# Putzmeister

38Z-5-METER | TRUCK-MOUNTED CONCRETE BOOM PUMP



## A NEW STANDARD OF INNOVATION AND EXCELLENCE

### THE RIGHT FIT FOR YOUR FLEET

The innovative 38Z-5 features a completely new five-section boom designed for increased maneuverability and reduced boom unfolding height, along with a new lightweight pedestal. Weighing a full 2,100 pounds less than its predecessor, the 38Z-5 allows for increased payloads for job site equipment, water and fuel.

As a result of the additional hinge in the five-section design, the 38Z-5 is more versatile and provides greater horizontal reach. The added hinge is crucial to expanding the boom's reach into the interior of a building. By combining critical elements of the roll-and-fold and Z-boom design, the 38Z-5 achieves maximum

flexibility and an extremely low unfolding height in a comparatively compact footprint. 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.

With the 38Z-5, Putzmeister has developed a highly responsive, user-friendly boom that delivers maximum maneuverability. The possibilities are virtually unlimited. And to meet the demands of the job site year-round, this three-axle unit can be ordered as a frost law weight-compliant model with a tag axle that can be easily removed when frost laws are not in effect.





HIGHLY EFFICIENT HYDRAULIC OIL SYSTEM

The hydraulic system on the 38Z-5-Meter has an improved filtration system, uses less oil and has fewer parts. Cleaner oil improves pump functioning and reduces maintenance intervals.



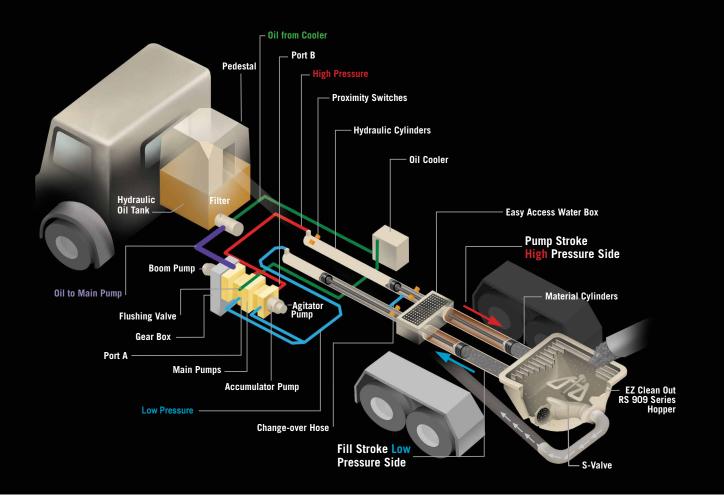
#### **IMPROVED PIPE LAYOUT**

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



#### **FLEXIBLE PEDESTAL**

By improving the pedestal construction with a bolt connection and simplifying the turret design, you can count on less down time and lower maintenance costs.



## 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.

#### **B00M**

- 123' 0" (37.50m) vertical reach
- Low unfolding height of 24' 3" (7.40m)
- 5-section Z-fold boom
- Manual Iubrication, optional auto Iubrication
- Integrated work lights

#### **BOOM OPERATION AND CONTROL**

- Smooth and precise boom positioning at greater distances
- Fully proportional HBC radio remote
- Fully proportional remote with 130' 0" (40m) cable
- Gauge Port Central (GPC)
- Modular Boom Controls (MBC)
- 24V electrical system

#### **DELIVERY LINE**

- Equipped with 5" (125mm) delivery line on all boom sections providing efficient concrete delivery
- 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 One-Sided Support (OSS) outriggers featuring 120° working range
- Optional auxiliary fuel tank

#### **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
- 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 ft<sup>3</sup> (550L) capacity
- 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 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
- Integrated 185 gallon (700L) water tank



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.



Putzmeister's "smart design" boom incorporates welding seams below the edge of maximum stress. The new 38Z-5 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.



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.



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.



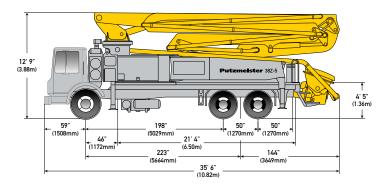
From pedestal construction and flatpack connections to pipe hanger brackets and hopper grate, many of the critical wear areas have been improved with bolt connections. Simplifying the design and allowing for torsion forces to easily pass through, the bolt connections provide extended service life and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

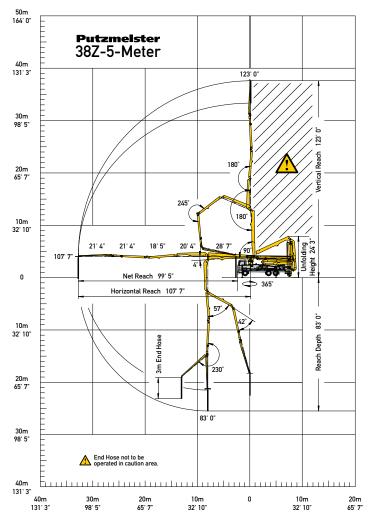


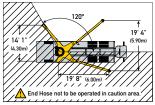
The computer-aided EPS constantly monitors and regulates the operation of the concrete pump and truck engine. The electronic regulation of this system means the pump always runs at peak performance. EPS results in more productivity and greater efficiency with less for the operator to worry about. The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



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.

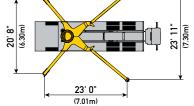








Optional One-Sided Support (OSS) 120°



Photos and drawings are for illustrative purposes only.

**Authorized Distributor** 





Length	35' 6"	(10.82m)
Width	8' 2"	(2.50m)
Height	12' 9"	(3.88m)
Wheelbase	223"	(5,664mm)
Front axle weight	18,620 lbs	(8,446kg)
Rear axle weight	35,980 lbs	(16,320kg)
Approx. total weight	54,600 lbs	(24,766kg)

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

Weights are approximate and include pump, boom, truck, driver and full fuel tank.

Varies with options selected.

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

#### **BOOM SPECIFICATIONS | Z-FOLD DESIGN**

Height & Reach		
Vertical reach	123' 0"	(37.50m)
Horizontal reach	107' 7"	(32.80m)
Reach from front of truck*	99' 5"	(30.30m)
Reach depth	83' 0"	(25.30m)
Unfolding height	24' 3"	(7.40m)
5-Section Boom		
1st section articulation	90°	
2nd section articulation	180°	
3rd section articulation	180°	
4th section articulation	245°	
5th section articulation	230°	
1st section length	28' 7"	(8.70m)
2nd section length	20' 4"	(6.20m)
3rd section length	18' 5"	(5.60m)
4th section length	21' 4"	(6.50m)
5th section length	21' 4"	(6.50m)
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 — front hydraulically extend out & down	20' 8"	(6.30m)
	23' 11"	(7.30m)
Outrigger spread L - R — rear hydraulically swing out & extend down		(7.30111)
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#### **PUMP SPECIFICATIONS** 38Z-5.16H 38Z-5.18H LS

Output — rod side 2	10 yd <sup>3</sup> /hr (160m <sup>3</sup> /hr)	_
— piston side 1	41 yd <sup>3</sup> /hr (108m <sup>3</sup> /hr)	238 yd <sup>3</sup> /hr (182m <sup>3</sup> /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" (230mm)	10" (250mm)
Stroke length	83" (2,100mm)	83" (2,100mm)
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" (140mm)	5.5" (140mm)
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 MRU 613
- Standard delivery line system rated at max line pressure of 1,233 psi (85 bar)



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