DEVELON

Wheel Loader DL320-7



Engine

| Make | DEVELON |
|---------------------------------------|---------------------------------------|
| Model | DL08 |
| Number of cylinders | 6 |
| Rated power, gross (hp per SAE J1995) | 270.9 hp (202.0 kW) @ 1800 rpm |
| Rated power, net (hp per SAE J1349) | 270.9 hp (202.0 kW) @ 1800 rpm |
| Max. torque, gross (SAE J1995) | 940.0 lbf.·ft. (130.0 kgf) @ 1300 rpm |
| Displacement | 466.0 in. ³ (7.64 L) |
| Bore and stroke | 4.3" x 5.5" (108 mm x 139 mm) |
| Starter | 24 V, 8.6 hp (6.0 kW) |
| Battery | 2 x 12 V, 200 AH, 1300 CCA |
| Alternator | 24 V, 80 A |
| Air cleaner | Double elements |

Hydraulics

| Main pumps | Variable displacement axial piston pump 79.3 gpm (300.0 L/min.) |
|-------------------------|--|
| System pressure (work) | 3626.0 psi (250.0 bar) |
| System pressure (steer) | 3118.0 psi (215.0 bar) |
| Boom speed – up | 5.8 sec |
| Boom speed – down | 2.9 sec |
| Bucket speed – crowd | 2.0 sec |
| Bucket speed – dump | 1.6 sec |

Travel Speeds

| Travel speed – forward (4-speed) | 3.9 / 7.2 / 14.3 / 22.4 mph (6.3 / 11.7 / 23.0 / 36.0 km/h) |
|--|--|
| Travel speed – forward (5-speed) (US50 and US51 packages only) | 4.0 / 7.0 / 10.6 / 15.9 / 24.9 mph (6.4 / 11.3 / 17.1 / 25.6 / 40.0 km/h) |
| Travel speed – reverse (4-speed) | 3.9 / 7.6 / 15.0 mph (6.3 / 12.3 / 24.4 km/h) |
| Travel speed – reverse (5-speed) (US50 and US51 packages only) | 4.0 / 7.5 / 17.7 mph (6.5 / 12.1 / 28.5 km/h) |
| Max. grade | 51% (27°) |

Environment

| Sound level (ISO 6395) | 105 dB(A) |
|------------------------------|-----------|
| Cabin sound level (ISO 6396) | 67 dB(A) |

Refill Capacities

| Fuel tank | 76.9 gal. (291.0 L) |
|------------------------------------|---------------------|
| DEF tank | 16.4 gal. (62.0 L) |
| Cooling system (radiator capacity) | 11.9 gal. (45.0 L) |
| Engine oil | 9.2 gal. (35.0 L) |
| Transmission | 11.1 gal. (42.0 L) |
| Front axle | 9.2 gal. (35.0 L) |
| Rear axles | 9.2 gal. (35.0 L) |
| Hydraulic system | 45.7 gal. (173.0 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

| Steering (2) bore x rod diameter x stroke | 3.1" x 1.6" x 17.4" (80 mm x 40 mm x 443 mm) |
|---|---|
| Lift arm (2) bore x rod diameter x stroke | 5.9" x 3.7" x 31.5" (150 mm x 95 mm x 800 mm) |
| Bucket (1) bore x rod diameter x stroke | 7.1" x 4.1" x 21.1" (180 mm x 105 mm x 535 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.

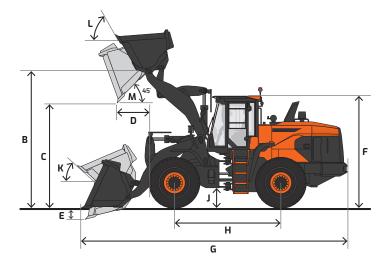
NOTE: Where applicable, dimensions are in accordance with Society of Automotive Engineers (SAE) and ISO standards. Specifications and design are subject to change without notice. All dimensions are given for DEVELON wheel loaders equipped with standard tires. Pictures of DEVELON wheel loaders may show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

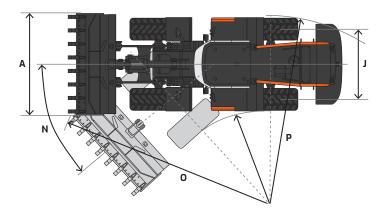
Dimensions

| | | Standard Arm | High-Lift | |
|---------------------------------------|-----------|---|-----------------------|--|
| Bucket capacity, heaped ISO/SAE | | 4.6 yd ³ (3.5 m ³) | | |
| Bucket width | А | 9' 6.9" (2920 mm) | | |
| Max. hinge pin height | В | 13' 8.2" (4170 mm) | 15' 4.6" (4690 mm) | |
| Dump height (45°) – fully raised | С | 9' 11.7" (3040 mm) | 11' 8.3" (3563 mm) | |
| Dump reach (45°) – fully raised | D | 4' 0.0" (1220 mm) | 4' 8.1" (1425 mm) | |
| Digging depth | E | 3.5" (88 mm) | 5.9" (149 mm) | |
| Overall height, ROPS cabin | F | 11' 6.2" (3511 mm) | | |
| Overall length | G | 27' 3.2" (8310 mm) | 29' 4.4" (8950 mm) | |
| Wheel base | Н | 10' 9.9" (3300 mm) | | |
| Tread width | I | 7' 0.6" (2150 mm) | | |
| Ground clearance | J | 1' 3.7" (400 mm) | | |
| Max. tilt angle on ground* | | 44° | 45° | |
| Max. tilt angle at carry position | К | 48° | 51° | |
| Max. tilt angle at fully raised | L | 64° | 63° | |
| Max. dump angle at fully raised | М | 45° | _ | |
| Max. steering angle | Ν | 40° | | |
| External turning radius, bucket edge | 0 | 21' 8.4" (6615 mm) | 22' 8.7" (6926 mm) | |
| External turning radius, outside tire | Ρ | 19' 4.9" (5917 mm) | | |
| Tire size | Tire size | | 23.5R25 L3 | |
| Operating weight | | 43572 lb. (19764 kg) | 43975 lb. (19947 kg) | |
| Static tipping load (straight) | | 34454 lb. (15628 kg) | 26264 lb. (11913 kg) | |
| Static tipping load (at full turn) | | 30424 lb. (13800 kg) | 23193 lb. (10520 kg) | |
| Breakout force | | 33946 lbf. (151.0 kN) | 34396 lbf. (153.0 kN) | |

*Not shown on diagram

Front Lift Arm Configuration Standard: US10, US11, US50, US51 High-Lift: US20, US21





Standard & Optional Equipment | Standard Base Package, US10

Standard • Optional

Engine

| Chance | |
|---|--|
| Emissions (EPA), T4f | |
| High-pressure common-rail (HPCR) | |
| Turbo, variable geometry (VGT) | |
| Cooled exhaust gas recirculation (CEGR) | |
| Diesel oxidation catalyst (DOC) | |
| Selective catalytic 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 | |
| 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 | - |
| Auxiliary hydraulics (3rd valve) | - |
| Automatic boom/lift kick-out, adjustable (in cab) | - |
| Automatic return-to-dig position, adjustable | - |
| Boom float | - |
| Ride control | - |

Electrical

| System voltage – 24 V | • |
|---|---|
| Alternator – 24 V, 80 A | • |
| 2 x 12 V batteries, 100 AH reserve capacity, 1300 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 3471) FOPS (ISO 3449) Front window with wiper/washer Rear 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 - 3' (76 mm) seat belt - Adjustable height & recline - Adjustable fore/aft - Adjustable fore/aft - Adjustable - Fore/aft adjustable - Fore/aft adjustable - Fore/aft adjustable - Fore/aft adjustable Storage for operator's manuals Mirrors, exterior (2), heated (electronic adjustable) Mirrors, exterior (2), heated (electronic adjustable) Pully automatic HVAC with ambient temperature sensor Smart Touch display - 4 djustable height & angle Transparent Bucket - Multi-camera system & controller |
|--|
| 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 - 3' (76 mm) seat belt - Adjustable height & recline - Adjustable fore/aft - Adjustable armrests Control stands - Height adjustable Storage for operator's manuals Mirrors, exterior (2), heated (electronic adjustable) Fully automatic HVAC with ambient temperature sensor Smart Touch display - 8' touch-enabled - Adjustable height & angle |
| Rear window with wiper Tinted safety glass Visor, retractable Adjustable sliding side door window Defrost, front window Lockable doors Seat - Air-suspension -3" (76 mm) seat belt - Adjustable height & recline - Adjustable fore/aft - Adjustable armrests Control stands - Height adjustable Storage for operator's manuals Mirrors, exterior (2), heated Mirrors, exterior (2), heated (electronic adjustable) Fully automatic HVAC with ambient temperature sensor Smart Touch display - 8" touch-enabled - Adjustable height & angle |
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| - 8° touch-enabled ' - Adjustable height & angle Transparent Bucket - Multi-camera system & controller |
| - Multi-camera system & controller |
| - In-cab display |
| AM/FM stereo with Bluetooth® |
| Speakers (2) |
| Antenna, roof-mounted |
| Emergency breakout tool |
| 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

| <u> </u> | |
|---|---|
| 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 - 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 pilot filter - Hydraulic return filter - Transmission mode - Transmission lock-up - Transmission gar indicator - Brake fluid pressure warning - Reverse fan indicator - Mirror heat indicator - Parking brake indicator - Marking brake indicator - Parking brake indicator - Marking brake brake indicator - Marking brake b |
| Back-up alarm | |
| Situation Awareness Technology | r (SAT) |
| Scale system, integrated smart s | scale • |
| Around view monitor (AVM) | • |
| | |

Frame & Driveline

| Z-bar lift arm | |
|--|---|
| Z-bar lift arm, high-lift | • |
| Steering cylinders, 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 | |
| Spring-applied hydraulic release brake | |
| Sealed, self-adjusting brakes | |
| Tires, 20.5R25 L3 radial | |
| Outboard brakes | |
| | |

Other

| Centralized lubrication Air-compressor Handrails, entrance & service steps Handrails, roof-mounted Skid-resistant entrance steps Skid-resistant entrance steps Skid-resistant service platforms Drawbar & pin Wheel chocks Rear fender, full Additional counterweight* Manuals - Operation & Maintenance - AEM Safety Manual MY DEVELON (telematics) Vandalism protection - Lockable Panels - Lockable Panels - Lockable Pindi fil points | | |
|---|---|---|
| Handrails, entrance & service steps Handrails, roof-mounted Skid-resistant entrance steps Skid-resistant service platforms Drawbar & pin Wheel chocks Rear fender, full Additional counterweight* Manuals - Operation & Maintenance - AEM Safety Manual MY DEVELON (telematics) Vandalism protection - Lockable panels - Lockable Pluid fill points | Centralized lubrication | |
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| Skid-resistant entrance steps • Skid-resistant service platforms • Drawbar & pin • Wheel chocks • Rear fender, full • Additional counterweight* • Manuals • - Operation & Maintenance • - AEM Safety Manual • MY DEVELON (telematics) • Vandalism protection • - Lockable fluid fill points • | Handrails, entrance & service steps | |
| Skid-resistant service platforms Drawbar & pin Wheel chocks Rear fender, full Additional counterweight* Additional counterweight* Operation & Maintenance - Operation & Maintenance - AEM Safety Manual MY DEVELON (telematics) Vandalism protection - Lockable fluid fill points | Handrails, roof-mounted | |
| Drawbar & pin Wheel chocks Rear fender, full Additional counterweight* Manuals Operation & Maintenance - AEM Safety Manual MY DEVELON (telematics) Vandalism protection - Lockable fluid fill points | Skid-resistant entrance steps | |
| Wheel chocks ■ Rear fender, full ● Additional counterweight* ● Manuals ● - Operation & Maintenance ■ - AEM Safety Manual ● MY DEVELON (telematics) ■ Vandalism protection = - Lockable Panels = - Lockable fluid fill points ■ | Skid-resistant service platforms | |
| Rear fender, full Additional counterweight* Manuals - Operation & Maintenance - AEM Safety Manual MY DEVELON (telematics) Vandalism protection - Lockable fluid fill points | Drawbar & pin | |
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| Operation & Maintenance AEM Safety Manual MY DEVELON (telematics) Vandalism protection Lockable panels Lockable fluid fill points | Additional counterweight* | • |
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| - Lockable panels - Lockable fluid fill points | MY DEVELON (telematics) | |
| | - Lockable panels - Lockable fluid fill points | • |

*Standard on high-lift models

Powered by Innovation

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