

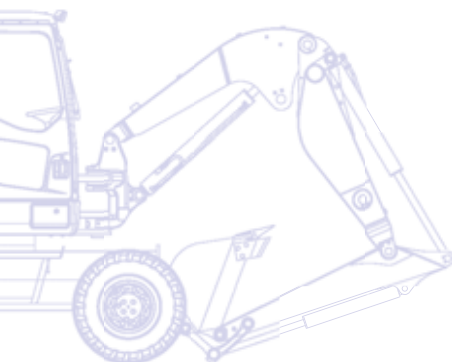
KOMATSU

PW
118MR



Midi-Excavator

PW118MR-8



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

OPERATING WEIGHT
12.305 - 12.885 kg

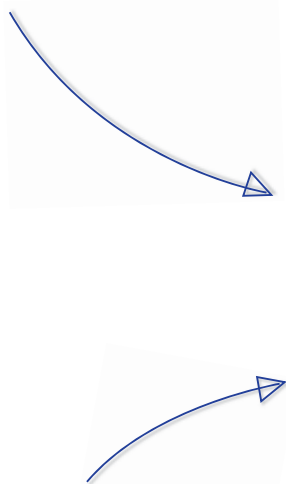
BUCKET CAPACITY
max. 0,40 m³

Walk-Around

The new PW118MR-8 compact midi-excavator is the result of expertise and technology that Komatsu has developed from over 80 years' experience. Developed with constant attention to the needs of customers all over the world, the PW118MR-8 is a user-friendly machine that delivers top-class performance. It has a tight tail swing and protrudes over the wheels by just 190 mm. So the operator can concentrate on the work in front, 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 and EPA Tier III
- Auto-deceleration and eco-gauge for a lower fuel usage
- 5 selectable working modes
- Low operating noise levels



PW118MR-8

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

OPERATING WEIGHT
12.305 - 12.885 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

- Compact design
- 4-wheel steering enabling 3 steering modes
- Proportional control on joystick for auxiliary circuits
- New 2-piece boom design
- Second auxiliary circuit and hydraulic quick-coupler line (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 PW118MR-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 PW118MR-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



High lift capacity

Along with its class leading compact size, the PW118MR-8 features an unrivalled lifting performance. The combination of power, convenient dimensions and complete control makes the PW118MR-8 the first choice for heavy duty lifting applications or simple excavating tasks in narrow alleys, road-construction sites and for sewer-construction work.



Excellent travel performance

Wheeled excavators are built to move quickly on and between jobsites. To increase its mobility, the PW118MR-8 features a completely reworked driveline for faster travel and uphill driving speeds. The front oscillating axle, manually lockable through the LCD monitor, further increases the performance on slopes.

Powerful and Environmentally Friendly



Performance and ecology

The PW118MR-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.





Work in tight spaces

The short-tail PW118MR-8 delivers optimal power and digging speed, even in confined spaces where traditional machines can't work: yards, road works, demolition sites, sewers, etc. Sturdy and very stable, it guarantees maximum safety and offers complete operator confidence in any working conditions.

4-wheel steering

It's possible to select between 3 steering modes: 2-wheel steering (for travelling), 4-wheel steering (for fast, agile operation) and crab (for confined areas). This ensures outstanding versatility and manoeuvrability. It's easy and safe to change the steering mode: just push 2 switches at the same time on the new panel, and a green lamp will inform you of the steering mode selected. When working, the front-axel oscillation can be blocked for improved stability.



Easy Maintenance

Excellent serviceability

Komatsu designed the PW118MR-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™ 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.



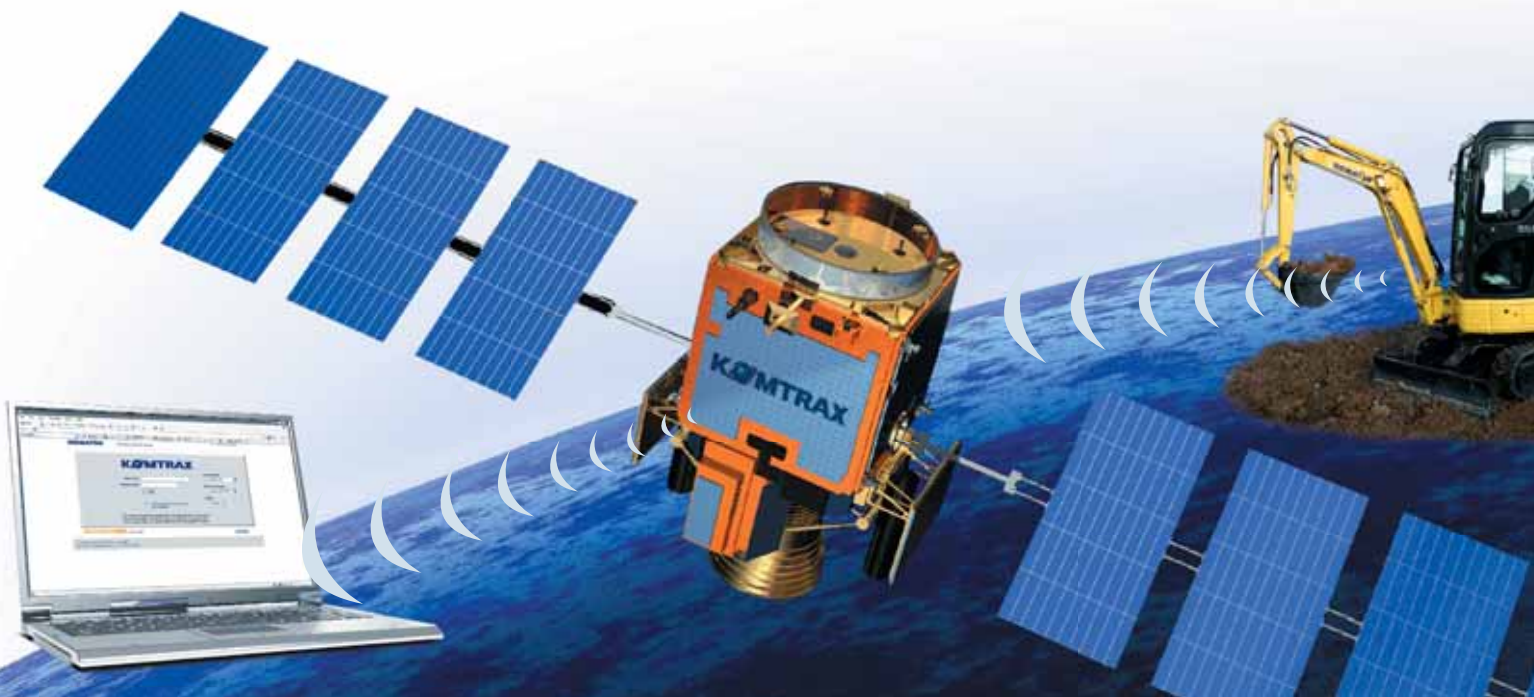
Fleet location - The machine list instantly locates all your machines, even those in other countries.



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 1439672,0 kW / 96,6 HP
SAE J134968,4 kW / 91,7 HP
Max. torque/engine speed358 Nm/1.500 rpm
Air cleanerdry, double element type air cleaner with
dust indicator and auto-dust evacuator

OPERATING WEIGHT

Operating weight, including 1.850 mm arm, 0,33 m³ bucket (ISO 7451),
blade, operator, liquids, filled tank and standard equipment (ISO 6016).

	Width	Operating weight with two-piece boom
With rear blade	2.500 mm	12.305 kg
With rear stabilizers	2.490 mm	12.310 kg
With blade and stabilizers	2.500 mm	12.885 kg

TRANSMISSION

Hydrostatic transmission with four driving wheels. The hydraulic
motor acts by means of a synchromesh gear that makes for two
speed ranges.

Maximum traction force 6.472 daN (6.600 kg)
Working speed 1st 4 km/h - 2nd 9 km/h
Travelling speed3rd 14 km/h - 4th 30 km/h

AXLES

Driving and steering axles with epicyclic reduction gears in the hubs.
The oscillation of the front axle can be blocked by means of two
hydraulic pistons.

Tyres:

Twin tyres (standard) 9-20
Single tyres (option) 18-19.5

STEERING

Hydraulically operated steering system that acts on the front and
rear wheels by means of double rod hydraulic cylinders in the axles.
The operator can select three kinds of steering by means of an
electric switch:

- two steering wheels
- four steering wheels
- crab steering

Steering radius:

Two steering wheels6.850 mm
Four steering wheels.....4.050 mm

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.

HYDRAULIC SYSTEM

Type.....HydrauMind. Closed-centre system with load sensing
and pressure compensation valves

Main pumps:

Pump for.....boom, arm, bucket, undercarriage and travelling
Type variable displacement, axial piston
Max. flow198 ltr/min

Pump for..... swing
Typefixed displacement gear pump
Max. flow 70 ltr/min

Hydraulic motors:

Travel..... 1 × piston motor with counterbalance valve
Swing..... 1 × piston motor with swing holding brake

Relief valve setting:

Swing and blade 20,3 MPa (208 kg/cm²)

Travel and work equipment 26,5 MPa (270 kg/cm²)

Bucket breakout force (ISO 6015)..... 7.169 daN (7.310 kgf)

Arm crowd force, 2.000 mm arm

(ISO 6015) 4.511 daN (4.600 kgf)

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

BRAKES

Type..... hydraulically controlled, with pedal, by means of
two double circuit pumps, acting on
oil immersed multiple discs on the four wheels.

Service brakes..... hydraulically controlled by means
of a pedal, acting on the four wheels

Parking brake negative type brakes, hydraulically controlled
by means of an electric push button positioned
inside the cab, acting on the rear axle.

ELECTRIC SYSTEM

Voltage24 V

Battery125 Ah

Alternator.....60 A

Starter motor4,5 kW

SERVICE REFILL CAPACITIES

Fuel tank150 ltr

Cooling system.....12,4 ltr

Engine oil.....11 ltr

Differential (each axle)9 ltr

Final drive (each side).....0,8 ltr

Swing drive.....3,5 ltr

Hydraulic oil tank..... 80 ltr

ENVIRONMENT

Engine emissions Fully complies with EU Stage IIIA and EPA
Tier III exhaust emission regulations

Noise levels

LwA external 100 dB(A) (2000/14/EC Stage II)

LpA operator ear74 dB(A) (ISO 6396 dynamic test)

Vibration levels (EN 12096:1997)*

Hand/arm ≤ 2,5 m/s² (uncertainty K = 0,58 m/s²)

Body ≤ 0,5 m/s² (uncertainty K = 0,22 m/s²)

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

LIFTING CAPACITY

A – Reach from swing centre

B – Height at bucket pin

 – Rating over front









 – Rating over side

DATAS AND SPECIFICATIONS ARE REFERRING TO THE MACHINE ACCORDING TO 89/392/CE AND EN 474-5 DIRECTIVES.









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

Lifting capacities with additional counterweight (388 kg), 266 kg bucket, twin tyres (9-20), blade and outriggers, levers and cylinder.









WITH FRONT BLADE AND REAR STABILISERS UP

B	A	Max.		6,0 m		4,5 m		3,0 m	
									
Arm length 1.850 mm	4,5 m	*1.840	1.170	*1.910	1.440	*2.080	*2.080		
	3,0 m	*1.740	1.030	*2.130	1.380	*2.790	2.160		
	1,5 m	*1.780	1.000	*2.410	1.310				
	0,0 m	*1.880	1.080	*2.460	1.280	*3.750	1.930		
Arm length 2.000 mm	4,5 m	*1.680	1.110	*1.830	1.440	*1.960	*1.960		
	3,0 m	*1.590	980	*2.070	1.370	*2.680	2.170		
	1,5 m	*1.620	960	*2.370	1.300				
	0,0 m	*1.790	1.030	*2.450	1.270	*3.740	1.910		

WITH REAR BLADE DOWN (LIFTING ON BLADE)

B	A	Max.		6,0 m		4,5 m		3,0 m	
									
Arm length 1.850 mm	4,5 m	1.840*	1.208	1.910*	1.910*	2.080*	2.080*		
	3,0 m	1.740*	1.140	2.130*	1.538	2.790*	2.370		
	1,5 m	1.780*	1.148	2.410*	1.508				
	0,0 m	1.880*	1.182	2.460*	1.477	3.750*	2.190		
Arm length 2.000 mm	4,5 m	1.680*	1.148	1.830*	1.830*	1.960*	1.960*		
	3,0 m	1.590*	1.013	2.070*	1.508	2.680*	2.340		
	1,5 m	1.620*	1.005	2.370*	1.425				
	0,0 m	1.790*	1.075	2.450*	1.397	3.740*	2.198		

WITH FRONT BLADE AND REAR STABILISERS DOWN

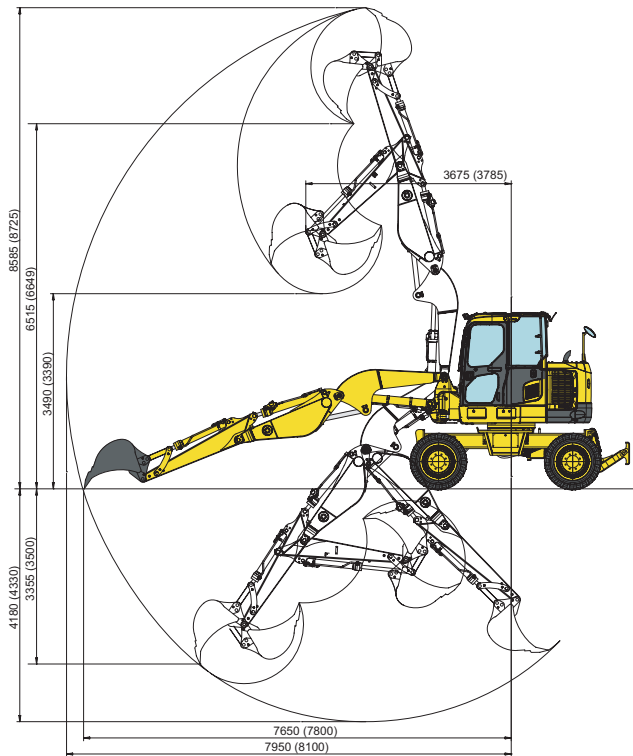
B	A	Max.		6,0 m		4,5 m		3,0 m	
									
Arm length 1.850 mm	4,5 m	1.840*	1.373	1.910*	1.910*	2.080*	2.080*		
	3,0 m	1.740*	1.290	2.130*	2.130*	2.790*	2.790*		
	1,5 m	1.780*	1.253	2.410*	1.703				
	0,0 m	1.880*	1.290	2.460*	1.668	3.750*	2.562		
Arm length 2.000 mm	4,5 m	1.680*	1.313	1.830*	1.830*	1.960*	1.960*		
	3,0 m	1.590*	1.170	2.070*	2.070*	2.680*	2.680*		
	1,5 m	1.620*	1.125	2.370*	1.538				
	0,0 m	1.790*	1.159	2.450*	1.507	3.740*	2.443		

NOTE:

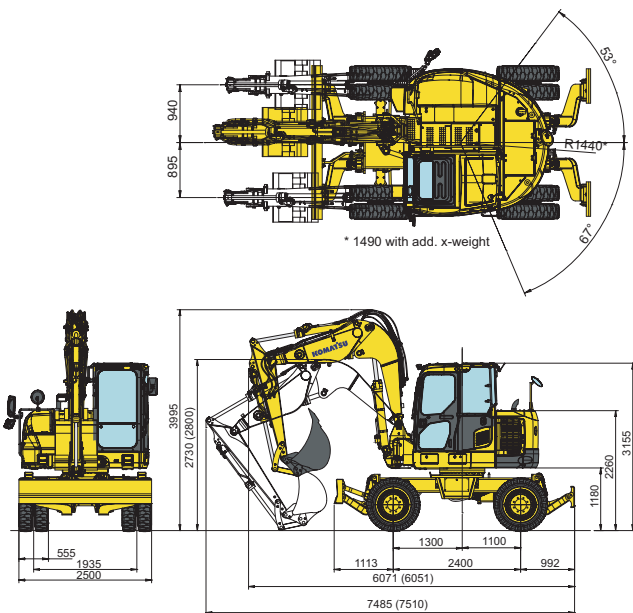
Ratings are based on ISO standard 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load. Excavators used in object handling operations must comply with the related local regulations and must be equipped with hose burst valves (boom & arm) and an overload warning device 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



DIMENSIONS



Bucket capacity (ISO 7451)	m ³	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

Midi-Excavator

PW118MR-8

Standard and Optional Equipment

ENGINE

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

TYRES

Twin tyres 9-20 ●
Single tyres 18-19.5 ○

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

Stabilisers and/or blade with safety valve ●
Bucket range (300 - 1.000 mm) ○
1.800 mm ditch cleaning bucket ○
2.100 mm ditch digging bucket (45°) ○

OTHER EQUIPMENT

Two-piece boom (with positioner) ●
2.000 mm digging arm ●
4-wheel steering ●
Auto deceleration ●
Proportional roll switch on joystick for equipment circuit ●
Automatic parking brake ●
Swing lock ●
Oscillating front axle with manual cylinder locking ●
Additional counterweight (388 kg) ●
1.850 mm digging arm ○

Further work equipment, accessories and special application arrangements on request

Other attachments on request

- standard equipment
- optional equipment

Your Komatsu partner:

KOMATSU

**Komatsu Europe
International NV**
Mechelsesteenweg 586
B-1800 VILVOORDE (BELGIUM)
Tel. +32-2-255 24 11
Fax +32-2-252 19 81
www.komatsu.eu

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