

SPECIFICATION

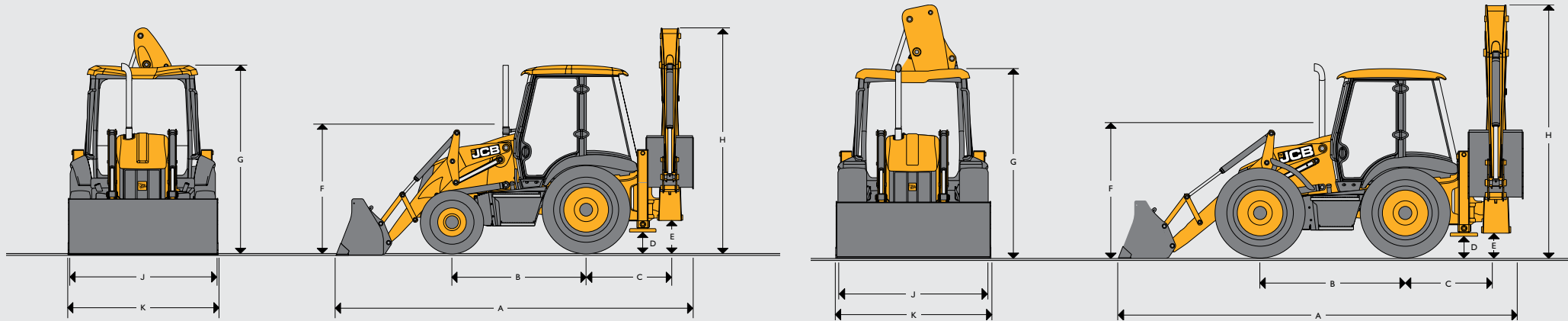


EXCAVATOR LOADER | 3CX ECO, 3CX PLUS, 3CX PRO, 5CX PRO

Gross power: 68kW (92hp) - 81kW (109hp) Maximum dig depth: 6.51m Weight: 7887 - 9500kg

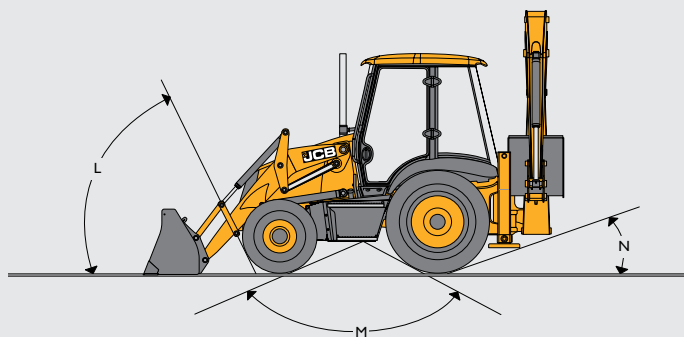


STATIC DIMENSIONS



Dimensions in m		3CX ECO		3CX PLUS		3CX PRO		5CX PRO
A	Total travel length	5.62		5.62		5.62		5.91
B	Axle centreline distance	2.17		2.17		2.17		2.22
C	Slew centre to rear axle centre distance	1.36		1.36		1.36		1.36
D	Stabiliser feet clearance	0.37		0.37		0.37		0.34
E	Kingpost clearance	0.52		0.52		0.52		0.50
F	Steering wheel centre height	1.94		1.94		1.94		1.88
G	Cab roof height	3.03		3.03		3.03		3.03
H	Total travel clearance	3.61		3.61		3.61		3.97
J	Rear frame width	2.35	2.24*	2.35	2.24*	2.35	2.24*	2.36
K	Shovel width	2.35	2.23*	2.35	2.23*	2.35	2.23*	2.33
K	Shovel width - option	-	-	-	-	-	-	2.44

* Narrow option



GROUND LINE ANGLES

Machine model		3CX ECO, 3CX PLUS, 3CX PRO	5CX PRO
L	Approach angle	degrees 66°	74°
M	Interference angle/ramp to ground plane	degrees 120°	118°
N	Departure angle	degrees 20°	19°

ENGINE					
Model		3CX ECO	3CX PLUS*	3CX PLUS 3CX PRO	5CX PRO
Engine standard		Stage V	Stage V	Stage V	Stage V
Manufacturer		JCB	JCB	JCB	JCB
Aspiration		Turbocharged & Intercooled	Turbocharged & Intercooled	Turbocharged & Intercooled	Turbocharged & Intercooled
Displacement	litre	3.0	4.8	4.8	4.8
No. of cylinders		4	4	4	4
Bore	mm	92	106	106	106
Stroke	mm	112	112	112	112
Rated engine	rpm	2200	2200	2200	2200
Power ratings					
Rated ISO 14396 (SAE J1995 Gross)	kW	68	81	81	81
Maximum torque					
Max. torque rpm	Nm	420	516	516	516
Max. torque rpm	rpm	1200	1450	1450	1450

* Model not available in all regions

ELECTRICAL AND INSTRUMENTATION	
7" colour display screen	Audio and phone, controls, engine coolant temperature, fuel level, machine hours, help files, service alerts, clock
Front display	Speedometer, warning alerts, engine oil, water in fuel, transmission oil temperature and pressure, park brake, air cleaner, alternator
Battery	1000 CCA (120 amp)
Horn	Controlled from both front and rear
Alternator	105 amp (55kW) 170 amp (72kW/81kW)
Front working lights	4 adjustable
Rear working lights	4 adjustable

ENGINE SUPPORT SYSTEM	
Fuel type	Diesel
Fuel filter	Replaceable cartridge plus water/sediment separator prefilter
Air cleaner	Dual, dry element type, with self cleaning internal air intake precleaner
Oil filter and lubrication	Full flow, spin-on type filter
Cooling system	Hot climate specification, pressurised 1.0 bar suction fan. Pressurised recovery tank with integral filler neck

TRANSMISSION					
Model		3CX ECO 68kW	3CX PLUS 81kW	3CX PRO 81kW	5CX PRO
Manufacturer		JCB	JCB	JCB	JCB
Type		Powershift	Powershift	Autoshift**	Autoshift
Gear selection		Powershift	Powershift	Powershift	Powershift
TorqueLock		N/A	Standard	Standard	Standard
Gear 1	kph	5.0	5.4	4.9	4.9
Gear 2	kph	9.3	10.0	8.9	8.9
Gear 3	kph	21.5	22.5	12.6	12.6
Gear 4	kph	38.1	41.8	18.2	18.2
Gear 5	kph	-	-	33	33
Gear 6	kph	-	-	47	42

** Engine Speed at 2200rpm on 400/70-20 Front Tyres and 480/80-R26 Rear Tyres.

OPERATING WEIGHTS					
Machine model		3CX ECO	3CX PLUS	3CX PRO	5CX PRO
Fixed dipper	kg	7887	-	-	9034
Extended dipper	kg	8320	8600	8600	9500

Operating weight to ISO 6016 includes machine with 6-in-1 shovel, 600mm excavator bucket and a full fuel tank and operator. Actual weight will vary depending on machine options.

FRONT AXLE

Model	3CX ECO, 3CX PLUS, 3CX PRO	5CX PRO
Type	JCB steer drive with torque proportional	JCB epicyclic hub reduction with torque proportional
Limited slip	-	Option
Axle ratings	kg	kg
Static load rating	16500	25000
Dynamic load rating	8300	12500
Oscillation angle	16°	16°

REAR AXLE

Model	3CX ECO, 3CX PLUS, 3CX PRO	5CX PRO
Type	JCB epicyclic hub reduction with torque proportional	JCB epicyclic hub reduction with torque proportional
Limited slip	Option	Option
Axle ratings	kg	kg
Static load rating	25000	25000
Dynamic load rating	12500	12500

STEERING

Model	3CX ECO, 3CX PLUS, 3CX PRO	5CX PRO
Axles	Steer drive	Steer drive
Steering turns - lock to lock	2¾	2¾
	m	m
Kerb – kerb turning circle - unbraked	8.1	9.1
Loader clearance circle - unbraked	10.4	10.7
Kerb – kerb turning circle - braked	6.9	8.0
Loader clearance circle - braked	9.5	9.5

(Depending on tyre size, ground conditions etc.)

STEERING

Model	3CX ECO, 3CX PLUS, 3CX PRO	5CX PRO
2WS	✓	✓
AWS	-	✓
Crab steer	-	✓

SERVICE CAPACITIES

Model	3CX ECO, 3CX PLUS, 3CX PRO	5CX PRO
Cooling system	ltr 18.5	18.5
Fuel tank	ltr 150	150
Engine oil with filter	ltr 15	15
Gearbox with filter	ltr 16	16
Rear axle	ltr 16	16
Front drive axle	ltr 16	16
Hydraulic system incl. tank	ltr 117	117

HYDRAULIC SYSTEM

Piston pump flow @ 2200rpm	l/min	154lpm 3cx ECO Gear Pump 165lpm 3CX PLUS/PRO/5CX
System relief pressure	bar	25 l
Loader auxiliary flow	l/min	140
Smooth Ride System SRS standard (Optional on 3CX ECO)		

OPTIONAL ACCESSORIES

Tyres - Michelin/Sitemaster brand of tyres with a selection of traction/industrial tread in a crossply/radial construction.**Hydraulics** - Hammer pipework, Bi-directional pipework, Hand-held tool circuit, 9m hose reel, Excavator lifting kits for EN474 and non-EN474.**Machine features** - JCB Power Slide Side Shift (Standard on PLUS/PRO models)**Machine and site protection** - Fuel tank guards, Stabiliser street pads, Lubricity filter, Biodegradable oil.**Attachments** - Standard excavator buckets (300mm to 900mm), Deep profile excavator bucket (300mm to 940mm), Ditching buckets (1542mm to 1828.8mm), General purpose 6-in-1 front shovel (1 m³ to 1.3m³), Manual/hydraulic front quickhitch, Manual/hydraulic rear quickhitch, Hand-held tool circuit.**Safety and security** - Reverse alarm.

CAB CONFIGURATION

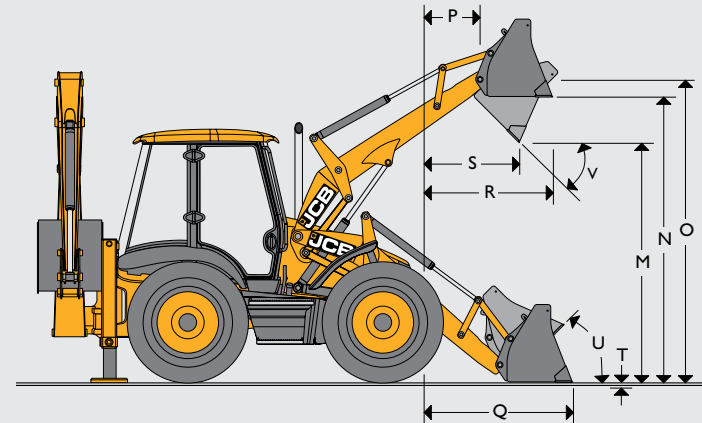
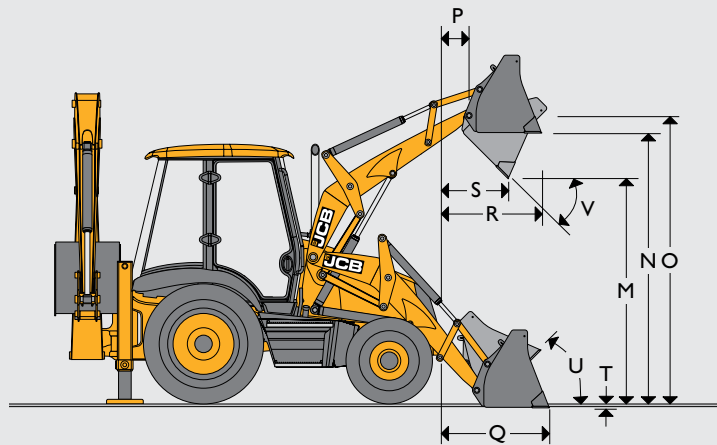
Seat and comfort	Miscellaneous
Mechanical suspension seat	● Exterior mirrors
Air suspension seat (Standard on PLUS/PRO models)	○ Interior rear view mirror
Seat head rest (Standard on PLUS/PRO models)	○ Front windscreen heater
Arm rest (Standard on PLUS/PRO models)	● 10 LED working lights (Standard on PLUS/PRO models)
Seat belt	● Reverse alarm
Heater	● LED roof beacons (Standard on PLUS/PRO models)
Air conditioning (3CX PRO, 5CX PRO)	● Controls
Air conditioning (3CX ECO, 3CX PLUS)	○ ISO/SAE changeover (Servo controls)
Doors and windows	Security
Tinted glass	● Instrumental panel vandal guard
Front windscreen wiper	● Fire extinguisher
Rear windscreen wiper	● Immobiliser (standard in UK and on 3CX PLUS)
Rear one piece opening window	● Livelink (region specific)
Door ajar stays	● Rear light guards
Steering column	● Front bumper protection
Tilted steering column (Not Available on 3CX ECO)	● End boom damping
Steering wheel knob	● Storage
Telescopic steering column	○ Side storage & roof storage (lockable)
Yellow cab grab handles	● Radio
Automatic cab interior light	● (Bluetooth, USB aux, SD) & speakers, integrated hands free phone system (Standard on PLUS/PRO models)

● Standard ○ Option

NOISE AND VIBRATION LEVELS

Internal dB(A)	74dB(A) - (55)	75dB(A) - (81kW engine)
External dB(A)	102	
Vibration	Hand arm vibration 2.5m/s ² - Whole body vibration 0.5m/s ²	

LOADER DIMENSIONS



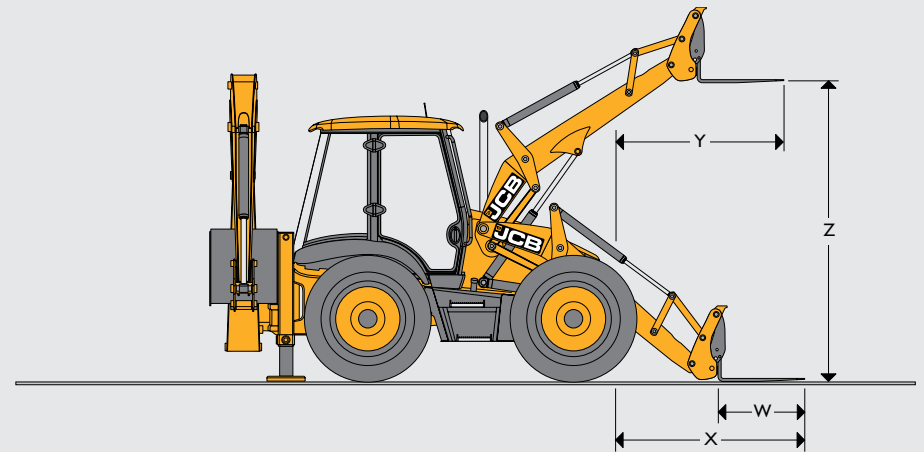
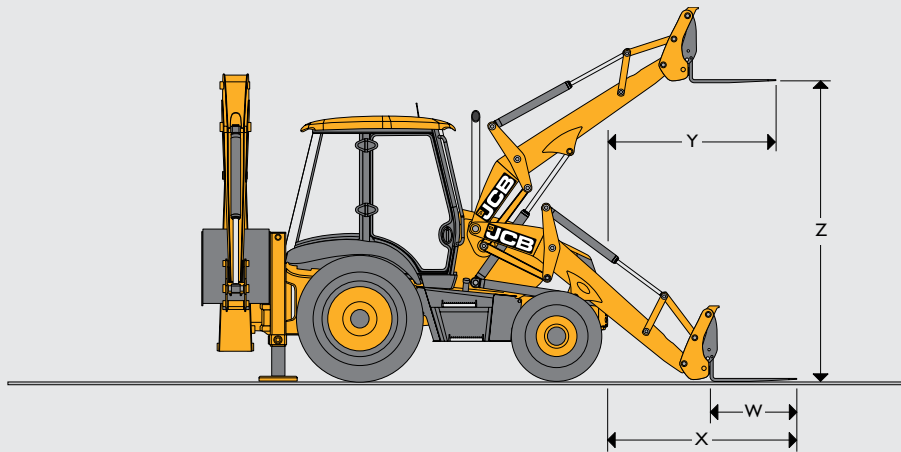
Model		3CX ECO, 3CX PLUS, 3CX PRO		5CX PRO	
		GP shovel	6-in-I shovel	6-in-I shovel	
M	Dump height	m	2.74	2.72	2.69
N	Load over height	m	3.23	3.20	3.18
O	Loader hinge pin height	m	3.45	3.45	3.46
P	Pin forward reach	m	0.36	0.36	0.41
Q	Reach at ground (toe plate horizontal)	m	1.42	1.37	1.39
R	Max. reach at full height	m	1.20	1.15	1.17
S	Reach at full height fully dumped	m	0.83	0.78	0.76
T	Dig depth	m	0.07	0.10	0.18
U	Roll back at ground	degrees	45°	45°	45°
V	Dump angle	degrees	43°	43°	45°
	Jaw opening width	m	-	0.95	0.95

LOADER PERFORMANCE

Model		3CX ECO, 3CX PLUS, 3CX PRO		3CX PRO	5CX PRO
		GP shovel	6-in-I shovel	6-in-I shovel	6-in-I shovel
	Loader breakout – shovel	kgf	6170	6531	6590
	Loader breakout – arms	kgf	4942	4732	5730
	Rated operating capacity 7'4"*	kgf	3479	3229	4378
	Rated operating capacity 7'8"*	kgf	3439	3169	-
	Rated operating capacity	kg	-	-	-
	Clamping force	kgf	-	2940	2945

*Rated operating capacity as determined according to ISO 14397: 2007

LOADER ATTACHMENTS – Forklift Performance Data

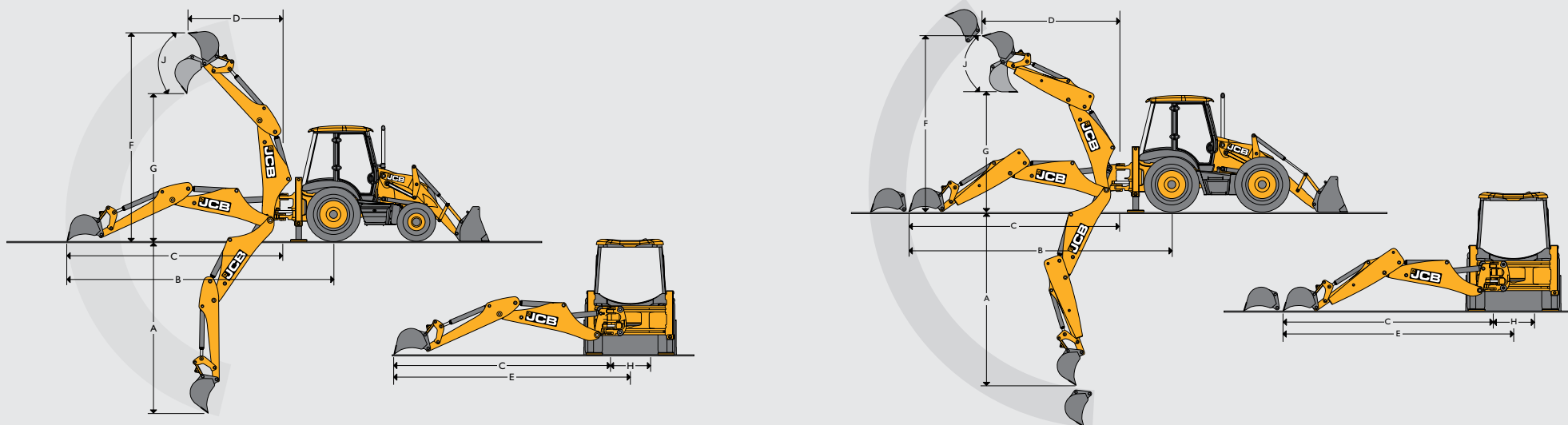


Model		3CX ECO, 3CX PLUS, 3CX PRO		5CX PRO	
		6-in-1 shovel mounted forks	Quickhitch mounted forks	6-in-1 shovel mounted forks	Quickhitch mounted forks
W	Forks – tine length	m	1.1	1.1	1.1
	Forks – tine width	m	0.08	0.08	0.08
X	Forks reach at ground level	m	2.66	2.03	2.68
Y	Forks reach at full height	m	2.25	1.72	2.30
Z	Forks lift height – max	m	2.92	3.27	2.90
	Fork spacing – min	m	0.2	0.2	0.2
	Fork spacing – max	m	2.17	1.03	2.17
	SWL @ 500mm load centres	kg	1000	2000	1000

LOADER ATTACHMENTS – Direct Mount

Width mm (ft-in)	Capacity SAE			
	G.P. Shovel		6 in 1	
	Rated m ³	Struck	Rated m ³	Struck
2235 (7-4)	1.0	0.83	1.0	0.76
2350 (7-8)	1.1	0.91	1.2	1.02
2350 (7-8) 4CX PLUS	1.3	1.19	1.2	1.02
2440 (8-0) 4CX PRO, 5CX PRO	-	-	1.3	1.19

BACKHOE DIMENSIONS



Model				3CX ECO	3CX ECO, 3CX PLUS 3CX PRO	5CX PRO
				Standard Dipper	Extradig	Extradig
A	SAE max dig depth	m	Ext	–	5.46	6.14
			Ret	4.24	4.24	4.98
	SAE 2ft flat bottom	m	Ext	–	5.43	6.11
			Ret	4.21	4.21	4.93
	Maximum dig depth with deep profile bucket	m	Ext	–	5.97	6.51
			Ret	4.75	4.75	5.35
B	Reach – ground level to rear wheel centre	m	Ext	–	7.87	8.44
			Ret	6.72	6.72	7.35
C	Reach – ground level to slew centre	m	Ext	–	6.52	7.10
			Ret	5.37	5.37	6.01
D	Reach – at full height to slew centret	m	Ext	–	3.66	4.47
			Ret	2.74	2.74	3.43
E	Side reach – to centre line of machine	m	Ext	–	7.09	7.71
			Ret	5.94	5.94	6.69
F	SAE operating height	m	Ext	–	6.35	6.52
			Ret	5.53	5.53	5.89
G	Maximum loadover height	m	Ext	–	4.72	5.03
			Ret	3.84	3.84	4.06
	SAE loadover height	m	Ext	–	4.32	4.55
			Ret	3.4	3.4	3.58
H	Total kingpost travel	m		1.16	1.16	1.16
			Narrow rear frame option	m	1.05	1.05
J	Bucket rotation		Speed	201°	201°	201°

BACKHOE PERFORMANCE

Model			3CX ECO, 3CX PLUS, 3CX PRO		3CX PRO	5CX PRO
			Standard Dipper	Extradig	Extradig	Extradig
Bucket tearout	kgf	Speed	5431	5385	5385	5387
		Power	6324	6228	6228	6230
Dipper tearout	kgf	Ext	–	2255	2255/ 2729*	2675
		Ret	3217	3225	3225/ 3903*	3722
Lift capacity of bucket pivot at full reach	kg	Ext	–	719	719/ 1082*	1199
		Ret	1584	1451	1451/ 1885*	1556

* Heavy lift excavator

BACKHOE ATTACHMENTS – Standard Profile Bucket

Model		3CX ECO, 3CX PLUS, 3CX PRO, 5CX PRO			
Width*		Capacity SAE		Weight (+ Teeth)	
mm	Rated m ³	Rated m ³	kg	Teeth	
229	0.04	0.03	95	0	
305 †	0.06	0.05	102	3	
356 †	0.075	0.06	105	3	
400 †	0.09	0.07	109	3	
457 †	0.12	0.09	116	3	
610 †	0.17	0.13	140	4	
800 †	0.24	0.17	162	5	
950 †	0.30	0.21	198	5	

* Including sidecutters. Width less sidecutters deduct 25mm.

† Available with additional wear strips to give added strength and rigidity.

DITCHING BUCKETS

Model		3CX ECO, 3CX PLUS, 3CX PRO			5CX PRO		
Width*		Capacity SAE		Weight	Capacity SAE		Weight
mm	Rated m ³	Struck m ³	kg	Rated m ³	Struck m ³	kg	
1525	0.22	0.155	150	0.22	0.16	150	
1830	0.26	0.186	172	0.26	0.19	172	

TAPERED BUCKETS – 3CX All models

Width*		Capacity SAE		Angle degrees		Teeth	
mm	Rated m ³	Struck m ³	Angle degrees		Teeth		
381–1676	0.07	0.06	30		2		
305–1067	0.12	0.10	60		2		

BACKHOE ATTACHMENTS – Standard Profile Bucket

Model		3CX ECO, 3CX PLUS, 3CX PRO				5CX PRO				
Width*		Capacity SAE		Weight (+ Teeth)		Capacity SAE		Weight (+ Teeth)		
mm	Rated m ³	Struck m ³	kg	Teeth		Rated m ³	Struck m ³	kg	Teeth	
305	0.09	0.07	102	3		0.09	0.07	102	3	
356	0.11	0.09	117	3		0.11	0.09	117	1	
457	0.16	0.13	122	3		0.16	0.13	122	3	
610	0.23	0.18	142	4		0.23	0.18	142	4	
800	0.30	0.24	163	5		0.30	0.24	163	5	
950	0.38 †	0.30	183	5		0.38	0.30	183	5	
1100	0.48 †	0.34	203	6		0.48	0.34	203	6	

* Including sidecutters. Width less sidecutters deduct 25mm (1in).

† Capacity in cu.yd.

ONE COMPANY, OVER 300 MACHINES.

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