



56Z-Meter

Truck-Mounted Concrete Boom Pump

A new standard of innovation and excellence

Do more for less

With the 56Z-Meter, Putzmeister makes it possible to get the reach of the 50-meter class boom pump with a smaller footprint.

Weighing in at 100,000 pounds, the 56Z-Meter is light and with the industry's most compact footprint, it can maneuver and pump in spaces where other 50-meter class booms simply cannot fit. Its two-section outriggers featuring our One-Sided Support (OSS) system help make deployment in extremely confined spaces possible. Combine that with a 181' 0" vertical reach, and the maneuverability of the 56Z-Meter is tough to beat.

The flexibility of the boom's five-section Z-Fold design further enhances both placement options and the all-around convenience of this 50-meter class model. For maximum versatility, the boom's sections can be deployed in either the 'Z' position or the 'A-Frame' configuration, depending on the application requirements.

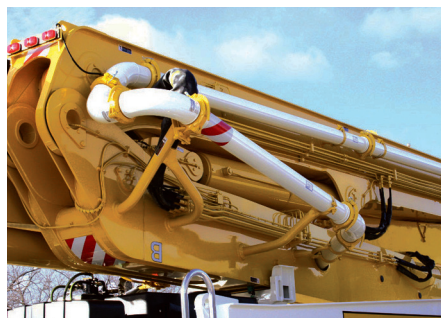
Designed and built with customary Putzmeister flexibility, strength, and dependability, the 56Z-Meter brings together world-class design and user value in a package that is both site-friendly and fully compliant with DOT weight restrictions.



AMPLE STORAGE SPACE

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With two spacious decks, there is plenty of room to comfortably move around the deck and ample capacity for storage of pipe, hose, and job site equipment.



IMPROVED PIPE LAYOUT

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Improved pipe layout, with single bend in turret and only two elbow sizes – 45-degree and 90-degree – increases parts commonality and reduces wear.

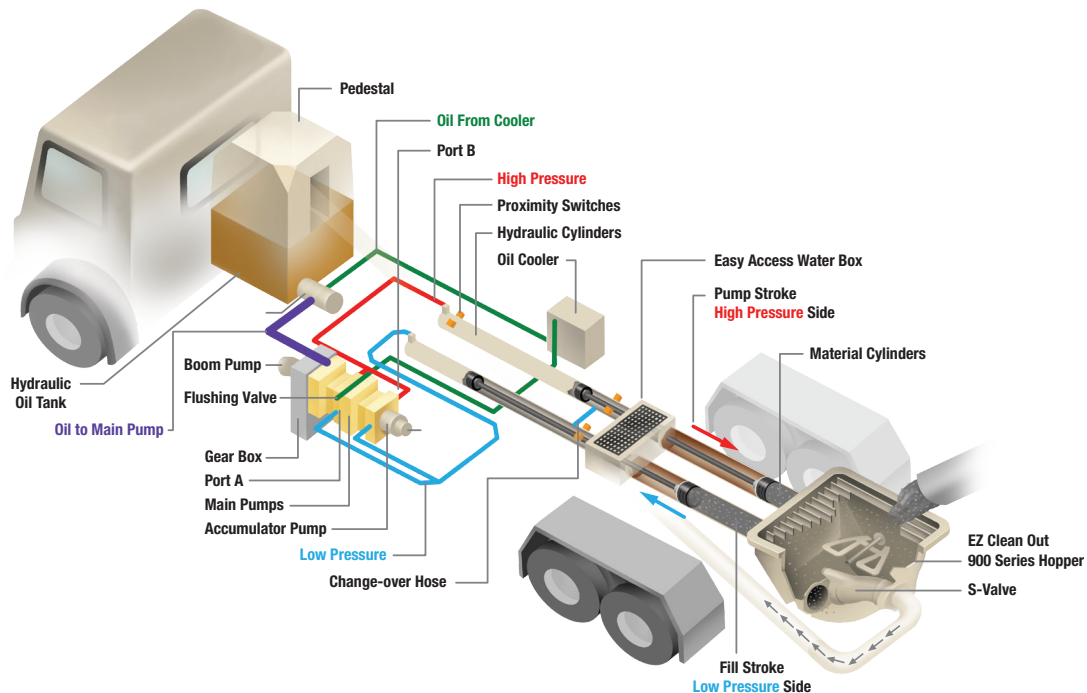


CONVENIENT OUTRIGGERS

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Two-section outriggers and One-Sided Support (OSS) allow the 56Z to safely maneuver in tight spaces. In addition, four identical bolt-on outrigger slewing cylinders make maintenance simple.

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 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 closed loop 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.

56Z-Meter — features at a glance

Benefits

- 5-section boom with Z-Fold design for maximum maneuverability
- Equipped with 5" (125 mm) twin-pipe delivery line on all boom sections for efficient concrete delivery
- Improved pipe layout reduces pipe wear
- Common component availability and easy replacement

Boom

- 181' 0" (55.17 m) vertical reach
- Integrated work lights
- Automatic lubrication
- Smooth and precise boom positioning at greater distances
- Fully proportional HBC radio remote
- Fully proportional remote with 164' 0" (50 m) cable
- Gauge Port Central (GPC)
- Modular Boom Controls (MBC)
- 24 V electrical system

Outriggers

- Two-part outriggers for easy maintenance
- Quick setup on restrictive job sites
- Fully hydraulic outriggers with integral cylinders
- "X" brace outrigger system
- Four outrigger pads in two side compartments
- Bubble level indicators
- 212 gallon (803 L) fuel tank in outrigger
- One-Sided Support (OSS) system featuring a 120° working range

Pedestal

- Rotation bearing and access openings for simplified turret pipe changes
- Fully-integrated pedestal design absorbs all forces
- Easy access large single-suction filter with indicator gauge
- Condensation trap in the hydraulic tank for water collection
- Increased deck space and payload capacity for pipe and hose storage
- Automatic lubrication
- Side-mounted aluminum toolboxes
- Integrated work lights
- Breakaway rear steps

Pump

- Ergonic® Pump System (EPS) with color Ergonic Graphic Display (EGD)
- Free flow hydraulic system for smooth, controllable pumping
- Multi-piece piston cup design
- Hard-chromed material cylinders
- Redundant proximity sensor system with function indicators
- Fully adjustable volume control for very slow pumping with full concrete pressure and boom speed
- Modular pump control box



The PRO-VANTAGE® Warranty Plan extends the coverage on all Putzmeister BSF boom pumps for a total of 36 months or 6,600 hours at no extra charge. Domestic only.

Boom and pump advantage



BETTER BOOM DESIGN

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Putzmeister's "smart design" boom incorporates welding seams below the edge of maximum stress. The new 56Z 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.



CONVENIENCE AND CONTROL

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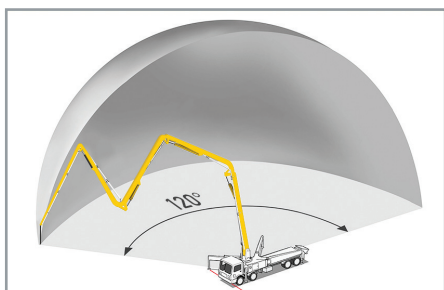
The Automatic Frequency Management (AFM) system on the standard HBC proportional radio remote ensures minimal interference with other frequency transmitters. A fully proportional cable remote is also standard. Unlike other remote control systems, the radio and cable remote systems are independent, offering redundancies to ensure proportional operation with either the radio or cable remote.



RS 909 HOPPER

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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

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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 120 degree working envelope on space restrictive sites that demand a larger boom.



ERGONIC® PUMP CONTROL SYSTEM (EPS)

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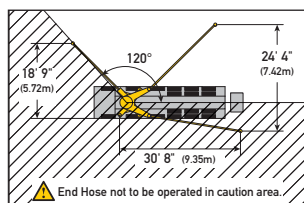
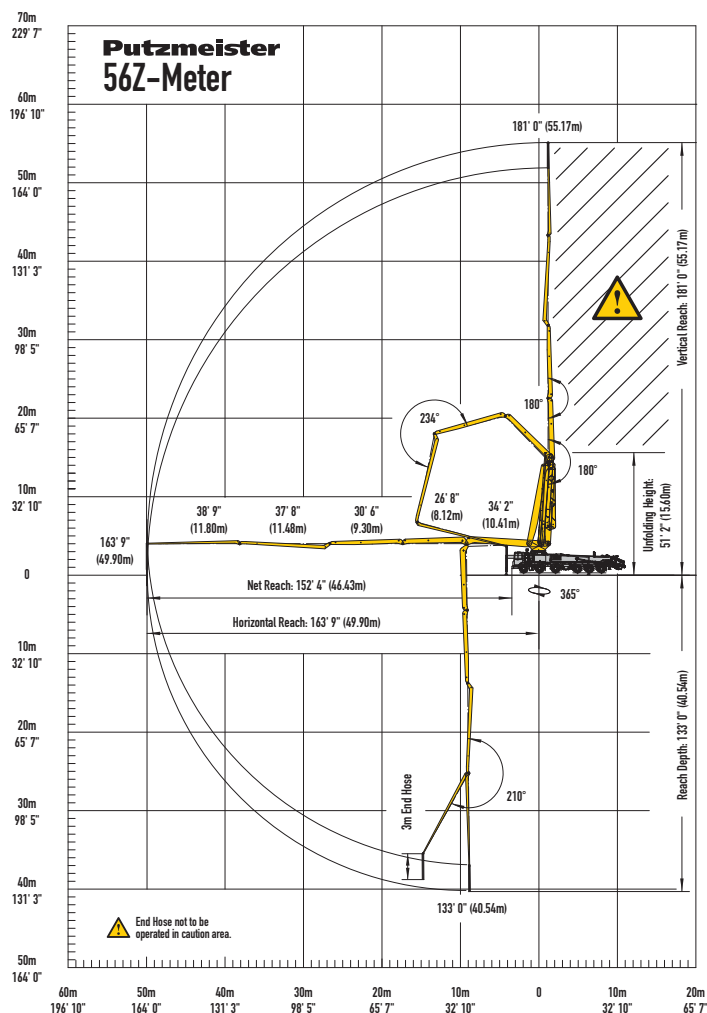
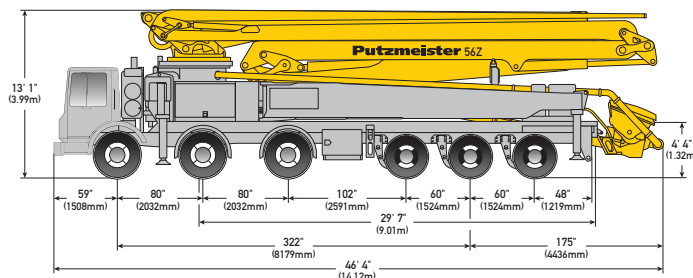
The computer-aided EPS constantly monitors and regulates the operation of the concrete pump and truck engine. The electronic regulation of this system means the pump always runs at peak performance. EPS results in more productivity and greater efficiency with less for the operator to worry about. The color Ergonic Graphic Display (EGD) provides EPS monitoring from one convenient location.



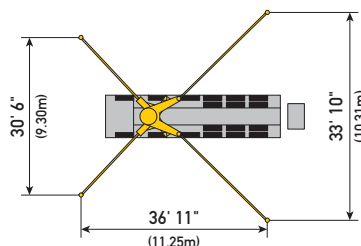
FUEL ECONOMY

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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, lowering noise levels, and reducing fuel consumption. Econo-Gear makes a significant impact on job site safety and profitability with an estimated 10-15% savings.



With One-Sided Support (OSS) 120°



56Z-Meter Truck-Mounted Specifications

Length	46' 4"	(14.12 m)
Width	8' 2"	(2.50 m)
Height	13' 1"	(3.99 m)
Wheelbase	322"	(8,179 mm)
Front axle weight	51,333 lbs	(23,284 kg)
Rear axle weight	48,967 lbs	(22,211 kg)
Approx total weight	100,300 lbs	(45,496 kg)

Based on Model MACK MRU 613 with .16H pump cell.

Weights are approximate and include pump, boom, truck, driver and full fuel. Varies with options selected.

Dimensions will vary with different truck makes, models and specifications.

Boom Specifications | Z-Fold Design

Height & Reach		
Vertical reach	181' 0"	(55.17 m)
Horizontal reach	163' 9"	(49.90 m)
Reach from front of truck*	152' 4"	(46.43 m)
Reach depth	133' 0"	(40.54 m)
Unfolding height	51' 2"	(15.60 m)

5-Section Boom

1st section articulation	90°
2nd section articulation	180°
3rd section articulation	180°
4th section articulation	234°
5th section articulation	210°

1st section length	34' 2"	(10.41 m)
2nd section length	26' 8"	(8.12 m)
3rd section length	30' 6"	(9.30 m)
4th section length	37' 8"	(11.48 m)
5th section length	38' 9"	(11.80 m)

General Specifications

Pipeline Size (ID) metric ends	5"	(125 mm)
Rotation	365°	
End hose — length	10' 0"	(3.00 m)
End hose — diameter	5"	(125 mm)
Outtrigger spread L-R — front	30' 6"	(9.30 m)
Outtrigger spread L-R — rear	33' 10"	(10.31 m)

Pump Specifications

	56Z.16H	56Z.18H LS
Output — rod side	210 yd ³ /hr (160 m ³ /hr)	—
— piston side	141 yd ³ /hr (108 m ³ /hr)	238 yd ³ /hr (182 m ³ /hr)
Pressure — rod side	1,233 psi (85 bar)	—
— piston side	1,885 psi (130 bar)•	1,233 psi (85 bar)•
Material cylinder diameter	9" (230 mm)	10" (250 mm)
Stroke length	83" (2,100 mm)	83" (2,100 mm)
Maximum strokes per minute		
— rod side	31	—
— 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" (140 mm)	5.5" (140 mm)
Rod diameter	3.1" (80 mm)	3.1" (80 mm)
Maximum size aggregate	2.5" (63 mm)	2.5" (63 mm)
Water tank — pedestal	185 gal (700 L)	185 gal (700 L)

Maximum theoretical values listed.

* Applies to units mounted on PMA stock truck — MACK MRU 613

• Standard delivery line system rated at max line pressure of 1,233 psi (85 bar)



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