



HYDRAULIC EXCAVATOR CX80



Engine Horsepower	40 kW - 54 hp
Operating weight (max.)	8.4 t
Bucket capacity	0.18 m ³ to 0.34 m ³

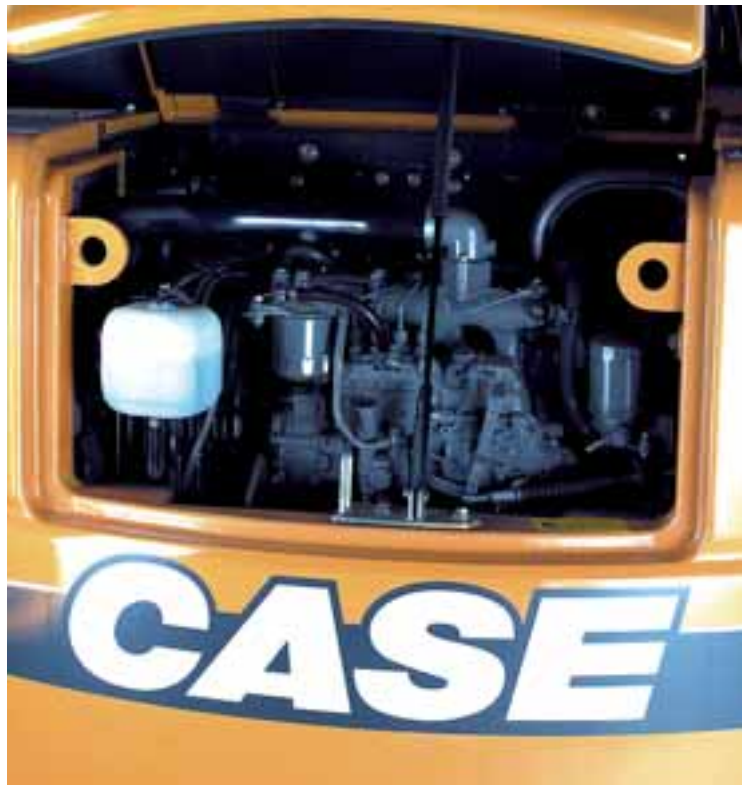
ENGINE

Engine meeting European standards (Tier 2 regulations) "low smoke emissions".

Particularly suitable for urban work, these engines have a very reduced noise level, one of the lowest fuel consumptions on the market and also meet environmental standards.

Checking the engine rotation speed using an electric potentiometer.

Manual return to idle, control on RH control lever. Engine pre-heating. High performance filtration circuit enables oil change intervals to be extended to every 500 h.



HYDRAULIC SYSTEM



FILTRATION

Hydraulic system components protected by "ULTRA CLEAN" filter which filters out particles larger than 1μ and also traces of condensation water. High performance filtration for longer hydraulic fluid life-time (fluid change interval now 5000 hours).



2 variable displacement axial piston hydraulic pumps feeding the attachment, the travel and the swing.



SWING

Fixed displacement, axial piston swing motor.
Upperstructure swing speed 10 rpm.
Planetary reduction gear with automatic braking by oil bath disc brakes.

TRAVEL

Variable displacement, axial piston hydraulic motors.
Planetary reduction gear with automatic braking by oil bath disc brakes.
Two travel speeds (selected on the instrument panel)



CAB

With CASE machines, "smaller machine dimensions" don't mean that there is less space for the operator. The CX80 cab has the same level of comfort and convenience as the standard models in the CX range; it is integrated with the upperstructure and therefore does not affect manoeuvrability on 360° swing. It's still wide enough to provide the operator with maximum comfort and all the advantages of a "standard" machine, including mechanical suspension and a multi-adjustable driver's seat, with a storage compartment to the rear LH of the seat. The cab has a large roof window, enabling continuous checking of the bucket position when the attachment is fully retracted. For operator comfort, the cab is insulated from vibration and noise by four elastofluid mountings.



RESPECT OF ENVIRONMENT

The CX80 respects the European "reduced noise level" as per directive 200/14/EC Phase 2.



UNDERCARRIAGE



LC type undercarriage providing excellent stability (as a result of its length) and loading capacity comparable to machines of standard dimensions.

Steel or rubber tracks are available. Upper and lower tracks equipped with bushings and seals.

Travel motors protected and incorporated in the undercarriage.

Track tension adjustable by grease cylinder.



DOZER BLADE

Dozer blade control lever at console height to the right hand side of the cab. Dozer blade movement by a central hydraulic cylinder.



ATTACHMENTS



To meet user requirements, CASE CX80 crawler excavator is suitable for every type of work-site. This machine is mainly used on the following types of work:

- **Construction and maintenance of high speed roads and urban streets.**
- **Construction in residential areas.**
- **Demolition.**
- **Forestry work.**
- **Machine hire companies.**

To provide best possible profitability in the various sorts of work encountered, machine configuration needs to be able to be changed quickly and easily.

THE "CASE" ANSWERS

- **A choice of two dipper lengths.**
- **"MULTIFIT" quick coupler.**
- **Supply to the most varied types of implement,** using supplementary hydraulic functions (swing, tool orientation, etc.)
- **Reduced maintenance costs** using EMS (Easy Maintenance System) which is standard on the boom foot and head linkages. This system, which is also used on the heavy CX machines, provides a considerable reduction in maintenance intervals (every 1000 h).



SPECIFICATIONS

ENGINE

Model _____ Isuzu AU-4LE2X
Type _____ 4-stroke
Cylinders _____ 4
Bore/Stroke _____ 85 x 96 mm
Displacement _____ 2179 cc
Fuel injection _____ Direct
Fuel injection pump _____ Mechanical
Fuel _____ Diesel
Fuel filter _____ In-line strainer
Cooling _____ Liquid
Horsepower per SAE J1349
Net _____ 54 hp (40 kW) @ 2000 rpm
Maximum torque @ 1500 rpm
Net _____ 210 Nm

BOOM/ARM

Swing Boom

Length _____ 3.50 m
Boom w/arm cylinder & plumbing _____ 492 kg
Hoist cylinders (1) _____ 103 kg ea
Total weight _____ 595 kg

Arm 1.71 m

Bare arm _____ 140 kg
Bucket cylinder linkage & plumbing _____ 115 kg
Total weight _____ 255 kg

Arm 2.12 m

Bare arm _____ 185 kg
Bucket cylinder linkage & plumbing _____ 115 kg
Total weight _____ 300 kg
Boom swing left _____ 80°
Boom swing right _____ 50°

UNDERCARRIAGE

Number of rollers
Top, each track _____ 1
Bottom, each track _____ 5
Number of shoes
Triple grouser - each side _____ 39
Link pitch _____ 154 mm

HYDRAULICS

Pumps (2) _____ Variable displacement axial piston design

Capacity

Maximum _____ 68 l/min

System relief pressure

Standard _____ 29.4 MPa

Control valves

2-blade, boom swing
4-spool section for right track travel, boom, bucket and arm
5-spool section for left track travel, boom, auxiliary, swing and arm
Boom anti-drift valves

Pilot control hydraulic system

Pump (1) _____ Gear design
Maximum capacity _____ 21.4 l/min
Relief pressure _____ 4.2 MPa

Swing

Motor (1) _____ Fixed displacement axial piston design
Speed _____ 0-9.5 rpm
Brake _____ Mechanical disk
Tail swing radius _____ 1.21 m

Travel

Motor (2) _____ Two-speed axial piston design
Final drive _____ Planetary gear reduction
Drawbar pull _____ 59.2 kN

Travel Speeds - Auto shift high to low

Forward/Reverse
Low _____ 3.4 km/h
High _____ 5.1 km/h

Travel control valve

Dual stage relief and counter-balance design

HYDRAULIC CYLINDERS

Boom cylinders (1)

Bore diameter _____ 110 mm
Rod diameter _____ 70 mm
Stroke _____ 911 mm

Arm cylinder (1)

Bore diameter _____ 95 mm
Rod diameter _____ 60 mm
Stroke _____ 797 mm

Bucket cylinder (1)

Bore diameter _____ 85 mm
Rod diameter _____ 55 mm
Stroke _____ 665 mm

Boom Swing Cylinder

Bore diameter _____ 95 mm
Rod diameter _____ 55 mm
Stroke _____ 640 mm

ELECTRICAL

Voltage _____ 24 volts, negative ground
Alternator _____ 50 amp
Batteries (1) _____ Low-maintenance 64 Ah

SERVICE CAPACITIES

Hydraulic tank

Refill capacity _____ 50 l
Total system _____ 97.3 l
Final drive (per side) _____ 1.1 l

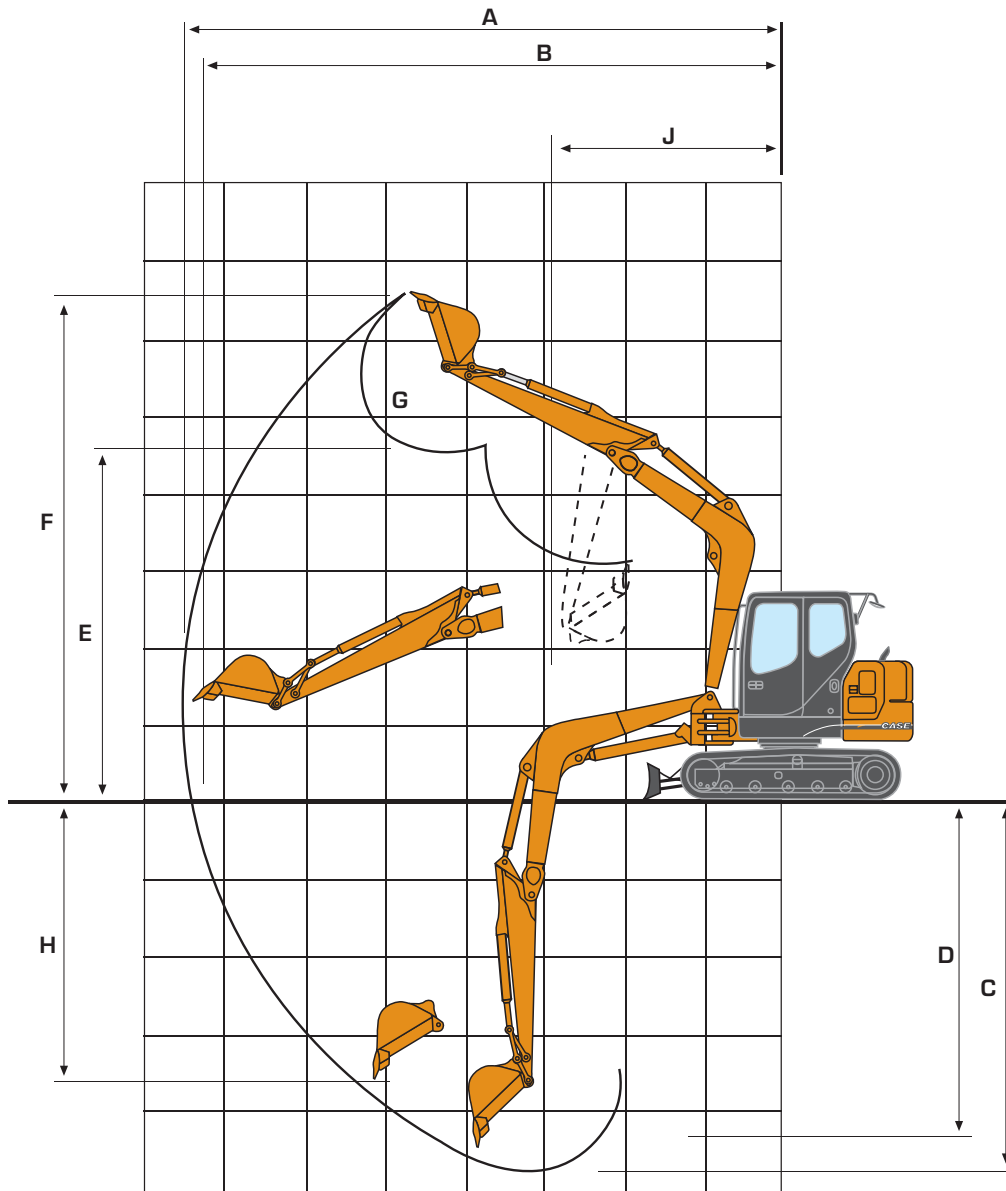
Engine

w/ filter change _____ 9.0 l
Fuel _____ 100 l
Radiator _____ 10.2 l

OPERATING WEIGHT

With 1.71 m arm, 450 mm track shoes, 210 kg bucket, 75 kg operator, full fuel and standard equipment _____ 8430 kg

PERFORMANCE DATA

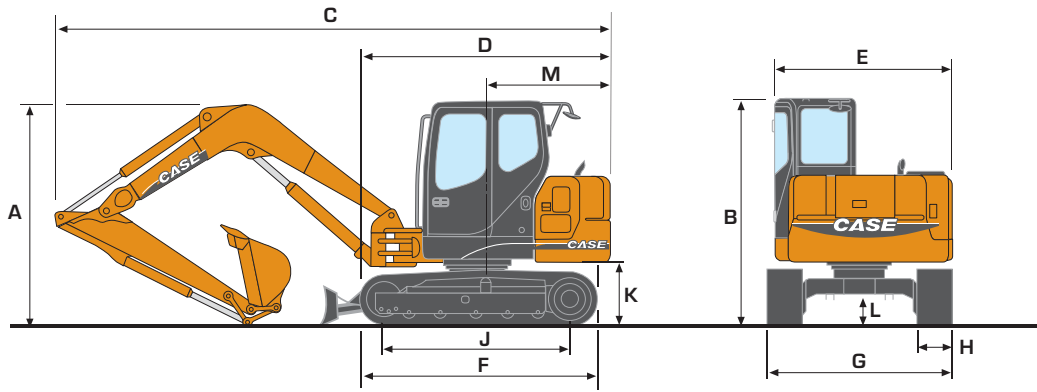


DIMENSIONS

1.71 m 2.12 m

A Maximum dig radius	m	7.03	7.40
B Dig radius at groundline	m	6.89	7.27
C Maximum dig depth	m	4.18	4.59
D Dig depth - 2.44 m level bottom	m	3.78	4.23
E Dump height	m	4.39	4.60
F Overall reach height	m	6.39	6.60
G Bucket rotation		177°	177°
H Vertical straight wall dig depth	m	3.08	3.55
J Minimum swing radius	m	1.79	2.09
Arm digging force	kN	38.3	34.0
Bucket digging force	kN	56.9	56.9
Dozer blade cutting edge			
Max. height	kN	0.42	0.42
Dozer blade cutting edge			
Max. depth	kN	0.21	0.21

GENERAL DIMENSIONS



DIMENSIONS		1.71 m	2.12 m	
A	Overall height	m	2.70	2.95
B	Cab height	m	2.70	2.70
C	Overall length	m	6.66	6.72
D	w/o attachment	m	3.51	3.51
E	Width of upperstructure	m	2.23	2.23
F	Track overall length	m	2.85	2.85
G	Track overall width w/ 450 mm shoes	m	2.32	2.32
H	Track shoe width	mm	450	450
J	Center to center (idler to sprocket)	m	2.21	2.21
K	Upperstructure ground clearance	m	0.75	0.75
L	Minimum ground clearance	m	0.36	0.36
M	Tail swing radius	m	1.66	1.66
	Dozer blade width	m	2.32	2.32
	Dozer blade height	m	0.45	0.45
	Working weight*	kg	8430	8475
	Ground pressure	kPa	38	38

*With 460 mm track shoe, 210 kg bucket, 75 kg operator, full fuel and standard equipment.

BUCKETS

GENERAL PURPOSE

SAE capacity	m ³	0.18 to 0.34
Width	m	0.457 to 0.762

DITCHING

SAE capacity	m ³	0.46 to 0.54
Width	m	1.067 to 1.219

LIFTING CAPACITY

Values are expressed in kilos

Front 360°	REACH			
	3.05 m	5.57 m	6.10 m	At max reach
				m

1.71 m Arm, 209 kg bucket, counterweight operating in "Standard" Mode, blade down.

4.57 m			1316 *	1316 *			1362 *	1135	5.86
3.05 m			1611 *	1611 *			1430 *	980	6.60
1.52 m	4060 *	2962	2291	1588	1838 *	999	1543 *	840	6.80
0 m	4151 *	2722	2926 *	1498	2042 *	953	1838 *	863	6.52
-1.52 m	5489 *	2745	3085 *	1452			2133 *	1089	5.63
-3.0 m	4491	2813							

2.12 m Arm, 191 kg bucket, counterweight operating in "Standard" Mode, blade down

4.57 m							1266 *	1022 *	6.32
3.05 m			1317 *	1317 *	1453 *	1044	1271 *	817	6.98
1.52 m	3312 *	2995	2042 *	1589	1679 *	999	1385 *	749	7.18
0 m	4446 *	2723	2768 *	1475	1974 *	954	1611 *	795	6.90
-1.52 m	5535 *	2677	3063 *	1430	2042 *	931	1974 *	954	6.12
-3.0 m	4900 *	2745	2745 *	1475					

NOTE: *Lift capacities do not exceed 75% of the minimum tipping load or 87% of the hydraulic lift capacity. Capacities that are marked with an asterisk are hydraulic limits

CX80

STANDARD EQUIPMENT & OPTIONS

STANDARD EQUIPMENT

Operator's compartment

- Cab with Isomount® system
- Adjustable deluxe seat with
- 76 mm seat belt
- Safety glass
- Air conditioning
- AM/FM Radio w/auto tuner
- Skylight
- Sliding front windows
- Windshield wiper w/washer
- Rear view mirrors

Engine

- Isuzu AU-4LE2X diesel
- Tier IV Stage 1 compliant
- Glow plug
- Selectable one touch accelerator/ decelerator

Electrical

- Batteries (2) 12-Volt
- Horn

Hydraulics

- ISO pattern pilot controls
- Position mode selector: S
- Variable flow piston pumps
- Neutral pump destroke
- Auxiliary hydraulic valve
- Boom anti-drift valves
- Ultra Clean filtration system

Undercarriage

- Shoes: 450 mm 3-bar, 39 per side
- Track length: 2.85 m
- Track gauge: 1.87 m
- Dozer blade

Track drive

- 2-speed hydrostatic travel
- Disc-type parking brakes

Upperstructure

- Swing boom: 3.50 m one piece
- Swing brake

Other

- Counterweight
- Single key vandal lockup

OPTIONS

Upperstructure

- Arm: 2.18 m

Uppercarriage

- Track Slides: 600 mm
- Rubber Link Track

Hydraulics

- Auxiliary hydraulics
- Single acting, one pump (includes heavy-duty bucket linkage)
- Double acting, single or dual pump (includes heavy-duty bucket linkage)
- Double acting general purpose for use with thumb kit
- Control pattern selector valve

Other

- Load holding control devices
- Cylinder mounted
- Hydraulic Coupler

Standard and optional equipment shown can vary by country.

Worldwide Case Construction Equipment Contact Information

EUROPE:

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AFRICA/MIDDLE EAST/CIS:

Riva Paradiso 14
6902 Paradiso - SWITZERLAND

NORTH AMERICA/MEXICO:

700 State Street Racine, WI 53404 U.S.A.

LATIN AMERICA:

Av. General David Sarnoff 2237
32210 - 900 Contagem - MG
Belo Horizonte BRAZIL

ASIA PACIFIC:

Unit 1 - 1 Foundation Place - Prospect
New South Wales - 2148 AUSTRALIA

CHINA:

No. 29, Industrial Premises, No. 376.
De Bao Road, Waigaoqiao Ftz, Pudong,
SHANGHAI, 200131, P.R.C.



The call is free from a land line. Check in advance with your Mobile Operator if you will be charged.

NOTE: Standard and optional fittings can vary according to the demands and specific regulations of each country. The illustrations may include optional rather than standard fittings - consult your Case dealer. Furthermore, CNH reserves the right to modify machine specifications without incurring any obligation relating to such changes.



Conforms to directive 98/37/CE

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