

Hydraulic Excavator

PC490LC-10
High Reach Demolition Specification

**ENGINE POWER** 270 kW / 362 HP @ 1.900 rpm

**OPERATING WEIGHT** 55.250 - 71.350 kg

MAX. ATTACHMENT WEIGHT

Medium Reach Demolition: 5.000 kg High Reach Demolition: 3.350 kg

# Specifications

#### **ENGINE**

Model
Engine power
at rated engine speed
ISO 14396270 kW/362 HP
ISO 9249 (net engine power)268 kW/359 HP
No. of cylinders6
Bore × stroke125 × 150 mm
Displacement11,04 ltr
Battery
Alternator
Starter motor
Air filter typeDouble element type with monitor panel
dust indicator and auto dust evacuator
Cooling Suction type cooling fan with radiator fly screen
Fan drive type

### **HYDRAULIC SYSTEM**

Type HydrauMind. Closed-centre system with load sensing
and pressure compensation valves
Additional circuits2 additional circuits with proportional
control are installed
Main pump2 variable displacement piston pumps
supplying boom, arm, bucket, swing and travel circuits
Maximum pump flow2 × 345 ltr/min
Relief valve settings
Implement380 kg/cm <sup>2</sup>
Travel380 kg/cm <sup>2</sup>
Swing
Pilot circuit

### UNDERCARRIAGE

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

### 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	
Medium or High reach demo	lition equipment 0 - 4,0 rpm
Excavation boom equipment	0 - 9,4 rpm
Swing torque	132 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
Max. travel speeds	
Lo / Mi / Hi	3,0 / 4,2 / 5,5 km/h
Maximum drawbar pull	34.000 kg
Brake system	Hydraulically operated discs
	in each travel motor

### SERVICE REFILL CAPACITIES

Fuel tank	650 ltr
Radiator	44,0 ltr
Engine oil	37,0 ltr
Swing drive	20,0 ltr
Hydraulic tank	248 ltr
Final drive (each side)	10,5 ltr

### **ENVIRONMENT**

Engine emissionsFully complies with EU Stage IIIB exhaust emission regulations				
Noise levels				
LwA external107 dB(A) (2000/14/EC Stage II)				
LpA operator ear71 dB(A) (ISO 6396 dynamic test)				
Vibration levels (EN 12096:1997)				
Hand/arm $\leq$ 2,5 m/s <sup>2</sup> (uncertainty K = 0,25 m/s <sup>2</sup> )				
Body $\leq$ 0,5 m/s <sup>2</sup> (uncertainty K = 0,10 m/s <sup>2</sup> )				
Contains fluorinated greenhouse gas HFC-134a (GWP 1430).				
Quantity of gas 1,0 kg, CO <sub>2</sub> equivalent 1,43 t.				

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

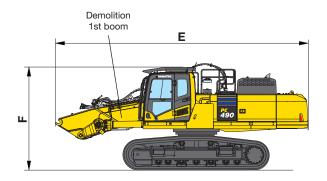
	HIGH REACH DEMOLITION MEDIUM REACH DEMOLITION		EXCAVATION BOOM			
Triple grouser shoes	Operating weight	Ground pressure	Operating weight	Ground pressure	Operating weight	Ground pressure
600 mm	65.000 kg	1,18 kg/cm <sup>2</sup>	65.950 kg	1,20 kg/cm <sup>2</sup>	55.250 kg	1,01 kg/cm <sup>2</sup>
700 mm	65.500 kg	1,02 kg/cm <sup>2</sup>	66.450 kg	1,04 kg/cm <sup>2</sup>	55.750 kg	0,87 kg/cm <sup>2</sup>
700 mm HWG	70.400 kg	1,03 kg/cm <sup>2</sup>	71.350 kg	1,04 kg/cm <sup>2</sup>	60.650 kg	0,88 kg/cm <sup>2</sup>

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

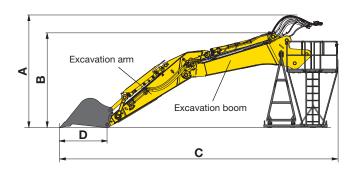
- High Reach Demolition includes attachment weight of 3.350 kg
- Medium Reach Demolition includes attachment weight of 5.000 kg
- Excavation boom includes 3,4 m arm and 2.180 kg bucket

# **Dimensions**

### **MACHINE DIMENSIONS**

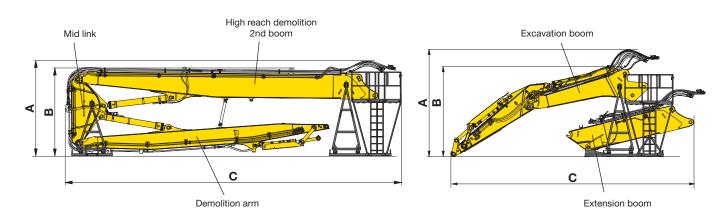


### **EXCAVATION BOOM**



### HIGH REACH DEMOLITION

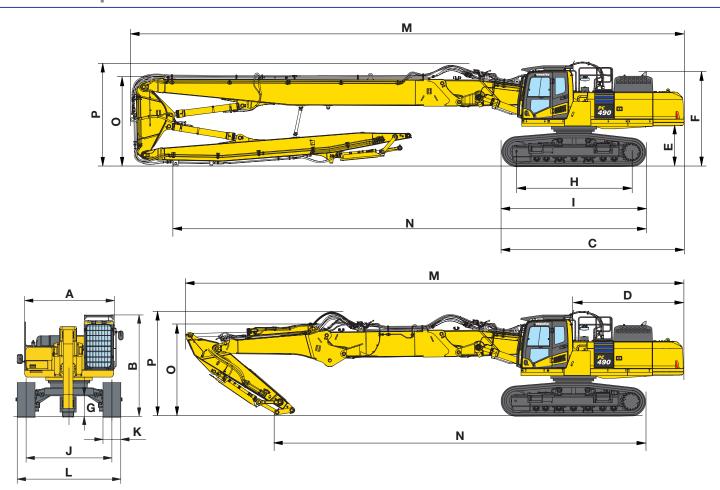
### MEDIUM REACH DEMOLITION



EQUIPMENT	EXCAVATION BOOM	MEDIUM REACH DEMOLITION	HIGH REACH DEMOLITION
A Overall height (to top of hose)	3.710 mm	3.710 mm	3.320 mm
B Overall height (to top of boom)	3.470 mm	3.470 mm	3.320 mm
C Overall length	8.435 mm	9.190 mm	12.480 mm
D Tip radius	1.700 mm	-	-
Width (incl. equipment stand)	2.505 mm	2.505 mm	2.505 mm
High reach demolition 2nd boom weight	-	-	4.460 kg
Excavation boom weight	3.090 kg	3.090 kg	-
Extension boom weight	-	2.880 kg	-
Mid link weight	-	-	1.240 kg
Arm weight	1.605 kg	1.605 kg	2.390 kg
Total weight with equipment stand	6.855 kg	9.930 kg	10.715 kg
Total weight without equipment stand	6.090 kg	8.970 kg	9.610 kg

M	ACHINE DIMENSIONS	HRD (LC)	HRD (HWG)
Е	Transport length	8.445 mm	8.445 mm
F	Overall height of cab (with FOPS)	3.570 mm	3.570 mm
	Overall height of cab (without FOPS)	3.360 mm	3.360 mm
	Transport weight (with 700 mm shoes, not including additional counterweight)	47.475 kg	52.375kg
	Additional counterweight (1470 $\times$ 700 $\times$ 620 mm)	5.000 kg	5.000 kg

# Transport Dimensions

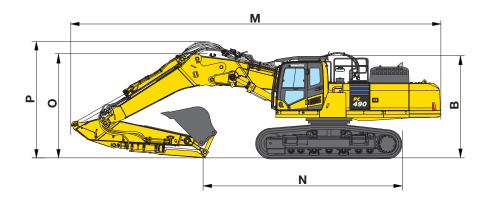


TRANSPORT DIMENSIONS		HIGH REACH DEMOLITION	HIGH REACH DEMOLITION	MEDIUM REACH DEMOLITION	MEDIUM REACH DEMOLITION
	Undercarriage	LC	HWG	LC	HWG
Α	Overall width of upper structure 1)	2.995 mm	2.995 mm	2.995 mm	2.995 mm
В	Overall height of cab, with FOPS	3.570 mm	3.600 mm	2.570 mm	3.600 mm
	Overall height of cab, without FOPS	3.360 mm	3.390 mm	3.360 mm	3.390 mm
С	Overall length of basic machine	6.525 mm	6.690 mm	6.525 mm	6.690 mm
D	Tail length	3.830 mm	3.830 mm	3.830 mm	3.830 mm
Е	Clearance under counterweight	1.385 mm	1.415 mm	1.385 mm	1.415 mm
F	Machine tail height	3.265 mm	3.295 mm	3.265 mm	3.295 mm
G	Ground clearance	700 mm	500 mm	700 mm	500 mm
Н	Tumbler centre distance	4.350 mm	4.680 mm	4.350 mm	4.680 mm
ı	Track length	5.385 mm	5.695 mm	5.385 mm	5.695 mm
J	Track gauge 2)	2.390 - 2.890 mm	2.280 - 3.280 mm	2.390 - 2.890 mm	2.280 - 3.280 mm
K	Track shoe width	600 mm, 700 mm	700 mm	600 mm, 700 mm	700 mm
L	Overall track width with 600 mm shoes 2)	2.990 - 3.490 mm	-	2.990 - 3.490 mm	-
	Overall track width with 700 mm shoes 2)	3.090 - 3.590 mm	2.980 - 3.980 mm	3.090 - 3.590 mm	2.980 - 3.980 mm
М	Transport length	19.215 mm	19.215 mm	17.250 mm	17.250 mm
N	Length on ground (transport)	16.005 mm	16.170 mm	12.470 mm	12.635 mm
0	Overall height (to top of boom)	3.320 mm	3.320 mm	3.420 mm	3.435 mm
Р	Overall height (to top of hose)	3.550 mm	3.580 mm	3.590 mm	3.605 mm

<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.

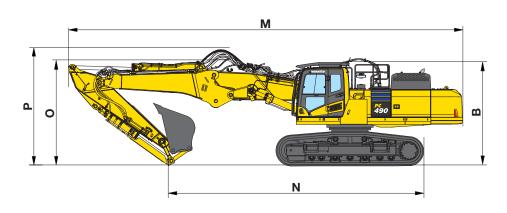
2) Undercarriage in retracted – extended position

# **EXCAVATION BOOM – CRANKED POSITION**



AF	RM LENGTH	3,4	m
	Undercarriage	LC	HWG
М	Overall transport length	12.565 mm	12.565 mm
N	Transport length on ground	6.310 mm	6.475 mm
В	Transport height (to top of cab, with FOPS)	3.570 mm	3.600 mm
	Transport height (to top of cab, without FOPS)	3.360 mm	3.390 mm
0	Transport height (to top of boom)	3.700 mm	3.700 mm
Р	Transport height (to top of hose)	3.980 mm	3.980 mm

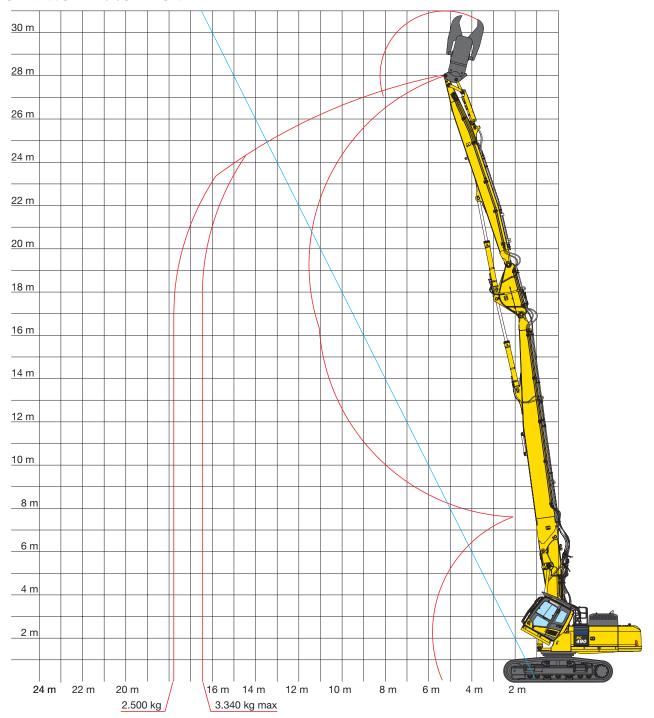
# **EXCAVATION BOOM – STRAIGHT POSITION**



ARM LENGTH	3,4	ł m
Undercarriage	LC	HWG
M Overall transport length	13.210 mm	13.210 mm
N Transport length on ground	8.190 mm	8.355 mm
B Transport height (to top of cab, with FOPS)	3.570 mm	3.600 mm
Transport height (to top of cab, without FOPS)	3.360 mm	3.390 mm
O Transport height (to top of boom)	3.215 mm	3.215 mm
P Transport height (to top of hose)	3.560 mm	3.560 mm

# Working Range

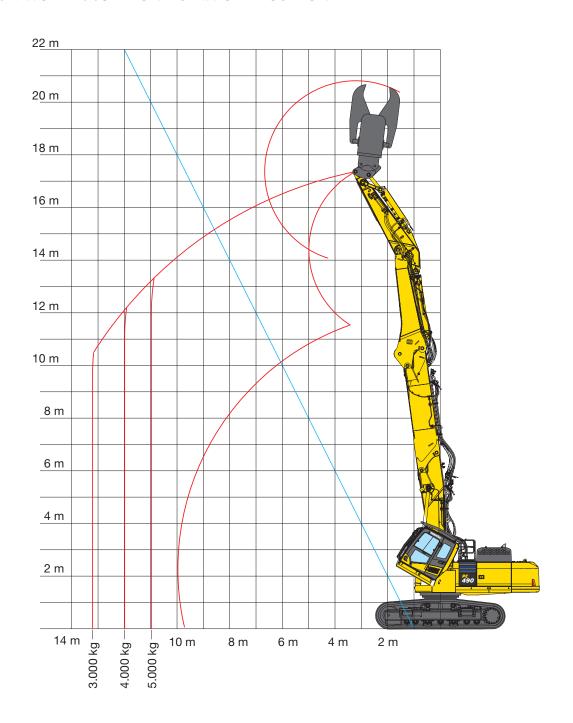
### HIGH REACH DEMOLITION



### HIGH REACH DEMOLITION

Max. height (to pin at arm end)	28.000 mm
Max. forward reach (max. tool weight)	16.500 mm
Min. swing radius of arm end pin at max. height	5.250 mm
Tail swing radius	3.860 mm
Height at max. reach (max. tool weight)	17.795 mm
Min. boom angle from ground at max. height	84°
Max. height (2:1 line)	24.925 mm
Reach at max. height (2:1 line)	13.465 mm

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

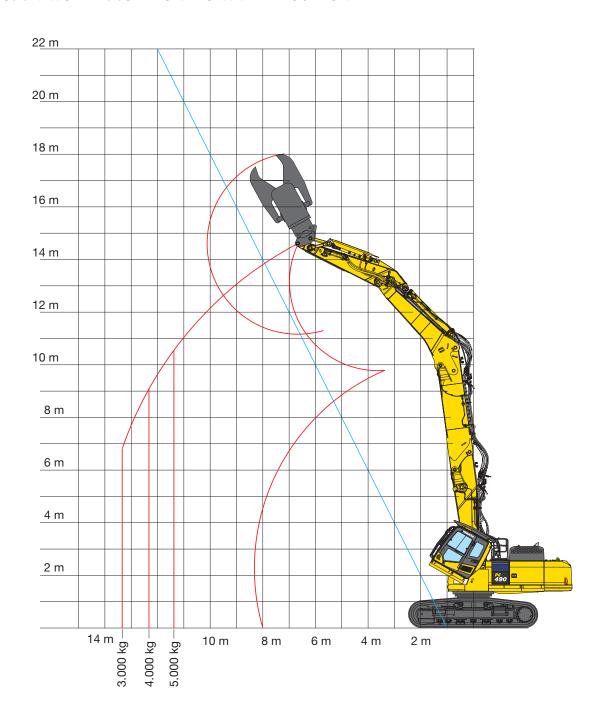


### MEDIUM REACH DEMOLITION - STRAIGHT POSITION

Max. height (to pin at arm end)	17.365 mm
Max. forward reach (max. tool weight)	11.000 mm
Min. swing radius of arm end pin at max. height	3.220 mm
Tail swing radius	3.860 mm
Height at max. reach (max. tool weight)	11.938 mm
Min. boom angle from ground at max. height	84°
Max. height (2:1 line)	15.160 mm
Reach at max. height (2:1 line)	8.580 mm

# Working Range

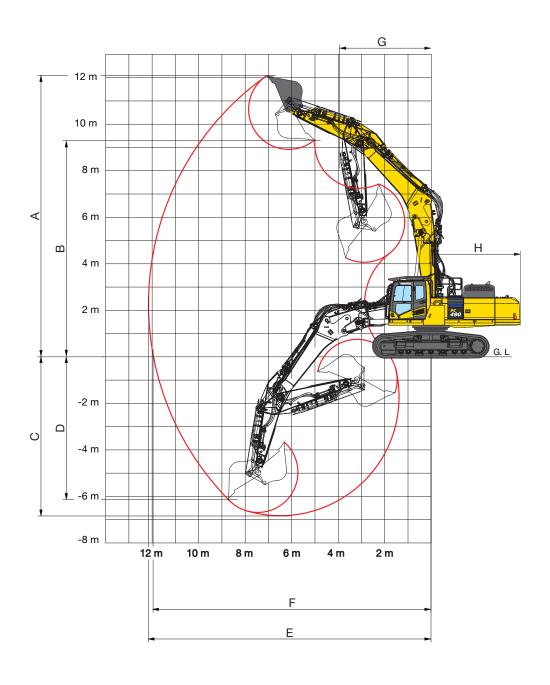
### MEDIUM REACH DEMOLITION - CRANKED POSITION



### MEDIUM REACH DEMOLITION - CRANKED POSITION

Max. height (to pin at arm end)	14.610 mm
Max. forward reach (max. tool weight)	11.400 mm
Min. swing radius of arm end pin at max. height	6.670 mm
Tail swing radius	3.860 mm
Height at max. reach (max. tool weight)	10.550 mm
Min. boom angle from ground at max. height	84°
Max. height (2:1 line)	13.855 mm
Reach at max. height (2:1 line)	7.930 mm

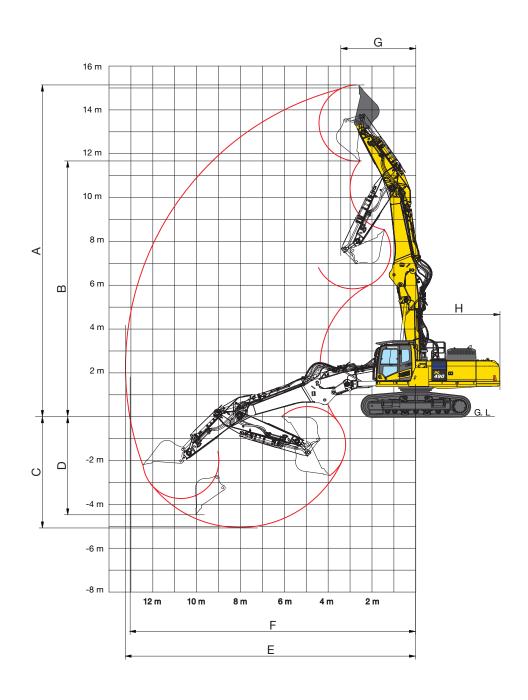
# **EXCAVATION BOOM – CRANKED POSITION**



3,4 m
12.090 mm
9.330 mm
6.830 mm
6.175 mm
12.155 mm
11.940 mm
3.840 mm
3.860 mm

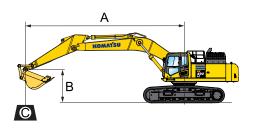
# Working Range

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



AR	M LENGTH	3,4 m
Α	Max. digging height	15.075 mm
В	Max. dumping height	11.600 mm
С	Max. digging depth	5.120 mm
D	Max. vertical wall digging depth	4.510 mm
Е	Max. digging reach	13.250 mm
F	Max. digging reach at ground level	13.060 mm
G	Min. swing radius (bucket loaded)	3.415 mm
Н	Tail swing radius	3.860 mm

# Lifting Capacity



A - Reach from swing center

B - Bucket hook height

C - Lifting capacities

Rating over front

Rating over side

- Rating at maximum reach

With 600 mm shoes

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

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

		A	(	•	10,	5 m	9,0	m	7,5	m	6,0	m	4,5	5 m
Arm length	В		Å	C <del>}</del> ≈	Å	<b>□</b> >==	ď	□₩	Ä	C <del>}</del> ≈	Ž	C}≈	å	C <del>}</del> ≈
	9.0 m	lea	6.000*	6.000*					8.650*	8.650*				
	7.5 m	kg kg	5.900*	5.900*			7.100*	7.100*	12.300*	12.300*				
	6,0 m	kg	6.050*	6.050*			11.650*	8.600	14.150*	12.050	16.800*	16.800*		
0 0 1	4,5 m	kg	6.400*	6.300			12.650	8.250	15.550*	11.350	19.150*	16.450	26.500*	25.950
-	3,0 m	kg	7.000*	5.800	9.250*	5.850	12.200	7.850	16.550	10.650	21.700*	15.150	20.600*	20.600*
3,4 m	1,5 m	kg	7.650*	5.600	9.050	5.650	11.750	7.450	15.850	10.000	22.850	14.050		
	0,0 m	kg	9.150	5.650	8.850	5.450	11.400	7.100	15.300	9.500	22.000	13.350	13.550*	13.550*
1 244	-1,5 m	kg	9.700	5.950			11.200	6.900	15.000	9.250	21.650	13.000	19.750*	19.750*
1.914 kg	-3,0 m	kg	10.950	6.750			11.150	6.900	14.900	9.150	20.700*	13.050	25.800*	21.050
	-4,5 m	kg	11.850*	8.350					13.700*	9.300	17.450*	13.250	21.300*	21.250

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

	Α Θ		8	10,5 m		9,0 m		7,5 m		6,0 m		4,5 m		
Arm length	В		Å		ď	<b>□</b> >==	ď	C⇒=	Ä	<b>□</b> >==	ď	<b>□</b> >==	ď	C⇒□
	9,0 m	kg	6.250*	6.250*			10.000*	8.300	12.250*	11.950	11.900*	11.900*		
5	7,5 m	kg	5.950*	5.850	6.100*	5.900	12.500*	8.250	13.150*	11.650	12.550*	12.550*	13.450*	13.450*
0 9 1	6,0 m	kg	5.900*	5.100	9.300	5.850	12.400	8.000	17.000*	11.150	20.100*	16.250	25.900*	25.900*
	4,5 m	kg	6.000*	4.600	9.100	5.700	11.950	7.650	16.300	10.450	22.700*	14.950		
3,4 m	3,0 m	kg	6.250*	4.350	8.900	5.500	11.550	7.250	15.550	9.750	22.450	13.750		
1.914 kg	1,5 m	kg	6.600*	4.300	8.700	5.300	11.150	6.900	15.000	9.250				
	0,0 m	kg	7.250*	4.400	8.550	5.150	10.950	6.700	14.600	8.900	17.750*	12.550		
	-1,5 m	kg	7.200*	4.700	8.500	5.150	10.850	6.600	14.500*	8.800	17.550*	12.600		
1	-3,0 m	kg					9.500*	6.650	12.000*	8.900	13.650*	12.700		

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. Ratings are based on SAE Standard No. J1097.

# PC490LC-10 High Reach Demolition Specification

# Standard and Optional Equipment

ENGINE	
Komatsu SAA6D125E-6-A turbocharged common	
rail direct injection diesel engine	'
EU Stage IIIB compliant	,
Remote hydraulically driven, variable speed,	
reversible cooling fan	_
Automatic engine warm-up system	,
Engine overheat prevention system	,
Fuel control dial	,
Auto-deceleration function   •	,
Engine key stop	,
Engine ignition can be password secured on	
request	_
Alternator 24 V/60 A	,
Starter motor 24 V/11 kW	,
Batteries 2 × 12 V/110 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.	

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	•

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

SERVICE AND MAINTENANCE	
Automatic fuel line de-aeration	•
Double element type air cleaner with dust indicator and auto dust evacuator	•
KOMTRAX <sup>™</sup> – Komatsu wireless monitoring system	•
Multi-function video compatible colour monitor with Equipment Management and Monitoring System (EMMS) and efficiency guidance	•
Toolkit	•

Your Komatsu partner:

Service points

#### **CABIN**

Demolition specification Safety SpaceCab <sup>TM</sup> , 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
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 and been beeny

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:

Medium Reach Demolition: Includes extension boom to fit onto demolition 1st boom, with Komatsu hydraulic quick connect system, demolition digging boom and 3.400 mm arm, piping for hydraulic quick-coupler, arm cylinder safety valve. Includes work equipment stands compliant with EN474 Part 1 : Annex G

Excavation boom:

Includes two position excavation boom to fit onto demolition 1st boom, 3.400 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

0

#### LIGHTING SYSTEM

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

#### **SAFETY EQUIPMENT**

Working range indicator (WRI) system with full colour graphical display and warning buzzer.	•
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	•

#### **DRIVES AND BRAKES**

Hydrostatic, 3-speed travel system with automatic 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	•

#### **OTHER EQUIPMENT**

Heavy duty revolving frame with heavy duty demolition 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

Further equipment on request

standard equipment

0

optional equipment



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UENSS17503 01/2017

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