

Putzmeister

20Z-METER | TRUCK-MOUNTED CONCRETE BOOM PUMP

20Z-METER



A NEW STANDARD OF INNOVATION AND EXCELLENCE

UNMATCHED VERSATILITY IN A COMPACT DESIGN

Offering a compact design, the 20Z-Meter is ideal for busy urban job sites. It offers both the lowest unfolding height at 12' 10" (3.91m) and smallest front outrigger spread at 11' 2" (3.40m) of any truck-mounted boom pump on the market today.

A four-section Z-Fold boom design provides exceptional maneuverability to negotiate over and around obstacles

for efficient concrete placement in hard-to-reach or highly congested areas. In addition, the 20Z-Meter may be equipped with either a .09 or .12H pump cell.

The Putzmeister 20Z-Meter will be one of the hardest-working units in your business. It's unmatched versatility in a compact design is just the boom pump to round out your fleet.



ERGONIC® SYSTEM BENEFITS



**ERGONIC PUMP
CONTROL SYSTEM (EPS)**

3



ERGONIC OUTPUT CONTROL (EOC)

4



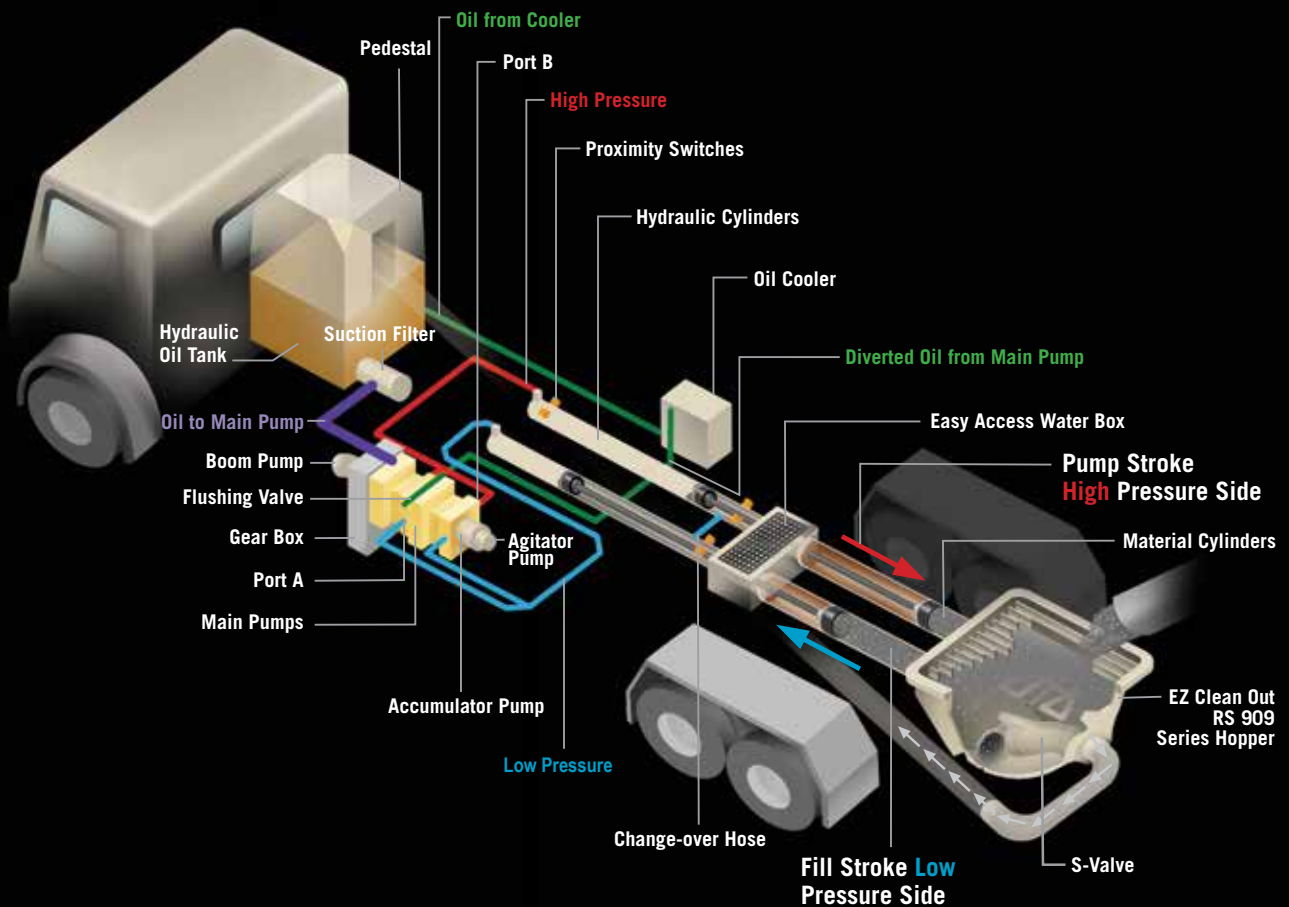
ERGONIC GRAPHIC DISPLAY (EGD)

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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.

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.

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.



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. Removing and cooling only this minimal amount of oil is possible because, unlike an open loop system, the oil flows freely without passing through any unnecessary valves that can generate heat.

The closed loop also requires far less oil to run the system, as a larger reservoir is not necessary to cool all of the oil.

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.



BETTER BOOM DESIGN 7

Robust and more resilient, Putzmeister's "smart design" boom incorporates welding seams below the edge of maximum stress. The boom is engineered to offer the flexibility to adapt to different loads and 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 if the boom is not fully extended.



CONVENIENCE AND CONTROL 8

The Frequency Hopping system on the standard HBC proportional radio remote ensures minimal interference with other frequency transmitters. Radiomatic Power Boost further enhances reception quality with a 50-100% increase in signal power. 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 9

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 hard-faced remixer paddle motor and grate-mounted vibrator. The multi-piece grate features bolted connections that allow for easy maintenance. An innovative RFID safety switch incorporated in the hopper disables the machine when the grate is opened.



A PERFECT FIT 10

Maneuverable enough for urban areas and powerful enough to handle a variety of civil and residential applications, the 20Z-Meter is an affordable fit for your fleet. It is ideal whether you are just starting out or adding more flexibility to models you already own.



MODULAR FLATPACK 11

Fully removable, Putzmeister's modular bolt-on flatpack and hydraulic system combine versatility and servicing convenience. This simple design allows for cost-effective, minimally labor intensive pump cell replacement for upgrades, repairs or as part of a maintenance program.



PUMP FROM THE BOOM OR THE BACK END 12

Small in size, but offering powerful versatility, the 20Z-Meter is fitted with a standard hinged swivel elbow off the back end of the model. Featuring a 90-degree pivot, this allows the unit to be attached to delivery line for operation as a City Pump.

BOOM

- 63' 10" (19.46m) vertical reach
- Low 12' 10" (3.91m) unfolding height
- Versatile 4-section Z-Fold boom
- Manual lubrication, optional auto lubrication
- 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) single-layer delivery line on all boom sections providing efficient concrete delivery
- ESSER 400 single-layer pipe with 400 turret elbow
- ESSER 400 back-end kit with swivel elbow
- Easy lift-out brackets for simple delivery line replacement
- Standardized elbows and straight pipe sections
- Common component availability and easy replacement

PEDESTAL

- Rotation bearing and access openings simplify turret pipe changes
- Fully integrated pedestal design absorbs all forces
- Access opening simplifies changing turret pipe
- Easy access large single-suction filter with indicator gauge
- Condensation trap in the hydraulic tank for water collection
- Two spacious decks for convenient pipe and hose storage
- Fold-down side panels
- Manual lubrication, optional auto lubrication
- Side-mounted aluminum toolboxes
- Integrated work lights
- Breakaway rear steps

OUTRIGGERS

- Quick setup on restrictive job sites
- Hydraulic outriggers with integral cylinders
- Front outriggers manually pull out and hydraulically extend down
- Rear outriggers hydraulically extend down
- Four outrigger pads in two side compartments
- Bubble level indicators

CONCRETE PUMP

- Ergonic Pump System (EPS) with color Ergonic Graphic Display (EGD)
- Choose from high pressure or high volume with the same setup
- 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 ft³ (550L) capacity
- Hard-faced remixer paddle
- Grate-mounted vibrator
- Multi-piece grate featuring bolted connections
- Hopper grate RFID safety switch
- Hinged splash guard covers hopper during transit
- Low hopper height allows easy discharge from a mixer truck
- Automatic lubrication
- Hopper work light

S-VALVE

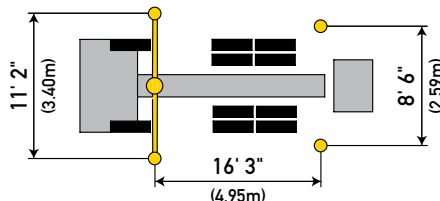
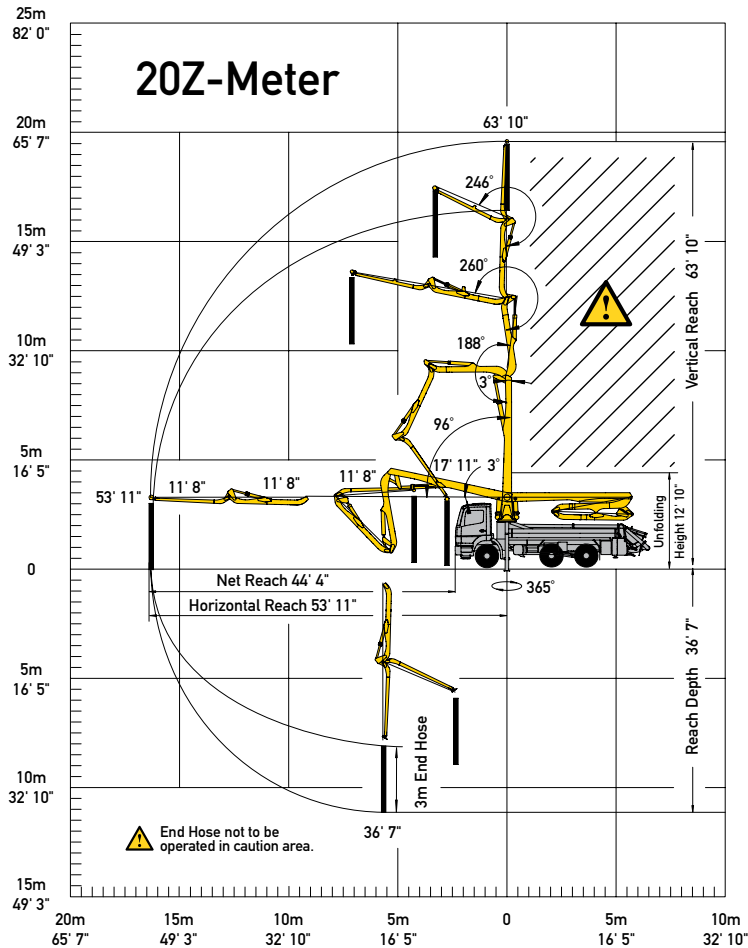
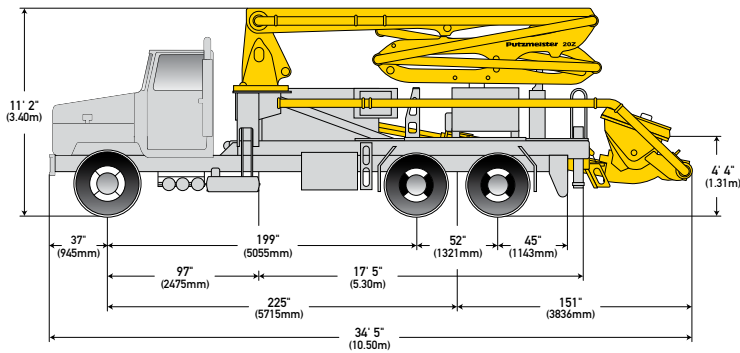
- Ideal for high pressure applications and harsh mixes
- Hard-faced S-Valve
- Gradual 9" to 7" (230 to 180mm) reduction
- Thick-walled valve construction
- Lasting wear over years of use

CLEAN OUT

- Fast and easy clean out
- 406 psi (28 bar) hydraulically-driven water pump
- Wash out kit and hose
- Integrated 172 gallon (650L) 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.



20Z-METER TRUCK-MOUNTED SPECIFICATIONS

Length	34' 5"	(10.50m)
Width	8' 2"	(2.50m)
Height	11' 2"	(3.40m)
Wheelbase	225"	(5,715mm)
Front axle weight	10,764 lbs	(4,882kg)
Rear axle weight	27,240 lbs	(12,356kg)
Approx total weight	38,004 lbs	(17,239kg)

Based on Model Kenworth T300 with .12H 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	63' 10"	(19.46m)
Horizontal reach	53' 11"	(16.43m)
Reach from front of truck*	44' 4"	(13.51m)
Reach depth	36' 7"	(11.15m)
Unfolding height	12' 10"	(3.91m)

4-Section Boom

1st section articulation	96°	
2nd section articulation	188°	
3rd section articulation	260°	
4th section articulation	246°	
1st section length	17' 11"	(5.46m)
2nd section length	11' 8"	(3.56m)
3rd section length	11' 8"	(3.56m)
4th section length	11' 8"	(3.56m)

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	11' 2"	(3.40m)
manually pull out & hydraulically extend down		
Outrigger spread L - R — rear	8' 6"	(2.59m)
hydraulically extend down		

PUMP SPECIFICATIONS

	20Z.09	20Z.12H
Output — rod side	117 yd ³ /hr (90m ³ /hr)	144 yd ³ /hr (110m ³ /hr)
— piston side	78 yd ³ /hr (60m ³ /hr)	97 yd ³ /hr (74m ³ /hr)
Pressure — rod side	1,015 psi (70 bar)	1,189 psi (82 bar)
— piston side	1,537 psi (106 bar)*	1,624 psi (122 bar)*
Material cylinder diameter	8" (200mm)	9" (230mm)
Stroke length	55" (1,400mm)	83" (2,100mm)
Max strokes per minute		
— rod side	36	21
— piston side	25	14
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	4.3" (110mm)	5.1" (130mm)
Rod diameter	2.5" (63mm)	3.1" (80mm)
Maximum size aggregate	2.5" (63mm)	2.5" (63mm)
Water tank— pedestal	172 gal (650L)	172 gal (650L)

Maximum theoretical values listed.

* Applies to units mounted on PMA stock truck

• 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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