMENSIONS

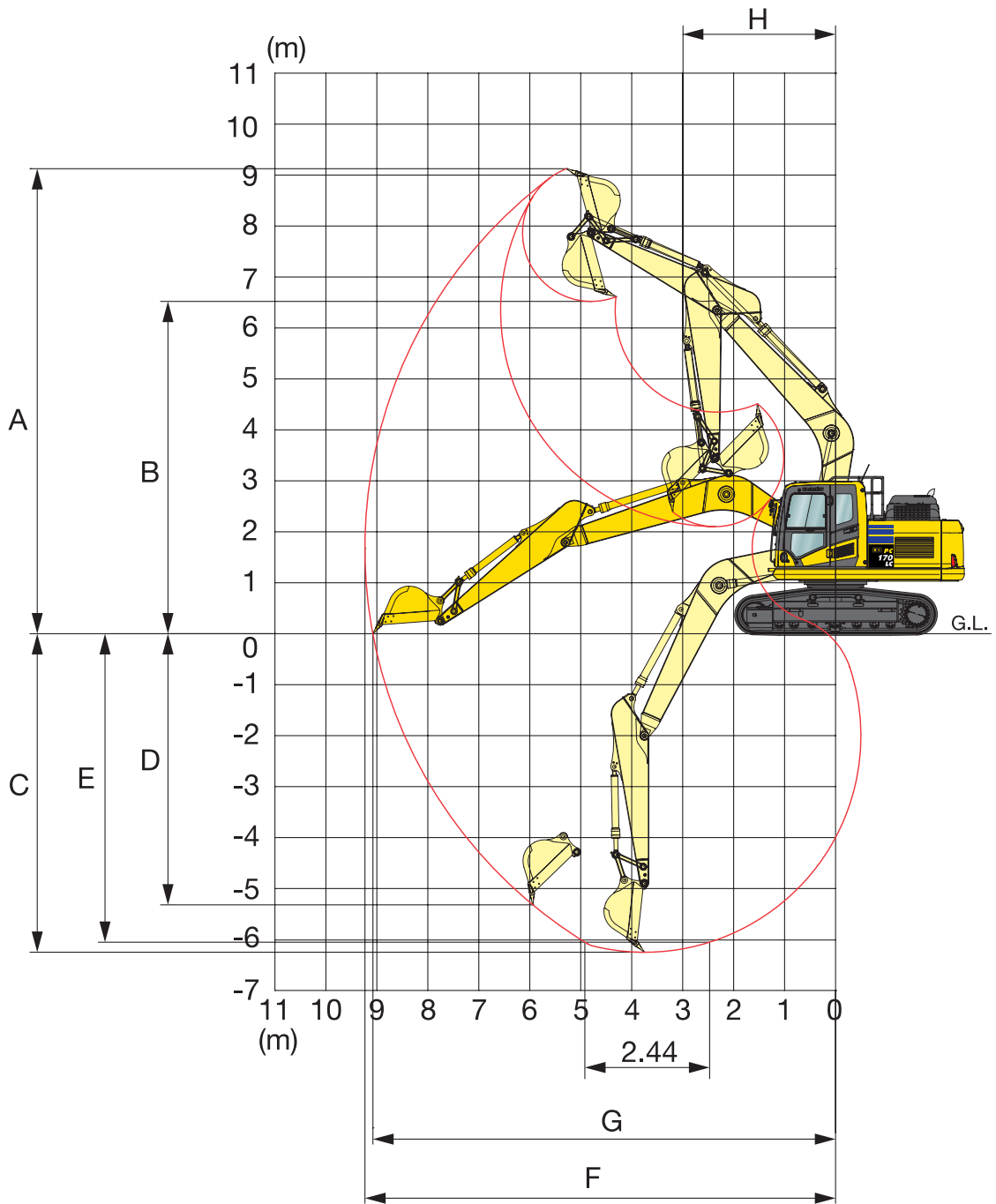
A	Overall width of upper structure	2.490 mm
B	Overall height of cab	3.035 mm
C	Overall length of basic machine	4.495 mm
D	Tail length	2.515 mm
	Tail swing radius	2.545 mm
E	Clearance under counterweight	1.055 mm
F	Machine tail height	2.710 mm
G	Ground clearance	440 mm
H	Tumbler centre distance	3.170 mm
I	Track length	3.965 mm
J	Track gauge	1.990 mm
K	Track shoe width	500, 600, 700, 800 mm
L	Overall track width with 500 mm shoes	2.490 mm
	Overall track width with 600 mm shoes	2.590 mm
	Overall track width with 700 mm shoes	2.690 mm
	Overall track width with 800 mm shoes	2.790 mm



TRANSPORT DIMENSIONS

		Mono boom		
		2,25 m	2,6 m	2,9 m
M	Transport length	8.690 mm	8.690 mm	8.690 mm
N	Length on ground (transport)	5.130 mm	4.760 mm	4.565 mm
O	Overall height (to top of boom)	3.030 mm	3.040 mm	3.140 mm

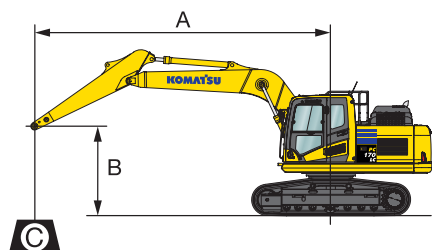
Working Range



ARM LENGTH	2,25 m	2,6 m	2,9 m
A Max. digging height	8.910 mm	8.980 mm	9.130 mm
B Max. dumping height	6.280 mm	6.370 mm	6.525 mm
C Max. digging depth	5.610 mm	5.960 mm	6.250 mm
D Max. vertical wall digging depth	4.860 mm	5.040 mm	5.320 mm
E Max. digging depth of cut for 2,44 m level	5.375 mm	5.740 mm	6.050 mm
F Max. digging reach	8.680 mm	8.960 mm	9.235 mm
G Max. digging reach at ground level	8.510 mm	8.800 mm	9.075 mm
H Min. swing radius	3.040 mm	2.990 mm	2.995 mm

PG170LG-11

Lifting Capacity



A – Reach from swing center

B – Bucket hook height

C – Lifting capacities

- Rating over front
- Rating over side
- Rating at maximum reach

Weights:

Bucket linkage and bucket cylinder: 237 kg

With 500 mm shoes

Arm length	A				7,5 m		6,0 m		4,5 m		3,0 m		1,5 m	
	B													
	6,0 m	kg	*2.600	*2.600			*3.050	*3.050						
	4,5 m	kg	*2.550	2.350			*4.450	3.050	*5.000	4.950				
	3,0 m	kg	*2.600	2.050	*2.600	2.000	4.800	2.950	*6.400	4.650	*9.900	8.600		
	1,5 m	kg	*2.900	1.900	3.250	1.900	4.650	2.750	7.400	4.300				
	0,0 m	kg	3.300	1.950	3.200	1.850	4.500	2.650	7.150	4.100	*6.800	*6.800		
	- 1,5 m	kg	3.700	2.200			4.450	2.600	7.050	4.000	*9.600	7.750	*6.450	*6.450
	- 3,0 m	kg	4.700	2.800			4.500	2.650	*7.100	4.100	*10.350	7.900	*9.600	*9.600
- 4,5 m	kg	*4.800	*4.800							*7.000	*7.000			

	6,0 m	kg	*2.150	*2.150			*3.350	3.150						
	4,5 m	kg	*2.100	*2.100			*4.200	3.100						
	3,0 m	kg	*2.200	1.900	3.300	2.000	*4.750	2.950	*6.000	4.700	*8.700	*8.700		
	1,5 m	kg	*2.400	1.800	3.250	1.900	4.650	2.800	7.400	4.350	*7.550	*7.550		
	0,0 m	kg	*2.850	1.800	3.150	1.850	4.500	2.650	7.150	4.100	*5.350	*5.350		
	- 1,5 m	kg	3.450	2.000			4.450	2.600	7.050	4.000	*9.400	7.700	*4.600	*4.600
	- 3,0 m	kg	4.250	2.500			4.450	2.600	7.050	4.050	*11.050	7.800	*8.800	*8.800
- 4,5 m	kg	*5.000	4.000					*5.500	4.200	*8.100	*8.000			

	6,0 m	kg	*1.850	*1.850			*3.300	3.200						
	4,5 m	kg	*1.800	*1.800	*2.200	2.050	*3.900	3.100						
	3,0 m	kg	*1.900	1.750	3.300	2.000	*4.550	2.950	*5.600	4.750	*8.350	*8.350		
	1,5 m	kg	*2.050	1.650	3.200	1.900	4.650	2.750	*7.150	4.350	*7.700	*7.700		
	0,0 m	kg	*2.400	1.650	3.150	1.800	4.450	2.600	7.100	4.050	*6.000	*6.000		
	- 1,5 m	kg	*3.000	1.850	3.100	1.800	4.400	2.550	6.950	3.950	*8.950	7.550	*4.400	*4.400
	- 3,0 m	kg	3.850	2.250			4.400	2.550	7.000	3.950	*11.400	7.650	*9.250	*9.250
- 4,5 m	kg	*4.900	3.400					*6.050	4.100	*8.850	7.900			

* Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE Standard No. J1097. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load. Lifting capacity stated is based on lifting with bare arm. When lifting with additional equipment installed to the arm, please subtract the weight of all additional equipment from the values stated.



Standard and Optional Equipment

ENGINE

Komatsu SAA4D107E-3 turbocharged common rail direct injection diesel engine	●
EU Stage IV compliant	●
Automatic engine warm-up system	●
Engine overheat prevention system	●
Fuel control dial	●
Auto-deceleration function	●
Adjustable idle shutdown	●
Engine key stop	●
Engine ignition can be password secured on request	●
Alternator 24 V/60 A	●
Starter motor 24 V/4,5 kW	●
Batteries 2 × 12 V/120 Ah	●

HYDRAULIC SYSTEM

Electronic closed-centre load sensing (E-CLSS) hydraulic system (HydrauMind)	●
Pump and engine mutual control (PEMC) system	●
6-working mode selection system; Power mode, Economy mode, Breaker mode, Attachment Power and Attachment Economy mode, and Lifting/Fine Operation mode	●
PowerMax function	●
Adjustable PPC wrist control levers for arm, boom, bucket and swing, with sliding proportional control for attachments and 3 auxiliary buttons	●
Prepared for hydraulic quick-coupler	●
Additional hydraulic functions	○

DRIVES AND BRAKES

Hydrostatic, 2-speed travel system with automatic shift and planetary gear type final drives, and hydraulic travel and parking brakes	●
PPC control levers and pedals for steering and travel	●

UNDERCARRIAGE

Track roller guards	●
Track frame under-guards	●
LC undercarriage	●
500, 600, 700, 800 mm triple grouser shoes	○

CABIN

Reinforced safety SpaceCab™; highly pressurised and tightly sealed hyper viscous mounted cab with tinted safety glass windows, large roof window with sun shade, pull-up type front window with locking device, removable lower window, front window wiper with intermittent feature, cigarette lighter, ashtray, luggage shelf, floor mat	●
Heated, high back air suspension seat with lumbar support, console mounted height adjustable arm rests, and retractable seat belt	●
Automatic climate control system	●
12/24 Volt power supplies	●
Beverage holder and magazine rack	●
Hot and cool box	●
Radio	●
Auxiliary input (MP3 jack)	●
Lower wiper	●
Rain visor (not with OPG)	●

SERVICE AND MAINTENANCE

Automatic fuel line de-aeration	●
Double element type air cleaner with dust indicator and auto dust evacuator	●
KOMTRAX™ – Komatsu wireless monitoring system (3G)	●
Komatsu CARE™ – a maintenance program for Komatsu customers	●
Multifunction video compatible colour monitor with Equipment Management and Monitoring System (EMMS) and efficiency guidance	●
Toolkit	●
Service points	○

LIGHTING SYSTEM

Working lights: 2 revolving frame, 1 boom	●
Additional working lights: 4 cab roof (front), 1 cab roof (rear), 1 boom, 1 counterweight (rear), beacon	●

SAFETY EQUIPMENT

Rear view camera	●
Electric horn	●
Overload warning device	●
Audible travel alarm	●
Boom safety valves	●
Large handrails, rear-view mirrors	●
Battery main switch	●
ROPS compliant to ISO 12117-2:2008	●
Emergency engine stop switch	●
Seat belt caution indicator	●
Neutral position detection system	●
Arm safety valve	●
KomVision surround view system	○
OPG Level II front guard (FOPS), hinged type	○
OPG Level II top guard (FOPS)	○

WORK EQUIPMENT

Mono boom	●
2,25 m; 2,6 m; 2,9 m arms	○

OTHER EQUIPMENT

Standard counterweight	●
Remote greasing for swing circle and pins	●
Electric refuelling pump with automatic shut-off function	●
Biodegradable oil for hydraulic system	○
Additional counterweight 3.230 kg	○

Further equipment on request

- standard equipment
- optional equipment

Your Komatsu partner:

KOMATSU

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