

DEVELON

Crawler Excavator

DX400HD-9



Engine

Make	DEVELON
Model	DX08
Number of cylinders	6
Rated power, gross (hp per SAE J1995)	340.6 hp (254.0 kW) @ 1800 rpm
Rated power, net (hp per SAE J1349)	336.6 hp (251.0 kW) @ 1800 rpm
Max. torque, gross (SAE J1995)	1076.8 ft.-lb. (1460.0 Nm) @ 1300 rpm
Displacement	7.5 L
Bore and stroke	4.3" x 5.2" (110 mm x 132 mm)
Starter	24 V, 8.0 hp (6.0 kW)
Battery	2 x 12 V, 150 AH
Alternator	24 V, 90 A
Air cleaner	Three-stage

Hydraulics

Main pumps	2 x 360.0 L/min.
Pilot pump (gear design)	6.4 gpm (24.1 L/min.)

Working Pressure

Boom/arm/bucket (normal mode)	350.0 kg/cm ²
Boom/arm/bucket (power boost)	(370.0 kg/cm ²)
Travel	4978.2 psi (350.0 kg/cm ²)
Swing	(300.0 kg/cm ²)
Pilot	(41.0 kg/cm ²)

Undercarriage

Upper rollers (each track)	2
Lower rollers (each track)	9
Number of shoes (links per side)	50

Swing Mechanism

Max. swing speed	9.7 rpm
Max. swing torque	(14786.0 kgf.m)

Drive System

Travel speed (low – high)	3.2 – 5.6 km/h
Traction force, max. (drawbar pull)	43032.0 kgf
Max. grade (limited by engine lub)	70% (35°)

Environment

Sound level (2000/14/EC)	105 dB(A)
Cabin sound level (ISO 6396)	69 dB(A)

Refill Capacities

Fuel tank	592.0 L
DEF tank	72.0 L
Cooling system (radiator capacity)	46.8 L
Engine oil (with filter)	35.0 L
Swing drive	15.0 L
Final drive (each side)	7.8 L
Hydraulic system	475.0 L
Hydraulic tank	243.0 L

All capacities are approximate values. Always refer to the machine's OM for exact refill levels. Check the dipstick, level eye, level plug, etc., to achieve the correct level.

Hydraulic Cylinders

Boom ¹ (2) bore x rod diameter x stroke	160 mm x 105 mm x 1450 mm
Arm ^{1,2} (1) bore x rod diameter x stroke	170 mm x 120 mm x 1805 mm
Bucket (STD) ¹ (1) bore x rod diameter x stroke	150 mm x 100 mm x 1300 mm

¹ Cushion on rod end

² Cushion on base end

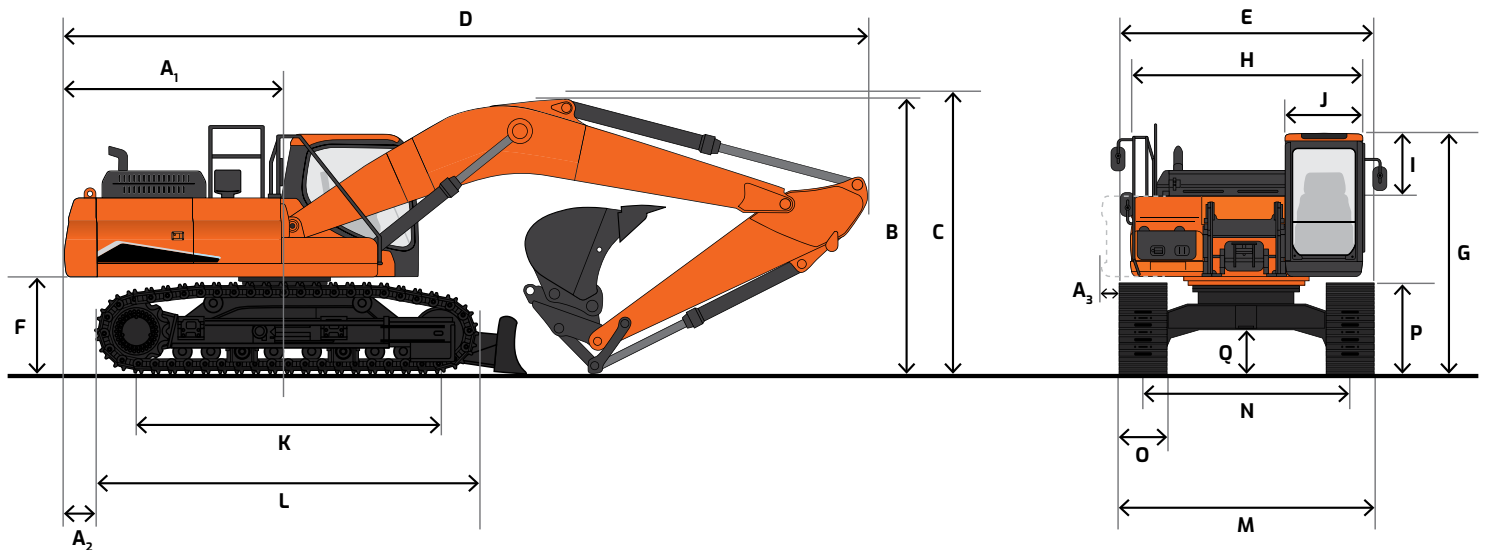
The piston rods and cylinder bodies are made of high-strength steel. A shock-absorbing mechanism is fitted in all cylinders to ensure shock-free operation and extended piston life.

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

		Boom & Standard Arm 600 mm TG Shoe	Standard Boom & Long Arm 600 mm TG Shoe
Boom length		6500 mm	
Arm length		3200 mm	3950 mm
Bucket size (SAE)		2.22 m ³	1.81 m ³
Tail swing radius	A	3527 mm	
Shipping height (boom)	B	3336 mm	3392 mm
Shipping height (hose)	C	3458 mm	3528 mm
Shipping length	D	11286 mm	11291 mm
Shipping width	E	3350 mm	
Counterweight clearance*	F	1277 mm	
Cabin height	G	3317 mm	
Upper structure width	H	2990 mm	
Cabin height above house	I	607 mm	
Cabin width	J	1015 mm	
Tumbler distance	K	4230 mm	
Overall track length	L	5185 mm	
Undercarriage width	M	3350 mm	
Track shoe width	N	600 mm	
Track height*	O	1066 mm	
Car body clearance*	P	601 mm	

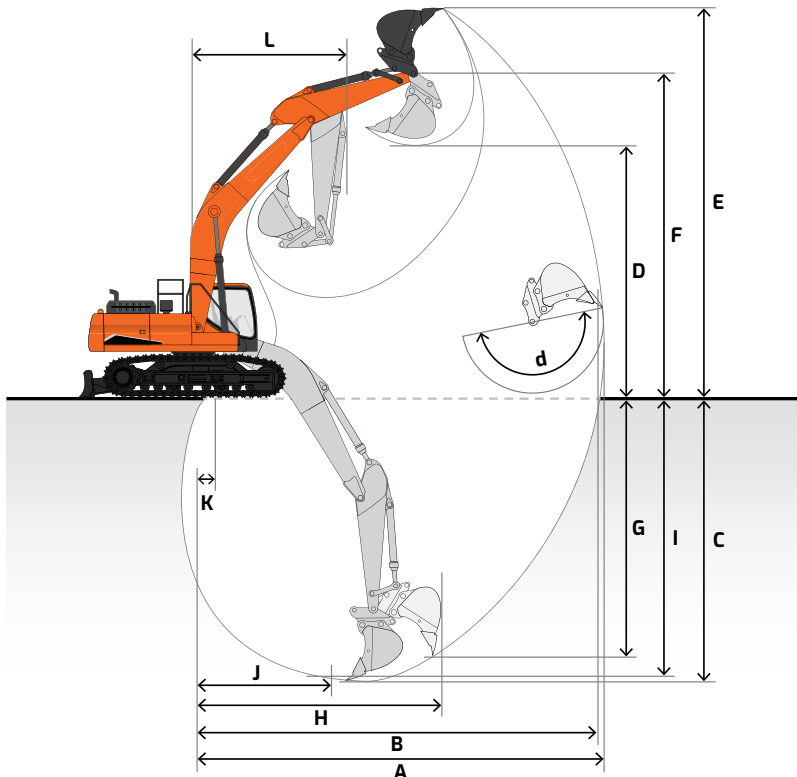
*Without shoe grouser



Working Range

		Boom & Standard Arm 600 mm TG Shoe	Standard Boom & Long Arm 600 mm TG Shoe
Boom length		6500 mm	
Arm length		3200 mm	3950 mm
Bucket size (SAE)		2.22 m ³	1.81 m ³
Counterweight		7400 kg	
Track type		Fixed	
Max. digging reach	A	11110 mm	11870 mm
Max. digging reach (ground)	B	10900 mm	11670 mm
Max. digging depth	C	7400 mm	8160 mm
Max. loading height	D	7310 mm	7770 mm
Max. digging height	E	10290 mm	10790 mm
Max. bucket pin height	F	8960 mm	9420 mm
Max. vertical wall depth	G	5710 mm	6640 mm
Max. radius vertical	H	7860 mm	7960 mm
Max. depth to 8' line	I	7220 mm	8020 mm
Min. radius to 8' line	J	3350 mm	3420 mm
Min. digging reach	K	700 mm	-340 mm
Min. swing radius	L	4450 mm	4510 mm
Bucket angle (DEG)	d	178	178
Digging force, bucket*	ISO	26921 kgf	26411 kgf
Digging force, arm*		18661 kgf	16112 kgf
Operating weight		42200 kg	41700 kg
Ground pressure		(0.77 kg/cm ²)	(0.76 kg/cm ²)

*With power boost ON

















Lifting Capacity

 Rating over front  Rating over side or 360°

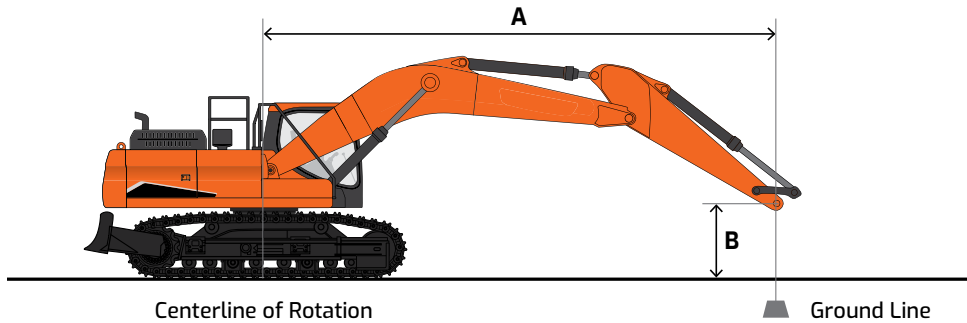
DX400HD-9

Boom: 6500 mm | Arm: 3200 mm | Counterweight: 7400 kg | 900 mm TG Shoes | No Dozer | Bucket: None | Unit: lb. (kg)

B (m) \ A (m)	(1.5 m)		(3.0 m)		(4.5 m)		(6.0 m)		(7.5 m)		29.5" (9.0 m)		Max. Reach		A
															
(7.5 m)									(* 9330)	(9260)			(* 7780)	(* 7780)	(7.80 m)
(6.0 m)									(* 9570)	(9160)			(* 7600)	(7230)	(8.65 m)
(4.5 m)					(* 14890)	(* 14890)	(* 11860)	(* 11860)	(* 10330)	(8900)	(* 9090)	(6680)	(* 7700)	(6470)	(9.18 m)
(3.0 m)					(* 18850)	(18000)	(* 13750)	(11840)	(* 11310)	(8570)	(* 9970)	(6540)	(* 8030)	(6080)	(9.43 m)
(1.5 m)					(* 21320)	(17020)	(* 15350)	(11300)	(* 12220)	(8270)	(9880)	(6390)	(* 8650)	(5960)	(9.44 m)
Ground Level					(* 21960)	(16630)	(* 16230)	(10960)	(12730)	(8060)	(9770)	(6290)	(9470)	(6100)	(9.20 m)
(-1.5 m)			(* 14120)	(* 14120)	(* 21730)	(16570)	(* 16250)	(10840)	(12630)	(7980)			(10230)	(6560)	(8.70 m)
(-3.0 m)	(* 16890)	(* 16890)	(* 22790)	(* 22790)	(* 20030)	(16730)	(* 15260)	(10890)	(* 11770)	(8040)			(* 10910)	(7560)	(7.88 m)
(-4.5 m)			(* 22290)	(* 22290)	(* 16780)	(* 16780)	(* 12660)	(11170)					(* 10960)	(9790)	(6.62 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°

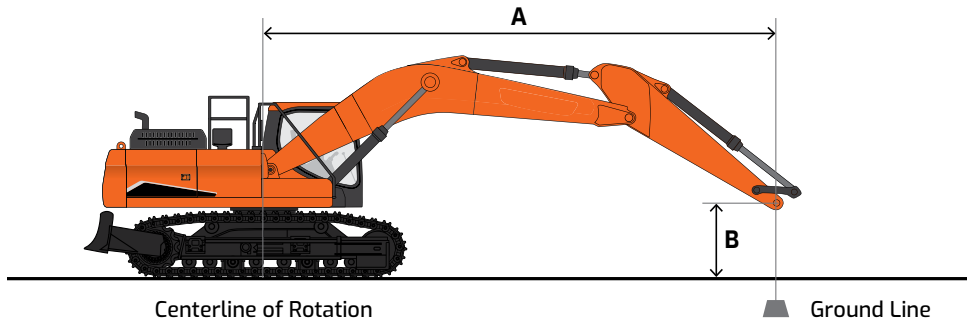
DX400HD-9

Boom: (6500 mm) | Arm: (3200 mm) | Counterweight: (7400 kg) | (900 mm) TG Shoes | No Dozer | Bucket: None | Unit: lb. (kg)

B (m)	(1.5 m)		(3.0 m)		(4.5 m)		(6.0 m)		(7.5 m)		(9.0 m)		Max. Reach		
															A
(9.0 m)									(* 6410)	(* 6410)			(* 6090)	(* 6090)	(758 m)
24.6" (7.5 m)													(* 5680)	(* 5680)	(8.71 m)
(6.0 m)									(* 8560)	(* 8560)	(* 7520)	(6890)	(* 5530)	(* 5530)	(9.48 m)
(4.5 m)							(* 10560)	(* 10560)	(* 9420)	(9020)	(* 8780)	(6760)	(* 5560)	(* 5560)	(9.96 m)
(3.0 m)					(* 16740)	(* 16740)	(* 12580)	(12040)	(* 10520)	(8660)	(* 9340)	(6570)	(* 5740)	(5390)	(10.19 m)
(1.5 m)					(* 20130)	(17300)	(* 14460)	(11410)	(* 11590)	(8300)	(9880)	(6380)	(* 6090)	(5280)	(10.20 m)
Ground Level			(* 7890)	(* 7890)	(* 21840)	(16640)	(* 15730)	(10960)	(* 12390)	(8030)	(9710)	(6220)	(* 6670)	(5380)	(9.98 m)
(-1.5 m)	(* 8350)	(* 8350)	(* 12630)	(* 12630)	(* 22040)	(16400)	(* 16200)	(10740)	(12530)	(7880)	(9630)	(6150)	(* 7610)	(5710)	(9.52 m)
(-3.0 m)	(* 13490)	(* 13490)	(* 18720)	(* 18720)	(* 21020)	(16440)	(* 15750)	(10700)	(* 12310)	(7860)			(* 9240)	(6400)	(8.78 m)
(-4.5 m)	(* 19700)	(* 19700)	(* 25930)	(* 25930)	(* 18650)	(16700)	(* 14110)	(10860)	(* 10560)	(8030)			(* 10110)	(7800)	(7.68 m)
(-6.0 m)			(* 19020)	(* 19020)	(* 14040)	(* 14040)	(* 9870)	(* 9870)					(* 9850)	(* 9850)	(6.00 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 (StageV.)	■
High-pressure common-rail (HPCR)	■
Twin turbo	■
Cooled exhaust gas recirculation (CEGR)	■
Diesel oxidation catalyst (DOC)	■
Selective catalytic 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	■
Water separator with heater	■

Hydraulic

Electronic Power Optimizing System (EPOS)	■
Variable axial piston main pump (tandem)	■
Cross-sensing pump control	■
Full-electric hydraulics	■
Gear pilot pump	■
Smart Power Control (SPC)	■
Variable-speed hydraulic cooling fan	■
Axial piston swing motor	■
Spring-applied hydraulic release brake	■
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	■
Boom & arm lock valves	●
Straight travel	■

Controls

Electronic joystick controls	■
Proportional control on joystick swithces for auxiliary hydraulic lines	■
Customizable joystick buttons - Right (two on front, two on back) - Left (two on front, two on back)	■
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	■
Stick steer (joystick steering functionality)	■
Multifunction keypad - Intelligent floating boom - Swing lock	■
Keypad - Lower wiper & washer - Upper wiper, Panto wiper & washer - Light	■
Emergency stop switch	■
Power modes (P+, P, S, E)	■
Work modes (digging, lifting, breaker, shear)	■
Jog dial display control	■
Hydraulic flow & pressure rate controlled from cab	■
Fine swing	■
Warning lamp	■
Cabin work light	■
Travel alarm mute	■
Travel speed selector	■

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	■
Wiper, lower window	■
Adjustable sliding side door window	■
Defrost, front window	■
Lockable doors	■
Seat - Heated - Air-suspension - 3" 2 point seat belt	■
Adjustable height & recline	■
Adjustable fore/aft	■
Adjustable armrests	■
Leatherette seat - Heating & cooling - Air-suspension - 2" 3 point seat belt	●
Adjustable height & recline	●
Adjustable fore/aft	●
Adjustable armrests	●
Control stands - Height adjustable - Mounted to seat base	■
Storage for operator's manuals	■
Mirrors	■
Fully automatic HVAC with radian energy photo sensor	■
New 12" Android touchscreen full HD monitor	■
Additional 12" monitor	■
Digital Bluetooth® & MP3 radio with cell phone integration	■
Wireless phone charger	■
Speakers (2)	■
Emergency breakout tool	■
Hot/cold beverage compartment	■
Power socket, 12 V & 24 V	■
USB port	■
Cup holder	■
Interior light	■
Ambient light	■
Rain shield	●
FOG guard	●
Front window guard	●

Electrical

System voltage – 24 V	■
Alternator – 24 V, 90 A	■
2 x 12 V batteries, 150 AH reserve capacity, 950 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)	■
Four-corner beacon light	■
Hour meter	■
Engine restart prevention system	■
Side view & rearview camera with LED lamps	■
Smart AVM	●
HDS (Human Detection System) with around-view camera & radar	●
Emergency Stop (E-Stop)	●
Laptop service port	■
Self-diagnostics system	■
Smart Key with Digital Key app	●
MY DEVELON (telematics)	■
2D Smart Guidance System with laser receiver	●
Virtual walls, weighing system, lift assist	●
Advanced lift assist	●

Display Monitor & Warnings

Indicators - Power modes - Work modes - 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	■
Smart Guidance 2D screen - Set assist mode - Set grade precision - Set grade mode - Virtual wall limits - Laser indicator - Vertical distance from target position - Pitch & roll angle indicators - Bucket angle indicator - Bucket tooth depth indicator zones - Slope indicator - Active bucket name - Horizontal distance between bucket tooth & reference point	●
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	2
Track rollers, lower	9
In-shoe motor protection	■
Shoes, triple grouser – 600 mm	■

Frame

Catwalk	●
Side protector	●

Other

Centralized lubrication - Boom - Swing	■
Handrails & service platforms	■
Skid-resistant steps & service platforms	■
Manuals - Operation & Maintenance - AEM Safety Manual	■
MY DEVELON 3-year subscription (telematics)	■
Vandalism protection - Lockable panels - Lockable fluid fill points - Anti-theft protection (password) - Window cover mount	■
Basic PHM (Prognostics & Health Management)	■
Premium PHM	●
Auto greasing unit	●

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.

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