



Putzmeister



38Z-5-Meter

Truck-Mounted Concrete Boom Pump

Better than ever before

Improving upon excellence

Putzmeister's most popular pump is only getting better. Thanks to meaningful feedback from customers across the globe, the best-selling 38Z-5-Meter features a number of functional improvements. Stability is increased with a more robust pedestal and the Ergonic® 2.0 technology is optimized for better control and monitoring. All in all, the pump continues to prove its worth as one of the most efficient and cost-effective units on the job site.

Maneuverable boom

The 38Z-5 boom is incredibly agile, which comes in handy on challenging job sites. Its low unfolding height makes it ideal for working inside buildings.

Minimal maintenance costs

The 38Z-5 is engineered to save time and money. Its robust components stand up to wear. Necessary maintenance is simple, quick and kept to a minimum.

Easy to operate

The boom control's fast response characteristics, smooth pump operation, sophisticated routing of the delivery lines, and robust steel structure ensure precise concrete placement.

Genuine Parts. Expert Service. Putzmeister keeps you running.

Not all parts and accessories are created equal. Putzmeister offers the longer-lasting, better-performing parts and accessories you need to stand up to increased wear conditions. This means greater savings and less downtime.

With a busy schedule and your reputation on the line, nothing is more critical than ongoing on-site support. Coast-to-coast and around the world, you can count on expert Putzmeister service to keep your project and jobsite moving. Our trained technicians are available 24/7 to deliver the help you need, when you need it.



Boom, control and support

The boom — uniquely flexible in any application

The optimized kinematics ensure that the working area is maximized and there is no “dead space.” This makes the 38Z-5 with a Z-fold boom a successful combination of flexibility and compactness.



Maximum usability, minimum maintenance costs

Engineered to save time and money

- Robust components with high wear resistance
- Many maintenance-free and standard components
- Quick and easy maintenance access
- Bolt-on parts such as the pipe bracket

Ease of maintenance to increase service life

Thanks to auto lubrication points, the operator can remain safely on the ground — the 38Z-5 lubricates the first boom cylinder and the slewing bearing and hub independently. This is not just faster and more cost-effective; it also increases the components' service life.

Ergonic® 2.0: the brains behind the brawn

Putzmeister machines with Ergonic overcome the difficulties of day-to-day work on the job site to deliver increased efficiency, reduced costs and greater flexibility.

- **EPS – Ergonic® Pump System**
- **EOC – Ergonic® Output Control**
- **Ergonic® FFS**
- **EGD-RC — Ergonic® Graphic Display (Radio) Remote Control**
- **EBC — Ergonic® Boom Control**

ergonic
inside

Stands steady in every location

With TRDI support, developed by Putzmeister, you can save time and space without compromising on safety. Telescoping outriggers can be placed between obstacles and in the smallest of spaces. A huge advantage when working under restrictive setup conditions.

Narrower support with One-Sided Support (OSS)

With OSS, the outrigger footprint is reduced even further. This ensures that the boom's total reach on the fully supported side is optimally used.



38Z-5-Meter — features at a glance

Benefits at a glance

- Smooth 5-section boom with Z-Fold design, optimum flexibility and lower unfolding height
- Versatile use on job sites, whether operating under low ceiling heights, congested sites, or demanding conditions
- Efficient operation thanks to intuitive and innovative ergonomic design
- Increased stability due to reinforced base structure, compact pedestal, and boom line installation
- Maintenance- and service-friendly with optimized accessibility and bolt-on concept for easy component replacement
- Lower service costs thanks to standardized, maintenance-free components and minimal quantities of operational fluids needed

The new boom at a glance

- 123' 0" (37.50m) vertical reach with 5-section in Z-Fold boom design
- No dead space, to improve job-site flexibility
- Lower unfolding height
- Fast response characteristics of boom control
- Reduced boom vibration improves safety and control for end hose operators
- Auto lubrication for first boom cylinder and the slewing bearing
- Standard 90° and 45° elbows, with lengthened collars

The new pedestal at a glance

- Reduced weight provides additional payload for storage and pipe/hose system
- Improved deck space for accessibility and storage
- A more robust and stable base structure
- Significantly reduced footprint with the use of one-sided support (OSS) outrigger system

The new pump at a glance

- Core pump optimized for high-performance on all concrete types with push-over (POH) functionality
- For best-in-class performance and reliability
- Wear-resistant design of S-Valve for long service life
- Hopper agitator safety shutdown via Radio Frequency Identification (RFID)
- Automatic agitator directs rotation to correspond with pumping direction
- Smooth, optimized pumping with EPS and EOC reduces boom bounce and increases control
- Intuitive and advanced control with Ergonic® 2.0 control system
- Minimal operating costs due to maintenance-free designed components and increased accessibility

High-performing pump and pedestal

Free flow hydraulics in a closed loop system

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.

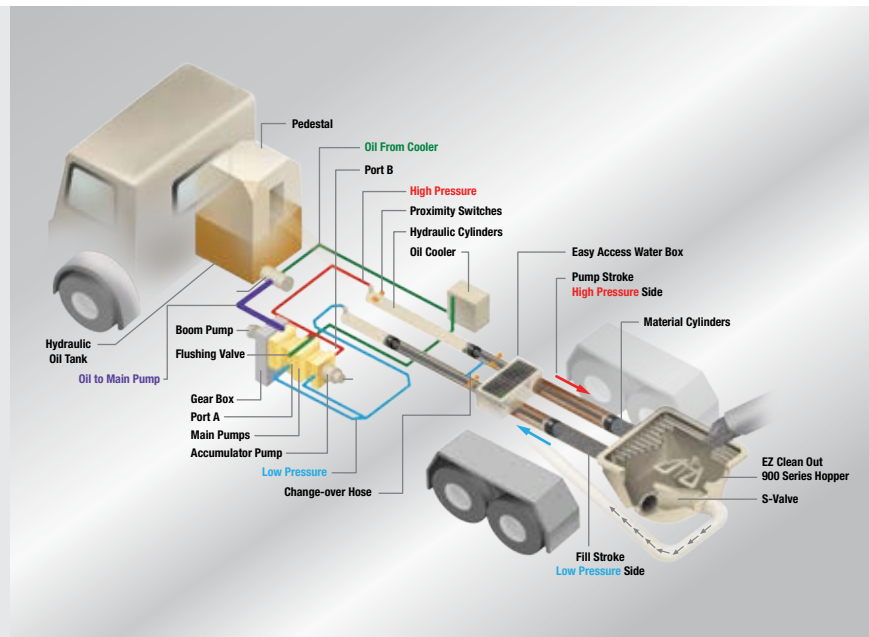
Depending on the specific pump cell size, up to 20% of the oil leaves the simple closed loop system during each stroke through a flushing valve on the main pump and cycles to a cooler before it returns to the hydraulic oil tank.

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.



The pedestal — robust, stable, reliable

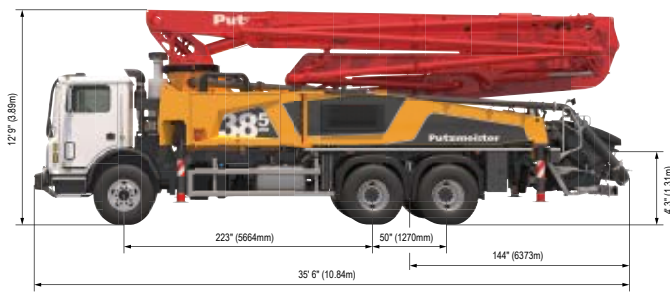
The 38Z-5 fulfills the most stringent weight regulations while offering plenty of additional payload for functional fluids and accessories. Sufficient storage is available due to the outrigger design and wide deck with anti-slip surface.

Additional details make the base structure particularly robust: the overlap length of the front telescopic support legs, the closed rear swinging outriggers, and the compact boom pedestal, which is made of a single piece of material.

The pedestal is particularly impressive when it comes to force distribution. The forces acting on it are completely distributed over the outriggers, protecting the chassis. The I-frame and connection concept also ensures a longer service life than that of rigid frames.

The concrete pump — enough power to fit your needs

Like all Putzmeister truck-mounted concrete pumps, the 38Z-5-Meter is available with different pump kits, each with a delivery pressure of 1,233 psi (85 bar). The cost-effective 16H and 18H LS feature two chromium-plated delivery cylinders and smooth operation. They both offer high delivery rates, but the LS version has a lower number of strokes, which means less wear over time.

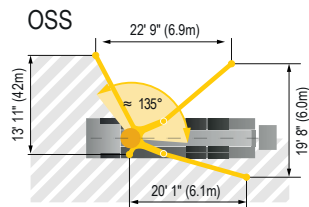
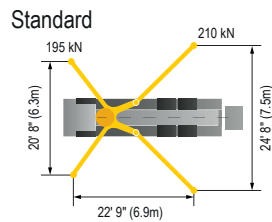
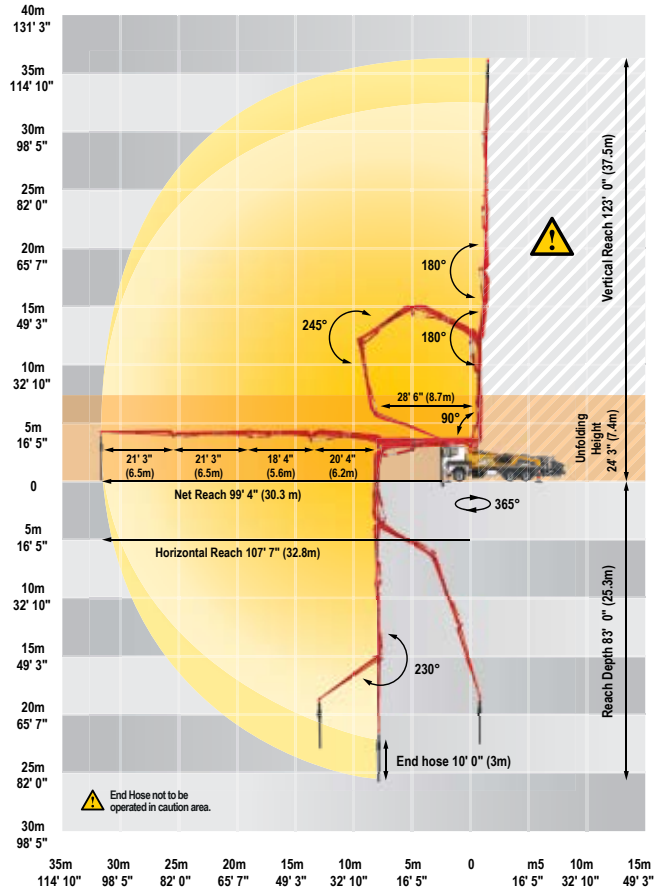


38Z-5-Meter Truck-Mounted Specifications

Length	35' 6"	(10.84m)
Width	8' 2"	(2.50m)
Height	12' 9"	(3.89m)
Wheelbase	223"	(5664mm)
Front axle weight	18,880 lbs	(8,564kg)
Rear axle weight	37,540 lbs	(17,540kg)
Approx total weight	56,420 lbs	(25,592kg)

Based on Model MACK Terrapro 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.

38Z-5-Meter Range Diagram



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' 4"	(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' 6"	(8.70m)
2nd section length	20' 4"	(6.20m)
3rd section length	18' 4"	(5.60m)
4th section length	21' 3"	(6.50m)
5th section length	21' 3"	(6.50m)

General Specifications

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	19' 8"	(6.00m)
Outrigger spread L-R — rear	24' 7"	(8.10m)
	hydraulically extended out & down	
	hydraulically swing out & extend down	

Pump Specifications

	38Z-5.16H	38Z-5.18H 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	—
— 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	5075 psi (350 bar)	5075 psi (350 bar)
Differential cylinder diameter	5.5" (140mm)	4.9" (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 Terrapro 613
• Standard delivery line system rated at max line pressure of 1,233 psi (85 bar)



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