

DEVELON

Wheel Loader

DL420-7



Engine

Make	Scania
Model	DC13
Number of cylinders	6
Rated power, gross (hp per SAE J1995)	345 hp (257 kW) @ 1800 rpm
Rated power, net (hp per SAE J1349)	345 hp (257 kW) @ 1800 rpm
Max. torque, net (SAE J1995)	1180 lbf·ft. (163 kgf·m) @ 1300 rpm
Displacement	775 in. ³ (12.7 L)
Bore and stroke	5.1 in. x 6.3 in. (130 x 160 mm)
Starter	24 V, 8.6 hp (6.0 kW)
Battery (qty 2)	2 x 12 V, 200 AH
Alternator	28 V, 100 amp
Air cleaner	Double elements

Hydraulics

Main pumps	70 gpm (266 L/min.)
System pressure (work)	4641 psi (320 bar)
System pressure (steer)	3046 psi (210 bar)
Boom speed – up	6.0 sec
Boom speed – down	2.7 sec
Bucket speed – crowd	2.3 sec
Bucket speed – dump	1.6 sec

Travel Speeds

Travel speed – forward (4)	4.5 / 7.6 / 11.6 / 22.6 mph (7.2 / 12.2 / 18.6 / 36.4 km/h)
Travel speed – forward (5) (US15 package only)	4.5 / 7.8 / 12.1 / 17.4 / 24.9 mph (7.2 / 12.5 / 19.5 / 28 / 40.0 km/h)
Travel speed – reverse (3)	4.5 / 7.6 / 16.5 mph (7.2 / 12.2 / 26.5 km/h)
Max. grade	51% (27°)

Environment

Sound level (2000/14/EC)	106 dB(A)
Cabin sound level (ISO 6396)	70 dB(A)

Refill Capacities

Fuel tank	84 gal. (318 L)
DEF tank	15.85 gal. (60 L)
Cooling system (radiator capacity)	14.48 gal. (54.8 L)
Engine oil	11.9 gal. (45 L)
Transmission	14.5 gal. (55 L)
Front axle	11.1 gal. (42 L)
Rear axles	11.1 gal. (42 L)
Hydraulic system	58.91 gal. (223 L)

Hydraulic Cylinders

Steering (2) bore x rod diameter x stroke	3.9 in. x 2.0 in. x 17.4 in. (100 mm x 50 mm x 442 mm)
Lift arm (2) bore x rod diameter x stroke	5.9 in. x 3.7 in. x 31.3 in. (150 mm x 95 mm x 795 mm)
Bucket (1) bore x rod diameter x stroke	6.3 in. x 3.9 in. x 24.2 in. (160 mm x 100 mm x 615 mm)

The piston rods and cylinder bodies are made of high-strength steel. A shock-absorbing mechanism is fitted in at the base and rod end of the lift and bucket cylinders and the rod end of the steering cylinders to ensure shock-free operation and extended piston life.

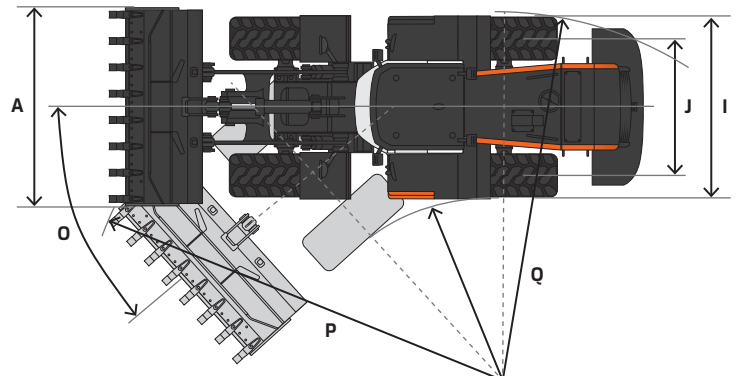
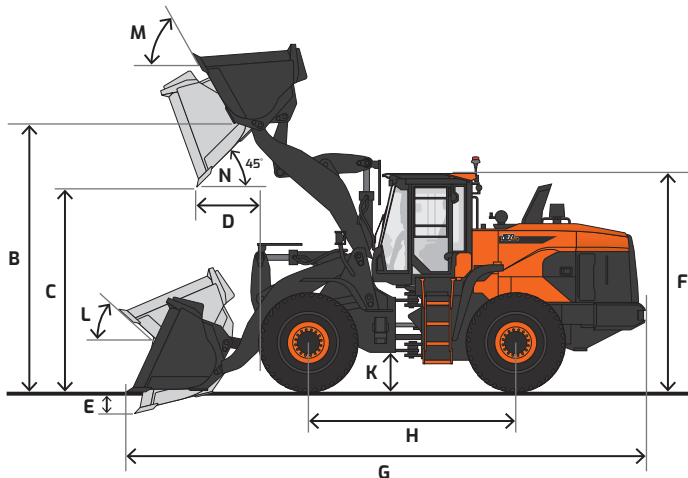
Dimensions

		Standard Arm	High-Lift
Bucket capacity, heaped ISO/SAE		5.5 yd ³ (4.2 m ³)	
Bucket width	A	10' 8" (3270 mm)	
Max. hinge pin height	B	13' 11" (4265 mm)	15' 6" (4745 mm)
Dump height (45°) – fully raised	C	10' 0" (3055 mm)	11' 7" (3537 mm)
Dump reach (45°) – fully raised	D	4' 1" (1255 mm)	4' 3" (1309 mm)
Digging depth	E	3" (100 mm)	
Overall height, ROPS cabin	F	12' 0" (3660 mm)	
Overall length	G	29' 11" (9135 mm)	30' 7" (9314 mm)
Wheel base	H	11' 6" (3525 mm)	
Width at tires	I	10' 6" (3200 mm)	
Tread width	J	7' 7" (2311 mm)	
Ground clearance	K	1' 7" (495 mm)	
Max. tilt angle on ground		44°	45°
Max. tilt angle at carry position	L	48°	51°
Max. tilt angle at fully raised	M	62°	64°
Max. dump angle at fully raised	N	45°	
Max. steering angle	O	40°	
External turning radius, bucket edge	P	22' 11" (7010 mm)	23' 2" (7055 mm)
External turning radius, outside tire	Q	20' 11" (6385 mm)	
Tire size		26.5R25 – L3	
Operating weight		51553 lb. (23380 kg)	52159 lb. (23660 kg)
Static tipping load (straight)		42719 lb. (19377 kg)	34099 lb. (15467 kg)
Static tipping load (at full turn)		37686 lb. (17094 kg)	30080 lb. (13644 kg)
Breakout force		41365 lbf. (184 kn)	39791 lbf. (177 kn)

Front Lift Arm Configuration

Standard: US10, US11

High-Lift: US20, US21



Standard & Optional Equipment

Standard Base Package, US10

■ Standard ● Optional

Engine

Emissions, T4 (EPA)	■
High-pressure common-rail (HPCR)	■
Turbo, variable geometry (VGT)	■
Cooled exhaust gas recirculation (CEGR)	■
Diesel oxidation catalyst (DOC)	■
Selective catalyst reduction (SCR)	■
Diesel exhaust fluid (DEF)	■
Fuel filter with water separator	■
Coolant recovery tank	■
Dual element dry-type air filter with evacuator	■
Precleaner	■
Electronic engine control (ECU)	■
Auto idle (working to standby)	■
Auto shutdown (time adjustable)	■
Overheat & low oil pressure engine protection	■
Cooling fan – radiator, variable speed	■
Cooling fan – radiator, automatic reversible	■
Remote drain port – engine oil	■
Block heater (110 V)	●

Hydraulic

Variable displacement axial piston pump	■
Closed-center system	■
Main control valves, pilot	■
Remote test ports	■
Remote drain port, hydraulic oil	■
Spring-applied hydraulic release brake	■
Auxiliary hydraulics (3rd valve)	■
Automatic boom/lift kick-out, adjustable (in cab)	■
Automatic return-to-dig position, adjustable	■
Boom float	■
Load isolation system	●

Electrical

System voltage – 24 V	■
Alternator – 28 V, 100 amp	■
2 x 12 V batteries, 200 AH reserve capacity, 900 CCA	■
Blade-type fuse panel	■
Main circuit breaker	■
Lights, work (LED): front (2), rear (2)	■
Lights, work (LED): front (4), rear (4)	●
Lights, work (LED): front (6), rear (6)	●
Lights, headlights (halogen) – hi/lo beams (2)	■
Lights, stop, tail & direction indicators	■
Horn	■
Rotating beacon	●
Hour meter	■
Engine restart prevention system	■
Rearview camera	■
Laptop service port	■
Self-diagnostics system	■

Cabin

Steel, all-weather & sound-suppressed	■
ROPS (ISO 3471)	■
FOPS (ISO 3449)	■
Front window with wiper/washer	■
Rear window with wiper	■
Tinted safety glass	■
Visor, retractable	■
Adjustable sliding side door window	■
Defrost, front window	■
Lockable doors	■
Seat	■
- Air suspension	■
- 2" (51 mm) seat belt	■
- Adjustable height & recline	■
- Adjustable fore/aft	■
- Adjustable armrests	■
3" (76 mm) seat belt	■
Control stands	■
- Height adjustable	■
- Fore/aft adjustable	■
Storage for operator's manuals	■
Mirror, interior rearview (1)	■
Mirror, exterior (2), heated	■
Mirror, exterior (2), heated (electronic adjustable)	●
Fully automatic HVAC with ambient temperature sensor	■
Smart Touch display	■
- 8" touch-enabled	■
- Adjustable height & angle	■
Transparent bucket	■
- Multi-camera system & controller	■
- In-cab display	■
AM/FM stereo with Bluetooth®	■
Speakers (2)	■
Antenna, roof-mounted	■
Emergency breakout tool	■
Hot/cold beverage compartment	■
Power socket, 12 V	■
Power socket, USB	■
Cup holder	■
Interior light	■
Coat hanger	■

Controls

Adjustable steering column	■
- Tilting	■
- Telescoping	■
Emergency secondary steering	●
Throttle pedal (accelerator)	■
Brake pedal, right	■
Brake pedal, left	●
Brake pedal transmission kick-out	■
Gear selector (FNR)	■
Joystick control	■
Fingertip control (3-lever)	●
Switches, console-mounted	■
- Starter (button)	■
- Parking brake	■
- Pilot cutoff	■
- Transmission cutoff	■
- Work light	■
- Reversible cooling fan	■
Emergency stop switch	■
Power mode (P, S, E)	■
Transmission mode (manual / auto 1-4 / auto 2-4)	■
Wiper control panel	■
Audio control panel	■

Display Monitor & Warnings

Buzzer	■
- Engine oil pressure	■
- Coolant temperature	■
- Transmission overheat	■
Gauges	■
- Fuel level	■
- DEF level	■
- Engine coolant temperature	■
- Transmission oil temperature	■
- Engine rpm	■
- Speedometer	■
- Transmission gear indicator	■
- Battery voltage	■
- ECO	■
- Smart guidance system	■
- Digital clock	■
- Trip meter	■
- Hour meter	■
- Total operation time	■
- 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	■
- Direction signal	■
- Lights (high, main, work, beacon)	■
- Emergency steering	■
- Hydraulic oil temperature	■
- Hydraulic charge pressure warning	■
- Hydraulic pilot filter	■
- Hydraulic return filter	■
- Transmission mode	■
- Transmission warning	■
- Transmission lock-up	■
- Transmission oil temp	■
- Transmission gear indicator	■
- Brake fluid pressure warning	■
- Reverse fan indicator	■
- Mirror heat indicator	■
- Parking brake indicator	■
Back-up alarm	■
Scale system, integrated smart scale	●
Rollover protection warning	■
Around view monitor (AVM)	●

Frame & Driveline

Z-bar lift arm	■
Z-bar lift arm, high-lift	●
Steering cylinder, double-acting (2)	■
Transmission – 4F/3R speed	■
- Full automatic – power shift	■
- Torque converter	■
Transmission – 5F/3R speed	●
- Automatic – power shift	●
- Torque converter lock-up clutch	●
Differentials	■
- Limited slip front/rear	■
Differentials	●
- Hydraulic locking front	●
- Open rear	●
Hydraulic power steering	■
Outboard planetary axles	■
Fixed front axle	■
Oscillating rear axle	■
Parking brake, spring-applied hydraulic release	■
Sealed, self-adjusting brakes	■
Tires, 20 5R25 L3 radial	■
Outboard brakes	■

Other

Centralized lubrication	■
Automatic lubrication system	● ²
Air compressor	●
Handrails, entrance & service steps	■
Handrails, roof-mounted	●
Skid-resistant entrance steps	■
Skid-resistant service platforms	■
Drawbar & pin	■
Wheel chocks	■
Rear fender, full	●
Additional counterweight	● ¹
Manuals	■
- Operation & Maintenance	■
- Parts	■
- AEM Safety Manual	■
DEVELON Fleet Management	■
Vandalism protection	■
- Lockable panels	■
- Lockable fluid fill points	■
- Anti-theft protection (password)	■

¹ Standard on high-lift models

² Dealer-installed only

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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