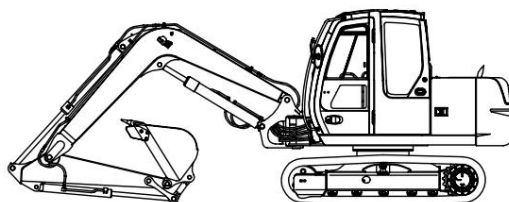


# HITACHI ZAXIS80SB

Rated engine power  
**39 kW / 52 HP**

Operating weight  
**ZAXIS80SB : 7 360 - 8 120 kg**  
**ZAXIS80SBLC : 7 440 - 8 210 kg**

Bucket  
capacity **SAE, PCSA heaped: 0.13 -**  
**0.33 m<sup>3</sup> CECE heaped: 0.12 - 0.29 m<sup>3</sup>**



# HITACHI

## EQUIPMENT

### Motor

model. .... Isuzu CC-4JG1  
 Type. .... 4-stroke water-cooled with direct injection  
 Number of cylinders. .... 4  
 rated capacity  
 DIN 6271, netto .  
 SAE J1349, netto . . . 39 kW (52 HP) bei 2 100 min-1 (U/min)  
 Maximum torque . . . . . 192 Nm (19.6 kgf/m) at 1 800 min-1 (rpm)  
 displacement. .... 3.059 l  
 Bore and stroke. .... 95.4 mm x 107 mm  
 Batteries. .... 2 x 12V / 52Ah  
 regulator. . . . Mechanical speed control using a stepper motor

### Hydraulic system

- Independent of the swivel system  
3 pump hydraulic system
- OHS (Optimum Hydraulic System) for parallel and independent operation of multiple functions
- New automatic 2-speed motor increased  
Traction force and driving speed

Main pumps. . . . 3 axial piston pumps with variable flow rates  
 Flow rate max. .... 2 x 69.3 l/min  
 1 x 52.5 l/min  
 Pilot pump. . . . . 1 gear pump  
 Flow rate max. .... 22.5 l/min

#### HYDRAULIC MOTORS

Traction drive. . . 2 axial piston motors with variable displacement  
 Swivel drive. .... 1 axial piston motor

#### OPERATING PRESSURES

Cantilever circle. .... 26.0 MPa (265 kgf/cm<sup>2</sup>)  
 Swing circle. .... 25.0 MPa (255 kgf/cm<sup>2</sup>)  
 Fahrkreis. .... 31.4 MPa (320 kgf/cm<sup>2</sup>)  
 Pilot circuit. .... 3.9 MPa (40 kgf/cm<sup>2</sup>)

#### HYDRAULIC CYLINDER

High-strength piston rods and cylinder tubes. End position cushioning in boom, stick and boom slewing cylinders  
 a controlled and shock-free stop at the ends of the stroke.

#### DIMENSIONS

	Number	Bore 115	Rod diameter
boom	1	mm	65 mm
stalk	1	95 mm	60 mm
Spoon	1	85 mm	55 mm
Boom slewing gear	1	110 mm	60 mm

#### HYDRAULIKFILTER

The hydraulic circuits are with high quality hydraulic filters fitted. A suction filter is located in the suction line and full flow filters are located in the return line.

### Controls

Hydraulic pilot control with original Hitachi shock absorption and quick warm-up systems.

- Cross control lever for boom and swing. .... 2
- Pedal / hand lever control for driving. .... 2

### Uppercarriage

#### UPPER CARRIAGE CONSTRUCTION

Welded box section construction made from solid steel sheets manufactured for the most extreme loads. The one made in D-profile Frame is extremely torsion-resistant.

#### SWIVEL DRIVE

Axial piston motor with planetary gears running in an oil bath. Single-row ball slewing ring with internal teeth induction hardened. The internal gearing and that Drive pinion running in a grease bath. The multi-disc parking brake for the slewing gear is spring-loaded and is released hydraulically.  
 Swing speed. .... at 11.3 min-1 (rpm)

#### DRIVER CAB

Independent, generously sized comfort cabin, 1,005 mm wide x 1,675 mm high in accordance with ISO standards.  
 Large-area safety all-round glazing for unrestricted access View. Front windows (top and bottom) can be opened.  
 Multi-adjustable comfort seat with armrests, with and without Adjustable control console.

### Undercarriage

#### TWO OF US

X undercarriage. Welded undercarriage frame using selected materials. The side frame is with the Drive frame welded. Permanently lubricated rollers, Chain drive and idler wheels with floating seals. The three-wall plates are made of induction-hardened rolled steel. Flat plates and sine plates are also available. Hardened and sealed chain pins. Hydraulic (grease) chain tensioner with shock-absorbing anti-shock spring.

#### NUMBER OF ROLLERS AND CARRIER ROLLERS AND CHAIN PLATES PER SIDE

Support rollers. .... 1  
 Castors. .... 5  
 Chain plates. . . . . 38: ZAXIS80SB  
 40: ZAXIS80SBLC

#### TRACTION DRIVE

Separate chain drive via 2-stage axial piston motor with planetary gear, to be operated in opposite directions.  
 The chain drive wheels are replaceable. The multi-disc parking brake is spring-loaded and is released hydraulically.  
 Shock-absorbing valves guarantee smooth braking.  
 Automatic gear shifting: fast-slow.  
 Driving speeds. .... fast: 0 to 5.0 km/h  
 slow: 0 to 3.3 km/h  
 Tensile force max. .... 60.4 kN (6 160 kgf)  
 Climbing ability. .... 35° (70%) continuous

## EQUIPMENT

## Weights and ground pressure

**ZAXIS80SB / ZAXIS80SBLC (WITHOUT PLATE):**

With 3.28 m mono boom, 1.62 m stick and 0.28 m<sup>3</sup> bucket  
(SAE, PCSA heaped).

Plate type	Plates- width	operating weight	Ground pressure
Triple-wall sheets 450 mm	7400 kg	34 kPa (0.35 kgf/cm <sup>2</sup> )	
Triple-wall sheets 450 mm	7490 kg	32 kPa (0.33 kgf/cm <sup>2</sup> )	
Triple-wall sheets 600 mm	7570 kg	26 kPa (0.27 kgf/cm <sup>2</sup> )	
Triple-wall sheets 600 mm	7660 kg	25 kPa (0.25 kgf/cm <sup>2</sup> )	
Rubber cleated chains 450 mm	7390 kg	34 kPa (0.35 kgf/cm <sup>2</sup> )	
Rubber cleated chains 450 mm	7480 kg	32 kPa (0.33 kgf/cm <sup>2</sup> )	
Gummiketten 450 mm	7360 kg	34 kPa (0.35 kgf/cm <sup>2</sup> )	
Rubber tracks	450 mm 7440 kg	32 kPa (0.33 kgf/cm <sup>2</sup> )	
Flat plates	450 mm 7570 kg	35 kPa (0.36 kgf/cm <sup>2</sup> )	
Flat plates	450 mm 7660 kg	33 kPa (0.34 kgf/cm <sup>2</sup> )	

With the values in  this is the data of the ZAXIS80SBLC.

Weights of the base machine [with 1,200 kg counterweight and triple grouser plates, without boom, fuel, hydraulic oil, engine oil and coolant, etc.]:

Without a sign

ZAXIS80SB . . . . . 6,060 kg with 450 mm triple-wall plates  
ZAXIS80SBLC . . . . . 6,140 kg with 450 mm triple-wall plates

**ZAXIS80SB / ZAXIS80SBLC (WITH SHIELD):**

With 3.28 m mono boom, 1.62 m stick and 0.28 m<sup>3</sup> bucket  
(SAE, PCSA heaped).

Plate type	Plates- width	operating weight	Ground pressure
Triple-wall sheets 450 mm	7950 kg	36 kPa (0.37 kgf/cm <sup>2</sup> )	
Triple-wall sheets 450 mm	8030 kg	35 kPa (0.36 kgf/cm <sup>2</sup> )	
Triple-wall sheets 600 mm	8110 kg	28 kPa (0.29 kgf/cm <sup>2</sup> )	
Triple-wall sheets 600 mm	8210 kg	26 kPa (0.27 kgf/cm <sup>2</sup> )	
Rubber cleated chains 450 mm	7940 kg	36 kPa (0.37 kgf/cm <sup>2</sup> )	
Rubber cleated chains 450 mm	8020 kg	34 kPa (0.35 kgf/cm <sup>2</sup> )	
Gummiketten 450 mm	7900 kg	36 kPa (0.37 kgf/cm <sup>2</sup> )	
Rubber tracks	450 mm 7980 kg	34 kPa (0.35 kgf/cm <sup>2</sup> )	
Flat plates	450 mm 8120 kg	37 kPa (0.38 kgf/cm <sup>2</sup> )	
Flat plates	450 mm 8210 kg	35 kPa (0.36 kgf/cm <sup>2</sup> )	

With the values in  this is the data of the ZAXIS80SBLC.

Weights of the base machine [with 1,200 kg counterweight and triple grouser plates, without boom, fuel, hydraulic oil, engine oil and coolant, etc.]:

With shield

ZAXIS80SB . . . . . 6,610 kg with 450 mm triple-wall plates  
ZAXIS80SBLC . . . . . 6,690 kg with 450 mm triple-wall plates

## Filling quantities

Fuel tank . . . . .	135.0 l
Motorölmittel . . . . .	9.5 l
Engine oil . . . . .	12.0 l
Final drive driving (each side) . . . . .	2.5 l
Hydraulic system . . . . .	100.0 l
Hydraulic tank (reference oil level) . . . . .	60.0 l

## Backhoe equipment

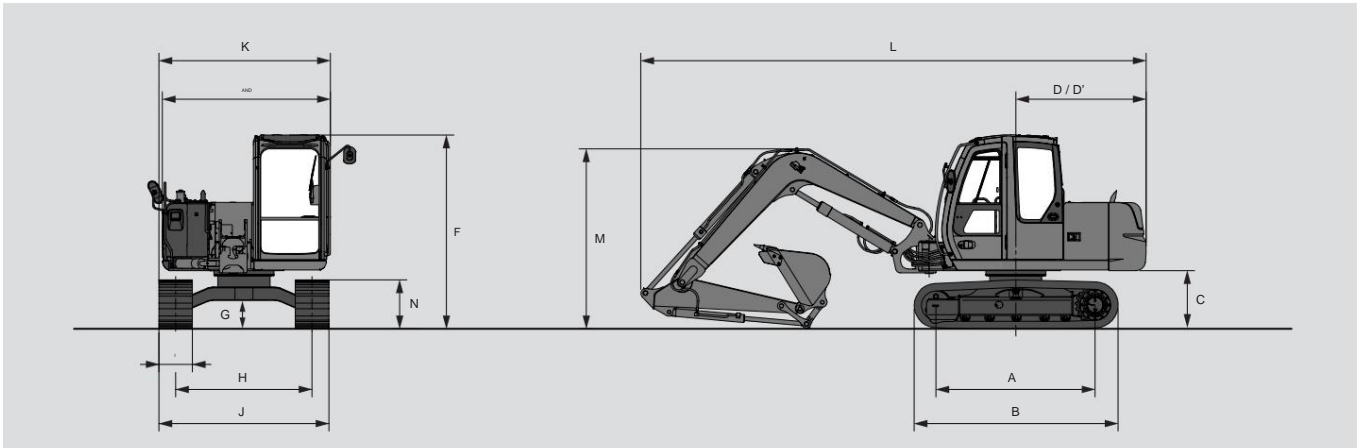
Boom and dipper arm as a box section - welded construction. 3.28 m mono boom, and sticks 1.62 m and 2.12 m available. Spoon as a welded construction. Axial play adjustment on the bucket linkage.

## SPOON

Contents PCSA, SAE heaped	Width Without side cutting	Weight
0.24 m <sup>3</sup>	500 mm	231 kg
0.27 m <sup>3</sup>	600 mm	251 kg
0.32 m <sup>3</sup>	700 mm	286 kg
0.38 m <sup>3</sup>	800 mm	306 kg

# TECHNICAL DATA

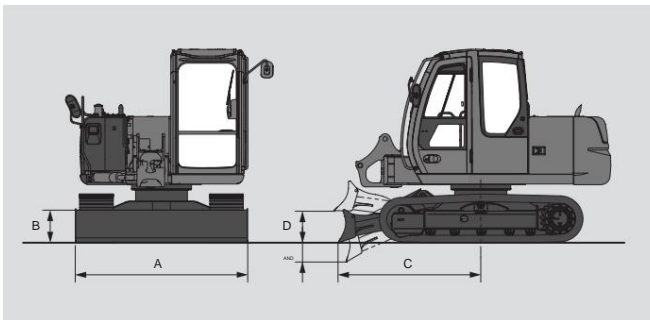
## Dimensions



Device: mm

	ZAXIS80SB	ZAXIS80SBLC	ZAXIS80SB with rubber cleated chains with	ZAXIS80SBLC rubber cleated chains
A Center sprocket to center idler	2 140	2 290	2 140	2 290
B Undercarriage length	2 765	2 920	2 815	2 970
*C Counterweight clearance	760	760	810	810
D Rear pivot radius	1 750	1 750	1 750	1 750
D length at the back	1 750	1 750	1 750	1 750
E Total width of the superstructure	2 260	2 260	2 260	2 260
F Height above cabin	2 600	2 600	2 630	2 630
*G Minimum ground clearance	360	360	410	410
H track width	1 750	1 870	1 750	1 870
I chain plate width	G 450	G 450	P 450	P 450
J Undercarriage width	2 200	2 320	2 200	2 320
K total width	2 260	2 320	2 260	2 320
L total length				
With 1.62 stem	6 780	6 780	6 780	6 780
With 2.12 m handle	6 910	6 910	6 910	6 910
M height above boom				
With 1.62 m handle	2 430	2 430	2 430	2 430
With 2.12 m handle	2 870	2 870	2 870	2 870
N chain height	655	655	715	715

\* Without chain plate cleats.      G: Triple-wall plates      P: Rubber studded chains



### ZAXIS80SB / ZAXIS80SBLC WITH SIGN (OPTION)

With 3.28 m boom, 1.62 m arm, 450 mm triple grouser plate and 0.28 m<sup>3</sup> bucket (SAE, PCSA heaped) for ZAXIS70 bucket.

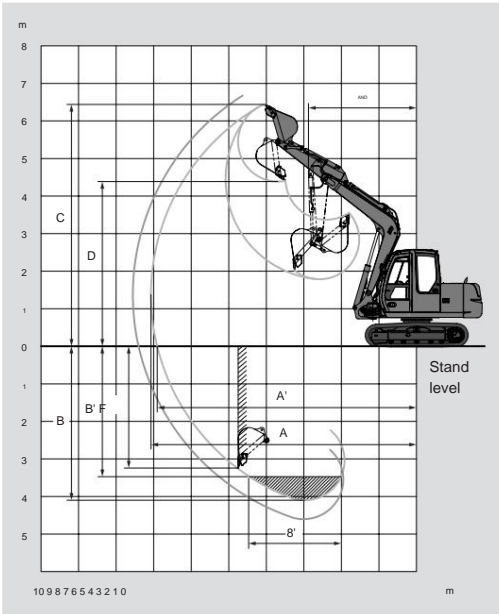
Operating weight..... STD: 7 600 kg  
LC: 8 030

Ground pressure..... STD: 36 kPa (0.37 kgf/cm<sup>2</sup>)  
LC: 35 kPa (0.36 kgf/cm<sup>2</sup>)

- A Total width of the sign..... 2 320mm
- B Total height of the sign..... 435mm
- C Schildabstand..... 1 920 mm
- D Max. lifting height above ground..... 400mm
- E Max. sinking depth below ground..... 280mm

# TECHNICAL DATA

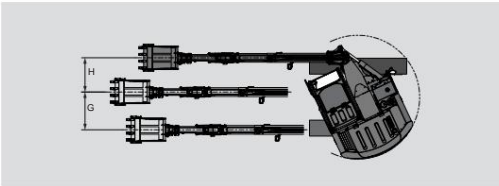
## working area



Device: mm

	ZAXIS80 SB	ZAXIS80 SBLC	ZAXIS80 SB with rubber with plate cleated chains	ZAXIS80 SBLC with plate cleated chains
<b>Stick length</b>	<b>1.62 m</b>	<b>2.12 m</b>	<b>1.62 m</b>	<b>2.12 m</b>
A Max. excavation reach A Max.	7 070	7 550	7 070	7 560
excavation reach (on the ground)	6 910	7 400	6 900	7 390
B Max. excavation depth	4 100	4 600	4 050	4 550
B' Max. excavation depth (8' level)	3 710	4 270	3 660	4 220
C Max. cutting height D	6 440	6 780	6 490	6 830
Max. dumping height E	4 390	4 720	4 440	4 770
Min. swing radius F Max.	2 880	3 140	2 880	3 140
vertical wall G Offset, left	3 240	3 750	3 190	3 700
H Offset, right Breakaway	1 070	1 070	1 070	1 070
force ISO	970	970	970	970
	55 kN	55 kN	55 kN	55 kN
	(5 600 kgf)	(5 600 kgf)	(5 600 kgf)	(5 600 kgf)
Breaking strength SAE: PCSA	47 kN	47 kN	47 kN	47 kN
	(4 800 kgf)	(4 800 kgf)	(4 800 kgf)	(4 800 kgf)
ISO tear strength	38 kN	32 kN	38 kN	32 kN
	(3 900 kgf)	(3 300 kgf)	(3 900 kgf)	(3 300 kgf)
Reißkraft SAE: PCSA	36 kN	31 kN	36 kN	31 kN
	(3 700 kgf)	(3 20 kgf)	(3 200 kgf)	(3 700 kgf)

Without chain plate cleats.







## EQUIPMENT

## Standard equipment

Standard equipment may vary from country to country. Please contact your HITACHI dealer about this.

**MOTOR**

P-Mode •  
E-Mode •  
30 A alternator • Dry air filter with dust drain valve (and clogging indicator) • Engine oil filter (cartridge) • Fuel filter (cartridge) • Double air filter • Water and oil cooler with dust protection net • Coolant

Expansion tank • Fan protection • Motor with  
Silent block storage • Automatic

Speed reduction

**HYDRAULIC SYSTEM •**

EP mode •  
Quick warm-up system for pilot circuit  
• Damping valve for pilot circuit • Load holding valves lift • Main control unit with pressure relief valve • Free control element • Suction filter • Full flow – return filter • Pilot filter

**CABIN •**

CRES cabin (cabin with reinforced cabin structure) • Cab with OPG canopy according to Class I (ISO) • All-weather soundproof  
Steel cabin  
• Reinforced and tinted Glazing • 4 silicone-filled ones  
Cabin storage • Retractable windshield (top and bottom) and sliding window on the left • Intermittent windshield wipers • Front windshield washers • Footrests • Electric

Dual horn • AM - FM radio with digital clock • Automatic

Speed reduction •  
Seat belt  
• Cup holder •  
Cigarette lighter • Ashtray • Storage compartment • Glove compartment • Fire extinguisher holder • Floor mat • Pilot control shutdown • Engine - emergency shutdown cable • Automatic climate control • Transparent roof hatch  
with roller blind • Spring-loaded comfort seat

**MONITORING SYSTEM •**

Visual displays:  
Operating hours and trip odometer,  
Coolant temperature and fuel level • Warning lights:  
charge control, engine oil pressure, Engine overheat,  
Air filter contamination and fuel reserve • Indicator  
lights:  
engine preheating, work lights, Automatic  
Speed reduction •  
Acoustic displays:  
Engine oil pressure and engine overheating

**LIGHTING •****UPPER CHASSIS**

• Underbody paneling • Counterweight 1 200 kg • Fuel level indicator • Hydraulic oil level indicator • Tool box • Rear view mirror (right and left) • Swivel drive

Parking brake

**UNDERCARRIAGE**

• Traction parking brake • Traction covers • Hydraulic chain tensioner • Bolt-on  
Chain drive wheels •  
Track and support rollers • Reinforced chain links with sealed chain pins

**WORK EQUIPMENT •**

HN joint bushings • WC-heat treated  
Contact surfaces  
• Bucket play adjustment • Monolyte cast - bucket joint A • Central lubrication bar • Sealed bucket bolts

**OTHER •**

Standard tool set • Lockable  
Machine covers • Lockable  
Fuel tank cap • Handrails  
• Direction  
indicator on undercarriage • ICX data recording

## Special equipment

The special equipment may vary from country to country. Please contact your HITACHI dealer about this.

**CAB •**

Lower windshield  
protective grille  
• Upper windshield  
Protective grille  
• Cab roof - protective grille • Anti-vandalism cover • Suspension seat with heating • Air suspension seat with heating • Rain cover  
• Sun visor •  
Additional fuse box • Immobilizer • 12 volt socket

**LIGHTING •**

Additional  
Front work lights  
• Additional  
Rear work lights • Rotating beacon  
• Additional headlights  
with  
Cover on the boom

**UNDERCARRIAGE**

• Slewing gear tower cover • Cutting edge cannot be replaced  
(width: 2,320 mm and 2,450 mm)  
Cutting edge replaceable (width: 2,320 mm)

**ATTACHMENTS •**

Piping for hammer and scissors •  
Parts for hammer attachment  
• Parts for hammer  
and scissor attachment  
• 2-speed selector switch •  
Grab piping (turning) • Grab turning pump (53 l/min) • Reinforced bucket  
linkage B • Reinforced dipper arm • Hydraulic quick coupler

Piping

**OTHER •**

Hose  
breakage  
Safety valves  
• Overload warning device • Electrical  
Refueling pump •  
Additional fuel filter • High-performance full-flow filter (with clogging indicator) • Biodegradable oil







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**Breaking  
new  
ground**

**HITACHI**