

DEVELON

Crawler Excavator

DX140LC-7K



Engine

Make	DEVELON
Model	G2 DM03
Number of cylinders	4
Rated power, gross (hp per SAE J1995)	115.3 hp (86 kW) @ 2000 rpm
Rated power, net (hp per SAE J1349)	100.6 hp (75 kW) @ 2000 rpm
Max. torque, net (SAE J1995)	340 lb.-ft. (460 Nm) @ 1400 rpm
Displacement	208 in. ³ (3.4 L)
Bore and stroke	3.9 in. x 4.4 in. (98 mm x 113 mm)
Starter	24 V, 6.7 hp (5.0 kW)
Battery	2 x 12 V, 100 AH
Alternator	24 V, 100 amp
Air cleaner	Two-stage

Hydraulics

Main pumps	2 x 30 gpm (2 x 114 L/min.)
Pilot pump (gear design)	8 gpm (30 L/min.)

Working Pressure

Boom/arm/bucket (normal mode)	4786 psi (336 kg/cm ²)
Boom/arm/bucket (power boost)	5076 psi (356 kg/cm ²)
Travel	5076 psi (356 kg/cm ²)
Swing	3916 psi (275 kg/cm ²)
Pilot	566 psi (40 kg/cm ²)

Undercarriage

Upper rollers (each track)	1
Lower rollers (each track)	7
Number of shoes (links per side)	46

Swing Mechanism

Swing speed	0 – 10 rpm
Swing torque	35355 lb.-ft. (4888 kgf-m)

Drive System

Travel speed (low – high)	1.8 – 2.9 mph (2.9 – 4.7 km/h)
Traction force, max. (drawbar pull)	30400 lb.-ft. (13789 kgf-m)
Max. grade (limited by engine lub)	70% (35°)

Environment

Sound level (2000/14/EC)	100 dB(A)
Cabin sound level (ISO 6396)	69 dB(A)

Refill Capacities

Fuel tank	70 gal. (265 L)
DEF tank	6.6 gal. (25 L)
Cooling system (radiator capacity)	6.7 gal. (25.5 L)
Engine oil (with filler)	3.3 gal. (12.6 L)
Swing drive	0.8 gal. (3 L)
Final drive (each side)	0.5 gal. (2 L)
Hydraulic system	38 gal. (145 L)
Hydraulic tank	25.6 gal. (97 L)

Hydraulic Cylinders

Boom ¹ (2) bore x rod diameter x stroke	4.3 in. x 3.0 in. x 42.7 in. (110 mm x 75 mm x 1085 mm)
Arm ^{1,2} (1) bore x rod diameter x stroke	4.5 in. x 3.1 in. x 43.6 in. (115 mm x 80 mm x 1108 mm)
Bucket (STD) ¹ (1) bore x rod diameter x stroke	3.9 in. x 2.8 in. x 35.4 in. (100 mm x 70 mm x 900 mm)

¹ Cushion on rod end

² Cushion on base end

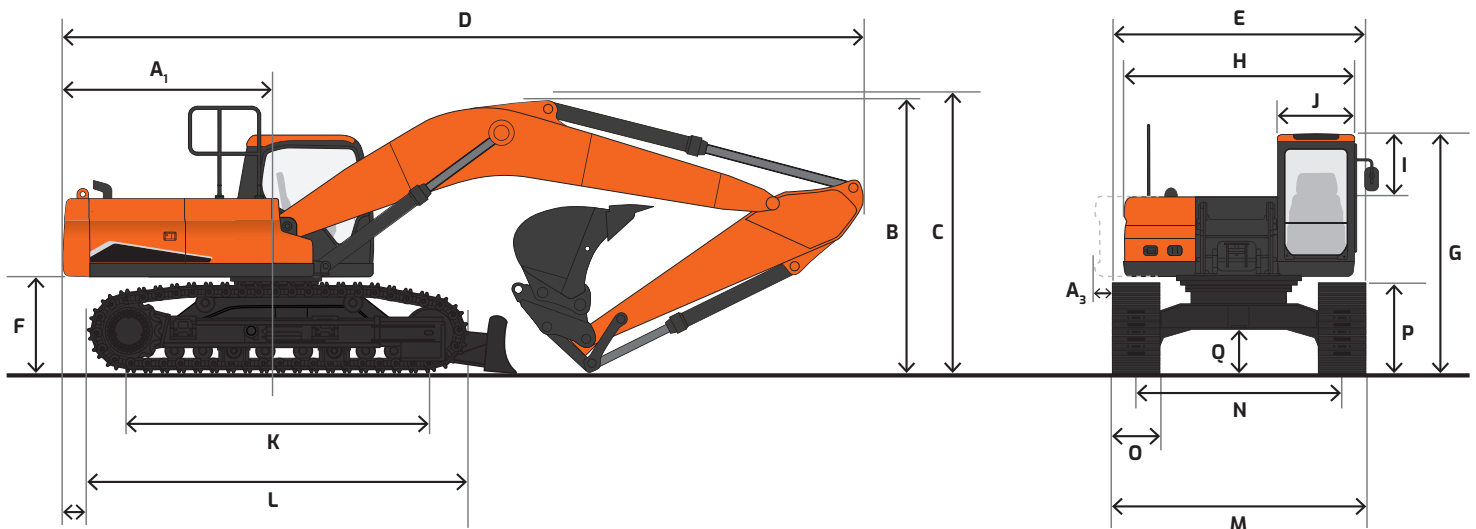
The piston rods and cylinder bodies are made of high-strength steel. A shock-absorbing mechanism is fitted in all cylinders to ensure shock-free operation and extended piston life.

NOTE: Where applicable, dimensions are in accordance with Society of Automotive Engineers (SAE) and ISO standards. Specifications and design are subject to change without notice. All dimensions are given for DEVELON excavators equipped with standard tracks and the standard front as listed. Pictures of DEVELON excavators may show other than standard equipment. All dimensions are shown in inches. Respective metric dimensions are enclosed by parentheses. Rounding may impact specifications. DEVELON equipment is manufactured with a Quality Management System that is in compliance with ISO 9001:2008.

Dimensions

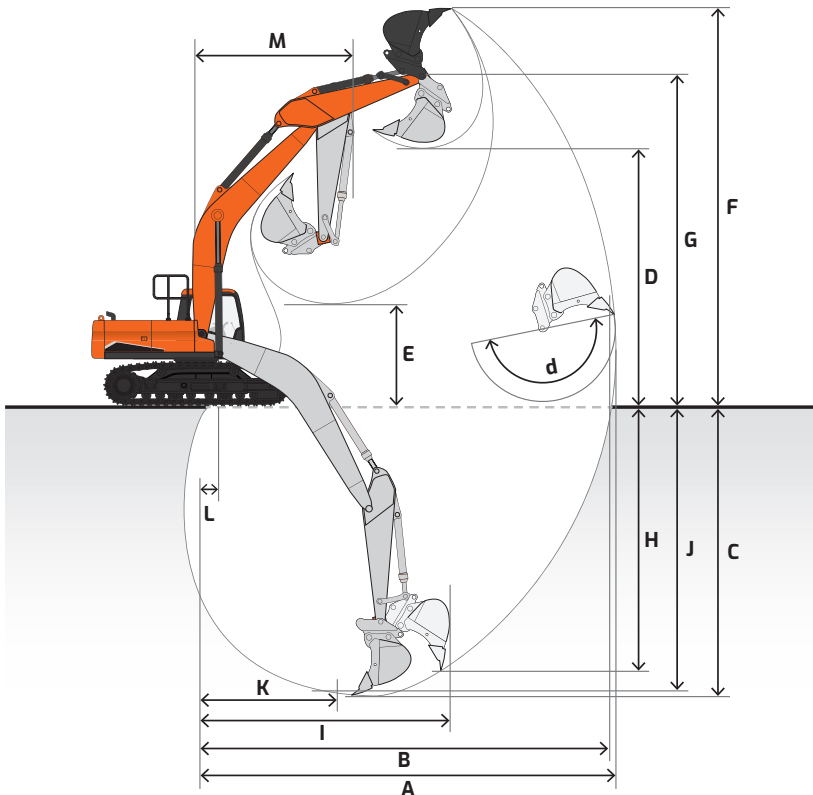
		Standard Arm 24" (600 mm) TG Shoe (US20)	Standard Arm & Dozer Blade 24" (600 mm) TG Shoe (US40)
Boom length		15' 1" (4600 mm)	
Arm length		9' 10" (3000 mm)	
Bucket type (SAE)		0.51 yd ³ (0.39 m ³)	
Track type		Fixed	
Tail swing radius	A ₁	7' 4" (2246 mm)	
Tail swing overhang (rear)	A ₂	1' 3" (369 mm)	
Tail swing overhang (side)	A ₃	3' 1" (951 mm)	
Shipping height (boom)*	B	10' 1" (3065 mm)	
Shipping height (hose)*	C	10' 5" (3180 mm)	
Shipping length	D	25' 2" (7680 mm)	
Shipping width	E	8' 5" (2590 mm)	
Counterweight clearance*	F	2' 10" (868 mm)	
Cabin height*	G	9' 2" (2819 mm)	
Upper structure width	H	8' 4" (2540 mm)	
Cabin height above house*	I	2' 8" (816 mm)	
Cabin width	J	3' 4" (1026 mm)	
Tumbler distance	K	9' 11" (3034 mm)	
Overall track length	L	12' 4" (3754 mm)	
Undercarriage width	M	8' 6" (2590 mm)	
Track gauge	N	6' 6" (1990 mm)	
Track shoe width	O	24" (600 mm)	
Track height*	P	2' 5" (743 mm)	
Car body clearance*	Q	1' 3" (382 mm)	

*Without shoe grouser



Working Range

		Standard Arm 24" (600 mm) TG Shoe (US20)	Standard Arm & Dozer Blade 24" (600 mm) TG Shoe (US40)
Boom length		15' 1" (4600 mm)	
Arm length		9' 10" (3000 mm)	
Bucket type (SAE, PCSA)		0.51 yd ³ (0.39 m ³)	
Track type		Fixed	
Max. digging reach	A	28' 5" (8665 mm)	
Max. digging reach (ground)	B	27' 11" (8530 mm)	
Max. digging depth	C	19' 7" (5985 mm)	
Max. loading height	D	21' 1" (6440 mm)	
Min. loading height	E	6' 11" (2120 mm)	
Max. digging height	F	28' 8" (8745 mm)	
Max. bucket pin height	G	27' 2" (8300 mm)	
Max. vertical wall depth	H	15' 4" (4680 mm)	
Max. radius vertical	I	19' 7" (5970 mm)	
Max. depth to 8' line	J	18' 10" (5765 mm)	
Min. radius to 8' line	K	6' 8" (2040 mm)	
Min. digging reach	L	-5" (-130 mm)	
Min. swing radius	M	7' 7" (2320 mm)	
Bucket angle (DEG)	d	174°	
Digging force, bucket (PCSA)	ISO	24471 lbf. (11100 kgf)	
Digging force, arm		13228 lbf. (6000 kgf)	
Operating weight		32408 lb. (14700 kg)	34540 lb. (15700 kg)
Ground pressure		7.25 psi (0.51 kg/cm ²)	



Bucket

	Standard Arm (US20)		Standard Arm & Dozer Blade (US40)	
Boom	15' 1" (4600 mm)			
Arm	9' 10" (3000 mm)			
Shoe size	24" (600 mm)			
Track type	Fixed		Fixed with dozer	
Mount	Pin-on	Quick-coupler	Pin-on	Quick-coupler
Counterweight	4840 lb. (2200 kg)			

Bucket Type	Model	Capacity* yd ³ (m ³)	Width in. (mm)	Weight lb. (kg)				
Heavy-duty	HD14-024	0.44 (0.34)	24 (610)	901 (409)	A	A	A	A
	HD14-030	0.59 (0.45)	30 (762)	1001 (454)	A	B	A	B
	HD14-036	0.75 (0.57)	36 (914)	1129 (512)	B	B	B	C
	HD14-042	0.91 (0.70)	42 (1067)	1222 (554)	C	X	C	X
	HD14-048	1.06 (0.81)	48 (1219)	1338 (607)	X	X	X	X
Severe-duty	SD14-024	0.44 (0.34)	24 (610)	931 (422)	A	A	A	A
	SD14-030	0.59 (0.45)	30 (762)	1035 (469)	A	B	A	B
	SD14-036	0.75 (0.57)	36 (914)	1154 (523)	B	C	C	X
	SD14-042	0.91 (0.70)	42 (1067)	1248 (566)	C	X	C	X
	SD14-048	1.06 (0.81)	48 (1219)	1367 (620)	X	X	X	X
Ditching	DC140-048	0.63 (0.48)	48 (1219)	820 (372)	A	B	A	B
	DC140-060	0.80 (0.61)	60 (1524)	985 (447)	B	C	B	C
	HDC140-060	1.38 (1.06)	60 (1524)	1620 (735)	X	X	X	X

*Capacity based on ISO 7451 and heaped with a 1:1 angle of repose

- Equipped with bolt-on wear shrouds
- Equipped with bolt-on teeth
- Equipped with bolt-on cutting edge
- These recommendations are given as a guide only and based on typical operating conditions.

Maximum Suitable Material Density

- A 3370 lb./yd³ (2000 kg/m³)
- B 2700 lb./yd³ (1600 kg/m³)
- C 1850 lb./yd³ (1100 kg/m³)
- X Not Approved

Please consult with your DEVELON dealer to properly match buckets and attachments for the application.

Features

- Optional air-suspension seat with heating and cooling



- Standard large tablet-like display
- Advanced split cooling system
- Standard DEVELON Fleet Management











- Standard rearview camera

Lifting Capacity

 Rating over front  Rating over side or 360°











DX140LC-7K US40

Boom: 15' 1" (4600 mm) | Arm: 8' 2" (2500 mm) | Counterweight: 4840 lb. (2200 kg) | 24" (600 mm) TG Shoes | No Dozer | Bucket: None | Unit: lb. (kg)

B (ft. or m) A (ft. or m)	5' (1.5 m)		10' (3.0 m)		15' (4.5 m)		20' (6.0 m)		Max. Reach		
											A
25' (7.5 m)									* 5920 (* 2691)	* 5920 (* 2691)	11.92' (3.63 m)
20' (6.0 m)					* 8010 (* 3641)	* 8010 (* 3641)			* 4760 (* 2164)	* 4760 (* 2164)	17.77' (5.42 m)
15' (4.5 m)					* 8640 (* 3927)	* 8640 (* 3927)	* 7020 (* 3191)	5550 (2523)	* 4400 (* 2000)	* 4400 (* 2000)	20.96' (6.39 m)
10' (3.0 m)			* 14630 (* 6650)	* 14630 (* 6650)	* 10860 (* 4936)	8380 (4055)	8150 (3705)	5410 (2459)	* 4390 (* 1995)	4310 (* 1959)	22.66' (6.91 m)
5' (1.5 m)			* 18370 (* 8350)	14170 (6441)	12340 (* 5609)	7840 (3564)	7910 (3595)	5190 (2359)	* 4630 (* 2104)	4060 (1845)	23.18' (7.07 m)
Ground Level			* 15800 (* 7182)	13530 (6150)	11910 (5414)	7470 (3395)	7720 (3509)	5010 (2277)	* 5200 (* 2364)	4130 (1877)	22.62' (6.89 m)
-5' (-1.5 m)	* 11910 (* 5414)	* 11910 (* 5414)	* 22820 (* 10373)	13480 (6127)	11760 (5345)	7340 (3336)	7660 (3482)	4960 (2255)	* 6360 (* 2891)	4600 (2091)	20.89' (6.37 m)
-10' (-3.0 m)	* 20290 (* 9223)	* 20290 (* 9223)	* 21630 (* 9832)	13720 (6236)	11880 (5400)	7450 (3386)			9140 (4155)	5890 (2677)	17.62' (5.37 m)

DX140LC-7K US40

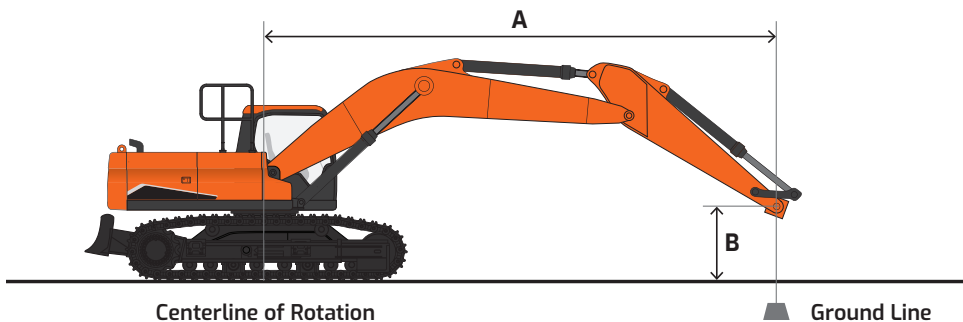
Boom: 15' 1" (4600 mm) | Arm: 8' 2" (2500 mm) | Counterweight: 4840 lb. (2200 kg) | 24" (600 mm) TG Shoes | Dozer Up | Bucket: None | Unit: lb. (kg)

B (ft. or m) A (ft. or m)	5' (1.5 m)		10' (3.0 m)		15' (4.5 m)		20' (6.0 m)		Max. Reach		
											A
25' (7.5 m)									* 6050 (* 2750)	* 6050 (* 2750)	11.84' (3.61 m)
20' (6.0 m)					* 8010 (* 3641)	* 8010 (* 3641)			* 4760 (* 2164)	* 4760 (* 2164)	17.77' (5.42 m)
15' (4.5 m)					* 8640 (* 3927)	* 8640 (* 3927)	* 7020 (* 3191)	5930 (2695)	* 4400 (* 2000)	* 4400 (* 2000)	20.96' (6.39 m)
10' (3.0 m)			* 14630 (* 6650)	* 14630 (* 6650)	* 10860 (* 4936)	8920 (4055)	8130 (3695)	5780 (2627)	* 4390 (* 1995)	* 4390 (* 1995)	22.66' (6.91 m)
5' (1.5 m)			* 18370 (* 8350)	15130 (6877)	12300 (* 5891)	8380 (3809)	7890 (3586)	5560 (2527)	* 4630 (* 2104)	4370 (1986)	23.18' (7.07 m)
Ground Level			* 15800 (* 7182)	14490 (6586)	11870 (5395)	8010 (3641)	7700 (3500)	5390 (2450)	* 5200 (* 2364)	4450 (2023)	22.62' (6.89 m)
-5' (-1.5 m)	* 11910 (* 5414)	* 11910 (* 5414)	* 22820 (* 10373)	14440 (6563)	11720 (5327)	7880 (3581)	7640 (3473)	5340 (2427)	* 6360 (* 2891)	4950 (2250)	20.89' (6.37 m)
-10' (-3.0 m)	* 20290 (* 9223)	* 20290 (* 9223)	* 21630 (* 9832)	14680 (6673)	11850 (5386)	7990 (3632)			9110 (4141)	6320 (2873)	17.62' (5.37 m)

A Distance from center of rotation

B Height

NOTE: Lifting capacities are in compliance with SAE 1097 and ISO 10567. Machine in lifting mode with power boost turned on. Load point is the end of the arm. Rated loads shown do not exceed 75% of minimum tipping loads or 87% of hydraulic capacities. Rated loads marked with an asterisk (*) are limited by hydraulic capacities. The least stable position is over the side. The total mass of machine includes the mass of the boom, arm, counterweight, all operating fluids and 165 lb. (75 kg) operator.













Lifting Capacity

 Rating over front  Rating over side or 360°

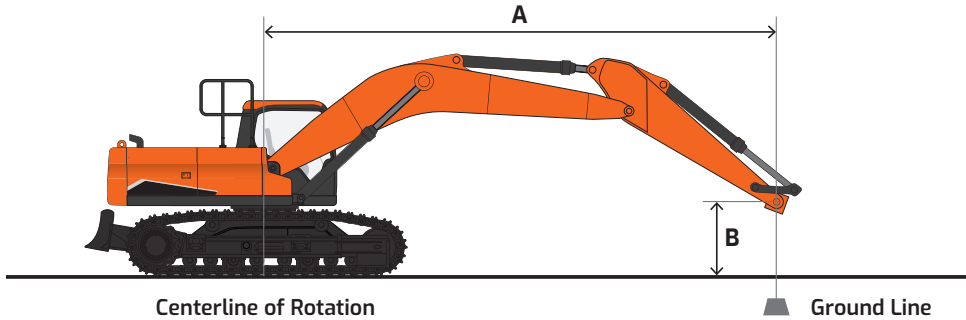
DX140LC-7K US40

Boom: 15' 1" (4600 mm) | Arm: 8' 2" (2500 mm) | Counterweight: 4840 lb. (2200 kg) | 24" (600 mm) TG Shoes | No Dozer | Bucket: None | Unit: lb. (kg)

B (ft. or m)	5' (1.5 m)		10' (3.0 m)		15' (4.5 m)		20' (6.0 m)		Max. Reach		
											A
25' (7.5 m)									* 6050 (* 2750)	* 6050 (* 2750)	11.84' (3.61 m)
20' (6.0 m)					* 8010 (* 3641)	* 8010 (* 3641)			* 4760 (* 2164)	* 4760 (* 2164)	17.77' (5.42 m)
15' (4.5 m)					* 8640 (* 3927)	* 8640 (* 3927)	* 7020 (* 3191)	* 7020 (* 3191)	* 4400 (* 2000)	* 4400 (* 2000)	20.96' (6.39 m)
10' (3.0 m)			* 14630 (* 6650)	* 14630 (* 6650)	* 10860 (* 4936)	* 10860 (* 4936)	* 9500 (* 4318)	7260 (3300)	* 4390 (* 1995)	* 4390 (* 1995)	22.66' (6.91 m)
5' (1.5 m)			* 18370 (* 8350)	* 18370 (* 8350)	* 13620 (* 6191)	10730 (4877)	* 10680 (* 4855)	7030 (3195)	* 4630 (* 2104)	* 4630 (* 2104)	23.18' (7.07 m)
Ground Level			* 15800 (* 7182)	* 15800 (* 7182)	* 15600 (* 7091)	10330 (4695)	* 11630 (* 5286)	6840 (3109)	* 5200 (* 2364)	* 5200 (* 2364)	22.62' (6.89 m)
-5' (-1.5 m)	* 11910 (* 5414)	* 11910 (* 5414)	* 22820 (* 10373)	19660 (8936)	* 16090 (* 7314)	10190 (4632)	* 11690 (* 5314)	6790 (3086)	* 6360 (* 2891)	6280 (2854)	20.89' (6.37 m)
-10' (-3.0 m)	* 20290 (* 9223)	* 20290 (* 9223)	* 21630 (* 9832)	19940 (9064)	* 14540 (* 6609)	10310 (4686)			* 9250 (* 4205)	8050 (3659)	17.62' (5.37 m)

A Distance from center of rotation
B Height

NOTE: Lifting capacities are in compliance with SAE 1097 and ISO 10567. Machine in lifting mode with power boost turned on. Load point is the end of the arm. Rated loads shown do not exceed 75% of minimum tipping loads or 87% of hydraulic capacities. Rated loads marked with an asterisk (*) are limited by hydraulic capacities. The least stable position is over the side. The total mass of machine includes the mass of the boom, arm, counterweight, all operating fluids and 165 lb. (75 kg) operator.



Standard & Optional Equipment

■ Standard ● Optional

Engine

Emissions	T4f
High-pressure common-rail (HPCR)	■
Turbo, waste gate (WGT)	■
Diesel oxidation catalyst (DOC)	■
Selective catalyst reduction (SCR)	■
Diesel exhaust fluid (DEF)	■
Fuel filter with water separator	■
Coolant expansion tank	■
Dual element dry-type air filter with evacuator	■
Precleaner	■
Electronic engine control (ECU)	■
Auto idle	■
Auto shutdown (time-adjustable)	■
Overheat & low oil pressure engine protection	■
Block heater (110 V)	●
Water separator with heater	●
Fuel filler pump	●

Hydraulic

Mechanics design	■
Variable axial piston main pump (tandem)	■
Cross-sensing pump control	■
Pilot-operated control valves	■
Gear pilot pump	■
Smart Power Control (SPC)	■
Variable-speed hydraulic cooling fan	■
Axial piston swing motor	■
Spring-applied hydraulic release brake, swing motor	■
Axial piston travel motor (high/low, auto)	■
Auxiliary hydraulics, one- & two-way piping	■
Auxiliary hydraulics, tilt/rotate piping	●
Adjustable auxiliary flow & pressure, 10 presets	■
Intelligent floating boom	●
Breaker filter	●
Boom & arm lock valves	●
Clamshell piping	●
Straight travel	●

Controls

Joystick controls	■
Pattern control change valve (SAE, ISO)	■
Joystick attachment control	■
Switches/buttons	■
- Right (one-way, two-way, power boost)	
- Left (tilt/rotate, horn, one-touch decel)	
Foot pedal attachment control	■
Control stands	■
- Height adjustable	
- Sliding (fore/aft)	
- Tilting armrests	
Engine speed control dial	■
Travel pedals with hand levers	■
Straight travel pedal	●
Switches, console-mounted	■
- Starter button switch	
- Travel speed selector	
- Work light	
- Auxiliary mode switch	
Emergency stop switch	■
Power modes (P+, P, S, E)	■
Work modes (digging, lifting, breaker, shear)	■
Smart Power Control (SPC)	■
Jog dial display control	■
Wiper control panel	■
Audio control panel	■

Cabin

Steel, all-weather & sound-suppressed	■
ROPS (ISO 12117-2:2008)	■
Viscous mount with spring reinforcement	■
Front window with wiper/washer	■
Tinted safety glass	■
Skylight top hatch with sun screen	■
Front window with sun screen	■
Pull-up type top front window	■
Removable lower front window with storage behind seat	■
Adjustable sliding side door window	■
Defrost, front window	■
Lockable doors	■
Seat	
- Heated	
- Air-suspension	
- 2" (51 mm) seat belt	■
- Adjustable height & recline	
- Adjustable fore/aft	
- Adjustable armrests	
Leatherette seat	
- Heating & cooling	
- Air-suspension	
- 2" (51 mm) seat belt	●
- Adjustable height & recline	
- Adjustable fore/aft	
- Adjustable armrests	
3" (76 mm) seat belt	●
Control stands	■
- Height adjustable	
- Mounted to seat base	
Storage for operator's manuals	■
Mirrors	■
Fully automatic HVAC with ambient temperature sensor	■
8" multi-function LCD interactive display monitor	■
Cigarette lighter	■
Digital audio broadcasting stereo	■
Speakers (2)	■
Antenna, roof-mounted	■
Emergency breakout tool	■
Hot/cold beverage compartment	■
Power socket, 12 V & 24 V	■
Cup holder	■
Interior light	■
Coat hanger	■
Rain shield	●
Fog guard	●
Front window guard	●
System voltage – 24 V	■
Alternator – 24 V, 80 amp	■
2 x 12 V batteries, 100 AH reserve capacity, 900 CCA	■
Blade-type fuse panel	■
Main circuit breaker	■
Light, work (LED): machine (2), boom (2)	■
Light, work (LED): 6 cab top, front (4), rear (2)	●
Light, work (LED): 4 cab top, front (2), rear (2)	●
Rotating beacon	●
Overload warning alarm	●
Hour meter	■
Engine restart prevention system	■
Side view & rearview camera with LED lamps (3)	■
360° all-around view camera	●
Microphone & speaker	●
Ultrasonic sensor	●
Laptop service port	■
Self-diagnostics system	■
Smart Key (remote ignition key)	■
DEVELON Fleet Management	■

Display Monitor & Warnings

Indicators	
- Work modes (P+, P, S, E)	■
- User/Service menu	
Gauges	
- Fuel level	
- DEF level	
- Engine coolant temperature	
- Hydraulic oil temperature	
- Engine rpm	
- Battery voltage	■
- Hydraulic pump pressure	
- ECO	
- Digital clock	
- Trip meter	
- Hour meter	
- Fuel consumption	
Warning & indicator lights	
- Seat belt	
- Error code	
- SCR warning	
- Check engine	
- Engine oil pressure	
- Engine pre-heat engaged	
- Radiator coolant level & temperature	
- Air filter	■
- Fuel level	
- DEF level – low	
- Water in fuel	
- Battery charge	
- Work lights on	
- Hydraulic oil temperature	
- Hydraulic charge pressure	
- Hydraulic pilot filter	
- Hydraulic return filter	
Swing alarm	■
Travel alarm	■
Buzzer	
- Engine oil pressure	■
- Coolant temperature	

Undercarriage

Track guards & chains with adjusters	■
Track rollers, upper	1
Track rollers, lower	7
In-shoe motor protection	■
Shoes, triple grouser – 500 mm, rubber shoe (road liner)	●
Shoes, triple grouser – 500 mm	●
Shoes, triple grouser – 600 mm	■
Shoes, triple grouser – 700 mm	●
Dozer blade, front	●

Other

Centralized lubrication	
- Boom	■
- Swing	
Handrails & service platforms	■
Skid-resistant steps & service platforms	■
Manuals	
- Operation & Maintenance	■
- Parts	
- AEM Safety Manual	
DEVELON Fleet Management 3-year subscription	■
Vandalism protection	
- Lockable panels	
- Lockable fluid fill points	●
- Anti-theft protection (password)	
- Vandalism window cover mount	
Air compressor	●

Certain specification(s) are based on engineering calculations and are not actual measurements. Specification(s) are provided for comparison purposes only and are subject to change without notice. Specification(s) for your individual DEVELON equipment will vary based on normal variations in design, manufacturing, operating conditions, and other factors. Pictures of DEVELON units may show other than standard equipment.

Powered by Innovation

DEVELON

A brand of HD Hyundai Infracore.

na.develon-ce.com/dx140lc-7k

DX140LC-7K Crawler Excavator Spec Sheet
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