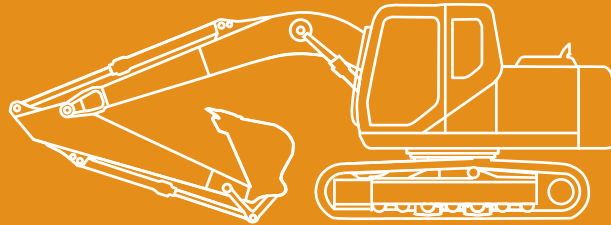


D-SERIES CRAWLER EXCAVATORS SPEC SHEET



ENGINE

Model _____ ISUZU AR-4HK1X
 Type _____ Water-cooled, 4-cycle diesel, 4-cylinder in line, High pressure common rail system (electric control), Turbocharger with air cooled intercooler, SCR system.
 Number of cylinders / Displacement _____ 4 / 5,2 l
 Emissions level _____ Tier 4 final / Eu stage IV
 Bore & stroke _____ 115 mm x 125 mm
Rated flywheel horse power
 SAE J 1349, ISO 9249 _____ 119.3 kW / 160 hp at 1800 min⁻¹
 ISO 14396 _____ 124 kW / 166 hp at 1800 min⁻¹
Maximum torque
 SAE J 1349, ISO 9249 _____ 620 Nm at 1600 min⁻¹
 ISO 14396 _____ 636 Nm at 1600 min⁻¹

HYDRAULIC SYSTEM

Main pumps _____ 2 variable displacement axial piston pumps with regulating system
 Max. oil flow _____ 2 x 211 liter/min at 1800 min⁻¹
Working circuit pressure
 Boom/Arm/Bucket _____ 34.3 MPa - 37.3 MPa with auto power boost
 Swing circuit _____ 29.4 MPa
 Travel circuit _____ 34.3 MPa
 Pilot pump _____ 18 liter/min
 Working circuit pressure _____ 3.9 MPa
Boom Cylinders
 Bore _____ 120 mm
 Stroke _____ 1255 mm
Boom Positioning (2 piece boom only)
 Bore _____ 150 mm
 Stroke _____ 1090 mm
Arm Cylinder
 Bore _____ 140 mm
 Stroke _____ 1460 mm
Bucket Cylinder
 Bore _____ 120 mm
 Stroke _____ 1010 mm

SWING

Swing Motor _____ Fixed displacement axial piston motor
 Maximum swing speed _____ 11.5 min⁻¹
 Swing torque _____ 64,000 Nm

FILTERS

Suction filter _____ 105 µm
 Return filter _____ 6 µm
 Pilot line filter _____ 8 µm

ELECTRICAL SYSTEM

Voltage _____ 24 V
 Alternator _____ 50 Amp
 Starter _____ 24 V 5.0 kW
 Battery _____ 2 x 12 V 92 Ah/5 HR

UNDERCARRIAGE

Travel motor _____ Variable displacement axial piston motor
 High travel speed (Automatic travel speed shifting) _____ 5.0 km/h
 Low travel speed _____ 3.2 km/h
 Drawbar pull _____ 200 KN
 Number of carrier rollers (each side) _____ 2
 Number of track rollers (each side) _____ 8
 Number of shoes (each side) _____ 47
 Type of shoe _____ Triple grouser shoe
 Grade ability _____ 70 % (35°)

CIRCUIT AND COMPONENT CAPACITIES

Fuel tank _____ 320 l
 Hydraulic system _____ 220 l
 Hydraulic tank _____ 117 l
 Adblue tank _____ 85 l

SOUND LEVEL

External guaranteed sound level
 (EU Directive 2000/14/EC) _____ LwA 101 dB(A)
 Operator cab sound pressure level (ISO 6396) _____ LpA 69 dB(A)

WEIGHT AND GROUND PRESSURE NHD

With 2.40 m arm, 1.0 m³ bucket, operator, lubricant, coolant and full fuel tank and top guard OPG level 2

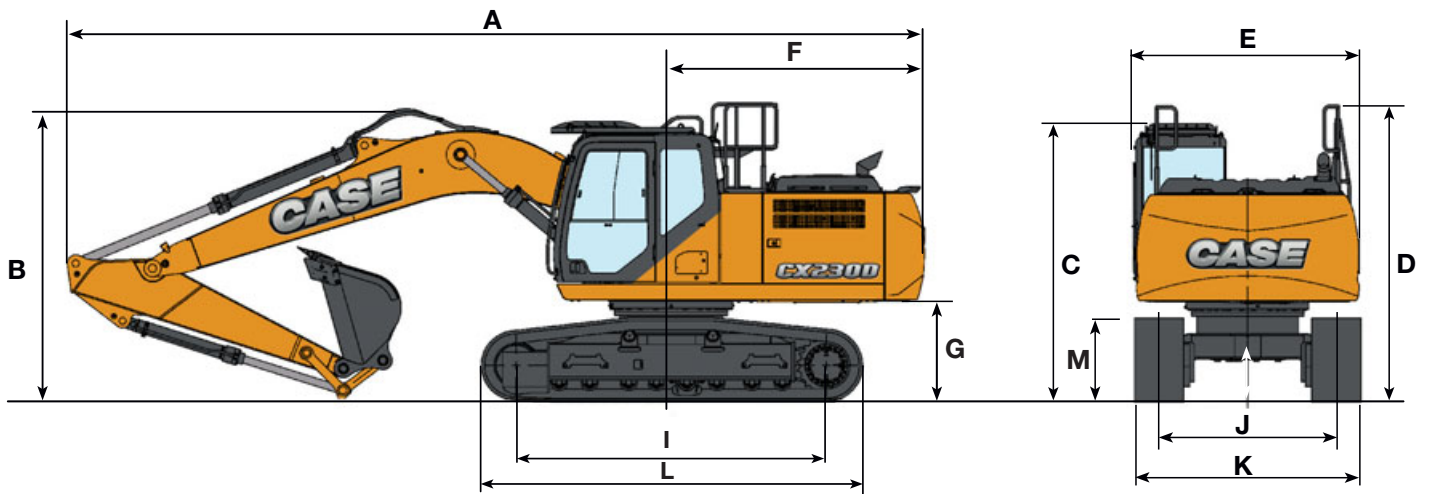
MONO	Weight	Ground pressure
550 mm grouser shoes	22.600 kg	0,054 MPa
Counterweight 4.700 kg		

2 PIECE BOOM	Weight	Ground pressure
550 mm grouser shoes	23.500 kg	0,056 MPa
Counterweight 4.700 kg		

CX D-SERIES

CX230D

GENERAL DIMENSIONS NHD MONO



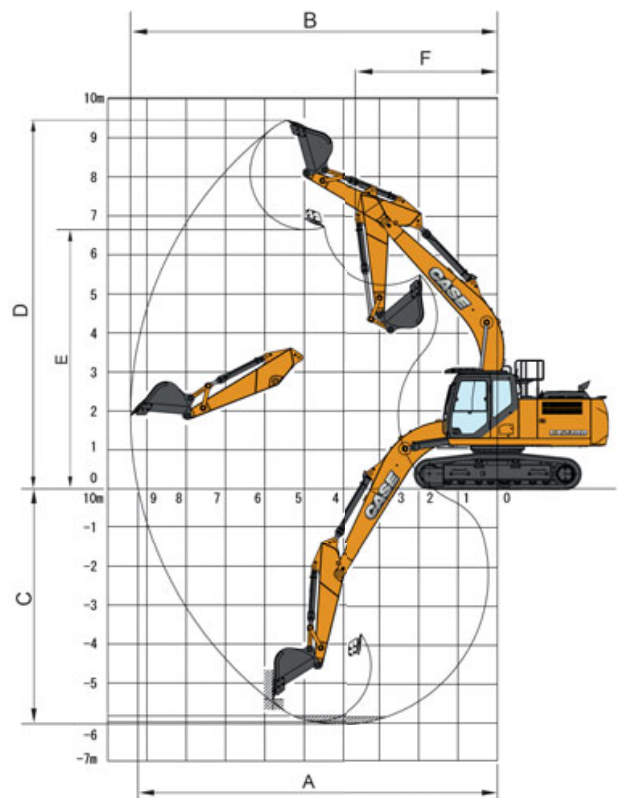
		Arm 2.40 m	Arm 1.91 m	Arm 2.94 m
A Overall length (without attachment)	mm	4950	4950	4950
A1 Overall length (with attachment)	mm	9570	9590	9490
B Overall height (to top of boom)	mm	3190	3110	3010
C Cab height	mm	3130	3130	3130
D Overall height (to top of guardrail)	mm	3340	3340	3340
E Upper structure overall width	mm	2530	2530	2530
F Swing (rear end radius)	mm	2830	2830	2830
G Clearance height under upper structure	mm	1110	1110	1110
H Minimum ground clearance	mm	430	430	430
I Wheel base (Center to center of wheels)	mm	3460	3460	3460
L Crawler overall length	mm	4240	4240	4240
M Crawler tracks height	mm	940	940	940
J Track gauge	mm	1990	1990	1990
K Undercarriage overall width (with 550 mm shoes)	mm	2540	2540	2540

PERFORMANCE DATA NHD MONO

		Arm 2.40 m	Arm 1.91 m	Arm 2.94 m
Boom length	mm	5700	5700	5700
Bucket radius	mm	1450	1450	1450
Bucket wrist action	°	177°	177°	177°
A Maximum reach at GRP	mm	9230	8760	9720
B Maximum reach	mm	9420	8960	9900
C Max. digging depth	mm	6050	5550	6590
D Max. digging height	mm	9450	9200	9670
E Max. dumping height	mm	6650	6390	6870
F Min. swing radius	mm	2830	2830	2830

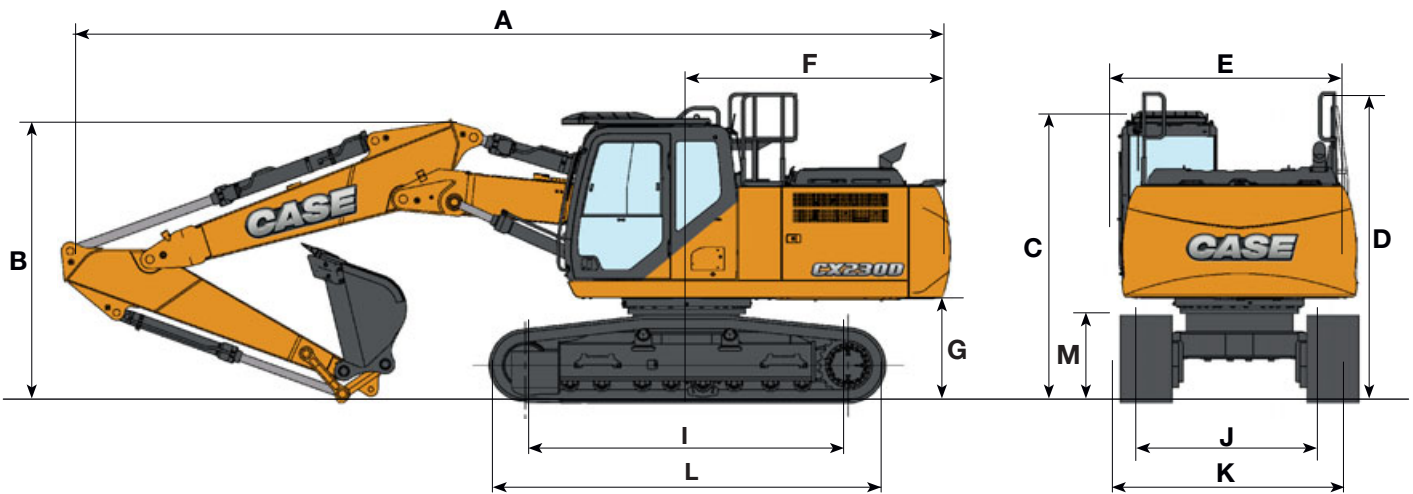
DIGGING FORCE

	Arm 2.40 m	Arm 1.91 m	Arm 2.94 m
Arm digging force	123 kN	142 kN	103 kN
with Auto power boost	133 kN	154 kN	112 kN
Bucket digging force	142 kN	142 kN	142 kN
with Auto power boost	154 kN	154 kN	154 kN



SPECIFICATIONS

GENERAL DIMENSIONS NHD 2 PIECE BOOM



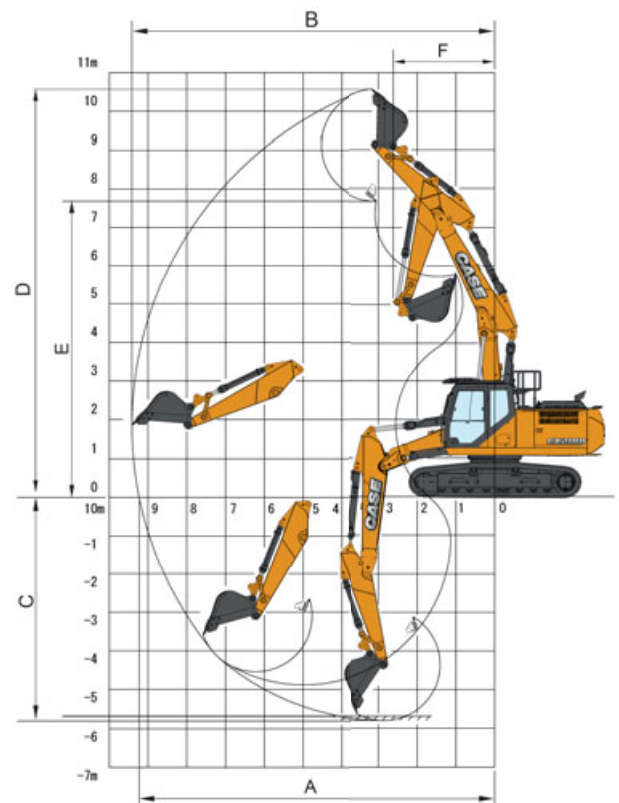
		Arm 2.40 m	Arm 1.91 m	Arm 2.94 m
A	Overall length (without attachment)	mm 4950	4950	4950
A1	Overall length (with attachment)	mm 9540	9570	9470
B	Overall height (to top of boom)	mm 3050	2960	2890
C	Cab height	mm 3130	3130	3130
D	Overall height (to top of guardrail)	mm 3340	3340	3340
E	Upper structure overall width	mm 2530	2530	2530
F	Swing (rear end radius)	mm 2830	2830	2830
G	Clearance height under upper structure	mm 1110	1110	1110
H	Minimum ground clearance	mm 430	430	430
I	Wheel base (Center to center of wheels)	mm 3460	3460	3460
L	Crawler overall length	mm 4240	4240	4240
M	Crawler tracks height	mm 940	940	940
J	Track gauge	mm 1990	1990	1990
K	Undercarriage overall width (with 550 mm shoes)	mm 2540	2540	2540

PERFORMANCE DATA 2 PIECE BOOM

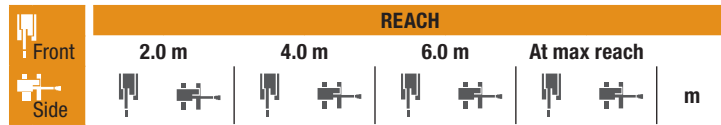
		Arm 2.40 m	Arm 1.91 m	Arm 2.94 m
1 st boom length	mm	2960	2960	2960
2 nd boom length	mm	2790	2790	2790
Bucket radius	mm	1450	1450	1450
Bucket wrist action	°	177°	177°	177°
A	Maximum reach at GRP	mm 9220	8750	9720
B	Maximum reach	mm 9420	8950	9900
C	Max. digging depth	mm 5770	5280	6290
D	Max. digging height	mm 10610	10240	10970
E	Max. dumping height	mm 7710	7350	8070
F	Min. swing radius	mm 2830	2830	2830

DIGGING FORCE

	Arm 2.40 m	Arm 1.91 m	Arm 2.94 m
Arm digging force	123 kN	142 kN	103 kN
with Auto power boost	133 kN	154 kN	112 kN
Bucket digging force	142 kN	142 kN	142 kN
with Auto power boost	154 kN	154 kN	154 kN

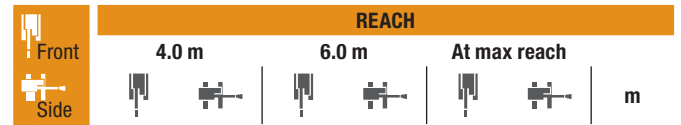


LIFTING CAPACITY MONOBOOM



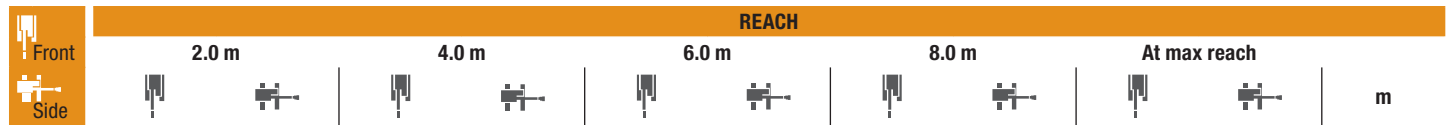
NHD - 2.40 m length, 550 mm shoes. Max reach 7.97 m

	REACH								
	2.0 m	4.0 m	6.0 m	At max reach		m			
8.0 m					5910*	5910*	5.05		
6.0 m			5580*	4960	5500*	4030	6.81		
4.0 m		8520*	8480	6300*	4730	5320	3260	7.68	
2.0 m		11670*	7580	7410*	4430	4930	2990	7.97	
0 m		12590*	7290	7260	4230	5060	3040	7.74	
-2.0 m	10290*	10290*	11870*	7340	7230	4210	5900	3520	6.95
-4.0 m			9320*	7610			6720*	5170	5.33



NHD - 1.91 m length, 550 mm shoes. Max reach 7.50 m

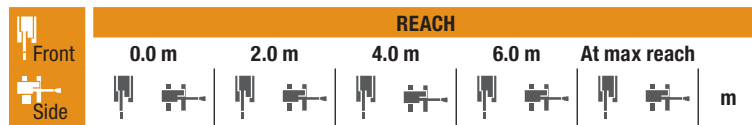
	REACH						
	4.0 m	6.0 m	At max reach		m		
6.0 m			6180*	4910	6220*	4570	6.26
4.0 m	9480*	8310	6750*	4720	5880	3600	7.2
2.0 m			7490	4440	5410	3290	7.51
0 m	12540*	7390	7310	4290	5600	3370	7.27
-2.0 m	11460*	7480	7350	4320	6710	3990	6.41
-4.0 m	8140*	7840			6860*	6480	4.61



NHD - 2.94 m length, 550 mm shoes. Max reach 8.45 m

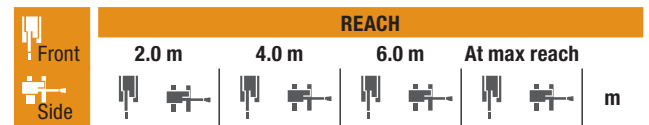
	REACH										
	2.0 m	4.0 m	6.0 m	8.0 m	At max reach		m				
8.0 m						4150*	4150*	5.79			
6.0 m				5030*	5030*		3710*	3610	7.37		
4.0 m			7570*	7570*	5860*	4810	4740*	3100	3660*	2990	8.18
2.0 m			10900*	7770	7070*	4490	4920	2990	3880*	2760	8.45
0 m			12490*	7330	7280	4250	4820	2900	4410*	2790	8.24
-2.0 m	9550*	9550*	12250*	7280	7200	4180			5270	3150	7.5
-4.0 m	17160*	17160*	10330*	7490	6570*	4330			6510*	4310	6.03

LIFTING CAPACITY 2 PIECE BOOM



NHD - 2.40 m length, 550 mm shoes. Max reach 7.97 m

	REACH										
	0.0 m	2.0 m	4.0 m	6.0 m	At max reach		m				
8.0 m					6280*	6280*	5.05				
6.0 m			7290*	7290*	5770*	5100	4900*	4000	6.8		
4.0 m			7480*	7480*	5770*	5100	4900*	4000	6.8		
2.0 m			9690*	8920*	6200*	5050	4480*	3200	7.68		
0 m			10260*	10260*	12350*	8570*	7250*	4810	4480*	2910	7.97
-2.0 m			15630*	15630*	12410*	7910	7530	4440	4850*	2960	7.74
-4.0 m	17510*	17510*	25000*	24780	12650*	7580	7320	4200	5100*	3440	6.94
			18370*	18370*	8390*	7560					



NHD - 1.91 m length, 550 mm shoes. Max reach 7.50 m

	REACH								
	2.0 m	4.0 m	6.0 m	At max reach		m			
8.0 m			8200*	8200*		7620*	7620*	4.27	
6.0 m			8090*	8090*	6230*	4930	5620*	4550	6.25
4.0 m			10990*	8920	6610*	4950	5070*	3540	7.19
2.0 m			12430*	8600	7640*	4710	5060*	3210	7.5
0 m	16490*	16490*	12550*	7870	11210*	6480	5520*	3290	7.26
-2.0 m	24710*	24710*	12540*	7640	6790*	4250	5230*	3920	6.4



NHD - 2.94 m length, 550 mm shoes. Max reach 8.45 m

	REACH												
	0.0 m	2.0 m	4.0 m	6.0 m	8.0 m	At max reach		m					
8.0 m								4200*	4200*	5.79			
6.0 m					5390*	5250		3720*	3580	7.37			
4.0 m			17210*	17210*	8650*	8650*	5840*	5120*	4300*	3070	3660*	2930	8.18
2.0 m			18170*	18170*	12040*	8610	6850*	4950	4880*	2980	3850*	2690	8.45
0 m	12740*	12740*	15350*	15350*	12370*	8080	7510	4560	4820	2840	4310*	2710	8.24
-2.0 m	14150*	14150*	20750*	20750*	12580*	7600	7360	4230			5000*	3070	7.5
-4.0 m			22330*	22330*	10500*	7480							

* The above loads (kg) are compliant to the ISO standards and refer to the excavator equipped without bucket. The indicated loads are no more than 87% of hydraulic system lift capacity or 75% of static tipping load. Values marked with an asterisk (*) are limited by the hydraulic lifting capacity.

HEAVY DUTY BUCKET (DIRECT MOUNT)

CAPACITY m ³ (ISO7451 HEAPED)	WIDTH mm	WEIGHT kg	ARM 1.91 m	ARM 2.40 m	ARM 2.94 m
0.44	600	591	○	○	○
0.59	750	641	○	○	○
0.75	900	719	○	○	○
0.85	1000	756	○	○	○
0.96	1100	792	○	○/●*	●
1.01	1200	844	○	●	●
1.23	1350	917	●	■	■
1.39	1500	995	■	■	×

HEAVY DUTY SCOOP BUCKET (WITH CASE MULTI-FIT S COUPLER)

CAPACITY m ³ (ISO7451 HEAPED)	WIDTH mm	WEIGHT kg	ARM 1.91 m	ARM 2.40 m	ARM 2.94 m
0.44	600	574	○	○	○
0.59	750	630	○	○	○
0.75	900	707	○	○	●
0.85	1000	745	○	●	●
0.96	1100	782	●	●	■
1.01	1200	841	●	■	■
1.23	1350	908	■	■/X*	X

- * only for CX230D NHD triple articulation
- Rated material density up to 2 ton/m³
- Rated material density up to 1.6 ton/m³
- Rated material density up to 1.2 ton/m³
- × Not applicable