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 ..... 90,0 kW / 121 HP
- ISO 9249 (net engine power) ..... 86,0 kW / 115 HP

No. of cylinders 4
Bore × stroke ..... 107 × 120 mm
Displacement ..... 4,46 ltr
Battery ..... 2 × 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

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) 44
- 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 ..... 101 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/s² (uncertainty K = 0,48 m/s²)
- Body ..... ≤ 0,5 m/s² (uncertainty K = 0,23 m/s²)

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

OPERATING WEIGHT (APPR.)

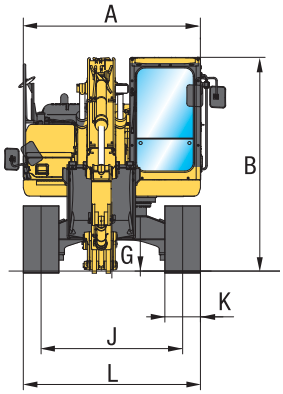
	Mono boom		Two-piece boom	
Triple grouser shoes	Operating weight	Ground pressure	Operating weight	Ground pressure
500 mm	17.260 kg	0,51 kg/cm²	17.785 kg	0,53 kg/cm²
600 mm	17.480 kg	0,43 kg/cm²	18.005 kg	0,44 kg/cm²
700 mm	17.700 kg	0,37 kg/cm²	18.225 kg	0,38 kg/cm²
800 mm	17.920 kg	0,33 kg/cm²	18.445 kg	0,34 kg/cm²

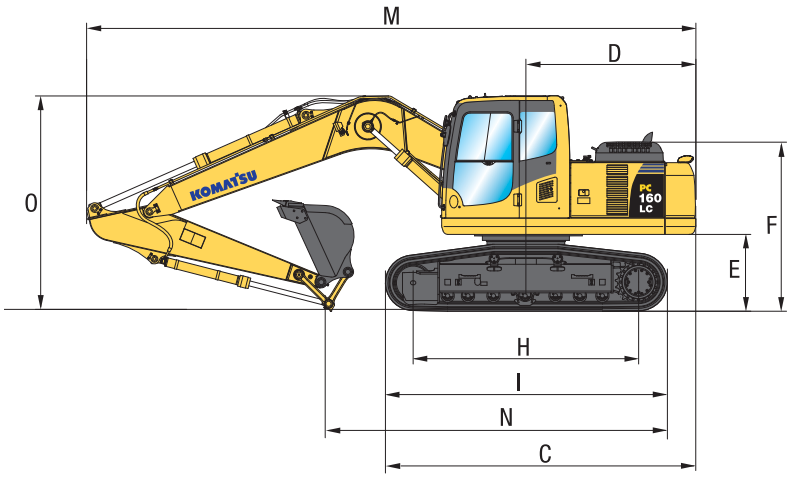
Operating weight, including specified work equipment, 2,6 m arm, 495 kg bucket, operator, lubricant, coolant, full fuel tank and the standard equipment.

Dimensions & Performance Figures

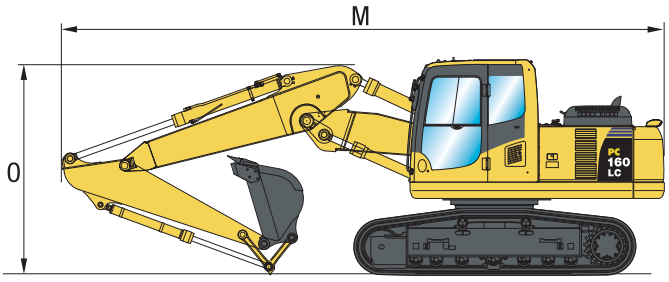
MACHINE DIMENSIONS		PC160LC-8
A	Overall width of upper structure	2.530 mm
B	Overall height of cab	3.030 mm
C	Overall length of basic machine	4.375 mm
D	Tail length	2.390 mm
	Tail swing radius	2.435 mm
E	Clearance under counterweight	1.055 mm
F	Machine tail height (to top of engine cover)	2.090 mm
G	Ground clearance	440 mm
H	Tumbler centre distance	3.170 mm
I	Track length	3.965 mm
J	Track gauge	1.990 mm
K	Track shoe width	500, 600, 700, 800 mm
L	Overall track width with 500 mm shoe	2.490 mm
	Overall track width with 600 mm shoe	2.590 mm
	Overall track width with 700 mm shoe	2.690 mm
	Overall track width with 800 mm shoe	2.790 mm

MONO BOOM





TWO-PIECE BOOM



TRANSPORT DIMENSIONS		MONO BOOM			TWO-PIECE BOOM		
		2,25 m	2,6 m	2,9 m	2,25 m	2,6 m	2,9 m
M	Transport length	8.565 mm	8.565 mm	8.565 mm	8.490 mm	8.490 mm	8.475 mm
N	Length on ground (transport)	5.130 mm	4.760 mm	4.565 mm	5.180 mm	4.825 mm	4.660 mm
O	Overall height (to top of boom)	2.990 mm	3.000 mm	3.100 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/m³	0,94 m³	615 kg	0,94 m³	615 kg	0,75 m³	530 kg
Material weight up to 1,5 t/m³	0,75 m³	530 kg	0,75 m³	530 kg	0,75 m³	530 kg
Material weight up to 1,8 t/m³	0,66 m³	495 kg	0,66 m³	495 kg	0,66 m³	495 kg

	TWO-PIECE BOOM					
Arm length	**2,25 m**		**2,6 m**		**2,9 m**	
Material weight up to 1,2 t/m³	0,94 m³	615 kg	0,94 m³	615 kg	0,75 m³	530 kg
Material weight up to 1,5 t/m³	0,75 m³	530 kg	0,75 m³	530 kg	0,75 m³	530 kg
Material weight up to 1,8 t/m³	0,66 m³	495 kg	0,66 m³	495 kg	0,66 m³	495 kg

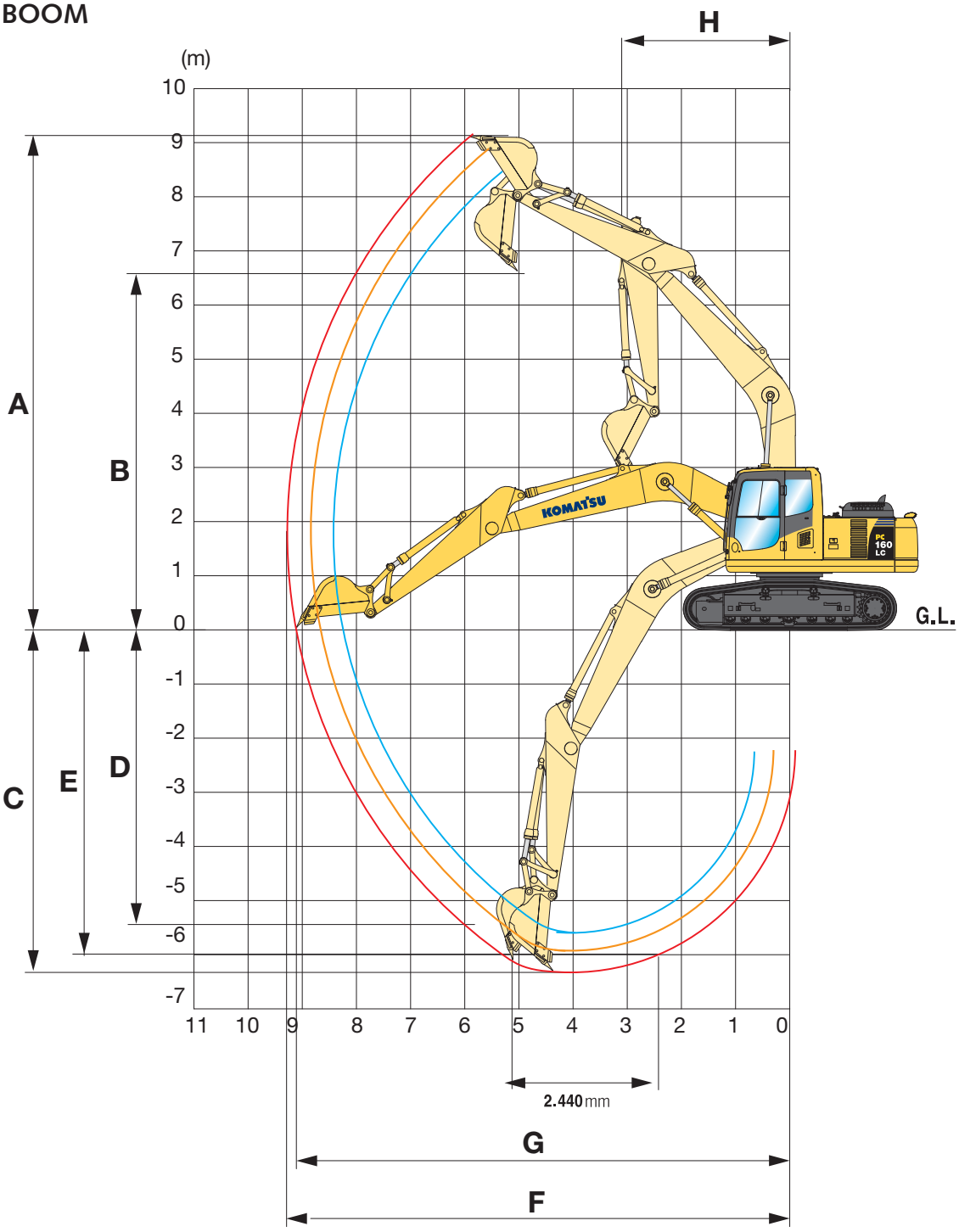
Max. capacity and weight have been calculated according to ISO 10567:2007.
Please consult with your distributor for the correct selection of buckets and attachments to suit the application.

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

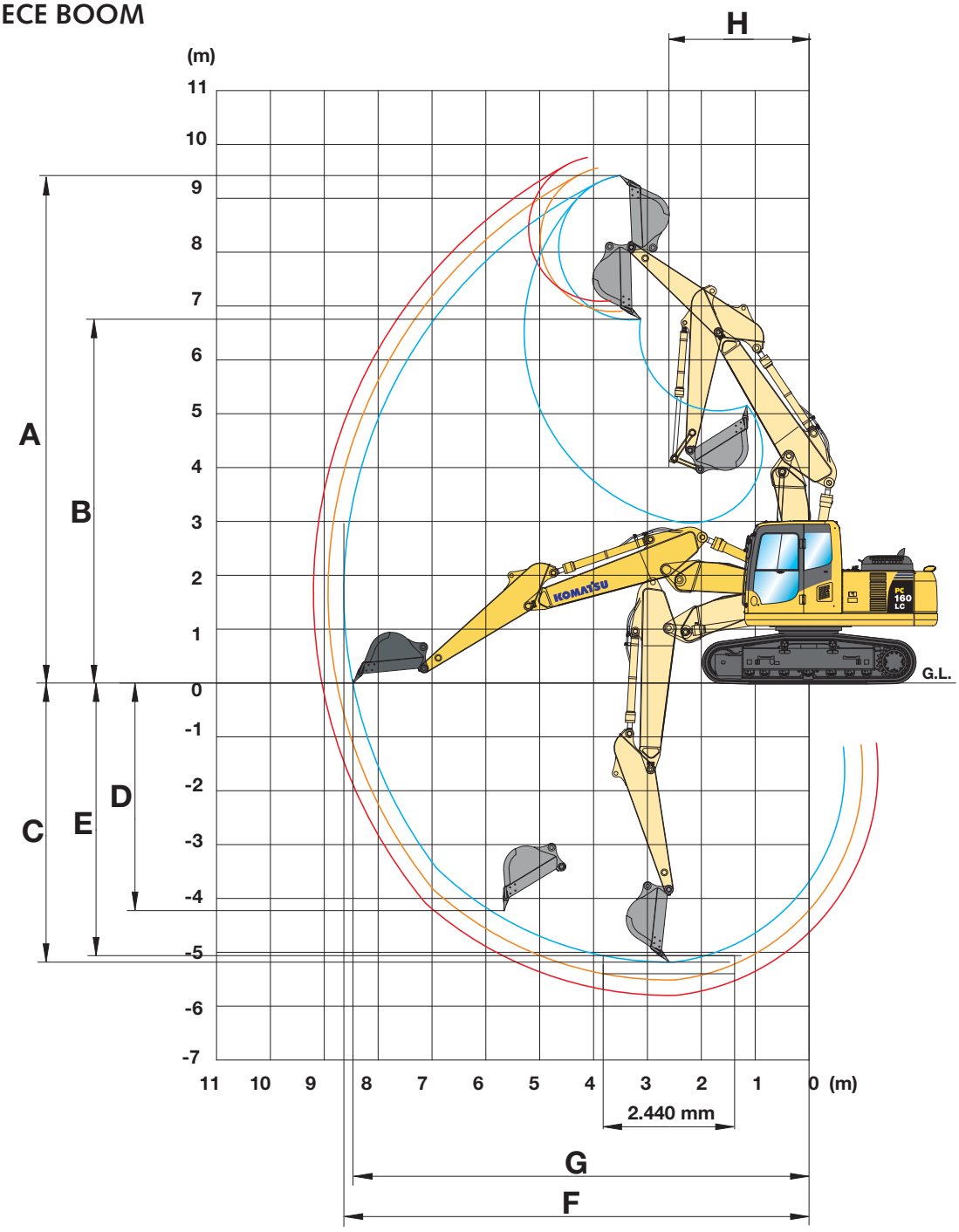
Working Range

MONO BOOM



ARM LENGTH		2.250 mm	2.600 mm	2.900 mm
A	Max. digging height	8.910 mm	8.980 mm	9.130 mm
B	Max. dumping height	6.280 mm	6.370 mm	6.525 mm
C	Max. digging depth	5.610 mm	5.960 mm	6.250 mm
D	Max. vertical wall digging depth	4.860 mm	5.040 mm	5.320 mm
E	Max. digging depth of cut for 2,44 m level	5.375 mm	5.740 mm	6.050 mm
F	Max. digging reach	8.680 mm	8.960 mm	9.235 mm
G	Max. digging reach at ground level	8.510 mm	8.800 mm	9.075 mm
H	Min. swing radius	3.040 mm	2.990 mm	2.995 mm

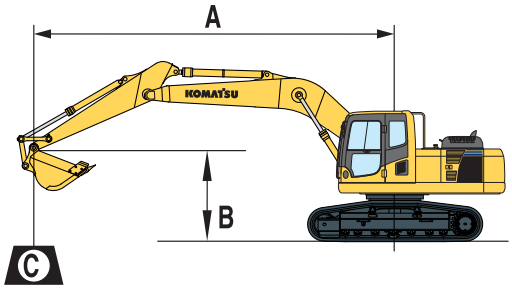
TWO-PIECE BOOM



ARM LENGTH		2.250 mm	2.600 mm	2.900 mm
A	Max. digging height	9.425 mm	9.580 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	4.230 mm	4.530 mm	4.850 mm
E	Max. digging depth of cut for 2,44 m level	5.065 mm	5.400 mm	5.690 mm
F	Max. digging reach	8.640 mm	8.930 mm	9.200 mm
G	Max. digging reach at ground level	8.470 mm	8.765 mm	9.045 mm
H	Min. swing radius	2.600 mm	2.600 mm	2.600 mm

Lifting Capacity

MONO BOOM



A – Reach from swing center

B – Bucket hook height

C – Lifting capacities, including bucket (495 kg), bucket linkage (200 kg) and bucket cylinder (140 kg)

– Rating over front

– Rating over side

– Rating at maximum reach

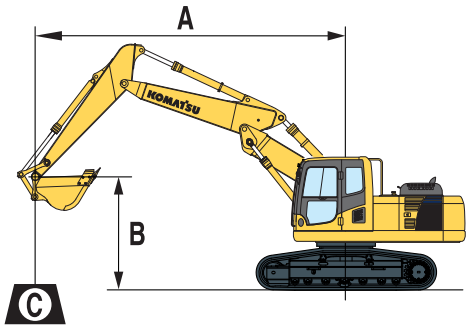
When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights.

With 500 mm shoes

Arm length	A / B			7,5 m		6,0 m		4,5 m		3,0 m		1,5 m	
2.250 mm 495 kg 0,65 m³ Boom: 5.150 mm	6,0 m	kg	*2.400	*2.400			*3.250	2.850						
	4,5 m	kg	*2.350	2.050			*4.450	2.850	*5.000	4.650				
	3,0 m	kg	*2.450	1.800			4.450	2.700	*6.300	4.300	*9.700	8.150		
	1,5 m	kg	*2.700	1.700	2.950	1.750	4.300	2.550	6.700	3.850				
	0,0 m	kg	2.950	1.700			4.150	2.400	6.550	3.750	*6.750	*6.750		
	-1,5 m	kg	3.300	1.950			4.100	2.400	6.500	3.650	*10.600	6.950	*6.200	*6.200
	-3,0 m	kg	4.200	2.450					6.550	3.700	*10.500	7.100	*10.250	*10.250
	-4,5 m	kg	*4.850	4.200							*7.050	*7.050		
2.600 mm 495 kg 0,65 m³ Boom: 5.150 mm	6,0 m	kg	*2.000	*2.000			*3.350	2.900						
	4,5 m	kg	*2.000	1.900			*4.200	2.850						
	3,0 m	kg	*2.050	1.650	3.050	1.800	4.500	2.750	*5.900	4.400	*8.700	8.450		
	1,5 m	kg	*2.300	1.600	3.000	1.750	4.300	2.550	6.900	4.000	*7.850	7.350		
	0,0 m	kg	*2.650	1.600	2.900	1.700	4.150	2.450	6.600	3.750	*7.350	6.950		
	-1,5 m	kg	3.050	1.750			4.100	2.350	6.500	3.650	*10.150	6.950	*5.800	*5.800
	-3,0 m	kg	3.800	2.200			4.100	2.400	6.500	3.650	*11.150	7.050	*9.200	*9.200
	-4,5 m	kg	*4.950	3.450					*5.550	3.850	*8.200	7.350		
2.900 mm 495 kg 0,65 m³ Boom: 5.150 mm	6,0 m	kg	*1.750	*1.750			*3.250	2.950						
	4,5 m	kg	*1.700	*1.700	*2.250	1.850	*3.900	2.850						
	3,0 m	kg	*1.800	1.550	3.050	1.800	4.500	2.700	*5.500	4.400	*7.850	*7.850		
	1,5 m	kg	*1.950	1.450	2.950	1.700	4.300	2.550	6.900	4.000	*10.000	7.450		
	0,0 m	kg	*2.250	1.450	2.850	1.650	4.100	2.400	6.600	3.700	*7.650	6.950		
	-1,5 m	kg	*2.800	1.600	2.850	1.600	4.050	2.300	6.400	3.600	*9.750	6.800	*5.400	*5.400
	-3,0 m	kg	3.450	1.950			4.050	2.300	6.400	3.600	*11.500	6.900	*8.400	*8.400
	-4,5 m	kg	*4.800	2.950					*6.050	3.700	*8.900	7.200		

* 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.

TWO-PIECE BOOM



A – Reach from swing center

B – Bucket hook height

C – Lifting capacities, including bucket (495 kg), bucket linkage (200 kg) and bucket cylinder (140 kg)

– 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

Arm length	A / B			7,5 m		6,0 m		4,5 m		3,0 m		1,5 m	
2.250 mm 495 kg 0,65 m³ 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	2.850	*5.100	4.900			
	4,5 m	kg	*2.550	2.100			4.650	2.800	*6.350	4.650			
	3,0 m	kg	*2.650	1.800			4.450	2.650	7.250	4.250	*14.050	8.000	
	1,5 m	kg	*2.850	1.700			4.250	2.350	6.750	3.800			
	0,0 m	kg	3.050	1.700			4.100	2.300	6.450	3.550	*7.100	6.550	
	-1,5 m	kg	3.400	1.900			4.050	2.250	6.350	3.450	*11.000	6.600	
	-3,0 m	kg							*5.650	3.550			
2.600 mm 495 kg 0,65 m³ 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	2.950					
	4,5 m	kg	*2.150	1.950			*4.600	2.850	*5.300	4.750			
	3,0 m	kg	*2.200	1.700	*2.850	1.750	4.500	2.650	7.350	4.300	*13.200	8.300	
	1,5 m	kg	*2.400	1.550	2.950	1.600	4.250	2.350	6.800	3.850	*8.300	7.000	
	0,0 m	kg	*2.750	1.600	2.850	1.600	4.050	2.300	6.450	3.550	*7.800	6.550	
	-1,5 m	kg	3.150	1.750			4.000	2.250	6.300	3.450	*10.900	6.550	
	-3,0 m	kg	3.950	2.200			4.050	2.300	6.350	3.500	*8.250	6.700	
2.900 mm 495 kg 0,65 m³ Boom: 5.069 mm	7,5 m	kg	*2.150	*2.150									
	6,0 m	kg	*1.900	*1.900			*3.300	2.950					
	4,5 m	kg	*1.850	1.800	*1.850	1.800	*4.250	2.850	*4.550	*4.550			
	3,0 m	kg	*1.900	1.550	3.050	1.750	4.500	2.650	7.400	4.350	*12.450	8.550	
	1,5 m	kg	*2.050	1.450	2.900	1.600	4.250	2.350	6.850	3.850	*10.500	7.150	
	0,0 m	kg	*2.350	1.450	2.850	1.550	4.050	2.250	6.450	3.500	*8.050	6.550	
	-1,5 m	kg	2.900	1.600			3.950	2.200	6.250	3.350	*10.400	6.450	
	-3,0 m	kg	3.550	1.950			3.950	2.200	6.300	3.400	*9.200	6.550	

* 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.