

# 31Z-Meter Truck-Mounted Concrete Boom Pump



- **100 ft Vertical Reach**
- **Maneuverable 5-Section Boom**
- **Innovative Z-Boom Configuration**
- **Low 18 ft 9 in (5.73m) Unfolding Height**
- **Free Flow Hydraulics**

**Boom** The Putzmeister 31Z-Meter truck-mounted concrete boom pump, the first 5-section 100 ft boom on the market. A unique combination "Z" and roll-and-fold boom design provides both additional maneuverability and a very low 18 ft 9 in (5.73m) unfolding height for use under low roofed buildings. In addition, compact dimensions without overhang enable convenient travel while a short outrigger spread makes setup quick and easy.

**Delivery Line** The boom is equipped with a 5 in delivery line mounted in easy lift-out brackets for simple delivery line replacement. Standardized elbows and straight pipe sections are used for common component availability and easy replacement.

**Pedestal** The unique pedestal design of the Putzmeister 31Z absorbs all forces as outriggers and boom are within one structural element. This design results in less twist, reduced forces transferred to the truck frame, a small outrigger footprint, low overall weight and quick setup. The boom pedestal includes a rack and pinion slewing system for reduced maintenance costs and access openings to simplify changing the turret pipe. It also incorporates a hydraulic oil tank for improved weight distribution as well as a tool box for convenience. Triple\* suction filters with indicator gauges are located in the pedestal for easy access, and a condensation trap is found in the tank to collect water. Two spacious 13 ft (4m) long decks allow convenient storage of pipe and hoses.

**Outriggers** The fully hydraulic outriggers with integral cylinders are only 20 ft 8 in (6.3m) in width (front) and 20 ft 8 in (6.3m) in width (rear), allowing operation on congested job sites. Front outriggers diagonally telescope while rear ones swing out with Putzmeister's unique "X" brace outrigger design. Wooden outrigger pads (4) with two side compartments are included with each unit.

**Radio Remote Controls** Fully proportional HBC radio remote controls are standard for smooth and precise positioning of the boom. Additionally, the unit comes with a backup cable remote box with 130 ft (40m) cable for all boom and pump functions.

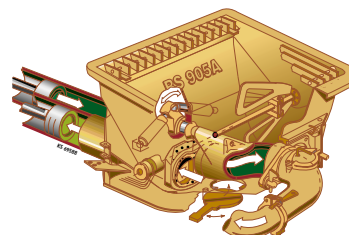
**Clean Out** A 406 psi (28 bar) hydraulically-driven water pump with a 185 gallon (700L) water tank make clean out easy.

**Concrete Pump** With the same setup, only Putzmeister has the

technology to offer both 210 yd<sup>3</sup>/hr output and provide 1233 psi concrete pressure (on the rod side).\* With competitive designs, you have to decide if you want either high pressure or high volume. Key features include a free flow hydraulic system for smooth controllable pumping as well as hard-chromed concrete cylinders and automatic lubrication of the concrete pistons for long service life. This pump has a fully adjustable volume control which allows very slow pumping while retaining full concrete pressure and boom speed.

\*Refers to .16H pump. Dependent on the application, the .12L pump (with long stroke cylinder) can handle the job - rated at 142 yd<sup>3</sup>/hr and 1015 psi concrete pressure (on the rod side). Also available is the .20H pump with 260 yd<sup>3</sup>/hr output and 1233 psi - piston side.

**S-Valve** Ideal for high pressure applications, our hard faced S-Valve with gradual 8 in to 7 in (200 to 180mm) reduction is designed to handle extremely harsh concrete mixes. A thick-walled valve construction, exclusive Putzmeister hard-chromed concrete cylinders and multi-piece piston cup design provide longer lasting wear overall.



**Hopper** With a large 19.4 cu ft (550L) capacity, this **EZ Clean Out RS 905A** hopper features a remixer, vibrator and splash guards as standard. A low 51 in (1295mm) hopper height allows easy discharging from a mixer truck.

# Specifications

## 31Z-Meter Concrete Pump

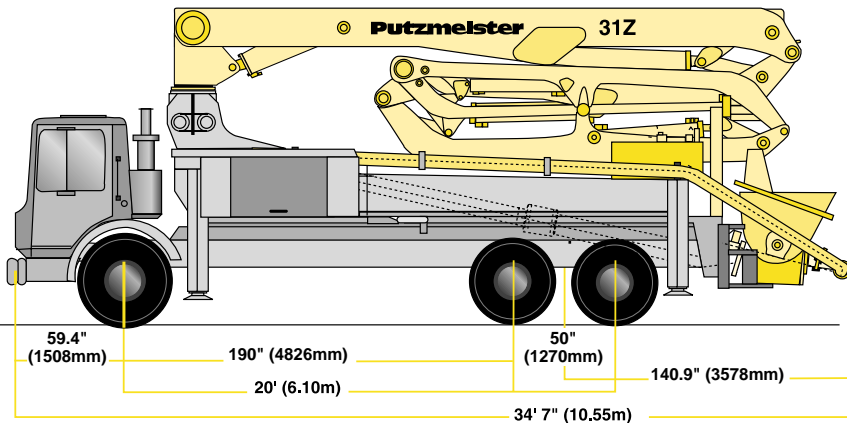
### Truck-Mounted Specifications

Based on Model MACK MR688S

Length	34' 7"	(10.55m)
Width	8' 2"	(2.50m)
Height	12' 10"	(3.90m)
Wheelbase	215"	(5461mm)
Front axle weight	19,041 lbs	(8,636kg)
Rear axle weight	36,239 lbs	(16,436kg)
Approx total weight	55,280 lbs	(25,072kg)

Weights are approximate and include pump, boom, truck, full hydraulic oil, 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	100' 1"	(30.50m)
Horizontal reach	86' 11"	(26.50m)
Reach from front of truck*	79' 1"	(24.10m)
Reach depth	67' 7"	(20.60m)
Unfolding height	18' 9"	(5.73m)

#### 5-Section Boom

1st section articulation	98°	
2nd section articulation	180°	
3rd section articulation	240°	
4th section articulation	241°	
5th section articulation	255°	
1st section length	24' 6"	(7.48m)
2nd section length	16' 8"	(5.08m)
3rd section length	16' 5"	(5.00m)
4th section length	15' 8"	(4.78m)
5th section length	13' 8"	(4.16m)

#### General Specs

Pipeline size (ID) metric ends	5"	(125mm)
with couplings	5.5"	(140mm)
Rotation	365°	
End hose-length (heavy duty)	13'	(4m)
End hose-diameter	5"	(125mm)
Outrigger spread L-R—front	20' 8"	(6.30m)
telescopic diagonal		
Outrigger spread L-R—rear	20' 8"	(6.30m)
swing-out		

### Pump Specifications

#### 31Z.12L

#### 31Z.16H

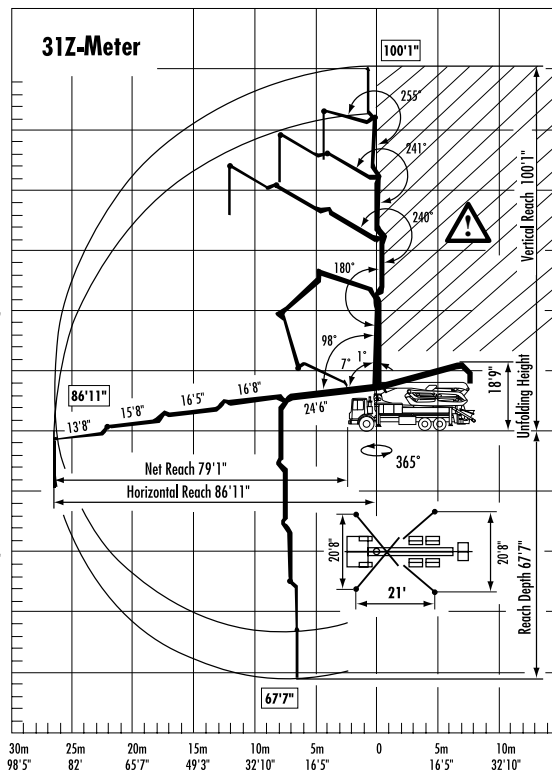
	31Z.12L	31Z.16H
<b>.20H pump also available</b>		
Output- rod side	142 yd <sup>3</sup> /hr (109m <sup>3</sup> /hr)	210 yd <sup>3</sup> /hr (160m <sup>3</sup> /hr)
piston side	85 yd <sup>3</sup> /hr (65m <sup>3</sup> /hr)	146 yd <sup>3</sup> /hr (112m <sup>3</sup> /hr)
Pressure- rod side	1015 psi (70 bar)	1233 psi (85 bar)
piston side	1624 psi (112 bar)	1885 psi (130 bar)
Concrete cylinder diameter	9" (230mm)	9" (230mm)
Stroke length	83" (2100mm)	83" (2100mm)
Max strokes per minute- rod side	21	31
piston side	13	21
Volume control	0-Full	0-Full
Vibrator	Standard	Standard
Hard chromed concrete cylinders	Standard	Standard
Hydraulic system	Free Flow	Free Flow
Hydraulic system pressure	5075 psi (350 bar)	5075 psi (350 bar)
Differential cylinder diameter	5.1" (130mm)	5.5" (140mm)
Rod diameter	3.1" (80mm)	3.1" (80mm)
Maximum size aggregate	2.5" (63mm)	2.5" (63mm)
Water Tank	185 gal (700L)	185 gal (700L)

Maximum theoretical values listed.

\* Applies to units mounted on PMA stock truck-MACK MR688S

• Standard delivery line system rated at max line pressure of 1233 psi (85 bar)

Right to make technical amendments reserved.



⚠ End hose not to be operated in caution area.



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