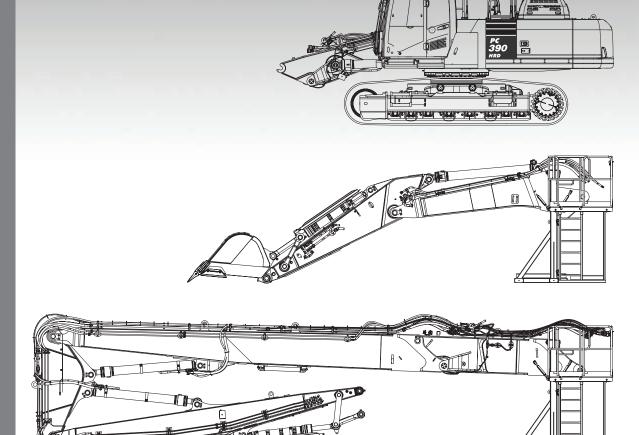


## PC390HRD-11

**EU Stage IV Engine** 

### **HIGH REACH DEMOLITION**

# 6500



#### **ENGINE POWER**

202 kW / 271 HP @ 1.950 rpm

#### **OPERATING WEIGHT**

45.760 - 61.800 kg

#### **MAX. ATTACHMENT WEIGHT**

Medium Reach Demolition: 4.000 kg

High Reach Demolition:

3.350 kg

Extended High Reach Demolition: 2.500 kg

## **Specifications**

#### **ENGINE**

Model	Komatsu SAA6D114E-6
Туре	Common rail direct injection, water-cooled, emissionised, turbocharged, after-cooled diesel
Engine power	
at rated engine speed	1.950 rpm
ISO 14396	202 kW / 271 HP
ISO 9249 (net engine power)	192 kW / 257 HP
No. of cylinders	6
Bore × stroke	114 × 144,5 mm
Displacement	8,85
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**

Туре	HydrauMind. Closed-centre system with load sensing and pressure compensation valves
Additional circuits	2 additional circuits with proportional control are installed
Main pump	variable displacement piston     pumps supplying boom, arm,     bucket, swing and travel circuits
Maximum pump flow	2 × 267,5 l/min
Relief valve settings	
Implement	380 kg/cm <sup>2</sup>
Travel	380 kg/cm <sup>2</sup>
Swing	285 kg/cm <sup>2</sup>
Pilot circuit	33 kg/cm²

#### **SERVICE REFILL CAPACITIES**

Fuel tank	605 I
Radiator	37,0
Engine oil	38,5
Swing drive	14,0 I
Hydraulic tank	188 I
Final drive (each side)	11,0
AdBlue® tank	39,0 I

#### **SWING SYSTEM**

Type	Axial piston motor driving through planetary double reduction gearbox
Swing lock	Electrically actuated wet multidisc brake integrated into swing motor
Swing speed	0 - 9,5 rpm
Swing torque	103 kNm

#### **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	2,8 / 3,7 / 4,5 km/h
Maximum drawbar pull	34.000 kg
Brake system	Hydraulically operated discs
	in each travel motor

#### **UNDERCARRIAGE**

Construction	X-frame centre section with box section track frames
<del>-</del>	
Track assembly	
Туре	Fully sealed
Shoes (each side)	49
Tension	Combined spring and hydraulic unit
Rollers	
Track rollers (each side)	8
Carrier rollers (each side)	2

#### **ENVIRONMENT**

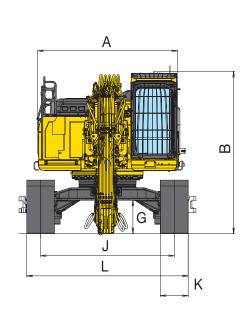
Engine emissions	Fully complies with EU Stage IV exhaust emission regulations	
Noise levels		
LwA external	104 dB(A) (2000/14/EC Stage II)	
LpA operator ear	71 dB(A) (ISO 6396 dynamic test)	
Vibration levels (EN 12096:	1997)	
Hand/arm	$\leq$ 2,5 m/s <sup>2</sup> (uncertainty K = 0,37 m/s <sup>2</sup> )	
Body	$\leq$ 0,5 m/s <sup>2</sup> (uncertainty K = 0,17 m/s <sup>2</sup> )	
Contains fluorinated greenhouse gas HFC-134a (GWP 1430). Quantity of gas 0,8 kg, CO <sub>2</sub> equivalent 1,14 t		

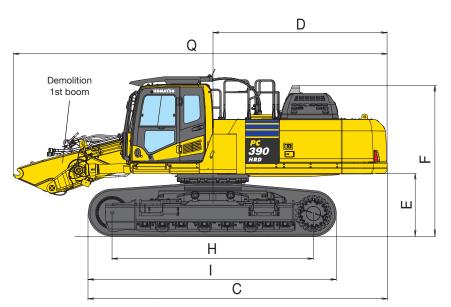
#### **OPERATING WEIGHT (APPR.)**

	Extended High R	each Demolition	High Reach Demolition		Medium Reach Demolition		Excavation Boom	
Triple grouser shoes	Operating weight	Ground pressure	Operating weight	Ground pressure	Operating weight	Ground pressure	Operating weight	Ground pressure
600 mm	57.300 kg	0,99 kg/cm <sup>2</sup>	55.300 kg	0,96 kg/cm <sup>2</sup>	56.200 kg	0,97 kg/cm <sup>2</sup>	45.760 kg	0,82 kg/cm <sup>2</sup>
700 mm	57.800 kg	0,86 kg/cm <sup>2</sup>	55.800 kg	0,83 kg/cm <sup>2</sup>	56.700 kg	0,84 kg/cm <sup>2</sup>	46.260 kg	0,71 kg/cm <sup>2</sup>
700 mm HWG	61.800 kg	0,92 kg/cm <sup>2</sup>	59.880 kg	0,89 kg/cm <sup>2</sup>	60.700 kg	0,90 kg/cm <sup>2</sup>	50.260 kg	0,77 kg/cm <sup>2</sup>
Attachment weight	2.50	0 kg	3.35	0 kg	4.00	0 kg	1.70	0 kg

Operating weight, including specified work equipment, operator, lubricant, coolant, full fuel tank and the standard equipment.

## **Basic Dimensions**





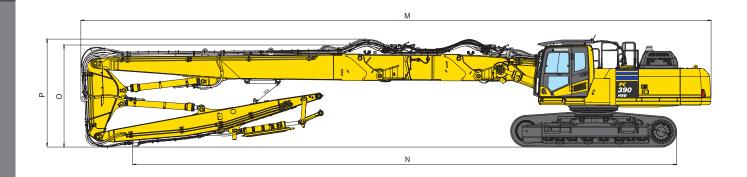
#### TRANSPORT DIMENSIONS

	Undercarriage	LC	HWG
Α	Overall width of upper structure 1)	2.995 mm	2.995 mm
В	Overall height of cab, with FOPS	3.495 mm	3.395 mm
	Overall height of cab, without FOPS	3.300 mm	3.200 mm
С	Overall length of basic machine	6.465 mm	6.465 mm
D	Tail length	3.770 mm	3.770 mm
Е	Clearance under counterweight	1.330 mm	1.230 mm
F	Machine tail height	3.225 mm	3.125 mm
G	Ground clearance	685 mm	385 mm
Н	Tumbler centre distance	4.350 mm	4.350 mm
I	Track length	5.385 mm	5.385 mm
J	Track gauge 2)	2.390 - 2.890 mm	2.280 - 3.290 mm
K	Track shoe width	600 mm, 700 mm	700 mm
L	Overall track width with 600 mm shoes 2)	2.990 - 3.490 mm	-
-	Overall track width with 700 mm shoes 2)	3.090 - 3.590 mm	2.980 - 3.980 mm
Q	Transport length	8.090 mm	8.090 mm
	Transport weight (600 mm shoe) 3)	39.500 kg	-
	Transport weight (700 mm shoe) 3)	40.000 kg	44.000 kg

<sup>1)</sup> Overall width of upper structure excludes side guards, handrails and mirrors. Side guards can be removed if transport width of less than 3 m is required.
2) Undercarriage in retracted – extended position
3) Transport weights exclude additional counterweight.

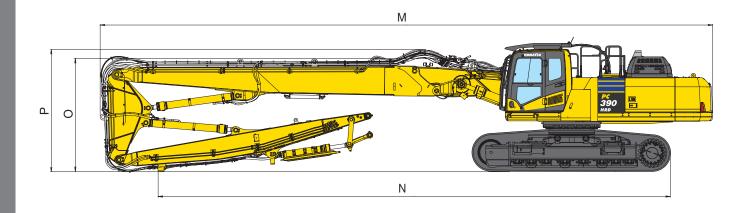
## **Transport Dimensions**

#### **EXTENDED HIGH REACH DEMOLITION**



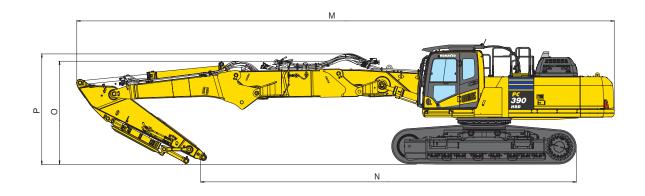
М	Overall transport length	19.530 mm
N	Transport length on ground	16.845 mm
0	Transport height (to top of boom)	3.090 mm
Р	Transport height (to top of hose)	3.370 mm
	Transport weight (LC undercarriage, 600 mm shoe, including additional counterweight)	54.800 kg

#### **HIGH REACH DEMOLITION**



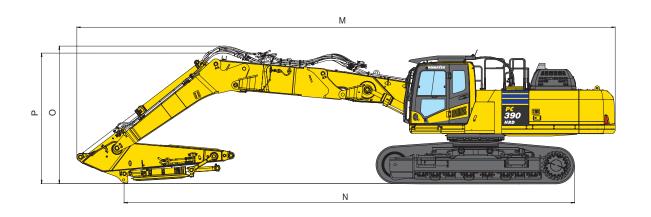
М	Overall transport length	16.530 mm
N	Transport length on ground	13.870 mm
0	Transport height (to top of boom)	3.090 mm
Р	Transport height (to top of hose)	3.370 mm
	Transport weight (LC undercarriage, 600 mm shoe, including additional counterweight)	51.950 kg

#### MEDIUM REACH DEMOLITION – STRAIGHT POSITION



М	Overall transport length	15.705 mm
N	Transport length on ground	10.985 mm
0	Transport height (to top of boom)	2.985 mm
Р	Transport height (to top of hose)	3.185 mm
	Transport weight (LC undercarriage, 600 mm shoe, including additional counterweight)	52.200 kg

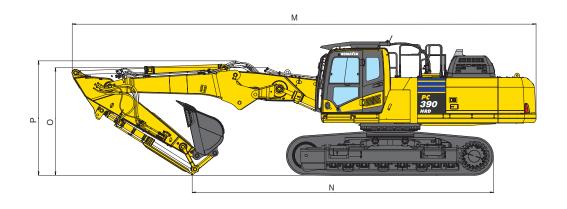
#### MEDIUM REACH DEMOLITION - CRANKED POSITION



М	Overall transport length	14.860 mm
N	Transport length on ground	12.445 mm
0	Transport height (to top of boom)	3.590 mm
Р	Transport height (to top of hose)	3.770 mm
	Transport weight (LC undercarriage, 600 mm shoe, including additional counterweight)	52.200 kg

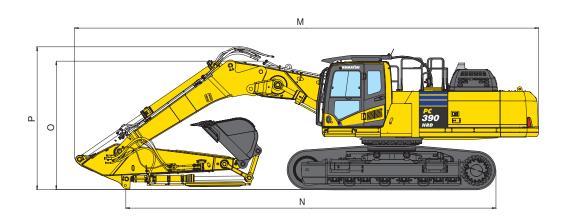
## **Transport Dimensions**

#### **EXCAVATION BOOM – STRAIGHT POSITION**



М	Overall transport length	12.680 mm
N	Transport length on ground	8.155 mm
0	Transport height (to top of boom)	3.160 mm
Р	Transport height (to top of hose)	3.260 mm
	Transport weight (LC undercarriage, 600 mm shoe, including 1.700 kg bucket)	45.760 kg

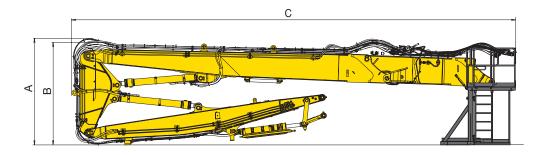
#### **EXCAVATION BOOM - CRANKED POSITION**



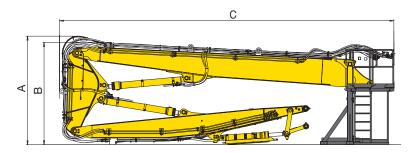
М	Overall transport length	11.930 mm
N	Transport length on ground	9.540 mm
0	Transport height (to top of boom)	3.310 mm
Р	Transport height (to top of hose)	3.670 mm
	Transport weight (LC undercarriage, 600 mm shoe, including 1.700 kg bucket)	45.760 kg

## **Work Equipment Storage Dimensions**

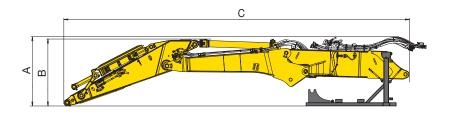
#### **EXTENDED HIGH REACH DEMOLITION**



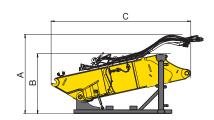
#### **HIGH REACH DEMOLITION**



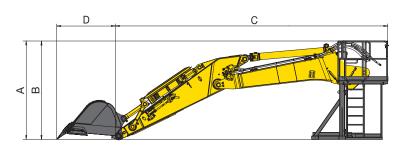
#### MEDIUM REACH DEMOLITION



#### **EXTENSION**



#### **EXCAVATION BOOM**

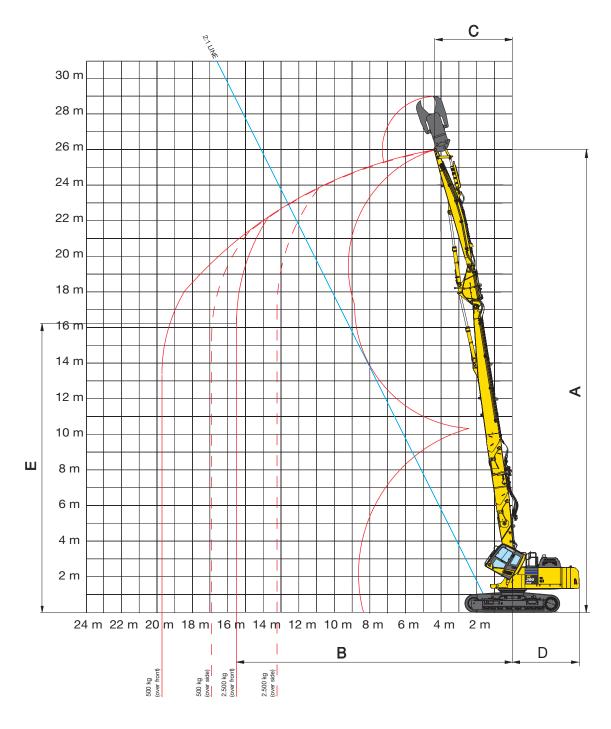


	Extended High Reach Demolition	High Reach Demolition	Medium Reach Demolition	Excavation Boom	Extension
A	3.065 mm	3.190 mm	2.040 mm	2.805 mm	1.865 mm
В	2.910 mm	3.080 mm	1.955 mm	2.805 mm	1.615 mm
С	12.800 mm	9.830 mm	10.355 mm	7.730 mm	3.845 mm
D	-	-	-	1.700 mm	-
Transport weight*	10.050 kg	7.970 kg	7.465 kg	5.775 kg	2.460 kg

 $<sup>^{\</sup>star}$  Transport weight includes equipment stands and excludes attachment/bucket.

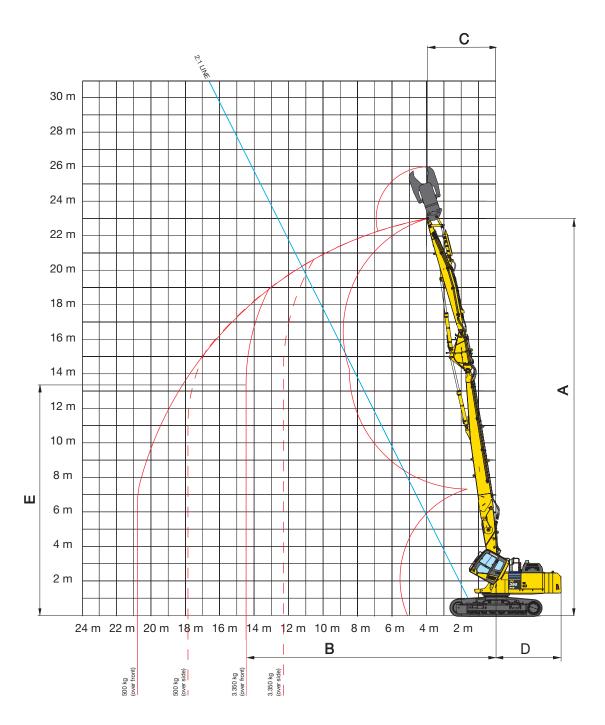
# **Working Range**

#### **EXTENDED HIGH REACH DEMOLITION**



EXTENDED HIGH REACH DEMOLITION	OVER FRONT	OVER SIDE
A Max. height (to pin at arm end)	26.015 mm	26.015 mm
B Max. forward reach (max. tool weight)	15.500 mm	13.250 mm
C Min. swing radius of arm end pin at max. height	4.315 mm	4.315 mm
D Tail swing radius	3.800 mm	3.800 mm
E Height at max. reach	16.230 mm	17.030 mm
Max. height (2:1 line)	22.940 mm	22.940 mm
Reach at max. height (2:1 line)	12.590 mm	12.590 mm

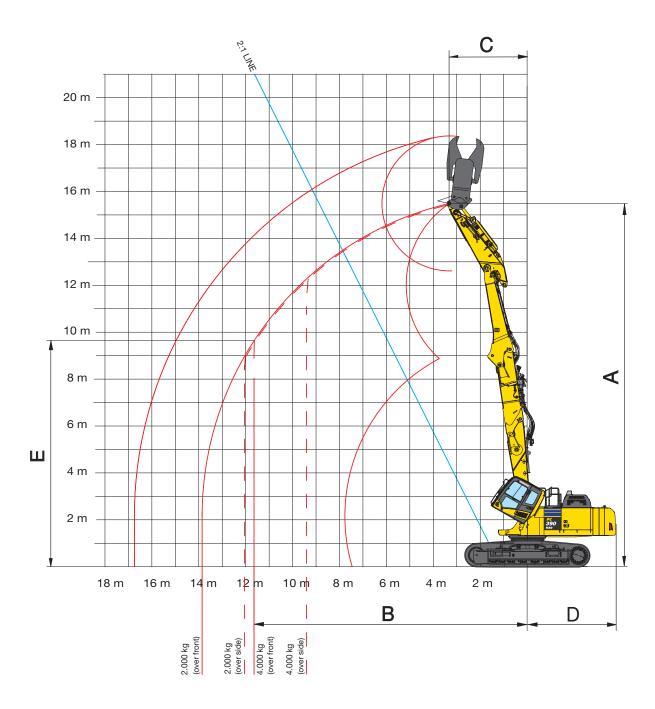
#### HIGH REACH DEMOLITION



HIGH REACH DEMOLITION	OVER FRONT	OVER SIDE
A Max. height (to pin at arm end)	23.035 mm	23.035 mm
B Max. forward reach (max. tool weight)	14.500 mm	12.250 mm
C Min. swing radius of arm end pin at max. height	3.960 mm	3.960 mm
D Tail swing radius	3.800 mm	3.800 mm
E Height at max. reach	13.380 mm	14.190 mm
Max. height (2:1 line)	20.250 mm	20.250 mm
Reach at max. height (2:1 line)	11.250 mm	11.250 mm

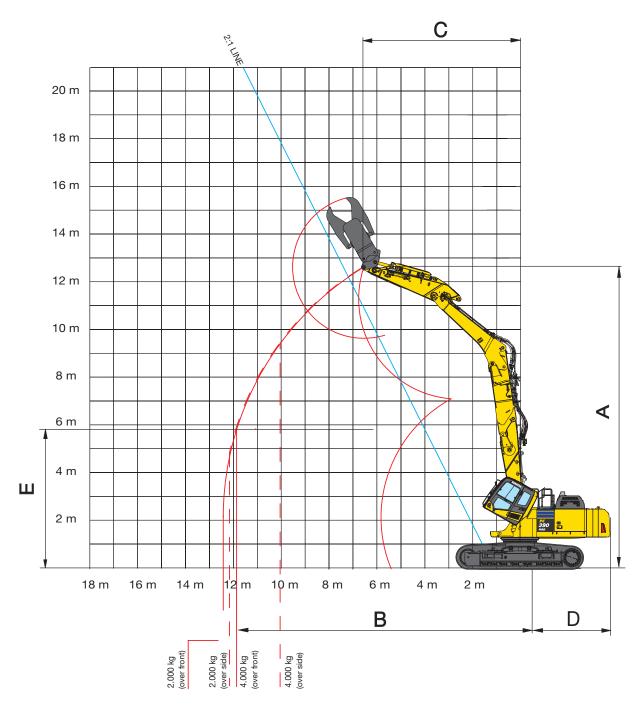
# **Working Range**

#### **MEDIUM REACH DEMOLITION – STRAIGHT POSITION**



MEDIUM REACH DEMOLITION – STRAIGHT POSITION	OVER FRONT	OVER SIDE
A Max. height (to pin at arm end)	15.490 mm	15.490 mm
B Max. forward reach (max. tool weight)	11.915 mm	9.450 mm
C Min. swing radius of arm end pin at max. height	3.310 mm	3.310 mm
D Tail swing radius	3.800 mm	3.800 mm
E Height at max. reach	9.185 mm	12.225 mm
Max. height (2:1 line)	13.485 mm	13.485 mm
Reach at max. height (2:1 line)	7.865 mm	7.865 mm

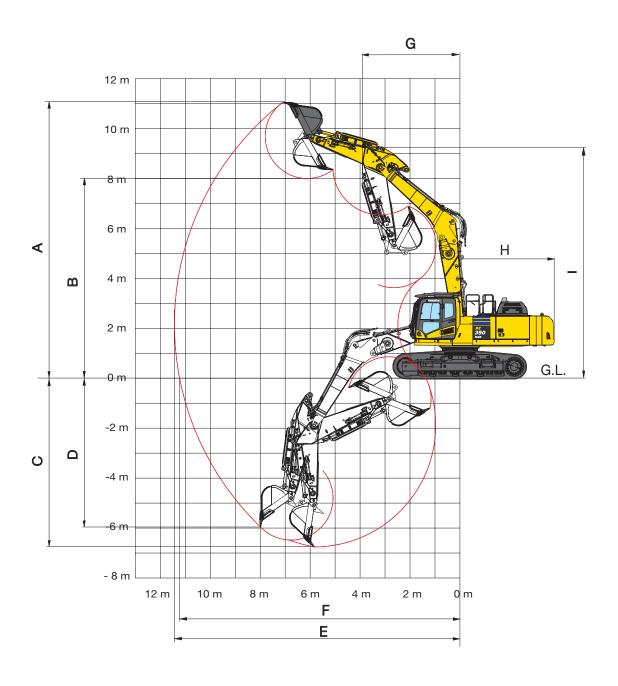
#### **MEDIUM REACH DEMOLITION – CRANKED POSITION**



MEDIUM REACH DEMOLITION – CRANKED POSITION	OVER FRONT	OVER SIDE
A Max. height (to pin at arm end)	12.655 mm	12.655 mm
B Max. forward reach (max. tool weight)	11.885 mm	10.025 mm
C Min. swing radius of arm end pin at max. height	6.550 mm	6.550 mm
D Tail swing radius	3.800 mm	3.800 mm
E Height at max. reach	5.830 mm	9.485 mm
Max. height (2:1 line)	12.210 mm	12.210 mm
Reach at max. height (2:1 line)	7.230 mm	7.230 mm

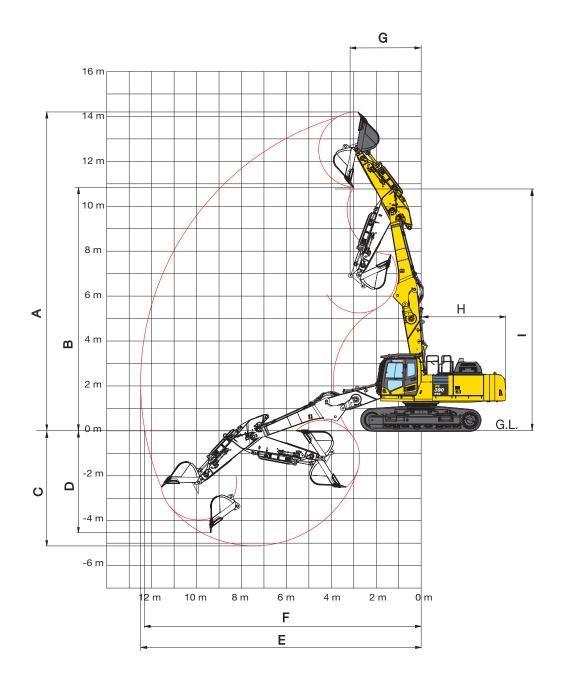
# **Working Range**

#### **EXCAVATION BOOM – CRANKED POSITION**



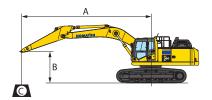
AF	RM LENGTH	3,2 m
Α	Max. digging height	11.060 mm
В	Max. dumping height	8.000 mm
С	Max. digging depth	6.770 mm
D	Max. vertical wall digging depth	5.945 mm
Е	Max. digging reach	11.435 mm
F	Max. digging reach at ground level	11.225 mm
G	Min. swing radius (bucket loaded)	3.905 mm
Н	Tail swing radius	3.800 mm
ı	Max. height at min. swing radius	9.485 mm
H		

#### **EXCAVATION BOOM – STRAIGHT POSITION**



ARM LENGTH	3,2 m
A Max. digging height	14.205 mm
B Max. dumping height	10.840 mm
C Max. digging depth	5.135 mm
D Max. vertical wall digging depth	4.535 mm
E Max. digging reach	12.490 mm
F Max. digging reach at ground level	12.300 mm
G Min. swing radius (bucket loaded)	3.245 mm
H Tail swing radius	3.800 mm
I Max. height at min. swing radius	10.895 mm
I Max. Height at Hill. Swing radius	10.095 11111

## **Lifting Capacity**



- A Reach from swing center
- B Bucket hook height
- C Lifting capacities
- Rating over front

☐⇒ - Rating over side

Rating at maximum reach

Weights:

Bucket linkage, bucket cylinder, including cylinder guard: 588 kg

With 600 mm shoes

#### **EXCAVATION BOOM - CRANKED POSITION**

Arm length	Α		(	•	9,0	m	7,5	m	6,0	m	4,5	m	3,0	m
	В		Å	□≒□	Å		Å	□₩	å		Å		4	□≒□
	9,0 m	kg	*9.050	*9.050										
	7,5 m	kg	*8.450	*8.450			*9.350	*9.350						
	6,0 m	kg	*8.300	8.050			*12.850	10.100	*14.100	*14.100				
<u>~</u>	4,5 m	kg	*8.450	7.100	*10.700	7.450	*13.600	9.800	*15.750	13.700	*19.700	*19.700		
	3,0 m	kg	*8.850	6.550	11.200	7.250	*14.600	9.400	*17.750	12.900	*24.050	19.450		
	1,5 m	kg	*9.500	6.250	10.950	7.050	14.300	9.000	*19.400	12.150	*18.600	17.900		
3,2 m	0,0 m	kg	9.750	6.250	10.750	6.850	13.900	8.700	19.350	11.650	*18.100	17.250		
	-1,5 m	kg	10.150	6.450	10.600	6.700	13.650	8.450	19.050	11.350	*23.400	17.050		
	-3,0 m	kg	11.150	7.050			13.600	8.400	*18.850	11.250	*23.800	17.100	*19.550	*19.550
	-4,5 m	kg	*12.350	8.250			*12.750	8.500	*16.400	11.350	*20.300	17.300		

#### **EXCAVATION BOOM - STRAIGHT POSITION**

		Α	(	9	10,	5 m	9,0	m	7,5	m	6,0	m	4,5	5 m
Arm length	В		Å	C≫	å	<b>□</b> >==	å	□	å	□⇒□	å	<b>□</b> >==	å	<b>□</b> ==
	9,0 m	kg	*9.550	9.050					*11.650	9.700	*13.550	*13.550	*12.950	*12.950
	7,5 m	kg	*8.800	7.200			*9.100	7.200	*13.650	9.750	*13.400	*13.400	*12.200	*12.200
	6,0 m	kg	*8.450	6.200			11.200	7.250	*14.850	9.550	*15.250	13.400	*14.900	*14.900
	4,5 m	kg	*8.300	5.650			11.000	7.100	14.500	9.250	*18.850	12.700		
<b>661</b>	3,0 m	kg	8.300	5.350	8.650	5.550	10.800	6.900	14.100	8.850	19.750	11.950		
	1,5 m	kg	8.150	5.200	8.550	5.450	10.600	6.700	13.700	8.500				
3,2 m	0,0 m	kg	8.200	5.250	8.500	5.400	10.450	6.550	13.450	8.250	18.700	11.050		
	-1,5 m	kg	*8.550	5.450			10.350	6.500	13.350	8.150	*17.050	10.950		
	-3,0 m	kg					*9.550	6.550	*12.050	8.200	*14.100	11.050		

Ratings are based on SAE Standard No. J1097.

Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.

Lifting capacities are stated in kg, on the tip of the arm, for machine on firm, level supporting surface.

<sup>\*</sup> Load is limited by hydraulic capacity rather than tipping.

# Notes


## Standard and Optional Equipment

ENGINE	
Komatsu SAA6D114E-6 turbocharged common rail direct injection diesel engine	•
EU Stage IV compliant	•
Suction type cooling fan with radiator fly screen	•
Automatic engine warm-up system	•
Engine overheat prevention system	•
Fuel control dial	•
Auto-deceleration function	•
Adjustable idle shutdown	•
Engine key stop	•
Engine ignition can be password secured on request	•
Alternator 24 V / 90 A	•
Starter motor 24 V / 11 kW	•
Batteries 2 × 12 V / 180 Ah	•

#### **HYDRAULIC SYSTEM**

Electronic closed-centre load sensing (E-CLSS) hydraulic system (HydrauMind)	•
Pump and engine mutual control (PEMC) system	•
6-working mode selection system; power mode, economy mode, breaker mode, attachment power and attachment economy mode, and lifting mode	•
PowerMax function	•
Two-mode boom control	•
In-line filter for hydraulics	•
Two additional service valves (full flow)	•
One additional service valve (1/2 flow)	•
Drain circuit for hydraulic attachment rotation motors	•
Prepared for hydraulic quick coupler	•
Adjustable PPC wrist control levers for arm, boom, bucket and swing, with sliding proportional control for attachments and 3 auxiliary buttons	•
PPC pedal for high reach demolition mid link	•
Tool Control system	0

#### **DRIVES AND BRAKES**

shift and planetary gear type final drives, and hydraulic travel and parking brakes	•
PPC control levers and pedals for steering and travel	•
PPC pedal for high reach demolition mid link	•

#### **LIGHTING SYSTEM**

Your Komatsu partner:

Working lights: 2 revolving frame lights and 2 LED boom lights, 4 LED cab roof (front) lights, 1 cab roof rear light, 1 counterweight (rear) light, 2 LED high reach arm lights

#### **CABIN**

Demolition specification Safety SpaceCab™, with ISO10262 level 2 FOPS guards and roof screen wash wipe system. Fixed, one piece front window. Front and roof window fitted with high impact protective laminated glass, compliant with EN356 Grade P5A, in accordance with EN474 Part 1: Annex G. Tilting cab, controlled by wrist controller buttons, with soft start/soft stop function, including hydraulic power hoses and cab raise cylinders Heated, high back air suspension seat with lumbar support, console mounted height adjustable arm rests, and retractable seat belt Automatic climate control system 12 / 24 Volt power supplies Beverage holder and magazine rack Hot and cool box Radio Auxiliary input (MP3 jack)

#### **WORK EQUIPMENT**

<del>-</del> -	
Demolition 1st boom: Includes demolition 1st boom, fitted with Komatsu hydraulic quick connect system and hydraulic pipework suitable for operation of rotating crusher attachment	•
High Reach Demolition:	

Includes heavy duty demolition 2nd boom, heavy duty mid link and heavy duty demolition arm, to fit onto demolition 1st boom. Includes work equipment stands compliant with EN474 Part 1: Annex G

Heavy Duty Extension boom: Includes extension boom to fit onto demolition 1st boom, with Komatsu hydraulic quick connect system, O piping for hydraulic quick coupler and piping for hose burst valves. Includes equipment stand.

Excavation boom:

Includes two position excavation boom to fit onto demolition 1st boom, 3.200 mm arm, with piping for hydraulic quick-coupler, arm cylinder safety valve. Includes work equipment stands compliant with EN474 Part 1: Annex G

Komatsu buckets

#### **UNDERCARRIAGE**

Track roller guards	•
Track frame under-guards	•
Hydraulic adjustable wide gauge (HWG) undercarriage	0
600, 700 mm triple grouser track shoes (HWG: 700 mm only)	0
Full length track roller guards (not with HWG)	0

#### **SAFETY EQUIPMENT**

Working range indicator (WRI) system with full colour graphical display and warning buzzer. Compatible with optional high reach arm camera. 15 attachment memory settings	•
Rear view camera system	•
Additional camera, right side mounted	•
Emergency engine stop switch	•
Electric horn	•
Lockable fuel cap and covers	•
Audible travel alarm	•
Boom, arm and mid link safety valves, compliant with EN474 Part 1: Annex G	•
Large handrails, rear-view mirrors	•
Battery main switch	•
Emergency cab lower switch (internal and external)	•
High reach arm end camera	0

#### **SERVICE AND MAINTENANCE**

Automatic fuel line de-aeration	•
Double element type air cleaner with dust indicator an auto dust evacuator	d •
KOMTRAX™ – Komatsu wireless monitoring system	•
Komatsu CARE™ – a maintenance program for Komatsu customers	•
Multi-function video compatible colour monitor with Equipment Management and Monitoring System (EMMS) and efficiency guidance	•
Toolkit	•
Service points	0

#### **OTHER EQUIPMENT**

under covers and side guard protection	•
Counterweight prepared for demolition counterweight	•
Remote greasing for swing circle and pins	•
Electric refuelling pump with automatic shut off function	•
Standard colour scheme and decals	•
Parts book and operator manual	•
Additional counterweight. To fit into main demolition counterweight when high reach or medium reach demolition equipment is installed. Removable for excavation operations	0
Biodegradable oil for hydraulic system	0
Customised paint	0
Dust resistance kit, including turbine type engine air pre cleaner, mesh protection to air intakes	0

Further equipment on request

 standard equipment o optional equipment

0



## Komatsu Europe

B-1800 VILVOORDE (BELGIUM) Tel. +32-2-255 24 11 Fax +32-2-252 19 81

www.komatsu.eu

International N.V. Mechelsesteenweg 586

UENSS18600 05/2017

**KOMATSU** is a trademark of Komatsu Ltd. Japan.