SPECIFICATIONS

ENGINE

Model . . . . . Komatsu SAA4D107E-1*
Type . . . . . Water cooled, 4-cycle, direct injection
Aspiration . . . . . Turbocharged, and air-to-air aftercooled
Number of cylinders 4
Bore . . . . . 107 mm **4.21"**
Stroke . . . . . 124 mm **4.88"**
Piston displacement . . . . . 4.46 ltr **272 in³**
Horsepower:
Gross (SAE J1995) . . . . . 90 kW **121 HP** @ 2200 rpm
Net (ISO 9249/SAE J1349) . . . . . 86 kW **115 HP** @ 2200 rpm
Governor . . . . . All speed control, electronic
Lubrication system :
Method . . . . . Gear pump, force-lubrication
Filter . . . . . Full-flow
Air cleaner . . . . . Dry type with double elements and auto dust evacuator, plus dust indicator

*EPA Tier 3 and EU Stage 3A emissions certified.

HYDRAULIC SYSTEM

Type . . . . . HydrauMind (Hydraulic Mechanical Intelligence New Design) system, 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 . . . . . 312 ltr/min **82.4 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 380 kgf/cm² **5,400 psi**
Travel circuit . . . . . 37.3 MPa 380 kgf/cm² **5,400 psi**
Swing circuit . . . . . 28.9 MPa 295 kgf/cm² **4,195 psi**
Pilot circuit . . . . . 3.2 MPa 33 kgf/cm² **470 psi**

Hydraulic cylinders:
(Number of cylinders – bore x stroke x rod diameter)
Boom . . . . . 2–110 mm x 1175 mm x 75 mm **4.3" x 46.3" x 3.0"**
Arm . . . . . 1–120 mm x 1342 mm x 85 mm **4.7" x 52.8" x 3.3"**
Bucket . . . . . 1–105 mm x 1027 mm x 70 mm **4.1" x 40.4" x 2.8"**

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 . . . . . 12.0 rpm
Swing torque . . . . . 4331 kg•m **31,314 ft. lbs.**

DRIVES AND BRAKES

Steering control . . . . . Two levers with pedals
Drive method . . . . . Hydrostatic
Maximum drawbar pull . . . . . 156 kN 15950 kgf **35,160 lbf**
Gradeability . . . . . 70%, 35°
Maximum travel speed: High . . . . . 5.5 km/h **3.4 mph**
Low . . . . . 3.4 km/h **2.1 mph**
Service brake . . . . . Hydraulic lock
Parking brake . . . . . Mechanical disc

UNDERCARRIAGE

Center frame . . . . . X-leg
Track frame . . . . . Box-section
Track type . . . . . Sealed
Track adjuster . . . . . Hydraulic
Number of shoes (each side) 44
Number of carrier rollers (each side) 2
Number of track rollers (each side) 7

SERVICE REFILL CAPACITIES

Fuel tank	280 ltr	**74 U.S. gal**
Radiator	18.5 ltr	**4.9 U.S. gal**
Engine	16.0 ltr	**4.2 U.S. gal**
Final drive (each side)	3.3 ltr	**0.9 U.S. gal**
Swing drive	4.5 ltr	**1.2 U.S. gal**
Hydraulic tank	121 ltr	**32.0 U.S. gal**

OPERATING WEIGHT (APPROXIMATE)

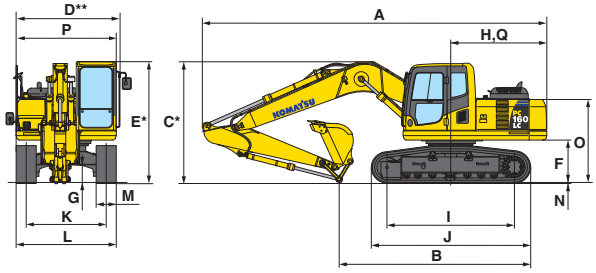
Operating weight including 5150 mm **16'11"** one-piece boom, 2610 mm **8'7"** arm, SAE heaped 0.65 m³ **0.85 yd³** backhoe bucket, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

Shoes		Operating Weight		Ground Pressure		
mm	**in**	kg	**lb**	kPa	kg/cm²	**psi**
600	**24"**	16900	**37,260**	40.3	0.41	**5.84**
700	**28"**	17120	**37,740**	35.0	0.36	**5.08**
800	**31.5"**	17420	**38,400**	31.0	0.32	**4.49**

DIMENSIONS

	Arm Length	2610 mm	**8'7"**	2900 mm	**9'6"**
A	Overall length	8565 mm	**28'1"**	8565 mm	**28'1"**
B	Length on ground (transport)	4760 mm	**15'7"**	4565 mm	**15'0"**
C	Overall height (to top of boom)*	3025 mm	**9'11"**	3125 mm	**10'3"**

D	Overall width**	2590 mm	**8'6"**
E	Overall height (to top of cab)*	3030 mm	**9'10"**
F	Ground clearance, counterweight	1055 mm	**3'6"**
G	Ground clearance (minimum)	440 mm	**1'5"**
H	Tail swing radius	2435 mm	**8'0"**
I	Track length on ground	3170 mm	**10'5"**
J	Track length	3965 mm	**13'0"**
K	Track gauge	1990 mm	**6'6"**
L	Width of crawler	2590 mm	**8'6"**
M	Shoe width	600 mm	**24"**
N	Grouser height	26 mm	**1.0"**
O	Machine cab height	2065 mm	**6'9"**
P	Machine cab width	2490 mm	**8'2"**
Q	Distance, swing center to rear end	2390 mm	**7'10"**



* Including grouser height ** Including handrail

BACKHOE BUCKET AND ARM COMBINATION

Bucket Type	Bucket						Arms	
	Capacity		Width		Weight		2.6 m **8'7"**	2.9 m **9'6"**
Komatsu TL	0.47 m³	**0.61 yd³**	610 mm	**24"**	506 kg	**1,116 lb**	V	V
	0.62 m³	**0.81 yd³**	762 mm	**30"**	568 kg	**1,252 lb**	V	V
	0.78 m³	**1.02 yd³**	914 mm	**36"**	660 kg	**1,454 lb**	W	X
	0.95 m³	**1.24 yd³**	1067 mm	**42"**	705 kg	**1,554 lb**	X	Y
Komatsu HP	0.37 m³	**0.48 yd³**	508 mm	**20"**	511 kg	**1,126 lb**	V	V
	0.47 m³	**0.61 yd³**	610 mm	**24"**	572 kg	**1,260 lb**	V	V
	0.62 m³	**0.81 yd³**	762 mm	**30"**	649 kg	**1,431 lb**	V	V
	0.78 m³	**1.02 yd³**	914 mm	**36"**	735 kg	**1,620 lb**	W	X
	0.95 m³	**1.24 yd³**	1067 mm	**42"**	806 kg	**1,776 lb**	Y	Y
Komatsu HPS	0.37 m³	**0.48 yd³**	508 mm	**20"**	563 kg	**1,241 lb**	V	V
	0.47 m³	**0.61 yd³**	610 mm	**24"**	635 kg	**1,400 lb**	V	V
	0.62 m³	**0.81 yd³**	762 mm	**30"**	729 kg	**1,607 lb**	V	W
	0.78 m³	**1.02 yd³**	914 mm	**36"**	831 kg	**1,833 lb**	X	X
	0.95 m³	**1.24 yd³**	1067 mm	**42"**	919 kg	**2,027 lb**	Y	Z

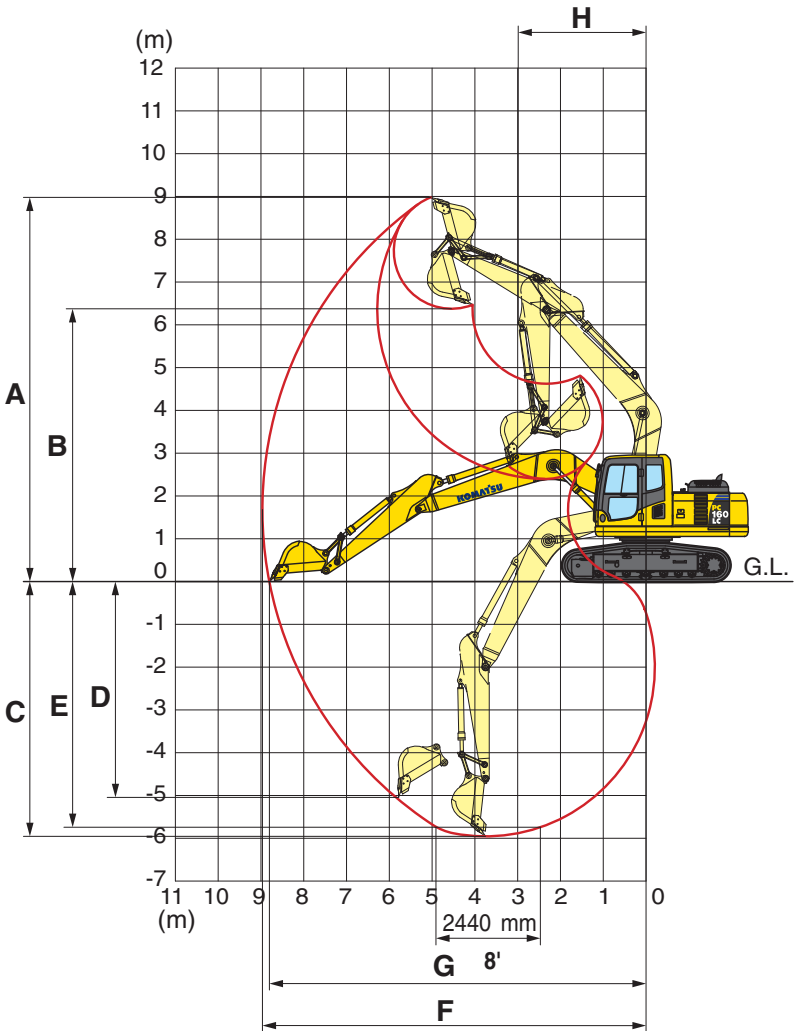
V – Used with densities up to 3,500 lb/yd³, W – Used with densities up to 3,000 lb/yd³
X – Used with densities up to 2,500 lb/yd³, Y – Used with densities up to 2,000 lb/yd³, Z – Not useable

COMMENTS: When using any quick coupler or other attachment equipment, there is an increased risk of the bucket hitting the cab.

*See the Operation & Maintenance Manual for detailed bucket installation instructions.

WORKING RANGES

WORKING RANGE



	Arm	2610 mm 8'7"	2900 mm 9'6"
A	Max. digging height	8980 mm **29'6"**	9130 mm **29'11"**
B	Max. dumping height	6370 mm **20'11"**	6525 mm **21'5"**
C	Max. digging depth	5960 mm **19'6"**	6250 mm **20'6"**
D	Max. vertical wall digging depth	5040 mm **16'6"**	5320 mm **17'5"**
E	Max. digging depth of cut for 8' level bottom	5740 mm **18'10"**	6050 mm **19'10"**
F	Max. digging reach	8960 mm **29'5"**	9235 mm **30'4"**
G	Max. digging reach at ground level	8800 mm **28'10"**	9075 mm **29'9"**
H	Min. swing radius	2990 mm **9'10"**	2995 mm **9'10"**
SAE rating	Bucket digging force at power max.	109 kN 11100 kgf/**24,470 lb**	109 kN 11100 kgf/**24,470 lb**
	Arm crowd force at power max.	83.4 kN 8500 kgf/**18,740 lb**	77.5 kN 7900 kgf/**17,420 lb**
ISO rating	Bucket digging force at power max.	123 kN 12500 kgf/**27,560 lb**	123 kN 12500 kgf/**27,560 lb**
	Arm crowd force at power max.	86.3 kN 8800 kgf/**19,400 lb**	79.4 kN 8100 kgf/**17,860 lb**