

ENGINE

Model	Komatsu SAA4D107E-1
Type	Common rail direct injection, water-cooled, emissionised, turbocharged, after-cooled diesel
Engine power	
at rated engine speed	2.200 rpm
ISO 14396	97,0 kW / 130 HP
ISO 9249 (net engine power)	92,0 kW / 123 HP
No. of cylinders	4
Bore x stroke	107 x 120 mm
Displacement	4,46 ltr
Battery	2 x 12 V/120 Ah
Alternator	24 V/60 A
Starter motor	24 V/4,5 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	2 additional circuits with proportional control can be installed
Main pump	Variable displacement piston pump supplying boom, arm, bucket, swing and travel circuits
Maximum pump flow	312 ltr/min
Relief valve settings	
Implement	380 bar
Travel	380 bar
Swing	295 bar
Pilot circuit	33 bar

SERVICE REFILL CAPACITIES

Fuel tank	280 ltr
Radiator	17,3 ltr
Engine oil	16,0 ltr
Swing drive	4,5 ltr
Hydraulic tank	121 ltr
Final drive (each side)	4,5 ltr

OPERATING WEIGHT (APPR.)

	MONO BOOM				TWO-PIECE BOOM			
	PC190LC-8		PC190NLC-8		PC190LC-8		PC190NLC-8	
Triple grouser shoes	Operating weight	Ground pressure	Operating weight	Ground pressure	Operating weight	Ground pressure	Operating weight	Ground pressure
500 mm	–	–	18.820 kg	0,50 kg/cm ²	–	–	19.350 kg	0,51 kg/cm ²
600 mm	19.050 kg	0,44 kg/cm ²	–	–	19.580 kg	0,47 kg/cm ²	–	–
700 mm	19.270 kg	0,39 kg/cm ²	–	–	19.800 kg	0,41 kg/cm ²	–	–
800 mm	19.490 kg	0,34 kg/cm ²	–	–	20.020 kg	0,36 kg/cm ²	–	–

Operating weight, including specified work equipment, 2,6 m arm, 495 kg 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 multi disc brake integrated into swing motor
Swing speed	0 - 12 rpm
Swing torque	44,3 kNm

DRIVES AND BRAKES

Steering control	2 levers with pedals giving full independent control of each track
Drive method	Hydrostatic
Travel operation	Automatic 2-speed selection
Gradeability	70%, 35°
Max. travel speeds	
Lo / Hi	3,4 / 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)	45
Tension	Combined spring and hydraulic unit
Rollers	
Track rollers (each side)	7
Carrier rollers (each side)	2

ENVIRONMENT

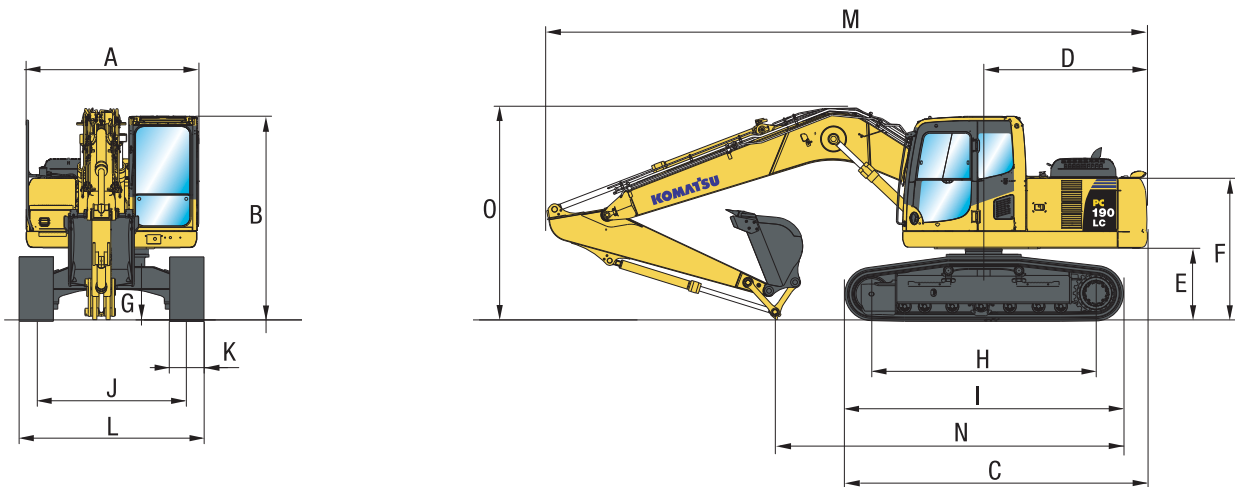
Engine emissions	Fully complies with EU Stage IIIA exhaust emission regulations
Noise levels	
LwA external	102 dB(A) (2000/14/EC Stage II)
LpA operator ear	68 dB(A) (ISO 6396 dynamic test)
Vibration levels (EN 12096:1997)*	
Hand/arm	≤ 2,5 m/s ² (uncertainty K = 0,48 m/s ²)
Body	≤ 0,5 m/s ² (uncertainty K = 0,23 m/s ²)

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

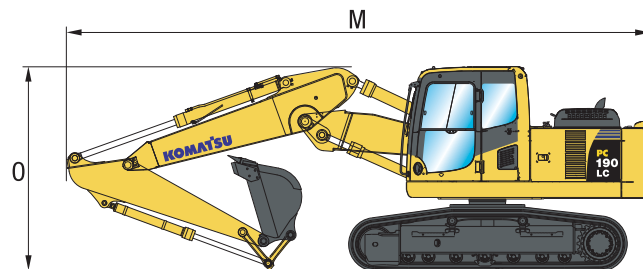
Dimensions & Performance Figures

MACHINE DIMENSIONS	PC190LC-8	PC190NLC-8
A Overall width of upper structure	2.490 mm	2.490 mm
B Overall height of cab	3.030 mm	3.030 mm
C Overall length of basic machine	4.420 mm	4.420 mm
D Tail length	2.390 mm	2.390 mm
Tail swing radius	2.435 mm	2.435 mm
E Clearance under counterweight	1.055 mm	1.055 mm
F Machine tail height	2.090 mm	2.090 mm
G Ground clearance	440 mm	440 mm
H Tumbler centre distance	3.275 mm	3.275 mm
I Track length	4.065 mm	4.065 mm
J Track gauge	2.200 mm	2.040 mm
K Track shoe width	600, 700, 800 mm	500, 600, 700, 800 mm
L Overall track width with 500 mm shoe	-	2.540 mm
Overall track width with 600 mm shoe	2.800 mm	2.640 mm
Overall track width with 700 mm shoe	2.900 mm	2.740 mm
Overall track width with 800 mm shoe	3.000 mm	2.840 mm

MONO BOOM



TWO-PIECE BOOM



TRANSPORT DIMENSIONS	MONO BOOM			TWO-PIECE BOOM		
Arm length	2,25 m	2,6 m	2,9 m	2,25 m	2,6 m	2,9 m
M Transport length	8.770 mm	8.770 mm	8.770 mm	8.490 mm	8.490 mm	8.480 mm
N Length on ground (transport)	5.180 mm	4.810mm	4.615 mm	5.230 mm	4.875 mm	4.710 mm
O Overall height (to top of boom)	3.055 mm	3.090 mm	3.170 mm	2.940 mm	2.980 mm	3.030 mm



MAX. BUCKET CAPACITY AND WEIGHT

MONO BOOM						
Arm length	2,25 m		2,6 m		2,9 m	
Material weight up to 1,2 t/m ³	1,14 m ³	695 kg	1,14 m ³	695 kg	0,94 m ³	615 kg
Material weight up to 1,5 t/m ³	0,94 m ³	615 kg	0,94 m ³	615 kg	0,75 m ³	530 kg
Material weight up to 1,8 t/m ³	0,75 m ³	530 kg	0,75 m ³	530 kg	0,66 m ³	495 kg

TWO-PIECE BOOM						
Arm length	2,25 m		2,6 m		2,9 m	
Material weight up to 1,2 t/m ³	1,14 m ³	695 kg	1,14 m ³	695 kg	0,94 m ³	615 kg
Material weight up to 1,5 t/m ³	0,94 m ³	615 kg	0,94 m ³	615 kg	0,75 m ³	530 kg
Material weight up to 1,8 t/m ³	0,75 m ³	530 kg	0,75 m ³	530 kg	0,66 m ³	495 kg

Max. capacity and weight have been calculated according to ISO 10567:2007.

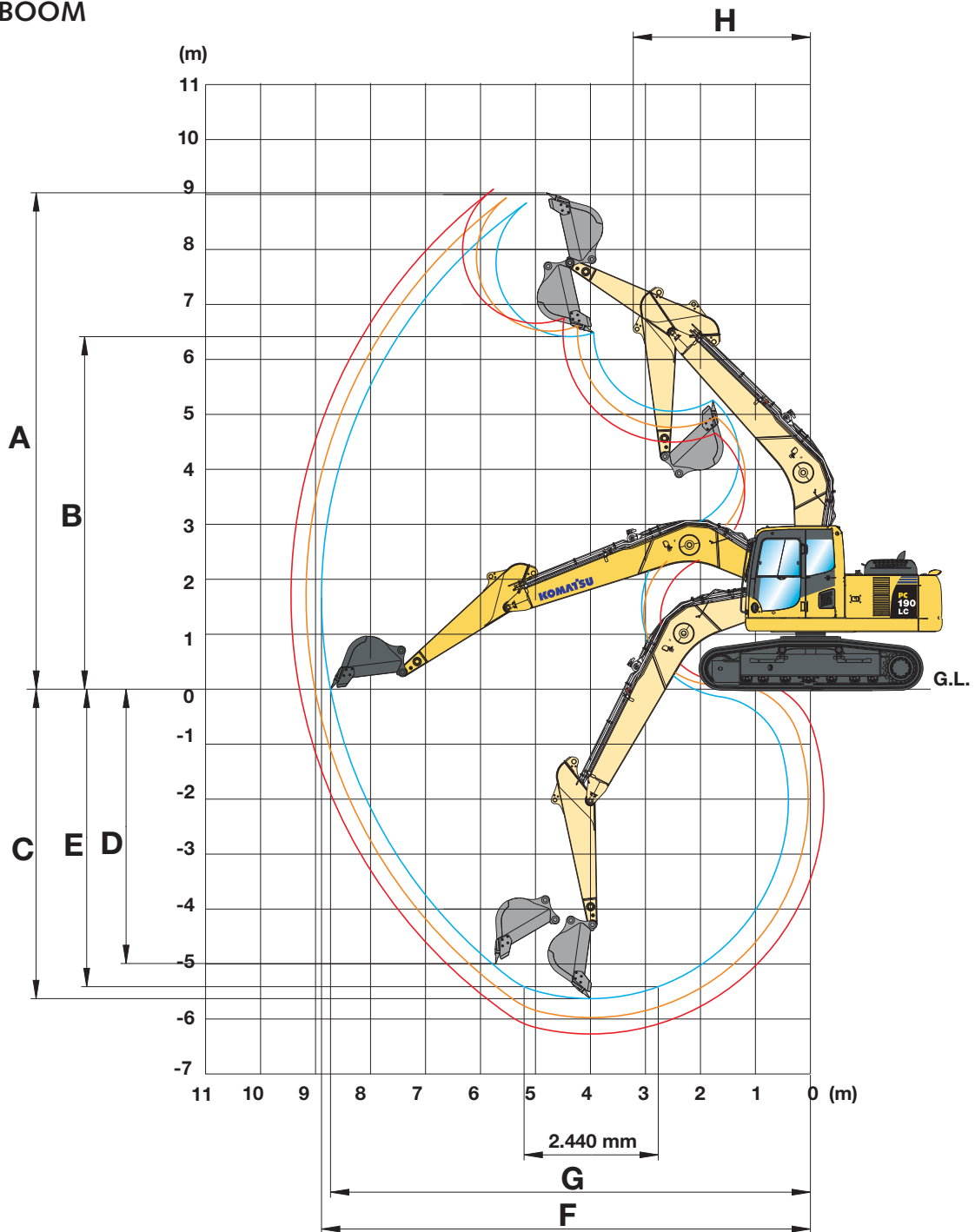
Please consult with your distributor for the correct selection of buckets and attachments to suit the application.

BUCKET AND ARM FORCE

Arm length	2,25 m	2,6 m	2,9 m
Bucket digging force	11.500 kg	11.500 kg	11.500 kg
Bucket digging force at PowerMax	12.500 kg	12.500 kg	12.500 kg
Arm crowd force	9.050 kg	8.200 kg	7.550 kg
Arm crowd force at PowerMax	9.700 kg	8.800 kg	8.100 kg

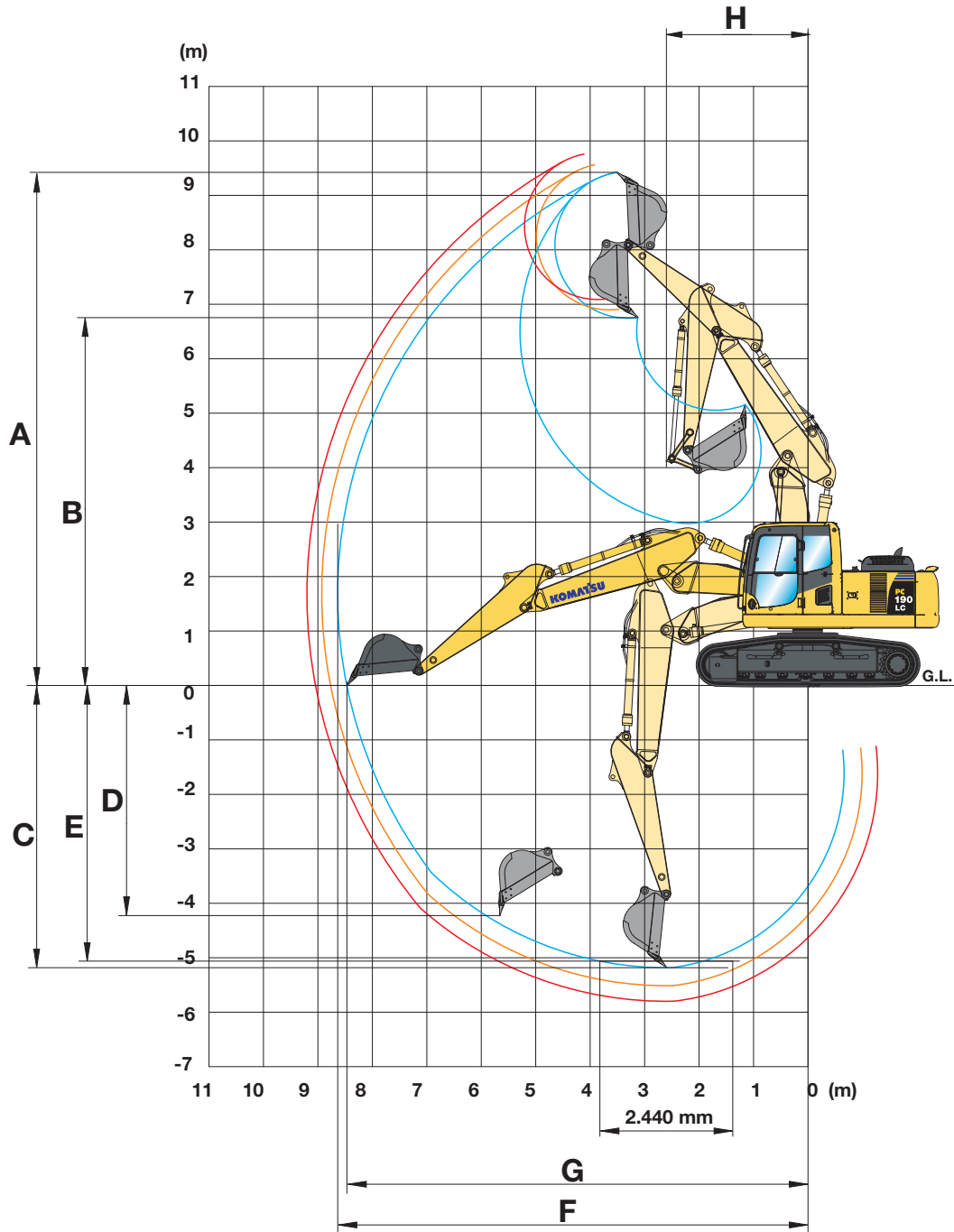
Working Range

MONO BOOM



ARM LENGTH	2.250 mm	2.600 mm	2.900 mm
A Max. digging height	9.030 mm	9.105 mm	9.255 mm
B Max. dumping height	6.415 mm	6.505 mm	6.655 mm
C Max. digging depth	5.630 mm	5.985 mm	6.275 mm
D Max. vertical wall digging depth	4.990 mm	5.180 mm	5.475 mm
E Max. digging depth of cut for 2,44 m level	5.410 mm	5.780 mm	6.090 mm
F Max. digging reach	8.890 mm	9.180 mm	9.445 mm
G Max. digging reach at ground level	8.730 mm	9.020 mm	9.295 mm
H Min. swing radius	3.220 mm	3.170 mm	3.175 mm











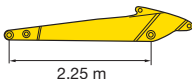

TWO-PIECE BOOM

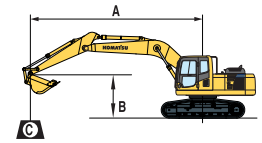


ARM LENGTH	2.250 mm	2.600 mm	2.900 mm
A Max. digging height	9.420 mm	9.575 mm	9.760 mm
B Max. dumping height	6.755 mm	6.910 mm	7.100 mm
C Max. digging depth	5.185 mm	5.515 mm	5.800 mm
D Max. vertical wall digging depth	4.225 mm	4.530 mm	4.845 mm
E Max. digging depth of cut for 2,44 m level	5.060 mm	5.400 mm	5.690 mm
F Max. digging reach	8.635 mm	8.930 mm	9.200 mm
G Max. digging reach at ground level	8.465 mm	8.765 mm	9.040 mm
H Min. swing radius	2.600 mm	2.600 mm	2.600 mm

Lifting Capacity

PC190LC-8 MONO BOOM

Arm length	A		7,5 m		6,0 m		4,5 m		3,0 m		1,5 m			
	B													
 2,25 m  495 kg 0,65 m ³ Boom: 5.350 mm	6,0 m	kg	*2.500	*2.500		*4.200	3.600							
	4,5 m	kg	*2.450	2.400		5.250	3.500	*6.200	5.700					
	3,0 m	kg	*2.500	2.100	3.550	2.300	5.150	3.350	*7.650	5.250				
	1,5 m	kg	*2.700	2.000	3.450	2.200	4.650	3.150	7.800	4.850				
	0,0 m	kg	*3.050	2.050	3.400	2.150	4.800	3.050	7.400	4.450	*4.850	*4.850		
	-1,5 m	kg	3.600	2.300			4.650	2.950	6.450	4.500	*8.750	8.450	*5.050	*5.050
	-3,0 m	kg	4.400	2.800			4.750	3.000	7.500	4.600	*12.700	8.900	*9.150	*9.150
-4,5 m	kg													



A – Reach from swing center

B – Bucket hook height

C – Lifting capacities, including bucket (495 kg), bucket linkage and bucket cylinder

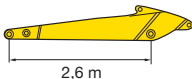

 – Rating over front

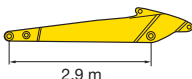

 – Rating over side

 – Rating at maximum reach













When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights.

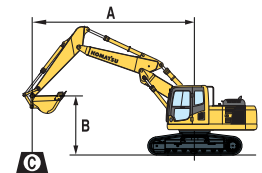
With 600 mm shoes

 2,6 m  495 kg 0,65 m ³ Boom: 5.350 mm	6,0 m	kg	*2.100	*2.100		*3.900	3.650							
	4,5 m	kg	*2.050	*2.050		*4.850	3.550							
	3,0 m	kg	*2.100	2.050	*2.750	2.400	5.200	3.400	*7.300	5.400	*11.200	10.400		
	1,5 m	kg	*2.300	1.950	3.600	2.350	4.700	3.250	7.950	4.950				
	0,0 m	kg	*2.600	1.950	3.500	2.250	4.850	3.100	7.500	4.550	*5.700	*5.700		
	-1,5 m	kg	*3.150	2.150	3.400	2.200	4.700	3.000	6.500	4.550	*8.600	*8.350	*5.000	*5.000
	-3,0 m	kg	*4.050	2.600	3.400	2.150	4.750	3.000	7.550	4.600	*13.200	8.950	*8.350	*8.350
-4,5 m	kg							7.150	4.750	*10.300	9.250			

 2,9 m  495 kg 0,65 m ³ Boom: 5.350 mm	6,0 m	kg	*1.800	*1.800		*3.600	3.600							
	4,5 m	kg	*1.800	*1.800	*3.050	2.400	*4.350	3.600						
	3,0 m	kg	*1.850	*1.850	3.550	2.300	5.200	3.400	*6.850	5.400	*10.150	*10.150		
	1,5 m	kg	*2.000	1.800	3.450	2.250	4.650	3.200	7.900	4.950	*6.600	*6.600		
	0,0 m	kg	*2.250	1.800	3.400	2.150	4.800	3.050	7.450	4.500	*6.000	*6.000		
	-1,5 m	kg	*2.700	1.950	3.350	2.100	4.630	2.900	6.450	4.450	*8.300	*8.050	*4.650	*4.650
	-3,0 m	kg	*3.600	2.350			4.700	2.950	7.450	4.500	*12.200	8.800	*7.600	*7.600
-4,5 m	kg													

PC190LC-8 TWO-PIECE BOOM

Arm length	A		7,5 m		6,0 m		4,5 m		3,0 m		1,5 m	
	B											
 2,25 m  495 kg 0,65 m ³ Boom: 5.069 mm	7,5 m	kg	*3.050	*3.050			*3.550	*3.350				
	6,0 m	kg	*2.650	*2.650		*2.900	*2.900	*5.100	*5.100			
	4,5 m	kg	*2.550	*2.550		5.150	3.550	*6.350	5.800			
	3,0 m	kg	*2.650	2.400		5.000	3.400	8.050	5.350	*14.050	10.300	
	1,5 m	kg	*2.850	2.250		4.800	3.100	7.550	4.900			
	0,0 m	kg	*3.300	2.300		4.650	3.050	7.250	4.650	*7.100	*7.100	
	-1,5 m	kg	3.850	2.550		4.550	3.000	7.150	4.600	*11.000	8.850	
-3,0 m	kg								*5.650	4.650		



A – Reach from swing center

B – Bucket hook height

C – Lifting capacities, including bucket (495 kg), bucket linkage and bucket cylinder

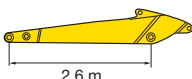

 – Rating over front

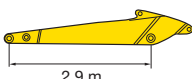

 – Rating over side

 – Rating at maximum reach

When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights.

With 600 mm shoes

 2,6 m  495 kg 0,65 m ³ Boom: 5.069 mm	7,5 m	kg	*2.500	*2.500			*3.550	*3.550					
	6,0 m	kg	*2.200	*2.200		*3.300	*3.300						
	4,5 m	kg	*2.150	*2.150		*4.600	3.600	*5.300	*5.300				
	3,0 m	kg	*2.200	*2.200	*2.850	2.300	5.050	3.400	8.150	5.450	*13.200	10.250	
	1,5 m	kg	*2.400	2.100	3.350	2.200	4.800	3.100	7.650	5.000	*8.300	*8.300	
	0,0 m	kg	*2.750	2.150	3.200	2.150	4.600	3.050	7.250	4.650	*7.800	*7.800	
	-1,5 m	kg	*3.450	2.350			4.550	2.950	7.150	4.550	*10.900	8.750	
-3,0 m	kg	*3.950	2.950			*4.200	3.050	*6.450	4.600	*8.250	*8.250		

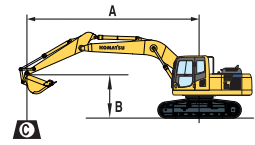
 2,9 m  495 kg 0,65 m ³ Boom: 5.069 mm	7,5 m	kg	*2.150	*2.150									
	6,0 m	kg	*1.900	*1.900		*3.300	*3.300						
	4,5 m	kg	*1.850	*1.850	*1.850	*1.850	*4.250	3.650	*4.550	*4.550			
	3,0 m	kg	*1.900	*1.900	*3.250	2.300	5.005	3.450	*7.650	5.550	*12.450	10.500	
	1,5 m	kg	*2.050	1.950	3.350	2.150	4.800	3.100	7.650	5.000	*10.500	9.400	
	0,0 m	kg	*2.350	2.000	3.250	2.150	4.600	3.000	7.250	4.650	*8.050	*8.050	
	-1,5 m	kg	*2.900	2.150			4.500	2.900	7.100	4.500	*10.400	8.650	
-3,0 m	kg	*3.950	2.650			4.500	2.950	6.950	4.500	*9.200	8.800		

* 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.



PC190NLC-8 MONO BOOM

Arm length	A		7,5 m		6,0 m		4,5 m		3,0 m		1,5 m			
	B													
 2,25 m 495 kg 0,65 m ³ Boom: 5.350 mm	6,0 m	kg	*2.500	*2.500		*4.200	3.250							
	4,5 m	kg	*2.450	2.150		5.150	3.200	*6.200	5.150					
	3,0 m	kg	*2.500	1.900	3.450	2.050	5.050	3.000	*7.700	4.750				
	1,5 m	kg	*2.700	1.800	3.400	2.000	4.550	2.850	7.650	4.350				
	0,0 m	kg	*3.050	1.850	3.350	1.950	4.700	2.700	7.250	3.940	*4.850	*4.850		
	-1,5 m	kg	3.500	2.050			4.580	2.600	6.350	4.000	*8.750	7.400	*5.050	*5.050
	-3,0 m	kg	4.350	2.500			4.700	2.700	7.400	4.100	*12.750	7.850	*9.150	*9.150



A – Reach from swing center

B – Bucket hook height

C – Lifting capacities, including bucket (495 kg), bucket linkage and bucket cylinder

– Rating over front

– Rating over side

– Rating at maximum reach

When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights.

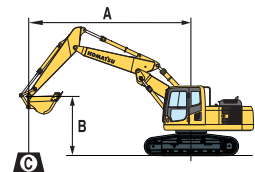
With 500 mm shoes

 2,6 m 495 kg 0,65 m ³ Boom: 5.350 mm	6,0 m	kg	*2.100	*2.100			*3.900	3.300						
	4,5 m	kg	*2.050	2.050			*4.850	3.250						
	3,0 m	kg	*2.100	1.800	*2.750	2.150	5.100	3.100	*7.300	4.850	*11.200	9.200		
	1,5 m	kg	*2.300	1.700	3.500	2.100	4.600	2.900	7.800	4.450				
	0,0 m	kg	*2.600	1.750	3.400	2.000	4.750	2.750	7.300	4.050	*5.700	*5.700		
	-1,5 m	kg	*3.150	1.900	3.350	1.950	4.600	2.650	6.350	4.050	*8.600	7.450	*5.000	*5.000
	-3,0 m	kg	3.950	2.300	3.300	1.900	4.650	2.700	7.400	4.100	*13.200	7.850	*8.350	*8.350

 2,9 m 495 kg 0,65 m ³ Boom: 5.350 mm	6,0 m	kg	*1.800	*1.800			*3.600	3.350						
	4,5 m	kg	*1.800	*1.800	*3.050	2.150	*4.350	3.250						
	3,0 m	kg	*1.850	1.650	3.500	2.050	5.100	3.050	*6.850	4.900	*10.150	9.400		
	1,5 m	kg	*2.000	1.600	3.400	2.000	4.550	2.850	7.700	4.400	*6.600	*6.600		
	0,0 m	kg	*2.250	1.600	3.300	1.900	4.700	2.700	7.300	4.000	*6.000	*6.000		
	-1,5 m	kg	*2.700	1.750	3.250	1.850	4.550	2.600	6.300	3.950	*8.300	7.350	*4.650	*4.650
	-3,0 m	kg	*3.600	2.100			4.600	2.600	7.300	4.000	*12.200	7.700	*7.600	*7.600

PC190NLC-8 TWO-PIECE BOOM

Arm length	A		7,5 m		6,0 m		4,5 m		3,0 m		1,5 m	
	B											
 2,25 m 495 kg 0,65 m ³ Boom: 5.069 mm	7,5 m	kg	*3.050	*3.050				*3.350	*3.350			
	6,0 m	kg	*2.650	*2.650			*2.900	*2.900	*5.100	*5.100		
	4,5 m	kg	*2.550	2.350			5.000	3.050	*6.350	5.000		
	3,0 m	kg	*2.650	2.000			4.800	2.900	7.750	4.600	*14.050	8.650
	1,5 m	kg	*2.850	1.900			4.600	2.600	7.250	4.150		
	0,0 m	kg	*3.300	1.900			4.400	2.550	6.950	3.900	*7.100	*7.100
	-1,5 m	kg	3.700	2.150			4.350	2.500	6.850	3.800	*11.000	7.250



A – Reach from swing center

B – Bucket hook height

C – Lifting capacities, including bucket (495 kg), bucket linkage and bucket cylinder

– Rating over front

– Rating over side

– Rating at maximum reach

When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights.

With 500 mm shoes

 2,6 m 495 kg 0,65 m ³ Boom: 5.069 mm	7,5 m	kg	*2.500	*2.500				*3.550	*3.550			
	6,0 m	kg	*2.200	*2.200			*3.300	3.250				
	4,5 m	kg	*2.150	*2.150			*4.600	3.200	*5.300	5.250		
	3,0 m	kg	*2.200	1.950	*2.850	2.000	4.850	3.000	7.850	4.800	*13.200	9.250
	1,5 m	kg	*2.400	1.800	3.200	1.900	4.600	2.700	7.300	4.350	*8.300	7.950
	0,0 m	kg	*2.750	1.850	3.150	1.850	4.400	2.650	6.950	4.050	*7.800	7.500
	-1,5 m	kg	3.400	2.050			4.350	2.550	6.850	3.900	*10.900	7.450

 2,9 m 495 kg 0,65 m ³ Boom: 5.069 mm	7,5 m	kg	*2.150	*2.150				*3.300	3.300			
	6,0 m	kg	*1.900	*1.900			*3.300	3.300				
	4,5 m	kg	*1.850	*1.850	*1.850	*1.850	*4.250	3.200	*4.550	*4.550		
	3,0 m	kg	*1.900	1.800	*3.250	2.000	4.850	3.000	*7.650	4.850	*12.450	9.500
	1,5 m	kg	*2.050	1.700	3.200	1.850	4.600	2.700	7.350	4.350	*10.500	8.100
	0,0 m	kg	*2.350	1.700	3.100	1.800	4.400	2.600	6.950	4.000	*8.050	7.450
	-1,5 m	kg	*2.900	1.850			4.300	2.500	6.800	3.850	*10.400	7.350

* 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.