

D7E

Track-Type Tractor

CATERPILLAR®



Engine

Engine Model	Cat® C9.3 ACERT™
Net Power – SAE J1349	175 kW 235 hp

Drive Train

Type	Electric Drive
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Weights

Operating Weight – STD SU	25 700 kg	56,669 lb
Operating Weight – LGP S	28 170 kg	62,115 lb
Shipping Weight – STD	21 600 kg	47,619 lb
Shipping Weight – LGP	23 980 kg	52,866 lb

D7E Track-Type Tractor Specifications

Engine

Engine Model	Cat® C9.3 ACERT™	
Gross Power	188 kW	252 hp
Net Power	175 kW	235 hp
– Caterpillar		
Net Power	175 kW	235 hp
– ISO 9249		
Engine Power	189 kW	253 hp
– ISO 14396		
Net Power	175 kW	235 hp
– SAE J1349		
Net Power	175 kW	235 hp
– EU 80/1269		
Bore	115 mm	4.5 in
Stroke	149 mm	5.9 in
Displacement	9.3 L	567 in ³

- Ratings at 1700 rpm.
- Net power advertised is the power available at the flywheel when engine is equipped with fan, air cleaner, and muffler.
- No derating required up to 2286 m (7,500 ft) altitude, beyond 2286 m (7,500 ft) automatic derating occurs.

Service Refill Capacities

Fuel Tank	409 L	108 gal
Fuel Tank, High Capacity	476 L	126 gal
Cooling System	87 L	22.5 gal
Engine Crankcase	30 L	8 gal
Power Train	60 L	16 gal
Final Drives (each)	34 L	9 gal
Final Drive (LGP each)	42 L	11 gal
Pivot Shaft Compartment	7 L	1.8 gal
Hydraulic Tank	76 L	20 gal

Weights

Shipping Weight	21 600 kg	47,619 lb
Operating Weight – STD SU	25 700 kg	56,669 lb
Operating Weight – LGP S	28 170 kg	62,115 lb
Shipping Weight – LGP	23 980 kg	52,866 lb

- Shipping Weight includes lubricants, coolant, ROPS/FOPS cab, standard track and 10% fuel.
- Operating Weight includes blade, lubricants, coolant, full fuel tank, standard track, ROPS/FOPS cab, drawbar and operator.

Hydraulic Controls – Pump

Pump Output – Steering	312 L/min	82.4 gal/min
Pump Output – Implement	200 L/min	52.8 gal/min
Lift Cylinder Flow	190 L/min	42 gal/min
Ripper Cylinder Flow	190 L/min	42 gal/min
Pump Type	Piston, Variable Displacement	
Tilt Cylinder Flow – Head End Flow	93 L/min	24.6 gal/min
Tilt Cylinder Flow – Rod End Flow	66 L/min	17.4 gal/min

Hydraulic Controls – Main Relief Valve

Pressure Setting – Steering	27 600 kPa	4,000 psi
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Hydraulic Controls – Maximum Operating Pressure

Bulldozer	27 600 kPa	4,000 psi
Tilt Cylinder	27 600 kPa	4,000 psi
Ripper (Lift)	27 600 kPa	4,000 psi
Ripper (Pitch)	27 600 kPa	4,000 psi
Steering	41 000 kPa	5,950 psi

Ripper

Type	Multi-Shank	
Number of Pockets	3	
Overall Beam Width	2088 mm	82.2 in
Beam Cross Section	355 mm	14.0 in
Maximum Clearance Raised (under tip, pinned in bottom hole)	588 mm	23.1 in
Maximum Penetration	650 mm	25.6 in
Maximum Penetration Force	8908 kg	19,639 lb
Pryout Force	23 902 kg	52,695 lb
Weight – with One Shank	1650 kg	3,572 lb
Each Additional Shank	150 kg	330 lb
Ramp Angle	26 Degrees	
Pocket Spacing	900 mm	35.4 in
Shank Gauge	1800 mm	70.9 in
Shank Section	72 mm × 228 mm 2.8 in × 9.0 in	

D7E Track-Type Tractor Specifications

Winch

Winch Model	PA90	
Weight*	1520 kg	3,350 lb
Oil Capacity	12 L	3.2 gal
Winch and Bracket Length	1115 mm	93.9 in
Winch Case Length	1110 mm	43.7 in
Winch Case Width	826 mm	32.5 in
Increased Tractor Length – STD	1032 mm	93.9 in
Increased Tractor Length – LGP	1032 mm	93.9 in
Drum Diameter	318 mm	12.5 in
Drum Width	226 mm	8.9 in
Flange Diameter	610 mm	24 in
Drum Capacity – 24 mm (1 in)	62 m	203 ft
Drum Capacity – 29 mm (1.13 in)	56 m	185 ft
Ferrule Size (O.D. × Length)	60 mm × 65 mm	2.38 in × 2.56 in
Winch Drive	Hydraulic	
Control	Electronic/Hydraulic	
Installed Weight	1520 kg	3,350 lb
Winch Length	1115 mm	43.9 in
Overall Width	1090 mm	43 in
Throat Clearance	218 mm	8.6 in
Rope Diameter (recommended)	25 mm	1 in
Cable Ferrule Size (O.D. × Length)	60 mm × 65 mm	2.38 in × 2.56 in
Maximum Bare Drum Line Pull	40 800 kg	90,000 lb
Maximum Bare Drum Line Speed	21 m/min	70 ft/min
Maximum Full Drum Line Pull	25 800 kg	57,000 lb
Maximum Full Drum Line Speed	35 m/min	116 ft/min

* Basic winch weight, mounting arrangement, hydraulic and electrical system weight.

Standards

ROPS/FOPS	SAE 1040, ISO 3471-1994/ISO 3449-2005, SAE 5231
Brakes	ISO 10265 2008
Cab	ANSI/SAE J1166 OCT 98

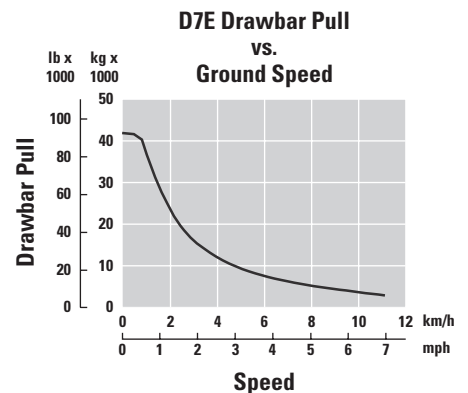
- The operator sound exposure Leq (equivalent sound pressure level) measured according to the work cycle procedures specified in ANSI/SAE J1166 OCT 98 is 77 dB(A), and as measured by ISO 6396: 2008 is 73 dB(A), for cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.
- Hearing protection may be needed when operating with an open cab (when not properly maintained or doors/windows open) for extended periods and noisy environment.
- The exterior sound pressure level for the standard machine measured at a distance of 15 meters according to the test procedures specified in SAE J88 APR 95, mid-gear-moving operation, is 80 dB(A).

Drive Train

Type	Electric Drive
AC Compressor Nominal Input Voltage	320 volts
AC Compressor Maximum Input Current	12 amps
Electric Water Pump System Nominal Input Voltage	320 volts
Electric Water Pump System Nominal Input Current	5 amps
AC Generator and Propulsion Module Voltage	480 volts

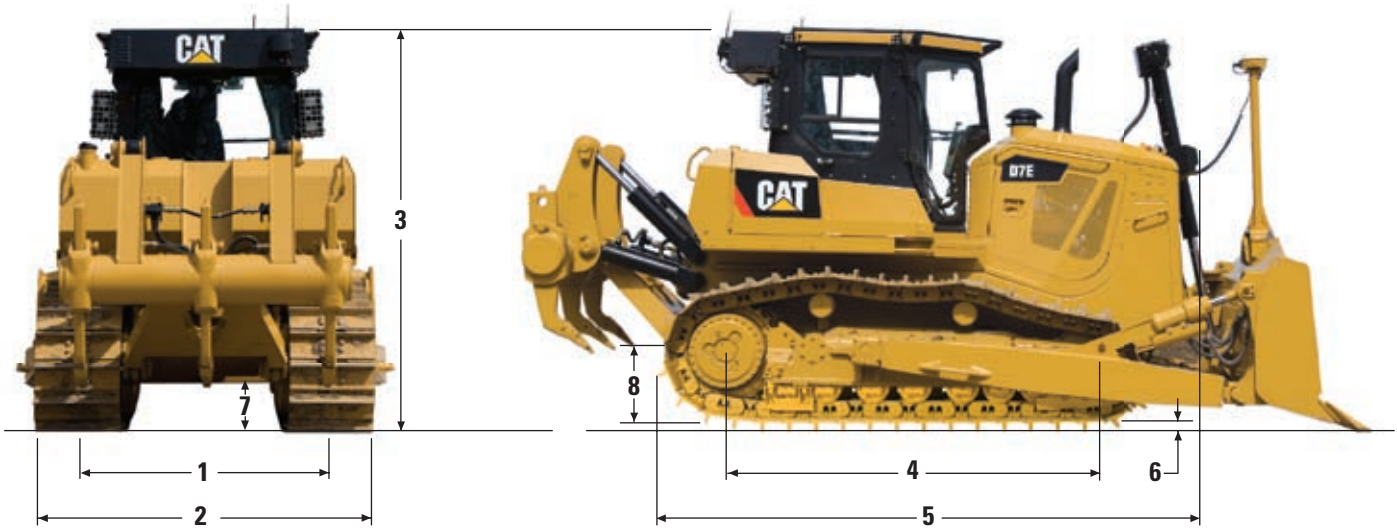
- Nominal current dependent on heat/humidity loading on HVAC unit.
- Measured with water pump operating speed of 4400 rpm. Measurement is 1 amp with the water pump operating speed of 2100 rpm.

Drawbar Pull



Dimensions

All dimensions are approximate



	STD		LGP	
1 Track Gauge	1981 mm	78 in	2286 mm	90 in
2 Width of Tractor over Trunnions	2880 mm	113 in	3423 mm	135 in
Width of Tractor without Trunnions (std. shoes)	2591 mm	102 in	3200 mm	126 in
3 Machine Height from Tip of Grouser				
Top of Stack	3365 mm	132 in	3365 mm	132 in
Top of Standard Cab	3392 mm	134 in	3392 mm	134 in
From Ground Face of Shoe	3322 mm	131 in	3322 mm	131 in
4 Length of Track on Ground	3016 mm	119 in	3450 mm	136 in
5 Length of Basic Tractor	4608 mm	181 in	4608 mm	181 in
With the following attachments add to basic tractor length:				
Ripper (with tip at ground line)	1391 mm	55 in		N/A
Ripper (with tip fully raised)	1222 mm	48 in		N/A
Winch	1032 mm	41 in	1032 mm	41 in
Drawbar	270 mm	10.6 in	270 mm	10.6 in
S Blade	977 mm	38 in		N/A
SU Blade	1187 mm	47 in		N/A
U Blade	1425 mm	56 in		N/A
A Blade	1230 mm	48 in	1230 mm	48 in
6 Height of Grouser	70 mm	2.75 in	70 mm	2.75 in
7 Ground Clearance	472 mm	18.6 in	472 mm	18.6 in
Ground Contact Area (std. shoes)	3.68 m ²	5,698 in ²	6.31 m ²	9,792 in ²
Number of Shoes per Side	40		44	
Standard Shoe Width and Type	610 mm	24 in	915 mm	36 in
	MS		MS	
Ground Pressure	0.699 kg/cm ²	9.9 psi	0.446 kg/cm ²	6.3 psi
Pitch	215.9 mm	8.5 in	215.9 mm	8.5 in
Track Rollers/Side	7		8	
Number of Carrier Rollers	2		2	
8 Drawbar Height (grouser tip to center of clevis)	719 mm	28 in	719 mm	28 in

D7E Track-Type Tractor Specifications

Bulldozer Specifications

Blade		7S	7SU	7U	7A		7S LGP
					Straight	Angled 25°	
Blade Capacity (SAE J1265)	m ³	5.16	6.86	8.34	5.15	–	5.89
	yd ³	6.75	8.98	10.91	6.74	–	7.7
Width (over end bits)	mm	3904	3713	3988	4503	4120	4545
	ft	12.81	12.18	13.08	14.77	13.52	14.91
Height	mm	1363	1524	1553	1373	1373	1343
	ft	4.5	5	5.1	4.5	4.5	4.4
Digging Depth	mm	586	586	586	711	711	644
	in	23.1	23.1	23.1	28	28	25.4
Ground Clearance	mm	1108	1108	1108	1120	1120	1264
	in	43.6	43.6	43.6	44.1	44.1	49.8
Maximum Tilt	mm	1045	987	1085	695	695	785
	in	41.1	38.9	42.7	27.4	27.4	30.9
Weight*	kg	3504	3832	3806	3790	3790	3970
	lb	7,709	8,431	8,373	8,330	8,330	8,734

* Weight includes cylinder mounting, lift cylinder and lines, blade, push arms, trunnions, and cylinder lines (Tilt).

Undercarriage

Type	Heavy Duty/SystemOne Undercarriage			
	STD		LGP	
Configuration	7		8	
Number of Rollers (each side)	7		8	
Number of Shoes (each side)	40		44	
Pitch	216 mm	8.5 in	216 mm	8.5 in
Shoe Width	610 mm	24 in	915 mm	36 in
Grouser Height (MS)	70 mm	2.75 in	70 mm	2.75 in
Length of Track on Ground (Heavy Duty)	3016 mm	119 in	3450 mm	136 in
Length of Track on Ground (SystemOne)	3021 mm	119 in	3455 mm	136 in
Track Gauge	1981 mm	78 in	2286 mm	90 in
Ground Contact Area (Heavy Duty)	3.68 m ²	5,698 in ²	6.31 m ²	9,792 in ²
Ground Pressure (Heavy Duty)	69.9 kPa	9.9 psi	44.6 kPa	6.3 psi
Ground Clearance	472 mm	18.6 in	472 mm	18.6 in