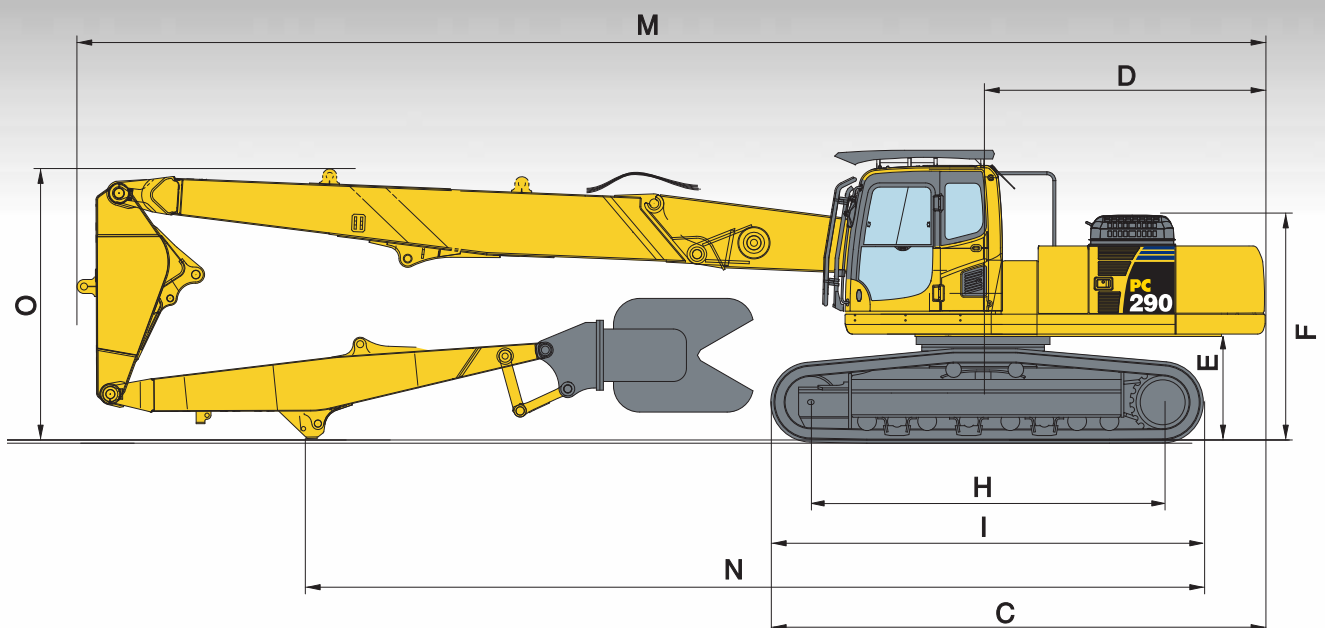


# KOMATSU



## Hydraulic Excavator

# PC290LC/NLC-8

### High Reach Demolition Specification

#### ENGINE POWER

149 kW / 200 HP @ 2.050 rpm

#### OPERATING WEIGHT

PC290LC-8: 33.980 - 41.010 kg

PC290NLC-8: 33.880 - 40.910 kg

#### ATTACHMENT TOOL WEIGHT

max. 3.000 kg

# Specifications

## ENGINE

Model ..... Komatsu SAA6D107E-1  
 Type ..... Common rail direct injection, water-cooled, emissionised, turbocharged, after-cooled diesel  
 Engine power  
 at rated engine speed ..... 2.050 rpm  
 ISO 14396 ..... 149 kW / 200 HP  
 ISO 9249 (net engine power) ..... 140 kW / 188 HP  
 No. of cylinders ..... 6  
 Bore × stroke ..... 107 × 124 mm  
 Displacement ..... 6,69 ltr  
 Battery ..... 2 × 12 V/140 Ah  
 Alternator ..... 24 V/60 A  
 Starter motor ..... 24 V/5,5 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 ..... HydraMind. Closed-centre system with load sensing and pressure compensation valves  
 Additional circuits ..... 2 additional circuits are installed  
 Main pump ..... 2 variable displacement piston pumps supplying boom, arm, bucket, swing and travel circuits  
 Maximum pump flow ..... 2 × 225 ltr/min  
 Relief valve settings  
 Implement ..... 380 bar  
 Travel ..... 380 bar  
 Swing ..... 295 bar  
 Pilot circuit ..... 33 bar

## UNDERCARRIAGE

Construction ..... X-frame centre section with box section track frames  
 Track assembly  
 Type ..... Fully sealed  
 Shoes (each side) ..... 48  
 Tension ..... Combined spring and hydraulic unit  
 Rollers  
 Track rollers (each side) ..... 8  
 Carrier rollers (each side) ..... 2

## OPERATING WEIGHT (APPR.)

	HIGH REACH				EXCAVATION BOOM			
	PC290LC-8		PC290NLC-8		PC290LC-8		PC290NLC-8	
Triple grouser shoes	Operating weight	Ground pressure	Operating weight	Ground pressure	Operating weight	Ground pressure	Operating weight	Ground pressure
600 mm	40.610 kg	0,78 kg/cm <sup>2</sup>	40.510 kg	0,78 kg/cm <sup>2</sup>	33.980 kg	0,65 kg/cm <sup>2</sup>	33.880 kg	0,64 kg/cm <sup>2</sup>
700 mm	41.010 kg	0,67 kg/cm <sup>2</sup>	40.910 kg	0,67 kg/cm <sup>2</sup>	34.380 kg	0,56 kg/cm <sup>2</sup>	34.280 kg	0,55 kg/cm <sup>2</sup>

Operating weight, including specified work equipment. High reach includes attachment weight of 3.000 kg. Excavation boom equipment includes 3,2 m arm and 1.290 kg bucket. All include operator, lubricant, coolant, full fuel tank.

## 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 - 10,5 rpm  
 Swing torque ..... 88 kNm  
 Max. pressure ..... 295 bar

## DRIVES AND BRAKES

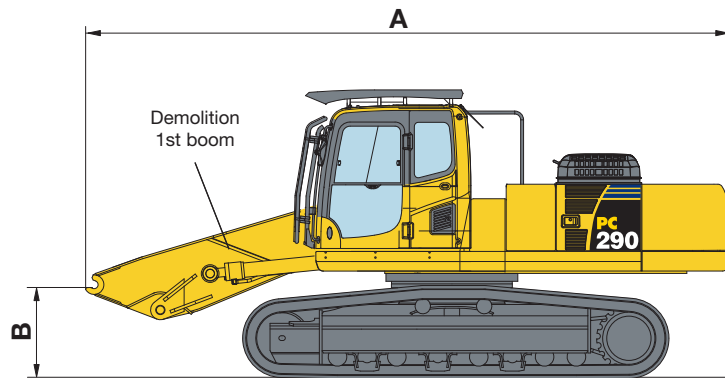
Steering control ..... 2 levers with pedals giving full independent control of each track  
 Drive method ..... Hydrostatic  
 Travel operation ..... Automatic 3-speed selection  
 Max. travel speeds  
 Lo / Mi / Hi ..... 3,0 / 4,1 / 5,5 km/h  
 Maximum drawbar pull ..... 25.400 kg  
 Brake system ..... Hydraulically operated discs in each travel motor

## SERVICE REFILL CAPACITIES

Fuel tank ..... 400,0 ltr  
 Radiator ..... 20,6 ltr  
 Engine oil ..... 23,1 ltr  
 Swing drive ..... 8,2 ltr  
 Hydraulic tank ..... 132,0 ltr  
 Final drive (each side) ..... 8,5 ltr

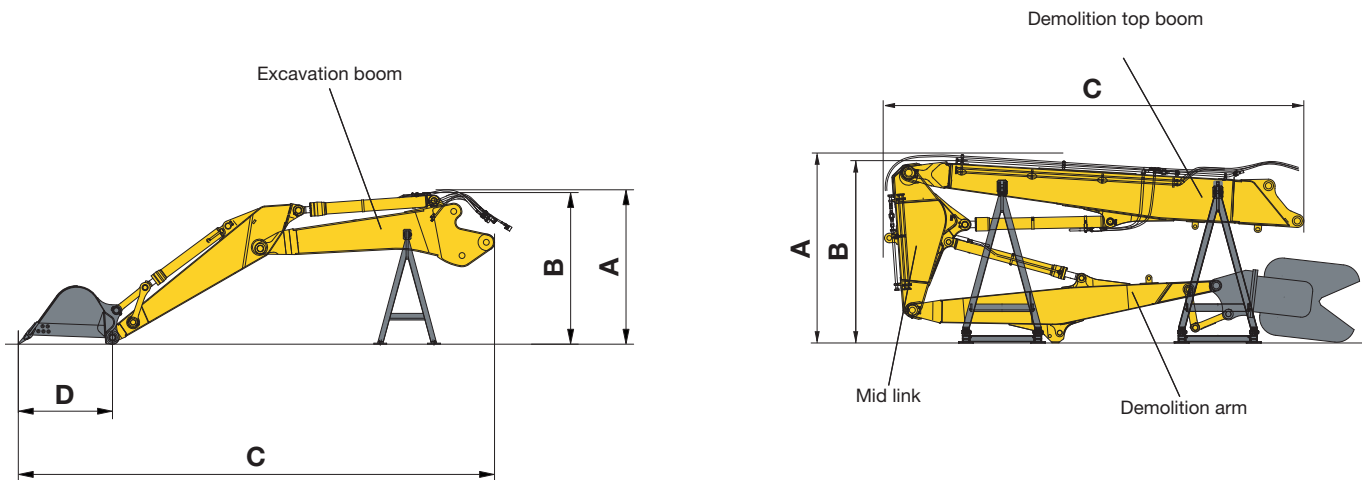
## ENVIRONMENT

Engine emissions ..... Fully complies with EU Stage IIIA and EPA Tier III exhaust emission regulations  
 Noise levels  
 LwA external ..... 104 dB(A) (2000/14/EC Stage II)  
 LpA operator ear ..... 70 dB(A) (ISO 6396 dynamic test)



## MACHINE DIMENSIONS

A	Transport length	7.100 mm
B	Maximum boom height (incl. hydraulic lines)	1.185 mm
	Transport weight with LC undercarriage (700 mm shoes, not including additional counterweight)	29.550 kg
	Transport weight with NLC undercarriage (600 mm shoes, not including additional counterweight)	29.050 kg
	Additional counterweight (1.470 mm × 730 mm × 535 mm)	3.560 kg

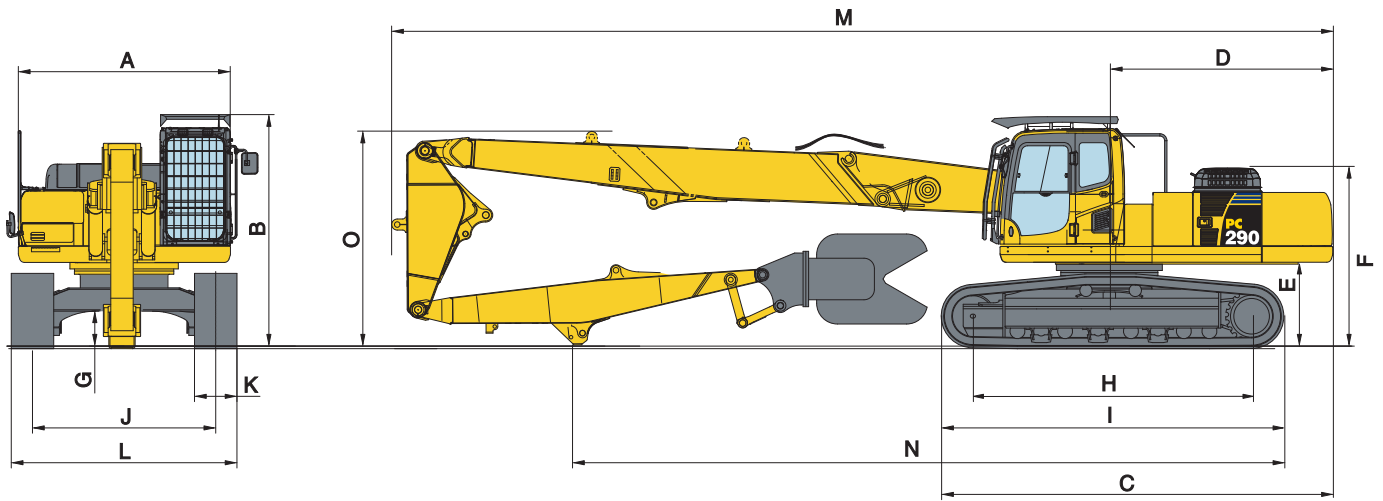


EQUIPMENT	EXCAVATION BOOM	EXCAVATION BOOM	HIGH REACH BOOM	
	2,6 m arm	3,2 m arm		
A	Total height (incl. hydraulic lines)	2.340 mm	2.340 mm	3.085 mm
B	Height	2.340 mm	2.340 mm	2.980 mm
C	Length	8.335 mm	8.955 mm	7.000 mm
D	Tip radius	1.555 mm	1.555 mm	–
	Support weight	400 kg	400 kg	937 kg
	Demolition top boom <sup>1)</sup>	1.960 kg	1.960 kg	2.280 kg
	Mid link weight	–	–	816 kg
	Arm weight <sup>1)</sup>	1.465 kg	1.600 kg	1.070 kg
	Bucket weight	1.300 kg	1.300 kg	–
	Total weight <sup>2)</sup>	5.640 kg	5.750 kg	9.400 kg

1) Not including hydraulic cylinder.

2) Including hydraulic cylinders, links, hydraulic lines, stands and stated attachment weight.

# Transport Dimensions



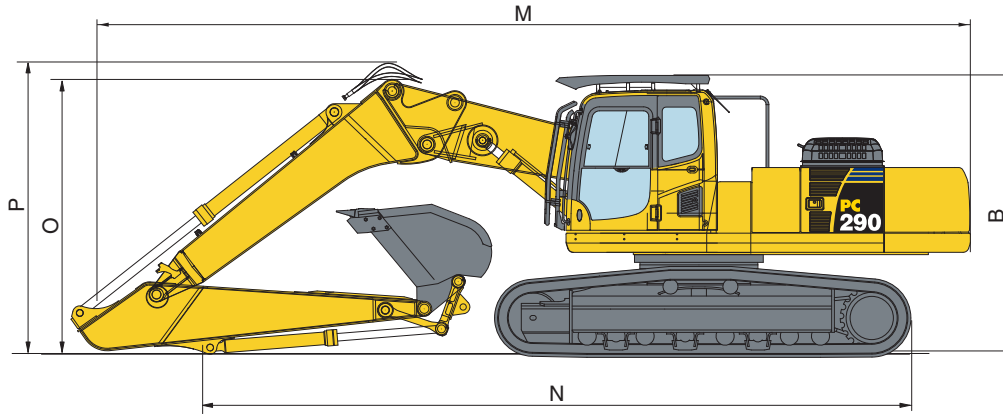
## MACHINE DIMENSIONS

## HIGH REACH

A	Overall width of upper structure <sup>1)</sup>	2.710 mm
B	Overall height of cab, with FOPS	3.400 mm
	Overall height of cab, without FOPS	3.180 mm
C	Overall length of basic machine	5.560 mm
D	Tail length	3.230 mm
E	Clearance under counterweight	1.250 mm
F	Machine tail height	2.615 mm
G	Ground clearance	500 mm
H	Tumbler centre distance	4.030 mm
I	Track length	4.955 mm
J	Track gauge (LC undercarriage)	2.590 mm
	Track gauge (NLC undercarriage)	2.390 mm
K	Track shoe width	600 mm, 700 mm
L	Overall track width with 600 mm shoes (LC undercarriage)	3.190 mm
	Overall track width with 600 mm shoes (NLC undercarriage)	2.990 mm
	Overall track width with 700 mm shoes (LC undercarriage)	3.290 mm
	Overall track width with 700 mm shoes (NLC undercarriage)	3.090 mm
M	Transport length	13.410 mm
N	Length on ground (transport)	9.820 mm
O	Overall height (to top of boom)	2.980 mm
P	Overall height (to top of hose)	3.085 mm

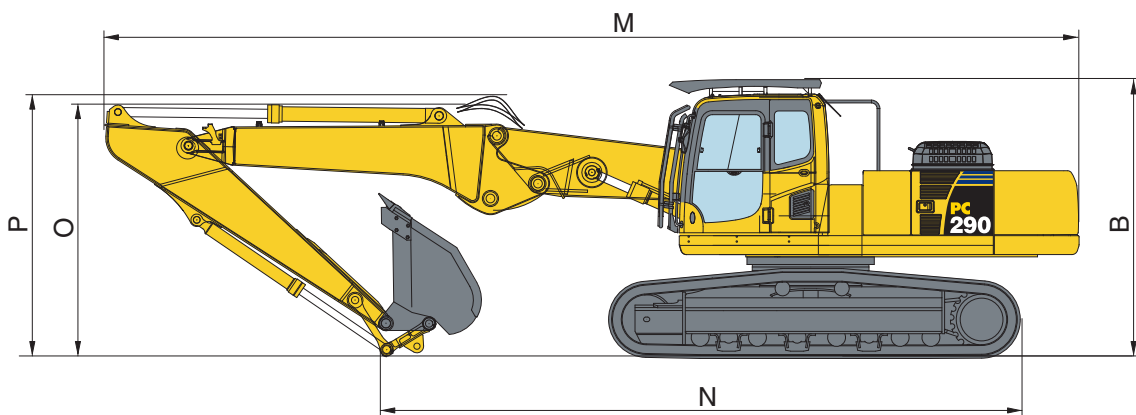
1) Overall width of upper structure excludes side guards, handrails and mirrors

## EXCAVATION BOOM - BENT POSITION



ARM LENGTH	2,6 m	3,2 m
M Overall transport length	11.100 mm	10.955 mm
N Length on ground (transport)	6.600 mm	8.605 mm
B Transport height (to top of cab, with FOPS)	3.400 mm	3.400 mm
Transport height (to top of cab, without FOPS)	3.180 mm	3.180 mm
O Transport height (to top of boom)	3.475 mm	3.265 mm
P Transport height (to top of hose)	3.765 mm	3.550 mm

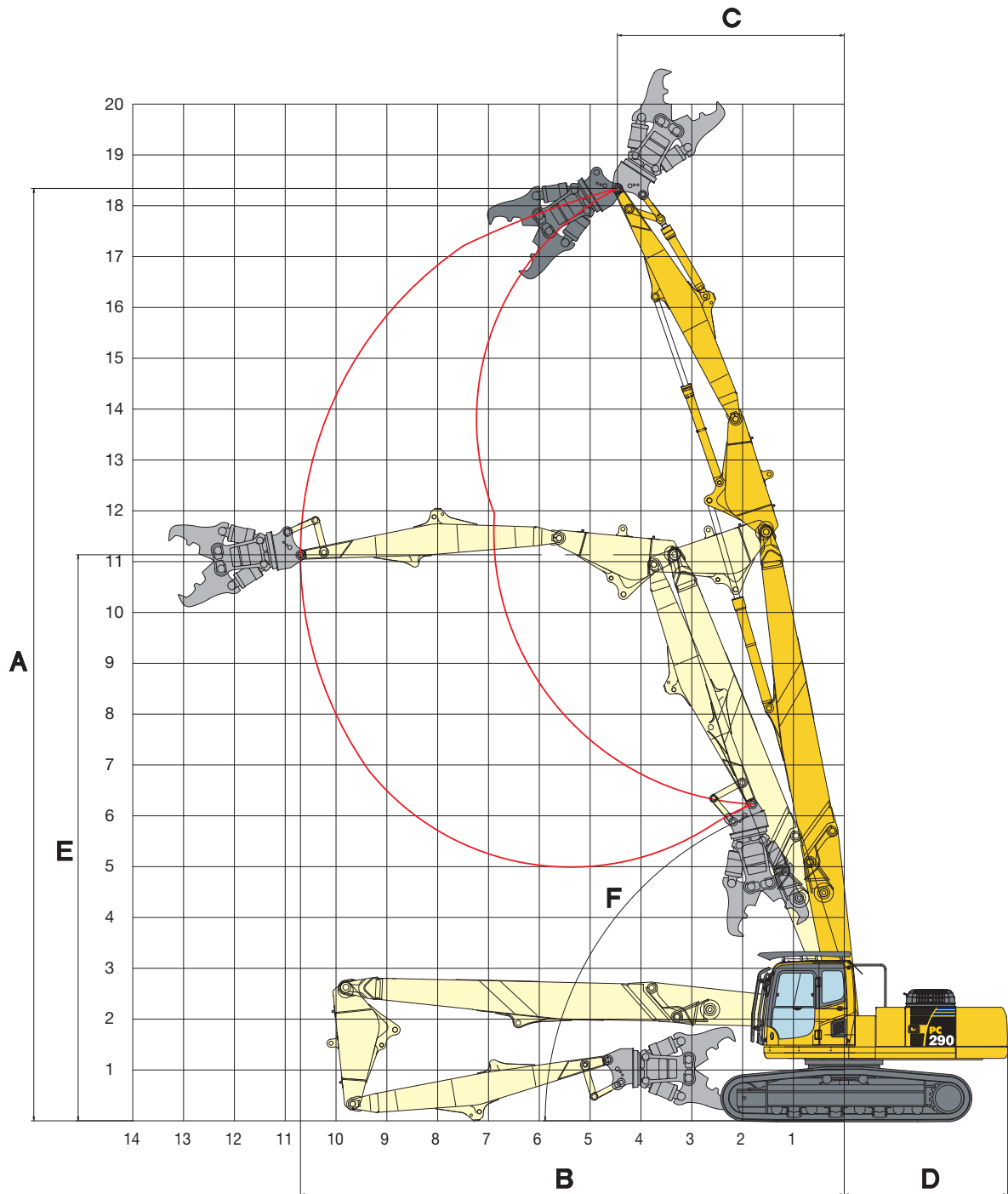
## EXCAVATION BOOM - STRAIGHT POSITION



ARM LENGTH	2,6 m	3,2 m
M Overall transport length	11.910 mm	11.870 mm
N Length on ground (transport)	8.490 mm	8.510 mm
B Transport height (to top of cab, with FOPS)	3.400 mm	3.400 mm
Transport height (to top of cab, without FOPS)	3.180 mm	3.180 mm
O Transport height (to top of boom)	2.985 mm	3.030 mm
P Transport height (to top of hose)	3.370 mm	3.440 mm

# Working Range

## HIGH REACH DEMOLITION

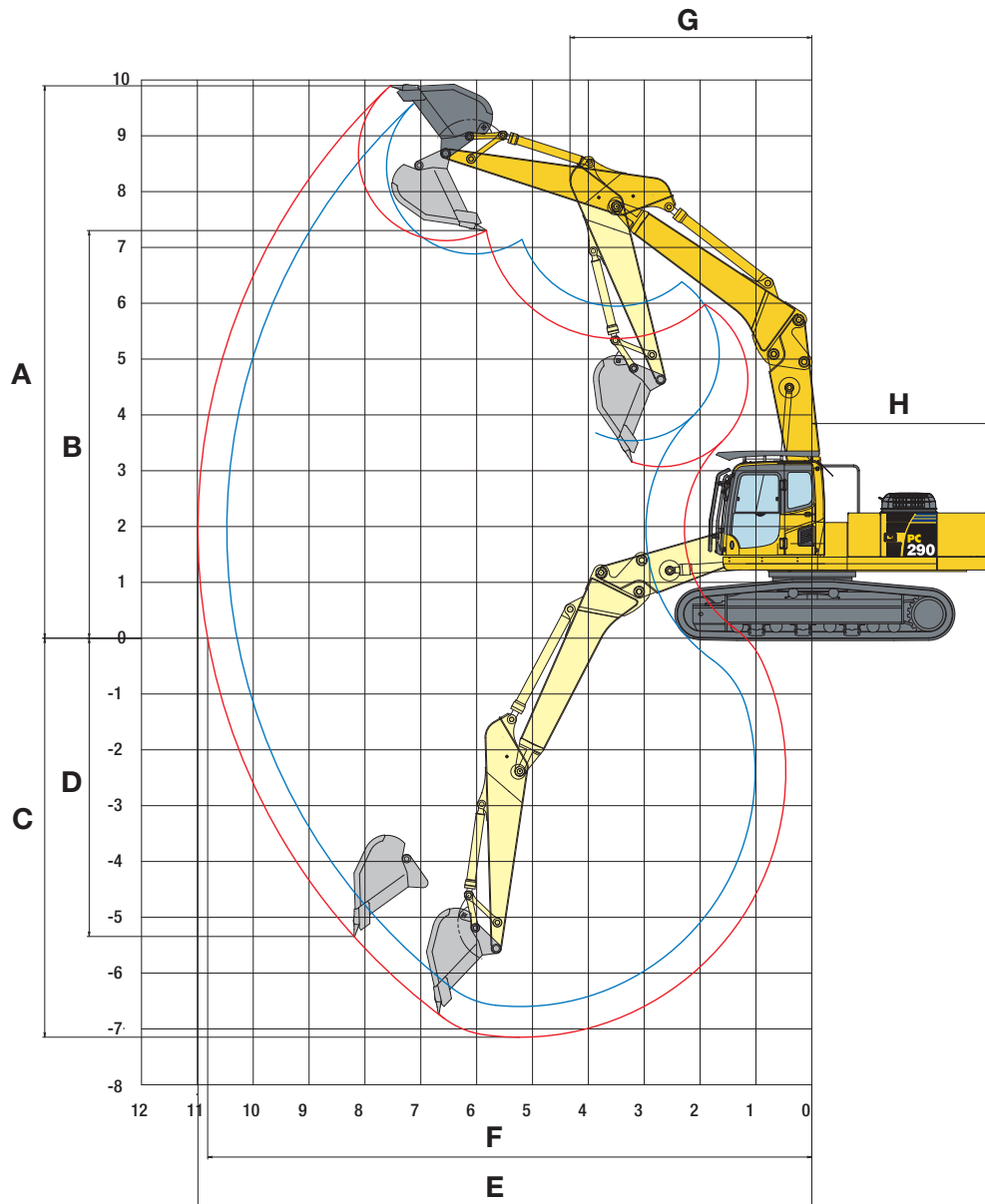


### HIGH REACH DEMOLITION

A	Max. working height (to pin at arm end)	18.340 mm
B	Max. forward reach	10.700 mm
C	Min. swing radius of arm end pin (max. height)	4.465 mm
D	Tail swing radius	3.270 mm
E	Height at max. reach	11.135 mm
F	Min. boom angle from ground at max. height	70,5°

This working range is applicable through 360 degrees (depending upon fitted attachment) (for LC undercarriage). For operator and jobsite safety, Komatsu recommend that high reach demolition machines work in line with the trackframe wherever possible.

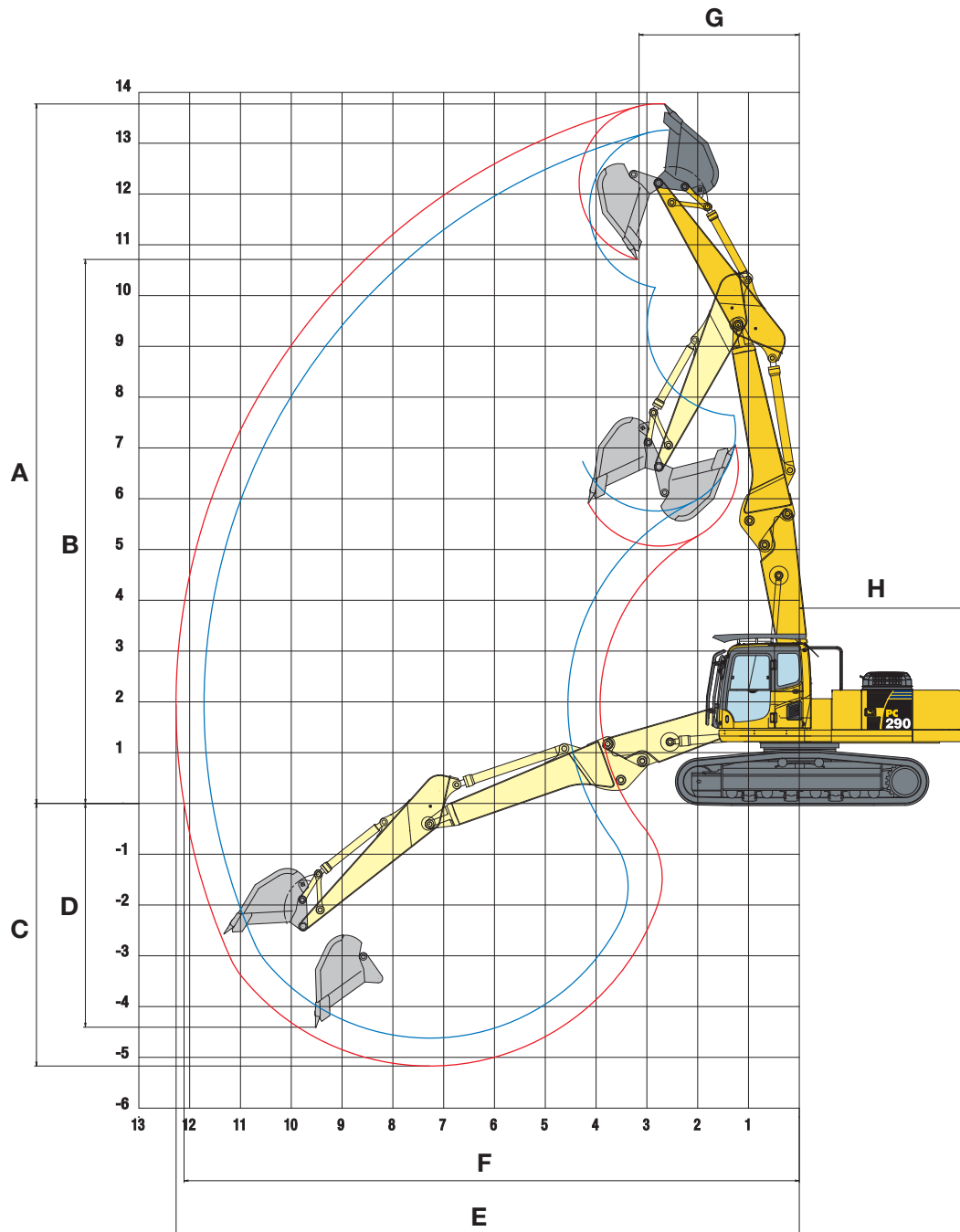
## EXCAVATION BOOM - BENT POSITION



ARM LENGTH	2,6 m	3,2 m
A Max. digging height	9.610 mm	9.930 mm
B Max. dumping height	7.180 mm	7.340 mm
C Max. digging depth	6.560 mm	7.110 mm
D Max. vertical wall digging depth	4.250 mm	5.310 mm
E Max. digging reach	10.470 mm	10.990 mm
F Max. digging reach at ground level	10.280 mm	10.810 mm
G Min. swing radius (bucket loaded)	4.310 mm	4.330 mm
H Tail swing radius	3.270 mm	3.270 mm

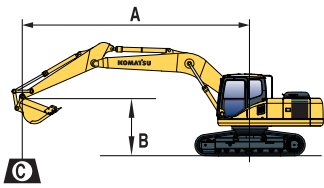
# Working Range

## EXCAVATION BOOM - STRAIGHT POSITION



ARM LENGTH	2,6 m	3,2 m
A Max. digging height	13.295 mm	13.810 mm
B Max. dumping height	10.195 mm	10.750 mm
C Max. digging depth	4.585 mm	5.135 mm
D Max. vertical wall digging depth	3.800 mm	4.370 mm
E Max. digging reach	11.715 mm	12.265 mm
F Max. digging reach at ground level	11.545 mm	12.100 mm
G Min. swing radius (bucket loaded)	3.205 mm	3.155 mm
H Tail swing radius	3.270 mm	3.270 mm

# Lifting Capacity



- A – Reach from swing center
- B – Bucket hook height
- C – Lifting capacities, including bucket, bucket linkage and 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.

## EXCAVATION BOOM - BENT POSITION

Arm length	A	9,0 m		8,5 m		7,5 m		6,0 m		4,5 m		3,0 m	
	B												

### PC290LC-8 700 mm shoes

	6,0 m	kg			6,530*	4,610							
	4,5 m	kg			5,730	3,420	6,960*	4,400	8,410*	6,500	11,320*	10,340	
	3,0 m	kg			5,550	3,260	6,900	4,110	9,480*	5,900	13,670*	8,860	
	1,5 m	kg			5,360	3,090	6,600	3,830	9,430	5,400			
	0 m	kg			5,230	2,960	6,380	3,640	9,090	5,110	12,660*	7,860	
	-1,5 m	kg					6,290	3,560	8,980	5,010	13,720*	7,890	
	-3,0 m	kg							9,050	5,070	12,250*	8,060	

	6,0 m	kg			3,570*	3,570*	6,110*	4,760					
	4,5 m	kg			4,040*	3,110	5,850	3,530	6,610*	4,520	7,920*	6,730	
	3,0 m	kg			5,080	2,970	5,640	3,340	7,020	4,210	9,070*	6,110	12,830*
	1,5 m	kg			4,910	2,820	5,430	3,140	6,690	3,910	9,610	5,560	13,120*
	0 m	kg			4,780	2,690	5,250	2,980	6,440	3,680	9,200	5,200	13,500*
	-1,5 m	kg					5,160	2,900	6,300	3,560	9,010	5,030	14,270*
	-3,0 m	kg							6,290	3,550	9,010	5,030	13,100*
-4,5 m	kg									8,140*	5,090	10,890*	

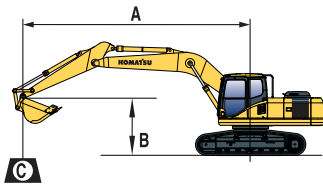
### PC290NLC-8 600 mm shoes

	6,0 m	kg			6,530*	4,100							
	4,5 m	kg			5,620	3,000	6,960*	3,890	8,410*	5,790	11,320*	9,180	
	3,0 m	kg			5,450	2,840	6,780	3,600	9,480*	5,200	13,670*	7,740	
	1,5 m	kg			5,260	2,670	6,470	3,330	9,260	4,710			
	0 m	kg			5,120	2,540	6,260	3,140	8,920	4,430	12,660*	6,770	
	-1,5 m	kg					6,170	3,060	8,810	4,330	13,720*	6,800	
	-3,0 m	kg							8,880	4,390	12,250*	6,970	

	6,0 m	kg			3,570*	3,220	6,110*	4,240					
	4,5 m	kg			4,040*	2,720	5,740	3,100	6,610*	4,010	7,920*	6,010	
	3,0 m	kg			4,980	2,580	5,540	2,920	6,900	3,710	9,070*	5,410	12,830*
	1,5 m	kg			4,810	2,430	5,320	2,720	6,570	3,410	9,440	4,870	13,120*
	0 m	kg			4,680	2,300	5,150	2,570	6,310	3,190	9,030	4,520	13,500*
	-1,5 m	kg					5,060	2,480	6,170	3,060	8,840	4,350	14,270*
	-3,0 m	kg							6,170	3,060	8,840	4,350	13,100*
-4,5 m	kg									8,140*	4,400	10,890*	

Lifting capacity table is published for guidance only, the machine is not intended for use as a crane.  
 Lifting capacities are stated in kg, on the tip of the arm, for machine on firm, level supporting surface.  
 The weight of any attachment used should be deducted from the values shown, to calculate payload.  
 Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated by \*).  
 Lifting capacity of the machine is limited by machine stability, hydraulic capacity and maximum permissible load of the attachment.

# Lifting Capacity



A – Reach from swing center

B – Bucket hook height

C – Lifting capacities, including bucket, bucket linkage and 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.

## EXCAVATION BOOM - STRAIGHT POSITION

Arm length	A	10,5 m		10,0 m		9,5 m		9,0 m		8,5 m		7,5 m		6,0 m		4,5 m	
	B																

### PC290LC-8 700 mm shoes

	9,0 m	kg														8.060*	6.980
	7,5 m	kg														8.340*	6.840
	6,0 m	kg														9.980*	6.400
	4,5 m	kg														9.840	5.770
	3,0 m	kg														5.010	2.910
	1,5 m	kg														4.420	2.490
	0 m	kg														4.900	2.810
	-1,5 m	kg														5.440	3.160

	10,5 m	kg														5.680*	5.680*
	9,0 m	kg														6.200*	4.580
	7,5 m	kg														4.510*	3.030
	6,0 m	kg														5.730	3.420
	4,5 m	kg														7.230	4.400
	3,0 m	kg														7.890*	6.620
	1,5 m	kg														8.900*	8.900*
	0 m	kg														3.130*	2.280

### PC290NLC-8 600 mm shoes

	9,0 m	kg														8.060*	6.260
	7,5 m	kg														8.340*	6.120
	6,0 m	kg														9.980*	5.690
	4,5 m	kg														9.670	5.070
	3,0 m	kg														4.920	2.530
	1,5 m	kg														5.510	2.900
	0 m	kg														6.970	3.770
	-1,5 m	kg														3.730	1.710

	10,5 m	kg														5.680*	5.680*
	9,0 m	kg														6.200*	4.070
	7,5 m	kg														4.510*	2.640
	6,0 m	kg														5.560*	3.080
	4,5 m	kg														6.200	7.110
	3,0 m	kg														7.110	3.890
	1,5 m	kg														7.890*	5.900
	0 m	kg														8.900*	8.900*

Lifting capacity table is published for guidance only, the machine is not intended for use as a crane.

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

The weight of any attachment used should be deducted from the values shown, to calculate payload.

Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated by \*).

Lifting capacity of the machine is limited by machine stability, hydraulic capacity and maximum permissible load of the attachment.

# Standard and Optional Equipment

## ENGINE

Komatsu SAA6D107E-1 turbocharged common rail direct injection diesel engine	●
EU Stage IIIA/EPA Tier III compliant	
Suction type cooling fan with radiator fly screen	●
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/5,5 kW	●
Batteries 2 × 12 V/140 Ah	●
Diesel particulate filter	○

## HYDRAULIC SYSTEM

Electronic closed-centre load sensing (E-CLSS) hydraulic system (HydrauMind)	●
Pump and engine mutual control (PEMC) system	●
5-working mode selection system; power mode, economy mode, breaker mode, attachment mode and lifting mode	●
PowerMax function	●
Adjustable PPC wrist control levers for arm, boom, bucket and swing, with sliding proportional control for attachments and 3 auxiliary buttons	●
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	●
LC and NLC undercarriages	○
600, 700 mm triple grouser track shoes	○
Full length track roller guards	○

## SERVICE AND MAINTENANCE

Automatic fuel line de-aeration	●
Double element type air cleaner with dust indicator and auto dust evacuator	●
KOMTRAX™ - Komatsu satellite monitoring system	●
Multi-function video compatible colour monitor with Equipment Management and Monitoring System (EMMS) and efficiency guidance	●
Toolkit and spare parts for first service	●
Service points	○

## CABIN

Demolition Safety SpaceCab™, with ISO 10262 level 2 FOPS guards and roof screen wash/wiper, safety glass windows with fixed one-piece front window, fixed roof window with wiper and washer, front window wiper	●
Tilting cab, with control equipment, hydraulic power hoses and cab tilt cylinders	●
Heated air suspension seat with high backrest	●
Automatic climate control system	●
12 Volt power supply	●
Beverage holder and magazine rack	●
Hot and cool box	●
Radio	●

## WORK EQUIPMENT

Demolition first boom: Includes demolition first boom, fitted with hydraulic pipework, with quick connectors, suitable for operation of high reach demolition work equipment and operation of rotating crusher attachment	●
Excavation arm assemblies: Includes bucket cylinder and piping, bucket linkage, 2,6 m or 3,2 m standard arm, with 2 additional dual flow proportional service circuits, with drain circuit for hydraulic attachment rotation motors	○
Excavation boom: Includes two position excavation boom (bent/straight) to fit onto demolition first boom. Associated pipework for excavation arm cylinder and bucket cylinder. Quick connectors to suit demolition first boom. With pipework suitable for operation of excavation equipment and rotating crusher attachment (includes pipework associated with excavation boom)	○
Demolition top boom: Includes demolition top boom, mid link, high reach demolition arm, demolition attachment linkage. Fitted with hydraulic pipework, with quick connectors, suitable for operation of high reach demolition work equipment and operation of rotating crusher attachment	○
Komatsu buckets	○

## SAFETY EQUIPMENT

Rear view camera system	●
Electric horn	●
Lockable fuel cap and covers	●
Audible travel alarm	●
Boom safety valves	●
Large handrails, r.h. rear-view mirror	●
Battery main switch	●
Arm safety valve (for excavation boom only)	○

## 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	●

## LIGHTING SYSTEM

Working lights: 2 revolving frame lights and 1 boom light, 4 cab roof (front) lights, 1 cab roof (rear) light, 1 counterweight (rear) light	●
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## 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	●
Prepared for hydraulic quick-coupler (for excavation boom only)	○
Additional counterweight. To fit into main demolition counterweight when high reach demolition equipment is installed. Removable for excavation operations. Included with high reach boom equipment	○
Biodegradable oil for hydraulic system	○
Customised paint	○

Further equipment on request

- standard equipment
- optional equipment

Hydraulic Excavator

# PC290LC/NLC-8

## High Reach Demolition Specification

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Your Komatsu partner:

**KOMATSU**

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