

Komatsu PC228USLC-10

Specifications

ENGINE

Model	Komatsu SAA6D107E-2
Type	Common rail direct injection, water-cooled, emissionised, turbocharged, after-cooled diesel
Engine power	
at rated engine speed	2.000 rpm
ISO 14396	123 kW / 165 HP
ISO 9249 (net engine power)	116 kW / 156 HP
No. of cylinders	6
Bore x stroke	107 x 124 mm
Displacement	6,69 ltr
Battery	2 x 12 V/120 Ah
Alternator	24 V/60 A
Starter motor	24 V/5,5 kW
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	Depending on the specification up to 2 additional circuits can be installed
Main pump	2 variable displacement piston pumps supplying boom, arm, bucket, swing and travel circuits
Maximum pump flow	2 x 237,5 ltr/min
Relief valve settings	
Implement	380 bar
Travel	380 bar
Swing	295 bar
Pilot circuit	33 bar

SERVICE REFILL CAPACITIES

Fuel tank	310 ltr
Radiator	30,0 ltr
Engine oil	23,1 ltr
Swing drive	6,5 ltr
Hydraulic tank	126 ltr
Final drive (each side)	5,0 ltr

SWING SYSTEM

Type	Axial piston motor driving through planetary double reduction gearbox
Swing lock	Electrically actuated wet multi-disc brake integrated into swing motor
Swing speed	0 - 11,0 rpm

DRIVES AND BRAKES

Steering control	2 levers with pedals giving full independent control of each track
Drive method	Hydrostatic
Travel operation	Automatic 3-speed selection
Gradeability	70%, 35°
Max. travel speeds	
Lo / Mi / Hi	3,0 / 4,1 / 5,5 km/h
Maximum drawbar pull	20.600 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)	49
Tension	Combined spring and hydraulic unit
Rollers	
Track rollers (each side)	9
Carrier rollers (each side)	2

ENVIRONMENT

Engine emissions	Fully complies with EU Stage IIIB and EPA Tier 4 interim exhaust emission regulations
Noise levels	
LwA external	102 dB(A) (2000/14/EC Stage II)
LpA operator ear	72 dB(A) (ISO 6396 dynamic test)
Vibration levels (EN 12096:1997)*	
Hand/arm	≤ 2,5 m/s ² (uncertainty K = 0,49 m/s ²)
Body	≤ 0,5 m/s ² (uncertainty K = 0,25 m/s ²)

* for the purpose of risk assessment under directive 2002/44/EC, please refer to ISO/TR 25398:2006.

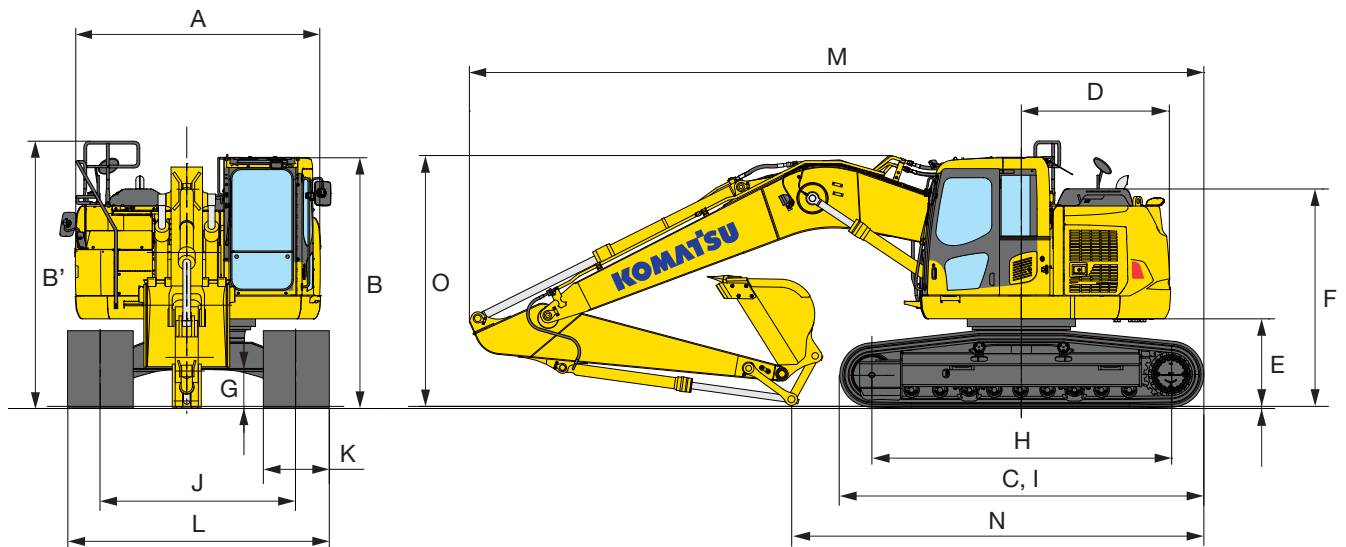
OPERATING WEIGHT (APPR.)

MONO BOOM		
Triple grouser shoes	Operating weight	Ground pressure
600 mm	23.800 kg	0,50 kg/cm ²
700 mm	24.070 kg	0,43 kg/cm ²
800 mm	24.350 kg	0,38 kg/cm ²

Operating weight, including 650 kg bucket, 2,9 m arm, operator, lubricant, coolant, full fuel tank and the standard equipment.

Dimensions

MACHINE DIMENSIONS		MONO BOOM
A	Overall width of upper structure	2.980 mm
B	Overall height of cab	3.065 mm
B'	Overall height (handrail)	3.255 mm
C	Overall length of basic machine	4.450 mm
D	Tail length	1.810 mm
	Tail swing radius	1.810 mm
E	Clearance under counterweight	1.075 mm
F	Machine tail height (to top of engine cover)	2.675 mm
G	Ground clearance	440 mm
H	Tumbler centre distance	3.655 mm
I	Track length	4.450 mm
J	Track gauge	2.380 mm
K	Track shoe width	600, 700, 800 mm
L	Overall track width with 600 mm shoe	2.980 mm
	Overall track width with 700 mm shoe	3.080 mm
	Overall track width with 800 mm shoe	3.180 mm



TRANSPORT DIMENSIONS

		MONO BOOM	
Arm length		2,4 m	2,9 m
M	Transport length	8.980 mm	8.920 mm
N	Length on ground (transport)	5.890 mm	5.050 mm
O	Overall height (to top of boom)	3.165 mm	3.040 mm



MAX. BUCKET CAPACITY AND WEIGHT

Arm length	MONO BOOM			
	2,4 m		2,9 m	
Material weight up to 1,2 t/m ³	1,49 m ³	1.100 kg	1,37 m ³	1.000 kg
Material weight up to 1,5 t/m ³	1,36 m ³	1.000 kg	1,26 m ³	950 kg
Material weight up to 1,8 t/m ³	1,18 m ³	900 kg	1,10 m ³	875 kg

Max. capacity and weight have been calculated according to ISO 10567:2007.
Please consult with your distributor for the correct selection of buckets and attachments to suit the application.

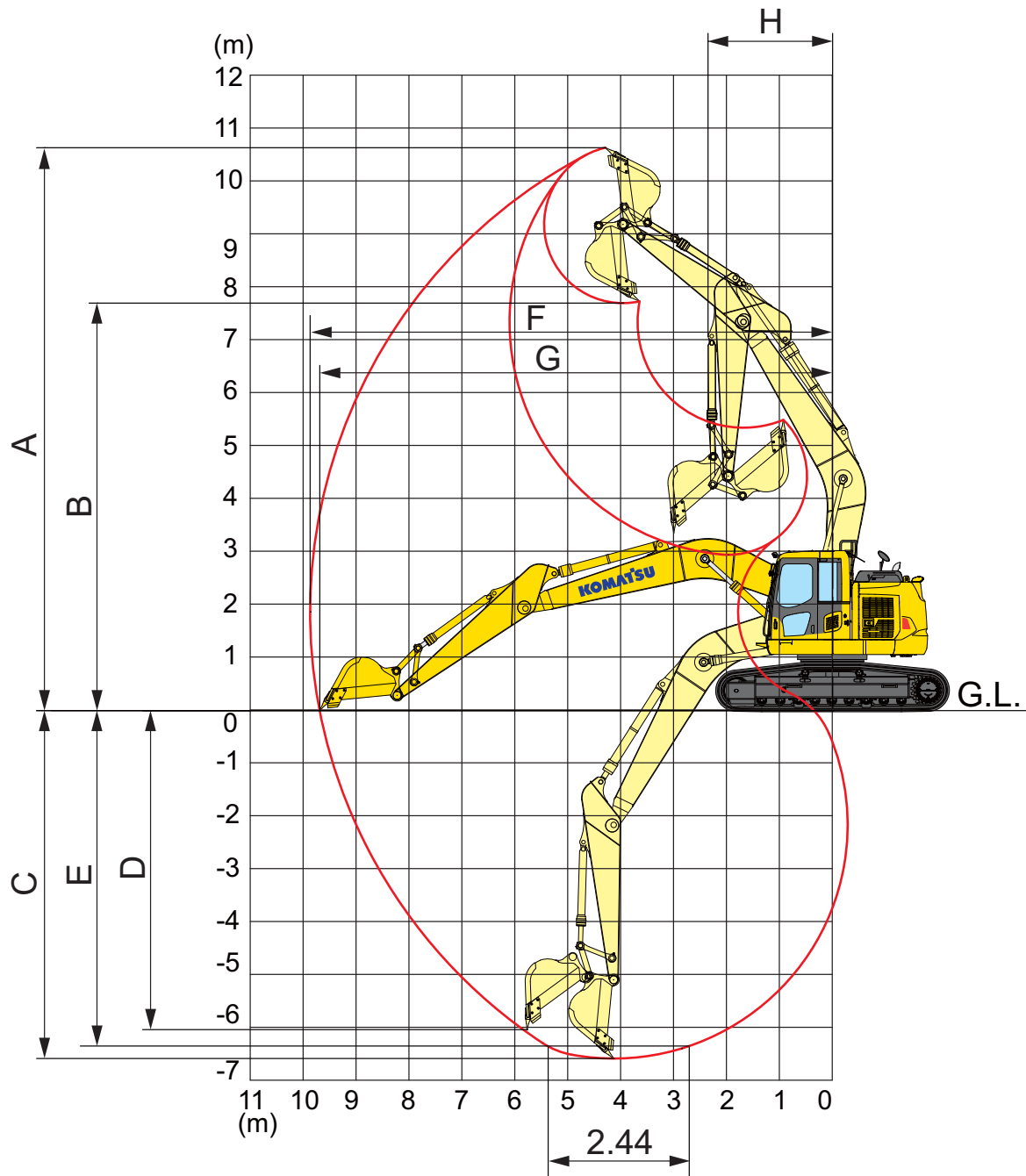
BUCKET AND ARM FORCE

Arm length	2,4 m	2,9 m
Bucket digging force	16.500 kg	14.100 kg
Bucket digging force at PowerMax	17.500 kg	15.200 kg
Arm crowd force	12.200 kg	10.300 kg
Arm crowd force at PowerMax	13.000 kg	11.000 kg



Working Range

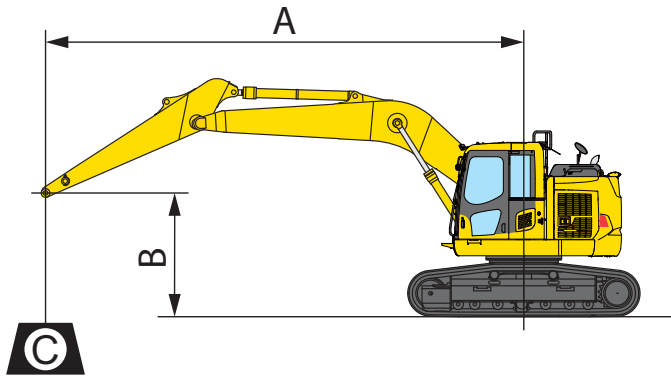
MONO BOOM



ARM LENGTH	2,4 m	2,9 m
A Max. digging height	10.380 mm	10.700 mm
B Max. dumping height	7.470 mm	7.825 mm
C Max. digging depth	6.095 mm	6.620 mm
D Max. vertical wall digging depth	5.315 mm	5.980 mm
E Max. digging depth of cut for 2,44 m level	5.840 mm	6.370 mm
F Max. digging reach	9.395 mm	9.875 mm
G Max. digging reach at ground level	9.205 mm	9.700 mm
H Min. swing radius	2.700 mm	2.310 mm

Lifting Capacity

MONO BOOM



A – Reach from swing center

B – Bucket hook height

C – Lifting capacities

Weights:

With 2,4 m arm: bucket, bucket linkage and bucket cylinder: 1.009 kg

With 2,9 m arm: bucket, bucket linkage and bucket cylinder: 985 kg

With 700 mm shoes

– Rating over front

– Rating over side

– Rating at maximum reach

Arm length	A		7,5 m		6,0 m		4,5 m		3,0 m		1,5 m	
	B											

	6,0 m kg	*5.259	4.609			*5.709	*5.709	*5.709	*5.709				
	4,5 m kg	*5.259	3.959	*5.959	4.109	*6.259	5.609	*7.209	*7.209	*8.959	*8.959		
	3,0 m kg	*5.509	3.659	6.109	4.009	*7.259	5.359	*9.459	7.909				
	1,5 m kg	5.409	3.509	6.009	3.859	8.159	5.109	*11.359	7.409				
	0,0 m kg	5.509	3.559	5.909	3.759	8.009	4.959	*12.009	7.109	*7.959	*7.959		
	-1,5 m kg	6.009	3.859	5.859	3.759	7.909	4.859	*11.959	7.059	*10.259	*10.259	*8.659	*8.659
	-3,0 m kg	7.159	4.509			7.959	4.909	*11.309	7.159	*15.609	13.559	*11.959	*11.959
-4,5 m kg	*8.159	6.409					*9.359	7.409	*12.809	*12.809			

	6,0 m kg	*3.735	*3.735	*4.085	*4.085	*5.135	*5.135						
	4,5 m kg	*3.785	3.685	*5.535	4.135	*5.785	5.685	*6.385	*6.385				
	3,0 m kg	*3.935	3.385	*5.985	4.035	*6.785	5.435	*8.585	8.085	*12.385	*12.385		
	1,5 m kg	*4.235	3.285	6.035	3.885	*7.885	5.185	*10.735	7.353	*7.835	*7.835		
	0,0 m kg	*4.735	3.335	5.885	3.785	8.035	4.985	*11.785	7.185	*6.185	*6.185		
	-1,5 m kg	5.535	3.535	5.835	3.735	7.885	4.885	*11.985	7.035	*10.285	*10.285	*6.135	*6.135
	-3,0 m kg	6.385	4.035			7.885	4.885	*12.635	7.085	*15.785	13.335	*10.685	*10.685
-4,5 m kg	*7.785	5.335					*10.235	7.285	*14.235	*13.535			

* 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.

When lifting with additional equipment installed to the arm, please subtract the weight of all additional equipment from the values stated.