

36Z-Meter

Truck-Mounted Concrete Boom Pump

A new standard of innovation and excellence

Do more for less

The innovative and lightweight 36Z-Meter Concrete Boom Pump delivers greater payload capacity, longer pump life, and a more user-friendly design for increased ease of service. The many improvements to the pump's design allows each piece to work together seamlessly while improving overall usability.

With a gross vehicle weight of approximately 52,000 lbs (26 tons), the 36Z weighs over 4,000 lbs less than the previous 36Z model. This allows for an increased payload capacity for job site equipment, water, and fuel. The 36Z has a three-axle chassis, which allows for less strict permits — even no permits — depending on local requirements.

While the pedestal has remained the same size, the new design allows for approximately 30 percent more space because several components that were previously located on the deck have been moved. The more spacious deck allows for ease of movement during maintenance and service, and provides an increase in physical space for the payload. Since the pedestal sub-frame's bolted connections allow for flexibility by adjusting to torsion from the force of the pump, the life of the pump is increased.



Ergonic® system benefits



ERGONIC PUMP CONTROL SYSTEM (EPS) 3

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.



ERGONIC OUTPUT CONTROL (EOC) 4

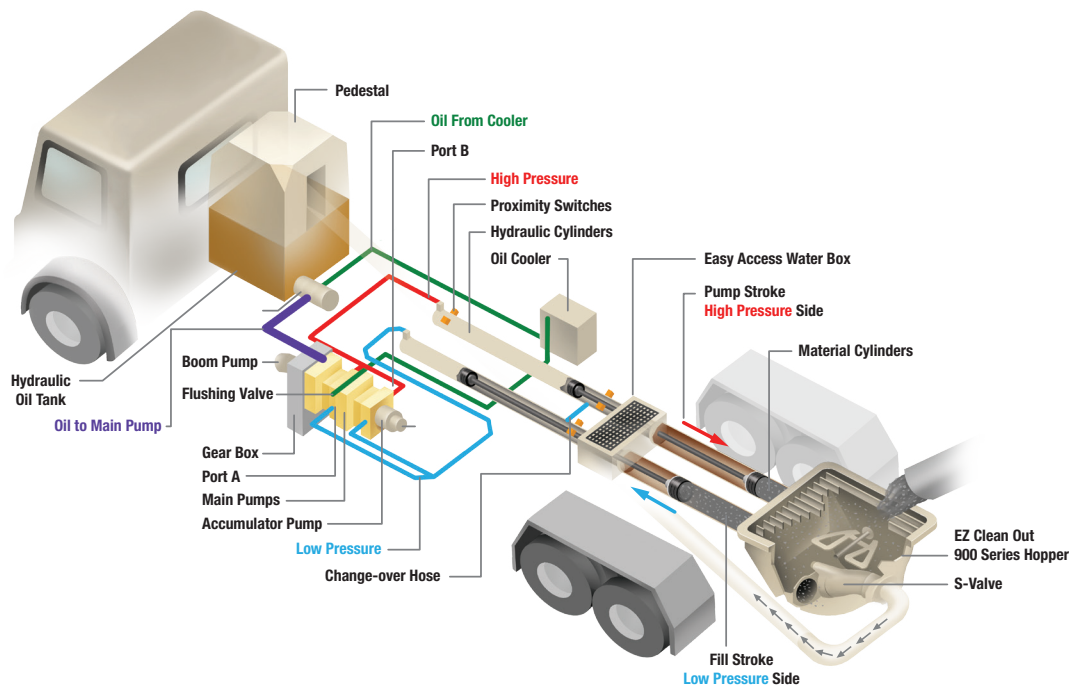
Integral to EPS, EOC reduces fuel consumption, wear, and noise. EOC automatically adjusts the engine speed to the minimum required for the delivery rate specified by the operator on the remote control.



ERGONIC GRAPHIC DISPLAY (EGD) 5

Putting the operator in control of success, the color EGD provides EPS monitoring from one convenient location. The simple-to-use EGD shows a quick and clear visual display of important system information and allows the operator to set individual pumping performance parameters.

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.

Standard features

Boom

- 116' 10" (35.61 m) vertical reach
- Low unfolding height
- Versatile 4-section Z-Fold boom
- Manual lubrication, optional auto lubrication
- Integrated work lights

Boom operation and control

- Fully proportional HBC radio remote
- Smooth and precise boom positioning at greater distances
- Fully proportional remote with 130' (40 m) cable
- Gauge Port Central (GPC)
- Modular Boom Controls (MBC)
- 24 V electrical system

Delivery line

- Equipped with 5" (125 mm) single-layer delivery line on all boom sections providing efficient concrete delivery
- P1IH single-layer pipe with PPT turret elbow
- Bolt-on easy lift-out brackets for simple delivery line replacement
- Standardized 45° and 90° elbows and straight pipe sections
- Improved pipe layout reduces pipe wear
- Common component availability and easy replacement

Pedestal

- Rotation bearing and access openings simplify turret pipe changes
- Sub-frame's bolted connections absorb all forces
- Easy access large single-suction filter with indicator gauge
- Efficient hydraulic oil system
- Condensation trap in the hydraulic tank for water collection
- Increased deck space and payload capacity for pipe and hose storage
- Manual lubrication, optional auto lubrication
- Side-mounted aluminum toolboxes
- Integrated work lights
- Breakaway rear steps

Outriggers

- Two-part outriggers for easy maintenance
- Quick setup on restrictive job sites
- Fully hydraulic outriggers with integral cylinders
- "X" brace outrigger system
- Front outriggers extend diagonally out and down
- Rear outriggers swing out and extend down
- Four outrigger pads in two side compartments
- Bubble level indicators
- Optional auxiliary fuel tank
- Optional One-Sided Support (OSS) outriggers 120°

Concrete 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 replaced by display on EGD
- 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 (550 L) capacity
- Hardox remixer paddle
- Grate-mounted vibrator
- Hopper grate RFID safety switch
- Hinged splash guard covers hopper during transit
- Lower hopper height allows easy discharge from ready mix truck
- Automatic lubrication
- Hopper work light

S-Valve

- Ideal for high pressure applications and harsh mixes
- Hard-faced S-Valve
- Gradual 9" to 7" (230 to 180 mm) 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
- Integrated 185 gallon (700 L) water tank

Putzmeister

PRO-VANTAGE®
WARRANTY PLAN

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.

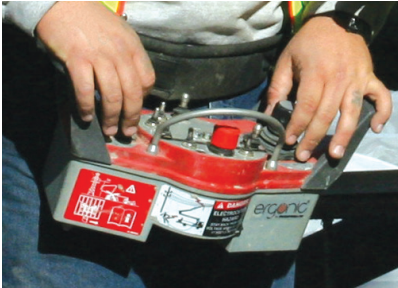
Boom and pump advantage



BETTER BOOM DESIGN

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Putzmeister's "smart design" boom incorporates welding seams below the edge of maximum stress. The 36Z 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.



BOLT CONNECTIONS

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From pedestal construction and flatpack connections to pipe hanger brackets and hopper grate, many of the critical wear areas have been improved with bolt connections. Simplifying the design and allowing for torsion forces to easily pass through, the bolt connections provide extended service life and easier maintenance.



ERGONIC PUMP CONTROL SYSTEM (EPS)

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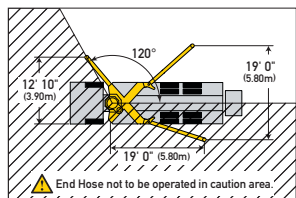
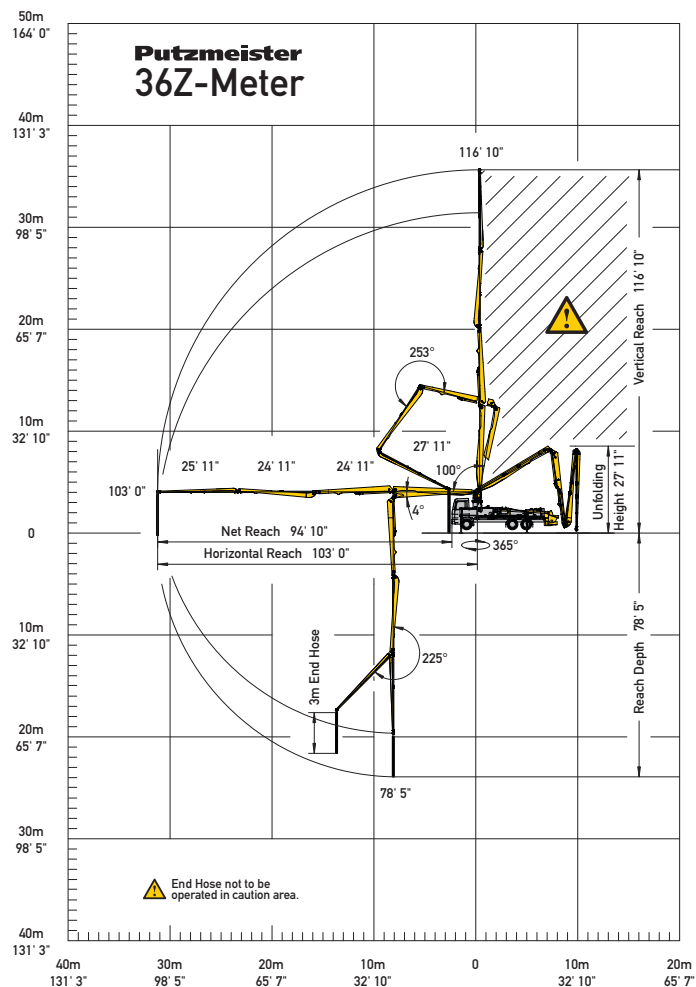
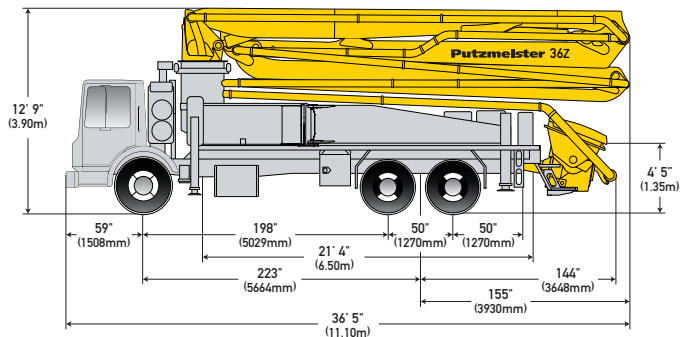
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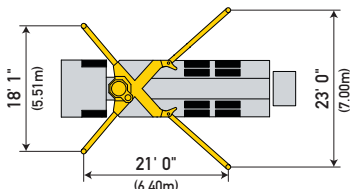
FUEL ECONOMY

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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, 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.



With One-Sided Support (OSS) 120°



36Z-Meter Truck-Mounted Specifications

| | | |
|---------------------|------------|-------------|
| Length | 36' 5" | (11.10 m) |
| Width | 8' 2" | (2.50 m) |
| Height | 12' 9" | (3.90 m) |
| Wheelbase | 223" | (5,664 mm) |
| Front axle weight | 18,164 lbs | (8,239 kg) |
| Rear axle weight | 33,966 lbs | (15,407 kg) |
| Approx total weight | 52,130 lbs | (23,646 kg) |

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

Boom Specifications | Z-Fold Design

| | | |
|----------------------------|----------|-----------|
| Height & Reach | | |
| Vertical reach | 116' 10" | (35.61 m) |
| Horizontal reach | 103' 0" | (31.39 m) |
| Reach from front of truck* | 94' 10" | (28.91 m) |
| Reach depth | 78' 5" | (23.90 m) |
| Unfolding height | 27' 11" | (8.51 m) |

4-Section Boom

| | |
|--------------------------|------|
| 1st section articulation | 104° |
| 2nd section articulation | 180° |
| 3rd section articulation | 253° |
| 4th section articulation | 225° |

| | | |
|--------------------|---------|----------|
| 1st section length | 27' 11" | (8.51 m) |
| 2nd section length | 24' 11" | (7.59 m) |
| 3rd section length | 24' 11" | (7.59 m) |
| 4th section length | 25' 11" | (7.90 m) |

General Specifications

| | | |
|---------------------------------------|--------|----------|
| Pipeline Size (ID) metric ends | 5" | (125 mm) |
| Rotation | 365° | |
| End hose — length | 10' 0" | (3.00m) |
| End hose — diameter | 5" | (125 mm) |
| Outrigger spread L-R — front | 18' 1" | (5.51 m) |
| hydraulically extended out & down | | |
| Outrigger spread L-R — rear | 23' 0" | (7.00 m) |
| hydraulically swing out & extend down | | |

Pump Specifications

| | 36Z.12H | 36Z.16H |
|---------------------------------|--|--|
| Output — rod side | 144 yd ³ /hr (110 m ³ /hr) | 210 yd ³ /hr (160 m ³ /hr) |
| — piston side | 97 yd ³ /hr (74 m ³ /hr) | 141 yd ³ /hr (108 m ³ /hr) |
| Pressure — rod side | 1,233 psi (85 bar) | 1,233 psi (85 bar) |
| — piston side | 1,885 psi (130 bar) | 1,885 psi (130 bar) |
| Material cylinder diameter | 9" (230 mm) | 9" (230 mm) |
| Stroke length | 83" (2,100 mm) | 83" (2,100 mm) |
| Maximum strokes per minute | | |
| — rod side | 21 | 31 |
| — piston side | 14 | 21 |
| 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)

• Ergonic Pump System (EPS) is standard.



Putzmeister

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