



47Z-METER | TRUCK-MOUNTED CONCRETE BOOM PUMP

47Z-METER



* OPTIONAL CHASSIS SHOWN

A NEW STANDARD OF INNOVATION AND EXCELLENCE

PRECISE ENGINEERING. SUPERIOR PERFORMANCE

From increased maneuverability and ease of use, to a brand-new, state-of-the-art remote control system and best-in-class performance. With the five-section, Z-fold boom and new, more robust pedestal design, the pump can navigate even the most congested job sites.

The new 47Z is designed with reduced gross vehicle weight, improved pipe layout, and increased parts commonality. The pump's brand-new Ergonic 2.0 Control System delivers a more reliable and customizable experience. Meanwhile, its Ergonic Graphic Display is added to the handheld Radio Remote Control, allowing the operator to view the live screen while controlling the pump remotely. Everything about the new 47Z was designed with the end-user in mind.



ERGONIC® 2.0 ADVANTAGE



ERGONIC® PUMP SYSTEM (EPS) WITH ERGONIC® OUTPUT CONTROL (EOC)

EPS ensures a fully optimized pumping process. While the EOC component regulates the optimum engine speed, ensuring that the concrete pump operates smoothly with fuel efficiency and reduced maintenance.



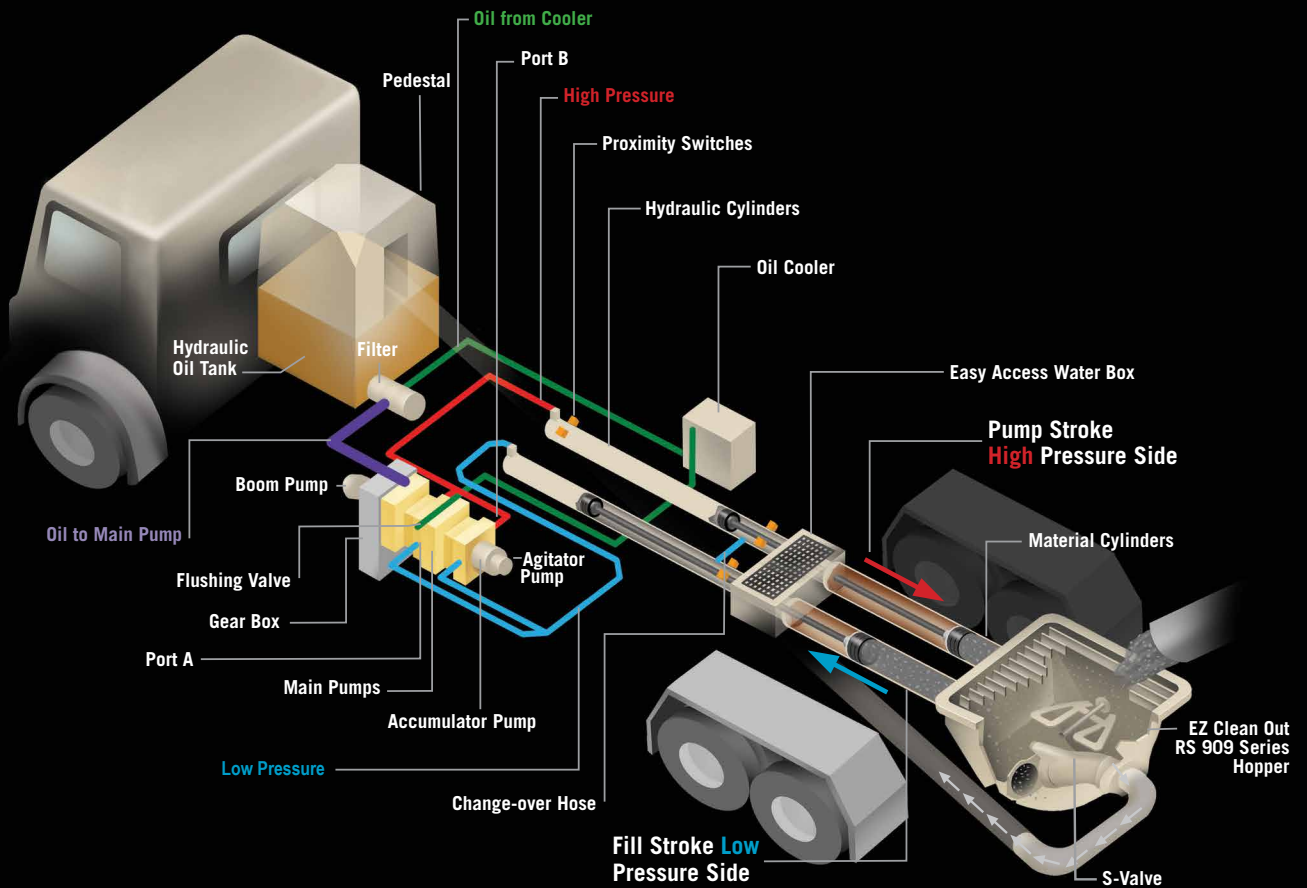
ERGONIC® FFS

The Ergonic 2.0 remote control is easy to handle and extremely lightweight — 30 percent lighter than the previous model. Its ergonomic design ensures convenient operation and up-to-date feedback, as well as system information for the machine.



EGD-RC — ERGONIC® GRAPHIC DISPLAY (RADIO) REMOTE CONTROL

The EGD-RC displays an overview of critical pump/machine information and settings on a high-resolution color display. Operators can operate closer to the end hose with vital performance information and control settings.



PUTZMEISTER | FREE FLOW HYDRAULICS

FREE FLOW HYDRAULICS IN A CLOSED LOOP SYSTEM

The pumps at the heart of Putzmeister’s free flow pumping system are bi-directional, variable displacement piston pumps. Depending on stroke, oil flows in a closed loop from either port A or port B on the pump to the hydraulic cylinders.

Depending on the specific pump cell size, up to 20% of the oil leaves the simple closed loop system during each stroke through a flushing valve on the main pump and cycles to a cooler before it returns to the hydraulic oil tank.

Unlike an open loop system, the oil flows freely without passing through any unnecessary valves that can generate heat. Thus, the closed loop requires far less oil to run the system, as a larger reservoir is not necessary to cool all of the oil. In addition, return oil can be cycled directly through the main kidney filter instead of going back to the tank, keeping it in the filtered state preferred by the hydraulic components for long life and dependable operation.

Speed and timing are also critical to superior performance. Quicker and more responsive than a hydraulic signal, the electrical system on a Putzmeister pump minimizes the time it takes to change direction at stroke end. An electrical signal precisely synchronizes the drive cylinders with the accumulator system that controls the S-Valve in the hopper. Reserved energy stored in a nitrogen bladder is sent as a supercharged blast of oil at precisely the right moment to facilitate a smooth and fast shift of the S-Valve from one position to another.

KEY ADVANTAGES OF PUTZMEISTER’S FREE FLOW HYDRAULICS

- Changes in material pressure in the delivery line are reduced to ensure smooth pumping and a consistent concrete flow.
- The intelligent design minimizes wear-inducing pressure peaks, increases service life and makes our pumps extremely powerful.
- Rapid change-over of the stroke means higher outputs, a smoother flow of concrete and less boom bounce.
- There is greater pump output due to the efficient use of all available energy.

BOOM

- 151' 3" (46.10m) vertical reach
- Versatile 5-section Z-Fold boom
- Manual lubrication, points with auto-lubrication (available option)
- Integrated work lights in critical areas

BOOM OPERATION AND CONTROL

- Fully proportional Ergonic 2.0 HBC radio remote with backup cable
- Gauge Port Central (GPC) makes easier to measure pressures with one central location
- Modular Boom Controls (MBC)
- 24V electrical system

DELIVERY LINE

- Equipped with 5" (125mm) twin pipe delivery line on all boom sections providing efficient concrete delivery
- P2W+ twin-pipe deck pipe with PPT turret elbow
- Easy lift-out brackets for simple delivery line replacement
- Common component availability and easy replacement

PEDESTAL

- Rotation bearing and access openings simplify turret pipe changes
- Fully integrated pedestal design absorbs forces to minimize boom bounce, increase stability, and increase structural reliability
- Easy access large single-suction filter with indicator gauge
- Two spacious decks for convenient storage
- Manual lubrication, points with auto-lubrication (available option)
- Side-mounted aluminum toolboxes
- Integrated LED work lights
- Slewable breakaway rear steps

OUTRIGGERS

- Quick setup on restrictive job sites
- Fully hydraulic outriggers with integral cylinders
- X-Style outrigger system
- Front outriggers hydraulically extend out and down
- Rear outriggers hydraulically swing out and extend down
- Four outrigger pads in two side compartments
- Bubble level indicators
- Auxiliary fuel tank in outrigger
- One-Sided Support (OSS) system featuring a 135° working range.

CONCRETE PUMP

- Ergonic 2.0 control system with Ergonic Graphic Display Radio Remote Control (EGD-RC)
- Free flow hydraulic system for smooth and controllable pumping for all concrete mixes
- Multi-piece piston cup design
- Hard-chromed material cylinders
- Redundant proximity sensor system with function indicators replaced by display on EGD-RC
- Fully adjustable volume control for very slow pumping with full concrete pressure and boom speed
- Modular pump control box

EZ CLEAN OUT RS 909 HOPPER

- Large 19.4 ft³ (550L) capacity
- Grate-mounted vibrator
- Hopper grate RFID safety switch
- Hinged composite splash guard covers hopper during transit
- Low hopper height allows easy discharge from a mixer truck
- Automatic lubrication
- Work lights to provide additional visibility in low light situations

S-VALVE

- Ideal for high pressure applications and harsh mixes
- Hard-faced S-Valve
- Gradual 9" to 7" (230 to 180mm) reduction
- Thick-walled valve construction
- Lasting wear over years of use

CLEAN OUT

- Fast and easy clean out
- 406 psi (28 bar) hydraulically-driven water pump
- Wash out kit and hose
- 700 L Water Tank



BETTER BOOM DESIGN

Putzmeister's "smart design" boom incorporates welding seams below the edge of maximum stress. The new 47Z rectangle boom design minimizes boom bounce, and is easier for the hoseman to maneuver. The boom features more straight pipe for a less stressful concrete flow and longer wear on parts. The Z-Fold configuration handles space-restrictive areas and can pump even when the boom is not fully extended. Putzmeister's boom design is highly responsive and has been optimized for the greatest maneuverability and flexibility available, resulting in a larger operational range.



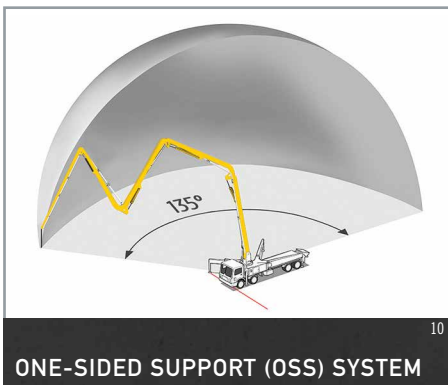
USER FRIENDLY

Tailored to meet the needs of owners, operators and service personnel, the 47Z offers an innovative, user-friendly design. The pump features improved access to components, new LED lighting features for added safety and usability, and bolted connections throughout, allowing for greater flexibility and reduced downtime.



RS 909 HOPPER

Putzmeister's robust, yet lightweight EZ Clean Out RS 909 hopper is engineered for performance and durability. Offering 19.4 ft³ (550L) capacity, the hopper uses one remixer paddle motor and grate-mounted vibrator. An innovative RFID safety switch incorporated in the hopper disables the machine when the grate is opened.



ONE-SIDED SUPPORT (OSS) SYSTEM

For enhanced job site versatility, Putzmeister's unique OSS system allows the operator to reduce the outrigger extension on one side of the unit to create a smaller overall machine footprint. Utilizing a series of sensors, OSS enables the unit to maintain a defined and safe 135 degree working envelope on space restrictive sites that demand a larger boom.



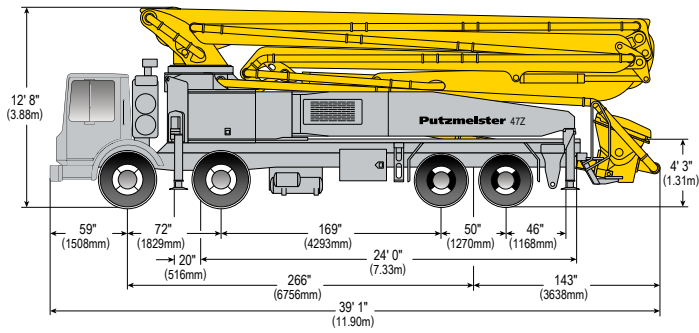
REDUCED OPERATING COSTS

The Putzmeister 47Z-Meter Truck-Mounted Concrete Boom Pump offers a variety of features to reduce overall operational costs, including efficient free-flow hydraulics and an Ergonic operational system, standardized and maintenance-free parts, and a reduced amount of functional fluids. The 47Z also uses fewer specialty components and offers a longer wear of boom pipeline, further reducing costs.



FUEL ECONOMY

Switch gears and save with Putzmeister's patented Econo-Gear™. The exclusive design allows the Mack chassis engine to run at a lower rpm, achieving less stress on wear parts, lower noise levels and reduced fuel consumption. Econo-Gear makes a significant impact on job site safety and profitability with an estimated 10-15% savings.



47Z-METER TRUCK-MOUNTED SPECIFICATIONS

Length	39' 0"	(11.90m)
Width	8' 2"	(2.50m)
Height	12' 8"	(3.88m)
Wheelbase	266"	(6756mm)
Front axle weight	32,831 lbs	(14,892 kg)
Rear axle weight	37,289 lbs	(16,914 kg)
Approx total weight	70,120 lbs	(31,806 kg)

Based on Model MACK TerraPro 613 with .16H pump cell.
 Weights are approximate and include pump, boom, truck, driver and some fuel.
 Varies with options selected.
 Dimensions will vary with different truck makes, models and specifications.

BOOM SPECIFICATIONS | Z-FOLD DESIGN

Height & Reach		
Vertical reach	151' 2"	(46.10m)
Horizontal reach	134' 10"	(41.10m)
Reach from front of truck*	124' 8"	(38.00m)
Reach depth	106' 3"	(32.40m)
Unfolding height	36' 5"	(11.10m)

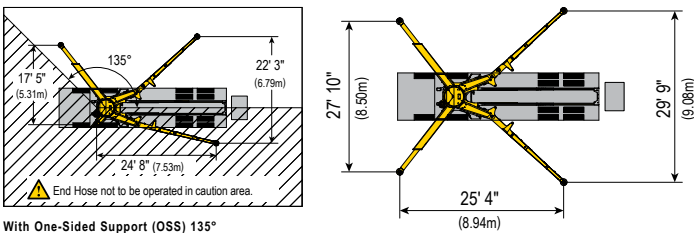
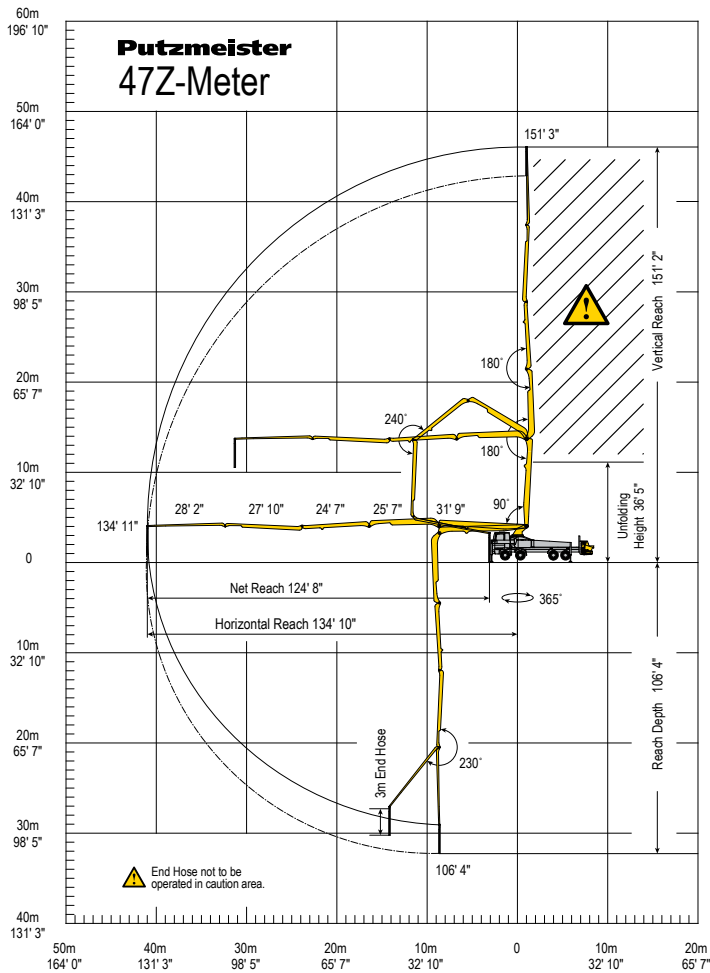
5-Section Boom		
1st section articulation	90°	
2nd section articulation	180°	
3rd section articulation	180°	
4th section articulation	240°	
5th section articulation	230°	
1st section length	31' 9"	(9.70m)
2nd section length	25' 7"	(7.80m)
3rd section length	24' 7"	(7.50m)
4th section length	27' 10"	(8.50m)
5th section length	28' 2"	(8.60m)

General Specs		
Pipeline Size (ID) metric ends	5"	(125mm)
Rotation	365°	
End hose — length	10' 0"	(3.00m)
End hose — diameter	5"	(125mm)
Outrigger spread L - R — hydraulically extend out & down	27' 10"	(8.50m)
Outrigger spread L - R — readydraulically swing out & extend down	29' 9"	(9.08m)

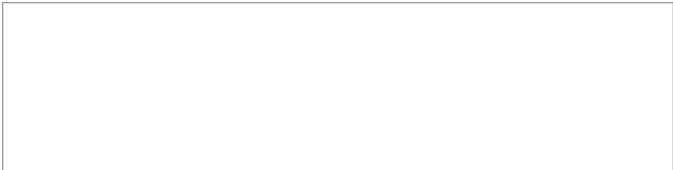
PUMP SPECIFICATIONS

	47Z.16H	47Z.18H LS
Output — rod side	209 yd ³ /hr (160m ³ /hr)	—
Output — piston side	141 yd ³ /hr (108m ³ /hr)	238 yd ³ /hr (182m ³ /hr)
Pressure — rod side	1233 psi (85 bar)	—
Pressure — piston side	1885 psi (130 bar)	1233 psi (85 bar)
Material cylinder diameter	9" (230mm)	10" (250mm)
Stroke length	83" (2100mm)	83" (2100mm)
Maximum strokes per minute — rod side	31	—
Maximum strokes per minute — piston side	21	29
Volume control	0-Full	0-Full
Vibrator	Standard	Standard
Hard-chromed material cylinders	Standard	Standard
Hydraulic system	Free Flow	Free Flow
Hydraulic system pressure	5,075 psi (350 bar)	5,075 psi (350 bar)
Differential cylinder diameter	5.5" (140mm)	4.9" (125mm)
Rod diameter	3.1" (80mm)	3.1" (80mm)
Maximum size aggregate	2.5" (63mm)	2.5" (63mm)
Water tank — pedestal	185 gal (700L)	185 gal (700L)

Maximum theoretical values listed.
 * Applies to units mounted on PMA stock truck — MACK TerraPro 613
 • Standard delivery line system rated at max line pressure of 1,233 psi (85 bar)



Photos and drawings are for illustrative purposes only. Authorized Distributor



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