

> We are DEVELON

We trace our roots to 1937 as one of Korea's first large scale machine plant. Throughout time we have consistently delivered exceptional products and solutions.

DEVELON is a bold name that reflects our core ambition to continue developing onwards and leaving behind a positive footprint in our world. Moving forward, we seek to be part of our customers and partners' endeavor to build a better world.

Powered by **Innovation**



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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.

develon-ce.com

DEVELON

Excavators

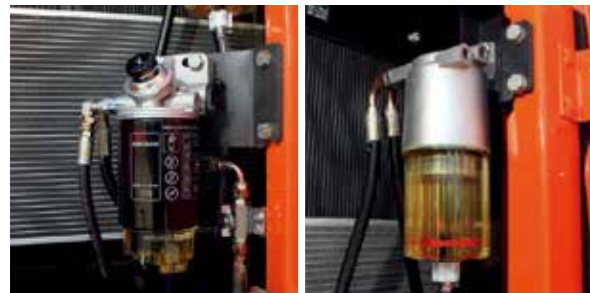
DX140LCA DX140AF



YOUR NEW DAILY WORK PARTNER DX140LCA & DX140AF

1 DB58TIS DEVELON ENGINE

DX140LCA/AF runs on DEVELON DB58TIS engine, one of the most widely-used engines in DEVELON. DEVELON DB58TIS engine has already gained recognition in the market for reliability, low fuel consumption and easy maintenance with quality that has been validated.



2 WATER SEPARATOR

The fuel water separator filters out water from fuel, enhances the engine's durability, and reduces quality problems caused by the presence of water in fuel.



3 NEW 8-INCH MONITOR

Bigger LCD monitor with user-friendly touch screen panel, allowing easy access to machine settings and maintenance data.



4 NEW GP (GENERAL PURPOSE) BUCKET

GP bucket installed onto DX140LCA/AF as a base spec with open type side cutters allows you to efficiently perform loading operations.



5 REINFORCED UNDERCARRIAGE FOR BETTER DURABILITY

ONLY DX140AF

DX140AF, THE RIGHT MACHINE FOR YOUR FOREST WORK

The DEVELON DX140AF features a reinforced lower body to protect it against the harsh, damp forestry work environment and a powerful and simple large 6-liter mechanical engine to maximize work efficiency, making it the optimal excavator for forestry work in any environment including plains and mountains.



REINFORCED UNDERCARRIAGE FOR BETTER DURABILITY

1 WIDER, HIGHER UNDERCARRIAGE FOR THE STABLE WORK.



- a Track gauge : 2,200mm
- b Tumbler distance : 3,180mm



- c Shoe width : 600 / 800 / 900 / 960mm
- d Ground clearance : 592mm



2



3



4



5



6



7

2 STRENGTHENED IDLER BRACKET

The idler bracket has been fitted with a reinforced bar to further protect the main components from external impacts.

3 HEAVY DUTY UNDERCOVER

The reinforced forestry undercover, pressed in an "X" shape, is specially designed to minimize external stress and to protect the excavator's main components from diverse external impacts resulting from rough surface environments.

4 CHANGED BOLT PROTECTOR

All bolts are protected by bolt protectors.

5 A DEDICATED TRACK GUARD FOR FORESTRY

Installed on each side (2 per side) to protect the tracks, enabling more stable work.

6 SECURED TRAVEL MOTOR BY FOREST-DEDICATED T/M MOUNT

The travel motor, protected by a reinforced forest-dedicated travel motor mount to prevent it from being damaged by the typically harsh environment of logging sites.

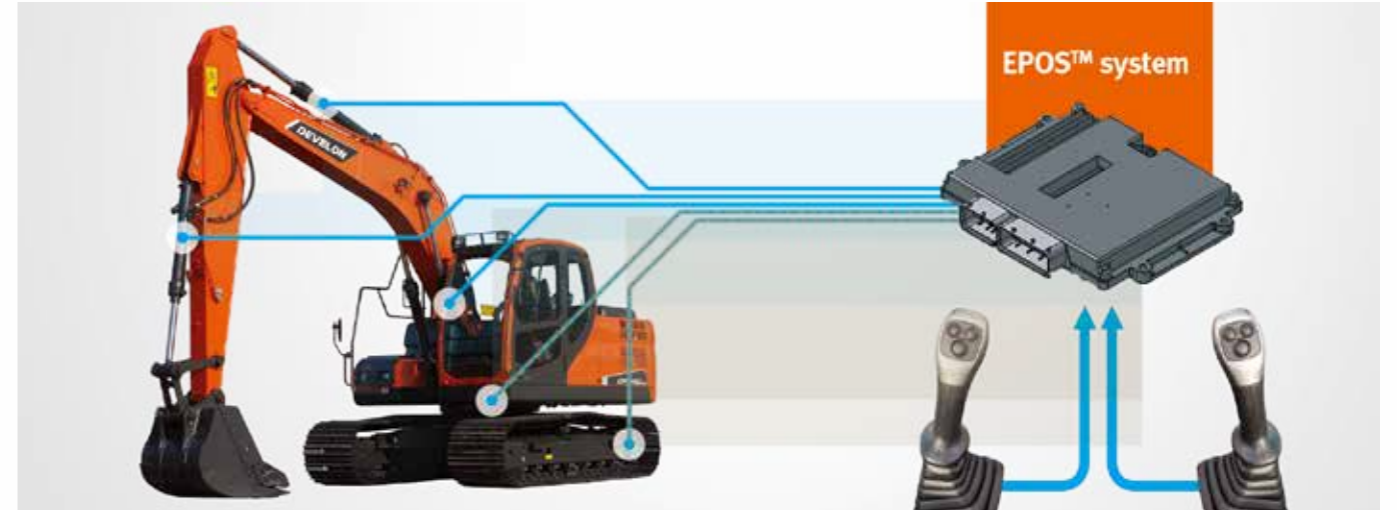
7 REINFORCED UPPER ROLLER AND MOUNT

Redesigned and strengthened mount to withstand the DX140AF's powerful traction, stably fixes the upper roller inside and outside to ensure reliable operation.

RELIABLE COMPONENTS FOR SUPERIOR PERFORMANCE

DEVELON ENGINE FOR POWERFUL PERFORMANCE

DX140LCA and DX140AF are equipped with a 22-ton class engine (DB58T1S), the company's renowned in-house engine, to deliver superior performance to the existing 14-ton class machine engines. The DB58T1S is a simple yet powerful mechanical engine that minimizes machine downtime as it is easy to manage and repair at your job sites located far from any maintenance facility. Also, this DEVELON engine is perfectly harmonized with the hydraulic system to ensure superior power that is needed to perform diverse tasks reliably and quickly even in harsh environments.



EXCAVATOR CONTROL

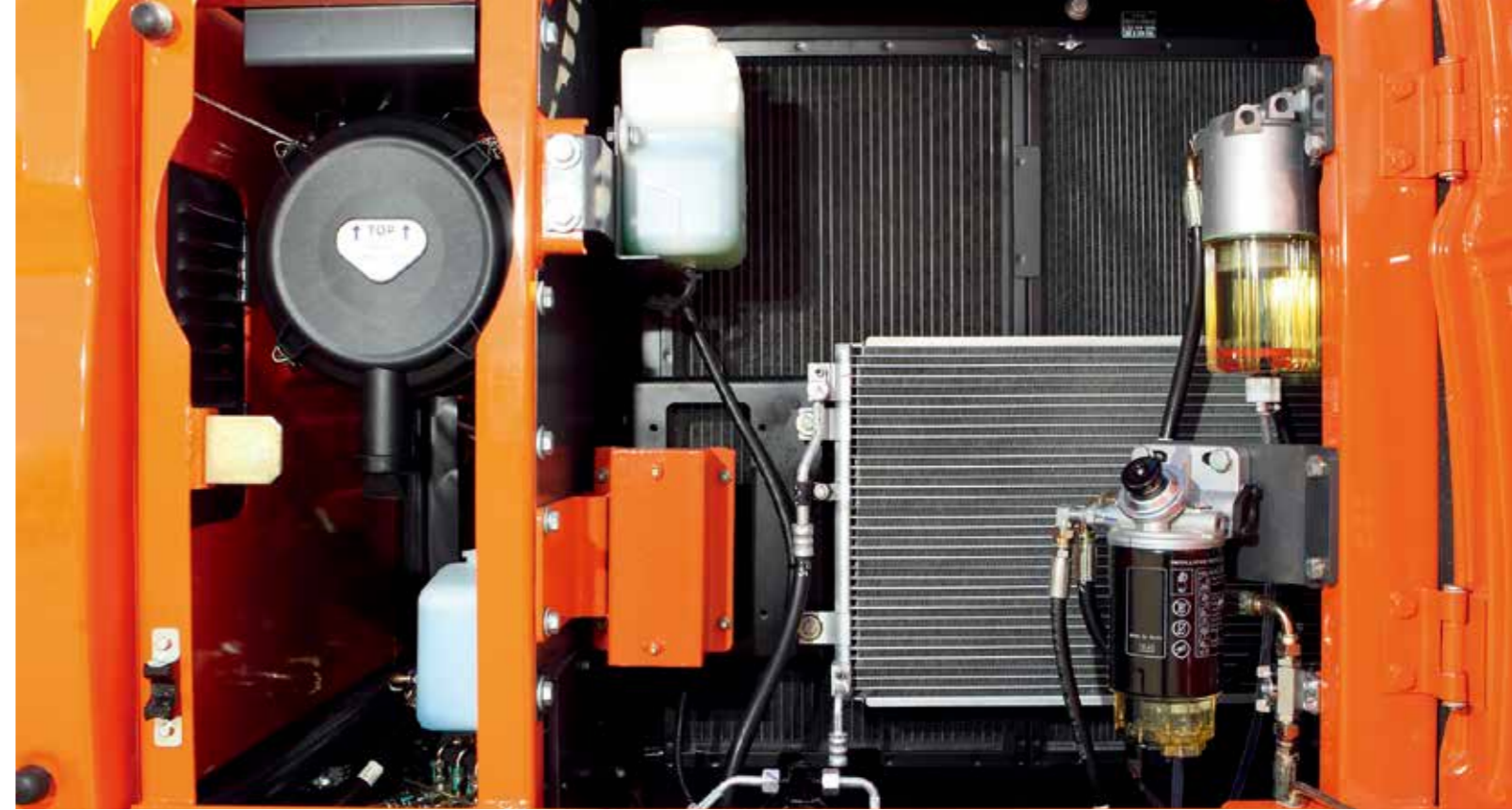
Excavator control improved by the EPOS™ system as the brain of the hydraulic excavator, the EPOS™ (Electronic Power Optimizing system) has been improved and perfectly synchronized with the newly adopted CAN (Controller Area Network) communication link.



LARGER TRAVEL DEVICE FOR INCREASED TRACTION FORCE **ONLY DX140AF**

Equipped with a higher-class travel engine than the conventional 14-ton excavator, the travel device offers superior traction and is perfectly matched to the mechanical 6-liter DEVELON engine (DB58T1S), providing reliable traction in any environment including wetlands, rough terrain and slopes.

EASY MAINTENANCE ANYTIME, ANYWHERE



CENTRALIZED PARTS FOR EASY ACCESS

The DX140LCA and DX140AF are designed to improved productivity by minimizing on-site maintenance. The radiators and filters are well arranged on one side for easy maintenance. The Upper and side doors enable easier access to the main parts for convenient maintenance.



3-STAGE FUEL FILTRATION SYSTEM, PERFECT MATCH FOR YOUR FUEL QUALITY

The DX140LCA and DX140AF are fitted with a 3-stage fuel filtration system to prevent engine system damages caused by the use of low-quality fuel containing contaminants, thereby reducing engine failure and increasing uptime.

- 1** Water separator with large capacity storage
- 2** Pre fuel filter with water separator
- 3** Main fuel filter

DEVELON FLEET MANAGEMENT Telematics Service (OPTIONAL)

TELECOMMUNICATIONS Data flow from machine to web



TELEMATICS TERMINAL

Terminal device is installed and connected to a machine to get machine data.



TELECOMMUNICATION

DEVELON provides Dual mode (Cellular, Satellite) communication to maximize communication coverage



Develon FM WEB

User can monitor machine status from DEVELON FM Web

TELEMATICS SERVICE BENEFITS Develon and dealer support customers to improve work efficiency with timely and responsive services

CUSTOMER

- Improve work efficiency
- Timely and preventive service
- Improve operator's skills by comparing work pattern
- Manage fleet more effectively

DEALER

- Better service for customers
- Provide better quality of service
- Maintain machine value
- Better understanding of market needs

DEVELON

- Responsive to customer's voice
- Utilize quality-related field data
- Apply customer's usage profile to developing new machine

FUNCTIONS(WEB/APP) Develon Telematics Service provides various functions to support your great performance



GPS



Fuel information



Preventive maintenance



Operation hours



Fault code/warning



ADT Productivity



Reports

FUNCTION		EXCAVATOR	WHEEL LOADER	ADT
GPS	Location Geo-fence	All models	All models	All models
Operation hours	Daily, Weekly, Monthly report	All models	All models	All models
Operation hours	Total operation hours Operation hours by mode	All models	All models	All models
Maintenance parts	Preventive maintenance by item replacement cycle	All models	All models	All models
Fault code/ Warning	Fault code Machine Warnings on Gauge Panel	All models	All models	All models
Fuel information	Fuel level Fuel consumption	All models	All models	All models
Dump capacity	Dump tonnage Count of Work Cycle	N/A	N/A	All models

GLOBAL PARTS NETWORK

QUALITY-PROVEN MAIN COMPONENTS

DEVELON provides fast and precise worldwide delivery of genuine DEVELON parts through its global PDC (parts distribution center) network.



GLOBAL NETWORK

The global network of the GPDC (Global Parts Distribution Center) maximizes its fill rate by making sure that each center is stockpiled with all the critical parts required for businesses in its area. The network also minimizes the time and costs required for parts delivery by positioning PDCs close to major markets around the world. DEVELON PDCs communicate with customers in their time zone, informing them that they are open for operation, and deliver parts to them as early as possible.

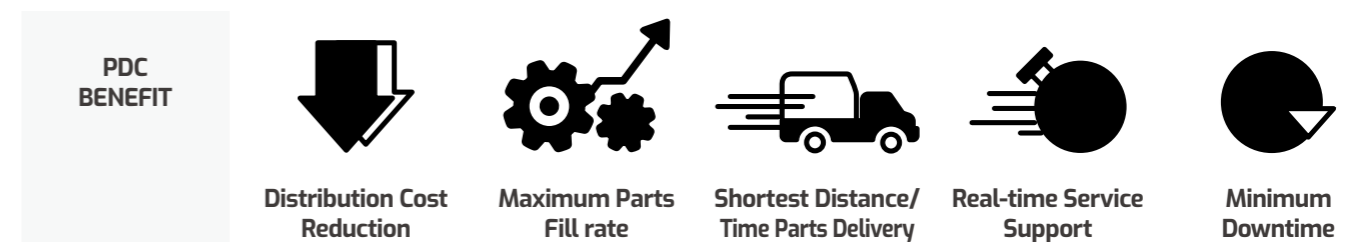
THE GLOBAL PARTS DISTRIBUTION CENTER NETWORK

PDCs had been set up as shown below, including Mother PDC in Ansan, Korea. The nine other PDCs include one in China (Yantai), three in USA (Atlanta, Seattle and Miami), two in Europe (Germany and the UK), one in the Middle East (Dubai) and two in Asia (Singapore and Indonesia).



MPDC : Mother Parts Distribution Center

PDC : Parts Distribution Center



TECHNICAL SPECIFICATIONS

ENGINE

Model	DEVELON DB58TIS
Type	4 - cycle, turbo charged, air to water intercooler
Number of cylinders	6
Rated power	74 kW (100 PS) @ 1,850 rpm [DX140LCA] 74 kW (100 PS) @ 1,900 rpm [DX140AF]
Max torque	44 kgf.m @ 1,400 rpm
Piston displacement	5,785 cc
Bore & stroke	Ø 102 mm X 118 mm [DX140LCA] Ø 100 mm X 125 mm [DX140AF]
Starting motor	24 V X 4.5 kW
Batteries	12 V X 2 / 100AH
Air cleaner	Double element

HYDRAULIC CYLINDERS

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 extend piston life.

Cylinders	Quantity	Bore x Rod diameter x stroke
Boom	2	110 X 75 X 1,085 mm
Arm	1	115 X 80 X 1,099 mm
Bucket	1	100 X 70 X 900 mm

WEIGHT

Triple grouser

	Shoe width	GROUND PRESSURE	MACHINE WEIGHT
DX140LCA	700 mm TG	0.30 kgf/cm ²	14,000 kg
	600 mm TG	0.35 kgf/cm ²	13,890 kg
DX140AF	960 mm SG	0.26 kgf/cm ²	17,500 kg
	900 mm SG	0.28 kgf/cm ²	17,200 kg
	800 mm SG	0.31 kgf/cm ²	16,900 kg

HYDRAULIC SYSTEM

The heart of the system is the EPOS™ (Electronic Power Optimizing System). It allows the efficiency of the system to be optimized for all working conditions and minimizes fuel consumption. The new EPOS™ is connected to the engine electronic control via a data transfer link to harmonize the operation of the engine and hydraulics.

- The hydraulic system enables independent or combined operations.
- Two travel speeds offer either increased torque or high speed tracking.
- Cross-sensing pump system for fuel savings.
- Auto deceleration system.
- Button control of flow in auxiliary equipment circuits.
- Computer-aided pump power control.

Main pumps

Tandem, Axial Piston
Maxflow:2X114l/min
Displacement : 61.6 X 2 cc/rev

Pilot pump

Gear pump - max flow : 26.4 l/min
Pilot pump : 15 cc/rev
Relief valve pressure : 40 kgf/cm²

Main relief Pressure

Normal Working : 330 kgf/cm²
Pressure-Up, Travel : 350 kgf/cm²

SWING MECHANISM

High-torque, axial piston motor with planetary reduction gear bathed in oil. Swing circle is singlerow, shear type ball bearing with induction-hardened internal gear. Internal gear and pinion gear immersed in lubricant.

Max. Swing speed -10.1rpm[DX140LCA]
- 10.1 rpm [DX140AF]

Max. Swing Torque - 3,655 kgf.m [DX140LCA]
- 3,655 kgf.m [DX140AF]

UNDERCARRIAGE

Chassis are of very robust construction, all welded structures are designed to limit stresses.High-quality material used for durability. Lateral chassis welded and rigidly attached to the undercarriage. Track rollers lubricated for life, idlers and sprockets fitted with floating seals. Tracks shoes made of induction-hardened alloy with triple grousers. Heat-treated connecting pins.Hydraulic track adjuster with shock-absorbing tension mechanism.

Upper rollers(Standard shoe) - 1

Lower rollers - 7

Track shoes - 46 [DX140LCA]
- 44 [DX140AF]

Overall track length - 3,750 mm [DX140LCA]
- 4,045 mm [DX140AF]

DRIVE

Each track is driven by an independent, high-torque, axial piston motor through planetary reduction gear. Two levers or foot pedal control provide smooth travel or counter-rotation upon demand.

Travel speed (High / low) - 5.0 / 3.0 km/h [140LCA]
- 4.3 / 2.5 km/h [140AF]

Maximum traction force - 15.5 ton [140LCA]
- 16.4 ton [140AF]

Gradeability - 70%

REFILL CAPACITIES

Fuel tank - 267 l

Cooling System - 20 l

Engine Oil - 27 l

Swing Drive - 3 l

Travel Device (each) - 2 X 2.2 l

HHydraulic oil tank - 147 l

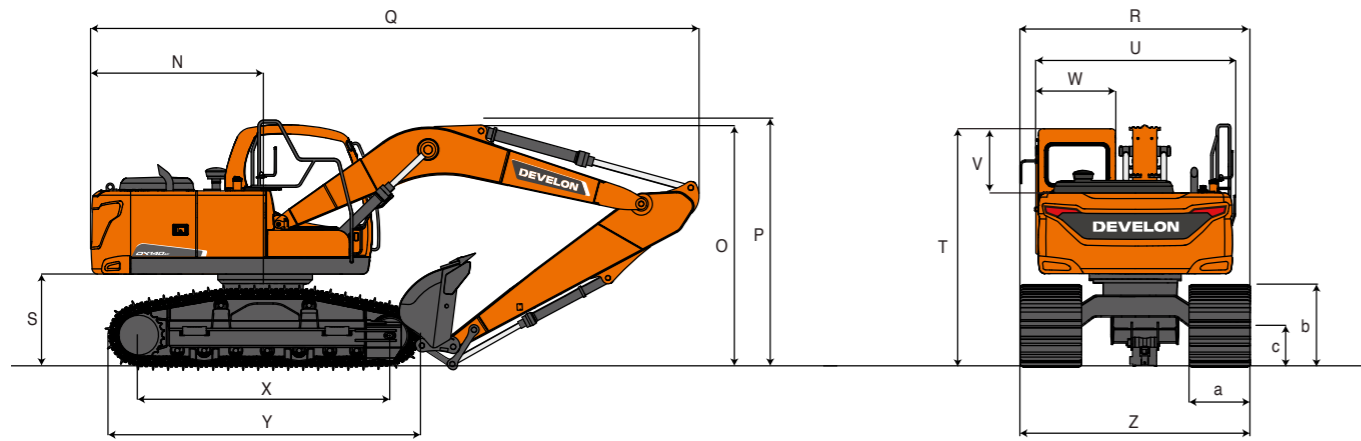
BUCKET

	Capacity (m ³)		Width (mm)		Digging Force (NOM./PRESS.UP, ton)
	SAE/PCSA	CECE	W/O Cutter	With Cutter	
OPT	0.58	0.51	1,023	1,107.8	SAE 9.0/9.6 ISO 10.3/10.9
STD	0.51	0.46	903.2	990.9	SAE 9.0/9.6 ISO 10.3/10.9

DIGGING FORCES (ISO)

	Length	Weight	Digging force (Nom. / Press. up, ton)
STD. Arm	3,000 mm	495 kg	SAE 5.9 / 6.3 ISO 6.1 / 6.5
OPT. Arm	2,500 mm	415 kg	SAE 5.9 / 6.3 ISO 6.2 / 6.5

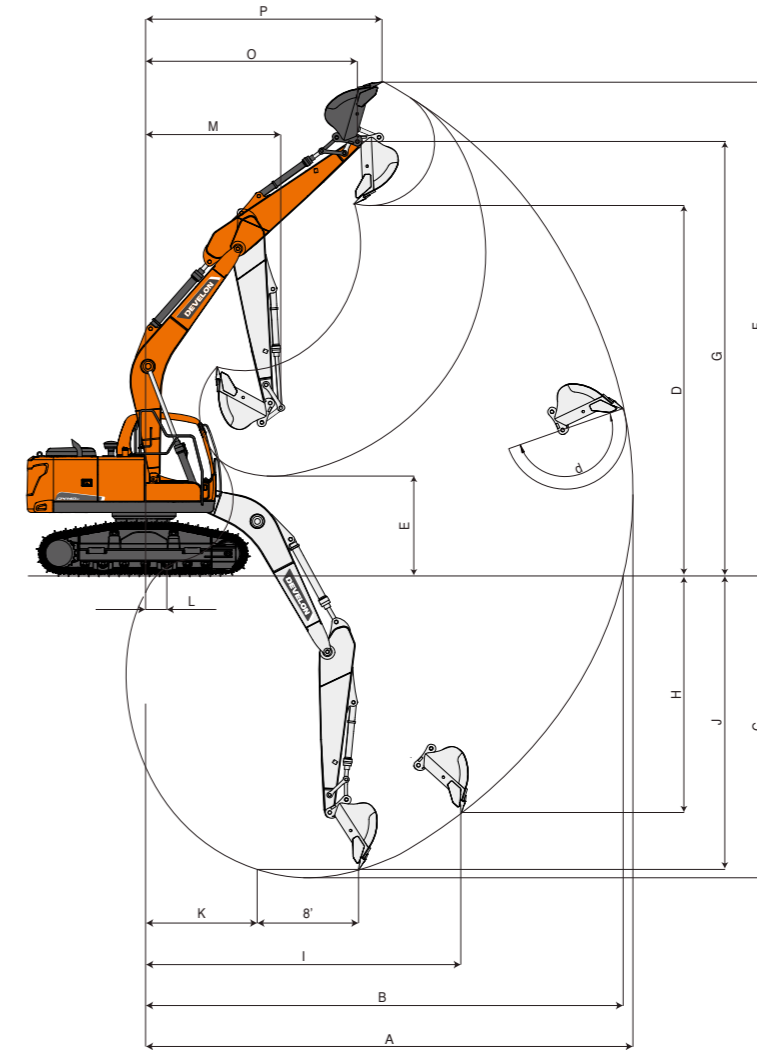
DIMENSIONS



			DX140LCA	DX140AF
Boom Type	(mm)		4,600	4,600
Arm Type	(mm)		3,000	3,000
Bucket Type (SAE/PCSA)	(m ³)		0.51	0.51
Tail Swing Radius	(mm)	N	2,205	2,205
Shipping Height (Boom)	(mm)	O	3,096	3,057
Shipping Height (Hose)	(mm)	P	3,153	3,142
Shipping Length	(mm)	Q	7,620	7,708
Shipping Width (Std.)	(mm)	R	2,690	3,000
C/Weight Clearance *	(mm)	S	869	1,154
Height Over Cab.	(mm)	T	2,780	3,100
House Width	(mm)	U	2,540	2,540
Cab. Height Above House	(mm)	V	830	842
Cab. Width	(mm)	W	1,010	1,010
Tumbler Distance	(mm)	X	3,035	3,180
Track Length	(mm)	Y	3,750	4,045
Undercarriage Width	(mm)	Z	2,690	3,000
Shoe Width	(mm)	a	700	800
Track Height *	(mm)	b	743	953
Car Body Clearance *	(mm)	c	385	592

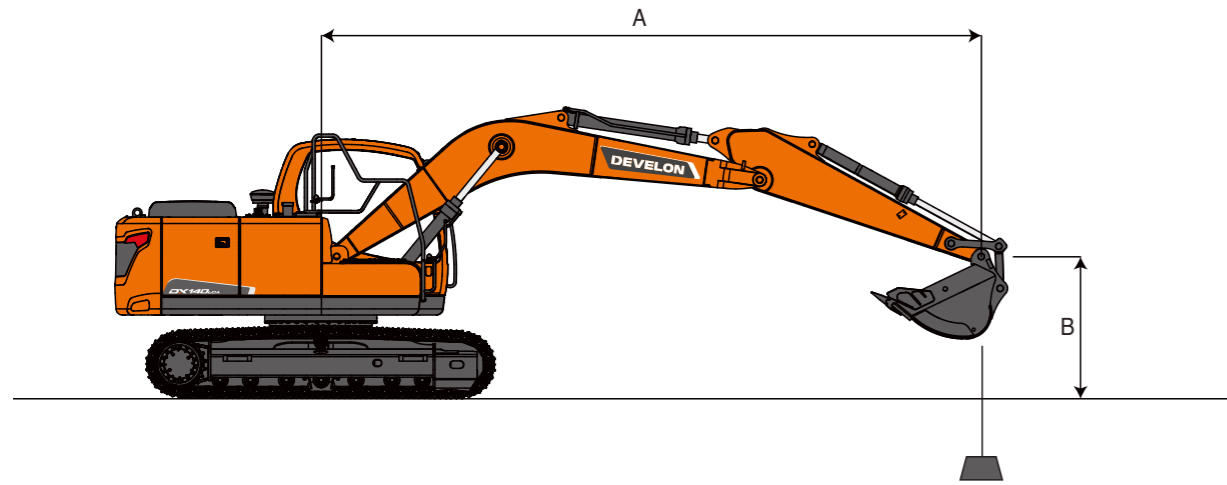
* without Grouser - Grouser height : 25mm (for TG) [DX140LCA]

WORKING RANGES



			DX140LCA	DX140AF
Boom Type (One Piece)	(mm)		4,600	4,600
Arm Type	(mm)		3,000	3,000
Bucket Type (SAE)	(m ³)		0.51	0.51
Max. digging reach	(mm)	A	8,680	8,680
Max. digging reach (Ground)	(mm)	B	8,476	8,476
Max. digging depth	(mm)	C	6,149	5,831
Max. loading height	(mm)	D	6,410	6,729
Min. loading height	(mm)	E	1,716	2,035
Max. digging height	(mm)	F	8,741	9,059
Max. bucket pin height	(mm)	G	7,643	7,961
Max. vertical wall depth	(mm)	H	4,828	4,510
Max. radius vertical	(mm)	I	5,860	5,860
Max. depth to 8'line	(mm)	J	5,905	5,587
Min. radius 8'line	(mm)	K	1,821	1,821
Min. digging reach	(mm)	L	-306	-642
Min. swing radius	(mm)	M	2,588	2,588
Reach to bucket pin center at maximum height	(mm)	O	4,096	4,096
Reach at maximum height	(mm)	P	4,656	4,656
Bucket angle	(deg)	d	179	179

LIFTING CAPACITY



DX140LCA

Metric

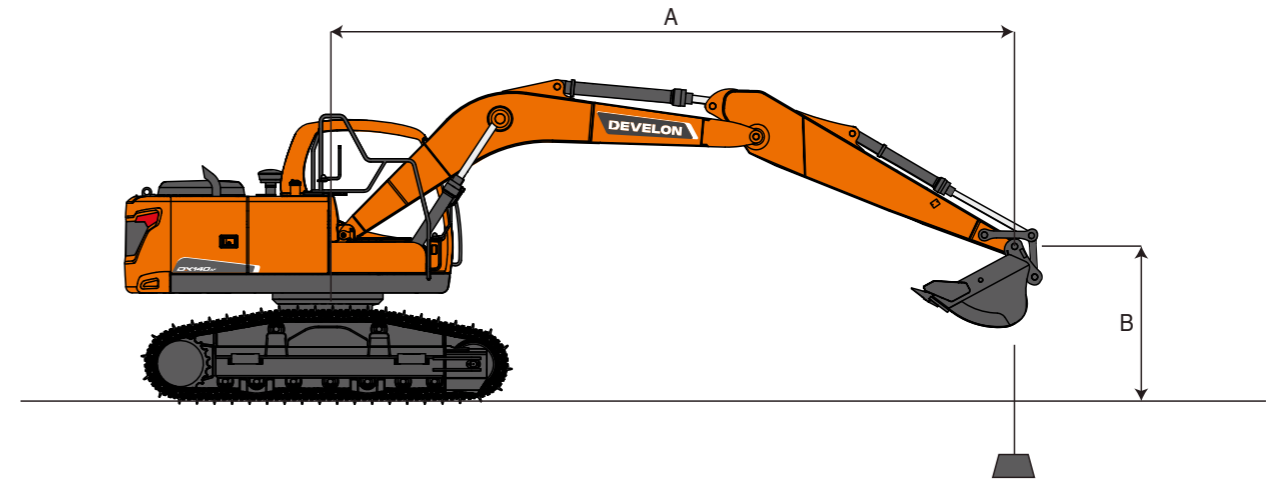
Boom : 4.6m Arm : 3.0m Bucket : SAE 0.51 m³ heaped Shoe : 700mm Counter Weight : 2,200 kg

Unit : 1,000kg

B(m)	A(m)		2		3		4		5		6		Max. Reach		
	Rating Over Front	Rating Over Side or 360 Degree	Rating Over Front	Rating Over Side or 360 Degree	Rating Over Front	Rating Over Side or 360 Degree	Rating Over Front	Rating Over Side or 360 Degree	Rating Over Front	Rating Over Side or 360 Degree	Rating Over Front	Rating Over Side or 360 Degree	Rating Over Front	Rating Over Side or 360 Degree	A(m)
7									2.22	2.22			2.06 *	2.06 *	@ 5.08
6									2.96 *	2.96 *			1.89 *	1.89 *	@ 6.00
5									3.06 *	3.06	2.8 *	2.8	1.81 *	1.81 *	@ 6.63
4					3.45 *	3.45 *	3.41 *	3.41	3.27 *	3.27	1.80 *	1.80 *	1.80 *	1.80 *	@ 7.06
3			5.25 *	5.25 *	4.4 *	4.4	3.95 *	3.95	3.7	3.21	1.82 *	1.82 *	1.82 *	1.82 *	@ 7.32
2			7.47 *	7.47	5.52 *	5.52	4.59	4.09	4.07	3.12	1.89 *	1.89 *	1.89 *	1.89 *	@ 7.44
1			9.24 *	8.55	6.54	5.47	5.20	3.95	4.4	3.04	2.01 *	2.01 *	2.01 *	2.01 *	@ 7.42
0 (GROUND)			7.91 *	7.91	7.26	5.31	5.68	3.85	4.33	2.98	2.20 *	2.20 *	2.20 *	2.20 *	@ 7.27
-1	5.12	5.12	8.86 *	8.21	7.62	5.22	5.62	3.79	4.28	2.94	2.50 *	2.41	2.50 *	2.41	@ 6.96
-2	6.91 *	6.91 *	10.26 *	8.22	7.61	5.19	5.59	3.77	4.28	2.93	2.98 *	2.65	2.98 *	2.65	@ 6.48
-3	9.23 *	9.23 *	9.56 *	8.29	7.2	5.23	5.62	3.79			3.90 *	3.12	3.90 *	3.12	@ 5.79
-4	11.52 *	11.52 *	8.19 *	8.19	6.17 *	5.33					4.86 *	4.13	4.86 *	4.13	@ 4.79

- * RATED LOADS ARE BASED ON HYDRAULIC CAPACITY.
- RATED LOADS DO NOT EXCEED 87% OF HYD. CAPACITY OR 75% OF TIPPING CAPACITY.

: Rating Over Front
 : Rating Over Side or 360 Degree



DX140AF

Metric

Boom : 4.6m Arm : 3.0m Bucket : SAE 0.51 m³ heaped Shoe : 700mm Counter Weight : 2,200 kg

Unit : 1,000kg

B(m)	A(m)		2		3		4		5		6		Max. Reach		
	Rating Over Front	Rating Over Side or 360 Degree	Rating Over Front	Rating Over Side or 360 Degree	Rating Over Front	Rating Over Side or 360 Degree	Rating Over Front	Rating Over Side or 360 Degree	Rating Over Front	Rating Over Side or 360 Degree	Rating Over Front	Rating Over Side or 360 Degree	Rating Over Front	Rating Over Side or 360 Degree	A(m)
7									2.22	2.22			2.06 *	2.06 *	@ 5.08
6									2.96 *	2.96 *			1.89 *	1.89 *	@ 6.00
5									3.06 *	3.06	2.8 *	2.8	1.81 *	1.81 *	@ 6.63
4					3.45 *	3.45 *	3.41 *	3.41	3.27 *	3.27	1.80 *	1.80 *	1.80 *	1.80 *	@ 7.06
3			5.25 *	5.25 *	4.4 *	4.4	3.95 *	3.95	3.7	3.21	1.82 *	1.82 *	1.82 *	1.82 *	@ 7.32
2			7.47 *	7.47	5.52 *	5.52	4.59	4.09	4.07	3.12	1.89 *	1.89 *	1.89 *	1.89 *	@ 7.44
1			9.24 *	8.55	6.54	5.47	5.20	3.95	4.4	3.04	2.01 *	2.01 *	2.01 *	2.01 *	@ 7.42
0 (GROUND)			7.91 *	7.91	7.26	5.31	5.68	3.85	4.33	2.98	2.20 *	2.20 *	2.20 *	2.20 *	@ 7.27
-1	5.12	5.12	8.86 *	8.21	7.62	5.22	5.62	3.79	4.28	2.94	2.50 *	2.41	2.50 *	2.41	@ 6.96
-2	6.91 *	6.91 *	10.26 *	8.22	7.61	5.19	5.59	3.77	4.28	2.93	2.98 *	2.65	2.98 *	2.65	@ 6.48
-3	9.23 *	9.23 *	9.56 *	8.29	7.2	5.23	5.62	3.79			3.90 *	3.12	3.90 *	3.12	@ 5.79
-4	11.52 *	11.52 *	8.19 *	8.19	6.17 *	5.33					4.86 *	4.13	4.86 *	4.13	@ 4.79

- * RATED LOADS ARE BASED ON HYDRAULIC CAPACITY.
- RATED LOADS DO NOT EXCEED 87% OF HYD. CAPACITY OR 75% OF TIPPING CAPACITY.

: Rating Over Front
 : Rating Over Side or 360 Degree

STANDARD & OPTION

STANDARD EQUIPMENT

Boom & Arm

- 4.6 m Boom
- 3.0 m Arm

Bucket

- 0.51 m³ bucket

Hydraulic system

- Boom and arm flow regeneration
- Boom and arm holding valves
- Swing anti-rebound valves
- Spare ports(Control valve)
- One-touch power boost

Cabin & Interior

- Viscous cab mounts
- All weather sound suppressed type cab
- Air conditioner & Heater
- Adjustable suspension seat with head rest and adjustable arm rest
- Pull-up type front window and removable lower front window
- Room light
- Cigarette lighter and ashtray
- Cup holder
- LCD color monitor panel
- Engine speed (RPM) control dial
- Joystick lever with 3 switches

Safety

- Punched metal anti-slip plates
- Seat belt
- Hydraulic safety lock lever
- Safety glass
- Hammer for emergency escape
- Right and left rearview mirrors
- Battery protector cover

Others

- Double element air cleaner
- Water seperator
- Fuel filter
- Dust screen for radiator/oil cooler
- Engine overheat prevention system
- Engine restart prevention system
- Alternator(24V, 60 amps)
- Electric horn
- Halogen working lights
(frame mounted 2, boom mounted 2)
- Greased and sealed track link
- Hydraulic oil tank air breather filter

OPTIONAL EQUIPMENT

Some of optional equipments may be standard in some markets. Some of this optional equipment is not available in some markets. You must check with the local DEVELON dealer to know about the availability or to release the adaptation following the needs of the applications

Boom & Arm

- 2.5 m Arm

Bucket

- 0.51 m³ bucket
- Non bucket

Safety

- Cabin Top/Front guard (ISO 10262, FOGS standard)
- Travel & swing alarm
- Rotating beacon
- Rear View Camera
- Telescopic beacon

Cabin & Interior

- Radio/MP3
- CD player

Others

- Piping option
 - Piping for crusher
 - Piping for two-way
 - Piping for breaker
 - Piping for quick clamp
 - Piping for rotating (PERO)
 - Quick coupler
- Track Shoe
 - 600 mm Shoe (Triple Grouser)
 - 700 mm Shoe (Triple Grouser)
 - 800 mm Shoe (Single Grouser) **ONLY DX140AF**
 - 900 mm Shoe (Single Grouser) **ONLY DX140AF**
 - 960 mm Shoe (Single Grouser) **ONLY DX140AF**
- DEVELON Fleet Management
- Working Lights
 - 2-front on cabin
 - 1 on counterweight