

ZAXIS-7 series

HITACHI

Reliable solutions

ZAXIS 690 / 890



HYDRAULIC EXCAVATOR

Model code : ZX690LCH-7/ZX690LCR-7
Engine rated power : 348 kW (ISO14396)
Operating weight : 69 400 – 71 400 kg
Bucket ISO heaped : 2.9 – 4.0 m³

Model code : ZX890LCH-7/ZX890LCR-7
Engine rated power : 382 kW (ISO14396)
Operating weight : 84 600 – 87 500 kg
Bucket ISO heaped : 3.5 – 5.0 m³

You're in control

You're at the heart of Hitachi's design for its latest range of excavators. In an effort to continuously improve on previous generation machines with the Zaxis-7 range, we've considered the challenges you face in running a mine or quarry. We've focused on enhancing the experience in the cab. And, always looking for solutions, we've zoomed in on the ways in which we can support you to achieve maximum uptime over the life cycle of your machine.

By putting you and your operation at the heart of Zaxis-7, we invite you to take control over your fleet. We also invite you to work in partnership with us, so we can work together to create your vision.





HITACHI

ZA1S
690
LCH



Complete control

The new Zaxis-7 range of large excavators puts you firmly in control, so you can feel assured of your machine's performance, and supported by the technological expertise and services that Hitachi provides.



Integrated console and seat suspension gives a greater sense of control, and helps to reduce fatigue.



ConSite Oil sensors monitor oil continuously and contribute to preventative maintenance, helping to reduce downtime.



ConSite Pocket app allows you to manage and monitor your fleet remotely.



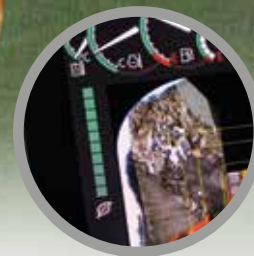
Options such as Hitachi ground engaging tools enable you to enhance the performance of your excavator.



Low noise and vibration levels in the cab provide a more comfortable working environment.



Visibility of the job site is excellent thanks to the Aerial Angle® camera system and new LCD monitor.



Fuel consumption has been reduced by 20% (ZX890LCH-7, PWR) 22% (ZX690LCH-7, PWR), saving running costs.



A variety of boom and arm types are available, ideal for tough environments and heavy-duty tasks. The ZX690LCR-7 and ZX890LCR-7 models are reinforced to work in the harshest conditions.



The improved efficiency of the new HIOS V hydraulic system reduces fuel consumption and results in higher productivity.

In control of your business



Improve your profit

The profitability of your mining or quarrying operation depends on the reliability and efficiency of your production machinery. With Hitachi's latest Zaxis-7 large excavators, you can count on the highest quality, guaranteed maximum uptime in the most remote locations and reduced total cost of ownership – all of which will have a positive impact on your bottom line.

Increase your profits thanks to the impressive fuel economy of these Stage-V compliant machines. The stunning new-look excavators deliver up to 20% (ZX890LCH-7) and 22% (ZX670LCH-7) less fuel consumption than the previous models.

Hitachi's industry-leading hydraulic system, HIOS V, enhances efficiency in the swing, boom lowering and arm bucket roll-out of the large excavators. Your operators can also control fuel efficiency – and reduce costs – by using the all-new ECO gauge, which is clearly visible on the multifunctional colour LCD eight-inch monitor.

Productivity levels on site will rise due to the improved front speed for loading operations; and increased engine output of the new Zaxis-7 large excavators that contributes to achieving a higher workload.

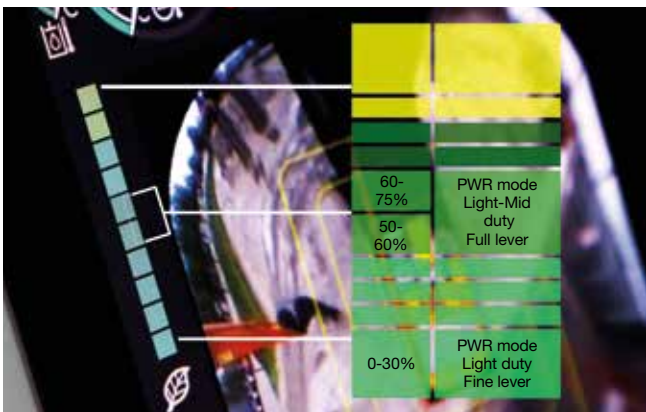
The environmental performance of Zaxis-7 large excavators is enhanced by the SCR (selective catalytic reduction) system, which reduces nitrogen oxide from exhaust gas by injecting a urea solution. The new machines comply with Stage V emissions regulations thanks to the combination of the SCR, DOC (diesel oxidation catalyst) and CSF (catalysed soot filter).



A fuel saving of up to 22% is achieved with the HIOS V hydraulic system.



The new HIOS V hydraulic system reduces fuel consumption and results in higher productivity.



The ECO gauge helps to deliver better fuel consumption.



Increased engine output results in higher productivity.

SPECIFICATIONS

ENGINE

ZX690LCH / ZX690LCR

Model	Isuzu 6WG1
Type	4-cycle water-cooled, common rail direct injection
Aspiration	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment	DOC + CSF and SCR system
No. of cylinders	6
Rated power	
ISO 14396	348 kW at 1 800 min ⁻¹
ISO 9249, net	347 kW at 1 800 min ⁻¹
SAE J1349, net	347 kW at 1 800 min ⁻¹
Maximum torque	2 050 Nm at 1 300 min ⁻¹
Piston displacement	15.681 L
Bore and stroke	147 mm x 154 mm
Batteries	2 x 12 V / 170 Ah

ZX890LCH / ZX890LCR

Model	Isuzu 6WG1
Type	4-cycle water-cooled, common rail direct injection
Aspiration	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment	DOC+CSF and SCR system
No. of cylinders	6
Rated power	
ISO 14396	382 kW at 1 800 min ⁻¹
ISO9249, net	380 kW at 1 800 min ⁻¹
SAE J1349, net	380 kW at 1 800 min ⁻¹
Maximum torque	2 250 Nm at 1 300 min ⁻¹
Piston displacement	15.681 L
Bore and stroke	147 mm x 154 mm
Batteries	2 x 12 V / 170 Ah

HYDRAULIC SYSTEM

Hydraulic Pumps

Main pumps	2 variable displacement axial piston pumps	
Maximum oil flow	ZX690LCH / ZX690LCR	2 x 489 L/min
	ZX890LCH / ZX890LCR	2 x 556 L/min
Pilot pump	1 gear pump	
Maximum oil flow	50 L/min	

Hydraulic Motors

Travel	ZX690LCH / ZX690LCR	2 axial piston motors with parking brake
	ZX890LCH / ZX890LCR	2 variable displacement axial piston motors
Swing	2 axial piston motors	

Relief Valve Settings

	Unit: Mpa	
	ZX690LCH / ZX690LCR	ZX890LCH / ZX890LCR
Implement circuit	31.9	31.9
Swing circuit	29.4	28.4
Travel circuit	34.3	34.3
Pilot circuit	3.9	3.9
Power boost	34.3	34.3

Hydraulic Cylinders

ZX690LCH / ZX690LCR

Unit: mm

	Quantity	Bore	Rod diameter
Boom	2	190	130
Arm	1	200	140
Bucket	1	180	130
Bucket (BE)	1	190	130

ZX890LCH / ZX890LCR

Unit: mm

	Quantity	Bore	Rod diameter
Boom	2	215	150
Arm	1	225	160
Bucket	1	200	140
Bucket (BE)	1	215	150

UPPERSTRUCTURE

Revolving Frame

D-section frame for resistance to deformation.

Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing parking brake is spring-set/hydraulic-released disc type.

ZX690LCH / ZX690LCR

Swing speed 9.0 min⁻¹
Swing torque 194 kNm

ZX890LCH / ZX890LCR

Swing speed 7.8 min⁻¹
Swing torque 267 kNm

UNDERCARRIAGE

Tracks

Track shoes with double grousers made of induction-hardened rolled alloy. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

Numbers of Rollers and Shoes on Each Side

	ZX690LCH / ZX690LCR	ZX890LCH / ZX890LCR
Upper rollers	3	3
Lower rollers	8	9
Track shoes	47	51
Track guard	1	1

Travel Device

Each track driven by axial piston motor through reduction gear for counterrotation of the tracks.

Parking brake is spring-set/hydraulic-released disc type.

Automatic transmission system: High-Low.

Travel speeds	ZX690LCH / ZX690LCR	High : 0 to 5.0 km/h Low : 0 to 3.4 km/h
	ZX890LCH / ZX890LCR	High : 0 to 4.7 km/h Low : 0 to 3.2 km/h

Maximum traction force	ZX690LCH / ZX690LCR	483 kN
	ZX890LCH / ZX890LCR	560 kN

Gradeability 70% (35 degree) continuous

ENVIRONMENT

Engine Emissions

EU Stage V

Sound Level

ZX690LCH / ZX690LCR

Sound level in cab according to ISO 6396 LpA 74 dB(A)

External sound level according to ISO 6395 and

EU Directive 2000/14/EC LwA 108 dB(A)

ZX890LCH / ZX890LCR

Sound level in cab according to ISO 6396 LpA 74 dB(A)

External sound level according to ISO 6395 and

EU Directive 2000/14/EC LwA 108 dB(A)

Air Conditioning System

The air conditioning system contains fluorinated greenhouse gas.

Refrigerant type: HFC-134a, GWP: 1430, Amount: 1.05 kg, CO₂e: 1.50 ton.

SERVICE REFILL CAPACITIES

Unit: L

	ZX690LCH / ZX690LCR	ZX890LCH / ZX890LCR
Fuel tank	900.0	1 110.0
Engine coolant	76.0	124.0
Engine oil	62.0	62.0
Pump drive	6.2	6.2
Swing device (each side)	10.5	15.7
Travel device (each side)	13.5	19.0
Hydraulic system	750.0	1 042.0
Hydraulic oil tank	380.0	500.0
DEF/AdBlue® tank	95.0	95.0

SPECIFICATIONS

WEIGHTS AND GROUND PRESSURE

Operating Weight and Ground Pressure

ZAXIS 690LCH

Bucket Capacity	Boom type	Arm type	Shoe grouser type	Shoe width (mm)	Operating weight (kg)	Ground pressure (kPa)
2.9 m ³ Rock bucket (ISO heaped)	7.8 m H	3.6 m H	Double	650	69 400	104
			Double	750	69 700	91
			Double	900	70 800	77
4.0 m ³ Rock bucket (ISO heaped)	6.8 m BE	2.9 m BE	Double	650	70 000	105
			Double	750	70 400	92
			Double	900	71 400	77

ZAXIS 690LCR

Bucket Capacity	Boom type	Arm type	Shoe grouser type	Shoe width (mm)	Operating weight (kg)	Ground pressure (kPa)
2.9 m ³ R-bucket (ISO heaped)	7.8 m R	3.6 m R	Double	650	70 700	106
3.3 m ³ R-bucket (ISO heaped)	6.8 m BER	2.9 m BER	Double	650	70 900	106

ZAXIS 890LCH

Bucket Capacity	Boom type	Arm type	Shoe grouser type	Shoe width (mm)	Operating weight (kg)	Ground pressure (kPa)
3.5 m ³ Rock bucket (ISO heaped)	8.4 m H	3.7 m H	Double	650	85 100	116
				750	85 800	101
				900	86 700	85
5.0 m ³ Rock bucket (ISO heaped)	7.1 m BE	2.95 m BE	Double	650	85 900	117
				750	86 600	102
				900	87 500	86
3.7 m ³ Rock bucket (ISO heaped)	7.1 m BE	3.7 m H	Double	650	84 600	115
				750	85 300	101
				900	86 300	85

ZAXIS 890LCR

Bucket Capacity	Boom type	Arm type	Shoe grouser type	Shoe width (mm)	Operating weight (kg)	Ground pressure (kPa)
4.3 m ³ R-bucket (ISO heaped)	7.1 m BER	2.95 m BER	Double	650	86 800	118
3.7 m ³ R-bucket (ISO heaped)	7.1 m BER	3.7 m R	Double	650	86 000	117
3.5 m ³ R-bucket (ISO heaped)	8.4 m R	3.7 m R	Double	650	86 500	118

BUCKET AND ARM DIGGING FORCE

Unit: kN

	ZAXIS 690LCH / ZAXIS 690LCR	
Boom length	Boom 6.8 m BE / Boom 6.8 m BER	Boom 7.8 m H / Boom 7.8 m R
Arm length	Arm 2.9 m BE / Arm 2.9 m BER	Arm 3.6 m H / Arm 3.6 m R
Bucket digging force* ISO	369	324
Bucket digging force* SAE	332	286
Arm crowd force* ISO	306	255
Arm crowd force* SAE	297	246

* At power boost

Unit: kN

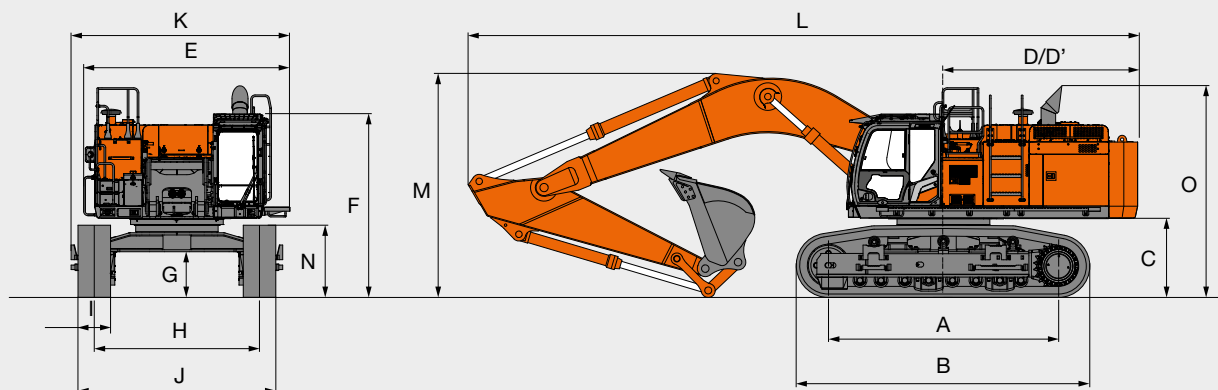
	ZAXIS 890LCH / ZAXIS 890LCR	
Boom length	Boom 7.1 m / Boom 7.1 m BER	Boom 8.4 m H / Boom 8.4 m R
Arm length	Arm 2.95 m BE / Arm 2.95 m BER	Arm 3.7 m H / Arm 3.7 m R
Bucket digging force* ISO	472	402
Bucket digging force* SAE	411	359
Arm crowd force* ISO	394	324
Arm crowd force* SAE	378	316

* At power boost

SPECIFICATIONS

ZX690LCH / ZX690LCR

DIMENSIONS



Unit: mm

	ZAXIS 690LCH ^{*2}			ZAXIS 690LCR ^{*3}
A Distance between tumblers	4 590			4 590
B Undercarriage length	5 840			5 840
^{*1} C Counterweight clearance	1 530			1 530
D Rear-end swing radius	4 020			4 020
D' Rear-end length	3 980			3 980
E Overall width of upperstructure	4 090			4 090
F Overall height of cab	3 660			3 660
^{*1} G Min. ground clearance	860			860
H Track gauge : Extended / Retracted	3 300 / 2 830			3 300 / 2 830
I Track shoe width				
J Undercarriage width : Extended / Retracted	G 650	G 750	G 900	G 650
	3 950 / 3 480	4 050 / 3 580	4 200 / 3 730	3 950 / 3 480
K Overall width	4 360			4 360
L Overall length	13 500			13 500
M Overall height of boom	4 460			4 460
^{*1} N Track height	1 440			1 440
O Overall height of base machine	4 230			4 230

^{*1} Excluding track shoe lug G: Double grouser shoe

^{*2} Equipped with Boom 7.8 m H and Arm 3.6 m H

^{*3} Equipped with Boom 7.8 m R and Arm 3.6 m R

Backhoe Buckets

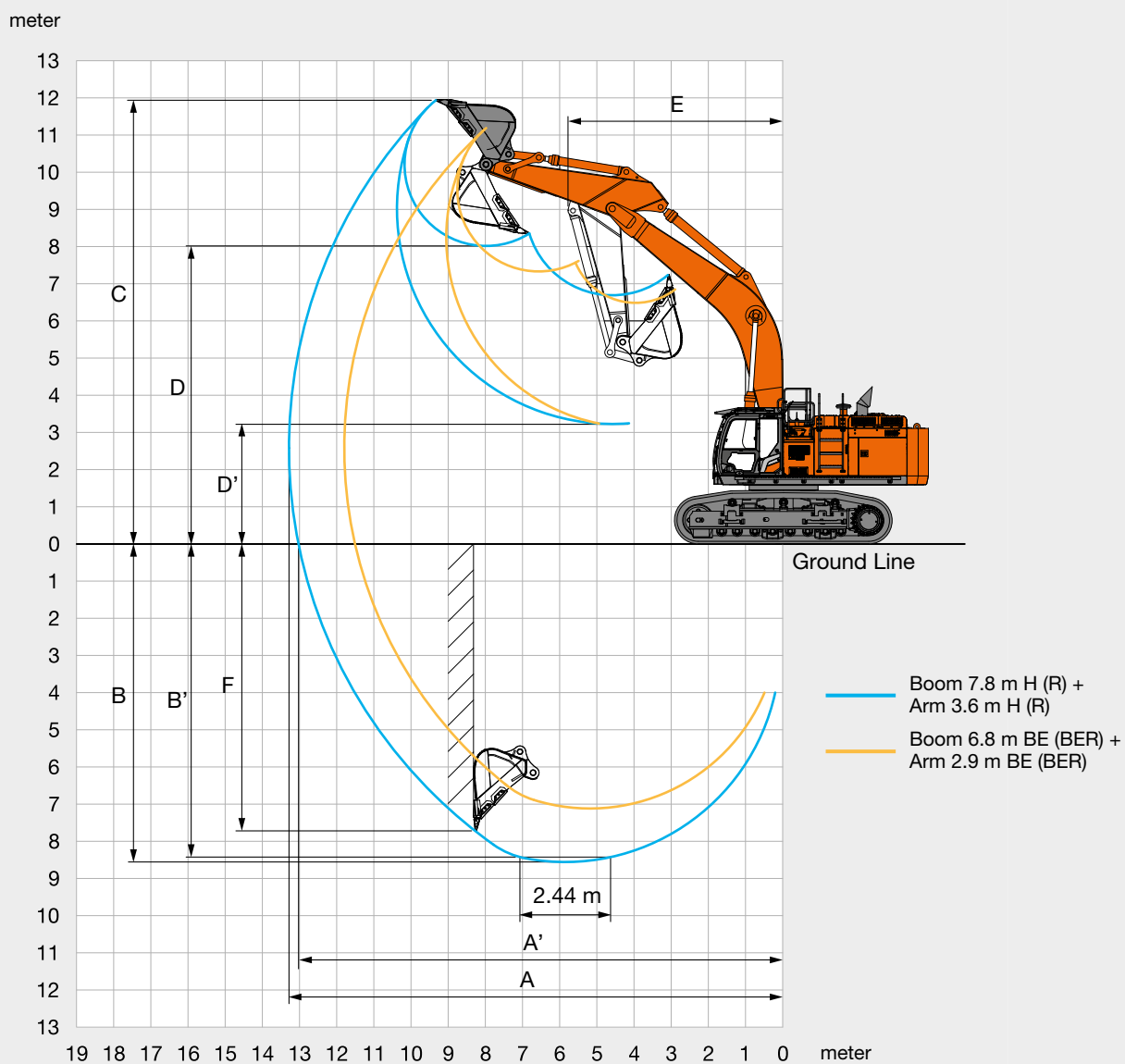
Bucket	Capacity (m ³)		Width (mm)		No. of teeth	Weight (kg)	Recommendation			
	ISO heaped	CECE heaped	Without side cutters	With side cutters			ZAXIS 690LCH		ZAXIS 690LCR	
							Boom 6.8 m BE	Boom 7.8 m H	Boom 6.8 m BER	Boom 7.8 m R
							Arm 2.9 m BE	Arm 3.6 m H	Arm 2.9 m BER	Arm 3.6 m R
Rock bucket	2.9	2.5	1 690	1 690	5	2 850	-	●	-	-
	3.3	2.9	1 790	1 790	5	3 110	●	-	-	-
	4.0	3.6	1 950	1 970	5	3 720	●	-	●	-
R-bucket	2.9	2.5	1 700	1 740	5	3 390	-	-	-	●
	3.3	2.9	1 800	1 840	5	3 990	-	-	●	-
Ripper bucket	1.5	1.3	-	1 310	3	3 150	-	●	-	-
	1.8	1.6	-	1 570	3	3 750	●	-	-	-
One-point ripper	-	-	-	-	1	1 800	●	●	●	●

● Heavy-duty service - Not applicable

SPECIFICATIONS

ZX690LCH / ZX690LCR

WORKING RANGES



Unit: mm

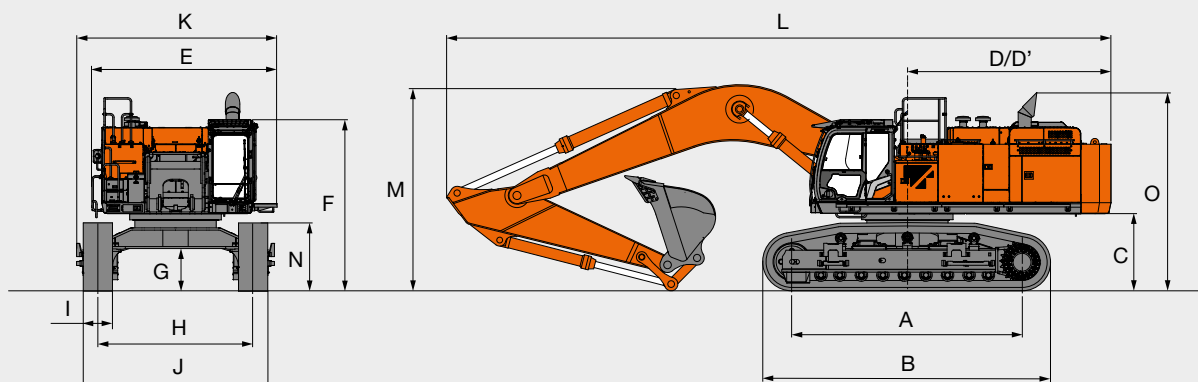
	ZAXIS 690LCH / ZAXIS 690LCR	
	Boom 6.8 m BE / Boom 6.8 m BER	Boom 7.8 m H / Boom 7.8 m R
Arm length	Arm 2.9 m BE / Arm 2.9 m BER	Arm 3.6 m H / Arm 3.6 m R
A Max. digging reach	11 800	13 280
A' Max. digging reach (on ground)	11 500	13 030
B Max. digging depth	7 120	8 560
B' Max. digging depth for 2.44 m level	6 970	8 420
C Max. cutting height	11 190	11 940
D Max. dumping height	7 330	8 020
D' Min. dumping height	3 200	3 230
E Min. swing radius	5 240	5 780
F Max. vertical wall	5 280	7 720

Excluding track shoe lug

SPECIFICATIONS

ZX890LCH / ZX890LCR

DIMENSIONS



Unit: mm

	ZAXIS 890LCH ²			ZAXIS 890LCR ³
A Distance between tumblers	5 110			5 110
B Undercarriage length	6 360			6 360
¹ C Counterweight clearance	1 680			1 680
D Rear-end swing radius	4 600			4 600
D' Rear-end length	4 590			4 590
E Overall width of upperstructure	4 120			4 120
F Overall height of cab	3 800			3 800
¹ G Min. ground clearance	890			890
H Track gauge : Extended / Retracted	3 450 / 2 830			3 450 / 2 830
I Track shoe width	G 650	G 750	G 900	G 650
J Undercarriage width : Extended / Retracted	4 100 / 3 480	4 200 / 3 580	4 350 / 3 730	4 100 / 3 480
K Overall width	4 450			4 450
L Overall length	14 900			14 900
M Overall height of boom	4 770			4 770
¹ N Track height	1 500			1 500
O Overall height of base machine	4 410			4 410

¹ Excluding track shoe lug ² Equipped with Boom 8.4 m H and Arm 3.7 m H ³ Equipped with Boom 8.4 m R and Arm 3.7 m R

G: Double grouser shoe

Shoe for use 650 mm ; Quarry ground, Dry riverbed, Soil ground 750 mm ; Mid-Solid ground, Soft ground 900 mm ; Soft ground

Backhoe Buckets

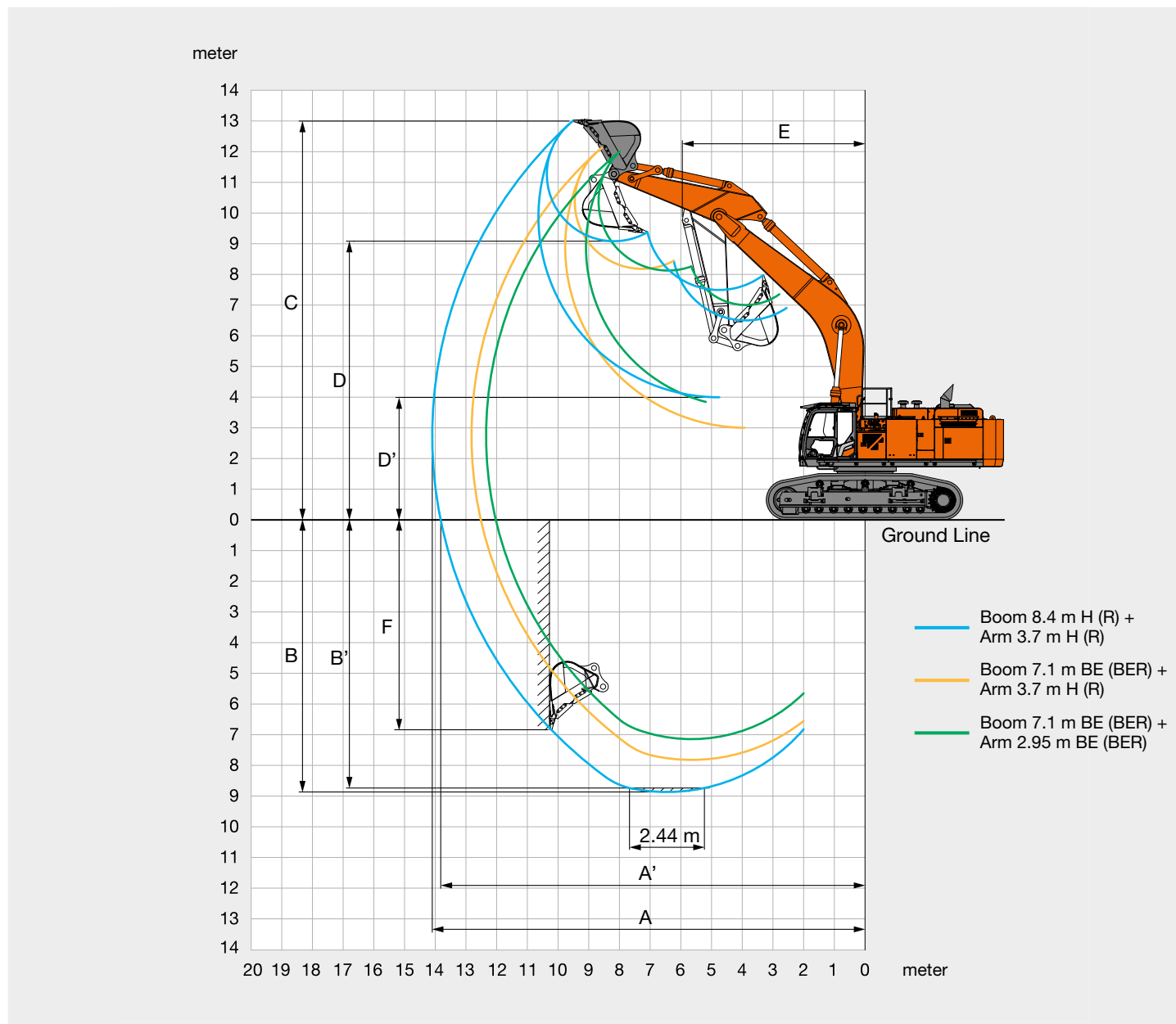
Bucket	Capacity (m ³)		Width (mm)		No. of teeth	Weight (kg)	Recommendation						
							ZAXIS 890LCH			ZAXIS 890LCR			
	ISO heaped	CECE heaped	Without side cutters	With side cutters			Boom 7.1 m BE		Boom 8.4 m H		Boom 7.1 m BER		Boom 8.4 m R
							Arm 2.95 m BE	Arm 3.7 m H	Arm 3.7 m H	Arm 2.95 m BER	Arm 3.7 m R	Arm 3.7 m R	
Rock bucket	3.5	3.1	1 870	1 890	5	3 790	-	●	●	-	-	-	
	3.7	3.2	1 950	1 970	5	3 900	-	●	-	-	-	-	
	4.3	3.8	2 090	2 110	5	4 270	●	-	-	-	-	-	
	5.0	4.4	2 240	2 260	5	5 010	●	-	-	●	-	-	
R-bucket	3.5	3.1	1 870	1 890	5	4 570	-	-	-	-	●	●	
	3.7	3.2	1 950	1 970	5	4 710	-	-	-	-	●	-	
	4.3	3.8	2 090	2 110	5	5 400	-	-	-	●	-	-	
Ripper bucket	1.9	1.7	-	1 490	3	4 200	-	●	●	-	-	-	
	2.2	2.0	-	1 580	3	4 400	●	-	-	-	-	-	
One-point ripper	-	-	-	-	1	2 680	●	●	●	●	●	●	

● Heavy-duty service - Not applicable

SPECIFICATIONS

ZX890LCH / ZX890LCR

WORKING RANGES



Unit: mm

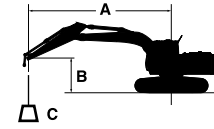
Arm length	ZAXIS 890LCH / ZAXIS 890LCR		
	Boom 7.1 m BE / Boom 7.1 m BER		Boom 8.4 m H / Boom 8.4 m R
	Arm 2.95 m BE / Arm 2.95 m BER	Arm 3.7 m H / Arm 3.7 m R	Arm 3.7 m H / Arm 3.7 m R
A Max. digging reach	12 340	12 820	14 100
A' Max. digging reach (on ground)	12 020	12 510	13 820
B Max. digging depth	7 140	7 820	8 870
B' Max. digging depth (2.44 m level)	7 000	7 690	8 740
C Max. cutting height	12 010	12 130	13 000
D Max. dumping height	8 130	8 180	9 080
D' Min. dumping height	3 770	3 000	3 990
E Min. swing radius	5 210	5 090	5 950
F Max. vertical wall	4 100	6 090	6 840

Excluding track shoe lug

MACHINE CAPACITIES

ZX690LCH / ZX690LCR

- Notes:
1. Ratings are based on ISO 10567.
 2. Machine capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
 3. The load point is the center-line of the bucket pivot mounting pin on the arm.
 4. *Indicates load limited by hydraulic capacity.
 5. 0 m = Ground.
 6. Each machine capacities values are applicable when selecting optional attachment basic piping and hose rupture valve for boom and arm.



- A: Load radius
B: Load point height
C: Machine capacity

For machine capacities, subtract installed attachment and quick hitch weight from machine capacities.

To determine lifting capacities, apply "Rating over-side or 360 degrees" machine capacities from the table and deduct weight of installed attachment and quick hitch.

ZAXIS 690LCH

Rating over-front Rating over-side or 360 degrees Unit : kg

Conditions	Load point height (m)	Load radius												At max. reach		
		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		meter		
Boom 6.8 m BE Arm 2.9 m BE Counterweight 10 400 kg	7.5							*16 660	*16 660					*12 490	*12 490	8.2
	6.0					*19 550	*19 550	*17 380	*17 380					*12 190	*12 190	9.0
	4.5					*22 420	*22 420	*18 760	17 510	*16 820	13 190			*12 310	12 250	9.4
	3.0					*25 310	23 250	*20 280	16 800	*17 470	12 830			*12 790	11 630	9.6
	1.5					*27 260	22 260	*21 460	16 200	17 570	12 510			*13 720	11 510	9.5
	0 (Ground)					*27 830	21 740	*21 910	15 820	17 370	12 330			*15 270	11 900	9.2
	-1.5			*35 050	34 260	*26 950	21 610	*21 270	15 720					*17 510	12 970	8.7
	-3.0	*37 780	*37 780	*31 110	*31 110	*24 320	21 840	*18 650	15 960					*17 450	15 250	7.8
-4.5			*24 230	*24 230	*18 340	*18 340							*16 370	*16 370	6.4	
Boom 7.8 m H Arm 3.6 m H Counterweight 10 400 kg	7.5									*13 380	*13 380			*9 280	*9 280	9.9
	6.0							*15 530	*15 530	*14 040	13 600	*9 750	*9 750	*9 310	*9 310	10.5
	4.5					*21 370	*21 370	*17 290	*17 290	*15 000	13 130	*13 580	10 270	*9 570	*9 570	10.9
	3.0					*24 450	22 710	*19 070	16 490	*16 040	12 640	13 980	10 000	*10 070	9 180	11.1
	1.5					*26 460	21 650	*20 460	15 800	*16 910	12 210	13 720	9 750	*10 870	9 050	11.0
	0 (Ground)			*15 110	*15 110	*27 170	21 100	*21 210	15 350	16 910	11 890	13 530	9 580	*12 090	9 230	10.8
	-1.5			*23 200	*23 200	*26 770	20 920	*21 200	15 130	16 740	11 740			*13 850	9 790	10.3
	-3.0	*22 480	*22 480	*32 260	*32 260	*25 320	21 000	*20 260	15 140	*16 360	11 770			*14 960	10 900	9.6
-4.5	*32 910	*32 910	*28 270	*28 270	*22 550	21 340	*17 960	15 390					*15 070	13 050	8.5	
-6.0			*21 920	*21 920	*17 430	*17 430							*14 480	*14 480	6.9	

ZAXIS 690LCR

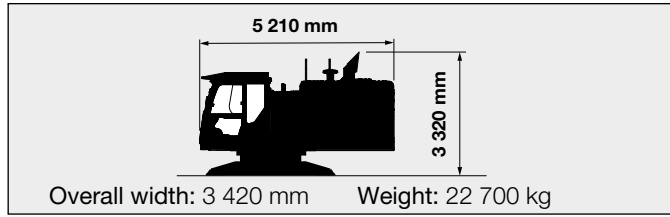
Rating over-front Rating over-side or 360 degrees Unit : kg

Conditions	Load point height (m)	Load radius												At max. reach		
		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		meter		
Boom 6.8 m BER Arm 2.9 m BER Counterweight 10 400 kg	7.5							*16 460	*16 460					*12 340	*12 340	8.2
	6.0					*19 340	*19 340	*17 170	*17 170					*12 040	*12 040	9.0
	4.5					*22 180	*22 180	*18 540	17 390	*16 600	13 060			*12 150	12 120	9.4
	3.0					*25 050	23 100	*20 040	16 650	*17 250	12 690			*12 640	11 490	9.6
	1.5					*26 980	22 080	*21 210	16 040	17 440	12 370			*13 560	11 360	9.5
	0 (Ground)					*27 530	21 550	*21 650	15 660	17 240	12 180			*15 100	11 750	9.2
	-1.5			*34 700	34 040	*26 650	21 430	*21 010	15 550					*17 270	12 820	8.7
	-3.0	*37 700	*37 700	*30 770	*30 770	*24 030	21 660	*18 390	15 800					*17 200	15 090	7.8
-4.5			*23 910	*23 910	*18 070	*18 070							*16 110	*16 110	6.4	
Boom 7.8 m R Arm 3.6 m R Counterweight 10 400 kg	7.5									*13 120	*13 120			*9 120	*9 120	9.9
	6.0							*15 260	*15 260	*13 760	13 440	*9 590	*9 590	*9 150	*9 150	10.5
	4.5					*21 040	*21 040	*16 990	*16 990	*14 710	12 960	*13 350	10 080	*9 410	*9 410	10.9
	3.0					*24 070	22 490	*18 730	16 290	*15 720	12 440	13 810	9 810	*9 900	8 980	11.1
	1.5					*26 040	21 380	*20 100	15 570	*16 570	11 990	13 540	9 550	*10 700	8 850	11.0
	0 (Ground)			*14 950	*14 950	*26 730	20 820	*20 830	15 100	16 720	11 670	13 340	9 370	*11 920	9 020	10.8
	-1.5			*23 050	*23 050	*26 330	20 630	*20 810	14 870	16 540	11 510			13 660	9 570	10.3
	-3.0	*22 320	*22 320	*31 720	*31 720	*24 880	20 710	*19 870	14 880	*16 010	11 540			*14 620	10 670	9.6
-4.5	*32 750	*32 750	*27 760	*27 760	*22 110	21 070	*17 580	15 150					*14 720	12 830	8.5	
-6.0			*21 430	*21 430	*17 020	*17 020							*14 110	*14 110	6.9	

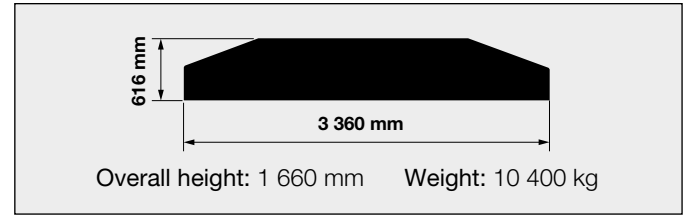
TRANSPORTATION

ZX690LCH / ZX690LCR

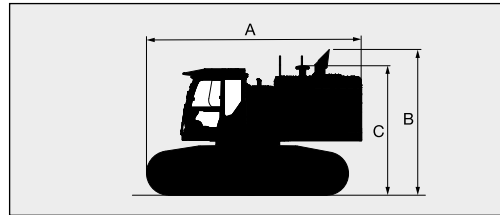
UPPERSTRUCTURE



COUNTERWEIGHT



BASIC MACHINE (WITHOUT COUNTERWEIGHT)

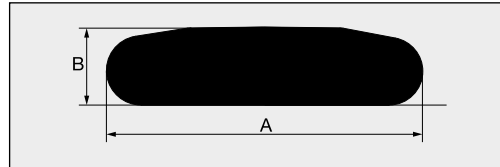


	Shoe width (mm)	A (mm)	B (mm)	C ¹ (mm)	Overall width ² (mm)	Weight (kg)
ZAXIS 690LCH	650	6 240	4 230	3 760	3 600	44 300
	750	6 240	4 230	3 760	3 600	44 700
	900	6 240	4 230	3 760	3 730	45 700
ZAXIS 690LCR	650	6 240	4 230	3 760	3 600	44 500

¹ Without exhaust funnel

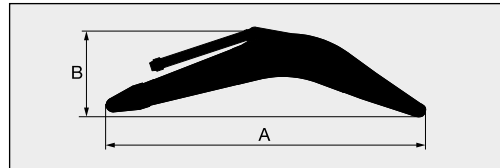
² Undercarriage retracted without truck sidestep

SIDE FRAME



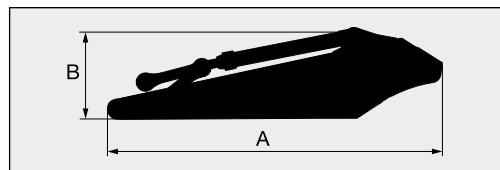
	Shoe width (mm)	A (mm)	B (mm)	Overall width (mm)	Weight (kg)
ZAXIS 690LCH	650	5 850	1 450	1 250	10 800
	750	5 850	1 450	1 250	11 000
	900	5 850	1 450	1 320	11 500
ZAXIS 690LCR	650	5 850	1 450	1 250	10 900

BOOM



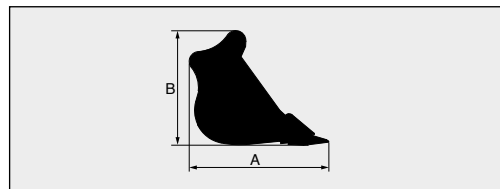
Boom	A (mm)	B (mm)	Overall width (mm)	Weight (kg)
6.8 m BE	7 130	2 550	1 390	6 140
7.8 m H	8 130	2 330	1 390	6 430
6.8 m BER	7 130	2 550	1 390	6 270
7.8 m R	8 130	2 330	1 390	6 770

ARM



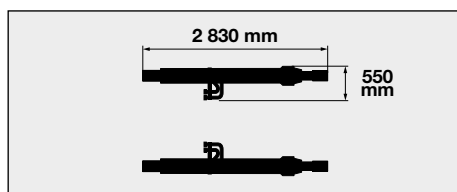
Arm	A (mm)	B (mm)	Overall width (mm)	Weight (kg)
2.9 m BE	4 370	1 680	790	3 720
3.6 m H	5 110	1 430	790	3 630
2.9 m BER	4 370	1 680	790	3 950
3.6 m R	5 110	1 430	790	3 900

BUCKET

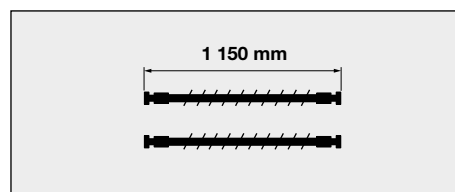


Bucket	Capacity (m ³)		A (mm)	B (mm)	Overall width (mm)	Weight (kg)
	ISO heaped	CECE heaped				
Rock bucket	2.9	2.5	2 290	1 770	1 690	2 850
	3.3	2.9	2 230	1 890	1 790	3 110
	4.0	3.6	2 370	1 930	1 970	3 720
R-bucket	2.9	2.5	2 270	1 800	1 740	3 390
	3.3	2.9	2 270	1 920	1 840	3 990

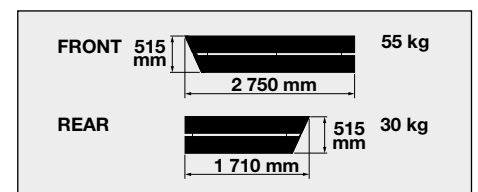
BOOM CYLINDERS 550 kg X 2 Overall height: 380 mm



HOSE OF BOOM CYLINDERS 7 kg X 2 / 10 kg X 2



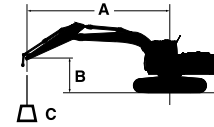
LEFT SIDEWALK Overall height FRONT: 195 mm / REAR: 150 mm



MACHINE CAPACITIES

ZX890LCH / ZX890LCR

- Notes:
1. Ratings are based on ISO 10567.
 2. Machine capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
 3. The load point is the center-line of the bucket pivot mounting pin on the arm.
 4. *Indicates load limited by hydraulic capacity.
 5. 0 m = Ground.
 6. Each machine capacities values are applicable when selecting optional attachment basic piping and hose rupture valve for boom and arm.



- A: Load radius
B: Load point height
C: Machine capacity

For machine capacities, subtract installed attachment and quick hitch weight from machine capacities.
To determine lifting capacities, apply "Rating over-side or 360 degrees" machine capacities from the table and deduct weight of installed attachment and quick hitch.

ZAXIS 890LCH

Rating over-front Rating over-side or 360 degrees Unit : kg

Conditions	Load point height (m)	Load radius										At max. reach				
		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		meter		
Boom 7.1 m BE Arm 2.95 m BE Counterweight 13 300 kg	7.5							*21 570	*21 570					*16 760	*16 760	8.9
	6.0					*26 640	*26 640	*22 930	*22 930	*20 950	18 620			*16 450	*16 450	9.5
	4.5					*30 680	*30 680	*24 920	23 910	*21 770	18 090			*16 640	15 440	9.9
	3.0					*34 300	31 580	*26 900	22 860	*22 730	17 510			*17 290	14 730	10.1
	1.5					*36 280	30 260	*28 260	22 000	*23 390	17 000			*18 510	14 600	10.0
	0 (Ground)					*36 370	29 580	*28 580	21 460	*23 320	16 660			*20 520	15 060	9.7
	-1.5			*42 290	*42 290	*34 720	29 380	*27 530	21 240	*21 770	16 590			*21 230	16 320	9.1
	-3.0	*41 830	*41 830	*39 020	*39 020	*31 060	29 580	*24 370	21 400					*20 900	18 960	8.2
	-4.5			*30 270	*30 270	*23 910	*23 910							*19 290	*19 290	6.9
Boom 7.1 m BE Arm 3.7 m H Counterweight 13 300 kg	7.5							*19 640	*19 640	*15 030	*15 030			*10 980	*10 980	9.5
	6.0							*21 500	*21 500	*19 240	19 210			*10 950	*10 950	10.1
	4.5			*38 770	*38 770	*28 650	*28 650	*23 720	*23 720	*20 880	18 630			*11 220	*11 220	10.5
	3.0					*32 780	32 630	*26 010	23 510	*22 130	17 970	*13 850	*13 850	*11 790	*11 790	10.6
	1.5					*35 630	31 000	*27 810	22 520	*23 150	17 370			*12 750	*12 750	10.6
	0 (Ground)					*36 680	30 020	*28 700	21 810	*23 580	16 920			*14 260	14 100	10.3
	-1.5					*35 980	29 580	*28 390	21 430	*23 020	16 680			*16 720	15 060	9.7
	-3.0			*43 150	*43 150	*33 430	29 560	*26 450	21 380					*20 970	17 040	8.9
	-4.5			*36 050	*36 050	*28 290	*28 290	*21 490	*21 490					*20 710	*20 710	7.7
Boom 8.4 m H Arm 3.7 m H Counterweight 13 300 kg	9.0									*15 980	*15 980			*12 110	*12 110	10.1
	7.5									*16 610	*16 610	*15 240	14 560	*11 950	*11 950	10.9
	6.0					*24 540	*24 540	*20 240	*20 240	*17 780	*17 780	*16 290	14 260	*12 060	*12 060	11.4
	4.5					*29 110	*29 110	*22 690	*22 690	*19 190	17 510	*17 060	13 840	*12 440	11 480	11.8
	3.0					*32 880	29 610	*24 960	21 720	*20 580	16 790	*17 870	13 400	*13 090	11 040	11.9
	1.5							*26 570	20 830	*21 680	16 190	*18 530	13 020	*14 080	10 930	11.8
	0 (Ground)							*27 290	20 290	*22 280	15 780	*18 840	12 760	*15 570	11 140	11.6
	-1.5					*34 000	27 900	*27 100	20 070	*22 210	15 580	*18 560	12 640	*17 210	11 750	11.1
	-3.0					*32 040	28 090	*25 920	20 120	*21 250	15 600			*17 510	12 940	10.4
	-4.5					*28 780	28 550	*23 440	20 430	*18 810	15 910			*17 600	15 130	9.4
	-6.0			*28 450	*28 450	*23 450	*23 450	*18 600	*18 600					*17 040	*17 040	7.9

ZAXIS 890LCR

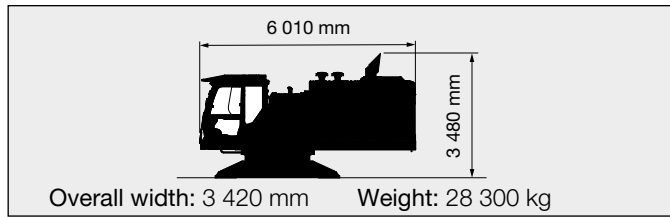
Rating over-front Rating over-side or 360 degrees Unit : kg

Conditions	Load point height (m)	Load radius										At max. reach				
		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		meter		
Boom 7.1 m BER Arm 2.95 m BER Counterweight 13 300 kg	7.5							*21 480	*21 480					*16 700	*16 700	8.9
	6.0					*26 550	*26 550	*22 840	*22 840	*20 860	18 610			*16 390	*16 390	9.5
	4.5					*30 570	*30 570	*24 830	23 910	*21 670	18 080			*16 570	15 420	9.9
	3.0					*34 180	31 590	*26 790	22 850	*22 630	17 490			*17 230	14 710	10.1
	1.5					*36 150	30 260	*28 150	21 990	*23 290	16 980			*18 440	14 570	10.0
	0 (Ground)					*36 240	29 580	*28 470	21 440	*23 220	16 640			*20 450	15 040	9.7
	-1.5			*42 250	*42 250	*34 590	29 380	*27 420	21 220	*21 670	16 570			*21 130	16 300	9.1
	-3.0	*41 790	*41 790	*38 870	*38 870	*30 940	29 580	*24 270	21 380					*20 800	18 940	8.2
	-4.5			*30 130	*30 130	*23 790	*23 790							*19 190	*19 190	6.9
Boom 7.1 m BER Arm 3.7 m R Counterweight 13 300 kg	7.5							*19 560	*19 560	*14 960	*14 960			*10 910	*10 910	9.5
	6.0							*21 380	*21 380	*19 170	*19 170			*10 880	*10 880	10.1
	4.5			*38 600	*38 600	*28 510	*28 510	*23 580	*23 580	*20 750	18 690			*11 150	*11 150	10.5
	3.0					*32 620	32 600	*25 860	23 470	*22 000	17 930	*13 780	*13 780	*11 720	*11 720	10.6
	1.5					*35 450	30 950	*27 660	22 470	*23 010	17 320	*13 740	*13 740	*12 670	*12 670	10.6
	0 (Ground)					*36 500	29 960	*28 540	21 760	*23 440	16 860			*14 180	14 050	10.3
	-1.5					*35 800	29 520	*28 230	21 370	*22 880	16 620			*16 630	15 010	9.7
	-3.0			*42 930	*42 930	*33 250	29 510	*26 290	21 330					*20 840	16 990	8.9
	-4.5			*35 850	*35 850	*28 120	*28 120	*21 350	*21 350					*20 560	*20 560	7.7
Boom 8.4 m R Arm 3.7 m R Counterweight 13 300 kg	9.0									*15 850	*15 850			*12 030	*12 030	10.1
	7.5									*16 470	*16 470	*15 160	14 500	*11 870	*11 870	10.9
	6.0					*24 370	*24 370	*20 080	*20 080	*17 620	*17 620	*16 140	14 200	*11 980	*11 980	11.4
	4.5					*28 900	*28 900	*22 520	*22 520	*19 030	17 450	*16 900	13 770	*12 350	11 410	11.8
	3.0					*32 640	29 520	*24 760	21 640	*20 410	16 710	*17 710	13 330	*13 000	10 970	11.9
	1.5							*26 360	20 740	*21 500	16 100	*18 360	12 940	*14 000	10 850	11.8
	0 (Ground)							*27 080	20 200	*22 080	15 690	*18 660	12 670	*15 490	11 060	11.6
	-1.5					*33 740	27 780	*26 880	19 970	*22 010	15 480	*18 390	12 560	*17 040	11 670	11.1
	-3.0					*31 780	27 980	*25 700	20 020	*21 060	15 510			*17 330	12 850	10.4
	-4.5					*28 530	28 450	*23 230	20 340	*18 620	15 820			*17 420	15 050	9.4
	-6.0			*28 170	*28 170	*23 220	*23 220	*18 400	*18 400					*16 850	*16 850	7.9

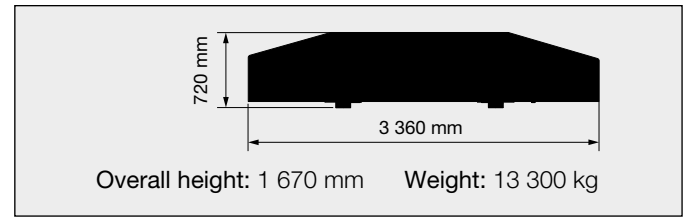
TRANSPORTATION

ZX890LCH / ZX890LCR

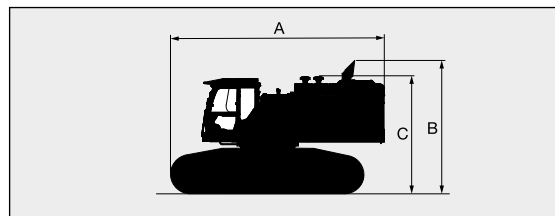
UPPERSTRUCTURE



COUNTERWEIGHT



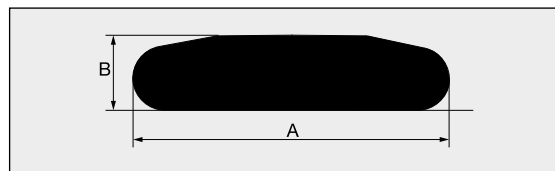
BASIC MACHINE (WITHOUT COUNTERWEIGHT)



	Shoe width (mm)	A (mm)	B (mm)	C ¹ (mm)	Overall width ² (mm)	Weight (kg)
ZAXIS 890LCH	650	7 080	4 410	3 890	3 630	53 000
	750	7 080	4 410	3 890	3 630	53 700
	900	7 080	4 410	3 890	3 730	54 600
ZAXIS 890LCR	650	7 080	4 410	3 890	3 630	53 300

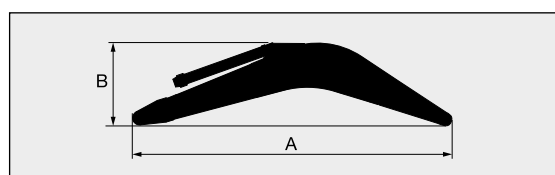
¹ Without exhaust funnel
² Undercarriage retracted

SIDE FRAME



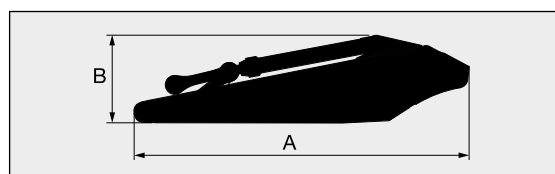
	Shoe width (mm)	A (mm)	B (mm)	Overall width (mm)	Weight (kg)
ZAXIS 890LCH	650	6 360	1 500	1 340	12 200
	750	6 360	1 500	1 340	12 500
	900	6 360	1 500	1 430	13 100
ZAXIS 890LCR	650	6 360	1 500	1 340	12 300

BOOM



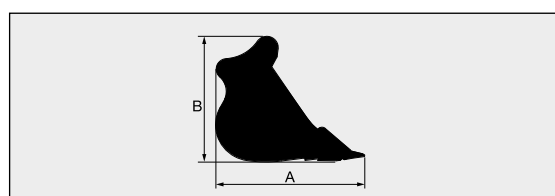
Boom	A (mm)	B (mm)	Overall width (mm)	Weight (kg)
7.1 m BE	7 470	2 680	1 440	7 710
8.4 m H	8 760	2 510	1 440	8 240
7.1 m BER	7 470	2 680	1 440	7 720
8.4 m R	8 760	2 510	1 440	8 360

ARM



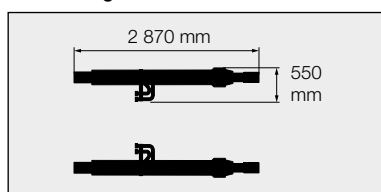
Arm	A (mm)	B (mm)	Overall width (mm)	Weight (kg)
2.95 m BE	4 430	1 700	840	4 630
3.7m H	5 260	1 460	810	4 490
2.95 m BER	4 430	1 700	840	4 760
3.7m R	5 260	1 460	820	4 670

BUCKET

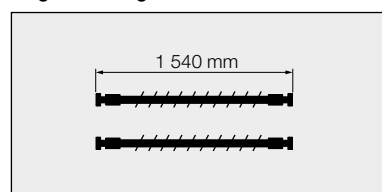


Bucket	Capacity (m ³)		A (mm)	B (mm)	Overall width (mm)	Weight (kg)
	ISO heaped	CECE heaped				
Rock bucket	3.5	3.1	2 270	1 960	1 920	3 790
	3.7	3.2	2 270	1 960	2 000	3 900
	4.3	3.8	2 360	2 050	2 150	4 270
	5.0	4.4	2 510	2 020	2 320	5 010
R-bucket	3.5	3.1	2 270	1 960	1 920	4 570
	3.7	3.2	2 270	1 960	2 000	4 710
	4.3	3.8	2 360	2 050	2 150	5 400

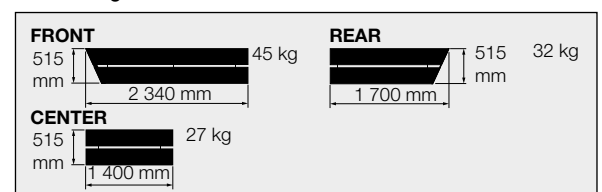
BOOM CYLINDERS 850 kg X 2 Overall height: 410 mm



HOSE OF BOOM CYLINDERS 9 kg X 2 / 13 kg X 2



LEFT SIDEWALK Overall height: 150 mm



EQUIPMENT

ENGINE	ZAXIS 690LCH	ZAXIS 690LCR	ZAXIS 890LCH	ZAXIS 890LCR
Aftertreatment device	●	●	●	●
Air cleaner double filters	●	●	●	●
Alternator 90 A	●	●	●	●
Auto idle system	●	●	●	●
Auto shut-down control	●	●	●	●
Cartridge-type engine oil filter	●	●	●	●
Cartridge-type fuel main filter	●	●	●	●
ConSite OIL (sensor)*	●	●	●	●
DEF/AdBlue® tank inlet strainer and extension filler	●	●	●	●
DEF/AdBlue® tank with ISO magnet adapter	●	●	●	●
Dry-type air filter with evacuator valve (with air filter restriction indicator)	●	●	●	●
Dust-proof net	●	●	●	●
ECO / PWR / HP mode control	●	●	●	●
Electrical fuel feed pump	●	●	●	●
Engine oil drain coupler	●	●	●	●
Expansion tank	●	●	●	●
Fan guard	●	●	●	●
Fuel cooler	●	●	●	●
Fuel pre-filter with water separator	●	●	●	●
Isolation-mounted engine	●	●	●	●
Maintenance free pre-cleaner	●	●	●	●
Radiator, oil cooler and intercooler	●	●	●	●

HYDRAULIC SYTEM				
Auto power lift	●	●	●	●
Boom mode selector system	●	●	●	●
ConSite OIL (sensor)*	●	●	●	●
Control valve with main relief valve	●	●	●	●
Drain filter	●	●	●	●
Engine speed sensing system	●	●	●	●
Extra port for control valve	●	●	●	●
Hose rupture valve for arm	○	○	○	○
Hose rupture valve for boom	○	○	○	○
Pilot filter	●	●	●	●
Power boost	●	●	●	●
Shockless valve in pilot circuit	●	●	●	●
Suction filter	●	●	●	●
Work mode selector	●	●	●	●

CAB	ZAXIS 690LCH	ZAXIS 690LCR	ZAXIS 890LCH	ZAXIS 890LCR
All-weather sound suppressed steel cab	●	●	●	●
Auto control air conditioner	●	●	●	●
Bluetooth® integrated DAB + radio	●	●	●	●
Console height adjustment	●	●	●	●
CRES VII (center pillar reinforced structure) cab	●	●	●	●
Drink holder with hot and cool function	●	●	●	●
Electric double horn	●	●	●	●
Engine shut-off switch	●	●	●	●
Equipped with reinforced, tinted (green color) glass windows	●	●	●	●
Evacuation hammer	●	●	●	●
Floor mat	●	●	●	●
Footrest	●	●	●	●
Front window washer (2 points)	●	●	●	●
Glove compartment	●	●	●	●
Hands-free calling device	●	●	●	●
Hot and cool box	●	●	●	●
Intermittent windshield wiper	●	●	●	●
Key cylinder light	●	●	●	●
Laminated straight glass front window	●	●	●	●
LED room light with door courtesy	●	●	●	●
Magazine rack	●	●	●	●
OPG front guard Level II (ISO10262) compliant	●	●	●	●
OPG top guard Level II (ISO10262) compliant	●	●	●	●
Pilot shut-off lever	●	●	●	●
Power outlet 12 V and 24 V	●	●	●	●
Rear tray	●	●	●	●
Retractable seat belt	●	●	●	●
Rubber radio antenna	●	●	●	●
Seat : air suspension seat with heater	●	●	●	●
Seat adjustment part : backrest, armrest, height and angle, slide forward / back	●	●	●	●
Seat belt reminder	●	●	●	●
Short wrist control levers	●	●	●	●
Smartphone holder	●	●	●	●
Sunscreen roller type (multi-use front or side and rear window)	●	●	●	●
Transparent roof with slide curtain	●	●	●	●
USB power supply	●	●	●	●
Wide view wiper	●	●	●	●
Windows on leftside can be opened	●	●	●	●
2 speakers	●	●	●	●
6 fluid-filled elastic mounts	●	●	●	●

MONITOR SYSTEM				
Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, SCR system trouble, etc	●	●	●	●
Alarm buzzers: overheat, engine oil pressure, overload, SCR system trouble, etc	●	●	●	●
Display of meters: water temperature, hour, fuel rate, clock, DEF/AdBlue® rate, etc	●	●	●	●
Other displays: work mode, auto-idle, glow, rear view monitor, side view monitor, operating conditions, etc	●	●	●	●
35 languages selection	●	●	●	●

LIGHTS	ZAXIS 690LCH	ZAXIS 690LCR	ZAXIS 890LCH	ZAXIS 890LCR
Additional boom LED light with cover	○	○	○	○
LED lights for camera (side and rear view camera)	●	●	●	●
4 cab LED lights	●	●	●	●
3 working LED lights	●	—	—	—
4 working LED lights	—	●	●	●

UPPER STRUCTURE				
Aerial Angle® (side and rear view camera)	●	●	●	●
Auto-grease lubricator (without bucket and link pins)	●	●	●	●
Batteries 2 x 170 Ah	●	●	●	●
Body top handrail	●	●	●	●
Counterweight 10 400 kg	●	●	—	—
Counterweight 13 300 kg	—	—	●	●
Electric fuel refilling pump with auto stop and filter	●	●	●	●
Electrical grease pump with hose-reel	●	●	●	●
Fuel level float	●	●	●	●
Hydraulic oil level gauge	●	●	●	●
Ladder	●	●	●	●
Lockable fuel refilling cap	●	●	●	●
Lockable machine covers	●	●	●	●
Lockable tool box	●	●	●	●
Platform handrail	●	●	●	●
Sidewalk (cab side)	●	●	●	●
Skid-resistant plates and handrails	●	●	●	●
Swing parking brake	●	●	●	●
Undercover	●	●	●	●
2 way disconnect switch	●	●	●	●

UNDERCARRIAGE				
Bolt-on sprocket	●	●	●	●
Full track guard	●	●	●	●
Reinforced track links with pin seals	●	●	●	●
Shoe: 650 mm double grouser	●	●	●	●
Shoe: 750 mm double grouser	○	—	○	—
Shoe: 900 mm double grouser	○	—	○	—
Track undercover	●	●	●	●
Travel direction mark on track frame	●	●	●	●
Travel motor covers	●	●	●	●
Travel parking brake	●	●	●	●
Upper and lower rollers (with single-flange lower rollers)	●	—	●	—
Upper and lower rollers (with double-flange lower rollers)	●	●	●	●
4 tie down hooks	●	●	●	●

● : Standard equipment ○ : Optional equipment — : Not applicable

FRONT ATTACHMENTS	ZAXIS 690LCH	ZAXIS 690LCR	ZAXIS 890LCH	ZAXIS 890LCR
Arm 2.9 m BE	○	—	—	—
Arm 2.9 m BER	—	○	—	—
Arm 2.95 m BE	—	—	○	—
Arm 2.95 m BER	—	—	—	○
Boom 6.8 m BE	○	—	—	—
Boom 6.8 m BER	—	○	—	—
Boom 7.1 m BE	—	—	○	—
Boom 7.1 m BER	—	—	—	○
Boom 7.8 m H and arm 3.6 m H	●	—	—	—
Boom 7.8 m R and arm 3.6 m R	—	●	—	—
Boom 8.4 m H and arm 3.7 m H	—	—	●	—
Boom 8.4 m R and arm 3.7 m R	—	—	—	●
Bucket 2.9 m³ (ISO heaped) (with dual type side shrouds)	—	●	—	—
Bucket 2.9 m³ Rock (ISO heaped) (with dual type side shrouds)	●	—	—	—
Bucket 3.5 m³ R (ISO heaped) (with dual type side shrouds)	—	—	—	●
Bucket 3.5 m³ Rock (ISO heaped) (with dual type side shrouds)	—	—	●	—
Centralized lubrication system	●	●	●	●
Cylinder hose protectors arm	●	●	●	●
Cylinder hose protectors boom	●	●	●	●
Cylinder hose protectors bucket	●	●	●	●
Damage prevention plate and square bars	●	●	●	●
Dirt seal on all bucket pins	●	●	●	●
Flanged pin	●	●	●	●
Reinforced link A	—	●	—	●
Reinforced link B	—	●	—	●

ATTACHMENTS				
Accessories for breaker and crusher	○	○	○	○
Accessories for 2 speed selector	○	○	○	○
Pilot accumulator	●	●	●	●

MISCELLANEOUS				
ConSite	○	○	○	○
Global e-Service	●	●	●	●
Onboard information controller	●	●	●	●
Standard tool kit	●	●	●	●
Theft prevention system**	○	○	○	○

Standard and optional equipment may vary by country, so please consult your Hitachi dealer for details.

* Engine oil and hydraulic oil monitoring sensor.

** Hitachi Construction Machinery cannot be held liable for theft, any system will just minimize the risk of theft.

Prior to operating this machine, including satellite communication system, in a country other than a country of its intended use, it may be necessary to make modifications to it so that it complies with the local regulatory standards (including safety standards) and legal requirements of that particular country. Please do not export or operate this machine outside the country of its intended use until such compliance has been confirmed. Please contact your Hitachi dealer in case of questions about compliance.

These specifications are subject to change without notice. Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in color and features. Before use, read and understand the Operator's Manual for proper operation.

