KOMATSU

PC
118MR

Midi-Excavator

PC118MR-8

ENGINE POWER
72,0 kW / 96,6 HP @ 2.200 rpm

OPERATING WEIGHT
11.885 - 12.190 kg

BUCKET CAPACITY
max. 0,40 m³

Walk-Around

The new PC118MR-8 compact midi-excavator is the result of the competence and technology that Komatsu has acquired over the past 80 years. It was designed and developed with constant attention to the needs of customers from all over the world. The end product is a user-friendly machine with top-class performances and a tight tail swing that protrudes over the tracks by just 240 mm. The operator can concentrate on his work, without having to worry about rear-swing impacts.

Outstanding performances

- Fast and precise movements
- Large digging envelope
- Unrivalled controllability
- Excellent mobility in confined work spaces
- CLSS hydraulic system

Powerful and environmentally friendly

- High torque and fuel efficient Komatsu ecot3 engine
- Meets EU Stage IIIA
- Auto-deceleration and eco-gauge for a lower fuel usage
- 5 selectable working modes
- Low operating noise levels

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11.885 - 12.190 kg

BUCKET CAPACITY
max. 0,40 m³

First-class operator comfort

- Spacious and comfortable cab
  ROPS compliant with ISO12117-2:2008
- Quiet and ergonomic working environment
- Large multifunction colour LCD monitor
- Sliding door for easy entry and exit
- Automatic air conditioner

Total versatility

- Proportional control on joystick for auxiliary circuits
- Hydraulic pump oil flow adjustable on the LCD monitor
- Standard hammer line
- Second auxiliary circuit and hydraulic quick-coupler line (optional)
- Road liner (optional)

Easy maintenance

- Optimal maintenance layout
- Side-by-side coolers
- Equipment Management and Monitoring System (EMMS)
- Standard fuel pre-filter with water separator
- Long maintenance intervals

KOMTRAX
Komatsu Satellite Monitoring System

First-Class Operator Comfort

Operator's environment

The PC118MR-8 has a spacious ROPS cab (ISO 12117-2) designed to absorb shocks and offer maximum protection in case of a roll over. It also gives outstanding comfort to this compact machine, even to the most demanding operator. With a double slide mechanism, the seat and PPC levers can be conveniently adjusted for maximum productivity and minimum fatigue. Wide front and side windows - and an opening skylight - enable better visibility in any situation. The standard automatic air conditioner completes a comfortable work environment by maintaining a perfect temperature in the cab, no matter the weather outside.

Large multifunction LCD monitor

A large and user-friendly colour monitor makes working in a PC118MR-8 safe, accurate and smooth. Its highly intuitive interface and easy-to-operate switches give the operator access to a huge range of functions and operating information.

Opening skylight for overhead visibility

Wide glass surface for excellent all around visibility

Large multi-lingual monitor

Outstanding Performances

Performance and controllability

The PC118MR-8 offers outstanding performances coupled with excellent controllability for even the toughest job. It has a powerful swing force, can efficiently work on slopes, and it delivers exceptional drawbar pull. In conjunction with automatic down shift, this machine is ideal on any terrain or for any application. The Closed Load Sensing System (CLSS) ensures unbeatable speed and control to all combined movements, no matter the load.

Powerful and Environmentally Friendly

Performance and ecology

The PC118MR-8 is fitted with an ecot3 engine that meets EU Stage IIIA regulations. Together with an advanced hydraulic system, this electronically controlled common-rail engine with multi stage injection achieves a superior level of productivity. Drastically reduced NOx emissions and noise levels make this compact excavator perfect for confined areas and urban jobsites.

High productivity and fuel saving

Depending on the load, operators can conveniently choose between 5 working modes designed to match engine speed, pump delivery and system pressure. Priority can be given either to speed, for more productivity, or to fuel consumption for lighter applications. Fuel efficiency is further improved with the auto-deceleration, a standard feature that automatically slows down engine speed when levers are in neutral position, and with the eco-gauge, visible on the LCD monitor.

Versatility

Great care went into the design of the PC118MR-8, to give it exceptional versatility and mobility for work in confined areas. It offers outstanding visibility and a reduced tail overhang that lets the operator work without worrying about rear impacts. A reduced front swing radius and a left side swing cylinder make trench digging a cinch, and with its compact size the PC118MR-8 is perfect for urban or road-building jobsites. A wide range of options - such as road liners or an additional counterweight - are available to let customers perfectly match the machine to their needs.

Maximum flexibility

Thanks to auxiliary hydraulic lines, the PC118MR-8 can use a wide range of attachments. For breaking, crushing and all other applications, the optimal oil flow from the hydraulic pump can be selected directly on the LCD monitor. On the joystick, proportional controls for auxiliary circuits guarantee precision work with any tool.

Easy Maintenance

Excellent serviceability

Komatsu designed the PC118MR-8 with an easy access to all service points. Routine maintenance and servicing are less likely to be skipped, which can mean a reduction of costly downtime later on. The radiator, aftercooler and oil cooler are made of aluminium to improve their efficiency and are mounted in parallel for quicker cleaning. The fuel and oil filters as well as the fuel drain valve, are all remote mounted and easily accessible.

EMMS (Equipment Management and Monitoring System)

Komatsu's EMMS can prevent a small problem from becoming a major service issue. The controller monitors all critical systems and key engine features such as engine oil pressure, coolant temperature, battery charge, air clogging etc. If an abnormality occurs, it is displayed on the LCD. The monitor also indicates when the oil or the filters must be replaced.

All major maintenance points can be easily reached from ground level

Fuel pre-filter with water separator

The LCD monitor informs about abnormalities and replacement times

Komatsu Satellite Monitoring System

KOMTRAX

KOMTRAX™ is a revolutionary machine tracking system designed to save you time and money. You can now monitor your equipment anytime and anywhere. Use valuable machine data received via the KOMTRAX™ web site to optimise your maintenance planning and machine performances.

With KOMTRAX™, you can:

- Check when & where your machines are at work
- Be informed of unauthorized machine use or movement
- Set and receive e-mail notification for security alarms

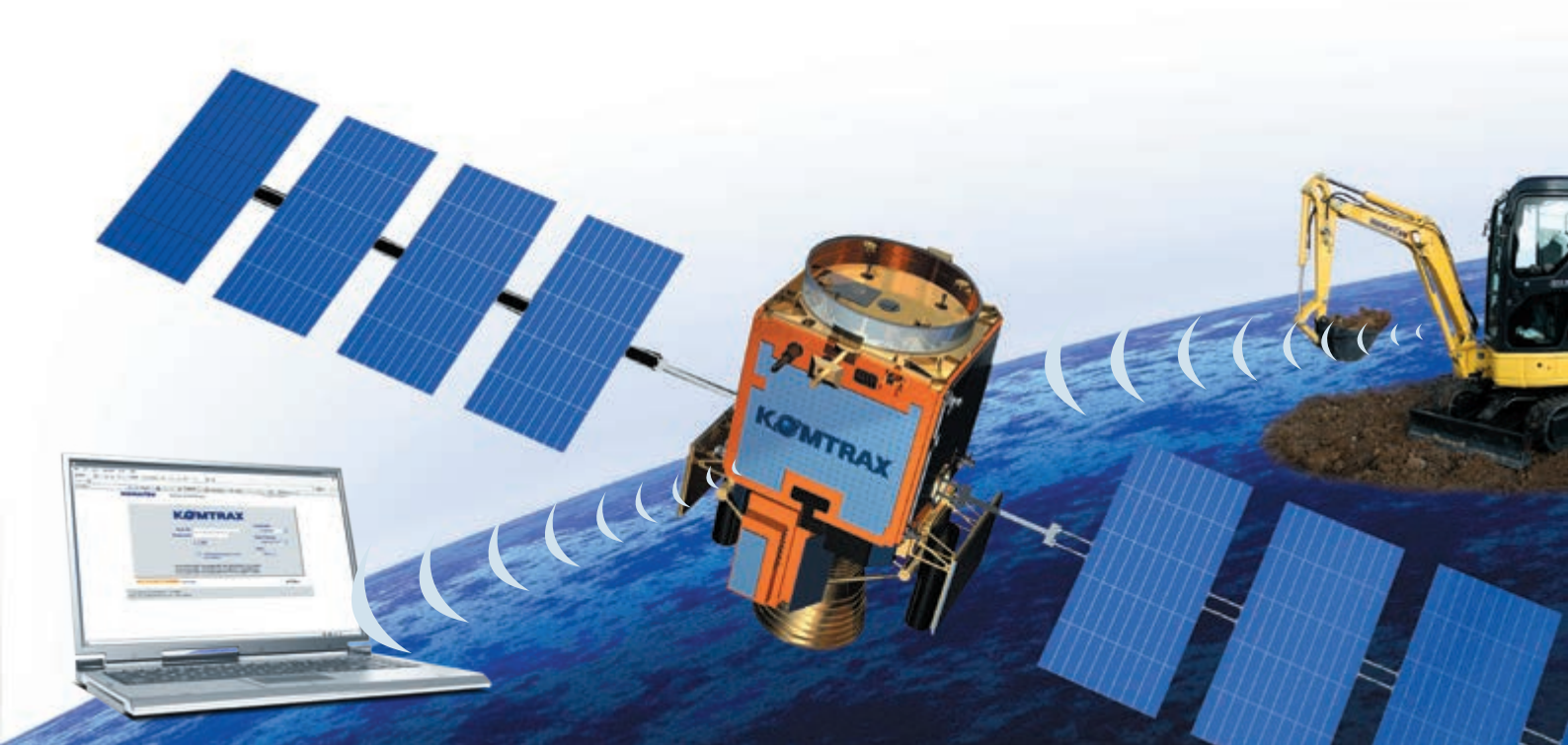
For further details on KOMTRAX™, please ask your Komatsu dealer for the latest KOMTRAX™ brochure.

Machine working time - With the "daily working record" chart, get precise engine running time data: when your machine was started and when it was shut down, as well as total engine running time.

Fleet location - The machine list instantly locates all your machines, even those in other countries.

Alarm notifications - You can receive notification of alarms both via the KOMTRAX™ website and by e-mail.

Added security - The "engine lock" feature allows to program when a machine's engine can be started. And with "geo-fence", KOMTRAX™ sends notification every time your machine moves in or out of a predetermined operating area.



Specifications

ENGINE

Model ..... Komatsu SAA4D95LE-5
Type ..... Common rail direct injection, water cooled, emissionised, turbocharged, after-cooled, diesel
Displacement ..... 3.260 cm³
Bore × stroke ..... 95 mm × 115 mm
No. of cylinders 4
Engine power
at engine speed ..... 2.200 rpm
ISO 14396 ..... 72,0 kW / 96,6 HP
SAE J1349 ..... 68,4 kW / 91,7 HP
Max. torque/engine speed ..... 358 Nm/1.500 rpm
Air cleaner ..... dry, double element type air cleaner with dust indicator and auto-dust evacuator

DRIVES AND BRAKES

Steering control ..... 2 levers with pedals
Transmission ..... hydrostatic
Hydraulic motors ..... variable displacement, axial piston
Max. drawbar pull ..... 7.950 daN (8.100 kgf)
Max. travel speeds Lo / Hi ..... 3,0 km/h - 4,5 km/h
Service brake ..... hydraulic lock
Parking brake ..... mechanical discs

UNDERCARRIAGE

Construction ..... X-frame centre section with box section track-frames
Type ..... fully sealed
Track adjuster ..... hydraulic
Shoes (each side) 38
Carrier rollers (each side) 1
Track rollers (each side) 6
Ground pressure ..... 0,43 kg/cm²

SWING SYSTEM

Driven by ..... hydraulic motor
Swing reduction gear ..... planetary gear
Swing circle lubrication ..... grease-bathed
Swing brakes ..... automatic, with oil immersed disks
Swing speed ..... 8,5 rpm

ELECTRIC SYSTEM

Voltage ..... 24 V
Battery ..... 125 Ah
Alternator ..... 60 A
Starter motor ..... 4,5 kW

HYDRAULIC SYSTEM

Type ..... HydrauMind. Closed-centre system with load sensing and pressure compensation valves
Main pumps:
Pump for ..... boom, arm, bucket and travelling
Type ..... variable displacement, axial piston
Max. flow ..... 198 ltr/min
Pump for ..... swing and blade
Type ..... fixed displacement gear pump
Max. flow ..... 80 ltr/min
Hydraulic motors:
Travel ..... 2 × piston motor with parking brake
Swing ..... 1 × piston motor with swing holding brake
Relief valve setting:
Swing and blade ..... 19,9 MPa (203 kg/cm²)
Travel and work equipment ..... 29,4 MPa (300 kg/cm²)
Bucket breakout force (ISO 6015) ..... 7.169 daN (7.310 kgf)
Arm crowd force, 2.000 mm arm
(ISO 6015) ..... 4.610 daN (4.700 kgf)

SERVICE CAPACITIES

Fuel tank ..... 150 ltr
Cooling system ..... 12,4 ltr
Engine oil ..... 11 ltr
Final drive (each side) ..... 2 ltr
Swing drive ..... 3,5 ltr
Hydraulic oil tank ..... 80 ltr

CAB

Sound-proof cab, provided with safety glasses, liftable windscreen, roof window, sliding door with lock, windscreen-wiper, electric horn, adjustable seat with double slide, control system and instrumentation, adjustable joysticks, outside air inlet.

ENVIRONMENT

Engine emissions ..... Fully complies with EU Stage IIIA exhaust emission regulations
Noise levels
LwA external ..... 100 dB(A) (2000/14/EC Stage II)
LpA operator ear ..... 74 dB(A) (ISO 6396 dynamic test)
Vibration levels (EN 12096:1997)
Hand/arm ..... ≤ 2,5 m/s² (uncertainty K = 0,45 m/s²)
Body ..... ≤ 0,5 m/s² (uncertainty K = 0,20 m/s²)
Contains fluorinated greenhouse gas HFC-134a (GWP 1430).
Quantity of gas 0,8 kg, CO_2 equivalent 1,14 t.

OPERATING WEIGHT

Operating weight, including 2.000 mm arm, 0,38 m³ bucket (ISO 7451), blade, operator, liquids, filled tank and standard equipment (ISO 6016).

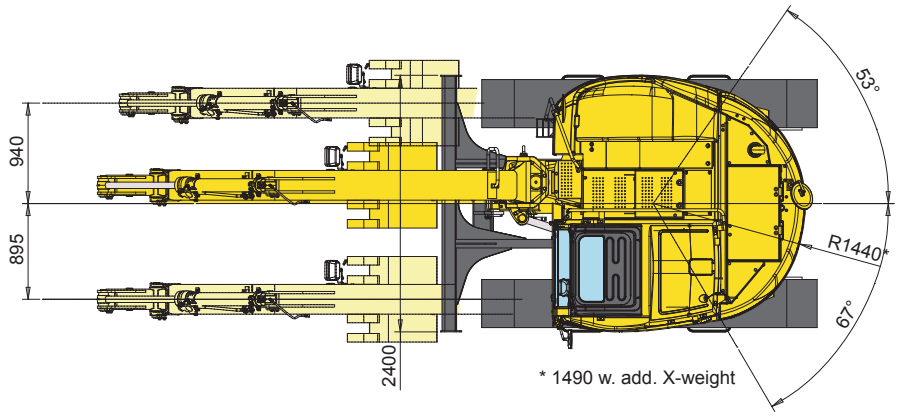
Shoes	Width	Mono boom	Two-piece boom
Steel (500 mm)	2.400 mm	11.885 kg	12.065 kg
Road liner (500 mm)	2.400 mm	12.005 kg	12.190 kg

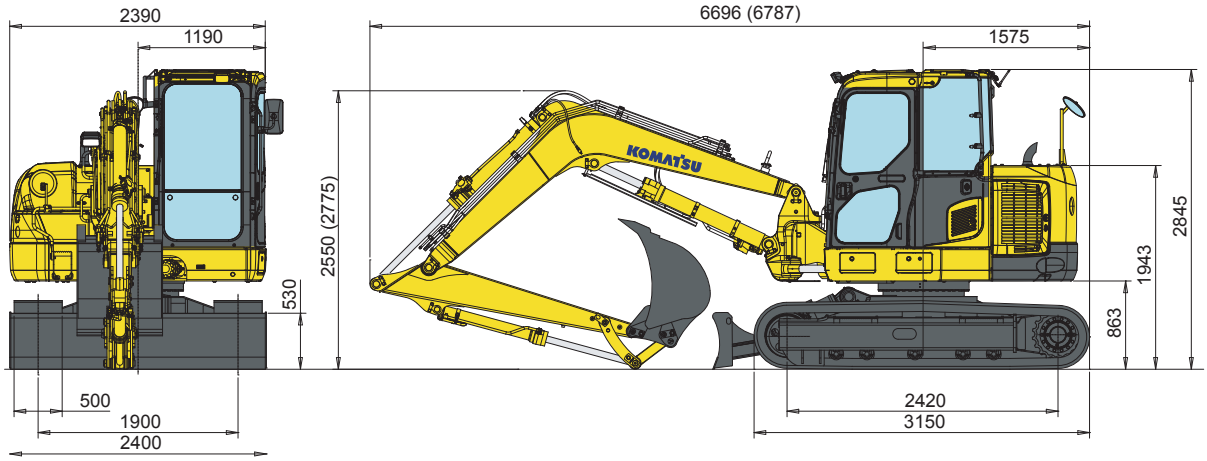
BLADE

Width × height .....2.400 × 530 mm
Max. lifting above ground level .....490 mm
Max. depth below ground level .....400 mm

Bucket capacity (ISO 7451)	m³	0,093	0,15	0,19	0,24	0,28	0,33	0,36	0,40
Bucket width	mm	300	400	500	600	700	800	900	1.000
Bucket weight	kg	168	194	218	234	252	270	294	320
No. of teeth	-	2	3	3	4	4	4	5	5

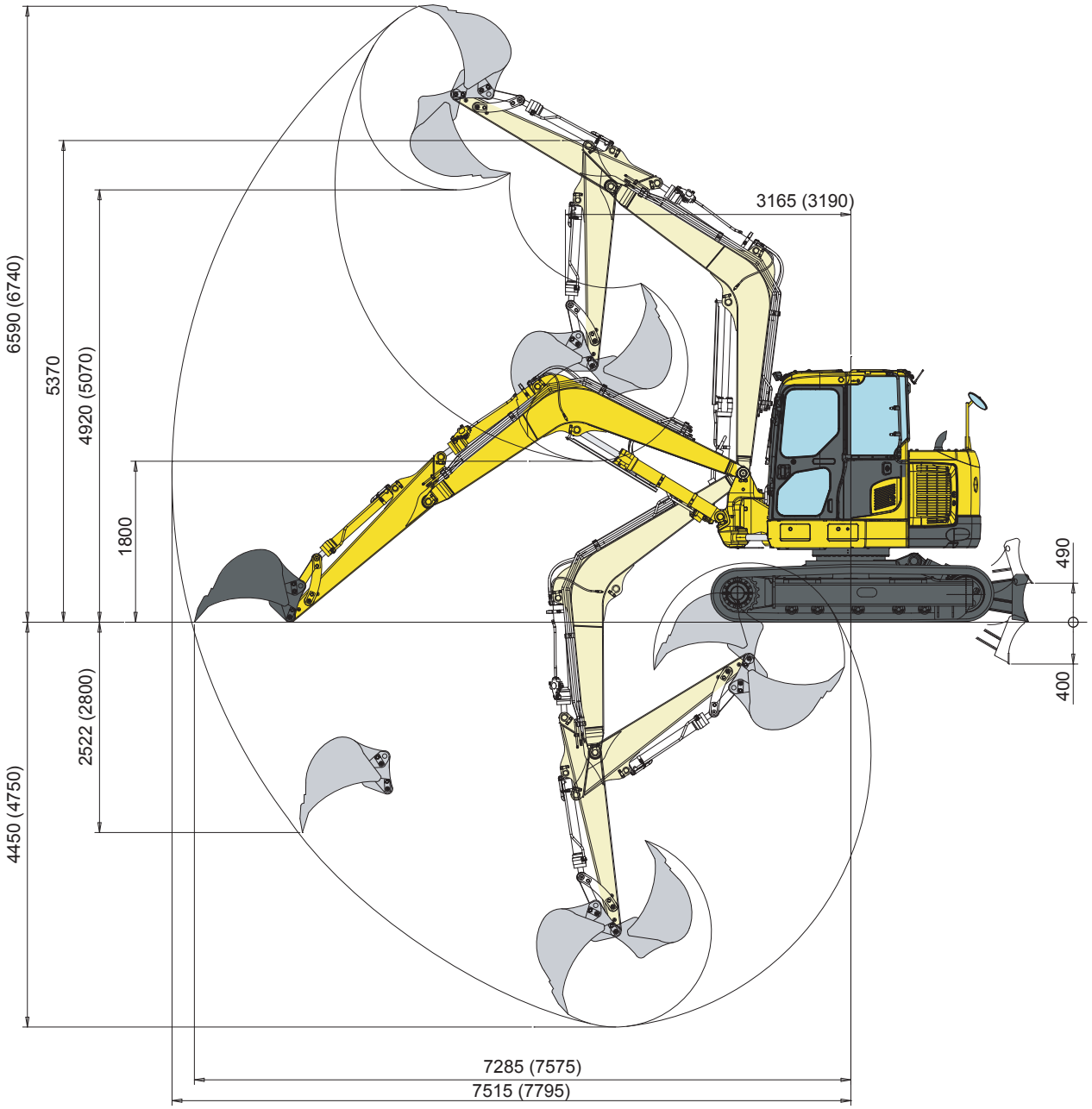
DIMENSIONS



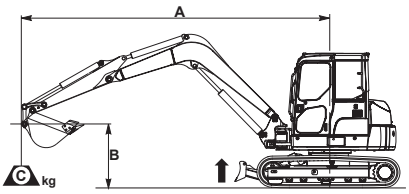


Working Range

WORKING RANGE MONO BOOM



LIFTING CAPACITY MONO BOOM



A – Reach from swing centre

B – Bucket hook height

C – Lifting capacities, including bucket (290 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.

Arm length	A			6,0 m		4,5 m		3,0 m		1,5 m	
	B										
1.850 mm	4,5 m	kg	*1.730	1.460							
	3,0 m	kg	1.420	1.190	1.580	1.320	*2.060	*2.060			
	1,5 m	kg	1.330	1.110	1.520	1.260	2.430	1.960			
	0,0 m	kg	1.390	1.160	1.470	1.220	2.320	1.860	*3.300	3.300	
	-1,5 m	kg	1.700	1.400			2.300	1.850	4.540	3.320	*6.090	*6.090
2.000 mm	4,5 m	kg	*1.590	1.380	*1.560	1.340						
	3,0 m	kg	1.360	1.140	1.580	1.320	*1.910	*1.910				
	1,5 m	kg	1.270	1.060	1.510	1.260	2.430	1.960				
	0,0 m	kg	1.320	1.100	1.460	1.210	2.310	1.850	*3.380	3.270		
	–1,5 m	kg	1.600	1.320			2.280	1.830	4.500	3.290	*5.480	*5.480
2.300 mm	4,5 m	kg	*1.360	1.260	*1.390	1.350					*1.630	*1.630
	3,0 m	kg	1.250	1.050	1.580	1.320	*1.620	*1.620				
	1,5 m	kg	1.170	980	1.510	1.250	2.440	1.960				
	0,0 m	kg	1.220	1.010	1.450	1.200	2.300	1.840	*3.560	3.250		
	–1,5 m	kg	1.440	1.190	1.440	1.190	2.250	1.790	4.440	3.230	*3.370	*3.370

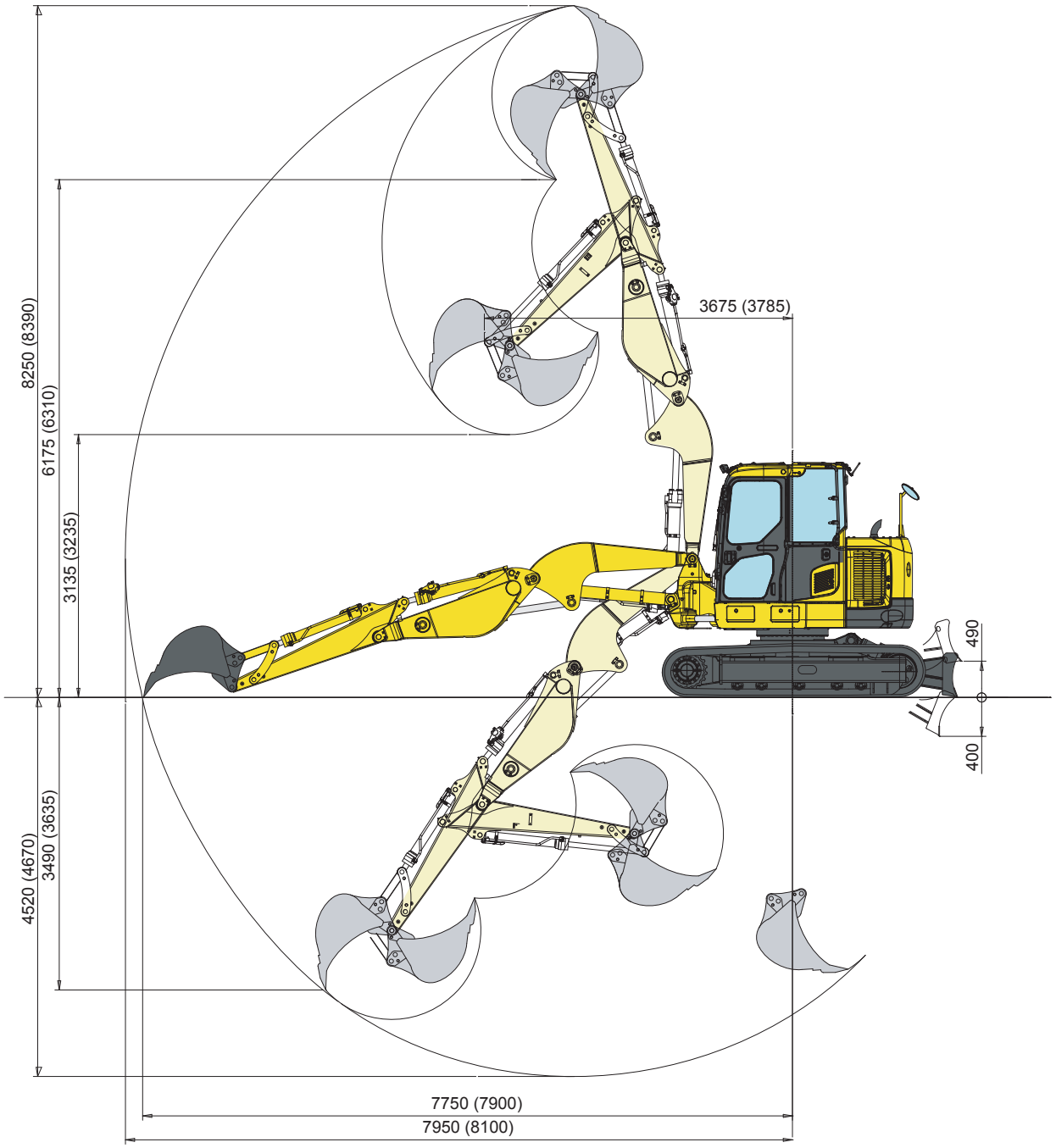
WITH ADDITIONAL COUNTERWEIGHT (388 kg)

Arm length	A			6,0 m		4,5 m		3,0 m		1,5 m	
	B										
1.850 mm	4,5 m	kg	*1.730	1.590							
	3,0 m	kg	1.570	1.310	1.740	1.440	*2.060	*2.060			
	1,5 m	kg	1.470	1.220	1.680	1.390	2.660	2.130			
	0,0 m	kg	1.540	1.270	1.640	1.350	2.550	2.030	*3.300	*3.300		
	–1,5 m	kg	1.880	1.540			2.530	2.020	4.970	3.600	*6.090	*6.090
2.000 mm	4,5 m	kg	*1.590	1.500	*1.560	1.460						
	3,0 m	kg	1.500	1.250	1.740	1.440	*1.910	*1.910				
	1,5 m	kg	1.410	1.170	1.670	1.380	2.660	2.130				
	0,0 m	kg	1.470	1.210	1.620	1.330	2.540	2.020	*3.380	*3.380		
	–1,5 m	kg	1.780	1.450			2.510	2.000	4.930	3.570	*5.480	*5.480
2.300 mm	4,5 m	kg	*1.360	*1.360	*1.390	*1.390					*1.630	*1.630
	3,0 m	kg	*1.370	1.160	*1.600	1.440	*1.620	*1.620				
	1,5 m	kg	1.310	1.080	1.670	1.370	2.650	2.130				
	0,0 m	kg	1.360	1.120	1.610	1.320	2.530	2.010	*3.560	3.530		
	–1,5 m	kg	1.600	1.310	1.600	1.310	2.480	1.960	4.880	3.520	*3.370	*3.370

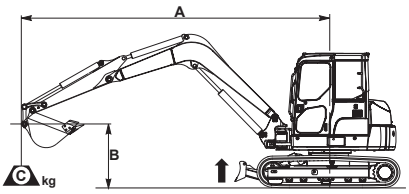
Ratings are based on ISO standard 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load. Excavators used in object handling operations must comply with the related local regulations and must be equipped with hose burst valves (boom & arm) and an overload warning device in compliance with EN474-5.
- The values marked with an asterisk (*) are limited by the hydraulic capacities
- Calculations are based on the machine resting on a uniform and firm surface
- The lifting point is a hypothetical hook placed behind the bucket.

Working Range

WORKING RANGE TWO-PIECE BOOM



LIFTING CAPACITY TWO-PIECE BOOM



A – Reach from swing centre

B – Bucket hook height

C – Lifting capacities, including bucket (290 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.

Arm length	A / B		6,0 m		4,5 m		3,0 m		1,5 m	
1.850 mm	4,5 m	kg	1.290	1.050	1.530	1.250	*1.980	*1.980		
	3,0 m	kg	1.090	890	1.480	1.210				
	1,5 m	kg	1.040	850	1.400	1.140				
	0,0 m	kg	1.100	900	1.360	1.100	2.130	1.670		
	-1,5 m	kg	1.320	1.080	1.390	1.120	2.150	1.690	*3.210	3.080
2.000 mm	4,5 m	kg	1.220	1.000	1.530	1.260	*1.860	*1.860		
	3,0 m	kg	1.040	850	1.480	1.200				
	1,5 m	kg	990	810	1.390	1.130				
	0,0 m	kg	1.040	850	1.350	1.090	2.110	1.650		
	–1,5 m	kg	1.250	1.010	1.360	1.100	2.130	1.670	*3.020	*3.020
2.300 mm	4,5 m	kg	1.110	900	1.550	1.270	*1.630	*1.630		
	3,0 m	kg	950	780	1.480	1.210				
	1,5 m	kg	910	740	1.390	1.120				
	0,0 m	kg	960	780	1.330	1.070	2.100	1.640		
	–1,5 m	kg	1.130	910	1.330	1.070	2.090	1.630		

WITH ADDITIONAL COUNTERWEIGHT (388 kg)

Arm length	A / B		6,0 m		4,5 m		3,0 m		1,5 m	
1.850 mm	4,5 m	kg	1.430	1.170	1.690	1.380	*1.980	*1.980		
	3,0 m	kg	1.220	990	1.640	1.330				
	1,5 m	kg	1.170	950	1.560	1.260				
	0,0 m	kg	1.230	1.000	1.520	1.220	2.360	1.840		
	–1,5 m	kg	1.480	1.190	1.550	1.250	2.390	1.860	*3.210	*3.210
2.000 mm	4,5 m	kg	1.360	1.100	1.690	1.380	*1.860	*1.860		
	3,0 m	kg	1.170	950	1.640	1.320				
	1,5 m	kg	1.120	900	1.550	1.250				
	0,0 m	kg	1.180	950	1.510	1.210	2.350	1.820		
	–1,5 m	kg	1.390	1.130	1.520	1.220	2.360	1.830	*3.020	*3.020
2.300 mm	4,5 m	kg	1.240	1.010	*1.650	1.390	*1.630	*1.630		
	3,0 m	kg	1.080	870	1.640	1.330				
	1,5 m	kg	1.030	830	1.550	1.240				
	0,0 m	kg	1.080	870	1.490	1.190	2.330	1.810		
	–1,5 m	kg	1.260	1.020	1.490	1.190	2.320	1.790		

Ratings are based on ISO standard 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load. Excavators used in object handling operations must comply with the related local regulations and must be equipped with hose burst valves (boom & arm) and an overload warning device in compliance with EN474-5.
- The values marked with an asterisk (*) are limited by the hydraulic capacities
- Calculations are based on the machine resting on a uniform and firm surface
- The lifting point is a hypothetical hook placed behind the bucket.

Midi-Excavator

PC118MR-8

Standard and Optional Equipment

ENGINE	
Komatsu SAA4D95LE-5 common rail, multi injection, water cooled, turbocharged diesel engine, EU Stage IIIA compliant	●
Alternator 24 V / 60 A	●

UNDERCARRIAGE	
500 mm steel shoes	●
500 mm road liner shoes	○
Track roller guard	○

HYDRAULIC SYSTEM	
5-working mode selection system; Power mode, economy mode, breaker mode, attachment mode and lifting mode	●
One additional 2-way full-flow service valve with hydraulic line for attachment on boom and arm (HCU-A)	●
Additional auxiliary hydraulic circuit (HCU-B)	●
Relieve valve on service spool	●
2nd auxiliary hydraulic circuit (HCU-C) + preparation for hydraulic quick-coupler	○
Final lock valves on attachment circuit	○

LIGHTING SYSTEM	
Working light on boom	●
Front working light on cab	○
4 front working lights on cab	○
Rear working light on cab	○
Additional working light on boom	○

CAB	
Automatic air conditioner	●
Adjustable seat with safety belt	●
Large multi-lingual LCD monitor	●
Radio pre-setting	●
12 V electric plug	●
Radio	○
Rain visor	○

SERVICE AND MAINTENANCE	
Equipment Management and Monitoring System (EMMS)	●
Double-element air filter	●
KOMTRAX™ - Komatsu satellite monitoring system	●
Refuelling pump	○

SAFETY EQUIPMENT	
Overload warning device	●
Travel acoustic alarm	●
Horn	●
Rear-view mirrors (left side, rear)	●
Hose burst valve on boom cylinder	●
Arm safety valve	●
Rotating beacon	○
Bucket linkage with lifting hook	○

ATTACHMENTS	
2.400 mm blade	●
Bucket range (300 - 1.000 mm)	○
1.800 mm ditch cleaning bucket	○
2.100 mm ditch digging bucket (45°)	○

OTHER EQUIPMENT	
Mono boom with cylinder protection	●
2.000 mm digging arm	●
Automatic 2-speed travel	●
Auto deceleration	●
Proportional roll switch on joystick for equipment circuit	●
Two-piece boom (with positioner)	○
1.850 mm digging arm	○
2.300 mm digging arm	○
Additional counterweight (388 kg)	○

Further work equipment, accessories and special application arrangements on request

Other attachments on request

● standard equipment
○ optional equipment

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WESS007303 01/2017