

SPECIFICATIONS



ENGINE

Model Komatsu SAA12V140E-3
 Type 4-cycle, water-cooled, direct injection
 Aspiration Turbocharged, aftercooled
 Number of cylinders 12
 Bore 140 mm
 Stroke 165 mm
 Displacement 30,48 ltr
 Governor All-speed, electronic
 Engine power
 at rated engine speed 1.800 rpm
 ISO 14396 728 kW / 976 HP
 ISO 9249 (net engine power) 713 kW / 956 HP
 Fan drive type Hydraulic



HYDRAULIC SYSTEM

Type Open-center load sensing system
 Number of selectable working modes 2
 Main pump:
 Type Variable displacement piston pumps
 Pumps for Boom, arm, bucket, swing and travel circuits
 Maximum flow:
 For attachment, swing and travel 2.317 ltr/min
 For fan drive 324 ltr/min
 Hydraulic motors:
 Travel 2 × axial piston motors with parking brake
 Swing 2 × axial piston motors with swing holding brake
 Fan 2 × axial piston motors
 Relief valve setting:
 Attachment circuits
 Backhoe 29,4 MPa (300 kgf/cm²)
 Loading shovel 29,4 MPa (300 kgf/cm²)
 Travel circuit 32,9 MPa (335 kgf/cm²)
 Swing circuit 29,4 MPa (300 kgf/cm²)
 Pilot circuit 2,9 MPa (30 kgf/cm²)
 Hydraulic cylinders (Number of cylinders—bore × stroke):
 Backhoe
 Boom 2 – 300 mm × 2.647 mm
 Arm 2 – 250 mm × 2.138 mm
 Bucket 2 – 200 mm × 2.170 mm
 Loading shovel
 Boom 2 – 280 mm × 1.930 mm
 Arm 2 – 200 mm × 2.170 mm
 Bucket 2 – 225 mm × 2.050 mm
 Bottom dump 2 – 180 mm × 600 mm



SWING SYSTEM

Swing gear 2 x Planetary gear
 Swing circle lubrication Grease
 Swing holding brakes Mechanical disk brakes
 Swing speed 4,8 rpm



DRIVE SYSTEM

Travel gear Planetary gear
 Gradeability 65%
 Maximum travel speed 2,7 km/h
 Parking brakes Mechanical disk brakes



UNDERCARRIAGE

Track adjuster Grease
 No. of shoes 49 each side
 No. of carrier rollers 3 each side
 No. of track rollers 8 each side



COOLANT AND LUBRICANT CAPACITY (REFILLING)

Fuel tank 3.400 ltr
 Radiator 180 ltr
 Engine 120 ltr
 Travel gear, each side 85 ltr
 Swing drives 30 × 2 ltr
 Hydraulic tank 1.300 ltr
 PTO 30 ltr



ENVIRONMENT

Vibration levels (EN 12096:1997)*
 Hand/arm ≤ 2,5 m/s² (uncertainty K = 0,22 m/s²)
 Body ≤ 0,5 m/s² (uncertainty K = 0,17 m/s²)
 * for the purpose of risk assessment under directive 2002/44/EC, please refer to ISO/TR 25398:2006.



OPERATING WEIGHT (APPROX.)

BACKHOE
 Operating weight, including 8.700 mm boom, 3.900 mm arm, SAE heaped 12,0 m³ general purpose backhoe bucket, operator, lubricant, coolant, full fuel tank, and the standard equipment.

PC2000-8		
Shoes	Operating weight	Ground pressure
Double grouser 810 mm	200.000 kg	190 kPa 1,94 kgf/cm ²
Triple grouser 1.010 mm	204.120 kg	156 kPa 1,59 kgf/cm ²

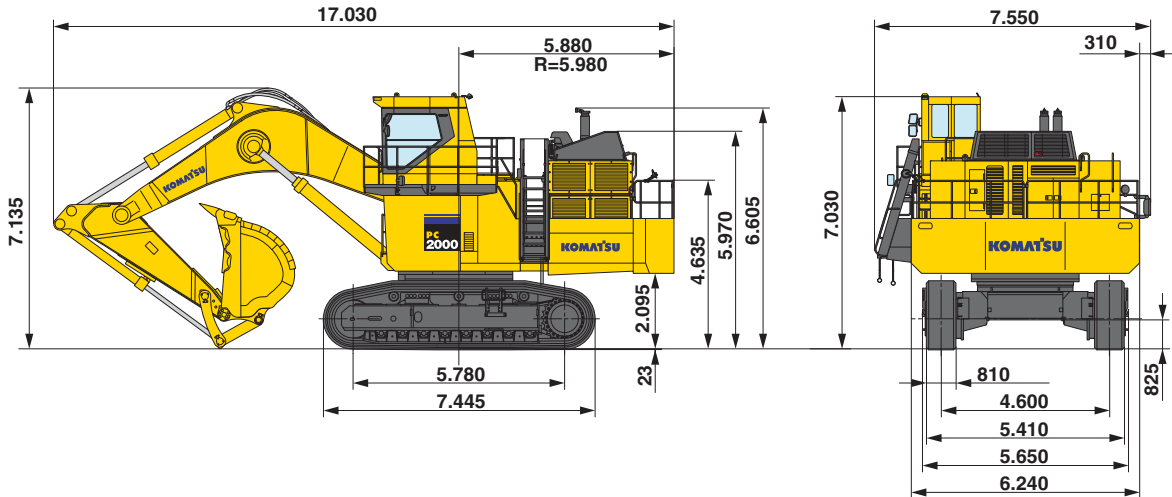
LOADING SHOVEL
 Operating weight, including 5.950 mm boom, 4.450 mm arm, 11,0 m³ heaped bucket, operator, lubricants, coolant, full fuel tank and standard equipment.

PC2000-8		
Shoes	Operating weight	Ground pressure
Double grouser 810 mm	195.000 kg	186 kPa 1,90 kgf/cm ²

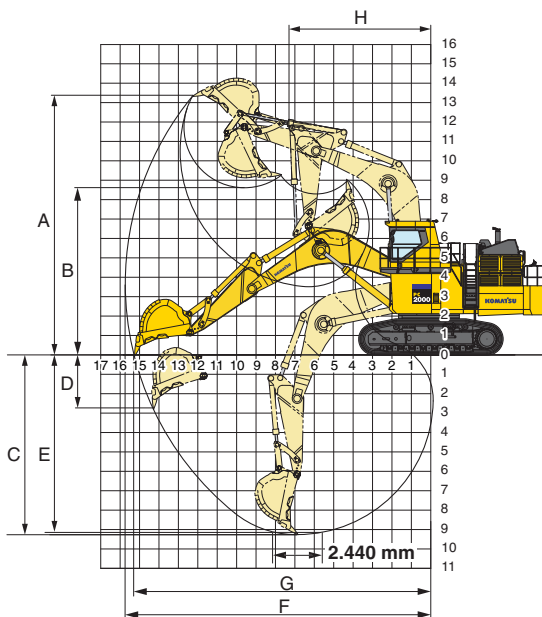


BACKHOE DIMENSIONS

Unit: mm



BACKHOE WORKING RANGE



Boom length	8,7 m
Arm length	3,9 m
A Max. digging height	13.410 mm
B Max. dumping height	8.650 mm
C Max. digging depth	9.235 mm
D Max. vertical wall digging depth	2.710 mm
E Max. digging depth of cut for 2.440 mm level	9.115 mm
F Max. digging reach	15.780 mm
G Max. digging reach at ground level	15.305 mm
H Min. swing radius	7.500 mm
Bucket digging force (SAE)	626 kN (63,8 tonnes)
Arm crowd force (SAE)	574 kN (58,5 tonnes)
Bucket digging force (ISO)	697 kN (71,1 tonnes)
Arm crowd force (ISO)	586 kN (59,8 tonnes)



BACKHOE BUCKET

MAX. BUCKET CAPACITY AND WEIGHT	
Arm length	8,7 m boom / 3,9 m arm
Material weight up to 1,2 t/m ³	15,54 m ³ 15.150 kg
Material weight up to 1,5 t/m ³	13,40 m ³ 13.675 kg
Material weight up to 1,8 t/m ³	11,78 m ³ 12.575 kg

Max. capacity and weight have been calculated according to EN474-5:2006+A1:2009.

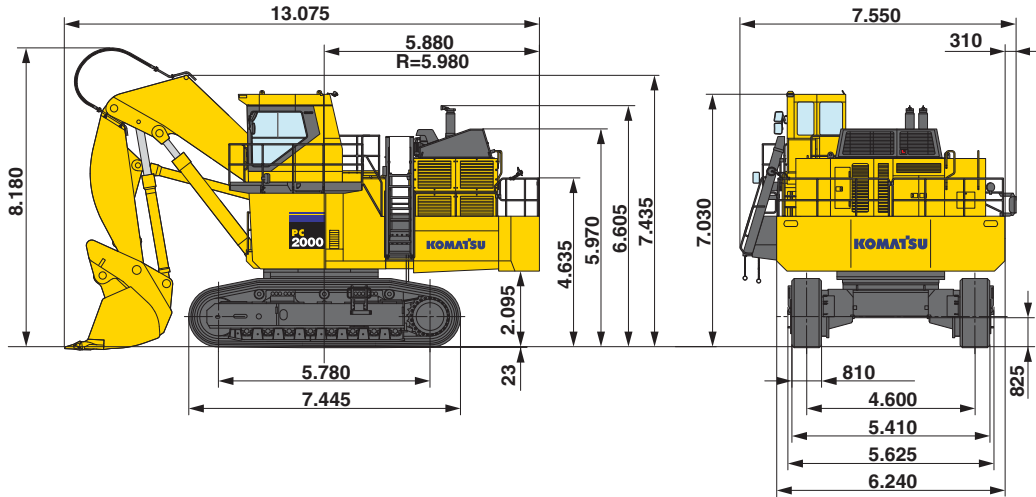
Please consult with your distributor for the correct selection of buckets and attachments to suit the application.

SPECIFICATIONS

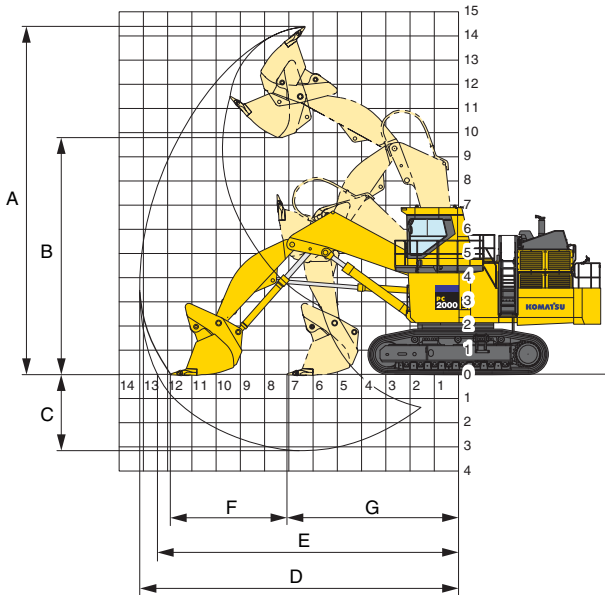


LOADING SHOVEL DIMENSIONS

Unit: mm



LOADING SHOVEL WORKING RANGE



Type of bucket	Bottom dump
Capacity, heaped	11,0 m ³
A Max. cutting height	14.450 mm
B Max. dumping height	9.665 mm
C Max. digging depth	3.190 mm
D Max. digging reach	13.170 mm
E Max. digging reach at ground level	11.940 mm
F Level crowding distance	4.850 mm
G Min. crowd distance	7.090 mm
Bucket digging force	721 kN (73,5 tonnes)
Arm crowd force	755 kN (77,0 tonnes)

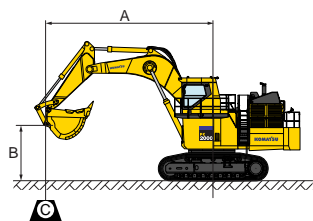


LOADING SHOVEL BUCKET

Type of bucket	Bottom dump
Capacity, heaped (ISO 7451)	11,0 m ³
Width (with side shrouds)	3.220 mm
Weight	14.400 kg
Max. material density	1,8 tonnes/m ³



LIFTING CAPACITY



PC2000-8

Equipment:

- Boom: 8,7 m
- Arm: 3,9 m
- Bucket: 12,0 m³
- Bucket weight: 9.700 kg
- Track shoe width: 810 mm

A: Reach from swing center

B: Bucket hook height

C: Lifting capacity

Cf: Rating over front

Cs: Rating over side

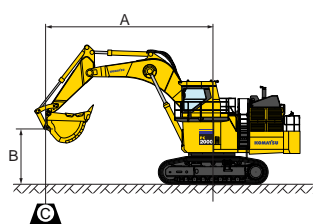
⊗: Rating at maximum reach

Heavy Lift Off

Unit: kg

B \ A	⊗ Maximum		10,7 m		9,1 m		7,6 m		6,1 m		4,6 m		3,0 m	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7,6 m	*21.050	*21.050	*31.450	*31.450										
6,1 m	*21.950	*21.950	*33.350	*33.350	*38.650	*38.650	*46.700	*46.700						
4,6 m	*23.400	*23.400	*35.400	*35.400	*42.000	*42.000	*52.200	*52.200						
3,0 m	*25.500	24.100	*37.150	36.050	*44.850	*44.850	*56.550	*56.550						
1,5 m	*28.450	24.150	*38.300	34.650	*46.650	44.900	*59.050	*59.050	*61.150	*61.150				
0,0 m	*29.800	25.050	*38.500	33.600	*47.150	43.450	*59.400	58.650	*68.850	*68.850				
-1,5 m	*30.250	27.000	*37.200	33.100	*45.950	42.750	*57.550	*57.550	*73.500	*73.500	*48.800	*48.800	*33.650	*33.650
-3,0 m	*30.350	*30.350	*33.700	33.200	*42.650	*42.650	*53.300	*53.300	*67.000	*67.000	*68.250	*68.250	*50.150	*50.150
-4,6 m	*29.750	*29.750			*36.050	*36.050	*45.850	*45.850	*57.200	*57.200	*70.850	*70.850	*69.500	*69.500
-6,1 m	*27.000	*27.000					*33.150	*33.150	*42.200	*42.200	*50.800	*50.800		

* 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.



PC2000-8

Equipment:

- Boom: 8,7 m
- Arm: 3,9 m
- Bucket: 12,0 m³
- Bucket weight: 9.700 kg
- Track shoe width: 810 mm

A: Reach from swing center

B: Bucket hook height

C: Lifting capacity

Cf: Rating over front

Cs: Rating over side

⊗: Rating at maximum reach

Heavy Lift On

Unit: kg

	⊗ Maximum		10,7 m		9,1 m		7,6 m		6,1 m		4,6 m		3,0 m	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7,6 m	*23.900	*23.900	*36.150	*36.150										
6,1 m	*24.850	*24.850	*38.350	*38.350	*44.150	*44.150	*52.950	*52.950						
4,6 m	*26.450	24.800	*40.700	37.700	*48.000	*48.000	*59.350	*59.350						
3,0 m	*28.700	24.100	*42.800	36.050	*51.300	47.050	*64.450	63.650						
1,5 m	*31.950	24.150	*44.150	34.650	*53.500	44.900	*67.350	60.500	*62.850	*62.850				
0,0 m	*34.100	25.050	*44.400	33.600	*54.150	43.450	*67.900	58.650	*62.450	*62.450				
-1,5 m	*35.300	27.000	*43.100	33.100	*52.900	42.750	*65.950	57.850	*62.950	*62.950	*54.150	*54.150	*37.650	*37.650
-3,0 m	*35.550	30.600	*39.250	33.200	*49.300	42.700	*61.300	57.500	*64.650	*64.650	*61.500	*61.500	*55.650	*55.650
-4,6 m	*34.950	*34.950			*42.000	*42.000	*53.100	*53.100	*66.000	*66.000	*62.200	*62.200	*62.000	*62.000
-6,1 m	*32.150	*32.150					*39.150	*39.150	*49.500	*49.500	*59.650	*59.650		

TRANSPORTATION



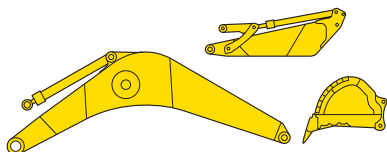
TRANSPORTATION GUIDE

Specifications shown include the following equipment:

Backhoe: boom 8.700 mm, arm 3.900 mm, bucket 12,0 m³, shoes 810 mm double grouser

Loading Shovel: boom 5.950 mm, arm 4.450 mm, bucket 11,0 m³, shoes 810 mm double grouser

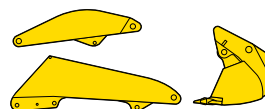
Work equipment assembly - Backhoe



	Length	Width	Height	Weight
Boom	9.170 mm	2.065 mm	3.195 mm	20,9 tonnes
Arm	5.495 mm	1.605 mm	2.055 mm	12,9 tonnes
Bucket	3.540 mm	2.790 mm	2.320 mm	9,7 tonnes

	Length	Weight	Quantity
Boom cylinder	4.265 mm	2,4 tonnes	2

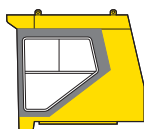
Work equipment assembly - Loading Shovel



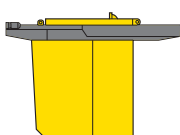
	Length	Width	Height	Weight
Boom	6.400 mm	1.740 mm	2.000 mm	11,8 tonnes
Arm	4.900 mm	1.450 mm	1.700 mm	9,5 tonnes
Bucket	3.500 mm	3.190 mm	2.920 mm	14,4 tonnes

	Length	Weight	Quantity
Boom cylinder	4.265 mm	1,90 tonnes	2
Arm cylinder	3.370 mm	1,05 tonnes	2
Bucket cylinder	3.350 mm	1,10 tonnes	2

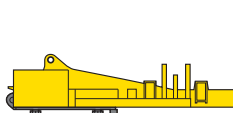
Cab



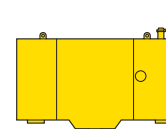
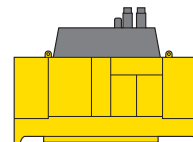
Cab base



Revolving frame



Power module

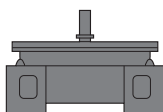


Length	2.885 mm	3.660 mm	7.575 mm	5.215 mm	3.100 mm
Width	1.880 mm	630 mm	3.180 mm	2.455 mm	875 mm
Height	2.520 mm	2.505 mm	2.640 mm	3.195 mm	2.070 mm
Weight	1,8 tonnes	2,0 tonnes	26,5 tonnes	16,1 tonnes	2,4 tonnes

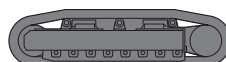
Counterweight



Center frame



Undercarriage



Hydraulic tank



Length	6.420 mm	3.815 mm	7.435 mm	1.860 mm
Width	1.115 mm	3.190 mm	1.720 mm	1.115 mm
Height	1.505 mm	2.210 mm	1.920 mm	2.125 mm
Weight	24,5 tonnes	18,0 tonnes	26,0 x 2 tonnes	3,5 tonnes

Others: Catwalk, step, handrail, small removed parts, etc.