

PL83/PL87

Pipelayer



Engine

Engine Model	Cat® C15 ACERT™	
U.S. EPA Tier 4 Final/EU Stage IV		
Net Power – ISO 9249	238 kW	319 hp
Net Power – ISO 9249		323 hp
U.S. EPA Tier 3/EU Stage IIIA Equivalent		
Net Power – ISO 9249	245 kW	329 hp
Net Power – ISO 9249		333 hp

Weights

PL83 Operating Weight	50 492 kg	111,316 lb
PL87 Operating Weight	55 246 kg	121,795 lb
Lift Capacity		
PL83 Lift Capacity at Tipping Point – ISO 8813	77 111 kg	170,000 lb
PL87 Lift Capacity at Tipping Point – ISO 8813	97 976 kg	216,000 lb

PL83/PL87 Features

Performance

A Cat C15 ACERT engine, integrated power train with differential steering and updated hydraulic system work together to provide power and improved machine maneuverability for any pipelayer application. Electro-Hydraulics offer greater response and precise control to the variable speed motors of the heavy duty winch for greater machine productivity.

Slope Capability

Improved machine center of gravity and lengthened track-roller frame with repositioned rear idler places more track on the ground, enhancing slope capability.

Operator Interface

The new Pipelayers offer a quieter, pressurized cab, heated/ventilated seat option and operator interface with diagnostics and electronic system monitoring. Operators can control all implements with the single joystick control. The differential steering paired with dual brake pedals enhance machine steering and control especially on slopes and within narrow operating environments.

Cold Weather Strategy

Equipped with an electronically monitored and controlled cold weather strategy in addition to a new Zero Speed Fan, the new PL83/PL87 help you meet emissions standards and operate reliably in severe climates.

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Cat Pipelayers have been the standard of the pipeline industry for decades. A worldwide network of Cat dealers, in tune with the special high production needs of pipeliners, supports these durable and dependable machines. Cat Pipelayers are purpose-built to meet the unique demands of pipeline customers. And like every Cat machine, Pipelayers are designed for long life, serviceability and rebuild capability to help keep owning and operating costs low. The PL83/PL87 answers customer needs for increased lift capacity, enhanced slope capability, ease of operation, performance and transportability.

Pipelayer

Purpose-built, robust components

Winches

Proven heavy-duty winch design works with updated electro-hydraulic control for more precise implement control. Boom and hook winches are driven by independent hydraulic winches. Oil-disc brakes provide smooth operation and positive retention of boom and hook positions. A modular pin-on design allows for fast removal and easy field service. Interchangeable parts between hook and boom winch assemblies help reduce cost and downtime. The winch profile is compact and enhances visibility.

Counterweight

New counterweight profile adds weight where you need it most to provide you the needed lift capacity for your application. Segments are contoured to help lower the machine center of gravity and are extended hydraulically for improved load balance and clearance. An electronic counterweight kickout switch has been added to limit the retraction of the extendable counterweight to the correct, retracted position.

Boom

The lightweight, durable boom features high tensile strength steel construction for narrow structures and maximum visibility to the work area. Replaceable boom-mount bearings aid serviceability and long life. New PL83 and PL87 now utilize common 7.31 m (24 ft) and 8.53 m (28 ft) booms.

Blocks and Hook

Short profile block set enhances visibility to the work area and helps maximize the working range of the full length of the boom. The heavy-lifting components include hook and boom blocks with sleeve bearings, a forged hook with latch and serviceable handle, and ductile iron sheaves. A bolt-on block horn mounted to the front of the machine allows for convenient storage of the block set during transport.

Pinned Pipelayer Frame Structure

Heavy duty pipelayer frame structures are designed to be easily pinned together to provide robust strength and durability in addition to improved serviceability.





Operator Station

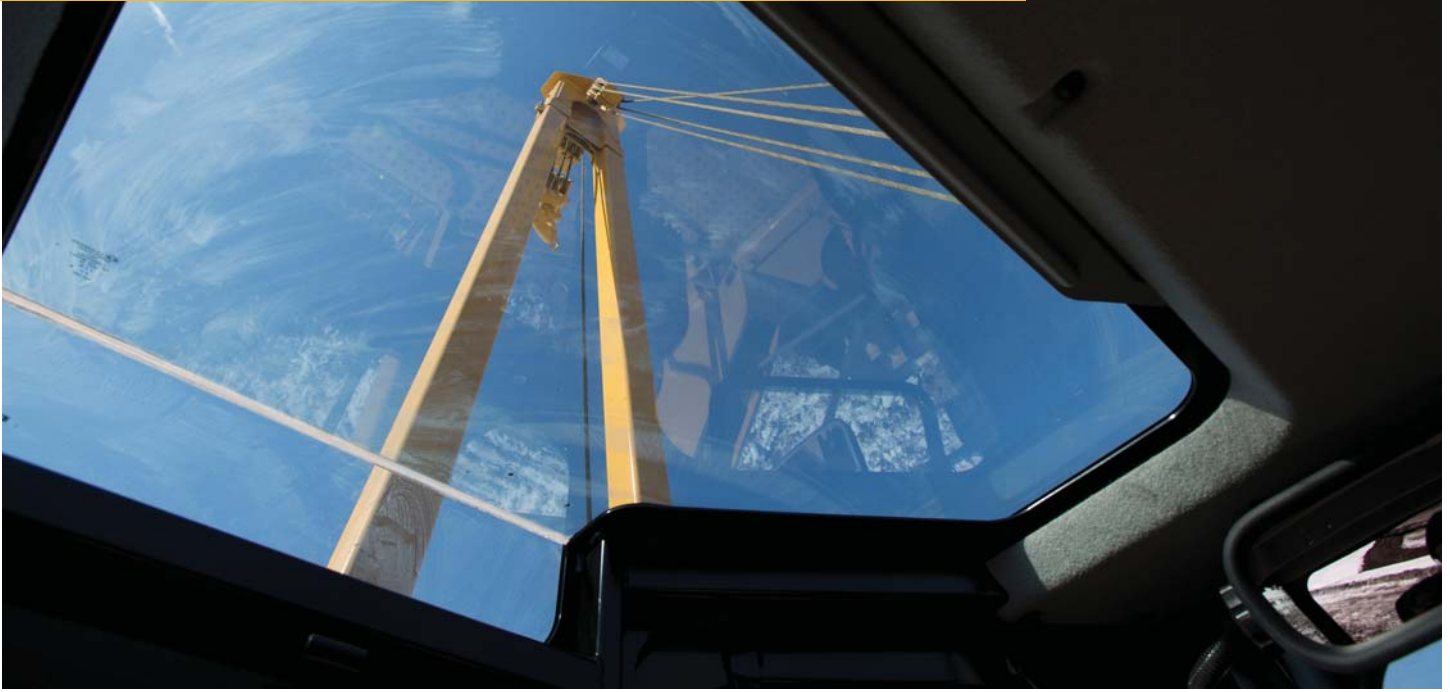
Designed for productive comfort

The latest PL83/PL87 Pipelayer offers operators added comforts like a quieter cab, adjustable armrests and heated/ventilated seat options. A seat belt indicator light helps remind you to work more safely.

- A new Rollover Protection Structure (ROPS) provides added operator protection for open or enclosed operator stations.
- A durable access ladder aids with access/egress to the operator station, and can be removed to minimize the machine shipping envelope. The new ladder system also features a grated top step, to provide added visibility to the trench.
- Additional mirrors further enhance the operator's visibility around the machine.
- Ergonomically designed seat is positioned for enhanced visibility to the working area and for convenient access to the machine control lever, switches and pedals.
- LCD Dash Display provides added machine diagnostics to the operator, in addition to allowing operators to create a personalized profile and operational settings.
- New HVAC system provides heat from ducting and dash vents to the operator for Open Cab (OROPS).

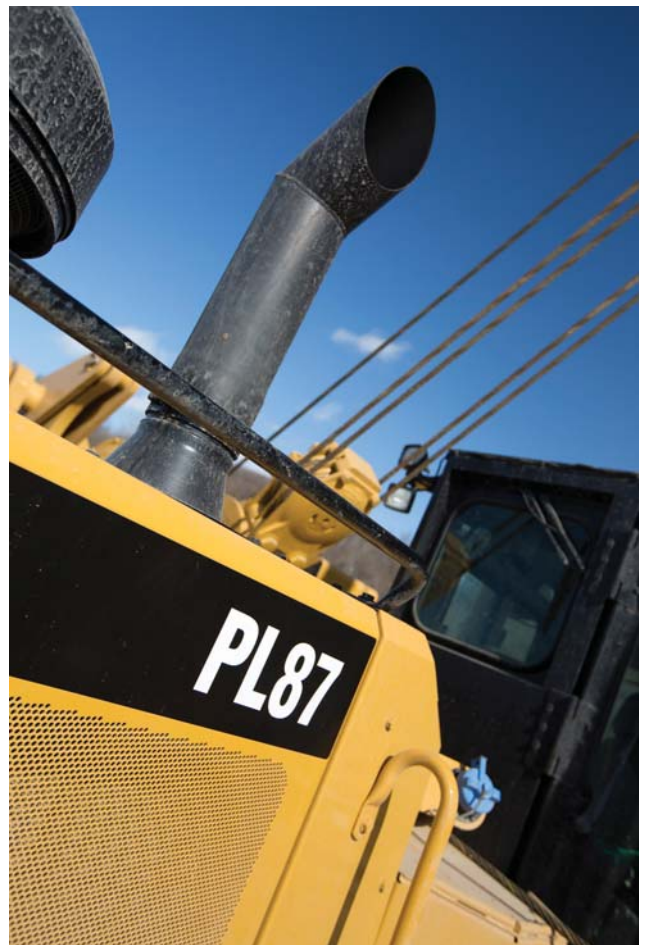
Enclosed and Pressurized Cab

Designed with pipeline productivity in mind



The new, optional enclosed cab is designed by Caterpillar specifically for demanding pipeline applications. The cab height meets shipping requirements and may be shipped by truck without removing the cab and Rollover Protective Structure (ROPS). The cab is fully sealed, filtered, and pressurized for harsh environments.

Glass area is maximized and visibility improved for better sight lines around the machine and to the trench. A large skylight window with sliding shade has been incorporated to provide a clear view from the seat to the boom and blocks.



Implement and Steering Controls

Ergonomically designed for ease of operation



Pipelayer Control

Implement joystick places all Pipelayer implement controls and functionality into one hand. Low-effort, ergonomically designed and positioned control handle allows simultaneous, precise positioning of the load line, boom, and extendible counterweight.

- Increment/decrement buttons on the implement handle provide continuous adjustable throttle.
- Thumb rocker controls the counterweight extension and retraction.
- Joystick pushed forward lowers the hook and joystick rearward raises the hook. Joystick left lowers the boom and joystick right raises the boom.
- Quick drop activation.
- Ergonomically positioned machine control switch panel provides easy access to the multiple switch functions of the machine.

Quick Drop Control

Quick drop control, when pushed downward, will allow the load on the hook line to fall freely to the ground. This control activation is to be used only in emergency situations, where the load must be quickly released.

Dual Brake Pedal Controls

Dual brake pedal controls provide enhanced maneuverability and steering control, especially in slope applications. Brakes are electronically applied and hydraulically actuated.

Differential Steering Control

A planetary differential turns the machine by speeding up one track and slowing down the other, while maintaining full power to both.

This contributes to superior maneuverability in tight areas of operation, as well as enhanced slope capability. Differential steering also aids performance in soft ground conditions, as both tracks are powered during turning. The low effort steering tiller aids in ergonomic, ease of operation.





Undercarriage

Engineered for performance

Structure

Underlying strength

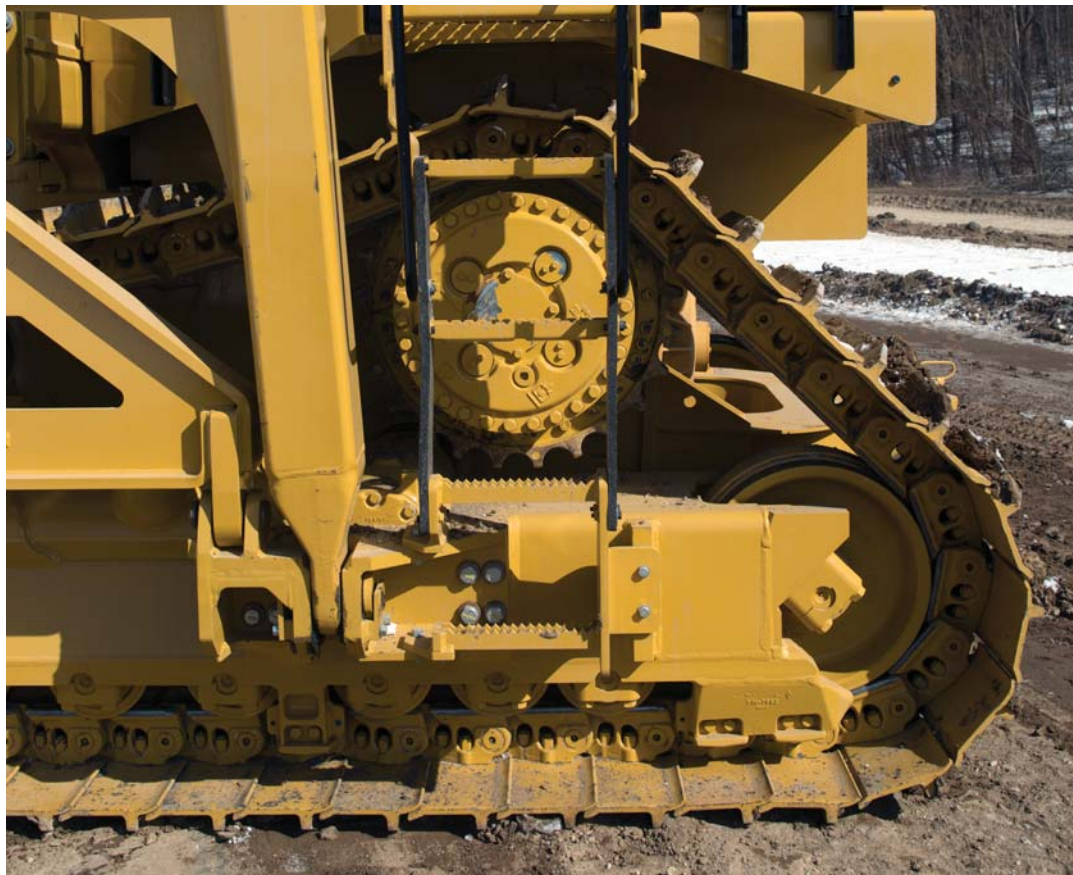
The Pipelayer mainframe is engineered to handle the most demanding applications. The purpose-built Pipelayer mainframe is built to absorb high impact shock loads and twisting forces, and full box section frame rails are designed to keep components rigidly aligned. Heavy steel casting of the main case and pinned E-bar provide machine strength and durability. Top and bottom rails are continuous rolled sections, with no machining, that help provide superior mainframe durability. The final drives are elevated well above the ground level work area to protect them from impact loads, abrasion, and contaminants.

Caterpillar uses robotic welding techniques in the assembly and manufacturing of the case and frames. The deep penetration and consistency of robotic welding ensures quality for a long, durable life.

The PL83/87 Pipelayers feature a non-suspended, Cat elevated sprocket undercarriage. Track roller frame length remains extended, with rear idler positioned downward, resulting in more track on the ground to enhance machine stability, especially in slope applications.

Undercarriage components are built for long life and ease of serviceability. Rollers and idlers feature Duo-Cone™ seals to help prevent oil loss and dirt entry into the system. Tubular roller frame design resists bending and twisting, with added reinforcement where operating loads and stresses are highest. Cat Tough Steel sprocket segments are precision machined after heat treat for proper fit. Segments can be removed or replaced without breaking the track.

Pipelayer track is designed for high-impact and high load applications. The Positive Pin Retention Sealed and Lubricated Track is an exclusive Caterpillar design that locks the link to the pin for enhanced service life. Track shoes help optimize the machine for performance in demanding underfoot conditions.





Engine and Power Train

Powerful efficiency



Engine

A Cat C15 ACERT engine provides the power and reliability you need to get the job done. Efficient use of Diesel Exhaust Fluid (DEF) improves overall fluid and fuel efficiency in Tier 4 Final/Stage IV engines.

Differential Steering

Differential steering maintains full power to both tracks for best-in-class turning, even with a loaded boom. When one track speeds up, the other slows down an equal amount, so you have better maneuverability in tight areas of operation. You also are equipped with dual brake pedal controls to provide additional maneuverability and steering control, especially in slope applications. The machine brakes are electronically actuated and hydraulically applied.

Emissions Technology

Emissions reduction technology on the PL83/PL87 is designed to be transparent, with no action required from the operator. Regeneration runs automatically in the background while you work.

Aftertreatment Technologies

Caterpillar designed Tier 4 Interim/Stage IIIB products with Tier 4 Final/Stage IV standards in mind for regions with Tier 4 Final/EU Stage IV emission standards requirements. To meet the additional 80% reduction in NO_x emissions required by U.S. EPA Tier 4 Final/EU Stage IV emission standards, Caterpillar engineers added Selective Catalytic Reduction (SCR) to the already proven aftertreatment solution.

Diesel Exhaust Fluid

In regions requiring Tier 4 Final/EU Stage IV emission standards, the Selective Catalytic Reduction utilizes Diesel Exhaust Fluid (DEF) which can be conveniently refilled when you refuel. A gauge on the dash displays your fluid level. When the machine is turned off, a pump will automatically purge the DEF lines to help prevent the fluid from freezing in the lines and pump in colder environments. A symbol on the dash and a light/symbol on the left fender service center indicate when the purge is complete and that it is safe to turn off the electrical disconnect. If the engine/aftertreatment temperatures are high, a delayed engine shutdown will activate automatically to cool the machine and then purge the lines. For complete aftertreatment information, please refer to your machine's Operation and Maintenance Manual.



Integrated Technologies

Solutions to make work easier
and more efficient

Cat Product Link™

Remote monitoring with Product Link improves overall fleet management effectiveness. Product Link is deeply integrated into machine systems. Events and diagnostic codes, as well as hours, fuel, idle time and other detailed information are transmitted to a secure web based application, VisionLink®. VisionLink includes powerful tools to convey information to users and dealers, including mapping, working and idle time, fuel level and more.

Load Monitor Ready

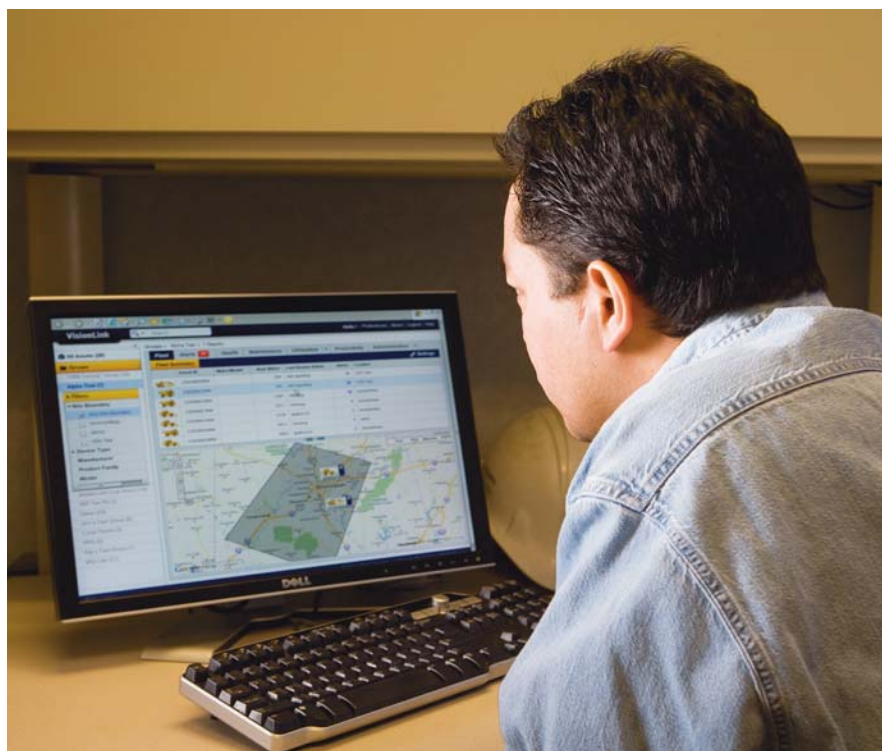
The PL83/PL87 is Load Monitor Indicator (LMI) ready from the factory and can accept regional LMI systems. New hydraulic circuitry, integrated mounting hardware and ready-mount power supply makes system installation simple. The LMI ready hydraulic system enables installation without opening the hydraulic system thus preventing contamination.

Sustainability

Generations ahead in every way

- The PL83/PL87 meets Tier 4 Final/Stage IV or Tier 3/Stage IIIA equivalent emission standards.
- Efficient use of Diesel Exhaust Fluid (DEF) improves overall fluid and fuel efficiency, for Tier 4 Final/Stage IV models only.
- Longer service intervals help reduce parts and fluid consumption.

Major components are built to be rebuilt, eliminating waste and saving money by giving your machine a second – and even third – life.





Serviceability and Customer Support

More productivity, less cost



Like all Cat machines, the PL83/PL87 is designed to allow you to get routine service done quickly and efficiently so you can get to work. The PL83/PL87 offers full left-side engine serviceability, including fill tube, dipstick, air cleaner, fuel filters, oil filter and coolant level check. Easy open engine enclosure doors allow you to maintain three points of contact for added safety. High speed oil change is standard and makes servicing even faster. Hydraulic and power train filters and fuel tank drain are located at the rear of the machine and are serviceable from ground level.

Pressure taps are placed within the hydraulic system to allow for quick monitoring.

Major components like the engine, transmission, and final drives are modular so they can be more quickly removed for service, saving you cost and downtime.

The radiator, Air-to-Air Aftercooler (ATAAC) and hydraulic oil cooler are packaged into a single plane, making cleanout easier. Durable aluminum bar plate construction gives you superior heat transfer and corrosion resistance. Six fins per inch core allow debris to pass through and help reduce plugging. In cooler conditions, the zero speed hydraulic fan will remain off until component temperatures require cooling, at which time the fan will begin to operate. Each pipelayer is equipped with reversing fan configuration as well.

Ecology drains provide a convenient method for draining fluids that save time and help prevent spills. They are included on the radiator (coolant) hydraulic tank, engine, transmission, and mainframe case.



Renowned Cat Dealer Support

When uptime counts

Cat dealers excel at providing parts availability and equipment service to even the most remote areas.

With more than 10,000 service technicians employed in over 3,000 Cat dealer locations around the world, Cat parts and service resources and capabilities are beyond compare.

- Manage costs with preventive maintenance programs like Custom Track Service, S-O-SSM analysis, and guaranteed maintenance contracts.
- Stay productive with best-in-class parts availability.

Cat dealers can even help you with operator training to help you boost your profits.

And when it's time for machine replacement, your Cat dealer can help you save even more with Genuine Cat Reman parts. Receive the same warranty and reliability as new products at cost savings of 40 to 70 percent for power train and hydraulic components.

Safety

Designed with protection in mind

Job site safety is a key concern for pipeline customers, and Cat Pipelayers are designed with features to help protect people in and around the machine.

- Convenient steps, handles and guardrail provide safe access/egress.
- New seat belt indicator registers a fault code through Product Link if the operator fails to buckle up, helping to improve job site safety.
- Electronic fluid level verification at startup for coolant, power train, engine oil and DEF means you can make fewer trips up and down from the operator station.
- A standard operator presence detection system allows the machine to idle when the operator is not seated, but locks out the power train to avoid unintentional movement.
- An optional rear vision camera is also available to further enhance visibility around the machine.



PL83/PL87 Pipelayer Specifications

Engine (PL83/PL87)

Engine Model	Cat C15 ACERT	
Emissions	U.S. EPA Tier 4 Final/ EU Stage IV	
Tier 4 Final/Stage IV		
Engine Power (maximum*)		
SAE J1995	271 kW	363 hp
ISO 14396	268 kW	359 hp
ISO 14396 (DIN)	364 hp	
Net Power (rated**)		
ISO 9249/SAE J1349	238 kW	319 hp
ISO 9249/SAE J1349 (DIN)	323 hp	
Net Power (maximum*)		
ISO 9249/SAE J1349	258 kW	345 hp
ISO 9249/SAE J1349 DIN	350 hp	
Bore	137 mm	5.4 in
Stroke	172 mm	6.75 in
Displacement	15.2 L	928 in ³
Tier 3/Stage IIIA equivalent		
Engine Power (maximum***)		
SAE J1995	273 kW	366 hp
ISO 14396	269 kW	361 hp
ISO 14396 (DIN)	366 hp	
Net Power (rated****)		
ISO 9249/SAE J1349	245 kW	329 hp
ISO 9249/SAE J1349 (DIN)	333 hp	
Net Power (maximum***)		
ISO 9249/SAE J1349	256 kW	343 hp
ISO 9249/SAE J1349 DIN	347 hp	
Bore	137 mm	5.4 in
Stroke	172 mm	6.75 in
Displacement	15.2 L	928 in ³

*Maximum speed 1,700 rpm

**Rated speed 1,900 rpm

***Maximum speed 1,600 rpm

****Rated speed 1,850 rpm

- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator.
- No derating required up to 3566 m (11,700 ft) altitude, beyond 3566 m (11,700 ft) automatic derating occurs.
- All non road U.S. EPA Tier 4 and EU Stage IIIB and IV diesel engines are required to use only Ultra Low Sulfur Diesel (ULSD) fuels containing 15 ppm (mg/kg) sulfur or less. Biodiesel blends up to B20 (20% blend by volume) are acceptable when blended with 15 ppm (mg/kg) sulfur or less ULSD. B20 should meet ASTM D7467 specification (biodiesel blend stock should meet Cat biodiesel spec, ASTM D6751 or EN 14214). Cat DEO-ULS™ or oils that meet Cat ECF-3, API CJ-4, and ACEA E9 specifications are required. Consult your OMM for further machine specific fuel recommendations.
- DEF used in Cat Selective Catalytic Reduction (SCR) systems must meet the requirements outlined in the International Organization for Standardization (ISO) standard 22241.

Hydraulic System (PL83/PL87)

Implement Pump Output – Maximum (closed loop)	317 L/min	83.8 gal/min
Counterweight (gear)	130 L/min	34.3 gal/min
Steering Pump Output (closed loop)	328 L/min	86.7 gal/min
Variable Charge Pump Output Maximum (open loop)	237 L/min	62.6 gal/min
Fan Pump	135 L/min	35.7 gal/min

Undercarriage (PL83)

Shoe Type	Moderate Service	
Width of Standard Shoes	710 mm	30 in
Number of Shoes (each side)	48	
Grouser Height	78 mm	3 in
Track Gauge	2337 mm	92 in
Length of Track on Ground	3715 mm	12 ft 2 in
Ground Contact Area	5.3 m ²	8,215 in ²
Number of Rollers (each side)	9	
Number of Carrier Rollers (each side)	1	

Undercarriage (PL87)

Shoe Type	Super Extreme Service	
Width of Standard Shoes	864 mm	34 in
Number of Shoes (each side)	48	
Grouser Height	93 mm	3.6 in
Track Gauge	2.54 m	8 ft 4 in
Length of Track on Ground	3715 mm	12 ft 2 in
Ground Contact Area	6.4 m ²	9,920.1 in ²
Number of Rollers (each side)	9	
Number of Carrier Rollers (each side)	1	

Service Capacities (PL83/PL87)

Cooling System	76.8 L	20.3 gal
Fuel Tank	415 L	109.6 gal
Engine Crankcase and Filter	43 L	11.4 gal
Diesel Engine Fluid (DEF)*	17 L	4.5 gal
Power Train Oil System	190 L	50.2 gal
Hydraulic Tank Oil	100 L	26.4 gal
Final Drives (each side)	13 L	3.4 gal
Recoil Spring Compartment	74 L	19.5 gal
Winch Case (boom)	11.3 L	3 gal
Winch Case (hook)	15.1 L	4 gal

*Tier 4 Final/Stage IV models only

PL83/PL87 Pipelayer Specifications

Transmission (PL83/PL87)

1 Forward	3.4 km/h	2.1 mph
2 Forward	6.1 km/h	3.8 mph
3 Forward	10.6 km/h	6.6 mph
1 Reverse	4.5 km/h	2.8 mph
2 Reverse	8 km/h	5 mph
3 Reverse	14.2 km/h	8.8 mph
Drawbar Pull		
1 Forward	661.1 kN	148 lbf
2 Forward	363.1 kN	81 lbf
3 Forward	197.5 kN	44 lbf

Weights (PL83)

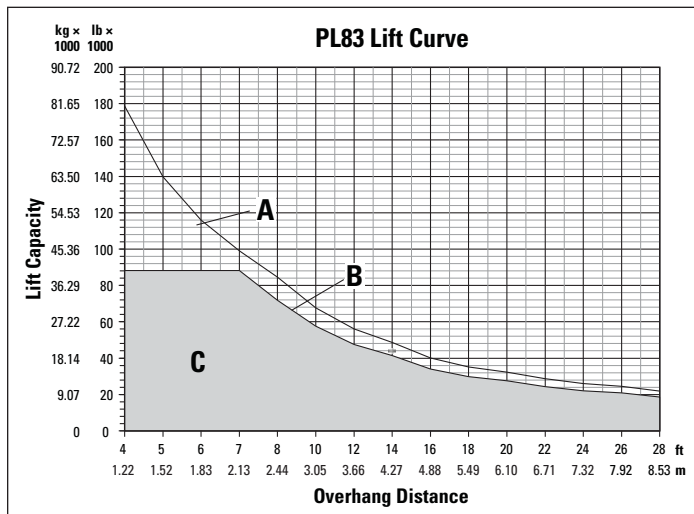
Operating Weight	50 492 kg	111,316 lb
Shipping Weight	38 954.5 kg	85,880 lb

Weights (PL87)

Operating Weight	55 245.5 kg	121,795 lb
Shipping Weight	41 095.5 kg	90,600 lb

Operating Specifications (PL83)

Lift Capacity at Tipping Point – ISO 8813	77 111 kg	170,000 lb
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A – Lift capacity at tipping point*

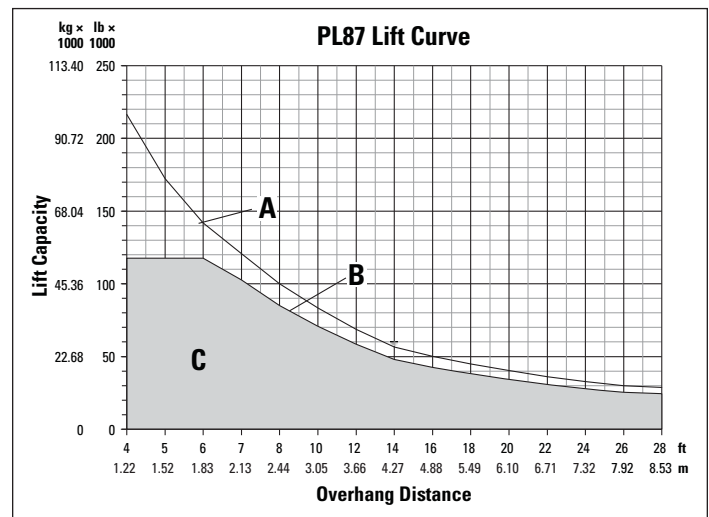
B – Rated load capacity*

C – Working range*

*Per ISO 8813:1992

Operating Specifications (PL87)

Lift Capacity at Tipping Point – ISO 8813	97 976 kg	216,000 lb
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A – Lift capacity at tipping point*

B – Rated load capacity*

C – Working range*

*Per ISO 8813:1992

Pipelayer Equipment (PL83)

Pullmaster Hydraulic Winches

Hook

Drum Diameter	254 mm	10 in
Flange Diameter	508 mm	20 in
Drum Length	355.6 mm	14 in
Wire Rope Diameter	19 mm	0.75 in
Boom and Cables, 7.3 m (24 ft)	74 m	242.8 ft
Boom and Cables, 7.3 m (24 ft) Extended	74 m	242.8 ft
Boom and Cables, 8.53 m (28 ft)	86.2 m	282.8 ft
Boom and Cables, 8.53 m (28 ft) Extended	86.2 m	282.8 ft
Hook Speed – Raise (6 part line)	22 m/min	72 ft/min

Boom

Drum Diameter	254 mm	10 in
Flange Diameter	508 mm	20 in
Drum Length	355.6 mm	14 in
Wire Rope Diameter	19 mm	0.75 in
Boom and Cables, 7.3 m (24 ft)	55 m	180.5 ft
Boom and Cables, 7.3 m (24 ft) Extended	74 m	242.8 ft
Boom and Cables, 8.53 m (28 ft)	62.5 m	205 ft
Boom and Cables, 8.53 m (28 ft) Extended	86.2 m	282.8 ft

PL83/PL87 Pipelayer Specifications

Pipelayer Equipment (PL87)

Pullmaster Hydraulic Winches

Hook		
Drum Diameter	254 mm	10 in
Flange Diameter	508 mm	20 in
Drum Length	355.6 mm	14 in
Wire Rope Diameter	19 mm	0.75 in
Boom and Cables, 7.3 m (24 ft)	114.3 m	375 ft
Boom and Cables, 7.3 m (24 ft) Extended	114.3 m	375 ft
Boom and Cables, 8.53 m (28 ft)	124.2 m	407.5 ft
Boom and Cables, 8.53 m (28 ft) Extended	124.2 m	407.5 ft
Hook Speed – Raise (8 part line)	15.5 m/min	50.8 ft/min

Boom

Drum Diameter	254 mm	10 in
Flange Diameter	508 mm	20 in
Drum Length	355.6 mm	14 in
Wire Rope Diameter	19 mm	0.75 in
Boom and Cables, 7.3 m (24 ft)	55 m	180.5 ft
Boom and Cables, 7.3 m (24 ft) Extended	74 m	242.8 ft
Boom and Cables, 8.53 m (28 ft)	62.5 m	205 ft
Boom and Cables, 8.53 m (28 ft) Extended	86.2 m	282.8 ft

Components (PL83/PL87)

PL83

Total Removable Counterweight*	8724 kg	19,233 lb
Removable Counterweight (12 plates) Single Plate	727 kg	1,603 lb
Upper Boom Block	112 kg	246 lb
Lower Boom Block	112 kg	246 lb
Load Block	159 kg	350 lb
Hook Block	176 kg	387 lb
Standard Boom	1431 kg	3,148 lb
Extended Boom	1572 kg	3,458 lb

PL87

Total Removable Counterweight*	10 864 kg	23,950 lb
Removable Counterweight (14 plates) Single Plate	776 kg	1,711 lb
Upper Boom Block	112 kg	246 lb
Lower Boom Block	112 kg	246 lb
Load Block	236 kg	519 lb
Hook Block	322 kg	708 lb
Standard Boom	1431 kg	3,148 lb
Extended Boom	1572 kg	3,458 lb

*Calculated with extended boom

Standards (PL83/PL87)

Brakes	Brakes meet the International Standard ISO 10265:2008
ROPS	ROPS (Rollover Protection Structure) meets the International Standard ISO 3471:2008

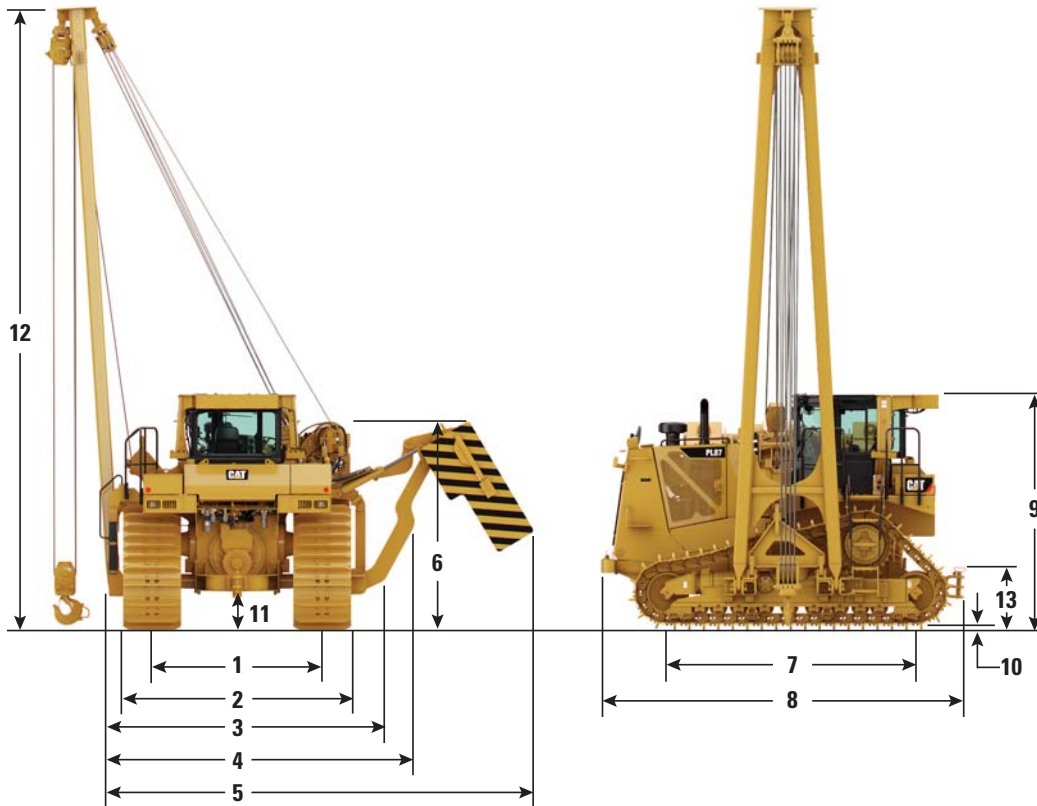
Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 2.5 kg of refrigerant which has a CO₂ equivalent of 3.575 metric tonnes.

PL83/PL87 Pipelayer Specifications

PL83 Dimensions

All dimensions are approximate.

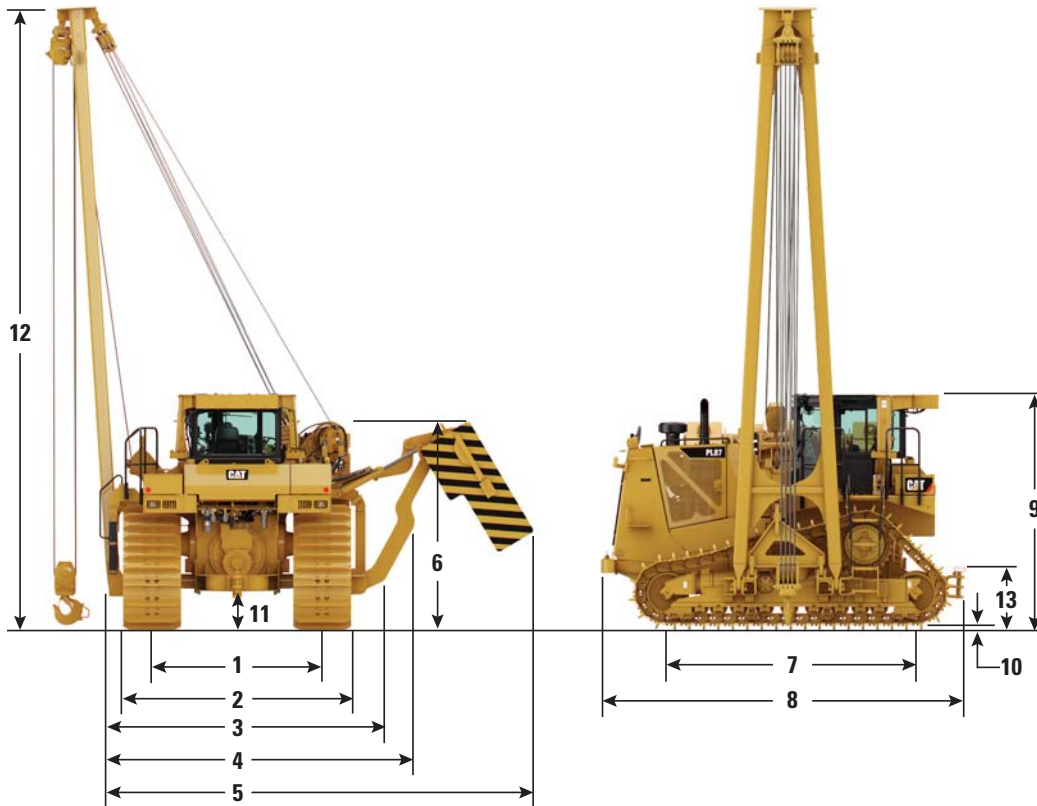


	PL83	
1 Track Gauge	2.34 m	7 ft 8 in
2 Width of Tractor (standard shoes)	3.25 m	10 ft 8 in
3 Width of Tractor (counterweight/boom removed)	3.86 m	12 ft 8 in
4 Width of Tractor (counterweight retracted)	4.11 m	13 ft 6 in
5 Width of Tractor (counterweight extended)	6.06 m	19 ft 11 in
6 Machine Height (top of counterweight)	3.4 m	11 ft 2 in
7 Length of Track on Ground	3.72 m	12 ft 2 in
8 Operating Length	5.45 m	17 ft 11 in
9 Height of Machine (Cab and ROPS)	3.53 m	11 ft 7 in
10 Grouser Height	0.08 m	3.1 in
11 Ground Clearance (per SAE J1234)	0.47 m	1 ft 7 in
12 Boom Height (at SAE 1.22 m [4 ft] overhang) 7.31 m (24 ft) boom	8.02 m	26 ft 4 in
Boom Height (at SAE 1.22 m [4 ft] overhang) 8.53 m (28 ft) boom	9.25 m	30 ft 5 in
13 Drawbar Height	0.43 m	1 ft 5 in

PL83/PL87 Pipelayer Specifications

PL87 Dimensions

All dimensions are approximate.



	PL87	
1 Track Gauge	2.54 m	8 ft 4 in
2 Width of Tractor (standard shoes)	3.86 m	12 ft 8 in
3 Width of Tractor (counterweight/boom removed)	4.06 m	13 ft 4 in
4 Width of Tractor (counterweight retracted)	4.32 m	14 ft 2 in
5 Width of Tractor (counterweight extended)	6.34 m	20 ft 9 in
6 Machine Height (top of counterweight)	3.4 m	11 ft 2 in
7 Length of Track on Ground	3.72 m	12 ft 2 in
8 Operating Length	5.45 m	17 ft 11 in
9 Height of Machine (Cab and ROPS)	3.53 m	11 ft 7 in
10 Grouser Height	0.09 m	3.6 in
11 Ground Clearance (per SAE J1234)	0.47 m	1 ft 7 in
12 Boom Height (at SA0E 1.22 m [4 ft] overhang) 7.31 m (24 ft) boom	8.02 m	26 ft 4 in
Boom Height (at SAE 1.22 m [4 ft] overhang) 8.53 m (28 ft) boom	9.25 m	30 ft 5 in
13 Drawbar Height	0.43 m	1 ft 5 in

PL83/PL87 Standard Equipment

PL83/PL87 Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

ELECTRICAL

- Alarm, backup
- Batteries, four maintenance free heavy duty
- Converter, 12V, 10 amp with one outlet
- Horn, forward warning
- Lights, two front, two rear
- Starting receptacle
- Machine disconnect switch
- Machine diagnostic connector
- Boom and counterweight limit switch

OPERATOR ENVIRONMENT

- Armrest, adjustable
- Deactivation switch, hydraulic controls
- Advisor operator interface
 - Electronic monitoring system
 - Diagnostic service information
 - Operator preferences
- ROPS
- Decelerator pedal
- Dual brake pedal
- Seat belt, retractable
- Heater and ventilation
- Differential steering control, with touch shift
- Storage compartment

PIPELAYING EQUIPMENT

- Block and hook with latch
- Counterweights, extendible segmented
- Winches, hydraulic actuated and electronically controlled

POWER TRAIN

- C15 ACERT diesel engine
 - Electronic Unit Injection (EUI)
 - Aftertreatment
 - Meets Tier 4 Final/Stage IV or Tier 3/Stage IIIA equivalent emission standards, depending on region of sale
- Aftercooler, air-to-air (ATAAC)
- High performance single plane cooling system
- Coolant, extended life with protection to -37°C (-34°F)
- 24V electric start
- Zero speed hydraulic fan, reversing and hydraulically driven, electronically controlled
- Filter, air with electronic service indicator
- Final drives
 - Four planet, double reduction planetary
- Fuel priming pump, electric
- Parking brake, electronic
- Precleaner, strata-tube dust ejector
- Prescreener
- Starting aid, ether
- Torque divider
- Transmission, electronically controlled
 - Powershift, 3F/3R speed
- Turbocharger, wastegate
- Water separator

UNDERCARRIAGE

- Carrier roller
- Track roller frames
- Hydraulic track adjusters
- Master links, two piece
- Non-suspended undercarriage
- Rollers and idlers, lifetime lubricated
- Sprocket rim segments, replaceable
- Track guiding guards
- Medium service grouser
 - 760 mm (30 in) – PL83
 - Sealed and lubricated track (48 section)
- Super extreme service grouser
 - 864 mm (34 in) – PL87
 - Sealed and lubricated track (48 section) clipped grousers

OTHER STANDARD EQUIPMENT

- Bumper, front with towing device
- Drawbar, heavy duty
- Ecology drains
 - Engine oil
 - Coolant
 - Hydraulic oil
 - Torque converter
 - Fuel tank
 - Power train case and transmission
- Enclosures, perforated engine
- Hood, perforated
- Bottom guards, hinged
- Guard, hinged radiator
- Hydraulics, independent steering and work tool pumps
- Hydraulic system, electronically activated for hook, boom and counterweight control
- Oil cooler, hydraulic
- Product Link ready
- S·O·S sampling ports
- Steering, electronically controlled power differential
- Vandalism protection for fluid compartments

PL83/PL87 Mandatory Attachments and Optional Equipment

Mandatory attachments and optional equipment may vary. Consult your Cat dealer for details.

MANDATORY ATTACHMENTS

- Factory arrangements
 - Merchandising arrangement
 - Cab with air conditioning and heat and 150 amp alternator
 - OROPS with heat and 150 amp alternator
 - Regional arrangement
 - NACD
 - EU
- Seat
 - Cloth air
 - Deluxe
 - Vinyl
 - Heated

- Rollers
 - Arctic
 - Standard
- Product Link
- Pipelaying equipment
 - Boom and cables 7.3 m (24 ft)
 - Boom and cables 7.3 m (24 ft) extended
 - Boom and cables 8.53 m (28 ft)
 - Boom and cables 8.53 m (28 ft) extended

OPTIONAL EQUIPMENT

- WAVs
- CE certification (Tier 3/Stage IIIA only)
- ROPS (Tier 3/Stage IIIA only)

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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