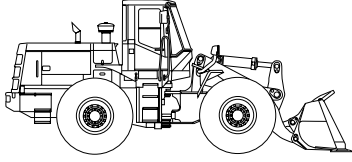


85Z^{IV}-2 BUCKET DATA



Standard Boom – General Purpose		Material Handling		High Lift Boom			
With Bolt-on Cutting Edge		With Teeth		With Bolt-on Cutting Edge		With Teeth	

Capacity	Heaped	yd ³ (m ³)	4.3 (3.3)	4.0 (3.1)	4.75 (3.6)	4.0 (3.1)
	Struck	yd ³ (m ³)	3.75 (2.8)	3.5 (2.7)	4.25 (3.25)	3.5 (2.7)
Maximum dumping clearance		ft-in (mm)	9'10" (3000)	9'5 1/2" (2885)	9'7 7/8" (2945)	11'6 3/16" (3510)
Dumping reach (to front of bucket edge or tooth)		ft-in (mm)	3'7 1/8" (1095)	3'10 1/4" (1175)	3'9 1/4" (1150)	4'2" (1270)
Bucket hinge pin height		ft-in (mm)	13'6 3/8" (4125)	13'6 3/8" (4125)	13'6 3/8" (4125)	15'7" (4750)
Digging depth		ft-in (mm)	2' 1/2" (65)	3' 1/4" (85)	2' 1/2" (65)	5' 1/2" (140)
Breakout force		lb (kg)	41,225 (18,700)	43,650 (19,300)	38,140 (17,300)	41,887 (19,000)
Bucket tilt-back angle	at ground level		43°	43°	43°	43°
	at carry position		50°	50°	50°	50°
Overall	Length	ft-in (mm)	26'3 1/4" (8010)	26'9 3/4" (8175)	26'6 1/2" (8090)	28'10 7/16" (8800)
	Height	ft-in (mm)	11'7 3/16" (3535)	11'7 3/16" (3535)	11'7 3/16" (3535)	11'7 3/16" (3535)
	Width (outside tire)	ft-in (mm)	9'7 3/8" (2930)	9'7 3/8" (2930)	9'7 3/8" (2930)	9'7 3/8" (2930)
	Width (outside bucket)	ft-in (mm)	10'2" (3100)	10'2" (3100)	10'2" (3100)	10'2" (3100)
Wheel base		ft-in (mm)	10'9 7/8" (3300)	10'9 7/8" (3300)	10'9 7/8" (3300)	10'9 7/8" (3300)
Minimum turning radius	at outside bucket	ft-in (mm)	21'9 1/8" (6635)	21'10 3/4" (6675)	21'10" (5355)	22'10 7/16" (6970)
	at center of outside tire	ft-in (mm)	18'7" (5665)	18'7" (5665)	18'7" (5665)	18'7" (5665)
Minimum ground clearance		ft-in (mm)	1'8 3/8" (520)	1'8 3/8" (520)	1'8 3/8" (520)	1'8 3/8" (520)
Full articulation angle		degree	40°	40°	40°	40°
Operating weight (with ROPS Cab)		lb (kg)	43,770 (19,850)	43,570 (19,760)	43,970 (19,940)	45,140 (20,475)
Static Tipping Load (with ROPS cab)	Straight	lb (kg)	31,990 (14,510)	32,260 (14,630)	31,800 (14,420)	24,135 (10,920)
	Full turn	lb (kg)	27,410 (12,430)	27,670 (12,550)	27,210 (12,340)	20,485 (9,490)

Full fuel tank and operator. Measured in accordance with SAEJ732C & J742

Bucket specifications figured with material density at 2500 lbs. per yd³ or less*

*The weight and load figure includes optional counterweight, Enclosed ROPS Cab, 26.5-25-20PR (L-3) tires.

85Z^{IV}-2 OPERATING SPECIFICATIONS

WEIGHTS AND DIMENSIONS (SUPPLEMENTAL DATA)

		Operating Weight	Tipping Load			Overall Width (Outside Tire)	Tread	Vertical Dimensions	Overall Length
			Straight	Full Turn					
ROPS Canopy (Instead of ROPS Cab)	lb (kg)	-440 (-200)	-395 (-180)	-395 (-180)	in (mm)				
Remove ROPS Canopy and Cab (for transport only)	lb (kg)	-1145 (-520)			in (mm)			-1'8 ⁵ / ₈ " (-525)	
Counterweight	lb (kg)	+550 (+250)	+1345 (+610)	+1135 (+515)	in (mm)				
Tires: 23.5-25-16PR (L-2)	lb (kg)	-1785 (-810)	-1400 (-635)	-1235 (-560)	in (mm)	-3 ¹ / ₄ " (-85)		-2 ³ / ₈ " (-60)	+2" (+50)
23.5-25-16PR (L-4)	lb (kg)	-465 (-210)	-365 (-165)	-320 (-145)	in (mm)	-3 ¹ / ₄ " (-85)		-2 ³ / ₈ " (-60)	+2" (+50)
23.5-25-16PR (L-5)	lb (kg)	+595 (+270)	+465 (+210)	+420 (+190)	in (mm)	-3 ¹ / ₄ " (-85)		-2 ³ / ₈ " (-60)	+2" (+50)
23.5-25-16PR (L-3)	lb (kg)	-1435 (-650)	-1125 (-510)	-990 (-450)	in (mm)	-3 ¹ / ₄ " (-85)		-2 ³ / ₈ " (-60)	+2" (+50)
26.5-25-20PR (L-4)	lb (kg)	+615 (+280)	+485 (+220)	+430 (+195)	in (mm)				
26.5-25-20PR (L-5)	lb (kg)	-2225 (-1010)	+1740 (+790)	+1545 (+700)	in (mm)				
23.5-25-16PR (L-3) with 75% CaCl ₂ for logging	lb (kg)	-950 (-430)	+2625 (+1190)	+2315 (+1050)	in (mm)				
26.5-25-20PR (L-3) with 75% CaCl ₂ for logging	lb (kg)	+3220 (+1460)	+5050 (+2290)	+4475 (+2030)	in (mm)				
Air conditioner	lb (kg)	+220 (+100)	+245 (+110)	+220 (+100)	in (mm)				
Belly Guard (rear frame)	lb (kg)	+245 (+110)	+245 (+110)	+220 (+100)	in (mm)				

Base Tire 25.5-25-20PR (L-3)

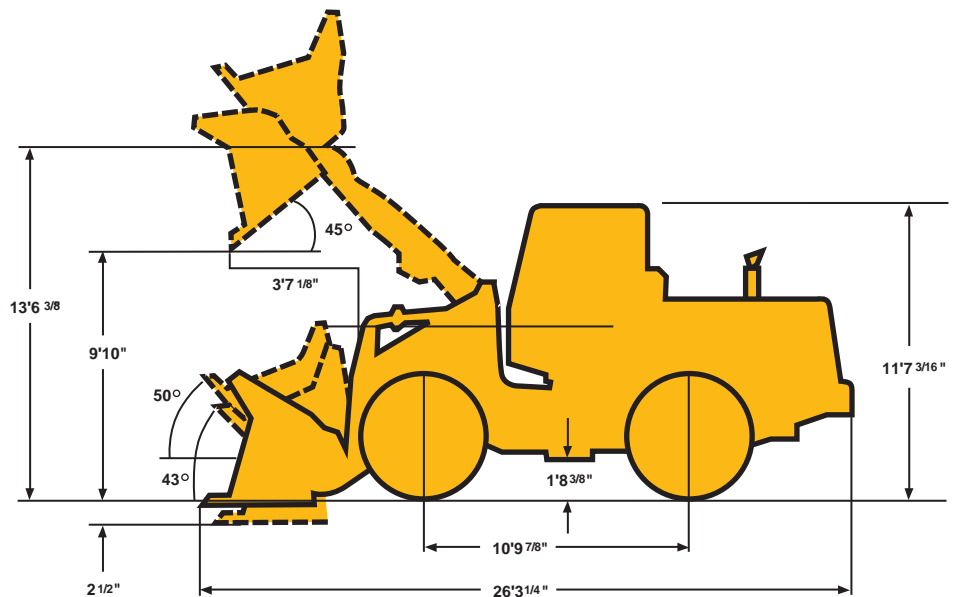
Tread7'3³/₄" (2230mm)

Width (outside tire)9'7³/₈" (2685mm)

Width (outside bucket)10'2" (3100mm)

Equipped with GSC bucket with bolt on cutting edge

26.5-25-20PR (L-3) Tire and ROPS Cab



85Z^{IV}-2 OPERATING SPECIFICATIONS

ENGINE

Make/Model/Fuel Type	Cummins M11-C
Type	4-cycle, watercooled, turbocharged, direct injection
Net flywheel horsepower	226HP/2100 RPM
Maximum torque	723 ft/lb @ 1300 RPM
Number of cylinders	6
Bore and stroke	4.92" x 5.79" (114mm x 147mm)
Total displacement	660 in3 (10,817 cm3)
Alternator	AC24V - 1800W (75 amp)
Starting motor	24V - 7.3kw (9.8HP)
Battery	12V - 150AH, 2 units
Governor	All-speed, mechanical type

TORQUE CONVERTER AND TRANSMISSION

Torque converter	3 elements, single stage
Torque stall ratio	3.32:1
Main clutches	Wet hydraulic, multi-disk type
Cooling method	Forced circulation type
Transmission	Full powershift, 4 forward, 4 reverse with automatic mode (2nd - 4th) with downshift switch for 2nd - 1st downshifting
Speeds	Forward
	1st: 4.6 MPH (7.4 km/hr) 2nd: 7.6 MPH (12.3km/hr) 3rd: 13.0 MPH (20.9 km/hr) 4th: 21.1 MPH (34.0 km/hr)
Speeds	Reverse
	1st: 4.7 MPH (7.6 km/hr) 2nd: 7.9 MPH (12.7 km/hr) 3rd: 13.4 MPH (21.5 km/hr) 4th: 21.6 MPH (34.7 km/hr)

SERVICE REFILL CAPACITY

LOCATION	CAPACITY:	Gallons	Liters
Engine (coolant)		14.8	(56)
Fuel tank (diesel fuel)		79.3	(300)
Engine oil (oil pan)		9.7	(37)
Front axle (gear oil)		19.8	(75)
Rear axle (gear oil)		21.1	(80)
Steering box		0.1	(0.4)
Torque converter and transmission (engine oil)		14.0	(53)
Hydraulic system (including tank hydraulic oil)		55.5	(210)
Brake oil tank (engine oil)		0.7	(2.5)

HYDRAULIC AND STEERING SYSTEM

Steering type	Articulated frame steering	
Steering mechanism	Hydraulic power steering unit, mechanical follow-up	
Lift (boom) cylinder	Two (2) double-acting piston type: 6.3" x 32.0" (160mm x 814mm)	
Tilt (bucket) cylinder	One (1) double-acting piston type: 7.5" x 21.2" (190mm x 538mm)	
Steering cylinder	Two (2) double-acting piston type: 3.54" x 17.3" (90mm x 440mm)	
Steering oil pump	Gear type: 57.3 GPM/1000psi @ 2100 RPM (217 LPM/70kg/cm2 @ 2100 RPM)	
Main oil pump	Gear type: 21.1 GPM/1000psi @ 2100 RPM (80 LPM/70kg/cm2 @ 2100 RPM)	
Pilot oil pump	Gear type: 13.5 GPM/1000psi @ 2100 RPM (51 LPM/70kg/cm2 @ 2100 RPM)	
Relief valve set pressure	Loading	3000 psi (210 kg/cm2)
	Steering	3000 psi (210 kg/cm2)
HYDRAULIC CYCLE TIME*		
Lifting time (at full load)	6.3 sec.	
Lowering time (empty)	3.5 sec.	
Bucket dumping time	1.4 sec.	
TOTAL	11.2 sec.	

* Measured in accordance with SAE J732C

AXLE SYSTEM

Drive system	4-wheel drive	
Front and rear axle	Full floating banjo type	
Tires	Standard	26.5 x 25-20PR (L-3)
	Optional	23.5 x 25-16PR (L-2) (L-4) (L-5) (L-3) 26.5 x 25-20PR (L-2) (L-4) (L-5)
Reduction and differential gear	Spiral bevel/gear, 1 stage reduction, torque proportioning type	
Final reduction gear	Outboard mounted, internal planetary gear	
Oscillation angle	±11° (total 22°)	

BRAKE SYSTEM

Service brakes	4 wheel air over hydraulic wet disk brakes, Dual circuit
Parking/Emergency brake	Spring applied air release type, located in front driveline. Meets MSHA requirements

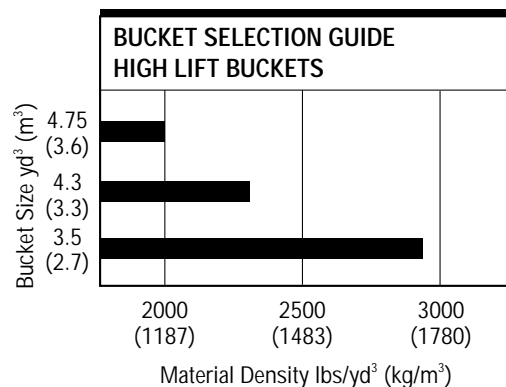
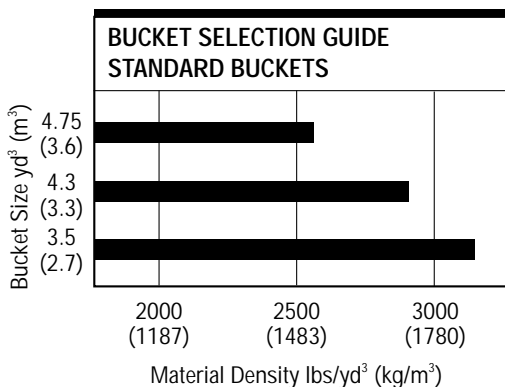
85Z^{II}-2 EQUIPMENT DATA

STANDARD EQUIPMENT

Adjustable Steering Column Air Cleaner (Double Element Donaldson with Precleaner) Alarms (Audible): Air Pressure Air Master Overstroke Brake Oil Level Engine Oil Pressure Alarms (Visual): Air Filter Air Master Overstroke Air Pressure Battery Discharge Brake Oil Level Converter Oil Temperature Engine Oil Pressure Engine Coolant Temperature Parking Brake Alternator (75 amp) AM/FM Cassette Radio Brake Line Protection (Front) Brake (Parking) Spring applied; Air released, Drum type	Brakes (Service) Oil/Air Actuation Enclosed Wet Disc Dual System Bucket Control Lever Dual, Pilot Assisted Bucket Leveler Boom Kickout Coat Hook Cold Start Aid Cup Holder Downshift Button Drawbar Electrical System (24 volt) Fan (Blower) Fenders (Front and Rear) Gauges: Air Pressure Converter Oil Temperature Engine Coolant Temperature Fuel Level Hour Meter Hydraulic Oil Level Tachometer	Heater/Pressurizer (40,000 BTU) Hoodsides (Hinged) Horn (Electric) Indicators: High Beam Parking Brake Transmission Declutch Transmission Shift Monitor Working Light Linkage (Z-type, Sealed) Lights: 4 Front 2 Rear 2 Stop/Tail Muffler Neutral Safety Start Operator's Manual Box Radiator: Heavy Duty Plate Fin Type Radiator Grille, Hinged Reverse Alarm	ROPS Cab: Enclosed cab with sound suppression, front lights, front and rear wipers and washers, one rear view and two side mirrors, tinted glass, and sliding side windows Safety Articulation Locking Bar Seat (Super Deluxe, Adjustable, Suspension) Seat Belt, Retractable, 3" wide Shift Control Unit for Automatic Shift Torque Proportioning Differential Transmission Declutch Selector Switch Vandalism Protection Wrist Rest, Adjustable
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OPTIONAL EQUIPMENT

Air Conditioner (R134 Refrigerant) Air Dryer Belly Guard Bolt-On Cutting Edge Segments	Bucket Teeth Counterweight Cushion Dump Valve Easy Clean Radiator Side-by-Side	Emergency Steering High Lift Arm Hydraulic System, 3-Spool Valve Lighting System	No Spin Differential Ride Control ROPS Canopy Turn Signal With Four-way Flasher
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Measured in accordance with SAE J732C & J742