DEVELON

Articulated Dump Truck



Engine

Make	Scania
Model	DC09
Number of cylinders	5
Rated power, gross (hp per ISO 3046)	370.1 hp (276.0 kW) @ 2100 rpm
Rated power, net (hp per ISO 9249)	362.1 hp (270.0 kW) @ 2100 rpm
Max. torque, gross	1381.5 lbf.·ft. (1873.0 Nm) @ 1300 rpm
Displacement	567.5 in. ³ (9.3 L)
Bore and stroke	5.1" x 5.5" (130 mm x 140 mm)
Starter	24 V, 8.0 hp (6.0 kW)
Battery	2 x 12 V, 105 AH
Alternator	24 V, 100 A
Air cleaner	Double elements

Hydraulics

Main pumps	77.7 gpm (294.0 L/min.)
Relief pressure (main)	4061.1 psi (280.0 bar)
Emergency steer pump	13.2 gpm (50.0 L/min.)
System pressure (steering)	3045.8 psi (210.0 bar)

Travel Speeds

Travel speed – forward (8)	3.7/5.0/6.8/9.9/14.3/19.9/28.0/34.2 mph (6.0/8.0/11.0/16.0/23.0/32.0/45.0/55.0 km/h)
Travel speed – reverse (4)	3.7/5.0/6.8/9.9 mph (6.0/8.0/11.0/16.0 km/h)

Environment

Sound level (ISO 6395)	108 dB(A)
Cabin sound level (ISO 6396)	72 dB(A)

Dump Body

Dump body volume	(2:1)	23.3 yd³ (17.8 m³)
Dump body dumping time		Up: 12 sec / Down: 10 sec
	with tailgate	18.6 yd³ (14.2 m³)
Level capacity	without tailgate	17.8 yd³ (13.6 m³)
Heaped capacity	with tailgate	23.3 yd³ (17.8 m³)
	without tailgate	22.0 yd³ (16.8 m³)
Density index		2809.0 lb.·yd³ (1667.0 kg·m³)

Refill Capacities

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Fuel tank	95.6 gal. (362.0 L)
DEF tank	18.5 gal. (70.0 L)
Cooling system (radiator capacity)	11.9 gal. (45.0 L)
Engine oil	9.2 gal. (35.0 L)
Transmission	17.7 gal. (67.0 L)
Front differential	2.5 gal. (9.4 L)
Rear differential	Included in tandem
Front hub (2)	2.5 gal. (9.6 L)
Tandem housing (2)	40.9 gal. (155.0 L)
Rear hub (4)	Included in tandem
Hydraulic tank	16.6 gal. (63.0 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

Dump body tilt (2) bore x stroke	4.5" x 90.2" (115 mm x 2290 mm)
Steering (2) bore x stroke	3.9" x 20.3" (100 mm x 515 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 articulated dump trucks equipped with with standard radial 23.5 R25 tires. Pictures of DEVELON articulated dump trucks may show other than standard equipment. All dimensions are shown in inches. Respective metric dimensions are enclosed by parentheses. DEVELON equipment is manufactured with a Quality Management System that is in compliance with ISO 9001:2008.

Features

Suspension

- Front: semi-independent, self-leveling hydro-gas suspension
- Rear: free-swinging tandem housing

Brake System

- · Dual circuit braking system acting on all six wheels
- Outboard hydraulic-operated brakes with enclosed, oil-cooled wet multiple discs on four hubs (braking force distributed to two hubs by tandem gear wheels)
- Spring-actuated hydraulic-released parking brake, mounted on driveline shaft
- Maximum gradient, parking brake: 14°
- Automatic hydrodynamic transmission retarder: 4 settings

Driveline

- Full-time 6×6 drive: two transverse differentials and one longitudinal
- Front axle transverse differential: limited-slip diff lock with 45% locking ratio
- Rear axle transverse differential: limited-slip diff lock with 40% locking ratio
- Inter-axle longitudinal differential:
- Torque-proportioning differential: integrated into ZF transmission
- Torque distribution: 1/3 to the front axle, 2/3 to the rear axle, 100% lockable
- Tandem housing: gear driven, free-swinging Provides equal drive to rear wheels and ensures the best possible ground contact – whatever the ground conditions.
- Ample ground clearance at articulation hinge (1' 10.4")

No diesel particulate filter (DPF) required

Articulation Hinge and Steering

- Articulation hinge with forward-mounted turning ring
- Steering cylinders (two): double-acting
- Maximum steering angle: 45°
- Ground-driven emergency steering pump

Cab

Comfort

- · Cab centrally located on rubber mountings
- Whole body vibration less than 0.5 ms²
- Ergonomic operating controls location
- Pressurized and sealed cab
- · Climate control: heater and air conditioning
- Adjustable heated air-suspension seat
- Adjustable steering column
- Standard radio supports MP3, digital audio and Bluetooth[®] wireless technology
- 12 V power source and spacious storage department
- 2 USB ports

Safety & Visibility

- Approved to ROPS/FOPS standards (ISO 3471/ISO 3449)
- Low interior sound level: 72 dB(A) (ISO 6396)
- External sound level: 108 dB(A) (ISO 6395)
- Superior visibility for safer operation
- Adjustable heated mirrors
- All-around handrails
- Front entry to cab
- Ground level fluid fill points and site gauges

Serviceability

- Tilting cab for service access
- Grouped hydraulic test ports



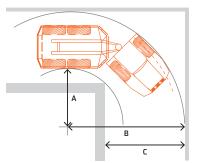
- Automatic central lubrication system
- Bed heater keeps material from sticking to body

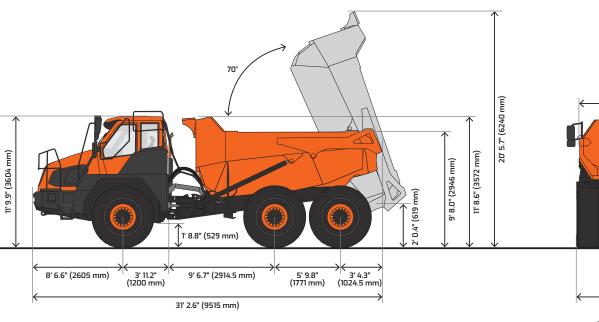
Dimensions

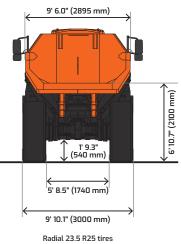
		DA30-5
Gross weight		112877 lb. (51200 kg)
Net weight		51147 lb. (23200 kg)
Payload		61729 lb. (28000 kg)
Empty weight distribution	front axle	27999 lb. (12700 kg)
	rear axle	23149 lb. (10500 kg)
	front/rear	54.7%/45.3%
Loaded weight distribution	front axle	34992 lb. (15872 kg)
	rear axle	77885 lb. (35328 kg)
	front/rear	31.0%/69.0%

Turning radius according to ISO 7457: **25' 5.9" (7770 mm)**

A = 13' 1.3" (3995 mm) B = 26' 6.9" (8100 mm) C = 17' 3.9" (5280 mm)







Standard & Optional Equipment

 Standard • Optional

Engine

engine	
Emissions (EPA), T4f	
High-pressure common-rail (HPCR)	
Cooled exhaust gas recirculation (CEGR)	
Selective catalyst reduction (SCR)	
Diesel exhaust fluid (DEF)	
Fuel filter with water separator	
Coolant recovery tank	
Dual element dry-type air filter with evacuator	
Electronic engine control (ECU)	
Cool-down mode	
Diesel engine heater	٠
Block heater (110 V)	•

Hydraulic

Electrical

System voltage – 24 V	-
Alternator – 24 V, 100 A	
2 x 12 V batteries, 140 AH reserve capacity	
Electronic fuses	
Lights, work (halogen): front & rear	•
Lights, work (LED): front & rear	•
Lights, stop, tail & direction indicators	
Rotating beacon	•
Hour meter	-
Rearview camera	
Laptop service port	
Self-diagnostics system	
Emergency shutdown switch	

Controls

Adjustable steering column - Tilting - Telescoping	•
Throttle pedal (accelerator)	
Brake pedal	•
Gear selector ("trip-tonic")	•
Electronic body hoist lever	
Adjustable hydrodynamic retarder lever	
Switches, console-mounted - Key switch - Parking brake	•
Buttons & indicator lights, keypad - Parking lights - Main lights - Engine pre-heater - Hazard lights - Rear axle differential lock - Inter-axle differential lock - Inter-axle differential lock - Retarder control - Filter heater - Heated seat - Heated seat - Heated mirrors - Rear work lights - Rotating beacon Mark lights	

- Work lights Interior cabin light

Cabin

Steel, all-weather & sound-suppressed	•
ROPS (ISO 3471)	•
FOPS (ISO 3449)	
Front window with wiper/washer	
Rear window	
Tinted safety glass	•
Visor, retractable	•
Adjustable sliding side window	•
Lockable doors	•
Seat - Heated - Air-suspension - 2" (51 mm) seat belt - Adjustable height & recline - Adjustable fore/aft - Adjustable armrests	•
Instructor's seat, folding	
Storage for operator's manuals	•
Mirrors (2), exterior front-mounted	
Mirrors (2), exterior side-mounted, adjustable & heated	•
Fully adjustable HVAC	
Multi-function LCD display	
Cigarette lighter	
AM/FM stereo & Bluetooth®	•
Speakers (2)	•
Antenna	•
Space for cooler box	•
Storage	•
Power socket, 12 V, USB power outlets (2)	•
Cup holder	•
Interior light	•
Guard, rear window	•
Cab tiliting system	•

Display Monitor & Warnings

Buzzer - Brake system - Parking brake		•
Gauges - Fuel level - DEF level - Engine coolant temperature - Transmission oil temperature - Retarder oil temperature - Payload meter - Gradient meter - Engine rpm	- Speedometer - Transmission gear indicator - Battery voltage - Digital clock - Trip meter - Hour meter - Foul consumption	•
Warning & indicator lights - Seat belt - Error code - SCR warning - Check engine - Engine oil pressure - Ragine pre-heat engaged - Radiator coolant level & temperature - Air filter - Fuel level - DEF level - Lights (high, main, work, beacon)	Direction signal Emergency steering Transmission mode Transmission lock-up Transmission oil temp Transmission gear indicator Retarder oil temperature Retarder brake Lubrication system Body down Parking brake indicator Payload indicator	•

Frame & Suspension

Articulation hinge	•
Steering cylinder, double-acting (2)	•
Turning ring, forward-mounted	•
Towing hook, front & rear	•
Sloping rear frame	•
Front – semi-independent, self-leveling hydro-gas suspension	•
Rear – free-swinging tandem housing	•
Tires, radial 23.5 R25	•
Tires, radial 23.5 R25 (various brands)	•
Tires, radial 750/65R25 (various brands)	•
Tire pressure monitoring (certain tires only)	•

Driveline

Transmission, automatic – electronic shift control	
Torque converter lock-up clutch	
6x6 drive, full-time	
Front axle transverse differential: limited-slip diff lock with 45% locking ratio	
Rear axle transverse differential (1): limited-slip diff lock with 40% locking ratio	
Inter-axle longitudinal differential - Torque-proportioning differential: integrated into ZF transmission - Torque distribution: 1/3 to front axle, 2/3 to rear axle, 100% lockable	
Tandem housing – gear driven, free-swinging	
Automatic hydrodynamic transmission retarder, 4 settings	
Braking system, dual circuit	
Hydraulic, wet multiple discs – 4 (front & mid wheels)	
Parking brake, spring-applied hydraulic release – driveshaft mounted	

Body

*	
Body, high-tensile Hb400 steel	
Body (none)	•
Lifting cylinder, double-acting (2) – cushion, extending	
Tailgate, scissor type	
Tailgate (none)	٠
Spill guard on front of body	
Bed heating system	
Body lining, standard	•
Body lining, full	•
Side extensions	•

Other

Automatic lubrication system	-
Handrails & service steps	-
Skid-resistant steps & service platforms	-
Body lift support	-
Fire extinguisher	•
First aid kit	•
Manuals - Operation & Maintenance - AEM Safety Manual	•
MY DEVELON (telematics)	-
Vandalism protection - Lockable panels - Lockable fluid fill points	•
Toolkit	•
Fast fill	•
Mud flaps	

Powered by Innovation

DEVELON

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