

# KOMATSU®

## PC220LC-8

**FLYWHEEL HORSEPOWER**  
125 kW **168 HP** @ 2000 rpm

**OPERATING WEIGHT**  
24634–24914 kg  
**54,309–54,926 lb**

**BUCKET CAPACITY**  
0.58–1.41 m<sup>3</sup> **0.76–1.85 yd<sup>3</sup>**

**PC  
220  
LC**



Photo may include optional equipment.

HYDRAULIC EXCAVATOR

# PC220LC-8 HYDRAULIC EXCAVATOR

## SPECIFICATIONS



### ENGINE

Model ..... Komatsu SAA6D107E-1  
 Type ..... Water-cooled, 4-cycle, direct injection  
 Aspiration ..... Turbocharged and aftercooled  
 Number of cylinders ..... 6  
 Bore ..... 107 mm **4.21"**  
 Stroke ..... 124 mm **4.88"**  
 Piston displacement ..... 6.69 ltr **408 in<sup>3</sup>**  
 Horsepower  
   SAE J1995 ..... Gross 134 kW **179 HP**  
   ISO 9249/SAE J1349 ..... Net 125 kW **168 HP**  
   Rated rpm ..... 2000 rpm  
 Fan drive type ..... Mechanical Governor  
   Governor ..... All-speed, electronic  
 EPA Tier 3 and EU stage 3A emission certified.



### HYDRAULIC SYSTEM

Type ..... HydraulMind  
 (Hydraulic Mechanical Intelligence New Design)  
 closed-center system with load sensing  
 valves and pressure compensated valves  
 Number of selectable working modes ..... 5  
 Main pump:  
   Type ..... Variable displacement piston type  
   Pumps for ..... Boom, arm, bucket, swing, and travel circuits  
   Maximum flow ..... 439 ltr/min **116 U.S. 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<sup>2</sup> **5,400 psi**  
   Travel circuit ..... 37.3 MPa 380 kg/cm<sup>2</sup> **5,400 psi**  
   Swing circuit ..... 29.9 MPa 295 kg/cm<sup>2</sup> **4,190 psi**  
   Pilot circuit ..... 3.2 MPa 33 kg/cm<sup>2</sup> **470 psi**

Hydraulic cylinders:  
 Number of cylinders—bore x stroke x rod diameter  
   Boom ..... 2 – 135 mm x 1335 mm x 90 mm **5.3" x 52.6" x 3.5"**  
   Arm ..... 1 – 140 mm x 1635 mm x 100 mm **5.5" x 64.4" x 3.9"**  
   Bucket ..... 1-130 mm x 1020 mm x 90 mm **5.1" x 40.2" x 3.5"**



### DRIVES AND BRAKES

Steering control ..... Two levers with pedals  
 Drive method ..... Hydrostatic  
 Maximum drawbar pull ..... 202 kN 20570 kg **45,350 lb**  
 Gradeability ..... 70%, 35°  
 Maximum travel speed: High ..... 5.5 km/h **3.4 mph**  
   (Auto-shift) Mid ..... 4.2 km/h **2.6 mph**  
   Low ..... 3.1 km/h **1.9 mph**  
 Service brake ..... Hydraulic lock  
 Parking brake ..... Mechanical disc brake



### SWING SYSTEM

Drive method ..... Hydrostatic  
 Swing reduction ..... Planetary gear  
 Swing circle lubrication ..... Grease bathed  
 Service brake ..... Hydraulic lock  
 Holding brake/Swing lock ..... Mechanical disc brake  
 Swing speed ..... 11.7 rpm  
 Swing torque ..... 8065 kg•m **58,334 ft. lbs.**



### UNDERCARRIAGE

Center frame ..... X-frame  
 Track frame ..... Box-section  
 Track type ..... Sealed track  
 Track adjuster ..... Hydraulic  
 No. of shoes ..... 51 each side  
 No. of carrier rollers ..... 2 each side  
 No. of track rollers ..... 10 each side



### COOLANT AND LUBRICANT CAPACITY (REFILLING)

Fuel tank ..... 400 ltr **105.7 U.S. gal**  
 Coolant ..... 19.8 ltr **5.2 U.S. gal**  
 Engine ..... 23.1 ltr **6.1 U.S. gal**  
 Final drive, each side ..... 3.3 ltr **0.9 U.S. gal**  
 Swing drive ..... 6.6 ltr **1.7 U.S. gal**  
 Hydraulic tank ..... 135 ltr **35.7 U.S. gal**



### OPERATING WEIGHT (APPROXIMATE)

Operating weight, including 5850 mm **19'2"** one-piece boom, 3045 mm **10'0"** arm, SAE heaped 1.2 m<sup>3</sup> **1.57 yd<sup>3</sup>** bucket, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

Triple-Grouser Shoes	Operating Weight	Ground Pressure
700 mm <b>28"</b>	24634 kg <b>54,309 lb</b>	0.43 kg/cm <sup>2</sup> <b>6.08 psi</b>
800 mm <b>31.5"</b>	24914 kg <b>54,926 lb</b>	0.38 kg/cm <sup>2</sup> <b>5.38 psi</b>



### WORKING FORCES

	Arm	3045 mm <b>10'0"</b>	3500 mm <b>11'6"</b>
SAE rating	Bucket digging force at power max.	15500 kgf <b>34,170 lb</b>	15500 kgf <b>34,170 lb</b>
	Arm crowd force at power max.	12100 kgf <b>26,680 lb</b>	10900 kgf <b>24,030 lb</b>
ISO rating	Bucket digging force at power max.	17500 kgf <b>38,580 lb</b>	17500 kgf <b>38,580 lb</b>
	Arm crowd force at power max.	13200 kgf <b>29,100 lb</b>	11200 kgf <b>24,690 lb</b>

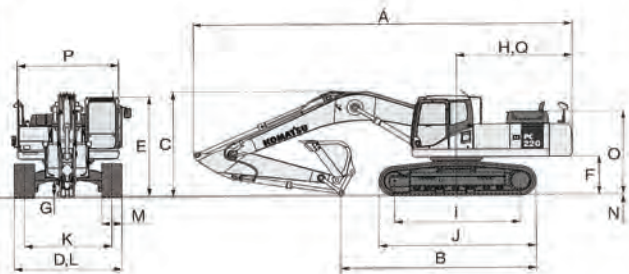
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## DIMENSIONS

	Arm Length	3045 mm	10'0"	3505 mm	11'6"
<b>A</b>	Overall length	9885 mm	32'5"	9910 mm	32'6"
<b>B</b>	Length on ground (transport):	5390 mm	17'8"	4950 mm	16'3"
<b>C</b>	Overall height (to top of boom)	3185 mm	10'5"	3270 mm	10'9"
<b>D</b>	Overall width	3380 mm	11'1"	3380 mm	11'1"
<b>E</b>	Overall height (to top of cab)	3055 mm	10'0"	3055 mm	10'0"
<b>F</b>	Ground clearance, counterweight	1100 mm	3'7"	1100 mm	3'7"
<b>G</b>	Ground clearance (minimum)	440 mm	1'5"	440 mm	1'5"
<b>H</b>	Tail swing radius	2940 mm	9'8"	2940 mm	9'8"
<b>I</b>	Track length on ground	3845 mm	12'7"	3845 mm	12'7"
<b>J</b>	Track length	4640 mm	15'3"	4640 mm	15'3"
<b>K</b>	Track gauge	2580 mm	8'6"	2580 mm	8'6"
<b>L</b>	Width of crawler	3380 mm	11'1"	3380 mm	11'1"
<b>M</b>	Shoe width	800 mm	31.5"	800 mm	31.5"
<b>N</b>	Grouser height	25 mm	1.0"	25 mm	1.0"
<b>O</b>	Machine cab height	2110 mm	6'11"	2110 mm	6'11"
<b>P</b>	Machine cab width	2710 mm	8'11"	2710 mm	8'11"
<b>Q</b>	Distance, swing center to rear end	2905 mm	9'6"	2905 mm	9'6"



## BACKHOE BUCKET, ARM, AND BOOM COMBINATION

Bucket Type	Bucket			Arms		
	Capacity	OLW	Weight	3045 mm 10'0"	3505 mm 11'6"	
Komatsu GSK	0.58 m <sup>3</sup>	0.76 yd <sup>3</sup>	610 mm 24"	765 kg 1,686 lb	V	V
	0.78 m <sup>3</sup>	1.02 yd <sup>3</sup>	762 mm 30"	774 kg 1,707 lb	V	V
	0.99 m <sup>3</sup>	1.29 yd <sup>3</sup>	914 mm 36"	869 kg 1,915 lb	V	V
	1.20 m <sup>3</sup>	1.57 yd <sup>3</sup>	1067 mm 42"	949 kg 2,092 lb	W	W
	1.41 m <sup>3</sup>	1.85 yd <sup>3</sup>	1219 mm 48"	1045 kg 2,304 lb	X	Y
Komatsu HP	0.58 m <sup>3</sup>	0.76 yd <sup>3</sup>	610 mm 24"	812 kg 1,791 lb	V	V
	0.78 m <sup>3</sup>	1.02 yd <sup>3</sup>	762 mm 30"	931 kg 2,053 lb	V	V
	0.99 m <sup>3</sup>	1.29 yd <sup>3</sup>	914 mm 36"	1054 kg 2,323 lb	V	V
	1.20 m <sup>3</sup>	1.57 yd <sup>3</sup>	1067 mm 42"	1154 kg 2,545 lb	X	X
	1.41 m <sup>3</sup>	1.85 yd <sup>3</sup>	1219 mm 48"	1278 kg 2,817 lb	Y	Y
Komatsu HPS	0.58 m <sup>3</sup>	0.76 yd <sup>3</sup>	610 mm 24"	870 kg 1,917 lb	V	V
	0.78 m <sup>3</sup>	1.02 yd <sup>3</sup>	762 mm 30"	1020 kg 2,248 lb	V	V
	0.99 m <sup>3</sup>	1.29 yd <sup>3</sup>	914 mm 36"	1162 kg 2,562 lb	V	W
	1.20 m <sup>3</sup>	1.57 yd <sup>3</sup>	1067 mm 42"	1282 kg 2,827 lb	X	X
	1.41 m <sup>3</sup>	1.85 yd <sup>3</sup>	1219 mm 48"	1425 kg 3,142 lb	Y	Y
Komatsu HPX	0.58 m <sup>3</sup>	0.76 yd <sup>3</sup>	610 mm 24"	987 kg 2,177 lb	V	V
	0.78 m <sup>3</sup>	1.02 yd <sup>3</sup>	762 mm 30"	1138 kg 2,508 lb	V	V
	0.99 m <sup>3</sup>	1.29 yd <sup>3</sup>	914 mm 36"	1280 kg 2,822 lb	W	W
	1.20 m <sup>3</sup>	1.57 yd <sup>3</sup>	1067 mm 42"	1400 kg 3,087 lb	X	Y
	1.41 m <sup>3</sup>	1.85 yd <sup>3</sup>	1219 mm 48"	1543 kg 3,402 lb	Y	Z

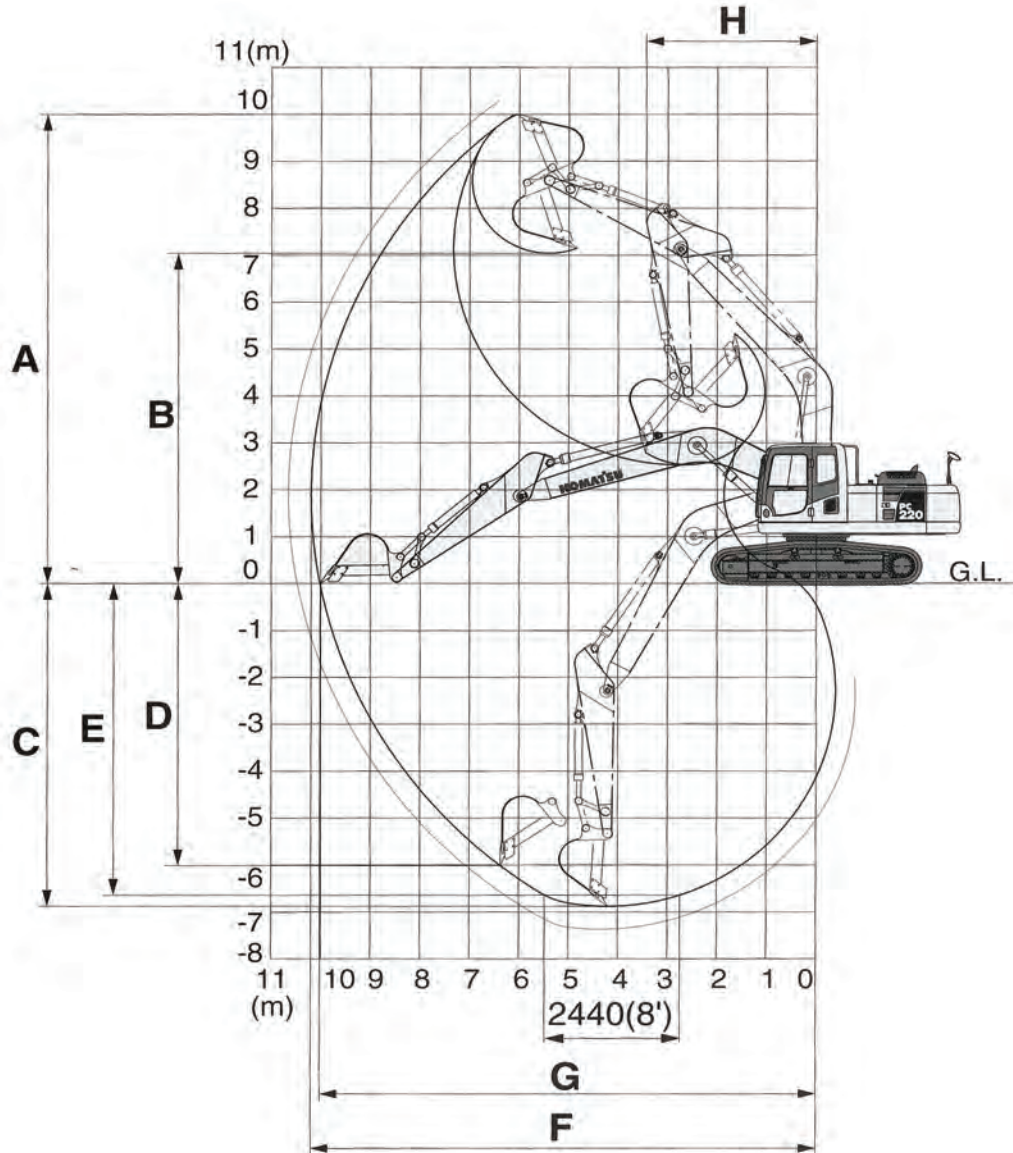
V – Used with weights up to 3,500 lb/yd<sup>3</sup>, W – Used with weights up to 3,000 lb/yd<sup>3</sup>

X – Used with weights up to 2,500 lb/yd<sup>3</sup>, Y – Used with weights up to 2,000 lb/yd<sup>3</sup>, Z – Not useable

# WORKING RANGES



**WORKING RANGE**



	Arm	3045 mm	10'0"	3500 mm	11'6"
A	Max. digging height	10000 mm	32'10"	10300 mm	33'10"
B	Max. dumping height	7035 mm	23'1"	7360 mm	24'2"
C	Max. digging depth	6920 mm	22'8"	7320 mm	24'0"
D	Max. vertical wall digging depth	6010 mm	19'9"	6230 mm	20'5"
E	Max. digging depth of cut for 8' level	6700 mm	22'0"	7150 mm	23'5"
F	Max. digging reach	10180 mm	33'5"	10580 mm	34'8"
G	Max. digging reach at ground level	10020 mm	32'10"	10420 mm	34'2"
H	Min. swing radius	3450 mm	11'4"	3340 mm	10'11"